OFFICIALS

Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

CITY OF KUNA

Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634

City Council Meeting
AGENDA
Tuesday, November 20, 2018

6:00 P.M. REGULAR CITY COUNCIL

1. Call to Order and Roll Call

2. Invocation: Chris Bent, Calvary Chapel

3. Pledge of Allegiance: Mayor Stear

4. Consent Agenda: ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

All items listed under the Consent Agenda are considered to be routine and are acted on with one motion by the City Council. There will be no separate discussion on these items unless the Mayor, Council Member, or City Staff requests an item to be removed from the Consent Agenda for discussion. Items removed from the Consent Agenda will be placed on the Regular Agenda under Business or as instructed by the City Council.

A. City Council Meeting Minutes:

1. Regular City Council Minutes, November 7, 2018

B. Accounts Payable Dated November 15, 2018 in the Amount of $496,047.51

C. Resolutions

1. Consideration to approve Resolution No. R90-2018

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO AMENDING RESOLUTION NO. R77-2018 APPOINTING ONE (1) NEW MEMBER TO THE KUNA ARTS COMMISSION.

D. Final Plats

1. Consideration to approve Case No. 18-17-FP (final plat) for Winfield Springs Subdivision No. 2

NOTICE: Copies of all agenda materials are available for public review in the Office of the City Clerk. Persons who have questions concerning any agenda item may call the City Clerk's Office at 922-5546. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at 922-5546 at least forty-eight (48) hours prior to the meeting to allow the City to make reasonable arrangements to ensure accessibility to this meeting.

E. Findings of Fact and Conclusions of Law

1. Consideration to approve the Findings of Fact & Conclusions of Law for Case No. 18-02-V (Variance) for J. Scott Dowdy

5. Community Reports or Requests:

A. Recognition of Sergeant Carl Olson – Mayor Stear

6. Public Hearings: (6:00 p.m. or as soon thereafter as matters may be heard.)

A. Continuation of Public Hearing on Ordinance No. 2018-37 and Resolution No. R85-2018 – Bobby Withrow, Parks Director

1. Second reading of Ordinance No. 2018-37

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING TITLE 7, CHAPTER 3 SECTION 6 TITLED EXCLUSIVE RESERVATIONS TO ALLOW FOR EXCLUSIVE RESERVATION OF CERTAIN AMENITIES, AND AMENDING TITLE 7, CHAPTER 3 SECTION 7 TITLED APPLICATION FOR RESERVATION ADDING A RESERVATION TIMEFRAME, AND AMENDING TITLE 7, CHAPTER 3 SECTION 8 TITLED VACATION OF PARKS UPON REQUEST OF CITY TO INCLUDE ADDITIONAL AMENITIES, AND PROVIDING AN EFFECTIVE DATE.

2. Consideration to approve Resolution No. R85-2018 ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING RESOLUTION NO. R44-2017 TO RAISE CERTAIN FEES TO COVER RISING COSTS, ADD DISCOUNT ELIGIBILITY, ADD NEW AMENITIES, ADD RESERVATION TIME FRAMES, ADD A RESERVATION DEADLINE AND PROVIDE AN EFFECTIVE DATE.

B. Continuation of Public Hearing and Consideration to approve Case No. 18-05-S (Preliminary Plat) Madrone Heights Subdivision - Troy Behunin, Planner III ACTION ITEM

Kristi Garbo, KM Engineering, on behalf of applicant Tim Eck, requests approval to subdivide approximately 39.50 ac. into 206 single home lots, an additional 27 common lots, and one shared driveway. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, T 2N, R 1W, APN #: S1322438400.

C. Public Hearing and Consideration to approve 18-04-AN (Annexation) & 18-03-S (Preliminary Plat) – Jace Hellman, Planner II ACTION ITEM

Billy Edwards, with Select Development and Contracting, LLC., requests to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

D. Public Hearing and Consideration to approve 18-01-S (Preliminary Plat) Whisper Meadows Subdivision – Troy Behunin, Planner III ACTION ITEM

Katie Miller with Bailey Engineers, requests approval to subdivide approximately 73.50 acres into 310 buildable lots, 38 common lots. The subject site is located near the northwest corner of Linder and Columbia Roads, Meridian, Idaho, ID 83642, within Section 2, Township 2 North, Range 1 West, B.M. (APN#'s R1393850100, R1693860010, R1693860290 and R1693860280).

7. Business Items:

A. Consideration to reappoint John Laraway to the Planning & Zoning Commission for a period of three years, which will expire in November 2021 – Wendy Howell, Planning & Zoning Director ACTION ITEM

8. Ordinances:

A. Consideration to approve Ordinance No. 2018-40 ACTION ITEM

AN ORDINANCE OF THE CITY OF KUNA, IDAHO, ANNEXING SEVERAL PROPERTIES ON SOUTH ASH AVENUE OWNED BY CLAY WOOD & VERA STREICHIK, INTO THE KUNA MUNICIPAL IRRIGATION DISTRICT FROM THE BOISE~KUNA IRRIGATION DISTRICT; THUS, CHANGING THE BOUNDARY OF THE KUNA MUNICIPAL IRRIGATION DISTRICT; DECLARING WATER RIGHTS APPURTENANT THERETO ARE POOLED FOR DELIVERY PURPOSES; DIRECTING THAT COPIES OF THIS ORDINANCE BE RECORDED AS PROVIDED BY LAW; AND PROVIDING AN EFFECTIVE DATE.

Consideration to waive three readings of ordinance
Consideration to approve ordinance

9. Mayor/Council Announcements:

10. Executive Session:

None

11. Adjournment:

OFFICIALS

Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

CITY OF KUNA

Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634

City Council Meeting
MINUTES
Wednesday, November 7, 2018

Note: *The regular City Council Meeting is moved to Wednesday to accommodate the election held on the first Tuesday of this November, the regular meeting date for Council.*

6:00 P.M. REGULAR CITY COUNCIL

1. *Call to Order and Roll Call*

COUNCIL MEMBERS PRESENT:
Mayor Joe Stear
Council President Briana Buban-Vonder Haar
Council Member Richard Cardoza
Council Member Warren Christensen
Council Member Greg McPherson

CITY STAFF PRESENT:
Chris Engels, City Clerk
Bob Bachman, Public Works Director
Bobby Withrow, Parks Director
Wendy Howell, Planning & Zoning Director
Jared Empey, City Treasurer
Troy Behunin, Planner III
Jace Hellman, Planner II

2. ***Invocation:*** Russell George, Changed Life Church

3. ***Pledge of Allegiance:*** Mayor Stear

4. ***Consent Agenda:*** ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

(Timestamp 00:01:17)

All items listed under the Consent Agenda are considered to be routine and are acted on with one motion by the City Council. There will be no separate discussion on these items unless the Mayor, Council Member, or City Staff requests an item to be removed from the Consent Agenda for discussion. Items removed from the Consent Agenda will be placed on the Regular Agenda under Business or as instructed by the City Council.

NOTICE: Copies of all agenda materials are available for public review in the Office of the City Clerk. Persons who have questions concerning any agenda item may call the City Clerk's Office at 922-5546. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at 922-5546 at least forty-eight (48) hours prior to the meeting to allow the City to make reasonable arrangements to ensure accessibility to this meeting.

A. City Council Meeting Minutes:

1. Regular City Council Minutes, October 16, 2018

B. Accounts Payable Dated November 1, 2018 in the Amount of $1,188,314.32

C. Resolutions

1. Consideration to approve Resolution No. R88-2018

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO APPROVING A PERFORMANCE BOND BY HUBBLE HOMES LLC FOR THE GREYHAWK SUBDIVISION PHASE 8 FOR UNCOMPLETED WORK INCLUDING LANDSCAPING AND STREET LIGHTS PURSUANT TO THE TERMS OF THIS RESOLUTION.

D. Findings of Fact and Conclusions of Law

1. Consideration to approve Findings of Fact and Conclusions of Law for Case No. 18-01-CPF (Combination Preliminary and Final Plat) for Kelleher Subdivision No. 2

2. Consideration to approve Findings of Fact and Conclusions of Law for Case No. 18-01-A (Appeal) & 18-12-DR (Design Review) for Kelleher Subdivision No. 2

Council President Buban-Vonder Haar moved to approve the Consent Agenda. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

5. Community Reports or Requests:

A. Introduction of Sergeant Mike Fratusco – Kuna Police Chief Jon McDaniel *(Timestamp 00:01:58)*

Kuna Police Chief Jon McDaniel introduced Sergeant Mike Fratusco.

Sergeant Fratusco thanked all for the time to introduce himself. He provided a summary of his background and goals with the community.

6. Public Hearings: (6:00 p.m. or as soon thereafter as matters may be heard.)

A. Public Hearing and consideration to approve Case No. 18-02-V (Variance) for J. Scott Dowdy - Troy Behunin, Planner III ACTION ITEM
(Timestamp 00:06:17)

Applicant, J. Scott Dowdy, requests approval of this Variance request, in order to reduce the setback requirements for accessory buildings, from public rights-of-way (ROW) on the street-side of a corner lot. The site address is 2534 N. Countryside Ave., Kuna, Idaho, within Galiano Estates Subdivision (Walnut Creek), on lot 19, block 1, within Section 14, T2N, R1W, (R3023310190).

Scott Dowdy presented his request and stood for questions.

Mayor Stear opened the public hearing.

Support: None

Against: None

Neutral: None

Rebuttal: None

Council President Buban-Vonder Haar moved to close the public hearing. Seconded by Council Member McPherson. Motion carried 4-0.

Council President Buban-Vonder Haar noted she lived in this subdivision and received the notice for the neighborhood meeting. She did not attend because it was during a Council Meeting. However, she did not have any personal opinions about it based on her being a nearby land owner and would not be recusing herself.

Council President Buban-Vonder Haar stated her primary concerns with these types of requests were the set backs for safety reasons and access to utilities services. She noted that because of the unique shape of the lot staff was not concerned about maintaining lines of sight and there weren't really any of the same types of safety issues they would normally have. She also noted the memo from the City Engineer that Public Works was willing to support the reduced set back because no other homes would be impacted by it and subdivision aesthetics would be maintained. It was unlikely the road would be straightened such that the setback would be eliminated. It appeared to comply with the relevant provisions of the comp plan and it met with her concerns regarding safety, utility access, and not sticking out and being substantially different from the surrounding properties. She would adopt the Findings of Fact in the code analysis that was listed in the packet. She asked if anyone else wanted to talk about it.

Council President Buban-Vonder Haar moved to approve 18-02-V (Variance) with the conditions of approval as listed. Seconded by Council Member McPherson. Motion carried 4-0.

B. Public Hearing and consideration to approve proposed Idaho Department of Commerce Community Development Block Grant (CDBG) Application and consideration to approve Resolution No. R86-2018 – Lisa Bachman, JUB Engineers Planner/Project Manager and Grant Administrator & Chris Engels, City Clerk *(Timestamp 00:19:39)*

Lisa Bachman, JUB Engineers, reviewed the proposed application and gave a project overview.

City Clerk Chris Engels reviewed the project funding and the request for $300,000 for match funds. She added that Kuna's Downtown Application and Funding model from Phase I of Downtown Revitalization was being used as an example for other cities as they applied for multiple funds for large projects.

Mayor Stear opened the public hearing.

Support: None

Against: None

Neutral: None

Rebuttal: None

Council President Buban-Vonder Haar moved to close the public hearing. Seconded by Council Member McPherson. Motion carried 4-0.

Mayor Stear stated it was very impressive to see the team work and number of people that came together to make Phase I happen. He was very proud of everybody that stepped up to help with that because it was quite an undertaking. Like Ms. Engels stated it was a model everyone was using because nobody else thought it was even possible to put that many funding sources together for 1 project. He was hopeful it would happen again for Phase II.

Council President Buban-Vonder Haar noted with all the funding sources the City of Kuna was only contributing about 27% of the almost $2.7 million needed for the project so it was a great return on investment. She was very excited to complete the project.

1. Consideration to approve proposed Idaho Department of Commerce Community Development Block Grant (CDBG) Application ACTION ITEM *(Timestamp 00:29:40)*

Review of application, scope of work, budget, schedule, benefits of the project, how ICDBG funds will benefit low- and moderate-income persons, and location of the proposed project.

Council President Buban-Vonder Haar moved to approve the Idaho Department of Commerce Community Development Block Grant (CDBG) Application. Seconded by Council Member McPherson. Motion carried 4-0.

2. Consideration to approve $300,000 from the General & Enterprise Contingency Funds for city grant matches to the CDBG, State TAP, & TMA TAP grants
ACTION ITEM
(Timestamp 00:31:02)

Council Member Cardoza asked why there were no sewer funds being used.

Public Works Director Bob Bachman explained there was no sewer work being done so sewer funds could not be used.

Council Member Cardoza asked if sewer funds were used on Phase I when new pipes were allocated for waste water.

Mr. Bachman replied he did not think so but could not answer with 100% certainty.

Council Member Cardoza asked if they were allocating any kind of waste water on those 2 blocks would sewer be involved with that.

Mr. Bachman stated his interpretation was sewer would not be eligible to contribute to this.

Council President Buban-Vonder Haar moved to approve the expenditure of $300,000; $173,169 from the General Fund Contingency, $70,251 from the Water Fund Contingency, and $56,580 from the Pressurized Irrigation Fund Contingency for the purpose of city grant matching funds for the CDBG, State TAP, & TMA TAP grants. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

3. Consideration to approve Resolution No. R86-2018 ACTION ITEM
(Timestamp 00:33:46)

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO APPROVING THE "PROFESSIONAL SERVICES AGREEMENT" WITH JUB ENGINEERING, INC. FOR GRANT WRITING AND ADMINISTRATIVE SERVICES FOR THE DOWNTOWN REVITALIZATION PROJECT PHASE II-A & PHASE II-B; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND THE CITY CLERK TO ATTEST TO SAID SIGNATURE.

Council Member Cardoza asked if the grant did not go through did the JUB agreement have any increments that would allow a pay down of the fees.

Ms. Bachman explained the grant writing fee would come out of the City funds but the administration fee was contingent on getting the grant. They would not charge that fee if they did not get the grant.

Council President Buban-Vonder Haar moved to approve Resolution No. R86-2018. Seconded by Council Member McPherson. Motion carried 4-0.

C. Public Hearing and consideration to approve Ordinance No. 2018-37 and Resolution No. R85-2018 – Bobby Withrow, Parks Director
(Timestamp 00:36:16)

Parks Director Bobby Withrow reviewed the changes that were being suggested and stood for questions.

Council President Buban-Vonder Haar asked for clarification on the new fee chart.

Mr. Withrow explained the changes made to the fee chart.

Council President Buban-Vonder Haar noted the amenities could be reserved with a minimum of 7 days advanced noticed. She asked if they ever had people submit requests in less than 7 days and if that could be accommodated.

Mr. Withrow replied they did and they could accommodate it. He explained the reasoning behind the 7-day minimum.

Council President Buban-Vonder Haar would support having a separate fee for a last-minute reservation but she deferred to him on doing something like that or sticking with a preferred 7-day advanced notice.

Mr. Withrow preferred to stick with the 7-day minimum.

Council President Buban-Vonder Haar asked how he felt about changing the verbiage a bit so people didn't feel they couldn't reserve amenities less than 7 days prior to their event.

Mr. Withrow was happy with the way it read already but, if it became a problem, they could bring it back and change it. If they needed to, they could add "a minimum of 7 days or call City Hall for reservations" or something like that.

Mayor Stear also did not want to exclude people who came at the last moment. He noted last minute reservations on a Friday afternoon could pose a problem for getting extra picnic tables set up but if there wasn't staff to do that then there wasn't staff to do that; it would just have to be made known.

Council President Buban-Vonder Haar felt that since 2 people brought up the same issue there would be value in changing it. She thought other people reading it may have the same question. That would also require changing Exhibit A. Her preference was to slow track this so people could comment on the changes if they wanted to. She recommended Mr. Withrow bring it back with the changes he preferred or recommended.

Council President Buban-Vonder Haar moved to continue the public hearing to accept additional testimony at the next 2 readings of Ordinance No. 2018-37 and Resolution No. R85-2018 on November 20, 2018 and December 4, 2018. Seconded by Council Member McPherson. Motion carried 4-0.

Council Discussed whether or not to republish.

William F. Gigray, III, legal counsel for the City, stated it would only need to be republished if a fee was being added or changed by more than 5% over what was advertised.

1. First reading of Ordinance No. 2018-37 ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING TITLE 7, CHAPTER 3 SECTION 6 TITLED EXCLUSIVE RESERVATIONS TO ALLOW FOR EXCLUSIVE RESERVATION OF CERTAIN AMENITIES, AND AMENDING TITLE 7, CHAPTER 3 SECTION 7 TITLED APPLICATION FOR RESERVATION ADDING A RESERVATION TIMEFRAME, AND AMENDING TITLE 7, CHAPTER 3 SECTION 8 TITLED VACATION OF PARKS UPON REQUEST OF CITY TO INCLUDE ADDITIONAL AMENITIES, AND PROVIDING AN EFFECTIVE DATE.

2. Consideration to approve Resolution No R85-2018 ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING RESOLUTION NO. R44-2017 TO RAISE CERTAIN FEES TO COVER

RISING COSTS, ADD DISCOUNT ELIGIBILITY, ADD NEW AMENITIES, ADD RESERVATION TIME FRAMES, ADD A RESERVATION DEADLINE AND PROVIDE AN EFFECTIVE DATE.

D. Public Hearing and consideration to approve Ordinance No. 2018-36 and Resolution No. R87-2018 – Chris Engels, City Clerk
(Timestamp 00:50:35)

City Clerk Chris Engels reviewed the ordinance had been read 2 previous times and the proposed changes to the animal licensing process. She reviewed the impoundment fee history with Kuna and the Humane Society and asked Council if they would like to impose the impound fee for dogs and cats or just dogs.

Council President Buban-Vonder Haar asked that impoundment fees not have a reset based on the number of incidents but have a reset after a certain time frame.

Mayor Stear suggested resetting the impound fees after 1 year without incident.

Council Member Cardoza asked if an owner would get a pro-rated refund on a 5-year license if their dog died.

Ms. Engels replied that was not provided for in the ordinance.

Council Member Cardoza asked if a 5-year license would be transferable if an owner's dog died and they got a new dog.

Ms. Engels replied that was not provided for in the ordinance either.

Council President Buban-Vonder Haar explained there was a discount for multi-year licenses so it was a calculated risk. She didn't necessarily have a problem with transferring the tag if it was administratively possible.

Ms. Engels replied staff would accommodate whatever Council decided but it would be an administrative juggle. She gave an example of how people try to use that as a work around. Part of the reason for the single license and the reduced multi-year license was to hopefully help reunite people with their dogs if they got loose.

Council President Buban-Vonder Haar reviewed the ½ year license fee that was currently in place and the issues with that versus the proposed multi-year fees. She was open to ways to make it more user friendly. She felt if there were going to be transfers there should be some sort of proof and administrative fee. She asked if they were comfortable asking for that.

Ms. Engels explained in general the City didn't transfer any type of license. If Council was interested in staff figuring out how to make a transfer work, they could do that. They would need to figure out how that would work with altered and

unaltered animals. If Council wanted to table, she could bring something back and they could republish for fees. She just wanted to have the fee schedule so renewals could be sent out as close to early December as possible.

Council President Buban-Vonder Haar stated that was another great point in terms of the different fees and felt it would be better not to do transfers.

Ms. Engels suggested rolling this out and over the next 12 – 24 months staff could watch to see if those purchasing multi-year licenses were making requests for transfers. If there were requests for transfers, they could come back and address a transfer option.

Council Member Christensen stated at some point it had to be about keeping it simple for the residents and multiple transfers start to make it to complex.

Ms. Engels reiterated staff would keep an eye on it and, if people were requesting transfers, they would voluntarily bring it back to Council.

Council President Buban-Vonder Haar asked if there should be different impoundment rates for cats versus dogs.

Council agreed it should be the same for both.

Council President Buban-Vonder Haar asked if they were fine with changing footnote 2 on Exhibit A of Resolution R87-2018 to read Impoundment Fees would automatically reset 1 year following the last date of the impoundment of an animal.

Council agreed to that language for the footnote.

William F. Gigray, III, legal counsel for the City, stated he didn't know what was advertised but, based on what was advertised, changing that might mean they needed to republish. Also, people who were violating the animal control ordinance of the City would be subject to an infraction. With regards to impound fees, that was a matter of providing service for impounding, feeding and harboring the animal. Fees had to have a reasonable relationship to the cost of providing the service, not revenue or punishment.

Council President Buban-Vonder Haar noted there was a boarding fee and an impoundment fee. The boarding fee was supposed to compensate the animal shelter for their costs for holding the animal. The impoundment fee, she would argue, was to cover the cost of the animal control officer driving out from the shelter getting the animal and taking it back. She felt there should be a penalty for repeat offenses such as this. That was why they were thinking of having the graduated fees for repeat offensives capped at a certain amount for incident 3 and thereafter. If that was not actually allowed, she wanted to explore that more.

Mr. Gigray believed there were enhanced penalties under the City ordinance for a habitual violator but he had not prepared for this. He suggested they review that and get a sense of how the ordinance regulated the control and impoundment of animals in the city. They were providing a service with impoundment including the officer going to the scene and the administrative work which was clearly justifiable. He was just saying as they were thinking about this, they think about their authority to impose fees for reasonable services provided by the City versus their authority under ordinance to have a violation penalized with an infraction.

Council President Buban-Vonder Haar clarified he was suggesting they might need to modify the way the ordinance was written so that the impoundment fee remained consistent and there was some sort of additional fee or infraction penalty that would potentially slide for habitual violators.

Mr. Gigray thought it would be a worthwhile conversation to have with administrative staff and enforcement officers to ensure they were comfortable with how it all fit together.

Ms. Engels stated the Humane Society had reviewed all of this. There was a standard graduated impound fee as a deterrent with most jurisdictions however they were free to do as they chose.

Council President Buban-Vonder Haar suggested Mr. Gigray take a few minutes to review the ordinance while they conducted the public hearing.

Council Member Cardoza asked who was responsible for setting the impound fees. He thought it was the Humane Society

Ms. Engels explained each City developed and established their own based on what fit for their jurisdiction. There were a lot of similarities though. She added Kuna would be the only city with this license structure. Everyone's license structure was a little bit different.

Mayor Stear opened the public hearing.

Support: None

Against: None

Neutral: None

Rebuttal: None

Council President Buban-Vonder Haar moved to close the public hearing. Seconded by Council Member McPherson. Motion carried 4-0.

Council decided to table this item, 6D, until after the next public hearing item to give Mr. Gigray time to review the ordinance.
(Timestamp 01:19:15)

Council returned to item 6D.
(Timestamp 02:24:34)

Council President Buban-Vonder Haar reviewed the questions regarding whether or not the ordinance looked problematic in any way and impound fees.

Mr. Gigray stated there was no problem with the ordinance and, in regards to the graduated impound fees, as long as they could justify it and show they had reasonable expenses, they could use their discretion. If they wanted to enhance penalties, they would have to look at additional changes in the ordinance.

Council President Buban-Vonder Haar did not see a penalty section in the ordinance. She was concerned they had not technically done a study regarding the cost of an animal control officer coming out and she did not know if that was required. She wasn't sure if it would be easier to build this in as a penalty but she did not see a penalty section in there.

Ms. Engels replied the penalty in the code refers to the penalty in a different code section that tells them if it is a misdemeanor or infraction. It was not included in this amendment.

Council President Buban-Vonder Haar clarified what was included in the packet was only the portion that was being changed and, if she wanted to look at the penalty section, she would need to look up the full ordinance.

Mr. Gigray explained the penalty was usually at the end of the animal control ordinance and it was usually an infraction to begin with and if they were continuing to have problems it would move up to a misdemeanor.

Ms. Engels asked Mr. Gigray if they needed to do a fee analysis with the Humane Society to justify the impound fees.

Mr. Gigray responded the standard rule with fees was they have the ability to charge a fee as long as it was reasonably related to providing a service but they could not use fees as a generation of income or someone could challenge it as an unlawful tax. That was his concern. If they kept the fee as the Humane Society's fee it would only be a provision in the ordinance requiring that fee be paid to get an animal back in accordance with the contract between the City and the Humane Society.

Mayor Stear said the problem was the City never saw that fee. He did not think a study was needed and that it just needed to be reasonable.

Mr. Gigray agreed but reiterated for the record the basis for their action would be better centered on the service provided.

Ms. Engels explained the Humane Society estimated the annual fee was about $800 so it was a pretty insignificant amount over all. The Humane Society would collect and remit that fee to the City which would go towards paying that contract.

Mayor Stear suggested tabling the item and spending some time looking into it to make sure it was done properly.

Mr. Gigray offered to double check to see if they had authority to have inducements to people by increased fees.

Council President Buban-Vonder Haar felt it was worth noting police were frequently called for these kinds of things because the Humane Society couldn't respond right away so that should cover anything additional since the City was paying for those services. She was good with everything now including the change to the footnote.

Ms. Engels clarified the change to the footnote.

1. Consideration to approve Ordinance No. 2018-36 ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL FOR KUNA, IDAHO AMENDING TITLE 10, CHAPTER 3, SECTION 7 TITLED DOG LICENSES TO ALLOW FOR MULTI-YEAR LICENSES AND ROLLING RENEWALS, REPEALING THE HALF PRICE FEE FOR LICENSES PURCHASED AFTER JULY 1 OF EACH CALENDAR YEAR AND AMENDING TITLE 10, CHAPTER 3, SECTION 23 TITLED IMPOUNDING OF ANIMALS CLARIFYING FEES RELATED TO THE IMPOUNDMENT AND KEEPING OF ANIMALS AND PROVIDING AN EFFECTIVE DATE.

Consideration to approve ordinance
Consideration to approve summary publication

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-36. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve the Summary Publication of Ordinance No. 2018-36. Seconded by Council Member McPherson. Motion carried 4-0.

2. Consideration to approve Resolution No. R87-2018 ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO, AMENDING RESOLUTION NO. R18-2010 AND ESTABLISHING NEW FEES FOR DOG LICENSES AND FEES FOR THE IMPOUNDMENT OF AN ANIMAL WITHIN THE CITY OF KUNA AND PROVIDING AN EFFECTIVE DATE.

Council President Buban-Vonder Haar moved to approve Resolution No. R87-2018. Seconded by Council Member McPherson. Motion carried 4-0.

Council returned to the public hearing on Madrone Heights.
(Timestamp 02:35:58)

E. Public Hearing and Consideration to approve Case No. 18-05-S (Preliminary Plat) Madrone Heights Subdivision - Troy Behunin, Planner III ACTION ITEM
(Timestamp 01:19:26)

Applicant requests approval to subdivide approximately 39.50 ac. into 206 single home lots, an additional 27 common lots, and one shared driveway. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, T 2N, R 1W, APN #: S1322438400.

Kevin McCarthy with KM Engineering, 9233 W. State Street, Boise, ID 83714, representing Madrone Heights and the applicant, Tim Eck, reviewed the proposed project. He noted they agreed to the list of conditions for approval listed in the staff report and stood for questions.

Planner III Troy Behunin presented the staff report on the application and stood for questions.

Council President Buban-Vonder Haar thought that when this was annexed in it was a maximum density of 4.2 not 5.2 based on a sewer capacity issue.

Council Member Christensen recalled the same.

Council President Buban-Vonder Haar asked if there was any way to check on this.

Mr. Behunin could pull the minutes but was confident it was 5.2.

Council Member Cardoza thought that the applicant had originally come in with a request for R8 and dropped it down to R6 with 5.2 which the Council agreed to.

Council President Buban-Vonder Haar felt that since both she and Council Member Christensen recalled the same thing without having spoken about it with each other it bared looking into.

Mr. Behunin explained the 4.2 they were thinking of was part of another project belonging to the applicant Tim Eck.

Council President Buban-Vonder Haar asked if the project was north of the tracks.

Mr. Behunin replied it was.

Council President Buban-Vonder Haar remembered that the project was south of the tracks and they set it at 4.2 because of a sewer capacity issue. She would not vote on this until it was checked on.

Mr. Behunin offered to pull the minutes.

Council Member Christensen recalled getting Public Works Director Bob Bachman's input on the sewer capacity and that he had said right around 4 houses per acre could possibly be supported.

Mr. Bachman stated the Public Works recommendation was R4 or less and he thought 4.2 was what had been decided by Council.

City Clerk Chris Engels found the minutes from the annexation application and reviewed them. The motion stated a maximum actually density of 5.2 per acre.

Mr. Behunin noted he had left some letters from citizens out of the staff report. There were 3 in total of which he gave copies to Council.

Mayor Stear noted 1 of the letters was from Nancy Simper who had signed up to testify. He asked if she wanted her letter read into record or if she wanted to testify.

Ms. Simper stated she had been unsure if she would make it on time to testify which was why she submitted the letter but she would like to testify.

Mayor Stear read the letters into the record.

The first letter from Richard Deutsche stated his concern regarding the public access to his property. He asked that the proposed road approximately 600' north of Kuna Road be blocked off. He stated he had spoken with Tim Eck about it previously and he had no problem putting a solid fencing across Mr. Deutsche's west boundary. He was also concerned about the greenbelt access points out of the north boundary of the subdivision. Cattle were grazing there and until those properties were developed the north access points shouldn't be open to the public. He asked that these concerns be kept in mind when making decisions.

Mayor Stear asked if Mr. Deutsche wanted to testify as well.

Mr. Deutsche did not.

The second letter was an email from Randy Maurer that Mayor Stear had received and forwarded on to Mr. Behunin. It would be considered ex-part' e so he asked that it be included in the packet. He read the email into the record. Mr. Maurer felt the land was not suitable for development and stated it did not boarder city limits. He wrote the impact fees were not enough to cover the expenses of new growth. He listed what impact fees would pay for and asked that, if development had to happen, they make it pay.

Mayor Stear opened the public hearing.

Support: None

Neutral:

Cindy Gieson, 1363 S. Ash, Kuna, ID 83634, did a search on lighting regulations when she noticed another subdivision was coming in to be heard and all she could find was the unincorporated Ada County regulations that had missing links. They were well known for their dark sky considerations. She couldn't find that in the zoning, it was all about wiring. She asked if Council would consider doing an ordinance that would keep the skies darker as they considered approving these developments. It ends up being cost saving because they are LED lights with framing. She noticed there were some in the parking lot so she thought maybe they were already doing that.

Mayor Stear replied they had an ordinance pertaining to that.

Council President Buban-Vonder Haar explained how to get to City code via the City Website.

Planning & Zoning Director Wendy Howell thought it was 642T.

Ms. Gieson thanked Council for that and asked that they also consider making bike lanes in subdivisions and throughout town more bike friendly.

Mayor Stear explained the City's goals and plans concerning connectivity for bike lanes, sidewalks, and pathways.

Against:

Nancy Simper, 4597 W. Deer Flat Road, Kuna, ID 83634, noted on page 61 of item 6E in the packet ITD stated that they object to the proposed application due to traffic concerns. She was not opposed to new development but she was opposed to this

development because of traffic concerns. She believed at this time Kuna did not have the roadway infrastructure needed to support increased traffic into Kuna from the west side of town during peak times. This issue was overlooked during the traffic impact study. The TIS only evaluated the intersection of Kuna Road and Black Cat Road and that 1 mile stretch between and Black Cat Road and Ten Mile Road. She felt it was reasonable to assume families in the new development would be making frequent trips into town. It was vital to study the impact on Avalon Street from the Ten Mile Road intersection to the railroad and creek crossings. She shared her experiences regarding traveling on that road and how the increased traffic would negatively affect the residents. She noted in the packet on page 7 of item 6E, IC §67-6513 requires the City to provide for mitigation of the effects of subdivision development on the ability of the School District to deliver services without compromising the quality. She felt until a solution was found not only for the traffic congestion but also for emergency service access to the area during a train crossing this point of entry into Kuna would continue to be a travel and safety problem. It would be irresponsible to add another 206 households to this traffic area until a TIS including Avalon Street and the crossings was completed and the problems corrected to accommodate potential new neighbors.

Rebuttal:

Kevin McCarthy with KM Engineering commented Mr. Eck had addressed the letter from Richard Deutsche and coordinated with him on putting something into that lot. As for the ITD letter it appeared that was just a standard response for developments coming into the city of Kuna. They did do a traffic study that ACHD reviewed and commented on. It was also provided to ITD but they did not comment on it that he was aware of. His client did contact the company that did the traffic impact study and they provided a response letter. He gave the letter out to Council and read the it into the record. It stated the property did not request direct access to the State Highway System so ITD was not requested to take part in the scope of work for the transportation impact study as required by ACHD. ACHD determined and verified the study area. He reviewed the results of the study and that it would have minimal impact to existing conditions currently experienced on SH 69. There was also a map on the back showing the area of influence and the peak hour demand contribution. Mr. McCarthy stood for questions.

Council Member Cardoza asked if Kuna Road going west continued as a State Highway all the way down to Happy Valley Road.

Mr. Behunin stated the State Highway ended at Orchard.

Council President Buban-Vonder Haar asked when the traffic study was provided to ITD.

Mr. McCarthy replied according to his client it was provided to ITD in July of 2018.

Council President Buban-Vonder Haar noted the date on the ITD letter was July 6th so as of that date they had not been provided a traffic study.

Mr. McCarthy said that was a fair assessment. His assumption was they received the study after they wrote that letter and they provided no comment after receiving the study.

Mr. Behunin added that ITD had been issuing this letter since May or April of 2018 where they say no to everything whether it abuts the system or not. It had caught staff off guard. They have actually been reaching out to staff for traffic impact studies provided to ACHD. The TIS was actually sent to them on July 2nd and their response on July 6th reflected their comment request from earlier. They had not had time to read, process, and analyze that study. Mr. Behunin had reached out to them since and he had not yet received an answer.

Council President Buban-Vonder Haar requested any record of that correspondence be included in the record in the future to show that loop was closed.

Mr. Behunin explained this had taken them by surprise and most communication with ITD had been via phone. Staff could start corresponding via email in order to present it in a format that shows the loop has been closed.

Mayor Stear asked if they needed to get ITD in to discuss this or if they should talk with their bosses.

Planning & Zoning Director Wendy Howell replied they could discuss that later.

Council President Buban-Vonder Haar asked if they usually got the traffic study in the packet.

Mr. Behunin said it should be in there around page 52. Additionally, ACHD was beginning to include the TIS or at least the executive summary in their response so it may be included at the back of their response.

Council President Buban-Vonder Haar asked about a possible missing page.

Mr. Behunin stated it was the page that identified Section 1 of the Executive Summary.

Council President Buban-Vonder Haar confirmed that should show up in another part of the packet.

Council Member Christensen clarified it had become pattern for ITD to object to proposed applications and that they had objected to other recent developments as well because it was just repeated history on their part.

Mr. Behunin didn't know what their reasoning was but this was not the first project where they have stated, until things got fixed, they object.

Council President Buban-Vonder Haar noted for the record they did not say until things got fixed. They said they objected to the proposed application due to traffic concerns and would withdraw any objection to the proposed application once all traffic concerns had been addressed. The overall concern was they had not received the traffic study so she interpreted it as they wanted to review the traffic study so they were objecting until they could do that.

Council President Buban-Vonder Haar asked if the public hearing was still open.

Mayor Stear replied it was.

Council President Buban-Vonder Haar stated a lot of the time people don't show up to testify or everything is pretty cut and dry and they don't have a lot of wiggle room. This was actually 1 of the times when someone has shown up and listed things they could consider as reasons for potentially denying an application or considering further modifications. Her preference was to table this and not make a decision that night. She asked if there was any interest in continuing the public hearing portion of it at the next meeting.

Ms. Howell stated ITD did not have any jurisdiction on this roadway.

Council President Buban-Vonder Haar replied that was fine but a portion of State Code was also mentioned that was potentially relevant. They had really hammered lately that they couldn't consider things that weren't related to the comp plan or code or the other things they were allowed to consider. She noted they had just delayed an application for a month because of a design review and did not feel it was unreasonable to put this off for 2 weeks. If others felt differently, they were fine to make a motion and proceed without her.

Mayor Stear suggested if they were going to table if for a date certain they leave the public hearing open.

Ms. Howell requested a recess on this item to allow legal counsel the opportunity to research Idaho State Code in this matter.

Mayor Stear stated they were waiting on legal counsel for the prior item as well so they would move on to item 7A.
(Timestamp 02:07:55)

Council returned to the public hearing on Madrone Heights.
(Timestamp 02:35:58)

William F. Gigray, III, legal counsel for the City, reviewed the Idaho Statute that was in question. He did not see it as a good argument to object to this preliminary plat.

Council President Buban-Vonder Haar still felt it was reasonable for her to take extra time to consider it but if someone else wanted to move forward they could.

Mr. Gigray stated they could continue the hearing for a date certain.

Council President Buban-Vonder Haar asked Mr. Behunin if he could provide anything showing they had provided the traffic study to ITD or communicated with them for the next meeting.

Mr. Behunin clarified what Council President Buban-Vonder Haar was wanting to see.

Council President Buban-Vonder Haar moved to table the public hearing and consideration to approve Case No. 18-05-S until the November 20, 2018 meeting at which time they would reopen the public hearing to receive additional testimony and information. Seconded by Council Member McPherson. Motion carried 4-0.

Council moved on to item 7C.
(Timestamp 02:42:52)

7. Business Items:

A. Idaho Career Development Month Proclamation – Mayor Stear
(Timestamp 02:08:10)

Mayor Stear read the proclamation.

B. Kuna Police Impact Fee Report and consideration to approve Kuna Police Impact Fees – Anne Wescott, Galena Consulting
(Timestamp 02:10:30)

Anne Wescott with Galena Consulting reviewed the Kuna Police Impact Fee Report. She noted the Impact Fee Advisory Committee unanimously supported the fees set forth in the report, encouraged the Council to consider adopting them by the end of 2018, requested to meet in 1 years' time to conduct a complete review of assumptions about projected growth and construction costs, and that the City of Kuna keep track of and report on the number of new housing units and the amount of non-residential square feet of construction being approved by the City at the annual meeting. Ms. Wescott stood for questions.

Council thanked her for the report.

Ms. Wescott stated the next step would be the Planning & Zoning hearing to amend the comp plan and a fee hearing at Council.

Council President Buban-Vonder Haar noted in a prior item it was requested to make growth pay for itself and they were trying to do that with the Fire District Impact Fee and with this Police Impact Fee. She supported this and felt that it seemed reasonable.

William F. Gigray, III, legal counsel for the City, clarified this would not be an action item that night and reviewed the process for implementing the impact fee.

Council President Buban-Vonder Haar asked that there be some sort of direction on the agenda for something like this. If they were to approve something else, she would appreciate noting how that should be phrased on the agenda.

Council Member Cardoza asked if the report had to be published.

Mr. Gigray explained the report did not have to published and what was required for the public notice.

Council returned to item 6D.
(Timestamp 02:24:34)

C. Information for Request for Qualifications (RFQ) on the City Website – Bob Bachman, Public Works Director
(Timestamp 02:42:52)

Public Works Director Bob Bachman reviewed the request and stood for questions.

Council Member Cardoza thought they had approved the purchase of some equipment to do a review of building apparatus.

Mr. Bachman explained they purchased a thermal imaging camera which they used to detect heat lose. That was 1 step into tightening up building envelopes. This went much deeper. It would provide a very thorough investigation into energy consumption so they could look to the future and bring projects to Council during budget season. With those projects they should be able to tell them how much energy they expect to save and how much it will cost.

Council Member Cardoza asked if the study would be done by a private contractor or public utilities.

Mr. Bachman replied the study would be done by a private contractor.

Council President Buban-Vonder Haar asked if they needed to make an official motion.

Mr. Bachman was just asking for the blessing of Council to move forward with this. He also wanted to give Carlee Oswald, Energy Conservation Specialist and Public Works Admin, credit for all the hard work she put into this project.

Council gave the go ahead for the RFQ.

Council took a brief recess.
(Timestamp 02:47:15)

D. Consideration to approve Resolution No. R89-2018 – Bobby Withrow, Parks Director ACTION ITEM
(Timestamp 02:53:32)

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO ACKNOWLEDGING CONSENT TO REPRESENTATION, APPROVING AND AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE ON BEHALF OF THE CITY COUNCIL THAT CERTAIN AGREEMENT ENTITLED THE "KUNA JOINT POWERS AND INTERAGENCY COOPERATIVE REPAIR AND MAINTENANCE SERVICES AGREEMENT", DIRECTING THE CITY CLERK, AND SETTING AN EFFECTIVE DATE.

Parks Director Bobby Withrow reviewed the request and stood for questions.

Council Member Cardoza felt that since it was a separate tax entity it opened the door for the library and school district. There were individuals out there that did this for a living. He had a problem with opening the door to do this for other entities.

Mayor Stear replied if it got to the point where it was a burden, they would stop doing it.

Council President Buban-Vonder Haar appreciated the concern but there were things that made this special and should help keep things very limited. She also thought this gave them the flexibility to stop doing it at any point should it become burdensome. Also, just because they said yes to this didn't mean they would have to say yes to everyone else. It seemed to be an appropriate use of the City's time and services because it was so minimal and it was another taxing entity. For them to go out and get this at a private rate would vastly exceed what they would be paying the City. This would be doing the tax payers a solid.

Council Member Christensen asked how long the City had been doing this.

Mr. Withrow replied they had been doing the mowing for about half of that year. They usually tried to help with snow removal in winter time because they had such a large parking lot. It was 1 of the last things they did though.

Council Member Christensen's take on that was this was not anything new for them, it was just publicizing it. If it did become a problem, like Council President Buban-Vonder Haar said, they could stop. He did not have a problem with putting the finances down to it.

Public Works Director Bob Bachman added that the Fire District performed all the City's flow tests. It was just an example of shaking each other's hands and helping each other out.

Council Member McPherson moved to approve Resolution No. R89-2018. Seconded by Council President Buban-Vonder Haar. Motion carried 3-1 Council Member Cardoza voted no.

E. Financial Update – Jared Empey, City Treasurer
(Timestamp 03:02:29)

City Treasurer Jared Empey reviewed some initial results from the prior fiscal year. The results weren't final and were subject to change but should provide a basic snap shot of where the City sat. He noted that although the funds were running cash positive, he wanted Council to consider that there were many capitol improvements projects that were not completed during the last fiscal year that were carrying over to this fiscal year. He also provided by account how things shook out with the budget. Revenue looked good as compared with their projections in both their governmental and enterprise funds. Lastly, cash was also looking pretty solid. He stood for questions.

Mayor Stear mentioned part of the Idaho State Liquor Distribution being absorbed with their agreement to use for court funding projects that came up the previous year. He didn't remember when that started but he thought that was 1 reason they didn't increase that budget from the previous year. It was what Association of Idaho Cities recommended. It was something legislatively that happened to help counties pay for the court house and magistrate services and it settled a law suit.

Mr. Empey thanked him for making him aware of that.

Mayor Stear commented he was very happy to have Mr. Empey on board.

Council thanked Mr. Empey.

8. Ordinances:

A. Consideration to approve Ordinance No. 2018-38 ACTION ITEM
(Timestamp 03:07:45

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO:

- AMENDING SECTION 3 OF CHAPTER 6 OF TITLE 1 OF THE KUNA CITY CODE MAKING A TECHNICAL CORRECTION OF THE IDAHO CODE CITATION TO THE OPEN MEETING LAW; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

Consideration to waive three readings of ordinance
Consideration to approve ordinance
Consideration to approve summary publication

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-38. Seconded by Council Member McPherson. Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-38. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve the Summary Publication of Ordinance No. 2018-38. Seconded by Council Member McPherson. Motion carried 4-0.

B. Consideration to approve Ordinance No. 2018-39 ACTION ITEM
(Timestamp 03:09:12)

A MUNICIPAL REZONE ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA, IDAHO;

- MAKING CERTAIN FINDINGS; AND
- REZONING CERTAIN REAL PROPERTY OWNED BY LOCK-N-ROLL SELF STORAGE LLC SITUATED WITHIN THE CORPORATE LIMITS OF THE CITY OF KUNA, ADA COUNTY, IDAHO TO WIT: PARCEL NO. S1419333400, FROM A (AGRICULTURAL ZONING DISTRICT) TO C-2 (AREA COMMERCIAL ZONING DISTRICT); AND
- AMENDING THE ZONING MAP; AND
- DIRECTING THE CITY ENGINEER AND THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

Consideration to waive three readings of ordinance
Consideration to approve ordinance

Consideration to approve summary publication

Council President Buban-Vonder Haar noted the Planning & Zoning Commission held a public hearing and approved the rezone 2 years prior and Council approved the rezone in January 2017. She asked why the ordinance took so long to get to them.

Planning & Zoning Director Wendy Howell stated it had some how slipped through the cracks.

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-39. Seconded by Council Member McPherson. Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-39. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve the Summary Publication of Ordinance No. 2018-39. Seconded by Council Member McPherson. Motion carried 4-0.

9. Mayor/Council Announcements:

(Timestamp 03:11:49)

Council commented on the number of people who were out voting the night before.

10. Executive Session:

A. Consider motion to conduct an executive session pursuant to:
(Timestamp 03:12:15)

Idaho Code Section 74-206 (1)(f)

(f) To communicate with legal counsel for the public agency to discuss the legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated.

Council President Buban-Vonder Haar moved to conduct an Executive Session Pursuant to Idaho Code 74-206(1)(f) to communicate with legal counsel for the public agency to discuss the legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated. Seconded by Council Member McPherson. Motion carried 4-0.

Mayor Stear indicated he, Council, and William F. Gigray, III, legal counsel for the City, Public Works Director, and City Engineer Paul Stevens would remain for the executive session and that Council President Buban-Vonder Harr would serve as special clerk to take the minutes of the Executive Session.

Executive Session Minutes of November 7, 2018 – The session commenced at 9:15 p.m. with Mayor Stear, members of the City Council, William F. Gigray, III, legal counsel for the City, Public Works Director Bob Bachman, and City Engineer Paul Stevens. Council President Buban-Vonder Haar was appointed as secretary to take the minutes of this executive session. Information was then exchanged among Mayor Stear, members of the City Council, Mr. Gigray, Mr. Bachman, and Mr. Stevens on the subject of the executive session. No action was taken. A motion was then made by Council President Buban-Vonder Haar and seconded by Council Member McPherson to come out of executive session which motion passed unanimously at 9:43 p.m.

Signed By: _____
Briana Buban-Vonder Haar, *Council President*, Secretary of Executive Sessions.

Open session resumed and Mayor Stear reported that information was received in relation to the announced purpose for going into executive session and no action was taken by the Council Members.

***11. Adjournment:* 9:45 P.M.**

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

Minutes prepared by Ariana Welker, Deputy City Clerk
Date Approved: CCM 11.20.2018

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5274
Fax: (208) 922-5989 • www.Kunacity.Id.gov

SIGN-UP SHEET

Wed. November 7, 2018 – Council, Public Hearing

Case Name: Variance Request; Request by J. Scott Dowdy

Case Type: Applicant requests approval to reduce the setback requirements for accessory buildings, from public rights-of-way (ROW) on the street-side of a corner lot. The site is located at northeast corner of Countryside Ave. and W. Oak Tree Dr., 2534 N. Countryside Ave., Kuna, Idaho, within Galiano Estates Subdivision, lot 19, block 1, within Section 14, T2N, R1W, (A.P.N. #'s: R3023310190).

Case No.: 18-02-V - Variance request for 2534 N. Countryside Ave..

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission/Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
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Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip

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PUBLIC HEARING SIGN-UP SHEET

Kuna City Council Meeting 6:00 p.m.
November 7, 2018

Proposed Idaho Department of Commerce Community Development Block Grant (CDBG) Application

And

Resolution No. R86-2018 – JUB Professional Services Agreement for Grant Writing Services

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
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City State, Zip	City State, Zip	City State, Zip
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Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip

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PUBLIC HEARING SIGN-UP SHEET

Kuna City Council Meeting 6:00 p.m.
November 7, 2018

Park Reservation Process & fees
Ordinance No. 2018-37 and Resolution No. R85-2018

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip

IN FAVOR	NEUTRAL	IN OPPOSITION

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5546
Fax: (208) 922-5989 • www.kunacity.id.gov

PUBLIC HEARING SIGN-UP SHEET

Kuna City Council Meeting 6:00 p.m.
November 7, 2018

Dog Licensing & Impound Fees
Ordinance No. 2018-36 and Resolution No. R87-2018

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
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Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip

IN FAVOR	NEUTRAL	IN OPPOSITION

RICHARD H. DEUTSCHE
135 N. Ten Mile Road
Kuna, ID 83634-1203
1-208-922-4360 Hm or 1-208-841-7335 Cell
September 10, 2018

CITY OF KUNA
PLANNING AND ZONING DEPARTMENT
PO Box 13
Kuna, ID 83634

ATTENTION: **18-01-S (Preliminary Plat) – Madrone Heights Sub**

To whom it may concern:
Our property is the 30+ or – Acres just east of Madrone Heights subdivision at Ten Mile Road and Kuna Road.

The main concern we have is the **public access** to my property. At times, there are, at list. 50 to 75 head of cattle on our property. **Public access** will not be suitable.

The proposed road out of the subdivision into our property (approximately 600' north of Kuna Road) **must be blocked off,** with solid fencing as proposed around the whole subdivision. Barb wire and or climbable fencing will be an open invitation for access into our field. At a prior meeting, Mr. Eck and I discussed this very problem. He showed concern and had no problem putting solid fencing across my West boundary until such time my property was developed.

The second concern is the two (2) Green Belt access points out of the north boundary of the subdivision in to Tim Gordon;s property north of Madrone Heights, along the fence line for ¼ mile. We can not demand that the two (2) access points be block-off because they do not adjoin our property. (I have called Mr. Gordon to talk with him about this complication, but he has not called me back to set up a meet time.)

Here in lies the problem. At the north-west corner, beyond our common boundary with Madrone Heights,we have a gate access (approximately a 10' opening) into Gordon's property. At this time, cattle are grazing between Gordon's property and ours. So until these two (2) properties are developed the two (2) access points mentioned above can not be open to the public.

By the way, we own the property to the north from Indian Creek to the U.P. Railroad, and from Ten Mile Road to the west to the Railroad Bridge. From there the Creek travels out of our property to the north-west. In addition, we own the Creek Bed and the Ditch Company has an easement to pass their water through our property.

We keep the access closed from the Railroad Bridge, at the north-west end of our property, as

Read into the record 11/7/2018

EXHIBIT C-5

Troy Behunin

From: Mayor Stear
Sent: Tuesday, August 28, 2018 12:21 PM
To: Wendy Howell; Troy Behunin
Subject: FW: Save our Farms

I received this communication on Madrone Heights that would be considered ex-part' e. So it will need to go with the councils packet when it is heard there.

Thanks

Joe Stear
Mayor of Kuna Idaho

751 W. 4th St.
PO Box 13
Kuna Idaho 83634
www.KunaCity.id.gov
(208) 922.5546

From: Mayor Stear
Sent: Tuesday, August 28, 2018 12:18 PM
To: 'Randy Maurer' <randy.maurer@yahoo.com>
Subject: RE: Save our Farms

Randy Maurer;

I never want to leave an email unanswered. But for future reference it is considered ex-part' e communications for myself or council members to discuss issues such as this that we will be making decisions on in the future. The discussion has to occur in a public forum so that neither party can have an advantage over the other.

If you would like to speak in general terms and not have projects in mind we can do that at some point. I would be happy to talk about impact fees with you.

I will have to make this communication a part of the record for this particular application for when it comes to council.

I would suggest that if you would like you may contact our planning and zoning department with concerns and questions. You just cannot have discussions with elected officials prior to public hearings. Also the time to speak on particular projects is at the public hearing for that project. There are generally 2. The first one is with the Planning and Zoning Commission and the second is with the City Council.

Thank You so much!

7. Fire

8. Parks

9. Libraries

10. Subsidies to keep our farms

11. SMART Planning ahead for growth

12. Other services

I don't want the Treasure Valley to be like the Phoenix metro area. They built to outer edges so it's a large sprawl city surrounded by desert. All the orange groves, vegetable farms are all gone. Subdivisions are everywhere.

IF DEVELOPMENT MUST HAPPEN MAKE ,IT PAY FOR THE RESIDENTS THAT ARE ALREADY HERE.

IMPACT FEES, IMPACT FEES, IMPACT FEES!

Randy Maurer, Native to the Treasure Valley

EXHIBIT
C-6

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5274
Fax: (208) 922-5989 • www.Kunacity.Id.gov

SIGN-UP SHEET

Wed. November 7, 2018 – Council, Public Hearing

Case Name: Pre Plat – Madrone Heights Sub; Request by Kevin McCarthy, KM Eng.

Case Type: Applicant requests approval to subdivide approximately 39.50 acres (previously zoned R-6) into 206 single home lots, an additional 27 common lots, and one shared driveway. A Design Review application for the landscaping for the 27 common lots accompanies this application. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, T 2N, R 1W, APN #: S1322438400.

Case No.: 18-02-S – Preliminary Plat for 206 new Home lots in an R-6 zone.

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission/Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☒ Testify ☐ Not Testify	☒ Testify ☐ Not Testify
Print Name	Cindy Giesen	Nancy Simper
Print Address	1363 S. Ash	4597 West Deer Flat Rd
City State, Zip	Kuna ID 83634	Kuna ID 83634
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
City State, Zip	City State, Zip	City State, Zip

KITTELSON & ASSOCIATES

101 S CAPITOL BOULEVARD, SUITE 301
BOISE, ID 83702
P 208.338.2683 F 208.338.2685

November 6, 2018

Project #: 22609.3

Tim Eck
N Star Farm, LLC
6152 W Half Moon Lane
Eagle, Idaho 83616

RE: Response to Idaho Transportation Department Comments, Development Application 18-02-S

Dear Tim,

After reviewing Idaho Transportation Department (ITD) comments regarding development application 18-02-S, we have provided the following response. As ITD has acknowledged, the Madrone Heights property (18-02-S) does not abut the State highway system or directly access an ITD facility. SH 69 is approximately 1.5 miles east of the property with access via Swan Falls Road or Linder Avenue to Avalon Road/SH 69.

Because the property is not requesting direct access to the State highway system, ITD was not requested to take part in the scope of work for the transportation impact study (TIS) as required by Ada County Highway District (ACHD). The study area for the TIS was determined and verified by ACHD, using a select zone analysis from Community Planning Association of Southwest Idaho's (COMPASS) regional travel demand model for the proposed property.

The select zone analysis estimated that approximately 45 percent of site-generated trips would leave and enter the property to/from the east. However, not all site-generated trips to/from the east would utilize SH 69. Upon full buildout of the site, the select zone analysis projected less than one percent of total vehicle volumes along Avalon Road/SH 69 would comprise of Madrone Heights' site-generated trips, as shown in Attachment A. Because of the negligible increase in trips along SH 69 attributed to the proposed Madrone Heights property, site-generated trips would have little to no impact to existing conditions currently experienced along SH 69.

We trust that this letter provides additional context to comments provided by ITD regarding site-generated trips along SH 69. Please reach out to me with any additional questions or comments.

Sincerely,
KITTELSON & ASSOCIATES, INC.

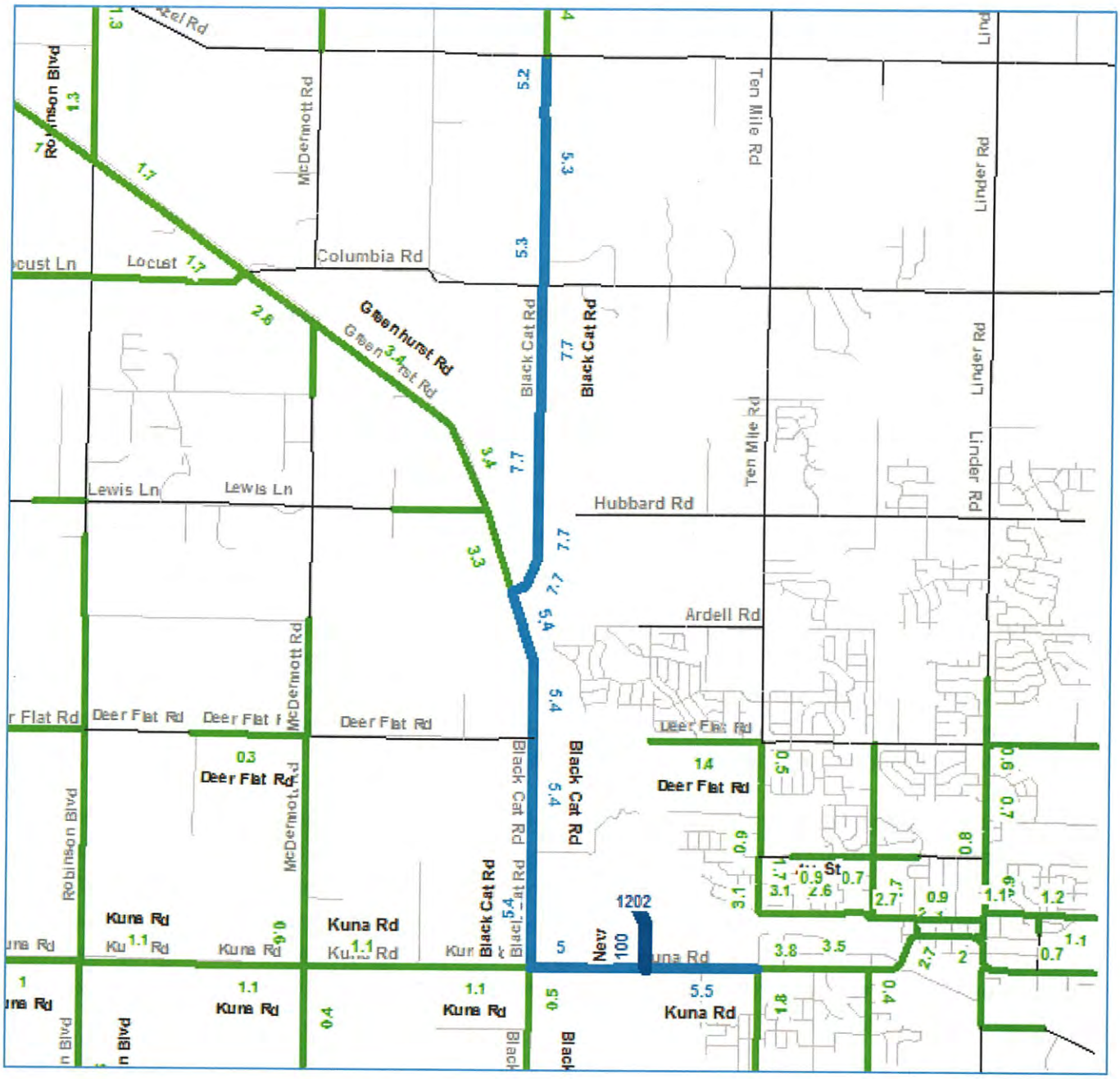
Brett Korporaal
Engineering Associate

FILENAME: H:\22\22609 - URZA FARM SUBDIVISION TIS\STAFF REPORT\RESPONSE TO ITD COMMENT.DOCX

provided to Council and added to record 11/7/18

EXHIBIT C-8

Figure 2: Area of Influence, Peak hour demand contribution to the total peak hour demand for 2022



City of Kuna | Payment Approval Report - City Council Approval | Page: 1
Report dates: 11/2/2018-11/14/2018 | Nov 15, 2018 11:09AM

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
A & D QUALITY HYDROSEEDING, IN												
511	A & D QUALITY HYDROSEEDING, IN	10172018ADH	7711	HYDROSEEDING FOR THE TREATMENT PLANT, J. MORFIN, OCT. ' 18	10/17/2018	111.30	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
511	A & D QUALITY HYDROSEEDING, IN	10172018ADH	7711	HYDROSEEDING FOR THE TREATMENT PLANT, J. MORFIN, OCT. ' 18	10/17/2018	111.30	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
511	A & D QUALITY HYDROSEEDING, IN	10172018ADH	7711	HYDROSEEDING FOR THE TREATMENT PLANT, J. MORFIN, OCT. ' 18	10/17/2018	42.40	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total 10172018ADH:						265.00	.00					
Total A & D QUALITY HYDROSEEDING, IN:						265.00	.00					
ADA COUNTY HIGHWAY DISTRICT (IMPACT)												
5	ADA COUNTY HIGHWAY DISTRICT (IMPACT)	11092018ACH		ACHD IMPACT FEES FOR OCTOBER 2018	11/09/2018	116,600.00	116,600.00	01-2510 ACHD IMPACT FEE TRANSFER	0	11/18	11/09/2018	
Total 11092018ACHD:						116,600.00	116,600.00					
Total ADA COUNTY HIGHWAY DISTRICT (IMPACT):						116,600.00	116,600.00					
ADA COUNTY PROSECUTING ATTORNE												
176	ADA COUNTY PROSECUTING ATTORNE	11142018ACP		PROSECUTORIAL SERVICES OCT & NOV ' 18	11/14/2018	9,261.70	.00	01-6203 PROSECUTORIAL SERVICES	0	11/18		
Total 11142018ACPA:						9,261.70	.00					
Total ADA COUNTY PROSECUTING ATTORNE:						9,261.70	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
ADA COUNTY SHERIFF'S OFFICE												
6	ADA COUNTY SHERIFF'S OFFICE	7966		SHERIFF SERVICES, NOVEMBER 2018	11/01/2018	183,845.78	.00	01-6000 LAW ENFORCEMENT SERVICES	0	11/18		
Total 7966:						183,845.78	.00					
Total ADA COUNTY SHERIFF'S OFFICE:						183,845.78	.00					
AIR FILTER SUPERSTORE WHOLESALE LLC												
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS - NOV.'18 - SENIOR CENTER	11/05/2018	6.36	.00	01-6140 MAINT. & REPAIR BUILDING	1001	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, SADIE WELLHOUSE, NOV.'18	11/05/2018	12.72	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, BUTLER WELLHOUSE, NOV.'18	11/05/2018	12.72	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, CITY HALL, NOV.'18 - ADMIN	11/05/2018	13.94	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, CITY HALL, NOV.'18 - P & Z	11/05/2018	4.98	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, CITY HALL, NOV.'18 - WATER	11/05/2018	12.95	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, CITY HALL, NOV.'18 - SEWER	11/05/2018	12.95	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1876	AIR FILTER SUPERSTORE WHOLESALE LLC	INV4375		FURNACE FILTERS, CITY HALL, NOV.'18 - P.I	11/05/2018	4.98	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total INV4375:						81.60	.00					
Total AIR FILTER SUPERSTORE WHOLESALE LLC:						81.60	.00					
ALLOWAY ELECTRIC CO												
1087	ALLOWAY ELECTRIC CO	46286	7700	REPAIRING LIGHT #1393B, CORNER OF COPPERDALE AND TREEHOUSE, D.CROSSLEY, OCT.'18	11/01/2018	87.06	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1002	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 46286:						87.06	.00					
Total ALLOWAY ELECTRIC CO:						87.06	.00					
ALLSTREAM BUSINESS US, INC												
1411	ALLSTREAM BUSINESS US, INC	15624121		MONTHLY TELEPHONE, DATA, NETWORK, NOV.'18 - ADMIN	11/01/2018	329.83	.00	01-6255 TELEPH0NE	0	11/18		
1411	ALLSTREAM BUSINESS US, INC	15624121		MONTHLY TELEPHONE, DATA, NETWORK, NOV.'18 - P & Z	11/01/2018	117.80	.00	01-6255 TELEPH0NE	1003	11/18		
1411	ALLSTREAM BUSINESS US, INC	15624121		MONTHLY TELEPHONE, DATA, NETWORK, NOV.'18 - WATER	11/01/2018	306.28	.00	20-6255 TELEPH0NE EXPENSE	0	11/18		
1411	ALLSTREAM BUSINESS US, INC	15624121		MONTHLY TELEPHONE, DATA, NETWORK, NOV.'18 - SEWER	11/01/2018	306.28	.00	21-6255 TELEPH0NE EXPENSE	0	11/18		
1411	ALLSTREAM BUSINESS US, INC	15624121		MONTHLY TELEPHONE, DATA, NETWORK, NOV.'18 - P.I	11/01/2018	117.79	.00	25-6255 TELEPH0NE EXPENSE	0	11/18		
Total 15624121:						1,177.98	.00					
Total ALLSTREAM BUSINESS US, INC:						1,177.98	.00					
ANALYTICAL LABORATORIES												
1	ANALYTICAL LABORATORIES	57936		MONTHLY SAMPLES, OCT.'18	10/31/2018	346.75	.00	20-6152 M & R - LABORATORY COSTS	0	11/18		
Total 57936:						346.75	.00					
1	ANALYTICAL LABORATORIES	57937		LAB TESTS, OCT.'18	10/31/2018	3,095.81	.00	21-6152 M & R - LABORATORY COSTS	0	11/18		
Total 57937:						3,095.81	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total ANALYTICAL LABORATORIES:						3,442.56	.00					
APA IDAHO CHAPTER												
580	APA IDAHO CHAPTER	202021-18107		APA CHAPTER DUES FOR PERIOD 1/1/19-12/31/19 - W.HOWELL	10/19/2018	303.24	.00	01-6075 DUES & MEMBERSHIPS	1003	11/18		
580	APA IDAHO CHAPTER	202021-18107		APA CHAPTER DUES FOR PERIOD 1/1/19-12/31/19 - W.HOWELL	10/19/2018	14.90	.00	20-6075 DUES & MEMBERSHIPS	1003	11/18		
580	APA IDAHO CHAPTER	202021-18107		APA CHAPTER DUES FOR PERIOD 1/1/19-12/31/19 - W.HOWELL	10/19/2018	14.90	.00	21-6075 DUES & MEMBERSHIPS	1003	11/18		
580	APA IDAHO CHAPTER	202021-18107		APA CHAPTER DUES FOR PERIOD 1/1/19-12/31/19 - W.HOWELL	10/19/2018	4.96	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	1003	11/18		
Total 202021-18107:						338.00	.00					
Total APA IDAHO CHAPTER:						338.00	.00					
BIG SKY RENTALS LLC												
1846	BIG SKY RENTALS LLC	5870	7718	PROPANE FOR THE WEED BURNER AT THE FARM, R.WARWICK, OCT.'18	10/19/2018	323.75	.00	21-6090 FARM EXPENDITURES	0	11/18		
Total 5870:						323.75	.00					
Total BIG SKY RENTALS LLC:						323.75	.00					
BUREAU OF OCCUPATIONAL LICENSE												
1091	BUREAU OF OCCUPATIONAL LICENSE	11132018IBOL		LICENSE RENEWAL FOR J.MORFIN, #DWD2-22006	11/13/2018	30.00	.00	01-6265 TRAINING & SCH00LING	1004	11/18		
Total 11132018IBOLJM:						30.00	.00					
Total BUREAU OF OCCUPATIONAL LICENSE:						30.00	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
BUYWYZ LLC												
1795	BUYWYZ LLC	128555	7730	INDEX DIVIDERS AND 2 DOZ GEL PENS, T.SHAFFER, NOV.'18 - SEWER	11/01/2018	72.27	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	6 EA FRAMES, 1 BOX LAMINATING SLEEVES, 1 DOZ MEMO BOOKS, D.CROSSLEY, NOV.'18 - WATER	11/01/2018	31.16	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	6 EA FRAMES, 1 BOX LAMINATING SLEEVES, 1 DOZ MEMO BOOKS, D.CROSSLEY, NOV.'18 - SEWER	11/01/2018	31.16	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	6 EA FRAMES, 1 BOX LAMINATING SLEEVES, 1 DOZ MEMO BOOKS, D.CROSSLEY, NOV.'18 - P.I	11/01/2018	11.88	.00	25-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	4 REAMS COLORED PAPER, NOV.'18 - P & Z	11/01/2018	33.96	.00	01-6165 OFFICE SUPPLIES	1003	11/18		
1795	BUYWYZ LLC	128555	7730	4 EA PRINTER CARTRIDGES - YELLOW, CYAN, MAGENTA, BLACK, M.BORZICK, NOV.'18 - WATER	11/01/2018	18.07	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	4 EA PRINTER CARTRIDGES - YELLOW, CYAN, MAGENTA, BLACK, M.BORZICK, NOV.'18 - SEWER	11/01/2018	18.07	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	4 EA PRINTER CARTRIDGES - YELLOW, CYAN, MAGENTA, BLACK, M.BORZICK, NOV.'18 - P.I	11/01/2018	6.88	.00	25-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128555	7730	1 BOX TRASH CAN LINERS, C.OSWALD, NOV.'18 - WATER	11/01/2018	14.67	.00	20-6025 JANITORIAL	0	11/18		
1795	BUYWYZ LLC	128555	7730	1 BOX TRASH CAN LINERS, C.OSWALD, NOV.'18 - SEWER	11/01/2018	14.67	.00	21-6025 JANITORIAL	0	11/18		
1795	BUYWYZ LLC	128555	7730	1 BOX TRASH CAN LINERS, C.OSWALD, NOV.'18	11/01/2018	5.58	.00	25-6025 JANITORIAL	0	11/18		
1795	BUYWYZ LLC	128555		MINT CANDY FOR CUSTOMER SERVICE, NOV.'18	11/01/2018	3.15	.00	01-6165 OFFICE SUPPLIES	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 128555:						261.52	.00					
1795	BUYWYZ LLC	128555.1	7730	1 EA WORKFORCE PRINTER, T.SHAFFER, NOV.'18 - SEWER	11/05/2018	79.99	.00	21-6175 SMALL TOOLS	0	11/18		
Total 128555.1:						79.99	.00					
1795	BUYWYZ LLC	128980	7767	1 EA.CD/DVD WALLET, T.FLEMING, NOV.'18	11/07/2018	32.79	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA 4-DRAWER FILE CABINET, T.SHAFFER, NOV.'18	11/07/2018	225.50	.00	21-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA 4-DRAWER FILE CABINET, UTILITY BILLING, NOV.'18 - ADMIN	11/07/2018	56.38	.00	01-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA 4-DRAWER FILE CABINET, UTILITY BILLING, NOV.'18 - WATER	11/07/2018	74.41	.00	20-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA 4-DRAWER FILE CABINET, UTILITY BILLING, NOV.'18 - SEWER	11/07/2018	74.41	.00	21-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA 4-DRAWER FILE CABINET, UTILITY BILLING, NOV.'18 - P.I	11/07/2018	20.30	.00	25-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA WALL CALENDAR, 1 BOX CLASP ENVELOPES, NOV.'18	11/07/2018	32.70	.00	01-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA WALL CALENDAR, 1 BOX CLASP ENVELOPES, NOV.'18	11/07/2018	.84	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA WALL CALENDAR, 1 BOX CLASP ENVELOPES, NOV.'18	11/07/2018	.84	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 EA WALL CALENDAR, 1 BOX CLASP ENVELOPES, NOV.'18	11/07/2018	.41	.00	25-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 DOZ GEL PENS, P.STEVENS, NOV.'18	11/07/2018	2.88	.00	01-6165 OFFICE SUPPLIES	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1795	BUYWYZ LLC	128980	7767	1 DOZ GEL PENS, P.STEVENS, NOV.'18	11/07/2018	3.81	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 DOZ GEL PENS, P.STEVENS, NOV.'18	11/07/2018	3.81	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	1 DOZ GEL PENS, P.STEVENS, NOV.'18	11/07/2018	1.03	.00	25-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980	7767	2 BOXES HANGING FILE FOLDERS, NOV.'18 - PARKS	11/07/2018	14.42	.00	01-6165 OFFICE SUPPLIES	1004	11/18		
1795	BUYWYZ LLC	128980	7767	MINT CANDIES FOR CUSTOMER SERVICE, NOV.'18	11/07/2018	3.15	.00	01-6165 OFFICE SUPPLIES	0	11/18		
Total 128980:						547.68	.00					
1795	BUYWYZ LLC	128980.1	7767	1 EA PRINTER CABLE, T.SHAFFER, NOV.'18	11/09/2018	15.79	.00	21-6175 SMALL TOOLS	0	11/18		
1795	BUYWYZ LLC	128980.1	7767	1 BOX AA BATTERIES, NOV.'18	11/09/2018	13.34	.00	01-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980.1	7767	1 EA WALL CALENDAR, NOV.'18 - CLERKS	11/09/2018	10.38	.00	01-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980.1	7767	1 EA WALL CALENDAR, NOV.'18 - CLERKS	11/09/2018	.27	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980.1	7767	1 EA WALL CALENDAR, NOV.'18 - CLERKS	11/09/2018	.27	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1795	BUYWYZ LLC	128980.1	7767	1 EA WALL CALENDAR, NOV.'18 - CLERKS	11/09/2018	.12	.00	25-6165 OFFICE SUPPLIES	0	11/18		
Total 128980.1:						40.17	.00					
Total BUYWYZ LLC:						929.36	.00					
CASELLE INC												
1239	CASELLE INC	90964		2019 IRRIGATION SERVICES (14 HOURS @ $145/HR)	10/30/2018	2,030.00	.00	25-6202 PROFESSIONAL SERVICES	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 90964:						2,030.00	.00					
Total CASELLE INC:						2,030.00	.00					
CENTURYLINK												
62	CENTURYLINK	11072018C		DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 11/7-12/6/18 - ADMIN	11/07/2018	13.58	.00	01-6255 TELEPH0NE	0	11/18		
62	CENTURYLINK	11072018C		DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 11/7-12/06/18 - P & Z	11/07/2018	4.85	.00	01-6255 TELEPH0NE	1003	11/18		
62	CENTURYLINK	11072018C		DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 11/7-12/6/18 - WATER	11/07/2018	12.61	.00	20-6255 TELEPH0NE EXPENSE	0	11/18		
62	CENTURYLINK	11072018C		DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 11/7-12/06/18 - SEWER	11/07/2018	12.61	.00	21-6255 TELEPH0NE EXPENSE	0	11/18		
62	CENTURYLINK	11072018C		DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 11/7-12/06/18 - P.I	11/07/2018	4.84	.00	25-6255 TELEPH0NE EXPENSE	0	11/18		
Total 11072018C:						48.49	.00					
62	CENTURYLINK	208922113610		DEDICATED LANDLINE SCADA, 10/25-11/24/18 - WATER	11/09/2018	19.77	19.77	20-6255 TELEPH0NE EXPENSE	0	11/18	11/09/2018	
62	CENTURYLINK	208922113610		DEDICATED LANDLINE SCADA, 10/25-11/24/18 - SEWER	11/09/2018	19.77	19.77	21-6255 TELEPH0NE EXPENSE	0	11/18	11/09/2018	
62	CENTURYLINK	208922113610		DEDICATED LANDLINE SCADA, 10/25-11/24/18 - P.I	11/09/2018	7.54	7.54	25-6255 TELEPH0NE EXPENSE	0	11/18	11/09/2018	
Total 20892211361025112418:						47.08	47.08					
Total CENTURYLINK:						95.57	47.08					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
CITIBANK, N.A.												
1874	CITIBANK, N.A.	200077605	7666	WINTER JACKET, AND RAIN GEAR FOR S. JONES, M. MEADE, OCT '18 - PARKS	10/04/2018	214.96	.00	01-6285 UNIF0RMS	1004	11/18		
Total 200077605:						214.96	.00					
Total CITIBANK, N.A.:						214.96	.00					
CITY OF BOISE												
571	CITY OF BOISE	336		FY 2019 CONTRIBUTION FOR ALLUMBAUGH HOUSE	10/29/2018	3,087.00	.00	01-6045 C0NTINGENCY	0	11/18		
Total 336:						3,087.00	.00					
Total CITY OF BOISE:						3,087.00	.00					
CORE & MAIN LP												
63	CORE & MAIN LP	J592002	7652	PULLOVER SWEATSHIRTS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	135.87	.00	20-6285 UNIF0RMS EXPENSE	0	11/18		
63	CORE & MAIN LP	J592002	7652	PULLOVER SWEATSHIRTS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	135.87	.00	21-6285 UNIF0RMS EXPENSE	0	11/18		
63	CORE & MAIN LP	J592002	7652	PULLOVER SWEATSHIRTS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	51.77	.00	25-6285 UNIF0RMS EXPENSE	0	11/18		
63	CORE & MAIN LP	J592002	7652	2 IN 1 CLASS III SAFETY BOMBER JACKETS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	224.81	.00	20-6285 UNIF0RMS EXPENSE	0	11/18		
63	CORE & MAIN LP	J592002		2 IN 1 CLASS III SAFETY BOMBER JACKETS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	224.81	.00	21-6285 UNIF0RMS EXPENSE	0	11/18		
63	CORE & MAIN LP	J592002		2 IN 1 CLASS III SAFETY BOMBER JACKETS FOR WATER AND SEWER CREWS, C.OSWALD, NOV.'18	11/07/2018	85.65	.00	25-6285 UNIF0RMS EXPENSE	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total J592002:						858.78	.00					
63	CORE & MAIN LP	J665879	7724	28 METERS 3/4 IN. AND REGISTERS, B. BURR, OCT. '18	10/23/2018	7,596.96	.00	20-6020 CAPITAL IMPR0VEMENTS	1089	11/18		
Total J665879:						7,596.96	.00					
63	CORE & MAIN LP	J714130	7755	10 SEALED BEARINGS, FOR MAINTENANCE ON PI STATIONS, B. BURR, NOV. '18	11/06/2018	3,851.90	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	11/18		
Total J714130:						3,851.90	.00					
63	CORE & MAIN LP	J737570	7756	LIDS AND RINGS, B.BURR, NOV.'18	11/06/2018	1,844.16	.00	20-6020 CAPITAL IMPR0VEMENTS	0	11/18		
Total J737570:						1,844.16	.00					
63	CORE & MAIN LP	J740327	7743	4 MAIN VALVE SEATS, LOWER AND UPPER VALVE PLATES AND STANDARD METER SET KEY, B.WITHROW, NOV.'18 - WATER	11/01/2018	683.87	.00	20-6150 M & R - SYSTEM	0	11/18		
Total J740327:						683.87	.00					
Total CORE & MAIN LP:						14,835.67	.00					
D & B SUPPLY												
75	D & B SUPPLY	343199001		1" POLY STRAINER, M.NADEAU, NOV.'18	11/02/2018	34.99	.00	21-6150 M & R - SYSTEM	0	11/18		
Total 343199001:						34.99	.00					
Total D & B SUPPLY:						34.99	.00					
DIGLINE												

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
25	DIGLINE	0059147-IN		DIG FEES, OCTOBER 2018	10/31/2018	251.10	.00	20-6065 DIG LINE EXPENSE	0	11/18		
25	DIGLINE	0059147-IN		DIG FEES, OCTOBER 2018 - SEWER	10/31/2018	251.10	.00	21-6065 DIG LINE EXPENSE	0	11/18		
25	DIGLINE	0059147-IN		DIG FEES, OCTOBER 2018 - P.I	10/31/2018	95.66	.00	25-6065 DIG LINE EXPENSE	0	11/18		
Total 0059147-IN:						597.86	.00					
Total DIGLINE:						597.86	.00					
DMH ENTERPRISES												
1745	DMH ENTERPRISES	11092018DMH		PLUMBING PERMITS - OCTOBER 2018	11/09/2018	7,886.66	7,886.66	01-6202 PR0FESSI0NAL SERVICES	1003	11/18	11/09/2018	
Total 11092018DMH:						7,886.66	7,886.66					
Total DMH ENTERPRISES:						7,886.66	7,886.66					
DUBOIS CHEMICALS INC												
512	DUBOIS CHEMICALS INC	IN-1772447	7744	POLYMER, T.SHAFFER, OCT.'18	11/12/2018	2,362.50	.00	21-6150 M & R - SYSTEM	0	11/18		
Total IN-1772447:						2,362.50	.00					
Total DUBOIS CHEMICALS INC:						2,362.50	.00					
ED STAUB & SONS PETROLEUM, INC												
1731	ED STAUB & SONS PETROLEUM, INC	N68612-IN		PROPANE REFILL FOR THE SHORTLINE SHOP, NOV.'18 - PARKS	11/08/2018	148.44	.00	01-6290 UTILITIES	1004	11/18		
1731	ED STAUB & SONS PETROLEUM, INC	N68612-IN		PROPANE REFILL FOR THE SHORTLINE SHOP, NOV.'18 - WATER	11/08/2018	125.95	.00	20-6290 UTILITIES EXPENSE	0	11/18		
1731	ED STAUB & SONS PETROLEUM, INC	N68612-IN		PROPANE REFILL FOR THE SHORTLINE SHOP, NOV.'18 - SEWER	11/08/2018	121.45	.00	21-6290 UTILITIES EXPENSE	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1731	ED STAUB & SONS PETROLEUM, INC	N68612-IN		PROPANE REFILL FOR THE SHORTLINE SHOP, NOV.'18 - P.I	11/08/2018	53.98	.00	25-6290 UTILITIES EXPENSE	0	11/18		
Total N68612-IN:						449.82	.00					
Total ED STAUB & SONS PETROLEUM, INC:						449.82	.00					
ELECTRICAL CONTROLS & INSTRUMENTATION												
1744	ELECTRICAL CONTROLS & INSTRUMENTATION	11092018ECI		ELECTRICAL PERMITS - OCTOBER 2018	11/09/2018	10,341.97	10,341.97	01-6202 PR0FESSI0NAL SERVICES	1003	11/18	11/09/2018	
Total 11092018ECI:						10,341.97	10,341.97					
Total ELECTRICAL CONTROLS & INSTRUMENTATION:						10,341.97	10,341.97					
FATBEAM LLC												
1831	FATBEAM LLC	6838		INTERNET SERVICES FOR NOVEMBER 2018 - ADMIN	11/01/2018	95.00	.00	01-6052 CONTRACT SERVICES	0	11/18		
1831	FATBEAM LLC	6838		INTERNET SERVICES FOR NOVEMBER 2018 - WATER	11/01/2018	65.00	.00	20-6052 CONTRACT SERVICES	0	11/18		
1831	FATBEAM LLC	6838		INTERNET SERVICES FOR NOVEMBER 2018 - SEWER	11/01/2018	65.00	.00	21-6052 C0NTRACT SERVICES	0	11/18		
1831	FATBEAM LLC	6838		INTERNET SERVICES FOR NOVEMBER 2018 - P.I	11/01/2018	25.00	.00	25-6052 C0NTRACT SERVICES	0	11/18		
Total 6838:						250.00	.00					
Total FATBEAM LLC:						250.00	.00					
FERGUSON ENTERPRISES INC												
219	FERGUSON ENTERPRISES INC	0697350	7681	REPLACEMENT HYDRANT PARTS FOR TEED AND HUBBARD, D. CROSSLEY, OCT								

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
				'18	10/23/2018	569.55	.00	20-6166 PP&E PURCHASES OPERATIONS	0	11/18		
Total 0697350:						569.55	.00					
219	FERGUSON ENTERPRISES INC	0698824		REPAIRED GATES AT THE LAGOONS, T.SHAFFER, OCT.'18	10/22/2018	2,250.00	.00	21-6150 M & R - SYSTEM	0	11/18		
Total 0698824:						2,250.00	.00					
219	FERGUSON ENTERPRISES INC	0699655	7747	1 EA TAPPING SADDLE, 1 EA 2" BALL CORP, 1 EA 8"X 17 1/8" S FLANGE SPOOL PIECE, 2 EA GASKET SET, FOR CHLORINE INJECTION UPGRADE AT DANSKIN WELL, C. DE YOUNG, OCT. '18	10/31/2018	646.22	.00	20-6150 M & R - SYSTEM	0	11/18		
Total 0699655:						646.22	.00					
219	FERGUSON ENTERPRISES INC	CM055952		CREDIT MEMO, RETURNED 5 METERS, B.BURR, OCT.'18	10/01/2018	-680.00	.00	20-6150 M & R - SYSTEM	0	11/18		
Total CM055952:						-680.00	.00					
Total FERGUSON ENTERPRISES INC:						2,785.77	.00					
H.D. FOWLER COMPANY												
1552	H.D. FOWLER COMPANY	I4989121	7706	NOZZLES FOR TREATMENT PLANT, M. MEADE, OCT. '18 - WATER	10/17/2018	19.20	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1552	H.D. FOWLER COMPANY	I4989121	7706	NOZZLES FOR TREATMENT PLANT, M. MEADE, OCT. '18 - SEWER	10/17/2018	19.20	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1552	H.D. FOWLER COMPANY	I4989121	7706	NOZZLES FOR TREATMENT PLANT, M. MEADE, OCT. '18 - P.I	10/17/2018	7.30	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total I4989121:						45.70	.00					
1552	H.D. FOWLER COMPANY	I4990832	7715	SPRINKLER AND NOZZLES FOR TREATMENT PLANT, M.MEADE, OCT.'18 - WATER	10/18/2018	84.42	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1552	H.D. FOWLER COMPANY	I4990832	7715	SPRINKLER AND NOZZLES FOR TREATMENT PLANT, M.MEADE, OCT.'18 - SEWER	10/18/2018	84.42	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1552	H.D. FOWLER COMPANY	I4990832	7715	SPRINKLER AND NOZZLES FOR TREATMENT PLANT, M.MEADE, OCT.'18 - P.I	10/18/2018	32.16	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total I4990832:						201.00	.00					
1552	H.D. FOWLER COMPANY	I4994267	7723	PLASTIC GRATE FOR THE WALL DRAIN, J.MORFIN - SPLASH PAD	10/22/2018	27.44	.00	40-6020 CAPITAL IMPROVEMENTS	1067	11/18		
Total I4994267:						27.44	.00					
Total H.D. FOWLER COMPANY:						274.14	.00					
IDAHO HUMANE SOCIETY												
833	IDAHO HUMANE SOCIETY	10/2018		CONTRACT SERVICES OCTOBER 2018	10/31/2018	5,833.33	.00	01-6005 ANIMAL CONTROL SERVICES	0	11/18		
Total 10/2018:						5,833.33	.00					
Total IDAHO HUMANE SOCIETY:						5,833.33	.00					
IDAHO POWER CO												
38	IDAHO POWER CO	11132018I		ELECTRIC SERVICE FOR OCTOBER 2018 - P.I	11/13/2018	124.40	.00	25-6290 UTILITIES EXPENSE	0	11/18		
38	IDAHO POWER CO	11132018I		ELECTRIC SERVICE FOR OCTOBER 2018 - STREET LIGHTS	11/13/2018	1.10	.00	01-6290 UTILITIES	1002	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 11132018I:						125.50	.00					
Total IDAHO POWER CO:						125.50	.00					
IDAHO PRESS TRIBUNE, LLC												
1802	IDAHO PRESS TRIBUNE, LLC	1132951	7721	AD#S 1827286 & 1827303, LEGAL PUBLICATION, PUBLIC HEARING NOTICE, PRE APPLICATION, DOG AND PARK LICENSE FEES, A. WELKER, OCT. '18	10/31/2018	292.90	.00	01-6125 LEGAL PUBLICATI0NS	1004	11/18		
1802	IDAHO PRESS TRIBUNE, LLC	1132951	7733	AD#1829935, LEGAL NOTICE, LUGARNO TERRA, J. HELLMAN, OCT. '18	10/31/2018	63.46	.00	01-6125 LEGAL PUBLICATI0NS	1003	11/18		
1802	IDAHO PRESS TRIBUNE, LLC	1132951	7735	AD# 1829921, LEGAL NOTICE, WHISPER MEADOWS PRE PLAT, T. BEHUNIN, OCT. '18	10/31/2018	53.84	.00	01-6125 LEGAL PUBLICATI0NS	1003	11/18		
1802	IDAHO PRESS TRIBUNE, LLC	1132951		AD#1827294, LEGAL NOTICE, GRANT ACTION, OCT.'18	10/31/2018	155.42	.00	01-6125 LEGAL PUBLICATI0NS	0	11/18		
Total 1132951:						565.62	.00					
1802	IDAHO PRESS TRIBUNE, LLC	1133988	7748	AD#1832411, LEGAL POSTING, LETE COMMERCIAL SUB, 18-05 -S, J.HELLMAN, OCT.'18	11/08/2018	50.88	.00	01-6125 LEGAL PUBLICATI0NS	1003	11/18		
1802	IDAHO PRESS TRIBUNE, LLC	1133988	7753	AD#1832909, LEGAL NOTICE, 18-03-V, DESERT HAWK #4, FOR COUNCIL, T. BEHUNIN, OCT. '18	11/08/2018	50.88	.00	01-6125 LEGAL PUBLICATI0NS	1003	11/18		
Total 1133988:						101.76	.00					
Total IDAHO PRESS TRIBUNE, LLC:						667.38	.00					
INTEGRINET SOLUTIONS, INC.												
1595	INTEGRINET SOLUTIONS, INC.	110597		PRINTER AND EMAIL SET UP FOR M.BORZICK, OCT.'18 - WATER	10/28/2018	147.84	.00	20-6142 MAINT. & REPAIRS-EQUIPMENT	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1595	INTEGRINET SOLUTIONS, INC.	110597		PRINTER AND EMAIL SET UP FOR M.BORZICK, OCT.'18 - SEWER	10/28/2018	147.84	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		PRINTER AND EMAIL SET UP FOR M.BORZICK, OCT.'18 - P.I	10/28/2018	56.32	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		ADDITIONAL LABOR FOR FIXING M.BORZICK'S PRINTER AND COMPUTER SET UP IN CLERK'S OFFICE, OCT.'18 - WATER	10/28/2018	36.96	.00	20-6142 MAINT. & REPAIRS- EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		ADDITIONAL LABOR FOR FIXING M.BORZICK'S PRINTER AND COMPUTER SET UP IN CLERKS OFFICE, OCT.'18 - SEWER	10/28/2018	36.96	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		ADDITIONAL LABOR FOR FIXING M.BORZICK'S PRINTER AND COMPUTER SET UP IN CLERKS OFFICE, OCT.'18	10/28/2018	14.08	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		EMAIL SET UP FOR K.DUTRA'S QUARANTINED EMAILS, OCT.'18	10/28/2018	11.00	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		EMAIL SET UP FOR K.DUTRA'S QUARANTINED EMAILS, OCT.'18	10/28/2018	14.52	.00	20-6142 MAINT. & REPAIRS- EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		EMAIL SET UP FOR K.DUTRA'S QUARANTINED EMAILS, OCT.'18	10/28/2018	14.52	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110597		EMAIL SET UP FOR K.DUTRA'S QUARANTINED EMAILS, OCT.'18	10/28/2018	3.96	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
Total 110597:						484.00	.00					
1595	INTEGRINET SOLUTIONS, INC.	110686		VGA ADAPTER FOR A.WELKER'S COMPUTER, OCT.'18	10/30/2018	19.00	.00	01-6175 SMALL TOOLS	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 110686:						19.00	.00					
1595	INTEGRINET SOLUTIONS, INC.	110707		MAPPED/DOCUMENTED NETWORK & DEVICES, MOVED MAILBOXES TO NEW DATABASE TO CLEAR D DRIVE SPACE, J.SNOW, OCT.'18	10/31/2018	130.59	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110707		MAPPED/DOCUMENTED NETWORK & DEVICES, MOVED MAILBOXES TO NEW DATABASE TO CLEAR C DRIVE SPACE, J.SNOW, OCT.'18 - P & Z	10/31/2018	46.64	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1003	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110707		MAPPED/DOCUMENTED NETWORK & DEVICES, MOVED MAILBOXES TO NEW DATABASE TO CLEAR C DRIVE SPACE, J.SNOW, OCT.'18 - WATER	10/31/2018	121.26	.00	20-6142 MAINT. & REPAIRS- EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110707		MAPPED/DOCUMENTED NETWORK & DEVICES, MOVED MAILBOXES TO NEW DATABASE TO CLEAR C DRIVE SPACE, J.SNOW, OCT.'18 - SEWER	10/31/2018	121.26	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110707		MAPPED/DOCUMENTED NETWORK & DEVICES, MOVED MAILBOXES TO NEW DATABASE TO CLEAR C DRIVE SPACE, J.SNOW, OCT.'18 - P.I	10/31/2018	46.65	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
Total 110707:						466.40	.00					
1595	INTEGRINET SOLUTIONS, INC.	110766		CLEANED UP DISK SPACE ON CITY HALL AND PLANT SERVERS, J.SNOW, NOV.'18 - ADMIN	11/04/2018	40.32	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110766		CLEANED UP DISK SPACE ON CITY HALL AND PLANT SERVERS, J.SNOW, NOV.'18 - P & Z	11/04/2018	14.40	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1003	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1595	INTEGRINET SOLUTIONS, INC.	110766		CLEANED UP DISK SPACE ON CITY HALL AND PLANT SERVERS, J.SNOW, NOV.'18 - WATER	11/04/2018	37.44	.00	20-6142 MAINT. & REPAIRS-EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110766		CLEANED UP DISK SPACE ON CITY HALL AND PLANT SERVERS, J.SNOW, NOV.'18 - SEWER	11/04/2018	37.44	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1595	INTEGRINET SOLUTIONS, INC.	110766		CLEANED UP DISK SPACE ON CITY HALL AND PLANT SERVERS, J.SNOW, NOV.'18 - P.I	11/04/2018	14.40	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
Total 110766:						144.00	.00					
Total INTEGRINET SOLUTIONS, INC.:						1,113.40	.00					
INTERMOUNTAIN GAS CO												
37	INTERMOUNTAIN GAS CO	482195000092		NATURAL GAS CONSUMPTION AT THE TREATMENT PLANT, 9/28-10/25/18 - WATER	11/09/2018	136.14	136.14	20-6290 UTILITIES EXPENSE	0	11/18	11/09/2018	
37	INTERMOUNTAIN GAS CO	482195000092		NATURAL GAS CONSUMPTION AT THE TREATMENT PLANT, 9/28-10/25/18 - SEWER	11/09/2018	136.14	136.14	21-6290 UTILITIES EXPENSE	0	11/18	11/09/2018	
37	INTERMOUNTAIN GAS CO	482195000092		NATURAL GAS CONSUMPTION AT THE TREATMENT PLANT, 9/28-10/25/18 - P.I	11/09/2018	51.87	51.87	25-6290 UTILITIES EXPENSE	0	11/18	11/09/2018	
Total 4821950000928102518:						324.15	324.15					
Total INTERMOUNTAIN GAS CO:						324.15	324.15					
J & M SANITATION, INC.												
230	J & M SANITATION, INC.	10262018-110		SANITATION RECEIPT TRANSFER 10/26/2018-11/01/2018	11/02/2018	11,741.07	11,741.07	26-7000 SOLID WASTE SERVICE FEES	0	11/18	11/02/2018	
230	J & M SANITATION, INC.	10262018-110		SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES, 10/26/18-11/01/2018	11/02/2018	-1,160.02	-1,160.02	01-4170 FRANCHISE FEES	0	11/18	11/02/2018	

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 10262018-11012018:						10,581.05	10,581.05					
230	J & M SANITATION, INC.	10312018JM		SLUDGE REMOVAL/DISPOSAL, OCT.'18	10/31/2018	2,880.00	.00	21-6153 M & R - SLUDGE DISPOSAL	0	11/18		
Total 10312018JM:						2,880.00	.00					
230	J & M SANITATION, INC.	11022018-110		SANITATION RECEIPT TRANSFER 11/02-08/18	11/09/2018	49,294.30	49,294.30	26-7000 SOLID WASTE SERVICE FEES	0	11/18	11/09/2018	
230	J & M SANITATION, INC.	11022018-110		SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES, 11/02-08/18	11/09/2018	-4,870.28	-4,870.28	01-4170 FRANCHISE FEES	0	11/18	11/09/2018	
Total 11022018-11082018:						44,424.02	44,424.02					
Total J & M SANITATION, INC.:						57,885.07	55,005.07					
KUNA LUMBER												
499	KUNA LUMBER	A103090	7749	SPRINKLER REPAIR PVC PARTS NIPPLES AND COUPLINGS, J. OSBORN, OCT. '18	11/01/2018	4.09	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	11/18		
Total A103090:						4.09	.00					
499	KUNA LUMBER	A103208	7762	INSULATION TAPE FOR IRRIGATION PITS, M.MEADE, NOV.'18	11/06/2018	50.18	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	11/18		
Total A103208:						50.18	.00					
499	KUNA LUMBER	B119176	7682	GALLON OF BUG SPRAY FOR LIFT STATIONS, R. WARWICK, OCT. '18	10/09/2018	8.09	.00	21-6150 M & R - SYSTEM	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total B119176:						8.09	.00					
499	KUNA LUMBER	B119904	7737	PAIR OF PLIERS FOR LAGOONS, R. WARWICK, OCT. '18	10/29/2018	10.79	.00	21-6175 SMALL TOOLS	0	11/18		
Total B119904:						10.79	.00					
499	KUNA LUMBER	B120012	7745	BOX CUTTER AND BLADES, R.DAVILA, OCT.'18	10/31/2018	6.73	.00	21-6175 SMALL TOOLS	0	11/18		
Total B120012:						6.73	.00					
499	KUNA LUMBER	B120170	7754	HOLE PUNCHES FOR BOISE ST. HYDRANT PROJECT, J.OSBORN, NOV.'18	11/05/2018	9.25	.00	20-6175 SMALL TOOLS	0	11/18		
Total B120170:						9.25	.00					
499	KUNA LUMBER	B120215	7763	8 ROLLS OF TEFLON TAPE, B. BURR, NOV. '18 - WATER	11/06/2018	5.70	.00	20-6150 M & R - SYSTEM	0	11/18		
499	KUNA LUMBER	B120215	7763	8 ROLLS OF TEFLON TAPE, B. BURR, NOV. '18 - P.I	11/06/2018	1.43	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	11/18		
Total B120215:						7.13	.00					
499	KUNA LUMBER	B120435	7772	4 EA BOLTS AND 2 EA NUTS, FOR FIXING CHECK VALVES AT ORCHARD LIFT STATION, T.FLEMING, NOV.'18	11/13/2018	2.50	.00	21-6150 M & R - SYSTEM	0	11/18		
Total B120435:						2.50	.00					
Total KUNA LUMBER:						98.76	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
KUNA MACHINE LLC												
1775	KUNA MACHINE LLC	2851	7655	GUIDE RAIL FOR THE VALVES WELDED FOR THE LAGOONS, R.DAVILA, OCT.'18	10/02/2018	22.50	.00	21-6090 FARM EXPENDITURES	0	11/18		
Total 2851:						22.50	.00					
Total KUNA MACHINE LLC:						22.50	.00					
KUNA RURAL FIRE DISTRICT (IMPACT)												
1944	KUNA RURAL FIRE DISTRICT (IMPACT)	11092018KRF		KRFD IMPACT FEE TRANSFER - OCTOBER 2018	11/09/2018	31,542.00	31,542.00	01-2511 KRFD IMPACT FEE TRANSFER	0	11/18	11/09/2018	
1944	KUNA RURAL FIRE DISTRICT (IMPACT)	11092018KRF		KRFD IMPACT FEES LESS ADMIN FEES - OCTOBER 2018	11/09/2018	-270.00	-270.00	01-4155 ADMINISTRATI0N SERVICES	0	11/18	11/09/2018	
Total 11092018KRFDI:						31,272.00	31,272.00					
Total KUNA RURAL FIRE DISTRICT (IMPACT):						31,272.00	31,272.00					
KUNA RURAL FIRE DISTRICT (PLAN REVIEW)												
1945	KUNA RURAL FIRE DISTRICT (PLAN REVIEW)	11092018KRF		KRFD PLAN REVIEW FEES TRANSFER - OCTOBER 2018	11/09/2018	253.74	253.74	01-2512 KRFD PLAN REVIEW FEE TRANSFER	0	11/18	11/09/2018	
1945	KUNA RURAL FIRE DISTRICT (PLAN REVIEW)	11092018KRF		KRFD PLAN REVIEW FEES LESS ADMIN FEE - OCTOBER 2018	11/09/2018	-3.50	-3.50	01-4155 ADMINISTRATI0N SERVICES	0	11/18	11/09/2018	
Total 11092018KRFDPR:						250.24	250.24					
Total KUNA RURAL FIRE DISTRICT (PLAN REVIEW):						250.24	250.24					
KUNA WELDING												
46	KUNA WELDING	4510	7674	FABRICATED NEW VENT, R.DAVILA, OCT.'18	10/04/2018	347.62	.00	21-6150 M & R - SYSTEM	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 4510:						347.62	.00					
46	KUNA WELDING	4535	7696	WELDED METER RING FABRICATION, B. BURR, OCT. '18	10/12/2018	88.84	.00	20-6150 M & R - SYSTEM	0	11/18		
Total 4535:						88.84	.00					
Total KUNA WELDING:						436.46	.00					
LOCAHAN LLC												
1619	LOCAHAN LLC	AR686179		MONTHLY COPY CARE INCLUDING PARTS, LABOR, AND TONER, MODEL #MPC4504EX, SERIAL #S C737M540155 & C737M540938, NOV.'18 - ADMIN	11/05/2018	99.53	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	0	11/18		
1619	LOCAHAN LLC	AR686179		MONTHLY COPY CARE INCLUDING PARTS, LABOR, AND TONER, MODEL#MPC4504EX, SERIAL #S C737M540155 & C737M540938, NOV.'18 - P & Z	11/05/2018	35.55	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1003	11/18		
1619	LOCAHAN LLC	AR686179		MONTHLY COPY CARE INCLUDING PARTS, LABOR, AND TONER, MODEL #MPC4504EX, SERIAL #S C737M540155 & C737M540938, NOV.'18 - WATER	11/05/2018	92.43	.00	20-6142 MAINT. & REPAIRS- EQUIPMENT	0	11/18		
1619	LOCAHAN LLC	AR686179		MONTHLY COPY CARE INCLUDING PARTS, LABOR, AND TONER, MODEL #MPC4504EX, SERIAL #S C737M540155 & C737M540938, NOV.'18 - SEWER	11/05/2018	92.43	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1619	LOCAHAN LLC	AR686179		MONTHLY COPY CARE INCLUDING PARTS, LABOR, AND TONER, MODEL #MPC4504EX, SERIAL #S C737M540155 & C737M540938, NOV.'18 - P.I	11/05/2018	35.54	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total AR686179:						355.48	.00					
Total LOCAHAN LLC:						355.48	.00					
MATHESON TRI-GAS INC												
1871	MATHESON TRI-GAS INC	18564952		REOCCURING TANK RENTAL, OCT.'18	10/31/2018	30.90	.00	21-6212 RENT-EQUIPMENT	0	11/18		
Total 18564952:						30.90	.00					
Total MATHESON TRI-GAS INC:						30.90	.00					
MISCELLANEOUS VENDORS 2												
1849	MISCELLANEOUS VENDORS 2	11022018WH		REIMBURSEMENT FOR PARKING, APA CONFERENCE, W.HOWELL, OCT.'18	11/02/2018	101.20	.00	01-6265 TRAINING & SCH00LING	1003	11/18		
Total 11022018WH:						101.20	.00					
1849	MISCELLANEOUS VENDORS 2	11032018RJ		REIMBURSEMENT FOR REGISTRATION/LICENSURE, R.JONES, NOV.'18 - WATER	11/03/2018	93.60	.00	20-6075 DUES & MEMBERSHIPS	0	11/18		
1849	MISCELLANEOUS VENDORS 2	11032018RJ		REIMBURSEMENT FOR REGISTRATION/LICENSURE, R.JONES, NOV.'18	11/03/2018	23.40	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	11/18		
Total 11032018RJ:						117.00	.00					
1849	MISCELLANEOUS VENDORS 2	11072018SH		REFUND OF ADMIN FEE OVERCHARGE, NOV.'18 - P & Z	11/07/2018	100.00	.00	01-4155 ADMINISTRATI0N SERVICES	1003	11/18		
Total 11072018SH:						100.00	.00					
1849	MISCELLANEOUS VENDORS 2	11132018LH		REIMBURSEMENT CONFERENCE/TRAVEL PER DIEM, L.HOLLAND - ECONOMIC DEVELOPMENT INSTITUTE, NOV.'18	11/13/2018	1,230.96	.00	01-6270 TRAVEL	4000	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
	Total 11132018LH:					1,230.96	.00					
	Total MISCELLANEOUS VENDORS 2:					1,549.16	.00					
MOTION INDUSTRIES, INC.												
1456	MOTION INDUSTRIES, INC.	ID09466555	7764	REPLACEMENT MOTOR FOR THE EXHAUST SYSTEM IN THE PROCESS BUILDING, T.SHAFFER, NOV.'18	11/06/2018	588.71	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
	Total ID09466555:					588.71	.00					
	Total MOTION INDUSTRIES, INC.:					588.71	.00					
MSBT LAW CHTD.												
1968	MSBT LAW CHTD.	61486		SPECIAL COUNSEL WORK, PROFESSIONAL SERVICES, 10/5-10/29/18 - ADMIN	11/02/2018	372.79	.00	01-6202 PR0FESSI0NAL SERVICES	0	11/18		
1968	MSBT LAW CHTD.	61486		SPECIAL COUNSEL WORK, PROFESSIONAL SERVICES, 10/5-10/29/18 - P & Z	11/02/2018	133.14	.00	01-6202 PR0FESSI0NAL SERVICES	1003	11/18		
1968	MSBT LAW CHTD.	61486		SPECIAL COUNSEL WORK, PROFESSIONAL SERVICES, 10/5-10/29/18 - WATER	11/02/2018	346.16	.00	20-6202 PROFESSIONAL SERVICES	0	11/18		
1968	MSBT LAW CHTD.	61486		SPECIAL COUNSEL WORK, PROFESSIONAL SERVICES, 10/5-10/29/18 - SEWER	11/02/2018	346.16	.00	21-6202 PR0FESSI0NAL SERVICES	0	11/18		
1968	MSBT LAW CHTD.	61486		SPECIAL COUNSEL WORK, PROFESSIONAL SERVICES, 10/5-10/29/18 - P.I	11/02/2018	133.14	.00	25-6202 PROFESSIONAL SERVICES	0	11/18		
	Total 61486:					1,331.39	.00					
	Total MSBT LAW CHTD.:					1,331.39	.00					
MUNICIPAL CODE CORPORATION												

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1488	MUNICIPAL CODE CORPORATION	00319255	7608	CODE SUPPLEMENT 52, A.WELKER, OCT.'18	10/31/2018	1,065.70	.00	01-6202 PR0FESSI0NAL SERVICES	0	11/18		
Total 00319255:						1,065.70	.00					
Total MUNICIPAL CODE CORPORATION:						1,065.70	.00					
PARTS, INC.												
470	PARTS, INC.	178185	7740	COMPRESSOR PARTS FOR PULL BEHIND COMPRESSOR, NUT AND AIR FILTER, M. MEADE, OCT. '18	10/30/2018	27.24	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	11/18		
Total 178185:						27.24	.00					
Total PARTS, INC.:						27.24	.00					
SHARP ELECTRONICS CORP -LEASE												
1734	SHARP ELECTRONICS CORP - LEASE	5005476737		MONTHLY COPIER LEASE, MX2615N, 11/1-30/18 - PARKS	11/05/2018	17.33	.00	01-6212 RENT-EQUIPMENT	1004	11/18		
1734	SHARP ELECTRONICS CORP - LEASE	5005476737		MONTHLY COPIER LEASE, MX2615N, 11/1-30/18 - WATER	11/05/2018	27.92	.00	20-6212 RENT - EQUIPMENT	0	11/18		
1734	SHARP ELECTRONICS CORP - LEASE	5005476737		MONTHLY COPIER LEASE, MX2615N, 11/1-30/18 - SEWER	11/05/2018	34.65	.00	21-6212 RENT-EQUIPMENT	0	11/18		
1734	SHARP ELECTRONICS CORP - LEASE	5005476737		MONTHLY COPIER LEASE, MX2615N, 11/1-30/18 - P.I	11/05/2018	16.36	.00	25-6212 RENT - EQUIPMENT	0	11/18		
Total 5005476737:						96.26	.00					
Total SHARP ELECTRONICS CORP -LEASE:						96.26	.00					
STATE OF IDAHO-DEPT OF ENVIR QUALITY												
128	STATE OF IDAHO-DEPT OF ENVIR QUALITY	20190000077		2019 TANK FEE - 500GAL DIESEL	10/29/2018	56.00	.00	21-6150 M & R - SYSTEM	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 20190000077:						56.00	.00					
Total STATE OF IDAHO-DEPT OF ENVIR QUALITY:						56.00	.00					
THUESON CONSTRUCTION INC												
1724	THUESON CONSTRUCTION INC	0002666	7768	VALVES ON DEER FLAT RD FOR DYNAMITE SUB, D.CROSSLEY, NOV.'18	11/06/2018	3,500.00	.00	20-6150 M & R - SYSTEM	0	11/18		
Total 0002666:						3,500.00	.00					
Total THUESON CONSTRUCTION INC:						3,500.00	.00					
TREASURE VALLEY COFFEE												
992	TREASURE VALLEY COFFEE	2160:05840506	7769	3 EA. 5-GALLON WATER JUGS, 1 EA. COOLER RENTAL, MAINTENANCE SHOP, NOV. '18	11/09/2018	28.10	.00	01-6165 OFFICE SUPPLIES	1004	11/18		
Total 2160:05840506:						28.10	.00					
992	TREASURE VALLEY COFFEE	2160:05840611	7769	4 EA. 5-GALLON WATER BOTTLES, 2 COOLER RENTALS, CITY HALL, NOV. '18	11/09/2018	52.80	.00	01-6165 OFFICE SUPPLIES	0	11/18		
Total 2160:05840611:						52.80	.00					
Total TREASURE VALLEY COFFEE:						80.90	.00					
TREASURE VALLEY PARTNERSHIP												
800	TREASURE VALLEY PARTNERSHIP	1818-16		ANNUAL MEMBERSHIP DUES, FY 2018-2019	11/06/2018	1,905.00	.00	01-6075 DUES & MEMBERSHIPS	0	11/18		
Total 1818-16:						1,905.00	.00					
Total TREASURE VALLEY PARTNERSHIP:						1,905.00	.00					
U.S. BANK (VISA)												

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1444	U.S. BANK (VISA)	104382720101	7600	HOME DEPOT, OUTDOOR STORAGE SHED, T.SHAFFER, SEPT.'18 - SEWER	09/28/2018	333.73	.00	21-6175 SMALL TOOLS	0	11/18		
Total 10438272010186596130:						333.73	.00					
1444	U.S. BANK (VISA)	310682709750	7613	COOKIES FOR DOWNTOWN BUSINESS MEETING, L. HOLLAND, SEPT, 18	09/26/2018	8.47	.00	01-6155 MEETINGS/COMMITTEES	4000	11/18		
Total 31068270975010230524:						8.47	.00					
1444	U.S. BANK (VISA)	316882690140	7614	DISCOUNT MUGS, ITEMS FOR YOUTH, J.LORENTZ, SEPT.'18	09/26/2018	995.00	.00	01-6265 TRAINING & SCH00LING	1086	11/18		
Total 31688269014000532010:						995.00	.00					
1444	U.S. BANK (VISA)	330982760915	7650	IBOL, EXAMS, J.WEBB & M.DAVILA- OCT.'18 - WATER	10/02/2018	99.20	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
1444	U.S. BANK (VISA)	330982760915		IBOL, EXAMS FOR J.WEBB & M.DAVILA - OCT.'18 - P.I	10/02/2018	24.80	.00	25-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
Total 33098276091563005929:						124.00	.00					
1444	U.S. BANK (VISA)	374782720000	7639	CWI, EXAM REGISTRATION FOR J.COX, SEPT.'18	09/28/2018	20.00	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
1444	U.S. BANK (VISA)	374782720000	7639	CWI, EXAM REGISTRATION FOR J.COX, SEPT.'18	09/28/2018	5.00	.00	25-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
Total 37478272000010624273:						25.00	.00					
1444	U.S. BANK (VISA)	374782790000	7675	CWI - REGISTRATION FOR CLASSES, M.DAVILA, OCT.'18	10/05/2018	25.00	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 37478279000011386149:						25.00	.00					
1444	U.S. BANK (VISA)	374782790000	7675	CWI - REGISTRATION FOR CLASSES, B.BURR, OCT.'18	10/05/2018	25.00	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
Total 37478279000011388335:						25.00	.00					
1444	U.S. BANK (VISA)	513882780180	7671	ENRIQUE'S, SITE VISIT PROJECT LUNCHEON, L.HOLLAND, OCT.'18	10/04/2018	258.03	.00	01-6155 MEETINGS/COMMITTEES	4000	11/18		
Total 51388278018021228236:						258.03	.00					
1444	U.S. BANK (VISA)	554282771527	7659	DEQ, CLASS REGISTRATION, M.NADEAU, OCT.'18	10/04/2018	75.00	.00	21-6265 TRAINING & SCH00LING EXPENSE	0	11/18		
Total 55428277152779521009:						75.00	.00					
1444	U.S. BANK (VISA)	893082801400	7672	ORIENTAL TRADING POST, HALLOWEEN CANDY, A.WELKER, OCT.'18	10/05/2018	52.96	.00	01-6155 MEETINGS/COMMITTEES	1032	11/18		
Total 89308280140001805273:						52.96	.00					
1444	U.S. BANK (VISA)	921582768949	7658	APA, CONFERENCE, W. HOWELL, OCT '18	10/03/2018	195.00	.00	01-6265 TRAINING & SCH00LING	1003	11/18		
Total 92158276894953084120:						195.00	.00					
1444	U.S. BANK (VISA)	921582788940	7668	APA, CONFERENCE, W. HOWELL, OCT '18	10/05/2018	220.00	.00	01-6265 TRAINING & SCH00LING	1003	11/18		
Total 92158278894037843416:						220.00	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1444	U.S. BANK (VISA)	921682691001	7605	AMAZON.COM, 2 EA CHAIRS FOR CLERKS OFFICE, SEPT.'18 - ADMIN	09/26/2018	147.96	.00	01-6175 SMALL TOOLS	0	11/18		
Total 92168269100123974752:						147.96	.00					
1444	U.S. BANK (VISA)	921682691002		AMAZON.COM, BLANK PVC CARDS FOR ID BADGE PRINTERS, F.GIDDINGS, SEPT.'18	09/26/2018	20.98	.00	01-6165 OFFICE SUPPLIES	0	11/18		
Total 92168269100274763681:						20.98	.00					
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELF FOR CITY HALL, C.OSWALD, SEPT.'18	09/26/2018	45.11	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELF FOR CITY HALL, C.OSWALD, SEPT.'18 - P & Z	09/26/2018	16.11	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELF FOR CITY HALL, C.OSWALD, SEPT.'18 - WATER	09/26/2018	41.89	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELF FOR CITY HALL, C.OSWALD, SEPT.'18 - SEWER	09/26/2018	41.89	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELF FOR CITY HALL, C.OSWALD, SEPT.'18 - P.I	09/26/2018	16.10	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total 92168269100346953765:						161.10	.00					
1444	U.S. BANK (VISA)	921682691003	7567	CABINET FOR TREATMENT PLANT, C.OSWALD, SEPT.'18	09/26/2018	94.49	.00	20-6165 0FFICE SUPPLIES	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	CABINET FOR TREATMENT PLANT, C.OSWALD, SEPT.'18	09/26/2018	94.50	.00	21-6165 OFFICE SUPPLIES	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	CABINET FOR TREATMENT PLANT, C.OSWALD, SEPT.'18	09/26/2018	36.00	.00	25-6165 OFFICE SUPPLIES	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 92168269100346991625:						224.99	.00					
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELVING FOR CITY HALL, C.OSWALD, SEPT.'18 - ADMIN	09/26/2018	270.65	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELVING FOR CITY HALL, C.OSWALD, SEPT.'18 - P & Z	09/26/2018	96.66	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELVING FOR CITY HALL, C.OSWALD, SEPT.'18 - WATER	09/26/2018	251.32	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELVING FOR CITY HALL, C.OSWALD, SEPT.'18 - SEWER	09/26/2018	251.32	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682691003	7567	LOWES, STORAGE SHELVING FOR CITY HALL, C.OSWALD, SEPT.'18 - P.I	09/26/2018	96.65	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total 92168269100346991674:						966.60	.00					
1444	U.S. BANK (VISA)	921682741003	7528	INDEED.COM, POSITION POSTING FOR WASTE WATER WORKER, F.GIDDINGS, OCT.'18	10/01/2018	195.20	.00	21-6125 LEGAL PUBLICATI0NS EXPENSE	0	11/18		
Total 92168274100369417030:						195.20	.00					
1444	U.S. BANK (VISA)	921682761000	7654	ISA, ARBORISTS BOOKS, J. LORENTZ, OCT '18	10/03/2018	83.80	.00	01-6265 TRAINING & SCH00LING	1004	11/18		
Total 92168276100002439522:						83.80	.00					
1444	U.S. BANK (VISA)	921682851001	7672	BROOK HOLLOW, CHRISTMAS CARDS, A.WELKER, OCT.'18	10/12/2018	247.00	.00	01-6155 MEETINGS/COMMI TTEES	1031	11/18		
Total 92168285100121478533:						247.00	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1444	U.S. BANK (VISA)	921682881001	7695	AMAZON.COM, INK FOR OFFICE PRINTER, J.EMPEY, OCT.'18	10/15/2018	72.89	.00	01-6165 OFFICE SUPPLIES	0	11/18		
Total 92168288100165357038:						72.89	.00					
1444	U.S. BANK (VISA)	921682881002	7693	AMAZON.COM, PHONE CASES AND CLIPS FOR TREATMENT PLANT, OCT.'18 - WATER	10/15/2018	119.17	.00	20-6142 MAINT. & REPAIRS-EQUIPMENT	0	11/18		
1444	U.S. BANK (VISA)	921682881002	7693	AMAZON.COM, PHONE CASES AND CLIPS FOR TREATMENT PLANT, OCT.'18 - SEWER	10/15/2018	119.17	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
1444	U.S. BANK (VISA)	921682881002	7693	AMAZON.COM, PHONE CASES AND CLIPS FOR TREATMENT PLANT, OCT.'18 - P.I	10/15/2018	45.39	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
Total 92168288100214214586:						283.73	.00					
1444	U.S. BANK (VISA)	921682891007	7703	LOWES, STORAGE TOTES FOR REC EQUIPMENT, J.LORENTZ, OCT.'18	10/16/2018	59.96	.00	01-6165 OFFICE SUPPLIES	1004	11/18		
Total 92168289100798016414:						59.96	.00					
1444	U.S. BANK (VISA)	921682911008	7567	LOWES, STORAGE RACKS FOR CITY HALL, C.OSWALD, OCT.'18	10/18/2018	277.17	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682911008	7567	LOWES, STORAGE RACKS FOR CITY HALL, OCT.'18 - P & Z	10/18/2018	98.99	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1444	U.S. BANK (VISA)	921682911008	7567	LOWES, STORAGE RACKS FOR CITY HALL, C.OSWALD, OCT.'18 - WATER	10/18/2018	257.37	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682911008	7567	LOWES, STORAGE RACKS FOR CITY HALL, C.OSWALD, OCT.'18 - SEWER	10/18/2018	257.37	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682911008	7567	LOWES, STORAGE RACKS FOR CITY HALL, C.OSWALD, OCT.'18 - P.I	10/18/2018	98.99	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 92168291100848818237:						989.89	.00					
1444	U.S. BANK (VISA)	921682921000	7567	LOWES, STORAGE RACKS FOR CITY HALL, S.HOWELL, OCT.'18 - ADMIN	10/18/2018	125.99	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921000	7567	LOWES, STORAGE RACK FOR CITY HALL, S.HOWELL, OCT.'18 - P & Z	10/18/2018	45.00	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1444	U.S. BANK (VISA)	921682921000	7567	LOWES, STORAGE RACKS FOR CITY HALL, S.HOWELL, OCT.'18	10/18/2018	116.98	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921000	7567	LOWES, STORAGE RACKS FOR CITY HALL, S.HOWELL, OCT.'18 - SEWER	10/18/2018	116.98	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921000	7567	LOWES, STORAGE RACKS FOR CITY HALL, S.HOWELL, OCT.'18 - P.I	10/18/2018	45.00	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total 92168292100037212043:						449.95	.00					
1444	U.S. BANK (VISA)	921682921003	7567	LOWES, STORAGE RACKS FOR CITY HALL, OCT.'18 - ADMIN	10/19/2018	125.99	.00	01-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921003	7567	LOWES, STORAGE RACKS FOR CITY HALL, OCT.'18 - P & Z	10/19/2018	45.00	.00	01-6140 MAINT. & REPAIR BUILDING	1003	11/18		
1444	U.S. BANK (VISA)	921682921003	7567	LOWES, STORAGE RACKS FOR CITY HALL, OCT.'18 - WATER	10/19/2018	116.98	.00	20-6140 MAINT. & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921003	7567	LOWES, STORAGE RACKS FOR CITY HALL, OCT.'18 - SEWER	10/19/2018	116.98	.00	21-6140 MAINT & REPAIR BUILDING	0	11/18		
1444	U.S. BANK (VISA)	921682921003	7567	LOWES, STORAGE RACK FOR CITY HALL, OCT.'18 - P.I	10/19/2018	45.00	.00	25-6140 MAINT & REPAIR BUILDING	0	11/18		
Total 92168292100378970993:						449.95	.00					
1444	U.S. BANK (VISA)	939882772000	7649	ROCKY MOUNTAIN SAND AND GRAVEL, SPLASH PAD SAND, M.MEADE, OCT.'18	10/02/2018	530.10	.00	40-6020 CAPITAL IMPROVEMENTS	1067	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 93988277200019400045:						530.10	.00					
Total U.S. BANK (VISA):						7,221.29	.00					
UTILITY REFUND #6												
1951	UTILITY REFUND #6	120440.01		SAMUEL J LYONS, 663 N FLAUSON AVE, UTILITY REFUND	10/18/2018	95.23	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 120440.01:						95.23	.00					
1951	UTILITY REFUND #6	120540.01		DONALD ANDERSON, 1697 W 4TH ST, UTILITY REFUND	10/18/2018	72.13	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 120540.01:						72.13	.00					
1951	UTILITY REFUND #6	121350.02		ROBERT L LONGSHAW, 1834 W TOPANGA DR, UTILITY REFUND	10/16/2018	31.04	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 121350.02:						31.04	.00					
1951	UTILITY REFUND #6	121550.03		KELSEY BAXTER, 860 N MEADOWSWEET AVE, UTILITY REFUND	10/12/2018	18.14	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 121550.03:						18.14	.00					
1951	UTILITY REFUND #6	130600.02		CAMILLE R REEDER, 1426 W WHEAT ST, UTILITY REFUND	10/30/2018	22.33	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 130600.02:						22.33	.00					
1951	UTILITY REFUND #6	130830.02		BRANDON ALTAMIRANO, 1534 W TOPANGA CT, UTILITY REFUND	11/05/2018	56.42	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 130830.02:						56.42	.00					
1951	UTILITY REFUND #6	150320.03		BRETT CONRAD TODD TRUST, 1441 N KENNETH AVE, UTILITY REFUND	11/05/2018	69.15	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 150320.03:						69.15	.00					
1951	UTILITY REFUND #6	161040.00		ADELINO SILVA, 1175 N CATERPILLAR AVE, UTILITY REFUND	11/13/2018	228.04	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 161040.00:						228.04	.00					
1951	UTILITY REFUND #6	162020.04		ETHAN H STANDLEE, 370 W CASE ST, UTILITY REFUND	11/05/2018	71.62	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 162020.04:						71.62	.00					
1951	UTILITY REFUND #6	164035.01		JOSEPH A BELL III, 227 E POPLIN ST, UTILITY REFUND	10/12/2018	153.85	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 164035.01:						153.85	.00					
1951	UTILITY REFUND #6	170670.01		JEFFREY L ANDERSON, 1754 W OAKLEY WAY, UTILITY REFUND	10/25/2018	5.25	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 170670.01:						5.25	.00					
1951	UTILITY REFUND #6	170725.01		DON S NORDQUIST, 1837 W POTOSI WAY, UTILITY REFUND	10/25/2018	13.41	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 170725.01:						13.41	.00					
1951	UTILITY REFUND #6	173160.02		WILLIAM MATTHEWS, 519 S WHIM AVE, UTILITY REFUND	11/09/2018	58.65	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 173160.02:						58.65	.00					
1951	UTILITY REFUND #6	173320.02		DIANNA VELDER, 524 S RETORT PL, UTILITY REFUND	10/30/2018	13.05	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 173320.02:						13.05	.00					
1951	UTILITY REFUND #6	173615.02		DEREK A DEASY, 1977 W SAHARA DR, UTILITY REFUND	11/09/2018	28.58	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 173615.02:						28.58	.00					
1951	UTILITY REFUND #6	174025.01		CBH HOMES, 1062 S RED SAND AVE, UTILITY REFUND	11/05/2018	49.09	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 174025.01:						49.09	.00					
1951	UTILITY REFUND #6	174108.01		CBH HOMES, 1691 W SAHARA DR, UTILITY REFUND	11/13/2018	19.98	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 174108.01:						19.98	.00					
1951	UTILITY REFUND #6	175014.01		CBH HOMES, 350 S ROCKER AVE, UTILITY REFUND	10/12/2018	43.96	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 175014.01:						43.96	.00					
1951	UTILITY REFUND #6	175016.01		CBH HOMES, 384 S ROCKER AVE, UTILITY REFUND	10/25/2018	21.87	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 175016.01:						21.87	.00					
1951	UTILITY REFUND #6	175028.01		CBH HOMES, 287 S ROCKER AVE, UTILITY REFUND	10/18/2018	29.80	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 175028.01:						29.80	.00					
1951	UTILITY REFUND #6	183860.03		SAMUEL F TUSINGER, 1621 N BUCKLER WAY, UTILITY REFUND	10/11/2018	4.25	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 183860.03:						4.25	.00					
1951	UTILITY REFUND #6	190305.02		MATT FISETTE, 347 W TROPHY ST, UTILITY REFUND	11/09/2018	6.72	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 190305.02:						6.72	.00					
1951	UTILITY REFUND #6	190640.01		JEFFREY N THOMASON, 1763 N DOE AVE, UTILITY REFUND	10/25/2018	13.48	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 190640.01:						13.48	.00					
1951	UTILITY REFUND #6	200740.02		REBECCA BARROW, 300 E SNOWY OWL ST, UTILITY REFUND	10/12/2018	2.76	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 200740.02:						2.76	.00					
1951	UTILITY REFUND #6	200765.02		TIM NASH, 1954 N DUCK HAWK AVE, 11/13	11/13/2018	11.25	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 200765.02:						11.25	.00					
1951	UTILITY REFUND #6	202000.02		JASON D ROPER, 2480 N SNOW HAWK AVE, UTILITY REFUND	10/16/2018	69.13	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 202000.02:						69.13	.00					
1951	UTILITY REFUND #6	20290.04		NICHOLAS VANCE, 580 E EASY ST, UTILITY REFUND	11/06/2018	97.60	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 20290.04:						97.60	.00					
1951	UTILITY REFUND #6	20770.02		MATTHEW POST, 130 E MORRIS CT, UTILITY REFUND	10/22/2018	89.90	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 20770.02:						89.90	.00					
1951	UTILITY REFUND #6	21230.02		JSV DEVELOPMENT, 692 W AVALON ST, UTILITY REFUND	10/18/2018	20.22	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 21230.02:						20.22	.00					
1951	UTILITY REFUND #6	221415.01		CBH HOMES, 1125 S RUMNEY AVE, UTILITY REFUND	10/30/2018	68.93	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 221415.01:						68.93	.00					
1951	UTILITY REFUND #6	230430.01		DONALD E GIRARD, 810 W OMPHALE ST, UTILITY REFUND	10/18/2018	66.41	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 230430.01:						66.41	.00					
1951	UTILITY REFUND #6	230465.03A		JAMES AARON BILLINGS, 704 S WILLOW SPRINGS PL, UTILITY REFUND	10/18/2018	78.75	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 230465.03A:						78.75	.00					
1951	UTILITY REFUND #6	230800.01		BLACK CREEK LTD PARTNERSHIP, S KAY AVE - JOURNEYS END 2	10/19/2018	10.41	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 230800.01:						10.41	.00					
1951	UTILITY REFUND #6	240040.00		CHRISTOPHER J BURA, 923 E FOURTH CT, UTILITY REFUND	10/23/2018	210.15	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 240040.00:						210.15	.00					
1951	UTILITY REFUND #6	250400.02		KSA PROPERTIES, 628 W BACKPACK ST, UTILITY REFUND	11/05/2018	68.68	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 250400.02:						68.68	.00					
1951	UTILITY REFUND #6	253005.02		PATRICK D WHITE, 1013 S CHALKBOARD PL,	10/12/2018	74.03	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 253005.02:						74.03	.00					
1951	UTILITY REFUND #6	260495.02A		AMALIA M BROOKS, 1629 N FIREBRICK DR, UTILITY REFUND	10/18/2018	32.81	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 260495.02A:						32.81	.00					
1951	UTILITY REFUND #6	260680.03		DONNA COOKNELL, 2195 W STEELY CT, UTILITY REFUND	10/12/2018	9.30	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 260680.03:						9.30	.00					
1951	UTILITY REFUND #6	261075.01		SHAWN MCGREW, 2724 W MARIBIN DR, UTILITY REFUND	11/05/2018	62.98	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 261075.01:						62.98	.00					
1951	UTILITY REFUND #6	264145.02		JONATHAN PAY, 1840 N BLUSH AVE, UTILITY REFUND	10/12/2018	11.03	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 264145.02:						11.03	.00					
1951	UTILITY REFUND #6	265118.01A		RIVERWOOD HOMES, 2179 W HENNA ST, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 265118.01A:						48.32	.00					
1951	UTILITY REFUND #6	268001.01		CBH HOMES, 1777 N THISTLE DR, UTILITY REFUND	11/05/2018	37.26	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 268001.01:						37.26	.00					
1951	UTILITY REFUND #6	274200.03		MOUNTAINWEST IRA INC FBO HAROLD O, 2406 N MOUNTAIN ASH AVE, UTILITY REFUND	10/16/2018	82.53	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 274200.03:						82.53	.00					
1951	UTILITY REFUND #6	274215.03		KATIE C MORGAN, 281 W QUAKING ASPEN LN, UTILITY REFUND	10/18/2018	13.51	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 274215.03:						13.51	.00					
1951	UTILITY REFUND #6	277038.01		CBH HOMES	10/23/2018	56.44	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277038.01:						56.44	.00					
1951	UTILITY REFUND #6	277043.01		CBH HOMES, 2562 N IDITAROD WAY, UTILITY REFUND	11/05/2018	8.42	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277043.01:						8.42	.00					
1951	UTILITY REFUND #6	277111.01		CBH HOMES, 689 W ALLSPICE ST, UTILITY REFUND	10/30/2018	100.13	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277111.01:						100.13	.00					
1951	UTILITY REFUND #6	277115.01		CBH HOMES, 730 W ALLSPICE ST, UTILITY REFUND	10/30/2018	58.01	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 277115.01:						58.01	.00					
1951	UTILITY REFUND #6	277319.01		CBH HOMES, 362 W SCREECH OWL DR, UTILITY REFUND	10/12/2018	1.48	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277319.01:						1.48	.00					
1951	UTILITY REFUND #6	277323.01		CBH HOMES, 397 W SCREECH OWL DR, UTILITY REFUND	10/16/2018	9.67	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277323.01:						9.67	.00					
1951	UTILITY REFUND #6	277329.01		CBH HOMES, 289 W SCREECH OWL DR, UTILITY REFUND	10/12/2018	47.03	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 277329.01:						47.03	.00					
1951	UTILITY REFUND #6	278062.02		PAYTON WARNER, 8963 S PINOVA AVE, UTILITY REFUND	10/12/2018	11.03	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 278062.02:						11.03	.00					
1951	UTILITY REFUND #6	278131.01		CBH HOMES, 3088 W PEAR APPLE ST, UTILITY REFUND	10/16/2018	45.40	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 278131.01:						45.40	.00					
1951	UTILITY REFUND #6	280125.02		JOEL A DIAZ, 1693 N AZURITE PL, UTILITY REFUND	10/12/2018	58.19	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 280125.02:						58.19	.00					
1951	UTILITY REFUND #6	280195.02		CAROL GOLDMAN, 1678 N AZURITE PL, UTILITY REFUND	10/12/2018	60.62	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 280195.02:						60.62	.00					
1951	UTILITY REFUND #6	280495.03		GARY LAMING	10/18/2018	13.48	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 280495.03:						13.48	.00					
1951	UTILITY REFUND #6	290125.01		JEFFREY MOORE, 4618 W SADDLE RIDGE DR, UTILITY REFUND	10/25/2018	36.76	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 290125.01:						36.76	.00					
1951	UTILITY REFUND #6	291040.01		CBH HOMES, 6884 S DONAWAY AVE, UTILITY REFUND	10/30/2018	93.74	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 291040.01:						93.74	.00					
1951	UTILITY REFUND #6	291044.01		CBH HOMES, 6980 S DONAWAY AVE, UTILITY REFUND	10/30/2018	56.45	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 291044.01:						56.45	.00					
1951	UTILITY REFUND #6	300400.03		KATHERINE MCCOLL	10/25/2018	82.89	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 300400.03:						82.89	.00					
1951	UTILITY REFUND #6	300630.02		NANCEY J DESOLA	10/11/2018	74.70	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 300630.02:						74.70	.00					
1951	UTILITY REFUND #6	302016.01		RIVERWOOD HOMES, 490 E RAISON ST, UTILITY REFUND	10/30/2018	22.17	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 302016.01:						22.17	.00					
1951	UTILITY REFUND #6	302101.01		RIVERWOOD HOMES, 613 E ANDES DR, UTILITY REFUND	10/30/2018	3.45	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 302101.01:						3.45	.00					
1951	UTILITY REFUND #6	302107.01		STYLISH HOMES, 741 E ANDES DR, UTILITY REFUND	11/09/2018	133.48	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 302107.01:						133.48	.00					
1951	UTILITY REFUND #6	302113.01A		RIVERWOOD HOMES, 853 E ANDES DR, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 302113.01A:						48.32	.00					
1951	UTILITY REFUND #6	302114.01A		RIVERWOOD HOMES, 887 E ANDES DR, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 302114.01A:						48.32	.00					
1951	UTILITY REFUND #6	302116.01		STYLISH HOMES, 919 E ANDES DR, UTILITY REFUND	10/18/2018	62.67	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 302116.01:						62.67	.00					
1951	UTILITY REFUND #6	303028.01		HUBBLE HOMES, 974 E FIRESTONE DR, UTILITY REFUND	10/12/2018	3.98	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 303028.01:						3.98	.00					
1951	UTILITY REFUND #6	303111.01		HUBBLE HOMES, 866 E FIRESTONE DR, UTILITY REFUND	10/11/2018	6.10	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 303111.01:						6.10	.00					
1951	UTILITY REFUND #6	310011.01A		TOLL BROS INC, 9497 S MACADAN WAY, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310011.01A:						48.32	.00					
1951	UTILITY REFUND #6	310016.01A		TOLL BROS INC, 1095 W SOLDOTNA ST, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310016.01A:						48.32	.00					
1951	UTILITY REFUND #6	310019.01		COLEMAN HOMES, 9522 S SARATOV WAY, UTILITY REFUND	10/25/2018	58.00	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310019.01:						58.00	.00					
1951	UTILITY REFUND #6	310137.01		TIMBERMIST LLC, 1449 W SAGWON DR, UTILITY REFUND	11/05/2018	42.85	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310137.01:						42.85	.00					
1951	UTILITY REFUND #6	310208.01A		TOLL BROS INC, 1476 W SOLDOTNA DR, UTILITY REFUND	10/18/2018	48.32	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310208.01A:						48.32	.00					
1951	UTILITY REFUND #6	310213.01		TOLL BROS INC, 9430 S UPDALE AVE, UTILITY REFUND	10/23/2018	28.25	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310213.01:						28.25	.00					

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1951	UTILITY REFUND #6	310217.01		TOLL BROS INC, 9417 S UPDALE AVE, UTILITY REFUND	11/09/2018	17.09	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310217.01:						17.09	.00					
1951	UTILITY REFUND #6	310226.01		TOLL BROS, 1493 W SOLDOTNA DR, UTILITY REFUND	10/18/2018	62.42	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310226.01:						62.42	.00					
1951	UTILITY REFUND #6	310229.01		TOLL BROS INC, 1445 W SOLDOTNA DR, UTILITY REFUND	10/12/2018	4.87	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310229.01:						4.87	.00					
1951	UTILITY REFUND #6	310306.01		TOLL BROS INC, 919 W SAGWON DR, UTILITY REFUND	10/18/2018	51.60	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310306.01:						51.60	.00					
1951	UTILITY REFUND #6	310307.01		TOLL BROS INC	10/11/2018	.89	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310307.01:						.89	.00					
1951	UTILITY REFUND #6	310314.02		JOHN D AIGNER, 9304 S FIDALGO AVE, UTILITY REFUND	11/05/2018	17.57	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310314.02:						17.57	.00					
1951	UTILITY REFUND #6	310338.01		TOLL BROS INC, 9293 S RYSSELL AVE, UTILITY REFUND	11/05/2018	30.26	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 310338.01:						30.26	.00					
1951	UTILITY REFUND #6	310339.01		TOLL BROS INC, 9317 S RUSSELL AVE, UTILITY REFUND	11/05/2018	28.70	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 310339.01:						28.70	.00					
1951	UTILITY REFUND #6	318302.01		SIMPLICITY HOMES, 136 S JOHNS BAY AVE, UTILITY REFUNDS	10/12/2018	2.12	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 318302.01:						2.12	.00					
1951	UTILITY REFUND #6	50060.01		PATRICK T KURDY, 239 W 4TH ST, UTILITY REFUND	11/13/2018	13.38	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 50060.01:						13.38	.00					
1951	UTILITY REFUND #6	50130.02		CHRIS T CONSTRUCTION LLC	10/18/2018	151.70	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 50130.02:						151.70	.00					
1951	UTILITY REFUND #6	50490.02		PAUL SCHEPPER, 656 N FRANKLIN AVE, UTILITY REFUND	10/12/2018	1.05	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 50490.02:						1.05	.00					
1951	UTILITY REFUND #6	60840.01		JAMES BRADY, 576-580 W DAWN CT, UTILITY REFUND	10/25/2018	210.19	.00	99-1075 Utility Cash Clearing	0	11/18		
Total 60840.01:						210.19	.00					
1951	UTILITY REFUND #6	91730.01		STEVEN E JENSEN, 1135 W SKAGWAY ST, UTILITY REFUND	10/30/2018	48.92	.00	99-1075 Utility Cash Clearing	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 91730.01:						48.92	.00					
Total UTILITY REFUND #6:						4,349.75	.00					
VALLI INFORMATION SYSTEMS, INC												
857	VALLI INFORMATION SYSTEMS, INC	49687		LOCKBOX TRANSACTIONS AND EPAY MONTHLY MAINTENANCE FOR OCT.'18 - ADMIN	10/31/2018	51.59	.00	01-6190 P0STAGE & BILLING	0	11/18		
857	VALLI INFORMATION SYSTEMS, INC	49687		LOCKBOX TRANSACTIONS AND EPAY MONTHLY MAINTENANCE FOR OCT.'18 - WATER	10/31/2018	81.06	.00	20-6190 P0STAGE & BILLING	0	11/18		
857	VALLI INFORMATION SYSTEMS, INC	49687		LOCKBOX TRANSACTIONS AND EPAY MONTHLY MAINTENANCE FOR OCT.'18 - SEWER	10/31/2018	81.06	.00	21-6190 P0STAGE & BILLING	0	11/18		
857	VALLI INFORMATION SYSTEMS, INC	49687		LOCKBOX TRANSACTIONS AND EPAY MONTHLY MAINTENANCE FOR OCT.'18 - P.I	10/31/2018	31.94	.00	25-6190 P0STAGE & BILLING	0	11/18		
Total 49687:						245.65	.00					
Total VALLI INFORMATION SYSTEMS, INC:						245.65	.00					
VERIZON WIRELESS												
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - ADMIN	10/28/2018	95.26	.00	01-6255 TELEPH0NE	0	11/18		
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - PARKS	10/28/2018	306.18	.00	01-6255 TELEPH0NE	1004	11/18		
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - BUILDING INSPECTION	10/28/2018	85.05	.00	01-6255 TELEPH0NE	1005	11/18		
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - WATER	10/28/2018	335.60	.00	20-6255 TELEPH0NE EXPENSE	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - SEWER	10/28/2018	488.69	.00	21-6255 TELEPH0NE EXPENSE	0	11/18		
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - P.I	10/28/2018	92.53	.00	25-6255 TELEPH0NE EXPENSE	0	11/18		
1575	VERIZON WIRELESS	9817403623		CELL PHONE SERVICE FOR 9/29-10/28/18 - ECONOMIC DEVELOPMENT	10/28/2018	42.52	.00	01-6255 TELEPH0NE	4000	11/18		
Total 9817403623:						1,445.83	.00					
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - ADMIN	11/01/2018	3.68	.00	01-6255 TELEPH0NE	0	11/18		
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - PARKS	11/01/2018	8.09	.00	01-6255 TELEPH0NE	1004	11/18		
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - BUILDING INSPECTION	11/01/2018	30.87	.00	01-6255 TELEPH0NE	1005	11/18		
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - WATER	11/01/2018	42.04	.00	20-6255 TELEPH0NE EXPENSE	0	11/18		
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - SEWER	11/01/2018	50.86	.00	21-6255 TELEPH0NE EXPENSE	0	11/18		
1575	VERIZON WIRELESS	9817514666		TABLET SERVICE, 10/2-11/1/18 - P.I	11/01/2018	11.46	.00	25-6255 TELEPH0NE EXPENSE	0	11/18		
Total 9817514666:						147.00	.00					
1575	VERIZON WIRELESS	9817514667		IPAD SERVICE 10/19-11/1/18 - PARKS	11/01/2018	43.59	.00	01-6255 TELEPH0NE	1004	11/18		
1575	VERIZON WIRELESS	9817514667		IPAD EQUIPMENT CHARGES - PARKS	11/01/2018	309.99	.00	01-6175 SMALL TOOLS	1004	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 9817514667:						353.58	.00					
Total VERIZON WIRELESS:						1,946.41	.00					
WESTERN RECORDS DESTRUCTION, INC.												
1633	WESTERN RECORDS DESTRUCTION, INC.	0415899		RECORDS DESTRUCTION, 10/1 -31/18 - ADMIN	11/01/2018	7.00	.00	01-6052 CONTRACT SERVICES	0	11/18		
1633	WESTERN RECORDS DESTRUCTION, INC.	0415899		RECORDS DESTRUCTION, 10/1 -31/18 - P & Z	11/01/2018	2.25	.00	01-6052 CONTRACT SERVICES	1003	11/18		
1633	WESTERN RECORDS DESTRUCTION, INC.	0415899		RECORDS DESTRUCTION, 10/1 -31/18 - WATER	11/01/2018	6.63	.00	20-6052 CONTRACT SERVICES	0	11/18		
1633	WESTERN RECORDS DESTRUCTION, INC.	0415899		RECORDS DESTRUCTION, 10/1 -31/18 - SEWER	11/01/2018	6.63	.00	21-6052 C0NTRACT SERVICES	0	11/18		
1633	WESTERN RECORDS DESTRUCTION, INC.	0415899		RECORDS DESTRUCTION, 10/1 -31/18 - P.I	11/01/2018	2.49	.00	25-6052 C0NTRACT SERVICES	0	11/18		
Total 0415899:						25.00	.00					
Total WESTERN RECORDS DESTRUCTION, INC.:						25.00	.00					
WESTERN STATES CHEM												
274	WESTERN STATES CHEM	181177		12 BOXES NITRILE DISPOSABLE GLOVES, T.SHAFFER, JUL.'18	07/12/2018	133.35	.00	21-6150 M & R - SYSTEM	0	11/18		
Total 181177:						133.35	.00					
274	WESTERN STATES CHEM	181708		12 BOXES NITRILE DISPOSABLE GLOVES, T.SHAFFER, SEPT.'18	09/11/2018	136.38	.00	21-6150 M & R - SYSTEM	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
Total 181708:						136.38	.00					
274	WESTERN STATES CHEM	181729	7774	WASP SPRAY, SAFETY SOLVENT, SCRUBS IN A BUCKET - SEPT.'18	09/11/2018	453.27	.00	01-6025 JANITORIAL	1004	11/18		
Total 181729:						453.27	.00					
274	WESTERN STATES CHEM	181990		30 BOXES NITRILE DISPOSABLE GLOVES, T.SHAFFER, OCT.'18	10/25/2018	325.22	.00	21-6150 M & R - SYSTEM	0	11/18		
Total 181990:						325.22	.00					
Total WESTERN STATES CHEM:						1,048.22	.00					
WEX BANK												
1234	WEX BANK	56398151		FUEL, OCT.'18 - ADMIN	10/31/2018	7.62	.00	01-6300 FUEL	0	11/18		
1234	WEX BANK	56398151		FUEL, OCT.'18 - PARKS	10/31/2018	324.79	.00	01-6300 FUEL	1004	11/18		
1234	WEX BANK	56398151		FUEL, OCT.'18 - BUILDING INSPECTION	10/31/2018	184.59	.00	01-6300 FUEL	1005	11/18		
1234	WEX BANK	56398151		FUEL, OCT.'18 - WATER	10/31/2018	429.79	.00	20-6300 FUEL	0	11/18		
1234	WEX BANK	56398151		FUEL, OCT.'18 - SEWER	10/31/2018	149.75	.00	21-6300 FUEL	0	11/18		
1234	WEX BANK	56398151		FUEL, OCT.'18 - P.I	10/31/2018	117.78	.00	25-6300 FUEL	0	11/18		
Total 56398151:						1,214.32	.00					
Total WEX BANK:						1,214.32	.00					
WHITE, PETERSON, GIGRAY, & NICHOLS P.A.												
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130682		LEGAL SERVICES PLUS TRAVEL FOR OCTOBER 2018 - ADMIN	10/31/2018	2,221.27	.00	01-6202 PR0FESSI0NAL SERVICES	0	11/18		

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130682		LEGAL SERVICES PLUS TRAVEL FOR OCTOBER 2018 - P & Z	10/31/2018	793.31	.00	01-6202 PR0FESSI0NAL SERVICES	1003	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130682		LEGAL SERVICES PLUS TRAVEL FOR OCTOBER 2018 - WATER	10/31/2018	2,062.61	.00	20-6202 PROFESSIONAL SERVICES	0	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130682		LEGAL SERVICES PLUS TRAVEL FOR OCTOBER 2018 - SEWER	10/31/2018	2,062.61	.00	21-6202 PR0FESSI0NAL SERVICES	0	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130682		LEGAL SERVICES PLUS TRAVEL FOR OCTOBER 2018 - P.I	10/31/2018	793.31	.00	25-6202 PROFESSIONAL SERVICES	0	11/18		
Total 130682:						7,933.11	.00					
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130683		LEGAL SERVICES FOR 10/15-10/26/18 - ADMIN	10/31/2018	433.44	.00	01-6202 PR0FESSI0NAL SERVICES	0	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130683		LEGAL SERVICES FOR 10/15-10/26/18 - P & Z	10/31/2018	154.80	.00	01-6202 PR0FESSI0NAL SERVICES	1003	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130683		LEGAL SERVICES FOR 10/15-10/26/18 - WATER	10/31/2018	402.48	.00	20-6202 PROFESSIONAL SERVICES	0	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130683		LEGAL SERVICES FOR 10/15-10/26/18 - SEWER	10/31/2018	402.48	.00	21-6202 PR0FESSI0NAL SERVICES	0	11/18		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	130683		LEGAL SERVICES FOR 10/15-10/26/18 - P.I	10/31/2018	154.80	.00	25-6202 PROFESSIONAL SERVICES	0	11/18		
Total 130683:						1,548.00	.00					
Total WHITE, PETERSON, GIGRAY, & NICHOLS P.A.:						9,481.11	.00					
XYLEM WATER SOLUTIONS U.S.A., INC.												
1623	XYLEM WATER SOLUTIONS U.S.A., INC.	400858075	7705	MECHANICAL SEAL FOR WASTEWATER PUMP,								

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided
				OVERNIGHT SHIPPING CHARGES, T. SHAFFER, OCT. '18	10/23/2018	226.25	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	11/18		
Total 400858075:						226.25	.00					
Total XYLEM WATER SOLUTIONS U.S.A., INC.:						226.25	.00					
ZAMZOWS												
66	ZAMZOWS	3944428-IN	7742	PRUNER SHEARS, M.MEADE, OCT.'18	10/30/2018	44.28	.00	01-6175 SMALL TOOLS	1004	11/18		
Total 3944428-IN:						44.28	.00					
Total ZAMZOWS:						44.28	.00					
Grand Totals:						496,047.51	221,727.17					

Dated: _____

Mayor: _____

City Council: _____

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City Treasurer: _____

Vendor #	Vendor Name	Invoice Number	PO #	Description	Invoice Date	Net Invoice Amount	Amount Paid	GL Account and Title	GL Activity #	GL Period	Date Paid	Voided

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

RESOLUTION NO. R90-2018
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO AMENDING RESOLUTION NO. R77-2018 APPOINTING ONE (1) NEW MEMBER TO THE KUNA ARTS COMMISSION.

WHEREAS, on November 15, 2016, the City Council for Kuna, Idaho established, by resolution, the Kuna Arts Commission; and

WHEREAS, the Commission has recommended one (1) person for appointment.

BE IT HEREBY RESOLVED by the Acting Mayor and Council of the City of Kuna, Idaho that the following person is appointed to the Kuna Arts Commission:

1. Allison Phythian

The Commission now consists of the following persons:

1. Patrick Bochnak
2. Sharon Fisher
3. Diane Kulin
4. Kody Newton
5. Ana Paz
6. Allison Phythian
7. DebAnn Rippy
8. Catherine Seamons
9. Cory Tanner
10. Teri Woods
11. Jan Allan Zarr

PASSED BY THE COUNCIL of Kuna, Idaho this 20th day of November, 2018.

APPROVED BY THE MAYOR of Kuna, Idaho this 20th day of November, 2018.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

City of Kuna
City Council Memo
P.O. Box 13
Kuna, ID 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
Kunacity.id.gov

To:	**Kuna City Council**
Case Number:	18-17-FP (Final Plat) – Winfield Springs No. 2
Location:	E. Hubbard Rd., Kuna, ID 83634 (APN: S1313428000)
Planner:	Jace Hellman, Planner II
Meeting Date:	November 20, 2018
Applicant/ Owner:	Toll ID, I LLC 3103 Sheryl Dr Meridian, ID 83642 208-424-0020 tcoleman@tollbrothers.com
Representative:	JUB Engineers, Scott Wonders 250 S Beechwood Ave., Suite 201 Boise, ID 83709 208-376-7330 swonders@jub.com



A. General Project Facts:

1. On behalf of Toll ID I, LLC, Scott Wonders, with JUB Engineers, is requesting final plat approval Winfield Springs Subdivision No. 2 which has fifty (50) residential building lots and seven (7) common lots on a total of approximately 18.79 acres (Ada County Assessor Parcel No. S1313428000).

B. Staff Analysis:

1. In accordance with Kuna City Code (KCC) Title 6 Subdivision Regulations, this application seeks final plat approval for Winfield Springs Subdivision No. 2.
2. The approved phasing plan for Winfield Springs Subdivision identifies the proposed phase two as phase three. However due the amount of buildable lots currently in place, and the concern for public safety, a second approved access to the Subdivision site, which is included in this phase, is required before several of the soon to be developed homes are occupied.
3. Staff has determined that the proposed final plat for Winfield Springs Subdivision No. 2 is in conformance with the approved preliminary plat.

C. Applicable Standards:

1. Kuna City Code Title 6 Subdivision Regulations.
2. City of Kuna Comprehensive Plan and Future Land Use Map.
3. Idaho Code, Title 50, Chapter 13, Plats and Vacations.

D. Conditions of Approval:

1. Applicant shall correct any technical items and make any requested changes on the final plat as recommended by Kuna Public Works Staff.
2. If any revisions are made, the applicant shall provide Planning and Zoning Staff with a revised copy of the final plat.

3. Applicant shall secure all signatures on the final plat check-off list prior to requesting Kuna City Engineer's signature on the final plat Mylar.

DATED: This 20th day of November, 2018.

received
10.15.18

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Final Plat Checklist

A final plat application does not require a public hearing. It will be placed on the City Council agenda as a regular agenda item.

Project name: Winfield Springs Ph 2

Applicant: Toll ID I, LLC
Representative: JUB Engineers, Inc.

All applications are required to contain one copy of the following:

Applicant (√)	Description	Staff (√)
X	Completed and signed Commission & Council Review Application.	X
X	All pages of the proposed Final Plat.	X
X	Approved final engineering construction drawings for streets, water, sewer, sidewalks, pressure irrigation and other public improvements.	X
X	Approved Findings of Fact, Conclusions of Law for Preliminary Plat	X
X	Proof of current ownership of the real property included in the proposed final plat and written consent of the record owners of the final plat (Affidavit of Legal Interest) for all interested parties involved.	X
X	Such other information as deemed necessary to establish whether or not all proper parties have signed and/or approved said final plat.	X
X	A statement of conformance with the following information: ◊ The approved preliminary plat and meeting all requirements or conditions. ◊ The acceptable engineering practices and local standards.	X
X	Any proposed restrictive covenants and/or deed restrictions, and homeowners' association documents.	X
X	The final plat shall include and be in compliance with all items required under title 50, chapter 13 of the Idaho Code.	X

Note: Only one copy of the above items need to be submitted when applying for multiple applications.

This application shall not be considered complete (nor will a meeting date be set) until staff has received all required information. Once the application is deemed complete, staff will notify the applicant of the scheduled hearing date, fees due, additional copies needed, etc.

Exhibit A2

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Commission & Council Review Application

Note: Engineering fees shall be paid by the applicant if required.

*Please submit the appropriate checklist (s) with application

For Office Use Only	
File Number (s)	18-17-FP
Project name	winfield springs no. 2
Date Received	10/15/18
Date Accepted/ Complete	10/25/18
Cross Reference Files	
Commission Hearing Date	
City Council Hearing Date	11/20/18

Type of Review (check all that apply):

- ☐ Annexation
- ☐ Appeal
- ☐ Comprehensive Plan Amendment
- ☐ Design Review
- ☐ Development Agreement
- ☐ Final Planned Unit Development
- ☒ Final Plat
- ☐ Lot Line Adjustment
- ☐ Lot Split
- ☐ Planned Unit Development
- ☐ Preliminary Plat
- ☐ Rezone
- ☐ Special Use
- ☐ Temporary Business
- ☐ Vacation
- ☐ Variance

Contact/Applicant Information

Owners of Record: Toll ID I, LLC
Address: 250 Gibraltar RD
City, State, Zip: Horsham, PA
Phone Number: 208-424-0020
E-Mail: tcoleman@tollbrothers.com
Fax #:

Applicant (Developer): Toll ID I, LLC
Address: 3103 Sheryl Dr
City, State, Zip: Meridian, ID 83642
Phone Number: 208-424-0020
E-Mail: tcoleman@tollbrothers.com
Fax #:

Engineer/Representative: JUB Engineers, Scott Wonders
Address: 250 S Beechwood Ave, Suite 201
City, State, Zip: Boise, ID 83709
Phone Number: 376-7330
E-Mail: swonders@jub.com
Fax #: 323-9336

Subject Property Information

Site Address: E Deer Flat Rd, Kuna, ID
Site Location (Cross Streets): Meridian Rd and Deer Flat Rd
Parcel Number (s): S1313428000
Section, Township, Range: Section 13, T2N, R1W, BM
Property size : 18.79
Current land use: Vacant
Proposed land use: Single Family Residential
Current zoning district: R-6
Proposed zoning district: N/A

Exhibit A2a

Project Description

Project / subdivision name: Winfield Springs Subdivision No. 2

General description of proposed project / request: Single-Family Residential Subdivision

Type of use proposed (check all that apply):

- [X] Residential Single-Family
- [ ] Commercial
- [ ] Office
- [ ] Industrial
- [ ] Other

Amenities provided with this development (if applicable): Open Space, Pathway along canal

Residential Project Summary (if applicable)

Are there existing buildings? [ ] Yes [X] No

Please describe the existing buildings:

Any existing buildings to remain? [ ] Yes [X] No

Number of residential units: 50 Number of building lots: 50

Number of common and/or other lots: 7

Type of dwellings proposed:

- [X] Single-Family
- [ ] Townhouses
- [ ] Duplexes
- [ ] Multi-Family
- [ ] Other

Minimum Square footage of structure (s): N/A

Gross density (DU/acre-total property): 2.66 Net density (DU/acre-excluding roads): 4.79

Percentage of open space provided: 10% Acreage of open space: 1.88

Type of open space provided (i.e. landscaping, public, common, etc.): Public, common area, Landscape Buffers

Non-Residential Project Summary (if applicable)

Number of building lots: N/A Other lots: N/A

Gross floor area square footage: N/A Existing (if applicable): N/A

Hours of operation (days & hours): N/A Building height: N/A

Total number of employees: N/A Max. number of employees at one time: N/A

Number and ages of students/children: N/A Seating capacity: N/A

Fencing type, size & location (proposed or existing to remain): N/A

Proposed Parking: N/A

a. Handicapped spaces: Dimensions:

b. Total Parking spaces: Dimensions:

c. Width of driveway aisle:

Proposed Lighting: N/A

Proposed Landscaping (berms, buffers, entrances, parking areas, common areas, etc.): N/A

Applicant's Signature: Kristi Watkins Date: 10-15-18

J-U-B ENGINEERS, INC.

J-U-B COMPANIES | THE LANGDON GROUP | GATEWAY MAPPING INC.

October 9, 2018

City of Kuna
PO Box 13
Kuna, ID 83634

RE: WINFIELD SPRINGS SUBDIVISION PH 2
FINAL PLAT MYLAR SUBMITTAL

To Whom It May Concern:

The final plat submittal package is enclosed for the proposed Winfield Springs Subdivision Ph 2 located at E Deer Flat Rd, Kuna in Section 13, Township 2 North, Range 1 West, Boise Meridian, Ada County, Kuna, Idaho, and consists of approximately 18.79 acres. The subdivision includes 50 buildable lots and 7 common lots.

The final plat is in substantial conformance with the specific conditions of approval set forth in the Findings of Fact and Conclusions of Law dated May 16, 2017 as described below:

1. **Approvals from the following Agencies:**
   - City Engineer: Approved sewer, drainage and grading plans
   - Kuna Fire District: Fire flow requirements – See attached email dated 4/6
   - Boise Project Board of Control
   - ACHD – See approved Construction Drawings (attached) and signature on Final Plat

2. **A stub street (with utility stubs) will be extended from the project south of the Kuna Canal to the property east of the project.**
   According to the ACHD Final Staff report dated April 6, 2017, two stub streets north of the Kuna Canal were required. See attached staff report page 21, item #22.

3. **Installation of utility service facilities will comply with the requirements of the public utility or irrigation district providing the services and will be installed underground.**
   COMPLETE - See approved Construction Drawings.

4. **Irrigation/drainage waters will not be impeded by any construction on site. The project will comply with Idaho Code Section §31-3805 and the requirements of the BPBC.**

5. **Street Lighting will use LED lights, with spacing and wattages meeting KCC 5-4-6.**
   Please see attached approved construction drawings containing sheet C-107: Street Light, signing and striping plan.

6. **Parking with the site will comply with KCC 5-9-3.**
   A separate Design Review application will be submitted at the time of building permit application for the clubhouse and parking lot.

Exhibit A2b

7. **Fencing within and around the site will comply with KCC standards.**

8. **Sign permit will be obtained for any subdivision entrance sign.**

9. **All landscaping will be permanently maintained per the CC & R's for this development.**
   CC & R's are included with this final plat submittal with a reference to landscape maintenance.

10. **Submit a petition to the city consenting to the pooling of irrigation surface water rights for delivery and request annexation of the irrigation surface water rights appurtenant to the property to the KMID prior to requesting final plat signature.**
    Developer will submit the required petition.

11. **Land has been provided for a well site with 3 phase power and a drain line for blow off water.**
    The location of the land to be provided is adjacent to Phase 2 of this subdivision.

12. **The developer will extend a 12" PI main from the existing 12" PI main located at Kay street.**
    COMPLETE - See approved Construction Drawings.

    Land has been provided for the pump station with 3 phase power and a drain line for water over-flow. *The location of the land to be provided is adjacent to Phase 2 of this subdivision.*

13. **Any future assigns will comply with the conditions of development.**
14. **The Preliminary plat and landscape plan are binding site plans and will be observed accordingly.**
15. **Applicant will follow staff, city engineer and other agency recommended requirements as applicable.**
16. **Applicant will comply with all local, state and federal laws as required.**

Please feel free to contact me at 208.376.7330 if you have any questions.

Sincerely,

J-U-B ENGINEERS, Inc.

Kristi Watkins

Kristi Watkins, Planner
Land Development Group

City of Kuna
AFFIDAVIT OF LEGAL INTEREST

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

Phone: (208) 922-5274
Fax: (208) 922-5989
Web: www.cityofkuna.com

State of Idaho)
)
County of Ada)

I, Thomas Coleman (Name), 3103 W. Sheryl Dr (Address)

Meridian (City), ID (State) 83642 (Zip Code)

being first duly sworn upon oath, depose and say:

(If Applicant is also Owner of Record, skip to B)

A. That I am the record owner of the property described on the attached, and I grant my permission to JUB Engineers, Inc. (Name) 250 S Beechwood Ave, Suite 201, Boise, ID 83709 (Address) to submit the accompanying application pertaining to that property.

B. I agree to indemnify, defend and hold City of Kuna and its employees harmless from any claim or liability resulting from any dispute as to the statements contained herein or as to the ownership of the property which is the subject of the application.

C. I hereby grant permission to the City of Kuna staff to enter the subject property for the purpose of site inspections related to processing said application(s),

Dated this 2nd day of October, 20 18

TWC
Signature

Subscribed and sworn to before me the day and year first above written.

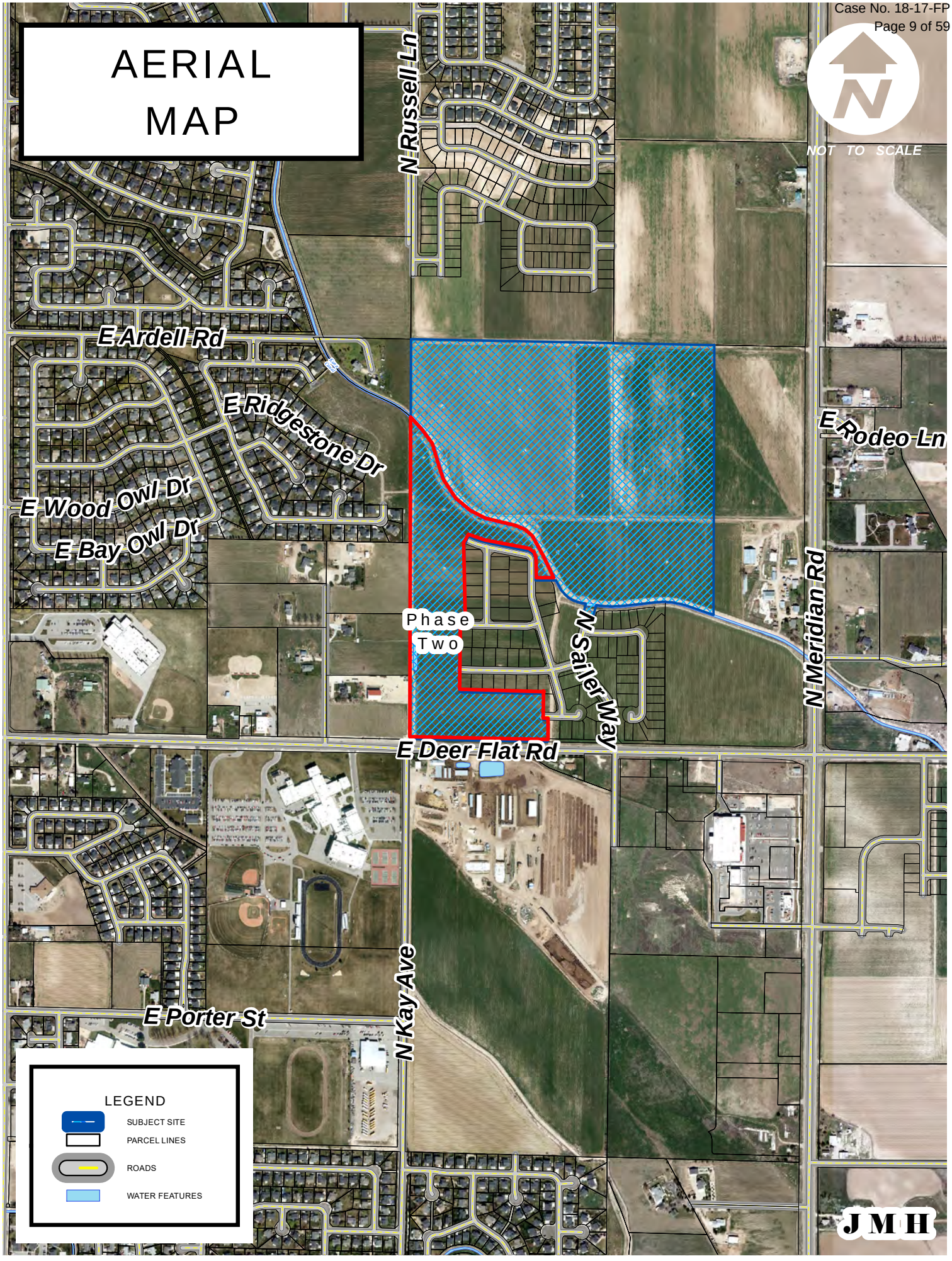
emily Andras
Notary Public for Idaho

Residing at: Ada County, Idaho

My commission expires: July 30, 2024

EMILY ANDRAS NOTARY PUBLIC COMMISSION #2018-1382 STATE OF IDAHO

Exhibit A2d


AERIAL MAP
NOT TO SCALE
N Russell Ln
E Ardell Rd
E Ridgestone Dr
E Wood Owl Dr
E Bay Owl Dr
E Rodeo Ln
N Meridian Rd
N Sailer Way
Phase Two
E Deer Flat Rd
N Kay Ave
E Porter St
LEGEND
SUBJECT SITE
PARCEL LINES
ROADS
WATER FEATURES
JMH

WINFIELD SPRINGS SUBDIVISION NO. 2

KUNA, IDAHO

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
	SECTION LINE	
— S —	SANITARY SEWER LINE	S
— W —	WATER LINE	W
— GI —	GRAVITY IRRIGATION PIPE	GIRR
	PRESSURE IRRIGATION LINE	PIRR
	STORM DRAIN LINE	SD
	CENTERLINE	
	PUBLIC RIGHT OF WAY LINE	
	LOT LINE	
	6" VERTICAL CURB AND GUTTER	
	6" VERTICAL CURB (NO GUTTER)	
	ROLLED CURB & GUTTER	
	5' SIDEWALK	
	SEWER MANHOLE	S
	STORM DRAIN MANHOLE	D
	GRAVITY IRRIGATION MANHOLE	PI
	DITCH FLOW LINE	
	PRESSURE IRRIGATION SERVICE	
	LED STREET LIGHT	
	FIRE HYDRANT	
— EG —	EDGE OF GRAVEL	
— OHP —	OVERHEAD POWER	
— X —	FENCE LINE	
	STREET SIGN	
	SINGLE WATER SERVICE	
	DOUBLE WATER SERVICE	
	WATER VALVE	
	CONCRETE SIDEWALK	
	ASPHALT ROADWAY	

ABBREVIATIONS

CB	CATCH BASIN
CL	CENTER LINE
EG	EXISTING GROUND
FG	FINISH GRADE
FL	FLOWLINE
GB	GRADE BREAK
GWE	GROUND WATER ELEVATION
IRR	IRRIGATION
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
PIRR	PRESSURIZED IRRIGATION
PT	POINT OF TANGENCY
SD	STORM DRAIN
SS	SANITARY SEWER
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
TRC	TOP BACK OF ROLL CURB
TVC	TOP BACK OF VERTICAL CURB
VOL	VOLUME
W	WATER
WSE	WATER SURFACE ELEVATION



SHEET INDEX

SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-002	NOTE SHEET
C-101	PRESSURE IRRIGATION PLAN
C-102	PRESSURE IRRIGATION PLAN
C-103	STREET LIGHT AND SIGNAGE PLAN
C-201	GRADING PLAN
C-202	GRADING PLAN
C-301	E. COWLEY STREET AND N. GREENVILLE AVENUE
C-302	N. GREENVILLE AVENUE
C-303	N. GREENVILLE AVENUE AND E. WHITETAIL STREET
C-304	E. WHITETAIL STREET
C-305	E. BAY OWL WAY AND E. BUCK DRIVE
C-306	E. TROPHY STREET
C-307	N. KAY AVENUE
C-308	N. KAY AVENUE
C-309	N. KAY AVENUE
C-310	E. DEER FLAT ROAD
C-311	E. DEER FLAT ROAD
C-400	OVERALL UTILITY PLAN
C-401	SEWER LINE A – N. GREENVILLE AVENUE
C-402	SEWER LINE A AND B – N. GREENVILLE AVENUE
C-403	SEWER LINE B – N. GREENVILLE AVENUE
C-404	SEWER LINE B – E. WHITETAIL STREET
C-405	SEWER LINE C AND 8 INCH WATER LINE – E. BAY OWL WAY AND E. BUCK DRIVE
C-406	12 INCH WATER LINE – N. KAY AVENUE
C-407	12 INCH WATER LINE AND SEWER LINE D – N. KAY AVENUE / E. COWLEY STREET
C-501	PEDESTRIAN RAMPS
C-502	STREET SECTIONS AND DRAINAGE DETAILS
C-503	DRAINAGE DETAILS

APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

☑ APPROVED
☐ APPROVED WITH CORRECTIONS
☐ SEE ATTACHED LETTER

ELEVATION NOTE

VERTICAL DATUM: NAVD 88

The Engineer of Record certifies that the plans are prepared in substantial conformance with the ACHD policy and standards in effect at the time of preparation. The Engineer acknowledges that ACHD assumes no liability for errors or deficiencies in the design. all variances from ACHD policy shall be approved in writing. The following variances, listed by date and short description, were approved for this project: none

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY Michael Abrahi DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

PROJECT NO. 10-18-001

J-U-B ENGINEERS, INC.

250 South Beechwood Avenue, Suite 201, Boise, ID 83709-0944
p 208 376 7330 f 208 323 9336 w www.jub.com

OTHER J-U-B COMPANIES THE LANGDON GROUP GATEWAY MAPPING INC.

DEVELOPER:

TOLL ID, LLC.
3103 W. SHERYL DR.
SUITE 100
MERIDIAN, ID. 83642
208-424-0020

SEWER & WATER:

CITY OF KUNA
6950 S TEN MILE RD.
MERIDIAN, ID. 83634
PHONE : (208) 287-1729 (SEW)
PHONE : (208) 287-1725 (WAT)

PRESSURE IRRIGATION:

CITY OF KUNA
6950 S TEN MILE RD.
MERIDIAN, ID. 83634
PHONE : (208) 287-1725

POWER:

IDAHO POWER
VIC STEELMAN
1221 W. IDAHO STREET
BOISE, ID. 83702
PHONE : (208) 388-2323

ROADWAYS

ADA COUNTY HIGHWAY DISTRICT
3775 ADAMS STREET
GARDEN CITY, ID. 83714
PHONE : (208) 387-6100

IRRIGATION DISTRICT:

BOISE PROJECT BOARD OF CONTROL
2465 OVERLAND ROAD
BOISE, ID 83705
PHONE : (208) 344-1141

REUSE OF DOCUMENTS

J-U-B grants to CLIENT a nonexclusive, non-transferable license to use the Drawings, Specifications and/or Contract Documents (Documents) as follows:

CLIENT may make and retain copies of the Documents for reference, but J-U-B shall retain all common law, statutory and other reserved rights, including the copyright thereto, and the same shall not be reused on this Project or any other Project without J-U-B's prior written consent. Distribution of Documents to meet regulatory or permitting requirements, or for similar purposes, in connection with the Project, including but not limited to distribution to contractors or subcontractors for the performance of their work, is not to be construed as publication adversely affecting the reserved rights of J-U-B. The Documents are not intended for use in creating dtm for grading or earthwork, survey staking layout (unless specifically identified as such in the documents), or property boundary layouts.

Any reuse without written consent by J-U-B, or without verification or adoption by J-U-B for the specific purpose intended by the reuse, will be at CLIENT's sole risk and without liability or legal exposure to J-U-B. The CLIENT shall release, defend, indemnify, and hold J-U-B harmless from any claims, damages, actions or causes of action, losses, and expenses, including reasonable attorneys' and expert fees, arising out of or resulting from such reuse.

If the Documents are provided in electronic format, the electronic documents are subject to the provisions of J-U-B's "electronic document/data limited license" found at edocs.jub.com.

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
250 S. Beechwood Ave.
Suite 201
Boise, ID 83709-0944
Phone: 208.376.7330
www.jub.com

PROFESSIONAL ENGINEER REGISTERED 12449 STATE OF IDAHO JUSTIN E. BOZOVICH

REUSE OF DRAWINGS
J-U-B SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE REUSED WITHOUT J-U-B'S PRIOR WRITTEN CONSENT. ANY REUSE WITHOUT WRITTEN CONSENT BY J-U-B WILL BE AT CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

NO.	DESCRIPTION	BY	APPR.	DATE
	REVISION			

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

COVER SHEET

Exhibit A3

FILE: 10-18-001_C-001
JUB PROJ.#: 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-001

RECEIVED
JUN 26 2018

Plot Date:5/23/2018 11:33 AM Plotted By: Keith Morse
Data Created:12/12/2017 \\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD SPRINGS\CAD\SHEETS\10-18-001_C-001.DWG

GENERAL

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR REQUIREMENTS OF KUNA CITY PUBLIC WORKS DEPARTMENT, THE ADA COUNTY HIGHWAY DISTRICT, AND/OR THE ISPWC (LATEST EDITION)
2. A PRE CONSTRUCTION CONFERENCE WILL BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR UTILITY CONTRACTORS SHOULD BE PRESENT. THE CONTRACTOR SHALL NOTIFY KUNA CITY WHEN SHUTTING DOWN A JOB FOR ANY REASON AND PROVIDE 48 HOURS NOTICE BEFORE RESTARTING WORK AGAIN.
3. WHERE IT IS NECESSARY FOR NON POTABLE WATER LINE AND POTABLE WATER LINE TO CROSS EACH OTHER AND THE NON POTABLE LINE IS LESS THAN 18" BELOW OR ABOVE THE WATER MAIN, THE NON POTABLE WATER LINE SHALL BE CONSTRUCTED WITH POTABLE WATER DR18 PIPE FOR A MINIMUM OF TEN FEET EITHER SIDE OF POTABLE PIPELINE WITH A SINGLE TWENTY FOOT SECTION OF OR18 WATER PIPE CENTERED ON THE CROSSING. PRESSURE SEWAGE MAINS SHALL BE NO CLOSER THAN 18 INCHES FROM POTABLE MAINS. IN LIEU OF CONSTRUCTING OR RECONSTRUCTING, THE NON POTABLE WATER LINE TO CONFORM TO WATER MAIN STANDARDS, THE POTABLE WATER LINE MAY BE PROTECTED BY A SLEEVING MATERIAL ACCEPTABLE TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY FOR A DISTANCE OF 10 HORIZONTAL FEET ON BOTH SIDES OF CROSSING.
4. CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GRDUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES STRUCTURES, DEBRIS, RUBBISH AND SUCH MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATIONS OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
5. SURVEY CONTROL POINTS WHICH ARE CRITICAL TO THE CONSTRUCTION OF THE PROJECT ARE TO BE LOCATED WITHIN THE LIMITS OF WORK. THE CONTRACTOR SHALL TAKE PRECAUTION TO PROTECT THE POINTS IN PLACE.
6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL REPLACEMENT DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
7. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT- OF-WAY PERMIT FROM ACHD AT LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION.
8. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.
9. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE.
10. CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF ITEM #9 AT THE REQUEST OF THE AGENCY AND/OR THE ENGINEER.
11. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT- OF-WAY PERMIT FROM ACHD AT LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION.
12. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACK CHARGED TO THE CONTRACTOR BY THE OWNER.
13. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.
14. THE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS AND SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
15. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
16. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY NECESSARY NPDES PERMITS, FILING ANY NOI'S, AND PREPARING A POLLUTION PREVENTION PLAN (PPP) IN ACCORDANCE WITH ENVIRONMENTAL PROTECTION AGENCY REGULATIONS. CONTACT THE EPA AT (208) 378-5748 FOR THE REQUIRED INFORMATION. SAID PERMIT SHALL BE PRESENTED TO THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
17. ALL UTILITIES, INCLUDING SERVICE LINES, WITHIN STREET TRAVEL WAYS SHALL BE IN PLACE PRIOR TO CURB, GUTTER, SIDEWALKS AND STREET CONSTRUCTION.
18. PIPE CONTRACTOR SHALL REPLACE ALL PAVEMENT AND CONCRETE REMOVED FOR THE INSTALLATION OF WATER, SEWER, OR IRRIGATION PIPE. ALL PAVEMENT SHALL BE REPLACED WITHIN SEVEN CALENDAR DAYS FROM THE TIME THE PAVEMENT AND/OR CONCRETE IS REMOVED. CONCRETE AND PAVEMENT SHALL BE REPLACED PER ISPWC AND ACHD STANDARDS
19. NO PAVING SHALL OCCUR UNTIL THE CONTRACTOR OBTAINS WRITTEN APPROVAL OF ALL INSTALLED WATER, SEWER, AND PRESSURE IRRIGATION FACILITIES FROM THE CITY OF KUNA.
20. IN AREAS WHERE ROCK EXCAVATION IS REQUIRED ALL BLASTING FOR OTHER UTILITIES SHALL OCCUR PRIOR TO INSTALLATION OF ANY SEWER MAINS, WATER MAINS, PRESSURE IRRIGATION MAINS OR SERVICE LINE CROSSINGS. BLASTING FOR ROCK EXCAVATION IN THE PROXIMITY OF EXISTING UTILITIES FROM PREVIOUS PHASES OF THE SUBDIVISION OR NEIGHBORING SUBDIVISIONS MAY BE PERFORMED AS LONG AS IT IS EQUAL DISTANCE HORIZONTAL AS IS THE EXCAVATION DEPTH OR A MINIMUM OF 15 FEET, WHICHEVER IS GREATER. THE CONTRACTOR PERFORMING THE BLASTING SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY EXISTING UTILITIES.
21. THE DEVELOPER IS REQUIRED TO RETAIN A QUALIFIED REGISTERED ENGINEER TO PERFORM INSPECTION SERVICES DURING CONSTRUCTION. THE ENGINEER SHALL FURNISH CITY A WRITTEN CERTIFICATION THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. COPIES OF ALL DENSITY, DEFLECTION TESTS, PRESSURE TESTS, AND BACTERIOLOGICAL TEST RESULTS SHALL BE FURNISHED WITH THE CERTIFICATION LETTER.
22. THE CITY OF KUNA WILL PROVIDE PERIODIC INSPECTION AND OBSERVE TESTING FOR AN EIGHT HOUR DAY, FROM 8:00 A.M. TO 5:00 P.M., FOR A FORTY HOUR WEEK. THE CONTRACTOR SHALL REIMBURSE THE CITY AT RATES ESTABLISHED BY THE CITY FOR INSPECTION IN EXCESS OF THE NORMAL WORK WEEK, INCLUDING LEGAL HOLIDAYS. OVERTIME INSPECTION RATES AND A LIST OF LEGAL HOLIDAYS CAN BE OBTAINED FROM THE CITY PUBLIC WORKS DEPARTMENT.
23. ALL PLANS USED FOR CONSTRUCTION SHALL BEAR THE CITY OF KUNA "APPROVED FOR CONSTRUCTION"STAMP. THE DEVELOPER OR HIS ENGINEER SHALL DELIVER THE ORIGINAL DRAWINGS TO THE CITY ENGINEER FOR APPLICATION OF THE APPROVAL STAMP FOLLOWING APPROVAL BY ALL OTHER AGENCIES AND PRIOR TO PRINTING THE FINAL PLAN SETS FOR CONSTRUCTION. COPIES OF AGENCY APPROVAL LETTERS SHALL BE SUBMITTED WITH THE ORIGINAL DRAWINGS TO RECEIVE THE APPROVAL STAMP. ALL PRINTING ON CONSTRUCTION SHALL BE PRINTED ON A PALE YELLOW PAPER. THREE COMPLETE SETS OF FINAL CONSTRUCTION PLANS FOR THE WATER, SEWER, PRESSURE IRRIGATION AND ROADWAY IMPROVEMENTS SHALL BE FURNISHED TO THE CITY PRIOR TO BEGINNING CONSTRUCTION. USE OF ANY PLANS WITHOUT THE KUNA "APPROVED FOR CONSTRUCTION" STAMP DURING CONSTRUCTION WILL BE CAUSE FOR A STOP WORK ORDER BY THE CITY. ANY MODIFICATIONS DURING CONSTRUCTION MUST BE APPROVED IN WRITING BY THE CITY.
24. WHEN CONSTRUCTION IS SATISFACTORILY COMPLETED, CLEANED AND TESTED THE DEVELOPER SHALL REQUEST A FINAL ACCEPTANCE INSPECTION BY THE CITY. THE FINAL ACCEPTANCE INSPECTION SHALL OCCUR AFTER ALL OTHER UTILITIES ARE INSTALLED. AT A MINIMUM, THE FINAL ACCEPTANCE INSPECTION SHALL CONSIST OF CLEANING ALL SEWER MAINS, VISUALLY INSPECTING EACH MANHOLE WITNESSING A FINAL SEWER AIR TEST AND WATER PRESSURE TEST, PRESSURE IRRIGATION DEFLECTION TESTING OF THE SEWER MAINS, VISUAL INSPECTION OF THE SEWER MAINS, AND PROVIDING A DVD VIDEO OF ALL SEWER MAIN VISUAL INSPECTION. ALL TESTING IS TO BE PROVIDED AND PAID FOR BY THE DEVELOPER AS PART OF SUBDIVISION OBLIGATIONS.
25. THE CITY HAS THE RIGHT TO INSPECT THE WORK AT ANY TIME DURING CONSTRUCTION. ANY WORK THAT DOES NOT CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS SHALL BE REJECTED.
26. THE DEVELOPER SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE CITY. THIS GUARANTEE SHALL COVER ALL DAMAGE TO THE CITY UTILITY SYSTEMS OF ANY KIND. DEVELOPER SHALL NOTIFY ALL PURCHASERS OF LOTS, AND THEIR CONTRACTORS, THAT CITY UTILITY SYSTEMS HAVE BEEN ACCEPTED BY THE CITY. ANY DAMAGE TO THESE SYSTEMS DURING HOME CONSTRUCTION SHALL BE BILLED DIRECTLY TO THE OWNER OF RECORD AT THE TIME THE DAMAGE IS FOUND.
27. THE DEVELOPER SHALL FURNISH THE CITY RECORD DRAWINGS AS FOLLOWS: ONE (1) SET OF ELECTRONIC DRAWINGS ON CD IN PDF FORMAT, AND TWO (2) 24 X 36 SETS ON WHITE PAPER BEFORE FINAL PLAT OR WITHIN 30 DAYS OF FINAL ACCEPTANCE.
28. ALL SURVEY MONUMENTS SHALL BE PRESERVED, SET, AND/OR RESTORED IN ACCORDANCE WITH IC 50-1303.

WATER

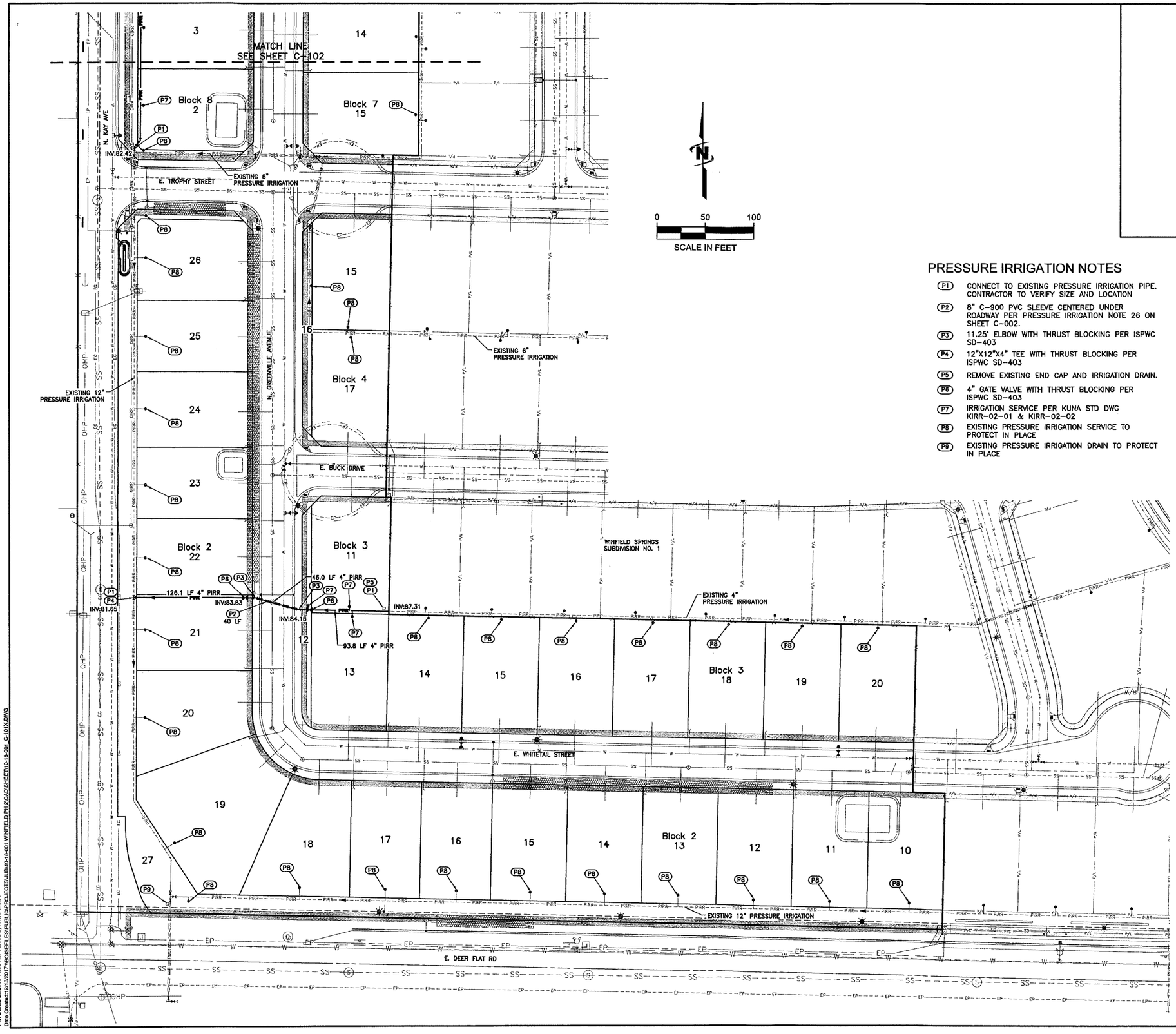
1. THE WATER SYSTEM SHALL BE CONSTRUCTED TO CONFORM WITH STANDARDS SET FORTH IN THE "IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS", THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC LATEST EDITION) AND CITY OF KUNA STANDARDS.
2. CONTRACTOR SHALL NOTIFY OWNER'S ENGINEER AND KUNA CITY 48 HOURS BEFORE INITIAL CONSTRUCTION BEGINS AND SHALL ALSO REQUEST KUNA CITY INSPECTION OF WATER LINES AND APPURTENANCES TWENTY-FOUR (24) HOURS IN ADVANCE OF BACKFILLING.
3. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT THE ENTRY OF ANIMALS, DIRT AND OTHER FOREIGN MATTER INTO PIPES AND SHALL NOT LEAVE ANY OPEN PIPE END AT ANY TIME WHEN ABSENT FROM THE WORK SITE
4. ALL WATER MAINS SHALL BE PVC CONFORMING TO THE PROVISIONS OF AWWA C-900 DR 18 (235 PSI) OR CLASS 150 CEMENT MORTAR LINED DUCTILE IRON CONFORMING TO AWWA C-151. ALL FITTINGS SHALL BE DUCTILE IRON CONFORMING TO AWWA C-110.
5. MINIMUM DEPTH FOR ALL WATER MAINS SHALL BE FOUR (4) FEET FROM FINISHED GRADE TO TOP OF PIPE.
6. AFTER INSTALLATION OF WATER MAINS, TRENCHES SHALL BE COMPACTED TO 95% OF MAXIMUM PROCTOR DENSITY TO PREVENT SETTLEMENT.
7. ALL MAIN LINE WATER VALVES SHALL BE RESILIENT-WEDGE GATE VALVES FOR WATER SUPPLY SERVICE CONFORMING TO ANSI/AWWA C-509. ACCEPTABLE VALVES ARE MUELLER MODEL A-2380 AND A-2361 OR CLOW MODEL 2839 AND 2640. ANY OTHERS MUST BE EXPLICITLY APPROVED BY THE CITY ENGINEER.
8. ALL WATER VALVES SHALL BE FURNISHED WITH A STANDARD CAST IRON 6-1/4 INCH DIAMETER 2-PIECE ADJUSTABLE VALVE BOX. THE CAST IRON COVER SHALL BE DESIGNED TO FIT ON TOP OF THE VALVE AND SHALL BE MARKED WITH THE WORD "WATER"AS AN INTEGRAL PART OF THE COVER. CONCRETE COLLAR SHALL BE REQUIRED WHEN LOCATED IN PAVEMENT.
9. ALL TEES, PLUGS, BENDS, AND OTHER LOCATIONS WHERE UNBALANCED FORCES EXIST, SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN ON SD-403 (ISPWC)
10. NO. 12 DIRECT BURIAL TRACER WIRE SHALL BE PLACED AND TAPED AT THE CROWN OF WATER MAINS AND SERVICE LINES. THE TRACER WIRE SHALL BE LOOPED FROM THE MAIN LINE TO EACH SERVICE VAULT ALONG THE SERVICE PIPE AND BACK TO THE MAIN LINE. THE TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVE BOXES AND SHALL BE EXTENDED ALONG THE OUTSIDE OF THE LOWER PORTION OF THE VALVE BOX AND ALONG THE INSIDE OF THE UPPER PORTION. AN ELECTRICAL CONTINUITY WIRE SHALL BE TAKEN TO EACH VALVES SO IT IS ACCESIBLE FROM ABOVE AND DOES NOT INTERFERE WITH VALVE OPERATION. AN ELECTRICAL CONTINUITY TEST SHALL BE CONDUCTED BEFORE PAVING TO PROVE THE INTEGRITY OF THE TRACER WIRE.
11. ALL MAINS SHALL BE LEAK-TESTED, FLUSHED ANO DISINFECTED AFTER INSTALLATION OF ALL UTILITIES, BEFORE PAVING AND BEFORE CONNECTING TO THE SYSTEM. THE DISTRIBUTION SYSTEM SHALL BE PRESSURE TESTED TO 150 PSI MINIMUM OR IN ACCORDANCE WITH SECTION 401 OF THE ISPWC. IT SHALL BE DISINFECTED ACCORDING TO SECTION 401 (ISPWC) AND THEN FLUSHED. THE DISINFECTION AND FINAL FLUSHING PROCEDURE SHALL BE TESTED TO DETERMINE IF THE APPROPRIATE MINIMUM CHLORINE (CL) RESIDUALS HAVE BEEN MET. EACH METER SETTER SHALL BE OPENED TO VERIFY THAT THE CORPORATION STOP IS OPEN AND THE SERVICE IS OPERABLE PRIOR TO PAVING. EACH VALVE AND HYDRANT SHALL BE OPERATED TO ENSURE IT IS FUNCTIONAL PRIOR TO PAVING. A REPRESENTATIVE OF THE CITY MUST OBSERVE THE TESTING.
12. ALL INSTALLED WATER LINES SHALL BE DISINFECTED IN ACCORDANCE WITH DIVISION 400, OF THE ISPWC SPECIFICATIONS AND PASS THE REQUIRED BACTERIOLOGICAL TEST PRIOR TO BEING PUT INTO SERVICE. THE CONTRACTOR SHALL FURNISH KUNA CITY WITH REPORTS FROM A CERTIFIED LABORATORY OF THE BACTERIA SAMPLES SHOWING THAT THE WATER LINES HAVE PASSED BACTERIA SAFETY REQUIREMENTS. A REPRESENTATIVE OF THE CITY MUST OBSERVE THE TESTING.
13. THE CONTRACTOR MAY PRESSURE TEST ALL WATER LINES AFTER DISINFECTION AND FLUSHING BUT PRIOR TO INSTALLATION OF OTHER UTILITIES. AFTER ALL UTILITIES ARE INSTALLED AND PRIOR TO PAVING THE CONTRACTOR SHALL PERFORM A FINAL PRESSURE TEST WITH KUNA CITY PERSONNEL IN ATTENDANCE. THE CONTRACTOR SHALL FURNISH ALL PERSONNEL AND EQUIPMENT NECESSARY TO CONDUCT THE TEST.
14. CONTRACTOR IS TO FIELD VERIFY ALL VALVE BOX LID ELEVATIONS TO ENSURE THAT SAID LID ELEVATIONS MATCH FINAL STREET GRADE, AND ALL METER LID ELEVATIONS TO MATCH SIDEWALK ELEVATIONS.
15. VALVES, FLANGED OR M.J., SHALL BE LOCATED IN THE STREET UNLESS EXPLICITLY APPROVED BY THE CITY ENGINEER. ALL GATE VALVES SHALL BE SET AS CLOSE (FLANGE CONNECTED) AS POSSIBLE TO MAIN LINE FITTINGS. ALL WATER METERS AND FIRE HYDRANTS ARE TO BE LOCATED OUT OF THE ROAD RIGHT-OF-WAY. THERE MUST BE AT LEAST A ONE (1) FOOT SEPARATION BETWEEN ANY BACK OF SIDEWALK (OR CURB IF NO SIDEWALK) AND THE LEADING EDGE OF ANY FIRE HYDRANT.
16. WATER SERVICE LINES SHALL BE PLACED IN A 4 INCH DIAMETER SCHEDULE 80 WATER CLASS PIPE WHEREVER THE SERVICE LINE CROSSES A STREET DRAINAGE SEEPAGE BED.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MARKING ALL EXISTING SERVICE CONNECTIONS WITH AN 8-FOOT 2 X 4 BOARD PAINTED BLUE. CONTRACTOR SHALL STAMP OR STENCIL THE SIDEWALK AT THE POINT WHERE THE SERVICE CROSSES THE SIDEWALK.
19. THE PAVING CONTRACTOR SHALL SET WATER VALVE RISERS IN CONCRETE COLLARS PER ISPWC STANDARD DRAWING NO. SD-408.
20. ALL FIRE HYDRANTS SHALL BE DRY BARREL CONFORMING TO AWWA C-502 AND PROVIDED AND INSTALLED PER ISPWC SECTION 403 AND ISPWC DWG SD-404. HYDRANTS SHALL HAVE A FIVE (5) FOOT SETTING MINIMUM; 150 PSI WORKING PRESSURE; ONE 4-1/2 INCH DIAMETER NATIONAL STANDARD PUMPER NOZZLE; AND TWO 2-1/2 INCH DIAMETER NATIONAL STANDARD THREAD FIRE HOSE NOZZLES WITH HYDRA-STORZ NYST 5.0-4.5 NH-NS ADAPTOR OR FIRE DEPARTMENT APPROVED EQUIVILENT. THE VALVE OPERATION SHALL OPEN COUNTER CLOCKWISE. THE HYDRANT SHALL BE EQUIPPED WITH DRAIN THAT OPENS WHEN HYDRANT IS CLOSED; AND A SIX (6) INCH FLANGED BY MECHANICAL JOINT RESILIENT-WEDGE GATE VALVE ATTACHED DIRECTLY TO THE MAIN LINE TEE. FIRE HYDRANTS SHALL BE A CLOW MEDALLION, WATEROUS PACER 100, OR MUELLER A423. NO OTHERS WILL BE ACCEPTED. MAXIMUM HYDRANT SPACING SHALL BE 450 FEET. HYDRANT LOCATIONS SHALL BE APPROVED IN WRITING BY THE KUNA RURAL FIRE DEPARTMENT AND SUBMITTED WITH THE CONSTRUCTION PLANS FOR FINAL REVIEW AND APPROVAL BY THE CITY ENGINEER.
21. INDIVIDUAL 1-INCH WATER SERVICES SHALL BE INSTALLED FOR EACH CONNECTION FROM A SINGLE OR DUAL METER VAULT. THE 1-INCH WATER SERVICE FOR EACH CONNECTION SHALL BE EXTENDED A MINIMUM OF 10-FEET ON THE HOUSE SIDE OF THE METER, OR AS REQUIRED TO EXTEND PAST OTHER UTILITIES LOCATED WITHIN THE 10-FOOT UTILITY EASEMENT. WATER METERS SHALL BE FURNISHED AND INSTALLED BY THE CITY. EXCEPT AS NOTED BELOW, SERVICE DETAILS SHALL BE AS NOTED ON ISPWC DWG SD-401. SPECIFICALLY EACH SERVICE LEG SHALL BE PROVIDED WITH 18-INCH TALL ¾-INCH COPPER METER SETTER; CURB STOP, LOCKABLE SHUTOFF VALVE AND CHECK VALVE; AND 20-INCH DIAMETER BY 36-INCH TALL INSULATED METER BOX AS MANUFACTURED BY "MID-STATES PLASTICS, INC.", OR APPROVED EQUAL; AND A CAST IRON FRAME AND COVER TAPPED WITH A 1-INCH DIAMETER RECESSED HOLE FOR THE CITY AUTOREAD METER SENSOR AS APPROVED BY THE CITY. WHERE PRACTICAL METER BOX SHALL BE LOCATED ON THE NORTH OR EAST SIDE OF THE PROPERTY, OR IN CASE OF DUAL WATER SERVICE, ON THE NORTH OR EAST SIDE OF THE COMMON PROPERTY LOT LINE. THE CENTERLINE OF THE METER SETTER SHALL BE LOCATED 18-INCHES BELOW FINISH GRADE. METERS SHALL BE PLACED 18-INCHES INSIDE THE PROPERTY LINE AND 18-INCHES AWAY FROM THE SIDE LOT LINE.
22. MULTIPLE TAPS IN THE SAME PIPE JOINT SHALL BE STAGGERED AND SHALL BE SEPARATED BY A MINIMUM OF ONE FOOT.
23. ALL PIPE, MAINS, AND SERVICES SHALL BE BEDDED WITH TYPE 1 OR TYPE III BEDDING. IN AREAS OF ROCK EXCAVATION BEDDING SHALL BE SIX (6) INCHES BELOW THE BOTTOM OF PIPE.

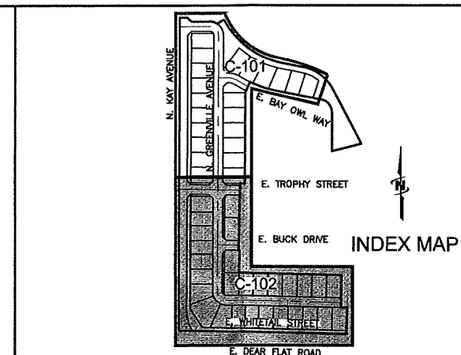
SEWER

1. ALL WORK SHALL BE DONE IH ACCORDANCE WITH "THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC – LATEST EDITION)", STANDARDS OF KUNA CITY PUBLIC WORKS DEPARTMENT AND/OR THE ADA COUNTY HIGHWAY DISTRICT MODIFICATIONS TO THE ISPWC.
2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE CITY OF KUNA.
3. ALL SEWER PIPE AND FITTINGS SHALL BE POLY-VINYL-CHLORIDE (PVC) CONFORMING TO THE PROVISIONS OF ASTM D-3034, SDR-35 FOR SIZES 4-INCH THROUGH 15-INCH AND ASTM F 679 FOR SIZES 18-INCH THROUGH 36-INCH. PRESSURE SEWER PIPE SHALL CONFORM TO AWWA C900 PVC, DR 18 (235 PSI) PIPE.
4. SEWER INSPECTIONS WILL BE BY OWNER'S ENGINEER AND THEIR DECISIONS SHALL BE CONSIDERED AS FINAL. SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER AND IN CONFORMANCE WITH APPROVED PLANS.
5. AFTER STUB OUTS FOR SERVICE LINES ARE INSTALLED AND MARKED, THE CONTRACTOR SHALL NOTIFY OWNER AND CITY ENGINEER FOR INSPECTION SO THAT ANY DESTRUCTION OF SAME IS NOT BACKCHARGED TO SEWER CONTRACTOR.
6. PRIOR TO FINAL ACCEPTANCE, AFTER ALL UTILITIES ARE IN AND PRIOR TO PAVING, TESTING SHALL BE CONDUCTED. THE CONTRACTOR SHALL CONTACT OWNER'S ENGINEER AND THE CITY OF KUNA A MINIMUM OF 24 HOURS PRIOR TO TESTING. ALL INSTALLED SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH DIVISION 500 OF THE ISPWC SPECIFICATIONS. A REPRESENTATIVE OF THE CITY MUST OBSERVE THE TESTING. TESTING SHALL INCLUDE AIR PRESSURE TESTING, DEFLECTION TESTING, SURVEY INVERT ELEVATIONS AND VISUAL INSPECTION USING CCTV CAMERA. A COPY OF THE VISUAL INSPECTION SHALL BE GIVEN TO THE CITY OF KUNA IN DVD FORMAT PRIOR TO FINAL ACCEPTANCE OF THE SEWER LINE. ALL SEWER LINES SHALL BE CLEANED PRIOR TO THE DEFLECTION TEST AND CCTV CAMERA INSPECTIONS.
7. ALL MANHOLES SHALL BE CONSTRUCTED WATER TIGHT AND WITH THE TOP OF CONE LOCATED WITHIN 12 INCHES OF FINISHED GRADE. THE SEWER CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE SEWER CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE EXISTING AND CONSTRUCTED MANHOLE CONES TO ASSURE THAT ALL RING ELEVATIONS MATCH FINAL STREET GRADES. EACH OF THE GRADE RINGS SHALL BE SET IN A BED OF NON-SHRINK GROUT OR MORTAR AND TROWELED SMOOTH WITH THE INSIDE OF THE MANHOLE. THE NON-SHRINK GROUT SHALL ALSO BE APPLIED BETWEEN METAL FRAME AND GRADE RINGS. STACKING OF THE GRADE RINGS AND FRAME WITHOUT NON-SHRINK GROUT OR MORTAR WILL NOT BE ALLOWED.
8. THE PAVING CONTRACTOR SHALL SET THE GRADE RINGS AND POUR THE CONCRETE COLLARS PER STANDARD DRAWING NO. SD-508. THE PAVING CONTRACTOR SHALL CONTACT ADA COUNTY HIGHWAY DISTRICT 24 HOURS PRIOR TO POURING CONCRETE COLLARS.
9. SERVICE STUB OUTS WILL BE TO THE POINTS SHOWN IN THE DRAWINGS OR AS MARKED BY THE ENGINEER IN THE FIELD. SEWER SERVICE STUB OUTS BEGINNING AT A MANHOLE ARE GENERALLY NOT APPROVED, BUT WHEN UNAVOIDABLE IN THE OPINION OF THE CITY ENGINEER, SHALL HAVE THE TOP OF THE FOUR INCH SERVICE LINE PIPE MATCH THE TOP OF THE MAINLINE PIPE. SEWER SERVICE MARKER SHALL BE IN PLACE FOR FINAL INSPECTION. SIDEWALKS ARE TO BE STAMPED OR STENCILED WHERE SERVICE CROSSES.
10. GROUNDWATER LEVELS SHALL BE LOWERED TO BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING OPERATIONS.
11. TRENCH BACKFILL ABOVE THE PIPE ZONE SHALL BE INSPECTED BY ADA COUNTY HIGHWAY DISTRICT OR BY THE OWNER'S ENGINEER IN ACCORDANCE WITH THE LATEST EDITION OF THE "CONSTRUCTION QUALITY ASSURANCE MANUAL". COMPACTION TESTS ARE REQUIRED IN THE BACKFILL ABOVE THE PIPE ZONE, WITHIN PUBLIC RIGHT-OF-WAY, ACCORDING TO ADA COUNTY HIGHWAY DISTRICT REQUIREMENTS AND THE RESULTS SHALL BE SUBMITTED TO KUNA CITY AND ADA COUNTY HIGHWAY DISTRICT PRIOR TO FINAL ACCEPTANCE.
12. ALL STATIONING IS REFERENCED TO THE GRAVITY SEWER CENTERLINE.
13. SEWER SERVICE LINES SHALL BE INSTALLED PRIOR TO STREET IMPROVEMENTS.
14. THE HORIZONTAL SEPARATION BETWEEN SEWER MAINS SHALL BE A MINIMUM OF TEN FEET FROM PIPE EDGE TO PIPE EDGE. PRESSURE SEWAGE MAINS SHALL CROSS NO CLOSER THAN 18 INCHES FROM POTABLE MAINS.
15. SEWER CONSTRUCTION SHALL MEET THE SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING STANDARD DRAWINGS AND ACCOMPANYING SPECIFICATIONS FOUND IN "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION" AND ADA COUNTY HIGHWAY DISTRICT STANDARD DRAWINGS:
    1. STANDARD MANHOLE -- DRAWING NO. SD-501 AND SD-501A.
    2. STANDARD SHALLOW MANHOLE -- DRAWING NO. SD-505.
    3. MANHOLE COLLAR DETAIL -- DRAWING NO. SD-508.
    4. MANHOLE COVER AND FRAME -- DRAWING NO. SD-507.
    5. STANDARD SEWER SERVICE LINE -- DRAWINJG NO. SD-511 & SD-511A.
    6. SEWER SERVICE MARKER -- DRAWING NO. SD-512.
16. MANHOLES SHALL BE CONSTRUCTED IN SEWER MAINS AT ALL CHANGES IN PIPE GRADE, ALL CHANGES IN PIPE SIZE, ALL CHANGES IN PIPE ALIGNMENT, ALL PIPE INTERSECTIONS AT THE TERMINATION OF ALL MAIN LINES. TEMPORARY SEWER CLEANOUTS MAY BE INSTALLED AT THE TERMINATION OF STUB MAIN LINES LESS THAN 150 FEET IN LENGTH, BUT IN SUCH INSTANCES, PROVISION MUST BE MADE FOR THE CITY TO CHECK OR CONFIRM THE INSTALLED GRADE BEFORE THE MAIN LINE IS BACKFILLED.
17. THE CONTRACTOR SHALL SEWER TEST EXCAVATION FOR THE UPSTREAM END OF ALL SERVICE LINES OPEN FOR FIELD VERIFICATION OF THE INVERT ELEVATIONS AND SLOPES BY THE CITY'S INSPECTOR. THE CONTRACTOR SHALL NOT BACKFILL THE ENDS OF SERVICE LINES UNTIL THE CONTRACTOR HAS OBTAINED APPROVAL FROM KUNA CITY'S INSPECTOR OR MADE OTHER ARRANGEMENTS FOR THE VERIFICATION OF SERVICE LINE INVERT ELEVATIONS AND SLOPES.
18. THE CONTRACTOR SHALL INSTALL A REMOVABLE PLUG IN THE DOWN STREAM SIDE OF THE EXISTING MANHOLE WHERE THE NEW CONNECTION WILL BE MADE. THE PLUG SHALL REMAIN IN PLACE DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THIS SEWER PROJECT.
19. ALL PIPE, MAINS, AND SERVICES SHALL BE BEDDED WITH TYPE 1 BEDDING. IN AREAS OF ROCK EXCAVATION BEDDING SHALL BE SIX (8) INCHES BELOW THE PIPE.
20. PRIOR TO CONNECTING TO THE EXISTING SEWER SYSTEM WHERE THE CONNECTION IS MADE BETWEEN MANHOLES AND THE EXISTING SERVICES ALL SEWER MAINS AND SERVICES MUST BE AIR TESTED

ROADWAY, ACHD

1. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPWC THE ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS, AND THE ISPWC WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.
2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.
3. INSPECTION OF WORK WITHIN THE RIGHT-OF-WAYS SHALL BE BY THE ADA COUNTY HIGHWAY DISTRICT (ACHD) AND MUST BE SCHEDULED A MINIMUM OF 24-HOURS IN ADVANCE. CONTACT ACHD INSPECTION SERVICES AT 387-6284. FOR PRIVATE ROADWAYS CONTACT THE OWNER'S ENGINEER.
4. ALL TOPS OF VALVE BOXES AND SEWER MANHOLES SHALL BE SET FLUSH WITH THE SLOPE OF THE FINISHED STREET GRADES. THE ROADWAY CONTRACTOR SHALL INSTALL AND ADJUST ALL SPACERS, GRADE RINGS, MANHOLE RINGS AND LIDS.
5. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.
6. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACK CHARGED TO THE CONTRACTOR BY THE OWNER.
7. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. F





PRESSURE IRRIGATION NOTES

- (P1) CONNECT TO EXISTING PRESSURE IRRIGATION PIPE. CONTRACTOR TO VERIFY SIZE AND LOCATION
- (P2) 8" C-900 PVC SLEEVE CENTERED UNDER ROADWAY PER PRESSURE IRRIGATION NOTE 26 ON SHEET C-002.
- (P3) 11.25° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403
- (P4) 12"X12"X4" TEE WITH THRUST BLOCKING PER ISPWC SD-403
- (P5) REMOVE EXISTING END CAP AND IRRIGATION DRAIN.
- (P6) 4" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
- (P7) IRRIGATION SERVICE PER KUNA STD DWG KIRR-02-01 & KIRR-02-02
- (P8) EXISTING PRESSURE IRRIGATION SERVICE TO PROTECT IN PLACE
- (P9) EXISTING PRESSURE IRRIGATION DRAIN TO PROTECT IN PLACE

APPROVED BY CITY OF KUNA ENGINEER

SIGNATURE DATE

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NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

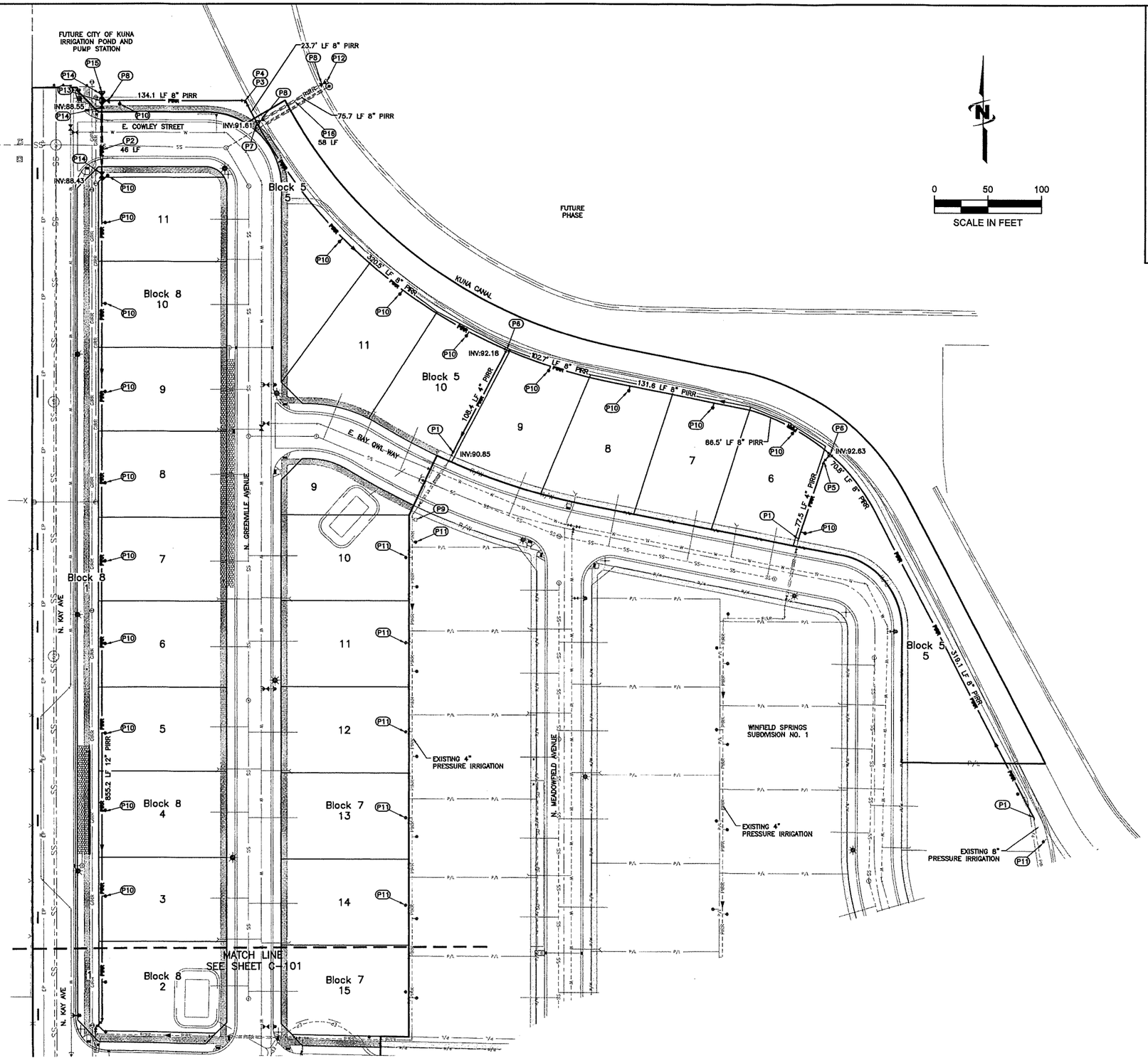
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

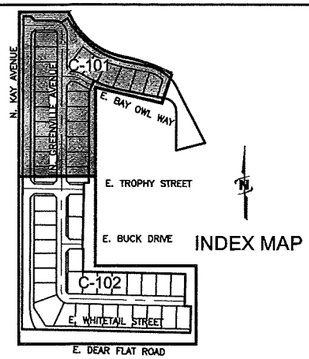
PRESSURE IRRIGATION PLAN

FILE:	10-18-001_C-101X
JUB PROJ. #:	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB
ONE INCH	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	4/5/2018

SHEET NUMBER:
C-101

Plot Date:5/23/2018 11:33 AM Plotted By: Keith Morse
Date Created:12/13/2017 I:\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-101X.DWG





PRESSURE IRRIGATION NOTES

- (P1) CONNECT TO EXISTING PRESSURE IRRIGATION PIPE. CONTRACTOR TO VERIFY SIZE AND LOCATION
- (P2) 16" C-905 PVC SLEEVE CENTERED UNDER ROADWAY PER PRESSURE IRRIGATION NOTE 26 ON SHEET C-002.
- (P3) 45° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403
- (P4) 22.5° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403
- (P5) 11.25° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403
- (P6) 8"X8"X4" TEE WITH THRUST BLOCKING PER ISPWC SD-403
- (P7) 8"X8" TEE WITH THRUST BLOCKING PER ISPWC SD-403
- (P8) 8" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
- (P9) EXISTING PRESSURE IRRIGATION AIR RELEASE VALVE TO PROTECT IN PLACE
- (P10) IRRIGATION SERVICE PER KUNA STD DWG KIRR-02-01 & KIRR-02-02
- (P11) EXISTING PRESSURE IRRIGATION SERVICE TO PROTECT IN PLACE
- (P12) 8" END CAP WITH THRUST BLOCKING PER ISPWC SD-403
- (P13) 12"X12"X8" TEE WITH THRUST BLOCKING PER ISPWC SD-403
- (P14) 12" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
- (P15) 12" END CAP WITH THRUST BLOCKING PER ISPWC SD-403
- (P16) PRESSURE IRRIGATION CANAL CROSSING UNDER SEPARATE PERMIT

APPROVED BY CITY OF KUNA ENGINEER

Jack Stern
23 JUNE 2018

SIGNATURE DATE

811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
250 S. Beechwood Ave.
Suite 201
Boise, ID 83709-0944
Phone: 208.376.7330
www.jub.com

PROFESSIONAL ENGINEER REGISTERED 12449 6-17-18 STATE OF IDAHO JUSTIN E. BOZOVICH

JUB SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE USED WITHOUT JUB'S WRITTEN CONSENT. ANY REUSE WITHOUT WRITTEN CONSENT BY J-U-B WILL BE AT CLIENTS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

NO.	DESCRIPTION	BY	APP'D	DATE
	REVISION			

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

PRESSURE IRRIGATION PLAN

FILE:	10-18-001_C-101X
J-U-B PROJ. # :	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 4/5/2018

SHEET NUMBER:
C-102

Plot Date:5/23/2018 11:33 AM Plotted By: Keith Morse
Date Created:12/13/2017 I:\BOISE\PLESSOR\DWG\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-101X.DWG

SIGN LEGEND

R1-1

R7-9

LIGHTING KEYED NOTES

(L1) INSTALL LED STREET LIGHT (100 WATT EQUIVALENT) PER ISPWC SD-1116

(L2) INSTALL LED STREET LIGHT (250 WATT EQUIVALENT) PER ISPWC SD-1116

(L3) EXISTING STREET LIGHT

STRIPING KEYED NOTES

(ST1) 8" SOLID WHITE BIKE LANE STRIPE PER ACHD DWG 1112 STRIPING DETAIL 15, SHEET 5 OF 10.

(ST2) 8" WHITE BIKE LANE STRIPING AT INTERSECTION WITH 2' SOLID AND 6' GAP PER ACHD DWG TS-1112, STRIPING DETAIL NO. 12, SHEET 4 OF 10.

SIGNAGE KEY NOTES

(SN1) INSTALL 30" R1-1 STOP SIGN

(SN2) INSTALL STREET DESIGNATION SIGN

(SN3) INSTALL 12"x18" R7-9 "NO PARKING/BIKE LANE" SIGN

(SN4) TYPE III TERMINUS BARRICADE PER ACHD SUPPLEMENT TO ISPWC SD-1132B WITH "ROAD TO BE EXTENDED IN THE FUTURE" SIGN

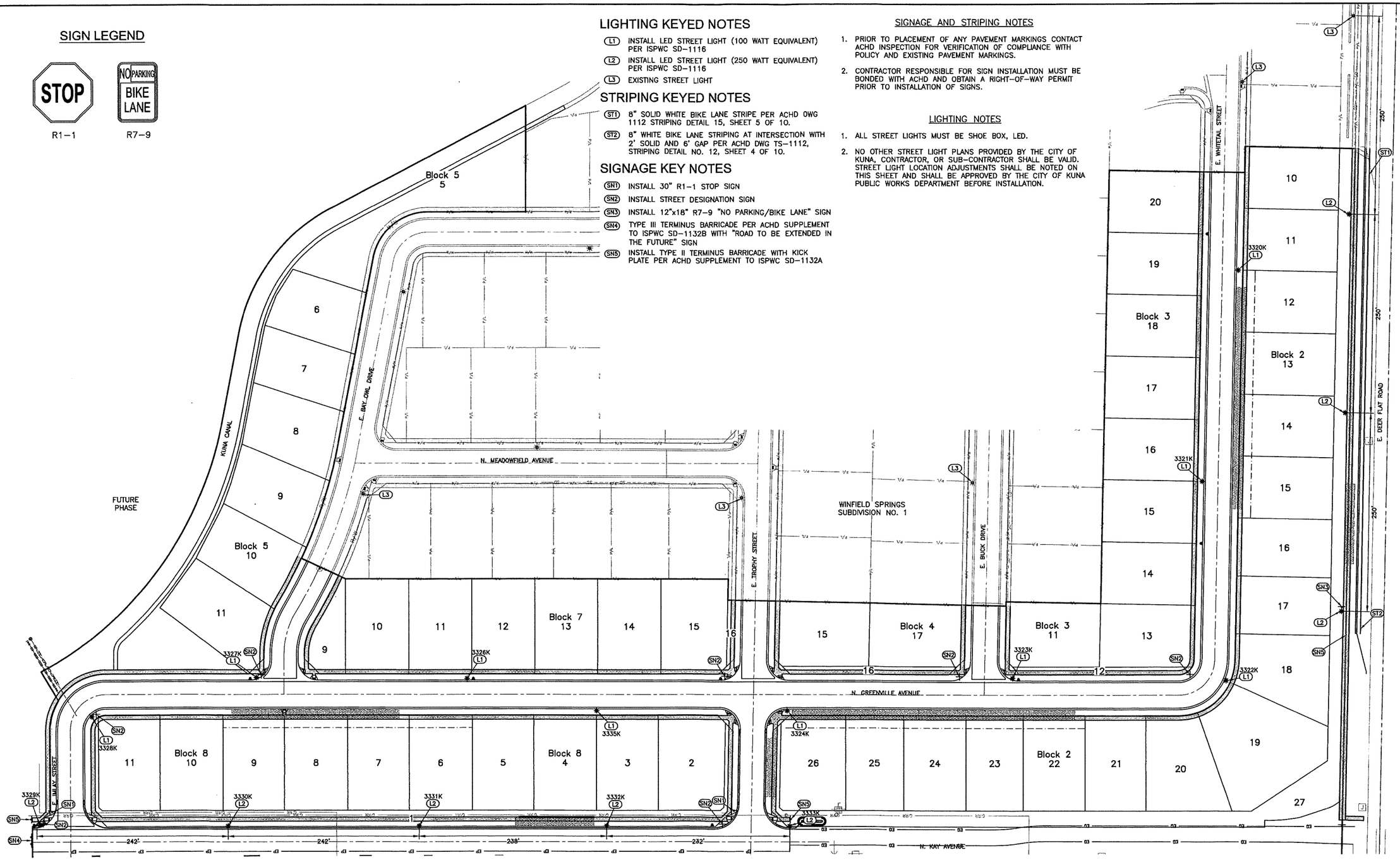
(SN5) INSTALL TYPE II TERMINUS BARRICADE WITH KICK PLATE PER ACHD SUPPLEMENT TO ISPWC SD-1132A

SIGNAGE AND STRIPING NOTES

1. PRIOR TO PLACEMENT OF ANY PAVEMENT MARKINGS CONTACT ACHD INSPECTION FOR VERIFICATION OF COMPLIANCE WITH POLICY AND EXISTING PAVEMENT MARKINGS.
2. CONTRACTOR RESPONSIBLE FOR SIGN INSTALLATION MUST BE BONDED WITH ACHD AND OBTAIN A RIGHT-OF-WAY PERMIT PRIOR TO INSTALLATION OF SIGNS.

LIGHTING NOTES

1. ALL STREET LIGHTS MUST BE SHOE BOX, LED.
2. NO OTHER STREET LIGHT PLANS PROVIDED BY THE CITY OF KUNA, CONTRACTOR, OR SUB-CONTRACTOR SHALL BE VALID. STREET LIGHT LOCATION ADJUSTMENTS SHALL BE NOTED ON THIS SHEET AND SHALL BE APPROVED BY THE CITY OF KUNA PUBLIC WORKS DEPARTMENT BEFORE INSTALLATION.



Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY Michael Allen DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

0 60 120
SCALE IN FEET

APPROVED BY CITY OF KUNA ENGINEER
20 JUNE 2018
SIGNATURE DATE

J-U-B ENGINEERS, INC.
250 S. Beechwood Ave.
Suite 201
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NO.	DESCRIPTION	BY	APP'L	DATE
	REVISION			

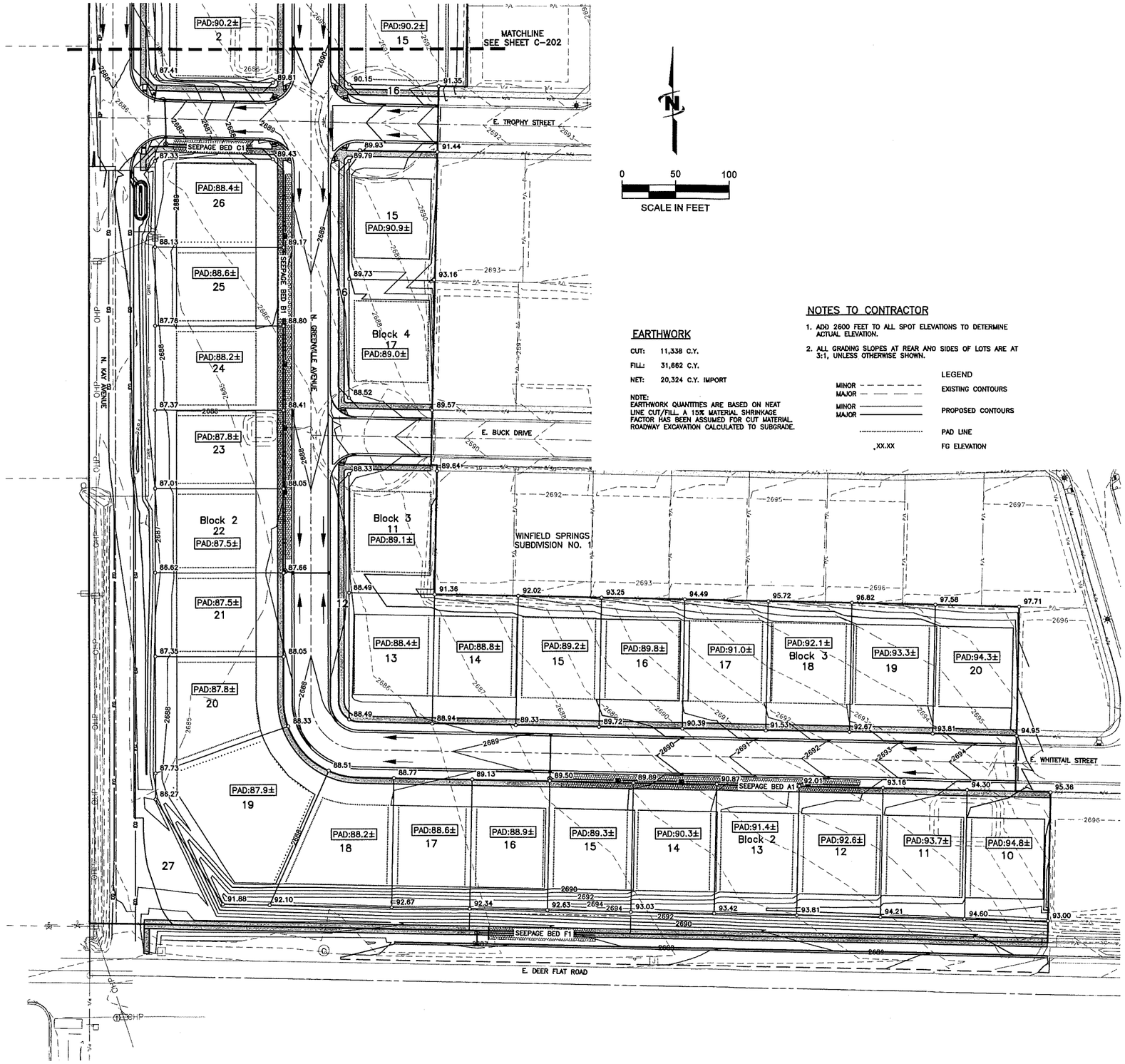
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

STREET LIGHT AND SIGNAGE PLAN

FILE :	10-18-001_C-103
JUB PROJ. # :	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB
ONE INCH AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY	
LAST UPDATED:	6/5/2018

SHEET NUMBER:
C-103

Plot Date:6/5/2018 3:11 PM Plotted By: Stephen Sarsha
Date Created:12/1/2017 \\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-103.DWG



EARTHWORK

CUT: 11,338 C.Y.

FILL: 31,662 C.Y.

NET: 20,324 C.Y. IMPORT

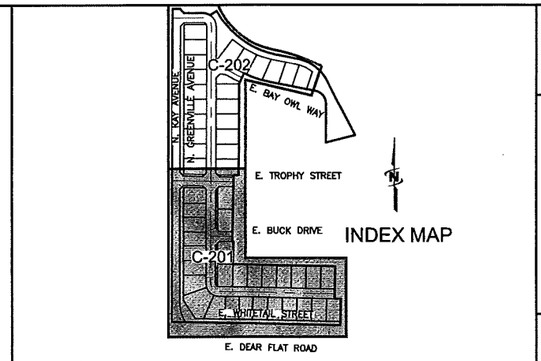
NOTE:
EARTHWORK QUANTITIES ARE BASED ON NEAT LINE CUT/FILL. A 15% MATERIAL SHRINKAGE FACTOR HAS BEEN ASSUMED FOR CUT MATERIAL. ROADWAY EXCAVATION CALCULATED TO SUBGRADE.

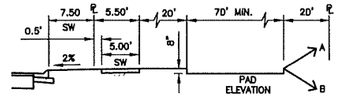
NOTES TO CONTRACTOR

1. ADD 2600 FEET TO ALL SPOT ELEVATIONS TO DETERMINE ACTUAL ELEVATION.
2. ALL GRADING SLOPES AT REAR AND SIDES OF LOTS ARE AT 3:1, UNLESS OTHERWISE SHOWN.

LEGEND

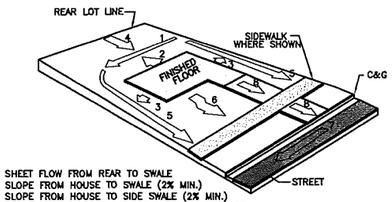
- MINOR / MAJOR — EXISTING CONTOURS
- MINOR / MAJOR — PROPOSED CONTOURS
- PAD LINE
- .XX.XX — FG ELEVATION





A: 2% MINIMUM, 3:1 MAXIMUM
B: 0% MINIMUM, 3:1 MAXIMUM

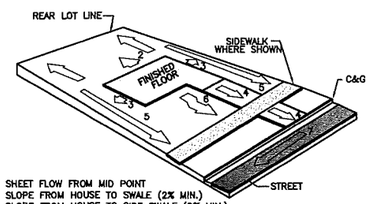
1 TYPICAL LOT GRADING
SCALE:NTS



1. SHEET FLOW FROM REAR TO SWALE
2. SLOPE FROM HOUSE TO SWALE (2% MIN.)
3. SLOPE FROM HOUSE TO SIDE SWALE (2% MIN.)
4. REAR SWALE (LOT 10' MIN. FROM REAR OF HOUSE)
5. SIDE SWALE (LOT 1% MIN.)
6. SLOPE FROM HOUSE TO SIDEWALK (VARIES)
7. SLOPE OF STREET (SEE PLANS)
8. DRIVEWAY SLOPE (VARIES)

ALL LOTS OTHER THAN ONES CALLED OUT IN DETAIL 3

2 TYPICAL LOT GRADING
SCALE:NTS



1. SHEET FLOW FROM MID POINT
2. SLOPE FROM HOUSE TO SWALE (2% MIN.)
3. SLOPE FROM HOUSE TO SIDE SWALE (2% MIN.)
4. DRIVEWAY SLOPE (VARIES)
5. SIDE SWALE (LOT 1% MIN.)
6. SLOPE FROM HOUSE TO SIDEWALK (VARIES)
7. SLOPE OF STREET (SEE PLANS)

LOTS 21-27 BLOCK 2

3 TYPICAL LOT GRADING
SCALE:NTS

APPROVED BY CITY OF KUNA ENGINEER

30 June 2018

SIGNATURE DATE

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NO.	DESCRIPTION	BY	APR	DATE
	REVISION			

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

GRADING PLAN

FILE: 10-18-001_C-201
JUB PROJ. # : 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/22/2018

SHEET NUMBER:
C-201

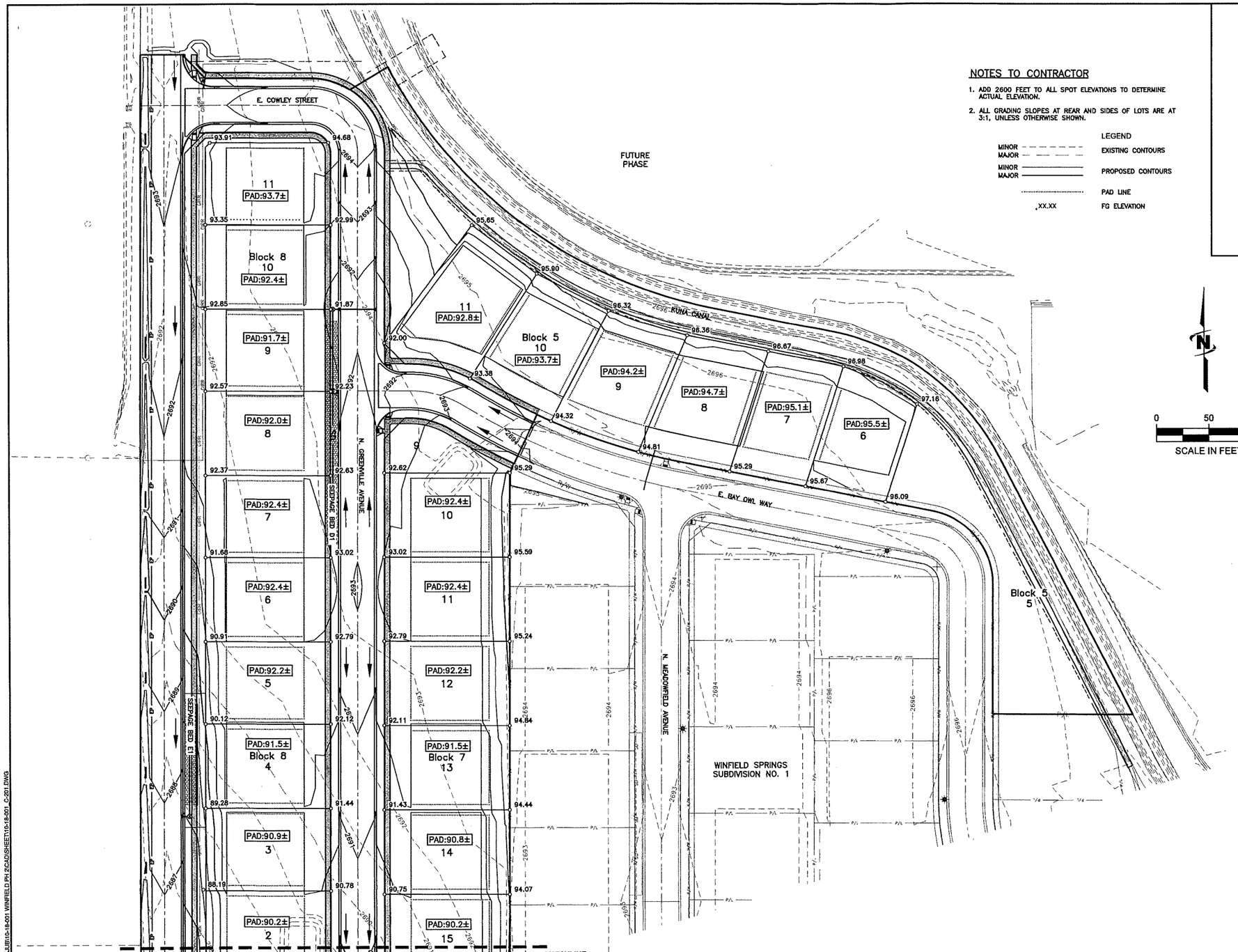
Plot Date:5/23/2018 11:34 AM Plotted By: Keith Morse
Date Created:10/13/2017 I:\BOISE\FILES\PJUB\JOBS\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEETS\10-18-001_C-201.DWG

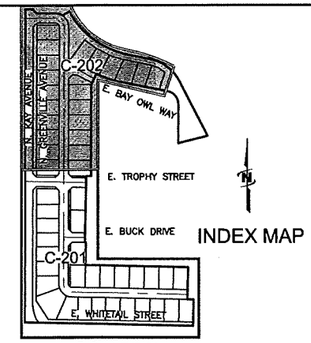
NOTES TO CONTRACTOR

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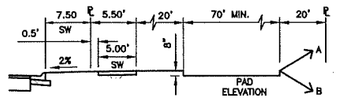
LEGEND

- MINOR / MAJOR — EXISTING CONTOURS
- MINOR / MAJOR — PROPOSED CONTOURS
- PAD LINE
- XX.XX — FG ELEVATION



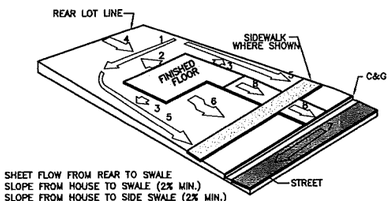






A: 2% MINIMUM, 3:1 MAXIMUM
B: 0% MINIMUM, 3:1 MAXIMUM

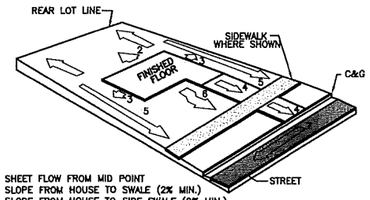
1 TYPICAL LOT GRADING
SCALE:NTS



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5. SIDE SWALE (LOT 1% MIN.)
6. SLOPE FROM HOUSE TO SIDEWALK (VARIES)
7. SLOPE OF STREET (SEE PLANS)
8. DRIVEWAY SLOPE (VARIES)

ALL LOTS OTHER THAN ONES CALLED OUT IN DETAIL 3

2 TYPICAL LOT GRADING
SCALE:NTS



1. SHEET FLOW FROM MID POINT
2. SLOPE FROM HOUSE TO SWALE (2% MIN.)
3. SLOPE FROM HOUSE TO SIDE SWALE (2% MIN.)
4. DRIVEWAY SLOPE (VARIES)
5. SIDE SWALE (LOT 1% MIN.)
6. SLOPE FROM HOUSE TO SIDEWALK (VARIES)
7. SLOPE OF STREET (SEE PLANS)

LOTS 21–27 BLOCK 2

3 TYPICAL LOT GRADING
SCALE:NTS

APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

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NO.	DESCRIPTION	REVISION	BY	APPR.	DATE

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

GRADING PLAN

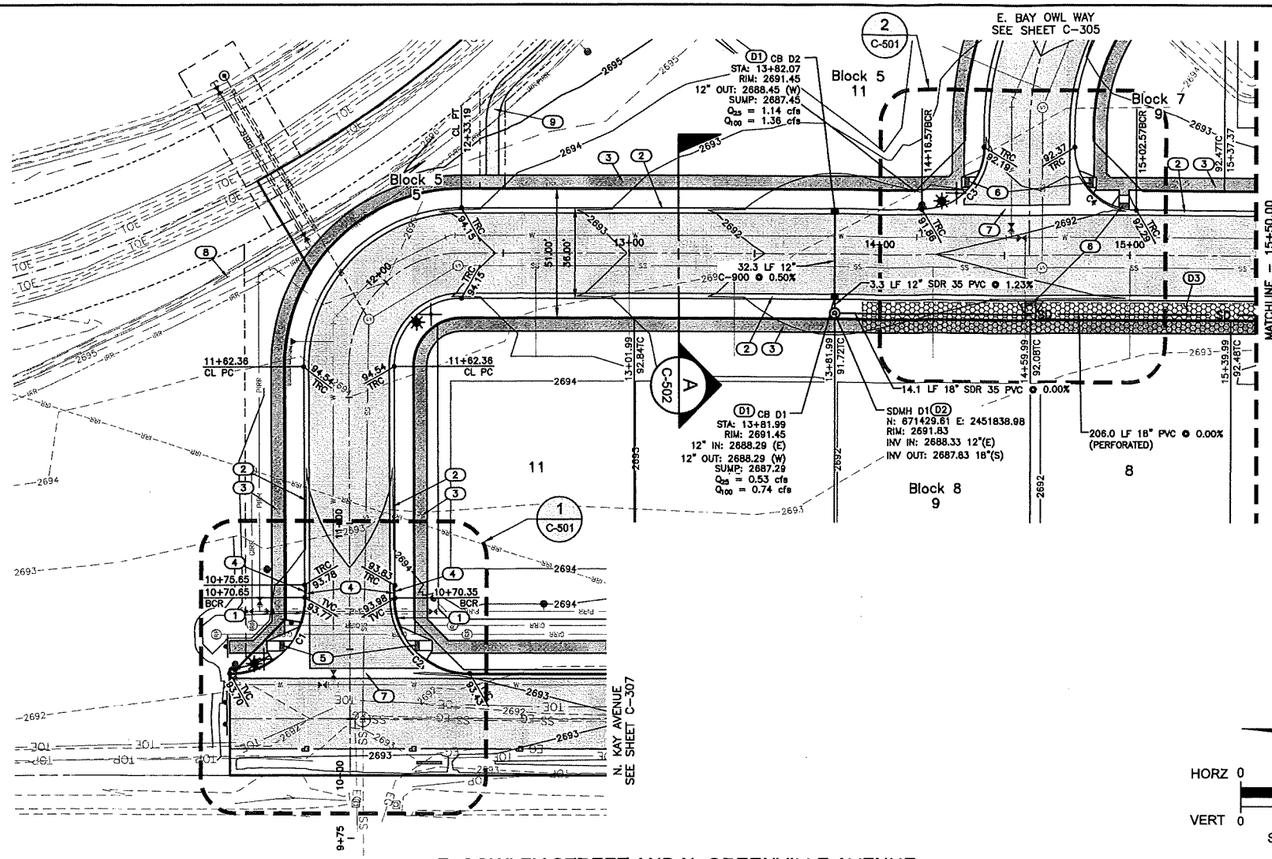
FILE:	10-18-001_C-201
JUB PROJ. #:	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 5/22/2018

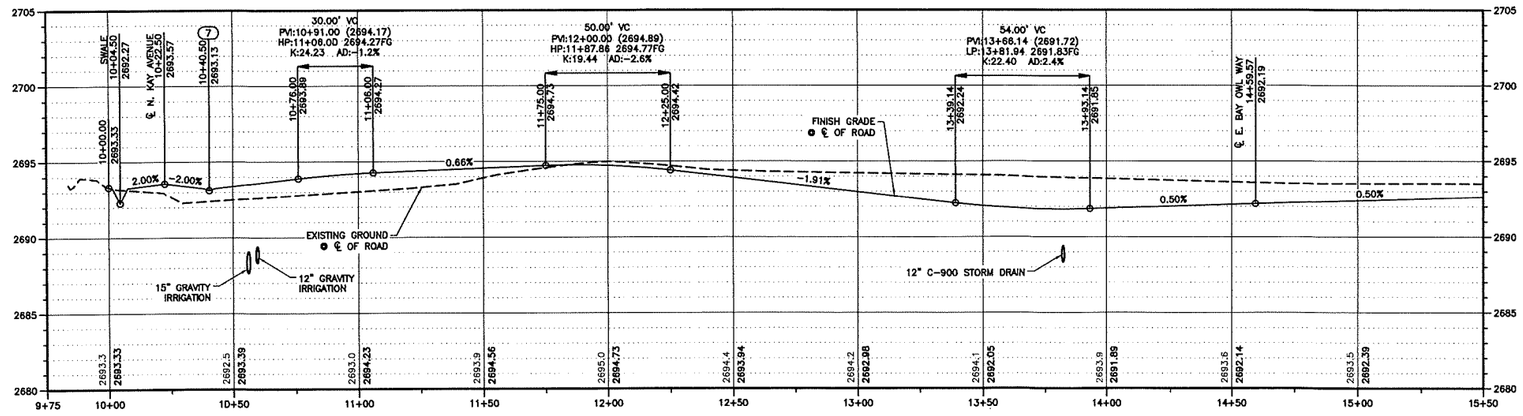
SHEET NUMBER:
C-202

Plot Date:5/23/2018 11:34 AM Plotted By: Keith Morse
Data Created:12/13/2017 N:\BOISE\PLES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-201.DWG



E. COWLEY STREET AND N. GREENVILLE AVENUE

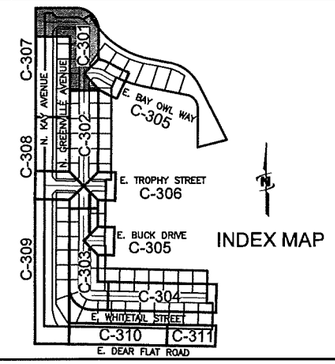
PUBLIC ROADWAY



NOTES TO CONTRACTOR

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2. SEWER LENGTHS ARE HORIZONTALLY (2D) MEASURED FROM INSIDE FACE OF STRUCTURES.
3. LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND AGREES TO BE FULLY RESPONSIBLE SHOULD DAMAGES OCCUR DUE TO A FAILURE TO LOCATE, INACTIVATE, ABANDON, OR PRESERVE SAID UTILITIES.
4. CONTRACTOR TO FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND NOTIFY ENGINEER OF ANY DISCREPANCY.
5. THIS DRAWING, OR ANY PORTION OF IT, SHALL NOT BE USED ON ANY PROJECT OR EXTENSION OF PROJECT(S) EXCEPT BY AGREEMENT IN WRITING FROM THE ENGINEER.

CURVE TABLE						
CURVE #	LENGTH	RADIUS	TANGENT	DELTA	CHORD BEARING	CHORD LENGTH
C1	47.22'	30.00'	30.09'	90°10'26"	S44°54'47"E	42.49'
C2	47.03'	30.00'	29.91'	89°49'34"	N45°05'13"E	42.36'
C3	39.27'	25.00'	25.00'	90°00'00"	S44°49'34"E	35.36'
C4	39.27'	25.00'	25.00'	90°00'00"	S45°10'26"W	35.36'



ROADWAY NOTES

1. 6" VERTICAL CURB AND GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-701
2. 3" ROLLED CURB AND GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-702
3. 5' CONCRETE SIDEWALK PER ACHD SUPPLEMENT TO ISPWC SD-709. 2.0% MAX. CROSS SLOPE.
4. 5 LF CURB TRANSITION FROM 6" VERTICAL CURB TO 3" ROLLED CURB
5. TYPE A PEDESTRIAN RAMP PER ISPWC SD-712A WITH DETECTABLE WARNINGS PER ISPWC SD-712
6. TYPE H2 PEDESTRIAN RAMP PER ACHD SUPPLEMENT TO ISPWC SD-712H WITH DETECTABLE WARNINGS PER ISPWC SD-712
7. VALLEY GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-708
8. REMOVE EXISTING CONCRETE IRRIGATION DITCH. FILL AND COMPACT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMENDATIONS
9. 5' ASPHALT PEDESTRIAN TRAIL. (D / C-502)

DRAINAGE NOTES

D1. TYPE IV CATCH BASIN PER ACHD SUPPLEMENT TO ISPWC SD-604A

D2. 48"ø STANDARD CONCRETE CATCH MANHOLE NO. D1 PER ACHD SUPPLEMENT TO ISPWC SD-611 WITH 2' SUMP.

D3. 212'X12'X6' DEEP SEEPAGE BED D PER ACHD BMP-20. (1 / C-502)
VOLUME 6,106 CF WITH 0.40 ROCK VOID RATIO
DESIGN INFILTRATION RATE: 3.0 IN/HR
FG EL: 2691.9
TOP OF BED EL: 2690.4
BOTTOM OF BED EL: 2684.4
BOTTOM OF SAND EL: 2682.9
GROUNDWATER EL: NOT ENCOUNTERED TO 2677.7

APPROVED BY CITY OF KUNA ENGINEER

SIGNATURE _____ DATE _____

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BY Michael Allen DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

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PROFESSIONAL ENGINEER
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12449
7-17-18
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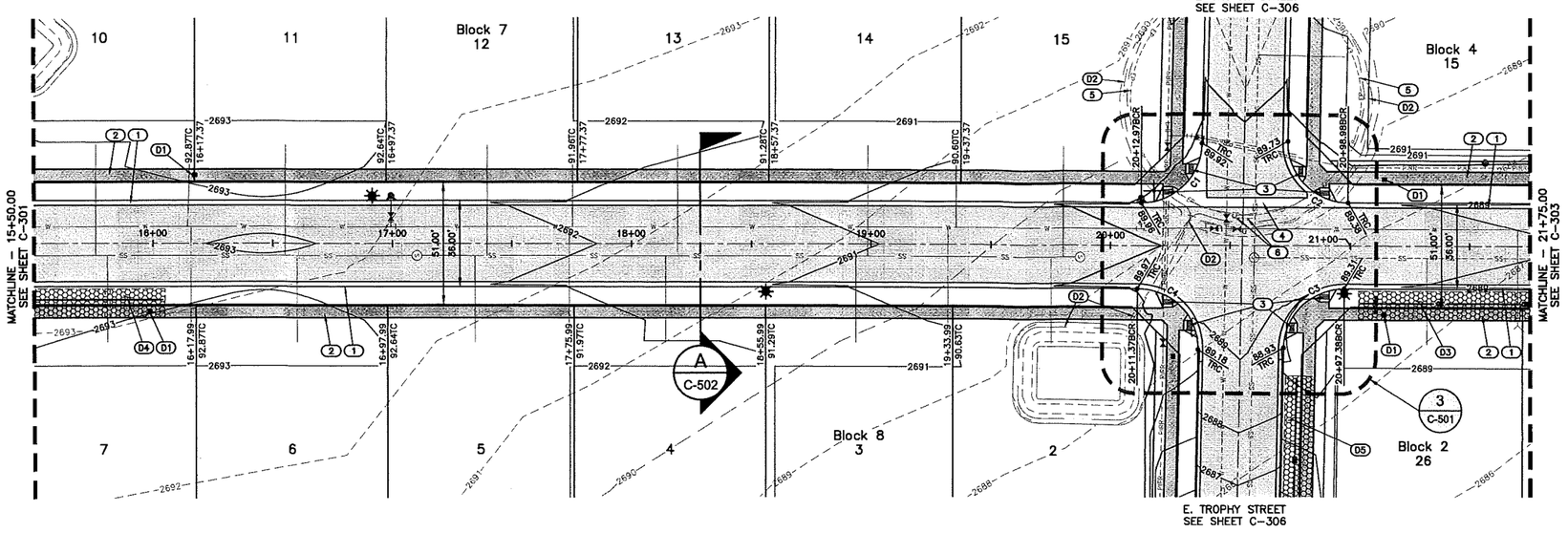
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

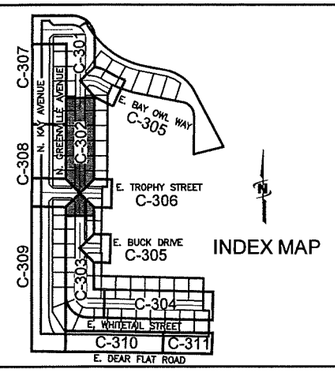
STREET PLAN AND PROFILE
E. COWLEY STREET AND N. GREENVILLE AVENUE

FILE : 10-18-001_C-301
JUB PROJ. # : 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-301

Plot Date:5/23/2018 11:35 AM Plotted By: Keith Manne
Data Created:12/8/2017 \\BOISEFILESPUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-301.DWG





NOTES TO CONTRACTOR

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CURVE TABLE						
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C1	38.81'	25.00'	24.54'	88°56'07"	S44°17'37"E	35.03'
C2	39.73'	25.00'	25.47'	91°03'53"	N45°42'23"E	35.68'
C3	38.81'	25.00'	24.54'	88°56'07"	S44°17'37"E	35.03'
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ROADWAY NOTES

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4. VALLEY GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-708
5. REMOVE EXISTING ASPHALT TURNAROUND
6. REMOVE EXISTING BARRICADE

DRAINAGE NOTES

- D1 OBSERVATION WELL PER ACHD SUPPLEMENT TO ISPWC SD-627
- D2 REMOVE EXISTING TEMPORARY STORM DRAIN POND AND DRAINAGE CHANNEL. FILL AND COMPACT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS
- D3 SEEPAGE BED NO. B1. SEE SHEET C-303
- D4 SEEPAGE BED NO. D1. SEE SHEET C-301
- D5 SEEPAGE BED NO. C1. SEE SHEET C-306

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BY Michael Mysnyk DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

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NO.	REVISION DESCRIPTION	BY	APP'L	DATE

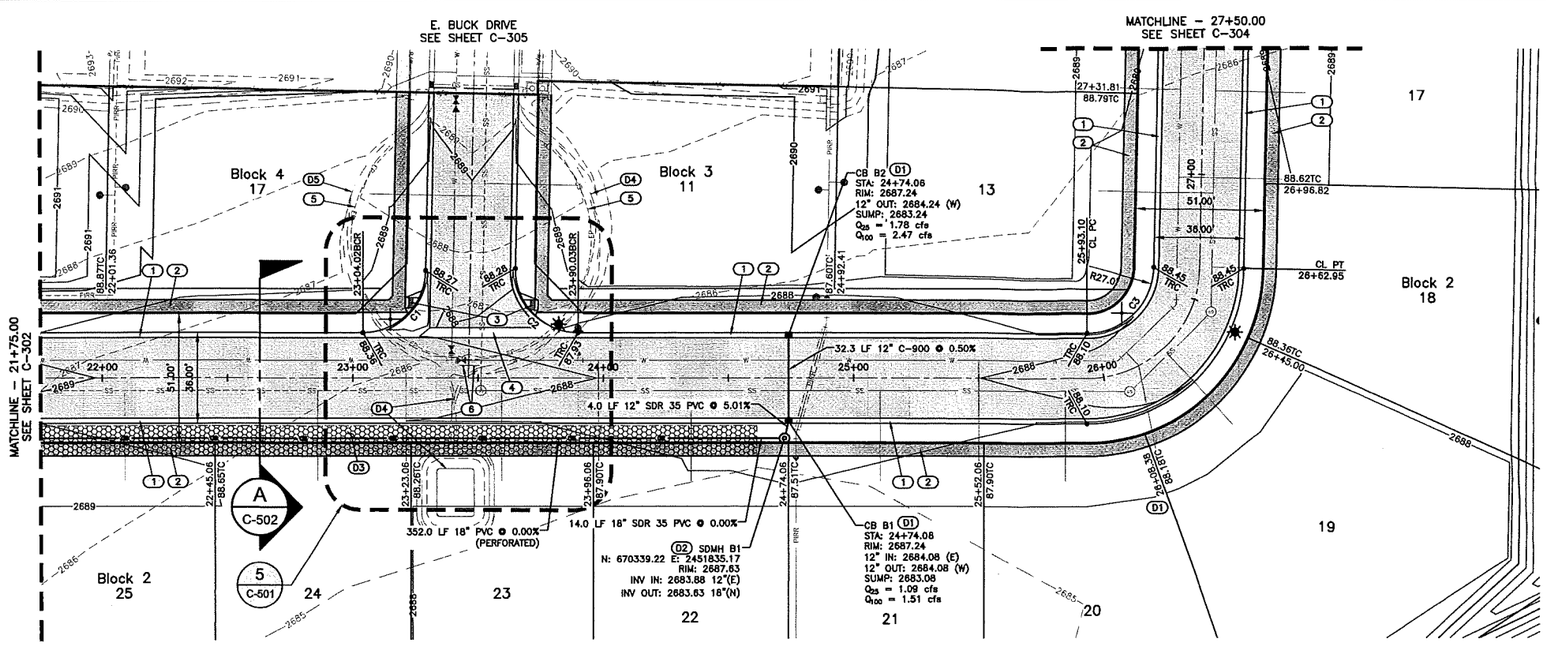
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

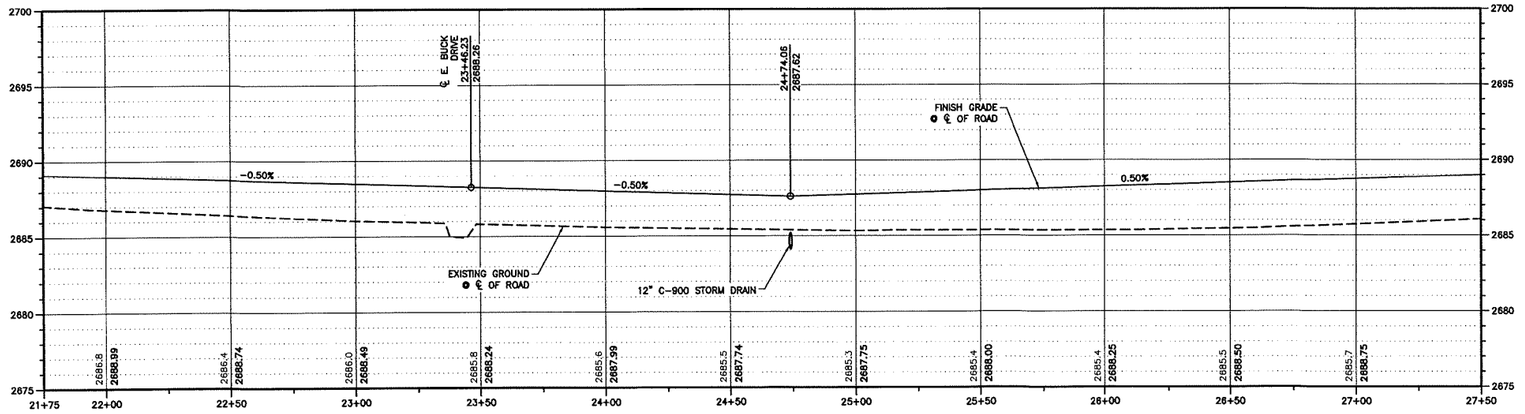
STREET PLAN AND PROFILE
N. GREENVILLE AVENUE

FILE: 10-18-001_C-302
JUB PROJ. # : 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-302

Plot Date:5/23/2018 11:36 AM Plotted By: Keith Morre
Date Created:12/11/2017 N:\BOISE\FILES\PLB\JUB\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-302.DWG

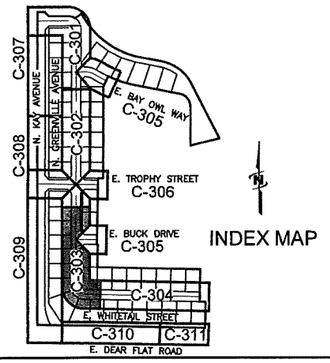




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6. REMOVE EXISTING BARRICADE

DRAINAGE NOTES

- (D1) TYPE IV CATCH BASIN PER ACHD SUPPLEMENT TO ISPWC SD-604A
- (D2) 48"ø STANDARD CONCRETE CATCH BASIN PER ACHD SUPPLEMENT TO ISPWC SD-611 WITH 2' SUMP
- (D3) 358'X12'X6' DEEP SEEPAGE BED B PER ACHD BMP-20 VOLUME 10,310 CF WITH 0.40 ROCK VOID RATIO (1 C-502)
  DESIGN INFILTRATION RATE: 3.0 IN/HR
  FG EL: 2687.8
  TOP OF BED EL: 2686.3
  BOTTOM OF BED EL: 2680.3
  BOTTOM OF SAND EL: 2678.8
  GROUNDWATER EL: NOT ENCOUNTERED TO 2677.7
- (D4) REMOVE EXISTING TEMPORARY STORM DRAIN POND AND DRAINAGE CHANNEL. FILL AND COMPACT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

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BY Michael Alvarado DATE 6-26-18
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NO.	DESCRIPTION	BY	APP'D	DATE
	REVISION			

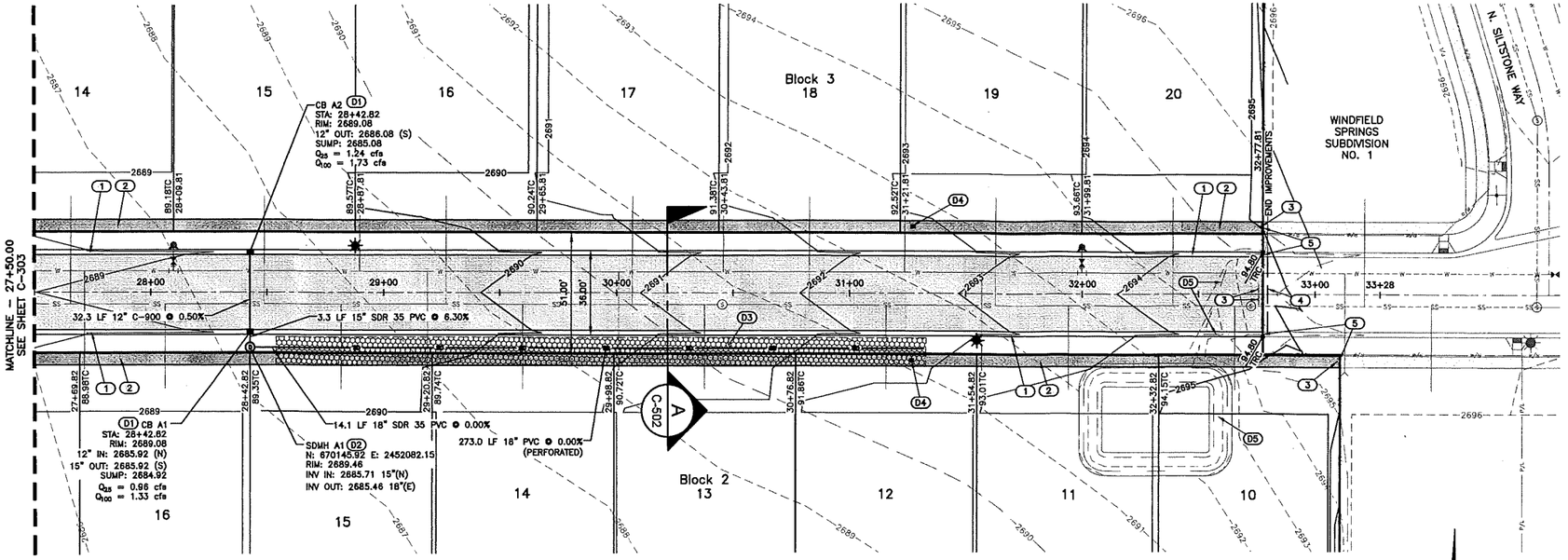
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

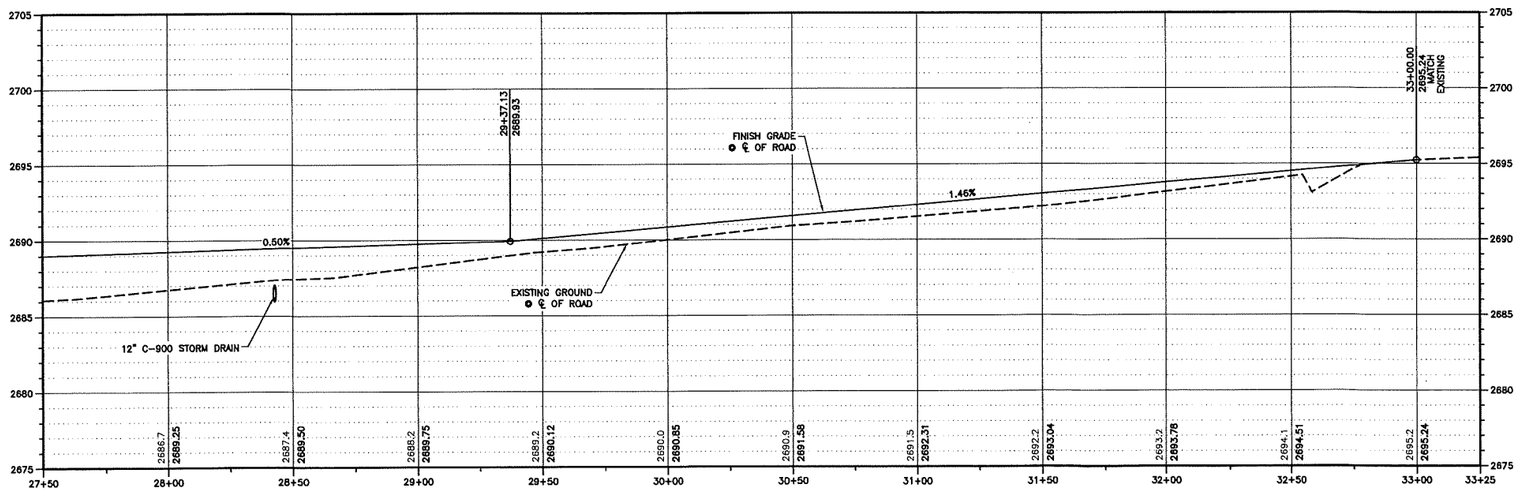
STREET PLAN AND PROFILE
N. GREENVILLE AVENUE AND E. WHITETAIL STREET

FILE: 10-18-001_C-303
JUB PROJ. #: 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-303

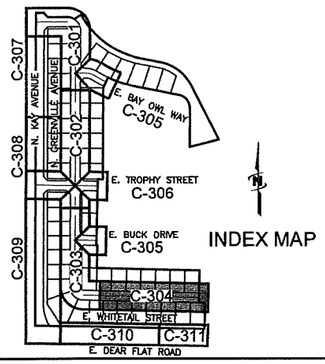
Plot Date:5/23/2018 11:36 AM Plotted By: Keith Morse
Date Created:12/11/2017 \BOISEFILESPUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEETS\10-18-001_C-303.DWG





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  GROUNDWATER EL: NOT ENCOUNTERED TO 2677.7
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BY Mitch Alexander DATE 6-26-18
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	REVISION			

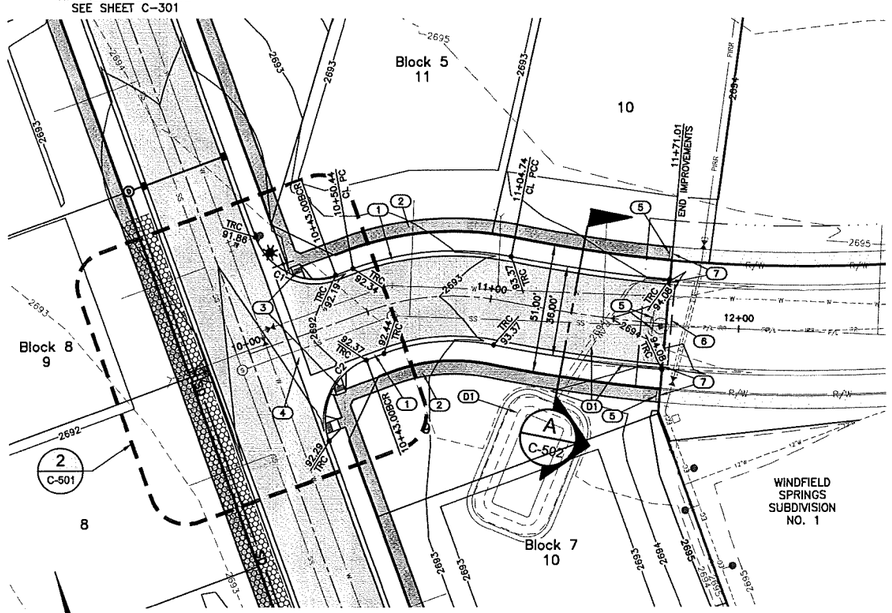
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

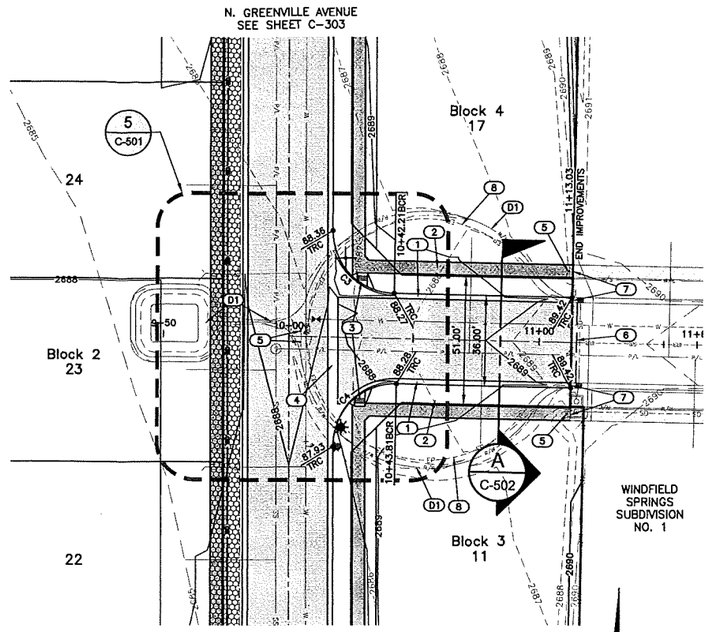
STREET PLAN AND PROFILE
E. WHITETAIL STREET

FILE: 10-18-001_C-304
JUB PROJ. #: 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

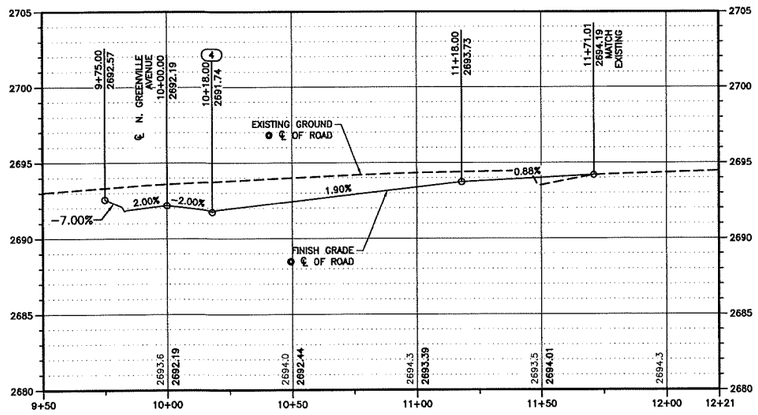
SHEET NUMBER:
C-304

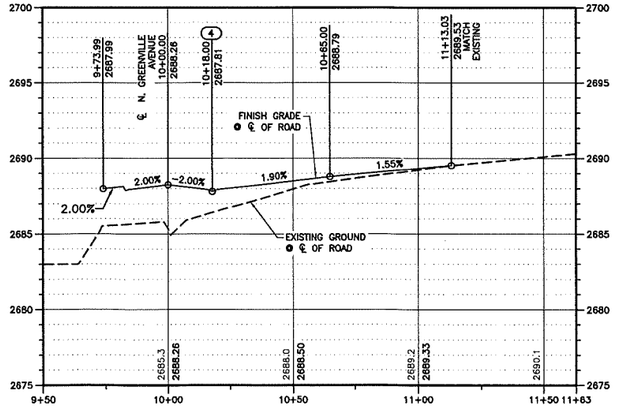
Plot Date:5/23/2018 11:37 AM Plotted By: Keith Morse
Date Created:12/11/2017 \\BOISEFILESERV\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-304.DWG





HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET

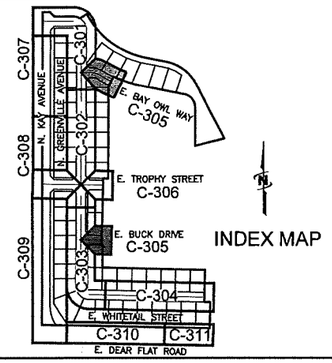




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C1	39.27'	25.00'	25.00'	90°00'00"	S44°49'34"E	35.36'
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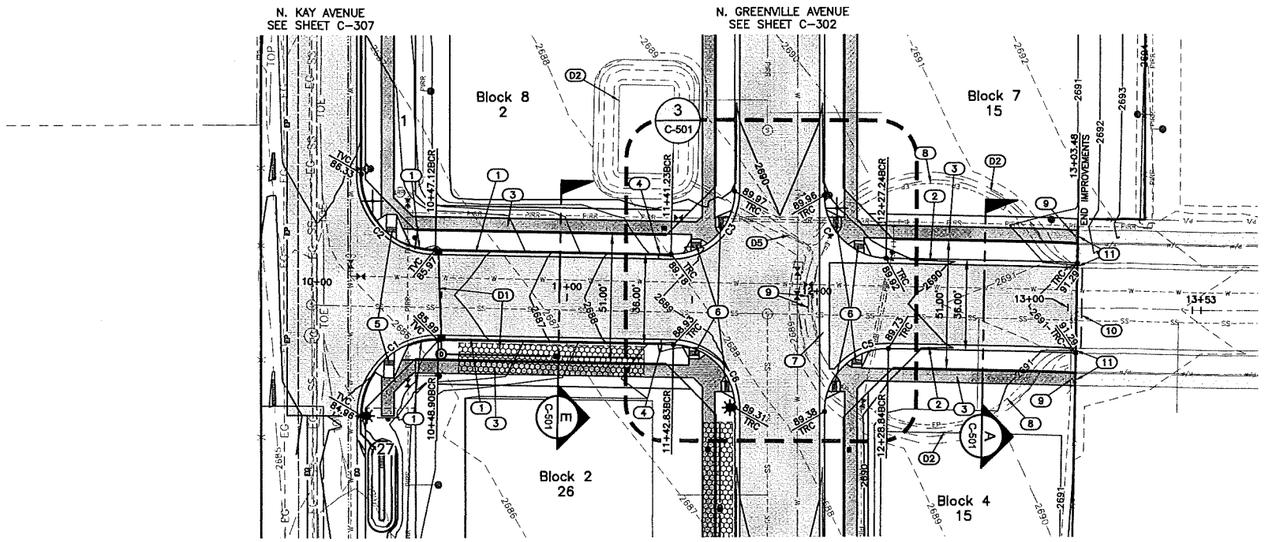
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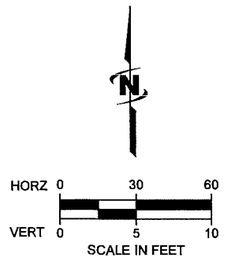
STREET PLAN AND PROFILE
E. BAY OWL WAY AND E. BUCK DRIVE

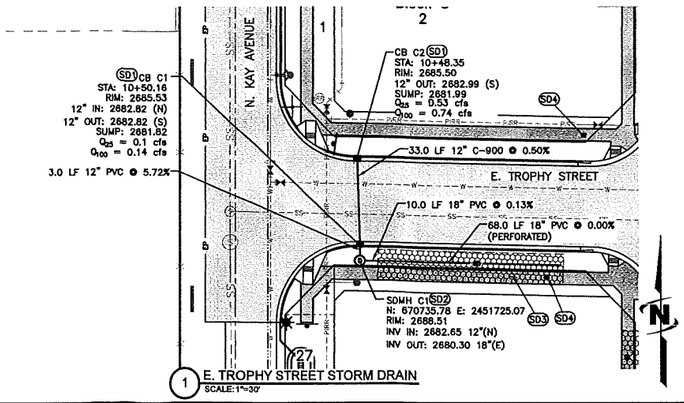
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DRAWN BY: KHM
DESIGN BY: KHM
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ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/2/2018

SHEET NUMBER:
C-305

Plot Date:5/22/2018 11:36 AM, Plotted By: Keith Morse
Date Created:12/11/2017 \\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-305.DWG



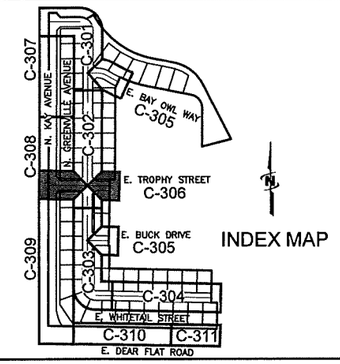




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ROADWAY NOTES

1. 6" VERTICAL CURB AND GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-701
2. 3" ROLLED CURB AND GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-702
3. 5' CONCRETE SIDEWALK PER ACHD SUPPLEMENT TO ISPWC SD-709. 2.0% MAX. CROSS SLOPE.
4. 5 LF CURB TRANSITION FROM 6" VERTICAL CURB TO 3" ROLLED CURB
5. TYPE A PEDESTRIAN RAMP PER ISPWC SD-712A WITH DETECTABLE WARNINGS PER ISPWC SD-712
6. TYPE H2 PEDESTRIAN RAMP PER ACHD SUPPLEMENT TO ISPWC SD-712H WITH DETECTABLE WARNINGS PER ISPWC SD-712
7. VALLEY GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-708
8. REMOVE EXISTING ASPHALT TURNAROUND
9. REMOVE EXISTING BARRICADE
10. SAWCUT PAVEMENT 2' INSIDE EXISTING EDGE PER ACHD ROADWAY NOTE 5 ON SHEET C-002 AND PER ACHD SUPPLEMENT TO ISPWC SD-303. MATCH EXISTING.
11. MATCH EXISTING CURB, GUTTER, AND SIDEWALK

DRAINAGE NOTES

D1. FOR STORM DRAIN DESIGN SEE 1/C-502

D2. REMOVE EXISTING TEMPORARY STORM DRAIN POND AND DRAINAGE CHANNEL. FILL AND COMPACT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

DETAIL 1 DRAINAGE NOTES

SD1. TYPE IV CATCH BASIN PER ACHD SUPPLEMENT TO ISPWC SD-601A

SD2. 48"ø STANDARD CONCRETE CATCH MANHOLE PER ACHD SUPPLEMENT TO ISPWC SD-611 WITH 2' SUMP

SD3. 74'X12'X6' DEEP SEEPAGE BED C PER ACHD BMP-20 VOLUME 2,131 CF WITH 0.40 ROCK VOID RATIO (2/C-502)
DESIGN INFILTRATION RATE: 3.0 IN/HR
FG EL: 2686.5
TOP OF BED EL: 2684.6
BOTTOM OF BED EL: 2678.6
BOTTOM OF SAND EL: 2677.1
GROUNDWATER EL: NOT ENCOUNTERED TO 2673.0

SD4. OBSERVATION WELL PER ACHD SUPPLEMENT TO ISPWC SD-627

SD5. TYPE III CATCH BASIN PER ACHD SUPPLEMENT TO ISPWC SD-603

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BY Michael Alberdon DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

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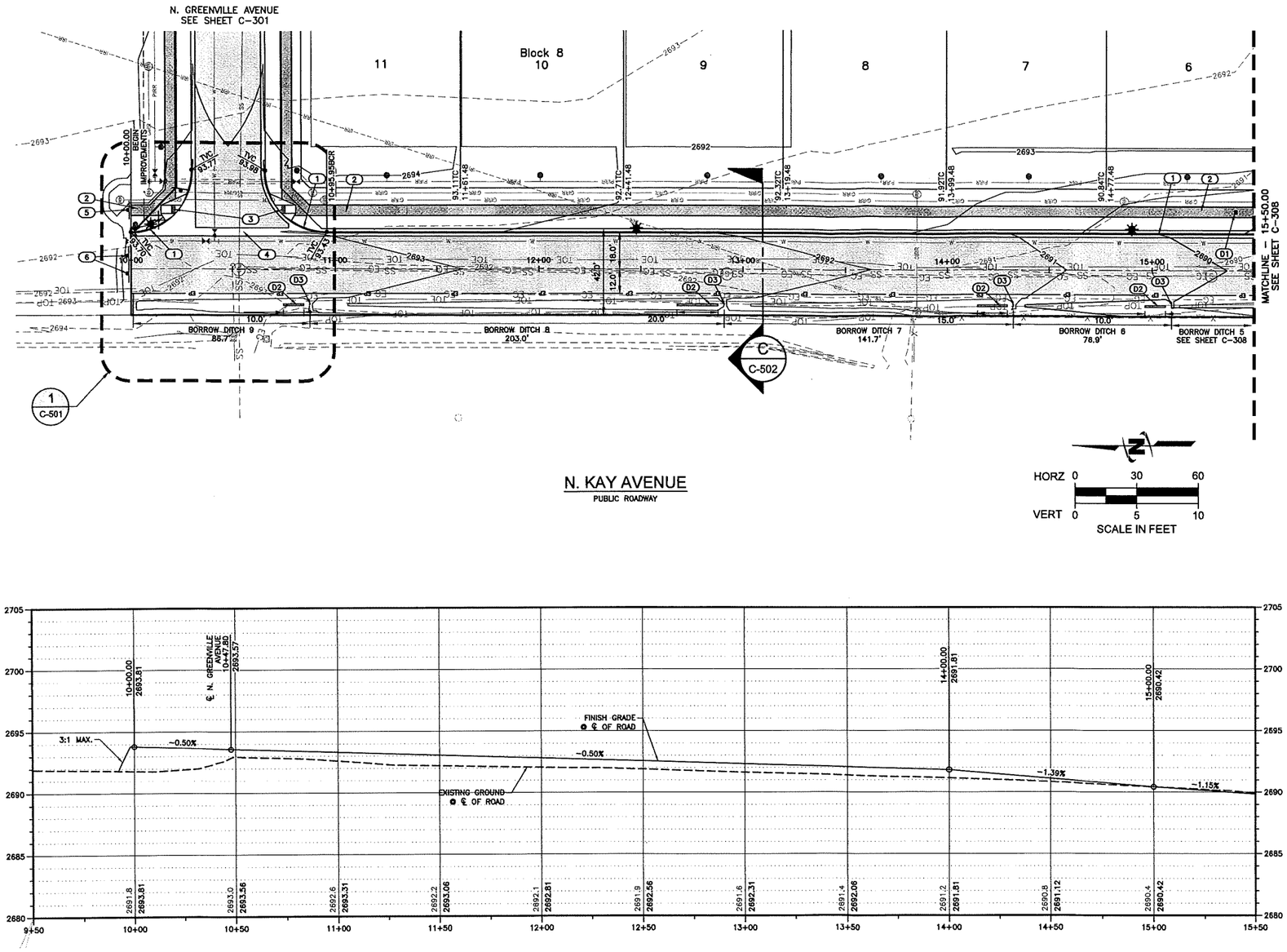
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KUNA, IDAHO

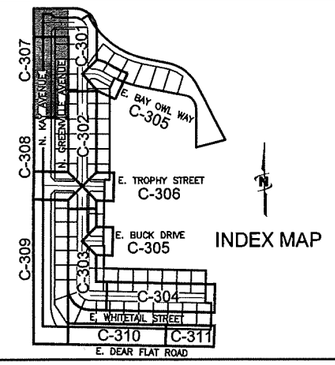
STREET PLAN AND PROFILE
E. TROPHY STREET

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JUB PROJ. #: 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-306

Plot Date:5/23/2018 11:36 AM Plotted By: Kolth Mcrae
Date Created:12/1/2017 N:\BOISE\FILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-306.DWG





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5. INSTALL TYPE II TERMINUS BARRICADE WITH KICK PLATE PER ACHD SUPPLEMENT TO ISPWC SD-1132A AT END OF SIDEWALK
6. INSTALL TYPE III TERMINUS BARRICADE PER ACHD SUPPLEMENT TO ISPWC SD-1132B WITH "ROAD TO BE EXTEDED IN THE FUTURE" SIGN

DRAINAGE NOTES

- D1 OBSERVATION WELL PER ACHD SUPPLEMENT TO ISPWC SD-627
- D2 1' WIDE BY 3' DEEP ASTM C-33 FILTER SAND WINDOW. LENGTH PER PLAN.
- D3 BORROW DITCH END BERM (G / C-502)

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BY Michael Allen ADA COUNTY HIGHWAY DISTRICT DATE 6-26-18

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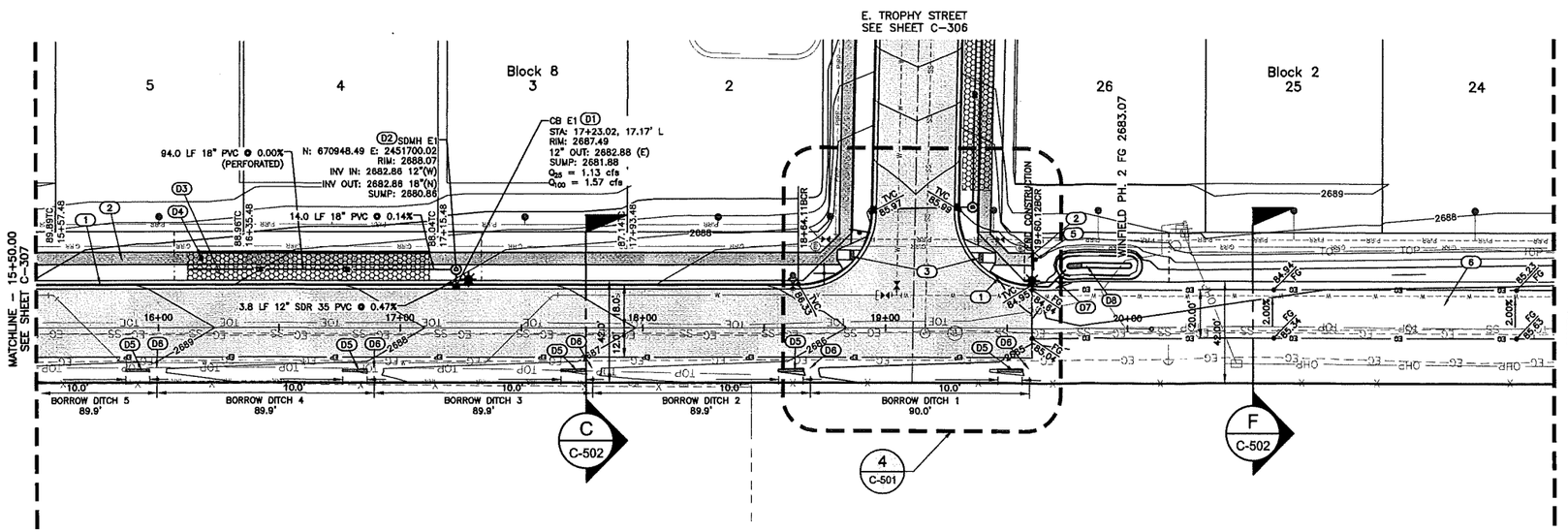
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STREET PLAN AND PROFILE
N. KAY AVENUE

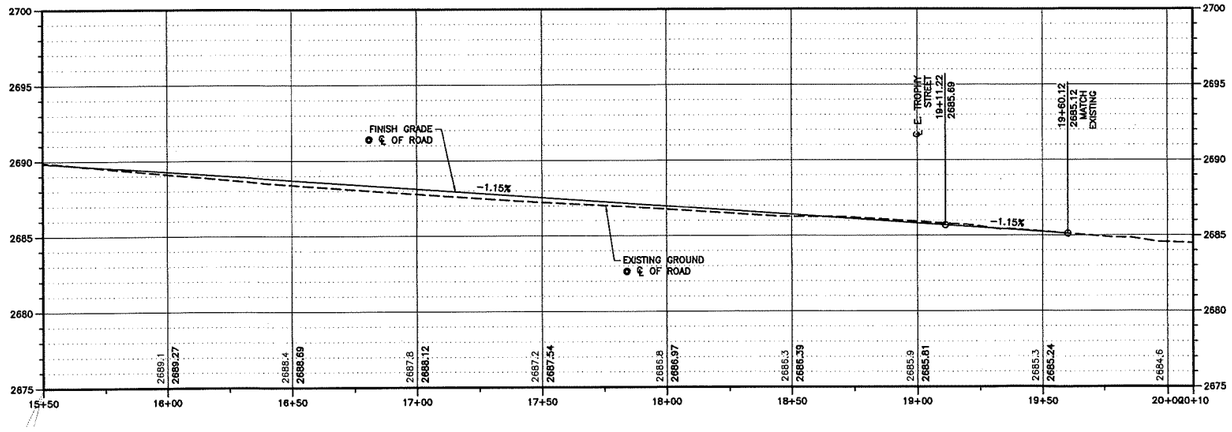
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DESIGN BY: KHM
CHECKED BY: JEB
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LAST UPDATED: 5/23/2018

SHEET NUMBER:
C-307

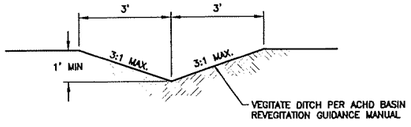
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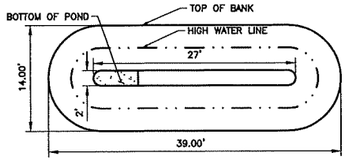
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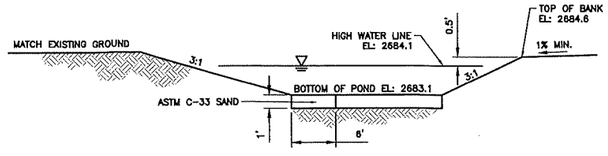


HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET



1 TEMPORARY DITCH DETAIL
SCALE:NTS

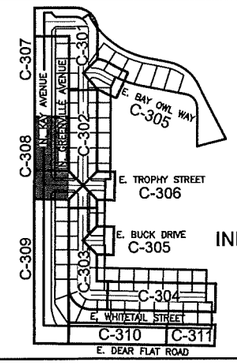




2 TEMPORARY STORMWATER POND G
SCALE:NTS
DEPTH = 1.0'
FREEBOARD = 0.5'
POND VOLUME= 140 C.F.

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D7. TEMPORARY STORMWATER DITCH. SEE DETAIL 1 THIS SHEET.

D8. TEMPORARY STORMWATER POND "G". SEE DETAIL 2 THIS SHEET.

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BY Michael Newman DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

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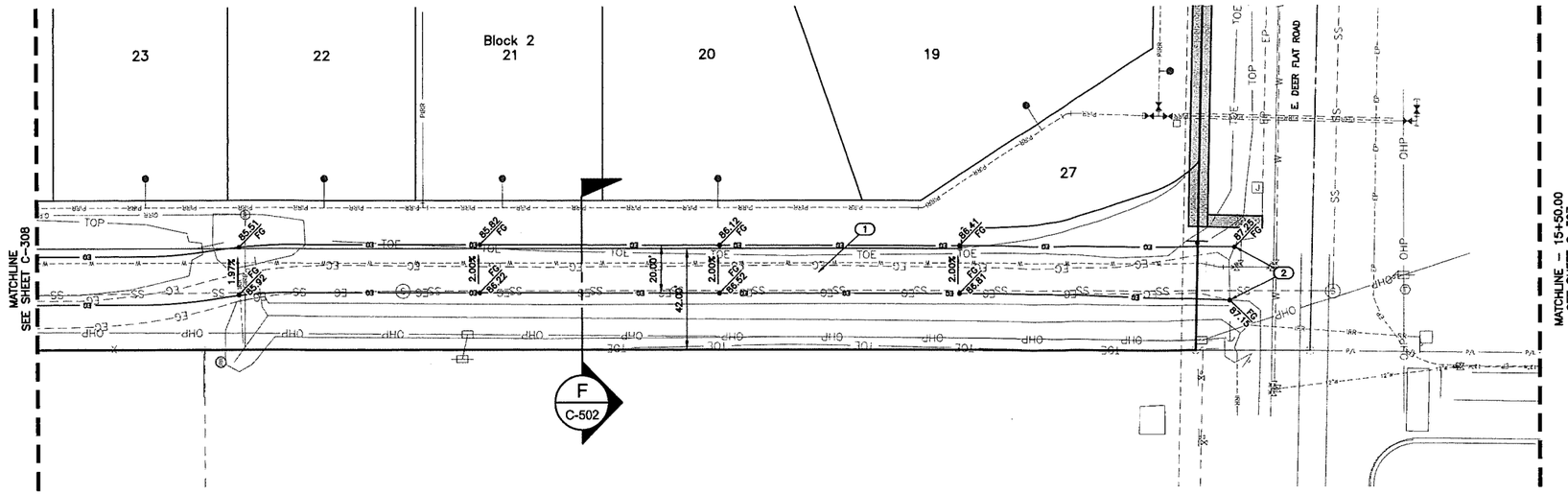
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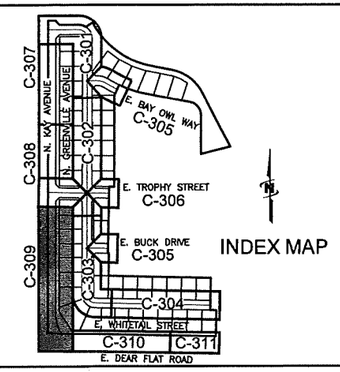
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N. KAY AVENUE

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DESIGN BY: KHM
CHECKED BY: JEB
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SHEET NUMBER:
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Plot Date:5/22/2018 11:40 AM Plotted By: Keith Morse
Date Created:12/1/2017 \\BOISEFILESPUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-308.DWG





ROADWAY NOTES

1. GRAVEL ACCESS ROAD
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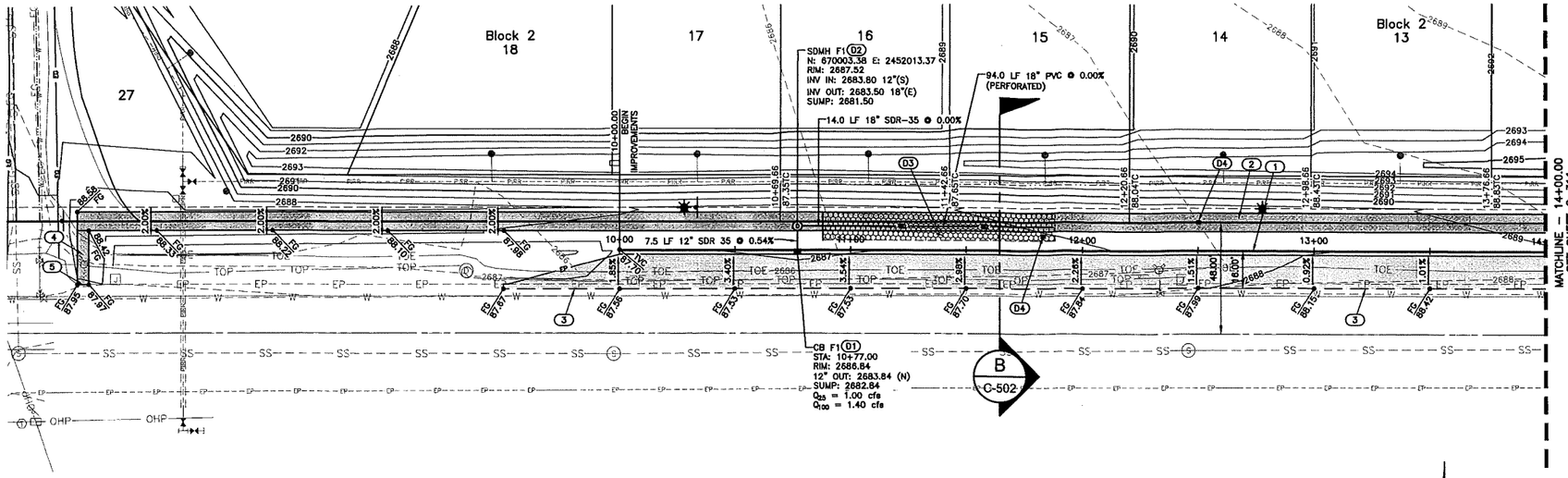
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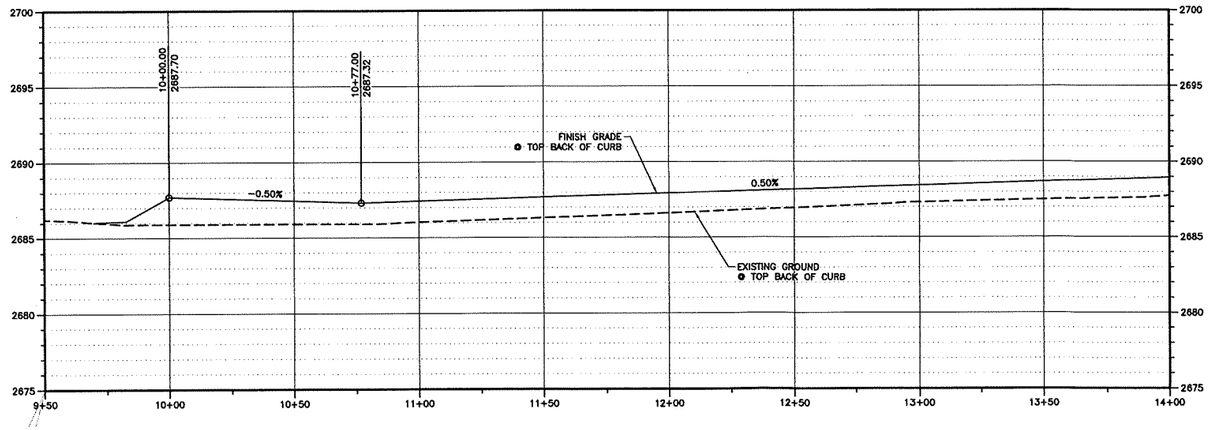
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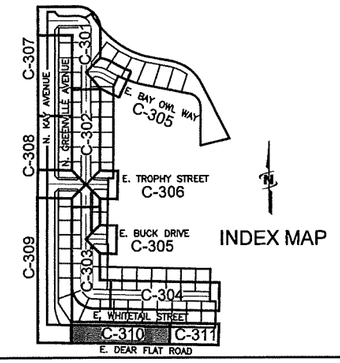
E. DEER FLAT ROAD
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HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET



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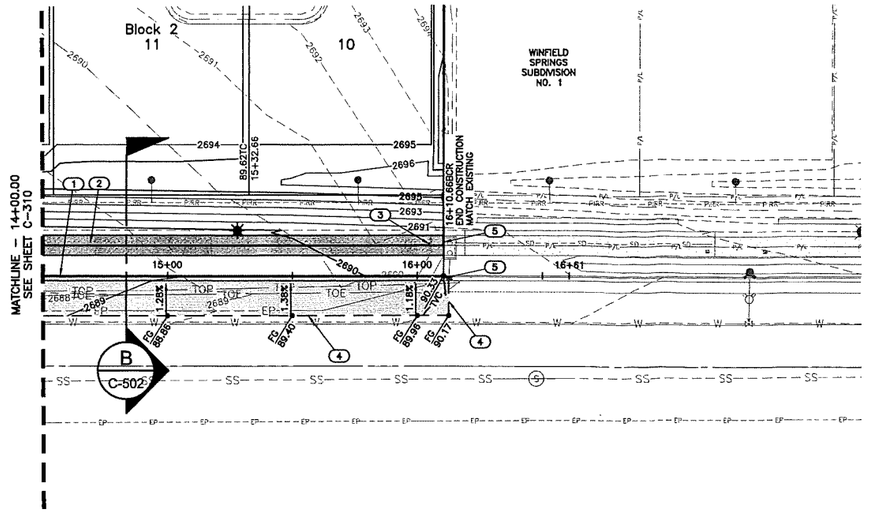
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

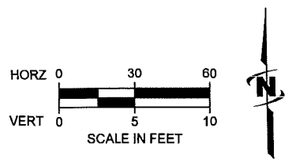
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E. DEER FLAT ROAD

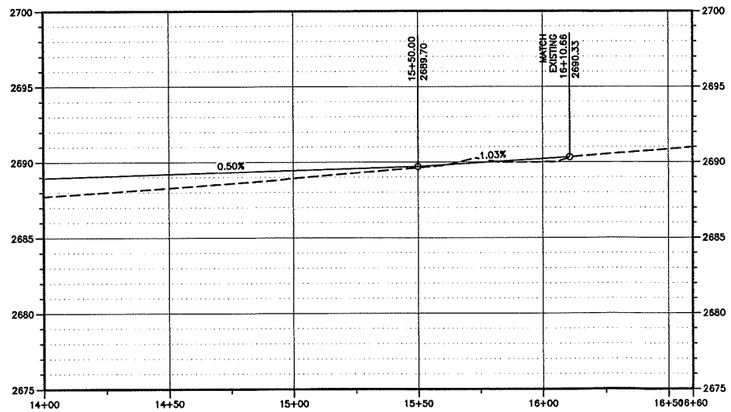
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LAST UPDATED: 5/23/2018

SHEET NUMBER:
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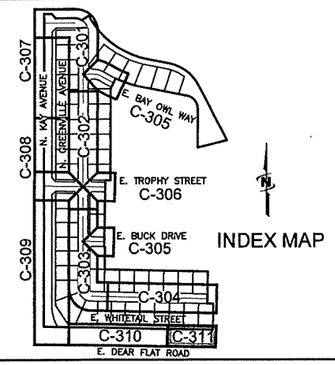






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ROADWAY NOTES

1. 6" VERTICAL CURB AND GUTTER PER ACHD SUPPLEMENT TO ISPWC SD-701
2. 8' CONCRETE SIDEWALK PER ACHD SUPPLEMENT TO ISPWC SD-709. 2.0% MAX. CROSS SLOPE.
3. REMOVE EXISTING BARRICADE
4. SAWCUT PAVEMENT 2' INSIDE EXISTING EDGE PER ACHD ROADWAY NOTE 5 ON SHEET C-002 AND PER ACHD SUPPLEMENT TO ISPWC SD-303. MATCH EXISTING.
5. MATCH EXISTING CURB, GUTTER, AND SIDEWALK

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY Michael Abrosky DATE 6-26-18
ADA COUNTY HIGHWAY DISTRICT

811
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NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

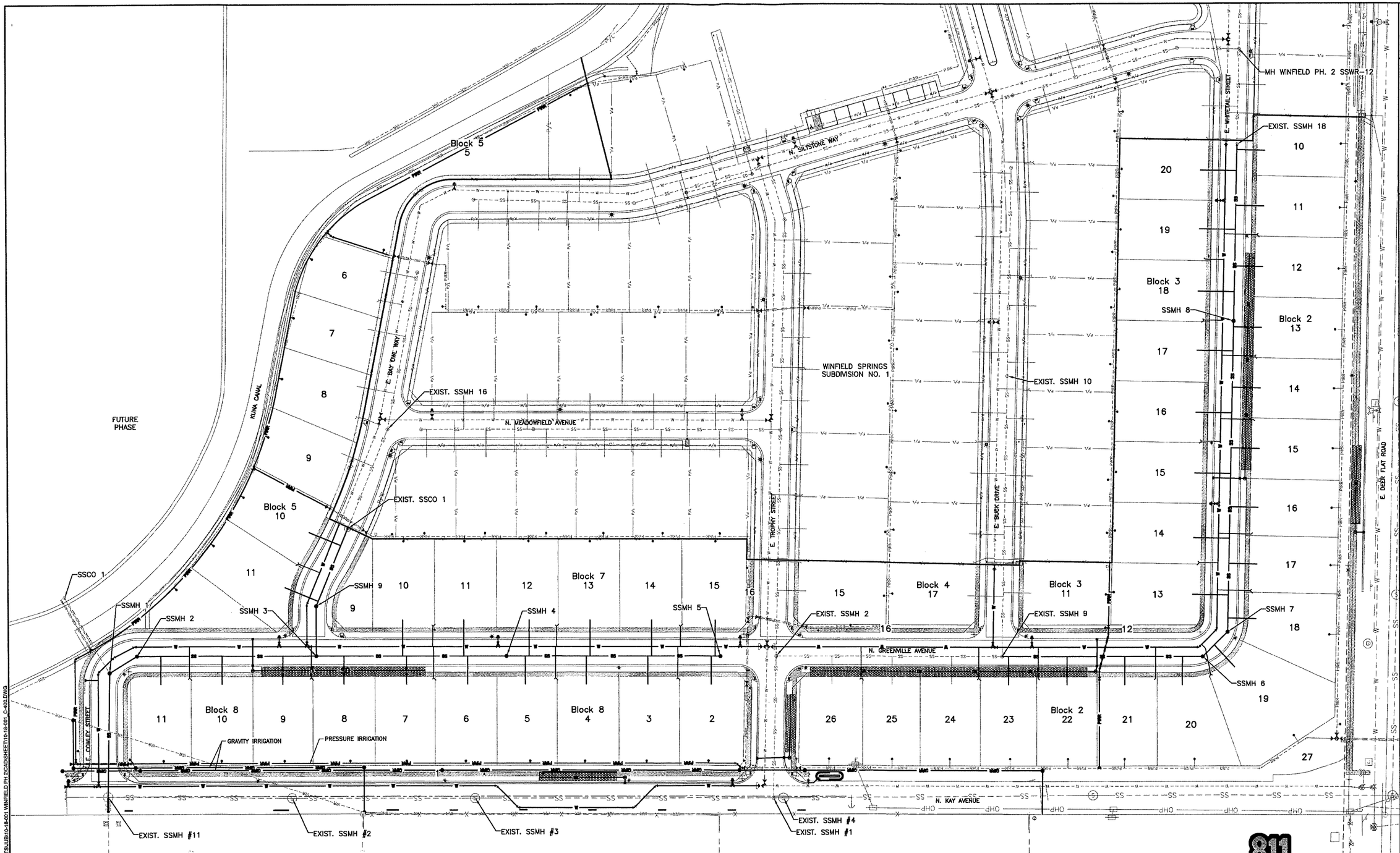
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

STREET PLAN AND PROFILE
E. DEER FLAT ROAD

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DRAWN BY: KHM
DESIGN BY: KHM
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LAST UPDATED: 4/2/2018

SHEET NUMBER:
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Date Created:12/12/2017 \\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEETS\10-18-001_C-311.DWG



APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

0 60 120

SCALE IN FEET

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WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

OVERALL UTILITY PLAN

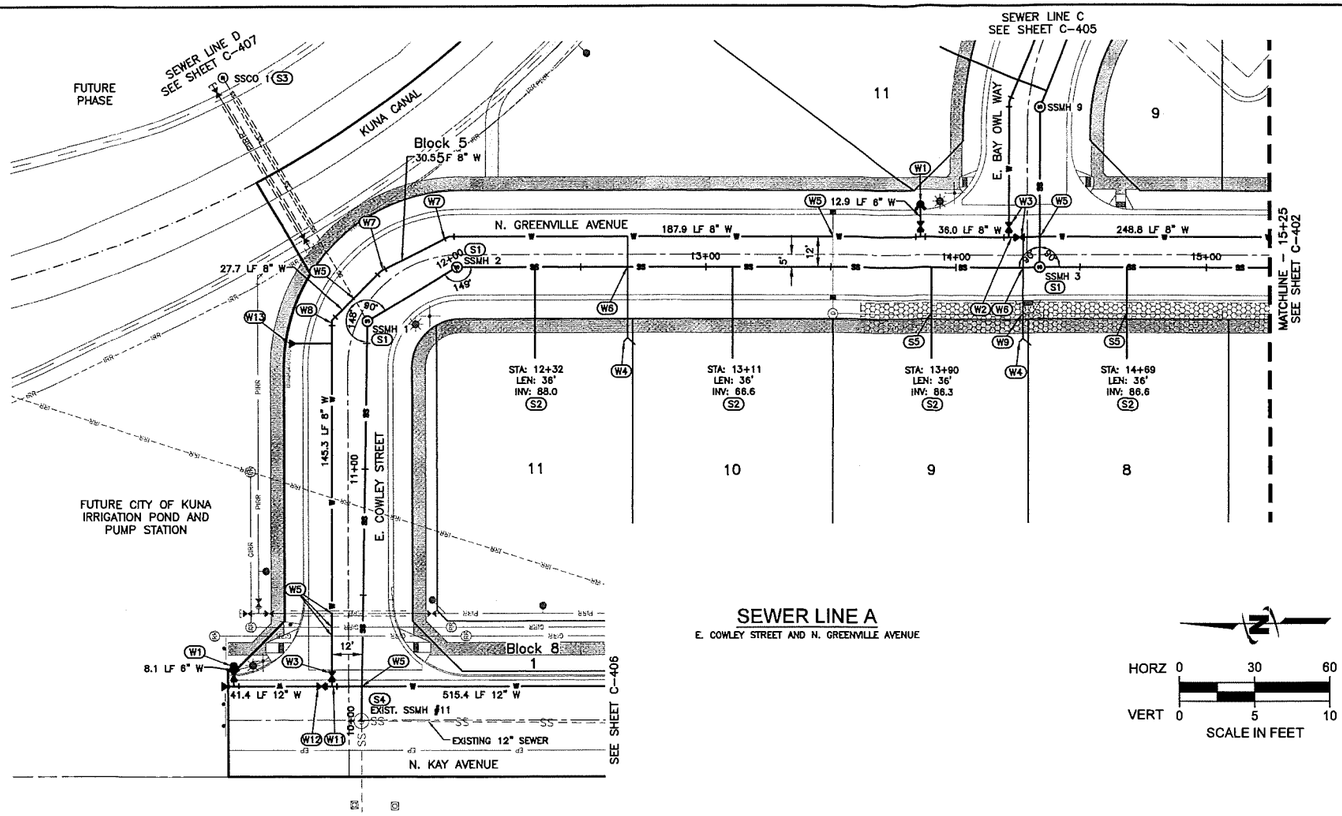
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DRAWN BY:	KHM
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LAST UPDATED: 5/9/2018

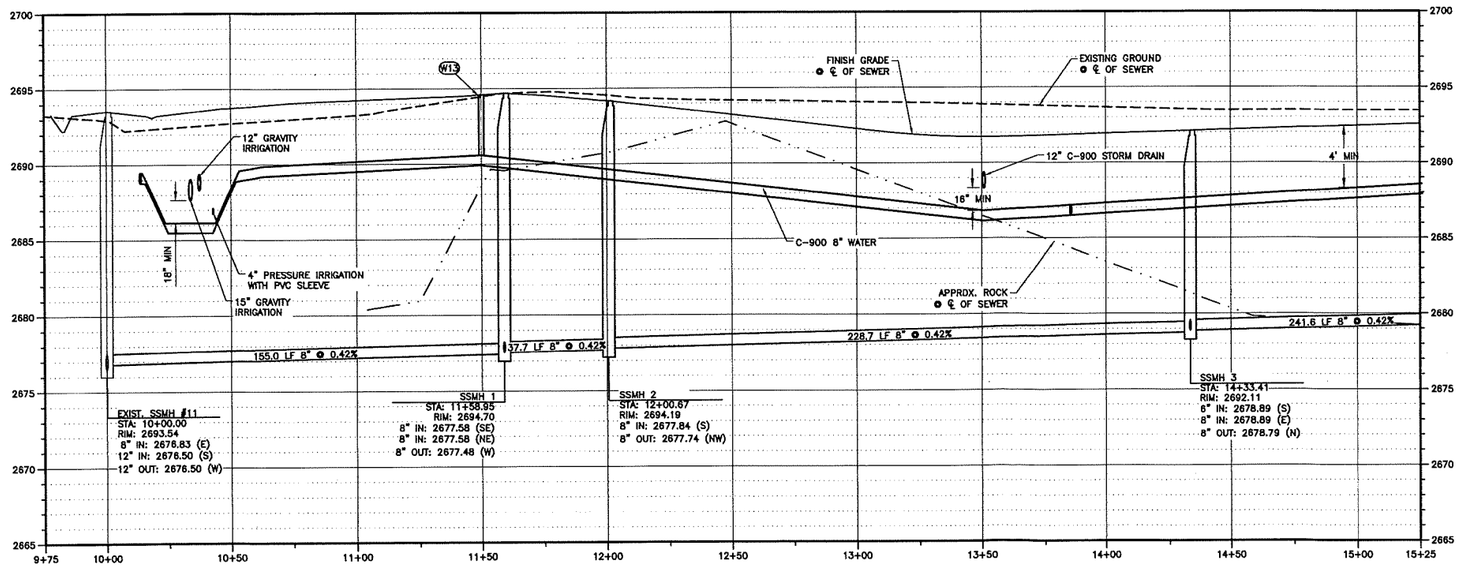
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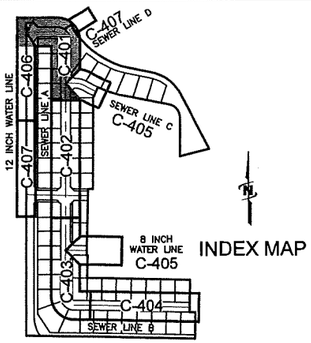
SEWER LINE A
E. COWLEY STREET AND N. GREENVILLE AVENUE

HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET



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(S2) STANDARD SEWER SERVICE MARKER PER ISPWC SD-512

(S3) SEWER CLEAN-OUT PER ISPWC SD-506

(S4) CONNECT TO EXISTING SEWER MANHOLE. CONTRACTOR TO VERIFY ELEVATIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CORE DRILL AND RECHANNEL EXISTING MANHOLE. PROVIDE KOR-N-SEAL BOOT FOR WATER TIGHT CONNECTION. ADJUST RIM ELEVATION TO FINISH GRADE.

(S5) SLEEVE SEWER SERVICE THROUGH SEEPAGE BED WITH WATER CLASS PIPE. EXTEND SLEEVE 5' BEYOND SEEPAGE BED ON BOTH SIDES.

WATER KEYED NOTES

(W1) FIRE HYDRANT ASSEMBLY PER ISPWC SD-404

(W2) 8"x8" TEE WITH THRUST BLOCKING PER ISPWC SD-403

(W3) 8" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403

(W4) 3/4" DOUBLE SERVICE CONNECTION PER COK SD-K401.75

(W5) POTABLE/NON-POTABLE MAIN CROSSING SEE WATER NOTE 2 ON SHEET C-002

(W6) POTABLE/NON-POTABLE SERVICE CROSSING SEE WATER NOTE 3 ON SHEET C-002

(W7) 22.50° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403

(W8) 45° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403

(W9) SLEEVE WATER SERVICE THROUGH SEEPAGE BED WITH WATER CLASS PIPE. EXTEND SLEEVE 5' BEYOND SEEPAGE BED ON BOTH SIDES

(W10) 3/4" SINGLE SERVICE CONNECTION PER COK SD-K401.75

(W11) 12"X12"X8" TEE WITH THRUST BLOCKING PER ISPWC SD-403

(W12) 12" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403

(W13) AIR RELEASE VALVE PER ISPWC SD-408. LOCATE AT HIGH POINT IN WATER LINE

APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

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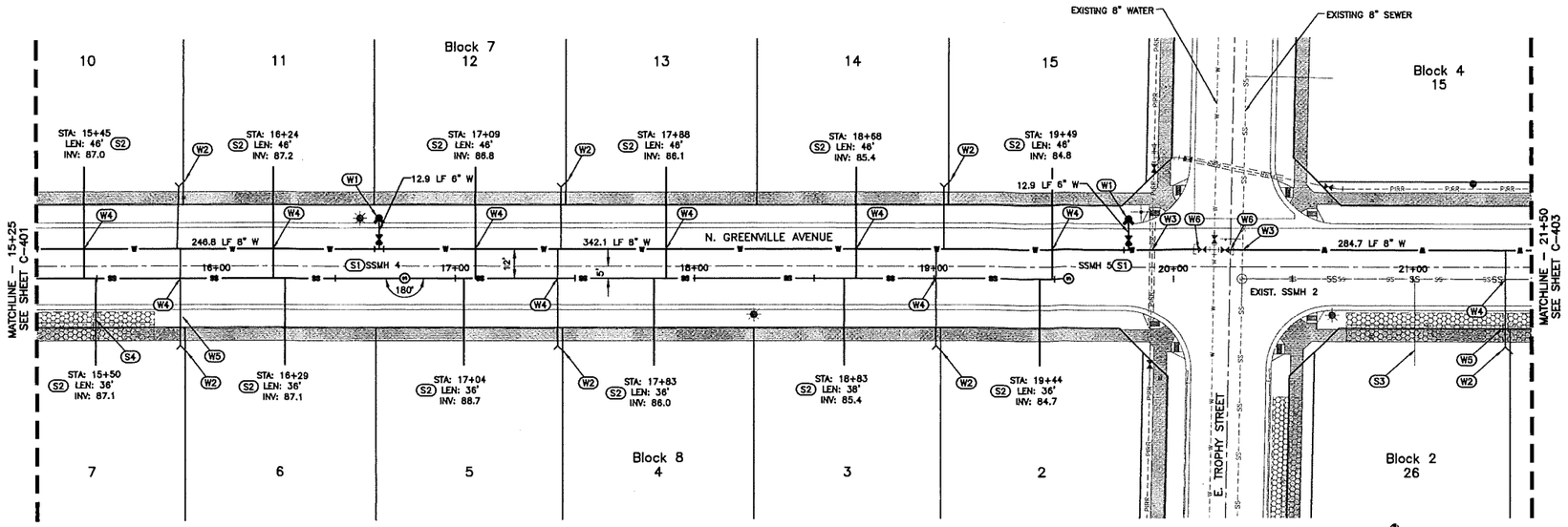
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
SEWER LINE A - N. GREENVILLE AVENUE

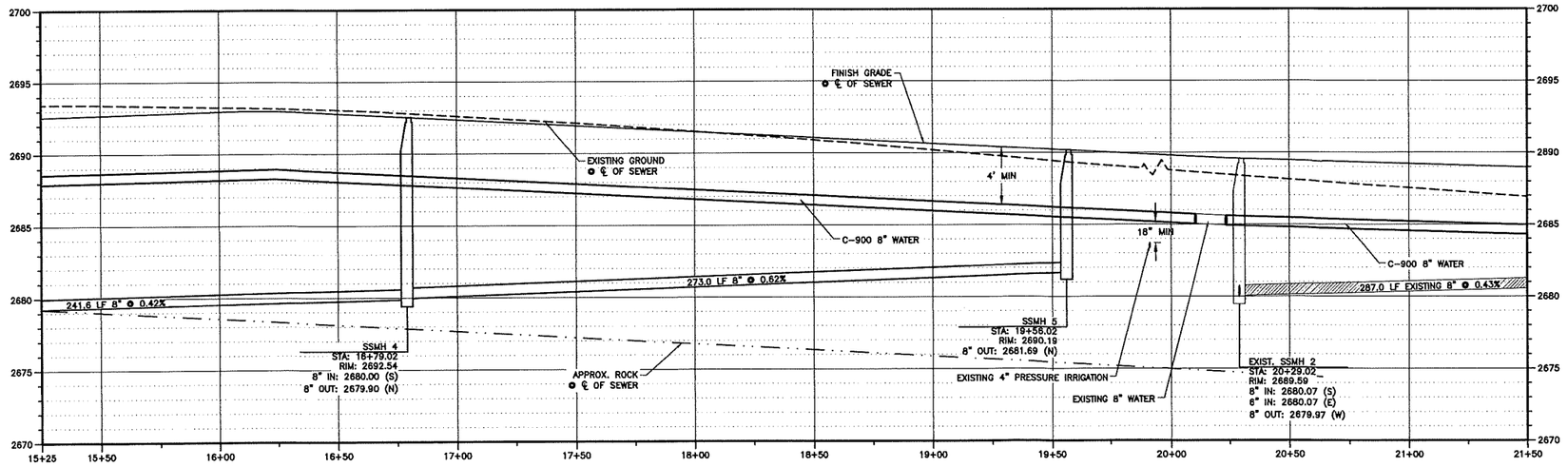
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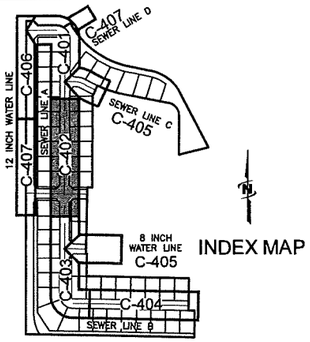


SEWER LINE A AND B
N. GREENVILLE AVENUE



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(W4) POTABLE/NON-POTABLE SERVICE CROSSING SEE WATER NOTE 3 ON SHEET C-0D2

(W5) SLEEVE WATER SERVICE THROUGH SEEPAGE BED WITH WATER CLASS PIPE. EXTEND SLEEVE 5' BEYOND SEEPAGE BED ON BOTH SIDES

(W6) FIELD LOCATE AND CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES

APPROVED BY CITY OF KUNA ENGINEER

20 June 2018

SIGNATURE DATE

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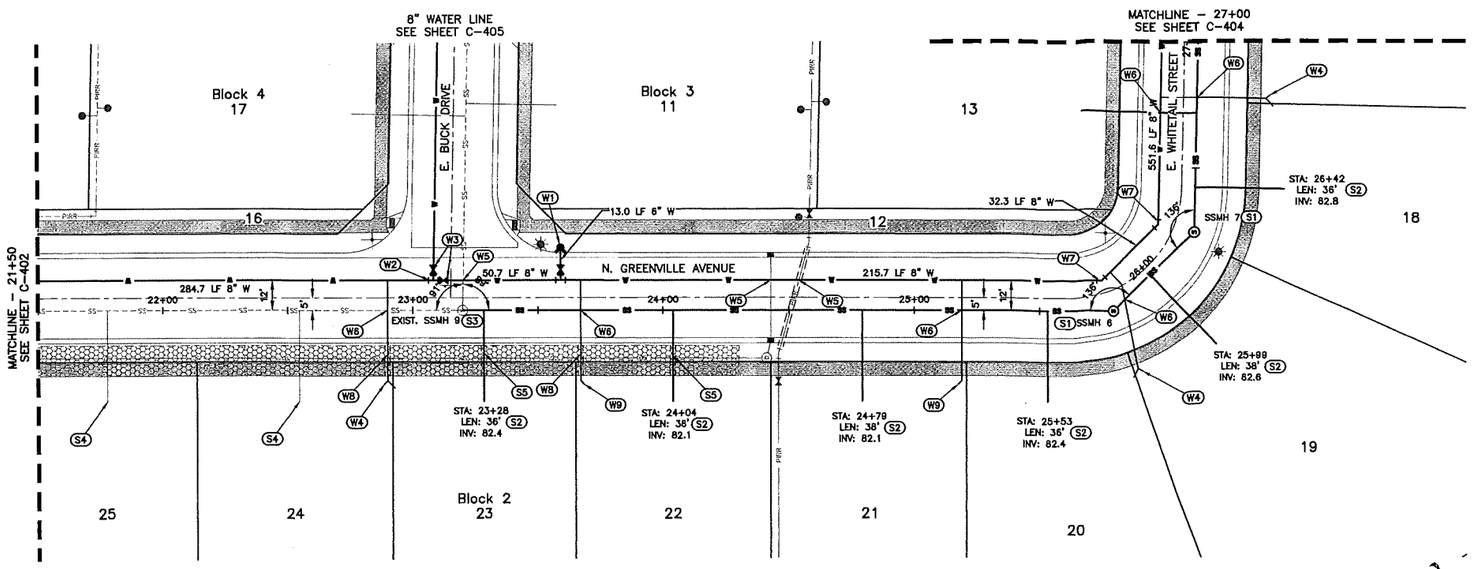
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
SEWER LINE A AND B - N. GREENVILLE AVENUE

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LAST UPDATED: 4/2/2018

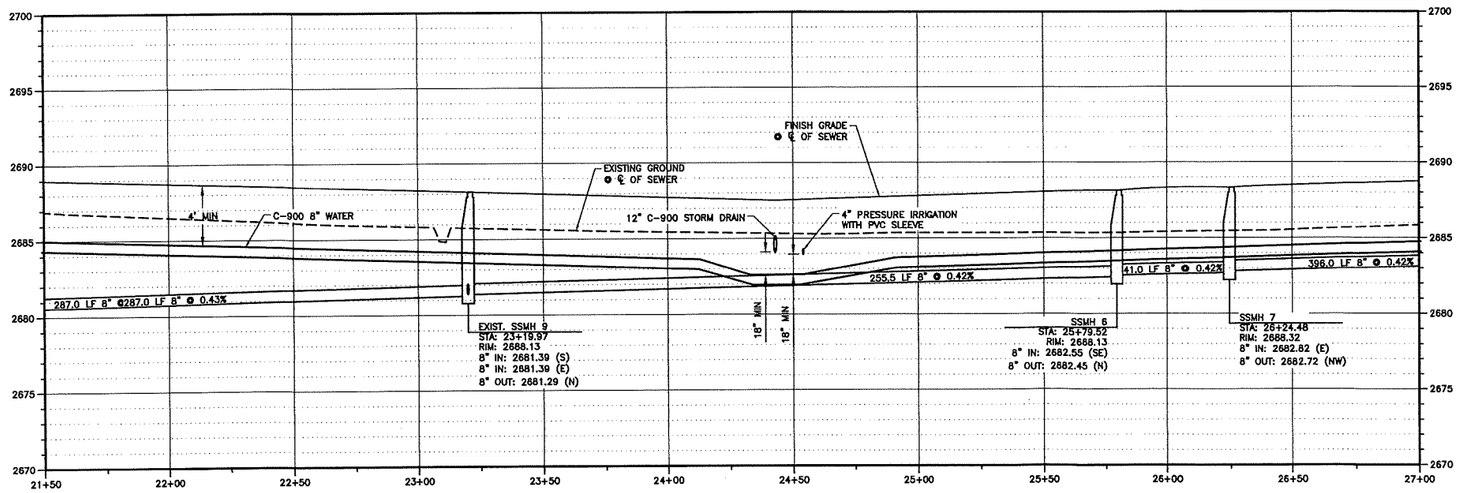
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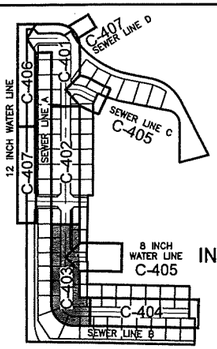
SEWER LINE B
N. GREENVILLE AVENUE

HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET



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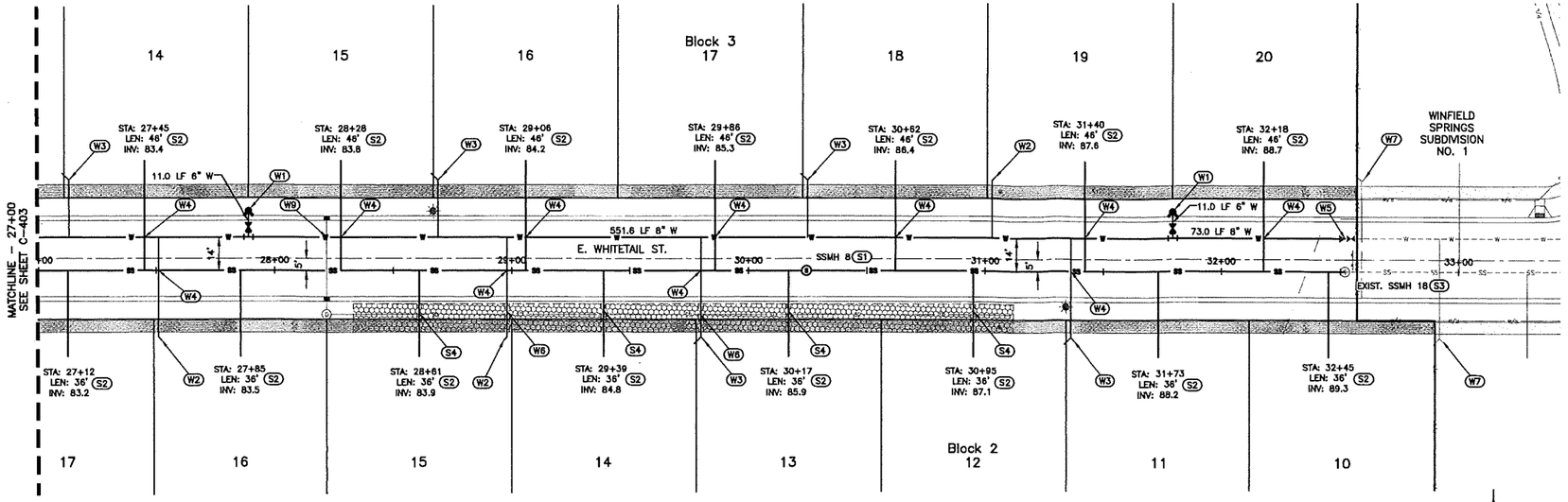
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WATER AND SEWER PLAN AND PROFILE
SEWER LINE B - N. GREENVILLE AVENUE

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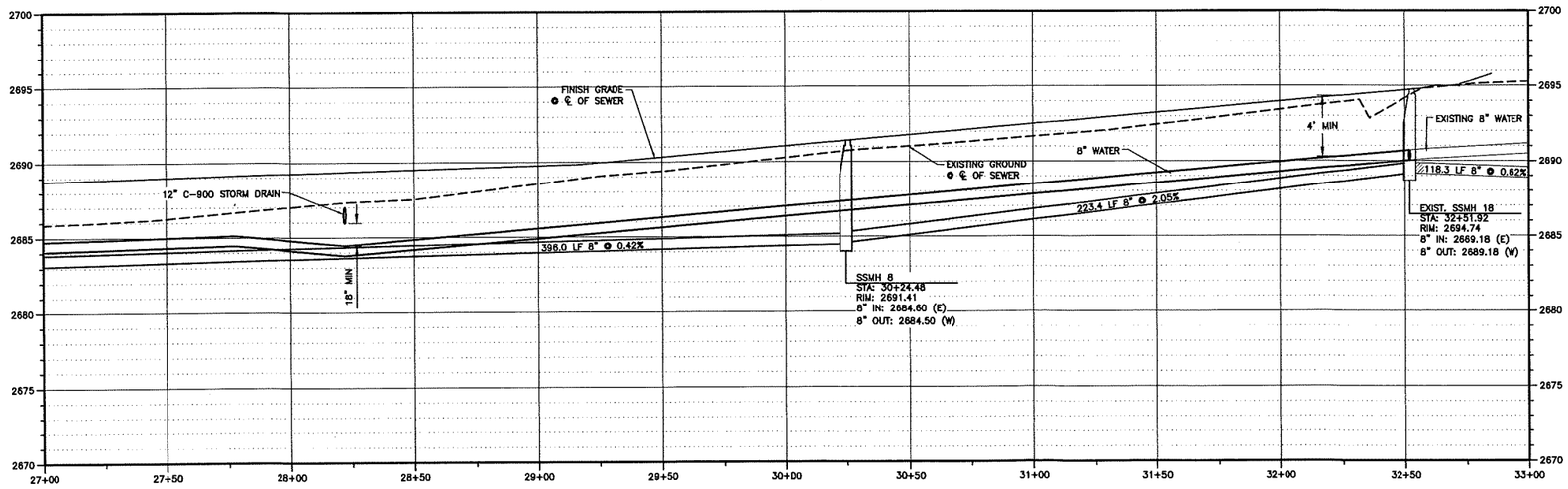
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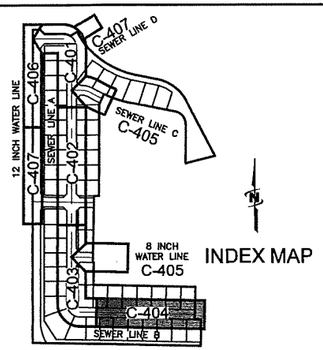
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VERT 0 5 10
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INDEX MAP

SEWER KEYED NOTES

(S1) 48"ø SEWER MANHOLE PER ISPWC SD-501

(S2) STANDARD SEWER SERVICE MARKER PER ISPWC SD-512

(S3) CONNECT TO EXISTING SEWER MANHOLE. CONTRACTOR TO VERIFY ELEVATIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CORE DRILL AND RECHANNEL EXISTING MANHOLE. PROVIDE KOR-N-SEAL BOOT FOR WATER TIGHT CONNECTION. ADJUST RIM ELEVATION TO FINISH GRADE.

(S5) SLEEVE SEWER SERVICE THROUGH SEEPAGE BED WITH WATER CLASS PIPE. EXTEND SLEEVE 5' BEYOND SEEPAGE BED ON BOTH SIDES.

WATER KEYED NOTES

(W1) FIRE HYDRANT ASSEMBLY PER ISPWC SD-404

(W2) 3/4" SINGLE SERVICE CONNECTION PER COK SD-K401.75

(W3) 3/4" DOUBLE SERVICE CONNECTION PER COK SD-K401.75

(W4) POTABLE/NON-POTABLE SERVICE CROSSING SEE WATER NOTE 3 ON SHEET C-002

(W5) FIELD LOCATE AND CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION. REMOVE EXISTING BLOW OFF AND RETAIN WATER VALVE. NOTIFY ENGINEER OF ANY DISCREPANCIES

(W6) SLEEVE WATER SERVICE THROUGH SEEPAGE BED WITH WATER CLASS PIPE. EXTEND SLEEVE 5' BEYOND SEEPAGE BED ON BOTH SIDES

(W7) EXISTING DOUBLE SERVIVCE. CONTRACTOR TO VERIFY LOCATION

(W8) REMOVE EXISTING TEMPORARY BLOW-OFF AND CONNECT TO EXISTING 8" WATER LINE. CONTRACTOR TO FIELD VERIFY SIZE AND LOCATION BEFORE CONSTRUCTION.

(W9) POTABLE/NON-POTABLE MAIN CROSSING SEE WATER NOTE 2 ON SHEET C-002

APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

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www.jub.com

PROFESSIONAL ENGINEER REGISTERED 12449 STATE OF IDAHO JUSTIN E. BOZOVICH

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	REVISION			

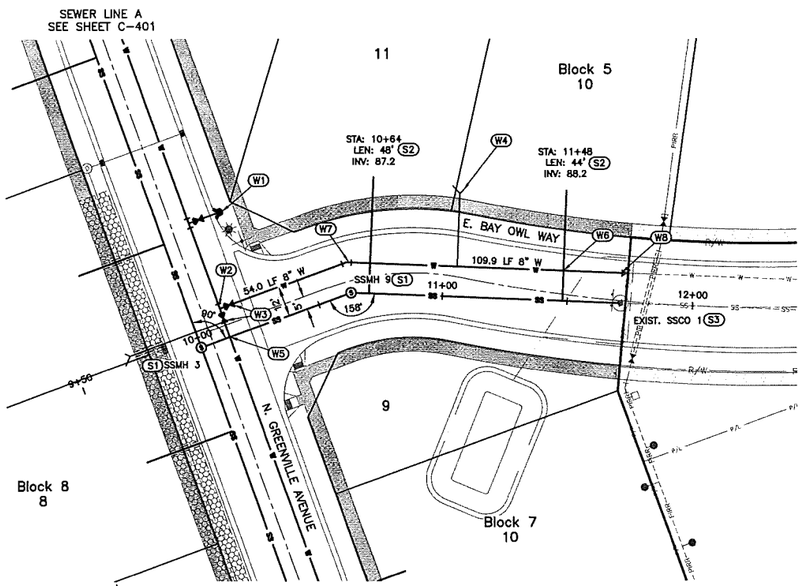
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
SEWER LINE B - E. WHITETAIL STREET

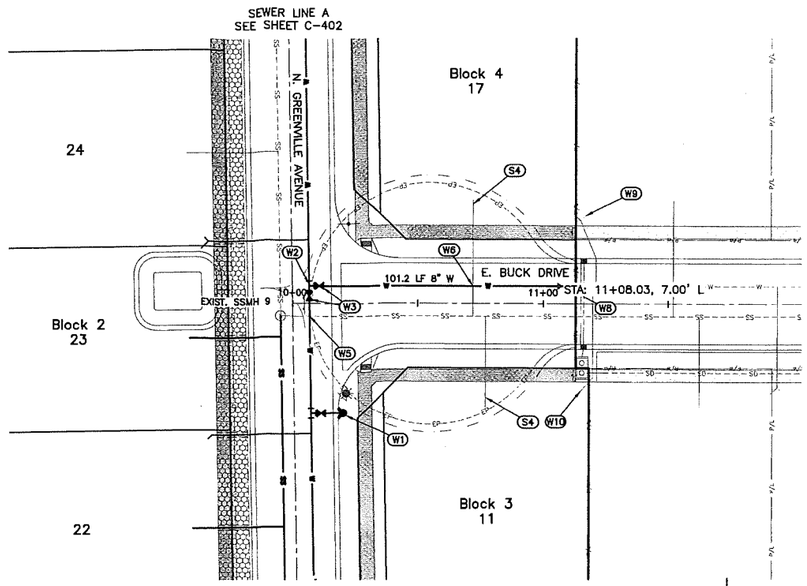
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DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB
ONE INCH	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	4/3/2018

SHEET NUMBER:
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Plot Date:5/22/2018 11:45 AM Plotted By: Kolin Morao
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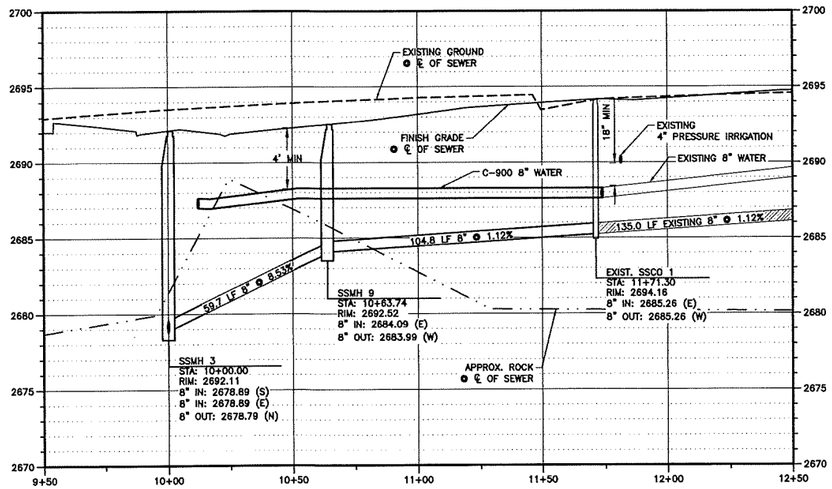


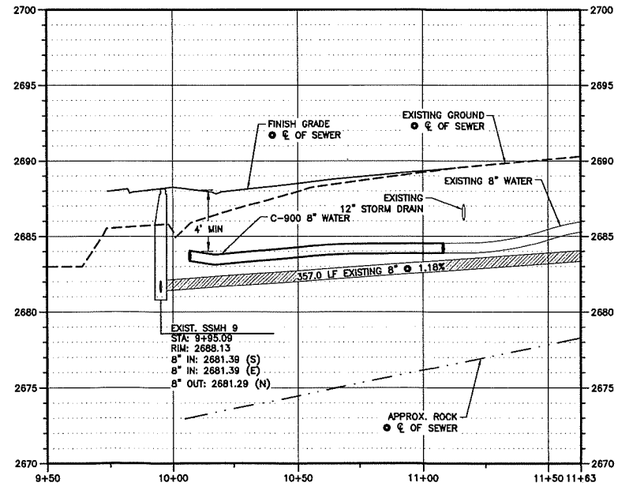
SEWER LINE C
E. BAY OWL WAY



8 INCH WATER LINE
E. BUCK DRIVE

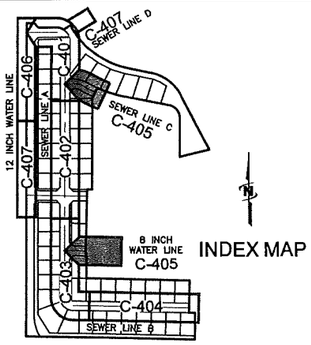
HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET





NOTES TO CONTRACTOR

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- (S2) STANDARD SEWER SERVICE MARKER PER ISPWC SD-512
- (S3) REMOVE EXISTING SEWER CLEANOUT. MATCH EXISTING PIPE INVERT AND SLOPE.
- (S4) EXISTING SEWER SERVICE

WATER KEYED NOTES

- (W1) FIRE HYDRANT ASSEMBLY PER ISPWC SD-404
- (W2) 8"x8" TEE WITH THRUST BLOCKING PER ISPWC SD-403
- (W3) 8" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
- (W4) 3/4" DOUBLE SERVICE CONNECTION PER COK SD-K401.75
- (W5) POTABLE/NON-POTABLE MAIN CROSSING SEE WATER NOTE 2 ON SHEET C-002
- (W6) POTABLE/NON-POTABLE SERVICE CROSSING SEE WATER NOTE 3 ON SHEET C-002
- (W7) 22.50° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403
- (W8) REMOVE EXISTING TEMPORARY BLOW-OFF AND CONNECT TO EXISTING 8" WATER LINE OR WATER VALVE. CONTRACTOR TO FIELD VERIFY SIZE AND LOCATION BEFORE CONSTRUCTION
- (W9) EXISTING DOUBLE SERVICE. CONTRACTOR TO VERIFY LOCATION
- (W10) EXISTING SINGLE SERVICE. CONTRACTOR TO VERIFY LOCATION

APPROVED BY CITY OF KUNA ENGINEER

20 JUNE 2018

SIGNATURE DATE

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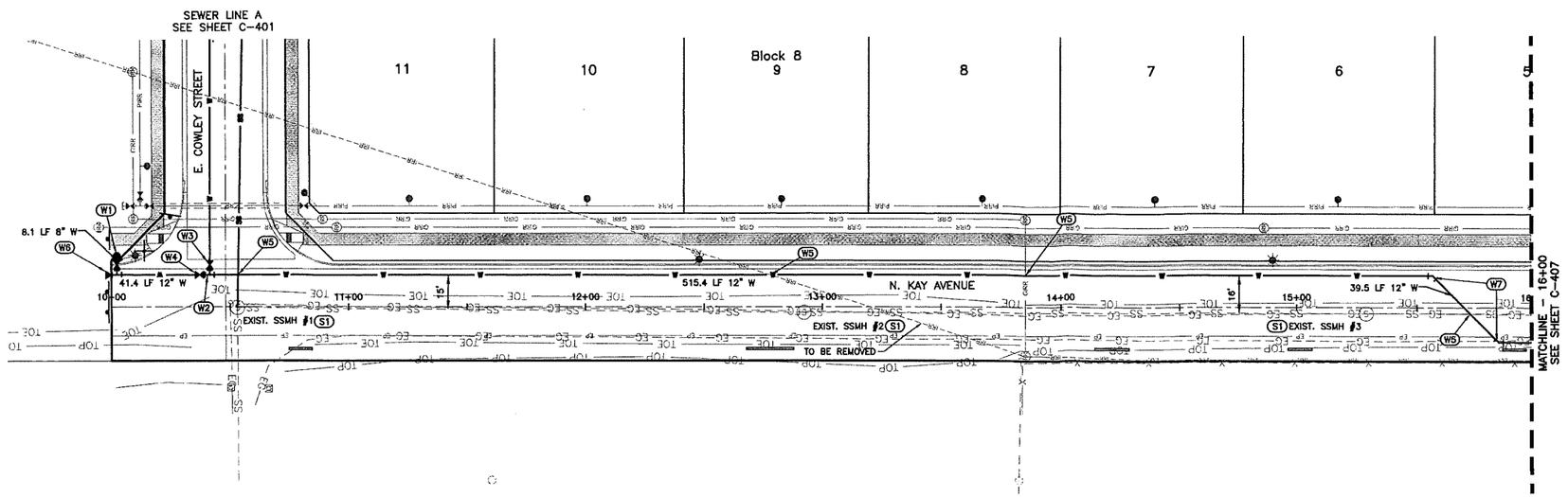
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
SEWER LINE C AND 8 INCH WATER LINE
E. BAY OWL WAY AND E. BUCK DRIVE

FILE:	10-18-001_C-405
JUB PROJ. # :	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB
ONE INCH	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	4/5/2018

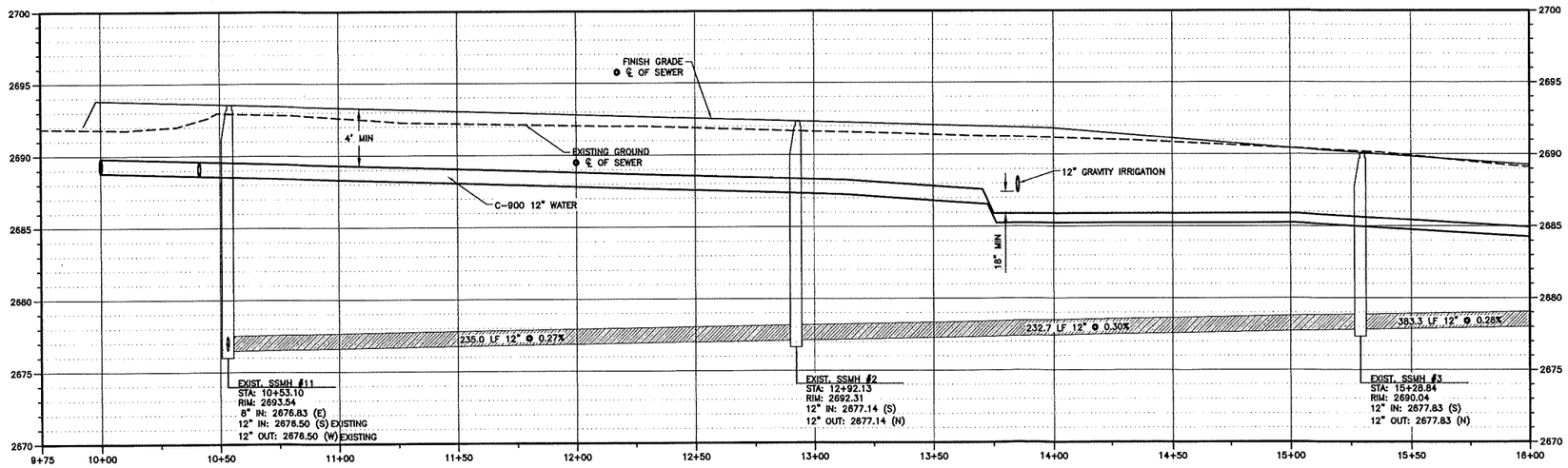
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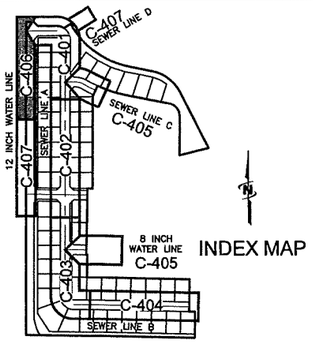
12 INCH WATER LINE
N. KAY AVENUE

HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET



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SEWER KEYED NOTES

(S1) EXISTING SEWER MANHOLE. ADJUST RIM TO FINISH GRADE ELEVATION

WATER KEYED NOTES

(W1) FIRE HYDRANT ASSEMBLY PER ISPWC SD-404
(W2) 12"x12"x8" TEE WITH THRUST BLOCKING PER ISPWC SD-403
(W3) 8" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
(W4) 12" GATE VALVE WITH THRUST BLOCKING PER ISPWC SD-403
(W5) POTABLE/NON-POTABLE MAIN CROSSING SEE WATER NOTE 2 ON SHEET C-002
(W6) 2" BLOW-OFF ASSEMBLY PER COK SD-KIRR-405
(W7) 45° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403

APPROVED BY CITY OF KUNA ENGINEER

SIGNATURE DATE

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	REVISION			

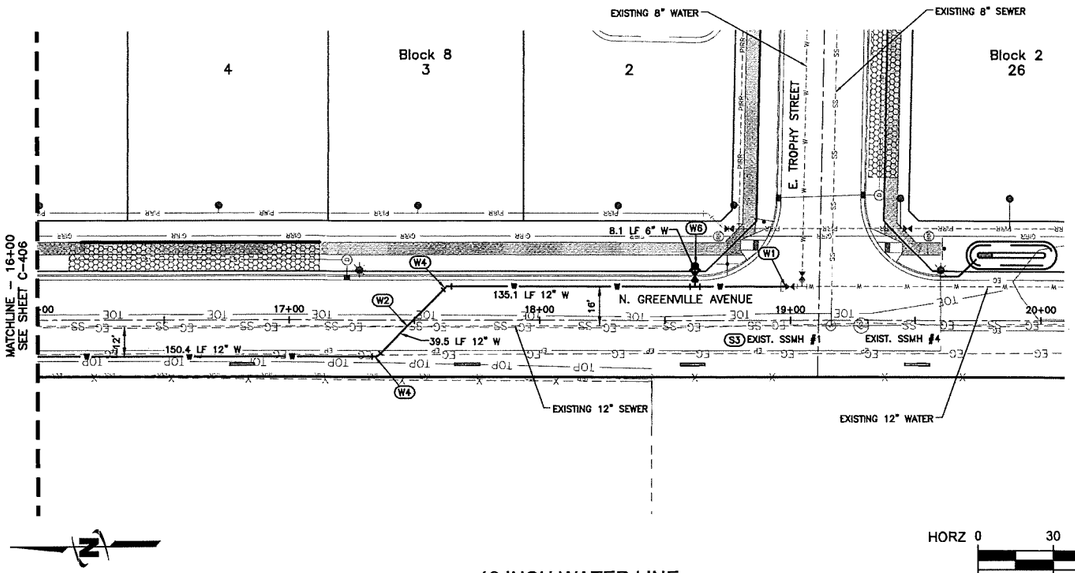
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
12 INCH WATER LINE - N. KAY AVENUE

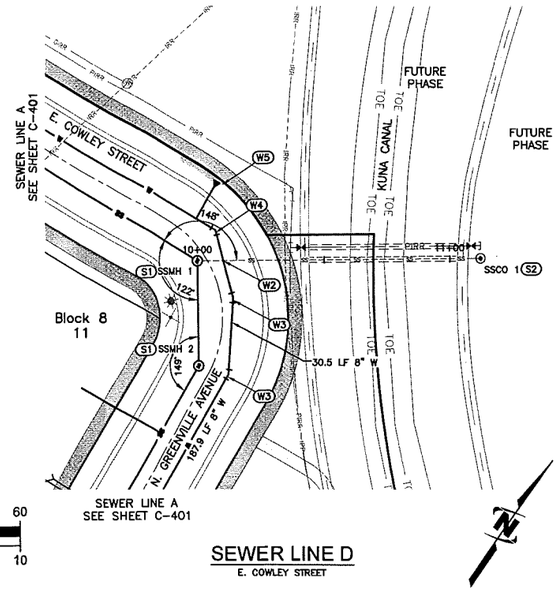
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DESIGN BY: KHM
CHECKED BY: JEB
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AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/9/2018

SHEET NUMBER:
C-406

Plot Date:5/23/2018 11:46 AM Plotted By: Keith Morse
Date Created:12/13/2017 I:\BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-406.DWG



12 INCH WATER LINE
N. KAY AVENUE

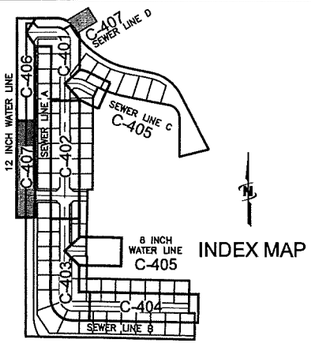


SEWER LINE D
E. COWLEY STREET

HORZ 0 30 60
VERT 0 5 10
SCALE IN FEET

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(S2) SEWER CLEAN-OUT PER ISPWC SD-506

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WATER KEYED NOTES

(W1) FIELD LOCATE AND CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES

(W2) POTABLE/NON-POTABLE MAIN CROSSING SEE WATER NOTE 2 ON SHEET C-002

(W3) 22.5° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403

(W4) 45° ELBOW WITH THRUST BLOCKING PER ISPWC SD-403

(W5) AIR RELEASE VALVE PER ISPWC SD-408. LOCATE AT HIGH POINT IN WATER LINE

(W6) FIRE HYDRANT ASSEMBLY PER ISPWC SD-404

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20 JUNE 2018

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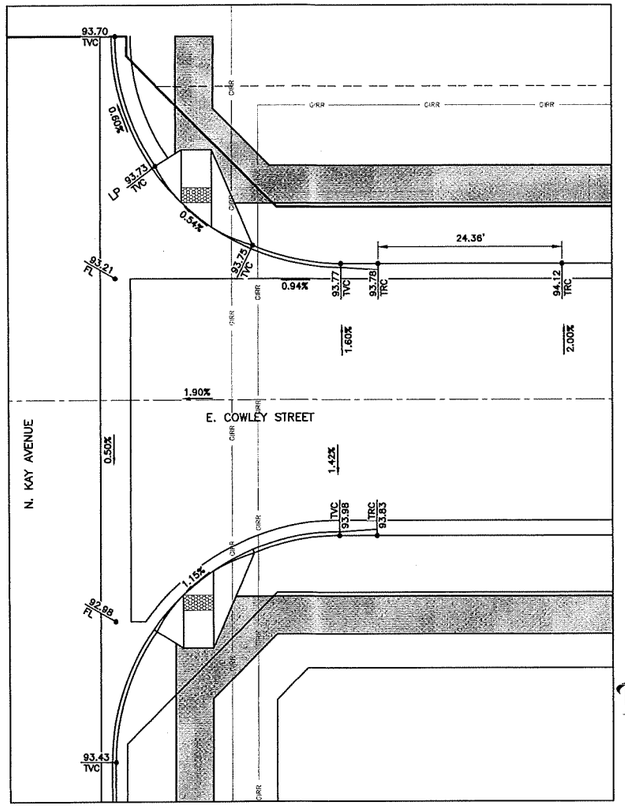
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

WATER AND SEWER PLAN AND PROFILE
12 INCH WATER LINE AND SEWER LINE D
- N. KAY AVENUE / E. COWLEY STREET

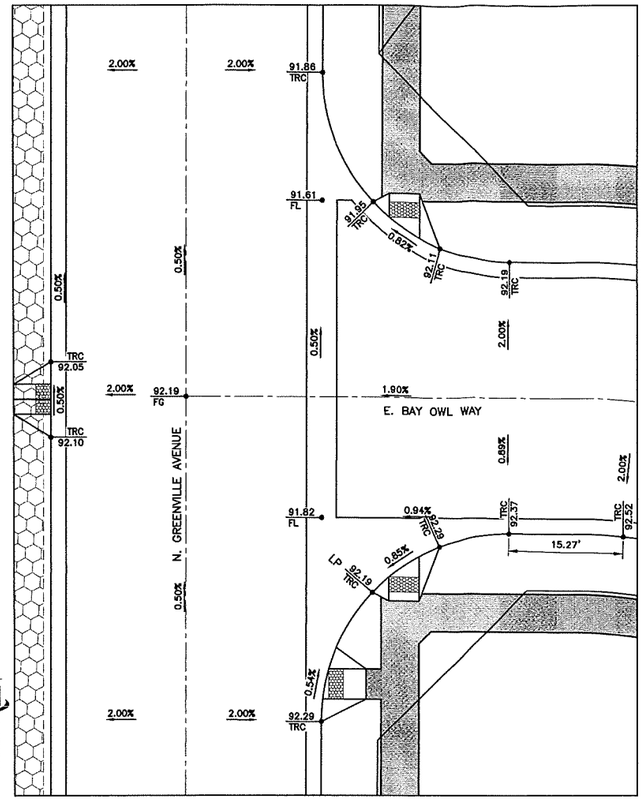
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LAST UPDATED: 4/5/2018

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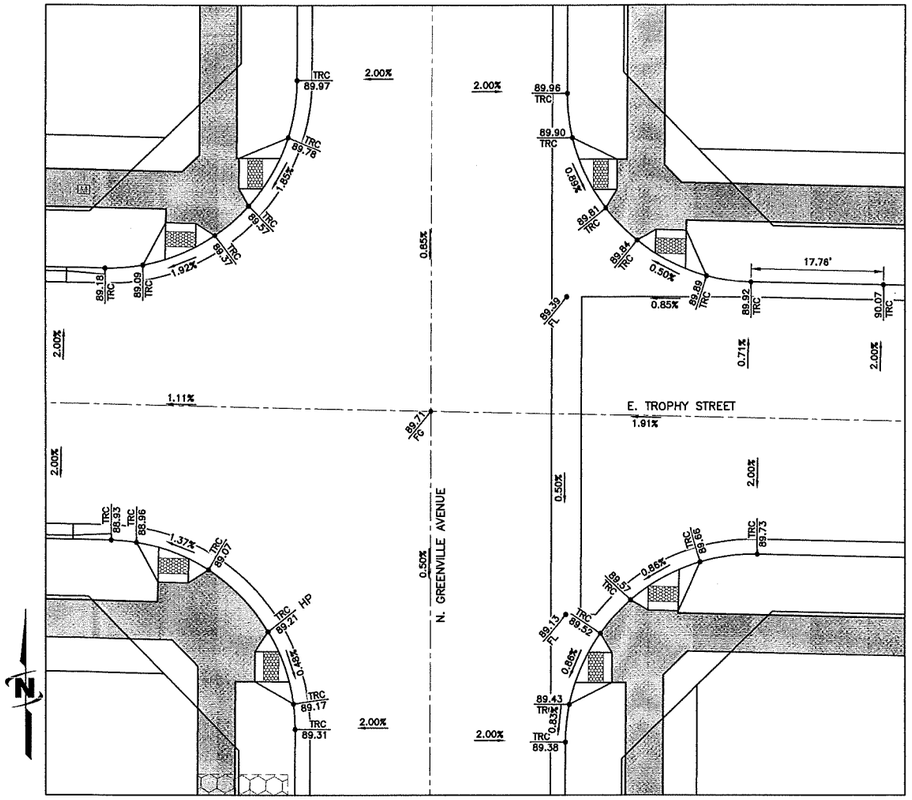
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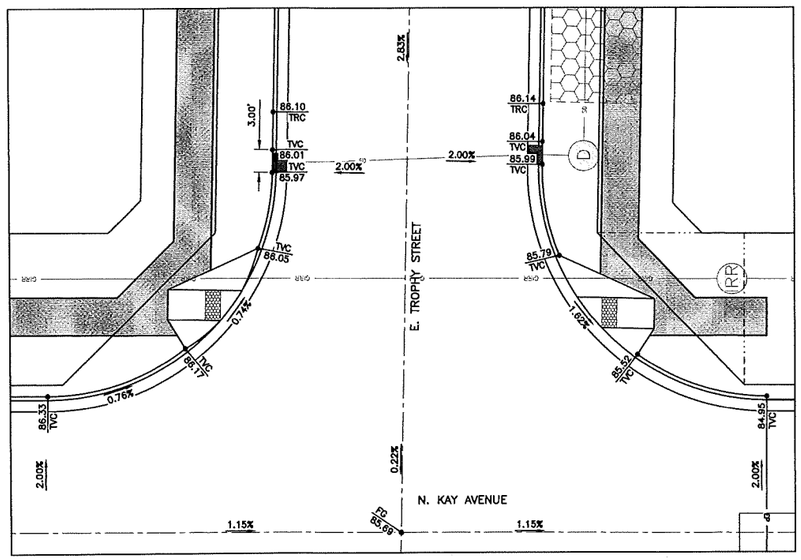
1 N. KAY AVENUE / E. COWLEY STREET
SCALE: 1"=10'



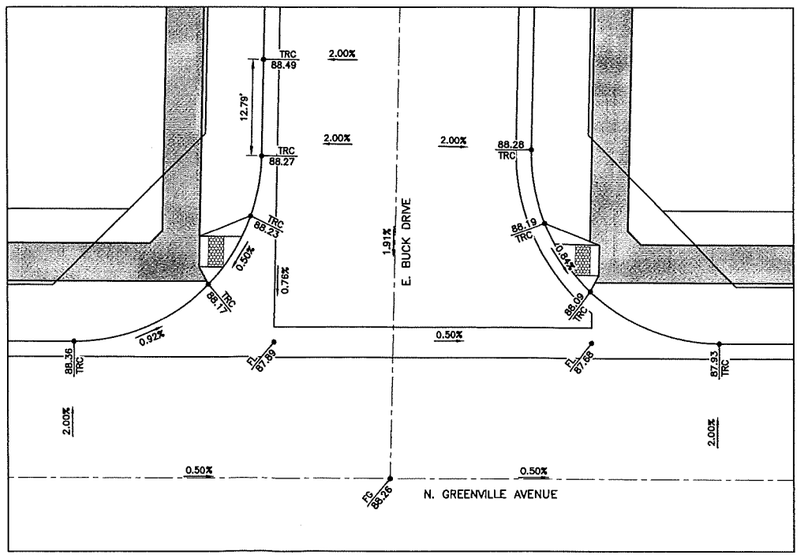
2 N. GREENVILLE AVENUE / E. BAY OWL WAY
SCALE: 1"=10'



3 N. GREENVILLE AVENUE / E. TROPHY STREET
SCALE: 1"=10'



4 N. KAY WAY / E. TROPHY STREET
SCALE: 1"=10'



5 N. GREENVILLE AVENUE / E. BUCK DRIVE
SCALE: 1"=10'

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY: Michael Alexander DATE: 6-26-18
ADA COUNTY HIGHWAY DISTRICT

NOTES TO CONTRACTOR

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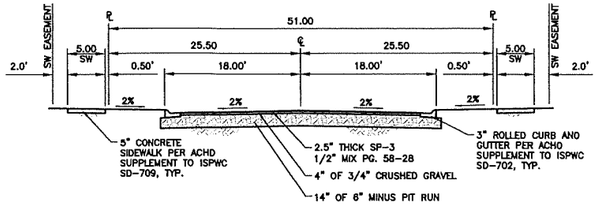
WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

PEDESTRIAN RAMPS

FILE: 10-18-001_C-501
JUB PROJ. # : 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/4/2018

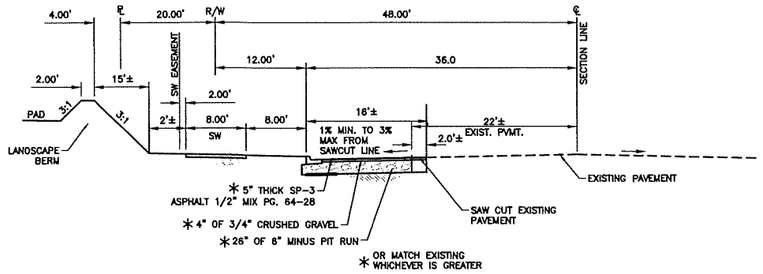
SHEET NUMBER:
C-501

Plot Date: 5/23/2018 11:47 AM Plotted By: Keith Moore
Date Created: 12/12/2017 \\BOISEFILESPUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEETS\10-18-001 C-501.DWG



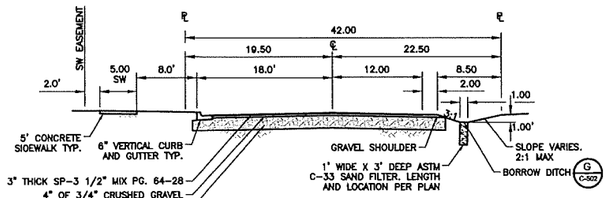
PAVEMENT SECTION PER ACHD AND GEOTECHNICAL REPORT PREPARED BY MTI, DATED DECEMBER 23, 2015

A TYPICAL LOCAL RESIDENTIAL ROAD SECTION
SCALE:N.T.S.

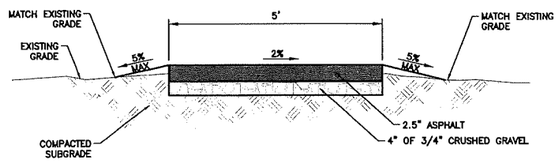


PAVEMENT SECTION PER ACHD AND GEOTECHNICAL REPORT PREPARED BY MTI, DATED DECEMBER 23, 2015

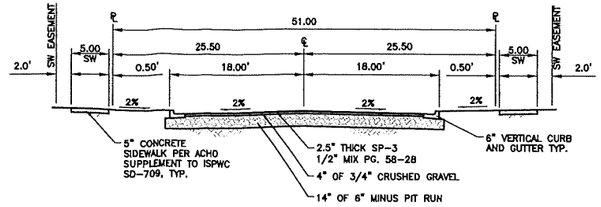
B E. DEER FLAT ROAD WIDENING (MINOR ARTERIAL)
SCALE:N.T.S.



C N. KAY AVENUE ROAD SECTION (COLLECTOR)
SCALE:N.T.S.

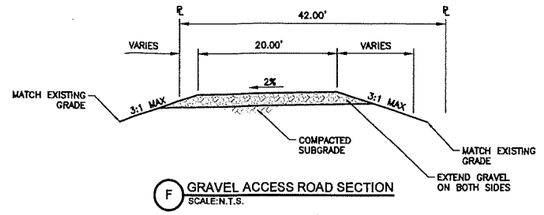


D 5' ASPHALT PEDESTRIAN TRAIL
SCALE:N.T.S.



PAVEMENT SECTION PER ACHD AND GEOTECHNICAL REPORT PREPARED BY MTI, DATED DECEMBER 23, 2015

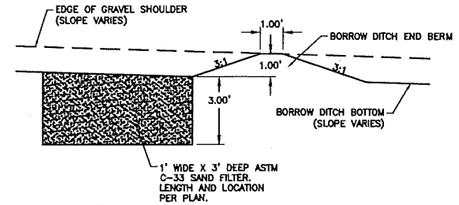
E E. TROPY STREET (LOCAL RESIDENTIAL) - STA. 10+47 TO 11+41
SCALE:N.T.S.



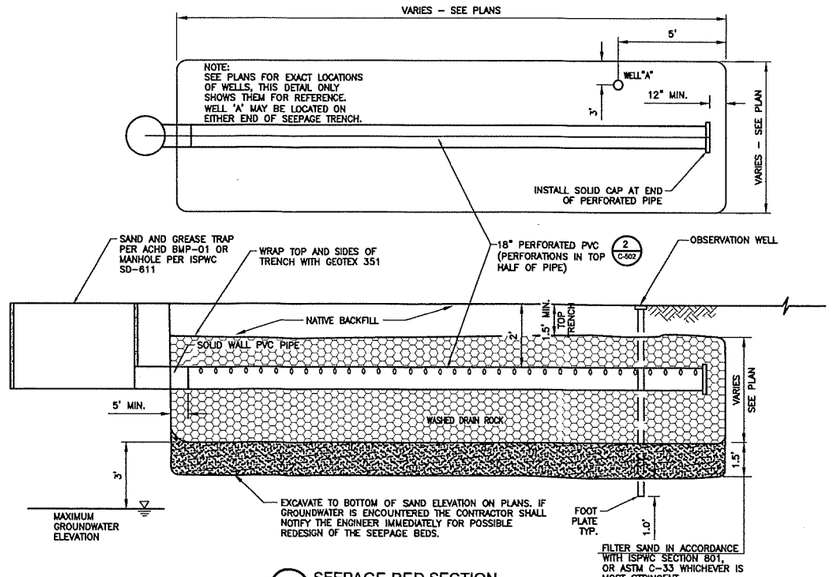
F GRAVEL ACCESS ROAD SECTION
SCALE:N.T.S.

SEEPAGE BED NOTES:

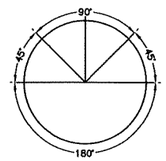
1. ACHD REQUIRES ELECTRONIC MARKERS AT ALL CORNERS OF UNDERGROUND INFILTRATION SYSTEMS. CONTRACTOR TO COORDINATE WITH ACHD INSPECTION FOR PLACEMENT OF MARKERS DURING CONSTRUCTION AND PRIOR TO BACKFILLING.
3. CONTRACTOR SHALL PERFORM INFILTRATION TESTING AT PROPOSED SEEPAGE BED LOCATIONS PRIOR TO START OF CONSTRUCTION. NOTIFY ACHD INSPECTOR 48 HOURS PRIOR TO TESTING.
4. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF GROUNDWATER IS ENCOUNTERED WITHIN 3 FEET OF THE BOTTOM DESIGN ELEVATION FOR ANY INFILTRATION FACILITY AND/OR IF IT IS HIGHER THAN ANTICIPATED.
5. IF ROCK IS ENCOUNTERED, CONTRACTOR SHALL HAVE A PERCOLATION TEST PERFORMED BY A SOILS ENGINEER AFTER THE SEEPAGE TRENCH IS FULLY EXCAVATED. IF THE PERCOLATION RATE IS LESS THAN THAT SPECIFIED BY THE SOILS REPORT AND ENGINEER, THE CONTRACTOR MAY NEED TO BLAST OR BORE TO CREATE A CONDUIT FOR DRAINAGE TO OCCUR OR REDESIGN THE SYSTEM TO ACHIEVE THE REQUIRED INFILTRATION.
6. NO TREES TO BE PLANTED ABOVE SEEPAGE BED.



G BORROW DITCH PROFILE (N. KAY AVENUE)
SCALE:N.T.S.



1 SEEPAGE BED SECTION
SCALE:N.T.S.



3/8" PERFORATIONS IN VALLEYS OF CORRUGATED PIPE. 5 EA.

2 18" PIPE PERFORATION SCHEDULE
SCALE:NTS

NOTES TO CONTRACTOR

1. ADD 2500 FEET TO ALL SPOT ELEVATIONS TO DETERMINE ACTUAL ELEVATION.
2. SEWER LENGTHS ARE HORIZONTALLY (2D) MEASURED FROM INSIDE FACE OF STRUCTURES.
3. LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND AGREES TO BE FULLY RESPONSIBLE SHOULD DAMAGES OCCUR DUE TO A FAILURE TO LOCATE, INACTIVATE, ABANDON, OR PRESERVE SAID UTILITIES.
4. CONTRACTOR TO FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND NOTIFY ENGINEER OF ANY DISCREPANCY.
5. THIS DRAWING, OR ANY PORTION OF IT, SHALL NOT BE USED ON ANY PROJECT OR EXTENSION OF PROJECT(S) EXCEPT BY AGREEMENT IN WRITING FROM THE ENGINEER.

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY: Michael Newton DATE: 6-26-18
ADA COUNTY HIGHWAY DISTRICT

Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
250 S. Beechwood Ave.
Suite 201
Boise, ID 83709-0944
Phone: 208.376.7330
www.jub.com

PROFESSIONAL ENGINEER REGISTERED 12449 STATE OF IDAHO JUSTIN E. BOZOVICH 6-26-18

J-U-B SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE REUSED WITHOUT J-U-B'S PRIOR WRITTEN CONSENT. ANY REUSE WITHOUT SUCH CONSENT SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

NO.	DESCRIPTION	BY	APPR.	DATE
REVISION				

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

STREET SECTIONS AND DRAINAGE DETAILS

FILE: 10-18-001_C-502
JUB PROJ. #: 10-18-001
DRAWN BY: KHM
DESIGN BY: KHM
CHECKED BY: JEB
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/21/2018

SHEET NUMBER:
C-502

Plot Date:5/23/2018 11:48 AM Plotted By: Keith Morse
Date Created:12/12/2017 \BOISEFILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-502.DWG

NOTES:

(A) ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS

(B) NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED

(C) SERVICE PIPE: 1" CLASS 250 POLYETHYLENE SIDR 7 PIPE

(D) SADDLE COUPLINGS: USED FOR CONNECTION OF ALL SERVICE LINES TO PVC MAIN. SERVICE SADDLES, EPOXY COATED STEEL WITH STAINLESS STEEL BAND AND MUELLER THREADS (TYPE CC)

(E) NO SERVICE CONNECTIONS WITHIN ONE (1) FOOT OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF 18 INCHES.

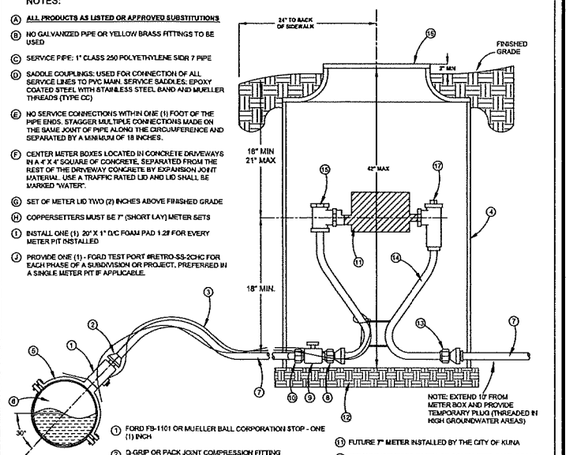
(F) CENTER METER BOXES LOCATED IN CONCRETE DRIVEWAYS IN A 4' X 4' SQUARE OF CONCRETE, SEPARATED FROM THE REST OF THE DRIVEWAY CONCRETE BY EXPANSION JOINT MATERIAL. USE A TRAFFIC RATED LID AND LID SHALL BE MARKED 'WATER'.

(G) SET OF METER LID TWO (2) INCHES ABOVE FINISHED GRADE

(H) COPPERSETTERS MUST BE 1" (SHORT LAY) METER SETS

(I) INSTALL ONE (1) 20" X 1" D/C FOAM PAD 1.2# FOR EVERY METER PIT INSTALLED

(J) PROVIDE ONE (1) - FORD TEST PORT #RETRO-SS-2CHC FOR EACH PHASE OF A SUBDIVISION OR PROJECT, PREFERRED IN A SINGLE METER PIT IF APPLICABLE.



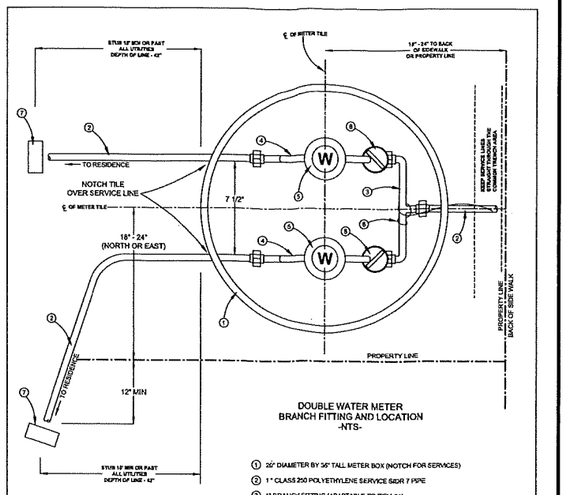
1. FORD FB-1101 OR MUELLER BALL CORPORATION STOP - ONE (1) INCH
2. G-GRIP OR PACK JOINT COMPRESSION FITTING
3. NO. 12 COPPER LOCATE/TRACER WIRE LOOPED BACK TO WATERMAIN
4. 20" DIA X 36" DEEP METER BOX (NOTCH FOR SERVICE LINES)
5. EPOXY COATED TAPPING SADDLE WITH STAINLESS STEEL BAND
6. WATERMAIN (SIZE VARIES - 6" TYP.)
7. USE 1" DIA. CLASS 250 POLYETHYLENE SIDR 7 PIPE(TYP.) NO SPLICING IS ALLOWED
8. SWIVEL IRON PIPE THREAD CONNECTION
9. FULL OPENING 3/4" BALL VALVE
10. G-GRIP OR PACK JOINT CURB STOP ADAPTER
11. FUTURE 7" METER INSTALLED BY THE CITY OF KUNA
12. FIRM UNDISTURBED EARTH OR COMPACTED SAND/GRAVEL
13. DOUBLE PURPOSE COUPLING
14. FORD VBH92-18W-61-33-NL
15. VALVE PER ITEM #14
16. D&L L2242 CAST IRON LID WITH TWO (2) RECESSED HOLES FOR DUAL SERVICE PITS AND ONE (1) RECESSED HOLE FOR SINGLE SERVICE METER PITS; 13 1/2" OPENING - 1 1/32" PENTAGONAL NUT
17. CARTRIDGE CHECK VALVE FOR BACK-FLOW PREVENTION PER ITEM #14

v. 18/03/14

1

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

WATER SERVICE CONNECTION
STANDARD 5/8" x 3/4" WATER SERVICE
KUNA STD DWG K401-.75



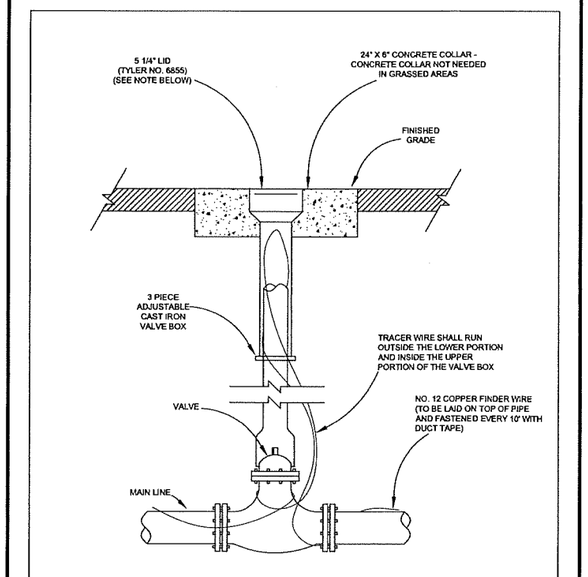
DOUBLE WATER METER
BRANCH FITTING AND LOCATION
-NTS-

1. 20" DIAMETER BY 36" TALL METER BOX (NOTCH FOR SERVICES)
2. 1" CLASS 250 POLYETHYLENE SERVICE SIDR 7 PIPE
3. 1" BRANCH FITTING (ADAPTABLE TO ITEM #4)
4. COPPER METER SETTER WITH LOCKABLE SHUT OFF VALVE AND ANGLE DUAL CARTRIDGE CHECK VALVE PART NUMBER PER APPROPRIATE SERVICE SIZE.
5. WATER METER (7" METER TYP.) FURNISHED BY CITY OF KUNA
6. No. 12 TRACER WIRE- LOOPED TO WATERMAIN
7. 2" X 4" MARKING POST PAINTED BLUE
8. FULL OPENING BALL VALVE BASED ON SERVICE SIZE

2

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

WATER SERVICE CONNECTION
WATER METER & PIT LAYOUT
KUNA WATER DETAIL K402

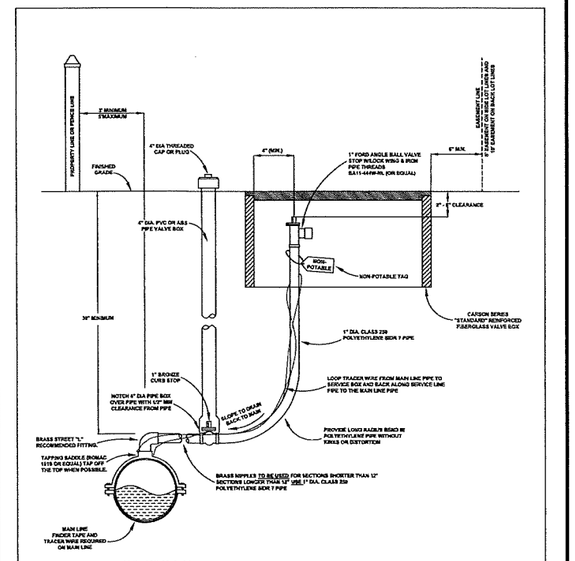


ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS

3

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

PRESSURIZED IRRIGATION
MAIN LINE VALVE
KUNA STD DWG KIRR-01

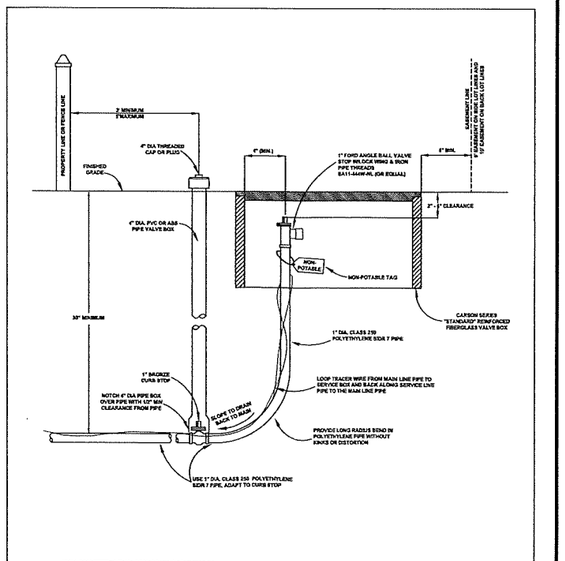


ALL CONNECTIONS SHALL BE MADE USING COMPRESSION BRASS GRIP JOINT/PACK JOINT FITTINGS. NO HOSE CLAMPS WILL BE ALLOWED.

4

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

PRESSURIZED IRRIGATION
STANDARD RESIDENTIAL 1" SERVICE
MAIN SIDE (SHORT SIDE)
KUNA STD DWG KIRR-02-01



ALL CONNECTIONS SHALL BE MADE USING COMPRESSION BRASS GRIP JOINT/PACK JOINT FITTINGS. NO HOSE CLAMPS WILL BE ALLOWED.

5

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

PRESSURIZED IRRIGATION
STANDARD RESIDENTIAL 1" SERVICE
MAIN SIDE (LONG SIDE)
KUNA STD DWG KIRR-02-02

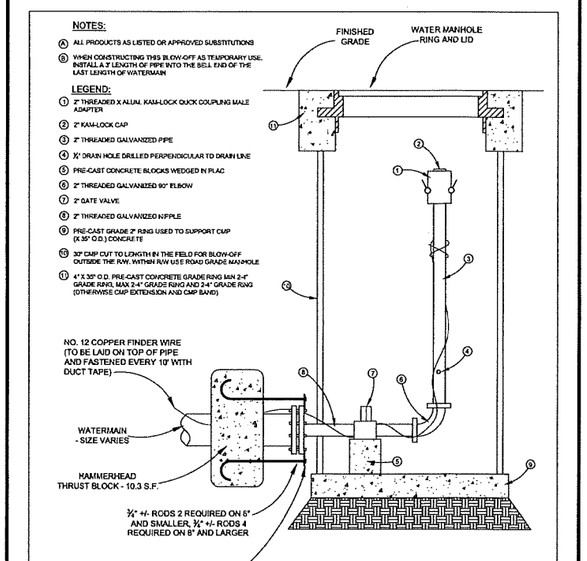
NOTES:

(A) ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS

(B) WHEN CONSTRUCTING THIS BLOW-OFF AS TEMPORARY USE, INSTALL A 3' LENGTH OF PIPE INTO THE SELL END OF THE LAST LENGTH OF WATERMAIN

LEGEND:

1. 2" THREADED X ALUM. KAM-LOCK QUICK COUPLING MALE ADAPTER
2. 2" KAM-LOCK CAP
3. 2" THREADED GALVANIZED PIPE
4. ¼" DRAIN HOLE DRILLED PERPENDICULAR TO DRAIN LINE
5. PRE-CAST CONCRETE BLOCKS WEDGED IN PLAC
6. 2" THREADED GALVANIZED 90° ELBOW
7. 2" GATE VALVE
8. 2" THREADED GALVANIZED NIPPLE
9. PRE-CAST GRADE 2' RING USED TO SUPPORT CMP (X 35" O.D.) CONCRETE
10. 30" CMP CUT TO LENGTH IN THE FIELD FOR BLOW-OFF OUTSIDE THE R/W, WITHIN R/W USE ROAD GRADE MANHOLE
11. 4" X 35" O.D. PRE-CAST CONCRETE GRADE RING MIN 2-4" GRADE RING, MAX 2-4" GRADE RING AND 2-4" GRADE RING (OTHERWISE CMP EXTENSION AND CMP BAND)



ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS

6

CITY OF KUNA
763 W AVALON AVE
KUNA, ID 83634
(208) 922-5546

2" BLOW-OFF ASSEMBLY DETAIL
TO BE USED ON MAINS <12" DIA
KUNA STD DWG KIRR-405

JUB ENGINEERS, INC.
J-U-B ENGINEERS, INC.
250 S. Beechwood Ave. Suite 201
Boise, ID 83709-0944
Phone: 208.376.7330
www.jub.com

PROFESSIONAL ENGINEER REGISTERED 12449 4-19-18 STATE OF IDAHO JUSTIN E. BOZOVICH

REUSE OF DRAWINGS
J-U-B SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE REUSED WITHOUT J-U-B'S PRIOR WRITTEN CONSENT. SAME RE-USE WITHOUT WRITTEN CONSENT SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

NO.	DESCRIPTION	REVISION BY	APPR.	DATE

WINFIELD SPRINGS SUBDIVISION NO. 2
KUNA, IDAHO

DRAINAGE DETAILS

FILE :	10-18-001_C-503
JUB PROJ. # :	10-18-001
DRAWN BY:	KHM
DESIGN BY:	KHM
CHECKED BY:	JEB
ONE INCH	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	5/9/2018

SHEET NUMBER:
C-503

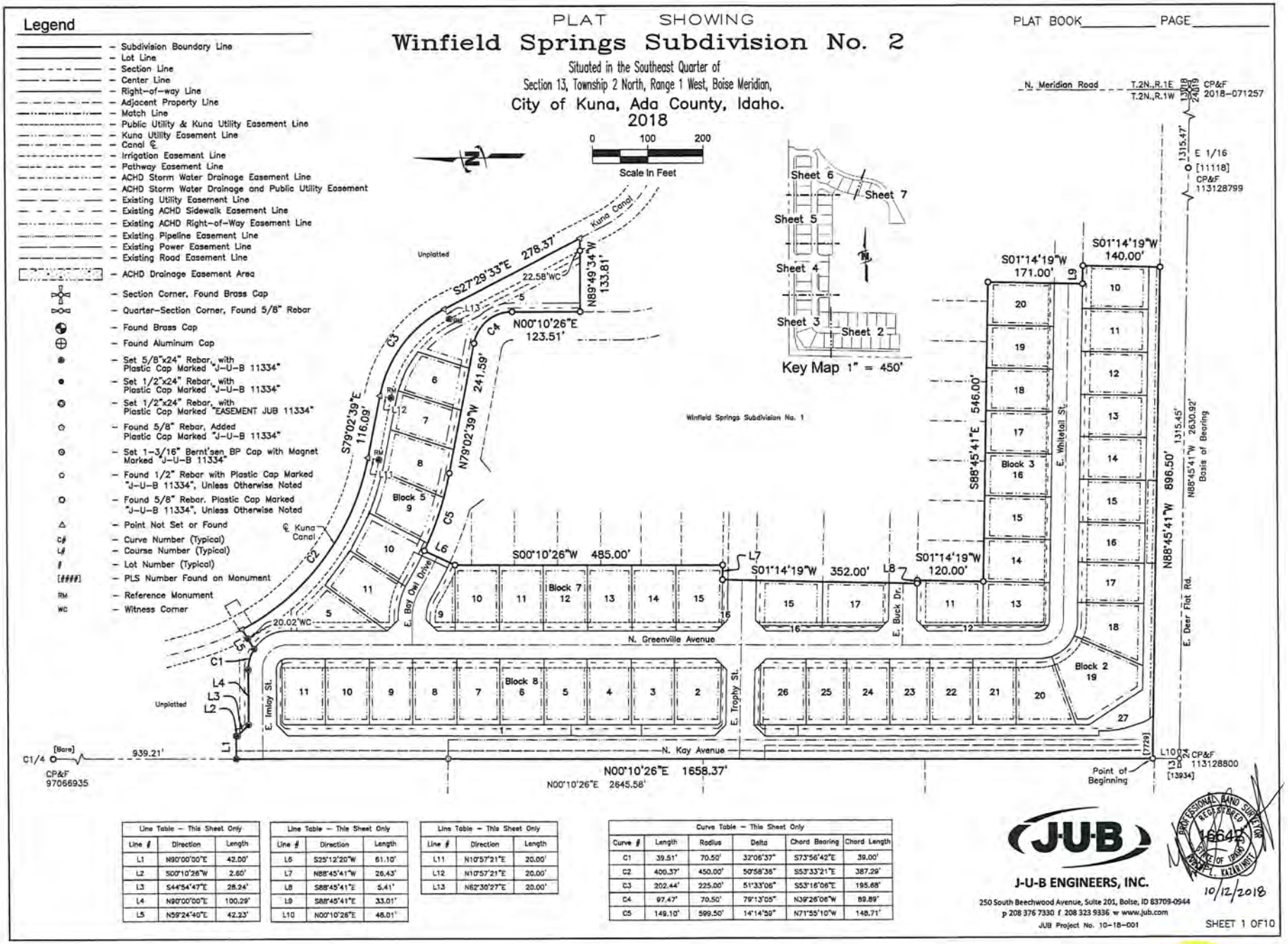
Plot Date:5/23/2018 11:48 AM Plotted By: Keith Morse
Data Created:12/20/2017 M:\BOISE\FILES\PUBLIC\PROJECTS\JUB\10-18-001 WINFIELD PH 2\CAD\SHEET\10-18-001_C-503.DWG

PLAT SHOWING

Winfield Springs Subdivision No. 2

Situated in the Southeast Quarter of
Section 13, Township 2 North, Range 1 West, Boise Meridian,
City of Kuna, Ada County, Idaho.
2018

PLAT BOOK_____ PAGE_____



Line Table – This Sheet Only		
Line #	Direction	Length
L1	N90°00'00"E	42.00'
L2	S00°10'26"W	2.60'
L3	S44°54'47"E	28.24'
L4	N90°00'00"E	100.29'
L5	N59°24'40"E	42.23'

Line Table – This Sheet Only		
Line #	Direction	Length
L6	S25°12'20"W	51.10'
L7	N88°45'41"W	26.43'
L8	S88°45'41"E	5.41'
L9	S88°45'41"E	33.01'
L10	N00°10'26"E	46.01'

Line Table – This Sheet Only		
Line #	Direction	Length
L11	N10°57'21"E	20.00'
L12	N10°57'21"E	20.00'
L13	N62°30'27"E	20.00'

Curve Table – This Sheet Only					
Curve #	Length	Radius	Delta	Chord Bearing	Chord Length
C1	39.51'	70.50'	32°06'37"	S73°56'42"E	39.00'
C2	406.37'	450.00'	50°58'36"	S53°33'21"E	387.29'
C3	202.44'	225.00'	51°33'06"	S53°16'06"E	195.68'
C4	97.47'	70.50'	79°13'05"	N39°26'06"W	89.89'
C5	149.10'	599.50'	14°14'59"	N71°55'10"W	148.71'

J-U-B ENGINEERS, INC.
250 South Beechwood Avenue, Suite 201, Boise, ID 83709-0944
p 208 376 7330 f 208 323 9336 w www.jub.com
JUB Project No. 10-18-001

PROFESSIONAL LAND SURVEYOR REGISTERED 18642 STATE OF IDAHO KEVIN L. KATERNDAHL 10/12/2018

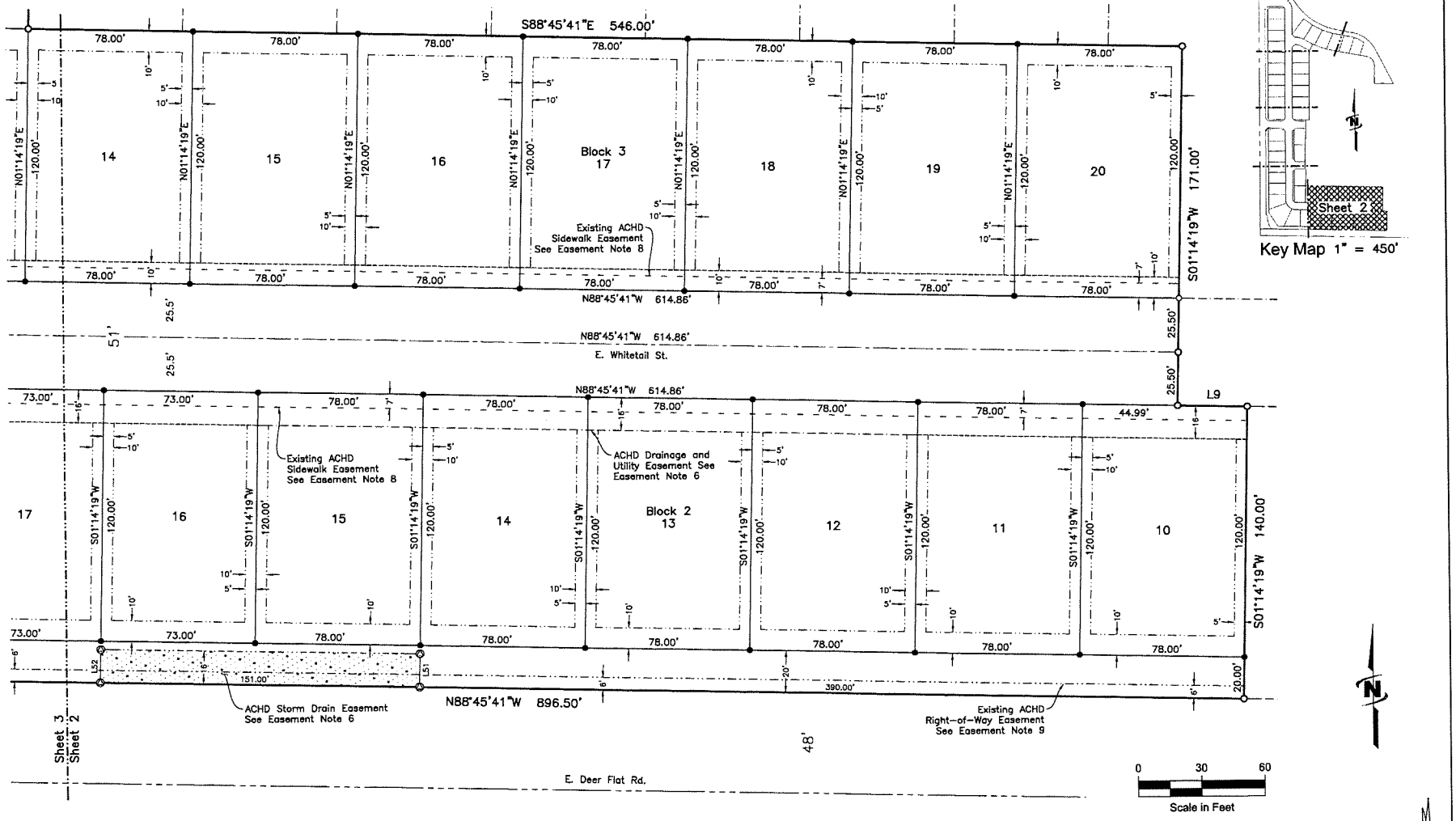
SHEET 1 OF10

Exhibit A4

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____



Line Table - This Sheet Only		
Line #	Direction	Length
L9	S88°45'41"E	33.01'

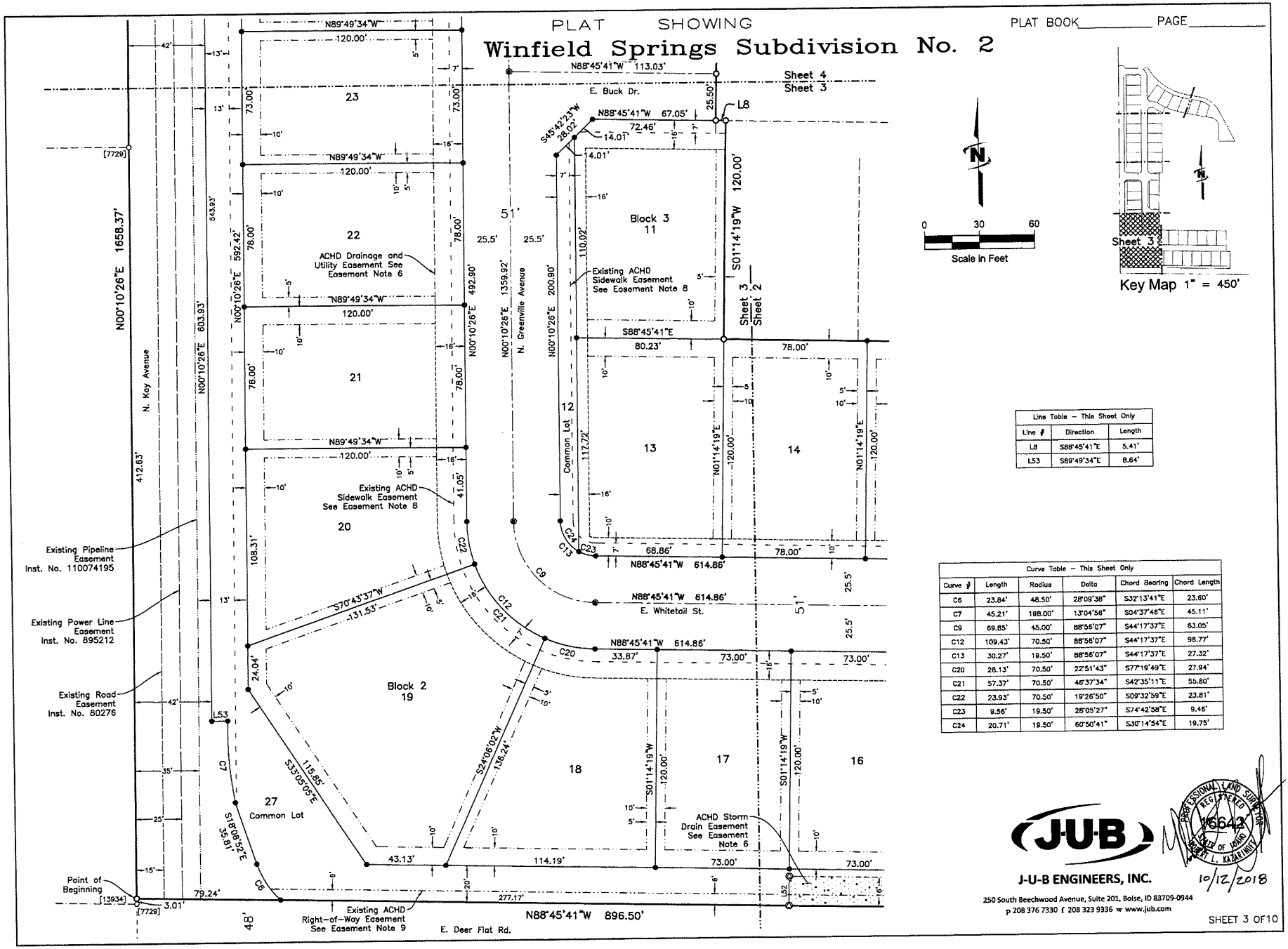
J-U-B ENGINEERS, INC.
250 South Beechwood Avenue, Suite 201, Boise, ID 83709-0944
p 208 376 7330 f 208 323 9336 w www.jub.com

PROFESSIONAL LAND SURVEYOR REGISTERED 16642 STATE OF IDAHO ROBERT L. KATZENMEYER
10/12/2018

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____



Line Table – This Sheet Only		
Line #	Direction	Length
L8	S88°45'41"E	5.41'
L53	S89°49'34"E	8.64'

Curve Table – This Sheet Only					
Curve #	Length	Radius	Delta	Chord Bearing	Chord Length
C6	23.84'	48.50'	28°09'38"	S32°13'41"E	23.60'
C7	45.21'	198.00'	13°04'56"	S04°37'46"E	45.11'
C9	69.85'	45.00'	88°56'07"	S44°17'37"E	63.05'
C12	109.43'	70.50'	88°56'07"	S44°17'37"E	98.77'
C13	30.27'	19.50'	88°56'07"	S44°17'37"E	27.32'
C20	28.13'	70.50'	22°51'43"	S77°19'49"E	27.94'
C21	57.37'	70.50'	46°37'34"	S42°35'11"E	55.80'
C22	23.93'	70.50'	19°26'50"	S09°32'59"E	23.81'
C23	9.56'	19.50'	28°05'27"	S74°42'58"E	9.46'
C24	20.71'	19.50'	60°50'41"	S30°14'54"E	19.75'

J-U-B ENGINEERS, INC.
250 South Beechwood Avenue, Suite 201, Boise, ID 83709-0944
p 208 376 7330 f 208 323 9336 w www.jub.com

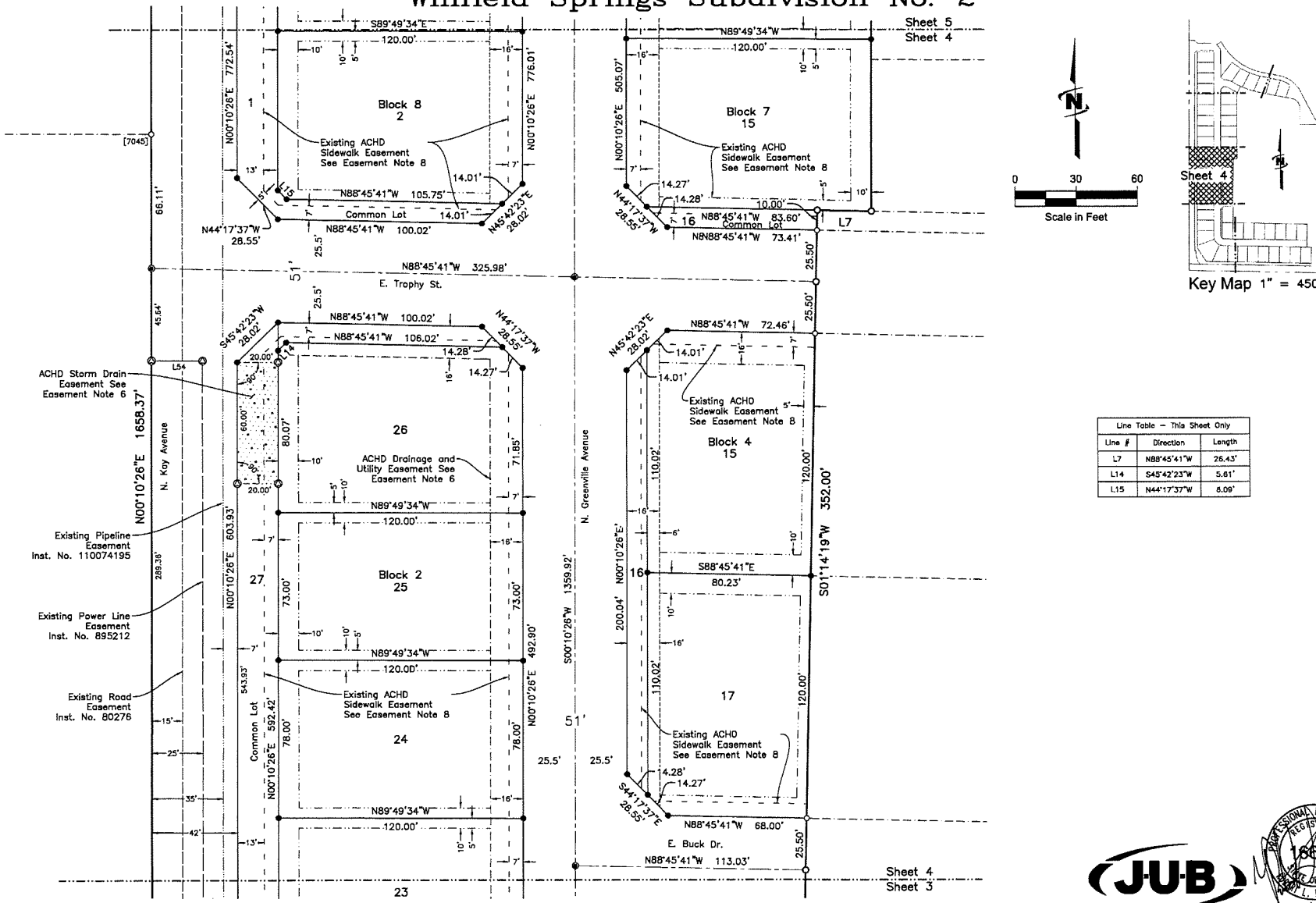
PROFESSIONAL LAND SURVEYOR REGISTERED STATE OF IDAHO 16642 BRENT L. KAZARINOFF

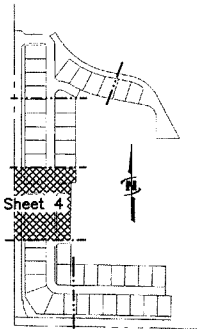
10/12/2018

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____





Line Table – This Sheet Only		
Line #	Direction	Length
L7	N88°45'41"W	26.43'
L14	S45°42'23"W	5.61'
L15	N44°17'37"W	8.09'

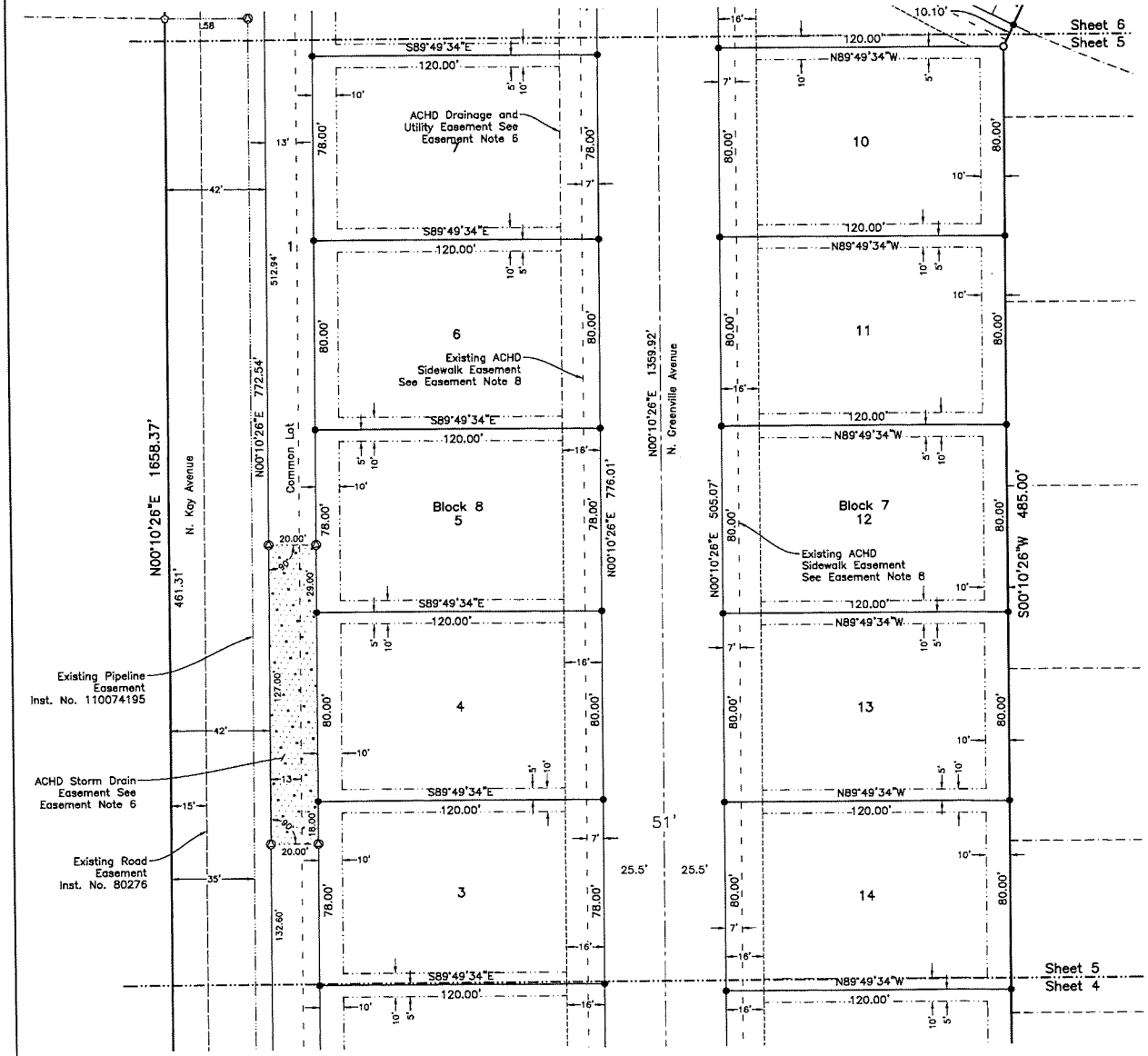


SHEET 4 OF 10

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____



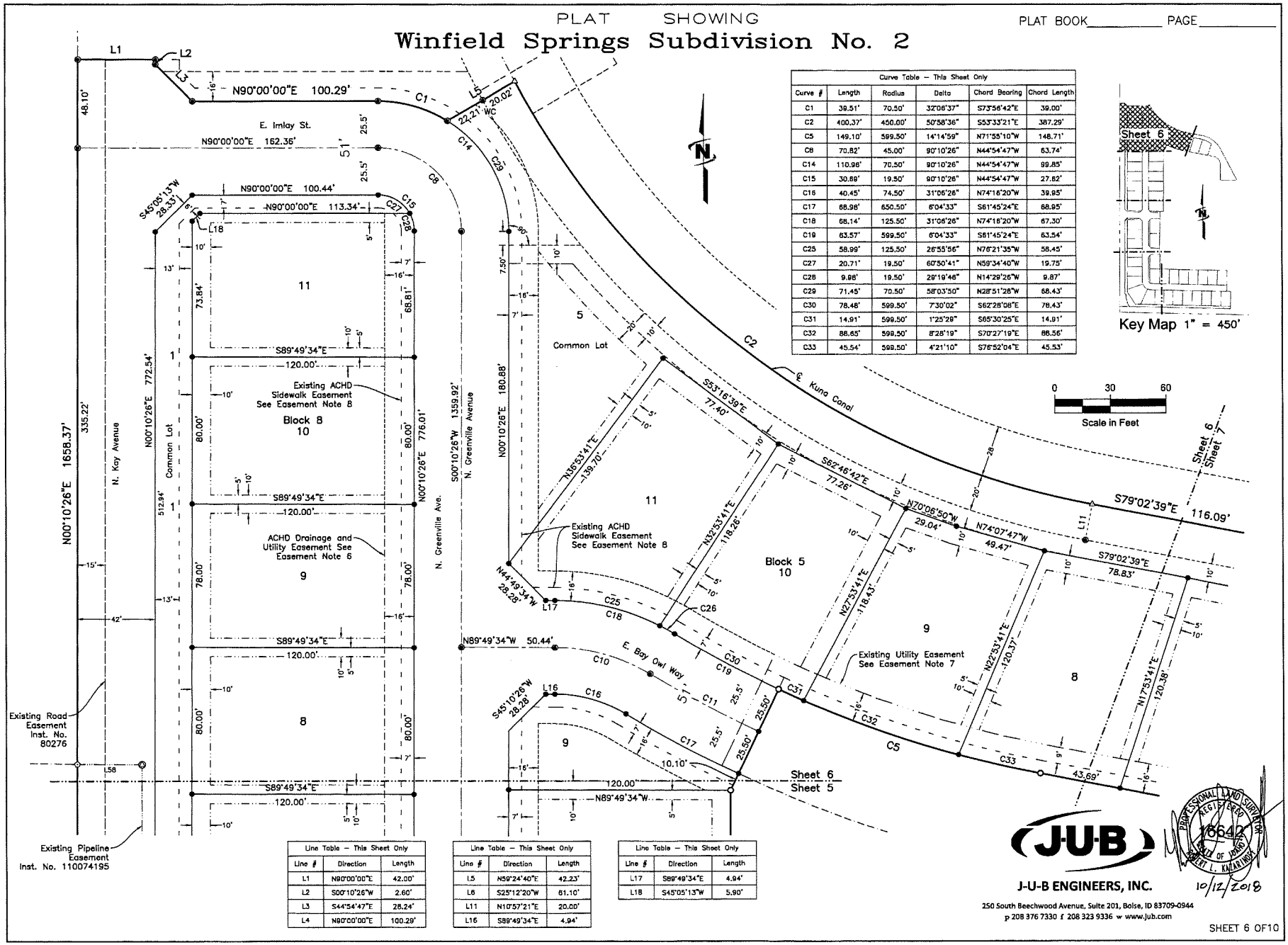
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PROFESSIONAL LAND SURVEYOR REGISTERED 16647 STATE OF IDAHO BRENT L. KAZARINOFF
10/12/2018

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____



Curve Table — This Sheet Only					
Curve #	Length	Radius	Delta	Chord Bearing	Chord Length
C1	39.51'	70.50'	32°06'37"	S73°56'42"E	39.00'
C2	400.37'	450.00'	50°58'36"	S53°33'21"E	387.29'
C5	149.10'	599.50'	14°14'59"	N71°55'10"W	148.71'
C8	70.82'	45.00'	90°10'26"	N44°54'47"W	63.74'
C14	110.96'	70.50'	90°10'26"	N44°54'47"W	99.85'
C15	30.89'	19.50'	90°10'26"	N44°54'47"W	27.82'
C16	40.45'	74.50'	31°06'26"	N74°16'20"W	39.95'
C17	66.96'	650.50'	6°04'33"	S61°45'24"E	66.95'
C18	66.14'	125.50'	31°06'26"	N74°16'20"W	67.30'
C19	63.57'	599.50'	6°04'33"	S61°45'24"E	63.54'
C25	58.99'	125.50'	26°55'56"	N76°21'35"W	58.45'
C27	20.71'	19.50'	60°50'41"	N59°34'40"W	19.75'
C28	9.98'	19.50'	29°19'46"	N14°29'26"W	9.87'
C29	71.45'	70.50'	58°03'50"	N28°51'28"W	68.43'
C30	78.48'	599.50'	7°30'02"	S62°28'08"E	78.43'
C31	14.91'	599.50'	1°25'29"	S65°30'25"E	14.91'
C32	88.65'	599.50'	8°28'19"	S70°27'19"E	88.56'
C33	45.54'	599.50'	4°21'10"	S76°52'04"E	45.53'

Line Table — This Sheet Only		
Line #	Direction	Length
L1	N90°00'00"E	42.00'
L2	S00°10'26"W	2.60'
L3	S44°54'47"E	28.24'
L4	N90°00'00"E	100.29'

Line Table — This Sheet Only		
Line #	Direction	Length
L5	N59°24'40"E	42.23'
L6	S25°12'20"W	61.10'
L11	N10°57'21"E	20.00'
L16	S89°49'34"E	4.94'

Line Table — This Sheet Only		
Line #	Direction	Length
L17	S89°49'34"E	4.94'
L18	S45°05'13"W	5.90'

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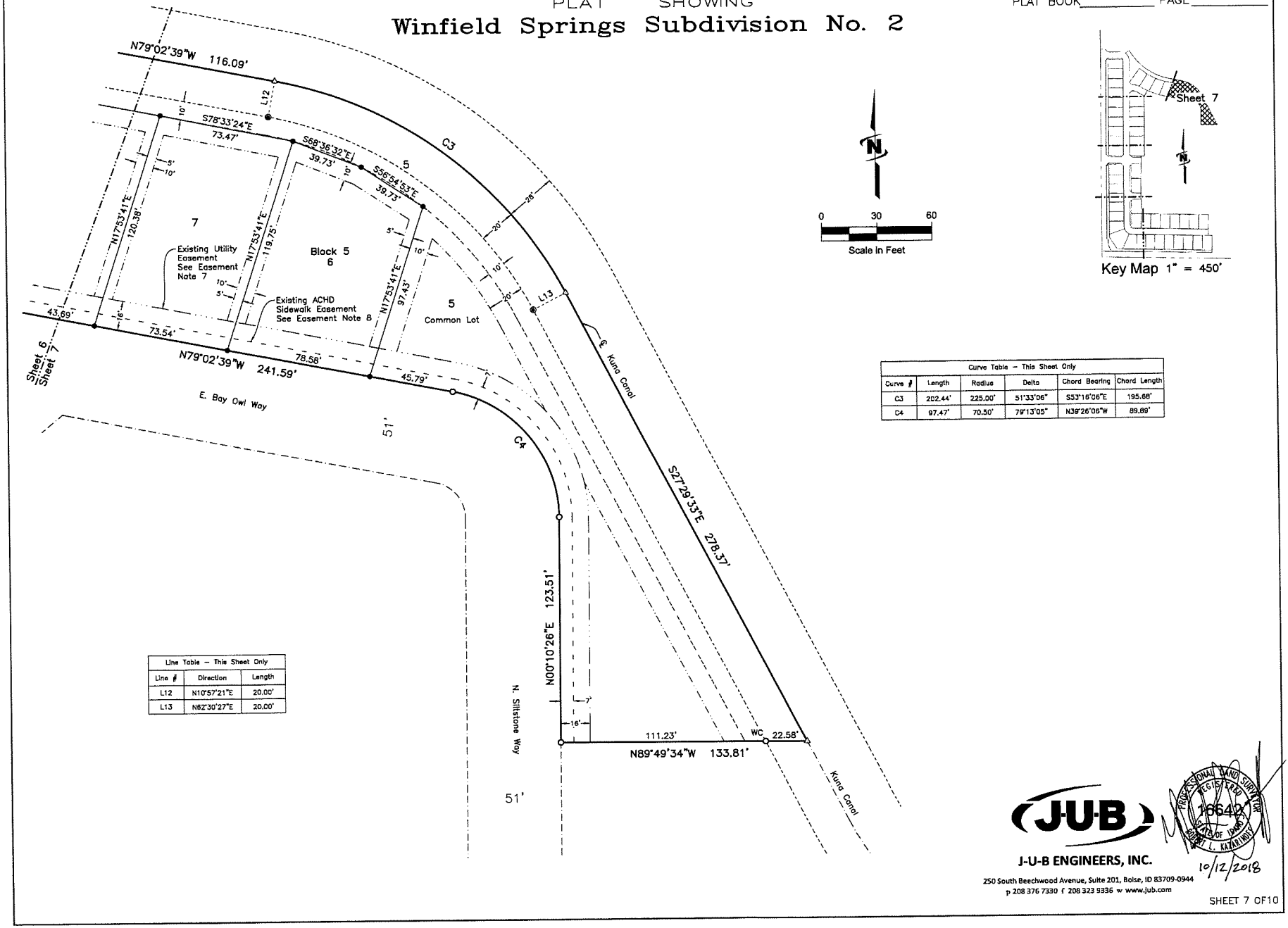
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10/12/2018

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____



Curve Table – This Sheet Only					
Curve #	Length	Radius	Delta	Chord Bearing	Chord Length
C3	202.44'	225.00'	51°33'06"	S53°16'06"E	195.68'
C4	97.47'	70.50'	79°13'05"	N39°26'06"W	89.89'

Line Table – This Sheet Only		
Line #	Direction	Length
L12	N10°57'21"E	20.00'
L13	N62°30'27"E	20.00'

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10/12/2018

PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____

Notes

1. Any re-subdivision of this plat shall comply with the applicable zoning regulations in effect at the time of re-subdivision.
2. Lot 27 of Block 2, Lot 12 of Block 3, Lot 16 of Block 4, Lot 5 of Block 5, Lot 9 & Lot 16 of Block 7, and Lot 1 of Block 8 are common lots which shall be owned and maintained by the Winfield Springs Subdivision Homeowners Association, Inc. The ownership and maintenance commitment may not be dissolved without the express consent of the City of Kuna.
3. Direct lot access to E. Deer Flat Road and N. Kay Ave. is prohibited.
4. Minimum building setback lines shall be in accordance with the City of Kuna's Zoning Ordinance at the time of issuance of the individual building permit, or as specifically approved and/or required.
5. Lots shall not be reduced in size without prior approval from the health authority.
6. No additional domestic water supplies shall be installed beyond the water system approved in the sanitary restriction release.
7. Reference is made to the public health letter on file with Ada County Recorder regarding additional restrictions.
8. This development recognizes Section 22-4503 of Idaho Code, Right to Farm Act, which states, "No agricultural operation, agricultural facility or expansion thereof shall be or become a nuisance, private or public, by any changed conditions in or about the surrounding nonagricultural activities after it has been in operation for more than one (1) year, when the operation, facility or expansion was not a nuisance at the time it began or was constructed. The provisions of this section shall not apply when a nuisance results from the improper or negligent operation of an agricultural operation, agricultural facility or expansion thereof."
9. Maintenance of any irrigation, drainage pipe, or ditch, crossing a lot, is the responsibility of the lot owner, unless such responsibility is assumed by an irrigation or drainage entity or district.
10. The Homeowners Association (HOA), its ownership, and maintenance commitments cannot be dissolved without the express written consent of the City of Kuna, Idaho. All improved individual lots are subject to the fractional share of the irrigation assessment for each HOA common lot that receives municipal irrigation. If the assessment is not paid by the HOA, the individual improved lots are subject to a lien for non-payment.
11. This development is subject to ACHD Temporary License Agreement Instrument No. 2018-081076.
12. See Record of Survey 10672 for additional boundary information.

Reference Documents

Subdivisions: Winfield Springs No. 1, Sandpoint Heights, & Sable Ridge No. 2
Surveys: ROSs 2060, 3684, 3985, 9004, & 10672.
Deeds: 2017-013030
Easements: 80276, 895212, & 110074195.

Easement Notes

1. Lot 27 of Block 2, Lot 12 of Block 3, Lot 16 of Block 4, Lot 9 & Lot 16 of Block 7, and Lot 1 of Block 8 are designated as having a Public Utility Easement co-situated with said lot (i.e. blanket easement).
2. Public Utility Easements are hereby dedicated 10-feet along public rights-of-way or as otherwise shown or dimensioned.
3. The Kuna Utility Easements for water, sewer, drainage, and irrigation are hereby dedicated to the City of Kuna for the installation and maintenance of lines; 10-feet along public rights-of-way, rear lot lines, and the exterior boundary; and 10-feet centered on interior lot lines; unless otherwise shown or dimensioned.
4. The Pathway Easements shown or designated hereon are non-exclusive, perpetual, shall run with the land, are appurtenant to the lots shown hereon, and are hereby reserved for the installation, maintenance, operation, and use of a paved pedestrian pathway; appurtenances thereto; and ingress & egress.
5. The Drain Easement shown hereon is non-exclusive, perpetual, shall run with the land, and is hereby reserved for the installation, maintenance, operation, and use of a irrigation and drain pipes; and appurtenances thereto.
6. Portions of Lots 12, 13, 14, 15, 22, 23, 24, 25, 26, & 27 of Block 2; and Lots 6, 7, 8, & 9 of Block 8 are servient to and contain the ACHD storm water drainage system. These lots are encumbered by that certain first amended Master Perpetual Storm Water Drainage Easement recorded on November 10, 2015 as Instrument Number 2015-103256, official records of Ada County, and incorporated herein by this reference as if set forth in full (the "Master easement"). The Master Easement and the storm water drainage system are dedicated to ACHD pursuant to Section 40-2302 Idaho Code. The Master Easement is for the operation and maintenance of the storm water drainage system.
7. The Existing Utility Easement described as Easement No. 1 of Instrument Number 2018-081492 will immediately terminate upon recordation of this plat.
8. See Instrument Number _____ for ACHD Sidewalk Easements.
9. See Instrument Number _____ for ACHD Right-of-Way Easement.
10. The Existing Temporary Turn-Around Easements as described in Instrument Number 2018-007047 will immediately terminate upon recordation of this plat.
11. The Existing Temporary Storm Drain Easements as described in Instrument Number 2018-007050 will immediately terminate upon recordation of this plat.
12. Kuna Canal widths provided by Boise Project Board of Control.
13. No Utility or City of Kuna Easement shown or designated hereon shall preclude the construction and maintenance of hard-surfaced driveways, landscaping, parking, side & rear property line fences, or other such nonpermanent improvements.
14. All easements are parallel (or concentric) to the lines (or arcs) that they are dimensioned from unless otherwise noted.

PROFESSIONAL LAND SURVEYOR REGISTERED 16643 STATE OF IDAHO ROBERT L. KATSMEIER
10/12/2018

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PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____

Certificate of Owners

Know all people by these presents: that Toll ID I LLC, an Idaho limited liability company, does hereby certify that it is the owner of that real property to be known as Winfield Springs Subdivision No. 2, and that it intends to include said real property, as described below, in this plat: To Wit:

A parcel of land situated in the southeast quarter of Section 13, Township 2 North, Range 1 West, Boise Meridian, City of Kuna, Ada County, Idaho, and being more particularly described as follows:

Commencing at the southeast corner of the southeast quarter of Section 13, Township 2 North, Range 1 West, Boise Meridian (the section corner common to Sections 13 & 24, Range 1 West, and 18 & 19, Range 1 East);
Thence N88°45'41"W, 2630.92 feet along the south line of the southeast quarter to the southwest corner of the southeast quarter (the south quarter–section corner);
Thence N00°10'26"E, 48.01 feet along the west line of the southeast quarter to the north right–of–way line of E. Deer Flat Road, the POINT OF BEGINNING:
Thence continuing N00°10'26"E, 1658.37 feet along the west line of the southeast quarter;
Thence N90°00'00"E, 42.00 feet;
Thence S00°10'26"W, 2.60 feet;
Thence S44°54'47"E, 28.24 feet;
Thence N90°00'00"E, 100.29 feet;
Thence 39.51 feet on a curve to the right, having a radius of 70.50 feet, a central angle of 32°06'37", a chord bearing of S73°56'42"E, and a chord length of 39.00 feet;
Thence N59°24'40"E, 42.23 feet to the centerline of the Kuna Canal;
Thence 400.37 feet on a non–tangent curve to the left, concave northeasterly, having a radius of 450.00 feet, a central angle of 50°58'36", a chord bearing of S53°33'21"E, and a chord length of 387.29 feet, along the centerline of the Kuna Canal;
Thence S79°02'39"E, 116.09 feet along the centerline of the Kuna Canal;
Thence 202.44 feet on a curve to the right, having a radius of 225.00 feet, a central angle of 51°33'06", a chord bearing of S53°16'06"E, and a chord length of 195.68 feet, along the centerline of the Kuna Canal;
Thence S27°29'33"E, 278.37 feet along the centerline of the Kuna Canal to an angle point in the boundary of Winfield Springs Subdivision No. 1 (Book _____ of Plats at Pages _____ through _____, records of Ada County, Idaho);
Thence N89°49'34"W, 133.81 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence N00°10'26"E, 123.51 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence 97.47 feet on a curve to the left, having a radius of 70.50 feet, a central angle of 79°13'05", a chord bearing of N39°26'06"W, and a chord length of 89.89 feet, along the boundary of Winfield Springs Subdivision No. 1;
Thence N79°02'39"W, 241.59 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence 149.10 feet on a curve to the right, having a radius of 599.50 feet, a central angle of 14°14'59", a chord bearing of N71°55'10"W, and a chord length of 148.71 feet, along the boundary of Winfield Springs Subdivision No. 1;
Thence S25°12'20"W, 61.10 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S00°10'26"W, 485.00 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence N88°45'41"W, 26.43 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S01°14'19"W, 352.00 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S88°45'41"E, 5.41 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S01°14'19"W, 120.00 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S88°45'41"E, 546.00 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S01°14'19"W, 171.00 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S88°45'41"E, 33.01 feet along the boundary of Winfield Springs Subdivision No. 1;
Thence S01°14'19"W, 140.00 feet along the boundary of Winfield Springs Subdivision No. 1 to the north right–of–way line of E. Deer Flat Road;
Thence N88°45'41"W, 896.50 feet along the north right–of–way line of E. Deer Flat Road to the POINT OF BEGINNING.

The above–described parcel contains 18.58 acres, more or less.

The public streets shown on this plat are hereby dedicated to the public. The easements shown on this plat are not dedicated to the public, however the right to use said easements is hereby reserved for the uses specifically depicted on the plat, and for any other purposes designated hereon, and no permanent structures, other than for such uses and purposes, are to be erected within the lines of said easements. All of the lots within this subdivision are eligible to receive water service from the City of Kuna, and the City of Kuna has agreed in writing to serve all lots within the subdivision. Irrigation water has been provided from Boise–Kuna Irrigation District via the City of Kuna, in compliance with Idaho Code 31–3805(1)(b). Lots within this subdivision will be entitled to irrigation water rights, and will be obligated for assessments from Boise–Kuna Irrigation District via the City of Kuna.

In witness whereof, I have hereunto set my hand:

Thomas Coleman, Division President
Toll ID I LLC

Acknowledgment

State of Idaho }
County of Ada } ss.

On this 20th day of September, in the year 2018, before me, a Notary Public in and for the State of Idaho, personally appeared Thomas Coleman, known or identified to me to be a Division President of Toll ID I LLC, that executed the within instrument, and acknowledged to me that Toll ID I LLC executed the same.

Notary public for Idaho
My commission expires July 30, 2024

EMILY ANDRAS NOTARY PUBLIC STATE OF IDAHO

Certificate of Surveyor

I, Robert L. Kazarinoff, do hereby certify that I am a Professional Land Surveyor, licensed by the State of Idaho, and that this plat of Winfield Springs Subdivision No. 2, as described in the Certificate of Owners and as shown on the attached plat is correct and was surveyed in accordance with Idaho Code relating to plats and surveys.

Robert L. Kazarinoff, PLS 16642

PROFESSIONAL LAND SURVEYOR REGISTERED 9/20/2018 16642 STATE OF IDAHO ROBERT L. KAZARINOFF

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PLAT SHOWING

Winfield Springs Subdivision No. 2

PLAT BOOK_____ PAGE_____

Approval of Central District Health Department

Sanitary restrictions as required by Idaho Code, Title 50, Chapter 13 have been satisfied according to the letter to be read on file with the County Recorder or his agent listing the conditions of approval. Sanitary restrictions may be re-imposed, in accordance with Section 50-1326, Idaho Code, by the issuance of a certificate of disapproval.

_____

Central District Health Department Date

Approval of Ada County Highway District

The foregoing plat was accepted and approved by the Board of Ada County Highway District Commissioners on the_____day of_____, 20____.

_____

Commission President
Ada County Highway District

Approval of City Engineer

I, the undersigned representative of Keller Associates, the City Engineer in and for the City of Kuna, Ada County, Idaho, on this day

_____, hereby approve this plat.

_____

City Engineer

Approval of City Council

The foregoing plat was accepted and approved this _____ day of _____, _____, by the City of Kuna, Idaho.

_____

City Clerk

Certificate of County Surveyor

I, the undersigned, Professional Land Surveyor for Ada County, Idaho, do hereby certify that I have checked this plat and find that it complies with the State of Idaho Code relating to plats and surveys.

_____

Ada County Surveyor Date

Certificate of County Treasurer

I, the undersigned, County Treasurer in and for the County of Ada, State of Idaho, per requirements of Idaho Code 50-1308, do hereby certify that any and all current and/or delinquent county property taxes for the property included in this proposed subdivision have been paid in full. This certificate is valid for the next thirty (30) days only.

_____

Ada County Treasurer Date

County Recorder's Certificate

State of Idaho } ss. Instrument No._____
County of Ada }

I hereby certify that this instrument was filed at the request of JUB Engineers, Inc. at

_____minutes past_____o'clock___.M.,

this_____day of_____, _____, in my office, and was recorded in

Book_____of Plats at Pages _____ through _____.

Fee:_____

_____ _____

Deputy Ex-Officio Recorder

PROFESSIONAL LAND SURVEYOR REGISTERED 19642 STATE OF IDAHO ROBERT L. KAZARINOFF
9/20/2018

J-U-B ENGINEERS, INC.
250 South Beechwood Avenue, Suite 201, Boise, ID 83709-0944
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City of Kuna
P.O. Box 13
Kuna, ID 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
Kunacity.id.gov

Findings of Fact and Conclusions of Law

To: Kuna City Council

Case Number(s): 16-03-S (Subdivision) and 16-06-AN (Annexation): *Winfield Springs Subdivision*

Location: North of Deer Flat Road, east of N. Kay Avenue and west of Meridian Road/Highway 69, Kuna, Idaho 83634

Planner: Trevor Kesner, Planner II

Hearing Date: May 02, 2017
Findings: **May 16, 2017**

Applicant: Coleman Real Estate Holdings LLC
1116 S Vista Avenue, #471
Boise ID 83705
208-917-7216

Engineer/ Representative: **J-U-B Engineers,** *Scott Wonders*
250 S. Beechwood Ave., Ste. 201
Boise, ID 83709
208.323.9336
swonders@jub.com

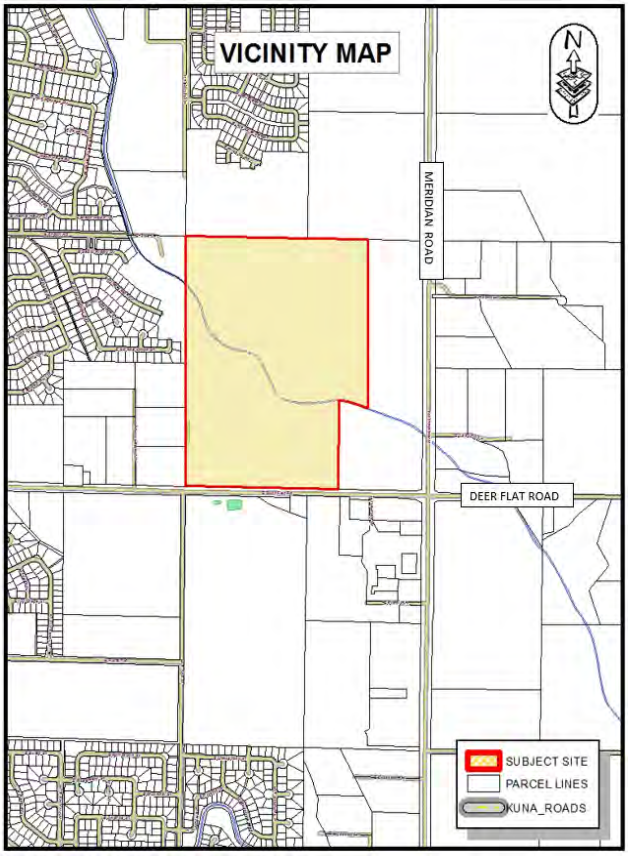


Table of Contents:

A. Course Proceedings
B. Applicant Request
C. Site History
D. General Project Facts
E. Staff Analysis
F. Applicable Standards
G. Procedural Background
H. Factual Summary
I. Comprehensive Plan Analysis
J. Conclusions of Law
K. Findings of Fact
L. Conditions of Approval

A. Course of Proceedings

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that annexations and subdivisions are designated as public hearings, with the City Council as the decision-making body. These land use applications were given proper public notice and have followed the requirements set forth in Idaho Code, Chapter 65, Local Land Use Planning Act (LLUPA).

a. Notifications

i.	Neighborhood Meeting	August 2, 2016
ii.	Agencies	September 22, 2016 (Original Concept) February 27, 2017 (Final Design)
iii.	300' Property Owners	April 14, 2017
iv.	Kuna, Melba Newspaper	April 12 and April 19, 2017

v. Site Posted April 21, 2017

B. Applicant Request:

1. Coleman Real Estate Holdings, LLC represented by J-U-B Engineers, requests approval to annex approximately 111.18 acres into Kuna City limits with an R-6 residential zoning designation and subdivide the property into 342 single family residential lots, and 33 common lots, for the Winfield Springs Subdivision. The applicant has received Design Review approval for common area landscaping. The site is located approximately 900 feet northwest of the intersection of Deer Flat and Meridian Roads, Kuna, Idaho.

2. **Site Location Map:**



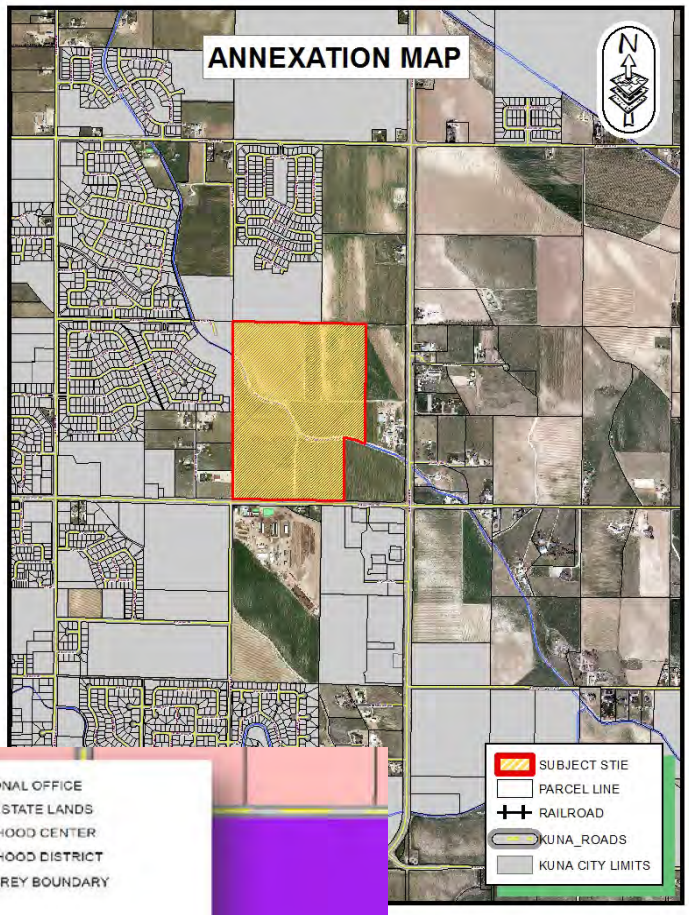
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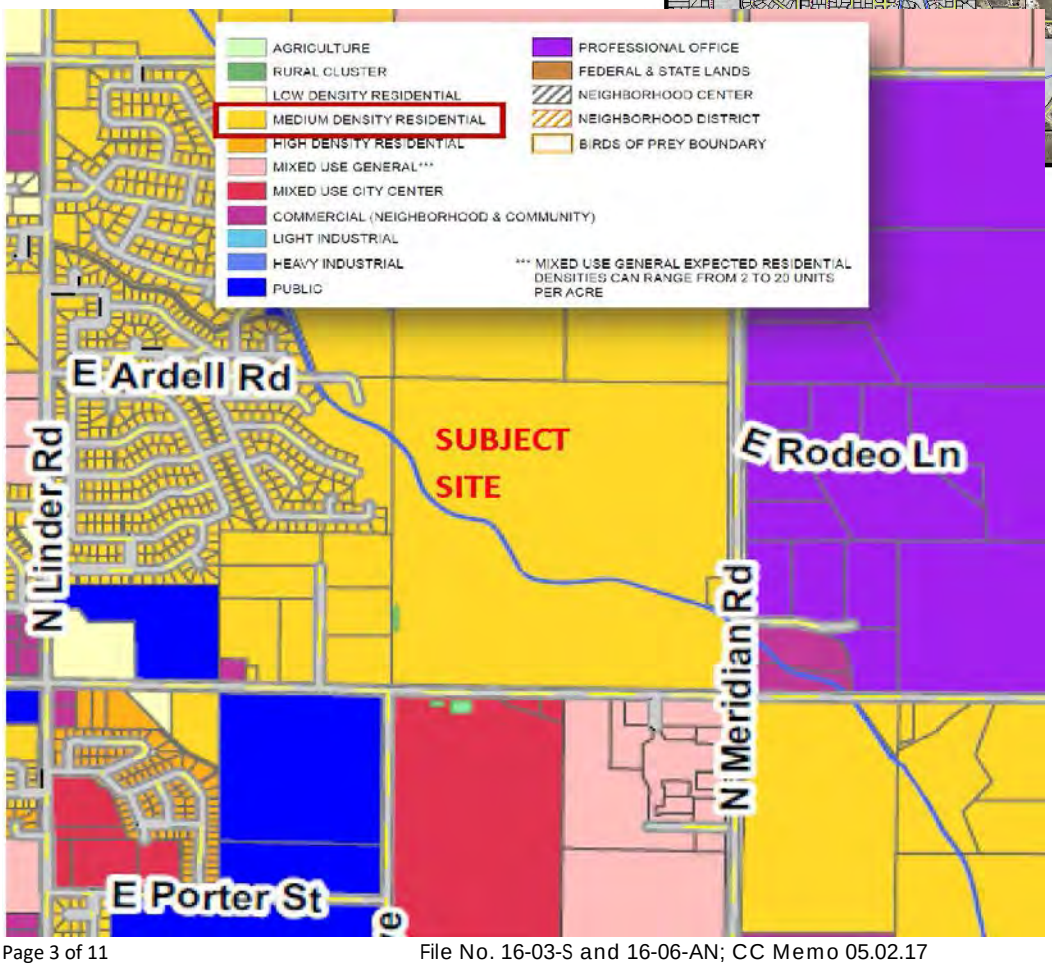
C. History: Approximately 111.18 acres was split from the original parcel of approximately 152.17 acres in Ada County (October 20, 2016), and is contiguous to Kuna City limits on the north and west portions of the parcel. The remaining lands (approximately 41.66 acres) from the lot split which front Highway 69/Meridian Road are not part of this annexation request. This property has historically been used for agricultural purposes.

D. General Projects Facts:

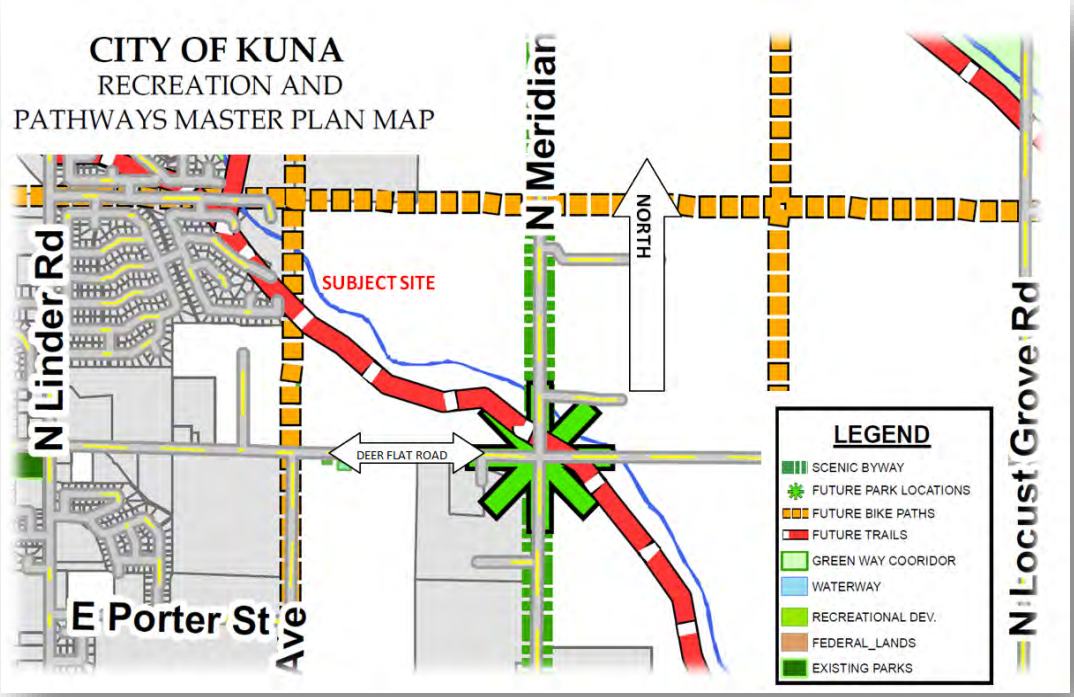
1. **Comprehensive Plan Designation:** The City of Kuna's Future Land Use Map identifies the 111.18-acre subject parcel as Medium Density Residential. Staff views this land use request to be consistent with the approved Future Land Use Map.

2. **Kuna Comprehensive Plan Future Land Use Map:**
   The Kuna Comprehensive Plan Future Land Use Map shown below in conjunction with the map legend indicates that the subject site is designated as Medium Density Residential. The applicant's request is consistent with the Future Land Use Map designation.





3. **Kuna Recreation and Pathways Master Plan Map:**
The Kuna Recreation and Master Pathways Plan map identifies a trail adjacent to the Kuna Canal waterway as it flows through the subject site. The applicants submitted, proposed landscape plan accommodates this trail designation along the Kuna Canal.



4. **Surrounding Existing Land Uses and Zoning Designations:**

North	R-6/ RR	Medium Density Residential – City of Kuna/ Rural Residential – Ada County
South	RR/ C-1	Rural Urban Transitional – Ada County/ Neighborhood Business District (commercial) – City of Kuna
East	RUT	Rural Urban Transitional – Ada County
West	RUT/ R-6	Rural Urban Transitional – Ada County/ Medium Density Residential – City of Kuna

5. **Parcel Sizes, Current Zoning, Parcel Numbers:**
   - Approximately 111.18 acres
   - RUT (Rural Urban Transitional) – Ada County
   - Parcel # S1313449115 (Original Parcel)

6. **Services:**
   Sanitary Sewer– City of Kuna
   Potable Water – City of Kuna
   Irrigation District – Boise-Kuna Irrigation District
   Pressurized Irrigation – City of Kuna (KMID)
   Fire Protection – Kuna Rural Fire District
   Police Protection – Kuna City Police (Ada County Sheriff's office)
   Sanitation Services – J&M Sanitation

7. **Existing Structures, Vegetation and Natural Features:** Currently there are no structures on the subject site. This site slopes slightly from the southwest to the north, but is otherwise generally flat. The Kuna Canal Lateral flows through the center of the subject parcel. On-site vegetation consists of agricultural crops which have historically been harvested annually.

8. **Transportation / Connectivity:** The applicant proposes to construct North Kay Avenue as a half street section from East Deer Flat Road to East Ardell Road; and extend East Ardell Road as a half street section from North Kay Avenue eastward to the project's eastern boundary, and extend the pavement to Highway 69 as a new roadway. The applicant will permit an access to Highway 69 at the alignment of East Ardell Road with Idaho Transportation Department (ITD). ITD and Ada County Highway District (ACHD) have approved the applicant's revised Traffic Impact Study (TIS).

   ITD will require the applicant to install southbound right turn lanes on State Highway 69/Meridian Road. at both West Ardell and Deer Flat Roads. ITD recommends timing the installation of said southbound right turn lanes be coordinated with ACHD, as trips in the Highway 69 corridor increase with development.

   - ACHD recommends a 36-foot wide street section for the extension of Kay Avenue and Ardell Roads, (which are classified as 'collectors') with vertical curb, gutter, 12-feet of additional pavement and a 3-foot wide gravel shoulder.
     This recommendation aligns with Kuna City Code Title 6, Chapter 3, Section 6, which states that the minimum roadway width within City limits shall be thirty-six (36) feet wide, back of curb to back of curb, in all zoning districts.
   - Applicant proposes a borrow ditch on the unimproved sides of Kay Avenue and Ardell Roads and either 7-foot wide attached concrete sidewalks, or 8-foot wide parkway strips with detached minimum 5-foot wide concrete sidewalk abutting the project site.
     Kuna City Code Title 5, Chapter 17, Section 5 states that development along a Towncenter Collector or mid-mile section road shall install an eight-foot wide detached sidewalk along the accompanying property frontage within the public right-of-way and separated from the public vertical curb (or its alignment) by a four- to eight-foot wide irrigated and landscaped planter strip.

   Internal streets are proposed as a 51-foot street width (back-of-curb to back-of-curb) with 8-foot wide parkway strips and detached 5-foot wide concrete sidewalks; except for North Windmill Avenue (primary subdivision entrance) off Deer Flat Road, which will utilize a 66-foot street width and include centerline landscape islands.

   The applicant proposes seven access points to the site:
   - Two (2) access streets on the west side of the project along North Kay Avenue extension (proposed *East Thorndale Street* and *East Wabash Street*);
   - Two (2) access streets on the north side of the project (proposed *North Whig Avenue* and *North Woodfield Avenue)* along East Ardell Street extension;
   - One (1) access on the south side of the project, from East Deer Flat Road (*proposed North Windmill Way*) to align with the future roadway constructed behind the Ridley's development.
   - Two (2) stub streets on the east side of the project (proposed *East Wabash Street* and *East Fort Erie Street*), which are intended to be future points of access to the remaining lands that are not a part of these requests.

   There are multiple pedestrian and bicycle pathway connections throughout the development to support alternative transportation choices for residents, and create a more walkable and pedestrian friendly neighborhood environment.

9. **Environmental Issues:** Staff is not aware of any environmental issues, health or safety conflicts. Idaho Department of Environmental Quality (DEQ) has provided recommendations for surface and groundwater protection practices and requirements for development of the site (see Exhibit B.7).

10. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:
    - Kuna City Engineer (Gordon Law, P.E.) – Exhibit B.1
    - Central District Health Department (CDHD) – Exhibit B.2
    - Community Planning Association of Southwest Idaho (COMPASS) – Exhibit B.3
    - Boise Project Board of Control – Exhibit B.4
    - Idaho Transportation Department (ITD) – Exhibit B.5
    - Ada County Highway District (ACHD) – Exhibit B.6
    - Idaho Department of Environmental Quality – Exhibit B.7

E. Staff Analysis:

Coleman Real Estate Holdings, LLC represented by J-U-B Engineers requests approval to annex approximately 111.18 acres with a current county zoning designation of Rural-Urban Transition (RUT) into Kuna City limits with an R-6 (Medium Density Residential) zoning designation; and subdivide the subject property to create a 343-single family residential building lot subdivision (Winfield Springs). The applicant also proposes to develop 33 additional lots into common lots for the use by residents. The common lots will comprise 12.6% of the site, or approximately 14 acres, respectively. The common lots will be developed as open space (lawn), a playground, a community clubhouse and a swimming pool facility. Applicant also proposes a multi-use pathway that runs through the project adjacent the Kuna Canal which is consistent with Kuna's Recreation and Pathways Map. A Homeowners Association (HOA) will be established for the care and maintenance for all common lots.

Applicant is proposing seven (7) phases of development which will be driven by the consumer market. A Design Review application for the common area landscaping and buffers has been approved for the applicant's annexation and preliminary subdivision plat request.

Public services will be extended by the developer to the property from existing facilities to the north and south of the project. The project anticipates a new potable water supply and distribution well site to serve this development.

Staff has determined these applications comply with Kuna City Code, Title 5, Idaho Statute §50-222, and Kuna's Comprehensive Plan; and forwards a recommendation of approval for Case No.'s 16-03-S and 16-06-AN, to the City Council with the proposed conditions of approval.

F. Applicable Standards:

1. Kuna City Code Chapter 6 – Chapter 1-6; Subdivision Regulations,
2. Kuna City Code Title 5 – Chapter 1-17; Zoning Regulations,
3. City of Kuna Comprehensive Plan and Future Land Use Map,
4. Idaho Code, Title 67, Chapter 65, Local Land Use Planning Act.

G. Procedural Background:

The Planning and Zoning Commission held a Public Hearing on April 11, 2017, to consider Cases No.'s 16-03-S, 16-06-AN and 16-13-DR, including the submitted application documents, agency comments, staff's report, exhibits and public testimony presented at the hearing. The Commission recommended approval for Case No.'s 16-03-S and 16-06-AN to the City Council, and subsequently made findings on April 25, 2017 with the conditions as stated in Section 'L' of this report.

H. Factual Summary:

This site is located near the northwest corner (NWC) of the intersection of West Deer Flat and North Meridian Roads. Applicant proposes to annex approximately 111.18 acres into the City of Kuna as an R-6 (medium density residential) zoning designation. Applicant has submitted a preliminary plat to subdivide the parcel into 347 total lots (342 buildable; 33 common).

I. Comprehensive Plan Analysis:

The comprehensive plan is a living document, intended for use as a guide to governmental bodies. The plan is not law that must be strictly adhered to in the most stringent sense; it is to be used by public officials to assist in their decision making for the City. The following Comprehensive Plan components are applicable:

Goals, Policies and Objectives from the Kuna Comprehensive Plan:

Private Property Rights Goals and Objectives - Section 2 - Summary:

Ensure the City land use policies, restrictions, conditions and fees do not violate private property rights and ensure that land use actions, decisions, and regulations do not effectively eliminate all economic value of the subject property. Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right and evaluate with guidance from the City attorney and the Idaho Attorney General's six criterion established to determine the potential for property takings.

Comment: *Utilizing the Idaho Attorney Generals criteria, and a review by the City Attorney, the proposed project does not constitute a "takings" and the economic value is intact.*

Economic Development Goals and Objectives - Section 5 - Summary:

Ensure an adequate supply of housing for all income levels and facilitate pedestrian connections, both visually and physically, to enhance pedestrian movement.

Comment: *The proposed application complies with the comprehensive plan by providing a mix of lot sizes, pathways and greenways to meet this goal.*

Land Use Goals and Objectives - Section 6 - Summary:

Adopt a future land use plan and map that includes natural and developed open spaces, while providing a variety of housing densities and types to accommodate various lifestyles, ages and economic groups. Protect existing neighborhoods and ensure new development is sustainable and keeps Kuna desirable. Develop cohesive neighborhoods with character and quality while incorporating a variety of densities and styles.

Comment: *The project complies with the land use plan as adopted by the City by incorporating the following; open spaces and utilization of the Kuna Canal corridor for the future pathway, varied housing densities and types and promotes desirable, cohesive community character and a quality neighborhood.*

Natural Resources Goals and Objectives - Section 7 - Summary:

Retain natural resources that contribute to Kuna's quality of life while developing a green grid of trails for bikes throughout the City for recreation and alternative transportation needs.

Comment: *The proposed application provides pathways through the development as well as a trail along the Kuna Canal for recreation and alternate transportation modes.*

Public Services, Facilities and Utilities Goals and Objectives - Section 8 -Summary:

Provide adequate services, facilities, and utilities for all City residents and annex contiguous properties that request City services. Ensure that development within Kuna connects into the City's sanitary sewer and potable water systems and continue expansion of the City's sewer systems as resources allow.

Comment: *Kuna has adequate capacity to provide public services for this development and the authority to annex the requested lands into the City. This application will expand the City's sanitary sewer system, potable water and adds to the pressure irrigation mainline in an orderly fashion.*

Transportation Goals and Objectives - Section 9 - Summary:
Work with ACHD, COMPASS, and ITD to promote and encourage bicycling and walking as transportation modes. Develop a transportation strategy and identify future transit corridors while requiring developers to preserve rights- of-way, to improve mobility on major routes while balancing land use planning with transportation needs.

Comment: *Applicant provided a Traffic Impact Study. ACHD and ITD have provided comments and a staff report based on the applicants submitted documents; and the City engineer has provided a staff report. The project meets with the transportation goals of the City by extending public rights-of-way on North Kay Avenue and East Ardell Roads to create additional transportation connections.*

Recreation Goals and Objectives - Section 10 - Summary:
Ensure a City wide system of parks, trails and recreational opportunities for a variety of year-round outdoor activities balancing active and passive open spaces with easy access for users. Encourage the development of community and neighborhood-centered recreational facilities including gathering places connected by trails, walkways, bikeways and horse paths.

Comment: *Applicant's proposed subdivision incorporates trails along the Kuna Canal, open spaces, a playground, a pool facility for residents among other gathering places for the community (clubhouse), meeting the goals of the City.*

Housing Goals and Objectives - Section 12 - Summary:
Encourage developers to provide high-quality development with a variety of lot sizes, dwelling types, densities and price points to meet the needs of current and future population while creating safe and aesthetically-pleasing neighborhoods. Ensure housing is available throughout the community for all income levels and those with special needs. Encourage logical and orderly residential development while discouraging developers from developing land divisions greater than one half acre because large lot subdivisions increase municipal costs, require public subsidy and create sprawl.

Comment: *Applicant has proposed 342 single family lots which will contribute to high-quality lots of varied sizes to be developed in a logical and orderly manner. The development adds trails and open space throughout the subdivision, creating a pleasant and walkable neighborhood environment.*

Community Design Goals and Objectives - Section 13 - Summary:
Strengthen Kuna's Image through good community and urban design principles that create self-sufficient neighborhoods. Foster good community design concepts that incorporate landscape features to serve as buffers between incompatible uses while reducing scale and create a sense of place.

Comment: *The application incorporates sound community design and landscape features to buffer incompatible uses to create a sense of place for the community to foster neighborhood interactions and activities.*

J. Conclusions of Law:

Based on the evidence contained in Case No's 16-03-S and 16-06-AN, the Kuna City Council finds Case No's 16-03-S and 16-06-AN complies with Kuna City Code and the Kuna Comprehensive Plan.

5. This request appears to be consistent and in compliance with Kuna City Code (KCC).

Comment: *The proposed project meets the land use and area standards in Chapter 3, Title 5 of the KCC. Staff also finds that the proposed project meets all applicable requirements of Title 6 of the KCC.*

6. The site is physically suitable for a subdivision.

   Comment: *The 111.18 acre subdivision is large enough to include a mix of lot sizes, a community clubhouse and pool facility, a playground, open spaces, pathways and a trail along the Kuna Canal.*

7. The annexation and subdivision uses are not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.

   Comment: *The land to be annexed is currently used as farmland and is not used as wildlife habitat. Roads, homes and open spaces are planned for construction according to City requirements and best practices. Staff is not aware of any environmental damage or loss of habitat associated with the development.*

8. The annexation and subdivision applications are not likely to cause adverse public health problems.

   Comment: *The annexation of the property requires a zoning designation per Kuna Code 5-13-9. The medium density zoning designation and application for a residential subdivision requires connection to public sewer and water facilities, therefore eliminating the occurrence of adverse public health problems.*

9. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public, taking into account the physical features of the site, public facilities available to the site and existing adjacent uses.

   Comment: *The annexation of lands and design of the subdivision considers the location of the property adjacent to the Kuna Canal, arterial and collector roadways (North Kay Avenue, East Deer Flat and East Ardell Roads) and the state highway system (Highway 69/Meridian Road). The subject property can be connected to the City's public sewer, water and pressure irrigation facilities. The adjacent uses are public, commercial and agriculture as proposed in the Kuna Comprehensive Plan Future Land Use Map.*

10. The existing and proposed street and utility services in proximity to the site are suitable and adequate for residential purposes.

    Comment: *Correspondence from ACHD and Kuna Public Works confirms that the proposed streets and utility services are suitable and adequate for the residential subdivision project. A traffic impact study (TIS) prepared by Thompson Engineers was submitted with the application documents and has been accepted by the ACHD and ITD. ACHD confirms that the proposed streets within and adjacent to the subdivision are adequate for the proposed development. With the addition of a southbound right-hand turn lane off Highway 69/Meridian Road onto Deer Flat Road and West Ardell Road, as recommended by Idaho Transportation Department (ITD), the roadways in proximity to the project are adequate to accommodate the traffic that will be generated by the development.*

K. <u>Council Findings:</u>

1. This request appears to be generally consistent and in compliance with Kuna City Code (KCC).
2. The use appears to meet the general objectives of Kuna's Comprehensive Plan.
3. The site is physically suitable for a subdivision.
4. The annexation and subdivision uses are not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.
5. The annexation and subdivision applications are not likely to cause adverse public health problems.
6. The applications appear to avoid detriment to the present and potential surrounding uses; the health, safety, and general welfare of the public, taking into account the physical features of the site, public facilities and existing adjacent uses.

7. The existing and proposed street and utility services in proximity to the site are suitable and adequate for residential purposes.
8. Kuna City Council accepts the facts as outlined in the staff report, public testimony and the supporting evidence list as presented.
9. The Kuna City Council has the authority to approve, conditionally approve, or deny this annexation and subdivision applications.
10. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and Kuna City Ordinances.

L. Council Decision:

Note: 16-03-S (Subdivision) and 16-06-AN (Annexation): The proposed motion is to approve these requests. If the Council wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.

Based on the facts outlined in staff's report and public testimony during the public hearing, the City Council of Kuna, Idaho, hereby grants *approval* of Case No's 16-03-S and 16-06-AN; an annexation and preliminary plat for the Winfield Springs residential subdivision with the following conditions of approval:

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve the drainage and grading plans. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties". No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    c. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    d. The *Boise Project and Board of Control* shall approval any modifications to the existing irrigation system.
    e. Approval from Ada County Highway District shall be obtained and Impact Fees must be paid prior to issuance of any building permit.
2. A stub street (with utility stubs) shall be extended from the project south of the Kuna Canal to the property east of the project. All public rights-of-way shall be dedicated and constructed to standards of the City, Ada County Highway District, and Idaho Transportation Department. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
    2.1– Dedicate right-of-way in sufficient amounts to follow Kuna City and ACHD standards and widths.
3. Installation of utility service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see KCC 6-4-2-W.
4. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
5. Street lighting shall use LED lights, with spacing and wattages meeting KCC 5-4-6; applicant shall coordinate a street light plan for Planning and Zoning approval in concert with the prepared construction drawings for the project.
6. Parking within the site shall comply with KCC 5-9-3. A separate Design Review application is required for the community clubhouse and parking lot.

7. Fencing within and around the site shall comply with KCC standards.
8. A sign permit shall be obtained prior to any subdivision entrance sign construction and shall comply with KCC 5-10-4. Monument signs will require a separate design review.
9. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within three days or as the planting season permits as required to meet KCC 5-17-7 standards. Maintenance and planting within public rights-of-way shall be approved from the public entities owning the property.
10. Submit a petition to the City consenting to the pooling of irrigation surface water rights for delivery purposes and requesting to annex the irrigation surface water rights appurtenant to the property to the Kuna Municipal Pressure Irrigation system of the City (KMID) prior to requesting final plat signature from the City Engineer.
11. Should the City Engineer conclude there is a need for a potable water supply well in the area (based upon the forthcoming results of a comprehensive water master plan study), the developer will be required to provide land for the well site, three (3) phase power to the well site and a drain line for blow-off water.
12. The City Engineer concludes there is a need for a Pressure Irrigation pump station and a 600,000-gallon reservoir along the Kuna Canal. The City will construct the pump station and reservoir, if the developer extends a 12-inch Pressure Irrigation main from an existing 12-inch Pressure Irrigation main, located .05 miles south of the southwest boundary of the property in the Kay Street/Boise Avenue right-of-way; and the developer provide sufficient land for the pump station, three (3) phase power to the pump station site, and a drain line for water over-flow. The developer may be eligible for reimbursement for oversized facilities consistent with City policy.
13. The land owner/applicant/developer and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the Commission and Council, or seek amending them through public hearing processes.
14. The applicant's proposed preliminary plat (dated 02/02/17) and landscape plan (dated 09/16/2017) shall be considered binding site plans, or as modified and approved through the public hearing process.
15. Applicant shall follow staff, city engineer and other agency recommended requirements as applicable.
16. Compliance with all local, state and federal laws is required.

DATED: this 16nd day of May 2017.

Joe Stear
Kuna City Mayor

Attest:
Deputy City Clerk
Chris Engels
Kuna City Clerk

City of Kuna

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

Council Findings of Fact & Conclusions of Law

To: **City Council**

File Numbers: **18-02-V** (Variance)

Location: 2534 N. Countryside Ave.
Kuna, Idaho 83634

Planner: Troy Behunin,
Planner III

Hearing date: November 8, 2018
Findings of Fact: *November 20, 2018*

Applicant/Owner: J. Scott Dowdy
2534 N. Countryside Ave.
Kuna, Idaho 83634
208.922.9919
lawyer@dowdylaw.com

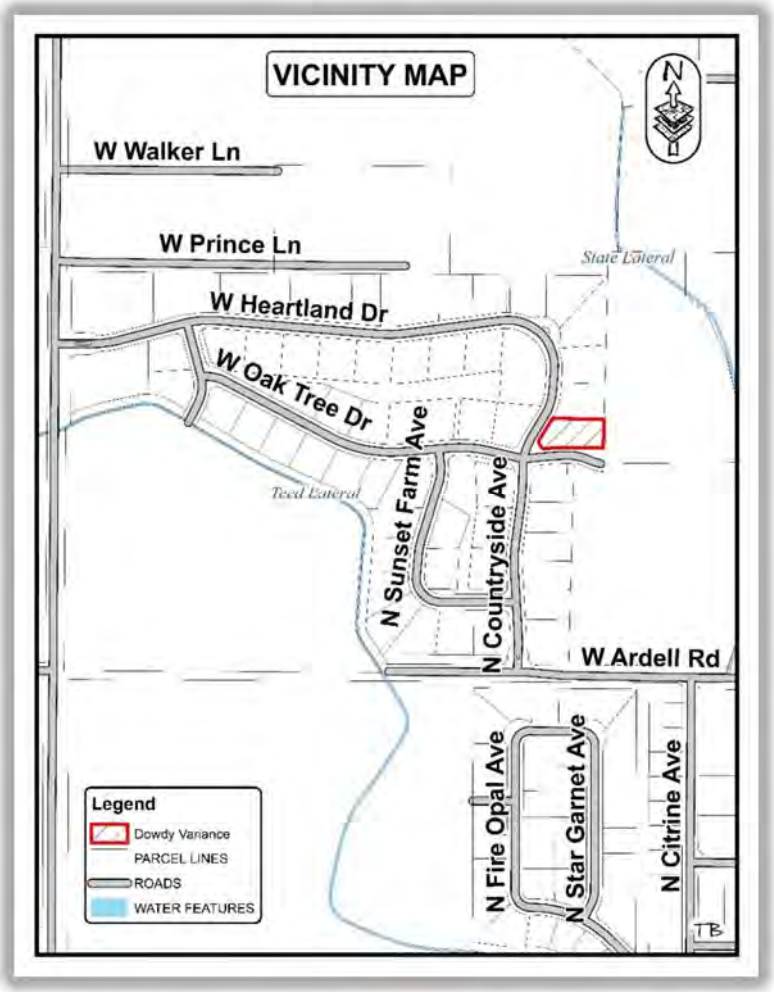


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A. Course of Proceedings:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that Variance Requests are designated as public hearings, with the City Council as the decision making body. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65 Local Planning Act.

a. Notifications

i.	Neighborhood Meeting	July 17, 2018 (One person attended)
ii.	Agencies	September 19, 2018
iii.	350' Notice to Property Owners	October 24, 2018
iv.	Kuna, Melba Newspaper	October 3, 2018
v.	Site Posted	October 22, 2018

B. Applicants Request:

Applicant, J. Scott Dowdy, requests approval of this Variance request, in order to reduce the setback requirements for the south side of their property (2534 N. Countryside Avenue). Applicant requests to reduce the setback requirements for the street-side of a corner lot, from 20 feet down to 10 feet for an accessory building. This site is located at northeast corner of Countryside Avenue and W. Oak Tree Drive (See Map Above).

C. Aerial Map:



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D. History: The property is within Galiano Estates Subdivision (a Kuna Subdivision), and is zoned R-4 (Low/Medium Density Residential). This large parcel has been used for a residence for the last eight years.

E. General Project Facts:

1. **Surrounding Land Uses:**

North	R-4	Low/Medium Density Residential – Kuna City
South	R-4	Low/Medium Density Residential – Kuna City
East	RR	Rural Residential – Ada County
West	R-4	Low/Medium Density Residential – Kuna City

2. **Parcel Sizes, Current Zoning, Parcel Numbers:**

- Parcel Size: Approximately .39 acres.
- Zoning: R-4 (Low/Medium Density Residential)
- Parcel #: R3023310190

3. **Services:**

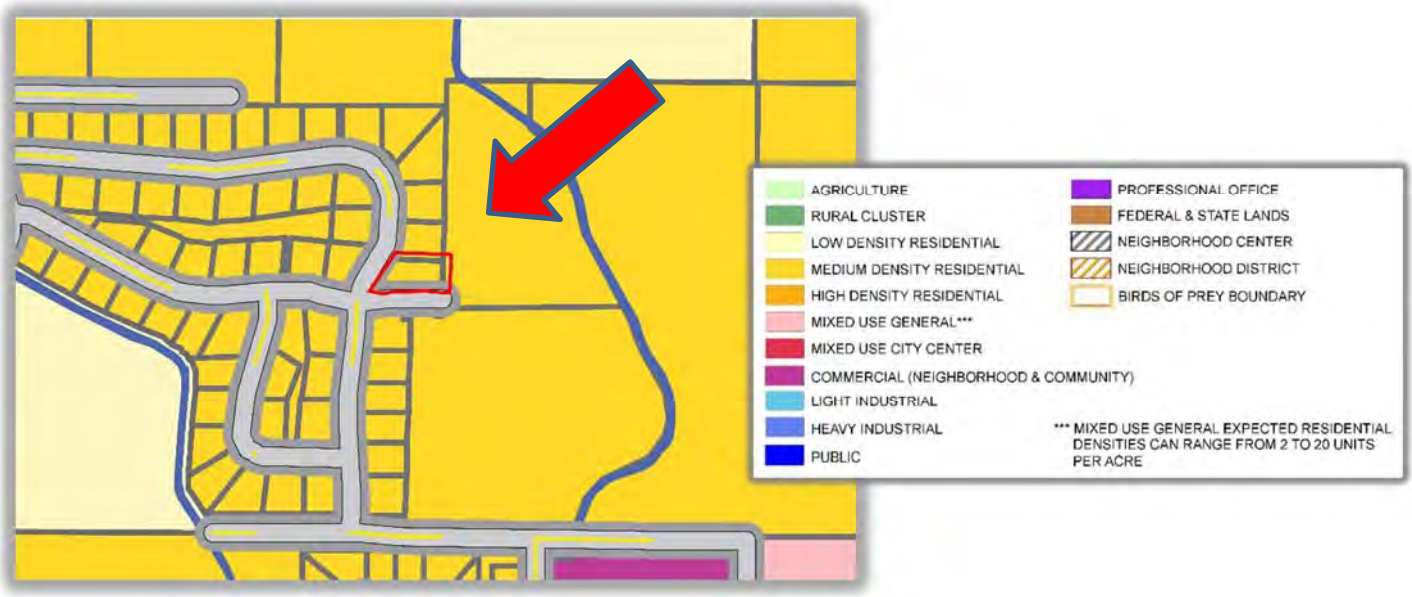
Sanitary Sewer– City of Kuna
Irrigation District – Kuna Municipal District
Fire Protection – Kuna Rural Fire District
Sanitation Services – J & M Sanitation
Potable Water – City of Kuna
Pressurized Irrigation – City of Kuna
Police Protection – Kuna Police (Ada County Sheriff)

4. **Existing Structures, Vegetation and Natural Features:**
The site is a residential lot with a residence, and is within a subdivision. The existing vegetation is consistent with a residential lot.

5. **Transportation / Connectivity:**
Current access to the site is on the south side of the lot, W. Oak Tree Drive.

6. **Environmental Issues:**
The lot is connected to the Kuna sanitary sewer system, staff is not aware of any environmental issues, health or safety conflicts at this time. This site's topography is generally flat.

7. **Comprehensive Future Land Use Map:** The Future Land Use Map (FLU) identifies this site as Medium Density Residential. Staff views this proposed Variance request to be consistent with approved Comprehensive Plan Future Land Use Map.



8. **Agency Responses:**
The following agencies returned comments which are included as exhibits with this case file:
- City Engineer.....Exhibit B1
- Boise Project Board of Control (*BPBC*) .....Exhibit B3

F. Staff Analysis:

The applicant requests this Variance in order to reduce the street-side setback requirement from 20 feet, down to 10 feet, measured from the property line/Rights-of-Way (ROW), in order to place an accessory building on his lot.

Corner lots in subdivisions are required to maintain a street side-yard setback for safety reasons. Additionally, there are easements with utilities around the outside of all property lines for example. Codes main safety goal is

to prevent a corner lot owner from placing a structure that does not allow motorists, bicyclists and pedestrians to see other obstructions and/or other conflicts, such as another owner backing out of their driveway. This code was written and based on an average property line running parallel with the side of a house where conflicts could take place without the 20 foot setback requirement for structures on corner lots. However, this lot has a unique circumstance. The developer of the subdivision designed the property line to be parallel with the side of the house; however, the back of curb, road and sidewalk do not run parallel to the house at the back of the house. The sidewalk and road improvements begin to pull away from the property line about the center of the driveway and provides a larger visual buffer for future properties/lots to the east. Staff has no cause for concern with the proposed reduction due to the unique circumstances that this lot has in relation to the roadway, the back of curb and the property line.

Staff believes that the safety for motorist and pedestrians will not be compromised if this accessory building is placed closer to the property line as requested. Staff believes this request qualifies for the reduction in side-yard setback. Staff will rely on the Council for a decision.

Staff has determined that this application appears to comply with Title 5, Chapter 11 of Kuna City Code; and the Kuna Comprehensive Plan; and sends Case No. 18-02-V to the City Council for its decision, subject to the conditions of approval as decided at the public hearing.

G. Applicable Standards:

1. Kuna City Code, Title 5, Zoning Regulations
2. City of Kuna Comprehensive Plan
3. Idaho Code, Title 67, Chapter 65, Local Land Use Planning Act

H. Comprehensive Plan Analysis:

The Kuna City Council may accept or reject the Comprehensive Plan components as described below:

1. The proposed Variance application for the site is consistent with the following comprehensive plan components:

2.0 – *Property Rights*

Goal 1: Ensure that the City of Kuna land use policies, restrictions, conditions and fees do not violate private property rights. Establish an orderly, consistent review process for the City of Kuna to evaluate whether proposed actions may result in private property "takings".

Policy: As part of a land use action review, the staff shall evaluate with guidance from the City's attorney; The Idaho Attorney General's six criteria established to determine the potential for property taking.

Objective 1.1: Ensure that City land use actions, decisions and regulations will not cause an unconstitutional physical occupation or physical invasion of private property.

Objective 1.2: Ensure that City land use actions, decisions and regulations will not do not effectively eliminate all economic value of the subject property.

Objective 1.4: Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right. Ensure City actions do not impose a substantial and significant limitation on the use of the property.

6.0 – Land Use

Goal 2: Encourage a balance of land uses to ensure that Kuna remains a desirable, stable and self-sufficient community.

I. Findings of Fact:

1. Based on the record contained in Case No. 18-02-V including the exhibits, staff's report and any public testimony at the public hearing, the Council of Kuna, Idaho, hereby *approves* the Findings of Fact and Conclusions of Law, and the conditions of approval for Case No. 18-02-V.

2. The Council of Kuna approves the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.

   Comment: *The Kuna Council held a public hearing on the subject applications on November 7, 2018, to hear from the City staff, the applicant, and to accept public testimony. The decision by the Council is based on the application, staff report and public testimony, both oral and written*

3. Based on the evidence contained in Case No. 18-02-V, this proposal appears to generally comply with the Comprehensive Plan and Future Land Use Map.

   Comment: *The Comp Plan Future Land Use Map designates the approximately 0.39 acres (project site) as Medium Density Residential. Accessory buildings are permitted in the R-4 zone.*

4. The Kuna City Council has the authority to approve or deny these applications.

   Comment: *On November 7, 2018, Kuna's Council voted to approve Case No. 18-02-V.*

5. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.

   Comment: *As noted in the process and noticing section, notice requirements were met to hold a public hearing on November 7, 2018.*

J. Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with all Kuna City Code (KCC).

   Comment: *The proposed application adheres to the applicable requirements of Title 5, Chapters 4 through 6, of the KCC.*

2. The site is physically suitable for the proposed expansion.

   Comment: *The approximately 0.39 acre project site is suitable for an accessory building.*

3. The Variance is not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat

   Comment: *The land to be expanded on is not used as wildlife habitat. Roads, structures and open space already exist and will therefore not cause environmental damage or loss of habitat.*

4. The Variance application *is not* likely to cause adverse public health problems.

   Comment: *Through comments received from outside agencies, there does not appear to be a health issue.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

Comment: *The Variance request considers the location of the property and adjacent uses. The adjacent uses are currently agriculture and commercial – as referenced in the Kuna Comprehensive Plan Future Land Use Map.*

6. The existing utility services in proximity to the site are adequate for this site.

Comment: *Utility services are already available and connected to the existing house and adequate for this addition.*

K. Conclusions of Law:

1. Based on the evidence contained in Case No. 18-02-V, Council finds Case No. 18-02-V generally complies with Kuna City Code.

2. Based on the evidence contained in Case No. 18-02-V, Council finds Case No. 18-02-V is generally consistent with Kuna's Comprehensive Plan.

3. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

L. Order of Decision by Council:

Note: This motion is for approval, conditional approval or denial of these requests. However, if the Council wishes to approve or deny specific parts of these requests as detailed in the report, those changes must be specified.

Based on the facts and exhibits outlined in staff's report, the public testimony as presented, the City Council of Kuna, Idaho, hereby approves Case No. 18-02-V, a Variance request by J. Scott Dowdy with the following conditions of approval:

1. In the event the uses or the building on this parcel are enlarged, expanded upon or altered in anyway (even for temporary purposes), the landowner/applicant/developer, and any future assigns having interest in the subject property, shall seek an amendment to the approvals of this Variance through the public hearing process.
2. All easements and public right-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District. Any work within the Ada County Highway District right-of-way requires a permit.
3. *Applicant shall pay all ACHD impact fees prior to issuance of a building permit from the City of Kuna.*
4. Applicant shall make/improve connections to city services and utilities, and pay any differences that may arise with the expansion of the building, for sewer, potable water and/or pressure Irrigation connection fees.
5. Installation of service facilities shall comply with the requirements of the public utility and irrigation district providing the services. All utilities shall be installed underground.
6. Compliance with Idaho Code, Section §31-3805, pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site.
7. This Variance is valid as long as the conditions of approval are adhered to continuously. In the event the conditions are not continuously followed; the Variance approval may be revoked by the City Council.
8. This Variance is *not* transferable to another property.
9. The applicant shall follow all staff and agency recommendations.
10. The applicant shall comply with all local, state and federal laws.

DATED: this 20th day of November, 2018.

_____

Joe Stear, Mayor
Kuna City

ATTEST:

_____

Chris Engels
Kuna City Clerk

KUNA CITY ORDINANCE NO. 2018-37

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING TITLE 7, CHAPTER 3 SECTION 6 TITLED EXCLUSIVE RESERVATIONS TO ALLOW FOR EXCLUSIVE RESERVATION OF CERTAIN AMENITIES, AND AMENDING TITLE 7, CHAPTER 3 SECTION 7 TITLED APPLICATION FOR RESERVATION ADDING A RESERVATION TIMEFRAME, AND AMENDING TITLE 7, CHAPTER 3 SECTION 8 TITLED VACATION OF PARKS UPON REQUEST OF CITY TO INCLUDE ADDITIONAL AMENITIES, AND PROVIDING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Kuna, Ada County, Idaho, as follows:

Section 1.

Title 7, Chapter 3, Section 6, titled Exclusive Reservations, of the Kuna City Code, is hereby amended as follows:

7-3-6: - EXCLUSIVE RESERVATIONS:

Kuna city parks and greenbelt are public use areas; any exclusive reservation will be only for the park amenity(ies)~~park band shell and/or gazebo~~ and their immediate surrounding area and that other citizenry have the right to the access and use of other park/greenbelt areas. Areas for reservation exclude playgrounds and splashpads.

Section 2.

Title 7, Chapter 3, Section 7, titled Application for Reservation, of the Kuna City Code, is hereby amended as follows:

7-3-7: - APPLICATION FOR RESERVATION:

Persons, associations, corporations, and other entities desiring to ~~use~~ reserve ~~the~~ Kuna city park amenity(ies) for exclusive use ~~and/or band shell or gazebo~~ shall apply ~~at~~ with the Kuna City Parks & Recreation Department or City Clerk's office seven (7) days prior to ~~city hall and reserve a time~~requested date for such use, or they will be assessed a ten (10) percent late fee.~~, if their requested use time is available~~. Reservation of ~~the~~ an entire park may be made for public events.

Section 3.

Title 7, Chapter 3, Section 8, titled Vacation of Parks Upon Request of City, of the Kuna City Code, is hereby amended as follows:

7-3-8: - VACATION OF PARKS UPON REQUEST OF CITY:

If persons, associations, corporations, and other entities using ~~the band shell or gazebo~~reservable Kuna city park amenity(ies) have not reserved the time, have not paid the appropriate fee, and/or are using ~~the~~ Kuna city park amenity(ies) ~~band shell or gazebo~~ at a time that has been reserved for another person, association, corporation, or other entity, they shall be requested to vacate by an appropriate representative of the city.

This ordinance shall be in full force and effect upon its passage, approval and publication, according to law.

APPROVED this ___ day of _____, 2018.

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

KUNA CITY ORDINANCE NO. 2018-37

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING TITLE 7, CHAPTER 3 SECTION 6 TITLED EXCLUSIVE RESERVATIONS TO ALLOW FOR EXCLUSIVE RESERVATION OF CERTAIN AMENITIES, AND AMENDING TITLE 7, CHAPTER 3 SECTION 7 TITLED APPLICATION FOR RESERVATION ADDING A RESERVATION TIMEFRAME, AND AMENDING TITLE 7, CHAPTER 3 SECTION 8 TITLED VACATION OF PARKS UPON REQUEST OF CITY TO INCLUDE ADDITIONAL AMENITIES, AND PROVIDING AN EFFECTIVE DATE.

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Section 1.

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Section 2.

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7-3-7: - APPLICATION FOR RESERVATION:

Persons, associations, corporations, and other entities desiring to reserve Kuna city park amenity(ies) for exclusive use shall apply with the Kuna City Parks & Recreation Department or City Clerk's office seven (7) days prior to requested date for such use, or they will be assessed a ten (10) percent late fee. Reservation of an entire park may be made for public events.

Section 3.

Title 7, Chapter 3, Section 8, titled Vacation of Parks Upon Request of City, of the Kuna City Code, is hereby amended as follows:

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If persons, associations, corporations, and other entities using reservable Kuna city park amenity(ies) have not reserved the time, have not paid the appropriate fee, and/or are using Kuna city park amenity(ies) at a time that has been reserved for another person, association, corporation, or other entity, they shall be requested to vacate by an appropriate representative of the city.

This ordinance shall be in full force and effect upon its passage, approval and publication, according to law.

APPROVED this ___ day of _____, 2018.

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

RESOLUTION NO. R85-2018
CITY OF KUNA, IDAHO

CITY PARKS AND CITY PUBLIC PROPERTY FEES- AMENDING FEE SCHEDULE

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING RESOLUTION NO. R44-2017 TO RAISE CERTAIN FEES TO COVER RISING COSTS, ADD DISCOUNT ELIGIBILITY, ADD NEW AMENITIES, ADD RESERVATION TIME FRAMES, ADD A RESERVATION DEADLINE AND PROVIDE AN EFFECTIVE DATE.

WHEREAS, Kuna City Code Title 7, Chapter 3, Section 11, provides the City Council with the authority to establish user fees for the rental of its city parks and city public property.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF KUNA, Ada County, Idaho, as follows:

Section 1: The Kuna City Council hereby amends certain fees, adds discount eligibility, new amenities, reservation time frames, and a reservation deadline to the City Parks and City Public Property Fee Schedule as set forth in Exhibit "A" attached hereto and incorporated herein by reference.

Section 2: This resolution shall take effect and be in force from and after January 1, 2019.

PASSED BY THE COUNCIL of Kuna this ___ day of _____, 2018.

APPROVED BY THE MAYOR of Kuna this ___ day of _____, 2018.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

EXHIBIT A TO RESOLUTION R85-2018
CITY OF KUNA
Fees for Rental of City Parks, Public Property and After Hours Permits
EFFECTIVE January 1, 2019

Note:

- All rates are based on the following time blocks 9am-1pm, 1:30pm -5:30pm, or 6pm-dusk. Any after dusk reservations will require an after hours permit. Electricity is an additional fee
- A 30% discount will be given upon proof of status to the following; current military, veterans, (military ID) non-profit organizations (after verification of 501c3 status), public schools and senior citizens (age 65 and older).
- Discounts with Parks and Recreation Directors Discretion
- Rates will increase depending on group size, and additional amenities to include electricity and volleyball nets
- Reservations to be made 7 or more days prior or they will be assessed a 10% late fee
- Special Events may have additional charges or higher fees.
- Rentals are first come, first serve.

FACILITY		**FEES**					
Bernie Fisher Park							
	Number of people	0-25 ~~0-15~~ ~~16-35~~	26-50 ~~16-35~~ ~~36-100~~	51-100 ~~36-100~~	101+	Minimum Rate Per Block	Max Rate Per Block
Bandshell* (10 Tables)	Max Capacity 200	$30 ~~$10/$25~~	$40 ~~$25/$50~~	$60 ~~$50~~	$110 ~~$100~~	$30	$110
*Electricity (Bandshell only)	Per time Block	$10 ~~$10~~	$10 ~~$10~~	$10 ~~$10~~	$10 ~~$10~~	$10	$10
Gazebo (5 Tables)	Max Capacity 100	$20 ~~$10/$25~~	$30 ~~$25/$50~~	$50 ~~$50~~	N/A	$20	$50
Horseshoe pits (Exclusive)	Both Pits	N/A	N/A	N/A	N/A	$15 Per 2 hours ~~$10 per hour~~	$15 Per 2 hours ~~$10 per hour~~

Greenbelt						
	Number of people	0-25	26-50	51-100	Minimum Rate Per Block	Max Rate Per Block
Table Rental Location East Side near Restroom *	Max Capacity 100	$20 5 Tables New	$30 10 Tables New	$50 15 Tables New	$20	$50
*Electricity (East Side only)	Per time Block	$10	$10	$10	$10	$10
Sand Volleyball Court (Exclusive)	*	N/A	N/A	N/A	$15 Per 2 hours ~~$10 per hour~~	$15 Per 2 hours ~~$10 per hour~~

Horseshoe pits (Exclusive)	Per 2 Pits $5 extra for additional 2 pits	N/A	N/A	N/A	$15 Per 2 hours ~~$10 per hour~~	$20 Per 2 hours (All 4 Pits) ~~$10 per hour~~
Table Rental Location Southside Near Indian Creek	Max Capacity 100	$20 5 Tables New	$30 10 Tables New	$50 15 Tables New	$20	$50
Pergola East side of Swan Falls (5 Tables)	Max Capacity 100	$10 New	$20 New	$40 New	$10	$40

Sego Prairie/Nicholson Park

	Capacity	Rate Per Block
Covered Area #1 (2 Tables)	Max Capacity 20	$10 New
Covered Area #2 (2 Tables)	Max Capacity 20	$10 New

Sadie Creek

	Capacity	Rate Per Block
Covered Area #1 (2 Tables)	Max Capacity 20	$10 New
Covered Area #2 (2 Tables)	Max Capacity 20	$10 New

Butler

	Capacity	Rate Per Block
Covered Area #1 (2 Tables)	Max Capacity 20	$10 New
Covered Area #2 (2 Tables)	Max Capacity 20	$10 New

Behind City Hall

	Number of people	0-25	26-50	51-100	101+	Minimum Rate Per Block	Max Rate Per Block
Table Rentals Location Area Behind City Hall	Max Capacity 500	$20 5 Tables New	$30 10 Tables New	$50 15 Tables New	$110 25 Tables New	$20	$110
Patio Area Behind City Hall	Max Capacity 100	$20 5 Tables New	$30 10 Tables New	$50 15 Tables New	N/A		
Electricity	Per time Block	$10 New	$10 New	$10 New	$10 New	$10	$10

Disc Golf Course

	Minimum Rate Per Day
Exclusive	$250
Event/tournament (day)	~~$200~~
Non-Exclusive Event /Tournament (day)	$75 ~~$50~~
Non-Exclusive for League play per day	$25 ~~$20~~

*$25 Discount for additional tournaments after the first

Additional Rental Fees

	Per Activity	Rate	Broken equipment fee
	Additional Picnic Tables (seat 6-8)	$15 per 5 tables ~~$25 per 10 tables~~	
	Turf Fee (Bounce house, Canopy etc.)	$20 New	
Bernie Fisher (Future Locations coming)	Volleyball Net and Volleyball (with shelter reservation)	$20 Per Block New	Up to$200 Need Rental Agreement
Bernie Fisher (Future Locations coming)	Volleyball Net and Volleyball (Standalone)	$25 Per 4 Hours New	Up to $200 Need Rental Agreement
	Spike Ball Net and 2 Balls (with shelter rental)	$5 Per Block New	Up to $50 Need Rental Agreement
	Spike Ball Net and 2 Balls (Standalone)	$10 Per 4 Hours New	Up to $50 Need Rental Agreement
	Archery Tag	$30/Hour New	Up to $200 Need Rental Agreement
Bernie Fisher Green Belt (Excludes Splashpad & Pergola) Behind City Hall	Special Event Fee (Includes electricity, up to 10 tables, with more available with added fee)	$150 Per Block New	$330 per Day
	Special Event with Parking Fee (parking on grass)	$200 Per Block New	$500 Per Day

Construction Fencing optional with 2 hour minimum	Additional parks personnel (set up, tear down etc.)	$30/Hour New

After Hours Park Permit

Number of people	0-25	26-50	51-100	101+
	$30 ~~$10/$25~~	$40 ~~$25/$50~~	$60 ~~$50~~	$110 ~~$100~~

Senior Center

Per Hour Rate	First 2 hours	Additional Hour or Fraction thereafter	Facility Cleaning Fee (if facility is not cleaned after use)
	$75.00	$25	$75 per hour

City Hall Parking Lot (dawn to dusk)

Daily Rates	1 Section	2 Sections	ALL 3Sections
	$50	$100	$150

(North Section/Center Section/South Section)

City of Kuna

Staff Memo – City Council

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

To: City Council

Case Numbers: 18-02-S (Pre Plat)
Madrone Heights

Location: Near the northwest corner of Ten Mile and Kuna Roads, Kuna, Idaho 83642

Planner: Troy Behunin, Planner III

Hearing Date: November 7, 2018 (Wed. – Elections)
Tabled until: November 20, 2018

Engineer: KM Engineering
Kirsti Grabo
9233 W. State St,
Boise, ID 83714
208.639.6930
KGrabo@kmengllp.com

Owner: *N Star Farm, LLC*
Tim Eck
6152 W. Half Moon Ln.
Eagle, ID, 83616

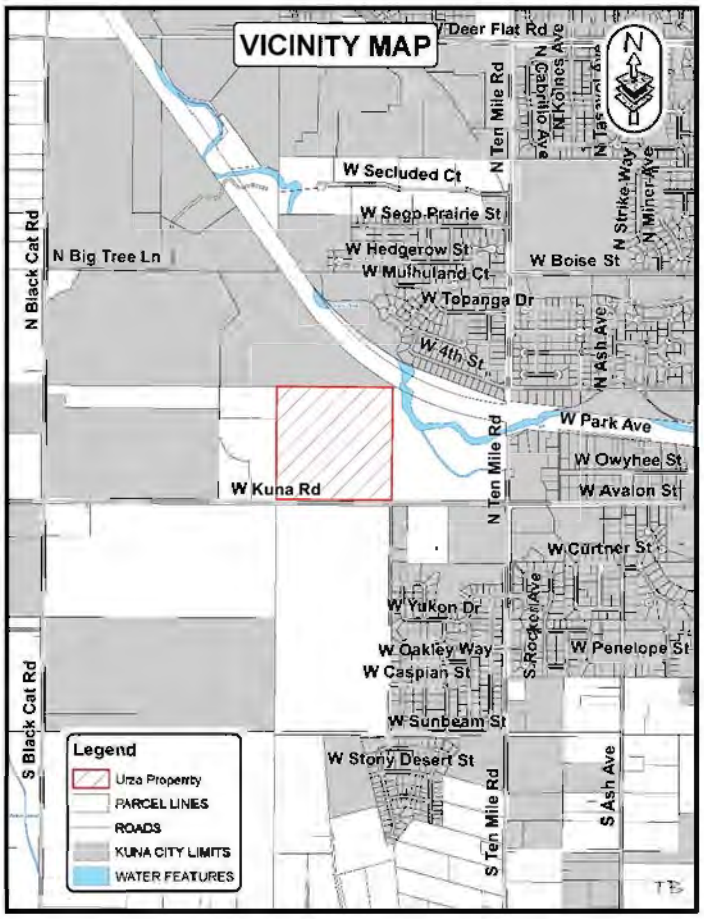


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E. General Project Facts
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J. Proposed Findings of Fact
K. Proposed Comprehensive Plan Analysis
L. Idaho Code Analysis
M. Proposed Conclusions of Law
N. Recommendation of the Commission
O. Councils Order of Decision

A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that annexations are designated as public hearings, with the P & Z Commission as a recommending body and City Council as the decision making body. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65, Local Planning Act.

a. Notifications

i. Neighborhood Meeting April 11, 2018 (seven persons attended)

ii.	Agency Comment Request	June 26, 2018
iii.	375' Property Owners Notice	October 29, 2018
iv.	Kuna, Melba Newspaper	October 3, 2018
v.	Site Posted	October 9, 2018

B. Applicant's Request:

On behalf of N Star Farm, LLC (the applicant), Kirsti Grabo with KM Engineering, requests approval to subdivide approximately 39.50 acres (previously zoned R-6) into 206 single home lots, an additional 27 common lots, and one shared driveway. A Design Review application for the landscaping for the 27 common lots accompanies this application. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, T 2N, R 1W, APN #: S1322438400. This project is known as Madrone Heights Subdivision.

C. Aerial Map:



©Copyrighted

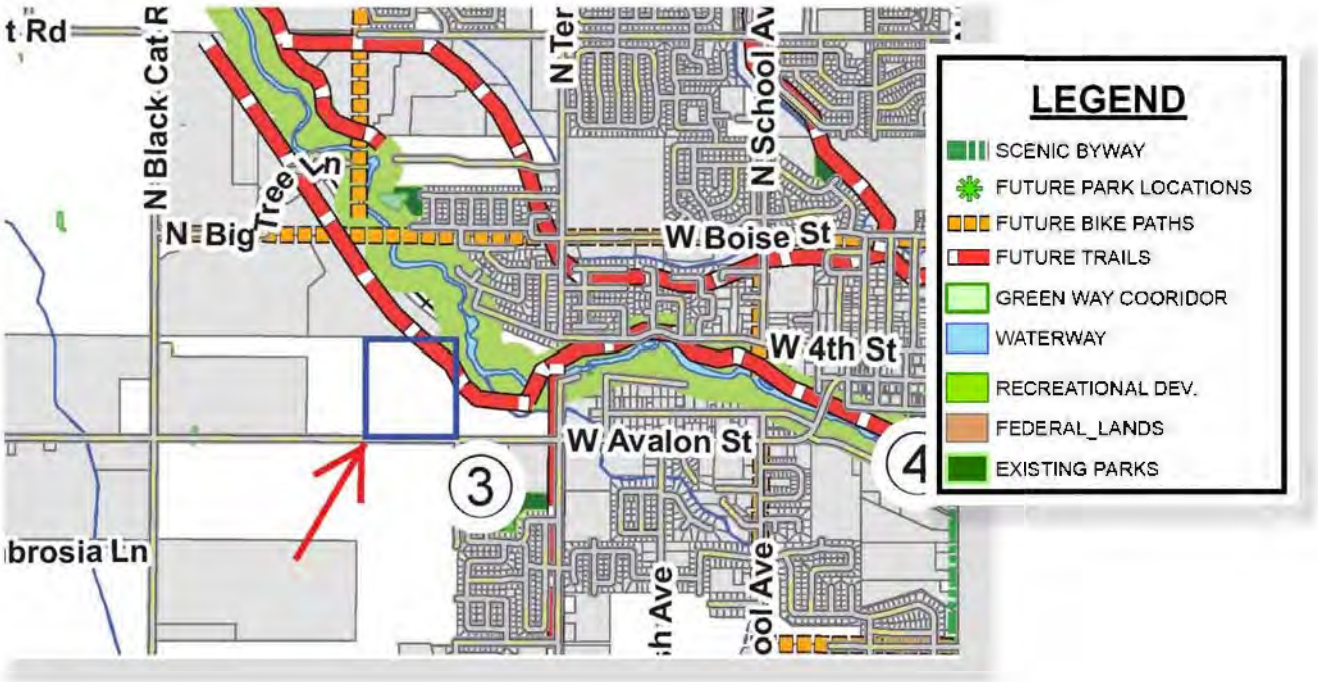
D. Site History:

This parcel is in the City of Kuna limits, with varying historical uses, ranging from residential to farming and is currently zoned R-6 (Medium Density Residential).

E. General Project Facts:

1. **Comprehensive Plan Map:** The Future Land Use Map (Comp Plan Map) is intended to serve as a *guide* for the decision making body for the City. The Comp Plan map indicates land use designations generally speaking, it is not the actual zone. The Comp Plan Map calls for Medium Density Residential for this parcel.
2. **Recreation and Pathways Map:** The Recreation and Pathways Master Plan Map indicates a future trail near the NEC of the site, situated along Indian Creek. Accordingly, it is the City's goal and desire to increase the number of trails and pathways in Kuna. It is necessary for each parcel to develop trails and pathways along

their frontages of creeks, canals and ditches to comply with the Master Plan's goals by either starting a pathway, or extending one in that area at time of development.



3. **Surrounding Land Uses:**

North	A	Agriculture – Kuna City
South	RUT	Rural Urban Transition – Ada County
East	RUT	Rural Urban Transition – Ada County
West	RR	Rural Residential – Ada County

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

Property Owner	**Parcel Size** (Approximately)	**Current Zone: (R-6)** Medium Density Resident	**Parcel Number**
N Star Farm, LLC	39.48 acres	R-6	S1322438400

5. **Services:**

Sanitary Sewer– City of Kuna
Potable Water – City of Kuna
Irrigation District – Boise-Kuna Irrigation Dist.
Pressurized Irrigation – City of Kuna (KMID)
Fire Protection – Kuna Rural Fire District
Police Protection – Kuna Police (Ada County Sheriff)
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**

The majority of this land is being used for agricultural purposes, a small part of the land was used for residential purposes (Approx. 1.5 ac.) Applicant anticipates that the land will continue the historic agricultural uses on the lands until development occurs. There are no outbuildings on site, or any other structures.

7. **Transportation / Connectivity:**

All access points will need to follow design standards according to City and ACHD (Ada County Highway Dist.) codes. Applicant proposes ingress/egress on Kuna Road near the middle of the site, and a new segment of a mid-mile collector on the west property line. In accordance with City Code, the applicant proposes two (2)

additional connection to properties to the east and north for future connection. Current legal points of access being used at this time may remain until development requires a change.

8. **Environmental Issues:**
Beyond being within the nitrate priority area, staff is not aware of any environmental, health or safety conflicts.

9. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:
    - Kuna City Engineer (Paul Stevens) – Exhibit B-1 [*This report will be late, due to his recent* hiring].
    - Ada County Highway District (ACHD – Austin Miller) – Exhibit B-2
    - Boise-Kuna Irrigation District (Lauren Boehlke) – Exhibit B-3
    - Cable One TV (Brett Pike) – Exhibit B-4
    - Community Planning Association of Southwest Idaho (COMPASS – Carl Miller) – Exhibit B-5

F. Staff Analysis:

The applicant previously annexed the land as part of the former Urza property application and now submits an application for preliminary plat and subdivision design review approvals and entitlements.

This parcel was annexed into Kuna City limits last spring with a R-6 (Medium Density) zoning. During the public hearings for said annexation there were certain density conditions approved by the Commission and City Council. Staff finds that this proposal conforms to the condition as outlined in the Findings of Fact and Conclusions of law.

All major public utilities are approximately 1,325 feet east, at Ten Mile and Kuna Roads. Applicant has been made aware that development of this parcel will require extension of, and connection to city services. Connection fees will be required for those utilities at time a building permit is issued. It is anticipated that development will require four phases for complete build-out. Staff concurs with ACHD's recommendation (for the north-south mid-mile collector on the west side of the project) for construction of the proposed mid-mile up to the north property line. Staff concurs that all required improvements shall be installed along with a barricade to be constructed and placed just beyond the W. Park Street intersection; if development has not occurred when phase four begins (ACHD Condition 9 in section D: Site Specific Conditions of Approval).

Staff has reviewed Kuna's Comprehensive Plan (Comp Plan), and found the Comp Plan encourages a variety of housing types for all income levels numerous times throughout the document. Pertinent sections of the Comp Plan that address housing types are included below, in Section K (Comp Plan Analysis) of this report. The City attempts to balance all housing types within the City. Staff would recommend that the applicant work with Kuna City, ACHD, and Kuna Rural Fire District (KRFD) to conform to each agency's requirements.

In the northeast corner of the site is a pocket park on lot 12, block 2. The Kuna Recreation and Pathway Map indicates a trail in this area. Staff recommends that the applicant provide a public easement for a future greenbelt/pathway to be built in the future by the H.O.A. if development occurs on the east or north. While this is a very small pinch point, it could become a pivotal piece in the future. Staff recommends that plantings be arranged so that a blockade is not formed accidentally.

Staff has determined that this application complies with Title 5 of the Kuna City Code; Idaho Statute § 67-6511; as well as the Kuna Comprehensive Plan document; and forwards a recommendation of approval for Case No. 18-02-S subject to any conditions of approval outlined by Kuna's City Council.

G. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5, Chapter 13.
2. City of Kuna Comprehensive Plan, adopted September 1, 2009.

3. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

H. Proposed Procedural Background:

On November 7, 2018, the Council considered the case, including the application, agency comments, staff's memo, the application exhibits and public testimony presented or given.

I. Proposed Factual Summary:

This parcel is located near the northwest corners of Ten Mile and Kuna Roads. The project consists of 39.48 (approx.) acres and is in Kuna City limits and zoned R-6 (Medium Density Residential). Applicant requests preliminary plat approval to subdivide said property in 206 homes, 27 common lots and one shared driveway. This parcel is adjacent to Kuna Road; a principle arterial.

J. Proposed Findings of Fact:

Based upon the record contained in Case No. 18-02-S, including the Comprehensive Plan, Kuna City Code, staff's memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Council hereby **approves/conditionally approves/denies** the Findings of Fact and Conclusions of Law, and the conditions of approval for Case No. 18-02-S, a request for preliminary plat approval, according to the following:

The Council concludes that the applications comply with the City of Kuna's Zoning regulations (Title 5) of KCC and/or the Subdivision regulations outlined in title 6 of KCC.

1. The Kuna Council accepts the facts as outlined in the staff memo, the public testimony and the supporting evidence list presented.

Comment: *The Kuna* Council *held a public hearing on the subject applications on November 7, 2018, to hear from City staff, the applicant and to accept public testimony. The decision by the Council is based on the application, staff report and public testimony, both oral and written.*

2. Based on the evidence contained in Case No. 18-02-S, this proposal **does/does not** appear to *generally* comply with the Comprehensive Plan.

Comment: *The Comp Plan has listed numerous goals for providing single-family housing in Kuna. The Comp Plan describes this property as Medium Density. As this project proposes to accommodate single-family residential uses, the project follows the goals of the Comp Plan.*

3. The Kuna Council has the authority to **approve/conditionally approve/deny** the preliminary plat application.

Comment: *On* November 7, 2018*, Council will decide to vote for an* ***approval/conditional approval/denial*** *for Case No.* 18-02-S.

4. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.

Comment: *As noted in the process and noticing sections, notice requirements were met to hold a public hearing on Wednesday, November 7, 2018.*

K. Proposed Comprehensive Plan Analysis:

Council determines the proposed preliminary plat and design review requests for the *site* ***are/are not*** consistent with the following Comp Plan components:

Housing:
Residents expressed interest in a mix of residential type dwellings applications; including a variety of housing. They were receptive to a greater mix of lot sizes and house price to appeal to a variety of people. A goal expressed by many was the preservation of large lots and rural cluster development in appropriate balance with a complement of other types of residential development (Page 21 Comprehensive Plan [CP]).

***Comment**: The Comp Plan provides for a mix of residential uses. This project has proposed a zone that provides an opportunity for a variety of densities, therefore it generally conforms to the Comp Plan goals and policies.*

Private Property Rights Goals and Objectives - Section 2 - Summary:
Ensure the City *land use policies, restrictions, conditions and fees do not violate private property rights and ensure that land use actions, decisions, and regulations do not effectively eliminate all economic value of the subject property.* Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right and staff shall evaluate with guidance from the City's attorney; the Idaho Attorney General's six criterion established to determine the potential for property taking.

***Comment:** Utilizing the Idaho Attorney General's criteria, and a review by the City Attorney, the proposed project **does/does not** constitute a "takings" and the Economic value is intact.*

Economic Development Goals and Objectives - Section 5 - Summary:
Promote and ensure an adequate supply of housing for all income levels and facilitate pedestrian connections, both visually and physically, to enhance pedestrian movement (Pg. 42 – 1.5 and Pg. 43 – 3.1 [CP]).

***Comment:** The Comp Plan encourages an adequate mix of housing for all income levels and calls for increasing pedestrian connections. The requested zoning for this project provides an opportunity for a number of additional housing types to Kuna's inventory and quality housing. At time of development, this project should be conditioned to add to the City's pedestrian network for non-motorized transportation, by proposing pathway connections for future development to connect to in the future.*

Land Use Goals and Objectives - Section 6 - Summary:
Adopt a future land use plan and map that includes natural and developed open spaces, while providing a variety of housing densities and types to accommodate various lifestyles, ages and economic groups. Protect existing neighborhoods and ensure new development is sustainable and keeps Kuna desirable. Develop cohesive neighborhoods with character and quality while incorporating a variety of densities and styles (Pg. 64 – 3.1 & Goal 3, and Pg. 65 – 4.3 [CP]).

Comment: *The requested zoning provides an opportunity for quality housing opportunities and multiple housing varieties to the City's inventory for all types of lifestyles, ages and economic groups.*

Housing Goals and Objectives - Section 12 - Summary:
Encourage developers to provide high-quality development with a variety of lot sizes, dwelling types, densities and price points to meet the needs of current and future population while creating safe and aesthetically-pleasing neighborhoods. Ensure housing is available throughout the community for all income levels and those with special needs. Encourage logical and orderly development while discouraging development of land divisions greater than one-half acre because large lot subdivisions increase municipal costs, require public subsidy and create sprawl (Pg. 155 – Obj. 1.1, Pg. 163 12.4 and Pg. 165 – 2.1 [CP]).

***Comment:** With the requested zoning, applicant proposes a future high quality development with a variety of dwelling types, densities, and price points for all income levels Kuna as encouraged by the Comp Plan. In the future, this project will add to the City's overall network of, utilities, sidewalks and roadways, therefore it complies with logical, orderly development and discourages land divisions and development greater than one half acre, and could avoid increased municipal services costs and sprawl.*

Community Design Goals and Objectives - Section 13 - Summary:
Strengthen Kuna's Image through good community and urban design principles that create well planned neighborhoods. Foster good community design concepts that incorporate landscape features to serve as buffers between incompatible uses while reducing scale and creates a sense of place (Pg.167 – Goal 1 and Pg. 168 – 1.2 and 2.1[CP]).

Comment: *Applicant should be conditioned to offer good community and urban design principles through creation of greenspaces, add to the pedestrian pathway network and add to the City's sidewalk network. Applicant has proposed and shall improve classified roadways, which add to the roadway system thereby complying with the adopted Master Street Plan of Kuna (Functional Classified Road Map). Applicant has proposed and should be conditioned to incorporate landscape buffers creating a sense of place for citizens. Applicant has proposed and should be conditioned to follow sound community design concepts and comply with the Comp Plan goals and help strengthen Kuna's image.*

L. Idaho State Code Analysis:

1. **IC §67-6511 (2) C** requires that the Council analyze the proposed changes to zoning ordinances to ensure that they are not in conflict with the policies of the adopted comprehensive plan. If the request is found by the governing board to be in conflict with the adopted plan, ***or*** would result in demonstrable adverse impacts upon the delivery of services by any political subdivision providing public services, including school districts, within the planning jurisdiction.

2. **IC §67-6513** provides that the City provide for mitigation of the effects of subdivision development on the ability of political subdivisions of the state, including school districts, to deliver services without compromising quality of service delivery to current residents or imposing substantial additional costs upon current residents to accommodate the proposed subdivision.

3. Through discussions and comments submitted by public service providers, the project would not create demonstrable adverse impact to quality of emergency service and/or delivery of said services, or impose substantial additional costs to current residents.

M. Council's Conclusions of Law:

The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

1. The Council feels the site ***is/is not*** physically suitable for development in the future.

   Comment: *The 39.48 acre (approximate) proposal appears to be suitable for a subdivision, as proposed.*

2. The subdivision request ***is/is not*** likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.

   Comment: *The land to be developed is not used as wildlife habitat. Roads, driveways, family units and open spaces are planned for construction according the City and ACHD requirements and best practices and will therefore not cause environmental damage or loss of habitat.*

3. The preliminary plat application ***is /is not*** likely to cause adverse public health problems.

   Comment: *As proposed, the preliminary plat generally complies with the Comp Plan. The project will connect to public sewer and potable water systems, therefore eliminating the occurrence of adverse public health problems.*

4. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

   Comment*: Through correspondence with public service providers and application evaluation, this subdivision request appears to avoid detriment to surrounding uses. Council did consider the subdivision and landscaping and the location of the property with adjacent uses.*

5. The existing and proposed street and utility services in proximity to the site ***are/are not*** suitable *or* adequate for future residential purposes.

   Comment: *Correspondence from ACHD and Kuna Public Works confirms that the streets and utility services (existing and proposed) are suitable and adequate for this subdivision, or will be as conditioned.*

6. Based on the evidence contained in Case No's 18-02-S, Council finds Case No. 18-02-S adequately complies with Kuna City Code.

7. Based on the evidence contained in Case No. 18-02-S, Council finds Case No. 18-02-S generally complies with Kuna's Zoning Code.

N. Recommendation of the Commission:

Based upon the facts outlined in staff's memo, the Comp Plan, City Code, the record before the Commission, the applicant's presentation, public testimony and discussion during the September 11, 2018, public hearing, the Kuna Commission votes to *recommend* ***approval*** for Case No. 18-02-S to Council with the following conditions of approval:

Preliminary Play Specific Conditions:

- Applicant shall follow *conditions as outlined in the staff report with a revision to No. 13, a condition that the applicant shall provide a perimeter pathway around Lot 12, Block 2 (similar to the central park) in the northeast corner for future connectivity to the city greenbelt,*
- *Applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue to seal off the streets with the future signage as recommended in the ACHD report,*
- *Applicant shall install barricades north of the Park Street and Beadlily intersection to restrict access for the road to the north property line.*
- *Applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue,*
- *Applicant shall install barricades north of Park Street and along Beadlily,*

O. Council's Order of Decision:

18-02-S (Preliminary Plat), *Note*: *The proposed motion is to recommend approval, conditional approval, or denial for these requests to City Council. If the Council wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.*

On November 7, 2018, the Council voted to **approve/conditionally approve/deny** Case No. 18-02-S, based upon the facts outlined in staff's memo, the Comp Plan, City Code, the record before the Council, the applicant's presentation, public testimony and discussion during the November 7, 2018, public hearing Therefore, the Kuna Council votes to ***approve/conditionally approve/deny*** Case No. 18-02-S, with the following conditions of approval,

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
   a. The City Engineer shall approve the sewer hook-ups.

b. The City Engineer shall approve the drainage and grading plans. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties". No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
c. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
d. The *Boise-Kuna* Irrigation District shall approval any modifications to the existing irrigation system.
e. Approval from Ada County Highway District (ACHD) shall be obtained and Impact Fees must be paid prior to *issuance* of any building permit(s).

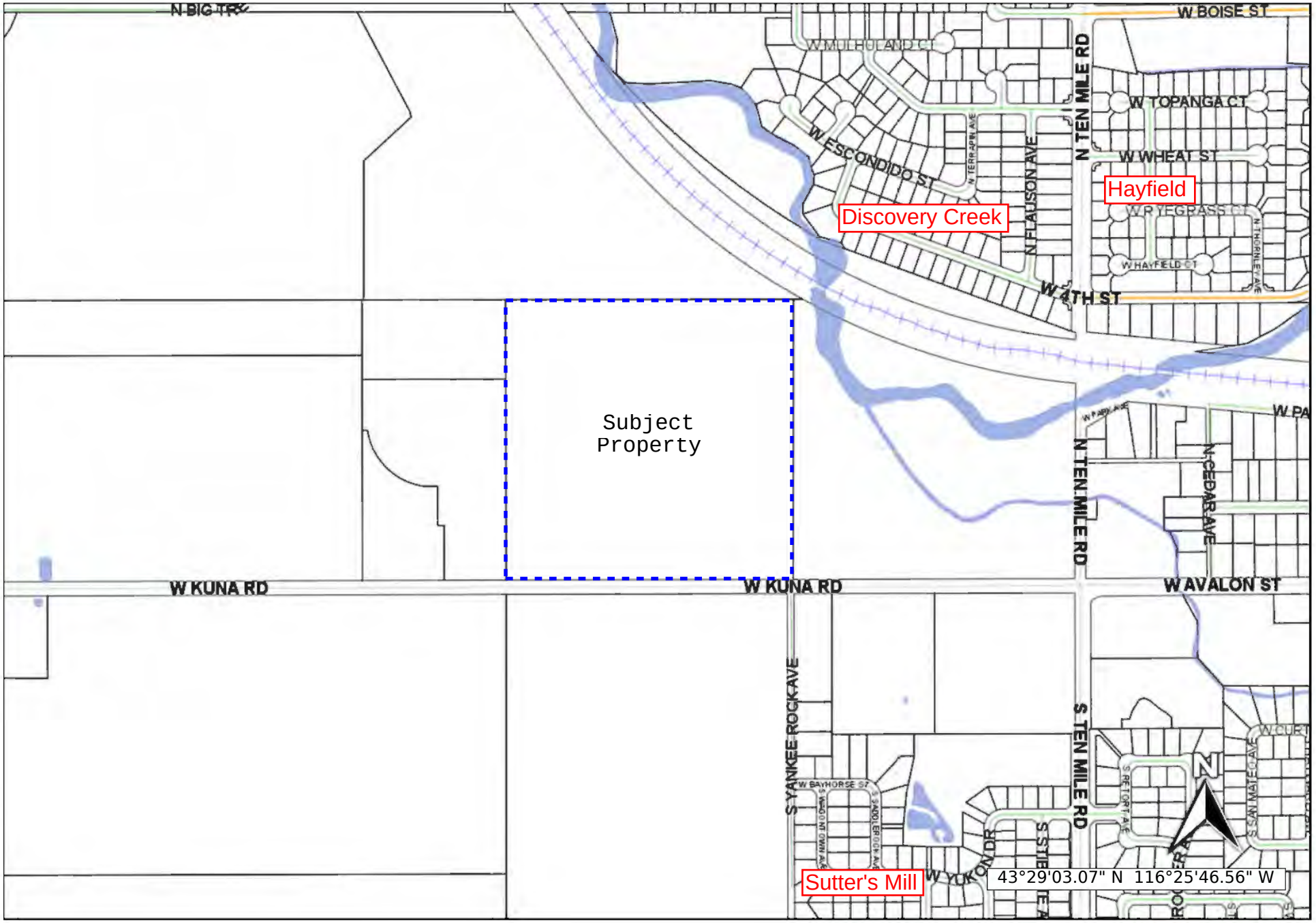
2. All public rights-of-way shall be dedicated and constructed to standards of the City, Ada County Highway District and Idaho Transportation Department. No public street construction may commence without the approval and permit from Ada County Highway District and/or Idaho Transportation Department.
   2.1– With development and as necessary, dedicate right-of-way in sufficient amounts to follow City and ACHD standards and widths.
3. Installation of service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see KCC 6-4-2-W.
4. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
5. When required, submit a petition to the City (as necessary, confirmed with the City engineer) consenting to the pooling of irrigation surface water rights for delivery purposes and request to annex the irrigation surface water rights appurtenant to the property over to the Kuna Municipal Pressure Irrigation system of the City (KMID).
6. Street lights and parking lights for the site shall be LED lighting and must comply with Kuna City Code and established Dark Skies practices.
7. Parking within the site shall comply with Kuna City Code. (Unless specifically approved otherwise).
8. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted). Perimeter fencing (and permit) is required prior to requesting final plat signatures from Kuna City Clerk and Engineer.
9. All signage/monuments within/for the project shall comply with Kuna City Code and shall be approved through the design review process with all subdivisions.
10. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within 3 days or as the planting season permits as required to meet the standards of these requirements. Maintenance and planting within public rights-of-way shall be with approval from the public entities owning the property.
11. Developer shall provide a perimeter pathway in Block 2 in the northwest corner for future connectivity to the city greenbelt
12. The land owner/applicant/developer, and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the City Council, or seek amending them through public hearing processes.
13. Applicant shall follow staff, City engineers and other agency recommended requirements as applicable.
14. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED: This _____ day of _____, 2018.

landproDATA

Vicinity Map

2030 West Kuna Road

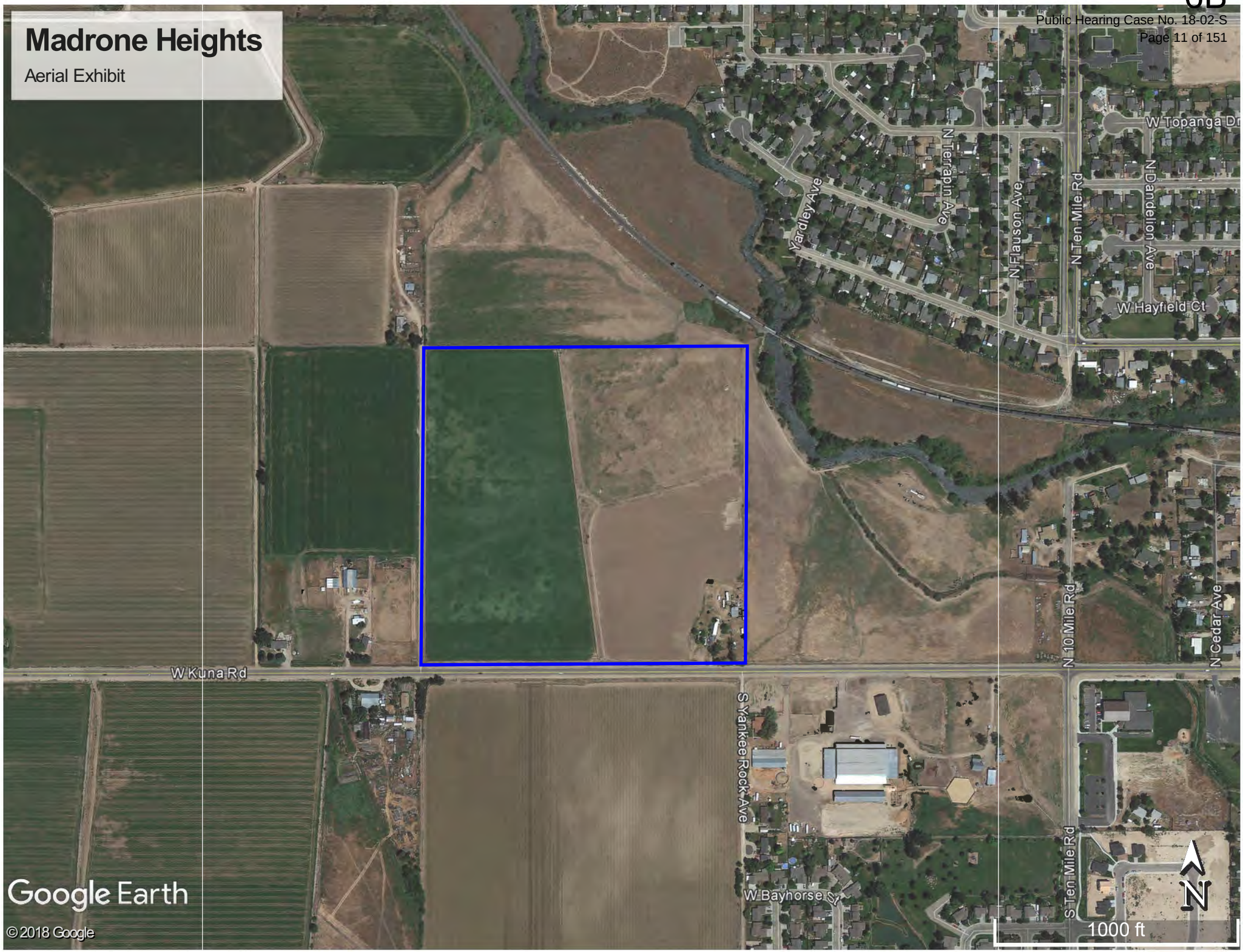


Oct 27, 2017 - landproDATA.com
Scale: 1 inch approx 600 feet

The materials available at this website are for informational purposes only and do not constitute a legal document.

Madrone Heights

Aerial Exhibit



ITD Paper Trail

Troy Behunin

From: Troy Behunin
Sent: Monday, July 02, 2018 3:24 PM
To: 'Ken Couch: Idaho Transportation Department'
Subject: Madrone Heights TIS
Attachments: TIS.pdf

Categories: Important, Agency Comments

Ken,
Here you are. ☺ Let me know if you need anything else. Let me know you receive this please.
Troy

Troy Behunin
Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634
TBehunin@KunaId.Gov

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Troy Behunin

From: Ken Couch <Ken.Couch@itd.idaho.gov>
Sent: Monday, July 02, 2018 3:28 PM
To: Troy Behunin
Subject: RE: [EXTERNAL] Madrone Heights TIS

Categories: Important, Agency Comments

This is great! Thanks Troy!

Thanks!
Ken Couch

Development Services Coordinator
Idaho Transportation Department
District 3
208-332-7190 Office
Ken.Couch@itd.idaho.gov

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From: Troy Behunin [mailto:tbehunin@kunaid.gov]
Sent: Monday, July 02, 2018 3:24 PM
To: Ken Couch
Subject: [EXTERNAL] Madrone Heights TIS

--- This email is from an external sender. Be cautious and DO NOT open links or attachments if the sender is unknown. ---
Ken,
Here you are. ☺ Let me know if you need anything else. Let me know you receive this please.
Troy

Troy Behunin
Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634
TBehunin@KunaId.Gov

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Reply Reply All Forward

Mon 7/2/2018 3:28 PM

Ken Couch <Ken.Couch@itd.idaho.gov>

RE: [EXTERNAL] Madrone Heights TIS

To Troy Behunin

Important Agency Comments

You replied to this message on 11/6/2018 10:07 AM.

Staff requested the promised comments.

Bing Maps Get more apps

This is great! Thanks Troy!

Thanks!
Ken Couch

Development Services Coordinator
Idaho Transportation Department
District 3
208-332-7190 Office
Ken.Couch@itd.idaho.gov

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From: Troy Behunin [mailto:tbehunin@kunaid.gov]
Sent: Monday, July 02, 2018 3:24 PM
To: Ken Couch
Subject: [EXTERNAL] Madrone Heights TIS

--- This email is from an external sender. Be cautious and DO NOT open links or attachments if the sender is unknown. ---

Ken,
Here you are. ☺ Let me know if you need anything else. Let me know you receive this please.
Troy

ITD Comments Part II

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

November 14, 2018

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

VIA EMAIL

Development Application	**18-02-S**
Project Name	**MADRONE HEIGHTS SUBDIVISION**
Project Location	2030 West Kuna Road, west of SH-69 milepost 2.22
Project Description	Construct a subdivision consisting of 206 single family lots, 27 common lots, and 1 shared driveway
Applicant	Kirsti Grabo of KM Engineering

The Idaho Transportation Department (ITD) reviewed the referenced preliminary plat application and has the following comments:

1. This project does not abut the State highway system.

2. ITD has received and reviewed the Traffic Impact Study (TIS) provided by the applicant. Based on the findings of the TIS, the number of trips traveling east from the site are not substantial enough to require mitigation to the State highway system.

3. ITD withdraws any objection to the proposed application.

If you have any questions, you may contact Ken Couch at (208) 332-7190 or me at (208) 334-8338.

Sincerely,

Sarah Arjona
Development Services

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

Sarah.Arjona@itd.idaho.gov

km ENGINEERING

May 25, 2018
Project No.: 17-054

Mr. Troy Behunin
Planning & Zoning Department
City of Kuna
751 West 4th Street
Kuna, ID 83634

RE: Madrone Heights Subdivision – 2030 West Kuna Road – Kuna, ID
Preliminary Plat and Landscape Design Review Applications

Dear Mr. Behunin:

On behalf of N Star Farm, LLC, and Waters Edge Farm, LLC, we are pleased to submit the attached application and required supplements for preliminary plat and landscape design review for Madrone Heights Subdivision.

As you know, the subject property (formerly known as the Urza property) is approximately 39.4 acres of agricultural ground identified as parcel number S1322438400 and located approximately one quarter mile west of Ten Mile on the north side of Kuna Road. Earlier this year, the site was annexed into the City of Kuna with the R-6 zoning designation (with a max density of 5.2 du/acre) commensurate with the existing Comprehensive Plan designation of Medium Density Residential.

Preliminary Plat

The attached preliminary plat proposes 206 buildable single-family residential lots, 27 common lots and 1 shared driveway lot for a total of 234 lots. The layout reflects a gross density of 5.2 units per acre, which is commensurate with the density allowed by Council as a part of the annexation and zoning approval. The project includes 3.4 acres of landscaped open space, which will include a central park with soccer fields and walking paths to provide pedestrian connectivity throughout the neighborhood. Further, the park's central location within the project creates ease of access for all residents of the subdivision. The open space and shared driveway lot will be owned and maintained by the homeowners' association, and draft CC&Rs including language for maintenance of the common lots are included herewith. The shared driveway lot will also serve as a corridor for extension of utilities into the neighborhood from Kuna Road. As such, it will be covered by the necessary access and utility easements.

A traffic impact study was completed, has been submitted to ACHD, and is provided with this application package for your review. As you can see on the preliminary plat, there are no existing stub streets in the area, so the subdivision proposes one access onto Kuna Road with a second access to the west onto a new mid-mile collector street, a portion of which will be constructed with this project. Per ACHD's annexation staff report, curb and gutter are not required along Kuna Road at this time, so we are proposing to improve Kuna Road with 17' of pavement plus a 3' gravel shoulder and a 5' detached sidewalk.

Mr. Eck has conducted significant due diligence regarding public utilities in the area and has worked with the City Engineer to determine a course of action to extend utilities to this site. We are not aware of any concerns in regards to other public services in the area and don't expect the project to create excessive additional requirements at public expense for public facilities and services because services will be supported by property taxes and/or fees paid directly to the service providers.

At this time, we are unaware of any health, safety, or environmental problems that currently exist or that will be created by this project.

Design Review

Included with this submittal package is the design review application for common area landscaping within the subdivision. There are existing trees onsite, but none are proposed to remain. The new landscaping will consist of a combination of trees, shrubs, and other landscape materials, which are detailed on the attached landscape plans, and we believe that the design complies with the City's Design Review standards.

Conclusion

With the proposals discussed herein, we feel that the new Madrone Heights neighborhood will complement the City's vision for growth and provide additional housing opportunities for this growing area. Should you have questions or require further information in order to process these applications, please feel free to contact me. We look forward to working with staff to accomplish this great addition to the City of Kuna.

Sincerely,
KM Engineering, LLP

Kirsti Grabo
Development Coordinator

cc: N Star Farm, LLC
Waters Edge Farm, LLC

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Commission & Council Review Application

Note: Engineering fees shall be paid by the applicant if required.

*Please submit the appropriate checklist (s) with application

For Office Use Only	
File Number (s)	18-02-S & 18-18-DR
Project name	Madrone Heights
Date Received	
Date Accepted/ Complete	
Cross Reference Files	
Commission Hearing Date	9.11.2018
City Council Hearing Date	

Type of Review (check all that apply):

- ☐ Annexation
- ☐ Appeal
- ☐ Comprehensive Plan Amendment
- ☒ Design Review
- ☐ Development Agreement
- ☐ Final Planned Unit Development
- ☐ Final Plat
- ☐ Lot Line Adjustment
- ☐ Lot Split
- ☐ Planned Unit Development
- ☒ Preliminary Plat
- ☐ Rezone
- ☐ Special Use
- ☐ Temporary Business
- ☐ Vacation
- ☐ Variance

Contact/Applicant Information

Owners of Record: N Star Farm, LLC and Waters Edge Farm, LLC	~~Phone Number:~~
Address: 6152 West Half Moon Lane	E-Mail:
City, State, Zip: Eagle, ID 83616	Fax #:
Applicant ~~(Developer)~~: same	Phone Number:
Address:	E-Mail:
City, State, Zip:	Fax #:
Engineer/Representative: KM Engineering, LLP	Phone Number: 208.639.6939
Address: 9233 West State Street	E-Mail: Kirsti Grabo - kgrabo@kmengllp.com
City, State, Zip: Boise, ID 83714	Fax #: 208.639.6930

Subject Property Information

Site Address: 2030 West Kuna Road	
Site Location (Cross Streets): approx. 1/4 mile west of Ten Mile and Kuna Roads	
Parcel Number (s): S1322438400	
Section, Township, Range: Section 22, T2N, R1W	
Property size : 39.4 acres +/-	
Current land use: Ag	Proposed land use: SFR
Current zoning district: R-6	Proposed zoning district: R-6

Project Description

Project / subdivision name: Madrone Heights

General description of proposed project / request: Preliminary plat for single-family residential subdivision

Type of use proposed (check all that apply):

- [X] Residential single-family detached
- [ ] Commercial
- [ ] Office
- [ ] Industrial
- [ ] Other

Amenities provided with this development (if applicable): open space with soccer fields and walking paths

Residential Project Summary (if applicable)

Are there existing buildings? [X] Yes [ ] No

Please describe the existing buildings: existing residence with ag outbuildings

Any existing buildings to remain? [ ] Yes [X] No

Number of residential units: 206 Number of building lots: 206

Number of common and/or other lots: 27 common + 1 shared driveway lot

Type of dwellings proposed:

- [X] Single-Family
- [ ] Townhouses
- [ ] Duplexes
- [ ] Multi-Family
- [ ] Other

Minimum Square footage of structure (s):

Gross density (DU/acre-total property): 5.2 Net density (DU/acre-excluding roads): 7.3

Percentage of open space provided: 8.6 Acreage of open space: 3.4

Type of open space provided (i.e. landscaping, public, common, etc.): landscaped open space with soccer fields and walking paths

Non-Residential Project Summary (if applicable)

Number of building lots: Other lots:

Gross floor area square footage: Existing (if applicable):

Hours of operation (days & hours): Building height:

Total number of employees: Max. number of employees at one time:

Number and ages of students/children: Seating capacity:

Fencing type, size & location (proposed or existing to remain):

Proposed Parking:

a. Handicapped spaces: Dimensions:
b. Total Parking spaces: Dimensions:
c. Width of driveway aisle:

Proposed Lighting:

Proposed Landscaping (berms, buffers, entrances, parking areas, common areas, etc.):

Applicant's Signature: Date: 5.25.18

City of Kuna
Design Review Application

P.O. Box 13
Kuna, Idaho 83634
(208) 922.5274
Fax: (208) 922.5989
Website: www.kunacity.id.gov

FILE NO.: _____

CROSS REF.: _____

FILES: _____

The City of Kuna has adopted a Design Review process whose purpose is to make Kuna a pleasant and comfortable place to live and work. This Design Review process is based on standards and guidelines found in the Design Review Ordinance No. 2007-02 and the Architecture and Site Design Booklet. Both of these documents can be found online (www.cityofkuna.com) or are picked up in the City's Planning and zoning department is located at 763 W Avalon, Kuna ID. Staff is glad to assist you with your application form.

The Design Review application applies to the following land use actions:

- ▶ Multi- family dwellings (3 or more)
- ▶ Commercial
- ▶ Industrial
- ▶ Institutional
- ▶ Office
- ▶ Common Area
- ▶ Subdivision Signage
- ▶ Proposed Conversions
- ▶ Proposed changes in land use and/or building use or exterior remodeling
- ▶ Exterior restoration, and enlargement or expansion of existing buildings, signs or sites.

Application Submittal Requirements

Applicant Use		Staff Use
X	Date of pre- application meeting : _____ *Note: Pre-Applications are valid for a period of three (3) months.*	☐
X	A complete Design Review Application form *Note: It is the applicant's responsibility to use a current application.*	☐
X	Detailed letter of explanation or justification for the application, describing the project and design elements, and how the project complies with Design Review standards.	☐
X	One (1) Vicinity Map (8 ½" x 11") at 1" = 300' scale (or similar), label the location of the property and adjacent streets.	☐
X	One 8 ½" x 11" colored aerial photo depicting proposed site, street names, and surrounding area within five-hundred feet (500').	☐
X	Copy of Deed; and, if the applicant is not the owner, an **original** notarized statement (affidavit of legal interest) from the owner (and all interested parties) stating the applicant is authorized to submit this application.	☐

☒ Detailed site, landscape, drainage plan, elevation and to scale. *(No smaller than 1"=30', unless otherwise approved.)* ☐
One of each plan (site, landscape, drainage plan and elevations) is required to be submitted in the following plan sizes:

(1) 24" X 36" TO SCALE COPIES
(1) 11" X 17" REDUCTIONS
(1) 8 ½" x 11" REDUCTIONS

☐ Provide a color rendering and material sample board specifically noting where each color and material is to be located on the structure. ☐
Note: Provide photo of the colored rendering and material samples board to City Staff electronically in a JPG or PDF format.

The Applicant is obligated to provide a site plan that graphically portrays the site and includes the following features:

Site Plan

Applicant Use		Staff Use
☒	North Arrow	☐
☒	To scale drawings	☐
☒	Property lines	☐
☒	Name of "Plan Preparer" with contact information	☐
☒	Name of project and date	☐
☒	Existing structures, identify those which are to be relocated or removed	☐
☒	On-site and adjoining streets, alleys, private drives and rights-of-way	☐
☒	Drainage location and method of on-site retention / detention	☐
☐	Location of public restrooms	☐
☒	Existing / proposed utility service and any above-ground utility structures and their location	☐
☒	Location and width of easements, canals and drainage ditches	☐
☐	Location and dimension of off-street parking	☐
☐	Locations and sizes of any loading area, docks, ramps and vehicle storage or service areas	☐
☐	Trash storage areas and exterior mechanical equipment, with proposed method of screening	☐
☐	Sign locations *(a separate sign application must be submitted with this application)*	☐
☐	On-site transportation circulation plan for motor vehicles, pedestrians and bicycles	☐
☒	Locations and uses of ALL open spaces	☐
☒	Locations, types and sizes of sound and visual buffers *(Note: all buffers must be located outside the public right-of-way)*	☐
☐	Parking layout including spaces, driveways, curb cuts, circulation patterns, pedestrian walks and vision triangle	☐
☒	Locations of subdivision lines *(if applicable)*	☐
☒	Illustration that demonstrates adequate sight distance is provided for motor vehicles, pedestrians and bicycles	☐
☒	Location of walls and fences and indication of their height and material of construction	☐
☐	Roofline and foundation plan of building, location on the site	☐
☒	Location and designations of all sidewalks	☐
☒	Location and designation of all rights-of-way and property lines	☐

Landscape and Streetscape Plan

The landscape and streetscape plans need to be drawn by the project architect, professional landscape architect, landscape designer, or qualified nurseryman for development's possessing more than twelve thousand (12,000) square feet of private land. The landscaped and streetscape plans must be colored. The Planning Director or City Forester may require the preparation of a landscape plan for smaller developments by one of the noted individuals if the lot(s) have unique attributes.

Applicant Use		Staff Use
☒	North Arrow	☐
☒	To scale drawings	☐
☒	Boundaries, property lines and dimensions	☐
☒	Name of "Plan Preparer" with contact information	☐
☒	Name of project and date	☐
☒	Type and location of all plant materials and other ground covers. *Please review the City's plant list and rely upon it to identify the site's planting strategy. Include botanical and common name, quantity, spacing and sizes of all proposed landscape materials at the time of planting, and at maturity. A list of acceptable trees is available upon request from City Planning Staff. If there are any questions, please contact the City Forester, Natalie Reeder, at 208.880.0953*	☐
☒	Existing vegetation identified by specific size. Identify those which are proposed to be relocated or removed.	☐
☒	Method of irrigation. *Note: All plant materials, except existing native plants not damaged during construction or xeriscape species shown not to require regular watering, shall be irrigated by underground sprinkler systems set on a timer in order to obtain proper watering duration and ease of maintenance.*	☐
☒	Location, description, materials, and cross-sections of special features, including berming, retaining walls, hedges, fencings, fountains street/pathway furniture *(benches, etc.), etc.*	☐
☐	Sign locations *Note: A separate sign application must be submitted with this application*	☐
☒	Locations and uses for open spaces	☐
☐	Parking layout including spaces, driveways, curb cuts, circulation patterns, pedestrian walks and visian triangle	☐
☒	Illustration that demonstrates adequate sight distance is provided for motor vehicles, pedestrians and bicycles	☐
☒	Location and designations of all sidewalks	☐
☒	Engineered grading and drainage plans: A generalized drainage plan showing direction drainage with proposed on-site retention. Upon submission of building/construction plans for an approved design review application, a detailed site grading and drainage plan, prepared by a registered professional engineer (PE) shall be submitted to the City for review and approval by the City Engineer.	☐

Building Elevations

Applicant Use		Staff Use
☐	Detailed elevation plans of each side of any proposed building(s) or additions(s) *Note: Four (4) elevations to include all sides of development and must be in color*	☐
☐	Identify the elevations as to north, south, east, and west orientation	☐
☐	Colored copies of all proposed building materials and indication where each material and color application is to be located *Note: Submit as 11"x17" reductions*	☐
☐	Screening/treatment of mechanical equipment	☐
☐	Provide a cross-section of the building showing any roof top mechanical units and their roof placement	☐
☐	Detailed elevation plans showing the materials to be used in construction of trash enclosures	☐

Lighting Plan

Applicant Use		Staff Use
☐	Exterior lighting including detained cut sheets and photometric plan (pedestrian, vehicle, security, decoration)	☐
☐	Types and wattage of all light fixtures *Note: The City encaurages use of "dark sky" lighting fixtures*	☐
☐	Placement of all light fixtures shown on elevations and landscaping plans	☐

Roof Plans

Applicant Use		Staff Use
☐	Size and location of all roof top mechanical units	☐

Design Review Application

Applicant: N Star Farm, LLC & Waters Edge Farm, LLC Phone: c/o KM Engineering 208.639.6939

☒ Owner ☐ Representative Fax/Email: 208.639.6930

Applicant's Address: 6152 West Half Moon Lane

Eagle, ID Zip: 83616

Owner: same Phone:

Owner's Address: Email:

Zip:

Represented By: *(if different from above)* KM Engineering, LLP Phone: 208.639.6939

Address: 9233 West State Street Email: kgrabo@kmengllp.com

Boise, ID Zip: 83714

Address of Property: 2030 West Kuna Road

Kuna, ID Zip: 83634

Distance from Major Cross Street: generally located north of Kuna Road west of Ten Mile Road

Street Name(s):

Please check the box that reflects the intent of the application

☐ **BUILDING DESIGN REVIEW**
☒ **SUBDIVISION / COMMON AREA LANDSCAPE**
☐ **DESIGN REVIEW MODIFICATION**
☐ **STAFF LEVEL APPLICATION**

This Design Review application is a request to construct, add or change the following: *(Briefly explain the nature of the request.)*

Common area landscaping for Madrone Heights Subdivision

1. Dimension of Property: +/- 39.4 acres
2. Current Land Use(s): ag
3. What are the land uses of the adjoining properties?
   - North: ag w/residence
   - South: ag across Kuna Road
   - East: ag w/residence
   - West: ag w/residence
4. Is the project intended to be phased, if so what is the phasing time period? yes
   Please explain: phasing will be market driven - see conceptual phasing plan for further details
5. The number and use(s) of all structures: few old buildings - all to be removed - current preliminary plat proposes 206 new single-family residences
6. Building heights: _____ Number of stories: _____

The height and width relationship of new structures shall be compatible and consistent with the architecturol character of the area and proposed use.

Note: The maximum building height for each zoning district is os follows:

L-O: 35'	C-2: 60'	CBD: 80'	M-2: 60'	P: 60'
C-1: 35'	C-3: 60'	M-1: 60'	M-3: 60'	

7. What is the percentage of building space on the lot when compared to the total lot area? _____
8. Exterior building materials & colors: *(Note: This section must be completed in compliance with the City of Kuna Ordinance No. 2007-21A (as amended); found online at (www.cityofkuna.com) under the City Code.*

	MATERIAL	/	COLOR
Roof:		/	

Walls: (State percentage of wall coverage fro each type of building material below for each frontage wall) If there is not adequate space to identify the various building materials and applications, please list them on the attached sheet of this application. Please attach photos to support application types.

% of Wood application:		/	
% EIFS: *(Exterior insulation Finish System)*		/	
% Masonry:		/	
% Face Block:		/	
% Stucco:		/	
& other material(s):		/	
List all other materials:			
Windows/Doors: *(Type of window frames & styles / doors & styles. material)*		/	
Soffits and fascia materiol:		/	
Trim, etc.:		/	

Other: _____ / _____

9. Please identify Mechanical Units: _____
   Type/Height: _____
   Proposed Screening Method: _____
10. Please identify trash enclosure: *(size, location, screening & construction materials)* _____
11. Are there any irrigation ditches/canals on or adjacent to the property? yes
    If yes, what is the name of the irrigation or drainage provider? Indian Creek / Boise Project
12. Fencing: *(Please provide information about new fencing material as well as any exiting fencing material)*
    no existing fencing to remain
    Type: subdivision fencing type TBD - will meet City Codes
    Size: _____
    Location: _____
    (Please note that the City has height limitations of fencing material and requires a fence permit to be obtained prior to installation)
13. Proposed method of On-site Drainage Retention/Detention:
    to be determined with final design - preliminarily showing seepage beds
14. Percentage of Site Devoted to Building Coverage: _____
    % of Site Devoted to Landscaping: *(Including landscaped rights-of-way)* _____ Square Footage: _____
    % of Site that is Hard Surface: *(Paving, driveways, walkways, etc.)* _____ Square Footage: _____
    % of Site Devoted to other uses: _____
    Describe: _____
    % of landscaping within the parking lot (landscaped islands, etc.): _____
15. For details, please provide dimensions of landscaped areas within public rights-of-way:
16. Are there any existing trees of 4" or greater in caliper on the property? *(Please provide the information on the site plans.)*
    If yes, what type, size and the general location? *(The City's goal is to preserve existing tree with greater than a four inch (4") caliper whenever possible):*
    aged trees to be removed
17. Dock Loading Facilities:
    Number of docking facilities and their location: _____
    Method of screening: _____
18. Pedestrian Amenities: *(bike racks, receptacles, drinking fountains, benches, etc.)* public sidewalks along streets and pathways in common areas
19. Setbacks of the proposed building from property lines:

Front _____ -feet Rear _____ -feet Side _____ -feet Side _____ -feet

20. Parking requirements: _____

Total Number of Parking Spaces: _____ Width and Length of Spaces: _____

Total Number of Compact Spaces 8'x17'): _____

21. Is any portion of the property subject to flooding conditions? Yes _____ No x

IF THE PLANNING DIRECTOR OR DESIGNEE, THE DESIGN REVIEW BOARD AND/OR THE CITY COUNCIL DETERMINE THAT ADDITIONAL AND/OR REVISED INFORMATION IS NEEDED, AND/OR IF OTHER UNFORESEEN CIRCUMSTANCES ARISE, ANY DATES OUTLINED FOR PROCESSING MAY BE RECHEDULED BY THE CITY. APPLICANT/REPRESENTATIVE MUST ATTED THE DESIGN REVIEW BOARD MEETING/PLANNING AND ZONING MEETINGS.

The Ada County Highway District may also conduct public meetings regarding this application. IF you have questions about the meeting date or the traffic that this development may generate or the impact of that traffic on streets in the area, please contact the Ada County Highway District at 208.387.6170. In order to expedite you request, please have ready the file number indicated in this notice.

Signature of Applicant _____ Date 5-25-18

City staff comments:

_____

_____

Signature of receipt by City Staff _____ Date _____

FOR ADDITIONAL INFORMATION:

(Please list page number and item in reference)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

W. PENSTEMON ST.
W. CASCARA ST.
W. VIBURNUM ST.
W. TROUT LILY ST.
W. PARK ST.
W. PARK ST.
KUNA ROAD
N. TIDEBERRY AVE.
N. COLTSFOOT AVE.
N. MADRONE AVE.
N. MEADOWSWEET AVE.
N. CRANESBILL AVE.
N. BEADLILY AVE.
N. TIDEBERRY AVE.
N. COLTSFOOT AVE.
N. MADRONE AVE.
N. MEADOWSWEET AVE.
N. CRANESBILL AVE.
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
BLOCK 7
BLOCK 8
BLOCK 9
BLOCK 10
BLOCK 11
BLOCK 12
BLOCK 13

SCHEDULE

	148,023	LANDSCAPE BUFFERS AND OPEN SPACE
	206	BUILDABLE LOTS
	336	DECIDUOUS TREES VARIETY AND CLASS VARIES. SEE LANDSCAPE PLAN
	50	EVERGREEN TREES VARIETY VARIES. SEE LANDSCAPE PLAN

REQUIRED LANDSCAPE CALCULATIONS

REQUIREMENTS	CALCULATION	PROVIDED
1 TREE PER LOT	206 BUILDABLE LOTS = 206 TREES REQUIRED	206
1 TREE PER 1000 SF OF OPEN SPACE	2.4 ACRES = +/- 104390 SF/1000= 104 TREES	104
FRONTAGE LANDSCAPE REQUIREMENTS		
1 DECIDUOUS TREES PER 100 LF OF FRONTAGE	26 DECIDUOUS TREES REQUIRED	26
2 EVERGREEN TREES PER 100 LF OF FRONTAGE	50 EVERGREEN TREES REQUIRED	50
12 SHRUBS PER 100 LF OF FRONTAGE		
TOTALS	386 TREES REQUIRED	386

CONTACT INFORMATION

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KM ENGINEERING, LLP
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE: (208) 639-6939
FAX: (208) 639-6930
CONTACT: KEVIN P. MCCARTHY, P.E.
EMAIL: kevin@kmengllp.com

OWNER
NORTH STAR FARM, LLC &
WATERS EDGE FARM LLC
6152 WEST HALF MOON LANE
EAGLE, IDAHO 83616
CONTACT: TIM ECK

N

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Plan Scale

PRELIMINARY NOT FOR CONSTRUCTION

MADRONE HEIGHTS SUBDIVISION
LANDSCAPE RENDERING
KUNA, IDAHO

REVISIONS

NO.	ITEM	DATE

km ENGINEERING
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

STATE OF IDAHO
LICENSED LANDSCAPE ARCHITECT
LA-16527
5/25/18

DATE: 5/25/18
PROJECT: 17-054
SHEET NO.
PPL2.0

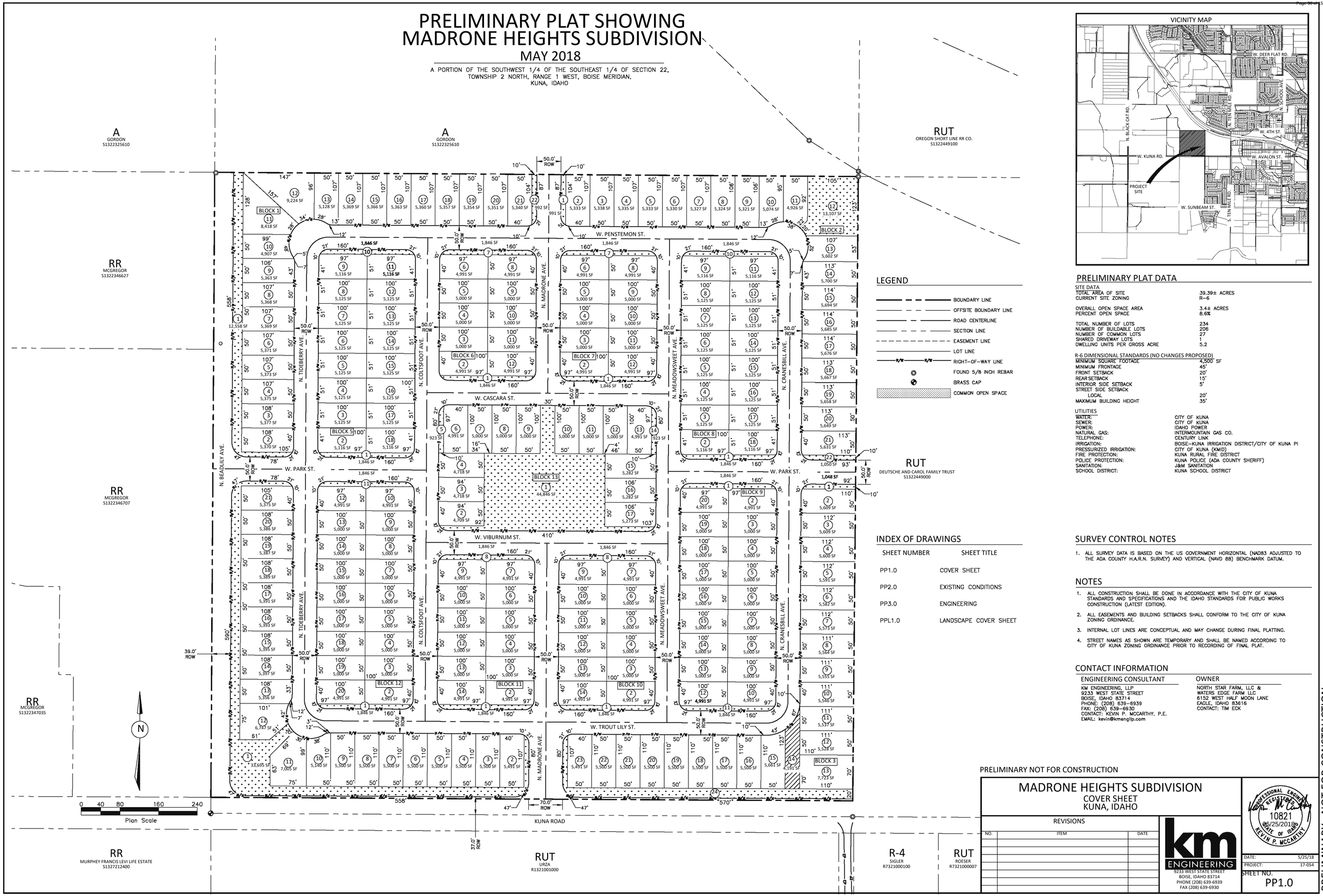
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PRELIMINARY PLAT SHOWING
MADRONE HEIGHTS SUBDIVISION

MAY 2018

A PORTION OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 22,
TOWNSHIP 2 NORTH, RANGE 1 WEST, BOISE MERIDIAN,
KUNA, IDAHO



VICINITY MAP

LEGEND

- BOUNDARY LINE
- OFFSITE BOUNDARY LINE
- ROAD CENTERLINE
- SECTION LINE
- EASEMENT LINE
- LOT LINE
- RIGHT-OF-WAY LINE
- FOUND 5/8 INCH REBAR
- BRASS CAP
- COMMON OPEN SPACE

PRELIMINARY PLAT DATA

SITE DATA	
TOTAL AREA OF SITE	39.39± ACRES
CURRENT SITE ZONING	R-6
OVERALL OPEN SPACE AREA	3.4± ACRES
PERCENT OPEN SPACE	8.6%
TOTAL NUMBER OF LOTS	234
NUMBER OF BUILDABLE LOTS	206
NUMBER OF COMMON LOTS	27
SHARED DRIVEWAY LOTS	1
DWELLING UNITS PER GROSS ACRE	5.2
R-6 DIMENSIONAL STANDARDS (NO CHANGES PROPOSED)	
MINIMUM SQUARE FOOTAGE	4,500 SF
MINIMUM FRONTAGE	45'
FRONT SETBACK	20'
REAR SETBACK	15'
INTERIOR SIDE SETBACK	5'
STREET SIDE SETBACK	
LOCAL	20'
MAXIMUM BUILDING HEIGHT	35'

UTILITIES	
WATER:	CITY OF KUNA
SEWER:	CITY OF KUNA
POWER:	IDAHO POWER
NATURAL GAS:	INTERMOUNTAIN GAS CO.
TELEPHONE:	CENTURY LINK
IRRIGATION:	BOISE-KUNA IRRIGATION DISTRICT/CITY OF KUNA PI
PRESSURIZED IRRIGATION:	CITY OF KUNA (KMID)
FIRE PROTECTION:	KUNA RURAL FIRE DISTRICT
POLICE PROTECTION:	KUNA POLICE (ADA COUNTY SHERIFF)
SANITATION:	J&M SANITATION
SCHOOL DISTRICT:	KUNA SCHOOL DISTRICT

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
PP1.0	COVER SHEET
PP2.0	EXISTING CONDITIONS
PP3.0	ENGINEERING
PPL1.0	LANDSCAPE COVER SHEET

SURVEY CONTROL NOTES

1. ALL SURVEY DATA IS BASED ON THE US GOVERNMENT HORIZONTAL (NAD83 ADJUSTED TO THE ADA COUNTY H.A.R.N. SURVEY) AND VERTICAL (NAVD 88) BENCHMARK DATUM.

NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CITY OF KUNA STANDARDS AND SPECIFICATIONS AND THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
2. ALL EASEMENTS AND BUILDING SETBACKS SHALL CONFORM TO THE CITY OF KUNA ZONING ORDINANCE.
3. INTERNAL LOT LINES ARE CONCEPTUAL AND MAY CHANGE DURING FINAL PLATTING.
4. STREET NAMES AS SHOWN ARE TEMPORARY AND SHALL BE NAMED ACCORDING TO CITY OF KUNA ZONING ORDINANCE PRIOR TO RECORDING OF FINAL PLAT.

CONTACT INFORMATION

ENGINEERING CONSULTANT

KM ENGINEERING, LLP
9233 WEST STATE STREET
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PHONE: (208) 639-6939
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CONTACT: KEVIN P. MCCARTHY, P.E.
EMAIL: kevin@kmengllp.com

OWNER

NORTH STAR FARM, LLC &
WATERS EDGE FARM LLC
6152 WEST HALF MOON LANE
EAGLE, IDAHO 83616
CONTACT: TIM ECK

PRELIMINARY NOT FOR CONSTRUCTION

MADRONE HEIGHTS SUBDIVISION
COVER SHEET
KUNA, IDAHO

REVISIONS

NO.	ITEM	DATE

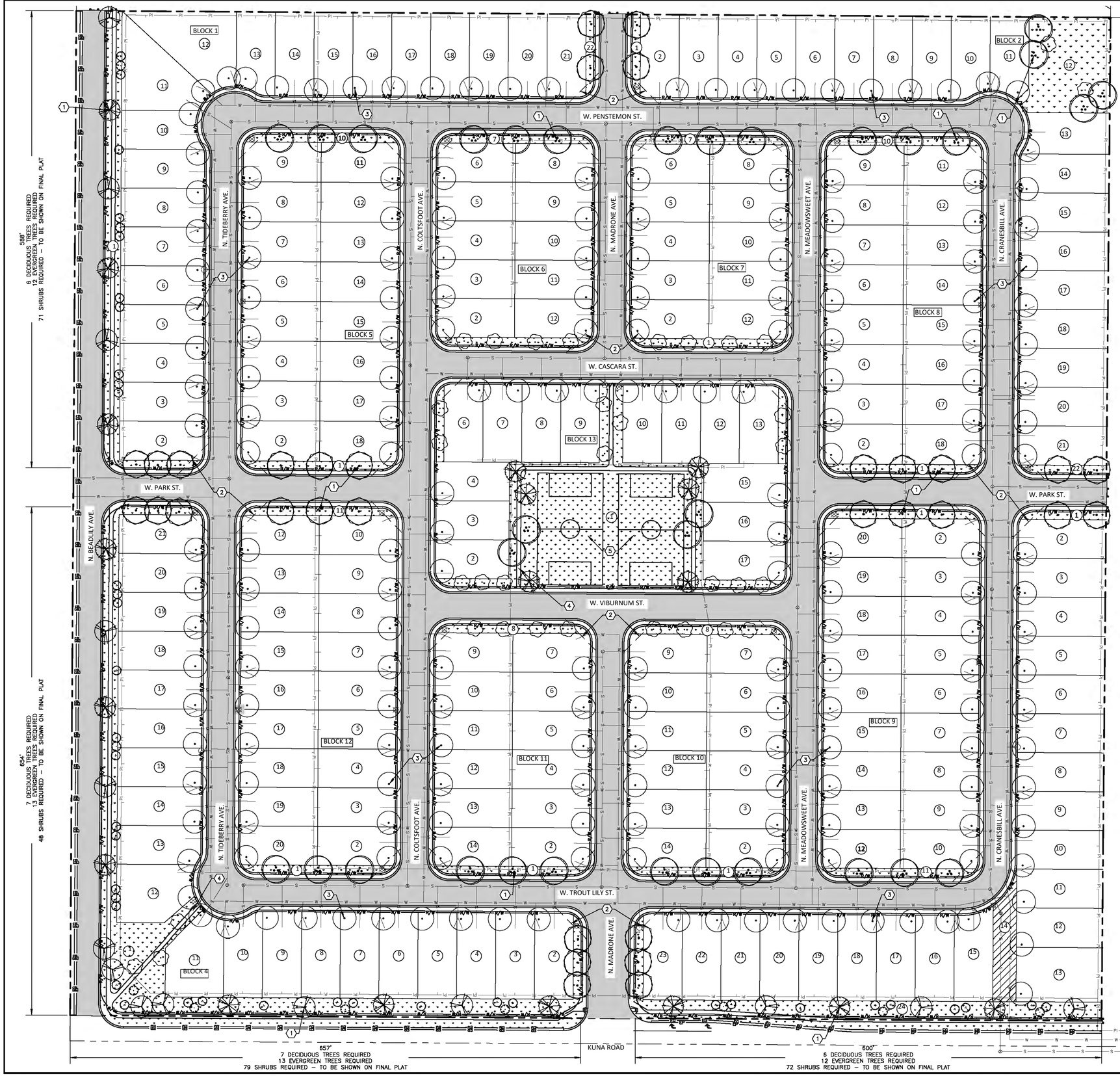
km ENGINEERING
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BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

PROFESSIONAL ENGINEER — REGISTERED — 10821 — 05/25/2018 — STATE OF IDAHO — KEVIN P. MCCARTHY

DATE: 5/25/18
PROJECT: 17-054
SHEET NO. PP1.0

PRELIMINARY - NOT FOR CONSTRUCTION

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PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	SIZE	MATURE HXW	CLASS
	18	ACER PLATANOIDES `CRIMSON KING` CRIMSON KING MAPLE	2" CAL. B&B	35'X30'	CLASS II
	32	FRAXINUS AMERICANA `AUTUMN PURPLE` AUTUMN PURPLE ASH	2" CAL. B&B	45'X45'	CLASS II
	14	GLEDITSIA TRIACANTHOS `SKYLINE` SKYLINE HONEY LOCUST	2" CAL. B&B	35'X30'	CLASS II
	32	LIQUIDAMBAR STYRACIFLUA `MORAINE` MORAINE SWEET GUM	2" CAL. B&B	55'X45'	CLASS II
	34	PYRUS CALLERYANA `GLEN'S FORM` TM CHANTICLEER FLOWING PEAR	2" CAL. B&B	35'X20'	CLASS I

EVERGREEN TREES	QTY	BOTANICAL NAME	SIZE	MATURE HXW	CLASS
	37	PICEA PUNGENS `HOOPSII` HOOPSI BLUE SPRUCE	6'-8' B&B	35'X15'	
	13	PINUS FLEXILIS `VANDERWOLF'S PYRAMID` VANDERWOLF'S PYRAMID PINE	10'-12' B&B	25'X15'	

OTHER SYMBOLS	QTY	BOTANICAL NAME	SIZE	MATURE HXW	CLASS
	206	INDIVIDUAL LOT TREE SCHEMATIC LOCATION PER KUNA CITY CODE 6-4-2V INSTALL ONE TREE PER LOT. INDIVIDUAL LOT TREES SHALL BE INSTALLED BY THE INDIVIDUAL HOME BUILDER IN CONJUNCTION WITH THE INDIVIDUAL LOT DEVELOPMENT. THESE TREES ARE NOT THE RESPONSIBILITY OF THE DEVELOPER.	2" CAL. B&B		CLASS II

GROUND COVERS	QTY	BOTANICAL NAME	CONT.
	154,043 SF	TURF SOD RHIZOMATOUS RHIZOMATOUS TALL FESCUE	SOD

GENERAL LANDSCAPE NOTES

1. CONTRACTOR SHALL LOCATE AND IDENTIFY EXISTING UNDERGROUND AND OVERHEAD UTILITIES WITHIN CONTRACT WORK AREAS PRIOR TO CONSTRUCTION. CONTACT DIG LINE, INC. @ 1.800.342.1585. PROVIDE ADEQUATE MEANS OF PROTECTION OF UTILITIES AND SERVICES DESIGNATED TO REMAIN. REPAIR UTILITIES DAMAGED DURING SITE WORK OPERATIONS AT CONTRACTOR'S EXPENSE.
2. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN NURSERYMAN STANDARDS FOR TYPE AND SIZE SHOWN.
3. ALL PLANTED BEDS TO RECEIVE A MIN. 3" DEPTH ORGANIC MULCH, SUCH AS BARK, SOIL AID, PERMABARK, OR SIMILAR PRODUCTS. USE OF MULCH OR ROCK AS THE ONLY GROUND COVER IN REQUIRED PLANTING ARES IS PROHIBITED. IF ROCK MULCH IS USED, INSTALL A PERMEABLE FABRIC WEED BARRIER UNDER ROCK MULCH. IMPERMEABLE PLASTIC WEED BARRIERS ARE PROHIBITED.
4. FENCING WITHIN SUBDIVISION, ALONG SIDE AND REAR LOT LINES SHALL BE INSTALLED BY BUILDER/HOMEOWNER IN CONJUNCTION WITH INDIVIDUAL LOT DEVELOPMENT AND SHALL COMPLY WITH THE STANDARDS ESTABLISHED IN THE SUBDIVISION'S CC&RS.
5. REQUIRED SUBDIVISION LOT TREES SHALL BE INSTALLED BY THE BUILDER/ HOMEOWNER IN CONJUNCTION WITH INDIVIDUAL LOT DEVELOPMENT.
6. INSTALL 3' RING WITH BARE EARTH SURFACE AT ALL TREES WITHIN TURF AREAS
7. TREES SHALL NOT BE PLANTED WITHIN THE 10' CLEAR ZONE OF ALL STORM DRAIN PIPE, STRUCTURES, OR FACILITIES.
8. SEEPAGE BEDS MUST BE PROTECTED FROM ANY AND ALL CONTAMINATION DURING THE CONSTRUCTION AND INSTALLATION OF THE LANDSCAPE IRRIGATION SYSTEM.

GENERAL IRRIGATION NOTES

1. ALL PLANT MATERIALS TO BE WATERED BY THE DEVELOPMENT OR SUBDIVISION PRESSURIZED IRRIGATION SYSTEM. IRRIGATION OF COMMON AREAS SHALL BE VIA THE SUBDIVISION'S PRESSURIZED IRRIGATION SYSTEM. IRRIGATION OF INDIVIDUAL LOTS AND LANDSCAPING ALONG THE FRONTAGE OF PRIVATE LOTS SHALL BE VIA METERED, POTABLE WATER AND THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS.
2. COVERAGE; THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE ONE HUNDRED PERCENT (100%) COVERAGE WITH HEAD TO HEAD SPACING OR TRIANGULAR SPACING AS APPROPRIATE.
3. MATCHED PRECIPITATION RATES: SPRINKLER HEADS SHALL HAVE MATCHED PRECIPITATION RATES WITHIN EACH CONTROL VALVE.
4. IRRIGATION DISTRICTS: SPRINKLER HEADS IRRIGATING LAWN OR OTHER HIGH WATER DEMAND AREAS SHALL BE CIRCUITED SO THAT THEY ARE ON THE SEPARATE ZONE OR DISTRICT FROM THOSE IRRIGATING TREES, SHRUBS, OR OTHER REDUCED WATER DEMAND AREAS.
5. OVERSPRAY: SPRINKLER HEADS SHALL BE ADJUSTED TO REDUCE OVERSPRAY ONTO IMPERVIOUS SURFACES SUCH AS STREETS, SIDEWALKS, DRIVEWAYS, AND PARKING AREAS.

KEY NOTES (#)

1. INSTALL 3' TREE RING, WITH BARE EARTH SURFACE AT ALL TREES WITHIN TURF AREAS.
2. 40' CLEAR VISION TRIANGLE. NO TREES SHALL BE PLANTED WITHIN A CLEAR VISION TRIANGLE. THE MAXIMUM HEIGHT OF ANY VEGETATIVE GROUND COVER AT MATURITY WITHIN THE CLEAR VISION TRIANGLE SHALL BE 3' FROM THE ADJACENT STREET GRADE.
3. SCHEMATIC LOCATION OF INDIVIDUAL LOT TREES. SEE SYMBOL LEGEND. TREES TO BE PLANTED IN CONJUNCTION WITH INDIVIDUAL LOT LANDSCAPING BY THE HOME BUILDING AND IN CONJUNCTION WITH THE INDIVIDUAL LOT DEVELOPMENT. THESE TREES ARE NOT THE RESPONSIBILITY OF THE DEVELOPER.
4. PEDESTRIAN PATHWAY
5. SCHEMATIC SOCCER FIELDS

REQUIRED LANDSCAPE CALCULATIONS

REQUIREMENTS	CALCULATION	PROVIDED
LOT REQUIREMENTS 1 TREE PER LOT	206 BUILDABLE LOTS = 206 TREES REQUIRED	206
1 TREE PER 1000 SF OF OPEN SPACE	2.4 ACRES = +/– 104390 SF/1000= 104 TREES	104
FRONTAGE LANDSCAPE REQUIREMENTS 1 DECIDUOUS TREES PER 100 LF OF FRONTAGE 2 EVERGREEN TREES PER 100 LF OF FRONTAGE 12 SHRUBS PER 100 LF OF FRONTAGE	26 DECIDUOUS TREES REQUIRED 50 EVERGREEN TREES REQUIRED	26 50
TOTALS	385 TREES REQUIRED	385

CONTACT INFORMATION

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6152 WEST HALF MOON LANE
EAGLE, IDAHO 83616
CONTACT: TIM ECK

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Plan Scale

PRELIMINARY NOT FOR CONSTRUCTION

MADRONE HEIGHTS SUBDIVISION
LANDSCAPE COVER SHEET
KUNA, IDAHO

REVISIONS

NO.	ITEM	DATE

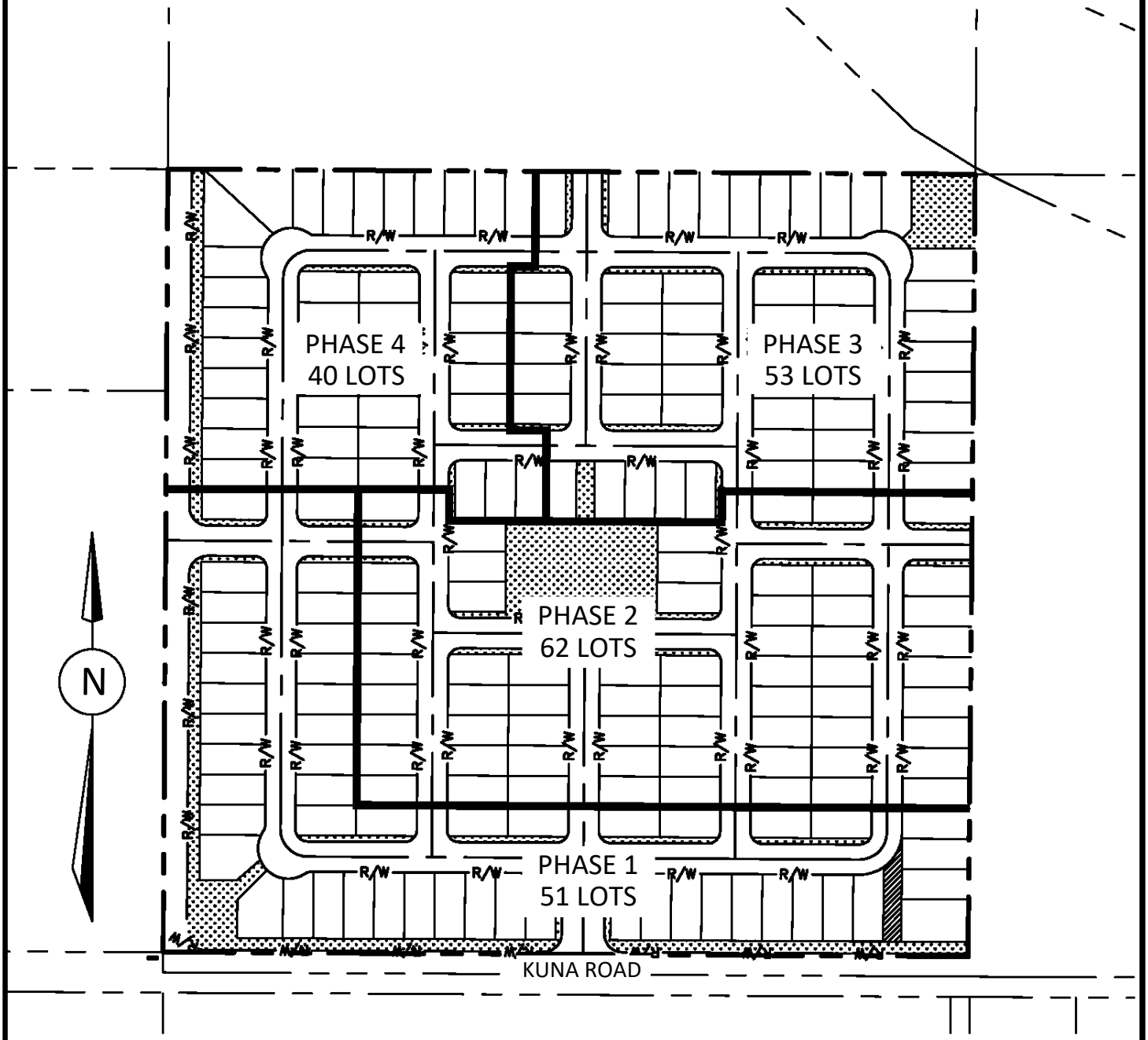
km ENGINEERING
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PHONE (208) 639-6939
FAX (208) 639-6930

STATE OF IDAHO
LICENSED LANDSCAPE ARCHITECT
LA-16577
5/25/18

DATE: 5/25/18
PROJECT: 17-054
SHEET NO: PPL1.0

PRELIMINARY - NOT FOR CONSTRUCTION

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km
ENGINEERING
ENGINEERS . SURVEYORS . PLANNERS
9233 WEST STATE STREET
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Plan Scale

MADRONE HEIGHTS SUBDIVISION
KUNA, IDAHO

CONCEPTUAL PHASING PLAN
SUBJECT TO CHANGE

DATE:	04/25/18
PROJECT:	17-054
SHEET:	1 OF 1

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CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.KunaID.gov

MICHAEL L. BORZICK
GIS MAPPING

Telephone (208) 208-287-1726; Fax (208) 287-1731
Email: mborzick@kunaID.gov

MEMORANDUM

TO: Director of Kuna Planning and Zoning

FROM: Bob Bachman ~ Public Works Director
Paul Stevens ~ City Engineer
Michael L. Borzick ~ GIS Manager/Plan Review

RE: The Urza 40 Subdivision

DATE: January 4, 2018

We have reviewed the request of the above applicant. It is noted that specific development plans are not provided except those implied as allowed or permitted in a residential subdivision. Our recommendation is to proceed with this Project and address any issues and conditions raised below in connection with this application during plan review. Accordingly, we have provided the following comments:

1. **Sanitary Sewer Needs**
   a) The City requires connection to all city utilities.
   b) Wastewater from the applicant's property will be treated at the South Treatment Plant, which has sufficient capacity to serve this site at this time. The nearest point of connection for the Urza Subdivision property is located ½ mile to the East of said property within a 15" sewer main that discharges into the Ten Mile Lift Station. When connecting to the sewer system, the applicant shall abide by all relevant inspection, sewer reimbursement policies and agreements and all relevant connection fees. One (1) unit is responsible for one (1) sewer connection fee. 90 units – 90 connection fees.
   c) The Ten Mile Lift Station is "over-committed" for future sewer connections. At this time, the City opines that this project ***will*** over-burden the Lift Station and there may be a delay in the connections to the City sewer while we are working on a solution.
   d) Applicant must conform to City of Kuna Sewer Master Plan.
   e) For assistance in locating existing facilities and understanding issues associated with connection, please contact the GIS Manager at 208-287-1726.

2. Potable Water Needs

a) The applicant's property is currently vacant and it is required that the applicant connect to City facilities at the commencement of development even though water is greater than 300' away.
b) The nearest point of connection for this property is in a 12-inch water main 1/4 mile to the east of said property. When connecting to the water system, the applicant will need to abide by any relevant water reimbursement policies and agreements and any relevant connection fees.
c) Improvements necessary to provide adequate fire protection as required by Kuna Fire District will be required of the development.
d) Applicant must conform to City of Kuna Water Master Plan.
e) For assistance in locating existing facilities, please contact the GIS Manager at 208-287-1726.

3. Pressure and Gravity Irrigation

a) There is no pressurized irrigation available to this property however the applicant would be responsible for the "to and through" policy and must conform to City of Kuna Irrigation Master Plan which entails extending a 12" PI main along the section line road of Avalon St and along the mid mile alignment on the western boundary.
b) Provide adequate request(s) and legal descriptions for annexing and pooling the irrigation water in a phased approach.
c) For assistance in locating existing facilities, please contact the GIS Manager at 208-287-1726.

4. Grading and Storm Drainage

The following is not required for an Annexation or a Re-zone but will be required when alteration of surface features is proposed (such as grading or paving) in connection with future land use applications:

a) Please provide a grading and drainage plan which supports and maintains all upstream drainage rights ***and all downstream irrigation delivery rights as they presently exist for this property***.
b) Please provide a storm water disposal plan acceptable to the City Engineer which accounts for the increased storm water drainage. Please provide detail drawings of drainage facilities for review. The city relies on the ACHD Storm water policy as guidance for design.
c) Any increase in quantity or rate of runoff or decrease in quality of runoff from the site compared to historical conditions must be detained, treated and released at rates no greater than historical amounts.
d) If offsite disposal of storm water in excess of historical rates or conditions is proposed, or disposed at locations different than provided historically, the approval of the affected entities is required.

5. General

a) Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties.
b) What is the intent for the existing buildings, well(s) and septic tank(s)
c) State the vertical datum used for elevations on all drawings.
d) Provide engineering certification on all final engineering drawings.

e) Inspection Fees

An inspection fee will be required for City inspection of the construction of any **public** water, sewer and irrigation facility associated with this development. The developer will still require a qualified responsible engineer to do sufficient inspection to justly certify to DEQ the project was completed in accordance with approved plans and specifications and to provide accurate as-built drawings to the City. The developer's engineer and the City's inspector are permitted to coordinate inspections as much as

possible. The current inspection fee is $1.00 per lineal foot of sewer, water and pressure irrigation pipe and payment is due and payable prior to City's approval of final construction plans.

f) Right-of-Way

The following conditions are related to these classified streets and future quarter line classified streets and apply at the time of additional development:

a) It is recommended new and existing approaches onto the classified streets comply with ACHD approach policies.
b) It is recommended that sidewalk, curb and gutter, street widening and any related storm drainage facilities, consistent with city code and policies, are provided at the time of land-use change or re-development.

g) As-Built Drawings

As-built drawings are required at the conclusion of any public facility construction project and are the responsibility of the developer's engineer. The city may help track changes, but will not be responsible for the finished product. As-built drawings will be required before occupancy or final plat approval is granted.

h) Property Description

a) The applicant provided a metes and bounds property description of the subject parcel.

i) Recommendation

Public Works recommends this property be zoned no more than R-4 or less due to the real capacity issues at the Ten Mile Lift Station. We are working on several solutions to increase the capacity issues within the Ten Mile LS, however these solutions can only be slowly implemented due to budget restraints/cycles and one of the "easiest" options may require putting an older outdated force main into service which is not recommended by staff because of the issues that are associated with that force main.

We look forward to working with you on this project. If we may be of further assistance, feel free to contact me at 208-287-1726.

Sincerely,

Michael L Borzick

Michael L Borzick
GIS Manager

Project/File: **Madrone Heights/ KPP18-0008/ 18-02-S**
This is a preliminary plat application to allow for the development of 206 single family building lots and 27 common lots on approximately 39 acres.

Lead Agency: City of Kuna

Site address: 2030 W. Kuna Road

Staff Approval: September 6, 2018

Applicant: Tim Eck
Star Farm, LLC
6152 W. Half Moon Lane
Eagle, ID 83616

Representative: Kirsti Grabo
KM Engineering
9233 W. State Street
Boise, ID 83714

Staff Contact: Mindy Wallace, AICP
Phone: 387-6178
E-mail: mwallace@achdidaho.org

A. Findings of Fact

1. **Description of Application:** This is a preliminary plat application to allow for the development of 206 single family building lots and 27 common lots on approximately 39 acres.

   The applicant's proposal is consistent with the R-6 residential zoning of the site.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Agricultural	A
South	Rural urban transitional	RUT
East	Rural urban transitional	RUT
West	Rural residential	RR

3. **Site History:** ACHD has not previously reviewed this site for a development application.
4. **Transit:** Transit services are not available to serve this site.
5. **New Center Lane Miles:** The proposed development includes 0.8 centerline miles of new public road.

6. **Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time.

7. **Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**

   There are no roadways, bridges or intersections in the general vicinity of the project that are in the Integrated Five Year Work Plan (IFYWP) or the District's Capital Improvement Plan (CIP).

B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 2,013 vehicle trips per day; 202 additional vehicle trips per hour in the PM peak hour, based on the traffic impact study.

2. **Traffic Impact Study**

   Kittelson & Associates prepared a traffic impact study for the proposed Madrone Heights Subdivision. The executive summary of the findings **as** presented by Consulting Firm can be found as attachment 3. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices, and may have additional requirements beyond what is noted in the summary.

   Staff Comments/Recommendations: The traffic study notes that all study intersections and roadway segments will operate at an acceptable level of service under existing conditions and under total traffic conditions in 2022.

   The traffic impact study recommends a posted speed reduction for Kuna Road between Yankee Rock Avenue and Black Cat Road as a potential mitigation alternative to constructing right turn lanes on Kuna Road at Black Cat Road and at the south site access (Madrone Avenue).

   ACHD collected radar speed data for this segment on August 9, 2018 and found that the existing 85th percentile speed is 56 mph. The construction of the proposed development is not likely to decrease vehicle speeds enough to warrant a reduction of the posted speed limit to 35 or 40 mph, as recommend in the study. Additional development may lead to reduced speeds and an extension to the west of the 35 mph speed zone that currently begins at Yankee Rock Avenue, but right turn lanes will be warranted due to an increase in volume on Kuna Road associated with the additional development. Therefore, staff recommends the construction of a westbound right turn at the Kuna Road/Black Cat Road intersection and the construction of a right turn lane on Kuna Road at Madrone Avenue.

   The turn lane analysis worksheets show that that the warrant is met for an eastbound left-turn lane under total traffic conditions in 2022 in the PM Peak hour at the South Access (Madrone Avenue) and Kuna Road intersection, however, the TIS states that the left-turn warrant is not met for either peak hour. Based on staff's evaluation, an eastbound left turn lane is warranted at this location.

   The TIS also lists potential four-way stop control at the intersection of Kuna Road and Black Cat Road as a potential mitigation alternative to constructing a westbound right turn lane at the intersection. The existing crash data and anticipated future volumes at the intersection do not meet warrants for four-way stop control.

3. Condition of Area Roadways
Traffic Count is based on Vehicles per hour (VPH)

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
Kuna Road	1,320-feet	Minor Arterial	291	Better than "E"

* Acceptable level of service for a two-lane minor arterial is "E" (575 VPH).

4. Average Daily Traffic Count (VDT)
Average daily traffic counts are based on ACHD's most current traffic counts.

- The average daily traffic count for Kuna Road west of Ten Mile Road was 5,240 on 3/21/2018.

C. Findings for Consideration

1. Kuna Road

a. Existing Conditions: Kuna Road is improved with 2-travel lanes, and no curb, gutter or sidewalk abutting the site. There is 66-feet of right-of-way for Kuna Road (33-feet from centerline).

b. Policy:
Arterial Roadway Policy: District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Master Street Map and Typology Policy: District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

Street Section and Right-of Way Width Policy: District Policy 7205.2.1 & 7205.5.2 states that the standard 3-lane street section shall be 46-feet (back-of-curb to back-of-curb) within 70 feet of right-of-way. This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Right-of-Way Dedication: District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

Sidewalk Policy: District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Frontage Improvements Policy: District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Arterial Road is designated in the MSM as a Residential Arterial with 3-lanes and on-street bike lanes, a 46-foot street section within 74-feet of right-of-way.

c. Applicant Proposal: The applicant has proposed to dedicate right-of-way to total 37-feet from the centerline of Kuna Road abutting the site. The applicant has proposed to widen the pavement on Kuna Road to 17-feet from centerline with 3-foot wide gravel shoulders and 5-foot wide detached concrete sidewalks.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed. The applicant should be required to provide a permanent right-of-way easement for detached sidewalk located outside of the dedicated right-of-way.

No compensation will be provided for right-of-way on Kuna Road, as the roadway is not listed as impact fee eligible in the Capital Improvements Plan.

As recommended in the traffic impact study, construct a dedicated right turn lane and a center left turn lane on Kuna Road at the Madrone Avenue intersection when Madrone Avenue is constructed.

2. Mid-Mile Collector

a. Existing Conditions: There are no mid-mile collector roadways adjacent to or within the site.

b. Policy:

Collector Street Policy: District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

Master Street Map and Typologies Policy: District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

Street Section and Right-of-Way Policy: District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Residential Collector Policy: District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and

taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. A new collector roadway was identified on the MSM with the street typology of Residential Collector. The new collector roadway should be located at the half mile between Black Cat and Ten Mile Roads and should extend from Kuna Road north stubbing to the north property line. The Residential Collector typology as depicted in the Livable Street Design Guide recommends a 36-lane roadway with bike lanes, a 36-foot street section within 54-feet of right-of-way.

c. Applicant Proposal: The applicant has proposed to construct ½ of a mid-mile collector, Beadlily Avenue, abutting the site's west property line. The roadway is proposed to be constructed as a ½ of a 36-foot collector roadway, plus 12-additional feet of pavement to total 30-feet, with vertical curb, gutter, an 8-foot wide planter strip, and 5-foot wide detached concrete sidewalks abutting the site with a gravel shoulder and barrow ditch on the west side of the roadway.

These improvements are proposed to be constructed within 38-feet of right-of-way, with the planter strip and detached sidewalk located outside of the right-of-way in an easement.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed. If the sidewalks are detached then the right-of-way may extend from the barrow ditch to 2-feet behind the back of curb on the south side of the roadway. Provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.

The construction of Beadlily Avenue north of Park Street will be evaluated with the final plat necessitating the improvements. If neighboring parcels have developed, or will likely develop, then the road should be constructed to the north property line, as proposed. If development hasn't occurred then Staff recommends that the right-of-way for Beadlily Avenue extend to the site's north property line, but that the improvements terminate at the Park Street intersection and that the applicant provide a road trust deposit for the future construction of the roadway.

The applicant should be required to install a sign at the terminus of Beadlily Avenue Street which states that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."*

If Beadliliy Avenue is constructed to the north property line, staff recommends that lieu of constructing a temporary turnaround at the terminus of the Beadlily Avenue, that a barricade be installed on the north side of Park Street with a sign that states that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND*

WIDENDED IN THE FUTURE.". Staff's recommendation is due to the fact that Beadlily is a collector roadway with no front-on housing and no direct lot access, there will be fencing and a 20-foot wide landscape buffer between the roadway and the building lots, and because there is no direct lot access emergency services will not need to turnaround at the terminus of the stub street, as the homes will be access from local streets within the development.

3. Internal Local Street

a. Existing Conditions: There are no local streets within the site.

b. Policy:

Local Roadway Policy: District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

Standard Urban Local Street—33-foot Street Section and Right-of-way Policy: District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.
For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

Sidewalk Policy: District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

c. Applicant's Proposal: The applicant has proposed to construct the internal local streets as 36-foot wide street sections with rolled curb, gutter, and 5-foot wide attached concrete sidewalks within 50-feet of right-of-way.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed.

4. Roadway Offsets

a. Existing Conditions: There are no roadways within the site.

b. Policy:

Local Street Intersection Spacing on Minor Arterials: District policy 7205.4.3 states that new local streets should not typically intersect arterials. Local streets should typically intersect collectors. If it is necessary, as determined by ACHD, for a local street to intersect an arterial, the minimum allowable offset shall be 660-feet as measured from all other existing roadways as identified in Table 1a (7205.4.6).

Collector Offset Policy: District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting minor arterials is one half-mile.

Local Offset Policy: District policy 7206.4.5, requires local roadways to align or offset a minimum of 330-feet from a collector roadway (measured centerline to centerline).

District policy 7207.4.2, requires local roadways to align or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

c. Applicant's Proposal: The applicant has proposed to construct 2 roadways to intersect Kuna Road. Madrone Avenue, located approximately 640-feet west of the east property line and Beadlily Avenue, located at the half mile between Ten Mile and Black Cat Roads.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy is consistent with the MSM and should be approved, as proposed.

5. Stub Streets

a. Existing Conditions: There are no stub streets to or from the site.

b. Policy:

Stub Street Policy: District policies 7206.2.4 and 7207.2.4 state that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7206.2.5.4 and 7207.2.5.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE." or "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

Temporary Dead End Streets Policy: District policies 7206.2.4 and 7207.2.4 requires that the design and construction for cul-de-sac streets shall apply to temporary dead end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

c. Applicant Proposal: The applicant has proposed to construct 1 stub street to the north, Madrone Avenue, located approximately 640-feet west of the east property line.

The applicant has proposed to construct 1 stub street to the east, Park Street, located approximately 670-feet north of the south property line.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed. The applicant should be required to install a sign at the terminus of each stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

6. Tree Planters

Tree Planter Policy: Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

7. Landscaping

Landscaping Policy: A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

8. Other Access

Kuna Road is classified as a minor arterial roadway. Beadlily Avenue is classified as a collector roadway. Direct lot access is prohibited to these roadways and should be noted on the final plat.

D. Site Specific Conditions of Approval

1. Construct a westbound right turn on Kuna Road at the Kuna Road/Black Cat Road intersection.

2. Dedicate right-of-way to total 37-feet from the centerline of Kuna Road abutting the site. No compensation will be provided for right-of-way dedication.

3. Widen the pavement on Kuna Road to 17-feet from centerline with 3-foot wide gravel shoulders and 5-foot wide detached concrete sidewalks, as proposed. Provide a permanent right-of-way easement for detached sidewalk located outside of the dedicated right-of-way.

4. Construct a dedicated right turn lane and a center left turn lane on Kuna Road at the Madrone Avenue intersection when Madrone Avenue is constructed.

5. Construct Beadlily Avenue to intersect Kuna Road at the half mile between Black Cat and Ten Mile Road, as proposed.

6. Construct Beadlily Avenue as a ½ of a 36-foot collector roadway, plus 12-additional feet of pavement to total 30-feet, with vertical curb, gutter, an 8-foot wide planter strip, and 5-foot wide detached concrete sidewalks abutting the site with a gravel shoulder and barrow ditch on the west side of the roadway, as proposed. The right-of-way shall extend a minimum of 2-feet behind the back curb and encompass the barrow ditch. Provide a permanent right-of-way easement for detached sidewalk located outside of the dedicated right-of-way.

7. The construction of Beadlily Avenue north of Park Street will be evaluated with the final plat necessitating the improvements. If Beadlily isn't constructed north of Park Street, then right-of-way dedication and a road trust deposit for that segment of the roadway will be required.

8. Install a sign at the terminus of Beadlily Avenue Street which states that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."*

9. If Beadliliy Avenue is constructed to the north property line, install a barricade on the north side of Park Street with a sign that states that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."*

10. Construct Madrone Avenue to intersect Kuna Road, located 640-feet west of the east property line, as proposed.

11. Construct the internal local streets as 36-foot wide street sections with rolled curb, gutter, and 5-foot wide attached concrete sidewalks within 50-feet of right-of-way.

12. Construct 1 stub street to the north, Madrone Avenue, located 640-feet west of the east property line, as proposed. Install a sign at the terminus the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

13. Construct 1 stub street to the east, Park Street, located 670-feet north of the south property line. Install a sign at the terminus of the street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

14. Other than the access specifically approved with this application, direct lot access is prohibited to Kuna Road and Beadlily Avenue and shall be noted on the final plat.

15. Payment of impact fees is due prior to issuance of a building permit.

16. Comply with all Standard Conditions of Approval.

E. Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).

2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.

3. In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.

4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.

5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.

6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.

7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.

8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.

9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.

10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.

11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.

12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

F. Conclusions of Law

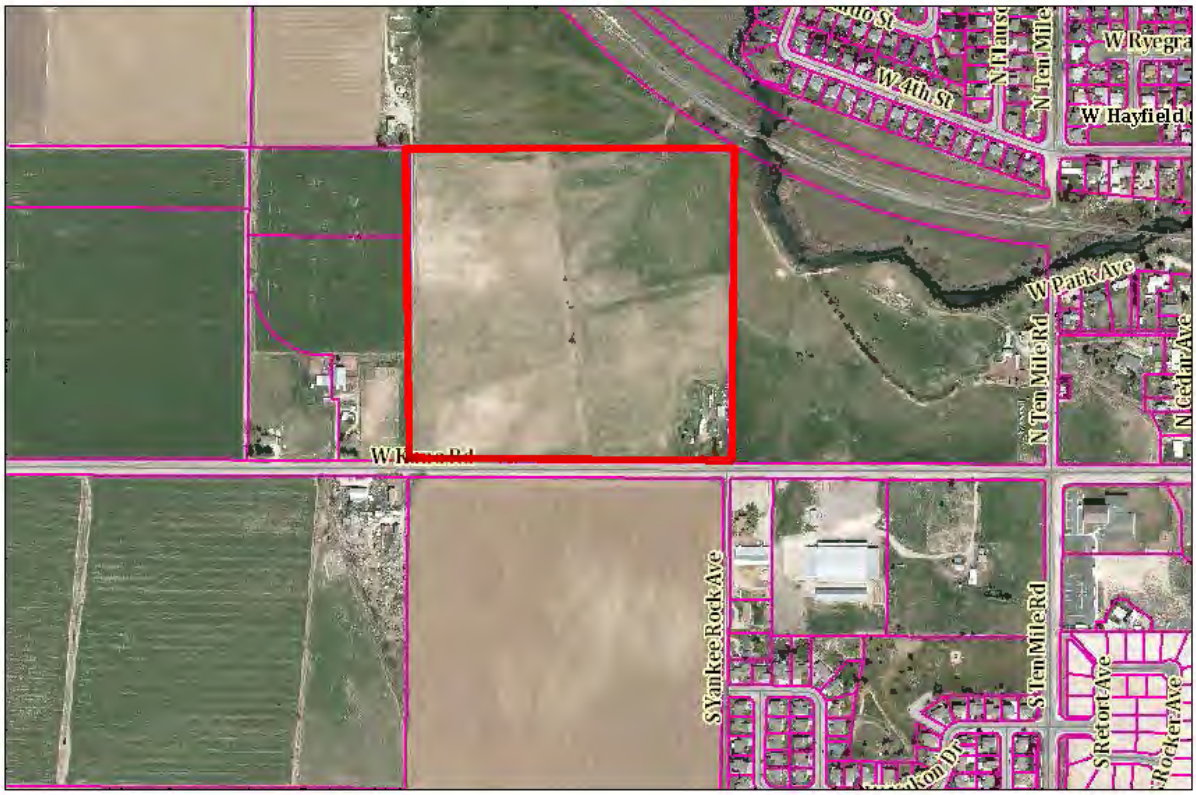
1. The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.

2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

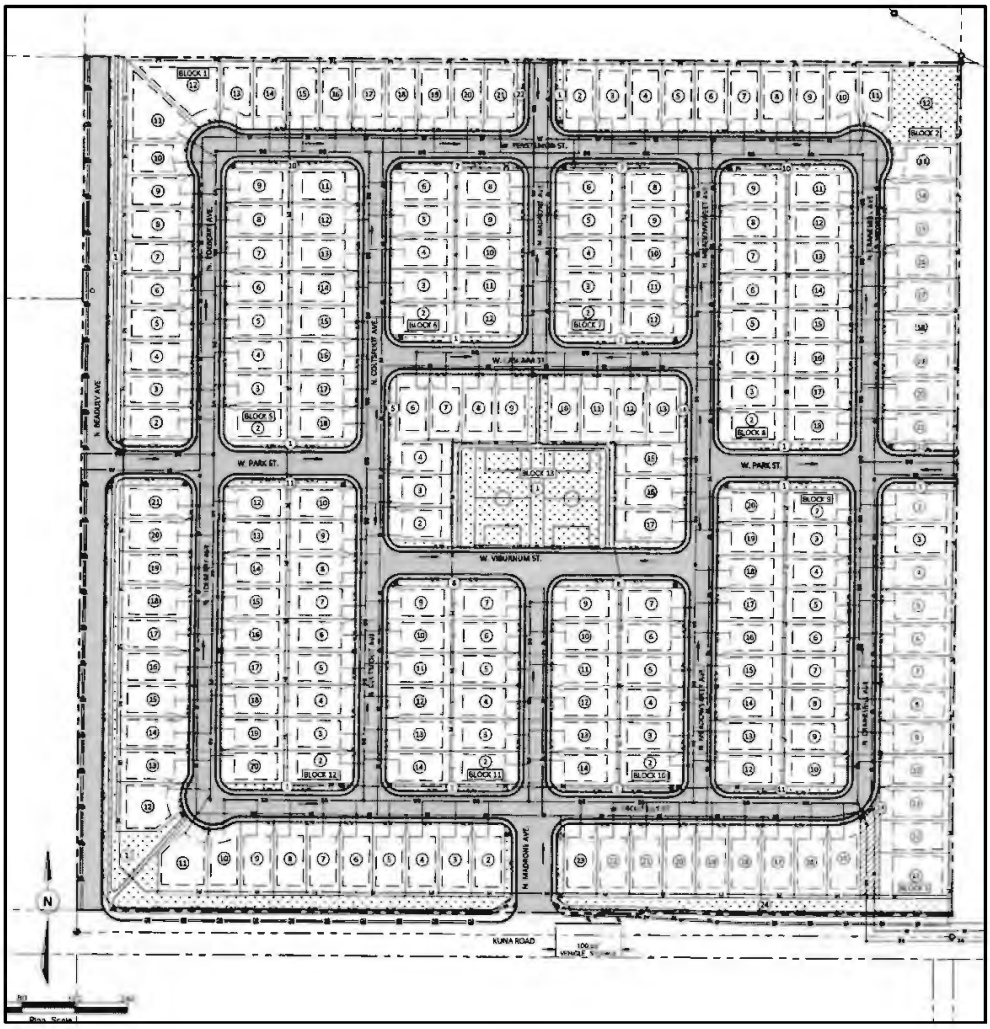
G. Attachments

1. Vicinity Map
2. Site Plan
3. Traffic Study - Summary
4. Utility Coordinating Council
5. Development Process Checklist
6. Request for Reconsideration Guidelines

VICINITY MAP



SITE PLAN



EXECUTIVE SUMMARY

N Star Farms, LLC is in the process of entitling the Madrone Heights Property, previously known as the Urza Farms Property. The entitlement includes the plan for 205 single-family detached housing unit, situated on approximately 39 acres of land in Kuna, Idaho. The property is located on the east side of the proposed mid-mile collector street between Black Cat Road and Ten Mile Road with Kuna Road serving as its southern boundary.

The parcels of land included in the property's site are identified as Rural Urban Transition (RUT) by the City of Kuna's *City Zoning Map*. The parcels in the immediate vicinity of the site are also zoned as RUT, as well as Agriculture (A), Rural Residential (RR) and Low Density Residential (R4) by the City of Kuna. The land has recently been annexed by the City of Kuna and rezoned to Medium Density Residential (R8).

Access to the Madrone Heights Property is proposed via one new mid-mile collector street on the north side of Kuna Road between Black Cat Road and Ten Mile Road, as well as a new local street connection to Kuna Road, approximately 2,640 feet west of Ten Mile Road and 700 feet east of the new collector. The new collector street is identified on the ACHD Master Street Map. Additionally, the preliminary site plan proposes two stub street connections, one to the east and one to north for potential connections to future developments. The timeframe for the development of parcels bordering the site is unknown, however, development is not anticipated to occur until after full build-out of the Madrone Heights Property.

Currently, the proposed site is undeveloped, but consists of one single-family home which would be removed if the site is built-out. The build-out of the site would be completed in four phases, with a projected full build-out in year 2022. This TIS addresses the existing (2018) and background (2022) traffic conditions, as well as the property's impact in the build-out year 2022. Lastly, the TIS provides the approximate number of homes that can be built before proposed mitigations are necessary at any impacted study intersection, roadway and/or driveway.

FINDINGS

Existing Conditions

- The study evaluated the off-site intersection at Black Cat Road & Kuna Road during the a.m. and p.m. peak period of a typical weekday (Tuesday – Thursday).
- The study intersection was found to operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road between Ten Mile Road and Black Cat Road operates at an acceptable level of service.

- Crash data at the study intersection for the most recent five years (2012-2016) was analyzed for any existing crash trends, below are the findings:
    - The Black Cat Road & Kuna Road intersection averaged 1.6 reported crashes per year, with 75% of crashes involving a turning vehicle onto or from Kuna Road.
    - There were eight reported crashes on the Kuna Road between Black Cat Road and Ten Mile Road. Seven of the crashes involved a single vehicle leaving the roadway.

Year 2022 Background Traffic Conditions

- Year 2022 background traffic volumes were forecasted using a 3% annual growth rate. There were no identified in-process developments within the vicinity of the site that were included in the analysis.
- Year 2022 background traffic analysis (without inclusion of site-generated traffic) found that the study intersection is expected to continue to operate at acceptable operating standards during the weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road between Ten Mile Road and Black Cat Road is projected to continue operating at acceptable levels of service.

Trip Generation and Distribution

- The *ITE Trip Generation Manual, 10th Edition* was used to estimate the trip generation for the proposed Madrone Heights Property.
- The proposed Madrone Heights Property, with 205 single-family homes in the build-out year of 2022, is estimated to generate a total of 2,013 daily net new trips, 150 weekday a.m. peak hour net new trips (38 inbound / 112 outbound) and 202 weekday p.m. peak hour net new trips (127 inbound / 75 outbound).
- The distribution pattern for site-generated trips was developed by evaluating existing traffic patterns and major trip origins and destinations within the study area, as well as a select zone analysis from COMPASS' regional travel demand model.

Year 2022 Total Traffic Conditions

- Year 2022 total traffic conditions found that the site-generated trips do not impact the study intersection and that the study intersection will continue to operate at acceptable levels of service during the weekday a.m. and p.m. peak hours.
- The site accessed operate acceptably during the weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road, between Time Mile Road and Black Cat Road is projected to continue operating at acceptable levels of service.

Turn Lane Warrant Evaluation

- The turn lane analysis using ACHD procedures resulted in turn lane warrants at the following site access street:
  - Kuna Road & Black Cat Road: A westbound right-turn lane is warranted under existing conditions, 2022 background conditions, and 2022 total traffic conditions. Following are considerations with respect to this location:
    - The intersection could be converted to an all-way-stop controlled intersection which would operate at LOS A and LOS B without turn lanes and potentially reduce the number of angle crashes at the intersection.
    - A reduction in the posted speed is likely to occur in the future as development occurs around the intersection. If the posted speed were to be reduced in the future to 35 mph (currently posted 1 mile to the east) or 40 mph, a westbound right turn lane would not be warranted at the intersection under existing, 2022 background or total traffic conditions.
    - Site traffic is projected to be approximately 11 percent of the westbound traffic movement during the weekday p.m. peak hour. Note that warrants would not be met if the posted speed limit was 40 mph.
  - South Access & Kuna Road (Site Access B): Westbound right-turn lane is warranted. A sensitivity analysis found that a westbound right-turn lane is warranted in approximately year 2021 with the build-out of approximately 161 Madrone Heights housing units. Following are considerations with respect to this location:
    - A reduction in the posted speed is likely to occur in the future as development occurs around the intersection. If the posted speed were to be reduced in the future to 35 mph (currently posted 1 mile to the east) or 40 mph, a westbound right turn lane would not be warranted at the intersection under existing, 2022 background or total traffic conditions.

Site Access Evaluation

- The results from the queuing analysis found that the 95th percentile queue lengths can be accommodated.
  - Each site accesses provides at least 100 feet of roadway length without a property driveway and/or internal street interference.
- The intersection sight distance evaluation identified that intersection sight distance can be achieved at all the site access intersections with the following actions:

- Remove miscellaneous vegetation and shrubbery, and potential obstructions along Kuna Road as necessary to obtain and maintain adequate intersection sight distance.
- Site access along Kuna Road should match the existing grade of Kuna Road at the intersection.
- Shrubbery, weeds and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.
- If future widening occurs along Kuna Road, care should be taken to ensure adequate intersection sight distance is maintained.

- There are two proposed local street access points to the Madrone Heights Property, as well as a new collector street at the mid-mile along Kuna Road between Black Cat Road and Ten Mile Road. Additionally, there are two proposed stub street for connections to future developments. Following is a summary of each access with respect to ACHD Policy:
  - **New Collector Street & Kuna Road (Site Access A):** This access, a proposed collector, is located on Kuna Road approximately 2,660 feet, or approximately one-half mile, east of Black Cat Road and 2,640 feet west of Ten Mile Road. While the collector meets the spacing requirements between public streets, it does not meet spacing requirements with respect to existing driveways on Kuna Road. The access should be considered by ACHD for the following reasons:
    - The proposed collector is on the ACHD Master Street Map.
    - The proposed collector meets ACHD spacing requirements for a collector street, except for two existing driveways to residential homes on the north and south side of Kuna Road approximately 300 feet west of the collector street. Given the location of the driveways it is assumed that neither of the driveways could be moved to the mid-mile collector.
    - Without the collector street access, site-generated trips would increase the ADT at the south access on Kuna Road to over the ACHD 2,000 ADT threshold for a local street.
    - This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
  - **South Access & Kuna Road (Site Access B):** This access, a proposed local street, accesses Kuna Road approximately 700 feet east of the proposed mid-mile collector and approximately 620 feet west of Yankee Rock Avenue. Therefore, the proposed

access does not meet the spacing requirement for Kuna Road. The access should be considered by ACHD for the following reasons:

- Without this access, the site would only have the collector street access, located on a minor arterial street, servicing 205 residential units, which is against ACHD requirements for a development of that size. The volume would remain under the ACHD policy of 3,000 ADT for a single access on a collector, but future development could increase the ADT above 3,000.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
- The access will function acceptably as a full access with a westbound right-turn lane.

- **West Access & New Collector Street (Site Access C):** This access, a proposed local street, accesses the new collector street approximately 710 feet north Kuna Road. This access is proposed to be full access; however, most movements will consist of right-in and left-out movements because of its connection to Kuna Road via the new collector street. The access should be considered by ACHD for the following reasons:
  - The access meets ACHD local street spacing requirements for collector streets.
  - Without this access, the site would only have one access, located on a minor arterial street, servicing 205 residential units, which is against ACHD requirements for a development of that size.
  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
  - The access will function acceptably as a full access without turn lanes.
- **Stub Streets:** The two proposed stub streets access would connect to a future development north and east of the site. These proposed stub streets are based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Madrone Heights Property. The stub streets have the following benefits:
  - The stub street would provide future access to an adjoining property east of the site and therefore reduce the need for additional access routes to Kuna Road.

- The streets adhere to ACHD stub street requirements.
- The stub streets are not the primary access to the site, with limited trips into and out of the site.
- The stub streets would only serve residential trips, reducing vehicle miles traveled and increasing access for emergency response and city services.

RECOMMENDATIONS

Based on the report's analyses and evaluation findings, recommendations were developed accordingly. There were no recommended mitigations for existing year and background year conditions.

Existing Conditions

The following mitigation is recommended under existing traffic conditions.

Kuna Road & Black Cat Road

- Consider the following options based on warrants being met for the westbound right-turn lane under existing, background, and total traffic conditions:
  - Install a westbound right-turn lane if right-of-way is available.
  - Conduct a speed study for the westbound approach after completion of the build-out of the property to evaluate whether the posted speed should be reduced to 40 mph or 35 mph. This would alleviate the need for a westbound right-turn lane.
  - Consider conversion to and all-way-stop-controlled intersection from a two-way-stop-controlled intersection.
- The site's traffic is projected to be approximately 11 percent of the westbound traffic movement under year 2022 (full build-out) p.m. peak hour (most critical time period for the right-turn lane) traffic conditions.

Mitigations Needed for Madrone Heights Property

The following mitigations are recommended due to the inclusion of Madrone Heights Property's site generated trips.

Collector Road & Kuna Road

- Construct the new collector as proposed.

South Access & Kuna Road

- Construct a westbound right-turn lane with approximately 100 feet of vehicle storage. A sensitivity analysis found that a westbound right-turn lane would be warranted in approximately year 2021 with the build-out of 161 Madrone Heights units.
    - Alternatively, a speed limit reduction in front of the site from 50 mph to 40 mph or 35 mph (consistent with the Kuna Road corridor to the east) would result in the westbound right-turn lane warrant not being met.

Site Accesses

- With approval from ACHD, construct all accesses to the property to allow full access on the public street approaches with the following designations:
    - All local streets within the property should be constructed with one travel lane in each direction.
    - Site driveways with access to public streets should provide sufficient stacking distance for four vehicles (100 feet) to ensure acceptable operation and accommodate larger vehicles, including utility service and delivery vehicles.
    - Site accesses along Kuna Road should match the existing grade of Kuna Road at the intersection to ensure the best possible sight distance.
    - All accesses and internal streets should be designed to provide adequate intersection site distance. Shrubbery, weeds and landscaping near the intersection and site access point should be maintained to ensure adequate sight distance is maintained.

Ada County Utility Coordinating Council

Developer/Local Improvement District
Right of Way Improvements Guideline Request

Purpose: To develop the necessary avenue for proper notification to utilities of local highway and road improvements, to help the utilities in budgeting and to clarify the already existing process.

1) **Notification:** Within five (5) working days upon notification of required right of way improvements by Highway entities, developers shall provide written notification to the affected utility owners and the Ada County Utility Coordinating Council (UCC). Notification shall include but not be limited to, project limits, scope of roadway improvements/project, anticipated construction dates, and any portions critical to the right of way improvements and coordination of utilities.

2) **Plan Review:** The developer shall provide the highway entities and all utility owners with preliminary project plans and schedule a plan review conference. Depending on the scale of utility improvements, a plan review conference may not be necessary, as determined by the utility owners. Conference notification shall also be sent to the UCC. During the review meeting the developer shall notify utilities of the status of right of way/easement acquisition necessary for their project. At the plan review conference each company shall have the right to appeal, adjust and/or negotiate with the developer on its own behalf. Each utility shall provide the developer with a letter of review indicating the costs and time required for relocation of its facilities. Said letter of review is to be provided within thirty calendar days after the date of the plan review conference.

3) **Revisions:** The developer is responsible to provide utilities with any revisions to preliminary plans. Utilities may request an updated plan review meeting if revisions are made in the preliminary plans which affect the utility relocation requirements. Utilities shall have thirty days after receiving the revisions to review and comment thereon.

4) **Final Notification:** The developer will provide highway entities, utility owners and the UCC with final notification of its intent to proceed with right of way improvements and include the anticipated date work will commence. This notification shall indicate that the work to be performed shall be pursuant to final approved plans by the highway entity. The developer shall schedule a preconstruction meeting prior to right of way improvements. Utility relocation activity shall be completed within the times established during the preconstruction meeting, unless otherwise agreed upon.

Notification to the Ada County UCC can be sent to: 50 S. Cole Rd. Boise 83707, or Visit iducc.com for e-mail notification information.

Development Process Checklist

Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☒Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

DID YOU REMEMBER:
Construction (Non-Subdivisions)
☐ **Driveway or Property Approach(s)**

- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**

- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

Construction (Subdivisions)
☐ **Sediment & Erosion Submittal**

- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**

- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

Request for Appeal of Staff Decision

1. **Appeal of Staff Decision:** The Commission shall hear and decide appeals by an applicant of the final decision made by the Development Services Manager when it is alleged that the Development Services Manager did not properly apply this section 7101.6, did not consider all of the relevant facts presented, made an error of fact or law, abused discretion or acted arbitrarily and capriciously in the interpretation or enforcement of the ACHD Policy Manual.

    a. Filing Fee: The Commission may, from time to time, set reasonable fees to be charged the applicant for the processing of appeals, to cover administrative costs.

    b. Initiation: An appeal is initiated by the filing of a written notice of appeal with the Secretary and Clerk of the District, which must be filed within ten (10) working days from the date of the decision that is the subject of the appeal. The notice of appeal shall refer to the decision being appealed, identify the appellant by name, address and telephone number and state the grounds for the appeal. The grounds shall include a written summary of the provisions of the policy relevant to the appeal and/or the facts and law relied upon and shall include a written argument in support of the appeal. The Commission shall not consider a notice of appeal that does not comply with the provisions of this subsection.

    c. Time to Reply: The Development Services Manager shall have ten (10) working days from the date of the filing of the notice of appeal to reply to the notice of the appeal, and may during such time meet with the appellant to discuss the matter, and may also consider and/or modify the decision that is being appealed. A copy of the reply and any modifications to the decision being appealed will be provided to the appellant prior to the Commission hearing on the appeal.

    d. Notice of Hearing: Unless otherwise agreed to by the appellant, the hearing of the appeal will be noticed and scheduled on the Commission agenda at a regular meeting to be held within thirty (30) days following the delivery to the appellant of the Development Services Manager's reply to the notice of appeal. A copy of the decision being appealed, the notice of appeal and the reply shall be delivered to the Commission at least one (1) week prior to the hearing.

    e. Action by Commission: Following the hearing, the Commission shall either affirm or reverse, in whole or part, or otherwise modify, amend or supplement the decision being appealed, as such action is adequately supported by the law and evidence presented at the hearing.

Request for Reconsideration of Commission Action

1. **Request for Reconsideration of Commission Action:** A Commissioner, a member of ACHD staff or any other person objecting to any final action taken by the Commission may request reconsideration of that action, provided the request is not for a reconsideration of an action previously requested to be reconsidered, an action whose provisions have been partly and materially carried out, or an action that has created a contractual relationship with third parties.

    a. Only a Commission member who voted with the prevailing side can move for reconsideration, but the motion may be seconded by any Commissioner and is voted on by all Commissioners present.

       If a motion to reconsider is made and seconded it is subject to a motion to postpone to a certain time.

    b. The request must be in writing and delivered to the Secretary of the Highway District no later than 11:00 a.m. 2 days prior to the Commission's next scheduled regular meeting following the meeting at which the action to be reconsidered was taken. Upon receipt of the request, the Secretary shall cause the same to be placed on the agenda for that next scheduled regular Commission meeting.

    c. The request for reconsideration must be supported by written documentation setting forth new facts and information not presented at the earlier meeting, or a changed situation that has developed since the taking of the earlier vote, or information establishing an error of fact or law in the earlier action. The request may also be supported by oral testimony at the meeting.

    d. If a motion to reconsider passes, the effect is the original matter is in the exact position it occupied the moment before it was voted on originally. It will normally be returned to ACHD staff for further review. The Commission may set the date of the meeting at which the matter is to be returned. The Commission shall only take action on the original matter at a meeting where the agenda notice so provides.

    e. At the meeting where the original matter is again on the agenda for Commission action, interested persons and ACHD staff may present such written and oral testimony as the President of the Commission determines to be appropriate, and the Commission may take any action the majority of the Commission deems advisable.

    f. If a motion to reconsider passes, the applicant may be charged a reasonable fee, to cover administrative costs, as established by the Commission.

Troy Behunin

From: Lauren Boehlke <laurenboehlke@yahoo.com>
Sent: Monday, December 04, 2017 8:40 AM
To: Troy Behunin
Subject: Re: Former Urza Property Annexation

Categories: Agency Comments

Good Morning Troy,
Just to let you know that this property does have a valid water right of 39.24 acres through Boise-Kuna Irrigation District. Our 2017 Fall/2018 Spring assessments have been mailed out and the Fall assessment is due by 12/20/17, with Spring Toll due by 4/1/17. Boise Project Board of Control, our delivery entity, will need to be contacted as to where water delivery is on this property and making sure that no other water user is deterred from receiving water do to any development of this property.

Thank you,
Lauren

Lauren S Boehlke
Sec.-Treasurer
Boise-Kuna Irrigation District
Phone# 922-5608
Fax# 922-5659

On Friday, 1 December 2017, 16:24, Troy Behunin <tbehunin@kunaid.gov> wrote:

Good afternoon everyone,
Please review the packet for a new request for annexation into Kuna City Limits. Please send relevant comments to our office within the 15 business days as requested. If your agency needs additional time, please let our office know as soon as possible.
If your agency needs hard copies, please let us know and we will be happy to send them.
Thanks and have a great weekend.
Troy

Troy Behunin
Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634
TBehunin@KunaId.Gov

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CENTRAL DISTRICT HEALTH DEPARTMENT

CENTRAL DISTRICT HEALTH DEPARTMENT

Environmental Health Division

RECEIVED
JUL 16 2018
CITY OF KUNA

Rezone # _____
Conditional Use # _____
Preliminary / Final / Short Plat 18-02-S
Madrone Heights

Return to:
- ☐ ACZ
- ☐ Boise
- ☐ Eagle
- ☐ Garden City
- ☒ Kuna
- ☐ Meridian
- ☐ Star

☐ 1. We have No Objections to this Proposal.

☐ 2. We recommend Denial of this Proposal.

☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.

☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.

☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
- ☐ high seasonal ground water
- ☐ bedrock from original grade
- ☐ waste flow characteristics
- ☐ other _____

☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.

☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.

☒ 8. After written approval from appropriate entities are submitted, we can approve this proposal for:
- ☒ central sewage
- ☐ interim sewage
- ☐ individual sewage
- ☐ community sewage system
- ☒ central water
- ☐ individual water
- ☐ community water well

☒ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
- ☒ central sewage
- ☐ sewage dry lines
- ☐ community sewage system
- ☒ central water
- ☐ community water

☐ 10. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.

☐ 11. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.

☐ 12. We will require plans be submitted for a plan review for any:
- ☐ food establishment
- ☐ beverage establishment
- ☐ swimming pools or spas
- ☐ grocery store
- ☐ child care center

☒ 13. Infiltration beds for storm water disposal are considered shallow injection wells. An application and fee must be submitted to CDHD.

☐ 14. _____ Reviewed By: Lora Bandy

_____ Date: 7/6/18

Review Sheet

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

DEQ Response to Request for Environmental Comment

Date:	*July 6, 2018*
Agency Requesting Comments:	*City of Kuna: Planning & Zoning Department*
Date Request Received:	*June 27, 2018*
Applicant/Description:	*18-02-S (Pre-Plat) Madrone Heights – Residential Subdivision*

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. Air Quality

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  The property owner, developer, and their contractor(s) must ensure that reasonable controls to prevent fugitive dust from becoming airborne are utilized during all phases of construction activities per IDAPA 58.01.01.651.

  Per IDAPA 58.01.01.600-617, the open burning of any construction waste is prohibited. The property owner, developer, and their contractor(s) are responsible for ensuring no prohibited open burning occurs during construction.

  For questions, contact David Luft, Air Quality Manager, at 373-0550.

2. Wastewater and Recycled Water

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects

require separate permits as well.

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*
- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.

3. Drinking Water

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*
- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  All projects for construction or modification of public drinking water systems require preconstruction approval.
- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*
- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*
- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*
- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  For questions, contact Todd Crutcher, Engineering Manager at 373-0550.

4. Surface Water

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*
- *Please contact DEQ to determine whether this project will require a National Pollution Discharge Elimination System (NPDES) Permit. If this project disturbs more than one*

acre, a stormwater permit from EPA may be required.

- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*
- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:* http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm
- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.

5. Hazardous Waste And Ground Water Contamination

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*
- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.*
- ***Water Quality Standards.*** *Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.
- ***Ground Water Contamination.*** *DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in*

accordance with a permit, consent order or applicable best management practice, best available method or best practical method."
For questions, contact Albert Crawshaw, Waste & Remediation Manager, at 373-0550.

6. Additional Notes

- *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*

- *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.

Sincerely,



Aaron Scheff
aaron.scheff@deq.idaho.gov
Regional Administrator
Boise Regional Office
Idaho Department of Environmental Quality

ec: TRIM 2018AEK84

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

July 6, 2018

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

VIA EMAIL

Development Application	**18-02-S**
Project Name	**MADRONE HEIGHTS SUBDIVISION**
Project Location	2030 West Kuna Road, west of SH-69 milepost 2.22
Project Description	Construct a subdivision consisting of 206 single family lots, 27 common lots, and 1 shared driveway
Applicant	Kirsti Grabo of KM Engineering

The Idaho Transportation Department (ITD) reviewed the referenced preliminary plat application and has the following comments:

1. This project does not abut the State highway system.

2. Applicant has indicated that a Traffic Impact Study has been completed. ITD requests a copy of the study to review before submitting comments. ITD reserves the right to make further comments upon review of any submitted traffic generation data or other documents.

3. The City is reminded that the SH-69 corridor is already congested. This project will increase the number of vehicle trips in the corridor. As the City continues to add additional trips to the corridor through development, the congestion will worsen until the roadway system is ultimately overloaded and fails. ITD has no current funding assigned to mitigate traffic congestion in the SH-69 corridor in this area.

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P.O. Box 8028 • Boise, ID 83707-2028
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4. IDAPA 39.03.60 rules govern advertising along the State highway system. The applicant may contact Justin Pond, Right-of-Way Section Program Manager, at (208) 334-8832 for more information.

5. Idaho Code 40-1910 does not allow advertising within the right-of-way of any State highway.

6. ITD objects to the proposed application due to traffic concerns. ITD will withdraw any objection to the proposed application once all traffic concerns have been addressed with ITD Staff.

If you have any questions, you may contact Tom Haynes at (208) 334-8944 or me at (208) 332-7190.

Sincerely,



Ken Couch
Development Services Coordinator
Ken.Couch@itd.idaho.gov

Neighborhood Meeting Certification

CITY OF KUNA PLANNING & ZONING * 763 W. Avalon, Kuna, Idaho, 83634 * www.kunacity.id.gov * (208) 922-5274 * Fax: (208) 922-5989

GENERAL INFORMATION:

You must conduct a neighborhood meeting prior to application for variance, conditional use, zoning ordinance map amendment, expansion or extension of a nonconforming use, and/or a subdivision. Please see Section 8-7A-3 of the Kuna City Code or ask one of our planners for more information on neighborhood meetings.

The meeting must be held either on a weekend between 10 a.m. and 7 p.m., or a weekday between 6 p.m. and 8 p.m. Meetings cannot be conducted on holidays, holiday weekends, or the day before or after a holiday or holiday weekend. The meeting must be held at one of the following locations:

- The Subject Property;
- The nearest available public meeting place (Examples include fire stations, libraries and community centers);
- An office space within a 1-mile radius of the subject property.

The meeting cannot take place more than 2 months prior to acceptance of the application and the application will not be accepted before the neighborhood meeting is conducted. You are required to send written notification of your meeting, allowing a reasonable amount of time before your meeting for property owners to plan to attend. Contacting and/or meeting individually with residents will not fulfill Neighborhood Meeting requirements.

You may request a list of the people you need to invite to the neighborhood meeting from our department. This list includes property owners within 300 feet of the subject property. Once you have held your neighborhood meeting, please complete this certification form and include it with your application.

Please Note: The neighborhood meeting must be conducted in one location for attendance by all neighboring residents. Contacting and/or meeting individually with residents does not comply with the neighborhood meeting requirements.

Please include a copy of the sign-in sheet for your neighborhood meeting, so we have written record of who attended your meeting and the letter of intent sent to each recipient. In addition, provide any concerns that may have been addressed by individuals that attended the meeting.

Description of proposed project: Preliminary Plat

Date and time of neighborhood meeting: April 11, 2018 at 6:00pm

Location of neighborhood meeting: Kuna Public Library

SITE INFORMATION:

Location: Quarter: SE Section: 22 Township: 2N Range: 1W Total Acres: 39.48

Subdivision Name: Urza Preliminary Plat Lot: Block:

Site Address: 2030 W Kuna Road Tax Parcel Number(s): S1322438400

Please make sure to include **all** parcels & addresses included in your proposed use.

CURRENT PROPERTY OWNER:

Name: N Star Farm, LLC & Waters Edge Farm, LLC - Tim Eck

Address: 6152 W Half Moon Lane City: Eagle State: Idaho Zip: 83616

CONTACT PERSON (Mail recipient and person to call with questions):

Name: Kirsti Grabo Business (if applicoble): KM Engineering, LLP

Address: 9233 W State Street City: Boise State: Idaho Zip: 83714

PROPOSED USE:

I request a neighborhood meeting list for the following proposed use of my property (check all that apply):

Application Type	*Brief Description*
Annexation	Subdivision - Preliminary Plat located at 2030 W Kuna Rd
Re-zone	
Subdivision (Sketch Plat and/or Prelim. Plat)	
Special Use	
Variance	
Expansion of Extension of a Nonconforming Use	
Zoning Ordinance Map Amendment	

APPLICANT:

Name: N Star Farm, LLC & Waters Edge Farm, LLC

Address: 6152 West Half Moon Lane

City: Eagle State: Idaho Zip: 83616

Telephone: _____ Fax: _____

I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accord with Section 5-1A-2 of the Kuna City Code

Signature: ~~(Applicant)~~ Applicants Representative _____ Date 4.11.18

Preliminary Plat - Urza Property
Neighborhood Meeting Sign-in Sheet
April 11, 2018 at 6:00 pm - Kuna Public Library

Name	Address	Signature
TANYA ROESER	1857 N. KUNA RD	
DICK DEUTSCHE	135 W TEN MILE	
CAROL DEUTSCHE	" " " "	
Kylee L. Siglin	1629 West Kuna Rd Kuna, Id 83634	
Cynthia Howard	1629 West Kuna Rd Kuna, ID 83634	
Jake Poulsum	4519 N. Vermillion Rd. Boise, ID 83706	
Tueyur Kong	1011 S Dale St #202 Boise, ID 83706	

Neighborhood Meeting Notes
Urza Property Preliminary Plat
4.11.18 – 6:00 pm – Kuna Public Library

Discussion Topics

- Will this project change the zoning of the surrounding properties?
- Will there be a road on the east side of the project?
- Why is there a stub street to the east?
- Can that stub street be fenced off so people can't drive into field?
- Is there sewer capacity for more development?
- Where will the water extension run?
- What type of fencing will the subdivision install?
- Why do people want such small lots? Isn't there a market for larger lots?
- What is the City going to do about the traffic?
- Are there any plans for a fire station?
- What style of housing will be built?
- How big will the houses be?
- Will the utility extensions require Kuna Road to be torn up?
- When will building begin? Who is building?
- Will we install a berm along Kuna Road?
- What is the plan for a crossing on Ten Mile?
- When will the application go in?

PRIMOWNER	SECOWNER	ADDCONCAT	STATCONCAT
CITY OF KUNA		PO BOX 13	KUNA, ID 83634-0013
DEUTSCHE RICHARD & CAROL FAMILY TRUST	DEUTSCHE RICHARD H TRUSTEE	135 N TEN MILE RD	KUNA, ID 83634-0000
DISCOVERY CREEK HOA INC		PO BOX 1246	MERIDIAN, ID 83680-0000
GORDON TIMOTHY W	GORDON BELINDA S	PO BOX 236	KUNA, ID 83634-0000
MATHEWSON CHLOE D		1881 W 4TH ST	KUNA, ID 83634-0000
MCGREGOR DANIEL	MCGREGOR EDITH ANN	2430 S MERIDIAN RD	KUNA, ID 83634-0000
MCGREGOR DANIEL A	MCGREGOR EDITH ANN	2430 S MERIDIAN RD	KUNA, ID 83634-0000
MURPHEY FRANCIS LEVI LIFE ESTATE	MURPHEY VELETTA JEAN LIFE ESTATE	2417 W KUNA RD	KUNA, ID 83634-0000
N STAR FARM LLC	WATERS EDGE FARM LLC	6152 W HALF MOON LN	EAGLE, ID 83616-0000
OREGON SHORT LINE R R CO		1400 DOUGLAS ST	OMAHA, NE 68179-1640
ROESER JON	ROESER TANYA	1857 W KUNA RD	KUNA, ID 83634-0000
SIGLER VYCKEE L		1629 W KUNA RD	KUNA, ID 83634-0000
THORNTON LAYNE	THORNTON LORI	3224 S SWAN FALLS RD	KUNA, ID 83634-1732
URZA MARCOS	URZA ESTEFANIA	1923 167TH AVE SE	BELLEVUE, WA 98008-5327
VUITTONET ALEX		569 N YARDLEY AVE	KUNA, ID 83634-0000

DATE: April 2, 2018

TO: Neighbors

FROM: N. Star Farm, LLC

RE: Property at 2030 West Kuna Road – Kuna, ID

Dear Neighbor:

As you know, we are currently working on a new subdivision project for our property located at 2030 West Kuna Road, which is depicted on the enclosed vicinity map. Last year we held a meeting to discuss the annexation of the property into Kuna City Limits, which has occurred, and we have now begun preparation of the preliminary plat application for submittal to the City. This letter is notice of an opportunity to review and discuss the subdivision as required by City Code; however, this is not a public hearing and public officials will not be present.

The neighborhood meeting will be held on Wednesday, April 11, 2018, at 6:00 p.m., in the small conference room at the Kuna Public Library, which is located at 457 North Locust Avenue, Kuna, ID 83634.

We look forward to seeing you there.

km ENGINEERING

9233 WEST STATE STREET | BOISE, ID 83714 | 208.639.6939 | FAX 208.639.6930

May 1, 2018
Project No.: 17-054
Urza Subdivision
Legal Description

A parcel of land being the Southwest 1/4 of the Southeast 1/4 of Section 22, Township 2 North, Range 1 West, Boise Meridian, City of Kuna, Ada County, Idaho and being more particularly described as follows:

Commencing at a found brass cap marking the south 1/4 corner of said Section 22, which bears N89°41'25"W a distance of 2,654.34 feet from a found brass cap marking the southeast corner of said Section 22, thence following the westerly line of said Southwest 1/4 of the Southeast 1/4, N00°21'13"E a distance of 33.00 feet to the **POINT OF BEGINNING.**

Thence following said westerly line, N00°21'13"E a distance of 1,291.70 feet to the Northwest corner of said Southwest 1/4 of the Southeast 1/4;
Thence leaving said westerly line and following the northerly line of said Southwest 1/4 of the Southeast 1/4, S89°37'26"E a distance of 1,330.95 feet to a found 5/8-inch rebar marking the Northeast corner of said Southwest 1/4 of the Southeast 1/4;
Thence leaving said northerly line and following the easterly line of said Southwest 1/4 of the Southeast 1/4, S00°31'02"W a distance of 1,290.16 feet to a point on the northerly right-of-way line of Kuna Road;
Thence leaving said easterly line and following said northerly right-of-way line, N89°41'25"W a distance of 1,327.27 feet to the **POINT OF BEGINNING.**

Said parcel contains a total of 39.389 acres, more or less, and is subject to all existing easements and/or rights-of-way of record or implied.



Kirsti Grabo

From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Thursday, May 10, 2018 6:05 PM
To: Aaron Ballard; Kirsti Grabo
Subject: Madrone Heights Sub Name Reservation

May 10, 2018

Aaron Ballard, KM Engineering
Kirsti Grabo. KM Engineering

RE: Subdivision Name Reservation: **MADRONE HEIGHTS SUBDIVISION**

At your request, I will reserve the name **Madrone Heights Subdivision** for your project. I can honor this reservation only as long as your project is in the approval process. Final approval can only take place when the final plat is recorded.

This reservation is available for the project as long as it is in the approval process unless the project is terminated by the client, the jurisdiction or the conditions of approval have not been met, in which case the name can be re-used by someone else.

Sincerely,

Jerry L. Hastings, PLS 5359
County Surveyor
Deputy Clerk Recorder
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7912 *office*
(208) 287-7909 *fax*

From: Kirsti Grabo [mailto:KGrabo@kmengllp.com]
Sent: Tuesday, May 08, 2018 10:23 AM
To: Sub Name Mail
Subject: Madrone Heights Sub Name Reservation

Hi Glen –

How about Madrone Heights?

Thanks,
Kirsti

From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Tuesday, April 24, 2018 8:50 AM
To: Kirsti Grabo <KGrabo@kmengllp.com>
Subject: RE: Sub Name Request

Kristi;

Both of the names you have selected have been used.
Please select another name. A link to the online subdivision name search is included below.

DECLARATION OF

COVENANTS, CONDITIONS AND RESTRICTIONS

FOR

MADRONE HEIGHTS SUBDIVISION

THIS DECLARATION is made effective as of Madrone Heights Subdivision, by _____, an Idaho _____ ("Declarant" or "Owner" or "Grantor").

ARTICLE I: RECITALS

1.1 Declarant is the owner of all of the real property located in the County of Ada, State of Idaho (the "County"), described in the attached Exhibit A (the "Property"), which exhibit is incorporated herein by this reference.

1.2 The purpose of this Declaration is to set forth the basic restrictions, covenants, limitations, easements, conditions, and equitable servitudes (collectively "Restrictions") that apply to the Property. The Restrictions are designed to preserve the Property's value, desirability and attractiveness, to ensure a well-integrated high-quality development, and to guarantee adequate maintenance of the Common Area, and the Improvements located thereon, in a cost effective and administratively efficient manner.

ARTICLE II: DECLARATION

Grantor declares that the Property shall be held, sold, conveyed, encumbered, hypothecated, leased, used, occupied, and improved subject to the following terms, covenants, conditions, easements, and restrictions, all of which are declared and agreed to be in furtherance of a general plan for the protection, maintenance, subdivision, improvement, and sale of the Property, and to enhance the value, desirability, and attractiveness of the Property. The terms, covenants, conditions, easements, and restrictions set forth herein:

A. shall run with the land constituting the Property and with each estate therein, and shall be binding upon all persons having or acquiring any right, title, or interest in the Property or any lot, parcel, or portion thereof; and

B. shall inure to the benefit of every Building Lot, parcel, or portion of the Property and any interest therein; and,

C. shall inure to the benefit of, and be binding upon, Grantor (as defined below), and each grantee and Owner, and such grantee's and Owner's respective successors-in-interest, and may be enforced by Grantor, by any Owner, and any such Owner's successors-in-interest, and by the Association as hereinafter described.

Notwithstanding any other provision in the Declaration to the contrary, no provision of this Declaration shall be construed as to prevent or limit (i) Grantor's right to complete development of the Property and to construct improvements thereon, or (ii) Grantor's right to maintain model homes, construction, sales, or leasing offices, or similar facilities (temporary or otherwise) on any portion of the Property, including the Common Area or any public right-of-way, or (iii) Grantor's right to post signs incidental to construction, sales, or leasing, or (iv) Grantor's right to modify plans for the Property, all in accordance with any necessary approvals of the applicable governmental entities.

ARTICLE III: DEFINITIONS

3.1 "Affiliate" shall mean any entity that has some form of common ownership interest or common management with the Grantor.

3.2 "Architectural Committee" shall mean the committee created by the Grantor or the Association pursuant to Article X hereof.

3.3 "Articles" shall mean the Articles of Incorporation of the Association or other organizational or the charter documents of the Association if formed using a type of entity other than a corporation.

3.4 "Assessments" shall mean those payments required of Owners or other Association Members, including Regular, Special, and Limited Assessments made by the Association as further defined in this Declaration.

3.5 "Association" shall mean the Idaho profit or non-profit corporation (or other type of entity), and its successors and assigns, established by Grantor to exercise the powers and to carry out the duties set forth in this Declaration and any Supplemental Declaration. Grantor shall have the power, in its discretion, to name the Association the "Madrone Heights Subdivision Homeowners Association, Inc.", or any similar name, which fairly reflects its purpose. Grantor, in its sole and absolute discretion, shall have the power to create any additional Associations that it deems necessary or appropriate to act as the Association for any Annexed Tract (as defined below). In such event, reference in this Declaration to the "Association" shall apply to the particular Association designated to apply to that Annexed Tract.).

3.6 "Association Rules" shall mean those rules and regulations promulgated by the Association governing conduct upon and use of the Property under the jurisdiction or control of an Association, the imposition of fines and forfeitures for violation of such rules and regulations, and procedural matters for use in the conduct of business of the Association.

3.7 "Board" shall mean the Board of Directors or other governing board or individual, if applicable, of the Association.

3.8 "Building Lot" shall mean one or more lots within the Property as specified or shown on any Plat and/or by Supplemental Declaration, upon which Improvements may be constructed.

3.9 "Bylaws" shall mean the Bylaws of the Association.

3.10 "Common Area" shall mean all real property in which the Association holds an interest or which is held or maintained, permanently or temporarily, for the common use, enjoyment, and benefit of the entire Subdivision and each Owner therein, and shall include, without limitation, all such parcels that are designated as private streets or drives, common open spaces, common landscaped areas, and Waterways. The Common Area may be established from time to time by Grantor on any portion of the Property by describing it on a Plat, by granting or reserving it in a deed or other instrument, or by designating it pursuant to this Declaration or any Supplemental Declaration. The Common Area may include easement and/or license rights.

3.11 "Declaration" shall mean this Declaration as it may be amended from time to time.

3.12 "Madrone Heights Subdivision" and the "Subdivision" shall each mean the Property.

3.13 "Design Guidelines" shall mean the construction guidelines approved by the Architectural Committee.

3.14 "Grantor" shall mean, _____, an Idaho _____ and its successors-in-interest, and Affiliates (collectively, "_____"), and any person or entity to whom _____ expressly transfers its Grantor rights, which transfer must be made in writing and must include a specific reference to the transfer being of _____'s "Grantor rights" or "rights as Grantor" or other similar specific reference.

3.15 "Improvement" shall mean any structure, facility, or system, or other improvement or object (and any portion of the foregoing), whether permanent or temporary, which is erected, constructed, or placed upon, under, or in, any portion of the Property, including but not limited to buildings, fences, streets, drives, driveways,

sidewalks, bicycle paths, curbs, landscaping, signs, lights, mail boxes, electrical lines, pipes, pumps, ditches, waterways, and fixtures of any kind whatsoever.

3.16 "Limited Assessment" shall mean Assessments as described in Section 7.4 of this Declaration.

3.17 "Member" shall mean each person or entity holding a membership in the Association. Where specific reference or the context so indicates, it shall also mean persons or entities holding membership.

3.18 "Owner" shall mean the person or other legal entity, including Grantor, holding fee simple interest of record to a Building Lot that is a part of the Property, and sellers under executory contracts of sale, but excluding those having such interest merely as security for the performance of an obligation.

3.19 "Person" shall mean any individual, partnership, corporation, limited liability company or other legal entity.

3.20 "Plat" shall mean any subdivision plat covering any portion of the Property as recorded at the office of the County recorder (the "County Recorder"), as the same may be amended by duly recorded amendments thereof.

3.21 "Property" shall mean, except as otherwise provided in this paragraph, the real property described in Exhibit A, including each lot, parcel, and portion thereof and interest therein, including all water rights associated with or appurtenant to such property. The Property also shall include, at Grantor's sole discretion, such additional property in addition to that described in Exhibit A as may be part of an Annexed Tract by means of a Supplemental Declaration as provided herein.

3.22 "Regular Assessment" shall mean the Assessments described in Section 7.2 of this Declaration.

3.23 "Special Assessment" shall mean the Assessments described in Section 7.3 of this Declaration.

3.24 "Supplemental Declaration" shall mean any Supplemental Declaration including additional covenants, conditions, and restrictions that might be adopted with respect to any portion of the Property and with respect to any Annexed Tract.

3.25 "Waterway" shall mean any surface water amenity, including, without limitation, any lake, pond, channel, slough, stream, ditch or reservoir, natural or artificial, which is located on the Property and which is included within or managed as Common Area.

ARTICLE IV: GENERAL AND SPECIFIC RESTRICTIONS

4.1 Improvements - Generally. All Improvements are to be designed, constructed and used in such a manner as to (i) comply with the conditions of approval (as may be amended from time to time) issued by the applicable governmental entity with respect to the Plat containing the portion of the Property upon which the Improvements are located (the "Plat Conditions"), (ii) comply with all applicable governmental laws, ordinances, rules and regulations, and (iii) promote compatibility between the types of use contemplated by this Declaration.

4.1.1 Use and Size of Dwelling Structure. All Building Lots shall be used exclusively for single-family residential purposes. No Building Lot shall be improved except with a single-family dwelling unit or structure.

4.1.2 Architectural Committee Review. No construction of any Improvements which will be visible above ground or which will ultimately affect the visibility of any above ground Improvement may commence until the Architectural Committee has approved, in writing, the elevations, building plans, specifications, lot plan and other plans and specifications requested by the Architectural Committee. Construction of all such Improvements must conform to and comply with the applicable approved elevations, plans and specifications. Prior to the start of construction, Owners will submit two (2) sets of plans, including a plat plan, floor plan, all elevations and other documentation requested by the Architectural Committee, to the Architectural Committee for review. These plans will be held for thirty (30) days after completion of the project. The review and approval or disapproval may be based upon the following factors - size, height, design and style elements, mass and form, topography, setbacks, finished ground elevations, architectural symmetry, drainage, color, materials (including, without limitation, Architectural Committee approved architectural shingles and roofing material), physical or aesthetic impacts on other properties (including, without limitation, Common Areas), artistic conformity to the terrain and the other Improvements on the Property, and any and all other factors which the Architectural Committee, in its reasonable discretion, deems relevant. Said requirements as to the approval of the design shall apply only to the exterior appearance of the Improvements and to landscaping. This Declaration is not intended to serve as authority for the Architectural Committee to control the interior layout or design of residential structures except to the extent incidentally necessitated by exterior and landscape design restrictions that this Declaration is intended to control.

4.1.3 Setbacks and Height. No residential or other structure (exclusive of fences and similar structures constructed in compliance with the terms of this Declaration) shall be placed nearer to the Building Lot lines or built higher than permitted by the Plat in which the Building Lot is located, by the applicable Plat

Conditions or by any applicable zoning restriction or by decision of the Architectural Committee, whichever is more restrictive.

4.1.4 Roofing. All residences must be built with a minimum of thirty (30) year life architectural composition unless otherwise approved by the Architectural Committee. Roof pitch on all dwellings shall be a minimum 5/12 roof pitch.

4.1.5 Accessory Structures. Garages shall accommodate a minimum of two (2) cars; detached garages shall be allowed if in conformity with the provisions of this Declaration, and as approved by the Architectural Committee. All garages, storage sheds and patio covers, whether attached or detached from the residential structure, shall be of the same construction, finish and color as the residential structure on the applicable Building Lot. No playhouses, playground equipment, pool slides, diving boards, hot tubs, spas, or similar items shall extend higher than five (5) feet above the finished graded surface of the Building Lot upon which such item(s) are located, unless specifically so allowed by the Architectural Committee, in its sole discretion. Basketball courts, backboards, pools, tennis courts, shall be allowed in the backyard of any Building Lot, provided that such amenities are approved by the Architectural Committee and are not visible from any street, and do not promote noise or other nuisance that is offensive or detrimental to other portions of the Subdivision or offensive or detrimental to the occupants of other Building Lots.

4.1.6 Elevations. As set forth in Section 4.1.2 above, no construction of any Improvements which will be visible above ground or which will ultimately affect the visibility of any above ground Improvement may commence until the Architectural Committee has approved the elevation drawings and all Improvements must be constructed pursuant to such approved drawings. The Architectural Committee reserves the right to reject plans that in the judgment of the Architectural Committee lack integrity and balance. Without limiting the general reservation of powers set forth in the immediately previous sentences, the following guidelines, which are subject to change by the Architectural Committee, are designed to help provide guidance on appropriate design features for elevation plans and any waiver or exception must be in writing signed by the Architectural Committee:

A. Hardboard or cement fiber siding. Vinyl siding is prohibited.

B. Sixteen-inch (16") eves and twelve-inch (12") gables are required.

C. Boxed or returned soffits are recommended.

D. Windows, at siding locations, must have relief or trim materials to give definition.

E. Stone, brick or stucco is required, provided, however, if the home to be constructed has architectural appeal the Architectural Committee may provide written waiver of the stone, brick or stucco requirement.

F. No vinyl or metal siding except soffit and fascia boards.

G. Minimum of 36" stucco, brick, stone or other masonry accents are required on front elevation, or as otherwise approved by the Architectural Committee.

H. No split entry homes will be approved.

4.1.7 Driveways/Sidewalks. All access driveways and sidewalks shall have concrete or other hard surface along its full width as approved by the Architectural Committee and shall be graded to assure proper drainage. Asphalt driveways will not be allowed. Driveways shall have a maximum width compliant with and as approved pursuant to ACHD driveway approach permit and shall continue until connecting to the garage floor.

4.1.8 Mailboxes. Owner shall supply and install black metal mailbox posts. The location and type of post shall be submitted to and approved by the Grantor or the Architectural Committee prior to installation. On all Building Lots where the adjoining Building Lot has a common utility (garage side) property line the mailbox posts shall be installed at the shared property line, and shall be a paired post capable of accepting two (2) mailboxes. The responsibility for the installation of the post shall be borne by the first Building Lot to obtain a building permit. All mailboxes shall be supplied and installed on the posts by Owner, shall be black and of standard single resident size and shape. Architectural Committee approval shall be obtained prior to installation. Ornamental or oversized mailboxes shall not be permitted. All replacement mailboxes and stands will be of consistent design, material, and coloration as required in 4.1.8 and shall be located as originally placed on adjoining Building Lot lines at places designated by Grantor or the Architectural Committee. Declarant, the Association and/or the US Postal Service may require mailbox locations to be grouped.

4.1.9 Fencing. Fence designs shall not extend into any common green space within the Subdivision. All fencing and boundary walls constructed on any Building Lot shall be permanent in nature, maintenance free and be constructed of materials specified by the Architectural Committee and shall be compliant with applicable code If fencing is used in combination with a landscape berm, the fence shall be placed behind the berm and under no circumstances, placed on the

berm. The material, style, texture and design shall match the existing Grantor installed fencing and shall be approved by the Architectural Committee. Fencing shall not extend higher than six (6) feet measured from the crest of the adjacent road or extend past the front setback of the home and shall meet any more stringent requirements established by the Architectural Committee. All fencing must meet the setback requirements of City ordinance.

4.1.10 Lighting. Fixtures, standards, and all exposed accessories shall be harmonious with building design, and shall be as approved by the Architectural Committee. Lighting shall be restrained in design, and excessive brightness shall Landscape lighting is encouraged. Building designs shall seek to minimize lighting impacts on adjoining properties.

4.2 Antennae and Satellite Dishes. Exterior radio antenna, television antenna, other antenna and satellite dishes of the type that are governed by 47 C.F.R. Section 1.4000, as amended from time to time, are permitted to be installed on the property without Architectural Committee approval if so required under the aforementioned regulation. No other types of antenna or satellite dish shall be erected or maintained on the property unless it is approved by the Architectural Committee and located or screened in a manner acceptable to the Architectural Committee.

4.3 Insurance Rates. Nothing shall be done or kept on any Building Lot which will increase the rate of insurance on any other portion of the Property without the approval of the Owner of such other portion, nor shall anything be done or kept on the Property or a Building Lot which would result in the cancellation of insurance on any property owned or managed by any such Association or which would be in violation of any law.

4.4 No Further Subdivision. No Building Lot may be further subdivided, nor may any easement or other interest any Building Lot be granted, or Building Lot line adjusted, unless the advanced written approval of the Architectural Committee is obtained.

4.5 Signs. No sign of any kind shall be displayed to the public view without the approval of the Architectural Committee or Association, and the City if so required, except:

A. Such signs as may be used by Grantor and Grantor's agents in connection with the development of the Property, the sale of Building Lots and general promotion of the project. Such signs may be installed in the Common Areas at the discretion of the Grantor.

B. Temporary signs naming the contractors, the architect, and the lending institution for particular construction operation.

C. Such signs identifying the Subdivision, or informational signs, of customary and reasonable dimensions as prescribed by the Architectural Committee may be displayed on or from the Common Area.

D. One (1) sign of customary and reasonable dimensions not to exceed three (3) feet by two (2) feet may be displayed by an Owner other than Grantor on or from a Building Lot advertising the residence for sale or lease. No such sign shall be placed on Common Areas or on the rear portion of any Lot being sold.

All signage, including signage for the exceptions listed as (B)-(D), must be erected in accordance with signage format approved and established by the Architectural Committee. Save and excepting the foregoing, no sign shall be placed in the Common Area without the written approval of the applicable Architectural Committee or the Association.

4.6 Nuisances. No rubbish or debris of any kind shall be placed or permitted to accumulate anywhere upon the Property, including the Common Area or vacant Building Lots, and no odor shall be permitted to arise therefrom so as to render the Property or any portion thereof unsanitary, unsightly, offensive, or detrimental to the Property or to its occupants, or to any other property in the vicinity thereof or to its occupants. All structures shall be designed to minimize the noise impact on adjoining properties and no noise or other nuisance, as described in any applicable, laws, rules, regulations or ordinances, shall be permitted to exist or operate upon any portion of the Property so as to be offensive or detrimental to the Property or to its occupants or to other property in the vicinity or to its occupants. Without limiting the generality of any of the foregoing provisions, no exterior sound systems, speakers, horns, whistles, bells, or other sound devices (other than security devices used exclusively for security purposes which have been approved by the Association), flashing lights, or search lights, shall be located, used, or placed on the Property without the prior written approval of the Association.

4.7 Site Cleaning: Owners are responsible for ensuring the Building Lot is kept clean in following specific manner:

4.7.1 All contractors and subcontractors must operate a clean site with all debris cleaned and contained on the site. Contractors and subcontractors are not to allow garbage to blow to other sites.

4.7.2 All contractors and subcontractors will make the best efforts to be courteous to the current residents and others on the Property. No dogs or loud music allowed during any phase of the construction.

4.7.3 During the construction phase the streets must be swept clean of debris nightly.

4.7.4 During the construction phase all weeds must be kept trimmed and properly disposed of in a proper receptacle.

4.7.5 Owners who do not adhere, or require their agents, contractors and/or subcontractors to adhere to the cleaning rules outlined herein will be subject to a charge equal to the cost of cleanup plus and administrative fee equal to 25% of the cleanup cost and any applicable attorney fees and costs incurred in the enforcement or collection of such charges.

4.7.6 During construction, each contractor shall provide portable toilets as is required by applicable laws, rules, regulations and ordinances or by the Architectural Committee, whichever is more restrictive.

4.7.7 The Architectural Committee has the authority to grant variances to the design guidelines and to the requirements of this Section 4.7.

4.8 Exterior Maintenance: Owner's Obligations. No Improvement shall be permitted to fall into disrepair, and each Improvement shall at all times be kept in good condition and repair. In the event that any Owner shall permit any Improvement, including, without limitation, trees and landscaping, which is the responsibility of such Owner to maintain, to fall into disrepair so as to create a dangerous, unsafe, unsightly, or unattractive condition, or to damage property or facilities on or adjoining their Building Lot which would otherwise be the Association's responsibility to maintain, the Board, upon fifteen (15) days prior written notice to the Owner, shall have the right to correct such condition, and to enter upon such Owner's Building Lot for the purpose of doing so, and such Owner shall promptly reimburse the Association for the cost thereof, plus all other costs associated with such action including, without limitation, legal fees, and plus interest at eighteen percent (18%) per annum on all costs incurred by the Association. All such costs and interest shall be a Limited Assessment and shall create a lien enforceable in the same manner as other Assessments set forth in Article VII of this Declaration. The Owner of the offending property shall be personally liable, and such Owner's property may be subject to a mechanic's lien, in addition to the lien for the Limited Assessment, for all costs and expenses incurred by the Association in taking such corrective acts, plus all costs incurred in collecting the amounts due, including attorney's fees and costs. Each Owner shall pay all amounts due for such work within ten (10) days after receipt of written demand therefore, or the amounts may, at the option of the Board, be added to the amounts payable by such Owner as Regular Assessments. Each Owner shall have the remedial rights set forth herein if the Association fails to exercise its rights within a reasonable time following written notice by such Owner.

4.9 Drainage. There shall be no interference with the established drainage pattern over any portion of the Property, unless an adequate alternative provision is made for proper drainage and is first approved in writing by the Architectural Committee. For the purposes hereof, "established" drainage is defined as the system of drainage, whether natural or otherwise, which exists at the time the overall grading of any portion of the

Property is completed by Grantor, or that drainage which is shown on any plans approved by the Architectural Committee, which may include drainage from the Common Area over any Building Lot in the Property. Drainage which is without the purview of Ada County Highway District Shall be governed by The Association shall maintain the drainage and roadway swales (to the extent roadway swales exist) pursuant to any requirements of ACHD.

4.10 Grading. The Owner of any Building Lot within the Property in which grading or other work has been performed pursuant to a grading plan approved under applicable provisions of City Code shall maintain and repair all graded surfaces and erosion prevention devices, retaining walls, drainage structures, means, devices and plantings and ground cover installed or completed thereon, which are not the responsibility of ACHD, the Association, or other public agency. Such requirements shall be subject to Regular, Special, and Limited Assessments provided in Article VII herein, as may be applicable.

4.11 Water Supply Systems. No separate or individual water supply system, regardless of the proposed use of the water to be delivered by such system, shall be permitted on any Building Lot unless such system is designed, located, constructed, and equipped in accordance with the requirements, standards, and recommendations of the Board and all governmental authorities having jurisdiction. Grantor may use the water supply as deemed necessary for any purpose on a temporary basis and for irrigation purposes.

4.12 No Hazardous Activities. No activities shall be conducted on the Property, and no Improvements constructed on any property, which are or might be unsafe or hazardous to any person or property.

4.13 Unsightly Articles. No unsightly articles, as determined by the Architectural Committee, shall be permitted to remain on any Building Lot so as to be visible from any other portion of the Property. Without limiting the generality of the foregoing, refuse, garbage, and trash shall be kept at all times in such containers and in areas approved by the Architectural Committee. No clothing or fabrics shall be hung, dried, or aired in such a way as to be visible to any other portion of the Property, and no equipment, heat pumps, compressors, containers, lumber, firewood, grass, shrub or tree clippings, plant waste, metals, bulk material, scrap, refuse, or trash shall be kept, stored or allowed to accumulate on any Building Lot except within an enclosed structure or as appropriately screened from view. No vacant residential structures shall be used for the storage of building materials.

4.14 No Temporary Structures. No house trailer, mobile home, tent (other than for short term individual use which shall not exceed one (1) week unless approved by the Association), shack or other temporary building, improvement, or structure shall be placed upon any portion of the Property, except temporarily as may be required by

construction activity undertaken on the Property. Also excepted from this requirement is any sales office established by the Grantor or the Association for the Property.

4.15 No Unenclosed or Unscreened Boats, Campers, and Other Vehicles. No boats, trailers, campers, all-terrain vehicles, motorcycles, recreational vehicles, bicycles, dilapidated or unrepaired and unsightly vehicles, or similar equipment shall be placed upon any portion of the Property (including, without limitation, streets, parking areas, and driveways) unless the same are enclosed or screened by a structure concealing them from adjacent street, Building Lot and Common Area view and in a manner approved by the Architectural Committee. To the extent possible, garage doors shall remain closed at all times.

4.16 Sewage Disposal Systems. No individual sewage disposal system shall be used on the Property. Each Owner shall connect the appropriate facilities on such Owner's Building Lot to the sewer system as required by the Architectural Committee and pay all charges assessed therefore.

4.17 No Mining or Drilling. No portion of the Property shall be used for the purpose of mining, quarrying, drilling, boring, or exploring for or removing water, oil, gas, or other hydrocarbons, minerals, rocks, stones, sand, gravel or earth. This Section 4.17 shall not prohibit exploratory drilling or coring which is necessary to construct a residential structure or Improvements.

4.18 Energy Devices Outside. No energy production devices, including, but not limited to, generators of any kind and solar energy devices, shall be constructed or maintained on any portion of the Property without the written approval of the Architectural Committee, except for heat pumps shown in plans approved by the Architectural Committee. This Section 4.18 shall not apply to passive solar energy systems incorporated into the approved design of a residential structure.

4.19 Vehicles. The use of all vehicles, including, but not limited to, trucks, automobiles, bicycles, motorcycles, snowmobiles, aircraft, and boats, shall be subject to all Association Rules, which may prohibit or limit the use thereof within the Subdivision. No overnight on-street parking shall be permitted except where expressly designated for parking use. No parking bays shall be permitted in any side, front, or backyard. Vehicles parked on a driveway shall not extend into any sidewalk, bike path or pedestrian path. No motorized vehicle or device shall be permitted on any Waterway or in the Common Area unless such vehicle is engaged in an emergency procedure.

4.20 Animals/Pets. No animals, birds, insects, pigeons, poultry or livestock shall be kept on the Property. This Section 4.20 does not apply to the keeping of up to two (2) domesticated dogs, up to two (2) domesticated cats, and other household pets, which do not unreasonably bother or constitute a nuisance to others. Without limiting the generality of the foregoing, consistent and/or chronic barking by dogs shall be considered a nuisance. Each dog in the Subdivision shall be kept on a leash, curbed, and otherwise

controlled at all times when such animal is off the Building Lot of its owner. Such owner shall clean up any animal defecation immediately from the Common Area or public right-of-way. Failure to do so may result, at the Board's discretion, with a Limited Assessment levied against such animal owner or the Owner of the Building Lot in which such animal is being kept. No dog or cat shall be allowed in any Waterway. The construction of dog runs or other pet enclosures shall be subject to Architectural Committee approval, shall be appropriately screened, and shall be maintained in a sanitary condition. Dog runs or other pet enclosures shall be placed a minimum of ten (10) feet from the side and twenty-five (25) feet from the rear Building Lot line, shall not be placed in any front yard of a Building Lot, shall be screened from view so as not to be visible from the Common Area or an adjacent Building Lot, and must be approved by the Architectural Committee.

4.21 Landscaping. The Owner of any Building Lot shall sod and landscape such Building Lot in conformance with the landscape plan approved by the Architectural Committee. The Owner must submit a landscaping plan for approval by the Architectural Committee.

The following restrictions apply with respect to landscaping subject to increased requirements established by the Architectural Committee:

A. Front Yard Landscaping: the front yard of all Building Lots must meet the following minimum requirements:

All landscaping is to be completed within thirty (30) days from actual occupancy;

It must be fully sodded within thirty (30) days from occupancy;

It must contain at least 2 trees with a minimum of 2" caliper;

It must contain at least five, one gallon plants/shrubs; and

An Automatic Sprinkler System (covering all of the yards) must be completed within thirty (30) days of occupancy.

B. Back Yard and Side Yard Landscaping: All back and side yard landscaping must be completed within six (6) months of occupancy unless it is not fenced with approved fencing and in that case shall comply with Front Yard Landscaping completion date requirements.

4.22 Water Rights Appurtenant to Subdivision Lands. Following the date of the recording of this Declaration, Declarant may transfer from the Property subject to this Declaration, and within the boundaries of an irrigation entity, as defined in Section

31-3805, Idaho Code, all water rights and assessment obligations appurtenant to the Property to the Association or the appropriate district providing pressurized irrigation and domestic water to Madrone Heights Subdivision.

4.23 Commencement of Construction. Any owner of a Building Lot shall, within a period of one (1) year following the date of purchase of a Building Lot from Grantor, commence the construction of a dwelling structure in compliance with the restrictions herein, and such construction shall be completed within six (6) months thereafter. The term "commence the construction," as used in this Section 4.23, shall require beginning and ongoing physical construction of the dwelling structure upon such Building Lot. In the event any Owner shall fail or refuse to commence the construction of a dwelling structure within said one (1) year period, Grantor may, at Grantor's option, following the expiration of said one (1) year period, repurchase said Building Lot from such Owner or the then Owner of such Building Lot at a repurchase price equivalent to the money actually paid to Grantor, less an amount equivalent to ten (10) percent thereof. In the event Grantor shall exercise Grantor's option to repurchase such Building Lot, upon tender of said repurchase price, Owner or the then Owner of such Building Lot shall make, execute, and deliver to Grantor a deed re-conveying said Building Lot, free and clear of all liens and encumbrances, which deed shall, by virtue of the notice provided hereby, be binding upon all persons who may, at any time hereafter, own or claim any right, title, or interest in such Building Lot, and the successors in title thereto, whether acquired by voluntary act or through operation of law.

4.24 Exemption of Grantor and for Common Area. Notwithstanding all other provisions in this Declaration, the Articles, Bylaws or any other documents, Grantor is and shall at all times be, and Improvements to the Common Areas by Grantor, or the Association are and shall at all times be, exempt from the obligations and restrictions set forth in this Article IV of the Declaration and from the governance and control of the Architectural Committee. Additionally, Grantor shall not be obligated to comply with any Association Rules. Without limiting the generality of the preceding sentences in this Section 4.24, so long as Grantor owns any Building Lot, nothing contained herein shall limit the right of Grantor to subdivide or re-subdivide any portion of the Property, to grant licenses, to reserve rights-of-way and easements with respect to the Common Area and Building Lots that it owns to utility companies, public agencies, or others, or to complete excavation, grading, and construction of Improvements to and on any portion of the property owned by Grantor, or to alter the foregoing and its construction plans and designs, or to construct such additional Improvements as Grantor deems advisable in the course of development of the Property. Such right shall include, but shall not be limited to, erecting, constructing, and maintaining on the Property such structures, signage and displays as may be reasonably necessary for the conduct of Grantor's business of completing development of the Property and disposing of the same by sales lease or otherwise. Grantor shall have the right at any time prior to acquisition of title to a Building Lot by a purchaser from Grantor to grant, establish, and/or reserve on that Building Lot, additional licenses, reservations and rights-of way to Grantor, to utility companies, or to others as may from time to time be reasonably necessary to the proper

development and disposal of the Property. Grantor may use any structures owned by Grantor on the Property as model homes or home complexes or real estate sales or leasing offices for lots and homes within or outside the Subdivision. Grantor need not seek or obtain Architectural Committee approval of any Improvement constructed or placed by Grantor on any portion of the Property owned by Grantor. All of the rights of Grantor, including, without limitation, those set forth in this Section 4.24 may be assigned by Grantor as set forth in Section 3.14 of this Declaration.

ARTICLE V: MADRONE HEIGHTS SUBDIVISION HOMEOWNERS ASSOCIATION

5.1 Organization of the Madrone Heights Subdivision Homeowners Association. The Association shall be initially organized by Grantor as an Idaho nonprofit corporation under the provisions of the Idaho Code relating to general non-profit corporations and shall be charged with the duties and invested with the powers prescribed by law and set forth in the Articles, Bylaws, and this Declaration. Neither the Articles nor the Bylaws shall be amended or otherwise changed or interpreted so as to be inconsistent with this Declaration or with any Supplemental Declaration which Grantor might adopt pertaining to the Subdivision. Conflicting terms between any of these three documents shall be resolved with the following priority: CC&Rs shall prevail over the Articles and the Bylaws and the Articles shall prevail over the Bylaws.

5.2 Membership. Each Owner, by virtue of being an Owner and for so long as such ownership is maintained, shall be a Member of the Association. Memberships in the Association shall be appurtenant to the Building Lot owned by such Owner. The memberships in the Association shall not be transferred, pledged, assigned, or alienated in any way except upon the transfer of Owner's title and then only to the transferee of such title. Any attempt to make a prohibited membership transfer shall be void and will not be reflected on the books of the Association.

5.3 Voting. Voting in the Association shall be carried out by Members who shall cast the votes attributable to the Building Lots, which they own, or, in the case of Grantor, attributable to the Building Lots owned by Grantor. Member voting procedures shall be performed in accordance with the terms of this Declaration, the Association's Bylaws, Articles and other properly adopted organizational documents. On any issue that comes to a vote of the Members, each Owner shall be entitled to vote a number of votes that correlates to the number of Building Lots owned by such Member as described in more detail below. When more than one person holds an interest in any Building Lot, all such persons shall be Members but shall share the votes attributable to the Building Lot. For voting purposes, the Association shall have two (2) classes of Members as described below:

5.3.1 Class A Members. Owners other than Grantor shall be known as Class A Members. Each Class A Member shall be entitled to cast one (1) vote for each Building Lot owned by such Class A Member on the day of the vote.

5.3.2 Class B Members. The Grantor shall be known as the Class B Member, and notwithstanding all other provisions of this Declaration to the contrary, Grantor shall be entitled to ten (10) votes for each Building Lot of which Grantor is the Owner. The Class B Member shall cease to be a voting Member in the Association when the total cumulative votes of the Class A Members equal or exceed the total votes of the Class B Members, provided that the Class B membership voting rights shall not cease before the expiration of ten (10) years from the date on which the first Building Lot is sold to an Owner other than Grantor. Immediately upon the Class B membership ceasing to have the rights to vote is set forth in this Section 5.3.2 it shall become a Class A Member and shall have the associated voting rights based on the number of Building Lots of which it is an Owner, provided, however, all other rights associated with Grantor's status as Grantor shall continue regardless of whether Grantor is a Class A Member or a Class B Member.

Fractional votes shall not be allowed. In the event that joint Owners are unable to agree among themselves as to how their vote or votes shall be cast, they shall lose their right to vote on the matter being put to a vote. When an Owner casts a vote, it will thereafter be presumed conclusively for all purposes that such Owner was acting with authority and consent of all joint owners of the Building Lot(s) from which the vote derived. The right to vote may not be severed or separated from the ownership of the Building Lot to which it is appurtenant, except that any Owner may give a revocable proxy, or may assign such Owners right to vote to a lessee, mortgagee, beneficiary, or contract purchaser of the Building Lot concerned, for the term of the lease, mortgage, deed of trust, or contract. Any sale, transfer, or conveyance of such Building Lot to a new Owner shall operate automatically to transfer the appurtenant voting right to the Owner, subject to any assignment of the right to vote to a lessee, mortgagee, or beneficiary as provided herein. Neither the Grantor nor the Association shall be responsible or liable for any dispute, or damages related thereto, based on a disagreement as to who has the voting rights associated with a particular Building Lot and shall be able to rely on the claim by any lessee, mortgagee, contract purchaser or beneficiary of their right to vote. The Association shall have the right to suspend the voting rights of an Owner, except Grantor, for any period during which any Assessment or charge against such Owner's or such Owner's Building Lot remains unpaid, and for a period not to exceed sixty (60) days for any infraction of the Association Rules.

5.4 Board and Officers. The affairs of the Association shall be conducted and managed by the Board and agents of the Board as the Board may elect or appoint, in accordance with the Articles and Bylaws, as the same may be amended from time to time. The Board shall be elected in accordance with the provisions set forth in the Association Bylaws.

5.5 Power and Duties of the Association.

5.5.1 Powers. The Association shall have all the powers of a corporation organized under the general corporation laws of the State of Idaho subject only to such limitations upon the exercise of such powers as are expressly set forth in the Articles, the Bylaws, and this Declaration. The Association shall have the power to do any and all lawful things which may be authorized, required or permitted to be done by the Association under Idaho law and under this Declaration, and the Articles and Bylaws, and to do and perform any and all acts which may be necessary to, proper for, or incidental to the proper management and operation of the Common Area and the Grantor's and Association's other assets (including water rights when and if received from Grantor) and affairs and the performance of the other responsibilities herein assigned, including without limitation:

5.5.1.1 Assessments. The power to levy Assessments on any Owner or any portion of the Property and to force payment of such Assessments, all in accordance with the provisions of this Declaration.

5.5.1.2 Right of Enforcement. The power and authority from time to time in its own name, on its own behalf or on behalf of any Owner who consents thereto, to commence and maintain actions and suits to restrain and enjoin any breach or threatened breach of this Declaration or the Article or the Bylaws, including the Association Rules adopted pursuant to this Declaration, and to enforce by injunction or otherwise, all provisions hereof.

5.5.1.3 Delegation of Powers. The authority to delegate its power and duties to committees, officers, employees, or to any person, firm, or corporation to act as manager, and to contract for the maintenance, repair, replacement, and operation of the Common Area. Neither the Association nor the members of its Board shall be liable for any omission or improper exercise by the manager of any such duty or power so delegated.

5.5.1.4 Association Rules. The power to adopt, amend and repeal, by majority vote of the Board, such rules and regulations as the Board deems reasonable, including, without limitation, reasonable charges for an Owner's failure to comply with such rules and regulations. The Association may govern the use of the Common Areas, including, but not limited to, the use of private streets and other common area improvements by the Owners, their families, invitees, licensees, lessees, or contract purchasers; provided, however, that any Association Rules shall apply equally to all Owners and shall not be inconsistent with this Declaration, the Articles, or the Bylaws. A copy of the Association Rules as they may from time to time be adopted, amended, or repealed, shall be mailed or otherwise delivered to each Owner. Upon such mailing or delivery, the Association Rules shall have the same force and effect as if they were set

forth in and were a part of this Declaration. In the event of any conflict between such Association Rules and any other provisions of this Declaration, or the Articles or the Bylaws, the provisions of the Association Rules shall be deemed to be superseded by provisions of this Declaration, the Articles, or the Bylaws to the extent of any such inconsistency.

5.5.1.5 Emergency Powers. The power, exercisable by the Association or by any person authorized by it, to enter upon any portion of the Property (but not inside any building constructed thereon) in the event of any emergency involving illness or potential danger to life or property or when necessary in connection with any maintenance or construction for which the Association is responsible. Such entry shall be made with as little inconvenience to the Owner as practicable, and any damage caused thereby shall be repaired by the Association unless the conditions of such emergency were caused by such Owner.

5.5.1.6 Licenses, Easements, and Rights-of-Way. The power to grant and convey to any third party such licenses, easements, and rights-of-way in, on, or under the Common Area as may be necessary or appropriate for the orderly maintenance, preservation, and enjoyment of the Common Area, and for the preservation of the health, safety, convenience, and welfare of the Owners, for the purpose of constructing, erecting, operating, or maintaining:

5.5.1.6.1 Underground lines, cables, wires, conduits, or other devices for the transmission of electricity or electronic signals-for lighting, heating, power, telephone, television, or other purposes, and the above ground lighting stanchions, meters, and other facilities associated with the provisions of lighting and services;

5.5.1.6.2 Public sewers, storm drains, water drains, and pipes, water supply systems, sprinkling systems, heating and gas lines or pipes, and any similar public or quasi-public improvements or facilities;

5.5.1.6.3 Mailboxes and sidewalk abutments around such mailboxes, or any service facility, berms, fencing and landscaping abutting Common Areas, public and private streets or land conveyed for any public or quasi-public purpose including, but not limited to, bicycle pathways.

5.5.1.7 Conveyances to and from Municipalities. The power to convey any portion of the Common Area and any portion of the

Property that it owns to any city, county, the State of Idaho, the United States of America, or any political subdivision of any of the foregoing. The Board shall also have the power to receive a conveyance of any property interest from the above-referenced entities, or any other individual or entity, and to hold such property interest as Common Area.

5.5.2 Duties. In addition to duties necessary and proper to carry out the power delegated to the Association by this Declaration, and the Articles and Bylaws, without limiting the generality thereof, the Association or its agents, if any, shall have the authority and the obligation to conduct all business affairs of the Association and to perform, without limitation, each of the following duties:

5.5.2.1 Operation and Maintenance of the Common Area. Operate, maintain, and otherwise manage, or provide for the operation, maintenance, and management of, the Common Area. Such properties may include those lands intended for open space uses and which may be referred to as "non-buildable" lots per the Plat. Without limiting the generality of the foregoing, the Association shall perform the following:

5.5.2.1.1 Maintain, repair, or replace all school bus staging areas;

5.5.2.1.2 Maintain the integrity of the vision triangles as required by the Plat Conditions;

5.5.2.1.3 Maintain the development's Common Area landscaping and open spaces, including temporary irrigation and furnishings located in all public rights-of-way;

5.5.2.1.4 Maintain the Subdivision's non-publically dedicated park and pathway areas;

5.5.2.1.5 Participate in a Road Improvement District or utility local improvement district as the need for these improvements arise;

5.5.2.1.6 Provide for snow removal along pathways in the Common Areas so they are pedestrian accessible within 24 hours of a snow event;

5.5.2.1.7 If the Subdivision becomes part of a transit route(s), provide residents of the Subdivision with transit street furnishings; and

5.5.2.1.8 Repair and replacement of property damaged or destroyed by casualty loss.

Additionally, the Association may, in its discretion, limit or restrict the access and use of the Common Area to any Owner or Owners, other than Grantor, residing in the Subdivision. **The Association shall establish rules and regulations regarding the Owners' use of Common Areas and Improvements located thereon.**

5.5.2.2 Reserve Account. Establish and fund a reserve account with a reputable banking institution or savings and loan association or title insurance company authorized to do business in the State of Idaho, which reserve account shall be dedicated to the costs of repair, replacement, maintenance and improvement of the Common Area.

5.5.2.3 Maintenance of Berms Retaining Walls and Fences. Maintain the berms, retaining walls, fences, and water amenities within and abutting the Common Area and Landscape Easement areas.

5.5.2.4 Taxes and Assessments. Pay all real and personal property taxes and assessments separately levied against the Common Area or against the Subdivision, the Association, and/or any other property owned by the Association. Such taxes and assessments may be contested or compromised by the Association, provided, however, that such taxes and assessments are paid or a bond insuring payment is posted prior to the sale or disposition of any property to satisfy the payment of such taxes and assessments. In addition, the Association shall pay all other federal, state, or local taxes, including income or corporate taxes levied against the Association, in the event that the Association is denied the status of a tax exempt corporation.

5.5.2.5 Water and Other Utilities. Acquire, provide, and/or pay for water, sewer, garbage disposal, refuse and rubbish collection, electrical, telephone, and gas, and other necessary services, for the Common Area, and manage for the benefit of the Subdivision all domestic, irrigation, and amenity water rights and rights to receive water held by the Association, whether such rights are evidenced by license, permit, claim, stock ownership, or otherwise. The Association shall maintain, repair, and operate any sewer lift stations located on the Property and shall comply with all of the terms and conditions of the Stormwater Plan. All responsibility for payment of fees related to the provision of utilities, and other similar fees, including, without limitation, impact fees, sewer treatment connection fees, sewer interceptor fees, water connection fees, pressure irrigation connection fees, and related inspections fees, shall belongs to the Owner of each Building Lot at the

time a building permit is acquired to commence construction on any Improvements on such Building Lot. In the event the Grantor or Association has paid any such fees, the Association or Grantor, whichever is applicable, shall be entitled to reimbursement of the same and such reimbursement shall be a Limited Assessment.

5.5.2.6 Insurance. Obtain insurance from reputable insurance companies authorized to do business in the State of Idaho, and maintain in effect any insurance policy the Board deems necessary or advisable, which policies must include, the following policies of insurance:

5.5.2.6.1 Fire insurance, including those risks embraced by coverage of the type known as the broad form "All Risk" or special extended coverage endorsement on a blanket agreed amount basis for the full insurable replacement value of all Improvements, equipment, and fixtures located within the Common Area.

5.5.2.6.2 Comprehensive public liability insurance insuring the Board, the Association, the Grantor, and the individual grantees and agents and employees of each of the foregoing, against any liability incident to the ownership and/or use of the Common Area. Limits of liability of such coverage shall be a minimum of the following:

Not less than One Million Dollars and No Cents ($1,000,000.00) per person, and One Million Dollars and No Cents ($1,000,000.00) per occurrence, with respect to personal injury or death, and One Million Dollars and No Cents ($1,000,000.00) per occurrence with respect to property damage.

5.5.2.6.3 Full coverage directors' and officers' liability insurance with a limit of at least Two Hundred Fifty Thousand Dollars and No Cents ($250,000.00).

5.5.2.6.4 Such other insurance, including motor vehicle insurance and Workmen's Compensation Insurance, to the extent necessary to comply with all applicable laws and indemnity, faithful performance, fidelity, and other bonds as the Board shall deem necessary or required to carry out the Association functions or to insure the Association against any loss from malfeasance or dishonesty of any employee or other person charged with the management or possession of any Association funds or other property.

5.5.2.7 Association as Trustee. The Association shall act as and be deemed trustee of the interests of all Owners in connection with any insurance proceeds paid to the Association under such policies, and have full power to receive such Owner's interests in such proceeds and to deal therewith.

5.5.2.8 Insurance Premiums as Regular Assessments. Charge as a common expense to be included in the Regular Assessments insurance premiums for any and all insurance coverage the Board deems necessary or advisable.

5.5.2.9 Rule Making. Make, establish, promulgate, amend, and repeal such Association Rules as the Board shall deem advisable.

5.5.2.10 Newsletter. If it so elects, prepare and distribute a newsletter on matters of general interest to Association Members, the cost of which shall be included in Regular Assessments.

5.5.2.11 Architectural Committee. Appoint and remove members of the Architectural Committee, subject to the provisions of this Declaration.

5.5.2.12 Enforcement of Restrictions and Rules. Perform such other acts, whether or not expressly authorized by this Declaration, as may be reasonably advisable or necessary to enforce any of the provisions of the Declaration, or of the Articles or the Bylaws, including, without limitation, the recordation of any claim of lien with the County Recorder, as more fully provided herein.

5.5.2.13 Private Streets, Signs and Lights. Maintain, repair, or replace private streets (as noted on the Plat and including any cul-de-sac easements), street signs, and private streetlights located on the Property. This duty shall run with the land and cannot be waived by the Association unless the all required governmental entities consent to such waiver.

5.6 Personal Liability. No member of the Board, or member of any committee of the Association, or any officer of the Association, or the Grantor, or the manager, if any, shall be personally liable to any Owner, or to any other party, including the Association, for any damage, loss, or prejudice suffered or claimed on the account of any act, omission, error, or negligence of such person, the Association, the Board, the manager, if any, or any other representative or employee of the Association, the Grantor, or the Architectural Committee, or any other committee, or any Owner, or the Grantor, provided that such person, upon the basis of such information as may be possessed by such person, has acted in good faith without willful or intentional misconduct.

5.7 Loans. At the election of Grantor, all expenditures made by Grantor related to the organization and operation of the Association shall be deemed loans made on behalf of Grantor for the benefit of the Association ("Grantor Loans"); provided, however, Grantor shall not be obligated to make any Grantor Loans or otherwise have any of the obligations attributable to the Association under this Declaration or otherwise. All Grantor Loans shall be repaid to Grantor as part of the Expenses used to calculate the Regular Assessment for the next successive fiscal year after each such Grantor Loan is made or, at the option of the Board, at an earlier time pursuant to a Special Assessment. In the event that there is more than one Grantor Loan outstanding and not all outstanding Grantor Loans are paid back in full at the same time, then regardless of when Grantor Loans are made, they shall be paid back on a pro-rata basis.

5.8 Budgets and Financial Statements. Financial statements for the Association shall be prepared regularly and copies shall be distributed to each Member of the Association as follows:

A pro forma operating statement or budget, for each fiscal year shall be distributed not less than sixty (60) days before the beginning of each fiscal year. The operating statement shall include a schedule of Assessments received and receivable, identified by the Building Lot number and the name of the person or entity assigned.

5.9 Meetings of Association. Each year the Association shall hold at least one (1) meeting of the Members, according to the schedule for such meetings established by the Bylaws. Only Members shall be entitled to attend Association meetings and all other persons may be excluded. Notice for all Association meetings shall be given pursuant to the Association's Bylaws.

ARTICLE VI: RIGHTS TO COMMON AREAS

6.1 Use of Common Area. Every Owner shall have a right to use, but not to control, all or any part of the Common Area, which right shall be appurtenant to and shall pass with the title to every Building Lot, subject to all of the following provisions:

6.1.1 The right of the Association holding or controlling such Common Area to levy and increase Assessments.

6.1.2 The right of the Association to suspend the use of, or interest in, the Common Area (but not including access to private streets, cul-de-sacs and walkways of the Property) by an Owner, except Grantor, for any period during which any Assessment or charge against such Owner's or such Owner's Building Lot remains unpaid, and for a period not to exceed sixty (60) days for any infraction of the Association Rules.

6.1.3 The right of the Association to prohibit the construction of structures or Improvements on all Common Areas.

6.1.4 The right of the Association to protect wildlife habitat.

6.1.5 The right of the Association and the Grantor to set aside and restrict access to, either temporarily or permanently, portions of the Common Area for the use of the Association, the Grantor, any individual Owner or any group of Owners, so long as such action does not materially impair the other Owner's use and enjoyment of the Common Area as a whole.

6.2 Designation of Common Area. Grantor shall specifically designate and reserve the Common Area in the Declaration, Supplemental Declarations, and/or recorded Plats. By accepting a deed to a Building Lot, each Owner agrees that such Owner is waiving all right to assert a common law dedication by Grantor or the Association of any Common Area.

6.3 Delegation of Right to Use. Any Owner may delegate, in accordance with the respective Bylaws and Association Rules, such Owner's right of enjoyment to the Common Area, to the members of such Owner's family in residence, and such Owner's tenants or contract purchasers who reside on such Owner's Building Lot. Only Grantor or the Association shall have the right to delegate the right of enjoyment to the Common Area to the general public, and such delegation to the general public shall be for a fee set by Grantor or the Association.

6.4 Damages. Each Owner shall be fully liable for any damage to any Common Area which may be sustained by reason of the negligence or willful misconduct of the Owner, such Owner's resident tenant or contract purchaser, or such Owner's family and guests, both minor and adult. In the case of joint ownership of a Building Lot, the liability of such Owners shall be joint and several. The cost of correcting such damage shall be a Limited Assessment against the Building Lot and may be collected as provided herein for the collection of other Assessments.

ARTICLE VII: ASSESSMENTS

7.1 Covenant to Pay Assessments. By acceptance of a deed to any property in the Subdivision, each Owner of such property hereby covenants and agrees to pay when due all Assessments or charges made by the Association, including all Regular, Special, and Limited Assessments and charges made against such Owner pursuant to the provisions of this Declaration or other applicable instrument. Notwithstanding any other provision of this Declaration, the Articles, Bylaws, or other document, the Grantor shall not be required to pay any Assessments.

7.1.1 Assessment Constitutes Lien. Such Assessments and charges, together with interest, costs, and reasonable attorney's fees which may be

incurred in collecting the same, shall be a charge on the land and shall be a continuing lien upon the property against which each such Assessment or charge is made.

7.1.2 Assessment is Personal Obligation. Each such Assessment, together with interest, costs and reasonable attorney's fees, shall also be the personal obligation of the Owner of such property beginning with the time when the Assessment falls due. The personal obligation for delinquent Assessments shall not pass to such Owner's successors in title unless expressly assumed by them but shall remain such Owner's personal obligation regardless of whether he remains an Owner.

7.2 Regular Assessments. All Owners are obligated to pay Regular Assessments to the treasurer of the Association on a schedule of payments established by the Board.

7.2.1 Purpose of Regular Assessments. The proceeds from Regular Assessments are to be used to repay all unpaid Grantor Loans and to pay for all costs and expenses incurred by the Association and that the Association expects to incur, including legal and attorneys' fees and other professional fees, for the conduct of its affairs, including without limitation the costs and expenses of construction, improvement, protection, maintenance, repair, management, and operation of the Common Areas, including all Improvements located on such areas owned and/or managed and maintained by such Association, and an amount allocated to an adequate reserve fund to be used for repairs, replacement, maintenance, and improvement of those elements of the Common Area, or other property of the Association that must be replaced and maintained on a regular basis (collectively "Expenses").

7.2.2 Computation of Regular Assessments. The Board shall compute the anticipated amount of its Expenses on an annual basis as set forth in this paragraph (the "Anticipated Expenses"). The Regular Assessment for a given fiscal year shall be based on the Anticipated Expenses. The Board shall compute the initial amount of Regular Assessments owed beginning the first day of the third month following the month in which the closing of the first sale of a Building Lot occurred in the Subdivision for the purposes of the Association's Regular Assessment ("Initiation Date"). Thereafter, the computation of Regular Assessments shall take place not less than thirty (30) or more than sixty (60) days before the beginning of each fiscal year of the Association, provided, however, in the event that for any reason the Board fails to make such a computation, the Owners shall not be relieved of the obligation to pay the Regular Assessments and until such computation is made, the Owners shall continue to pay an amount of Regular Assessments consistent with the previous fiscal year. The computation of the Regular Assessment for the period from the Initiation Date until the beginning

of the next fiscal year shall be reduced by an amount, which fairly reflects the fact that such period was less than one (1) year.

7.2.3 Amounts Paid by Owners. The Board can require, in its discretion or as provided in the Articles or Bylaws, payment of Regular Assessments in monthly, quarterly, semi-annual, or annual installments. The Regular Assessment to be paid by any particular Owner, except Grantor, for any given fiscal year shall be computed as follows:

7.2.3.1 An initial assessment set up fee of $200.00 shall be paid to the Association at the closing of the acquisition by any Owner, aside from the Grantor, of a Building Lot. This fee shall (i) be paid by the purchaser, (ii) only apply to the initial sale from Grantor to a non-Grantor Owner, (iii)be in addition to and not a credit towards the Regular Assessments owed by an Owner and (iv) be used to pay back Grantor Loans. On all subsequent transfers of Building Lots, at the closing of the acquisition, the purchaser shall pay to the Association a transfer fee of $150.00.

7.2.3.2 As to the Association's Regular Assessment, initially, each Owner shall be assessed and shall pay an amount computed by multiplying the Association's total Anticipated Expenses by 1.5 and then multiplying that total by the fraction produced by dividing the Building Lots attributable to the Owner by the total number of Building Lots that are part of the Property at the time such calculation is made. Regular Assessments shall be calculated in this manner until such time as all Grantor Loans have been repaid in full and, thereafter, each Owner shall be assessed and shall pay an amount computed by multiplying the Association's total Anticipated Expenses by the fraction produced by dividing the Building Lots attributable to the Owner by the total number of Building Lots not owned by Grantor that are part of the Property at the time such calculation is made. As of the date of this Declaration the estimated initial amount of the regular assessment is $450.00 per year, per Building Lot.

7.2.3.3 Notwithstanding anything in this Declaration to the contrary, Grantor is not obligated to pay any Regular, Special or Limited Assessment on any Building Lot that it owns.

7.3 Special Assessments.

7.3.1 Purpose and Procedure. In the event that the Board shall determine that its respective Regular Assessment for a given calendar year is or will be inadequate to meet the Expenses of the Association for any reason, including but not limited to costs of construction, reconstruction, unexpected

repairs or replacement of capital improvements upon the Common Area, attorney's fees and/or litigation costs, other professional fees, or for any other reason, the Board shall determine the approximate amount necessary to defray such Expenses and levy a Special Assessment against the Owners and the Building Lots, pursuant to the terms of this Article VII and which shall be computed in the same manner as Regular Assessments. No Special Assessment shall be levied which exceeds twenty percent (20%) of the Anticipated Expenses of such Association for that fiscal year, without the vote or written assent of the Owners representing a majority of the votes of the Members of such Association. The Board shall, in its discretion, determine the schedule under which such Special Assessment will be paid.

7.3.2 Consistent Basis of Assessment. Every Special Assessment levied by and for the Association shall be levied and paid upon the same basis as that prescribed for the levying and payment of Regular Assessments.

7.4 Limited Assessments. Notwithstanding the above provisions with respect to Regular and Special Assessments, the Board may levy a Limited Assessment against any individual Member or multiple members (i) as a remedy to reimburse the Association for costs incurred in bringing the Member and/or such Member's Building Lot or restricted Common Area into compliance with the provisions of this Declaration, the Articles, Bylaws, Association Rules and any other governing instruments of the Subdivision, (ii) to collect other amounts owed by an Owner to the Association, and (iii) otherwise reimburse the Association for expenses incurred as a result of such Member's acts and omissions.

7.5 Uniform Rate of Assessment. Unless otherwise specifically provided herein, Regular and Special Assessments shall be fixed at a uniform rate per Building Lot for all Members of the Association.

7.6 Assessment Period. Unless otherwise provided in this Declaration or otherwise determined by the Board, the Assessment period shall commence on January 1st of each year and terminate December 31st of such year. The first Assessment shall be pro-rated according to the number of months remaining in the fiscal year and shall be payable by the Owner of a Building Lot at the closing of the Owner's acquisition of such Building Lot.

7.7 Notice and Assessment Due Date. Ten (10) days' prior written notice of any change in the amount or due date of Regular and Special Assessments shall be sent to the Owner of every Building Lot subject thereto, and to any person in possession of such Building Lot. The due dates for the semi-annual payment of Regular Assessments and Special Assessments shall be the first day of January and the first day of July, unless some other due date is established by the Board. Each installment of the Regular Assessment or Special Assessment shall become delinquent if not paid within ten (10) days after the due date thereof. All Limited Assessments shall be delinquent if not paid

within ten (10) days after notice of such Limited Assessment is provided to Owner. There shall accrue with each delinquent payment a late charge equal to ten percent (10%) of the delinquent charge and installment. In addition, each payment which is delinquent for more than twenty (20) days shall accrue interest at eighteen percent (18%) per annum calculated from the date of delinquency to and including the date full payment is received by the Association. The Association may bring an action against the delinquent Owner and may foreclose the lien against such Owner's Building Lot, or Building Lots if Owner owns more than one, as more fully provided herein. Each Owner is personally liable for Assessments, together with all interest, costs and attorney's fees, and no Owner may exempt themselves from such liability by a waiver of the use and enjoyment of the Common Areas, by lease or abandonment of such Owner's Building Lot, or by virtue of the fact that their voting and/or Common Area use rights have been restricted pursuant to the terms of this Declaration.

7.8 Estoppel Certificate. The Association, upon at least twenty (20) days prior written request, shall execute, acknowledge and deliver to the party making such request, a statement in writing stating whether or not, to the knowledge of the Association, a particular Owner is in default under the provisions of this Declaration, and further stating the dates, within the preceding twelve (12) month period that any Assessments have been paid by the Owner. Any such certificate delivered pursuant to this Section 7.8 may be relied upon by any prospective purchaser or mortgagee of the Owner's Building Lot. Reliance on such certificate may not extend to any default of which the signor of such certificate had no actual knowledge.

ARTICLE VIII: ENFORCEMENT OF ASSESSMENT; LIENS

8.1 Right to Enforce. The Association has the right to collect and enforce its Assessments pursuant to the provisions hereof. Each Owner, upon becoming an Owner of a Building Lot, shall be deemed to covenant and agree to pay each and every Assessment provided for in this Declaration and agrees to the enforcement of all Assessments in the manner herein specified. In the event an attorney or attorneys are employed for the collection of any Assessment, whether by suit or otherwise, or to enforce compliance with or specific performance of the terms and conditions of this Declaration, each Owner agrees to pay reasonable attorney's fees in addition to any other relief or remedy obtained against such Owner. The Board or its authorized representative may enforce the obligations of the Owners to pay such Assessments by any and all means available to it in law and in equity, including, without limitation, commencement and maintenance of a legal action, or exercise of the power of foreclosure and sale pursuant to Section 8.3 to enforce the liens created hereby. A suit to recover a money judgment for an unpaid Assessment shall be maintainable without foreclosing or waiving the lien hereinafter provided for.

8.2 Assessment Liens.

8.2.1 Creation. There is hereby created a claim of lien with power of sale on each and every Building Lot to secure payment of any and all Assessments levied against such Building Lot pursuant to this Declaration together with interest thereon at the maximum rate permitted by law and all costs of collection which may be paid or incurred by the Association making the Assessment in connection therewith, including reasonable attorney's fees. All sums assessed in accordance with the provisions of this Declaration shall constitute a lien on such respective Building Lot upon recordation of a claim of lien with the County Recorder. Such lien shall be prior and superior to all other liens or claims created subsequent to the recordation of the claim of lien except for tax liens for real property taxes on any Building Lot and assessments on any Building Lot in favor of any municipal or other governmental assessing body which, by law, would be superior thereto.

8.2.2 Claim of Lien. Upon default of any Owner in the payment of any Assessment issued hereunder, the Association may cause to be recorded in the office of the County Recorder a claim of lien. The claim of lien shall state the amount of such delinquent sums and other authorized charges (including the cost of recording such claim of lien), a sufficient description of the Building Lot(s) against which the same have been assessed, and the name of the record Owner thereof. Each delinquency shall constitute a separate basis for a claim of lien, but any number of defaults may be included within a single claim of lien. Upon payment to the Association of all delinquent sums and charges in any given claim of lien or other satisfaction thereof, the Association shall cause to be recorded a notice stating the satisfaction of such delinquent sums and charges. The Association may demand and receive the cost of preparing and recording such notice before recording the same.

8.3 Method of Foreclosure. Such lien may be foreclosed by appropriate action in court or by sale by the Association, its attorney or other person authorized to make the sale. Such sale shall be conducted in accordance with the provisions of the Idaho Code applicable to the exercise of powers of sale permitted by law. The Board is hereby authorized to appoint its attorney, any officer or director of the Association, or any title company authorized to do business in Idaho, as trustee for the purpose of conducting such power of sale or foreclosure.

8.4 Required Notice. Notwithstanding anything contained in this Declaration to the contrary, no action may be brought to foreclose the lien created by recordation of claim of lien, whether judicially, by power of sale or otherwise, until the expiration of thirty (30) days after a copy of such claim of lien has been deposited in the United States mail, certified or registered, postage prepaid, to the Owner of the Building Lot(s) described in such claim of lien, and to the person in possession of such Building Lot(s) and a copy thereof is recorded by the Association in the office of the County Recorder.

8.5 Subordination to Certain Trust Deeds. The lien for the Assessments provided for herein in connection with a given Building Lot shall not be subordinate to the lien of any deed of trust or mortgage except the lien of a first deed of trust or first mortgage given and made in good faith and for value that is of record as an encumbrance against such Building Lot prior to the recordation of a claim of lien for the Assessments. Except as expressly provided in Section 8.6 with respect to a first mortgagee who acquires title to a Building Lot, the sale or transfer of any Building Lot shall not affect the Assessment lien provided for herein, nor the creation thereof by the recordation of a claim of lien, on account of the Assessments becoming due whether before, on, or after the date of such sale or transfer, nor shall such sale or transfer diminish or defeat the personal obligation of any Owner for delinquent Assessments as provided for in this Declaration.

8.6 Rights of Mortgagees. Notwithstanding any other provision of this Declaration, no amendment of this Declaration shall operate to defeat the rights of the beneficiary under any deed of trust, or a mortgagee under a mortgage, upon a Building Lot made in good faith and for value, and recorded prior to the recordation of such amendment, provided that after the foreclosure of any such deed of trust or mortgage such Building Lot shall remain subject to this Declaration as amended.

ARTICLE IX: INSPECTION OF ASSOCIATION'S BOOKS AND RECORDS

9.1 Member's Right of Inspection. The membership register, books of account and minutes of meetings of the Board and any committees of the Association shall be made available at the office of the Association or at such other place as the Board of such Association shall prescribe, for inspection and copying by any Member of the Association or by such Member's duly appointed representatives, upon reasonable notice, at any reasonable time and for a purpose reasonably related to such Member's interest as a Member. No Member or any other person shall copy the membership register for the purposes of solicitation of or direct mailing to any Member of the Association.

9.2 Rules Regarding Inspection of Books and Records. The Board shall establish reasonable rules with respect to:

9.2.1 Notice to be given to the custodians of the records by the persons desiring to make the inspection.

9.2.2 Hours and days of the week when such an inspection may be made.

9.2.3 Payment by the requesting Member of the cost of reproducing copies of documents requested pursuant to this Article IX.

9.3 Director's Rights of Inspection. Every director shall have the absolute right at any reasonable time to inspect all books, records and documents of the Association, and the physical properties owned or controlled by the Association. The right of inspection by a director includes the right to make extracts and copies of documents at the Association's expense.

ARTICLE X: ARCHITECTURAL COMMITTEE

10.1 Creation. Within thirty (30) days of the date on which the Grantor first conveys a Building Lot to an Owner, Grantor shall appoint three (3) individuals to serve on an architectural control committee (the "Architectural Committee"). Each member of the Architectural Committee shall hold office until such time as such member has resigned or has been removed, or such member's successor has been appointed, as provided herein. A member of the Architectural Committee need not be an Owner or Member of the Association. Members of the Architectural Committee may be removed by the person or entity appointing them at any time without cause.

10.2 Rights of Appointment. After the initial appointment by Grantor as set forth in Section 10.1, the Board shall have the exclusive right, at any time, and from time to time, to appoint and remove all members of the Architectural Committee. If a vacancy on the Architectural Committee occurs and a permanent replacement has not yet been appointed, the Board may appoint a member to serve for a specified temporary period not to exceed one (1) year.

10.3 Review of Proposed Construction. The Architectural Committee shall consider and act upon any and all proposals or plans and specifications submitted for its approval pursuant to this Declaration, and perform such other duties as from time to time shall be assigned to it by the Board, including, without limitation, the inspection of construction in progress to assure its conformance with plans and specifications approved by the Architectural Committee. The Board shall have the power to determine, by rule or other written designation consistent with this Declaration, which types of Improvements shall be submitted for Architectural Committee review and approval. The Architectural Committee shall have the power to hire an architect, licensed with the State of Idaho, to assist the Architectural Committee in its review of proposals or plans and specifications submitted to the Architectural Committee. The Architectural Committee shall approve proposals or plans and specifications submitted for its approval only if it deems that the construction, alterations or additions or other Improvements contemplated thereby in the locations indicated will not be detrimental to the habitat of the Common Areas, or appearance of the Property as a whole, that the appearance of any structure affected thereby will be in harmony with the surrounding structures, and that the upkeep and maintenance thereof will not become a burden on the Association.

10.3.1 Conditions on Approval. The Architectural Committee may condition its approval of proposals or plans and specifications upon such changes thereto as it deems appropriate, and/or upon the agreement of the Owner to

reimburse the Association for the cost of maintenance, and may require submission of additional plans and specifications or other information before approving or disapproving material submitted.

10.3.2 Architectural Committee Rules and Fees. The Architectural Committee also may establish rules and/or guidelines setting forth procedures for and the required content of the applications and other documentation submitted for approval. Such rules may require a fee to accompany each application for approvals or additional factors which it will take into consideration in reviewing submissions. The Architectural Committee shall determine the amount of such fee in a reasonable manner. Such fees shall be used to defray the costs and expenses of the Architectural Committee, including the cost and expense of hiring an architect licensed by the State of Idaho, as provided above, or for such other purposes as established by the Board, and such fee shall be refundable to the extent not expended for the purposes herein stated. If plans submitted are the same or substantially similar to plans previously approved by the Architectural Committee, at the discretion of the Architectural Committee, fees may be reduced for such application approvals.

Such rules and guidelines may establish, without limitation, specific rules and regulations regarding design and style elements, landscaping, and fences and other structures such as animal enclosures as well as special architectural guidelines applicable to Building Lots located adjacent to public open space, private open space or other Common Area.

10.3.3 Detailed Plans. The Architectural Committee may require such detail in plans and specifications submitted for its review as it deems proper, including, without limitation, floor plans, site plans, landscape plans, drainage plans, elevation drawings, and descriptions or samples of exterior material and colors. Until receipt of such details, the Architectural Committee may postpone review of any plan submitted for approval.

10.3.4 Architectural Committee Decisions. Decisions of the Architectural Committee and the reasons therefore shall be transmitted by the Architectural Committee to the Applicant at the address set forth in the application for approval within forty-five (45) days after filing all materials required by the Architectural Committee. Any materials submitted pursuant to this Article X shall be deemed approved unless written disapproval by the Architectural Committee shall have been mailed to the Applicant within forty-five (45) days after the date of filing said materials with the Architectural Committee.

10.4 Meetings of the Architectural Committee. The Architectural Committee shall meet from time to time as necessary to perform its duties hereunder. The Architectural Committee may from time to time by resolution unanimously adopted in writing, designate an Architectural Committee representative (who may, but need not be,

one of its members) to take any action or perform any duties for and on behalf of the Architectural Committee, except the granting of variances pursuant to Section 10.9. In the absence of such designation, the vote of any two (2) members of the Architectural Committee, or the written consent of any two (2) members of the Architectural Committee taken without a meeting, shall constitute an act of the Architectural Committee.

10.5 No Waiver of Future Approvals. The approval of the Architectural Committee of any proposals or plans and specifications or drawings for any work done or proposed, or in connection with any other matter requiring the approval or consent of the Architectural Committee, shall not be deemed to constitute a waiver of any right to withhold approval or consent as to any similar proposals, plans and specifications, drawings or matter whatsoever subsequently or additionally submitted for approval or consent. Similarly, the disapproval of the Architectural Committee of any proposals or plans and specifications or drawings for any work done or proposed, or in connection with any other matter requiring the approval or consent of the Architectural Committee, shall not be deemed to constitute a waiver of any right to grant approval or consent as to any similar proposals, plans and specifications, drawings or matter whatsoever subsequently or additionally submitted for approval or consent.

10.6 Compensation of Members. The members of the Architectural Committee shall receive no compensation for services rendered, other than reimbursement for expenses incurred by them in the performance of their duties hereunder and except as otherwise agreed by the Board.

10.7 Inspection of Work. Inspection of work and correction of defects therein shall proceed as follows:

10.7.1 Upon the completion of any work for which approved plans are required under this Declaration, the Owner shall give written notice of completion to the Architectural Committee.

10.7.2 Within sixty (60) days thereafter, the Architectural Committee or its duly authorized representative may inspect such Improvement. If the Architectural Committee finds that such work was not done in substantial compliance with the plans, specifications and other documents submitted to and approved by the Architectural Committee, it shall notify the Owner in writing of such noncompliance within such sixty (60) day period, specifying the particular noncompliance issues and the Owner shall be required to remedy the same.

10.7.3 If upon the expiration of thirty (30) days from the date of such notification, or any longer time the Architectural Committee determines to be reasonable, the Owner shall have failed to remedy such noncompliance, the Architectural Committee shall notify the Board in writing of such failure. Upon receipt of such notice, the Board shall call a Special Meeting, as provided in the

Bylaws, at which it shall authorize the Architectural Committee members and the applicable Owner to be heard. Based on such special meeting, the Board shall determine whether there is a noncompliance and, if so, the nature thereof and the estimated cost of correcting or removing the same. If a noncompliance exists, the Owner shall remedy or remove the same within a period of not more than forty-five (45) days from the date of the announcement of the Board ruling unless the Board specifies a longer time as reasonable. If the Owner does not comply with Board ruling within such period, the Board, at its option, may either remove the non-complying improvement or remedy the noncompliance, and the Owner shall reimburse the Association, upon demand, for all expenses incurred in connection therewith. If such expenses are not promptly repaid by the Owner to the Association, the Board shall levy a Limited Assessment against such Owner for reimbursement pursuant to this Declaration.

10.7.4 If for any reason the Architectural Committee fails to notify the Owner of any noncompliance with sixty (60) days after receipt of the written notice of completion from the Owner, the work shall be deemed to be in accordance with the approved plans.

10.8 Non-Liability of Architectural Committee Members. Neither the Architectural Committee nor any member thereof, nor any duly authorized Architectural Committee representative, shall be liable to the Association, any Owner, Grantor, or any other individual or entity, for any loss, damage, or injury arising out of or in any way connected with the performance of the Architectural Committee's duties hereunder, unless due to the willful misconduct or bad faith of the Architectural Committee. The Architectural Committee shall review and approve or disapprove all plans submitted to it for any proposed improvement, alteration or addition, solely on the basis of aesthetic considerations and the overall benefit or detriment which would result to the immediate vicinity and to the Property generally. The Architectural Committee shall take into consideration the aesthetic aspects of the architectural designs, placement of building, landscaping, color schemes, exterior finishes and materials and similar features, but shall not be responsible for reviewing, nor shall its approval of any plan or design be deemed approval of, any plan or design from the standpoint of structural safety or conformance with building or other codes, laws or regulations.

10.9 Variances. With respect to the approval and construction of Improvements, the Architectural Committee may authorize variances from provisions of this Declaration and any other rules and guidelines created by the Architectural Committee, including restrictions upon height, size, floor area, or placement of structures, or similar restrictions, when circumstances such as topography, natural obstructions, hardship, aesthetic, or environmental considerations may require. However, no variances will be granted allowing for construction of structures or Improvements by Owners in the Common Areas. All authorized variances must be evidenced in writing and must be signed by at least two (2) members of the Architectural Committee. If such variances are granted, no violation of the covenants, conditions or restrictions contained in this

Declaration shall be deemed to have occurred with respect to the matter for which the variance was granted. The granting of such a variance shall not operate to waive any of the terms and provisions of this Declaration for any purpose except as to the particular Building Lot and particular provision hereof covered by the variance, nor shall it affect any way the Owners obligation to comply with all governmental laws and regulations affecting such Owners use of the Building Lot, including but not limited to zoning ordinances or requirements imposed by any governmental or municipal authority.

ARTICLE XI: ANNEXATION OF ADDITIONAL PROPERTIES

11.1 By Grantor. Should Grantor own any property that is contiguous to the Property and, in Grantor's sole discretion, Grantor deems it desirable to annex some or all of such properties into the Subdivision (an "Annexed Tract"), such property may be annexed into the Subdivision and brought within the provisions of this Declaration as provided herein by Grantor at any time, and from time to time, without the approval of any Owner or the Association. The use and development of an Annexed Tract shall conform to all applicable land use regulations as such regulations are modified by variances.

11.2 Rights and Obligations of Owners of an Annexed Tract. Subject to the provisions hereof, upon the recording of a Supplemental Declaration as to any Annexed Tract, all provisions contained in the Declaration shall apply to the Annexed Tract in the same manner as if it were originally covered by this Declaration, subject to such modifications, changes and deletions as are specifically provided in such Supplemental Declaration, such Annexed Tract shall be treated for all purposes as part of the Property as defined above. Without limiting the generality of the immediately preceding sentence, if an Annexed Track becomes part of the Property, all Building Lots in the Annexed Tract shall be included for the purposes of the calculation set forth in Section 5.3.2 of this Declaration and such calculation shall be redone based on the inclusion of such Building Lots and Class B membership reinstated based on such recalculation. The Owners of lots located any Annexed Tract shall become members of the Association and shall become liable for their appropriate share of Assessments. Title to the Common Areas which are to be owned and managed by the Association within any Annexed Tract shall be conveyed to the Association, free and clear of any and all encumbrances and liens, subject to reservations, easements, covenants, conditions and restrictions then of record including those set forth in this Declaration or any Supplemental Declaration applicable to such Annexed Tracts.

11.3 Method of Annexation. The addition of an Annexed Tract to the Property authorized under sections 11.1 and 11.2 shall be made by filing of record a Supplemental Declaration or other similar instrument with respect to the Annexed Tract, which shall be executed by Grantor or the owner of the Annexed Tract, and which shall cause the annexation of the Annexed Tract into the Subdivision. Thereupon each Annexed Tract shall be part of the Property, shall be subject to this Declaration and encompassed within the general plan and scheme hereof as modified by such Supplemental Declaration, and

shall be subject to the functions, powers, and jurisdiction of the Association, or, at the election of the Grantor, of a new Association established for the area encompassing the Annexed Tract. Such Supplemental Declaration or other appropriate document may contain such additions, modifications or deletions as may be deemed by Grantor or the owner of the Annexed Tract desirable to reflect the different character, if any, of the Annexed Tract, or as Grantor or such owner may deem appropriate in the development of the Annexed Tract. If any Annexed Tract is created, the Association shall have the authority to levy Assessments against the Owners located within such Annexed Tract, and the Association shall have the duty to maintain additional Common Area located within the Annexed Tract if so specified in any Supplemental Declaration.

11.4 De-annexation. Grantor may delete all or a portion of the Property, including, without limitation, previously Annexed Tracts, from the Property and from coverage of this Declaration and the jurisdiction of the Association so long as Grantor is the owner of all such de-annexed Property and provided that a Supplemental Declaration of Deletion of Property is recorded in the office of the County Recorder. Members other than Grantor as described above shall not be entitled to de-annex all or any portion of the Property.

ARTICLE XII: EASEMENTS

12.1 Easements of Encroachment. There shall be reciprocal appurtenant easements of encroachment as between each Building Lot and such portion or portions of the Common Area adjacent thereto or as between adjacent Building Lots due to the un-willful placement or settling or shifting of the sidewalks and driveways constructed, reconstructed or altered thereon in accordance with the terms of this Declaration. Easements of encroachment shall be valid only so long as they exist, and the rights and obligations of Owners shall not be altered in any way because of encroachments, settling or shifting of the Improvements; provided, however, that in no event shall a valid easement for encroachment occur due to the willful act or acts of an Owner. In the event a structure on any Building Lot is partially or totally destroyed, and then repaired or rebuilt, the owners of each Building Lot agree that minor encroachments over adjoining Building Lots that existed prior to the encroachment may be reconstructed pursuant to the easement granted by this Section 12.1

12.2 Easements of Access. All Owners of Building Lots will have a perpetual easement for access, ingress and egress over the Common Area, including but not limited to the private streets, cul-de-sacs and walkways; provided, however, this shall not be a limitation of the Association's right to restrict or suspend use of other portions of the Common Area pursuant to the terms of this Declaration. These easements shall run with the land. Such easements may be used by Grantor, and by all Owners, their guests, tenants and invitees, residing on or temporarily visiting the property, for pedestrian walkways, vehicular access and such other purposes reasonably necessary for the use and enjoyment of a Building Lot or Common Area.

12.3 Drainage and Utility Easements. Grantor expressly reserves for the benefit of all the Property reciprocal easements of access, ingress and egress for all Owners to and from their respective Building Lots for installation and repair of utility services, for drainage of water over, across and upon adjacent Building Lots, and Common Areas, resulting from the normal use of adjoining Building Lots or Common Areas, and for necessary maintenance and repair for any Improvement including, without limitation, fencing, retaining walls, lighting facilities, mailboxes and sidewalk abutments, trees, and landscaping. Notwithstanding anything expressly or impliedly contained herein to the contrary, this Declaration shall be subject to all easements heretofore or hereafter granted by Grantor for the installation and maintenance of utilities and drainage facilities that are required for the development of the Property. In addition, Grantor hereby reserves for the benefit of the Association the right to grant additional easements and rights-of-way over any portion of the Property until close of escrow for the sale of the last Building Lot in the property to a purchaser. The Owners are hereby restricted and enjoined from constructing any Improvements upon any drainage or utility easement areas as shown on the Plat of the Subdivision or otherwise designated in any recorded document which would interfere with or prevent the easement from being used for such purpose; provided, however, that the Owner and the Grantor, Association or designated entity with regard to the landscaping easement described in this Article XII, shall be entitled to install and maintain landscaping on such easement areas, and also shall be entitled to build and maintain fencing on such easement areas subject to approval by the Architectural Committee, so long as the same would not interfere with or prevent the easement areas from being used for their intended purposes; provided, that any damage sustained to Improvements on the easement areas as a result of legitimate use of the easement areas shall be the sole and exclusive obligation of the Owner whose Improvements were so damaged.

12.4 Rights and Duties Concerning Utility Easements. The rights and duties of the Owners with respect to utilities shall be governed by the following:

12.4.1 Wherever utility house connections are installed within the Property, which connections or any portions thereof lie in or upon Building Lots owned by an Owner other than the Owner of the Building Lot served by the connections, the Owner of the Building Lot served by the connections shall have the right, and is hereby granted an easement to the full extent necessary therefore, to enter upon any Building Lot or to have their agent enter upon any Building Lot within the Property in or upon which said connections or any portion thereof lie, to repair, replace and generally maintain the connections as and when it may be necessary.

12.4.2 Whenever utility house connections are installed within the Property, which connections serve more than one Building Lot, the Owner of each Building Lot served by the connections shall be entitled to full use and enjoyment of such portions of said connections as service to such Owner's Building Lot.

12.5 Driveway Easements. Whenever a driveway is installed within the Property that in whole or in part lies upon a Building Lot owned by an Owner other than the Owner of the Building Lot served, or a driveway is installed to serve more than one Building Lot, the Owner of each Building Lot served or to be served by such driveway shall be entitled to full use and enjoyment of the Building Lot upon which the driveway is installed as is required to service such Owner's Building Lot or to repair, replace, or maintain such driveway.

12.6 Disputes as to Sharing of Costs. In the event of a dispute between Owners with respect to the repair or rebuilding of utility connections or driveways, or with respect to the sharing of the cost therefore, upon written request of one of such Owners addressed to the Association, the matter shall be submitted to the Board which shall decide the dispute and, if appropriate, make an appropriate Assessment against any or all of the Owners involved, which Assessment shall be collected and enforced in the manner provided by this Declaration for Limited Assessments.

12.7 General Easement for Corrective Action. An easement is hereby reserved to the Association, its contractors and agents, to enter those portions of Building Lots, for the purpose of performing any and all corrective and other action that it is entitled to take pursuant to the terms of this Declaration and any rules or regulations adopted by the Board or the Architectural Committee.

12.8 Overhang Easement. There shall be an exclusive easement appurtenant to each Building Lot over the Common Areas for overhanging eaves, and for any projections from the buildings, which projections shall not extend beyond the save line and shall be consistent with all building codes and all Architectural Committee approval requirements.

12.9 Maintenance and Use Easement Between Walls and Lot Lines. Whenever the wall of a structure, or a fence or retaining wall legitimately constructed on a Building Lot under plans and specifications approved by the Architectural Committee is located within five (5) feet of the lot line of such Building Lot, the Owner of such Building Lot is hereby granted an easement over and on the adjoining Building Lot (not to exceed five (5) feet from the Building Lot line) for purposes of maintaining and repairing such wall or fence and eaves or other overhangs, and the Owner of such adjoining Building Lot is hereby granted an easement for landscaping purposes over and on the area lying between the lot line and such structure or fence so long as such use does not cause damage to the structure or fence.

12.10 Waterway Easements. Grantor hereby reserves for the benefit of the Association an easement for all Waterways and related pipes, pumps and other equipment over, across and under all Building Lots and Common Areas, to the extent reasonably required to maintain any water system installed by Grantor or the Association on the Property or pursuant to plans and specifications approved by the Architectural Committee. Any relocation of the water lines installed as a part of such system shall not

be undertaken in any way which interrupts the flow of water through the system or damages the system in any other fashion. Grantor reserves the right for Grantor and for the Association, to make any reconfiguration of any Waterway which it determines, in its own discretion, to be necessary, expedient or desirable, provided, however, that nothing herein shall reserve unto Grantor the right to take any action which would disturb, encroach upon, or endanger the foundation of any building, nor shall Grantor take any action which would materially alter any Waterway's proximity to improved property abutting such Waterways.

12.11 Specific Landscape Easement. Grantor hereby reserves for the benefit of the Association a perpetual Landscape Easement. Such easement shall allow the Association to install and maintain the berms, retaining walls, fences, and landscaping within the area defined as the Landscape Easement.

12.12 Specific Easements Designated in Plat. Notwithstanding any provisions heretofore, the Grantor reserves, for the benefit of the Association, the specific easements for utility, drainage, irrigation and access as set forth on the recorded Plat for the Subdivision.

ARTICLE XIII: MISCELLANEOUS

13.1 Term. The easements created hereunder shall be perpetual, subject only to extinguishment by the holders of such easements as provided by law. The covenants, conditions, restrictions, and equitable servitudes of this Declaration shall run until December 31, 2023, unless amended as herein provided. After such date, such covenants, conditions, and restrictions shall be automatically extended for successive periods of ten (10) years each, unless amended or extinguished by a written instrument executed by Members holding at least three-fourths (3/4) of the voting power of the Association and such written instrument is recorded with the County Recorder. If the consent of any governmental entity is required prior to dissolution of the Association, then the Association may not dissolve without first obtaining such consent.

13.2 Amendment.

13.2.1 By Grantor. Until the recordation of the first deed conveying a Building Lot to a party other than Grantor, the provisions of this Declaration may be amended, modified, clarified, supplemented, added to (collectively, "amendment") or terminated by Grantor by recordation of a written instrument setting forth such amendment or termination, provided, however, the effect of such amendment shall be subject to the limitation set forth in Section 13.3. Any amendment affecting a particular Annexed Tract may be made by Grantor by an amendment to this Declaration at any time up to the recordation of the first deed conveying a Building Lot in such Annexed Tract to a party other than Grantor or the owner of such Annexed Tract.

13.2.2 By Owners. Except where a greater percentage is expressly required in this Declaration, the provisions of this Declaration, other than this Article XIII, may be amended only by the vote or written consent of Owners representing more than fifty percent (50%) of the votes in the Association. Any such amendment must be by an instrument in writing signed and acknowledged by the president and secretary of the Association certifying and attesting that such amendment has been approved as set forth above and such amendment shall be effective upon its recordation with the County Recorder. Any amendment to this Article XIII shall require the vote or written consent of Members holding ninety-five percent (95%) of the voting power of the Association and must meet the requirements in the immediately preceding sentence to be effective.

13.2.3 Effect of Amendment. Any amendment of this Declaration approved in the manner specified above shall be binding on and effective as to all Owners and their respective properties notwithstanding that such Owners may not have voted for or consented to such amendment. Such amendments may add to and increase the covenants, conditions, restrictions, and easements applicable to the Property but shall not prohibit or unreasonably interfere with the allowed uses of such Owner's Building Lot that existed prior to the said amendment.

13.3 Mortgage Protection. Notwithstanding any other provision of this Declaration, no amendment of this Declaration shall operate to defeat or render invalid the rights of the beneficiary under any first deed of trust, or the mortgagee on a first mortgage, upon a Building Lot made in good faith and for value, and recorded prior to the recordation of such amendment, provided that after foreclosure of any such first deed of trust or mortgage, such Building Lots shall remain subject to this Declaration, as amended.

13.4 Notices. Except as otherwise specifically set forth in this Declaration or in the Bylaws, any notices permitted or required to be delivered as provided in this Declaration shall be in writing and may be delivered either personally or by mail. If delivery is made by mail, it shall be deemed to have been delivered seventy-two (72) hours after the same has been deposited in the United States mail, postage prepaid, addressed to such person at the address appearing on the Association's records. Such address may be changed from time to time by notice in writing to the Association's registered agent and to the Association's Secretary, as provided in this Section 13.4.

13.5 Enforcement and Non-Waiver.

13.5.1 Right of Enforcement. Except as otherwise provided herein; any Owner of any Building Lot shall have the right to enforce any or all of the provisions of this Declaration.

13.5.2 Violations and Nuisances. The failure of any Owner to comply with any provision hereof, or with any provision of the Articles or Bylaws

of any Association, is hereby declared a nuisance and will give rise to a cause of action by the Grantor, the Association or any Owner within the Property for recovery of damages or for negative or affirmative injunctive relief or both. However, notwithstanding all other provisions in the Declaration to the contrary, only Grantor, the Association, the Board, or a duly authorized agent of any of them, may enforce by self-help any of the provisions hereof and only if such self-help is preceded by notice to the Owner pursuant to the terms of this Declaration, and if notice is not addressed in a particular case, reasonable notice.

13 5.3 Violation of Law. Any violation of any state, municipal, or local law, ordinance, or regulation pertaining to the ownership, occupation or use of any property within the Property is hereby declared to be a violation of this Declaration and subject to any or all of the enforcement procedures set forth in this Declaration and any or all enforcement procedures in law and equity.

13.5.4 Remedies Cumulative. Each remedy provided in this Declaration is cumulative and not exclusive.

13.5.5 Non-Waiver. The failure to enforce any of the provisions of the Declaration at any time shall not constitute a waiver of the right to enforce any such provision.

13.6 Interpretation. The provisions of this Declaration shall be liberally construed to effectuate its purpose of creating a uniform plan for the development and operation of the Property. This Declaration shall be construed and governed under the laws of the State of Idaho.

13.6.1 Restrictions Construed Together. All of the provisions of this Declaration shall be liberally construed together to promote and effectuate the fundamental concepts of the development of the Property as set forth in the recitals of this Declaration.

13.6.2 Restrictions Severable. Notwithstanding the provisions of the foregoing paragraph 13.6.1, each of the provisions of this Declaration shall be deemed independent and severable, and the invalidity or partial invalidity of any provision or portion thereof shall not affect the validity or enforceability of any other provision of the Declaration.

13.6.3 Singular Includes Plural. Unless the context requires a contrary construction, the singular shall include the plural and the plural singular, and the masculine, feminine, or neuter shall each include the masculine, feminine, and neuter.

13.6.4 Captions. All captions and titles used in this Declaration are intended solely for convenience or reference and shall not affect that which is set forth in any of the provisions hereof.

13.7 Successors and Assigns. Except with respect to the terms of Section 3.14of this Declaration providing specific requirements for L assignment of the Grantor's rights, all references herein to Grantor, Owners, any Association, or person shall be construed to include all successors, assigns, partners, and authorized agents of such Grantor, Owners, Association, or person.

13.8 Mediation. Prior to the commencement of any legal or equitable proceedings with respect to the terms and provisions of this Declaration, the Articles, Bylaws or any decision by the Architectural Committee, the parties involved in the dispute are required to participate in a mediation to attempt resolution of the disputed matter, provided, however, this right to mediation shall not apply to disputes related to any Assessments. Unless the parties mutually agree otherwise, the mediation shall be non-binding, shall be held County, Idaho, and shall be performed in accordance with the then existing Idaho rule of civil procedure governing mediation (currently I.R.C.P. 16(k)). If Grantor is a party to the dispute, regardless of the identity of the opposing party, Grantor shall be entitled to payment by the opposing party of Grantor's fees and costs incurred prior to and as part of the required mediation. If the Association is a party to the dispute, so long as Grantor is not the opposing party (in which case the immediately preceding sentence shall apply), the Association shall be entitled to payment by the opposing party of the Association's fees and costs incurred prior to and as part of the required mediation. After unsuccessful, good faith, efforts to resolve claims and disputes by mediation, the parties shall have all rights and remedies otherwise available to them in law or equity.

ARTICLE XIV: ACHD STORMWATER DRAINAGE

14.1 Operation and maintenance of the storm water facilities at the Subdivision shall be governed by the operation and maintenance manual of storm drainage system for the Subdivision (the O&M Manual"), if any, which manual may only be modified at the direction of the Board of the Association, with written approval by ACHD.

14.2 ACHD Storm Water Drainage System. Lots _____ of Block ___, Lots ____ of Block ___ and Lots ____ of Block ___ are servient to and contain the Ada County Highway District ("ACHD") storm water drainage system. These Lots are encumbered by that certain First Amended Master Perpetual Storm Water Drainage Easement recorded on November 10, 2015 as Instrument No. 2015-103256 official records of Ada County, and incorporated herein by this reference as if set forth in full (the "Master Easement"). The Master Easement

and the storm water drainage system are dedicated to ACHD pursuant to Section 40-2302 Idaho Code. The Master Easement is for the operation and maintenance of the storm water drainage system. Said easement shall remain free of all encroachments and obstructions (including fences and trees) which may adversely affect the operation and maintenance of the storm drainage facilities.

14.3 ACHD Right to Inspect and Maintain. ACHD shall have the right at all times to inspect the storm water drainage system, and perform any required maintenance and repairs.

14.4 ACHD Approval of Amendments. Any amendment of this Declaration, the covenants, conditions and restrictions contained herein, having any direct impact or affect on the ACHD storm water drainage system shall be subject to prior review and approval by ACHD.

14. 5 ACHD Assessment of Costs. ACHD shall be entitled to pursue reimbursement for the reasonable costs of all required maintenance and repairs to the storm water drainage system that are a result of failure by the HOA or dues paying organization to properly perform the light maintenance duties as defined in the referenced O & M Manual.

14.6 Term. The easements created hereunder shall be perpetual, subject only to extinguishment by the holders of such easements as provided by law. The covenants, conditions, restrictions, and equitable servitudes of this Declaration shall be perpetual.

ARTICLE XV: PROVISIONS RELATED TO FINES

- 15.1 The Board shall have the right to adopt provisions for the imposition of fines for a violation of the provisions set forth herein and/or the violation of rules promulgated by the Board in accordance with its Articles, Bylaws, and this Declaration.

  In accordance with Idaho Code Section 55-115:

- No fine may be imposed for a violation of the covenants and restrictions pursuant to the rules or regulations of the homeowner's association unless:
- (a) A majority vote by the board shall be required prior to imposing any fine on a member for a violation of any covenants and restrictions pursuant to the rules and regulations of the homeowner's association.

- (b) Written notice by personal service or certified mail of the meeting during which such vote is to be taken shall be made to the member at least thirty (30) days prior to the meeting.
- (c) In the event the member begins resolving the violation prior to the meeting, no fine shall be imposed so long as the member continues to address the violation in good faith until fully resolved.
- (d) No portion of any fine may be used to increase the remuneration of any board member or agent of the board.

The Association shall be entitled to assess its attorney fees against an Owner who fails to comply with the provisions of this Article but attorney's fees and costs shall not accrue and shall not be assessed or collected by the homeowner's association until the Association has complied with the requirements set forth above and the Owner has failed to address the violation as prescribed in subsection in the time and manner set forth above. A court of competent jurisdiction may determine the reasonableness of attorney's fees and costs assessed against an Owner. In an action to determine the reasonableness of attorney's fees and costs assessed by the Association against a member, the court may award reasonable attorney's fees and costs to the prevailing party.

IN WITNESS WHEREOF, the Declarant has executed this Declaration effective as of the date first set forth above.

_____, an Idaho corporation

By: _____
Its: President

ACKNOWLEDGEMENT

State of Idaho)
)ss.
County of _____)

On this the ___ day of _____, 2017, before me, the undersigned Notary Public in and for said state, personally appeared _____, known by me to be the President of _____, an Idaho corporation, whose name is subscribed to the within and foregoing instrument and he acknowledged to me that he executed the same on its behalf.

_____
Notary Public
Residing At:
My Commission Expires:

DRAFT

Exhibit A

The Property

Madrone Heights Subdivision
According to the plat recorded in records of Ada County, Idaho, as Instrument Number _____ in Book _____, Pages _____ - _____ on _____

DRAFT

KITTELSON & ASSOCIATES

Transportation Impact Study

Madrone Heights Property

Kuna, Idaho

May 2018

PREPARED FOR:
N Star Farm, LLC
Mr. Tim Eck
6152 W Half Moon Lane
Eagle, Idaho 83616

PREPARED BY:
KITTELSON & ASSOCIATES, INC.
101 S Capitol Boulevard, Suite 301
Boise, ID 83706
208.338.2683

Transportation Impact Study

Madrone Heights Property

Kuna, Idaho

Prepared For:
N Star Farms, LLC
6152 W Half Moon Lane
Eagle, Idaho 83616

Prepared By:
Kittelson & Associates, Inc.
101 South Capitol Boulevard, Suite 301
Boise, Idaho 83702
(208) 338-2683

Project Principal: John Ringert, PE
Project Manager: Brett Korporaal

Project No. 22609

May 2018



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Note: Madrone Heights Property was originally referred to as the Urza Farms Property. Some appendices reflect the previous Urza Farms Property name.

Section 1
Executive Summary

EXECUTIVE SUMMARY

N Star Farms, LLC is in the process of entitling the Madrone Heights Property, previously known as the Urza Farms Property. The entitlement includes the plan for 205 single-family detached housing unit, situated on approximately 39 acres of land in Kuna, Idaho. The property is located on the east side of the proposed mid-mile collector street between Black Cat Road and Ten Mile Road with Kuna Road serving as its southern boundary.

The parcels of land included in the property's site are identified as Rural Urban Transition (RUT) by the City of Kuna's *City Zoning Map*. The parcels in the immediate vicinity of the site are also zoned as RUT, as well as Agriculture (A), Rural Residential (RR) and Low Density Residential (R4) by the City of Kuna. The land has recently been annexed by the City of Kuna and rezoned to Medium Density Residential (R8).

Access to the Madrone Heights Property is proposed via one new mid-mile collector street on the north side of Kuna Road between Black Cat Road and Ten Mile Road, as well as a new local street connection to Kuna Road, approximately 2,640 feet west of Ten Mile Road and 700 feet east of the new collector. The new collector street is identified on the ACHD Master Street Map. Additionally, the preliminary site plan proposes two stub street connections, one to the east and one to north for potential connections to future developments. The timeframe for the development of parcels bordering the site is unknown, however, development is not anticipated to occur until after full build-out of the Madrone Heights Property.

Currently, the proposed site is undeveloped, but consists of one single-family home which would be removed if the site is built-out. The build-out of the site would be completed in four phases, with a projected full build-out in year 2022. This TIS addresses the existing (2018) and background (2022) traffic conditions, as well as the property's impact in the build-out year 2022. Lastly, the TIS provides the approximate number of homes that can be built before proposed mitigations are necessary at any impacted study intersection, roadway and/or driveway.

FINDINGS

Existing Conditions

- The study evaluated the off-site intersection at Black Cat Road & Kuna Road during the a.m. and p.m. peak period of a typical weekday (Tuesday – Thursday).
- The study intersection was found to operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road between Ten Mile Road and Black Cat Road operates at an acceptable level of service.

- Crash data at the study intersection for the most recent five years (2012-2016) was analyzed for any existing crash trends, below are the findings:
  - The Black Cat Road & Kuna Road intersection averaged 1.6 reported crashes per year, with 75% of crashes involving a turning vehicle onto or from Kuna Road.
  - There were eight reported crashes on the Kuna Road between Black Cat Road and Ten Mile Road. Seven of the crashes involved a single vehicle leaving the roadway.

Year 2022 Background Traffic Conditions

- Year 2022 background traffic volumes were forecasted using a 3% annual growth rate. There were no identified in-process developments within the vicinity of the site that were included in the analysis.
- Year 2022 background traffic analysis (without inclusion of site-generated traffic) found that the study intersection is expected to continue to operate at acceptable operating standards during the weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road between Ten Mile Road and Black Cat Road is projected to continue operating at acceptable levels of service.

Trip Generation and Distribution

- The *ITE Trip Generation Manual, 10th Edition* was used to estimate the trip generation for the proposed Madrone Heights Property.
- The proposed Madrone Heights Property, with 205 single-family homes in the build-out year of 2022, is estimated to generate a total of 2,013 daily net new trips, 150 weekday a.m. peak hour net new trips (38 inbound / 112 outbound) and 202 weekday p.m. peak hour net new trips (127 inbound / 75 outbound).
- The distribution pattern for site-generated trips was developed by evaluating existing traffic patterns and major trip origins and destinations within the study area, as well as a select zone analysis from COMPASS' regional travel demand model.

Year 2022 Total Traffic Conditions

- Year 2022 total traffic conditions found that the site-generated trips do not impact the study intersection and that the study intersection will continue to operate at acceptable levels of service during the weekday a.m. and p.m. peak hours.
- The site accessed operate acceptably during the weekday a.m. and p.m. peak hours.
- The ACHD study roadway segment of Kuna Road, between Time Mile Road and Black Cat Road is projected to continue operating at acceptable levels of service.

Turn Lane Warrant Evaluation

- The turn lane analysis using ACHD procedures resulted in turn lane warrants at the following site access street:
  - Kuna Road & Black Cat Road: A westbound right-turn lane is warranted under existing conditions, 2022 background conditions, and 2022 total traffic conditions. Following are considerations with respect to this location:
    - The intersection could be converted to an all-way-stop controlled intersection which would operate at LOS A and LOS B without turn lanes and potentially reduce the number of angle crashes at the intersection.
    - A reduction in the posted speed is likely to occur in the future as development occurs around the intersection. If the posted speed were to be reduced in the future to 35 mph (currently posted 1 mile to the east) or 40 mph, a westbound right turn lane would not be warranted at the intersection under existing, 2022 background or total traffic conditions.
    - Site traffic is projected to be approximately 11 percent of the westbound traffic movement during the weekday p.m. peak hour. Note that warrants would not be met if the posted speed limit was 40 mph.
  - South Access & Kuna Road (Site Access B): Westbound right-turn lane is warranted. A sensitivity analysis found that a westbound right-turn lane is warranted in approximately year 2021 with the build-out of approximately 161 Madrone Heights housing units. Following are considerations with respect to this location:
    - A reduction in the posted speed is likely to occur in the future as development occurs around the intersection. If the posted speed were to be reduced in the future to 35 mph (currently posted 1 mile to the east) or 40 mph, a westbound right turn lane would not be warranted at the intersection under existing, 2022 background or total traffic conditions.

Site Access Evaluation

- The results from the queuing analysis found that the 95th percentile queue lengths can be accommodated.
  - Each site accesses provides at least 100 feet of roadway length without a property driveway and/or internal street interference.
- The intersection sight distance evaluation identified that intersection sight distance can be achieved at all the site access intersections with the following actions:

- Remove miscellaneous vegetation and shrubbery, and potential obstructions along Kuna Road as necessary to obtain and maintain adequate intersection sight distance.

- Site access along Kuna Road should match the existing grade of Kuna Road at the intersection.

- Shrubbery, weeds and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.

- If future widening occurs along Kuna Road, care should be taken to ensure adequate intersection sight distance is maintained.

- There are two proposed local street access points to the Madrone Heights Property, as well as a new collector street at the mid-mile along Kuna Road between Black Cat Road and Ten Mile Road. Additionally, there are two proposed stub street for connections to future developments. Following is a summary of each access with respect to ACHD Policy:

  - **New Collector Street & Kuna Road (Site Access A):** This access, a proposed collector, is located on Kuna Road approximately 2,660 feet, or approximately one-half mile, east of Black Cat Road and 2,640 feet west of Ten Mile Road. While the collector meets the spacing requirements between public streets, it does not meet spacing requirements with respect to existing driveways on Kuna Road. The access should be considered by ACHD for the following reasons:

    - The proposed collector is on the ACHD Master Street Map.

    - The proposed collector meets ACHD spacing requirements for a collector street, except for two existing driveways to residential homes on the north and south side of Kuna Road approximately 300 feet west of the collector street. Given the location of the driveways it is assumed that neither of the driveways could be moved to the mid-mile collector.

    - Without the collector street access, site-generated trips would increase the ADT at the south access on Kuna Road to over the ACHD 2,000 ADT threshold for a local street.

    - This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

  - **South Access & Kuna Road (Site Access B):** This access, a proposed local street, accesses Kuna Road approximately 700 feet east of the proposed mid-mile collector and approximately 620 feet west of Yankee Rock Avenue. Therefore, the proposed

access does not meet the spacing requirement for Kuna Road. The access should be considered by ACHD for the following reasons:

- Without this access, the site would only have the collector street access, located on a minor arterial street, servicing 205 residential units, which is against ACHD requirements for a development of that size. The volume would remain under the ACHD policy of 3,000 ADT for a single access on a collector, but future development could increase the ADT above 3,000.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
- The access will function acceptably as a full access with a westbound right-turn lane.

- **West Access & New Collector Street (Site Access C):** This access, a proposed local street, accesses the new collector street approximately 710 feet north Kuna Road. This access is proposed to be full access; however, most movements will consist of right-in and left-out movements because of its connection to Kuna Road via the new collector street. The access should be considered by ACHD for the following reasons:
  - The access meets ACHD local street spacing requirements for collector streets.
  - Without this access, the site would only have one access, located on a minor arterial street, servicing 205 residential units, which is against ACHD requirements for a development of that size.
  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
  - The access will function acceptably as a full access without turn lanes.
- **Stub Streets:** The two proposed stub streets access would connect to a future development north and east of the site. These proposed stub streets are based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Madrone Heights Property. The stub streets have the following benefits:
  - The stub street would provide future access to an adjoining property east of the site and therefore reduce the need for additional access routes to Kuna Road.

- The streets adhere to ACHD stub street requirements.
- The stub streets are not the primary access to the site, with limited trips into and out of the site.
- The stub streets would only serve residential trips, reducing vehicle miles traveled and increasing access for emergency response and city services.

RECOMMENDATIONS

Based on the report's analyses and evaluation findings, recommendations were developed accordingly. There were no recommended mitigations for existing year and background year conditions.

Existing Conditions

The following mitigation is recommended under existing traffic conditions.

Kuna Road & Black Cat Road

- Consider the following options based on warrants being met for the westbound right-turn lane under existing, background, and total traffic conditions:
  - Install a westbound right-turn lane if right-of-way is available.
  - Conduct a speed study for the westbound approach after completion of the build-out of the property to evaluate whether the posted speed should be reduced to 40 mph or 35 mph. This would alleviate the need for a westbound right-turn lane.
  - Consider conversion to and all-way-stop-controlled intersection from a two-way-stop-controlled intersection.
- The site's traffic is projected to be approximately 11 percent of the westbound traffic movement under year 2022 (full build-out) p.m. peak hour (most critical time period for the right-turn lane) traffic conditions.

Mitigations Needed for Madrone Heights Property

The following mitigations are recommended due to the inclusion of Madrone Heights Property's site generated trips.

Collector Road & Kuna Road

- Construct the new collector as proposed.

South Access & Kuna Road

- Construct a westbound right-turn lane with approximately 100 feet of vehicle storage. A sensitivity analysis found that a westbound right-turn lane would be warranted in approximately year 2021 with the build-out of 161 Madrone Heights units.
    - Alternatively, a speed limit reduction in front of the site from 50 mph to 40 mph or 35 mph (consistent with the Kuna Road corridor to the east) would result in the westbound right-turn lane warrant not being met.

Site Accesses

- With approval from ACHD, construct all accesses to the property to allow full access on the public street approaches with the following designations:
    - All local streets within the property should be constructed with one travel lane in each direction.
    - Site driveways with access to public streets should provide sufficient stacking distance for four vehicles (100 feet) to ensure acceptable operation and accommodate larger vehicles, including utility service and delivery vehicles.
    - Site accesses along Kuna Road should match the existing grade of Kuna Road at the intersection to ensure the best possible sight distance.
    - All accesses and internal streets should be designed to provide adequate intersection site distance. Shrubbery, weeds and landscaping near the intersection and site access point should be maintained to ensure adequate sight distance is maintained.

City of Kuna

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P&Z Findings of Fact & Conclusions of Law

To: Planning and Zoning Commission (P & Z)

Case Numbers: 18-02-S (Pre Plat), and 18-18-DR (Design Review
Madrone Heights

Location: Near the northwest corner of Ten Mile and Kuna Roads, Kuna, Idaho 83642

Planner: Troy Behunin, Planner III

Hearing Date: August 28 2018
Tabled Until: *September 11, 2018*
Findings of Fact: *September 25, 2018*

Engineer: KM Engineering
Kirsti Grabo
9233 W. State St,
Boise, ID 83714
208.639.6930
KGrabo@kmengllp.com

Owner: *N Star Farm, LLC*
Tim Eck
6152 W. Half Moon Ln.
Eagle, ID, 83616



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A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that annexations are designated as public hearings, with the P & Z Commission as a recommending body and City Council as the decision making body. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65, Local Planning Act.

a. Notifications

i.	Neighborhood Meeting	April 11, 2018 (seven persons attended)
ii.	Agency Comment Request	June 26, 2018
iii.	375' Property Owners Notice	August 16, 2018
iv.	Kuna, Melba Newspaper	August 1, 2018
v.	Site Posted	August 8, 2018

B. Applicant's Request:

On behalf of N Star Farm, LLC (the applicant), Kirsti Grabo with KM Engineering, requests approval to subdivide approximately 39.50 acres (previously zoned R-6) into 206 single home lots, an additional 27 common lots, and one shared driveway. A Design Review application for the landscaping for the 27 common lots accompanies this application. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, T 2N, R 1W, APN #: S1322438400. This project is known as Madrone Heights Subdivision.

C. Aerial Map:



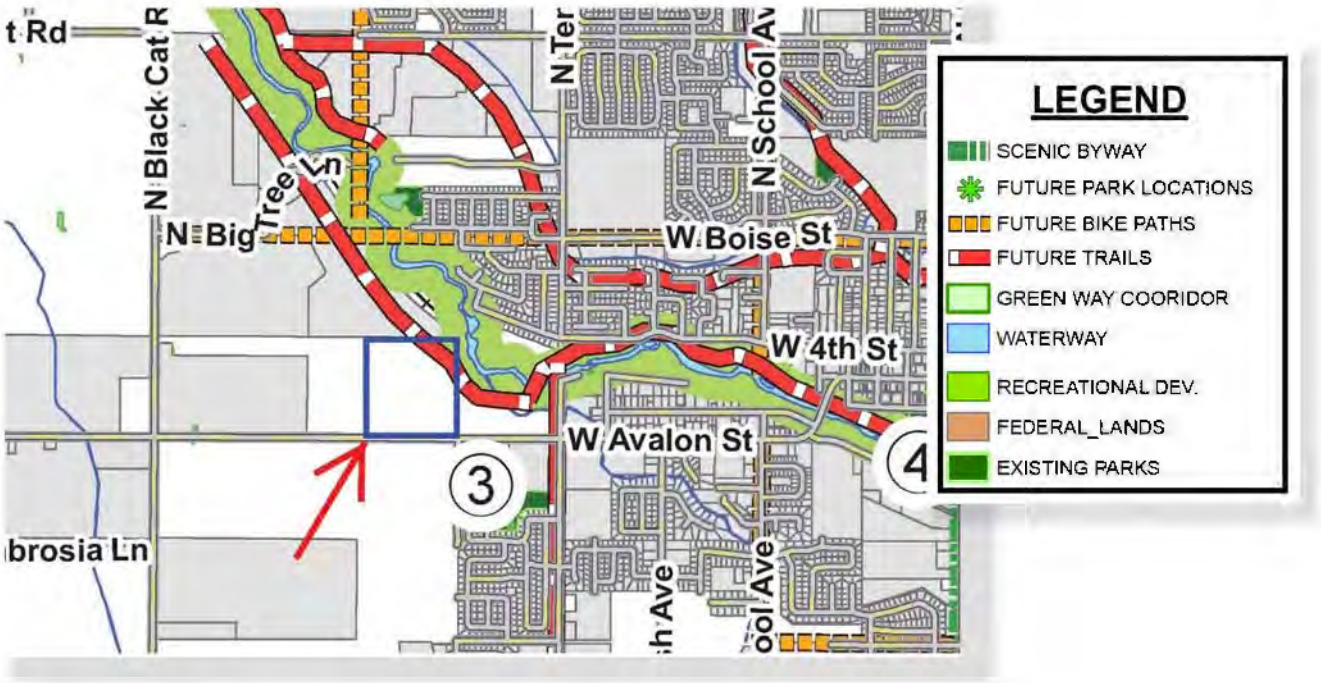
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D. Site History:

This parcel is in the City of Kuna limits, with varying historical uses, ranging from residential to farming and is currently zoned R-6 (Medium Density Residential).

E. General Projects Facts:

1. **Comprehensive Plan Map:** The Future Land Use Map (Comp Plan Map) is intended to serve as a *guide* for the decision making body for the City. The Comp Plan map indicates land use designations generally speaking, it is not the actual zone. The Comp Plan Map calls for Medium Density Residential for this parcel.
2. **Recreation and Pathways Map:** The Recreation and Pathways Master Plan Map indicates a future trail near the NEC of the site, situated along Indian Creek. Accordingly, it is the City's goal and desire to increase the number of trails and pathways in Kuna. It is necessary for each parcel to develop trails and pathways along their frontages of creeks, canals and ditches to comply with the Master Plan's goals by either starting a pathway, or extending one in that area at time of development.



3. **Surrounding Land Uses:**

North	A	Agriculture – Kuna City
South	RUT	Rural Urban Transition – Ada County
East	RUT	Rural Urban Transition – Ada County
West	RR	Rural Residential – Ada County

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

Property Owner	**Parcel Size** (Approximately)	**Current Zone: (R-6)** Medium Density Resident	**Parcel Number**
N Star Farm, LLC	39.48 acres	R-6	S1322438400

5. **Services:**

Sanitary Sewer– City of Kuna
Potable Water – City of Kuna
Irrigation District – Boise-Kuna Irrigation District
Pressurized Irrigation – City of Kuna (KMID)
Fire Protection – Kuna Rural Fire District
Police Protection – Kuna Police (Ada County Sheriff's office)
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**
The majority of this land is being used for agricultural purposes, a small part of the land was used for residential purposes (Approx. 1.5 ac.) Applicant anticipates that the land will continue the historic agricultural uses on the lands until development occurs. There are no outbuildings on site, or any other structures.

7. **Transportation / Connectivity:**
All access points will need to follow design standards according to City and ACHD (Ada County Highway Dist.) codes. Applicant proposes ingress/egress on Kuna Road near the middle of the site, and a new segment of a mid-mile collector on the west property line. In accordance with City Code, the applicant proposes two (2) additional connection to properties to the east and north for future connection. Current legal points of access being used at this time may remain until development requires a change.

8. **Environmental Issues:**
Beyond being within the nitrate priority area, staff is not aware of any environmental, health or safety conflicts.

9. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:
   - Kuna City Engineer (Paul Stevens) – Exhibit B-1 [*This report will be late, due to his recent* hiring].
   - Ada County Highway District (ACHD – Austin Miller) – Exhibit B-2
   - Boise-Kuna Irrigation District (Lauren Boehlke) – Exhibit B-3
   - Cable One TV (Brett Pike) – Exhibit B-4
   - Community Planning Association of Southwest Idaho (COMPASS – Carl Miller) – Exhibit B-5

F. Staff Analysis:

The applicant previously annexed the land as part of the former Urza property application and now submits an application for preliminary plat and subdivision design review approvals and entitlements.

This parcel was annexed into Kuna City limits last spring with a R-6 (Medium Density) zoning. During the public hearings for said annexation there were certain density conditions approved by the Commission and City Council. Staff finds that this proposal conforms to the condition as outlined in the Findings of Fact and Conclusions of law.

All major public utilities are approximately 1,325 feet east, at Ten Mile and Kuna Roads. Applicant has been made aware that development of this parcel will require extension of, and connection to city services. Connection fees will be required for those utilities at time a building permit is issued. It is anticipated that development will require four phases for complete build-out. Staff concurs with ACHD's recommendation (for the north-south mid-mile collector on the west side of the project) for construction of the proposed mid-mile up to the north property line. Staff concurs that all required improvements shall be installed along with a barricade to be constructed and placed just beyond the W. Park Street intersection; if development has not occurred when phase four begins (ACHD Condition 9 in section D: Site Specific Conditions of Approval).

Staff has reviewed Kuna's Comprehensive Plan (Comp Plan), and found the Comp Plan encourages a variety of housing types for all income levels numerous times throughout the document. Pertinent sections of the Comp Plan that address housing types are included below, in Section K (Comp Plan Analysis) of this report. The City attempts to balance all housing types within the City. Staff would recommend that the applicant work with Kuna City, ACHD, and Kuna Rural Fire District (KRFD) to conform to each agency's requirements.

In the northeast corner of the site is a pocket park on lot 12, block 2. The Kuna Recreation and Pathway Map indicates a trail in this area. Staff recommends that the applicant provide a public easement for a future greenbelt/pathway to be built in the future by the H.O.A. if development occurs on the east or north. While this is a very small pinch point, it could become a pivotal piece in the future. Staff recommends that plantings be arranged so that a blockade is not formed accidentally.

This application includes a request for subdivision landscape design review. In the proposed landscape plans, the buffer on Kuna Road indicates incorrectly that one shade tree is *required every 100*'. Two shade trees are required per 100' (KCC 5-17-15). The plans also state that only 2 evergreen trees are required, however, three every 100' is the required amount. It appears that the shrub amount is correct. Staff recommends the applicant add two notes to the landscape plan for planting requirements, and submit an 11 X 17 for approval bearing the requested changes that are listed in the Recommended Conditions of Approval. Design Review for a subdivision monument was not applied for the project, however it will be required to place a monument sign at the entry(ies).

Staff has determined this application complies with Title 5 of the Kuna City Code; Idaho Statute § 67-6511; and the Kuna Comprehensive Plan document; and forwards a recommendation of approval for Case No's 18-02-S and 18-18-DR subject to any conditions of approval outlined by Kuna's Commission and City Council.

G. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5, Chapter 13.
2. City of Kuna Comprehensive Plan, adopted September 1, 2009.
3. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

H. Procedural Background:

On September 11, 2018, the Planning and Zoning Commission considered the case, including the application, agency comments, staff's memo, the application exhibits and public testimony presented or given.

I. Factual Summary:

This parcel is located near the northwest corners of Ten Mile and Kuna Roads. The project consists of 39.48 (approx.) acres and is in Kuna City limits and zoned R-6 (Medium Density Residential). Applicant requests preliminary plat approval to subdivide said property in 206 homes, 27 common lots and one shared driveway. This parcel is adjacent to Kuna Road; a principle arterial.

J. Findings of Fact:

Based upon the record contained in Case No. 18-02-S, including the Comprehensive Plan, Kuna City Code, staff's memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Commission hereby recommends **approval** of the Findings of Fact and Conclusions of Law, and the conditions of approval for Case No. 18-02-S, a request for preliminary plat, and hereby **approves** Case No. 18-18-DR, a request for subdivision design review, by the applicant follows:

The Commission concludes that the applications comply with the City of Kuna's Zoning regulations (Title 5) of KCC and/or the Subdivision regulations outlined in title 6 of KCC.

1. The Kuna Commission accepts the facts as outlined in the staff memo, the public testimony and the supporting evidence list presented.

Comment: *The Kuna* Commission *held a public hearing on the subject applications on September 11, 2018, to hear from City staff, the applicant and to accept public testimony. The decision by the Commission is based on the application, staff report and public testimony, both oral and written.*

2. Based on the evidence contained in Case No. 18-02-S and 18-18-DR, this proposal **does** appear to *generally* comply with the Comprehensive Plan.

Comment: *The Comp Plan has listed numerous goals for providing single-family housing in Kuna. The Comp Plan describes this property as Medium Density. As this project proposes to accommodate single-family residential uses, the project follows the goals of the Comp Plan.*

3. The Kuna Commission has the authority to recommend **approval** for the preliminary plat application, and the authority to **approve** the design review application.

Comment: *On* September 11, 2018*, the Commission voted to recommend **approval** for Case No.* 18-02-S*, and voted to approve Case No.* 18-18-DR.

4. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.

Comment: *As noted in the process and noticing sections, notice requirements were met to hold a public hearing on* September 11, 2018*.*

K. City Commissions Comprehensive Plan Analysis:

Commission determines the proposed preliminary plat and design review requests for the *site **are*** consistent with the following Comp Plan components:

Housing:

Residents expressed interest in a mix of residential type dwellings applications; including a variety of housing. They were receptive to a greater mix of lot sizes and house price to appeal to a variety of people. A goal expressed by many was the preservation of large lots and rural cluster development in appropriate balance with a complement of other types of residential development (Page 21 Comprehensive Plan [CP]).

***Comment**: The Comp Plan provides for a mix of residential uses. This project has proposed a zone that provides an opportunity for a variety of densities, therefore it generally conforms to the Comp Plan goals and policies.*

Private Property Rights Goals and Objectives - Section 2 - Summary:

Ensure the City *land use policies, restrictions, conditions and fees do not violate private property rights and ensure that land use actions, decisions, and regulations do not effectively eliminate all economic value of the subject property.* Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right and staff shall evaluate with guidance from the City's attorney; the Idaho Attorney General's six criterion established to determine the potential for property taking.

***Comment:** Utilizing the Idaho Attorney General's criteria, and a review by the City Attorney, the proposed project **does/does not** constitute a "takings" and the Economic value is intact.*

Economic Development Goals and Objectives - Section 5 - Summary:

Promote and ensure an adequate supply of housing for all income levels and facilitate pedestrian connections, both visually and physically, to enhance pedestrian movement (Pg. 42 – 1.5 and Pg. 43 – 3.1 [CP]).

***Comment:** The Comp Plan encourages an adequate mix of housing for all income levels and calls for increasing pedestrian connections. The requested zoning for this project provides an opportunity for a number of additional housing types to Kuna's inventory and quality housing. At time of development, this project should be conditioned to add to the City's pedestrian network for non-motorized transportation, by proposing pathway connections for future development to connect to in the future.*

Land Use Goals and Objectives - Section 6 - Summary:

Adopt a future land use plan and map that includes natural and developed open spaces, while providing a variety of housing densities and types to accommodate various lifestyles, ages and economic groups. Protect existing neighborhoods and ensure new development is sustainable and keeps Kuna desirable. Develop cohesive

neighborhoods with character and quality while incorporating a variety of densities and styles (Pg. 64 – 3.1 & Goal 3, and Pg. 65 – 4.3 [CP]).

Comment: *The requested zoning provides an opportunity for quality housing opportunities and multiple housing varieties to the City's inventory for all types of lifestyles, ages and economic groups.*

Housing Goals and Objectives - Section 12 - Summary:
Encourage developers to provide high-quality development with a variety of lot sizes, dwelling types, densities and price points to meet the needs of current and future population while creating safe and aesthetically-pleasing neighborhoods. Ensure housing is available throughout the community for all income levels and those with special needs. Encourage logical and orderly development while discouraging development of land divisions greater than one half acre because large lot subdivisions increase municipal costs, require public subsidy and create sprawl (Pg. 155 – Obj. 1.1, Pg. 163 12.4 and Pg. 165 – 2.1 [CP]).

Comment: *With the requested zoning, applicant proposes a future high quality development with a variety of dwelling types, densities, and price points for all income levels Kuna as encouraged by the Comp Plan. In the future, this project could add to the City's overall network of, utilities, sidewalks and roadways, therefore it complies with logical, orderly development and discourages land divisions and development greater than one half acre, and could avoid increased municipal services costs and sprawl.*

Community Design Goals and Objectives - Section 13 - Summary:
Strengthen Kuna's Image through good community and urban design principles that create well planned neighborhoods. Foster good community design concepts that incorporate landscape features to serve as buffers between incompatible uses while reducing scale and creates a sense of place (Pg.167 – Goal 1 and Pg. 168 – 1.2 and 2.1[CP]).

Comment: *Applicant should be conditioned to offer good community and urban design principles through creation of greenspaces, add to the pedestrian pathway network and add to the City's sidewalk network. Applicant has proposed and shall improve classified roadways, which add to the roadway system thereby complying with the adopted Master Street Plan of Kuna (Functional Classified Road Map). Applicant has proposed and should be conditioned to incorporate landscape buffers creating a sense of place for citizens. Applicant has proposed and should be conditioned to follow sound community design concepts and comply with the Comp Plan goals and help strengthen Kuna's image.*

L. Council's Idaho State Code Analysis:

1. **IC §67-6511 (2) C** requires that the Commission analyze the proposed changes to zoning ordinances to ensure that they are not in conflict with the policies of the adopted comprehensive plan. If the request is found by the governing board to be in conflict with the adopted plan, ***or*** would result in demonstrable adverse impacts upon the delivery of services by any political subdivision providing public services, including school districts, within the planning jurisdiction.

2. **IC §67-6513** provides that the City provide for mitigation of the effects of subdivision development on the ability of political subdivisions of the state, including school districts, to deliver services without compromising quality of service delivery to current residents or imposing substantial additional costs upon current residents to accommodate the proposed subdivision.

3. Through discussions and comments submitted by public service providers, the project would not create demonstrable adverse impact to quality of emergency service and/or delivery of said services, or impose substantial additional costs to current residents.

M. P & Z Commission's Conclusions of Law:

The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

1. The Commission feels the site ***is*** physically suitable for development in the future.

   Comment: *The 39.48 acre (approximate) proposal appears to be suitable for a subdivision, as proposed.*

2. The subdivision request ***is not*** likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.

   Comment: *The land to be developed is not used as wildlife habitat. Roads, driveways, family units and open spaces are planned for construction according the City and ACHD requirements and best practices and will therefore not cause environmental damage or loss of habitat.*

3. The preliminary plat application ***is not*** likely to cause adverse public health problems.

   Comment: *As proposed, the preliminary plat generally complies with the Comp Plan. The project will connect to public sewer and potable water systems, therefore eliminating the occurrence of adverse public health problems.*

4. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

   Comment*: Through correspondence with public service providers and application evaluation, this subdivision request appears to avoid detriment to surrounding uses. Commission did consider the subdivision and landscaping and the location of the property with adjacent uses.*

5. The existing and proposed street and utility services in proximity to the site ***are*** suitable *or* adequate for future residential purposes.

   Comment: *Correspondence from ACHD and Kuna Public Works confirms that the streets and utility services (existing and proposed) are suitable and adequate for this subdivision, or will be as conditioned.*

6. Based on the evidence contained in Case No's 18-02-S and 18-18-DR, Commission finds Case No. 18-02-S and 18-18-DR adequately comply with Kuna City Code.

7. Based on the evidence contained in Case No. 18-02-S and 18-18-DR, Commission finds Case No. 18-02-S and 18-18-DR generally comply with Kuna's Zoning Code.

N. Recommended Conditions of Approval:

18-02-S (Preliminary Plat), *Note*: *The proposed motion is to recommend approval, conditional approval, or denial for these requests to City Council. If the Commission wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.*

18-18-DR (Design Review), *Note: The proposed motion is to approve or deny the design review request. If the Planning and Zoning Commission wishes to approve or deny specific parts of the requests as detailed in the report, those changes must be specified.*

Based upon the facts outlined in staff's memo, the Comp Plan, City Code, the record before the Commission, the applicant's presentation, public testimony and discussion during the September 11, 2018, public hearing, the Kuna

Commission votes to *recommend* ***approval*** for Case No. 18-02-S to Council, and votes to ***approve*** Case No. 18-18-DR, with the following conditions of approval:

Preliminary Play Specific Conditions:

- Applicant shall follow *conditions as outlined in the staff report with a revision to No. 13, a condition that the applicant shall provide a perimeter pathway around Lot 12, Block 2 (similar to the central park) in the northeast corner for future connectivity to the city greenbelt,*
- *Applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue to seal off the streets with the future signage as recommended in the ACHD report,*
- *Applicant shall install barricades north of the Park Street and Beadlily intersection to restrict access for the road to the north property line.*

Design Review Specific Conditions:

- *Applicant shall follow the conditions as outlined in the staff report*
- *Applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue,*
- *Applicant shall install barricades north of Park Street and along Beadlily,*
- *Applicant shall work with staff for the perimeter hardscaping and port and/or pathway for future access.*

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve the drainage and grading plans. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties". No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    c. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    d. The *Boise-Kuna* Irrigation District shall approval any modifications to the existing irrigation system.
    e. Approval from Ada County Highway District (ACHD) shall be obtained and Impact Fees must be paid prior to *issuance* of any building permit(s).
2. All public rights-of-way shall be dedicated and constructed to standards of the City, Ada County Highway District and Idaho Transportation Department. No public street construction may commence without the approval and permit from Ada County Highway District and/or Idaho Transportation Department.
    2.1– With development and as necessary, dedicate right-of-way in sufficient amounts to follow City and ACHD standards and widths.
3. Installation of service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see KCC 6-4-2-W.
4. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
5. When required, submit a petition to the City (as necessary, confirmed with the City engineer) consenting to the pooling of irrigation surface water rights for delivery purposes and request to annex the irrigation surface water rights appurtenant to the property over to the Kuna Municipal Pressure Irrigation system of the City (KMID).
6. Street lights and parking lights for the site shall be LED lighting and must comply with Kuna City Code and established Dark Skies practices.
7. Parking within the site shall comply with Kuna City Code. (Unless specifically approved otherwise).

8. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted). Perimeter fencing (and permit) is required prior to requesting final plat signatures from Kuna City Clerk and Engineer.
9. All signage/monuments within/for the project shall comply with Kuna City Code and shall be approved through the design review process with all subdivisions.
10. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within 3 days or as the planting season permits as required to meet the standards of these requirements. Maintenance and planting within public rights-of-way shall be with approval from the public entitles owning the property.
11. Applicant shall add the following notes to the landscape plans and resubmit a PDF for Planning and Zoning approved plans, bearing the changes.
    11.1 – Landscape contractor shall remove *all* twine/ropes and burlap from root balls.
    11.2 – Landscape contractor shall remove the wire basket from the top 1/2 *(HALF)* of the root ball.
12. Applicant shall bring the landscape plans plant count into conformance with KCC 5-17-15 and resubmit a PDF for Planning and Zoning approved plans, bearing the changes.
13. Developer shall provide a perimeter pathway in Block 2 in the northwest corner for future connectivity to the city greenbelt
14. The land owner/applicant/developer, and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the City Council, or seek amending them through public hearing processes.
15. Applicant shall follow staff, City engineers and other agency recommended requirements as applicable.
16. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED: This 25TH day of SEPT., 2018.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:
Troy Behunin, Planner III,
Kuna Planning and Zoning Department

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PZ COMMISSION MEMBER	PRESENT	CITY STAFF PRESENT:	PRESENT
Chairman Lee Young	X	Wendy Howell, Planning Director	X
Commissioner Dana Hennis	X	Troy Behunin, Senior Planner	X
Commissioner Cathy Gealy	X	Jace Hellman, Planner II	X
Commissioner Stephen Damron	X	Sam Weiger, Planner I	X
Commissioner John Laraway	X		

6:00 pm – COMMISSION MEETING & PUBLIC HEARING

Chairman Young called the meeting to order at **6:00 pm**.

Call to Order and Roll Call

1. **CONSENT AGENDA**

a. Meeting Minutes for August 28, 2018.

Commissioner Damron Motions to approve the consent agenda; Commissioner Laraway Seconds, all aye and motion carried 3-0.

2. **NEW BUSINESS**

18-22-DR (Design Review) – Walnut Creek Town Homes; The applicant, Daniel B. Zillner, seeks Design Review approval from the Planning and Zoning Commission (acting as Design Review Committee) for five quadplex buildings, which includes 20 townhomes and landscaping, parking and lighting for two commercial lots. The sites are located on W Heartland Drive, Kuna, Idaho 83634 (APN# R3023310010 & R3023310220)

C/Young: The first item up on your public hearing is 18-22-DR, Design Review for the Walnut Creek Townhomes. **Jeff Hatch**: Jeff Hatch, Hatch Design Architecture, 2126 W State Street, Boise, ID 83703. We're requesting consideration for Design Review for the Walnut Creek Subdivision. These would be two parcels that are zoned appropriately for this use. We have included a sample of the material. As a wood look, it will be fairly durable. **C/Damron**: Are you guys the same owners of the 2553 and the 2575 lots too? The ones directly east? **Jeff Hatch**: No. **C/Laraway**: The townhomes that you're proposing, are they a part of the Galiano Subdivision, or is it part of a separate HOA? **Dan Zillner**: My name is Dan Zillner, and I live at 1277 W Oak Tree, which is just down the street from these two lots. Those two lots are part of the Galiano Estates, but they are exempt from the current HOA agreement. All of the guidelines that are laid out by the HOA, all of the building materials are well with them. **C/Laraway**: It is the same Galiano, but it will have a separate HOA? **Dan Zillner**: Yes. **C/Laraway**: Will it be maintained by one owner, or is it all going to be sold off? **Dan Zillner**: Maintained by one owner. **C/Young**: Commissioner Gealy has arrived at 6:07 PM. **Sam Weiger**: Chairman and Commissioners, for the record, Sam Weiger, Planner I, Kuna Planning and Zoning Staff, 751 West 4th Street. The application before you tonight is seeking approval for five townhome quadplex buildings, 20 townhome units, accompanied with landscaping, lighting, and parking within Galiano Subdivision. There are 50 total parking spaces with 20 garage spaces, 20 driveway spaces and 10 parking lot spaces. This exceeds the requirement of 1.5 spaces per unit. The applicant has provided a material sample board and a rock sample for the Commission. The applicant has agreed to work with J&M Sanitation and install trash enclosure gates on the outside ends of enclosure side walls. All enclosure gates shall open past 120 degrees. Applicant shall provide new trash enclosure details to city staff and to J&M Sanitation for approval. Staff forwards a recommendation of approval. With that I will stand for any questions you may have. **C/Damron**: The only concern that I had was the two lots to

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applicant will permit with the city to make any recommended modifications. Property owners within 300 feet of the property were notified, a notice was printed in the Kuna Melba News and the subject property was posted with a sign. Staff has determined that this application complies with Kuna City Code, the goals and objectives of the Kuna Comprehensive plan and Idaho State Code. Staff would forward a recommendation of approval. One side note, it is a three-car garage with the three parking stalls on the driveway. There is addition room for off-street parking, and that's on your site plan. It is listed under A-4-G, and there's some pages that show additional parking for people that come at different times. I will now stand for any questions. **C/Young**: I will open the public testimony at 6:34 and close it at 6:35. **C/Damron**: It is a nice large lot and a good play area. **C/Hennis**: It seems like it's been run well for the last 12 and a half years. **C/Gealy**: There is a need.

Commissioner Hennis motions to approve Case No. 18-10-SUP with the conditions as outlined in the staff report; Commissioner Gealy Seconds; Motion carried 4-0.

18-02-S (Preliminary Plat) & 18-18-DR (Design Review) – Madrone Heights Subdivision; On behalf of N Star Farm, LLC (the applicant), Kirsti Grabo with KM Engineering, requests approval to subdivide approximately 39.48 acres (previously zoned R-6) into 206 single home lots, an additional 27 common lots, and one shared driveway. Applicant has reserved the name Madrone Heights Subdivision. A Design Review application for the landscaping for the 27 common lots accompanies this application. The address is 2030 W. Kuna Road, Kuna Idaho, and is located near the NWC of Ten Mile and Kuna Roads, in Section 22, Township 2 North, Range 1 West, B.M. (APN #: S1322438400.)

Kevin McCarthy: Chairman and Commissioners, Kevin McCarthy, 9233 W State Street. I'm here on behalf of the Madrone Heights Subdivision. The property owner is Tim Eck, and he is here to answer any questions if necessary. Madrone Heights is approximately 40 acres. The property is located on the north side of Kuna Road with an R-6 zoning. It has a maximum density of 5.2 dwelling units per acre as approved by Planning and Zoning and City Council. The preliminary plat before you has 206 single-family lots, 27 common lots and one shared driveway. This makes a total of 234 lots. This layout reflects the gross density. It also includes approximately 3.4 acres of landscape open space which is located at the center of the project. It is proposed to have soccer fields and walking paths around it. That will improve connectivity throughout the project. We reviewed the staff report from the City of Kuna and Ada County Highway District had no comments. The conditions of approval have been listed. We appreciate working with the city staff on this project. **Troy Behunin**: Good evening Commissioners, Troy Behunin, Planner III, Kuna Planning and Zoning Staff. The preliminary plat is presented for your vote to recommend to the City Council for approval, conditional approval or denial. All notes have been followed for tonight's public hearing, in fact a courtesy notice was also sent out late last week. The courtesy notice was tabled at the last meeting to be heard tonight. The applicant does seek to subdivide approximately 39.5 acres into 206 single-family homes, 27 common lots and one shared driveway. This is in the city limits like Kevin McCarthy mentioned. The project does have significant front along Kuna Road, and it is near the northwest corner of Ten Mile Road and Kuna Road. This project has provided for a mid-mile collector, Beadlily I believe is what it's called. It is on the west side of the project. There is a considerable amount of landscape buffers and internal open spaces for recreational uses. Staff mentioned that the back-T tests were approved earlier this year. One condition of approval was that it would not exceed a certain density. Staff is here to tell you that the density that was required at time of annexation and zoning does conform to that. Staff agrees with ACHD and the applicant that the mid-mile collector shall be completed from Kuna Road all the way to the northern property line. As stated in the ACHD staff report, in their conditions of approval, they suggest that a barricade be placed on the north side of Beadlily and West Park Street. The reason for that is that the improvements that the developer is going to expand to have them put in are protected. It's actually put in already and available for any additional development either to the west or to the north. Staff supports the ACHD condition that they can put that barricade there. Staff also supports the proposed shared driveway in the subdivision. As I handed out in my presentation, the applicant has also submitted an updated landscape plan. This plan does comply with Kuna City

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Code 5-17-15. Originally the first submission was just a few trees and shrubs shy, but they provided that earlier today. This new one appears to conform with that code. The applicant is aware that they will be extending and be required to extend all city and public utilities at this site. It's anticipated there will be up to four phases for the project. The applicant has provided everything that we have asked for. With that staff can answer any questions you may have. We hope that it's a new chapter for the City of Kuna. **C/Young**: In the staff report in the conditions of approval, it's listed that there be easement in the northeast corner for a future pathway and for when properties in the north and east develop. It goes on to state that the HOA will be responsible for building that pathway when the development happens. Does the applicant need to build out the city required width for a future reminder rather than putting them on an HOA? **Troy Behunin**: That is something that this body could condition, but you may also ask the applicant to do that. The reason that staff included that is that was tucked in the northeast corner of this project against the creek. It was a pinch point between two properties. One of them is to the north, and it will likely develop and there is one to the west of the Deutsch property. It will probably be some time before that develops, just because of the many constraints that are on that site. We don't want to miss that opportunity to get the greenbelt in place. **C/Gealy**: Do you feel like that the new landscape plan addresses concerns about space available in that corner for that pathway? **Troy Behunin**: I did notice in that corner that the landscaping was pulled away from that corner where the master pathway map indicates that there is a recreational path. **C/Gealy**: What about the rest of the new landscape plan? **Troy Behunin**: It is significantly different from the original. Even if there is something missing, it will still be required because it needs to conform to Kuna City Code 5-17-15. If there is a discrepancy, we can handle that afterwards. **C/Hennis**: You said the Deutsch property is to the west? **Troy Behunin**: I did say to the west, I'm sorry. I meant to the east. **C/Hennis**: Also, has there been talk between staff and the applicant regarding the issue with the sewer. The issue is that there is not enough capacity in this R-6 that they recommend in an R-4. **Troy Behunin**: Actually, that was a very significant part of the discussion. At the public hearing for the annexation, this explained why they are limited to the 5.2. I spoke to Public Works Director Bob Bachman and Paul Stevens, and they agree that would not compromise the available capacity. They also believe that there are other solutions working to provide more sewer connections in the area over the next couple years. The number of 206 homes was not a concern to them. The recommendation from Mike Borzick was that it be zoned no more than an R-4 or less. That was their recommendation before the rezone. It was discussed at length at the public hearing for the annexation. **C/Hennis**: We have nothing that states that everyone is ok with the 5.2? **Troy Behunin**: They were at the meeting stating that they were ok with the 5.2. That was actually the number that was agreed on between council, the applicant and public works. **C/Laraway**: When he's talking about it being naïve to the city engineer, is the wastewater portion of it going to be sent to the ponds or are they connected to the Ten Mile? **Troy Behunin**: This one will actually be connected to the south Swan Falls plant. **C/Laraway**: Wasn't there talk about getting rid of those? **Troy Behunin**: I don't know. **C/Young**: We will open the public testimony at 6:50 and I have listed neutral to testify Kay Albers. **Kay Albers**: I live at 8165 McDermott Road. I know I live outside city limits, but I will be passing by this development several times a day, possibly. I can't imagine what the traffic is going to be like. One of my worries is being on the outside of the tracks, adding more homes and people for fire and emergency responders. We have had to have them deal with fires on the wheat fields and if the tracks are blocked, what do we do? A month ago, both tracks are blocked and fire trucks are blazing past the post office. My other concern is that living out in the country, I would hate to see our rural feeling disappear. I'm just wondering why the developers, instead of cramming five or six homes on an acre, can't give people the option of one-third of an acre or one-fourth of an acre. This would give us a rural feel that Kuna is known for, and we moved here 30 years ago. The other thing is the schools. All the homes in this subdivision are coming in, and our schools can't handle it. If you go to the schools and walk the halls to see how crowded they are, they have to do three sections for lunch. This is because they can't fit the kids into the lunchrooms at one time. Some of these kids are going to lunch at 10:30. My concern is slowing down and keeping out rural feeling. With 206 homes and 27 common lots, how many homes is that putting on an acre? **C/Young**: 5.2. **Kay Albers**: I noticed that there is no place for the kids to play in the backyards, not even room for a swing set or a fair-sized dog to roam around because the yards are so tiny. The picture shows the common lot right in the middle. All these children have to cross these streets to get to this common lot in this development. They need a place to play or roam. I would

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think the common lots would need to be more spread out in this subdivision instead of right in the middle where all the children cross the streets. I'm concerned about going from one entry to a two-lane road. **C/Young**: Next, I have listed Tim Gordon. **Tim Gordon**: I'm ok, thank you. **Tim Eck**: Good evening Commissioners, Tim Eck, 6152 W. Half Moon Lane, Eagle, Idaho. I am the applicant. These are all single-family detached lots. They all have the ability to be fenced, they all have private yards for their kids and their dogs. We do try to provide internal connectivity with the pathways. We centrally locate a larger amenity, which is the smaller pocket parks that aren't big enough to run your dog on. We have the ability to house two of these. Since the soccer fields turn the other direction, we'll house the larger soccer fields for the teenage groups. We want them to be able to have the outdoor activities. Soccer seems to be the hot sport today, so we've got a good amount of open space in it. For questions about the back corner, we're just barely touching it, nobody knows exactly what we're going to need there. We'll gladly from the road put a pathway out to the corner at the dead end, because there's nothing on either side of it. We don't know what will come there, but we can certainly improve a pathway if Planning and Zoning would like to see that. **C/Gealy**: I think the concern is more about the area for the pathway would be kept free, the cross-through pathway. **Tim Eck**: We left it open on the corner, and we left it open in the center. If time comes that the connecting pathway along the Indian Creek is constructed, there's a space for it. If that occurs, then we can easily put a connecting path from that road to that pathway. That's why we've got everything laid out the way that it is, to accommodate all that. We do anticipate building out about 4 phases. We prefer to construct Beadlily. One of the options that ACHD put forth was that we would road trust warrants. Then, what would we do with the landscape buffer? We don't know the road, I still have the landscape buffer between the fence and where the road would be. We have a landscape buffer that goes to leaves. At least this way, the road gets built with the contiguous phase. The road really isn't open for public use beyond the park. When the neighbors come on to our west or to our north, the north is stubbed to them ready to go. You take that money, 130 percent of their anticipated costs, put it in a road trust and it sits there for 10 years. If it's not used in 10 years, I get it back and the road doesn't get built. I'd rather get it built. That would be a request of ACHD, and staff agreed with stopping the road past Park Street. Policy requires a stop street over 150 feet has an emergency vehicle turnaround, but there's no reason for a firetruck to go down there. It's a dead-end road. It will be stopped off at Park, and we read into putting a turnaround out there. It's in the abyss, and it would be a dumping ground. We see that in all of our subdivisions. People think the most beautiful thing about a new subdivision is that they can back their trucks and dump all of their garbage. We haul truck loads for every subdivision, and at least a load is dumped in our plats. I will answer any questions you may have. **C/Hennis**: What size houses are you looking to build in here? **Tim Eck**: We think that this will be a continuation of the Desert Hawk Subdivision. I think there are 1800-2400 square foot homes out there. This is one of our smaller lot projects. We're trying to hit a little more affordable product out here. As you get closer to Meridian, everything gets more expensive. We've started putting bigger homes and bigger lots out there. As we move a little bit south, south of the tracks, we try to go a little bit tighter with smaller product. The smaller product has been very successful in the Crowman Subdivision. We just started the fourth phase of Desert Hawk, it's 30-32 lots. That's the end of it. We spend $18-20,000 on traffic studies. All recommendations for traffic study are rolled into the ACHD staff report. This includes improvements that are recommended by ACHD. This is an example of ones that are not warranted. It is not warranted by the subdivision and ACHD is putting it in, because we're close. **C/Damron**: You said you're putting up two soccer fields in that center section? Tim Eck: You can see that on this landscape plan, it's laid out. The soccer fields will be sized based on the age group. We have different sized soccer fields, smaller and larger fields. We'll put two of the smaller soccer fields vertically on this layout. The larger fields would be placed horizontally on this layout. **C/Damron**: If you've got soccer fields there, it's not just going to be the residents using it. You're going to have a lot of parking overflow in there that's going to block driveways. It will block driveways at other people's houses, which will cause problems. **Tim Eck**: This is not intended to be a public use, this is for the private community. It will be an HOA-owned park amenity. If they elect to chalk out soccer fields, then their kids can go play soccer. We're providing the capacity for the kids to play soccer or softball. We're not promoting a soccer field for hire. **C/Gealy**: I think you said there's a pathway around the park? **Tim Eck**: Yes, we'll put a pathway around it. You can see on the landscape plan that to the north there is a fairly wide landscape strip in the lots that have a pathway to the north segment. **C/Laraway**: Were you made aware

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of any concerns by first responders about getting over to this section? **Tim Eck**: No, they've all gotten notification of the plat, and they would actually respond to staff. **C/Gealy**: We were just given two letters from them that I haven't read yet. Have you had a chance to read them yet? **Tim Eck**: I did receive two today, and Mr. Deutsch's letter speaks about our stub street and his property. We talked about the fact that he runs cattle, and he's very close to being 100 percent accurate. We did discuss the fact about putting a contiguous fence around there, but that would have to meet ACHD and council approval. This is where out stub street meets his property. Normally we would stop our vinyl fence and put up a barricade that says this will be extended for the future. Then whatever fence he's strung up already would remain. What he's concerned about is that the stub street would promote ingress to his property. He doesn't feel that the three-rail barbed wire fence is going to slow down or stop him. We're seeing this done more and more where instead of putting a temporary fence and the barricades across there, you just run the vinyl fence straight across. The sign on it that says to be continued in the future. We're finding that doing this provided that it meets policy with ACHD and the City of Kuna. The other letter spoke about varying the power and building the streets. It talked about bringing utilities. **C/Gealy**: Mr. Chairman, I would like to moment to read the letters that we first received. **C/Young**: We will close the public testimony at 7:07. **C/Gealy**: I'm confused by the two greenbelt access points in Mr. Deutsch's letter. **C/Young**: I think what he's referring to is in the northeast corner of the Future Land Use Map. As things develop to the north and to the east. The city has planned another continuation of the greenbelt there. For this northeast tip, it just kisses that and there's a small 20 to 30-foot section lengthwise. This would enter on the east side and from the north. **C/Gealy**: Is he calling that two access points from the east and north? **C/Young**: That's what I'm getting out of the letter. Does that seem correct, Troy? **Troy Behunin**: Troy Behunin, Planning and Zoning Staff. What Mr. Deutsch is talking about is concerning the two access points on the greenbelt out of the north boundary of the subdivision. He's talking about the two that aren't even on his property. He's talking about the one for this subdivision. It says Tim Gordon, so I'm guessing that is going into Tim Gordon's property. He's talking about offsite greenbelt access. I don't know why he's referring to them as two different ones. **C/Laraway**: Just for clarification about Mr. Gordon's property. Is this directly to the north, behind this property? **Troy Behunin**: Correct. He has a little 30-foot property line that actually overlaps the property boundary between Madrone Heights and Dick Deutsch. **C/Gealy**: His concern is that they need to maintain a barrier between people from this subdivision to keep them from wandering into the site? **Troy Behunin**: He doesn't explain that very well, it's about access to his property. He does say that we can't talk about that, because they do not adjoin our property. He's got concerns that are actually off of his property. It sounds like he needs to talk with Mr. Gordon, and I know that Tim Eck, the developer of Madrone Heights, has had a number of discussions. I think that Mr. Eck and Mr. Deutsch see eye to eye on everything. At least from what I've heard, I think he submitted this letter just to get on record. His suggestion would be to put that vinyl fence. That was the main thrust. **C/Laraway**: Earlier, we've heard a couple times that the facility director said R-4, and people said that it was discussed at the city council meeting. What was agreed upon? Troy Behunin: R-6 is what was agreed upon with the 5.2 dwelling units. R-6 actually allows six units per acre, but he's not interested in six units per acre. The developer is interested in the dimensional standards of the R-6. As you can see, he's actually below that by a pretty good chunk. **C/Gealy**: Could I ask for your opinion about the solid vinyl fence across the stub street? **Troy Behunin**: I have no opinion. As long as it says that it's blocked off and to be continued for future development, as ACHD requires, then staff has no opinion whether it's all the way across or not. **C/Gealy**: Would it be a violation of the city code to put a solid fence across there? **Troy Behunin**: They're not blocking off any of the road, it's either at the edge of road of just beyond the edge of road. **C/Gealy**: Would staff object if that was a condition? **Troy Behunin**: No. **C/Young**: I think the overall layout and access points are good. There are two access points off of Kuna Road. I think that helps with accessing the back end. As things develop, there will be other additional things to enter. **C/Hennis**: As Stephen said, I'm still concerned with parking for any usage of that park. There's just nothing there. The streets are fairly narrow. You've got a lot of people crammed into a little place. **C/Damron**: I also have concerns with, and I've addressed this before, what point in the city we start building a fire station on this side of the tracks. How many houses have to go in before we need this public safety. Wendy Howell: The city doesn't have any say in when and if they do, we would support one if they choose to do that. **C/Damron**: Is that up to the fire district? **Wendy Howell**: Yes. They are a separate taxing entity. **C/Hennis**: Did they have any

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response to this application? **Troy Behunin**: No, they did not. However, the silver lining is that they just implemented a rural fire district impact fee. This subdivision would be subject to that. **C/Damron**: Knowing fire districts, that impact fee usually goes to the district. It still doesn't show us that they're looking towards the south station. When those tracks are blocked, there is no access. We all know that fire burns rapidly and EMS calls and they're not there and people die. I'm real concerned with those aspects as we build through there. **Wendy Howell**: They are working with the Pulse Point app, and that may help with some of those issues for the emergency if it's a heart attack for example. You might want to get a hold of the fire district to chat with them about that program that they're doing. **C/Damron**: Do you have any other information besides that? Being a former paramedic, an app doesn't save people's lives. **Wendy Howell**: No, but it will get someone close to it that will sign up for it and can help. **C/Damron**: They are looking at first responder notification, so they'll be able to get there first. **Wendy Howell**: Correct. They have told me verbally that the rail has been only minimally been an issue for them. If it's a big emergency, they'll just go around to another route. I know that it makes it longer, I realize that. That's what I've been told verbally. They do have to have a capital improvement plan for their impact fees. That plan is what you could potentially review to see what they planned for the impact fees to go towards. **Troy Behunin**: I know that Commissioner Hennis had a concern just a moment ago about the park and parking. The streets are actually to Kuna City standards. Staff has actually had discussions with the developer about the soccer fields that are shown on there. The discussions were about how large they are. You may have missed it, but in his testimony, he said that if the HOA wants to chalk out soccer fields, then they can. That's really just an illustration of the size. If you ask most people how large an acre of ground is, they think that half of an acre is a full acre. People understand soccer field sizes for whatever reason, so it's just an illustration. **C/Hennis**: I understand that, but it's still going to be usage of the park. Considering you've got a lot of houses here, not all of them are going to track from the outside corner all the way out there. I was concerned a little bit more on the park. **Troy Behunin**: Traditionally speaking, with a centrally located park like this, there might be a few people that do drive. I believe I ran a measuring tool on there, and most people are going to walk less than 600 feet to get there. It's not a public park so the outside influence shouldn't be there. **C/Young**: Do we like the idea of extending Beadlily all the way to the north boundary? Do we want to install a barricade at that point, having that built out with this development? Without having to worry about if development isn't happening to the north right away, this development still gets taken care of. The barricade will keep people from the rear of the subdivision. I like the idea of extending the vinyl fencing on the east boundary from West Park Street with the Ada County signage on there. The road is going to terminate there one way or another until something develops. It could be ten years, it could be never. If the fencing's in place, I think that helps address the neighbor's concerns to the east. It doesn't affect anything. **C/Hennis**: What about the one to the north, though? Don't the cattle graze across here? I think it would have to cross both. **C/Young**: To keep consistency. **C/Gealy**: This street here, the Beadlily, that will be constructed to a full width, correct? Or is it half of a width? **C/Young**: They'll develop a street with the curb and gutter along the side they develop. The curb and gutter on the other side will be developed. Yes, full width. **C/Gealy**: Are you suggesting that they build the whole road? **C/Young**: I recommend they build it as shown in this plan and barricade it. **C/Gealy**: This would be so they don't have to build the turnaround for emergency vehicles. My only other concern I still have is with the northeast corner. I know it's all in the future and it has to align a certain way. As far as the future pathway or future greenbelt, I have a hard time saying in the future that the HOA is going to pay for something. It's either a parks improvement or something the developer should have done. We can have that easement off of the pathway, but I don't know what the verbiage would be. **C/Gealy**: It would seem that at this point, given the concerns about the stub streets there would be this same concern about open streets in the corner. It would need to be fenced in. **C/Young**: I think that it is fenced in. The concern is in the future when the north property develops, and again that northeast corner barely touches it. I'd like to see the developer do something now, rather than put those on the HOA to build out this little strip. The staff report right now indicates that the onus would be on the HOA in the future to do that. **C/Hennis**: One other way to do it is to specify something and in the future simply connect what's there. First in, first to determine it. **C/Young**: That's where I'm at. The corners would have to align that in the future. **C/Hennis**: Well just imagine something like a concrete pad back there that would allow some amenities to go in. People would picnic or something there, and there would be something in the corner

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for any pathways that would come in. You've got a half moon or half circle right there. You give them a corner of concrete and fence either side so they can bring the path in so they connect either way. **C/Young**: There's an easement here that also has to be a part of that. If we don't have a defined pathway now, then that concrete will be over that easement. It would have to get tore up in the future as things change. **C/Hennis**: Well, I think you're going to have a hard time tying the cart on the horse here. My only suggestion is to put something else here, but beyond that I don't know what it's going to look like down the road. **C/Gealy**: I agree that if we require them to construct something there and then drive that pathway at either side. It does seem premature to do that. They're holding the space open, and they're requiring it to be constructed at a future date. **C/Young**: By the HOA? That's where my hang-up is. Right now, the verbiage is that the residents will pay for that. Is there some contingency in the HOA that there's money set aside for that? Do they just get a surprise bill in the mail that says you have to spend $10,000 to get a pathway there? **C/Hennis**: That's true, but I don't think you're going to be in the realm of $10,000. I think they'll be more around $2,000. **C/Laraway**: Am I missing something, are we suggesting that the path either be built by the developer or the HOA? Does the path have to be paved, or can it be a gravel material designated as a path? **C/Young**: In the future would the pathway along that side of the greenbelt be intended to be an asphalt pathway? **Troy Behunin**: For the record, Troy Behunin. There's a high likelihood that at some point, there might need to be some kind of ACHD stormwater pond. For that little pocket park, it will be a small one. Why don't you condition that they work with staff to provide some kind of walk way? It would be an easy way to meld what they would put in with a future path in the future. They likely might put a walkway around the outside edge of that lot, so that people could walk around much like that one in the center. In the future, it would be really easy to either add to it or to extend it just a little bit so that it is included. Because this is a master path or plan, there is no definitive location that it goes. In the event that it does happen, there's something working in place that could accommodate something like that. **C/Damron**: What would the size of that storm drainage pond be? **Troy Behunin**: No more that 2-3 feet deep. The only was to know that is to go all the way through engineering. **C/Gealy**: I think the concern is that at some point we're going to have some kind of pathway connectivity through there. We're trying to figure out how to get the developer to pay for it, rather than the homeowners and the city. **Troy Behunin**: That's what the developer is suggesting. He will put a walkway in around the outside edge of that entire property. This would circle the property. In the event that Mr. Deutsch's and Mr. Gordon's property develops in this point, then there would be something to connect to a lot closer to a path than just grass. Somebody might have to expend a few more dollars to connect to it, but we can work with the developer. **C/Gealy**: The other landowners and the city would be able to resolve any issues. **Troy Behunin**: We can work with them to get it so close to that corner that it's very minimal. We're talking hundreds of dollars, not thousands of dollars. **C/Young**: This would alleviate the language in the staff report. **Troy Behunin**: You can strike that completely and say that you want to condition or read this instead. **C/Damron**: Is Beverly an existing road or just a farm access only? **Troy Behunin**: There are no roads at all existing on this property. The developer just reminded me that likely if there is subservice drainage needed, the naked eye won't see it. It would just be flat grass, not a pond. **C/Laraway**: I'm assuming the developer solved our problem if he's going to put the sidewalk around the property at the considered path.

Commissioner Hennis recommends approval for Case No. 18-02-S with the conditions as outlined in the staff report and a revision to No. 13, a condition that the applicant shall provide a perimeter pathway in Block 2 in the northwest corner for future connectivity to the city greenbelt, a condition that the applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue to seal off the streets with the future signage as recommended in the ACHD report, and a condition that the applicant shall install barricades north of Park Street and along Beadlily to restrict access for the road to the north. Commissioner Laraway Seconds; Motion carried 4-0.

Commissioner Hennis motions to approve 18-18-DR with the conditions as outlined in the staff report, a condition that the applicant shall install solid vinyl fencing across both stub streets at Park and Madrone Avenue; a condition that the applicant shall install barricades north of Park Street and along Beadlily; and a condition that the applicant

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shall work with staff for the perimeter hardscaping and port and/or pathway for future access; Commissioner Gealy Seconds; Motion carried 4-0.

4. **COMMISSION REPORTS**

5. **ADJOURNMENT**

Commissioner Hennis motions to adjourn; Commissioner Laraway Seconds, all aye and motion carried 4-0.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:

Wendy I. Howell, Planning and Zoning Director
Kuna Planning and Zoning Department

City of Kuna
City Council
Staff Memo

P.O. Box 13
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www.Kunacity.id.gov

To: City Council

Case Numbers: 18-04-AN (Annexation) & 18-03-S (Preliminary Plat) **Lugarno Terra Subdivision**

Site Location: 1919 E. Deer Flat Road & E. Deer Flat Road, Kuna, ID 83634

Planner: Jace Hellman, Planner II

Hearing Date: November 20, 2018

Owner/Applicant: **Select Development & Contracting, LLC.**
PO Box 1030
Meridian, ID 83680
208.288.0700
randy@selectmanagement.com

Representative: Billy Edwards
P.O. Box 1030
Meridian, ID 83680
208-288-0700
wedwards@selectdev.com

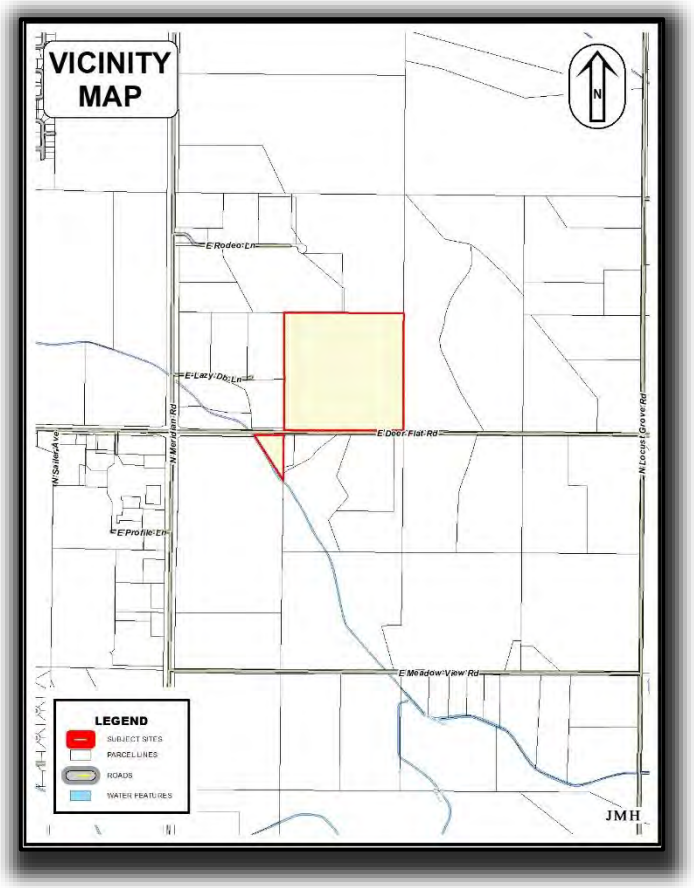


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A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that preliminary plats and annexations are designated as public hearings, with the Planning and Zoning Commission as a recommending body and City Council as the decision-making body. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65, Local Planning Act.

a. Notifications

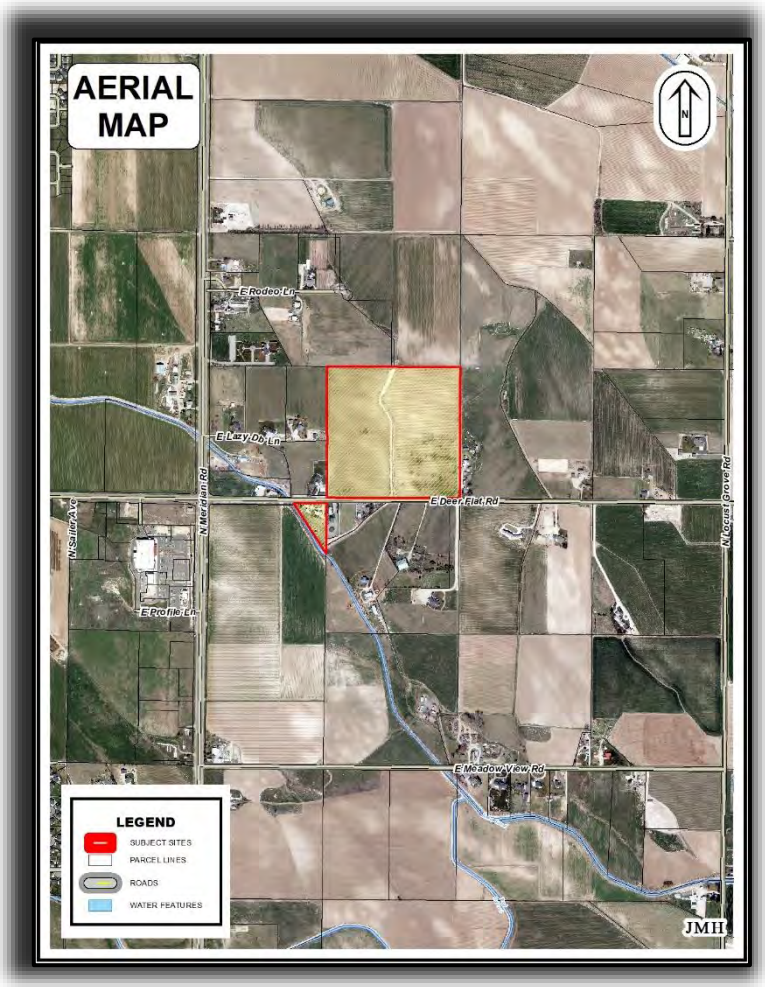
i.	Neighborhood Meeting	May 30, 2018 (9 people attended)
ii.	Agency Comment Request	August 17, 2018
iii.	400' Property Owners Notice	October 31, 2018
iv.	Kuna Melba Newspaper	October 31, 2018

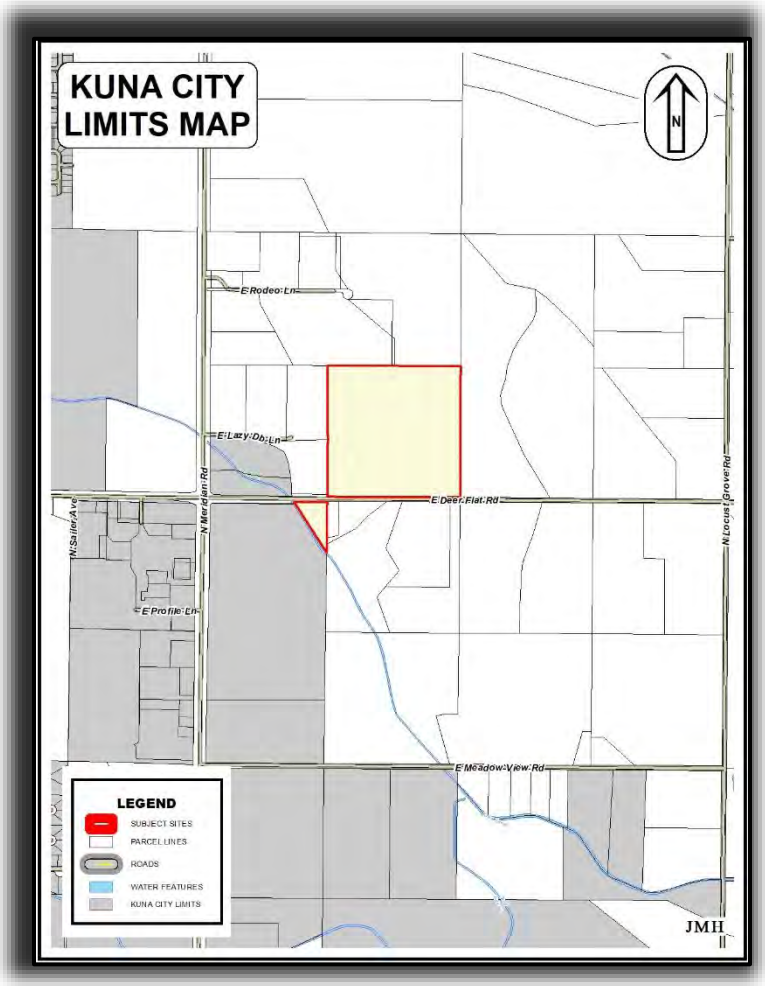
v. Site Posted October 31, 2018

B. Applicant's Request:

Billy Edwards, with Select Development and Contracting, LLC., requests to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

C. Exhibit Maps:



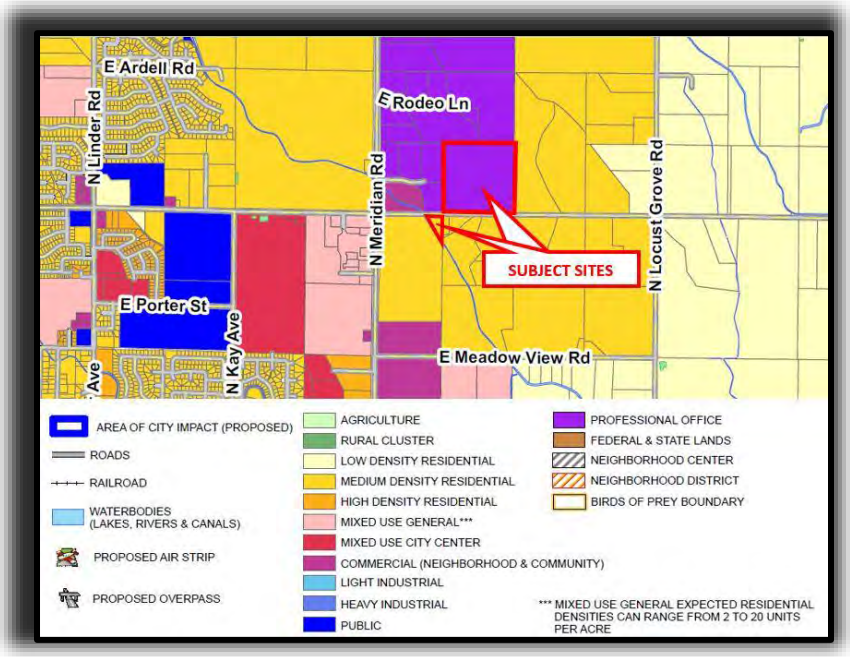


D. Site History:

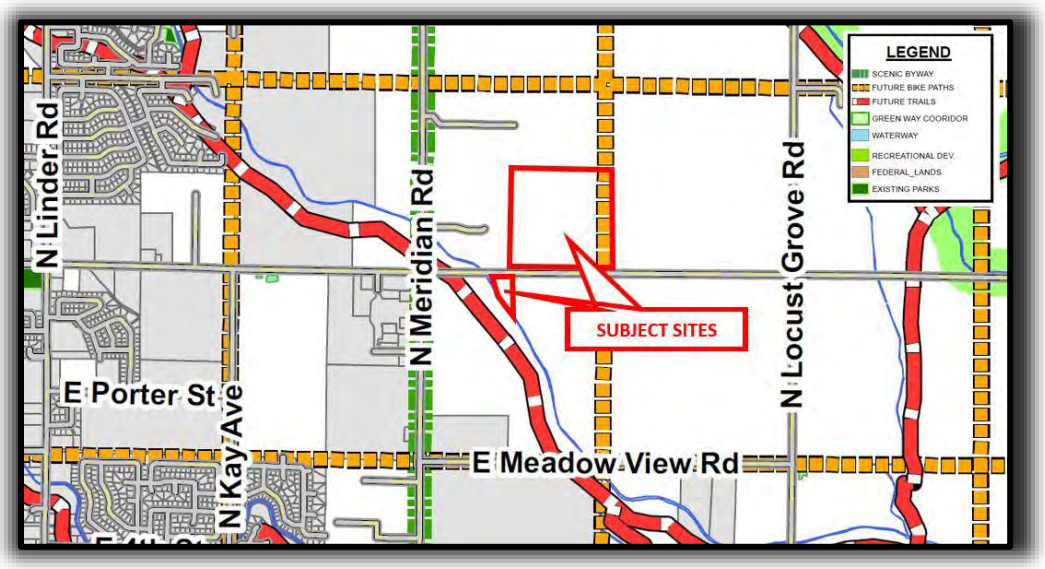
These parcels are currently within Ada County. The approximately 1.725-acre property has served as residential property and the approximately 40-acre parcel has historically been considered agricultural land.

E. General Projects Facts:

1. **Comprehensive Plan Map:** The Future Land Use Map (Comp Plan Map) is intended to serve as a *guide* for the decision-making body for the City. The Comp Plan map indicates land use designations, it is not the actual zone. The Future Land Use Map identifies the 40-acre site as professional office and the 1.725-acre site as medium density residential.



2. **Recreation and Pathways Map:** The Recreation and Pathways Master Plan Map does not indicate a future trail through either site. However, a future bike path is shown along the future extension of Stroebel Road. Accordingly, it is the City's goal and desire to increase the number of trails and pathways in Kuna. Staff highly recommends that developers design and construct trails and pathways, or work with Ada County Highway District to pay their proportionate share to comply with the Master Plan's goals by either starting a pathway, or extending current ones at time of development.



3. **Surrounding Land Uses:**

North	RUT RR	Rural Urban Transition – Ada County Rural Residential – Ada County
South	RR	Rural Residential – Ada County
East	RR	Rural Residential – Ada County
West	RUT R-6	Rural Urban Transition – Ada County Medium Density Residential – Kuna City

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

Property Owner	Parcel Size	Current Zone:	Parcel Number
Select Development & Contracting, LLC	40.00 acres	RR, Ada County	S1418346600
Select Development & Contracting, LLC	1.725 acres	RUT, Ada County	S1419223000
Total Acres 41.725			

5. **Services:**

Sanitary Sewer– City of Kuna
Potable Water – City of Kuna
Pressurized Irrigation – City of Kuna (KMID)
Fire Protection – Meridian Rural Fire District
Police Protection – Kuna Police (Ada County Sheriff's office)
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**

The 1.725-acre parcel contains one manufactured home and several outbuildings. The front of the site contains landscaping typically associated with a residential lot (i.e. grass, trees and shrubs). The 40-acre parcel historically has been farmed and contains features associated with agricultural land. A Boise Project Board of Control irrigation access easements divides the subject site. The site is relatively flat with an estimated average slope of 0% to 2% towards the Mason Creek Feeder. Bedrock depth is estimated to be between twenty and forty inches according to the USDA Soil Survey for Ada County.

7. **Transportation / Connectivity:**

The applicant has proposed connections to public streets in two locations, including a new section of the mid mile collector Stroebel Road. All proposed access points will need to follow design standards according to City and ACHD (Ada County Highway Dist.) codes. Internal pathways and sidewalks have been proposed for pedestrian connectivity.

8. **Environmental Issues:**

Staff is not aware of any environmental issues, health or safety conflicts beyond the designation of being in the nitrate priority area. Idaho Department of Environmental Quality (DEQ) has provided recommendations for surface and groundwater protection practices and requirements for development of the site.

9. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:

- Kuna School District …… Exhibit C-2
- Kuna City Engineer …… Exhibit C-3
- Idaho Transportation Department (ITD) …… Exhibit C-4
- Department of Environmental Equality (DEQ) …… Exhibit C-5
- Central District Health Department (CDHD) …… Exhibit C-6
- Community Planning Association of Southwest Idaho (Compass) …… Exhibit C-7
- Nampa & Meridian Irrigation District …… Exhibit C-8
- Ada County Highway District (ACHD) …… Exhibit C-9
- Boise Project Board of Control …… Exhibit C-11

F. Staff Analysis:

The applicant requests to annex an approximately 40-acre site into Kuna City limits with an R-4 (Medium Density Residential) zoning designation. The applicant proposes to subdivide the 40-acre site into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. Density per acre for the site is proposed to be approximately 2.8 residential units per acre with lot sizes ranging from approximately 8,100 square feet to 13, 100 square feet.

This project is adjacent to Deer Flat Road. All major public utilities are located approximately within 300 feet of the subject site within East Deer Flat Road. Applicant is aware that development of these parcels will require connection to all city services and associated connection fees at time of building permit submittal. Full build out is estimated to be built out by 2025 and may require up to two (2) phases.

Applicant is constructing a new section of Stroebel Road along the east property line. Stroebel Road is listed as a north-south collector according to the City of Kuna's Street Circulation Map. Staff would recommend the applicant work with Staff and Ada County Highway District to ensure the new collector street is constructed to each agency's standards. Several stub streets have been provided as a part of this project, two (2) to the west and two (2) the north, including the stub of future collector Stroebel Road. The applicant will be required to install a sign at the terminus of each of the roads stating these roads will continue in the future. Staff will defer the applicant to comments provided by ACHD for preferred language.

Kuna's Comprehensive Plan (Comp Plan), encourages a variety of housing types for all income levels numerous times throughout the document. Pertinent sections of the Comp Plan that address housing types are included below, in Section K (Comp Plan Analysis) of this report. The City attempts to balance all housing types within the City. Staff has reviewed the proposed preliminary plat for technical compliance with Kuna City Code (KCC), and finds the pre plat and landscape plan is in compliance with applicable codes. Staff would recommend that the applicant work with Kuna's staff, ACHD, and Kuna Rural Fire District (KRFD) to conform to each agency's requirements.

The Recreation and Pathways Master Plan Map does not indicate a future trail through either site. However, a future bike path is shown along the future extension of Stroebel Road. Staff will require the applicant to work with ACHD and follow the American Association of State Highway and Transportation Officials (AASHTO) standards and guidelines for the development of bicycle facilities. Internal pathways and sidewalks have been proposed throughout the project site in order to provide a pedestrian connectivity component to the project.

Additionally, the applicant proposes to annex an approximately 1.725-acre parcel into Kuna City limits with an R-6 zoning designation. This parcel will serve as a path of annexation for the overall proposed project. City limits are contiguous to the western property line. No development is proposed for this parcel at this time.

Staff has determined the annexations and the preliminary plat comply with the goals and policies for Kuna City, Title 5 and Title 6 of the Kuna City Code; Idaho Statute § 67-6511; and the Kuna Comprehensive Plan; and forwards a recommendation of approval for Case No's 18-04-AN (Annexation) and 18-03-S (Preliminary Plat) subject to any conditions of approval outlined by Kuna's Planning and Zoning Commission and City Council.

G. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5.
2. City of Kuna Subdivision Ordinance Title 6.
3. City of Kuna Public Ways and Property Ordinance Title 7.
4. City of Kuna Comprehensive Plan.
5. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

H. Factual Summary:

These parcels on Deer Flat Road just east of Meridian Road. The project consists annexation of two parcels into Kuna City limits and to subdivide one of the two parcels. The first parcel is 1.725 acres and proposed to be zoned R-6. No development is proposed at this time. The purpose of annexing this parcel is to create a path of annexation. The second parcel is approximately 40.00 acres and proposed. The applicant requests preliminary plat approval on the 40.00-acre lot for 114 single family residential lots and 20 common lots. Density per acre for the site is proposed to be approximately 2.8 residential units per acre with lot sizes ranging from approximately 8,100 square feet to 13,100 square feet.

I. Proposed Findings of Fact:

Based upon the record contained in Case No's 18-04-AN and 18-03-S including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna City Council hereby recommends *approval*/*denial of* the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 18-04-AN and 18-03-S, a request for annexation & preliminary plat approval by the applicant:

1. *The Kuna City Council approves/conditionally approves/denies the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.*

   Comment: *The Kuna City Council held a public hearing on the subject applications on November 20, 2018. The decision by the Council was based on the application, staff report and public testimony, both oral and written.*

2. *Based on the evidence contained in Case Nos. 18-04-AN and 18-03-S, this proposal does/does not generally comply with the Comprehensive Plan and City Code.*

   Comment: *The Comp Plan has listed numerous goals for providing a variety of housing densities and types to accommodate various lifestyles, ages and economic group in Kuna.*

3. *The Kuna City Council has the authority to approve or deny case nos. 18-04-AN and 18-03-S.*

   Comment: *On November 20, 2018, the Council voted to approve/deny Case Nos. 18-04-AN and 18-03-S.*

4. *The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.*

   Comment: *As noted in the process and noticing sections, notice requirements were met to hold a public hearing on November 20, 2018.*

J. Proposed Comprehensive Plan Analysis:

The Kuna City Council may accept or reject the Comprehensive Plan components, and has determined the proposed combination preliminary and final plat request for the site *is*/*is not* consistent with the following Comprehensive Plan components as described below:

2.0 – Property Rights

Goal 1: Ensure that the City of Kuna land use policies, restrictions, conditions and fees do not violate private property rights. Establish an orderly, consistent review process for the City of Kuna to evaluate whether proposed actions may result in a private property "takings".

Policy: As part of a land use action review, the staff shall evaluate with guidance from the City's attorney; The Idaho Attorney General's six criteria established to determine the potential for property taking.

6.0 – Land Use

Policy: Provide a variety of housing densities and types to accommodate various lifestyles, ages and economic groups.

Goal 2: Encourage a balance of land uses to ensure that Kuna remains desirable, stable and a self-sufficient community.

Goal 3: Protect the quality of existing residential neighborhoods and ensure new residential development is sustainable. Provide a variety of housing opportunities to meet the needs of all Kuna residents.

Objective 3.1: Encourage and plan for the development of cohesive neighborhood units that incorporate a variety of housing densities and styles.

9.0 – Transportation

Goal 1: Promote and encourage bicycling and walking as transportation modes.

10.0 – Recreation

Goal 2: Integrate trails, pathways, bike lanes and greenway corridor systems into community life and development patterns.

Objective 2.1: Ensure that neighborhoods have easy access to open green space, pathways, trails and bike lanes.

12.0 – Housing

Goal 1: Provide a wide-range of housing to meet the needs of the current and future population. Ensure that hosing is available throughout the community for people of all income levels and for those with special needs.

Objective 1.1: Encourage the construction of housing that is safe, affordable and designed to accommodate a range of income levels and lifestyles.

Policy: encourage the development community to provide a variety of lot sizes, dwelling types, densities and price points.

Goal 3: Encourage high-quality residential development.

K. Proposed Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with all Kuna City Code (KCC).

   Comment: *The proposed application adheres/does not adhere to the applicable requirements of Title 5 and Title 6 of KCC.*

2. The City Council feels the site *is/is not* physically suitable for the proposed development.

   Comment: *The 40.00-acre (approximate) site does/does not appear to be suitable for the proposed development.*

3. The annexation and preliminary plat requests are/are not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.

   Comment: *The land to be developed is not used as wildlife habitat. Roads, driveways, family units and open spaces are planned for construction according the City and ACHD requirements and best practices and will therefore not cause environmental damage or loss of habitat.*

4. These applications *are/are not* likely to cause adverse public health problems.

   Comment: *The project would connect to public sewer and potable water systems, therefore eliminating the occurrence of adverse public health problems.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

   Comment*: The preliminary plat request considers the location of the property and adjacent uses. The adjacent uses are residential and agricultural.*

6. The existing and proposed street and utility services in proximity to the site are suitable *or* adequate for single family homes.

   Comment: *Correspondence from ACHD and Kuna Public Works confirms that the streets and utility services are suitable and adequate for this project.*

L. Proposed Conclusions of Law:

1. Based on the evidence contained in Case Nos. 18-04-AN and 18-03-S, Council finds Case Nos. 18-04-AN and 18-03-S *does/does not* adequately comply with Kuna City Code.

2. Based on the evidence contained in Case Nos. 18-04-AN and 18-03-S, Council finds Case Nos. 18-04-AN and 18-03-S generally *does/does not* comply with Kuna City Comprehensive Plan.

3. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

M. Commission's Recommendation:

Based on the facts outlined in staff's report and public testimony as presented, the Planning and Zoning Commission of Kuna, Idaho, hereby recommends approval of Case No. 18-04-AN (Annexation) & 18-03-S (Preliminary Plat) to the City Council subject to the conditions of approval listed in section O of this staff report.

N. Council's Order of Decision:

Based on the facts outlined in staff's report and public testimony as presented, the City Council of Kuna, Idaho, hereby *approves/conditionally approves/denies* Case Nos. 18-04-AN (Annexation) & 18-03-S (Preliminary Plat) subject to the conditions of approval listed in section O of this staff report:

O. Recommended Conditions of Approval:

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
   a. The City Engineer shall approve the sewer hook-ups.
   b. The City Engineer shall approve all civil plans. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
   c. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".

d. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District are required.
e. The Kuna Municipal Irrigation District and Boise Project Board of Control shall approve any modifications to the existing irrigation system.
f. Approval from Ada County Highway District (ACHD) shall be obtained and Impact Fees must be paid prior to *issuance* of any building permit(s).
g. All public rights-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District. No public street construction may commence without the approval and permit from Ada County Highway District.

2. Installation of service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see **KCC 6-4-2-W**.
3. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
4. When required, submit a petition to the City (as necessary, confirmed with the City engineer) consenting to the pooling of irrigation surface water rights for delivery purposes and request to annex the irrigation surface water rights appurtenant to the property over to the Kuna Municipal Pressure Irrigation system of the City (KMID).
5. Curb, gutter and sidewalk shall be installed throughout the proposed project site and along the site's frontages on Deer Flat Road and Stroebel Road.
6. Applicant shall work with ACHD and follow the American Association of State Highway and Transportation Officials (AASHTO) standards and guidelines for the development of bicycle facilities.
7. Street lights and parking lights for the site shall be LED lighting and must comply with Kuna City Code and established Dark Skies practices.
8. Parking within the site shall comply with Kuna City Code. (Unless specifically approved otherwise).
9. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted). Perimeter fencing (and permit) is required prior to requesting final plat signatures from Kuna City Clerk and Engineer.
10. All signage within/for the project shall comply with Kuna City Code and shall be approved through the design review process.
11. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within 3 days or as the planting season permits as required to meet the standards of these requirements. Maintenance and planting within public rights-of-way shall be with approval from the public entities owning the property.
12. All proposed amenities shall comply with Kuna City Code and shall be approved through the design review process prior to receiving building permits.
13. If any revisions are made, the applicant shall provide the Planning and Zoning Staff with a revised copy of the preliminary plat.
14. The land owner/applicant/developer, and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the City Council, or seek amending them through public hearing processes.
15. Developer/owner/applicant shall follow staff, City engineers and other agency recommended requirements as applicable.
16. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED: This 20th day of November, 2018.

City of Kuna
Planning & Zoning
Department
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Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Preliminary Plat Checklist

Preliminary Plats require public hearings with both the Planning & Zoning Commission and City Council. Public hearing signs will be required to be posted by the applicant for both meetings. Sign posting regulations are available online.

Project name: Lugarno Terra Subdivision
Stark Property - 1.725 Acres
Bennett Property - 40 Acres

Applicant: Select Development & Contracting, LLC.
P.O. Box 1030
Meridian, Idaho 83680
Attn.: Billy Edwards (208) 288-0700
wedwards@selectdev.com

All applications are required to contain one copy of the following:

Applicant (√)	Description	Staff (√)
✓	Completed and signed Commission & Council Review Application.	✓
✓	Vicinity map showing relationship of the proposed plat to the surrounding area with a 2-mile radius.	✓
✓	Homeowner's maintenance agreement for the care of landscaped common areas.	✓
✓	Legal description of the preliminary plat area: Include a metes & bounds description to the section line of all adjacent roadways stamped & signed by a registered professional land surveyor with a calculated closure sheet & a map showing the boundaries of the legal description.	✓
✓	Proof of ownership—A copy of your deed **and** Affidavit of Legal Interest (for all interested parties involved).	✓
✓	Letter of Intent indicating reasons and details for preliminary plat.	✓
✓	Commitment of Property Posting form signed by the applicant/agent.	✓
✓	If preliminary plat includes 100 lots or more, please submit a traffic impact study. If preliminary plat includes 50 lots or more, please submit an estimate of tax revenue generation and an estimate of the public service costs to provide adequate service to the development.	✓
✓	A letter from Ada County Engineer with the Subdivision Name reservation. **ANY** name change(s) needs to be submitted and approved by the Planning & Zoning Director and Ada County Engineer.	✓
✓	Phasing Plan	✓
✓	Include Large Scale Development Requirements. KCC 6-5-4	✓
✓	Landscape Plan— (in color)	✓
✓	Neighborhood meeting certification (certification & neighborhood meeting list forms shall accompany this application).	✓
✓	8 1/2 x 11 proposed preliminary plat.	✓
✓	Preliminary plat drawing on 24x36 quality paper drawn to scale of 1 to 100' or more. The following information shall be contained on the preliminary plat: ◊ Topography at two foot (2') intervals ◊ Land uses (location, layout, types & dimensions): residential, commercial & industrial land uses. ◊ Street right-of-ways: dimensions of right-of-way dedication for all roadways, street sections, improvements, etc. ◊ Easements/common space: utility easements, parks, community spaces ◊ Lots: layout and dimensions of lots ◊ Preliminary improvement drawing: show water, sewer, drainage, electricity, irrigation, telephone, natural gas, proposed street lighting, proposed street names, proposed subdivision name, fire hydrant placement, storm water disposal, underground utilities, and sidewalks..	✓

Note: Only one copy of the above items need to be submitted when applying for multiple applications. This application shall not be considered complete (nor will a Public Hearing be set) until Staff has received all required information. Once the application is deemed complete, Staff will notify the applicant of the scheduled hearing date, fees due, additional copies needed, etc.

Exhibit
A2

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Annexation Checklist

Annexation requires public hearings with both the Planning & Zoning Commission and City Council. Public hearing signs will be required to be posted by the applicant for both meetings. Sign posting regulations are available online.

Project name: Lugarno Terra Subdivision
Stark Property - 1.725 Acres
Bennett Property - 40 Acres

Applicant: Select Development & Contracting, LLC.
P.O. Box 1030
Meridian, Idaho 83680
Attn.: Billy Edwards (208) 288-0700
wedwards@selectdev.com

All applications are required to contain one copy of the following:

Applicant (√)	Description	Staff (√)
✓	Completed and signed Commission & Council Review Application.	✓
✓	Letter of Intent indicating reasons for proposed annexation and the availability of public services. If reason for annexation is development, also submit a conceptual plan.	✓
✓	Vicinity map drawn to scale, showing the location of the subject property. Map shall contain the following information: Shaded area showing the annexation property, Street names and names of surrounding subdivisions.	✓
✓	Legal description of the annexation area: Include a metes & bounds description to the section line of all adjacent roadways stamped & signed by a registered professional land surveyor with a calculated closure sheet & a map showing the boundaries of the legal description.	✓
✓	Recorded warranty deed for the property.	✓
✓	Proof of ownership—A copy of your deed **and** Affidavit of Legal Interest (All parties involved)	✓
N/A	Development Agreement & Development Agreement Checklist	N/A
✓	Neighborhood meeting certification (certification & neighborhood meeting list forms shall accompany this application).	✓
✓	Commitment of Property Posting form signed by the applicant/agent.	✓

Note: Only one copy of the above items need to be submitted when applying for multiple applications.

This application shall not be considered complete (nor will a Public Hearing be set) until staff has received all required information. Once the application is deemed complete, staff will notify the applicant of the scheduled hearing date, fees due, additional copies needed, etc.

received
6.28.18

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Commission & Council Review Application

Note: Engineering fees shall be paid by the applicant if required.

*Please submit the appropriate checklist (s) with application

For Office Use Only	
File Number (s)	18-04-AN 18-23-DR 18-03-S
Project name	Lugarno Terra Subdivision
Date Received	6/28/18
Date Accepted/ Complete	8/17/18
Cross Reference Files	
Commission Hearing Date	10/9/18
City Council Hearing Date	

Type of Review (check all that apply):

- ☑ Annexation
- ☐ Appeal
- ☑ Comprehensive Plan Amendment
- ☐ Design Review
- ☐ Development Agreement
- ☐ Final Planned Unit Development
- ☐ Final Plat
- ☐ Lot Line Adjustment
- ☐ Lot Split
- ☐ Planned Unit Development
- ☑ Preliminary Plat
- ☐ Rezone
- ☐ Special Use
- ☐ Temporary Business
- ☐ Vacation
- ☐ Variance

Contact/Applicant Information

Owners of Record: Select Development & Contracting, LLC.	Phone Number: 208-288-0700
Address: P.O. Box 1030	E-Mail: randy@selectmanagement.com
City, State, Zip: Meridian, Idaho 83680	Fax #: 208-898-9527
Applicant (Developer): Select Development & Contracting	Phone Number: 208-288-0700
Address: P.O. Box 1030	E-Mail: randy@selectmanagement.com
City, State, Zip: Meridian, Idaho 83680	Fax #: 208-898-9527
Engineer/Representative: Billy Edwards, Project Manager	Phone Number: 208-288-0700
Address: P.O. Box 1030	E-Mail: wedwards@selectdev.com
City, State, Zip: Meridian, Idaho 83680	Fax #: 208-898-9527

Subject Property Information

Site Address: Parcel 1.725 Acres (1919 East Deer Flat Road; Kuna, Idaho 83634) and Parcel 40 Acres Farmland (No Address Given)

Site Location (Cross Streets): North Meridian Road and East Deer Flat Road

Parcel Number (s): S1419223000 (1.725 Acres) and S1418346600 (40 Acres)

Section, Township, Range: 2N1E18 and 2N1E19

Property size : 1.725 Acres and 40 Acres

Current land use: Private Single Family Residence & Farmland — Proposed land use: TBD & Single Family Subdivision

Current zoning district: RUT — Proposed zoning district: R-6 and R-4

Exhibit A2a

Project Description

Project / subdivision name: Stark Property (1.725 acres) - TBD and Bennett Property(40 acres) - Single Family Subdivision

General description of proposed project / request: Both parcels to be annexed into the City of Kuna. Stark Property use TBD and Bennett Property to be single family subdivision

Type of use proposed (check all that apply):

- ☑ Residential R-6 Medium Density Residential and R-4 Medium Density Residential
- ☐ Commercial
- ☐ Office
- ☐ Industrial
- ☐ Other

Amenities provided with this development (if applicable): R-4 Development to have Community Center and Features

Residential Project Summary (if applicable)

Are there existing buildings? ☑ Yes ☐ No

Please describe the existing buildings: Stark Property - Private Single Family Residence - Manufactured Home

Any existing buildings to remain? ☑ Yes ☐ No

Number of residential units: 114 Number of building lots: 114

Number of common and/or other lots: 20

Type of dwellings proposed:

- ☑ Single-Family Bennett Property - Single family Residential
- ☐ Townhouses
- ☐ Duplexes
- ☐ Multi-Family
- ☐ Other

Minimum Square footage of structure (s): TBD

Gross density (DU/acre-total property): 2.83 Acres Net density (DU/acre-excluding roads): XXX Acres

Percentage of open space provided: 11.8% Acreage of open space: 4.76 Acres

Type of open space provided (i.e. landscaping, public, common, etc.): Landscape and Common Open Space

Non-Residential Project Summary (if applicable)

Number of building lots: Other lots:

Gross floor area square footage: Existing (if applicable):

Hours of operation (days & hours): Building height:

Total number of employees: Max. number of employees at one time:

Number and ages of students/children: Seating capacity:

Fencing type, size & location (proposed or existing to remain):

Proposed Parking:

a. Handicapped spaces: Dimensions:
b. Total Parking spaces: Dimensions:
c. Width of driveway aisle:

Proposed Lighting:

Proposed Landscaping (berms, buffers, entrances, parking areas, common areas, etc.):

Applicant's Signature: Date:

SELECT
DEVELOPMENT &
CONTRACTING

Mr. Troy Behunin
Planning & Zoning Department, City of Kuna
751 West 4th Street
Kuna, ID 83634

17 August 2018

RE: Lugarno Terra Subdivision
Stark and Bennett Properties
East Deer Flat Road

Dear Mr. Behunin,

On behalf of Select Development & Contracting, LLC (Applicant) please accept applications for Annexation, Preliminary Plat, and Design Review for two separate properties noted as (see attached site map):

Stark Property - 1.725 acres
Bennett Property – 40 acres

Overview of proposed projects:

Stark Property
The Applicant proposes this property maintain the current designation described in the future Comp Plan Map. Development plans for this property will be addressed at a future date.

Bennett Property – Lugarno Terra Subdivision

- The future Lugarno Terra Sub (Sub) will include 114 single family residential lots ranging in size from ±8,100SF to ±13,100SF. Density per acre is 2.8 residential units per acre.
- Amenities will include an approximately 1,700 SF clubhouse with integrated sales center, large community room, 850 SF covered seating area, swimming pool with zero entry/lounge with expansive perimeter patio seating within a fenced in area.
- Common area totaling 1.6 acres with a sports court, integrated hillside playground, climbing area and large grass area.
- Dedicated Landscape areas mingled throughout subdivision to soften road intersections that represent 11.3% of total project.
- Applicant will work with a select group of quality residential builders to insure quality construction and variation of construction.
- Home prices will average $340,000.
- Strong CC&R's to insure the Lugarno Terra sub is well maintained.

Exhibit
A26

- South Stroebel Road will be constructed the entire length of the east boundary of the Sub with the development of this project.
- Proposing full access from both East Deer Flat Road and South Stroebel Road in accordance with ACHD standards.
- Vinyl fencing along East Deer Flat Road and South Stroebel Road bordering the landscape buffer.

Annexation

Annexation will allow Lugarno Terra to connect to Kuna's public services including water, sewer, pressurized irrigation, police and fire. The subdivision will not create an adverse economic impact on the City as services will be supported by property taxes (see chart showing estimated tax revenue that will be generated by the development).

Access to sewer, domestic water, and pressurized irrigation is on East Deer Flat Road west of the site.

Preliminary Plat

The Applicant is submitting a preliminary plat based on two phases due to a Boise Project Irrigation canal bisecting the project in a north south direction. The plan is to alter and tile the open irrigation ditch. Based on meetings with Boise Projects and Bureau of Reclamation, approval to relocate the ditch can take from 7- 12 months (a relocation application has been submitted to Bureau of Reclamation). The applicant's goal is to start site work this winter on both phases if the Applicant can secure approval to relocate the irrigation ditch prior to 2019 irrigation season. If not successful, the applicant is proposing phase 1 this coming winter with phase 2 in 2020.

Interior streets will be dedicated to ACHD through the plating process in conformance with District standards. Two access points are proposed one on East Deer Flat Road and the other off the future South Stroebel Road.

All necessary utility easements are noted on the plat.

Design Review

A complete Design Review (DR) application accompanies this submittal for landscaping throughout the overall subdivision. All planned utilities and preliminary storm drain facilities (with directional flow arrows) are shown on the Pre-Plat map and is stamped by a professional engineer. The Pre-Plat also shows all property lines, right-of-ways, easements, and street lights per City of Kuna spacing requirements. The landscape plans identify all the other required DR checklist items to include; signage locations, vision triangles, fencing locations/details, etc.. Specific applications for signage, club house, and common lot amenities will be submitted later, when appropriate for City review and approval

In conclusion, the goal of the Applicant is not to meet City zoning requirements but to exceed them in an effort to complement the City's vision and provide additional housing opportunities for your growing community. We look forward to working with Staff to accomplish this great project.

Thank you in advance for consideration of our applications. Please feel free to contact me if you have any questions. I can be reached at (208) 288-0700 or at wedwards@selectdev.com.
Thank you in advance.

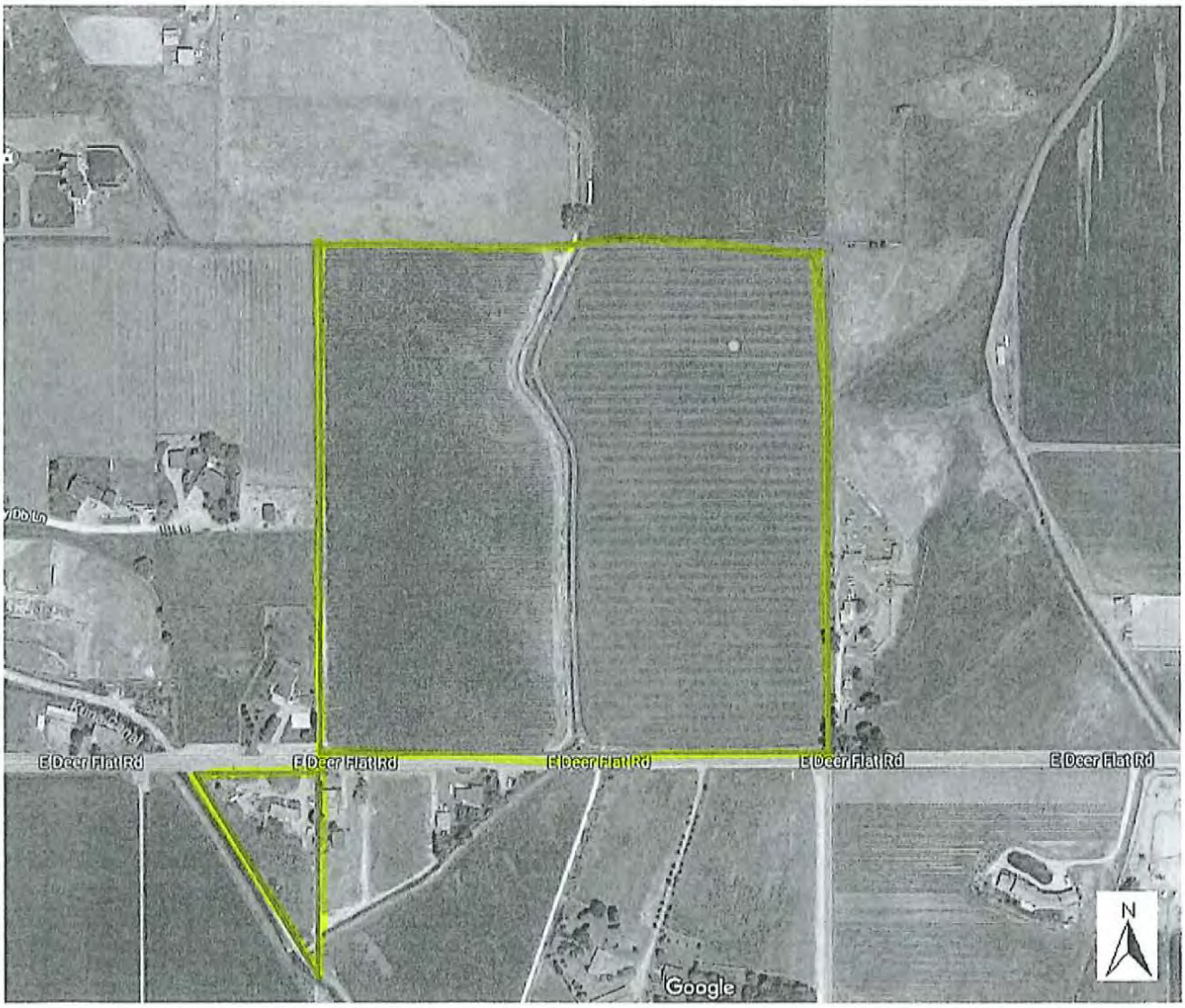
Sincerely,
William Edwards, Project Manager
Select Development & Contracting, LLC.

AERIAL PHOTO

LUGARNO TERRA SUBDIVISION

E. DEER FLAT ROAD, KUNA, ID 83634

SE ¼ , SW ¼, SEC-18, T-2N, R-1E, B.M



ROCK SOLID CIVIL
Civil Engineering and Land Development Consulting

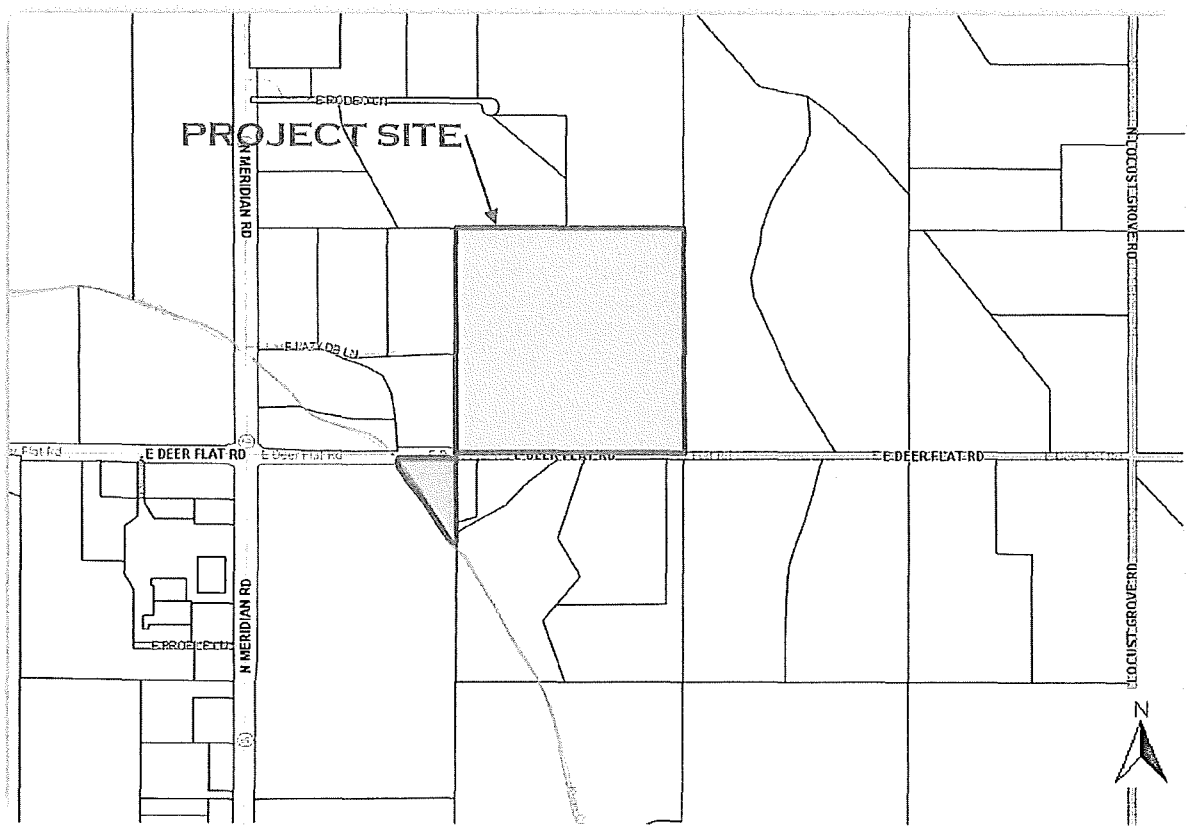
Exhibit
A2C

VICINITY MAP

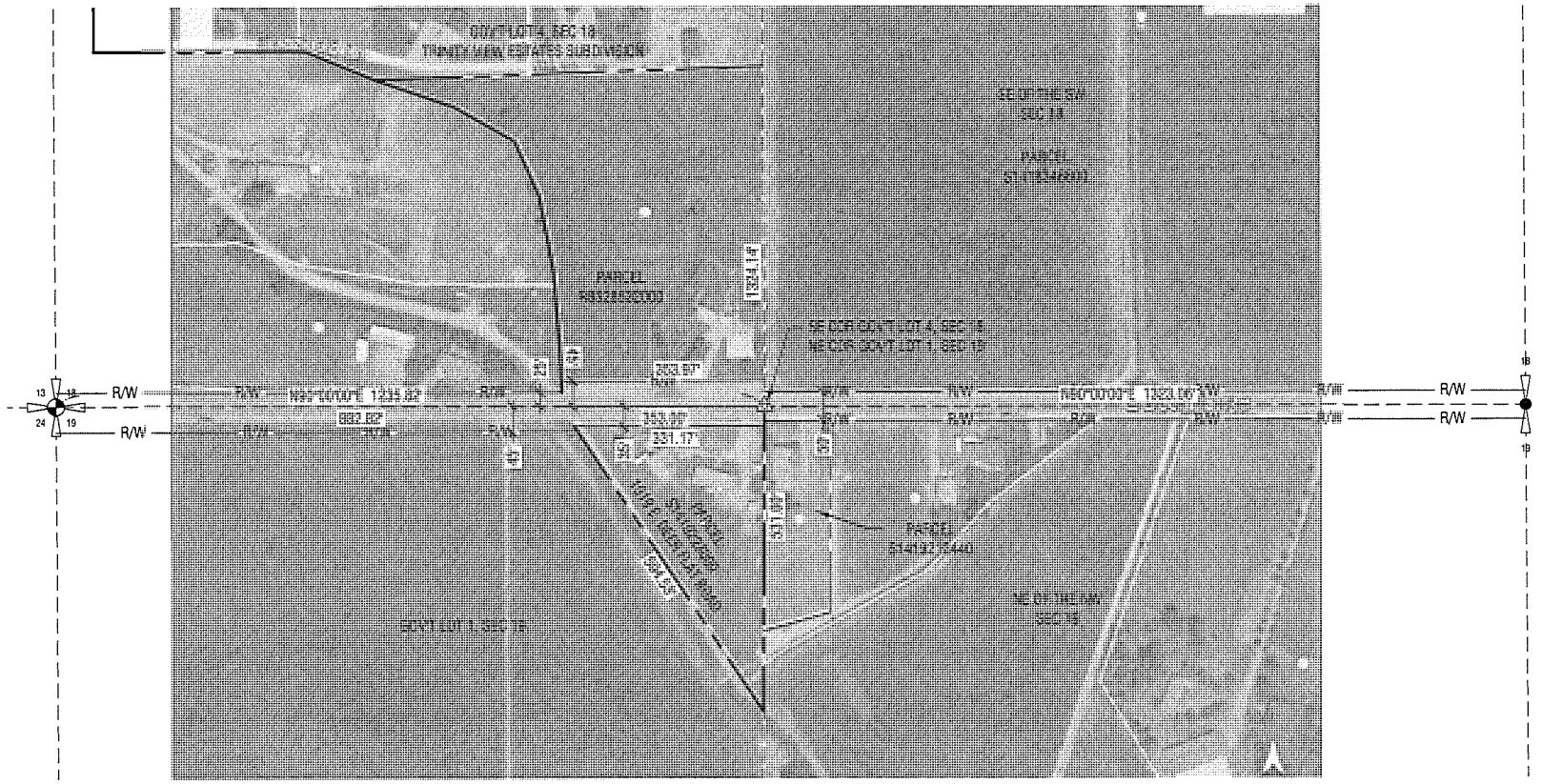
LUGARNO TERRA SUBDIVISION

E. DEER FLAT ROAD, KUNA, ID 83634

SE ¼ , SW ¼, SEC-18, T-2N, R-1E, B.M



ROCK SOLID CIVIL
Civil Engineering and Land Development Consulting


R/W
R/W
R/W

Sawtooth Land Surveying, LLC

2030 S. Washington Ave.
Emmett, ID 83617
P: (208) 398-8104
F: (208) 398-8105

1044 Northwest Blvd., Ste. G
Coeur d'Alene, ID 83814
P: (208) 714-4544
F: (208) 292-4453

141 1st Avenue East
Jerome, ID 83338
P: (208) 329-5303
F: (208) 324-3821

June 18, 2018
12.00 Acre Parcel Description

BASIS OF BEARINGS for this description is South 89°35'05" East, between an illegible aluminum cap marking the NW Corner of Section 19, and a brass cap PLS 8575, marking the North 1/4 Corner of said Section 19, both in T. 2 N., R. 1 E., B.M., Ada County, Idaho.

A parcel of land lying within Government Lot 1, Section 19, T. 2 N., R. 1 E., B.M., Ada County, Idaho, more particularly described as follows:

COMMENCING at an illegible aluminum cap marking the NW Corner of said Section 19;

Thence South 89°35'05" East, coincident with the north line of said Government Lot 1, Section 19, a distance of 1235.78 feet to the W1/16 of said Section 19;

Thence leaving said north line of Government Lot 1, Section 19, South 0°48'10" West, coincident with the east line of said Government Lot 1, Section 19, a distance of 35.00 feet to the south right of way of E. Deer Flat Road, and the **POINT OF BEGINNING**;

Thence continuing, South 0°48'10" West, coincident with the east line of said Government Lot 1, Section 19, a distance of 499.53 feet;

Thence leaving said east line of Government Lot 1, Section 19, North 47°20'47" West, 60.21 feet to the east bank of the Kuna Canal;

Thence North 31°15'28" West, coincident with said east bank of said Kuna Canal, 539.38 feet to the south right of way of E. Deer Flat Road;

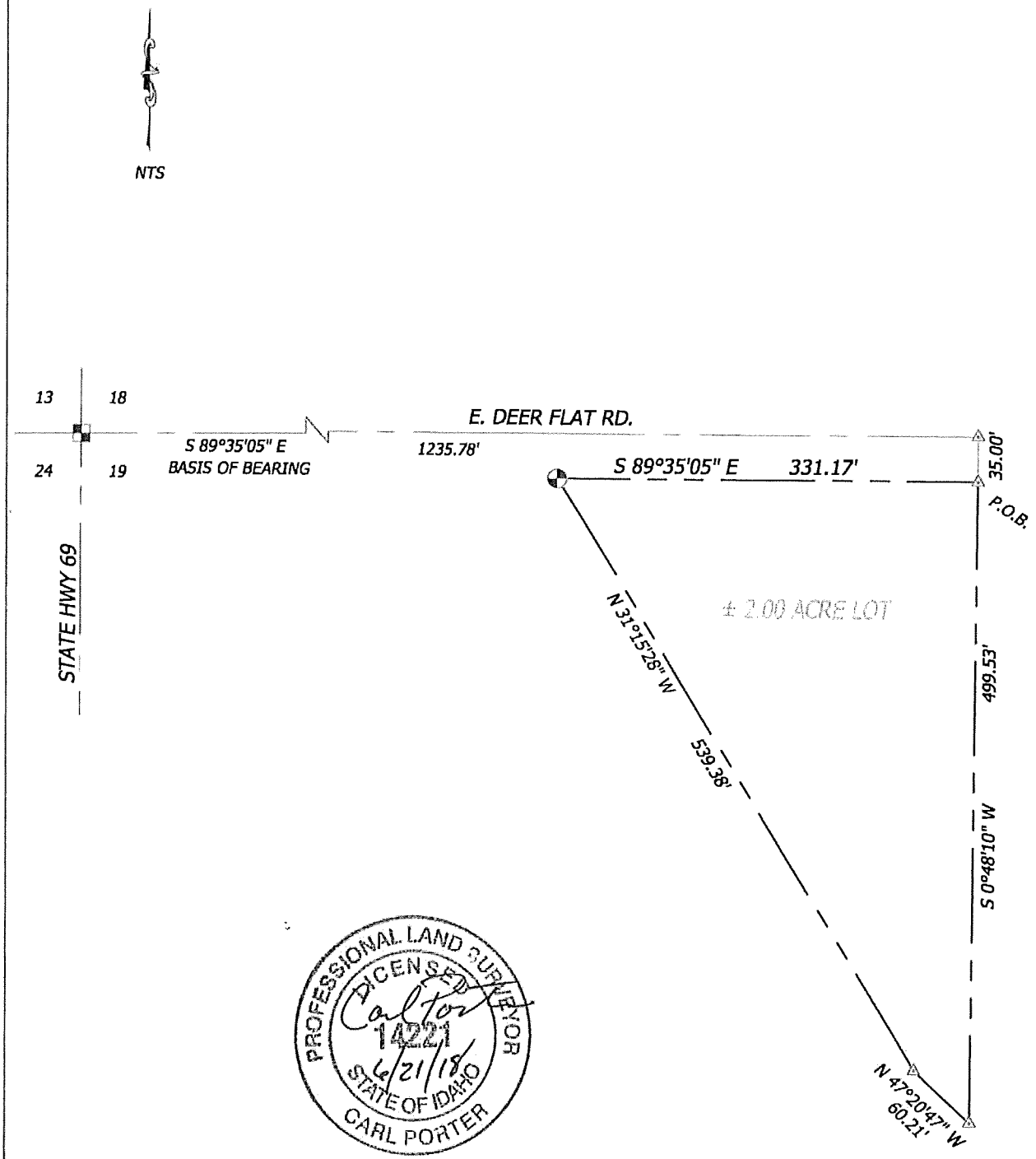
Thence leaving said east bank of the Kuna Canal, South 89°35'05" East, coincident with said south right of way of E. Deer Flat Road, 331.17 feet to the **POINT OF BEGINNING.**

The above described parcel of land contains 2.00 acres, more or less.



Exhibit
A2e

SECTION 19, T. 2 N., R. 1 E.,
B.M., ADA COUNTY, IDAHO



PROJECT:	CLIENT		DWG #
LUGARNO SUBDIVISION ADA COUNTY, IDAHO	ROCK SOLID CIVIL DERRITT KERNER	SAWTOOTH Land Surveying, LLC 2030 S. WASHINGTON AVE. EMMETT, ID 83617 P: (208) 398-8104 F: (208) 398-8105 WWW.SAWTOOTHLS.COM	18050-EX
	DATE: 6/2018		PROJECT# 18050
			SHEET 1 OF 1

Sawtooth Land Surveying, LLC

2030 S. Washington Ave.
Emmett, ID 83617
P: (208) 398-8104
F: (208) 398-8105

1044 Northwest Blvd., Ste. G
Coeur d'Alene, ID 83814
P: (208) 714-4544
F: (208) 292-4453

141 1st Avenue East
Jerome, ID 83338
P: (208) 329-5303
F: (208) 324-3821

June 18, 2018
40 Acre Parcel Description

BASIS OF BEARINGS for this description is South 89°35'05" East, between an illegible aluminum cap marking the SW Corner of Section 18, and a brass cap PLS 8575, marking the South 1/4 Corner of said Section 18, both in T. 2 N., R. 1 E., B.M., Ada County, Idaho.

A parcel of land lying within the SE1/4 of the SW1/4 of Section 18, T. 2 N., R. 1 E., B.M., Ada County, Idaho, more particularly described as follows:

COMMENCING at an illegible aluminum cap marking the SW Corner of said Section 18;

Thence South 89°35'05" East, coincident with the south line of the SW1/4 of said Section 18, a distance of 1235.78 feet to the W1/16 corner of said Section 18, the **POINT OF BEGINNING**;

Thence leaving said south line of said SW1/4 of Section 18, North 0°09'26" East, coincident with the west line of the SE1/4 of the SW1/4 of said Section 18, a distance of 1324.14 feet to the SW1/16 corner of said Section 18;

Thence leaving said west line of the SE1/4 of the SW1/4 of Section 18, South 89°32'05" East, coincident with the north line of said the SE1/4 of the SW1/4 of Section 18, a distance of 1325.47 feet to the CS1/16 corner of said Section 18;

Thence leaving said north line of the SE1/4 of the SW1/4 of Section 18, South 0°15'37" West, coincident with the east line of said the SE1/4 of the SW1/4 of Section 18, a distance of 1322.97 feet to the brass cap PLS 8575, marking the S1/4 corner of said Section 18;

Thence leaving said east line of the SE1/4 of the SW1/4 of Section 18, North 89°35'05" West, coincident with said south line of the SW1/4 of Section 18, a distance of 1323.09 feet to the **POINT OF BEGINNING.**

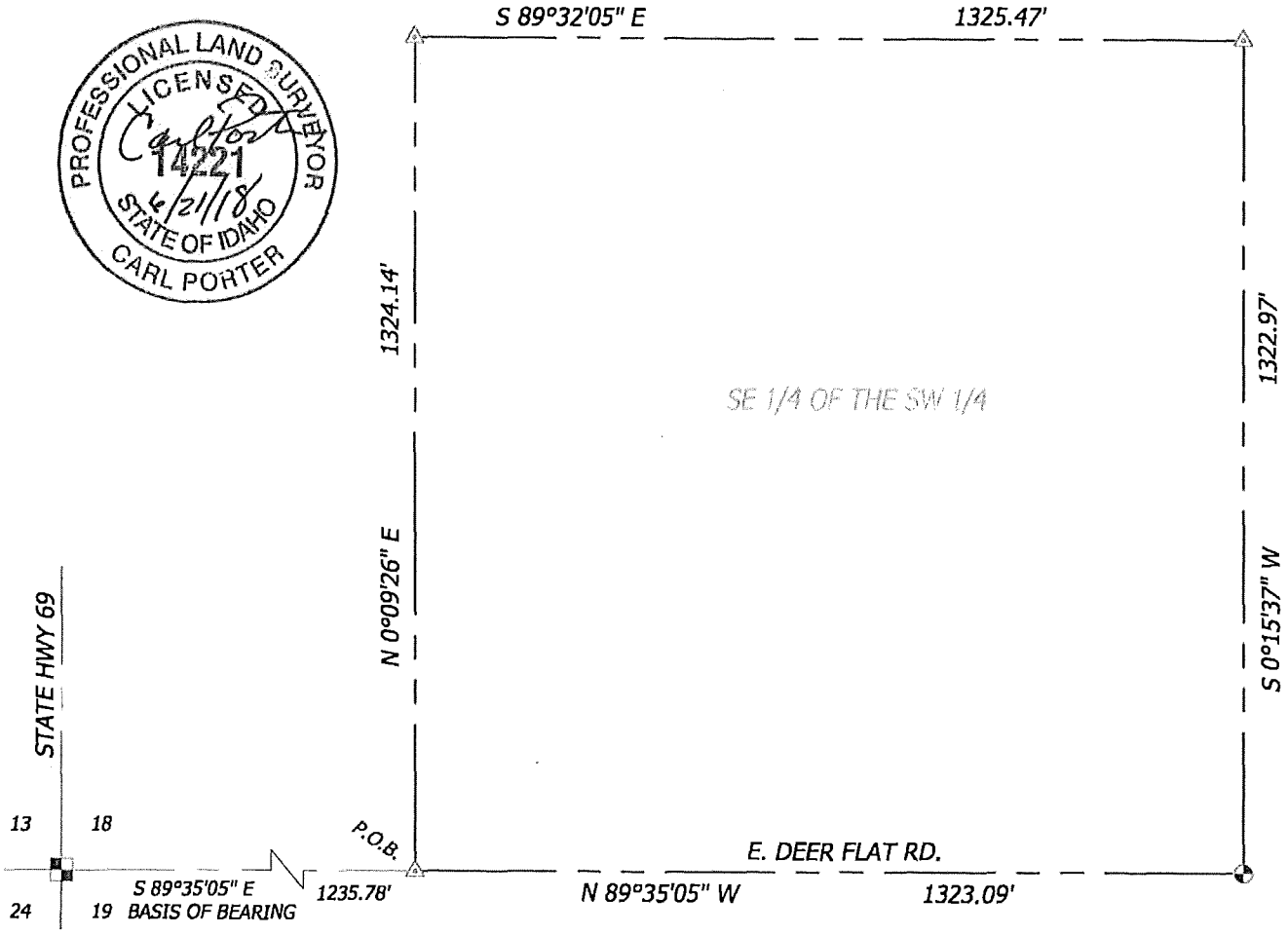
The above described parcel of land contains 40.24 acres, more or less.



Exhibit
A2f

SECTION 18, T. 2 N., R. 1 E.,
B.M., ADA COUNTY, IDAHO

NTS



PROJECT:	CLIENT		DWG #
LUGARNO SUBDIVISION ADA COUNTY, IDAHO	ROCK SOLID CIVIL DERRITT KERNER	SAWTOOTH Land Surveying, LLC 2030 S. WASHINGTON AVE. EMMETT, ID 83617 P: (208) 398-8104 F: (208) 398-8105 WWW.SAWTOOTHLS.COM	18050-EX
	DATE: 6/2018		PROJECT# 18050
			SHEET 1 OF 1

ADA COUNTY RECORDER Christopher D. Rich	2018-001545
BOISE IDAHO Pgs=2 NIKOLA OLSON	01/05/2018 11:33 AM
FIRST AMERICAN TITLE INSURANCE COMPANY	$15.00

AFTER RECORDING MAIL TO:

Select Development & Contracting, LLC
PO Box 1030
Meridian, ID 83680

ELECTRONICALLY RECORDED - DO NOT REMOVE THE COUNTY STAMPED FIRST PAGE AS IT IS NOW INCORPORATED AS PART OF THE ORIGINAL DOCUMENT

WARRANTY DEED

File No.: **4103-2974647 (DS)** Date: **December 28, 2017**

For Value Received, **Dave Stark and Brittany Stark, husband and wife who acquired title as Dave Stark and Brittany Stark, a married couple,** hereinafter referred to as Grantor, does hereby grant, bargain, sell and convey unto **Select Development & Contracting, LLC, an Idaho limited liability company,** hereinafter referred to as Grantee, whose current address is **PO Box 1030, Meridian, ID 83680,** the following described premises, situated in **Ada** County, **Idaho,** to wit:

LEGAL DESCRIPTION: Real property in the County of Ada, State of Idaho, described as follows:

ALL THAT PORTION OF LOT 1 OF SECTION 19, TOWNSHIP 2 NORTH, RANGE 1 EAST, BOISE, MERIDIAN, ADA COUNTY, IDAHO, LYING NORTH AND EAST OF KUNA CANAL. EXCEPT THAT PORTION CONVEYED TO ADA COUNTY HIGHWAY DISTRICT ON AUGUST 27, 2002 AS INSTRUMENT NO. 102097128.

APN: **S1419223000**

TO HAVE AND TO HOLD the said premises, with their appurtenances, unto said Grantee, and to the Grantee's heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that the Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

Exhibit A29

AFTER RECORDING MAIL TO:

Select Development & Contracting, LLC
PO Box 1030
Meridian, ID 83680

ELECTRONICALLY RECORDED - DO NOT REMOVE THE COUNTY STAMPED FIRST PAGE AS IT IS NOW INCORPORATED AS PART OF THE ORIGINAL DOCUMENT

WARRANTY DEED

File No.: **4103-2974647 (DS)** Date: **December 28, 2017**

For Value Received, **Dave Stark and Brittany Stark, husband and wife who acquired title as Dave Stark and Brittany Stark, a married couple**, hereinafter referred to as Grantor, does hereby grant, bargain, sell and convey unto **Select Development & Contracting, LLC, an Idaho limited liability company**, hereinafter referred to as Grantee, whose current address is **PO Box 1030, Meridian, ID 83680**, the following described premises, situated in **Ada** County, **Idaho**, to wit:

LEGAL DESCRIPTION: Real property in the County of Ada, State of Idaho, described as follows:

ALL THAT PORTION OF LOT 1 OF SECTION 19, TOWNSHIP 2 NORTH, RANGE 1 EAST, BOISE, MERIDIAN, ADA COUNTY, IDAHO, LYING NORTH AND EAST OF KUNA CANAL. EXCEPT THAT PORTION CONVEYED TO ADA COUNTY HIGHWAY DISTRICT ON AUGUST 27, 2002 AS INSTRUMENT NO. 102097128.

APN: **S1419223000**

TO HAVE AND TO HOLD the said premises, with their appurtenances, unto said Grantee, and to the Grantee's heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that the Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

APN: **S1419223000** | Warranty Deed - continued | File No.: **4103-2974647 (DS)** Date: **12/28/2017**

Dave Stark

Brittany Stark

STATE OF Idaho)
SS.
COUNTY OF Ada)

On this 4 day of **January, 2018** , before me, a Notary Public in and for said State, personally appeared **Dave Stark and Brittany Stark**, known or identified to me to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

ALEC CINDRICH NOTARY PUBLIC STATE OF IDAHO

Notary Public for the State of Idaho
Residing at: ~~Eagle, ID.~~
My Commission Expires: ~~9-29-23~~

Residing at: Meridian, ID
My Commission Expires: 2/27/2021

AFTER RECORDING MAIL TO:

Select Development & Contracting, LLC
PO Box 1030
Meridian, ID 83680

ELECTRONICALLY RECORDED - DO NOT REMOVE THE COUNTY STAMPED FIRST PAGE AS IT IS NOW INCORPORATED AS PART OF THE ORIGINAL DOCUMENT.

WARRANTY DEED

File No.: **4103-2956488 (DS)** Date: **December 28, 2017**

For Value Received, **Bennett Properties, L.P., an Idaho limited partnership**, hereinafter referred to as Grantor, does hereby grant, bargain, sell and convey unto **Select Development & Contracting, LLC, an Idaho limited liability company**, hereinafter referred to as Grantee, whose current address is **PO Box 1030, Meridian, ID 83680**, the following described premises, situated in **Ada** County, **Idaho**, to wit:

LEGAL DESCRIPTION: Real property in the County of Ada, State of Idaho, described as follows:

The Southeast Quarter of the Southwest Quarter of Section 18, Township 2 North, Range 1 East, Boise Meridian, Ada County, Idaho.

APN: **S1418346600**

TO HAVE AND TO HOLD the said premises, with their appurtenances, unto said Grantee, and to the Grantee's heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that the Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

APN: **S1418346600** | Warranty Deed - continued | File No.: **4103-2956488 (DS)** Date: **12/28/2017**

Bennett Properties, L.P., an Idaho limited partnership

By: Bennett Investments, LLC, an Idaho limited liability company, as General Partner

By: _____

Name: Aundria E Bailey

Title: Managing Member

STATE OF Idaho)
SS.
COUNTY OF Ada)

On this 31st **day of January, 2018**, before me, a Notary Public in and for said State, personally appeared **Aundria E. Bailey**, known or identified to me to be the person whose name is subscribed to the within instrument as **Managing Member** of the **Bennett Investments, LLC as General Partner of Bennett Properties, L.P.**, limited liability company, and acknowledged to me that such limited company executed same.

In witness whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

DEEDRA STITH NOTARY PUBLIC STATE OF IDAHO

_____
Notary Public for the State of Idaho
Residing at: Eagle, ID
My Commission Expires: 9-29-23

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

Phone: (208) 922-5274
Fax: (208) 922-5989
Web: www.kunacity.id.gov

City of Kuna

AFFIDAVIT OF LEGAL INTEREST

State of Idaho)
) ss
County of Ada)

I, SELECT DEVELOPMENT AND CONTRACTING, LLC
Name Address

PO BOX 1030, MERIDIAN, ID 83680
City State Zip Code

BY: RANDY FULLMER, MANAGER

being first duly sworn upon oath, depose and say:

(If Applicant is also Owner of Record, skip to B)

A. That I am the record owner of the property described on the attached, and I grant my

Permission to _____ _____ Name Address
to submit the accompanying application pertaining to that property.

B. I agree to indemnify, defend and hold City of Kuna and its employees harmless from any claim or liability resulting from any dispute as to the statements contained herein or as to the ownership of the property which is the subject of the application.

C. I hereby grant permission to the City of Kuna staff to enter the subject property for the purpose of site inspections related to processing said application(s).

Dated this 25th day of JUNE, 2018

_____
Signature

Subscribed and sworn to before me the day and year first above written.

_____
Notary Public for Idaho

Residing at: MERIDIAN, ID

My commission expires: 2/21/19

ALAN C. NOBLE
NOTARY PUBLIC
STATE OF IDAHO

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

Phone: (208) 922-5274
Fax: (208) 922-5989
Web: www.kunacity.id.gov

City of Kuna
COMMITMENT TO PROPERTY POSTING

Per City Code 5-1A-8, the applicant for all applications requiring a public hearing shall post the subject property not less than ten (10) days prior to the hearing. The applicant shall post a copy of the public hearing notice or the application(s) on the property under consideration.

The applicant shall submit proof of property posting in the form of a notarized statement and a photograph of the posting to the City no later than seven (7) days prior to the public hearing attesting to where and when the sign(s) were posted. Unless such Certificate is received by the required date, the hearing will be continued.

The sign(s) shall be removed no later than three (3) days after the end of the public hearing for which the sign(s) had been posted.

I am aware of the above requirements and will comply with the posting requirements as stated in Kun a City Code 5-1A-8.

William T. Edwards Digitally signed by William T. Edwards DN: C=US, E=wedwards@selectmanagment.com, O=Select Development, OU=Project Manager, CN=William T. Edwards Date: 2018.06.27 10:40:24-06'00'

Applicant/agent signature:

06.27.2018

Date:

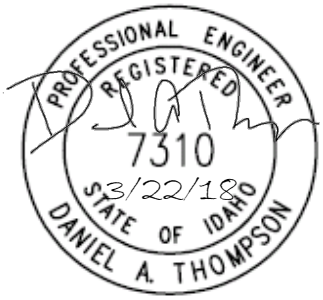
Exhibit A2h

Traffic Impact Study

Deer Flat Subdivision

Kuna, Idaho





Prepared For:

Select Development & Contracting, LLC
P.O. Box 1030
Meridian, ID 83680

March 1, 2018
Revised March 22, 2018

Thompson Traffic and Civil Engineers Inc.

181 East 50th St
Garden City, ID 83714
(208) 484-4410

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EXECUTIVE SUMMARY

Introduction

Thompson Engineers, Inc. has been retained to prepare a traffic impact study for the proposed Deer Flat Subdivision located on Deer Flat Road between Meridian Road and Locust Grove Road in Kuna, Idaho, as shown in **Figure 1**. The TIS evaluates the potential traffic impacts resulting from the development and make recommendations for mitigation of the impacts. The scope of this report was determined through coordination with the Ada County Highway District (ACHD) and was prepared in accordance with ACHD Policy, Section 7106 – Traffic Impact Studies.

Proposed Development

1. Deer Flat Subdivision is a proposed residential development containing 122 single-family dwelling units with an expected 2025 build-out year.

2. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition), the development is estimated to generate approximately 1,152 trips per day, 91 trips during the AM peak hour and 121 trips during the PM peak hour.
   - The development is not expected to retain internal capture trips within the site or generate pass-by trips.
   - All trips generated by the development are assumed to be made by personal or commercial vehicles for the traffic analysis.
   - The estimated site traffic distribution patterns are:
     - 55% north of the site
     - 20% south of the site
     - 10% west of the site
     - 15% east of the site

3. The proposed driveway locations on Deer Flat Road meet ACHD's access spacing:
   - None of the proposed driveway intersections are expected to warrant turn lanes.
   - Intersection sight distances at both driveway intersections are estimated to exceed ACHD minimum requirement of 555 feet for a 50 mph posted speed. Building setback and landscaping should be located and designed to ensure adequate intersection sight distance.

4. All proposed internal roadways are projected to carry less than 1,000 vehicles per day (vpd), except for the East access approach with an estimated ADT of 1,076 vpd.

Improvements Needed to Mitigate 2018 Existing Traffic

5. All study area intersections meet ACHD's minimum operational thresholds with 2018 existing traffic conditions analyzed with the existing intersection control and lane configurations. No improvements are needed to mitigate 2018 existing traffic.

Improvements Needed to Mitigate 2025 (Build-Out Year) Background Traffic

6. The Winfield Springs Subdivision, a proposed off-site development located in the northwest quadrant of the Meridian Road and Deer Flat Road intersection, is required to construct a southbound right-turn lane and signal modifications at the Meridian Road and Deer Flat Road intersection. According to the Engineer for the project, these improvements are currently under design and awaiting ITD's review and approval. Therefore, these improvements are expected to be constructed by 2025 and were included in the 2025 background traffic analysis.

7. All study area intersections are projected to meet ACHD's minimum operational thresholds with 2025 background traffic conditions analyzed with the existing intersection control and lane configurations or with the required improvements at the Meridian Road and Deer Flat Road intersection needed to mitigate the Winfield Springs Subdivision impacts. As a result, no additional improvements are needed to mitigate 2025 background traffic.

Improvements Needed to Mitigate 2025 (Build-Out Year) Total Traffic

8. All study area intersections are projected to meet ACHD's minimum operational thresholds with 2025 total traffic conditions analyzed with the existing intersection control and lane configurations or with the required improvements at the Meridian Road and Deer Flat Road intersection needed to mitigate the Winfield Springs Subdivision impacts. As a result, no additional improvements are needed to mitigate 2025 total traffic.

PROPOSED DEVELOPMENT

The proposed Deer Flat Subdivision is located on Deer Flat Road between Meridian Road and Locust Grove Road in Kuna, Idaho. **Figure 1** shows the site location and its vicinity. Deer Flat Subdivision will be annexed into the City of Kuna limits.

Figure 1 – Site Location and Vicinity

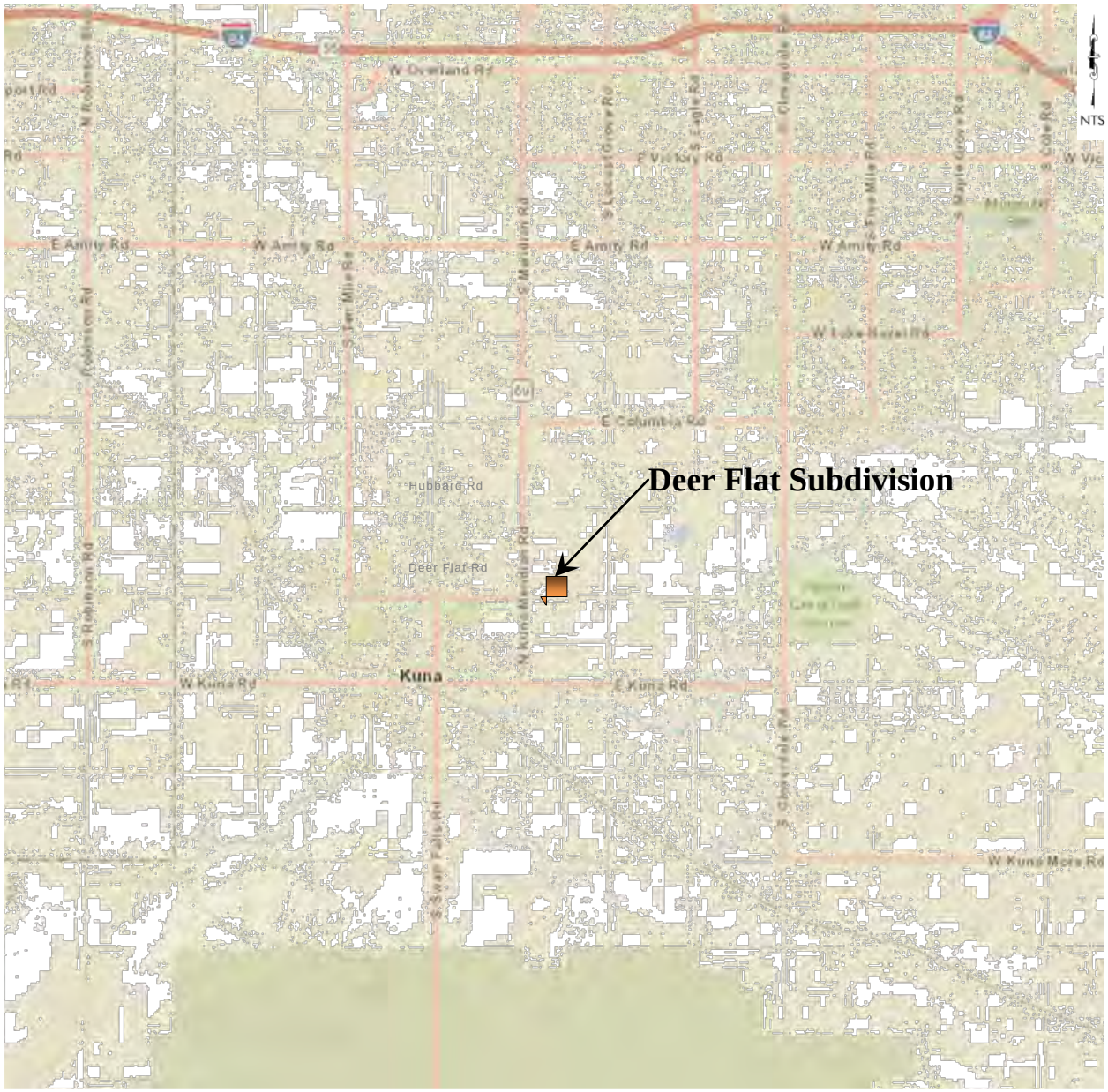
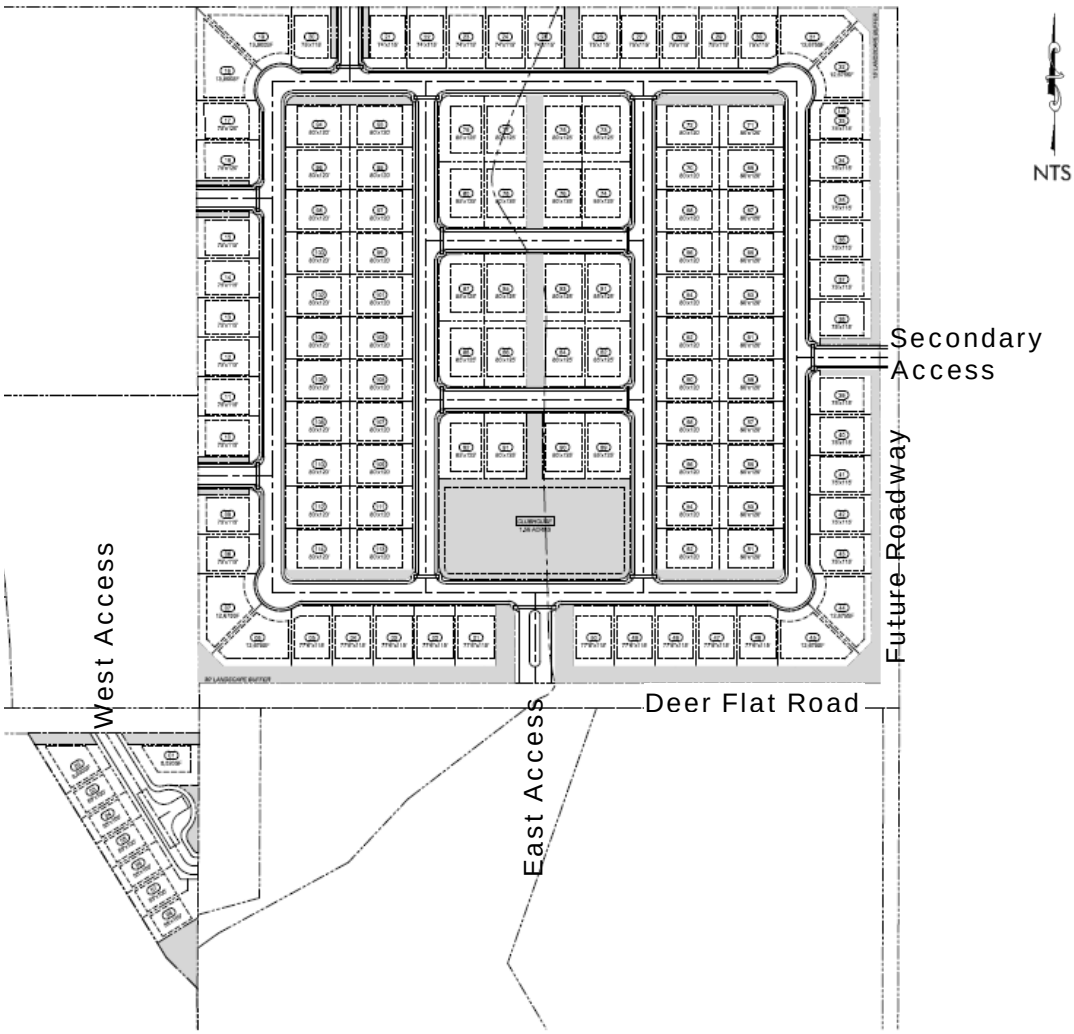


Figure 2 shows the preliminary site plan with proposed access locations. Deer Flat Subdivision is a proposed residential development containing 122 single-family lots, with 8 lots south of Deer Flat Road and 114 lots north of Deer Flat Road. The expected build-out year is 2025. The development is proposing one full access point on Deer Flat Road for the northern portion. For the southern portion, the development is consolidating three existing driveways into one full access approach.

Figure 2 – Preliminary Site Plan



STUDY APPROACH

This study follows the ACHD's requirements for transportation impact studies. The study area, specific parameters and requirements for the study were coordinated with ACHD's staff. Scoping results from the Community Planning Association of Southwest Idaho (COMPASS) area of influence model runs are included in the appendix.

Study Area

The following study area intersections were identified by ACHD for collecting peak hour turning movement counts and traffic impact analysis:

- Locust Grove Road and Hubbard Road
- Meridian Road and Deer Flat Road
- Locust Grove Road and Deer Flat Road
- Proposed access points on Deer Flat Road

The following study area roadway segments were identified by ACHD for collecting daily traffic counts and traffic impact analysis:

- Deer Flat Road between Meridian Road and Locust Grove Road
- Locust Grove Road between Hubbard Road and Deer Flat Road

Study Period

The analysis peak periods will be the AM and PM peak hours of operation of the adjacent transportation system. The analysis years are:

- 2018 existing traffic
- 2025 build-out year background traffic
- 2025 build-out year total traffic

EXISTING CONDITIONS

Road System

A brief description of the existing roadways and intersections within the study area is described below. The roadway functional classification is based on COMPASS 2040 Functional Classification Map, which does not include collector or local streets. **Figure 3** summarizes the existing intersection control and lane configuration.

Meridian Road is a state highway (SH 69) functionally classified as a principal arterial with a posted speed limit of 55 miles per hour (mph). Meridian Road is under the ITD's jurisdiction and designated as a District Rout under IDAPA access and signal spacing policy. It has two travel lanes in each direction with a continuous center turn lane. It has a rural section without curb, gutter, sidewalk, or designated bike lane, except for a segment of sidewalk and gutter constructed along the Merrell Town Centre and Ensign Subdivision No. 1 developments.

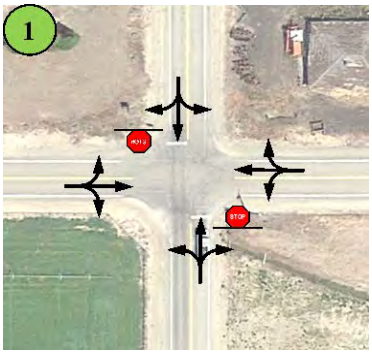
Deer Flat Road is functionally classified as a minor arterial with a posted limit of 45 mph west of Meridian Road and 50 mph east of Meridian Road. It has one travel lane in each direction with a center turn lane west of Meridian Road and one travel lane in each direction east of Meridian Road. It has a rural section without curb, gutter, sidewalk or bike lane.

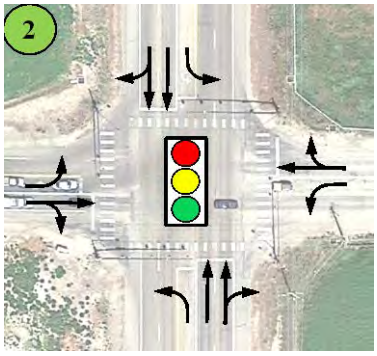
Hubbard Road is functionally classified as a minor arterial with a posted speed limit of 50 mph. It has one travel lane in each direction with a rural section without curb, gutter, sidewalk or bike lane.

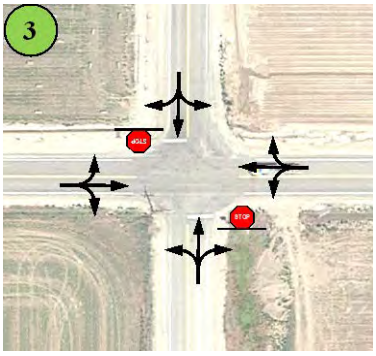
Locust Grove Road is functionally classified as a minor arterial with a posted speed limit of 50 mph. It has one travel lane in each direction with a rural section without curb, gutter, sidewalk or bike lane.

Figure 3 – Existing Intersection Control and Lane Configuration









Existing Traffic Volumes

AM and PM peak hour traffic counts were obtained at the study intersections on January 23, 2018. Peak hour traffic counts for the Meridian Road and Deer Flat Road intersection was collected on February 6, 2018. The peak our intersection turning movement counts were collected on a weekday for a 2-hour period at 15-minute intervals between 7:00 and 9:00 during the AM peak travel period hour and between 4:00 and 6:00 during the PM peak travel period, which are included in the appendix. Existing peak hour traffic volumes are summarized in **Figure 4**.

24-hour counts were also obtained for the study area roadway segments on January 23-24, 2018 – summarized in **Table 1**.

Table 1 – 2018 Existing ADT Summary

Roadway Segment	ADT
Locust Grove Road – north of Deer Flat Road	542
Deer Flat Road – east of Meridian Road	1,750

Intersection Crash Data

The most current five-year crash data (2012-2016) was obtained from the Local Highway Technical Assistance Council (LHTAC) website (http://gis.lhtac.org/safety/). **Table 2** summarizes the crash data statistics for the study area intersections and roadway segments. The following bullets summarize the crash statistics for the five years period between 2021 and 2016:

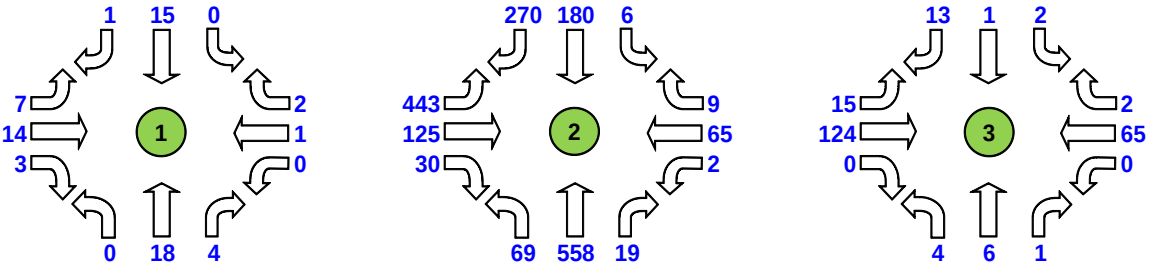
- **Locust Grove Road and Hubbard Road intersection** – There were three reported intersection related crashes.
- **Meridian Road and Deer Flat Road intersection** – There were 17 reported intersection related crashes. Sixteen out of the 17 reported crashes are rear-end crashes or angle/turning crashes. With the 2016 existing traffic volumes, the estimated existing crash rate is 0.41 crashes per million entering vehicles (ACC/MV), which is lower than the base rate.
- **Locust Grove Road and Deer Flat Road intersection** – There were five reported intersection related crashes. All five crashes were angle crashes resulting from failure to obey stop sign.
- **Deer Flat Road between Meridian Road and Locust Grove Road** – There were four reported intersection related crashes**.**
- **Locust Grove Road between Hubbard Road and Deer Flat Road** – There were one reported intersection related crash.

There were no reported crashes that resulted in fatalities or involved pedestrian or bicycle. Based on these crash statistics, the study area roadways and intersections do not have safety issues to warrant mitigations.

Figure 4 – 2018 Existing Peak Hour Traffic



AM Peak Hour



PM Peak Hour

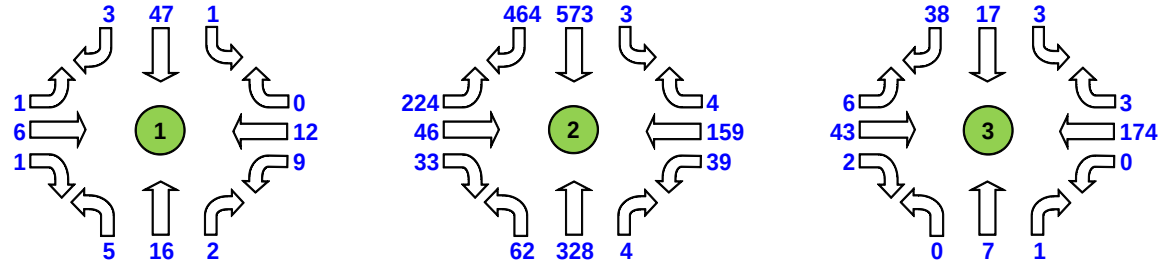


Table 2 – Intersection Crash Data (2012-2016)

Intersection or Roadway Segment		Total Crashes	Crash Severity			Base[1] Crash Rate (ACC/MV)	Existing Crash Rate (ACC/MV)
			Property Damage Only	*Injury*	*Fatal*		
1	Locust Grove Road and Hubbard Road	3	*1*	*2*	*0*	Existing crash rate is expected to be lower than the base rate	
2	Meridian Road and Deer Flat Road	17	*7*	*10*	*0*	0.56 (Type=72)	0.41
3	Locust Grove Road and Deer Flat Road	5	*3*	*2*	*0*	Existing crash rate is expected to be lower than the base rate	
Deer Flat Road (between Meridian Rd and Locust Grove Rd)		4	*3*	*1*	*0*	Existing crash rate is expected to be lower than the base rate	
Locust Grove Road (between Deer Flat Rd and Hubbard Rd)		1	*1*	*0*	*0*	Existing crash rate is expected to be lower than the base rate	

[1] Based on similar roadway type, width, and volume.

Roadway Network Improvements

Future roadway network within the study area is expected to remain the same as existing, except for the required improvements at the Meridian Road and Deer Flat Road intersection for mitigating the impacts generated by the proposed Winfield Springs Subdivision. These improvements are:

- Construct a southbound right-turn lane on Meridian Road
- Modify the signal

These improvements are currently being designed and awaiting ITD's review and approval. As a result, these improvements were included in the build-out year analysis.

There are also planned improvements on Deer Flat Road and the Meridian Road and Deer Flat Road intersection according the ACHD's Capital Improvement Plan (CIP), which are:

- Reconstruct/widen Deer Flat Road from 3 to 5 lanes from Linder Road to Meridian Road (2026-2030)
- Replace/modify signal at Meridian Road and Deer Flat Road intersection (2031-2035)

ACHD has included the construction of a traffic signal at the intersection of Meridian Road and Hubbard Road in the current Five Year Work Plan. This signal will improve the capacity of the intersection and could impact traffic patterns at the intersection of Meridian Road and Deer Flat Road.

PROJECTED TRAFFIC

2025 Build-Out Year Background Traffic

2025 background traffic was estimated by expanding the existing traffic counts at a 1.5% annual growth rate. This growth rate is based on historical traffic counts at Automatic Traffic Recorder (ATR) No. 110 located on Meridian Road approximately one mile north of Deer Flat Road. In addition to the traffic growth, traffic generated by five off-site development located in the vicinity of the site is included in the 2025 background traffic volumes:

- Merrell Town Centre (Profile Ridge Phase 1)
- Ensign Subdivision No. 1
- Ensign Subdivision No. 2
- Winfield Springs Subdivision
- Ashton Subdivision

Traffic data for these off-site developments was obtained from their traffic impact study reports. **Figure 5** summarizes the 2025 build-out year peak hour background turning movement traffic.

Site Traffic

Trip Generation

Site trip generation is usually estimated using the procedures recommended in the latest edition of the Trip Generation Manual (10th edition), published by the Institute of Transportation Engineers, in the absence of site-specific data. The site trip generation is obtained by applying the trip generation rates obtained from the manual for the proposed land use within the development. **Table 3** summarizes the site trip generation. At full build-out, the development is estimated to generate approximately 1,152 trips per day, 91 trips during the AM peak hour and 121 trips during the PM peak hour.

Table 3 – Build-Out Site Trip Generation Summary

Land Use	ITE Code	Size	Unit	Period	Trip Rate per Unit	Total Trips	Entering		Exiting	
Single-Family Detached Housing	210	122	Dwelling Unit	Weekday Daily (vpd)	9.44	1,152	50%	576	50%	576
				AM Peak Hour (vph)	0.74	91	25%	23	75%	68
				PM Peak Hour (vph)	0.99	121	63%	76	37%	45

Trip Capture, Pass-by Trips, and Modal Split

Based on the proposed land use, the development is not expected to retain trips within the site at full build-out. No trip reduction for internal capture trip was assumed in the traffic impact analysis.

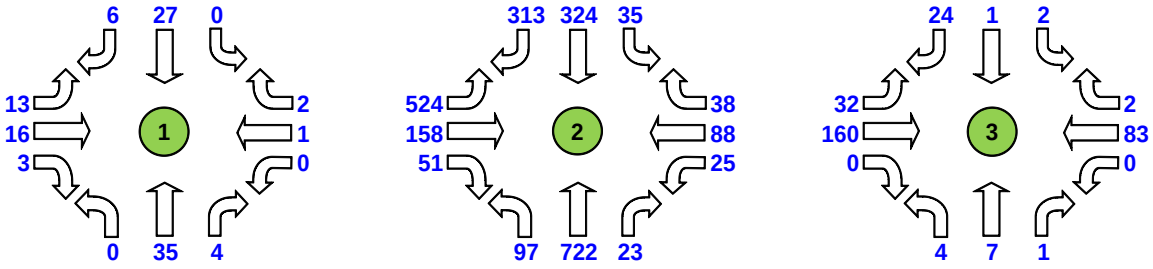
The development is residential and is not expected to attract pass-by trips. No pass-by trips were assumed in the traffic impact analysis.

All trips generated by the development were assumed to be made by personal and commercial vehicles for the traffic analysis purposes.

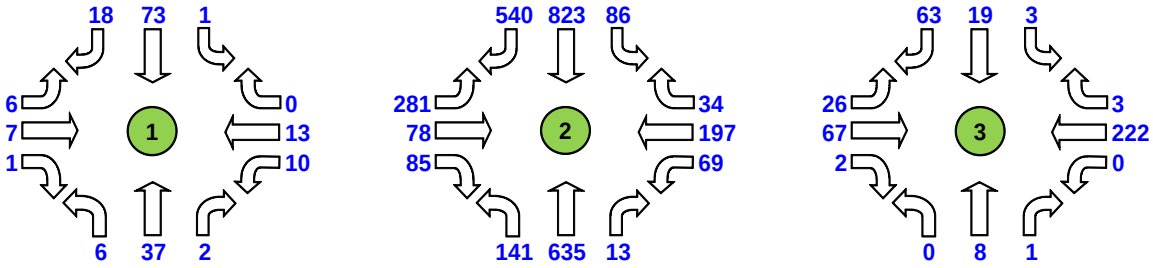
Figure 5 – 2025 Build-Out Year Peak Hour Background Traffic



AM Peak Hour



PM Peak Hour



Trip Distribution and Assignment

Site traffic was distributed and assigned to the external roadway system based on the current travel patterns, site layout and the general location of the site within the area. **Figure 6** shows site traffic distribution patterns. **Figure 7** and **Figure 8** summarize the estimated build-out site traffic.

Total Traffic

The site traffic is then added to the background traffic as determined above. **Figure 9** and **Figure 10** show the total traffic at each intersection for AM and PM peak hour traffic conditions for the 2025 build-out year.

Figure 6 – Site Traffic Distribution Patterns

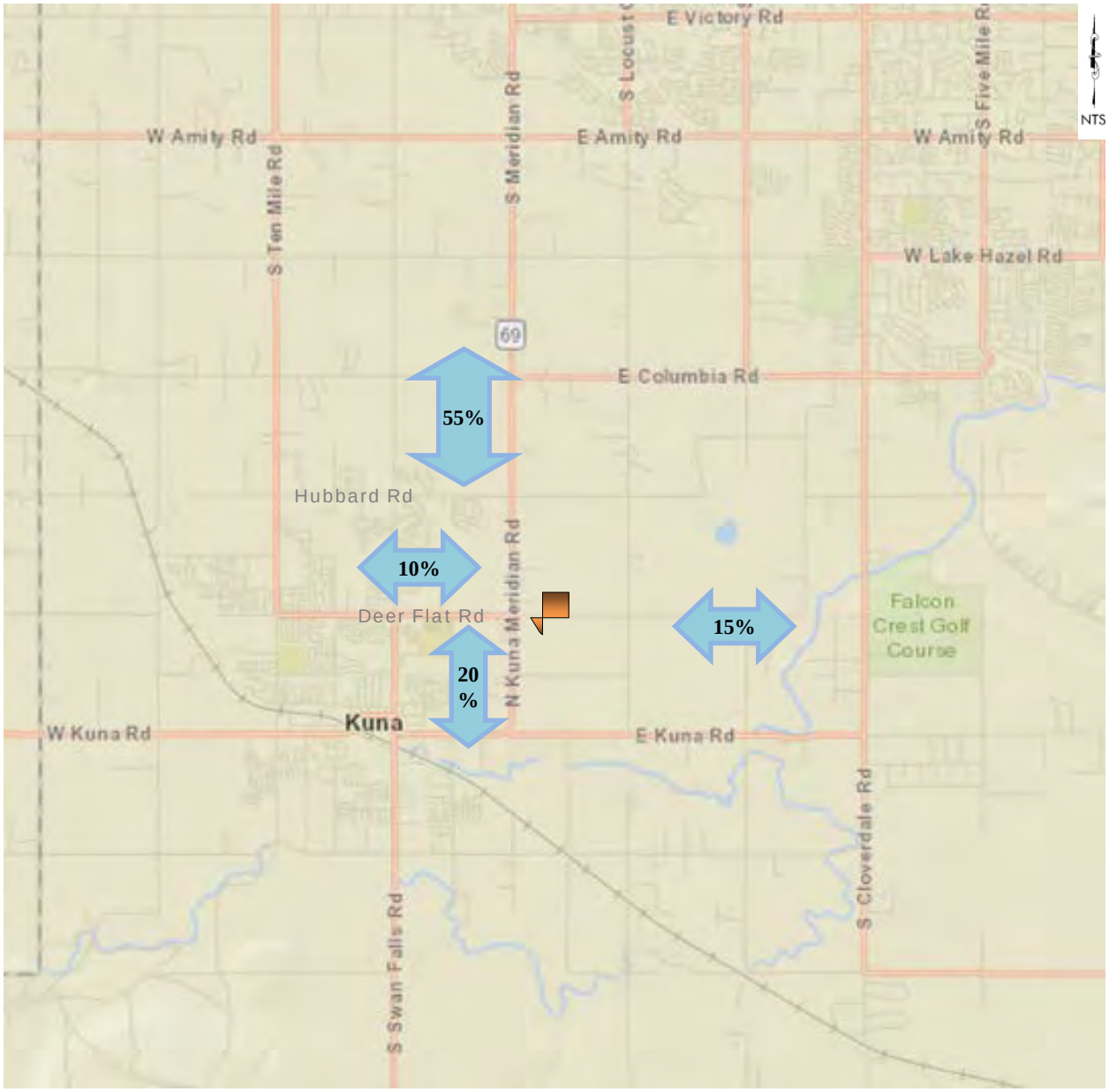


Figure 7 – Build-Out AM Peak Hour Site Traffic

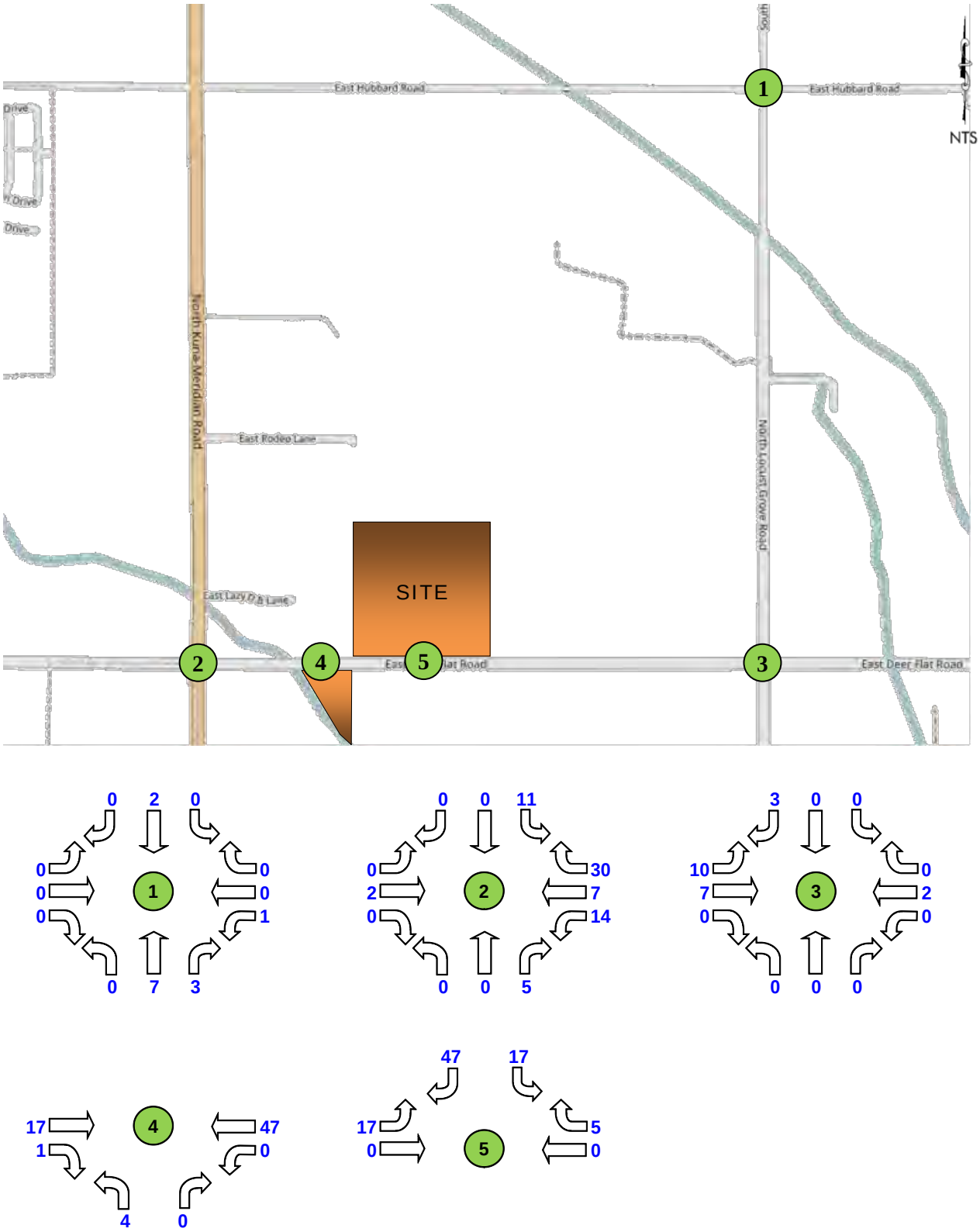


Figure 8 – Build-Out PM Peak Hour Site Traffic

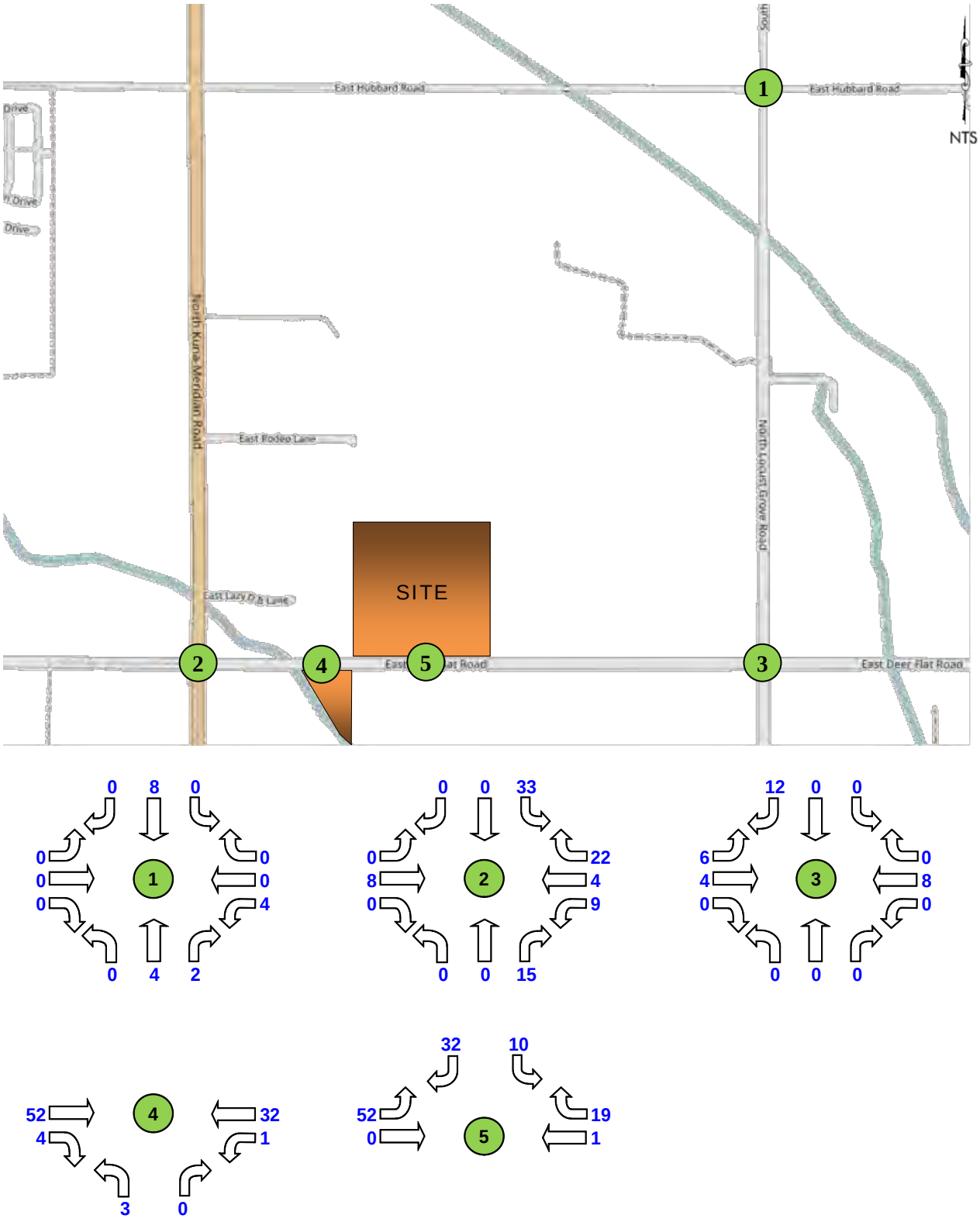


Figure 9 – 2025 Build-out Year AM Peak Hour Total Traffic

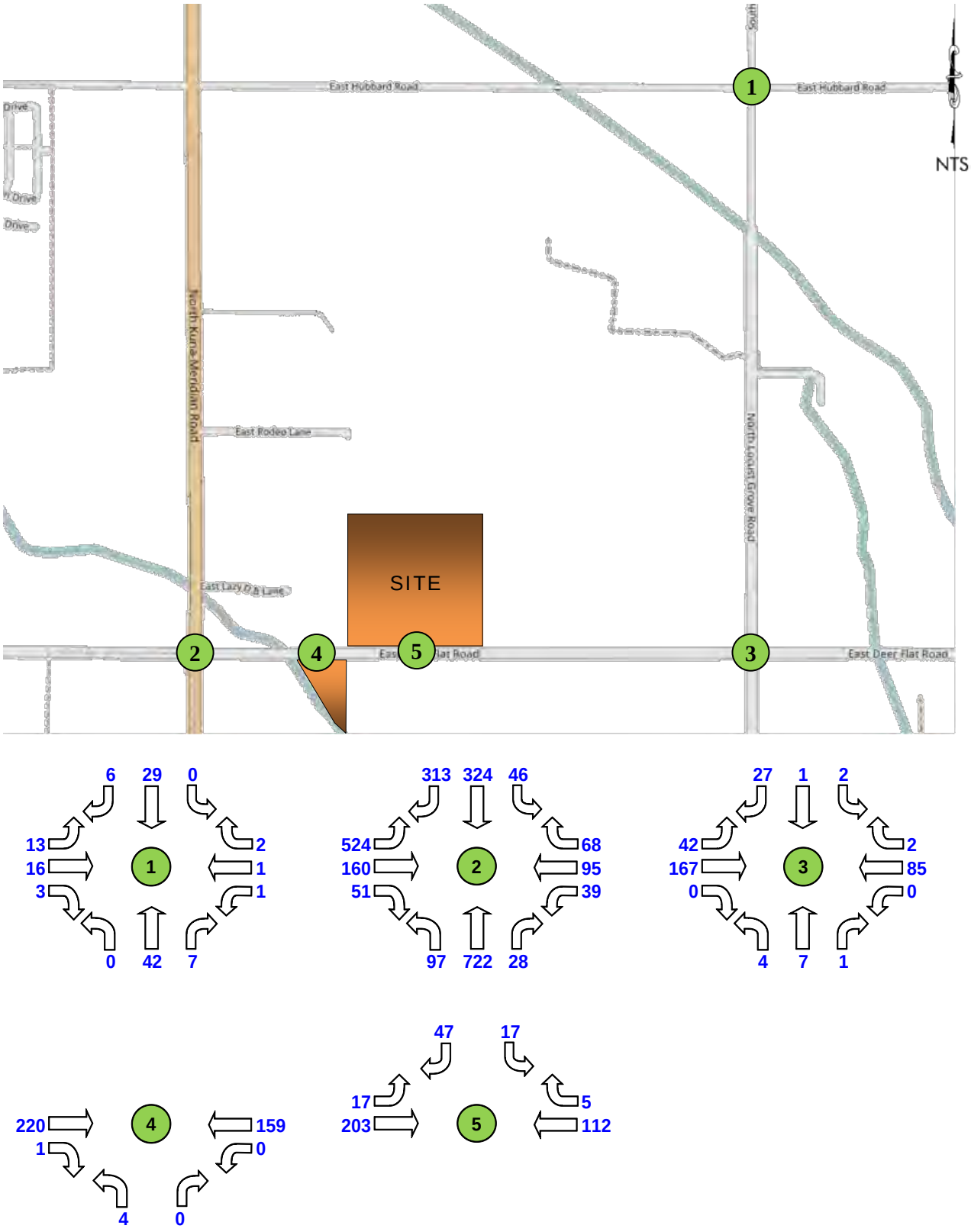
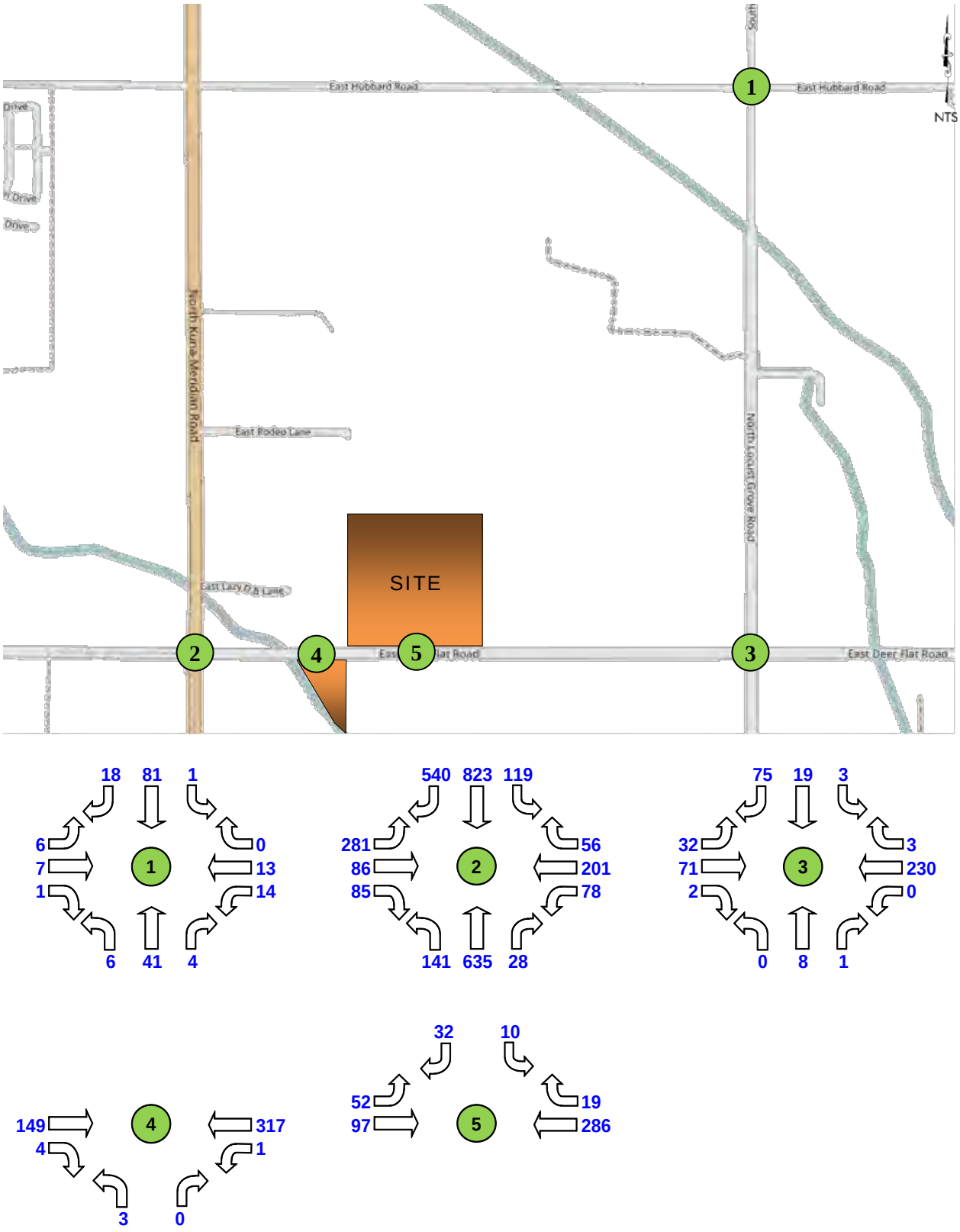


Figure 10 – 2025 Build-Out Year PM Peak Hour Total Traffic



TRAFFIC ANALYSIS

Roadway segment was evaluated based on ACHD level of service standards in accordance with Table C-4 of the 2016 Capital Improvement Plan Exhibit C. The roadway segment level of service is based on the maximum peak hour directional volume for different roadway functional classifications, number of through lanes, and left-turn type. The minimum acceptable level of service for arterials is LOS E.

Intersection capacity analysis was performed using the Synchro 10 (Version 10.1.2.20), which utilizes the 2010 Highway Capacity Manual methodologies. All parameters used in the analysis were based on existing data when available or Synchro default values, when not available. Level of service for intersection is based on the average delay of vehicles traveling through the intersection. According to ACHD policy, the minimum acceptable level of service is LOS D with a v/c ratio of 0.90 for the intersection and 1.00 for a lane group. The HCM 2010 methodology does not include an overall intersection v/c ratio as a measure of effectiveness (MOE) for signalized intersection. For this study, the overall intersection v/c ratio was estimated based on HCM 2000 methodology.

2018 Existing Traffic

Roadway Segment Level of Service

The study area roadway segments level of service were evaluated with 2018 existing traffic. **Table 4** summarizes the results. All study area roadway segments currently meets minimum operational thresholds with the existing lane configuration. No roadway capacities improvements are needed to mitigate 2018 existing traffic.

Table 4 – Roadway Segment Level of Service – 2018 Existing Traffic

Roadway Segment	Functional Classification	Left-Turn Lane Type	LOS E Directional Volume Threshold (vph)	Peak Hour Directional Volume (vph)		Meet Minimum Acceptable LOS?
				AM Peak	PM Peak	
Deer Flat Road East of Meridian Road	Minor Arterial	None	575	150	212	Yes
Locust Grove Road North of Deer Flat Road	Minor Arterial	None	575	23	58	Yes

Intersection Capacity Analysis and Level of Service

To determine the existing traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration and 2018 peak hour traffic. Copies of the calculations are included in the appendix. **Table 5** and **Table 6** summarize the MOE from the intersection capacity analysis. All study area intersections meet minimum operational thresholds with 2018 existing traffic during peak hour traffic:

- Locust Grove Road and Hubbard Road intersection
  - The northbound and southbound approaches are operating at LOS A with a v/c ratio of 0.08 or less.
- Meridian Road and Deer Flat Road intersection
  - The intersection is expected to operate at LOS C with an overall intersection v/c ratio of *0.69* or less.
  - All lane groups are expected to operate at LOS E or better with a v/c ratio of *0.84* or less.
- Locust Grove Road and Deer Flat Road intersection
  - The northbound and southbound approaches are operating at LOS B or better with a v/c ratio of 0.09 or less

Mitigation

All study area roadway segments and intersections meet minimum operational thresholds with 2018 existing traffic. As a result, no roadway or intersection improvements are needed to mitigate 2018 existing traffic. Turn lane warrant was evaluated using ACHD guidelines – see the appendix for turn lane warrant worksheets. None of the study area intersections meet warrant for turn lanes with 2018 existing traffic.

Table 5 – Intersection Level of Service – 2018 Existing Traffic

Intersection		Control	MOEs	AM Peak Hour	PM Peak Hour
1	Locust Grove Road and Hubbard Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	A / A	A / A
			Delay (s/v) (NB / SB)	9 / 9	9 / 10
			Worst Lane Group LOS	A (SBTR)	A (SBTR)
2	Meridian Road and Deer Flat Road	Signal	Intersection LOS	C	C
			Intersection Delay (s/v)	*29*	31
			Intersection v/c	*0.68*	0.69
			Worst Lane Group LOS	D (WBTR)	E (WBTR)
3	Locust Grove Road and Deer Flat Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	B / A	B / B
			Delay (s/v) (NB / SB)	11 / 9	10 / 10
			Worst Lane Group LOS	B (NBTR)	B (NBTR)

Table 6 – Lane Group v/c Ratio – 2018 Existing Traffic

Intersection		Approach	AM Peak Hour			PM Peak Hour		
			LT	THRU	RT	LT	THRU	RT
1	Locust Grove Road and Hubbard Road	NB	0.04			0.04		
		SB	0.03			0.08		
		EB	0.01			< 0.01		
		WB	--			0.01		
2	Meridian Road and Deer Flat Road	NB	0.23	0.46	0.46	0.28	0.19	0.19
		SB	0.02	*0.32*	*0.54*	0.01	0.69	0.69
		EB	*0.84*	0.28		*0.75*	0.22	
		WB	0.01	*0.69*		0.16	*0.83*	
3	Locust Grove Road and Deer Flat Road	NB	0.02			0.01		
		SB	0.02			0.09		
		EB	0.01			0.01		
		WB	--			--		

2025 Build-Out Year Background Traffic

Roadway Segment Level of Service

The study area roadway segments level of service were evaluated with 2025 background traffic. **Table 7** summarizes the results. All study area roadway segments are expected to meet minimum operational thresholds with the existing lane configuration. No roadway capacities improvements are needed to mitigate 2025 background traffic.

Table 7 – Roadway Segment Level of Service – 2025 Build-Out Year Background Traffic

Roadway Segment	Functional Classification	Left-Turn Lane Type	LOS E Directional Volume Threshold (vph)	Peak Hour Directional Volume (vph)		Meet Minimum Acceptable LOS?
				AM Peak	PM Peak	
Deer Flat Road East of Meridian Road	Minor Arterial	None	575	215	301	Yes
Locust Grove Road North of Deer Flat Road	Minor Arterial	None	575	41	85	Yes

Intersection Capacity Analysis and Level of Service

To determine the 2025 background traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the required improvements at the Meridian Road and Deer Flat Road intersection needed to mitigate the Winfield Springs Subdivision impacts. Copies of the calculations are included in the appendix. **Table 8 and Table 9** summarize the intersection capacity analysis results. All study area intersections are projected to meet minimum operational thresholds with 2025 background traffic during peak hour traffic:

- Locust Grove Road and Hubbard Road intersection
  - The northbound and southbound approaches are operating at LOS B or better with a v/c ratio of 0.15 or less.
- Meridian Road and Deer Flat Road intersection
  - The intersection is expected to operate at LOS *D* with an overall intersection v/c ratio of *0.85* or less.
  - All lane groups are expected to operate at LOS E or better with a v/c ratio of *0.93* or less.
- Locust Grove Road and Deer Flat Road intersection
  - The northbound and southbound approaches are operating at LOS B or better with a v/c ratio of 0.14 or less

Mitigation

All study area roadway segments and intersections meet minimum operational thresholds with 2025 background traffic. As a result, no roadway or intersection improvements are needed to mitigate 2025 background traffic. Turn lane warrant was evaluated using ACHD guidelines – see the appendix for turn lane warrant worksheets. None of the study area intersections meet warrant for turn lanes with 2025 background traffic.

Table 8 – Intersection Level of Service – 2025 Build-Out Year Background Traffic

Intersection		Control	MOEs	AM Peak Hour	PM Peak Hour
1	Locust Grove Road and Hubbard Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	A / A	A / B
			Delay (s/v) (NB / SB)	10 / 10	10 / 10
			Worst Lane Group LOS	A (NBTR)	B (SBTR)
2	Meridian Road and Deer Flat Road	Signal	Intersection LOS	*D*	C
			Intersection Delay (s/v)	*37*	*32*
			Intersection v/c	*0.85*	*0.74*
			Worst Lane Group LOS	E (WBTR)	D (WBTR)
3	Locust Grove Road and Deer Flat Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	B / A	B / B
			Delay (s/v) (NB / SB)	11 / 9	12 / 11
			Worst Lane Group LOS	B (NBTR)	B (NBTR)

Table 9 – Lane Group v/c Ratio – 2025 Build-Out Year Background Traffic

Intersection		Approach	AM Peak Hour			PM Peak Hour		
			LT	THRU	RT	LT	THRU	RT
1	Locust Grove Road and Hubbard Road	NB	0.07			0.08		
		SB	0.06			0.15		
		EB	0.01			0.01		
		WB	--			0.01		
2	Meridian Road and Deer Flat Road	NB	*0.31*	*0.67*	*0.67*	*0.62*	*0.48*	*0.48*
		SB	*0.18*	*0.32*	*0.36*	*0.27*	*0.66*	*0.69*
		EB	*0.93*	*0.35*		*0.83*	0.38	
		WB	0.12	*0.81*		0.22	*0.87*	
3	Locust Grove Road and Deer Flat Road	NB	0.02			0.02		
		SB	0.04			0.14		
		EB	0.03			0.02		
		WB	--			--		

2025 Build-Out Year Total Traffic

Roadway Segment Level of Service

The study area roadway segments level of service were evaluated with 2025 total traffic. **Table 10** summarizes the results. All study area roadway segments are expected to meet minimum operational thresholds with the existing lane configuration. No roadway capacities improvements are needed to mitigate 2025 total traffic.

Table 10 – Roadway Segment Level of Service – 2025 Build-Out Year Total Traffic

Roadway Segment	Functional Classification	Left-Turn Lane Type	LOS E Directional Volume Threshold (vph)	Peak Hour Directional Volume (vph)		Meet Minimum Acceptable LOS?
				AM Peak	PM Peak	
Deer Flat Road East of Meridian Road	Minor Arterial	None	575	233	336	Yes
Locust Grove Road North of Deer Flat Road	Minor Arterial	None	575	51	97	Yes

Intersection Capacity Analysis and Level of Service

To determine the 2025 total traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the above mentioned mitigations. Copies of the calculations are included in the appendix. **Table 11 and Table 12** summarize the intersection capacity analysis results. All study area intersections are projected to meet minimum operational thresholds with 2025 total traffic during peak hour traffic:

- Locust Grove Road and Hubbard Road intersection
  - The northbound and southbound approaches are operating at LOS B or better with a v/c ratio of 0.17 or less.
- Meridian Road and Deer Flat Road intersection
  - The intersection is expected to operate at LOS D or better with an overall intersection v/c ratio of *0.87* or less.
  - All lane groups are expected to operate at LOS E or better with a v/c ratio of *0.96* or less.
- Locust Grove Road and Deer Flat Road intersection
  - The northbound and southbound approaches are operating at LOS B or better with a v/c ratio of 0.16 or less

Mitigation

All study area roadway segments and intersections meet minimum operational thresholds with 2025 total traffic. As a result, no roadway or intersection improvements are needed to mitigate 2025 total traffic. Turn lane warrant was evaluated using ACHD guidelines – see the appendix for turn lane warrant worksheets. None of the study area intersections meet warrant for turn lanes with 2025 total traffic.

Table 11 – Intersection Level of Service – 2025 Build-Out Year Total Traffic

Intersection		Control	MOEs	AM Peak Hour	PM Peak Hour
1	Locust Grove Road and Hubbard Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	A / A	B / B
			Delay (s/v) (NB / SB)	10 / 10	10 / 10
			Worst Lane Group LOS	A (NBTR)	B (SBTR)
2	Meridian Road and Deer Flat Road	Signal	Intersection LOS	D	C
			Intersection Delay (s/v)	*39*	*0.34*
			Intersection v/c	*0.87*	*0.76*
			Worst Lane Group LOS	E (WBTR)	E (WBTR)
3	Locust Grove Road and Deer Flat Road	2-Way Stop (Locust Grove Rd)	LOS (NB / SB)	B / A	B / B
			Delay (s/v) (NB / SB)	12 / 9	12 / 11
			Worst Lane Group LOS	B (NBTR)	B (NBTR)

Table 12 – Lane Group v/c Ratio – 2025 Build-Out Year Total Traffic

Intersection		Approach	AM Peak Hour			PM Peak Hour		
			LT	THRU	RT	LT	THRU	RT
1	Locust Grove Road and Hubbard Road	NB	0.09			0.09		
		SB	0.06			0.17		
		EB	0.01			0.01		
		WB	< 0.01			0.01		
2	Meridian Road and Deer Flat Road	NB	*0.33*	*0.71*	*0.71*	*0.64*	*0.53*	*0.53*
		SB	*0.26*	*0.34*	*0.37*	*0.38*	*0.68*	*0.71*
		EB	*0.96*	*0.34*		*0.84*	*0.39*	
		WB	0.17	*0.85*		0.23	*0.88*	
3	Locust Grove Road and Deer Flat Road	NB	0.03			0.02		
		SB	0.04			0.16		
		EB	0.03			0.03		
		WB	--			--		

Site Access and Circulation

Figure 11 summarizes the estimated ADTs on the internal roadways and proposed access locations. All proposed internal roadways are projected to carry less than 1,000 vpd except for the proposed East access approach. The East access approach segment is expected to carry approximately 1,076 vpd at the Deer Flat Road intersection. This road does not have front on housing.

Deer Flat Road is functionally classified as a minor arterial with a posted speed limit of 50 mph, which requires the following access spacing per ACHD Policy, Section 7205, Table 1a:

- 1,320 feet minimum separation for unsignalized collector streets
- 660 feet minimum separation for local streets
- 425 feet minimum driveways separation
- 330 feet from a signalized intersection with a single or dual left-turn lanes for a RIRO driveway
- 660 feet from a signalized intersection with a single left-turn lane for a full-movement driveway
- 710 feet from a signalized intersection with dual left-turn lanes for a full-movement driveway

The proposed access locations on Deer Flat Road generally meet ACHD's access spacing. It should be noted that there are numerous existing single-family driveways on Deer Flat Road within the study area.

According to ACHD policy per AASHTO guidelines, the minimum sight distance for a 50 mph posted speed limit is 555 feet. The proposed driveways are located within a generally flat and straight segment of Deer Flat Road alignment and are expected to have adequate intersection sight distance. However, building setback and landscaping should be located and designed to ensure adequate intersection sight distance.

Turn lane warrant was evaluated for the proposed site access intersections using ACHD guidelines – see the appendix for turn lane warrant worksheets. None of the site access intersections are expected to warrant turn lanes.

Table 13 and Table 14 summarize site access intersections capacity analysis results. All site access intersections are expected to operate at LOS B or better with a lane group v/c of 0.09 or less during the peak hours with 2025 total traffic.

Figure 11 – Proposed Access Locations and Internal Roadway ADTs

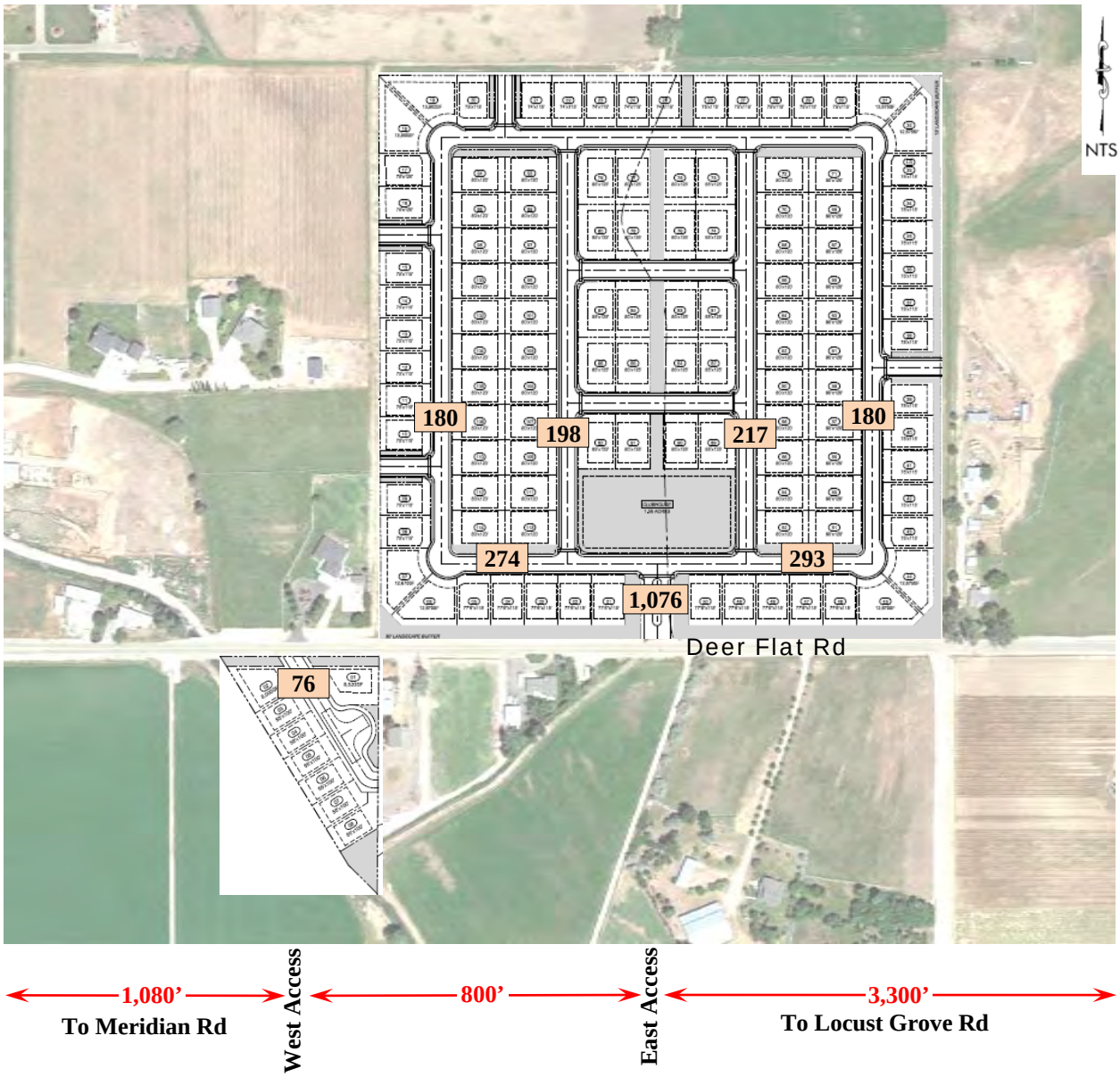


Table 13 – Site Access Intersection Level of Service – 2025 Build-Out Year Total Traffic

Intersection		Control	MOEs	AM Peak Hour	PM Peak Hour
4	West Access and Deer Flat Road	Stop (NB Approach)	LOS (NB)	B	B
			Delay (s/v) (NB)	11	12
			Worst Lane Group LOS	B (NB)	B (NB)
5	East Access and Deer Flat Road	Stop (SB Approach)	LOS (SB)	A	B
			Delay (s/v) (SB)	10	11
			Worst Lane Group LOS	A (SB)	B (SB)

Table 14 – Site Access Intersection Lane Group v/c Ratio – 2025 Build-Out Year Total Traffic

Intersection		Approach	AM Peak Hour			PM Peak Hour		
			LT	THRU	RT	LT	THRU	RT
4	West Access and Deer Flat Road	NB	0.01			0.01		
		EB	--			--		
		WB	--			< 0.01		
5	East Access and Deer Flat Road	SB	0.09			0.07		
		EB	0.01			0.05		
		WB	--			--		

APPENDIX

SCOPE AND COMPASS AREA OF INFLUENCE RESULTS
TRAFFIC COUNTS
CRASH RATES
SYNCHRO REPORTS
TURN LANE WARRANT WORKSHEETS

Deer Flat Property, TAZ 1184

The following summarizes the results of an area of influence model run for a proposed development located northwest of SH 69 and Deer Flat Road. The proposed development will consist of 126 single family units with an anticipated build out by 2025. See figure 1.

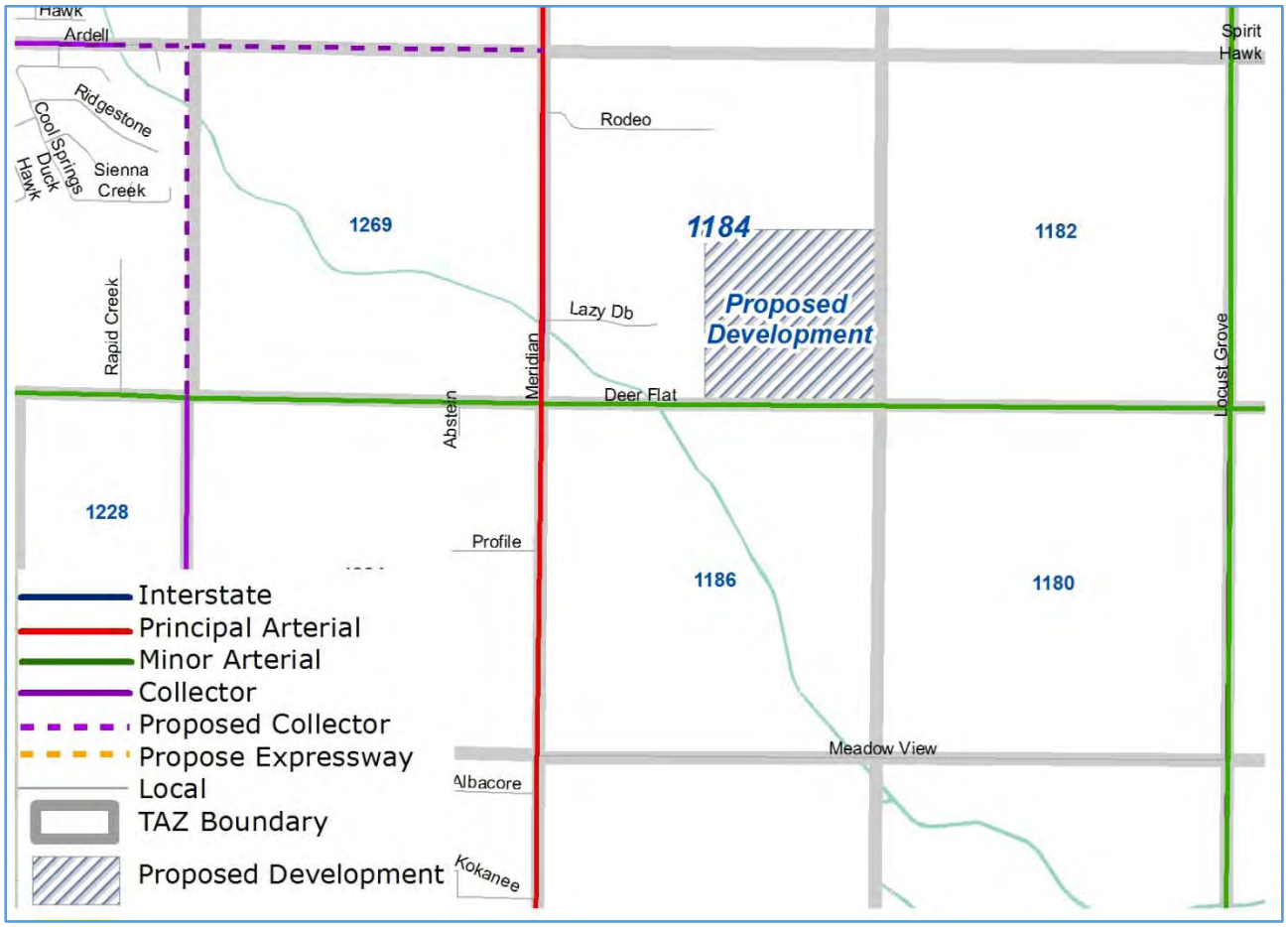


Figure 1: TAZ 1184

Table 1 provides the existing demographics for TAZ 1184 and the demographics for the proposed development that were used for the area of influence model run.

Table 1

	2017		2025 with proposal		2040	
	HH	Jobs	HH	Jobs	HH	Jobs
TAZ 1184	5	14	131	33	21	109

The area of influence results for the proposed development are shown in figures 2. The 2040 peak hour results are shown in figures 3 and 4.

A cumulative development model run was also completed for this area. See Table 2 for the demographics, figure 5 for the vicinity map and figures 6 and 7 for the peak hour results.

Figure 2: Area of Influence, Peak hour demand contribution to the total peak hour demand for 2025



Figure 3: 2025 Peak Hour Demand with Proposed Development

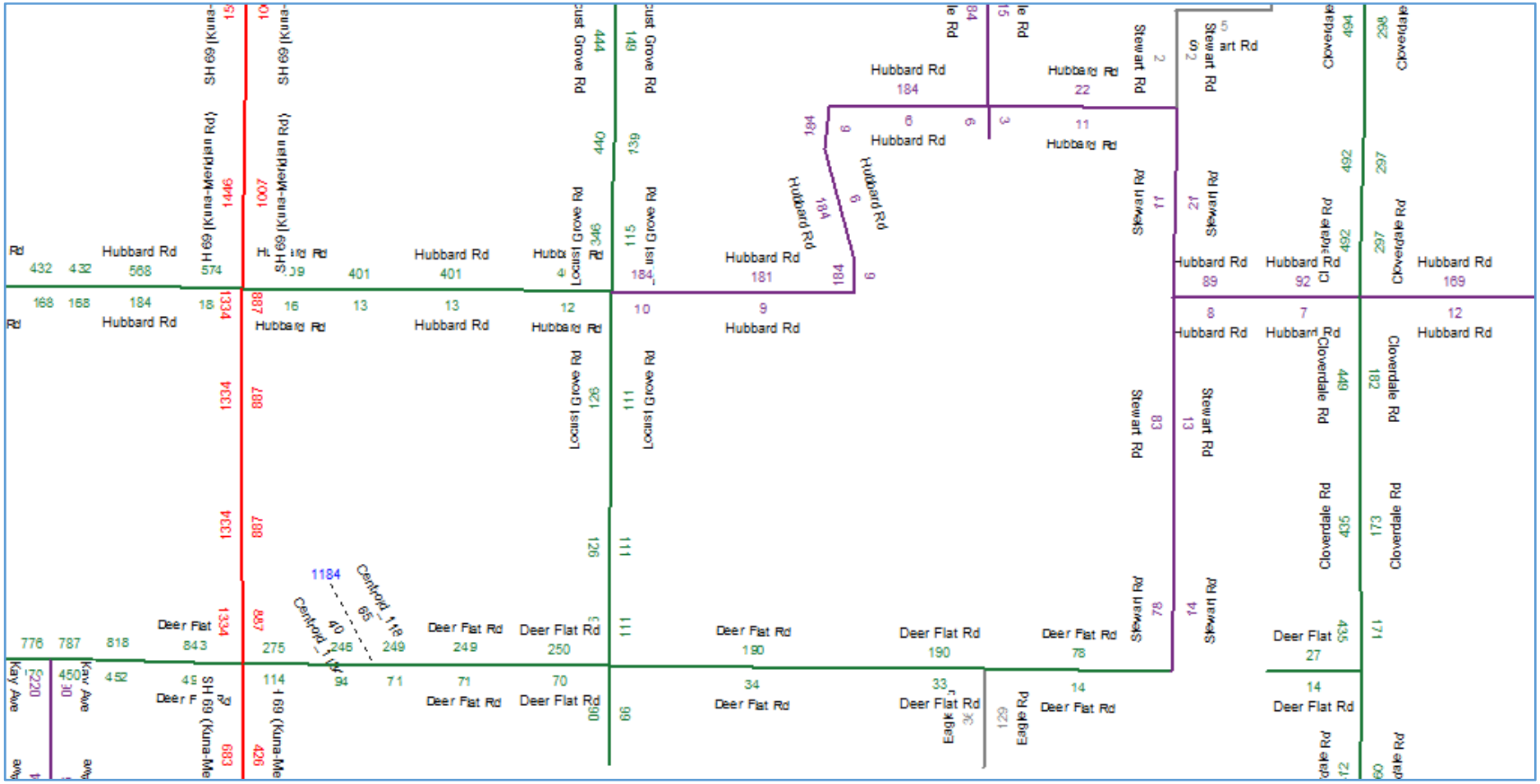


Figure 4: 2025 Peak Hour Demand without Proposed Development

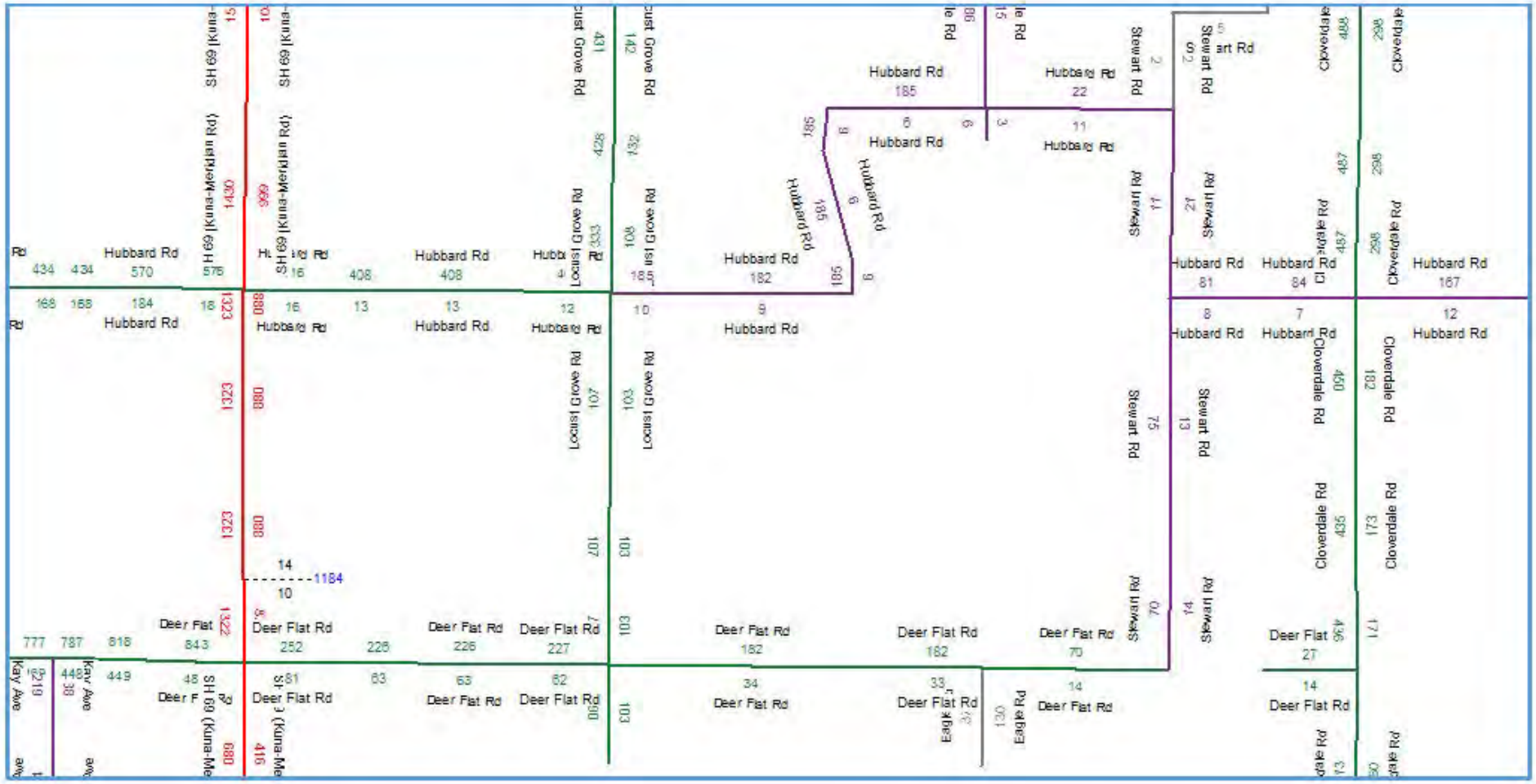


Table 2

TAZ	2017		2025 with proposals		2040	
	HH	Jobs	HH	Jobs	HH	Jobs
1184	5	14	131	33	21	109
1186*	8	2	310	175	310	175
1269	4	36	357	180	407	450

*Ashton Estates had an anticipated build out by year 2030 however, the area of influence included 100% of the development.

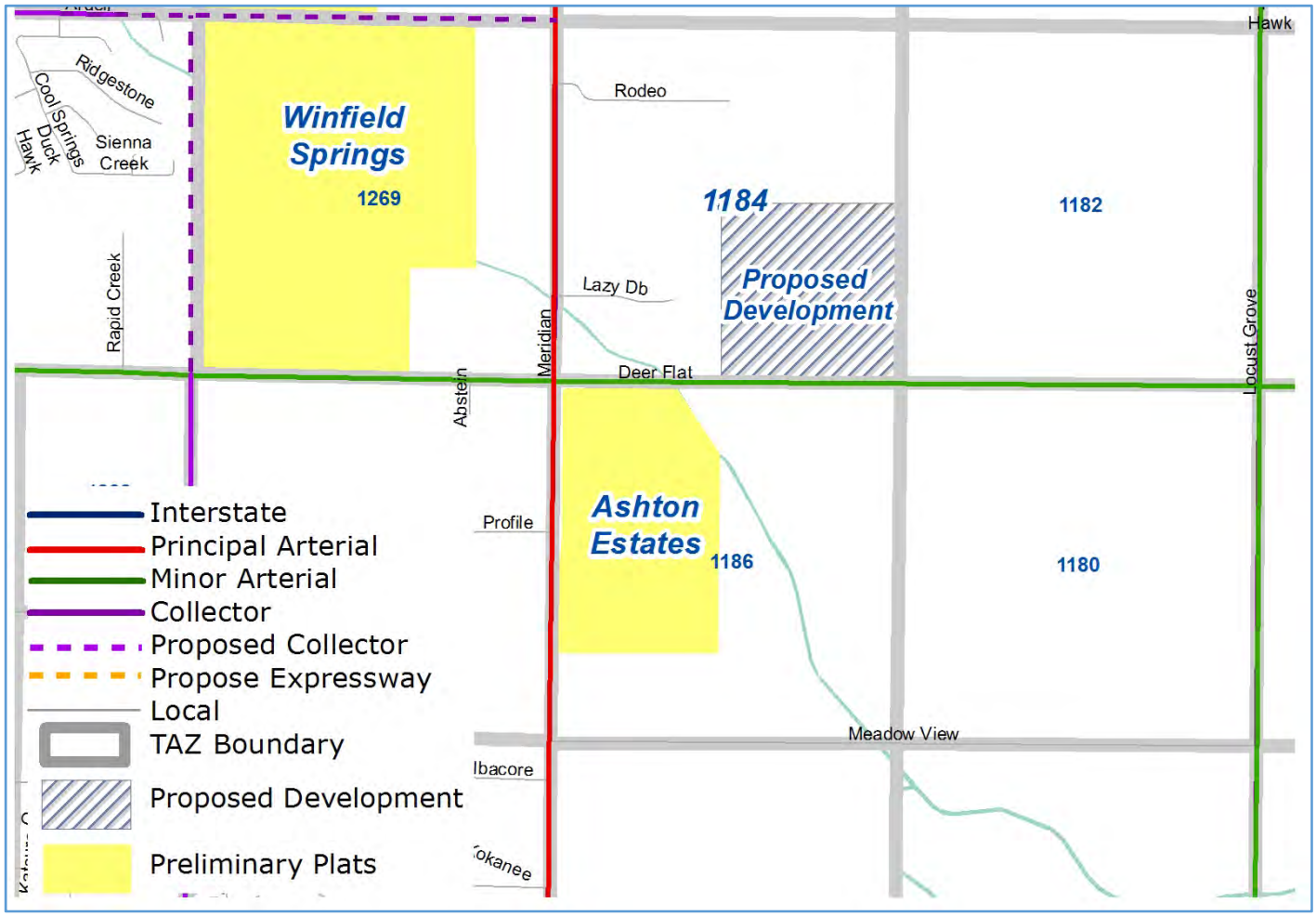


Figure 5: Proposed development, Winfield Springs and Ashton Estates

Figure 6: 2025 Cumulative Peak Hour results

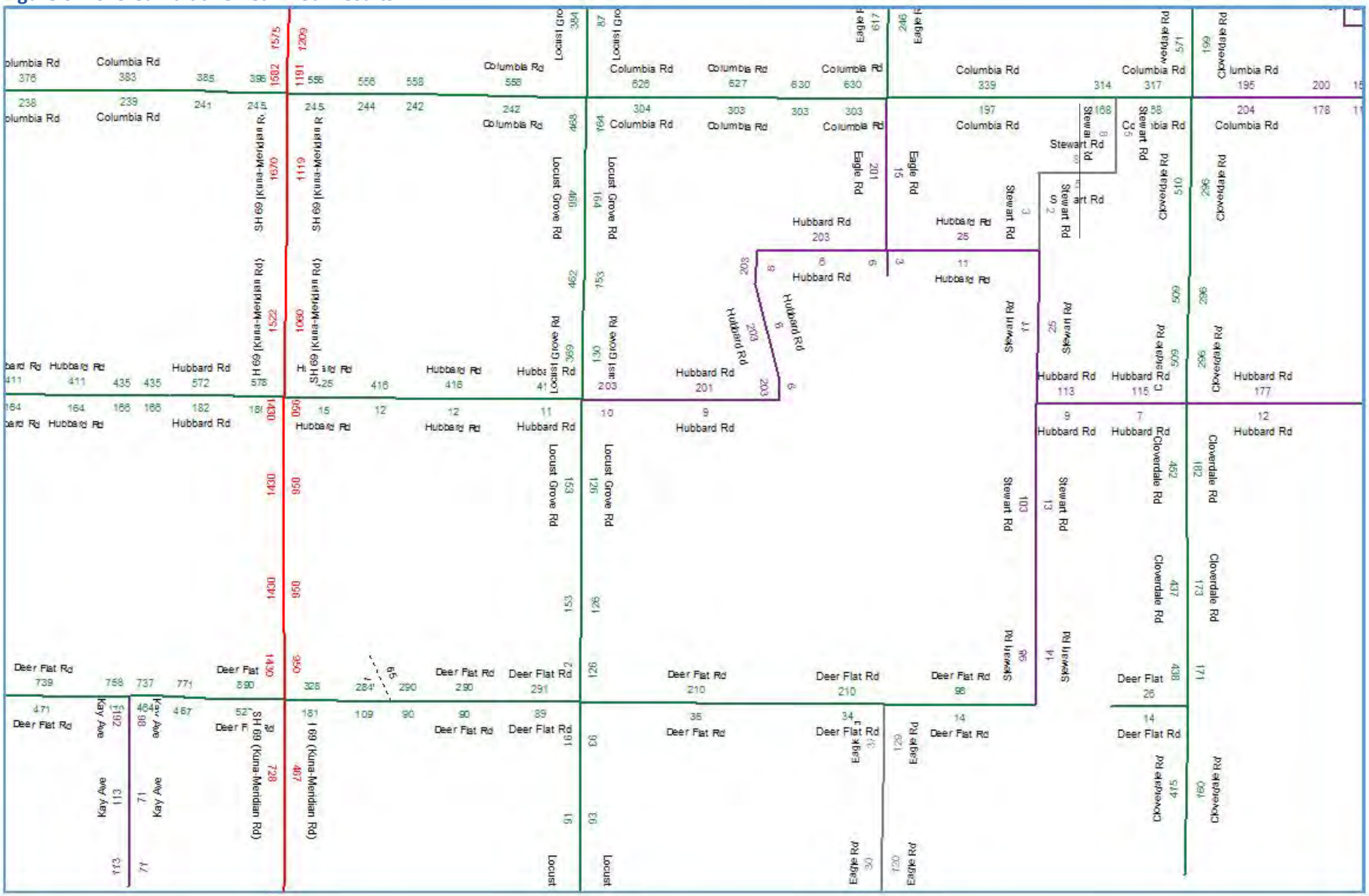


Figure 7: Area of Influence for proposed development with Winfield Springs and Ashton Estates included in "background traffic"



Cable One Webmail thompsonengineers@cableone.net

Fwd: TAZ1184.docx

From : Mary Ann Waldinger <MWaldinger@compassidaho.org> Wed, Nov 15, 2017 02:09 PM
Subject : Fwd: TAZ1184.docx
To : thompsonengineers@cableone.net

Hi Dan
Here you go.
Do you need/use the write up I send to ACHD? I'll forward it if so.
M

Sent from my iPhone

Begin forwarded message:

From: Aimee Loudenslager <Aloudenslager@achdidaho.org>
Date: November 15, 2017 at 1:07:18 PM CST
To: 'Mary Ann Waldinger' <MWaldinger@compassidaho.org>, Mindy Wallace <Mwallace@achdidaho.org>, Shona Tonkin <Shona.Tonkin@itd.idaho.gov>
Cc: Shawn Martin <smartin@achdidaho.org>
Subject: RE: TAZ1184.docx

Hi Mary Ann,

ACHD recommends the following segments and intersections to be included in the TIS for the residential development northwest of SH 69 and Deer Flat Road.

Intersections:
- SH 69 and Deer Flat Road
- Deer Flat Road and Locust Grove Road
- Locust Grove Road and Hubbard Road
- All site access points

Segments:
- Deer Flat Road from SH 69 to Locust Grove Road
- Locust Grove Road from Deer Flat Road to Hubbard Road
- All internal collector roadways

Let me know if you have any questions.

Thanks,

Aimee Loudenslager, P.E.
Traffic Engineer
Ada County Highway District
(208) 387-6339

From: Mary Ann Waldinger [mailto:MWaldinger@compassidaho.org]
Sent: Monday, November 13, 2017 10:43 AM
To: Mindy Wallace; Aimee Loudenslager; Shona Tonkin

Cc: Shawn Martin
Subject: TAZ1184.docx

Good morning,
A. ached in an area of influence for 126 unit subdivision north of Deer Flat and east of SH 69. The write up also includes an cumula. ve model run and an area of influence with the addiĀonal developments as “background” traffic.

This was requested by Dan T. and I a ached the site plan he provided.

Thank you,
MaryAnn

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 1

Groups Printed- General Traffic

	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	5	0	0	5	1	0	0	0	1	1	4	0	0	5	1	3	1	0	5	16
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	1	5	0	0	6	10
07:30 AM	1	8	0	0	9	0	1	0	0	1	3	7	0	0	10	0	2	3	0	5	25
07:45 AM	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	1	4	3	0	8	14
Total	1	15	0	0	16	2	1	0	0	3	4	18	0	0	22	3	14	7	0	24	65
08:00 AM	2	1	0	0	3	0	0	0	0	0	1	5	0	0	6	0	1	0	0	1	10
08:15 AM	1	0	0	0	1	0	1	0	0	1	0	4	0	0	4	0	2	0	0	2	8
08:30 AM	1	3	0	0	4	0	3	0	0	3	0	3	0	0	3	0	4	0	0	4	14
08:45 AM	2	6	0	0	8	0	2	2	0	4	1	5	0	0	6	1	3	0	0	4	22
Total	6	10	0	0	16	0	6	2	0	8	2	17	0	0	19	1	10	0	0	11	54

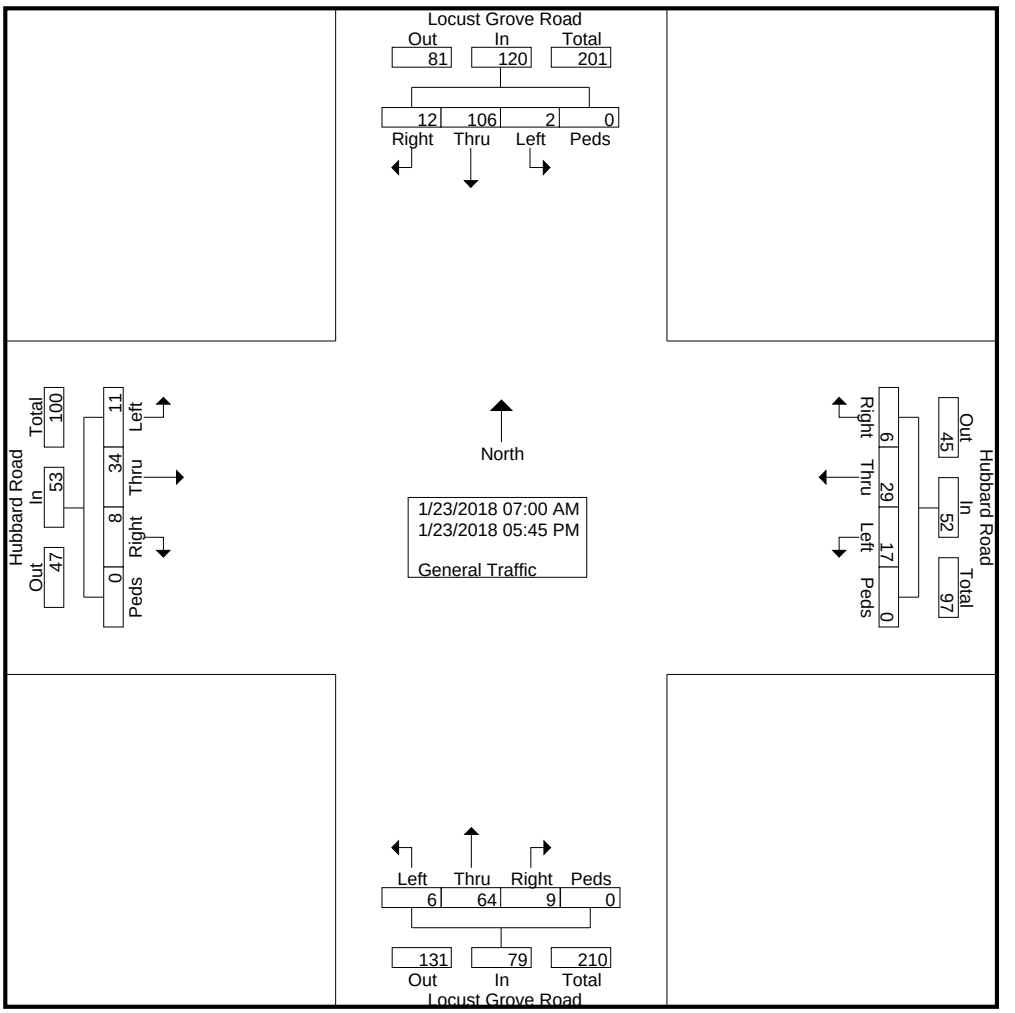
04:00 PM	1	7	0	0	8	1	2	1	0	4	0	7	0	0	7	0	0	2	0	2	21
04:15 PM	0	11	1	0	12	0	2	2	0	4	1	3	1	0	5	1	0	0	0	1	22
04:30 PM	0	8	0	0	8	1	0	3	0	4	0	1	0	0	1	0	1	0	0	1	14
04:45 PM	0	18	0	0	18	0	4	1	0	5	0	4	0	0	4	0	2	0	0	2	29
Total	1	44	1	0	46	2	8	7	0	17	1	15	1	0	17	1	3	2	0	6	86
05:00 PM	0	8	0	0	8	0	3	3	0	6	0	2	2	0	4	1	0	1	0	2	20
05:15 PM	2	15	1	0	18	0	2	3	0	5	1	6	3	0	10	0	3	0	0	3	36
05:30 PM	1	6	0	0	7	0	3	2	0	5	1	4	0	0	5	0	1	0	0	1	18
05:45 PM	1	8	0	0	9	2	6	0	0	8	0	2	0	0	2	2	3	1	0	6	25
Total	4	37	1	0	42	2	14	8	0	24	2	14	5	0	21	3	7	2	0	12	99
Grand Total	12	106	2	0	120	6	29	17	0	52	9	64	6	0	79	8	34	11	0	53	304
Apprch %	10	88.3	1.7	0		11.5	55.8	32.7	0		11.4	81	7.6	0		15.1	64.2	20.8	0		
Total %	3.9	34.9	0.7	0	39.5	2	9.5	5.6	0	17.1	3	21.1	2	0	26	2.6	11.2	3.6	0	17.4	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 2



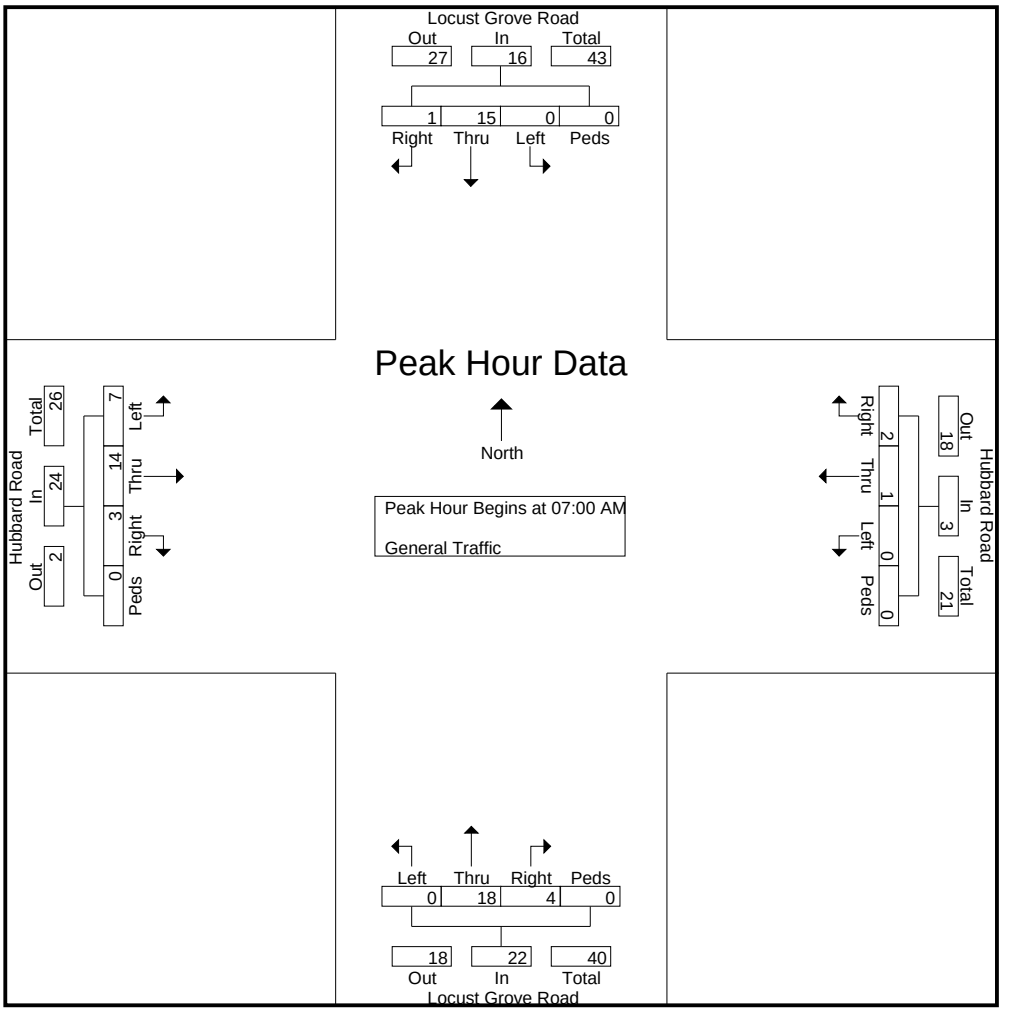
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 3

	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					
Start Time	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	5	0	0	5	**1**	0	0	0	**1**	1	4	0	0	5	**1**	3	1	0	5	16
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	1	**5**	0	0	6	10
07:30 AM	**1**	**8**	0	0	**9**	0	**1**	0	0	1	**3**	**7**	0	0	**10**	0	2	**3**	0	5	**25**
07:45 AM	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	1	4	3	0	**8**	14
Total Volume	1	15	0	0	16	2	1	0	0	3	4	18	0	0	22	3	14	7	0	24	65
% App. Total	6.2	93.8	0	0		66.7	33.3	0	0		18.2	81.8	0	0		12.5	58.3	29.2	0		
PHF	.250	.469	.000	.000	.444	.500	.250	.000	.000	.750	.333	.643	.000	.000	.550	.750	.700	.583	.000	.750	.650



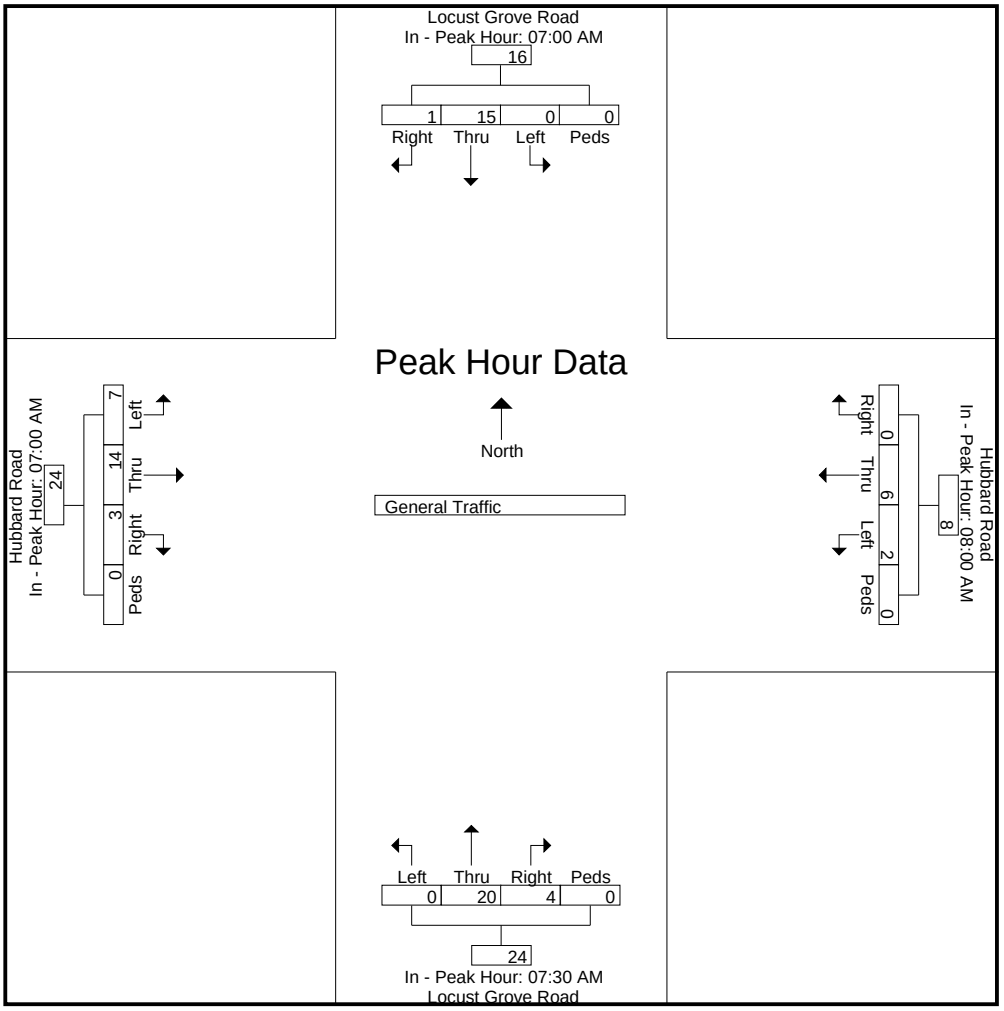
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 4

	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00 AM					08:00 AM					07:30 AM					07:00 AM					
+0 mins.	0	5	0	0	5	0	0	0	0	0	**3**	**7**	0	0	**10**	**1**	3	1	0	5	
+15 mins.	0	1	0	0	1	0	1	0	0	1	0	4	0	0	4	1	**5**	0	0	6	
+30 mins.	**1**	**8**	0	0	**9**	0	**3**	0	0	3	1	5	0	0	6	0	2	**3**	0	5	
+45 mins.	0	1	0	0	1	0	2	**2**	0	**4**	0	4	0	0	4	1	4	3	0	**8**	
Total Volume	1	15	0	0	16	0	6	2	0	8	4	20	0	0	24	3	14	7	0	24	
% App. Total	6.2	93.8	0	0		0	75	25	0		16.7	83.3	0	0		12.5	58.3	29.2	0		
PHF	.250	.469	.000	.000	.444	.000	.500	.250	.000	.500	.333	.714	.000	.000	.600	.750	.700	.583	.000	.750	



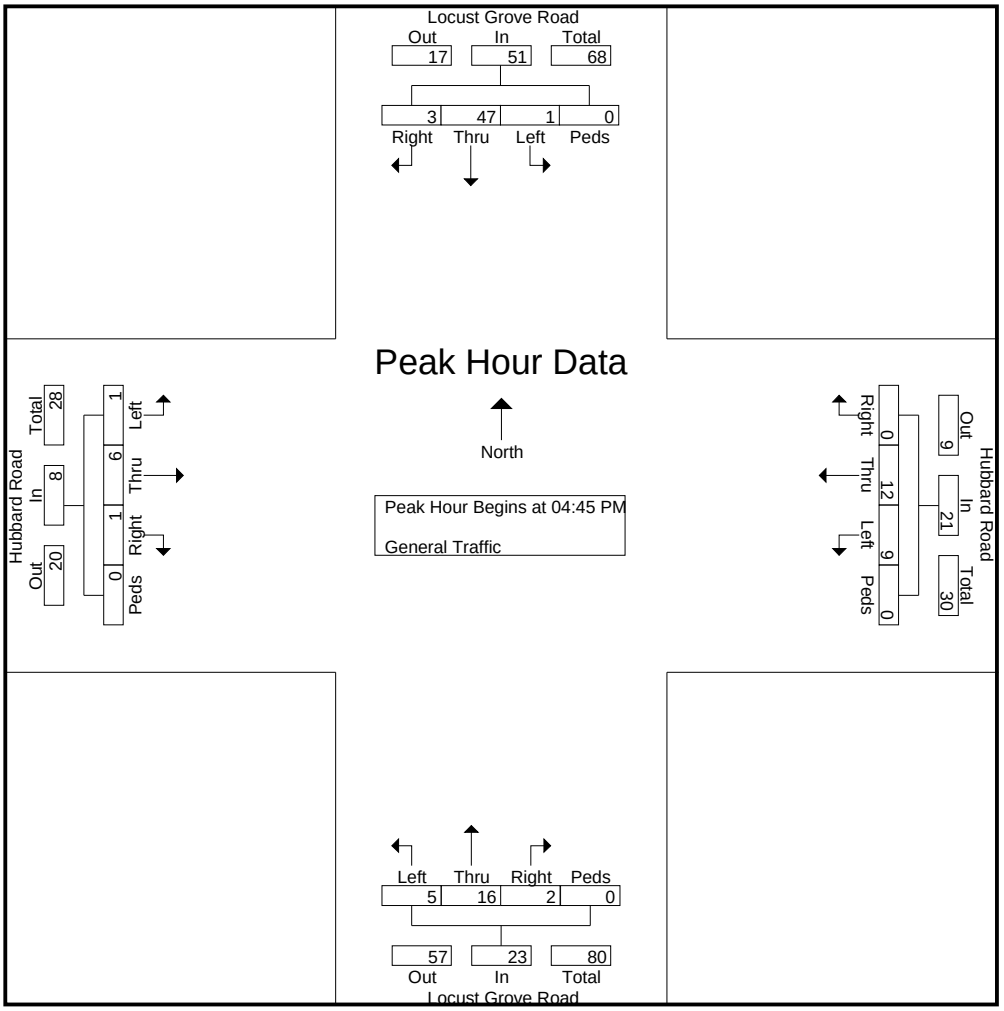
L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 5

	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					
Start Time	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	**18**	0	0	**18**	0	**4**	1	0	5	0	4	0	0	4	0	2	0	0	2	29
05:00 PM	0	8	0	0	8	0	3	**3**	0	**6**	0	2	2	0	4	**1**	0	**1**	0	2	20
05:15 PM	**2**	15	**1**	0	18	0	2	3	0	5	**1**	**6**	**3**	0	**10**	0	**3**	0	0	**3**	**36**
05:30 PM	1	6	0	0	7	0	3	2	0	5	1	4	0	0	5	0	1	0	0	1	18
Total Volume	3	47	1	0	51	0	12	9	0	21	2	16	5	0	23	1	6	1	0	8	103
% App. Total	5.9	92.2	2	0		0	57.1	42.9	0		8.7	69.6	21.7	0		12.5	75	12.5	0		
PHF	.375	.653	.250	.000	.708	.000	.750	.750	.000	.875	.500	.667	.417	.000	.575	.250	.500	.250	.000	.667	.715



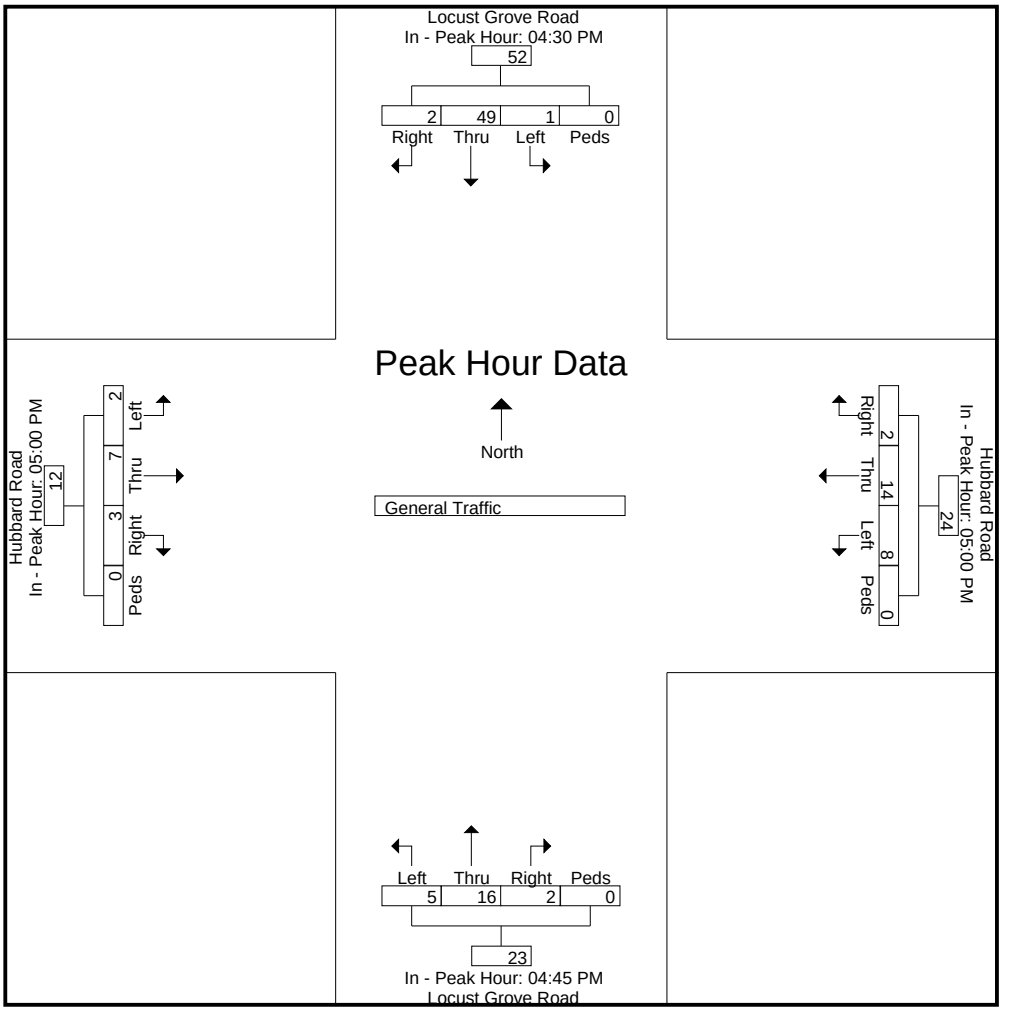
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 6

	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:30 PM					05:00 PM					04:45 PM					05:00 PM					
+0 mins.	0	8	0	0	8	0	3	**3**	0	6	0	4	0	0	4	1	0	**1**	0	2	
+15 mins.	0	**18**	0	0	**18**	0	2	3	0	5	0	2	2	0	4	0	**3**	0	0	3	
+30 mins.	0	8	0	0	8	0	3	2	0	5	**1**	**6**	**3**	0	**10**	0	1	0	0	1	
+45 mins.	**2**	15	**1**	0	18	**2**	**6**	0	0	**8**	1	4	0	0	5	**2**	3	1	0	**6**	
Total Volume	2	49	1	0	52	2	14	8	0	24	2	16	5	0	23	3	7	2	0	12	
% App. Total	3.8	94.2	1.9	0		8.3	58.3	33.3	0		8.7	69.6	21.7	0		25	58.3	16.7	0		
PHF	.250	.681	.250	.000	.722	.250	.583	.667	.000	.750	.500	.667	.417	.000	.575	.375	.583	.500	.000	.500	



L2 Data Collection
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Study: THOM0136
Intersection: Locust Grove Rd / Hubbard
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 1

Groups Printed- General Traffic

	Locust Grove Road From North					Deer Flat Road From East					Locust Grove Road From South					Deer Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	1	1	0	5	0	13	0	0	13	0	1	1	0	2	0	32	3	0	35	55
07:15 AM	2	0	0	0	2	0	21	0	0	21	0	1	1	0	2	0	40	2	0	42	67
07:30 AM	7	0	0	0	7	2	17	0	0	19	0	3	1	0	4	0	24	6	0	30	60
07:45 AM	1	0	1	0	2	0	14	0	0	14	1	1	1	0	3	0	28	4	0	32	51
Total	13	1	2	0	16	2	65	0	0	67	1	6	4	0	11	0	124	15	0	139	233
08:00 AM	0	0	1	0	1	0	6	0	0	6	0	2	0	0	2	0	19	5	0	24	33
08:15 AM	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	0	13	1	0	14	18
08:30 AM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	9	0	0	9	13
08:45 AM	2	2	1	0	5	2	7	1	0	10	1	2	0	0	3	1	5	1	0	7	25
Total	3	3	2	0	8	2	16	1	0	19	1	7	0	0	8	1	46	7	0	54	89

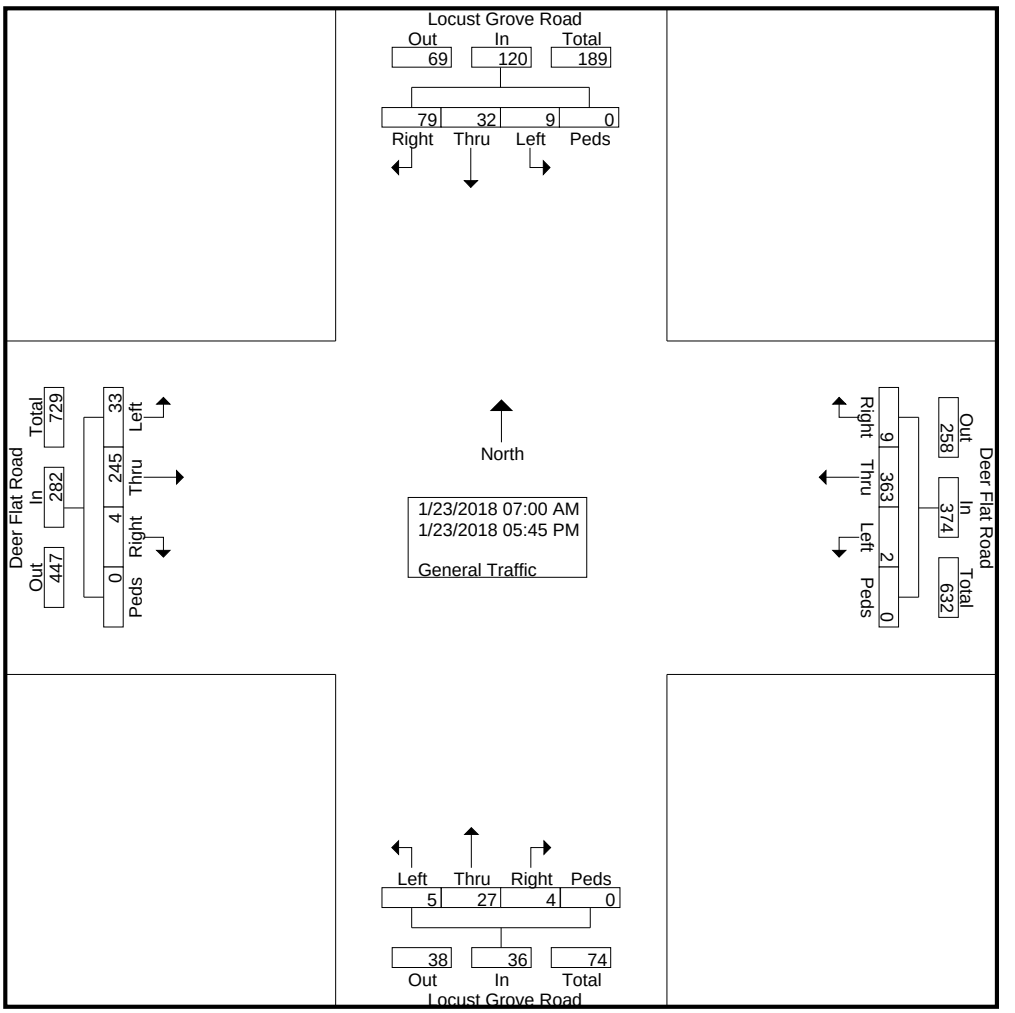
04:00 PM	7	3	0	0	10	1	22	0	0	23	0	3	0	0	3	0	9	2	0	11	47
04:15 PM	5	3	2	0	10	0	26	0	0	26	0	3	1	0	4	0	4	2	0	6	46
04:30 PM	7	2	0	0	9	1	28	1	0	30	0	0	0	0	0	0	7	0	0	7	46
04:45 PM	11	5	0	0	16	0	36	0	0	36	1	3	0	0	4	1	9	0	0	10	66
Total	30	13	2	0	45	2	112	1	0	115	1	9	1	0	11	1	29	4	0	34	205
05:00 PM	10	5	2	0	17	1	42	0	0	43	0	1	0	0	1	1	11	0	0	12	73
05:15 PM	10	3	1	0	14	2	40	0	0	42	0	1	0	0	1	0	11	4	0	15	72
05:30 PM	7	4	0	0	11	0	56	0	0	56	0	2	0	0	2	0	12	2	0	14	83
05:45 PM	6	3	0	0	9	0	32	0	0	32	1	1	0	0	2	1	12	1	0	14	57
Total	33	15	3	0	51	3	170	0	0	173	1	5	0	0	6	2	46	7	0	55	285
Grand Total	79	32	9	0	120	9	363	2	0	374	4	27	5	0	36	4	245	33	0	282	812
Apprch %	65.8	26.7	7.5	0		2.4	97.1	0.5	0		11.1	75	13.9	0		1.4	86.9	11.7	0		
Total %	9.7	3.9	1.1	0	14.8	1.1	44.7	0.2	0	46.1	0.5	3.3	0.6	0	4.4	0.5	30.2	4.1	0	34.7	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 2



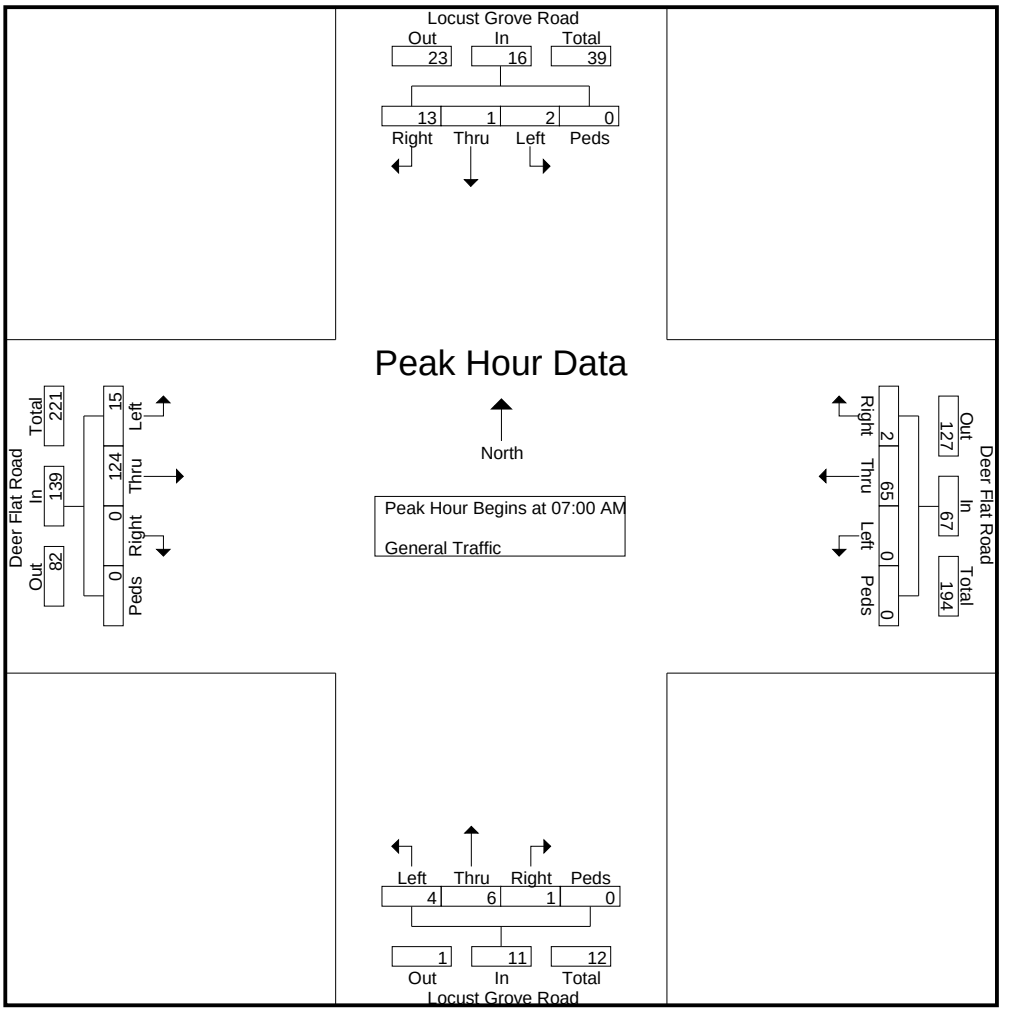
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 3

	Locust Grove Road From North					Deer Flat Road From East					Locust Grove Road From South					Deer Flat Road From West					
Start Time	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	3	**1**	**1**	0	5	0	13	0	0	13	0	1	**1**	0	2	0	32	3	0	35	55
07:15 AM	2	0	0	0	2	0	**21**	0	0	**21**	0	1	1	0	2	0	**40**	2	0	**42**	**67**
07:30 AM	**7**	0	0	0	**7**	**2**	17	0	0	19	0	**3**	1	0	**4**	0	24	**6**	0	30	60
07:45 AM	1	0	1	0	2	0	14	0	0	14	**1**	1	1	0	3	0	28	4	0	32	51
Total Volume	13	1	2	0	16	2	65	0	0	67	1	6	4	0	11	0	124	15	0	139	233
% App. Total	81.2	6.2	12.5	0		3	97	0	0		9.1	54.5	36.4	0		0	89.2	10.8	0		
PHF	.464	.250	.500	.000	.571	.250	.774	.000	.000	.798	.250	.500	1.00	.000	.688	.000	.775	.625	.000	.827	.869



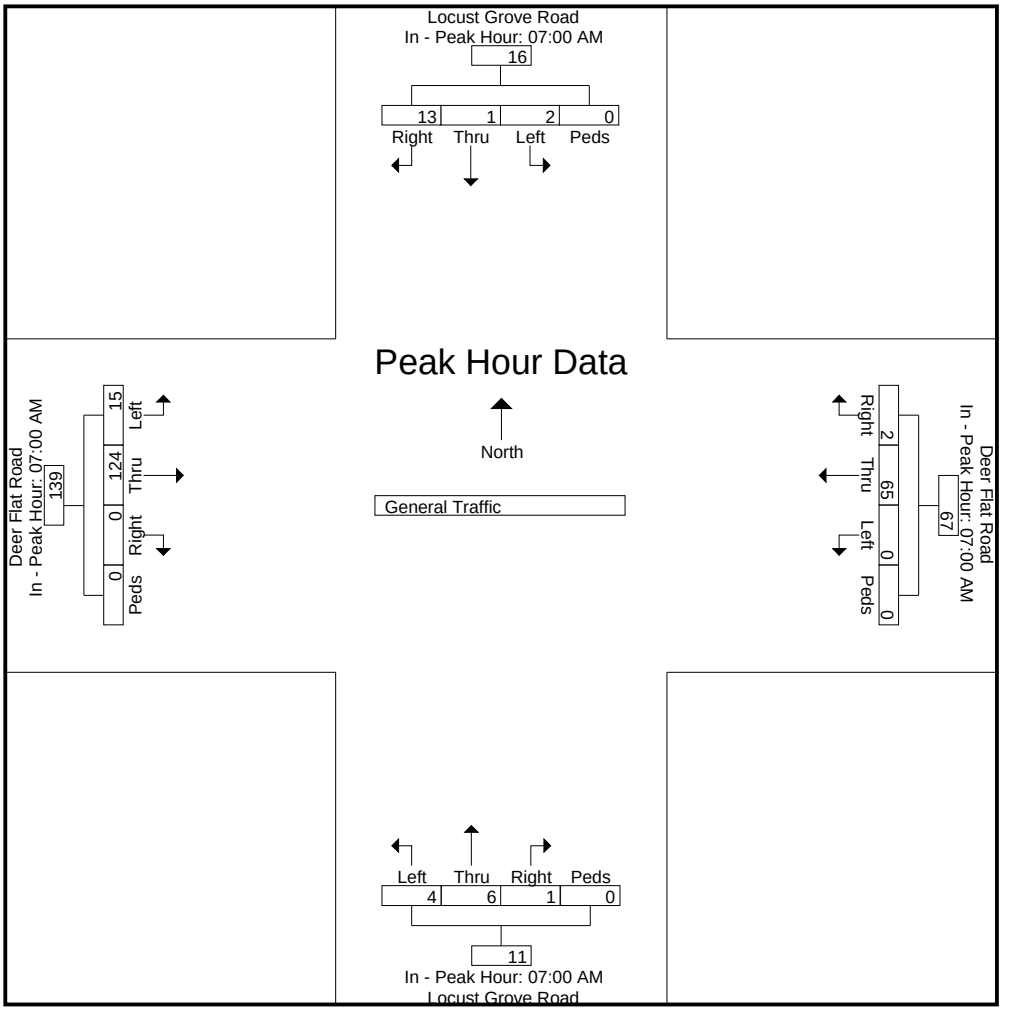
L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 4

	Locust Grove Road From North					Deer Flat Road From East					Locust Grove Road From South					Deer Flat Road From West					
Start Time	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Right**	**Thru**	**Left**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00 AM					07:00 AM					07:00 AM					07:00 AM					
+0 mins.	3	**1**	**1**	0	5	0	13	0	0	13	0	1	**1**	0	2	0	32	3	0	35	
+15 mins.	2	0	0	0	2	0	**21**	0	0	**21**	0	1	1	0	2	0	**40**	2	0	**42**	
+30 mins.	**7**	0	0	0	**7**	**2**	17	0	0	19	0	**3**	1	0	**4**	0	24	**6**	0	30	
+45 mins.	1	0	1	0	2	0	14	0	0	14	**1**	1	1	0	3	0	28	4	0	32	
Total Volume	13	1	2	0	16	2	65	0	0	67	1	6	4	0	11	0	124	15	0	139	
% App. Total	81.2	6.2	12.5	0		3	97	0	0		9.1	54.5	36.4	0		0	89.2	10.8	0		
PHF	.464	.250	.500	.000	.571	.250	.774	.000	.000	.798	.250	.500	1.000								



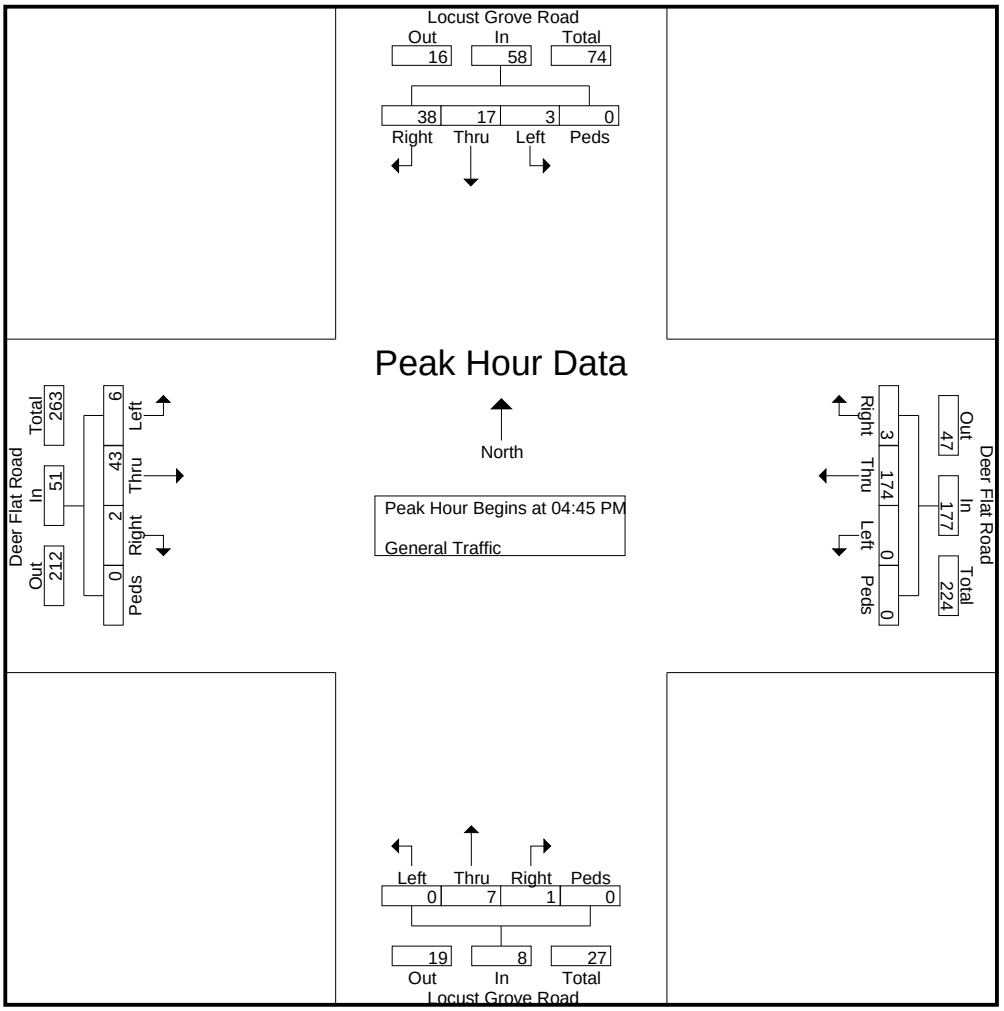
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Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 5

	Locust Grove Road From North					Deer Flat Road From East					Locust Grove Road From South					Deer Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**11**	**5**	0	0	16	0	36	0	0	36	**1**	**3**	0	0	**4**	**1**	9	0	0	10	66
05:00 PM	10	5	**2**	0	**17**	1	42	0	0	43	0	1	0	0	1	1	11	0	0	12	73
05:15 PM	10	3	1	0	14	**2**	40	0	0	42	0	1	0	0	1	0	11	**4**	0	**15**	72
05:30 PM	7	4	0	0	11	0	**56**	0	0	**56**	0	2	0	0	2	0	**12**	2	0	14	**83**
Total Volume	38	17	3	0	58	3	174	0	0	177	1	7	0	0	8	2	43	6	0	51	294
% App. Total	65.5	29.3	5.2	0		1.7	98.3	0	0		12.5	87.5	0	0		3.9	84.3	11.8	0		
PHF	.864	.850	.375	.000	.853	.375	.777	.000	.000	.790	.250	.583	.000	.000	.500	.500	.896	.375	.000	.850	.886



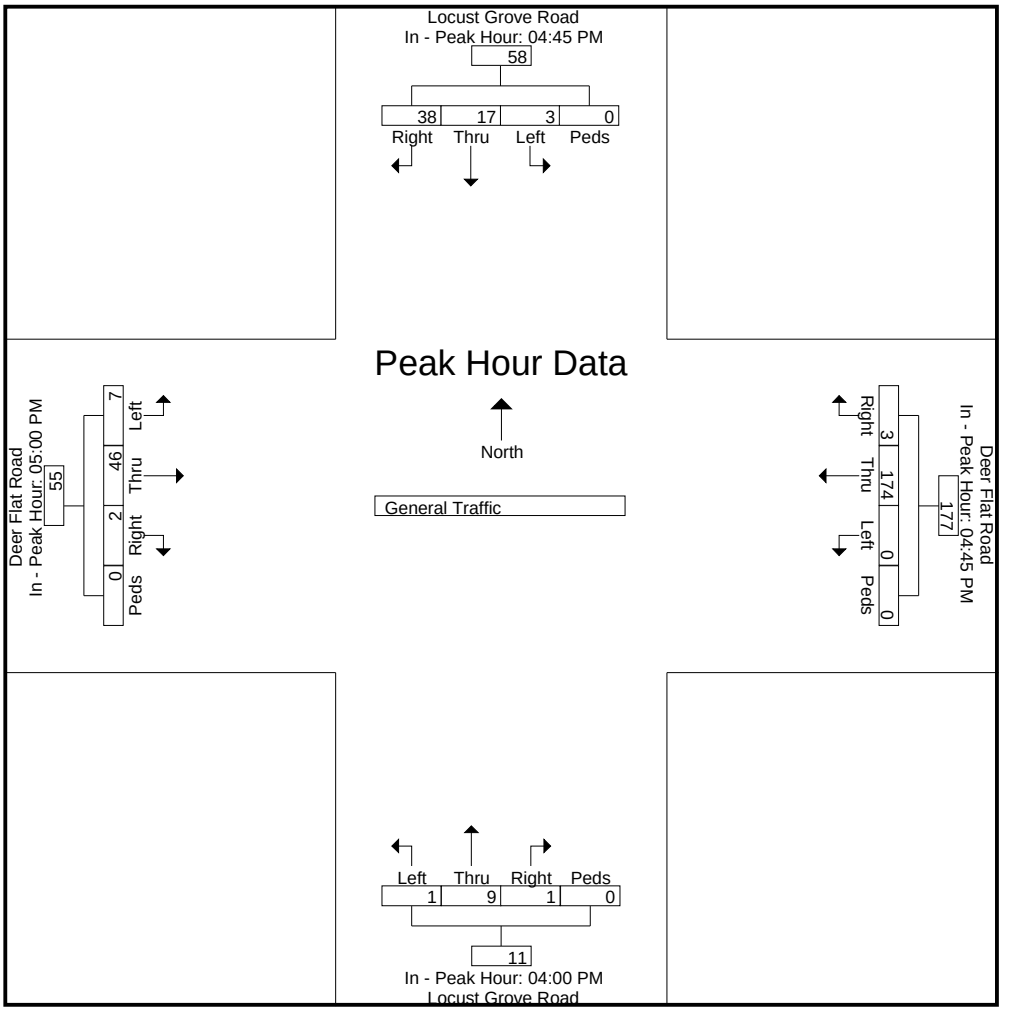
L2 Data Collection

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Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 6

	Locust Grove Road From North					Deer Flat Road From East					Locust Grove Road From South					Deer Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					04:45 PM					04:00 PM					05:00 PM					
+0 mins.	**11**	**5**	0	0	16	0	36	0	0	36	0	**3**	0	0	3	**1**	11	0	0	12	
+15 mins.	10	5	**2**	0	**17**	1	42	0	0	43	0	3	**1**	0	**4**	0	11	**4**	0	**15**	
+30 mins.	10	3	1	0	14	**2**	40	0	0	42	0	0	0	0	0	0	**12**	2	0	14	
+45 mins.	7	4	0	0	11	0	**56**	0	0	**56**	**1**	3	0	0	4	1	12	1	0	14	
Total Volume	38	17	3	0	58	3	174	0	0	177	1	9	1	0	11	2	46	7	0	55	
% App. Total	65.5	29.3	5.2	0		1.7	98.3	0	0		9.1	81.8	9.1	0		3.6	83.6	12.7	0		
PHF	.864	.850	.375	.000	.853	.375	.777	.000	.000	.790	.250	.750	.250	.000	.688	.500	.958	.438	.000	.917	



L2 Data Collection
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Study: THOM0136
Intersection: Locust Grove / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Deer Flat Rd
Site Code :
Start Date : 1/23/2018
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 1

Groups Printed- General Traffic

	Meridian Road From North					Hubbard Road From East					Meridian Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	66	2	0	79	1	0	0	0	1	0	261	2	0	263	7	4	45	0	56	399
07:15 AM	15	109	2	0	126	4	0	0	0	4	0	280	7	0	287	14	4	43	0	61	478
07:30 AM	11	123	2	0	136	3	2	4	0	9	2	216	7	0	225	32	4	37	0	73	443
07:45 AM	8	103	1	0	112	1	1	0	0	2	1	203	14	0	218	7	9	46	0	62	394
Total	45	401	7	0	453	9	3	4	0	16	3	960	30	0	993	60	21	171	0	252	1714
08:00 AM	15	57	2	0	74	0	0	1	0	1	2	187	5	0	194	8	2	33	0	43	312
08:15 AM	11	65	1	0	77	4	1	1	0	6	2	150	4	0	156	3	1	27	0	31	270
08:30 AM	17	58	3	0	78	0	1	2	0	3	0	142	1	0	143	1	3	37	0	41	265
08:45 AM	8	68	7	0	83	3	3	2	0	8	0	135	5	0	140	7	2	25	0	34	265
Total	51	248	13	0	312	7	5	6	0	18	4	614	15	0	633	19	8	122	0	149	1112

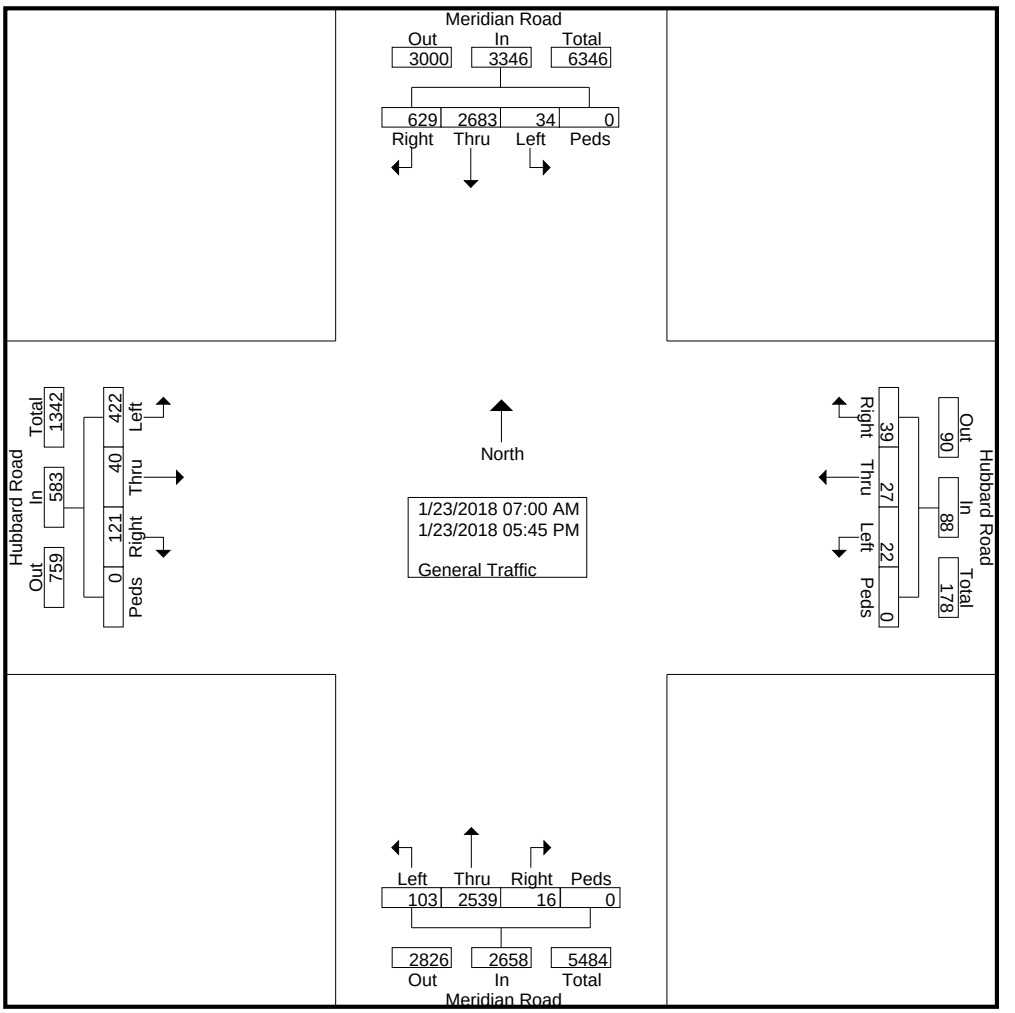
04:00 PM	54	230	0	0	284	2	4	0	0	6	1	128	9	0	138	5	1	15	0	21	449
04:15 PM	53	233	0	0	286	3	0	1	0	4	1	120	1	0	122	5	1	22	0	28	440
04:30 PM	62	237	3	0	302	1	0	1	0	2	1	146	7	0	154	3	1	15	0	19	477
04:45 PM	73	237	2	0	312	3	2	1	0	6	2	114	4	0	120	9	1	16	0	26	464
Total	242	937	5	0	1184	9	6	3	0	18	5	508	21	0	534	22	4	68	0	94	1830
05:00 PM	61	254	2	0	317	6	1	3	0	10	1	117	8	0	126	6	2	20	0	28	481
05:15 PM	81	271	0	0	352	3	5	4	0	12	2	116	12	0	130	2	0	12	0	14	508
05:30 PM	72	293	4	0	369	1	3	0	0	4	1	111	8	0	120	8	2	15	0	25	518
05:45 PM	77	279	3	0	359	4	4	2	0	10	0	113	9	0	122	4	3	14	0	21	512
Total	291	1097	9	0	1397	14	13	9	0	36	4	457	37	0	498	20	7	61	0	88	2019
Grand Total	629	2683	34	0	3346	39	27	22	0	88	16	2539	103	0	2658	121	40	422	0	583	6675
Apprch %	18.8	80.2	1	0		44.3	30.7	25	0		0.6	95.5	3.9	0		20.8	6.9	72.4	0		
Total %	9.4	40.2	0.5	0	50.1	0.6	0.4	0.3	0	1.3	0.2	38	1.5	0	39.8	1.8	0.6	6.3	0	8.7	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 2



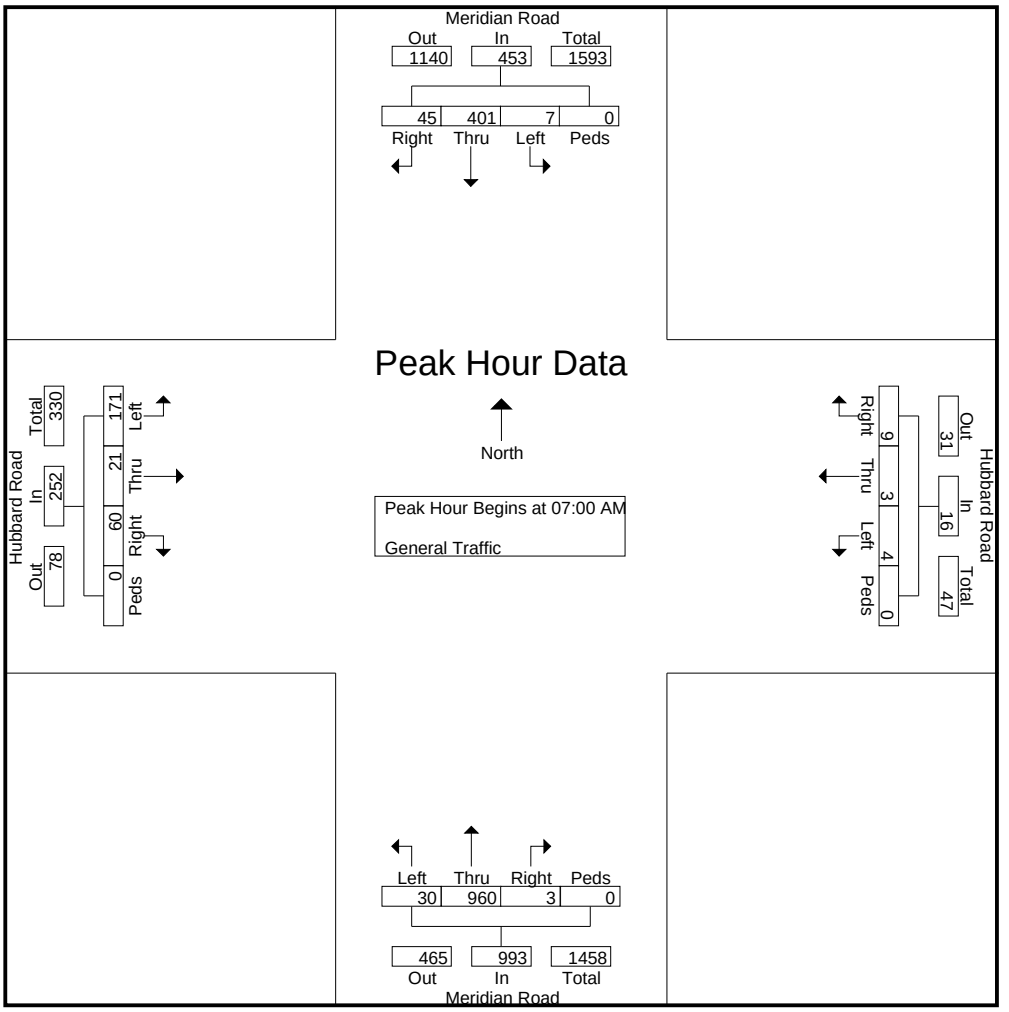
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 3

	Meridian Road From North					Hubbard Road From East					Meridian Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	11	66	**2**	0	79	1	0	0	0	1	0	261	2	0	263	7	4	45	0	56	399
07:15 AM	**15**	109	2	0	126	**4**	0	0	0	4	0	**280**	7	0	**287**	14	4	43	0	61	**478**
07:30 AM	11	**123**	2	0	**136**	3	**2**	**4**	0	**9**	**2**	216	7	0	225	**32**	4	37	0	**73**	443
07:45 AM	8	103	1	0	112	1	1	0	0	2	1	203	**14**	0	218	7	**9**	**46**	0	62	394
Total Volume	45	401	7	0	453	9	3	4	0	16	3	960	30	0	993	60	21	171	0	252	1714
% App. Total	9.9	88.5	1.5	0		56.2	18.8	25	0		0.3	96.7	3	0		23.8	8.3	67.9	0		
PHF	.750	.815	.875	.000	.833	.563	.375	.250	.000	.444	.375	.857	.536	.000	.865	.469	.583	.929	.000	.863	.896



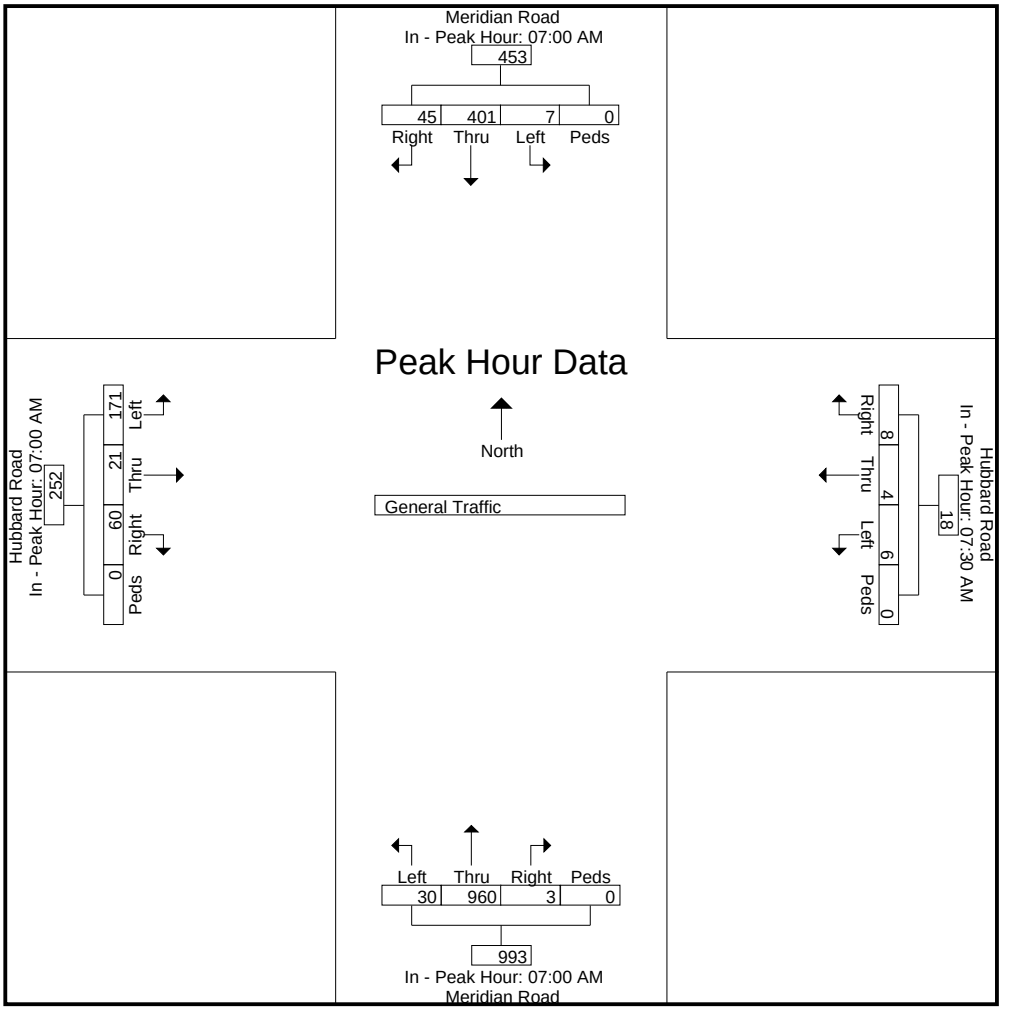
L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 4

	Meridian Road From North					Hubbard Road From East					Meridian Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00 AM					07:30 AM					07:00 AM					07:00 AM					
+0 mins.	11	66	**2**	0	79	3	**2**	**4**	0	**9**	0	261	2	0	263	7	4	45	0	56	
+15 mins.	**15**	109	2	0	126	1	1	0	0	2	0	**280**	7	0	**287**	14	4	43	0	61	
+30 mins.	11	**123**	2	0	**136**	0	0	1	0	1	**2**	216	7	0	225	**32**	4	37	0	**73**	
+45 mins.	8	103	1	0	112	**4**	1	1	0	6	1	203	**14**	0	218	7	**9**	**46**	0	62	
Total Volume	45	401	7	0	453	8	4	6	0	18	3	960	30	0	993	60	21	171	0	252	
% App. Total	9.9	88.5	1.5	0		44.4	22.2	33.3	0		0.3	96.7	3	0		23.8	8.3	67.9	0		
PHF	.750	.815	.875	.000	.833	.500	.500	.375	.000	.500	.375	.857	.536	.000	.865	.469	.583	.929	.000	.863	



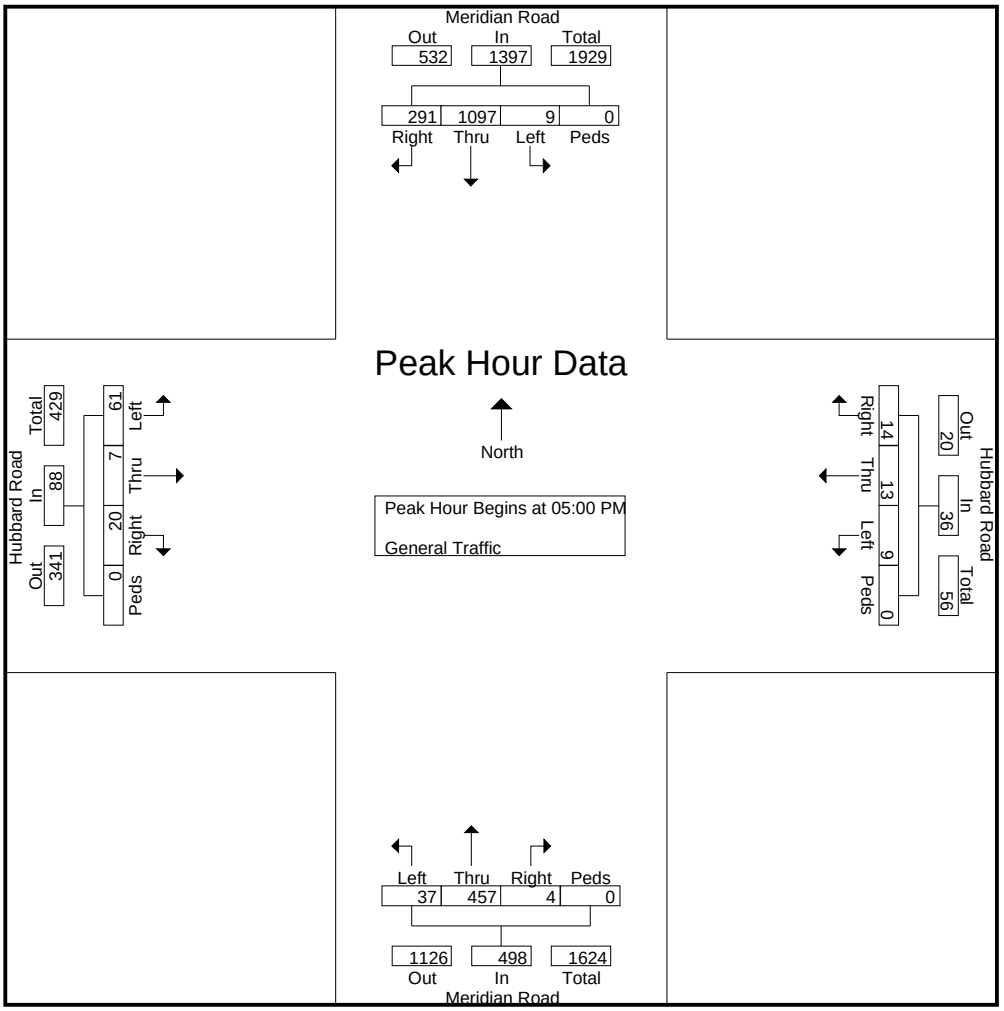
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 5

	Meridian Road From North					Hubbard Road From East					Meridian Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	61	254	2	0	317	**6**	1	3	0	10	1	**117**	8	0	126	6	2	**20**	0	**28**	481
05:15 PM	**81**	271	0	0	352	3	**5**	**4**	0	**12**	**2**	116	**12**	0	**130**	2	0	12	0	14	508
05:30 PM	72	**293**	**4**	0	**369**	1	3	0	0	4	1	111	8	0	120	**8**	2	15	0	25	**518**
05:45 PM	77	279	3	0	359	4	4	2	0	10	0	113	9	0	122	4	**3**	14	0	21	512
Total Volume	291	1097	9	0	1397	14	13	9	0	36	4	457	37	0	498	20	7	61	0	88	2019
% App. Total	20.8	78.5	0.6	0		38.9	36.1	25	0		0.8	91.8	7.4	0		22.7	8	69.3	0		
PHF	.898	.936	.563	.000	.946	.583	.650	.563	.000	.750	.500	.976	.771	.000	.958	.625	.583	.763	.000	.786	.974



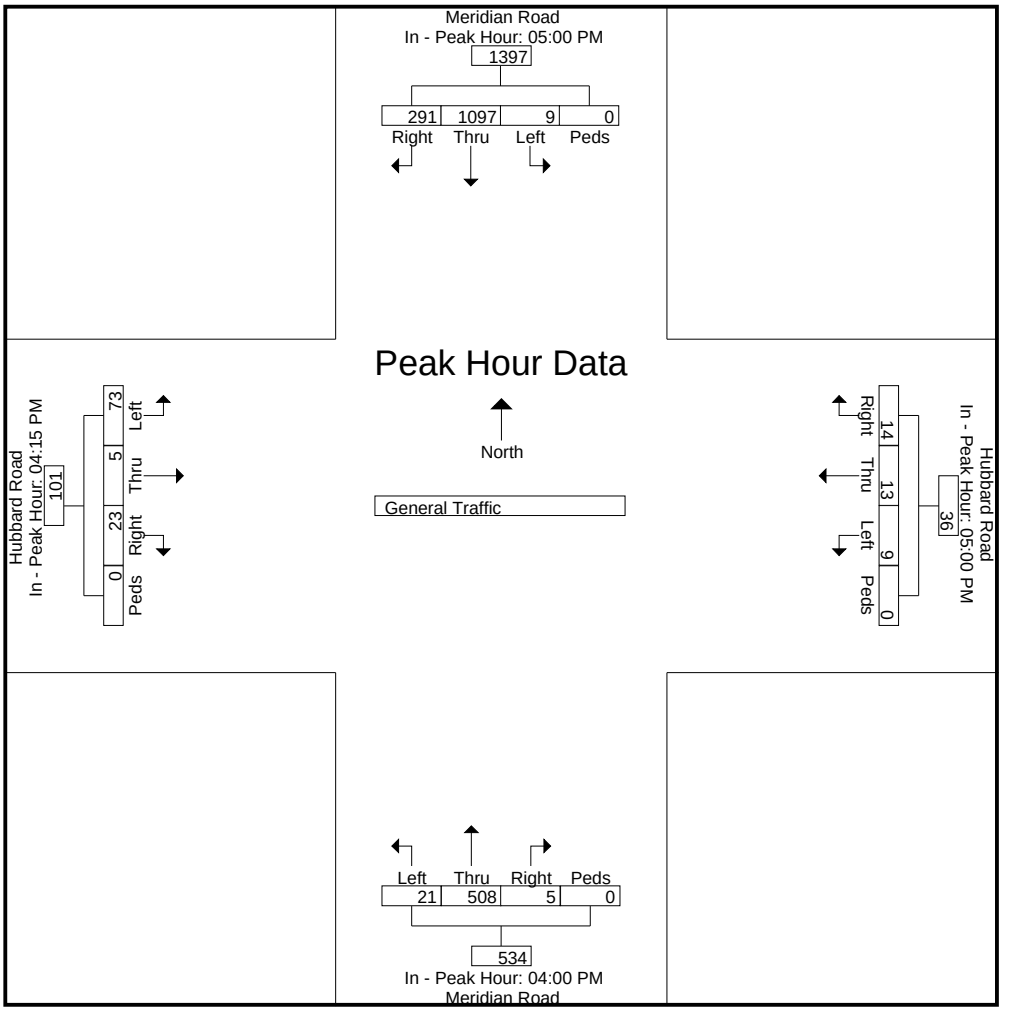
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 6

	Meridian Road From North					Hubbard Road From East					Meridian Road From South					Hubbard Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					04:00 PM					04:15 PM					
+0 mins.	61	254	2	0	317	**6**	1	3	0	10	1	128	**9**	0	138	5	1	**22**	0	**28**	
+15 mins.	**81**	271	0	0	352	3	**5**	**4**	0	**12**	1	120	1	0	122	3	1	15	0	19	
+30 mins.	72	**293**	**4**	0	**369**	1	3	0	0	4	1	**146**	7	0	**154**	**9**	1	16	0	26	
+45 mins.	77	279	3	0	359	4	4	2	0	10	**2**	114	4	0	120	6	**2**	20	0	28	
Total Volume	291	1097	9	0	1397	14	13	9	0	36	5	508	21	0	534	23	5	73	0	101	
% App. Total	20.8	78.5	0.6	0		38.9	36.1	25	0		0.9	95.1	3.9	0		22.8	5	72.3	0		
PHF	.898	.936	.563	.000	.946	.583	.650	.563	.000	.750	.625	.870	.583	.000	.867	.639	.625	.830	.000	.902	



L2 Data Collection

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Study: THOM0136
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Hubbard Rd
Site Code :
Start Date : 1/23/2018
Page No : 7

Image 1



L2 Data Collection

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Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Locust Grove Rd b Hubbard Rd & Deer Flat Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Locust Grove between Hubbard & Deer Flat
Kuna, Idaho

Start Time	23-Jan-18 Tue	SB	NB							Total
12:00 AM		*	*							*
12:15		*	*							*
12:30		*	*							*
12:45		*	*							*
01:00		*	*							*
01:15		*	*							*
01:30		*	*							*
01:45		*	*							*
02:00		1	0							1
02:15		0	0							0
02:30		0	0							0
02:45		0	0							0
03:00		1	0							1
03:15		0	0							0
03:30		0	0							0
03:45		0	0							0
04:00		0	0							0
04:15		1	0							1
04:30		0	1							1
04:45		1	0							1
05:00		0	0							0
05:15		3	4							7
05:30		2	3							5
05:45		1	1							2
06:00		0	2							2
06:15		0	4							4
06:30		2	4							6
06:45		**3**	2							5
07:00		**5**	6							**11**
07:15		**2**	**4**							**6**
07:30		**6**	**10**							**16**
07:45		2	**5**							**7**
08:00		1	**8**							9
08:15		0	2							2
08:30		2	2							4
08:45		8	5							13
09:00		1	1							2
09:15		2	3							5
09:30		2	7							9
09:45		6	3							9
10:00		2	3							5
10:15		1	2							3
10:30		3	2							5
10:45		3	4							7
11:00		1	9							10
11:15		3	2							5
11:30		6	6							12
11:45		4	1							5
Total		75	106							181
Percent		41.4%	58.6%							
Peak	-	06:45	07:15	-	-	-	-	-	-	07:00
Vol.	-	16	27	-	-	-	-	-	-	40
P.H.F.		0.667	0.675							0.625

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Locust Grove Rd b Hubbard Rd & Deer Flat Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Locust Grove between Hubbard & Deer Flat
Kuna, Idaho

Start Time	23-Jan-18 Tue	SB	NB	Total
12:00 PM		6	2	8
12:15		4	8	12
12:30		5	2	7
12:45		6	2	8
01:00		3	0	3
01:15		4	5	9
01:30		4	4	8
01:45		2	0	2
02:00		5	2	7
02:15		6	2	8
02:30		6	4	10
02:45		10	4	14
03:00		2	4	6
03:15		3	3	6
03:30		11	**9**	20
03:45		11	**6**	17
04:00		9	**6**	15
04:15		10	**5**	15
04:30		9	1	10
04:45		**18**	4	**22**
05:00		**16**	2	**18**
05:15		**14**	6	**20**
05:30		**11**	4	**15**
05:45		9	2	11
06:00		12	3	15
06:15		5	2	7
06:30		6	2	8
06:45		3	2	5
07:00		8	2	10
07:15		4	1	5
07:30		1	2	3
07:45		3	2	5
08:00		2	3	5
08:15		1	2	3
08:30		2	1	3
08:45		2	0	2
09:00		2	3	5
09:15		1	3	4
09:30		2	1	3
09:45		0	0	0
10:00		1	0	1
10:15		1	0	1
10:30		0	1	1
10:45		0	0	0
11:00		1	0	1
11:15		0	0	0
11:30		0	0	0
11:45		0	0	0
Total		241	117	358
Percent		67.3%	32.7%	
Peak	-	16:45	15:30	16:45
Vol.	-	59	26	75
P.H.F.		0.819	0.722	0.852

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Locust Grove Rd b Hubbard Rd & Deer Flat Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Locust Grove between Hubbard & Deer Flat
Kuna, Idaho

Start Time	24-Jan-18 Wed	SB	NB	Total
12:00 AM		1	0	1
12:15		0	0	0
12:30		0	0	0
12:45		0	0	0
01:00		**1**	0	**1**
01:15		**0**	0	**0**
01:30		**0**	0	**0**
01:45		**1**	0	**1**
02:00		*	*	*
02:15		*	*	*
02:30		*	*	*
02:45		*	*	*
03:00		*	*	*
03:15		*	*	*
03:30		*	*	*
03:45		*	*	*
04:00		*	*	*
04:15		*	*	*
04:30		*	*	*
04:45		*	*	*
05:00		*	*	*
05:15		*	*	*
05:30		*	*	*
05:45		*	*	*
06:00		*	*	*
06:15		*	*	*
06:30		*	*	*
06:45		*	*	*
07:00		*	*	*
07:15		*	*	*
07:30		*	*	*
07:45		*	*	*
08:00		*	*	*
08:15		*	*	*
08:30		*	*	*
08:45		*	*	*
09:00		*	*	*
09:15		*	*	*
09:30		*	*	*
09:45		*	*	*
10:00		*	*	*
10:15		*	*	*
10:30		*	*	*
10:45		*	*	*
11:00		*	*	*
11:15		*	*	*
11:30		*	*	*
11:45		*	*	*
Total		3	0	3
Percent		100.0%	0.0%	
Peak	-	01:00	-	01:00
Vol.	-	2	-	2
P.H.F.		0.500		0.500
Grand Total		319	223	542
Percent		58.9%	41.1%	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Deer Flat Rd b Meridian Rd & Locust Grove Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Deer Flat between Meridian & Locust Grov
Kuna, Idaho

Start Time	23-Jan-18 Tue	WB	EB							Total
12:00 AM		*	*							*
12:15		*	*							*
12:30		*	*							*
12:45		*	*							*
01:00		*	*							*
01:15		*	*							*
01:30		*	*							*
01:45		*	*							*
02:00		0	0							0
02:15		0	0							0
02:30		0	1							1
02:45		2	0							2
03:00		1	0							1
03:15		3	0							3
03:30		0	0							0
03:45		0	0							0
04:00		0	1							1
04:15		0	2							2
04:30		2	2							4
04:45		2	0							2
05:00		0	3							3
05:15		2	10							12
05:30		4	18							22
05:45		2	14							16
06:00		6	15							21
06:15		2	19							21
06:30		7	21							28
06:45		6	32							38
07:00		**20**	**34**							**54**
07:15		**24**	**40**							**64**
07:30		**27**	**32**							**59**
07:45		**17**	**34**							**51**
08:00		9	23							32
08:15		4	14							18
08:30		1	9							10
08:45		12	7							19
09:00		6	6							12
09:15		8	11							19
09:30		6	10							16
09:45		8	10							18
10:00		11	9							20
10:15		6	5							11
10:30		12	11							23
10:45		7	2							9
11:00		6	19							25
11:15		8	2							10
11:30		14	12							26
11:45		18	8							26
Total		263	436							699
Percent		37.6%	62.4%							
Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	88	140	-	-	-	-	-	-	228
P.H.F.		0.815	0.875							0.891

L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Deer Flat Rd b Meridian Rd & Locust Grove Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Deer Flat between Meridian & Locust Grov
Kuna, Idaho

Start Time	23-Jan-18 Tue	WB	EB							Total
12:00 PM		6	10							16
12:15		10	15							25
12:30		6	11							17
12:45		10	8							18
01:00		4	5							9
01:15		16	10							26
01:30		10	8							18
01:45		11	8							19
02:00		12	11							23
02:15		14	4							18
02:30		15	13							28
02:45		9	**12**							21
03:00		14	**13**							27
03:15		12	**19**							31
03:30		16	**28**							44
03:45		15	12							27
04:00		30	8							38
04:15		34	5							39
04:30		35	7							42
04:45		**47**	10							**57**
05:00		**53**	12							**65**
05:15		**51**	16							**67**
05:30		**61**	17							**78**
05:45		39	13							52
06:00		24	12							36
06:15		20	4							24
06:30		12	6							18
06:45		20	5							25
07:00		11	4							15
07:15		3	7							10
07:30		6	3							9
07:45		5	5							10
08:00		1	6							7
08:15		2	4							6
08:30		5	3							8
08:45		5	5							10
09:00		3	14							17
09:15		3	8							11
09:30		3	4							7
09:45		1	2							3
10:00		2	5							7
10:15		1	0							1
10:30		1	6							7
10:45		2	0							2
11:00		1	0							1
11:15		0	1							1
11:30		0	2							2
11:45		2	1							3
Total		663	382							1045
Percent		63.4%	36.6%							
Peak	-	16:45	14:45	-	-	-	-	-	-	16:45
Vol.	-	212	72	-	-	-	-	-	-	267
P.H.F.		0.869	0.643							0.856

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: THOM0136
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Deer Flat Rd b Meridian Rd & Locust Grove Rd VOL
Date Start: 23-Jan-18
Date End: 24-Jan-18
Deer Flat between Meridian & Locust Grov
Kuna, Idaho

Start Time	24-Jan-18 Wed	WB	EB							Total
12:00 AM		1	0							1
12:15		0	0							0
12:30		0	0							0
12:45		0	0							0
01:00		**1**	**1**							**2**
01:15		**0**	**0**							**0**
01:30		**0**	**0**							**0**
01:45		**2**	**1**							**3**
02:00		*	*							*
02:15		*	*							*
02:30		*	*							*
02:45		*	*							*
03:00		*	*							*
03:15		*	*							*
03:30		*	*							*
03:45		*	*							*
04:00		*	*							*
04:15		*	*							*
04:30		*	*							*
04:45		*	*							*
05:00		*	*							*
05:15		*	*							*
05:30		*	*							*
05:45		*	*							*
06:00		*	*							*
06:15		*	*							*
06:30		*	*							*
06:45		*	*							*
07:00		*	*							*
07:15		*	*							*
07:30		*	*							*
07:45		*	*							*
08:00		*	*							*
08:15		*	*							*
08:30		*	*							*
08:45		*	*							*
09:00		*	*							*
09:15		*	*							*
09:30		*	*							*
09:45		*	*							*
10:00		*	*							*
10:15		*	*							*
10:30		*	*							*
10:45		*	*							*
11:00		*	*							*
11:15		*	*							*
11:30		*	*							*
11:45		*	*							*
Total		4	2							6
Percent		66.7%	33.3%							
Peak	-	01:00	01:00	-	-	-	-	-	-	01:00
Vol.	-	3	2	-	-	-	-	-	-	5
P.H.F.		0.375	0.500							0.417
Grand Total		930	820							1750
Percent		53.1%	46.9%							

ITD-2658 7-99

SAFETY EVALUATION

I. PROJECT DATA

	DISTRICT	ROUTE	SEG CODE	B.M.P.	E.M.P.	LENGTH	AADT	TYPE RDWY
EXIST. RDWY	3	SH 69	2150	3.12	3.12	SPOT	15.552	72

		PROPOSED IMPROVEMENT			
			COST (1000)		
LOCATION	Deer Flat Rd and Meridian Rd Intersection	LIFE	CONST	R/W	TOTAL
IMPROVEMENT					

II. ACCIDENT SUMMARY - SIGNIFICANCE

MO.	YR.	TOTAL	FATAL	INJURY	I + F	PDO	SV	MV	WET	DRY		
12	2012	3	0	1	1	2						
12	2013	3	0	3	3	0						
12	2014	4	0	2	2	2						
12	2015	4	0	2	2	2						
12	2016	3	0	2	2	1						
TOTAL------		17	0	10	10	7	0	0	0	0	0	0

AVE. SEVERITY % FOR THIS ROAD TYPE--------	18.8	81.2
EXPECTED I+F AND PDO ACCIDENTS----------	3.2	13.8
DIFFERENCE (DEVIATION FROM EXPECTED)---	6.8	
STATISTICALLY SIGNIFICANT?----------	YES(+)	
CONFIDENCE LEVEL----------	95%	

- (●) SPOT INTERSECTION (INCLUDE X STREET)
- ( ) SPOT NON-INTERSECTION
- ( ) SEGMENT (ALL ACCIDENTS)

III. TRAFFIC DATA

1	2	3	4	5	6	7	8	9	10	11	12
AADT (1000)					TOTAL NO. OF			TOTAL TRAVEL			
			CROSS STREET	VCF (3÷1)			ACC/YR	MV/YR	MVM/YR	ACC/MV	ACC/MVM
PRES.	FUT.	AVE.			YEARS	ACC.	(7 ÷ 6)	.365(1+4)	(9 x MI.)	(8 ÷ 9)	(8 ÷ 10)
15.6			6.946	###	5	17	3.40	8.21	-	0.41	-

IV. REDUCTION FACTOR

1	2	3	4	5	6
		BASE RATE	EXPECTED	D.R.	CALC.
ACC/MVM	R.F.	ACC/MV(M)	ACC/MV(M)	MV(M)	R.F.
				1-(>3 OR 4)	(5 ÷ 1)
0.41	*	0.56	*	*	*

V. SAFETY INDEX CALCULATION (METHOD I)

1	2		3	4								
	ACC.		BEFORE ACC. COST ($1000)									
	TYPE	NO.	COST	TOTAL	5	6	7	8	9	10	11	
	I+F											
	PDO				$/ACC.	ACC./YR	VCF	LIFE	1.00-CRF	$ BEFORE	$ AFTER	
YES(+)												
YES(-)												
NO												

SAFETY INDEX = (BOX 10 - BOX 11) ÷ TOTAL COST =		÷	=
ANNUAL SAFETY BENEFIT = (BOX 10 - BOX 11) ÷ (BOX 8) =		÷	=

COMPUTED BY: Chhang Ream DATE: 03/01/18 PROJECT NO.: _____

CHECKED BY: _____ DATE: _____ KEY NUMBER: _____

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2018 Existing
AM Peak

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	14	3	0	1	2	0	18	4	0	15	1
Future Vol, veh/h	7	14	3	0	1	2	0	18	4	0	15	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	22	5	0	2	3	0	28	6	0	23	2

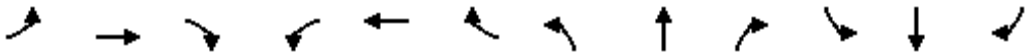
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	27	0	0	63	52	25	68	53	4
Stage 1	-	-	-	-	-	-	47	47	-	4	4	-
Stage 2	-	-	-	-	-	-	16	5	-	64	49	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1587	-	-	932	839	1051	925	838	1080
Stage 1	-	-	-	-	-	-	967	856	-	1018	892	-
Stage 2	-	-	-	-	-	-	1004	892	-	947	854	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1587	-	-	906	833	1051	892	832	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	906	833	-	892	832	-
Stage 1	-	-	-	-	-	-	960	850	-	1011	892	-
Stage 2	-	-	-	-	-	-	977	892	-	904	848	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0	9.3	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	866	1616	-	-	1587	-	-	844
HCM Lane V/C Ratio	0.039	0.007	-	-	-	-	-	0.029
HCM Control Delay (s)	9.3	7.2	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2018 Existing
AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	443	125	30	2	65	9	69	558	19	6	180	270
Future Volume (vph)	443	125	30	2	65	9	69	558	19	6	180	270
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.98		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1676	1713		1676	1732		1676	3336		1676	3051	
Flt Permitted	0.47	1.00		0.65	1.00		0.36	1.00		0.37	1.00	
Satd. Flow (perm)	831	1713		1147	1732		627	3336		651	3051	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	487	137	33	2	71	10	76	613	21	7	198	297
RTOR Reduction (vph)	0	6	0	0	4	0	0	1	0	0	155	0
Lane Group Flow (vph)	487	164	0	2	77	0	76	633	0	7	340	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	49.8	42.8		13.1	12.1		55.2	48.5		44.6	43.2	
Effective Green, g (s)	49.8	42.8		13.1	12.1		55.2	48.5		44.6	43.2	
Actuated g/C Ratio	0.42	0.36		0.11	0.10		0.47	0.41		0.38	0.37	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	
Lane Grp Cap (vph)	579	622		132	178		353	1374		258	1119	
v/s Ratio Prot	c0.23	0.10		0.00	0.04		c0.01	c0.19		0.00	0.11	
v/s Ratio Perm	c0.13			0.00			0.09			0.01		
v/c Ratio	0.84	0.26		0.02	0.43		0.22	0.46		0.03	0.30	
Uniform Delay, d1	27.9	26.4		46.5	49.6		18.0	25.1		22.9	26.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.7	0.1		0.0	1.7		0.3	1.1		0.1	0.7	
Delay (s)	38.5	26.4		46.6	51.3		18.4	26.2		23.0	27.2	
Level of Service	D	C		D	D		B	C		C	C	
Approach Delay (s)		35.4			51.2			25.4			27.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	117.7	Sum of lost time (s)	24.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2018 Existing
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	443	125	30	2	65	9	69	558	19	6	180	270
Future Volume (veh/h)	443	125	30	2	65	9	69	558	19	6	180	270
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1800
Adj Flow Rate, veh/h	487	137	33	2	71	10	76	613	21	7	198	297
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	581	485	117	157	103	15	334	1333	46	296	618	553
Arrive On Green	0.29	0.35	0.35	0.00	0.07	0.07	0.04	0.40	0.40	0.01	0.37	0.37
Sat Flow, veh/h	1681	1375	331	1681	1514	213	1681	3308	113	1681	1676	1500
Grp Volume(v), veh/h	487	0	170	2	0	81	76	310	324	7	198	297
Grp Sat Flow(s),veh/h/ln	1681	0	1706	1681	0	1727	1681	1676	1745	1681	1676	1500
Q Serve(g_s), s	26.3	0.0	7.4	0.1	0.0	4.7	2.9	14.0	14.0	0.3	8.7	16.1
Cycle Q Clear(g_c), s	26.3	0.0	7.4	0.1	0.0	4.7	2.9	14.0	14.0	0.3	8.7	16.1
Prop In Lane	1.00		0.19	1.00		0.12	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	581	0	601	157	0	118	334	676	703	296	618	553
V/C Ratio(X)	0.84	0.00	0.28	0.01	0.00	0.69	0.23	0.46	0.46	0.02	0.32	0.54
Avail Cap(c_a), veh/h	768	0	961	397	0	536	506	676	703	526	618	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	24.0	44.5	0.0	46.9	20.0	22.5	22.5	20.6	23.3	25.6
Incr Delay (d2), s/veh	6.3	0.0	0.1	0.0	0.0	6.9	0.3	2.2	2.2	0.1	1.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.0	0.0	6.3	0.1	0.0	4.5	2.4	11.2	11.6	0.2	7.6	11.6
LnGrp Delay(d),s/veh	35.0	0.0	24.1	44.5	0.0	53.8	20.4	24.8	24.7	20.6	24.6	29.3
LnGrp LOS	C		C	D		D	C	C	C	C	C	C
Approach Vol, veh/h		657			83			710			502	
Approach Delay, s/veh		32.1			53.6			24.3			27.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.6	13.0	10.4	44.0	6.3	42.3	6.9	47.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	41.0	32.0	15.0	38.0	15.0	58.0	15.0	38.0
Max Q Clear Time (g_c+I1), s	28.3	6.7	4.9	18.1	2.1	9.4	2.3	16.0
Green Ext Time (p_c), s	1.3	0.3	0.1	1.6	0.0	0.6	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2018 Existing
AM Peak

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	124	0	0	65	2	4	6	1	2	1	13
Future Vol, veh/h	15	124	0	0	65	2	4	6	1	2	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	143	0	0	75	2	5	7	1	2	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	143	0	0	261	254	143	257	253	76
Stage 1	-	-	-	-	-	-	177	177	-	76	76	-
Stage 2	-	-	-	-	-	-	84	77	-	181	177	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1522	-	-	1440	-	-	692	650	905	696	650	985
Stage 1	-	-	-	-	-	-	825	753	-	933	832	-
Stage 2	-	-	-	-	-	-	924	831	-	821	753	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1522	-	-	1440	-	-	674	642	905	683	642	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	674	642	-	683	642	-
Stage 1	-	-	-	-	-	-	815	744	-	922	832	-
Stage 2	-	-	-	-	-	-	909	831	-	803	744	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	10.5	9.1
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1522	-	-	1440	-	-	905
HCM Lane V/C Ratio	0.019	0.011	-	-	-	-	-	0.02
HCM Control Delay (s)	10.5	7.4	0	-	0	-	-	9.1
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2018 Existing
PM Peak

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	6	1	9	12	0	5	16	2	1	47	3
Future Vol, veh/h	1	6	1	9	12	0	5	16	2	1	47	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	8	1	13	17	0	7	22	3	1	65	4

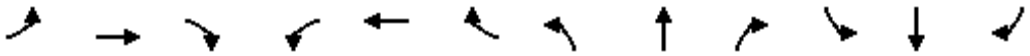
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	17	0	0	9	0	0	89	54	9	66	54	17
Stage 1	-	-	-	-	-	-	11	11	-	43	43	-
Stage 2	-	-	-	-	-	-	78	43	-	23	11	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1600	-	-	1611	-	-	896	837	1073	927	837	1062
Stage 1	-	-	-	-	-	-	1010	886	-	971	859	-
Stage 2	-	-	-	-	-	-	931	859	-	995	886	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1600	-	-	1611	-	-	833	829	1073	899	829	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	833	829	-	899	829	-
Stage 1	-	-	-	-	-	-	1009	885	-	970	852	-
Stage 2	-	-	-	-	-	-	849	852	-	967	885	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	3.1	9.4	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	847	1600	-	-	1611	-	-	841
HCM Lane V/C Ratio	0.038	0.001	-	-	0.008	-	-	0.084
HCM Control Delay (s)	9.4	7.3	0	-	7.3	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2018 Existing
PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	46	33	39	159	4	62	328	4	3	573	464
Future Volume (vph)	224	46	33	39	159	4	62	328	4	3	573	464
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	1.00		1.00	1.00		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1676	1654		1676	1759		1676	3347		1676	3128	
Flt Permitted	0.32	1.00		0.70	1.00		0.14	1.00		0.54	1.00	
Satd. Flow (perm)	556	1654		1240	1759		251	3347		950	3128	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	241	49	35	42	171	4	67	353	4	3	616	499
RTOR Reduction (vph)	0	17	0	0	1	0	0	0	0	0	83	0
Lane Group Flow (vph)	241	67	0	42	174	0	67	357	0	3	1032	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	42.0	29.7		24.2	17.9		76.7	70.3		66.7	65.3	
Effective Green, g (s)	42.0	29.7		24.2	17.9		76.7	70.3		66.7	65.3	
Actuated g/C Ratio	0.32	0.23		0.18	0.14		0.58	0.53		0.51	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	
Lane Grp Cap (vph)	331	372		248	239		215	1786		488	1550	
v/s Ratio Prot	c0.10	0.04		0.01	0.10		c0.02	0.11		0.00	c0.33	
v/s Ratio Perm	c0.13			0.02			0.17			0.00		
v/c Ratio	0.73	0.18		0.17	0.73		0.31	0.20		0.01	0.67	
Uniform Delay, d1	36.4	41.2		45.0	54.6		16.3	16.0		16.1	25.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.8	0.1		0.3	10.6		0.8	0.3		0.0	2.3	
Delay (s)	44.2	41.3		45.3	65.1		17.1	16.3		16.1	27.3	
Level of Service	D	D		D	E		B	B		B	C	
Approach Delay (s)		43.4			61.3			16.4			27.2	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	131.7	Sum of lost time (s)	24.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2018 Existing
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	46	33	39	159	4	62	328	4	3	573	464
Future Volume (veh/h)	224	46	33	39	159	4	62	328	4	3	573	464
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1800
Adj Flow Rate, veh/h	241	49	35	42	171	4	67	353	4	3	616	499
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	219	156	268	205	5	242	1827	21	561	891	720
Arrive On Green	0.14	0.23	0.23	0.03	0.12	0.12	0.04	0.54	0.54	0.00	0.51	0.51
Sat Flow, veh/h	1681	959	685	1681	1717	40	1681	3396	38	1681	1764	1425
Grp Volume(v), veh/h	241	0	84	42	0	175	67	174	183	3	585	530
Grp Sat Flow(s),veh/h/ln	1681	0	1644	1681	0	1758	1681	1676	1758	1681	1676	1513
Q Serve(g_s), s	14.6	0.0	5.0	2.6	0.0	11.8	2.3	6.5	6.5	0.1	32.1	32.2
Cycle Q Clear(g_c), s	14.6	0.0	5.0	2.6	0.0	11.8	2.3	6.5	6.5	0.1	32.1	32.2
Prop In Lane	1.00		0.42	1.00		0.02	1.00		0.02	1.00		0.94
Lane Grp Cap(c), veh/h	321	0	375	268	0	210	242	902	946	561	847	764
V/C Ratio(X)	0.75	0.00	0.22	0.16	0.00	0.83	0.28	0.19	0.19	0.01	0.69	0.69
Avail Cap(c_a), veh/h	378	0	476	424	0	422	388	902	946	763	847	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	37.9	44.7	0.0	52.0	18.1	14.4	14.4	14.6	22.7	22.8
Incr Delay (d2), s/veh	6.8	0.0	0.1	0.3	0.0	8.4	0.6	0.5	0.5	0.0	4.6	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.8	0.0	4.1	2.2	0.0	10.3	2.0	5.6	5.9	0.1	22.4	20.7
LnGrp Delay(d),s/veh	44.8	0.0	38.0	45.0	0.0	60.4	18.8	14.9	14.8	14.6	27.3	27.9
LnGrp LOS	D		D	D		E	B	B	B	B	C	C
Approach Vol, veh/h		325			217			424			1118	
Approach Delay, s/veh		43.0			57.4			15.5			27.6	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	20.4	10.5	67.0	9.8	33.5	6.5	71.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	21.0	29.0	15.0	61.0	15.0	35.0	15.0	61.0
Max Q Clear Time (g_c+I1), s	16.6	13.8	4.3	34.2	4.6	7.0	2.1	8.5
Green Ext Time (p_c), s	0.3	0.6	0.1	4.3	0.0	0.2	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2018 Existing
PM Peak

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	43	2	0	174	3	0	7	1	3	17	38
Future Vol, veh/h	6	43	2	0	174	3	0	7	1	3	17	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	48	2	0	196	3	0	8	1	3	19	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	199	0	0	50	0	0	292	262	49	266	262	198
Stage 1	-	-	-	-	-	-	63	63	-	198	198	-
Stage 2	-	-	-	-	-	-	229	199	-	68	64	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1373	-	-	1557	-	-	660	643	1020	687	643	843
Stage 1	-	-	-	-	-	-	948	842	-	804	737	-
Stage 2	-	-	-	-	-	-	774	736	-	942	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1373	-	-	1557	-	-	610	640	1020	677	640	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	610	640	-	677	640	-
Stage 1	-	-	-	-	-	-	943	838	-	800	737	-
Stage 2	-	-	-	-	-	-	716	736	-	927	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	10.4	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1373	-	-	1557	-	-	762
HCM Lane V/C Ratio	0.013	0.005	-	-	-	-	-	0.086
HCM Control Delay (s)	10.4	7.6	0	-	0	-	-	10.2
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2025 Background
AM Peak

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	16	3	0	1	2	0	35	4	0	27	6
Future Vol, veh/h	13	16	3	0	1	2	0	35	4	0	27	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	25	5	0	2	3	0	54	6	0	42	9

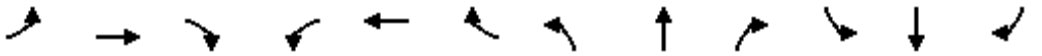
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	30	0	0	97	73	28	102	74	4
Stage 1	-	-	-	-	-	-	68	68	-	4	4	-
Stage 2	-	-	-	-	-	-	29	5	-	98	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1583	-	-	885	817	1047	879	816	1080
Stage 1	-	-	-	-	-	-	942	838	-	1018	892	-
Stage 2	-	-	-	-	-	-	988	892	-	908	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1583	-	-	835	806	1047	821	805	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	835	806	-	821	805	-
Stage 1	-	-	-	-	-	-	930	827	-	1005	892	-
Stage 2	-	-	-	-	-	-	934	892	-	833	826	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0	9.7	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	825	1616	-	-	1583	-	-	844
HCM Lane V/C Ratio	0.073	0.012	-	-	-	-	-	0.06
HCM Control Delay (s)	9.7	7.3	0	-	0	-	-	9.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2025 Background
AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	524	158	51	25	88	38	97	722	23	35	324	313
Future Volume (vph)	524	158	51	25	88	38	97	722	23	35	324	313
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1676	1700		1676	1685		1676	3338		1676	3353	1500
Flt Permitted	0.40	1.00		0.62	1.00		0.45	1.00		0.19	1.00	1.00
Satd. Flow (perm)	701	1700		1086	1685		792	3338		338	3353	1500
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	576	174	56	27	97	42	107	793	25	38	356	344
RTOR Reduction (vph)	0	7	0	0	11	0	0	1	0	0	0	136
Lane Group Flow (vph)	576	223	0	27	128	0	107	817	0	38	356	208
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	61.7	51.6		21.7	17.6		55.2	44.7		49.2	41.7	79.8
Effective Green, g (s)	61.7	51.6		21.7	17.6		55.2	44.7		49.2	41.7	79.8
Actuated g/C Ratio	0.47	0.39		0.16	0.13		0.42	0.34		0.37	0.32	0.61
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	3.0
Lane Grp Cap (vph)	609	665		197	224		401	1131		202	1060	975
v/s Ratio Prot	c0.27	0.13		0.00	0.08		c0.02	c0.24		0.01	0.11	0.06
v/s Ratio Perm	c0.17			0.02			0.09			0.06		0.08
v/c Ratio	0.95	0.33		0.14	0.57		0.27	0.72		0.19	0.34	0.21
Uniform Delay, d1	29.1	28.1		46.8	53.6		24.1	38.2		27.9	34.5	11.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	23.7	0.1		0.3	3.5		0.4	4.0		0.9	0.9	0.1
Delay (s)	52.8	28.2		47.1	57.1		24.4	42.2		28.8	35.4	11.9
Level of Service	D	C		D	E		C	D		C	D	B
Approach Delay (s)		45.8			55.5			40.1			24.1	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	131.9	Sum of lost time (s)	24.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2025 Background
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	524	158	51	25	88	38	97	722	23	35	324	313
Future Volume (veh/h)	524	158	51	25	88	38	97	722	23	35	324	313
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1765
Adj Flow Rate, veh/h	576	174	56	27	97	42	107	793	25	38	356	344
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	504	162	217	119	52	340	1179	37	211	1098	966
Arrive On Green	0.32	0.39	0.39	0.02	0.10	0.10	0.06	0.36	0.36	0.03	0.33	0.33
Sat Flow, veh/h	1681	1280	412	1681	1169	506	1681	3318	105	1681	3353	1500
Grp Volume(v), veh/h	576	0	230	27	0	139	107	401	417	38	356	344
Grp Sat Flow(s),veh/h/ln	1681	0	1692	1681	0	1675	1681	1676	1746	1681	1676	1500
Q Serve(g_s), s	36.0	0.0	11.6	1.7	0.0	9.9	5.1	24.7	24.7	1.8	9.8	12.9
Cycle Q Clear(g_c), s	36.0	0.0	11.6	1.7	0.0	9.9	5.1	24.7	24.7	1.8	9.8	12.9
Prop In Lane	1.00		0.24	1.00		0.30	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	617	0	666	217	0	171	340	596	621	211	1098	966
V/C Ratio(X)	0.93	0.00	0.35	0.12	0.00	0.81	0.31	0.67	0.67	0.18	0.32	0.36
Avail Cap(c_a), veh/h	649	0	776	382	0	411	449	596	621	367	1098	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	26.0	47.3	0.0	53.7	25.1	33.3	33.3	27.8	30.9	10.1
Incr Delay (d2), s/veh	20.3	0.0	0.1	0.3	0.0	8.9	0.5	6.0	5.7	0.9	0.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	27.5	0.0	9.3	1.5	0.0	8.7	4.3	18.2	18.8	1.6	8.1	9.5
LnGrp Delay(d),s/veh	50.7	0.0	26.1	47.6	0.0	62.6	25.6	39.3	39.1	28.7	31.7	11.1
LnGrp LOS	D		C	D		E	C	D	D	C	C	B
Approach Vol, veh/h		806			166			925			738	
Approach Delay, s/veh		43.7			60.2			37.6			21.9	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.6	18.5	13.0	46.0	9.0	54.1	9.6	49.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	41.0	30.0	15.0	40.0	15.0	56.0	15.0	40.0
Max Q Clear Time (g_c+I1), s	38.0	11.9	7.1	14.9	3.7	13.6	3.8	26.7
Green Ext Time (p_c), s	0.6	0.5	0.1	1.8	0.0	0.8	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	36.5
HCM 2010 LOS	D

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2025 Background
AM Peak

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	160	0	0	83	2	4	7	1	2	1	24
Future Vol, veh/h	32	160	0	0	83	2	4	7	1	2	1	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	184	0	0	95	2	5	8	1	2	1	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	184	0	0	369	355	184	359	354	96
Stage 1	-	-	-	-	-	-	258	258	-	96	96	-
Stage 2	-	-	-	-	-	-	111	97	-	263	258	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1496	-	-	1391	-	-	588	571	858	596	571	960
Stage 1	-	-	-	-	-	-	747	694	-	911	815	-
Stage 2	-	-	-	-	-	-	894	815	-	742	694	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1496	-	-	1391	-	-	558	555	858	576	555	960
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	555	-	576	555	-
Stage 1	-	-	-	-	-	-	726	675	-	885	815	-
Stage 2	-	-	-	-	-	-	867	815	-	712	675	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	11.4	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	573	1496	-	-	1391	-	-	892
HCM Lane V/C Ratio	0.024	0.025	-	-	-	-	-	0.035
HCM Control Delay (s)	11.4	7.5	0	-	0	-	-	9.2
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2025 Background
PM Peak

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	7	1	10	13	0	6	37	2	1	73	18
Future Vol, veh/h	6	7	1	10	13	0	6	37	2	1	73	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	10	1	14	18	0	8	51	3	1	101	25

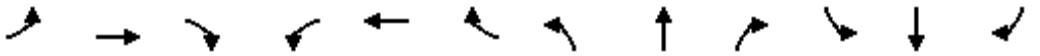
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	11	0	0	136	73	11	100	73	18
Stage 1	-	-	-	-	-	-	27	27	-	46	46	-
Stage 2	-	-	-	-	-	-	109	46	-	54	27	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1599	-	-	1608	-	-	835	817	1070	881	817	1061
Stage 1	-	-	-	-	-	-	990	873	-	968	857	-
Stage 2	-	-	-	-	-	-	896	857	-	958	873	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1608	-	-	729	806	1070	827	806	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	729	806	-	827	806	-
Stage 1	-	-	-	-	-	-	985	869	-	963	849	-
Stage 2	-	-	-	-	-	-	763	849	-	895	869	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	3.2	9.9	10
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	803	1599	-	-	1608	-	-	846
HCM Lane V/C Ratio	0.078	0.005	-	-	0.009	-	-	0.151
HCM Control Delay (s)	9.9	7.3	0	-	7.3	0	-	10
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.5

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2025 Background
PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	78	85	69	197	34	141	635	13	86	823	540
Future Volume (vph)	281	78	85	69	197	34	141	635	13	86	823	540
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.92		1.00	0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1676	1627		1676	1725		1676	3343		1676	3353	1500
Flt Permitted	0.27	1.00		0.65	1.00		0.17	1.00		0.27	1.00	1.00
Satd. Flow (perm)	478	1627		1141	1725		296	3343		470	3353	1500
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	302	84	91	74	212	37	152	683	14	92	885	581
RTOR Reduction (vph)	0	26	0	0	4	0	0	1	0	0	0	151
Lane Group Flow (vph)	302	149	0	74	245	0	152	696	0	92	885	430
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	53.9	40.3		32.8	25.2		60.7	49.0		60.3	48.8	71.5
Effective Green, g (s)	53.9	40.3		32.8	25.2		60.7	49.0		60.3	48.8	71.5
Actuated g/C Ratio	0.41	0.30		0.25	0.19		0.46	0.37		0.46	0.37	0.54
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	3.0
Lane Grp Cap (vph)	399	495		313	328		257	1237		318	1235	878
v/s Ratio Prot	c0.13	0.09		0.01	0.14		c0.05	0.21		0.03	c0.26	0.08
v/s Ratio Perm	c0.18			0.04			0.22			0.11		0.20
v/c Ratio	0.76	0.30		0.24	0.75		0.59	0.56		0.29	0.72	0.49
Uniform Delay, d1	29.9	35.3		39.2	50.6		24.2	33.2		21.8	35.9	19.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.0	0.1		0.4	8.9		3.6	1.9		1.1	3.6	0.4
Delay (s)	37.9	35.4		39.6	59.5		27.8	35.0		22.8	39.5	19.5
Level of Service	D	D		D	E		C	D		C	D	B
Approach Delay (s)		37.0			55.0			33.7			31.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	24.0
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2025 Background
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	78	85	69	197	34	141	635	13	86	823	540
Future Volume (veh/h)	281	78	85	69	197	34	141	635	13	86	823	540
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1765
Adj Flow Rate, veh/h	302	84	91	74	212	37	152	683	14	92	885	581
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	219	237	343	244	43	244	1415	29	345	1338	845
Arrive On Green	0.16	0.28	0.28	0.05	0.17	0.17	0.07	0.42	0.42	0.05	0.40	0.40
Sat Flow, veh/h	1681	776	841	1681	1464	256	1681	3360	69	1681	3353	1500
Grp Volume(v), veh/h	302	0	175	74	0	249	152	341	356	92	885	581
Grp Sat Flow(s),veh/h/ln	1681	0	1616	1681	0	1720	1681	1676	1753	1681	1676	1500
Q Serve(g_s), s	17.2	0.0	10.5	4.3	0.0	17.0	6.3	17.8	17.8	3.8	25.9	33.2
Cycle Q Clear(g_c), s	17.2	0.0	10.5	4.3	0.0	17.0	6.3	17.8	17.8	3.8	25.9	33.2
Prop In Lane	1.00		0.52	1.00		0.15	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	365	0	456	343	0	286	244	706	738	345	1338	845
V/C Ratio(X)	0.83	0.00	0.38	0.22	0.00	0.87	0.62	0.48	0.48	0.27	0.66	0.69
Avail Cap(c_a), veh/h	480	0	645	470	0	500	336	706	738	473	1338	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	34.8	38.7	0.0	48.8	23.4	25.3	25.3	20.5	29.5	18.7
Incr Delay (d2), s/veh	8.9	0.0	0.2	0.3	0.0	8.0	2.6	2.4	2.3	0.9	2.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.7	0.0	8.2	3.6	0.0	13.6	5.6	13.5	14.0	3.3	18.2	21.0
LnGrp Delay(d),s/veh	42.0	0.0	35.0	39.0	0.0	56.8	26.0	27.6	27.5	21.4	32.1	23.2
LnGrp LOS	D		C	D		E	C	C	C	C	C	C
Approach Vol, veh/h		477			323			849			1558	
Approach Delay, s/veh		39.4			52.7			27.3			28.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.8	26.0	14.5	54.0	11.9	39.9	11.8	56.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	28.0	35.0	15.0	48.0	15.0	48.0	15.0	48.0
Max Q Clear Time (g_c+I1), s	19.2	19.0	8.3	35.2	6.3	12.5	5.8	19.8
Green Ext Time (p_c), s	0.6	1.1	0.2	3.9	0.1	0.6	0.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2025 Background
PM Peak

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	67	2	0	222	3	0	8	1	3	19	63
Future Vol, veh/h	26	67	2	0	222	3	0	8	1	3	19	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	75	2	0	249	3	0	9	1	3	21	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	252	0	0	77	0	0	431	386	76	390	386	251
Stage 1	-	-	-	-	-	-	134	134	-	251	251	-
Stage 2	-	-	-	-	-	-	297	252	-	139	135	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1313	-	-	1522	-	-	535	548	985	569	548	788
Stage 1	-	-	-	-	-	-	869	785	-	753	699	-
Stage 2	-	-	-	-	-	-	712	698	-	864	785	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1313	-	-	1522	-	-	464	535	985	551	535	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	464	535	-	551	535	-
Stage 1	-	-	-	-	-	-	849	767	-	736	699	-
Stage 2	-	-	-	-	-	-	628	698	-	833	767	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0	11.5	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	564	1313	-	-	1522	-	-	703
HCM Lane V/C Ratio	0.018	0.022	-	-	-	-	-	0.136
HCM Control Delay (s)	11.5	7.8	0	-	0	-	-	10.9
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2025 Total
AM Peak

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	16	3	1	1	2	0	42	7	0	29	6
Future Vol, veh/h	13	16	3	1	1	2	0	42	7	0	29	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	25	5	2	2	3	0	65	11	0	45	9

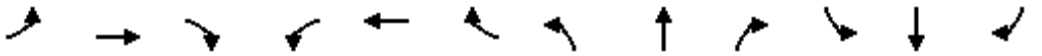
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	30	0	0	103	77	28	114	78	4
Stage 1	-	-	-	-	-	-	68	68	-	8	8	-
Stage 2	-	-	-	-	-	-	35	9	-	106	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1583	-	-	877	813	1047	863	812	1080
Stage 1	-	-	-	-	-	-	942	838	-	1013	889	-
Stage 2	-	-	-	-	-	-	981	888	-	900	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1583	-	-	824	802	1047	793	801	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	824	802	-	793	801	-
Stage 1	-	-	-	-	-	-	930	827	-	1000	888	-
Stage 2	-	-	-	-	-	-	923	887	-	810	826	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	1.8	9.8	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	830	1616	-	-	1583	-	-	838
HCM Lane V/C Ratio	0.091	0.012	-	-	0.001	-	-	0.064
HCM Control Delay (s)	9.8	7.3	0	-	7.3	0	-	9.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2025 Total
AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	524	160	51	39	95	68	97	722	28	46	324	313
Future Volume (vph)	524	160	51	39	95	68	97	722	28	46	324	313
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1676	1701		1676	1654		1676	3334		1676	3353	1500
Flt Permitted	0.32	1.00		0.61	1.00		0.45	1.00		0.17	1.00	1.00
Satd. Flow (perm)	568	1701		1084	1654		790	3334		303	3353	1500
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	576	176	56	43	104	75	107	793	31	51	356	344
RTOR Reduction (vph)	0	7	0	0	19	0	0	1	0	0	0	139
Lane Group Flow (vph)	576	225	0	43	160	0	107	823	0	51	356	205
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	64.4	52.5		25.2	19.3		54.0	43.3		49.0	40.8	79.9
Effective Green, g (s)	64.4	52.5		25.2	19.3		54.0	43.3		49.0	40.8	79.9
Actuated g/C Ratio	0.48	0.39		0.19	0.14		0.40	0.32		0.37	0.30	0.60
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	3.0
Lane Grp Cap (vph)	596	666		230	238		389	1078		194	1021	962
v/s Ratio Prot	c0.28	0.13		0.01	0.10		c0.02	c0.25		0.02	0.11	0.06
v/s Ratio Perm	c0.18			0.03			0.09			0.08		0.07
v/c Ratio	0.97	0.34		0.19	0.67		0.28	0.76		0.26	0.35	0.21
Uniform Delay, d1	29.0	28.5		45.3	54.3		25.7	40.7		29.4	36.2	12.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	28.3	0.1		0.4	7.3		0.4	5.1		1.5	0.9	0.1
Delay (s)	57.3	28.6		45.7	61.6		26.1	45.8		30.9	37.2	12.6
Level of Service	E	C		D	E		C	D		C	D	B
Approach Delay (s)		49.0			58.5			43.6			25.5	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	133.9	Sum of lost time (s)	24.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2025 Total
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	524	160	51	39	95	68	97	722	28	46	324	313
Future Volume (veh/h)	524	160	51	39	95	68	97	722	28	46	324	313
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1765
Adj Flow Rate, veh/h	576	176	56	43	104	75	107	793	31	51	356	344
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	602	521	166	257	122	88	327	1111	43	198	1048	932
Arrive On Green	0.31	0.41	0.41	0.03	0.13	0.13	0.06	0.34	0.34	0.03	0.31	0.31
Sat Flow, veh/h	1681	1284	409	1681	955	688	1681	3290	129	1681	3353	1500
Grp Volume(v), veh/h	576	0	232	43	0	179	107	404	420	51	356	344
Grp Sat Flow(s),veh/h/ln	1681	0	1693	1681	0	1643	1681	1676	1742	1681	1676	1500
Q Serve(g_s), s	35.6	0.0	11.8	2.8	0.0	13.3	5.3	26.2	26.2	2.6	10.2	14.1
Cycle Q Clear(g_c), s	35.6	0.0	11.8	2.8	0.0	13.3	5.3	26.2	26.2	2.6	10.2	14.1
Prop In Lane	1.00		0.24	1.00		0.42	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	602	0	686	257	0	211	327	566	588	198	1048	932
V/C Ratio(X)	0.96	0.00	0.34	0.17	0.00	0.85	0.33	0.71	0.71	0.26	0.34	0.37
Avail Cap(c_a), veh/h	650	0	774	406	0	395	432	566	588	344	1048	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	25.5	45.2	0.0	53.2	26.8	36.0	36.0	29.8	33.0	11.6
Incr Delay (d2), s/veh	24.2	0.0	0.1	0.3	0.0	9.2	0.6	7.5	7.2	1.5	0.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	27.8	0.0	9.3	2.3	0.0	10.8	4.5	19.3	19.9	2.3	8.4	10.1
LnGrp Delay(d),s/veh	53.9	0.0	25.6	45.5	0.0	62.4	27.4	43.5	43.3	31.3	33.8	12.7
LnGrp LOS	D		C	D		E	C	D	D	C	C	B
Approach Vol, veh/h		808			222			931			751	
Approach Delay, s/veh		45.8			59.1			41.6			24.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.5	22.0	13.3	45.0	9.9	56.6	10.1	48.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	42.0	30.0	15.0	39.0	15.0	57.0	15.0	39.0
Max Q Clear Time (g_c+I1), s	37.6	15.3	7.3	16.1	4.8	13.8	4.6	28.2
Green Ext Time (p_c), s	0.9	0.7	0.1	1.7	0.0	0.8	0.1	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2025 Total
AM Peak

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	42	167	0	0	85	2	4	7	1	2	1	27
Future Vol, veh/h	42	167	0	0	85	2	4	7	1	2	1	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	192	0	0	98	2	5	8	1	2	1	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	192	0	0	403	388	192	392	387	99
Stage 1	-	-	-	-	-	-	288	288	-	99	99	-
Stage 2	-	-	-	-	-	-	115	100	-	293	288	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1493	-	-	1381	-	-	558	547	850	567	547	957
Stage 1	-	-	-	-	-	-	720	674	-	907	813	-
Stage 2	-	-	-	-	-	-	890	812	-	715	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1493	-	-	1381	-	-	524	527	850	544	527	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	524	527	-	544	527	-
Stage 1	-	-	-	-	-	-	694	650	-	874	813	-
Stage 2	-	-	-	-	-	-	860	812	-	680	650	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	11.8	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	543	1493	-	-	1381	-	-	888
HCM Lane V/C Ratio	0.025	0.032	-	-	-	-	-	0.039
HCM Control Delay (s)	11.8	7.5	0	-	0	-	-	9.2
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

HCM 2010 TWSC
4: West Access & Deer Flat Rd

2025 Total
AM Peak

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	220	1	0	159	4	0
Future Vol, veh/h	220	1	0	159	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	244	1	0	177	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	245	0	422	245
Stage 1	-	-	-	-	245	-
Stage 2	-	-	-	-	177	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1321	-	588	794
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1321	-	588	794
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	854	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	588	-	-	1321	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	11.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 2010 TWSC
5: Deer Flat Rd & East Access

2025 Total
AM Peak

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	203	112	5	17	47
Future Vol, veh/h	17	203	112	5	17	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	226	124	6	19	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	130	0	-	0	391	127
Stage 1	-	-	-	-	127	-
Stage 2	-	-	-	-	264	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1455	-	-	-	613	923
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1455	-	-	-	604	923
Mov Cap-2 Maneuver	-	-	-	-	604	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	780	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1455	-	-	-	809
HCM Lane V/C Ratio	0.013	-	-	-	0.088
HCM Control Delay (s)	7.5	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

HCM 2010 TWSC
1: Locust Grove Rd & Hubbard Rd

2025 Total
PM Peak

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	7	1	14	13	0	6	41	4	1	81	18
Future Vol, veh/h	6	7	1	14	13	0	6	41	4	1	81	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	10	1	19	18	0	8	57	6	1	113	25

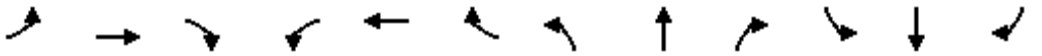
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	11	0	0	152	83	11	114	83	18
Stage 1	-	-	-	-	-	-	27	27	-	56	56	-
Stage 2	-	-	-	-	-	-	125	56	-	58	27	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1599	-	-	1608	-	-	815	807	1070	863	807	1061
Stage 1	-	-	-	-	-	-	990	873	-	956	848	-
Stage 2	-	-	-	-	-	-	879	848	-	954	873	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1608	-	-	700	793	1070	801	793	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	700	793	-	801	793	-
Stage 1	-	-	-	-	-	-	985	869	-	951	838	-
Stage 2	-	-	-	-	-	-	734	838	-	882	869	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	3.8	10	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	797	1599	-	-	1608	-	-	831
HCM Lane V/C Ratio	0.089	0.005	-	-	0.012	-	-	0.167
HCM Control Delay (s)	10	7.3	0	-	7.3	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.6

HCM 2000 Signalized Intersection Capacity Analysis
2: Meridian Rd & Deer Flat Rd

2025 Total
PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	86	85	78	201	56	141	635	28	119	823	540
Future Volume (vph)	281	86	85	78	201	56	141	635	28	119	823	540
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.93		1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1676	1633		1676	1707		1676	3332		1676	3353	1500
Flt Permitted	0.23	1.00		0.64	1.00		0.17	1.00		0.24	1.00	1.00
Satd. Flow (perm)	406	1633		1133	1707		299	3332		432	3353	1500
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	302	92	91	84	216	60	152	683	30	128	885	581
RTOR Reduction (vph)	0	25	0	0	7	0	0	2	0	0	0	153
Lane Group Flow (vph)	302	158	0	84	269	0	152	711	0	128	885	428
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	54.3	38.7		35.3	25.7		59.3	47.5		61.1	48.4	71.0
Effective Green, g (s)	54.3	38.7		35.3	25.7		59.3	47.5		61.1	48.4	71.0
Actuated g/C Ratio	0.41	0.29		0.27	0.19		0.45	0.36		0.46	0.37	0.54
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	2.0		3.0	3.0		3.0	2.0		5.0	2.0	3.0
Lane Grp Cap (vph)	383	476		341	331		256	1194		318	1224	871
v/s Ratio Prot	c0.13	0.10		0.02	0.16		c0.05	0.21		0.04	c0.26	0.08
v/s Ratio Perm	c0.19			0.05			0.21			0.15		0.20
v/c Ratio	0.79	0.33		0.25	0.81		0.59	0.60		0.40	0.72	0.49
Uniform Delay, d1	30.1	36.8		37.5	51.1		24.8	34.7		22.2	36.3	19.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	10.3	0.2		0.4	14.0		3.7	2.2		1.7	3.7	0.4
Delay (s)	40.4	36.9		37.9	65.1		28.5	36.9		24.0	40.0	19.8
Level of Service	D	D		D	E		C	D		C	D	B
Approach Delay (s)		39.1			58.8			35.4			31.4	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary
2: Meridian Rd & Deer Flat Rd

2025 Total
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	86	85	78	201	56	141	635	28	119	823	540
Future Volume (veh/h)	281	86	85	78	201	56	141	635	28	119	823	540
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1765	1765	1800	1765	1765	1800	1765	1765	1800	1765	1765	1765
Adj Flow Rate, veh/h	302	92	91	84	216	60	152	683	30	128	885	581
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	358	238	235	370	245	68	239	1288	57	338	1295	821
Arrive On Green	0.16	0.29	0.29	0.05	0.18	0.18	0.07	0.39	0.39	0.06	0.39	0.39
Sat Flow, veh/h	1681	816	807	1681	1330	369	1681	3272	144	1681	3353	1500
Grp Volume(v), veh/h	302	0	183	84	0	276	152	350	363	128	885	581
Grp Sat Flow(s),veh/h/ln	1681	0	1622	1681	0	1700	1681	1676	1739	1681	1676	1500
Q Serve(g_s), s	17.0	0.0	11.0	4.9	0.0	19.3	6.6	19.5	19.5	5.5	26.8	34.8
Cycle Q Clear(g_c), s	17.0	0.0	11.0	4.9	0.0	19.3	6.6	19.5	19.5	5.5	26.8	34.8
Prop In Lane	1.00		0.50	1.00		0.22	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	358	0	473	370	0	313	239	660	685	338	1295	821
V/C Ratio(X)	0.84	0.00	0.39	0.23	0.00	0.88	0.64	0.53	0.53	0.38	0.68	0.71
Avail Cap(c_a), veh/h	474	0	653	487	0	503	326	660	685	438	1295	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	34.4	37.2	0.0	48.4	24.8	28.3	28.3	21.6	31.2	20.4
Incr Delay (d2), s/veh	10.1	0.0	0.2	0.3	0.0	10.5	2.8	3.0	2.9	1.5	2.9	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.7	0.0	8.6	4.1	0.0	15.1	5.7	14.5	15.1	4.8	18.8	22.0
LnGrp Delay(d),s/veh	42.6	0.0	34.6	37.5	0.0	58.8	27.6	31.3	31.2	23.1	34.1	25.5
LnGrp LOS	D		C	D		E	C	C	C	C	C	C
Approach Vol, veh/h		485			360			865			1594	
Approach Delay, s/veh		39.6			53.9			30.6			30.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	28.4	14.7	53.0	12.6	41.5	13.8	53.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	28.0	36.0	15.0	47.0	15.0	49.0	15.0	47.0
Max Q Clear Time (g_c+I1), s	19.0	21.3	8.6	36.8	6.9	13.0	7.5	21.5
Green Ext Time (p_c), s	0.6	1.2	0.2	3.6	0.1	0.6	0.4	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

HCM 2010 TWSC
3: Logust Grove Rd/Locust Grove Rd & Deer Flat Rd

2025 Total
PM Peak

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	71	2	0	230	3	0	8	1	3	19	75
Future Vol, veh/h	32	71	2	0	230	3	0	8	1	3	19	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	80	2	0	258	3	0	9	1	3	21	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	82	0	0	465	414	81	418	414	260
Stage 1	-	-	-	-	-	-	153	153	-	260	260	-
Stage 2	-	-	-	-	-	-	312	261	-	158	154	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1303	-	-	1515	-	-	508	529	979	545	529	779
Stage 1	-	-	-	-	-	-	849	771	-	745	693	-
Stage 2	-	-	-	-	-	-	699	692	-	844	770	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1303	-	-	1515	-	-	429	514	979	525	514	779
Mov Cap-2 Maneuver	-	-	-	-	-	-	429	514	-	525	514	-
Stage 1	-	-	-	-	-	-	824	749	-	723	693	-
Stage 2	-	-	-	-	-	-	604	692	-	809	748	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	11.8	11.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	543	1303	-	-	1515	-	-	698
HCM Lane V/C Ratio	0.019	0.028	-	-	-	-	-	0.156
HCM Control Delay (s)	11.8	7.8	0	-	0	-	-	11.1
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.6

HCM 2010 TWSC
4: West Access & Deer Flat Rd

2025 Total
PM Peak

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	149	4	1	317	3	0
Future Vol, veh/h	149	4	1	317	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	166	4	1	352	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	170	0	522	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	354	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1407	-	515	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	710	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1407	-	514	876
Mov Cap-2 Maneuver	-	-	-	-	514	-
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	710	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	514	-	-	1407	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	12.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 2010 TWSC
5: Deer Flat Rd & East Access

2025 Total
PM Peak

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	52	97	286	19	10	32
Future Vol, veh/h	52	97	286	19	10	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	108	318	21	11	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	339	0	-	0	553	329
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1220	-	-	-	494	712
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1220	-	-	-	469	712
Mov Cap-2 Maneuver	-	-	-	-	469	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	813	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1220	-	-	-	634
HCM Lane V/C Ratio	0.047	-	-	-	0.074
HCM Control Delay (s)	8.1	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

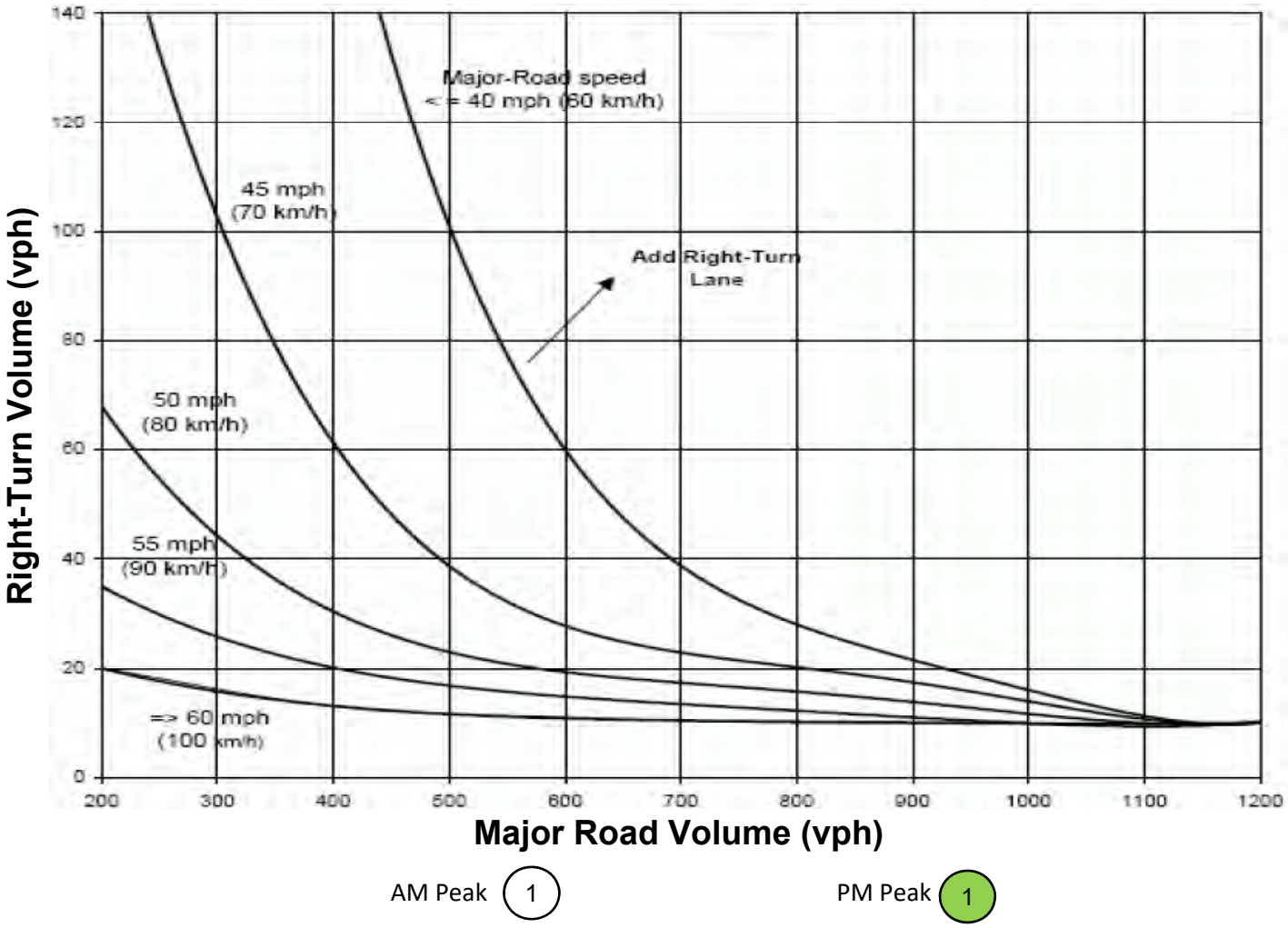
Deer Flat Subdivision

ACHD Right-Turn Lane Analysis - Two-Lane Road

2018 Existing Traffic

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
(1) Hubbard Road and Locust Grove Road	EB	50	AM	3	24	No[1]
			PM	1	8	No[1]
(2) Hubbard Road and Locust Grove Road	WB	50	AM	2	3	No[1]
			PM	0	21	No[1]
(3) Deer Flat Road and Locust Grove Road	EB	50	AM	0	139	No[1]
			PM	2	51	No[1]
(4) Deer Flat Road and Locust Grove Road	WB	50	AM	2	67	No[1]
			PM	3	177	No[1]

[1] Right-turn volume less than 10 vph and/or major road volume less than 200 vph - not warranted.



AM Peak (1) PM Peak (1)

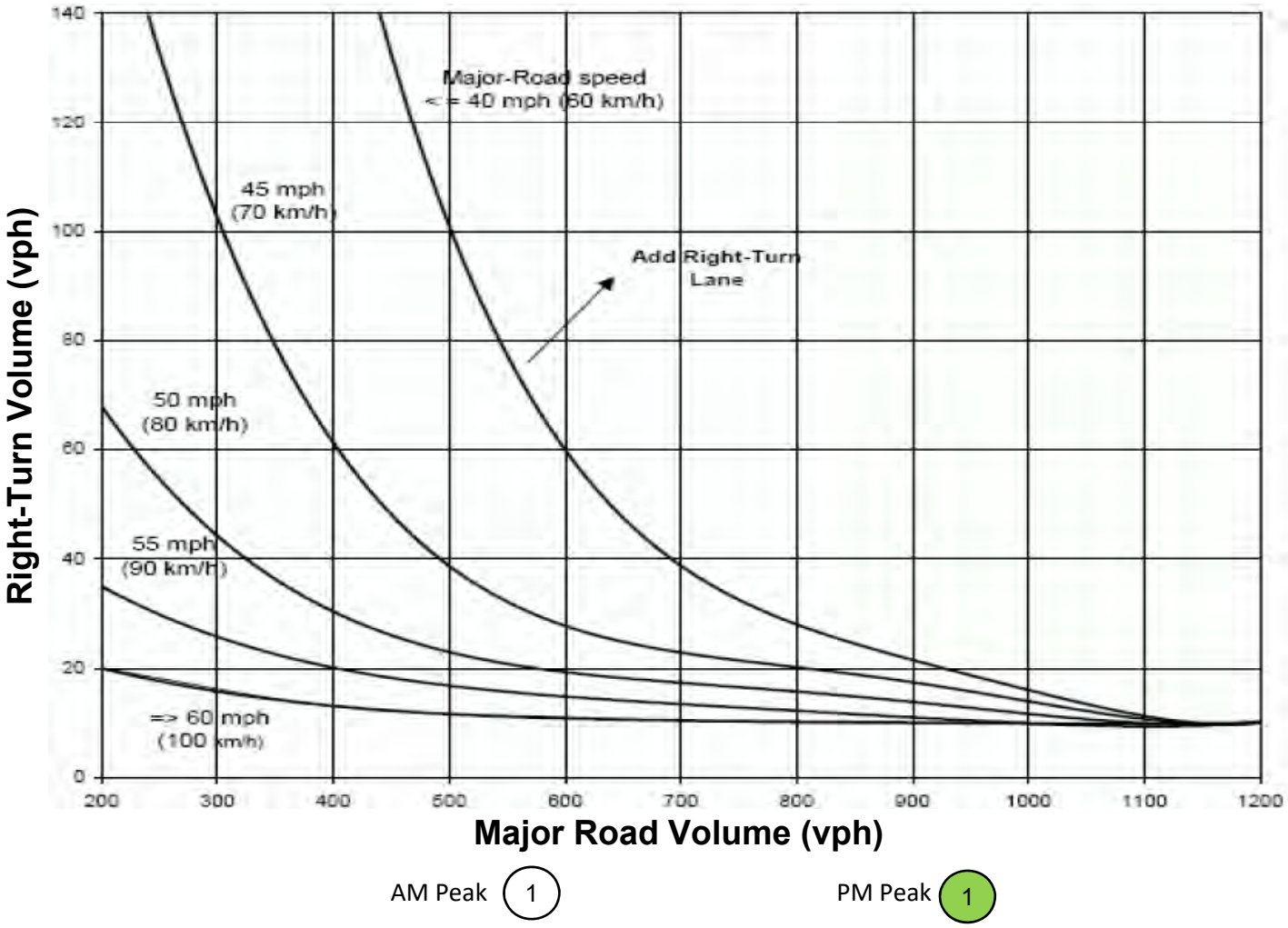
Deer Flat Subdivision

ACHD Right-Turn Lane Analysis - Two-Lane Road

2025 Background Traffic

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
(1) Hubbard Road and Locust Grove Road	EB	50	AM	3	32	No[1]
			PM	1	14	No[1]
(2) Hubbard Road and Locust Grove Road	WB	50	AM	2	3	No[1]
			PM	0	23	No[1]
(3) Deer Flat Road and Locust Grove Road	EB	50	AM	0	191	No[1]
			PM	2	95	No[1]
(4) Deer Flat Road and Locust Grove Road	WB	50	AM	2	85	No[1]
			PM	3	225	No[1]

[1] Right-turn volume less than 10 vph and/or major road volume less than 200 vph - not warranted.



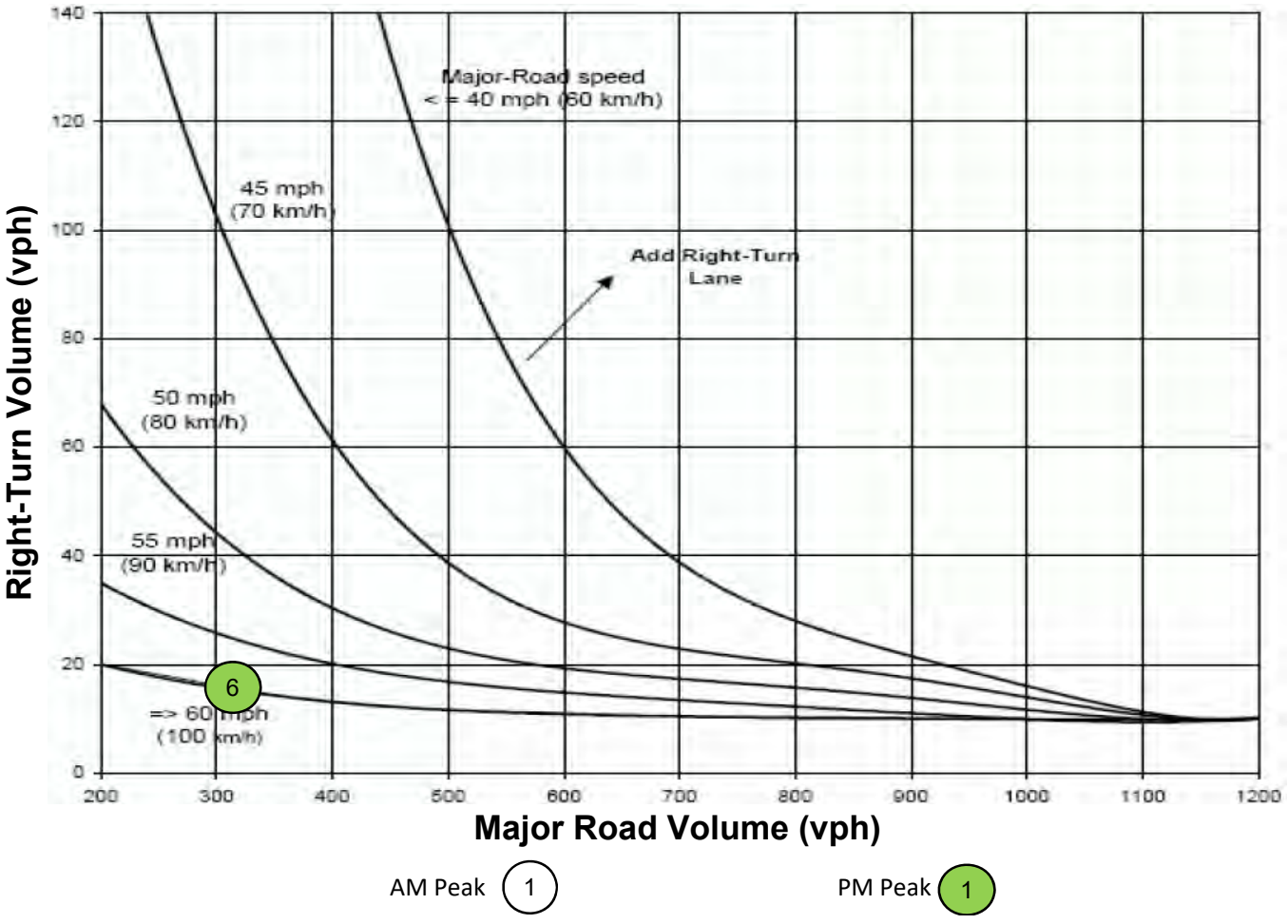
AM Peak (1) PM Peak (1)

Deer Flat Subdivision
ACHD Right-Turn Lane Analysis - Two-Lane Road

2025 Total Traffic

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
1 Hubbard Road and Locust Grove Road	EB	50	AM	3	32	No[1]
			PM	1	14	No[1]
2 Hubbard Road and Locust Grove Road	WB	50	AM	2	4	No[1]
			PM	0	27	No[1]
3 Deer Flat Road and Locust Grove Road	EB	50	AM	0	208	No[1]
			PM	2	105	No[1]
4 Deer Flat Road and Locust Grove Road	WB	50	AM	2	87	No[1]
			PM	3	233	No[1]
5 West Access and Deer Flat Road	EB	50	AM	1	221	No[1]
			PM	4	153	No[1]
6 East Access and Deer Flat Road	WB	50	AM	5	117	No[1]
			PM	19	305	No

[1] Right-turn volume less than 10 vph and/or major road volume less than 200 vph - not warranted.



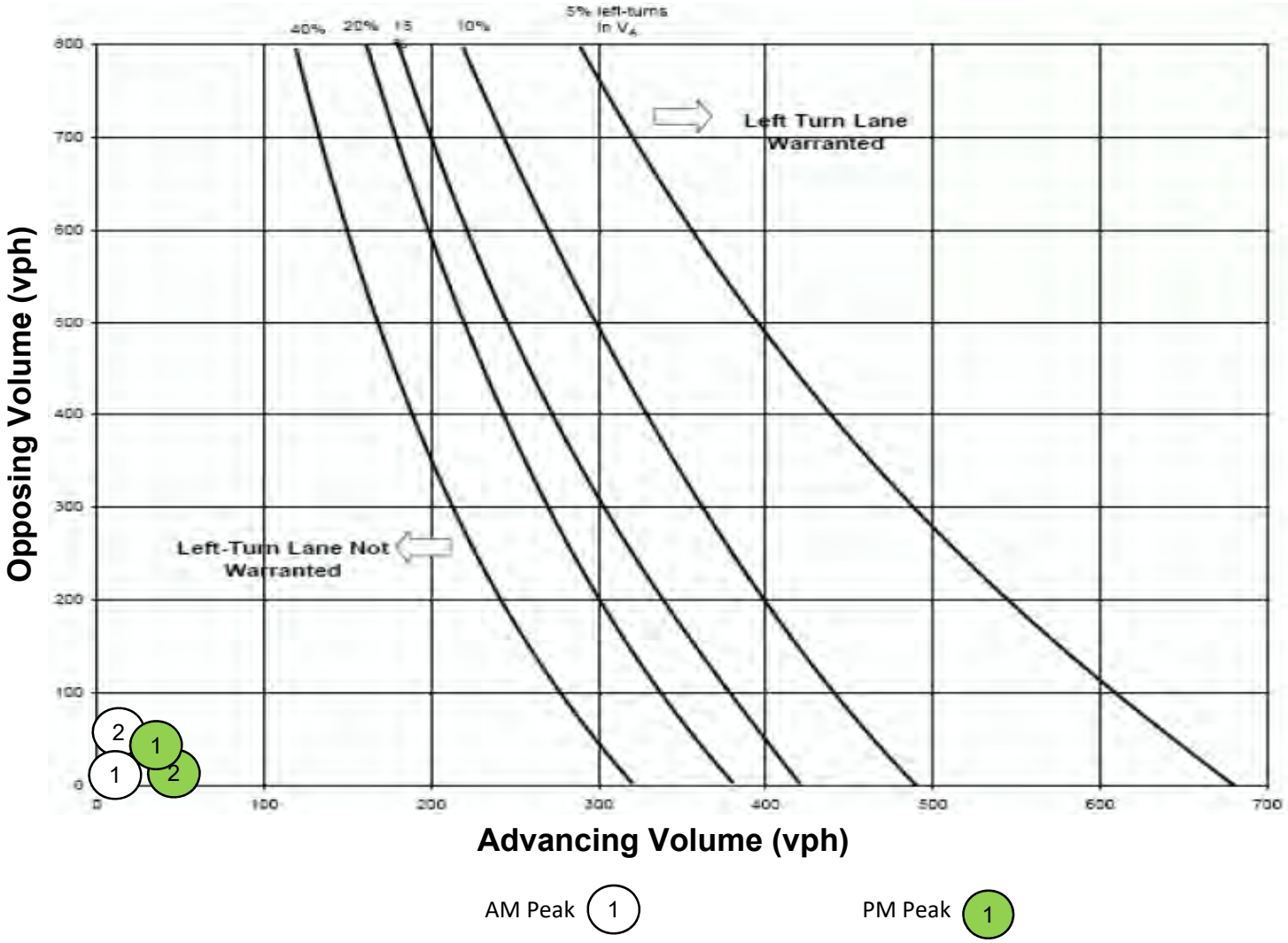
AM Peak (1) PM Peak (1)

Deer Flat Subdivision

ACHD Left-Turn Lane Analysis - 50 mph Two-Lane Road

2018 Existing Traffic

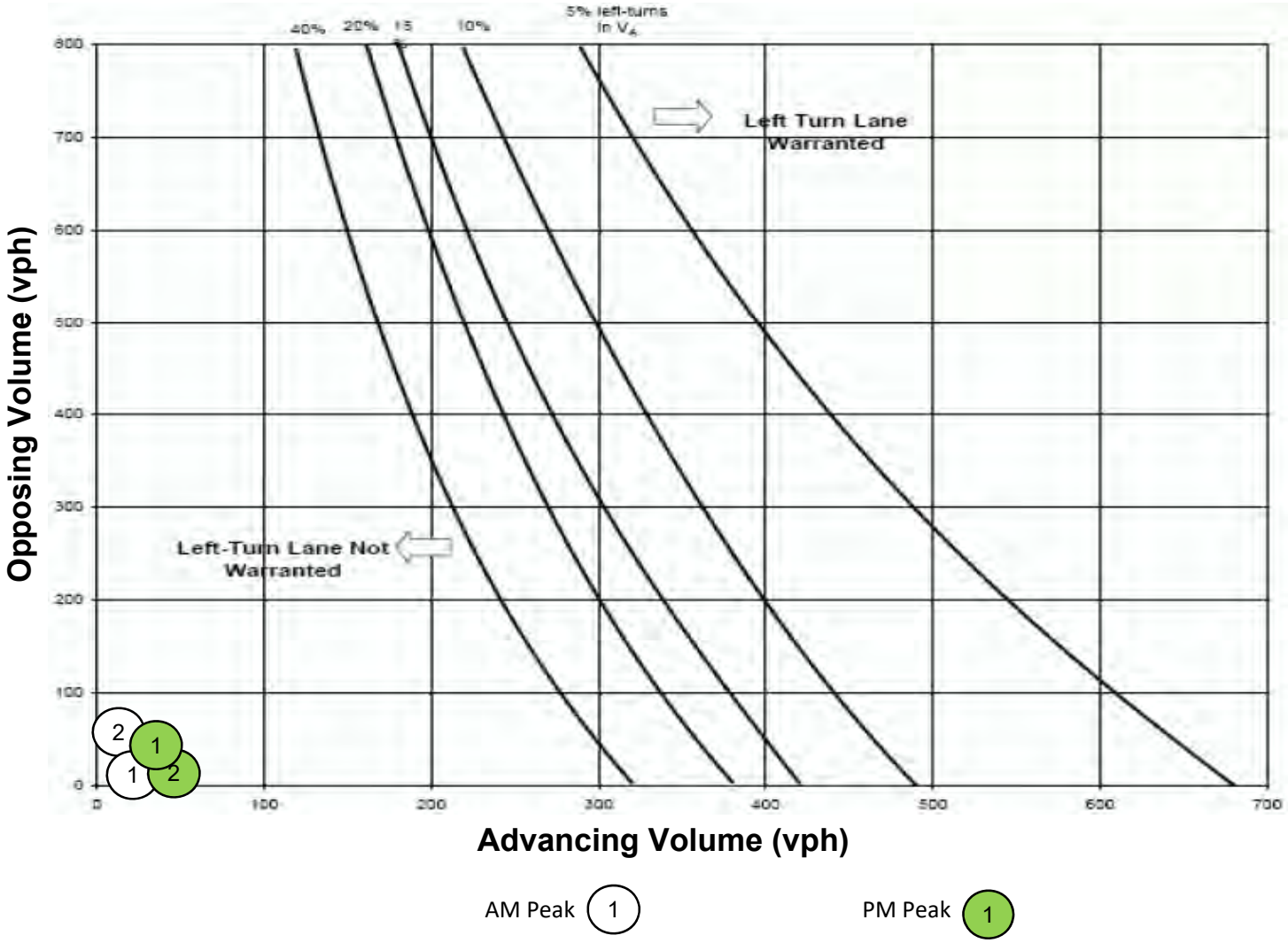
Intersection	Approach	Speed Limit (mph)	Peak Hour	Advancing Volume (vph)	Opposing Volume (vph)	Left-Turn Volume (%)	Meet Warrant?
(1) Hubbard Road and Locust Grove Road	EB	50	AM	24	3	29%	No
			PM	8	12	13%	No
(2) Hubbard Road and Locust Grove Road	WB	50	AM	3	17	0%	No
			PM	21	7	43%	No



Deer Flat Subdivision
ACHD Left-Turn Lane Analysis - 50 mph Two-Lane Road

2025 Background Traffic

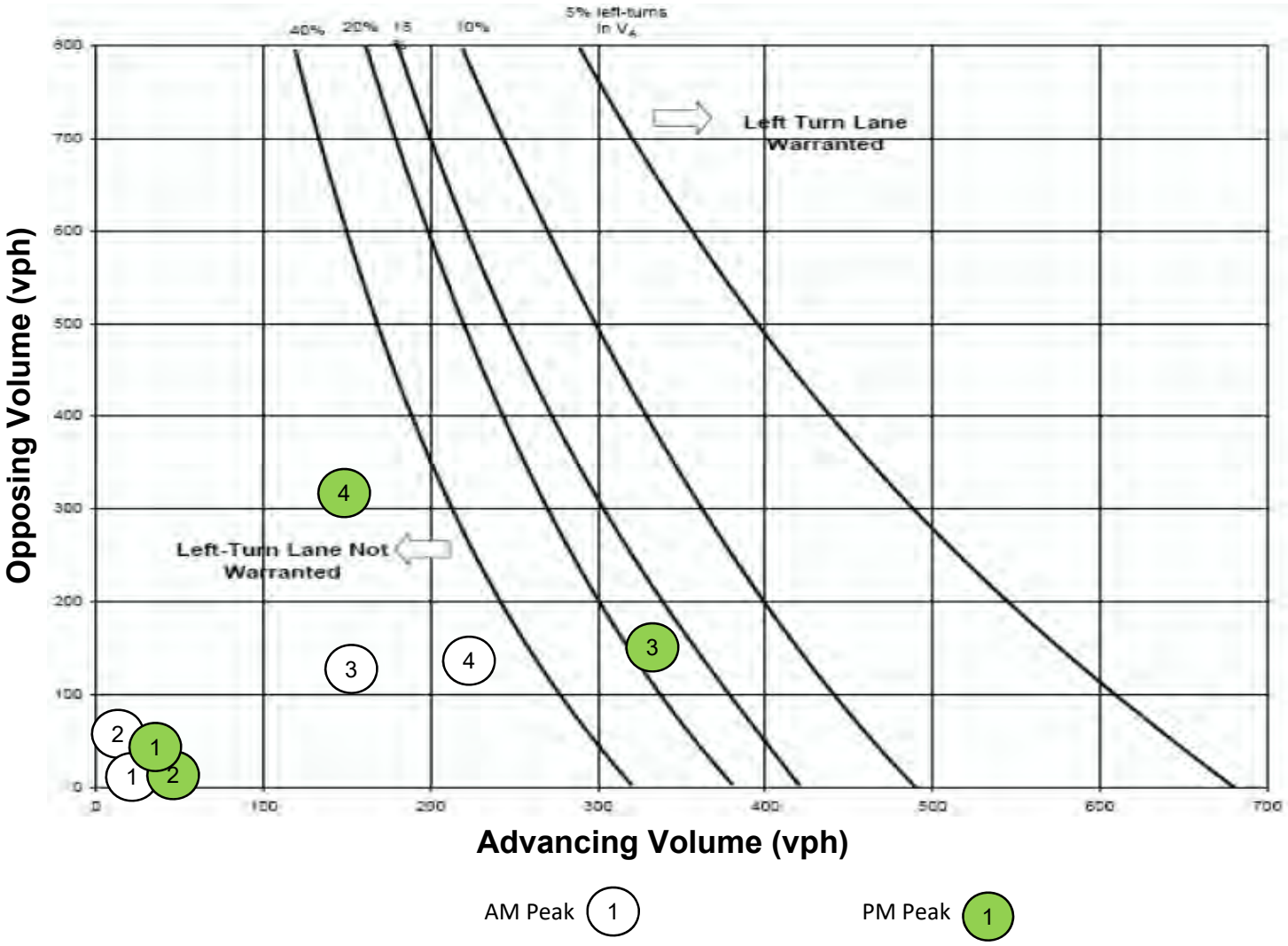
Intersection	Approach	Speed Limit (mph)	Peak Hour	Advancing Volume (vph)	Opposing Volume (vph)	Left-Turn Volume (%)	Meet Warrant?
(1) Hubbard Road and Locust Grove Road	EB	50	AM	32	3	40%	No
			PM	14	13	44%	No
(2) Hubbard Road and Locust Grove Road	WB	50	AM	3	19	0%	No
			PM	23	8	43%	No



Deer Flat Subdivision
ACHD Left-Turn Lane Analysis - 50 mph Two-Lane Road

2025 Total Traffic

Intersection	Approach	Speed Limit (mph)	Peak Hour	Advancing Volume (vph)	Opposing Volume (vph)	Left-Turn Volume (%)	Meet Warrant?
1 Hubbard Road and Locust Grove Road	EB	50	AM	32	3	40%	No
			PM	14	13	44%	No
2 Hubbard Road and Locust Grove Road	WB	50	AM	4	19	23%	No
			PM	27	8	51%	No
3 West Access and Deer Flat Road	WB	50	AM	159	221	0%	No
			PM	318	153	0%	No
4 East Access and Deer Flat Road	EB	50	AM	220	117	8%	No
			PM	149	305	35%	No



William Edwards

From: Derritt Kerner <dkerner@rocksolidcivil.com>
Sent: Wednesday, June 06, 2018 3:51 PM
To: William Edwards
Cc: Jon Seel; Randy Fullmer; Randy Carpenter
Subject: FW: Lugarno Village / Terra Subdivision Name Change

All – Below is the official name reservation for Lugarno Terra Subdivision. Thanks,

Derritt Kerner, EIT

ROCK SOLID CIVIL

CIVIL ENGINEERING AND LAND DEVELOPMENT CONSULTING

270 N 27th Street Suite 100
Boise, Idaho 83702-4741
(208) 342-3277 Office Main
(208) 391-7682 Direct
(208) 376-1821 Fax
dkerner@rocksolidcivil.com
www.rocksolidcivil.com

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From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Wednesday, June 6, 2018 3:41 PM
To: Derritt Kerner <dkerner@rocksolidcivil.com>
Subject: RE: Lugarno Village / Terra Subdivision Name Change

Derritt;

The name has been changed in our reservations from Lugarno Village to LUGARNO TERRA SUB.

Glen Smallwood
Surveying Technician
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7926 *office*
(208) 287-7909 *fax*

Exhibit
A23

From: Derritt Kerner [mailto:dkerner@rocksolidcivil.com]
Sent: Wednesday, June 06, 2018 3:30 PM
To: Sub Name Mail
Subject: [EXTERNAL] RE: Lugarno Village Subdivision Name Reservation

Glen – Either way. I'll use your email as proof of the authorized name change. Thank you Sir,

Derritt Kerner, EIT

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270 N 27th Street Suite 100
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From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Wednesday, June 6, 2018 2:43 PM
To: Derritt Kerner <dkerner@rocksolidcivil.com>
Subject: RE: Lugarno Village Subdivision Name Reservation

Did you need a new letter, or can we just change the name?

From: Derritt Kerner [mailto:dkerner@rocksolidcivil.com]
Sent: Monday, June 04, 2018 8:26 AM
To: Sub Name Mail
Cc: Carl Porter Carl@sawtoothls.com
Subject: [EXTERNAL] RE: Lugarno Village Subdivision Name Reservation

Glen – Sorry to be a pain. The clients would like to change our name reservation from "Lugarno Village Subdivision" to "Lugarno Terra Subdivision" and apologize for not selecting this name the first time. Would that be possible? Thank you Sir,

Derritt Kerner, EIT

ROCK SOLID CIVIL

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270 N 27th Street Suite 100
Boise, Idaho 83702-4741
(208) 342-3277 Office Main
(208) 391-7682 Direct
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dkerner@rocksolidcivil.com
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From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Wednesday, May 23, 2018 2:54 PM
To: Derritt Kerner <dkerner@rocksolidcivil.com>; Sub Name Mail <subnamemail@adaweb.net>
Cc: Carl Porter Carl@sawtoothls.com <Carl@sawtoothls.com>
Subject: RE: Lugarno Village Subdivision Name Reservation

Derritt;

The title of the plat must state "Lugarno Village Subdivision", as stated in the reservation letter.

Glen Smallwood
Surveying Technician
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7926 *office*
(208) 287-7909 *fax*

From: Derritt Kerner [mailto:dkerner@rocksolidcivil.com]
Sent: Wednesday, May 23, 2018 1:24 PM
To: Sub Name Mail
Cc: Carl Porter Carl@sawtoothls.com
Subject: [EXTERNAL] RE: Lugarno Village Subdivision Name Reservation

Glen & Jerry – Just to clarify, the final plat can simply state "Lugarno Village" and not "Lugarno Village Subdivision", correct? It seem redundant and out of place (like using the word "Estates"). Let me know. Thank you both,

Derritt Kerner, EIT

ROCK SOLID CIVIL

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270 N 27th Street Suite 100
Boise, Idaho 83702-4741
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From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Tuesday, May 22, 2018 3:34 PM
To: Derritt Kerner <dkerner@rocksolidcivil.com>
Cc: Carl Porter Carl@sawtoothls.com <Carl@sawtoothls.com>
Subject: Lugarno Village Subdivision Name Reservation

May 22, 2018

Carl Porter, Sawtooth Land Surveying
Derritt Kerner, Rock Solid Civil

RE: Subdivision Name Reservation: **LUGARNO VILLAGE SUBDIVISION**

At your request, I will reserve the name **Lugarno Village Subdivision** for your project. I can honor this reservation only as long as your project is in the approval process. Final approval can only take place when the final plat is recorded.

This reservation is available for the project as long as it is in the approval process unless the project is terminated by the client, the jurisdiction or the conditions of approval have not been met, in which case the name can be re-used by someone else.

Sincerely,

Jerry L. Hastings, PLS 5359
County Surveyor
Deputy Clerk Recorder
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7912 *office*
(208) 287-7909 *fax*

From: Derritt Kerner [mailto:dkerner@rocksolidcivil.com]
Sent: Monday, May 21, 2018 12:52 PM
To: Sub Name Mail

Cc: Carl Porter
Subject: Lugarno Village Subdivision Name Reservation

Glen – Carl Porter will be the surveyor of record for this one. Thank you Sir,

Derritt Kerner, EIT

ROCK SOLID CIVIL

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270 N 27th Street Suite 100
Boise, Idaho 83702-4741
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From: Sub Name Mail <subnamemail@adaweb.net>
Sent: Monday, May 21, 2018 10:16 AM
To: Derritt Kerner <dkerner@rocksolidcivil.com>
Subject: RE: Subdivision Name Reservation

Derritt;
I also need a surveyor of record for this project.

Glen Smallwood

From: Derritt Kerner [mailto:dkerner@rocksolidcivil.com]
Sent: Friday, May 18, 2018 11:52 AM
To: Sub Name Mail
Cc: William Edwards; Randy Fullmer
Subject: Subdivision Name Reservation

Jerry & Glen - I'd like to reserve the name "Lugarno Village" on behalf Billy and Randy with Select Development for a subdivision of parcel # S1418346600 (40 acres) in Kuna. I don't believe Randy or Billy reserved this name yet. Let us know if that will work. Thank you both,

Derritt Kerner, EIT

ROCK SOLID CIVIL

CIVIL ENGINEERING AND LAND DEVELOPMENT CONSULTING

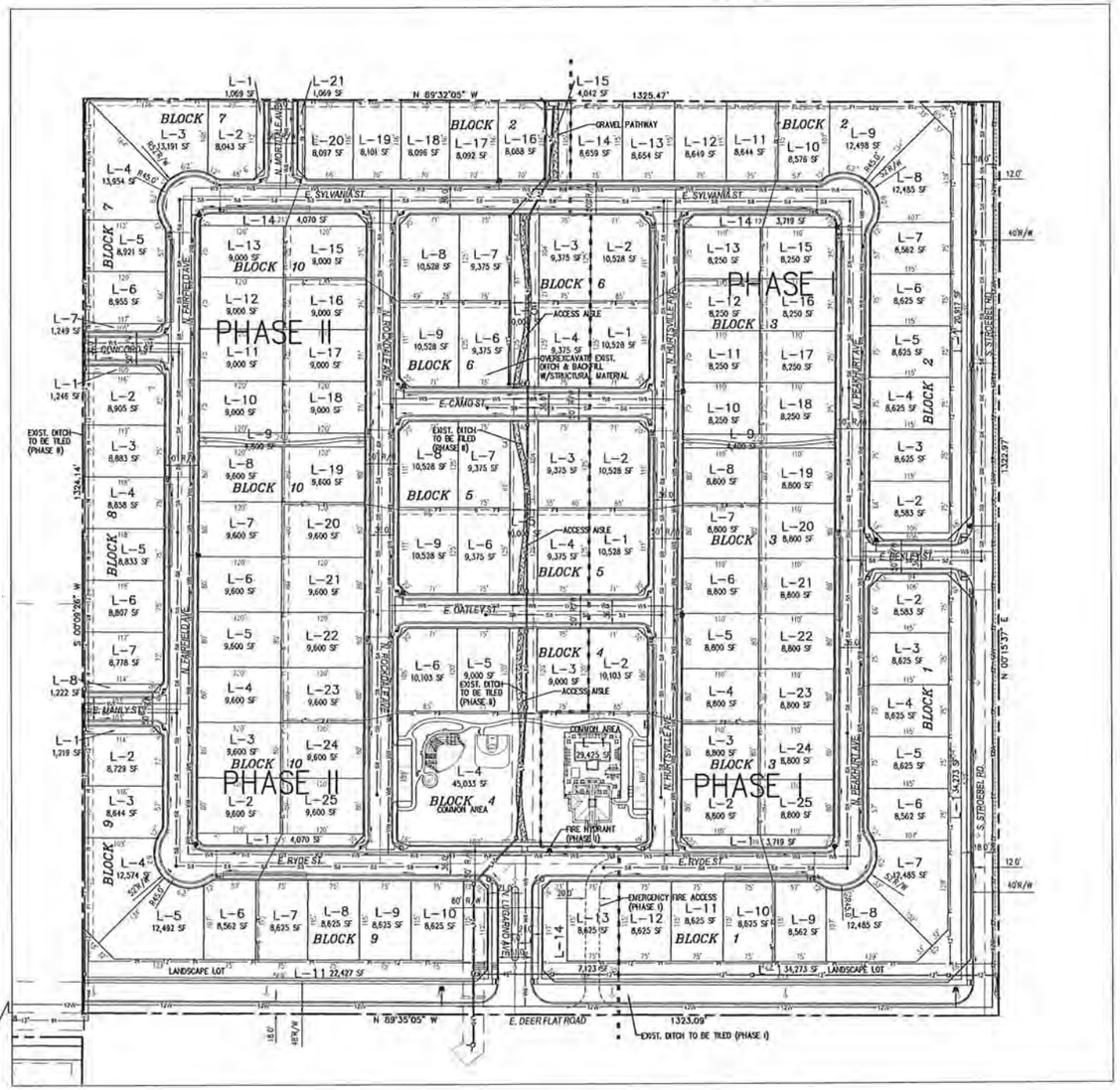
270 N 27th Street Suite 100
Boise, Idaho 83702-4741
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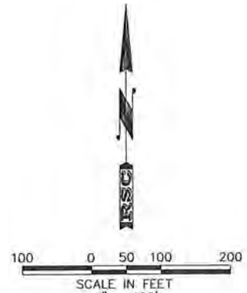
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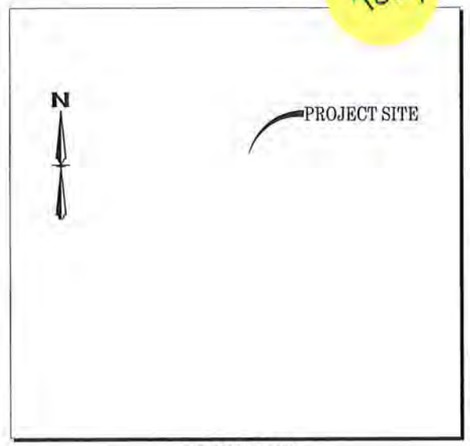
Exhibit A2M

PRELIMINARY PLAT FOR
LUGARNO TERRA SUBDIVISION

LOCATED IN SE 1/4 OF THE SW 1/4 SECTION 18, AND A PORTION OF NW 1/4 OF THE NW 1/4 SECTION 19
T.2N., R.1E., B.M., KUNA ADA COUNTY, IDAHO
2018







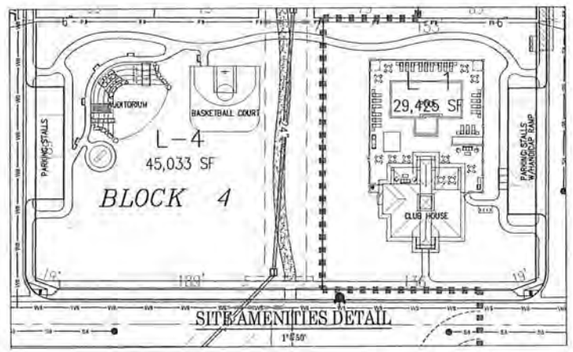
VICINITY MAP
1"= 800'

GENERAL LEGEND

BOUNDARY LINE
RIGHT OF WAY LINE
LOT LINE
PRESSURE IRRIGATION EASEMENT
GRAVITY IRRIGATION EASEMENT
PHASE LINE
NEW ROLLED CURB & GUTTER
NEW EDGE OF PAVEMENT
NEW GRAVEL SHOULDER
NEW EDGE OF ROAD SWALE
NEW SANITARY SEWER W/SIZE
NEW POTABLE WATER W/SIZE
NEW PRESSURE IRRIGATION W/SIZE
C-900 UTILITY SLEEVES
NEW GRAVITY IRRIGATION W/SIZE
NEW FIRE HYDRANT
NEW STREET LIGHT
DRAINAGE FLOW DIRECTION
L-1 BLOCK 1 LOT/BLOCK NUMBER

DEVELOPMENT FEATURES:

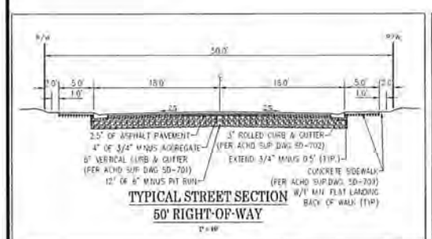
TOTAL ACRES	±40.24 ACRES
TOTAL LOTS	134
BUILDABLE LOTS	114
COMMON LOTS/ACRE	20/4.76 ACRES/11.8%
GROSS DENSITY DU/ACRES	2.83 ACRES
NET DENSITY DU/ACRES	4.66 ACRES
EXISTING ZONING (ADA COUNTY)	RR
PROPOSED ZONING, (CITY OF KUNA)	R4
MINIMUM RESIDENTIAL LOT SIZE	8,043 sq.ft.
AVERAGE RESIDENTIAL LOT SIZE	9,343 sq.ft.



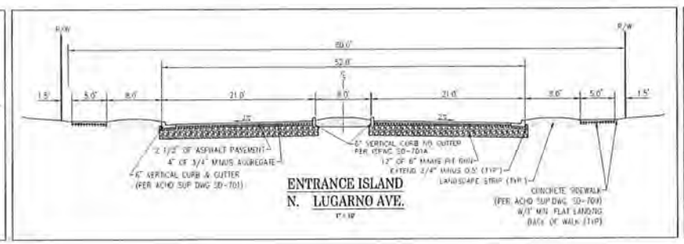
SITE AMENITIES DETAIL
1"=50'

NOTES:

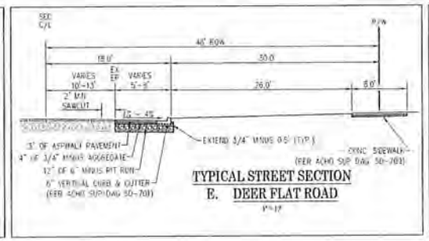
1. SANITARY SEWER MAINS SHALL BE 8" DIAMETER UNLESS OTHERWISE SHOWN.
2. WATER MAINS SHALL BE 8" DIAMETER UNLESS OTHERWISE SHOWN.
3. SURFACE STORM WATER DRAINAGE SHALL BE DIRECTED TO THE EXISTING STORM WATER MANAGEMENT FACILITIES.
4. THIS SUBDIVISION IS SUBJECT TO COMPLIANCE WITH THE IDAHO CODE SECTION 31-3805 CONCERNING IRRIGATION WATER.
5. ALL LOTS ARE TO BE DESIGNATED SINGLE FAMILY RESIDENTIAL EXCEPT; LOT 1 & 14, BLOCK 1; LOTS 1, 15 & 21, BLOCK 2; LOTS 1 & 7, BLOCK 7; LOTS 1 & 8, BLOCK 8; LOTS 1 & 11, BLOCK 9; LOTS 1, 9, & 14, BLOCK 10; LOT2 1 & 4, BLOCK 4; LOT 5, BLOCK 5; LOT 5, BLOCK 6; LOTS 1, 9, & 14, BLOCK 3. LOTS LISTED ABOVE WILL BE COMMON LOTS OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.



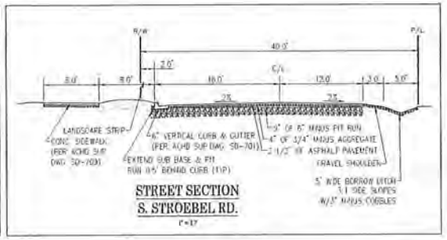
TYPICAL STREET SECTION
50' RIGHT-OF-WAY



ENTRANCE ISLAND
N. LUGARNO AVE.



TYPICAL STREET SECTION
E. DEER FLAT ROAD



STREET SECTION
S. STROEBEL RD.

DEVELOPER
RANDY FULLMER
SELECT DEVELOPMENT & CONTRACTING LLC
P.O. BOX 1030
MERIDIAN, ID 83680

CIVIL ENGINEER
JIM E. COSLETT, P.E.
ROCK SOLID CIVIL LLC
270 N. 27th ST. SUITE 100
BOISE, ID 83702
(208) 342-3277

LAND SURVEYOR
CARL PORTER, P.L.S.
SAWTOOTH LAND SURVEYING LLC.
2030 S. WASHINGTON AVE.
EMMETT, ID 83617
(208) 398-8104

811 Know what's below. Call before you dig

CALL BEFORE YOU DIG!
CALL DIGLINE INC. PRIOR TO COMMENCING UNDERGROUND WORK
208-342-1585

Revisions

△	Date	Description
1		
2		
3		
4		

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Civil Engineering and Land Development Consulting
270 North 27th Street, Boise, ID 83702
Office Phone: 208.342.3277
www.rocksolidcivil.com

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Project Name: LUGARNO TERRA SUBDIVISION
Sheet Name: PRELIMINARY PLAT

Stamp
PROFESSIONAL ENGINEER LICENSED 17887 11-1-18 STATE OF IDAHO DERRITT KERRER

Project No.	RSC-1825
Drawn By:	RLC
Date:	7 November 2018
Sheet No.	PP1
	1 of 1

Neighborhood Meeting Certification

CITY OF KUNA PLANNING & ZONING * 763 W. Avalon, Kuna, Idaho, 83634 * www.kunacity.id.gov * (208) 922-5274 * Fax: (208) 922-5989

GENERAL INFORMATION:

You must conduct a neighborhood meeting prior to application for variance, conditional use, zoning ordinance map amendment, expansion or extension of a nonconforming use, and/or a subdivision. Please see Section 8-7A-3 of the Kuna City Code or ask one of our planners for more information on neighborhood meetings.

The meeting must be held either on a weekend between 10 a.m. and 7 p.m., or a weekday between 6 p.m. and 8 p.m. Meetings cannot be conducted on holidays, holiday weekends, or the day before or after a holiday or holiday weekend. The meeting must be held at one of the following locations:

- The Subject Property;
- The nearest available public meeting place (Examples include fire stations, libraries and community centers);
- An office space within a 1-mile radius of the subject property.

The meeting cannot take place more than 2 months prior to acceptance of the application and the application will not be accepted before the neighborhood meeting is conducted. You are required to send written notification of your meeting, allowing a reasonable amount of time before your meeting for property owners to plan to attend. Contacting and/or meeting individually with residents will not fulfill Neighborhood Meeting requirements.

You may request a list of the people you need to invite to the neighborhood meeting from our department. This list includes property owners within 300 feet of the subject property. Once you have held your neighborhood meeting, please complete this certification form and include it with your application.

Please Note: The neighborhood meeting must be conducted in one location for attendance by all neighboring residents. Contacting and/or meeting individually with residents does not comply with the neighborhood meeting requirements.

Please include a copy of the sign-in sheet for your neighborhood meeting, so we have written record of who attended your meeting and the letter of intent sent to each recipient. In addition, provide any concerns that may have been addressed by individuals that attended the meeting.

Description of proposed project: Annexation of two properties into the City of Kuna; Stark TBD and Bennett Property Single Family Subdivision

Date and time of neighborhood meeting: Wednesday May 30, 2018 @ 6:00pm

Location of neighborhood meeting: Kuna Public Library, Meeting Room

SITE INFORMATION:

Location: Quarter: ____ Section: 19 & 18 Township: 2N Range: 1E Total Acres: 40

Subdivision Name: Lugarno Terra Lot: ____ Block: ____

Site Address: 1919 E. Deer Flat Rd. Township/Range/Section 2N1E19 Tax Parcel Number(s): S1419223000

Farm Land No Address Township/Range/Section 2N1E18 S1418346600

Please make sure to include **all** parcels & addresses included in your proposed use.

CURRENT PROPERTY OWNER:

Name: Select Development & Contracting, LLC.

Address: P.O. Box 1030 City: Meridian State: Idaho Zip: 83680

CONTACT PERSON (Mail recipient and person to call with questions):

Name: Billy Edwards, Project Manager Business (if applicable): Select Development

Address: P.O. Box 1030 City: Meridian State: Idaho Zip: 83680

Exhibit A2.1

PROPOSED USE:

I request a neighborhood meeting list for the following proposed use of my property (check all that apply):

Application Type	*Brief Description*
Annexation	Annex two parcels into City of Kuna
Re-zone	
Subdivision (Sketch Plat and/or Prelim. Plat)	Stark Property future development TBD; Bennett Property Single Family Subdivision
Special Use	
Variance	
Expansion of Extension of a Nonconforming Use	
Zoning Ordinance Map Amendment	Stark Property R-6; Bennett Property R-4

APPLICANT:

Name: Billy Edwards, Project Manager with Select Development

Address: P.O. Box 1030

City: Meridian State: Idaho Zip: 83680

Telephone: 208-288-0700 Fax: 208-898-9527

I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accord with Section 5-1A-2 of the Kuna City Code

Signature: (Applicant) William T. Edwards Digitally signed by William T. Edwards DN: C=US, E=wedwards@selectmanagment.com, O=Select Development, OU=Project Manager, CN=William T. Edwards Date: 2018.06.25 12:26:35-06'00' Date 06.25.2018

SIGN IN SHEET

PROJECT NAME: LUGARNO VILLAGE

Date: 5.30.18

	Name	Address	Zip	Phone
1	Larry Hansen	622 N. Mudgtave	83634	208-866-0546
2	Danny Cottle	410 S. Orchard		208-344-1980
3	Rod Wiens	2329 E Deer Flat Rd	83634	661-345-6332
4	DAN & SHIRLEY GROTHAUS	2404 E. DEER	FL 83634	208-890-2234
5	Flay Kelm	2211 E. Deer Flat	83624	208 922 3454
6	Dawn Rodgers Andrews	1928 E Deer Flat	83634	208 484 3690
7	Austin Manning	2800 E. Deer Flat	83634	208-421-1577
8	Debbie Doll	1920 E. Lazy B Ln	83634	406-799-5058
9	Paul Abbott	4255 E. Deer Flat	83634	406 861-1091
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SELECT
DEVELOPMENT &
CONTRACTING

Billy Edwards
P.O. Box 1030
Meridian, ID 83680
208-288-0700

22 May 2018

RE: Lugarno Village (East Deer Flat Road)

Dear Property Owners,

Kuna City Code requires an opportunity for a meeting between applicant of the proposed development and the property owners located within 300 feet of the proposed project. Please come to a neighborhood meeting for the property located ¼ & ½ mile east of Meridian Road along East Deer Flat Road. The site and location of the meeting is shown below.

Lugarno Village is proposed to be 114 single family residential lots and 17 common lots on 40.24 acre site. The applications applied for are Annexation, Comprehensive Plan Amendment, and Preliminary Plat. The purpose of this neighborhood meeting is to provide you with information about the proposed subdivision. Parcel located at 1919 East Deer Flat Road is a part of these applications and will be developed at a later time.

Meeting Location:	Kuna Public Library, Meeting Room 457 North Locust Avenue Kuna, ID 83634
Meeting Date & Time:	Wednesday May 30, 2018 @ 6:00pm
Project Applications:	Annexation, Comprehensive Plan Amendment, Preliminary Plat
Attachments:	Vicinity Map

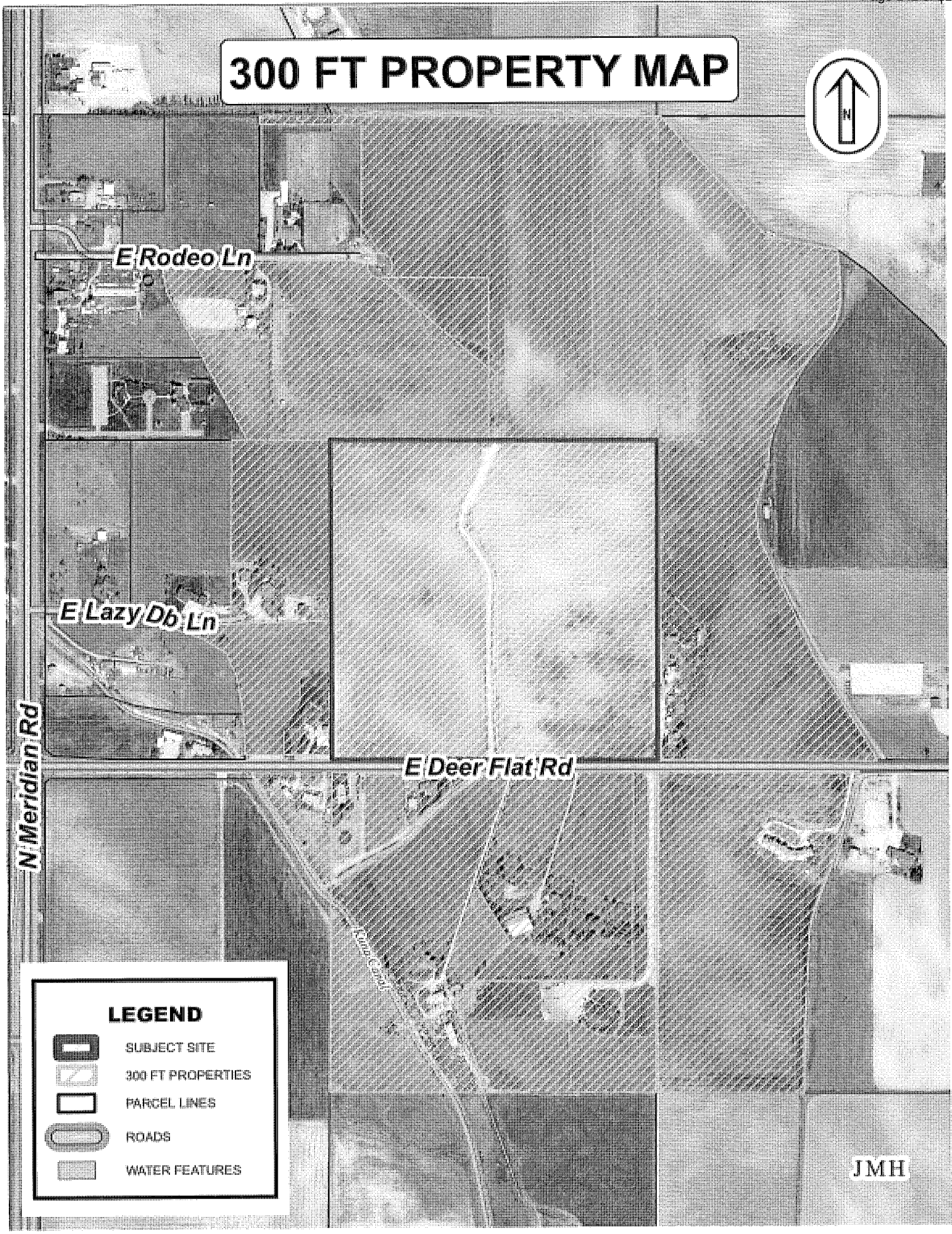
Representatives of the applicant will be present at the meeting to answer any questions you have about the proposed subdivision. Please contact me if you have any questions. I can be reached at (208) 288-0700 or at wedwards@selectdev.com.

Thank you in advance for your interest.

Sincerely,

Billy Edwards
Project Manager

300 FT PROPERTY MAP



PRIMOWNER	SECOWNER	ADDCONCAT	STATCONCAT
ANDRUS DAVID L	ANDRUS ROSLYN	1928 E DEER FLAT RD	KUNA, ID 83634-1324
DOLL FAMILY REVOCABLE TRUST DATED 12/8/11	DOLL DEBRA A TRUSTEE	PO BOX 56	KUNA, ID 83634-0000
GOLDEN JANE C		1863 E RODEO LN	KUNA, ID 83634-0000
GROTHAUS DANIEL LEE &	GROTHAUS SHIRLEY LOUISE	2404 DEER FLAT	KUNA, ID 83634-0000
KOHN CHRISTOPHER WILLIAM	KOHN DANNELLE	2095 E DEER FLAT RD	KUNA, ID 83634-0000
KOHN HARRY C	KOHN PENNY L	2211 E DEER FLAT RD	KUNA, ID 83634-0000
PERRY RICHARD S	PERRY TERESA R	2151 E DEER FLAT RD	KUNA, ID 83634-1325
SANDSTONE FARMS LLC		1888 E RODEO LN	KUNA, ID 83634-0000
SCHENK DEBORAH K		PO BOX 721	JOSEPH, OR 97846-0000
SELECT DEVELOPMENT & CONTRACTING LLC		PO BOX 1030	MERIDIAN, ID 83680-0000
TANG SANH D	TANG MIMI	2725 E DEER FLAT RD	KUNA, ID 83634-0000
WIENS RODNEY & KAREN FAMILY TRUST	WIENS RODNEY H TRUSTEE	2329 E DEER FLAT RD	KUNA, ID 83634-0000

received
11.5.18

SELECT
DEVELOPMENT & CONTRACTING

Billy Edwards
P.O. Box 1030
Meridian, ID 83680
208-288-0700

Jace Hellman, Planner II
City of Kuna, Planning Department
751 West 4th Street
Kuna, ID 83634
208-922-5274

05 November 2018

RE: Lugarno Village – Proof of Posting

Dear Jace Hellman,

Per City of Kuna City Code Ordinance 5-1A-8 Sign Posting Procedures, please accept this notarized statement and dated pictures as proof of posting. Signage was posted at both parcels (S1419223000 & S1418346600) related to our annexation and preliminary plat applications under review with City of Kuna. Signage was revised on 10.31.2018 in preparation for our City Council Hearing on 11.20.2018

Please contact me if you have any questions. I can be reached at (208) 288-0700 or at wedwards@selectdev.com.

Thank you in advance for your interest.

Sincerely,

William T. Edwards
Project Manager

Dated this 05th day of NOVEMBER 2018

Signature William T. Edwards

Subscribed and sworn to before me the day and year first above written

Notary Public for Idaho Alan C. Noble

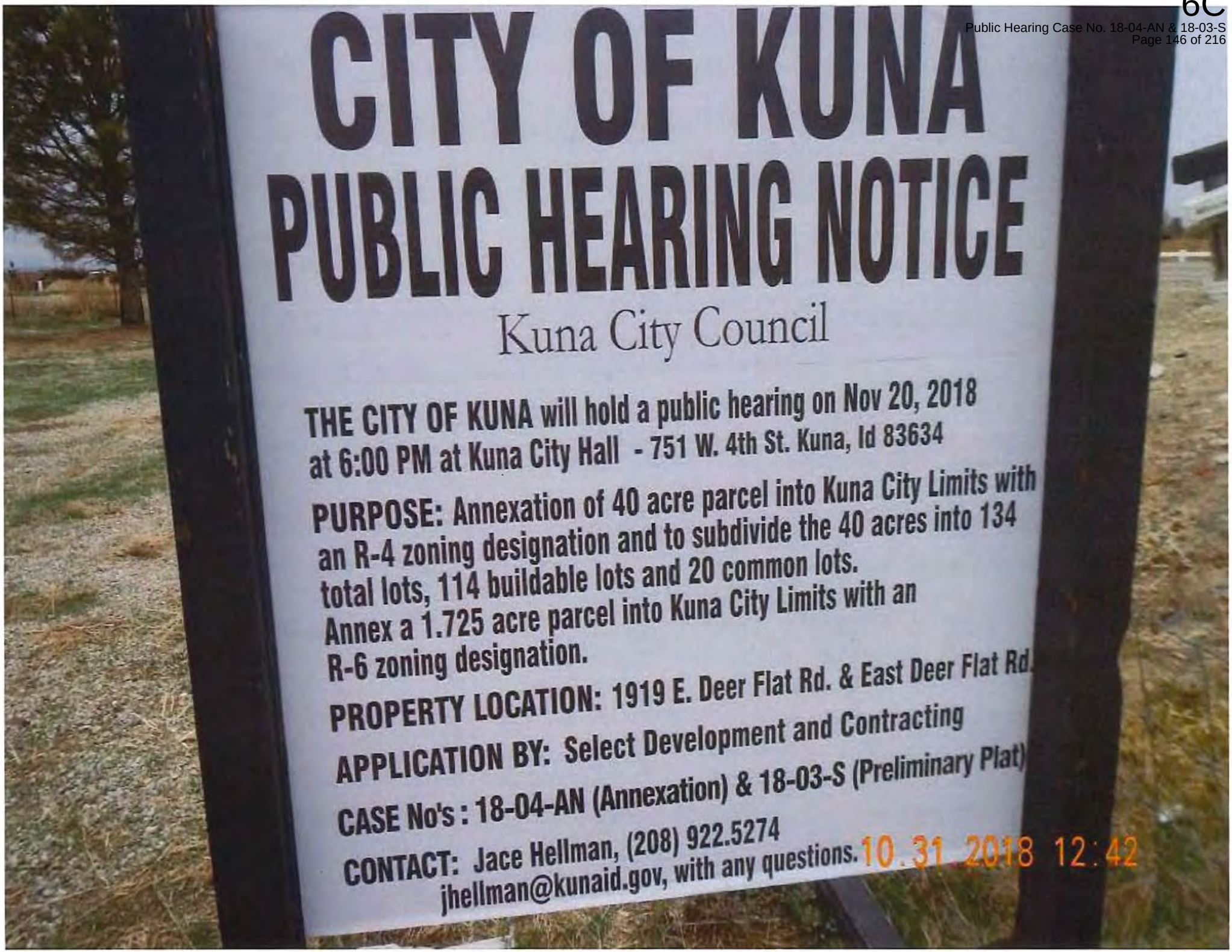
Residing at: MERIDIAN, IDAHO

My Commission Expires: 2/21/19

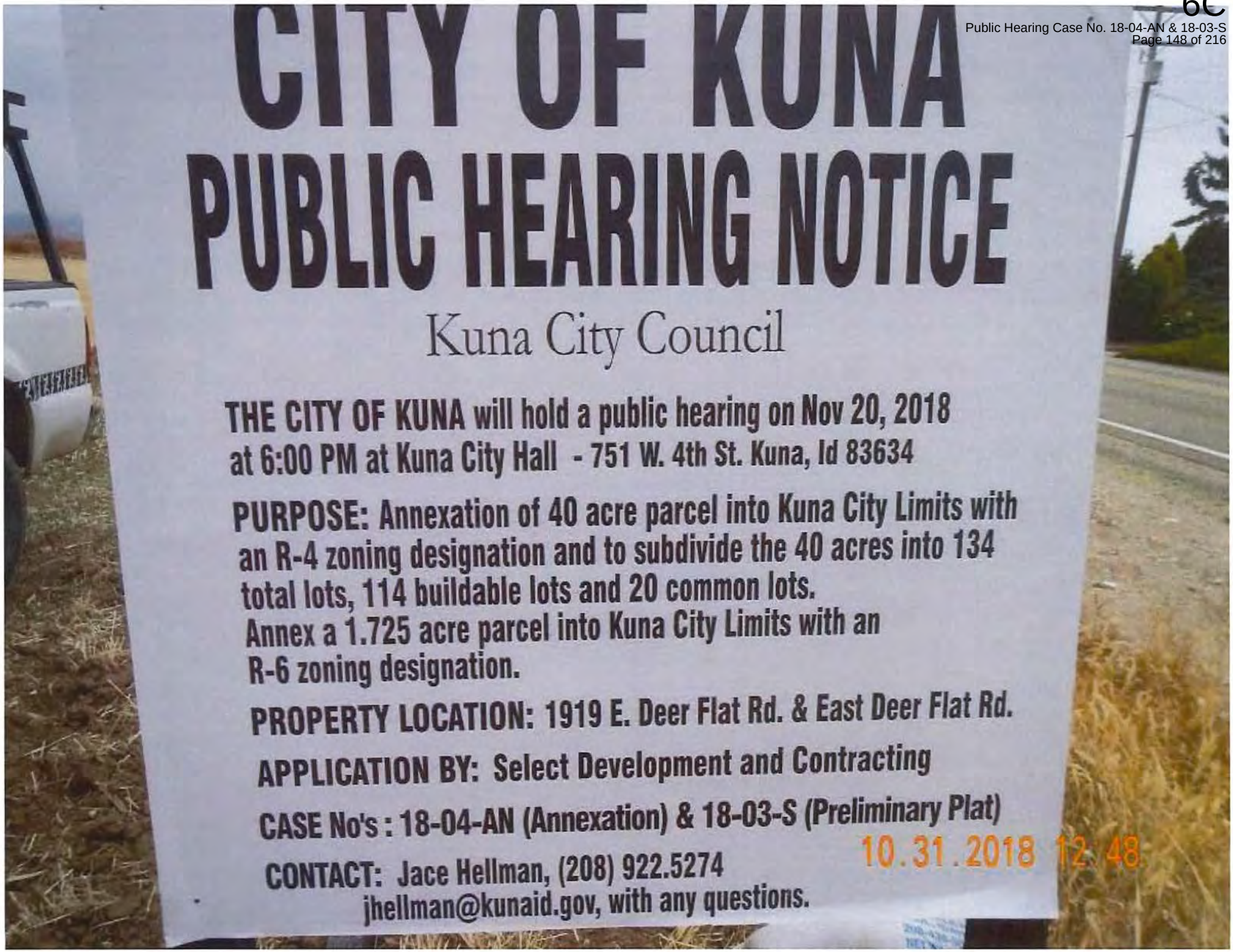
ALAN C NOBLE
COMM NO. 61141
NOTARY PUBLIC
STATE OF IDAHO

Exhibit
AS


CITY OF KUNA
PUBLIC HEARING NOTICE
Kuna City Council
THE CITY OF KUNA will hold a public hearing on Nov 20, 2018
at 6:00 PM at Kuna City Hall - 751 W. 4th St. Kuna, Id 83634
PURPOSE: Annexation of 40 acre parcel into Kuna City Limits with an R-4 zoning designation and to subdivide the 40 acres into 134 total lots, 114 buildable lots and 20 common lots.
Annex a 1.725 acre parcel into Kuna City Limits with an R-6 zoning designation.
PROPERTY LOCATION: 1919 E. Deer Flat Rd. & East Deer Flat Rd.
APPLICATION BY: Select Development and Contracting
CASE No's : 18-04-AN (Annexation) & 18-03-S (Preliminary Plat)
CONTACT: Jace Hellman, (208) 922.5274
jhellman@kunaid.gov, with any questions.
10 31 2018 12 42


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jhellman@kunaid.gov, with any questions.
10.31.2018 12:42


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jhellman@kunaid.gov, with any questions.
10.31.2018 12:48


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CONTACT: Jace Hellman, (208) 922.5274
jhellman@kunaid.gov, with any questions.
10.31.2018 12:48

IDAHO TERR
E. DEER FLAT

City of Kuna
Design Review Application

P.O. Box 13
Kuna, Idaho 83634
(208) 922.5274
Fax: (208) 922.5989
Website: www.kunacity.id.gov

FILE NO.: 18-23-DR
CROSS REF.: 18-04-AN ; 18-03-S
FILES: 18-04-AN, 18-03-S, 18-23-DR

The City of Kuna has adopted a Design Review process whose purpose is to make Kuna a pleasant and comfortable place to live and work. This Design Review process is based on standards and guidelines found in the Design Review Ordinance No. 2007-02 and the Architecture and Site Design Booklet. Both of these documents can be found online (www.cityofkuna.com) or are picked up in the City's Planning and zoning department is located at 763 W Avalon, Kuna ID. Staff is glad to assist you with your application form.

The Design Review application applies to the following land use actions:

- ▶Multi- family dwellings (3 or more)
- ▶Commercial
- ▶Industrial
- ▶Institutional
- ▶Office
- ▶Common Area
- ▶Subdivision Signage
- ▶Proposed Conversions
- ▶Proposed changes in land use and/or building use or exterior remodeling
- ▶Exterior restoration, and enlargement or expansion of existing buildings, signs or sites.

Application Submittal Requirements

Applicant Use		Staff Use
☑	Date of pre- application meeting : _____ *Note: Pre-Applications are valid for a period of three (3) months.*	☑
☑	A complete Design Review Application form *Note: It is the applicant's responsibility to use a current application.*	☑
☑	Detailed letter of explanation or justification for the application, describing the project and design elements, and how the project complies with Design Review standards.	☑
☑	One (1) Vicinity Map (8 ½" x 11") at 1" = 300' scale (or similar), label the location of the property and adjacent streets.	☑
☑	One 8 ½" x 11" colored aerial photo depicting proposed site, street names, and surrounding area within five-hundred feet (500').	☑
☑	Copy of Deed; and, if the applicant is not the owner, an **original** notarized statement (affidavit of legal interest) from the owner (and all interested parties) stating the applicant is authorized to submit this application.	☑

Exhibit B6

☑ Detailed site, landscape, drainage plan, ~~elevation~~ and to scale. *(No smaller than 1"=30', unless otherwise approved.)* ☑
One of each plan (site, landscape, drainage plan and elevations) is required to be submitted in the following plan sizes:

(1) 24" X 36" TO SCALE COPIES
(1) 11" X 17" REDUCTIONS
(1) 8 ½" x 11" REDUCTIONS

N/A Provide a color rendering and material sample board specifically noting where each color and material is to be located on the structure. N/A
Note: Provide photo of the colored rendering and material samples board to City Staff electronically in a JPG or PDF format.

The Applicant is obligated to provide a site plan that graphically portrays the site and includes the following features:

Site Plan

Applicant Use		Staff Use
☑	North Arrow	☑
☑	To scale drawings	☑
☑	Property lines	☑
☑	Name of "Plan Preparer" with contact information	☑
☑	Name of project and date	☑
N/A	Existing structures, identify those which are to be relocated or removed	N/A
☑	On-site and adjoining streets, alleys, private drives and rights-of-way	☑
☑	Drainage location and method of on-site retention / detention	☑
N/A	Location of public restrooms	N/A
☑	Existing / proposed utility service and any above-ground utility structures and their location	☑
☑	Location and width of easements, canals and drainage ditches	☑
☑	Location and dimension of off-street parking	☑
N/A	Locations and sizes of any loading area, docks, ramps and vehicle storage or service areas	N/A
N/A	Trash storage areas and exterior mechanical equipment, with proposed method of screening	N/A
N/A	Sign locations *(a separate sign application must be submitted with this application)*	N/A
☑	On-site transportation circulation plan for motor vehicles, pedestrians and bicycles	☑
☑	Locations and uses of ALL open spaces	☑
N/A	Locations, types and sizes of sound and visual buffers *(Note. all buffers must be located outside the public right-of-way)*	N/A
☑	Parking layout including spaces, driveways, curb cuts, circulation patterns, pedestrian walks and vision triangle	☑
☑	Locations of subdivision lines *(if applicable)*	☑
☑	Illustration that demonstrates adequate sight distance is provided for motor vehicles, pedestrians and bicycles	☑
☑	Location of walls and fences and indication of their height and material of construction	☑
N/A	Roofline and foundation plan of building, location on the site	N/A
☑	Location and designations of all sidewalks	☑
☑	Location and designation of all rights-of-way and property lines	☑

Landscape and Streetscape Plan

The landscape and streetscape plans need to be drawn by the project architect, professional landscape architect, landscape designer, or qualified nurseryman for development's possessing more than twelve thousand (12,000) square feet of private land. The landscaped and streetscape plans must be colored. The Planning Director or City Forester may require the preparation of a landscape plan for smaller developments by one of the noted individuals if the lot(s) have unique attributes.

Applicant Use		Staff Use
☑	North Arrow	☑
☑	To scale drawings	☑
☑	Boundaries, property lines and dimensions	☑
☑	Name of "Plan Preparer" with contact information	☑
☑	Name of project and date	☑
☑	Type and location of all plant materials and other ground covers. *Please review the City's plant list and rely upon it to identify the site's planting strategy. Include botanical and common name, quantity, spacing and sizes of all proposed landscape materials at the time of planting, and at maturity. A list of acceptable trees is available upon request from City Planning Staff. If there are any questions, please contact the City Forester, Natalie Reeder, at 208.880.0953*	☑
N/A	Existing vegetation identified by specific size. Identify those which are proposed to be relocated or removed.	N/A
☑	Method of irrigation. *Note: All plant materials, except existing native plants not damaged during construction or xeriscape species shown not to require regular watering, shall be irrigated by underground sprinkler systems set on a timer in order to obtain proper watering duration and ease of maintenance.*	☑
☑	Location, description, materials, and cross-sections of special features, including berming, retaining walls, hedges, fencings, fountains street/pathway furniture *(benches, etc.), etc.*	☑
N/A	Sign locations *Note: A separate sign application must be submitted with this application*	N/A
☑	Locations and uses for open spaces	☑
☑	Parking layout including spaces, driveways, curb cuts, circulation patterns, pedestrian walks and vision triangle	☑
☑	Illustration that demonstrates adequate sight distance is provided for motor vehicles, pedestrians and bicycles	☑
☑	Location and designations of all sidewalks	☑
☑	Engineered grading and drainage plans: A generalized drainage plan showing direction drainage with proposed on-site retention. Upon submission of building/construction plans for an approved design review application, a detailed site grading and drainage plan, prepared by a registered professional engineer (PE) shall be submitted to the City for review and approval by the City Engineer.	☑

Building Elevations

Applicant Use		Staff Use
N/A	Detailed elevation plans of each side of any proposed building(s) or additions(s) *Note: Four (4) elevations to include all sides of development and must be in color*	
N/A	Identify the elevations as to north, south, east, and west orientation	
N/A	Colored copies of all proposed building materials and indication where each material and color application is to be located *Note: Submit as 11"x17" reductions*	N/A
N/A	Screening/treatment of mechanical equipment	
N/A	Provide a cross-section of the building showing any roof top mechanical units and their roof placement	
N/A	Detailed elevation plans showing the materials to be used in construction of trash enclosures	

Lighting Plan

Applicant Use		Staff Use
N/A	Exterior lighting including detained cut sheets and photometric plan (pedestrian, vehicle, security, decoration)	
N/A	Types and wattage of all light fixtures *Note: The City encourages use of "dark sky" lighting fixtures*	N/A
N/A	Placement of all light fixtures shown on elevations and landscaping plans	

Roof Plans

Applicant Use		Staff Use
N/A	Size and location of all roof top mechanical units	N/A

Design Review Application

Applicant: Select Development & Contracting, LLC. Phone: 208-288-0700

☑ Owner ☐ Representative Fax/Email: 208-898-9527

Applicant's Address: P.O. Box 1030

Meridian, Idaho Zip: 83680

Owner: Randy Fullmer, Owner Phone: 208-288-0700

Owner's Address: P.O. Box 1030 Email: randy@selectmanagement

Meridian, Idaho Zip: 83680

Represented By: *(if different from above)* Billy Edwards, Project Manager Phone: 208-288-0700

Address: P.O. Box 1030 Email: wedwards@selectdev.com

Meridian, Idaho Zip: 83680

Address of Property: 40 Acre Farmland on East Deer Flat Road (No Address Given) Parcel #: S1418346600

Kuna, Idaho Zip: 83634

Distance from Major Cross Street: 1/4 & 1/2 mile east of North Meridian Road on East Deer Flat Road Street Name(s): East Deer Flat Road

Please check the box that reflects the intent of the application

☐ **BUILDING DESIGN REVIEW**
☑ **SUBDIVISION / COMMON AREA LANDSCAPE**
☐ **DESIGN REVIEW MODIFICATION**
☐ **STAFF LEVEL APPLICATION**

This Design Review application is a request to construct, add or change the following: *(Briefly explain the nature of the request.)*

Subdivision Landscape at All Common Lots (Clubhouse, Pool, Playground, Sports Court, and Monument Sign to be submitted at a later time)

1. Dimension of Property: 40 Acre Parcel (+/-1325' x +/-1324')
2. Current Land Use(s): Current Use Farmland (Ada County RR Designation)
3. What are the land uses of the adjoining properties?
   - North: Farmland (Ada County RR & RUT Designation)
   - South: Farmland & Single Family Residence (Ada County RR Designation)
   - East: Farmland & Single Family Residence (Ada County RR Designation)
   - West: Single Family Residence (Ada County RUT Designation)
4. Is the project intended to be phased, if so what is the phasing time period? Possibly 2 Phases
   Please explain: Refer to Letter of Intent/Narrative for further details clarification. Preference is to do entire project in 1 Phase but depending on separate jurisdiction review 2 Phases might be necessary
5. The number and use(s) of all structures: Subdivision to be 114 Buildable Lots and 18 Common Lots. Vertical construction (Clubhouse, Pool, Playground, Sports Court, and Monument Sign) to be submitted at a later time.
6. Building heights: N/A Number of stories: N/A

The height and width relationship of new structures shall be compatible and consistent with the architectural character of the area and proposed use.

Note: The maximum building height for each zoning district is as follows:

L-O: 35'	C-2: 60'	CBD: 80'	M-2: 60'	P: 60'
C-1: 35'	C-3: 60'	M-1: 60'	M-3: 60'	

7. What is the percentage of building space on the lot when compared to the total lot area? N/A
8. Exterior building materials & colors: *(Note: This section must be completed in compliance with the City of Kuna Ordinance No. 2007-21A (as amended); found online at (www.cityofkuna.com) under the City Code.*

	MATERIAL		COLOR
Roof:	N/A	/	N/A

Walls: (State percentage of wall coverage fro each type of building material below for each frontage wall) If there is not adequate space to identify the various building materials and applications, please list them on the attached sheet of this application. Please attach photos to support application types.

N/A

% of Wood application:	/	
% EIFS: *(Exterior Insulation Finish System)*	/	
% Masonry:	/	
% Face Block:	/	
% Stucco:	/	
& other material(s):	/	
List all other materials:		
Windows/Doors: *(Type of window frames & styles / doors & styles, material)*	/	
Soffits and fascia material:	/	
Trim, etc.:	/	

Other: _____ / _____

9. Please identify Mechanical Units: N/A
   Type/Height: _____
   Proposed Screening Method: _____
10. Please identify trash enclosure: *(size, location, screening & construction materials)* N/A
11. Are there any irrigation ditches/canals on or adjacent to the property? Yes
    If yes, what is the name of the irrigation or drainage provider? Perry Lateral
12. Fencing: *(Please provide information about new fencing material as well as any exiting fencing material)*
    Two Types of Fencing are being used; Solid Vinyl and Unscreened "Wrought-Iron". Locations are identified on Landscape Plan
    Type: Solid Vinyl and Unscreened 'Wrought-Iron"
    Size: 6'-0" and 3'-0" Tall Solid Vinyl and 4'-0" Tall Unscreened "Wrought-Iron"
    Location: Solid Vinyl Perimeter of Subdivision & Adjacent to ACHD ROW. 'Wrought-Iron" Adjacent to Irrigation Easements
    (Please note that the City has height limitations of fencing material and requires a fence permit to be obtained prior to installation)
13. Proposed method of On-site Drainage Retention/Detention:
    Underground Seepage Beds, see Preliminary Plat for Locations
14. Percentage of Site Devoted to Building Coverage: N/A
    % of Site Devoted to Landscaping: *(Including landscaped rights-of-way)* 11.3% (4.55 Acres) Square Footage: 198,198 SF
    % of Site that is Hard Surface: *(Paving, driveways, walkways, etc.)* _____ Square Footage: _____
    % of Site Devoted to other uses: _____
    Describe: _____
    % of landscaping within the parking lot (landscaped islands, etc.): _____
15. For details, please provide dimensions of landscaped areas within public rights-of-way:
    N/A
16. Are there any existing trees of 4" or greater in caliper on the property? *(Please provide the information on the site plans.)*
    If yes, what type, size and the general location? *(The City's goal is to preserve existing tree with greater than a four inch (4") caliper whenever possible):*
    No
17. Dock Loading Facilities:
    Number of docking facilities and their location: N/A
    Method of screening: N/A
18. Pedestrian Amenities: *(bike racks, receptacles, drinking fountains, benches, etc.)* N/A (To be submitted at a later time)
19. Setbacks of the proposed building from property lines:

Front _____ -feet Rear _____ -feet Side _____ -feet Side _____ -feet

20. Parking requirements: N/A

Total Number of Parking Spaces: _____ Width and Length of Spaces: _____

Total Number of Compact Spaces 8'x17'): _____

21. Is any portion of the property subject to flooding conditions? Yes _____ No X

IF THE PLANNING DIRECTOR OR DESIGNEE, THE DESIGN REVIEW BOARD AND/OR THE CITY COUNCIL DETERMINE THAT ADDITIONAL AND/OR REVISED INFORMATION IS NEEDED, AND/OR IF OTHER UNFORESEEN CIRCUMSTANCES ARISE, ANY DATES OUTLINED FOR PROCESSING MAY BE RECHEDULED BY THE CITY. APPLICANT/REPRESENTATIVE MUST ATTED THE DESIGN REVIEW BOARD MEETING/PLANNING AND ZONING MEETINGS.

The Ada County Highway District may also conduct public meetings regarding this application. IF you have questions about the meeting date or the traffic that this development may generate or the impact of that traffic on streets in the area, please contact the Ada County Highway District at 208.387.6170. In order to expedite you request, please have ready the file number indicated in this notice.

William T. Edwards Digitally signed by William T. Edwards
DN: C=US, E=wedwards@selectmanagment.com, O=Select Development, OU=Project Manager, CN=William T. Edwards
Date: 2018.07.10 11:16:23-06'00'

Signature of Applicant _____ Date 07.10.2018

City staff comments:

_____

_____

Signature of receipt by City Staff _____ Date 7-30-18

FOR ADDITIONAL INFORMATION:

(Please list page number and item in reference)

Refer to Preliminary Plat and Landscape Plans for further information

LANDSCAPE NOTES:

1. REGULATIONS & STANDARDS
   - 1.1. All contractor work shall be conducted in accordance with ISPWC (Idaho Standard Public Works Construction), 2018; and Kuna, ID codes, standards and state and local regulations.
2. EXISTING CONDITIONS
   - 2.1. All utilities shall be located prior to construction and protected. Any damage to structures, utilities or concrete will be replaced at contractor's expense.
   - 2.2. The site has many existing improvements such as underground utilities, curb and gutter, light poles and sidewalks.
   - 2.3. See Engineer's plans for information about existing features; all drainage pipes and locations. Protect and retain drainage at all times.
3. GRADING & SITE PREPARATION
   - 3.1. Prepare finish grades for planting by grubbing and removing weeds. If necessary apply Round-Up (or equivalent herbicide), using a certified applicator. Remove rocks and other materials over 2".
   - 3.2. All gravel overprep to be removed and disposed of off site.
   - 3.3. Finish grade to be smooth transition to allow for entire site to be a natural flowing space.
   - 3.4. Refer to Engineer's plans for grading information & for all drainage pipes and locations. Protect and retain drainage at all times.
   - 3.5. No pooling or standing water will be accepted per industry standards.
4. SOILS
   - 4.1. All planter beds to receive a minimum of 18" depth of screened topsoil. Spread, compact, and fine grade to smooth and uniform grade 2.5" below adjacent surfaces.
   - 4.2. All lawn areas to receive a minimum of 12" depth of screened topsoil. Spread, compact, and fine grade topsoil to a smooth uniform grade 1" below adjacent surfaces.
   - 4.3. Reuse of existing topsoil that has been stockpiled on site is permitted if:
     - 4.3.1. Topsoil is tested and analyzed to ensure a proper growing medium. Provide additional amendments as determined by soil tests. And
     - 4.3.2. Topsoil is to be loose, friable sandy loam that is clean and free of toxic materials, noxious weeds, weed seeds, rocks, grass or other foreign materials.
     - 4.3.3. Topsoil should have a pH of 6.5 to 8.
     - 4.3.4. If on site topsoil does not meet these minimum standards contractor is responsible for providing approved imported topsoil or improving onsite topsoil per the approval of the project manager.
   - 4.4. If imported topsoil is used it must be from a local source and be screened free of any debris or foreign matter. Topsoil must not contain rocks, sticks, lumps, or toxic matter.
   - 4.5. Smooth, compact, and fine grade topsoil in lawn areas to smooth and uniform grade .5" below adjacent surfaces.
   - 4.6. Prepare finish grade of topsoil to elevations set by Engineer's plans with positive drainage away from structures. Refer to Civil Engineer's plans for grading information.
   - 4.7. Amend all new plantings with 2 parts topsoil and 1 part compost.
5. PLANTER BED MULCH
   - 5.1. All planter beds to receive 3" depth of black and tan mini rock mulch, or approved other. Install over commercial grade weed barrier fabric per manufacturer recommendations.
6. LAWN AREAS
   - 6.1. Sod, to be tall turf-type fescue or approved equal per approved by owner.
   - 6.2. All lawn areas to have cut edge.
7. PLANTS
   - 7.1. All plant material shall be installed per industry standards.
   - 7.2. All plant material shall meet or exceed the minimum federal standards as regulated by ANSI Z60.1, American Standard for Nursery Stock. Plants not meeting these standards for quality, or plants determined to be unhealthy by Owner's representative, will be rejected.
   - 7.3. All trees and shrubs to be installed per details.
   - 7.4. Fertilize all trees and shrubs with 'Agriform' planting tablets or approved equal. Apply per manufacturers recommendations.
   - 7.5. All plants shall adhere to plant schedule, species & sizes. Any necessary substitutions due to availability or alternatives shall be coordinated to the landscape architect via submittal.
8. IRRIGATION
   - 8.1. Irrigation system shall be built to the following specifications:
     - 8.1.1. Adhere to city codes when connecting to city water.
     - 8.1.2. All irrigation material to be new with manufacturers' warranty fully intact.
   - 8.2. All remote control valves (including master control valve) to have flow control device.
   - 8.3. Install indoor rated controller. Coordinate with general contractor on exact location.
   - 8.4. Controller to include On/Off rain switch or other rain shut off device that does not alter program.
   - 8.5. Irrigation system piping to be minimum class 200 PVC or approved equal, sleeves to be double the size of pipes located within, all wires to be contained in separate sleeves 1-1/2" dia min.
   - 8.6. Use common trenching where possible.
   - 8.7. All PVC located under hardscapes to be schedule 40 PVC with same req's as above.
   - 8.8. All mainline pipe and wires to be buried a minimum of 18" and all lateral piping to be buried a minimum of 12" below grade.
   - 8.9. All wires to be 14 gauge direct bury wire at a minimum. Size wire for correct voltage loss.
   - 8.10. Supply a minimum of (2) spare wires to furthest valves from controller in all directions.
   - 8.11. Sprinkler heads shall have a matched precipitation within each control circuit. Velocities shall not exceed 5 feet per second.
   - 8.12. Contractor is responsible complying with all codes and paying all permits necessary.
   - 8.13. Sprinkler heads shall have matched precipitation within each control circuit. Velocities shall not exceed 5 feet per second.
9. CONTRACTOR RESPONSIBILITIES
   - 9.1. Contractor is responsible for 1 year of maintenance starting at the final date of acceptance by owner.
   - 9.2. Estimated quantities are shown for general reference only. Contractor shall be responsible for all quantity estimates.
   - 9.3. All plant material and workmanship shall be guaranteed for a period of one year beginning at the date of Acceptance by Owner. Replace all dead or unhealthy plant material immediately with same type and size at no cost to Owner.
   - 9.4. Landscape contractor to turn in as built drawings at the end of project. Substantial completion will not be granted until 2 copies @ 1"=30' scale are turned in and approved by owner's representative.
10. In the event of a discrepancy, notify the General Contractor.

LANDSCAPE REQUIREMENTS:

(PER KUNA MUNICIPAL CODE)

SCREENING & BUFFERING:
STREET LANDSCAPE BUFFER:
- (2) 2"-GAL TREE PER 100 LF
- (3) 6'-7' MIN HEIGHT EVERGREEN TREES PER 100 LF
- (12) 2 GALLON POT MINIMUM SHRUBS PER 100 LF

STREET	LENGTH (MINUS CURB CUTS)	DECID. TREES REQ./PROVIDED	EVGRN. TREES REQ./PROVIDED	SHRUBS REQ./PROVIDED
DEER FLAT RD	1,145'	22/23	33/33	137/142
S. STROEBEL RD	1,160'	24/24	36/36	139/141
N. LUGARNO AVE (WEST)	115'	2/2	3/3	14/18
N. LUGARNO AVE (EAST)	115'	2/2	3/3	14/18
E. RYDE ST	410'	8/8	12/12	44/75
E. MANLY ST (NORTH)	105'	2/2	3/3	12/12
E. MANLY ST (SOUTH)	105'	2/2	3/3	12/12
E. CONCORD ST (NORTH)	105'	2/2	3/3	12/12
E. CONCORD ST (SOUTH)	105'	2/2	3/3	12/12
N. MORTDALE AVE (WEST)	105'	2/2	3/3	12/12
N. MORTDALE AVE (EAST)	105'	2/2	3/3	12/12
E. SYLVANIA ST	410'	8/8	12/12	44/75
E. BEXLEY ST (NORTH)	105'	2/2	3/3	12/13
E. BEXLEY ST (SOUTH)	105'	2/2	3/3	12/13

COMMON LOT LANDSCAPING
*1 TREE PER 1,000 SF

COMMON LOT	AREA (SF)	TREES REQUIRED	TREES PROVIDED
BLOCK 2/L-15	4,042	4	4
BLOCK 3/L-9	4,402	4	4
BLOCK 4/L-1	29,425	29	30
BLOCK 4/L-4	45,033	45	45
BLOCK 5/L-9	10,000	10	10
BLOCK 6/L-5	10,000	10	10
BLOCK 10/L-9	4,800	5	5

GENERAL REQUIREMENTS:
TREE SIZING:
- SHADE TREES: MIN 2" CAL, B&B
- ORNAMENTAL TREES: MIN 2" CAL, B&B
- CONIFER TREES: MIN 6' H, B&B

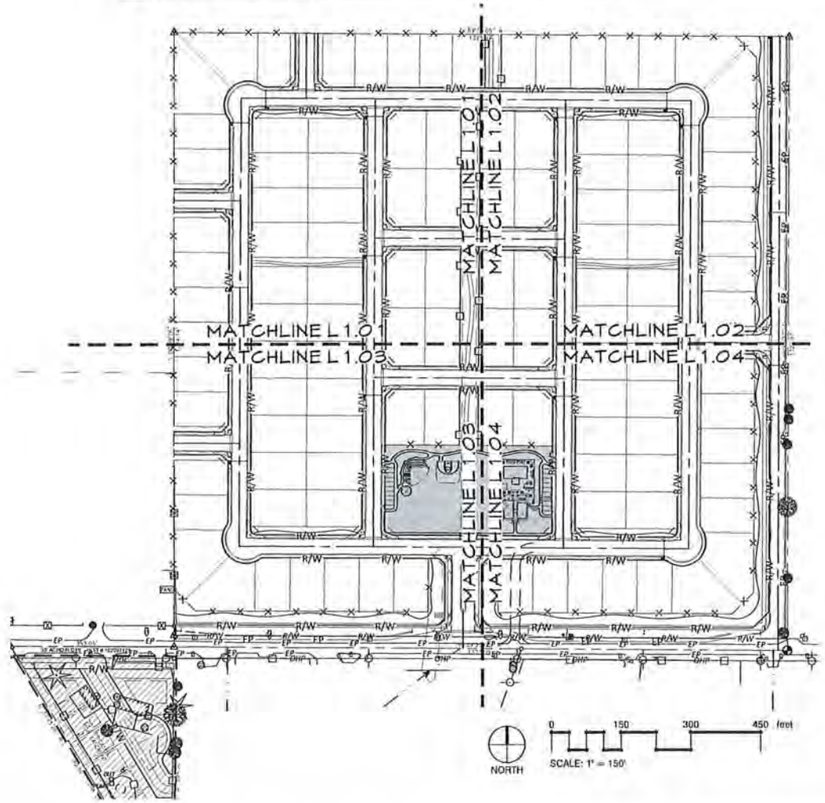
SHRUB SIZING:
- WOODY SHRUBS: 2 GAL

Exhibit B7

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL.	SIZE	QTY	REMARKS
+	Acer x freemanii 'Jeffered' / Autumn Blaze Maple	B&B	2"		28	50'h x 40'w
·	Fraxinus pennsylvanica 'Patmore' / 'Patmore' Green Ash	B&B	2"		20	40'h x 20'w
+	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	B&B	2"		14	50'h x 30'w
+	Liquidambar styraciflua 'Worplesdon' / Worplesdon Sweet Gum	B&B	2"		21	40'h x 25'w
·	Picea omorika 'Bruns' / Bruns Spruce	B&B		6'-7' H	79	30'h x 10'w
·	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine	B&B		6'-7' H	44	25'h x 12'w
·	Prunus virginiana 'Canada Red' / Canada Red Cherry	B&B	2"		50	25'h x 20'w
o	Quercus robur x alba 'Crimson Spire' / Crimson Spire Oak	B&B	2"		43	40'h x 20'w
·	Tilia americana 'Redmond' / Redmond American Linden	B&B	2"		19	50'h x 30'w
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT			QTY	REMARKS
⊙	Euonymus fortunei 'Emerald 'n Gold' TM / Wintercreeper	2 gal			137	2'h x 5'w
⊙	Perovskia atriplicifolia 'Blue Spires' / Russian Sage	2 gal			263	4'h x 4'w
⊙	Prunus laurocerasus 'Otto Luyken' / Otto Luykens English Laurel	2 gal			99	3'h x 6'w
⊙	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal			117	2'h x 6'w

PLAN OVERVIEW:



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STATE OF IDAHO · MILLET HOWARD · IA-16733 · 11.02.18 · REGISTERED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

LUGARNO TERRA SUBDIVISION
KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO.	18-1042
DATE:	NOVEMBER 2, 2018
DRAWN BY:	DM
CHECKED BY:	JB

DRAWING TITLE
LANDSCAPE OVERVIEW

SHEET NUMBER
L1.00

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I:\191_LSRG Projects\18-1042 Kuna Subdivision\03-CAD\13-00-City Submittals\18-1042 L1.00 DR LayoutTab1 LandscapePlan.dwg

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME
	Acer x freemanii 'Jeffsred' / Autumn Blaze Maple
	Fraxinus pennsylvanica 'Patmore' / 'Patmore' Green Ash
	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust
	Liquidambar styraciflua 'Morplesdon' / Morplesdon Sweet Gum
	Picea omorika 'Bruns' / Bruns Spruce
	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine
	Prunus virginiana 'Canada Red' / Canada Red Cherry
	Quercus robur x alba 'Crimson Spire' / Crimson Spire Oak
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	Prunus laurocerasus 'Otto Luyken' / Otto Luykens English Laurel
	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac

LANDSCAPE MATERIALS LEGEND:

LAWN: SOD PER NOTE 6/L1.00

6' TAN VINYL FENCE - SEE DETAIL 3/L1.05

4' OPEN BLACK WROUGHT IRON FENCE - SEE DETAIL 4/L1.05

40' CLEAR VISION TRIANGLE

NO TREES WITHIN 10' OF ACHD SEEPAGE BED

MATCHLINE L1.01

MATCHLINE L1.02

MATCHLINE L1.01

N 89°39'26" W
314.14'

0 30 60 90 feet
SCALE: 1" = 30'
NORTH

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LUGARNO TERRA SUBDIVISION

KUNA, ID

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LANDSCAPE PLAN

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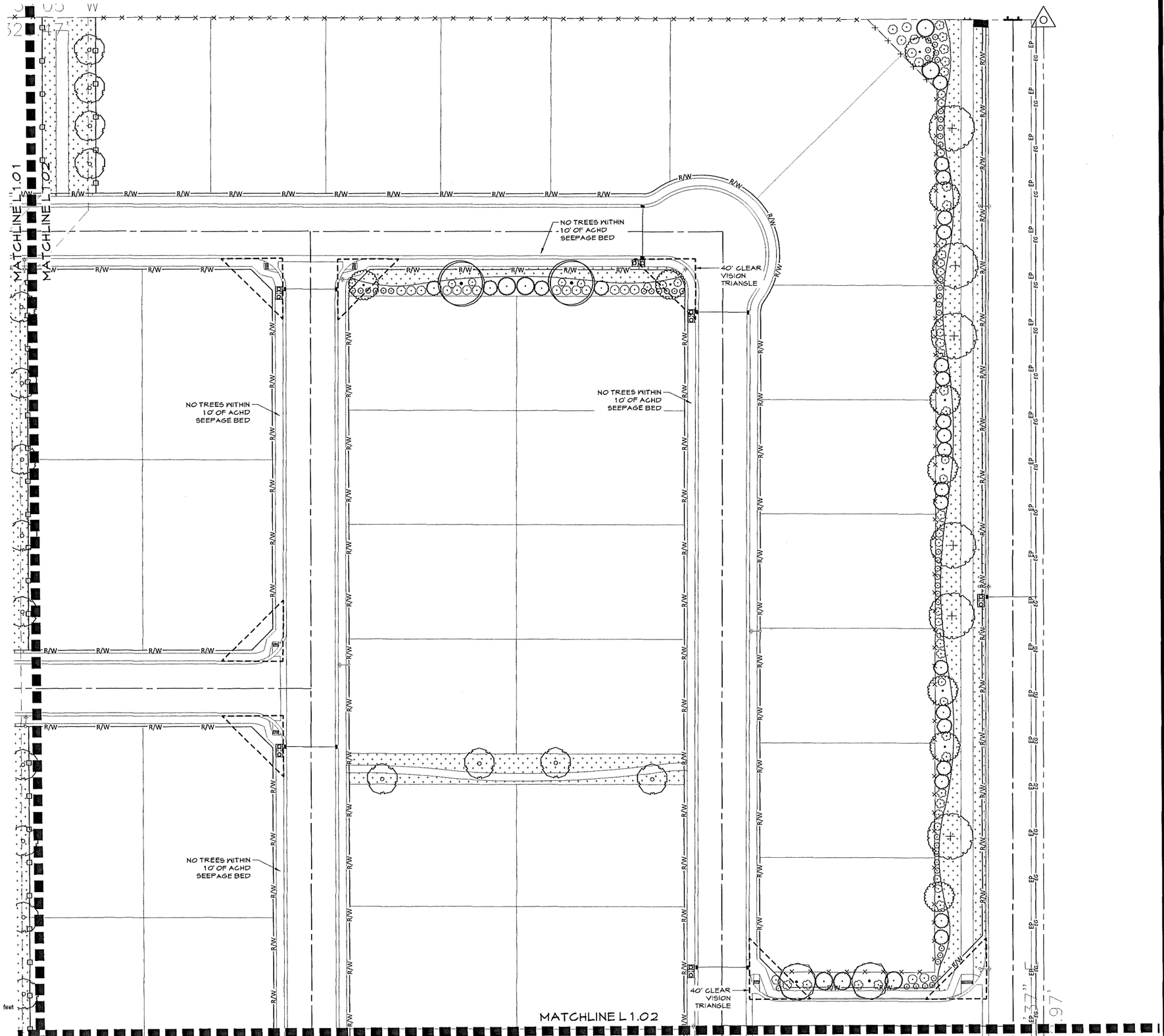
PLANT SCHEDULE

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	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine
	Prunus virginiana 'Canada Red' / Canada Red Cherry
	Quercus robur x alba 'Crimson Spire' / Crimson Spire Oak
	Tilia americana 'Redmond' / Redmond American Linden

SHRUBS	BOTANICAL NAME / COMMON NAME
	Euonymus fortunei 'Emerald 'n Gold' TM / Wintercreeper
	Perovskia atriplicifolia 'Blue Spires' / Russian Sage
	Prunus laurocerasus 'Otto Luyken' / Otto Luykens English Laurel
	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac

LANDSCAPE MATERIALS LEGEND:

- LAWN: SOD PER NOTE 6/L1.00
- 6' TAN VINYL FENCE - SEE DETAIL 3/L1.05
- 4' OPEN BLACK WROUGHT IRON FENCE - SEE DETAIL 4/L1.05



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NOT FOR CONSTRUCTION

LUGARNO TERRA SUBDIVISION

KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	18-1042
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LANDSCAPE PLAN

SHEET NUMBER

L1.02

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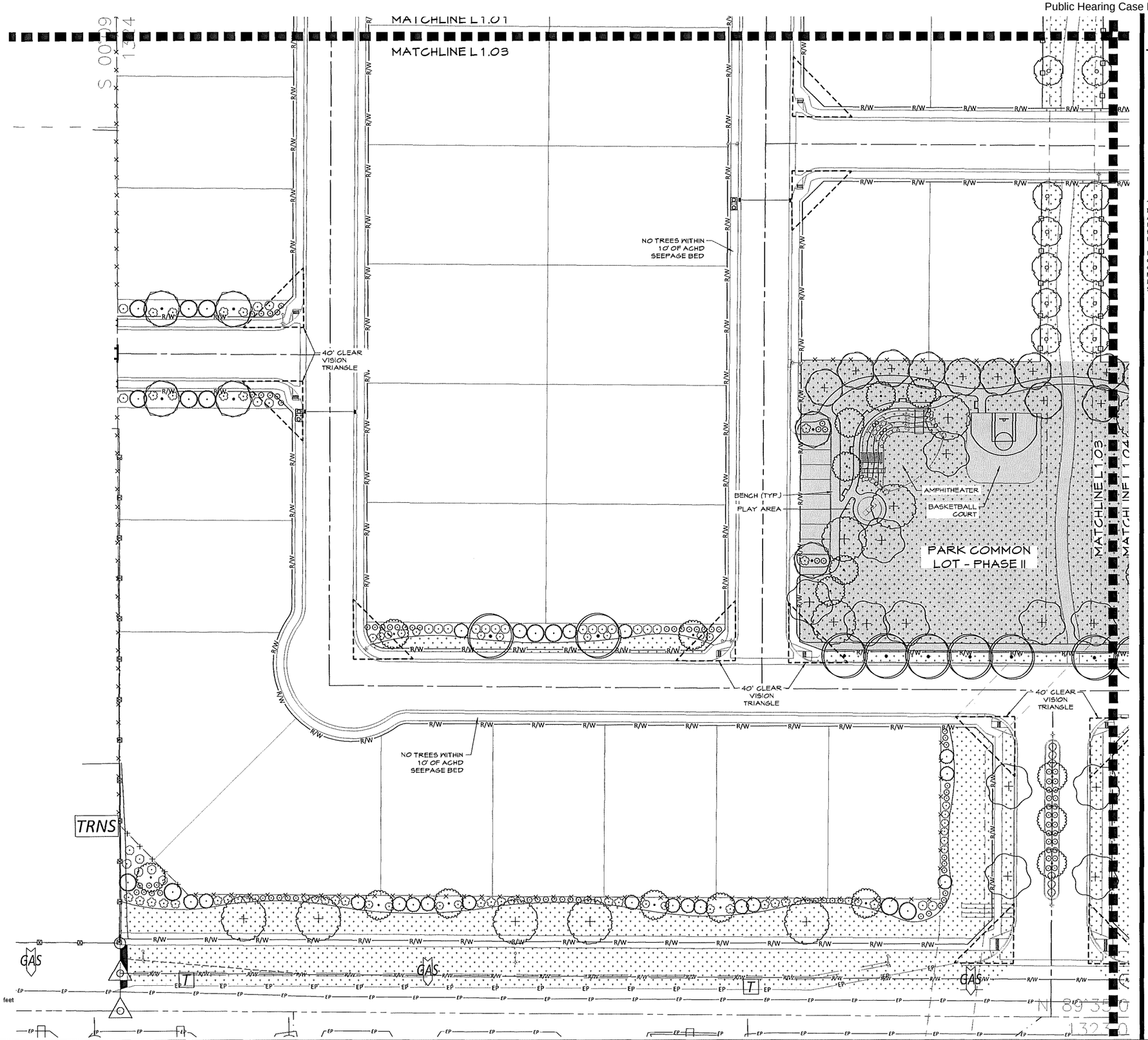
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PLANT SCHEDULE

	BOTANICAL NAME / COMMON NAME
TREES	
	Acer x freemanii 'Jeffered' / Autumn Blaze Maple
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	Prunus laurocerasus 'Otto Luyken' / Otto Luykens English Laurel
	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac

LANDSCAPE MATERIALS LEGEND:

- LAWN: SOD PER NOTE 6/L 1.00
- 6' TAN VINYL FENCE - SEE DETAIL 3/L 1.05
- 4' OPEN BLACK WROUGHT IRON FENCE - SEE DETAIL 4/L 1.05



NORTH

0 30 60 90 feet

SCALE: 1" = 30'

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LUGARNO TERRA SUBDIVISION

KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO.	18-1042
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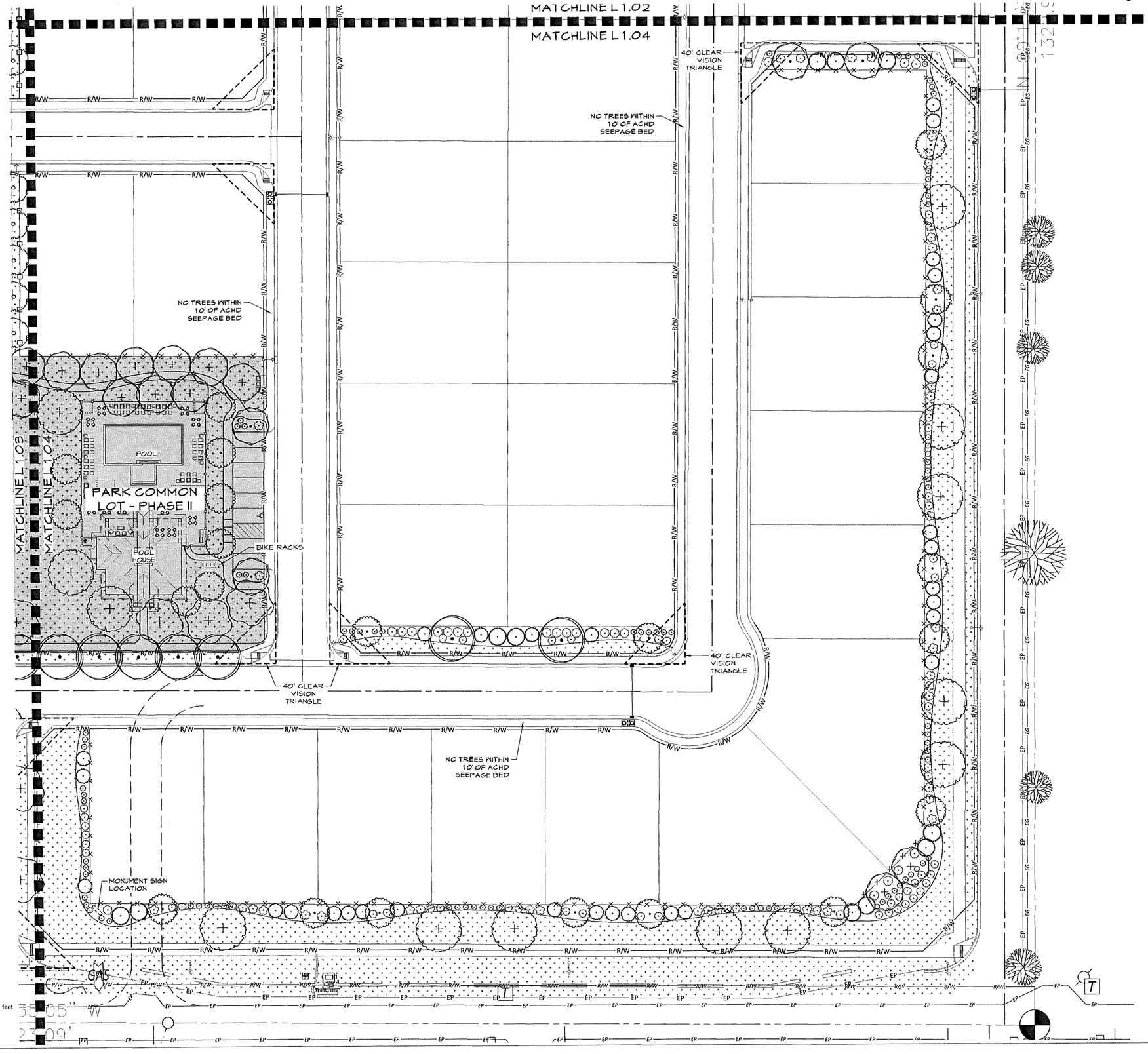
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PLANT SCHEDULE

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LANDSCAPE MATERIALS LEGEND:

- LAWN: SOD PER NOTE 6/L1.00
- 6' TAN VINYL FENCE - SEE DETAIL 3/L1.05
- 4' OPEN BLACK WROUGHT IRON FENCE - SEE DETAIL 4/L1.05



NORTH

0 30 60 90 feet

SCALE: 1" = 30'

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NOT FOR CONSTRUCTION

LUGARNO TERRA SUBDIVISION

KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	18-1042
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CHECKED BY:	JB

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LANDSCAPE PLAN

SHEET NUMBER

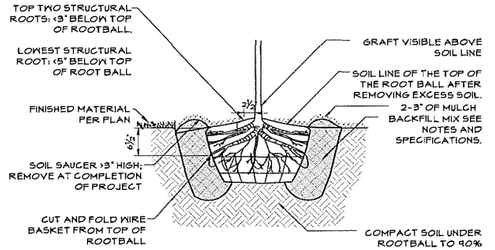
L1.04

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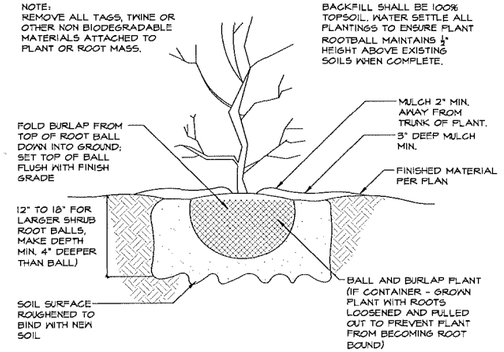
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STACK ROCK GROUP - CITY REVIEW SET

NOTES:
1. DO NOT DAMAGE OR CUT LEADER
2. DO NOT DISTURB ROOT OR DAMAGE ROOT BALL WHEN INSTALLING TREE OR TREE STAKES.
3. TREE STAKING SHALL BE AT THE DISCRETION OF CONTRACTOR. HOWEVER ANY TREES DISTURBED FROM PLUMB DURING THE PLANT WARRANTEE PERIOD WILL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
4. WATER PLANTS THOROUGHLY IMMEDIATELY AFTER INSTILLATION.
5. REMOVE ALL BURLAP, TWINE, ROPE, OR MATERIAL FROM THE TOP ⅓ OF THE ROOTBALL.
6. 4' DIAMETER PLANTER BED/MULCH RING AROUND THE TRUNK OF THE TREE. 3" OF MULCH MIN. DO NOT PLACE MULCH WITHIN 2" OF TRUNK OF TREE.

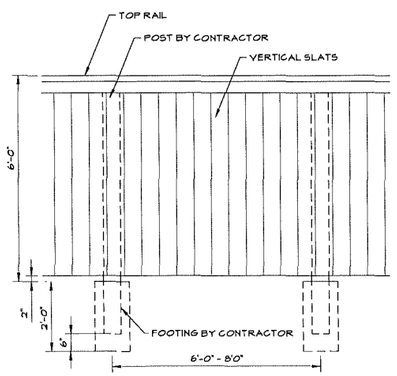


1 BALL AND BURLAP TREE PLANTING
3/4" = 1'-0" 329343.33-04



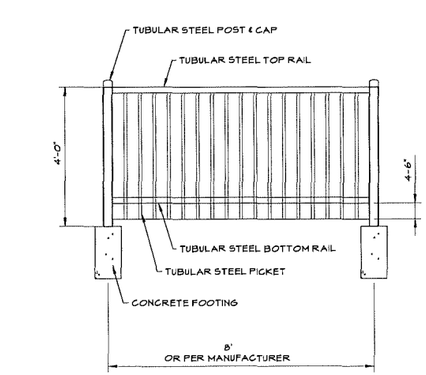
2 SHRUB PLANTING
1" = 1'-0" 329333.16-01

NOTE:
*FENCE TO BE TAN VINYL, OR OTHER TO BE APPROVED BY OWNER
*POSTS, CONNECTIONS, SLATS & FOOTINGS BY CONTRACTOR



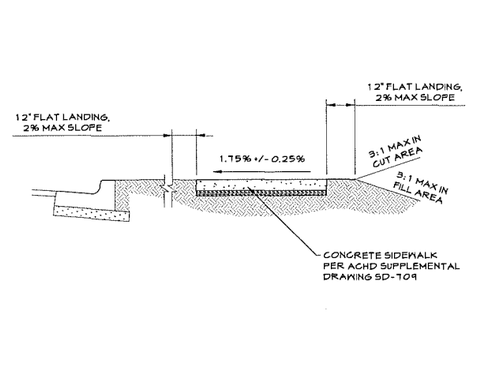
3 6' CLOSED VISION FENCE
1/2" = 1'-0" 329329.23-04

NOTE:
*ALL COMPONENTS TO BE BLACK
*INSTALL PER MANUFACTURER RECOMMENDATIONS
*DIMENSIONS TO MATCH EXISTING FENCE ON SITE



4 TUBULAR STEEL FENCE
1/2" = 1'-0" 329329-04

NOTE:
REFERENCE ACHD SUPPLEMENTAL DRAWING SD-709 & CIVIL DRAWINGS



5 CONCRETE SIDEWALKS ADJ LANDING- 12"
3/8" = 1'-0" 033361-01

STACK ROCK GROUP
LANDSCAPE ARCHITECTURE & MASTER PLANNING
(208) 345-0500
404 S 8th St. # 154
Boise, ID 83702
StackRockGroup.com
WILLET C HOWARD, PLA
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STATE OF IDAHO · WILLET C HOWARD · LA-16733 · 11.02.18 · LICENSED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

LUGARNO TERRA SUBDIVISION

KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	18-1042
DATE:	NOVEMBER 2, 2018
DRAWN BY:	DM
CHECKED BY:	JB

DRAWING TITLE

LANDSCAPE DETAILS

SHEET NUMBER

L1.05

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STACK ROCK GROUP - CITY REVIEW SET

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME
	Acer x freemanii 'Jeffsred' / Autumn Blaze Maple
	Fraxinus pennsylvanica 'Patmore' / 'Patmore' Green Ash
	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust
	Liquidambar styraciflua 'Worplesdon' / Worplesdon Sweet Gum
	Picea omorika 'Bruns' / Bruns Spruce
	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine
	Prunus virginiana 'Canada Red' / Canada Red Cherry
	Quercus robur x alba 'Crimson Spire' / Crimson Spire Oak
	Tilia americana 'Redmond' / Redmond American Linden
SHRUBS	**BOTANICAL NAME / COMMON NAME**
	Euonymus fortunei 'Emerald 'n Gold' TM / Wintercreeper
	Perovskia atriplicifolia 'Blue Spires' / Russian Sage
	Prunus laurocerasus 'Otto Luyken' / Otto Luykens English Laurel
	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac

LANDSCAPE MATERIALS LEGEND:

LAWN: SOD



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Seals

PRELIMINARY

STATE OF IDAHO · WILLET C. HOWARD · LA-16733 · 06.14.18 · LICENSED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

LUGARNO TERRA SUBDIVISION

KUNA, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	18-1042
DATE:	JUNE, 14, 2018
DRAWN BY:	DM
CHECKED BY:	JB

DRAWING TITLE

OVERALL LANDSCAPE COLOR PLAN

SHEET NUMBER

L1.06

STACK ROCK GROUP - CITY REVIEW SET

D:\01_SRG Projects\18-1042 Kuna Subdivision\SRG_181042_LPNSRG-X-LP ColorPlan.dwg

Jace Hellman

From: Jace Hellman
Sent: Friday, August 17, 2018 2:19 PM
To: ACHD; Ada County Engineer; Adam Ingram; Attorney Icloud; Becky Rone - Kuna USPS Addressing; Bob Bachman; Boise Project Board of Control (TRitthaler@boiseproject.org); Cable One t.v.; Central District Health Dept. CDHD; COMPASS; DEQ (Alicia.martin@deq.idaho.gov); Eric Adolfson; Idaho Power; Idaho Power; Idaho Power Easements 1; 'Idaho Power Easments 2'; Intermountain Gas; J&M Sanitation - Chad Gordon; jmcdaniel@adaweb.net; Julie Stanely - Regional Address Mgmt.; Ken Couch: Idaho Transportation Department; Kuna Postmaster - Marc C. Boyer; Kuna School District; Kuna School District; Kuna School District; Megan Leatherman; Nampa Meridian Irrigation District; New York Irrigation; Paul Stevens; Perry Palmer; Planning Mgr: Ada County Development Services; Terry Gammel
Subject: Kuna Planning and Zoning Request for Comment - Case Nos. 18-04-AN (Annexation) & 18-03-S (Preliminary Plat)
Attachments: Agency Notification Packet.pdf

August 17, 2018

Notice is hereby given by the City of Kuna that the following action(s) are under consideration:

File Number & Case Name:	18-04-AN (Annexation) & 18-03-S (Preliminary Plat) Lugarno Terra.
Project Description	Billy Edwards, with Select Development and Contracting, requests approval to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).
Site Location	1919 East Deer Flat Road and East Deer Flat Road, Kuna, ID 83634 (North Meridian Road and East Deer Flat Road).
Representative	**Select Development & Contracting, LLC.** Billy Edwards P.O. Box 1030 Meridian, ID 83680 208-288-0700 wedwards@selectdev.com
Public Hearing Date	Tuesday, **October 9, 2018** 6:00 pm Kuna City Hall is located at 751 W. 4th Street, Kuna, ID 83634

Exhibit C-1

Staff Contact	Jace Hellman, Planner II jhellman@kunaid.gov Phone: 208.922.5274 Fax: 208.922.5989

Enclosed is information to assist you with your consideration and response. All comments as to how this action may affect the service(s) your agency provides, is greatly appreciated. Please contact staff with any questions. **If your agency needs different or additional information to review and provide comments please notify our office and they will be sent to you.** If your agency needs additional time for review, please let our office know as soon as possible. *No response within 15 business days will indicate you have no objection or comments for this project.*

Thank you,

Jace Hellman
Planner II
751 W 4th St
Kuna, ID 83634
jhellman@kunaid.gov

Jace Hellman

From: Brenda Saxton <bsaxton@kunaschools.org>
Sent: Saturday, August 18, 2018 10:57 AM
To: Jace Hellman
Subject: Re: Kuna Planning and Zoning Request for Comment - Case Nos. 18-04-AN (Annexation) & 18-03-S (Preliminary Plat)

Hello Jace,

Request in plans for a place for students to wait, such as a sidewalk for the bus back from Deer Flat Rd otherwise no concerns.

Thank you,
Brenda

On Fri, Aug 17, 2018 at 2:19 PM, Jace Hellman <jhellman@kunaid.gov> wrote:

August 17, 2018

Notice is hereby given by the City of Kuna that the following action(s) are under consideration:

File Number & Case Name:	18-04-AN (Annexation) & 18-03-S (Preliminary Plat) Lugarno Terra.
Project Description	Billy Edwards, with Select Development and Contracting, requests approval to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).
Site Location	1919 East Deer Flat Road and East Deer Flat Road, Kuna, ID 83634 (North Meridian Road and East Deer Flat Road).

Exhibit C2

Representative	**Select Development & Contracting, LLC.** Billy Edwards P.O. Box 1030 Meridian, ID 83680 208-288-0700 wedwards@selectdev.com
Public Hearing Date	Tuesday, **October 9, 2018** 6:00 pm Kuna City Hall is located at 751 W. 4th Street, Kuna, ID 83634
Staff Contact	Jace Hellman, Planner II jhellman@kunaid.gov Phone: 208.922.5274 Fax: 208.922.5989
Enclosed is information to assist you with your consideration and response. All comments as to how this action may affect the service(s) your agency provides, is greatly appreciated. Please contact staff with any questions. **If your agency needs different or additional information to review and provide comments please notify our office and they will be sent to you.** If your agency needs additional time for review, please let our office know as soon as possible. *No response within 15 business days will indicate you have no objection or comments for this project.*	

Thank you,

Jace Hellman

Planner II

751 W 4th St

Kuna, ID 83634

jhellman@kunaid.gov

CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.kunacity.id.gov

Paul A. Stevens, P.E.
Kuna City Engineer
208-287-1727

MEMORANDUM

Date: 24 August 2018
From: Paul A. Stevens, P.E.
To: Wendy Howell, Planning and Zoning Director
RE: Lugarno Terra Subdivision

The City Engineer has reviewed the Lugarno Terra Subdivision Preliminary Plat request dated 8 August 2018. It is noted that while the application outlines the applicant's general development intent, specific development plans are not provided except those implied as allowed or permitted in a "R-4 and R-6" zone. These comments apply to the Preliminary Plat and do not apply to the design review. The design review request rests with the Planning and Zoning Department. Review of civil design drawings is accomplished separately.

Recommendation: proceed with this Preliminary Plat consistent with the enclosed comments but to keep in mind that these comments may be expanded or refined in connection with the future land-use actions. The following comments apply:

1. **Sanitary Sewer & Potable Water**

   a) The applicant's property is presently in an undeveloped state, is not connected to City services and would be subject to connection fees for the ultimate connected sewer load and water demand as provided in the City's Standard Tables. City Code (6-4-2) requires connection to the City sewer system for all sanitary sewer needs. City Code (6-4-2X) requires connection to City water services.
   b) City code 5-16-3: B.2 states that applicant shall extend public sewer and water to each parcel when water and sewer are available within three hundred (300) feet of the parcels.
   c) In this case, the water and sewer utilities are available in E. Deer Flat Road
   d) Recommendation: connect the water and sewer to infrastructure in E. Deer Flat Road.

Exhibit 13

2. Pressure Irrigation

a) The applicant's property is not connected to the City pressure irrigation system. Relying on drinking water for irrigation purposes is contrary to City Code (6-4-2). Pressurized irrigation extends to E. Deer Flat Road and has been configured to allow connection and extension.

b) The development is subject to connection fees based on the number of dwellings and lot size for the residential area and based on ultimate landscaped area and lot size for the common lot, as provided in City Resolutions.

c) It is recommended that annexation into the municipal irrigation district and pooling of water rights is a requirement at the time of final platting.

d) For any connected load, it is recommended that this application be conditioned to conform to the Pressure Irrigation Master Plan.

3. Grading and Storm Drainage

The following provisions apply to Lugarno Terra Subdivision:

a) Provide a grading and drainage plan which supports and maintains all upstream drainage rights and all downstream irrigation delivery rights as they presently exist for this property.

b) Runoff from public right-of-way is regulated by ACHD. On site storm water retention shall be reviewed in conjunction with the Civil Engineering review by ACHD.

c) Any increase in quantity or rate of runoff or decrease in quality of runoff compared to historical conditions must be detained, treated and released at rates no greater than historical amounts. In the alternative, offsite disposal of storm water in excess of historical rates or conditions of disposal at locations different than provided historically, approval of the operating entity is required. The City of Kuna relies on the ACHD Stormwater Policy Manual to establish the requirements for design of any private disposal system.

d) If impervious area is increased, provide a storm water disposal plan acceptable to the City Engineer which accounts for the increased storm water drainage. Provide detailed drawings of drainage facilities for review.

4. General

a) With the development of this property and its connection to water, sewer, and pressurized irrigation services, this property will be placing demand not only on constructed facilities but on water & irrigation rights provided by others. It is the reasonable expectation, in return, that this property transfer to the City at time of connection (development) any conveyable water rights by deed and "Change of Ownership" form from IDWR, that are presently associated with the property. The domestic water right associated solely with a residence and ½ acre or less is not conveyable. The water right held in trust by an irrigation district is also not conveyable.

b) A plan approval letter will be required if this project affects any local irrigation districts. Specifically, the relocation of gravity irrigation to the midpoint of the subdivision.

c) Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties.

d) State the vertical datum used for elevations on all drawings.

e) Provide engineering certification on all final engineering drawings.

5. Inspection Fees

An inspection fee will be required for City inspection of the construction of any water, sewer and irrigation facilities associated with this development. The developer will still require a qualified responsible engineer to do sufficient inspection to justly certify to DEQ the project was completed in accordance with approved plans and specifications and to provide accurate as-built drawings to the City. The developer's engineer and the City's inspector are permitted to coordinate inspections as much as possible. The current inspection fee is $1.00 per lineal foot of sewer, water and pressure irrigation pipe and payment is due and payable prior to City's approval of final construction plans.

6. Right-of-Way

The subject property fronts on its south side by a section line principal arterial street (E. Deer Flat - ACHD). The following conditions are related to E. Deer Flat Road.

a) Sufficient half right-of-way on the quarter line and section line for existing and future classified streets should be provided pursuant to City & ACHD standards.
b) Approaches onto classified streets must comply with ACHD approach policies.
c) It is recommended that sidewalk, curb and gutter, street widening and any related storm drainage facilities, consistent with city code and policies, are provided in connection with property development.

7. As-Built Drawings

As-built drawings are required at the conclusion of any public facility construction project and are the responsibility of the developer's engineer. The city may help track changes but will not be responsible for the finished product. As-built drawings will be required before occupancy or final plat approval is granted.

8. Property Description

a) The applicant provided a preliminary and supporting documents as part of the application.

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Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

August 28, 2018

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

VIA EMAIL

Development Application	**18-04-AN, 18-03-S**
Project Name	**LUGARNO TERRA SUBDIVISION**
Project Location	North of East Deer Flat Road, 0.40 miles east of SH-69 milepost 3.21
Project Description	Annex a 40 acre parcel into Kuna City limits with R-4 zoning and subdivide the 40 acres into 134 total lots and approve preliminary plat consisting of 114 single family lots and 20 common lots.
Applicant	Billy Edwards with Select Development and Contracting

The Idaho Transportation Department (ITD) reviewed the referenced annexation and preliminary plat applications and has the following comments:

1. This project does not abut the State highway system.

2. ITD requests a right turn warrant for the intersection of East Deer Flat Road/ SH-69 to determine if a right turn lane is required. If warranted, the right turn lane is required to be constructed prior to the start of any other construction.

3. The City is reminded that the SH-69 corridor is already congested. This project will increase the number of vehicle trips in the corridor. As the City continues to add additional trips to the corridor through development, the congestion will worsen until the roadway system is ultimately overloaded and fails. ITD has no current funding assigned to mitigate traffic congestion in the SH-69 corridor in this area.

4. IDAPA 39.03.60 rules govern advertising along the State highway system. The applicant may contact Justin Pond, Right-of-Way Section Program Manager, at (208) 334-8832 for more information.

Exhibit C4

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P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

5. Idaho Code 40-1910 does not allow advertising within the right-of-way of any State highway.

6. ITD objects to the proposed application due to traffic concerns noted above. ITD respectfully requests that all building permits be withheld until such time that all traffic concerns are resolved. ITD will withdraw any objection to the proposed application once all traffic concerns are resolved.

If you have any questions, you may contact Tom Haynes at (208) 334-8944 or me at (208) 332-7190.

Sincerely,

Ken Couch
Development Services Coordinator
Ken.Couch@itd.idaho.gov

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Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

October 2, 2018

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

VIA EMAIL

Development Application	**18-04-AN, 18-03-S**
Project Name	**LUGARNO TERRA SUBDIVISION**
Project Location	North of East Deer Flat Road, 0.40 miles east of SH-69 milepost 3.21
Project Description	Annex a 40 acre parcel into Kuna City limits with R-4 zoning and subdivide the 40 acres into 134 total lots and approve preliminary plat consisting of 114 single family lots and 20 common lots.
Applicant	Billy Edwards with Select Development and Contracting

The Idaho Transportation Department (ITD) reviewed the referenced annexation and preliminary plat applications and has the following comments:

1. ITD received a right turn warrant for the intersection of East Deer Flat Road/ SH-69. The right turn lane is not required.

2. The City is reminded that the SH-69 corridor is already congested. This project will increase the number of vehicle trips in the corridor. As the City continues to add additional trips to the corridor through development, the congestion will worsen until the roadway system is ultimately overloaded and fails. ITD has no current funding assigned to mitigate traffic congestion in the SH-69 corridor in this area.

3. ITD withdraws the objection to the proposed application. The traffic concerns are resolved.

If you have any questions, you may contact Tom Haynes at (208) 334-8944 or me at (208) 332-7190.

Sincerely,

Exhibit
C4

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Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

Ken Couch
Development Services Coordinator
Ken.Couch@itd.idaho.gov

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

DEQ Response to Request for Environmental Comment

Date:	*August 29, 2018*
Agency Requesting Comments:	*City of Kuna*
Date Request Received:	*August 17, 2018*
Applicant/Description:	*18-04-AN (Annexation) & 18-03-S (Preliminary Plat) Lugarno Terra*

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. *Air Quality*

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  The property owner, developer, and their contractor(s) must ensure that reasonable controls to prevent fugitive dust from becoming airborne are utilized during all phases of construction activities per IDAPA 58.01.01.651.

  Per IDAPA 58.01.01.600-617, the open burning of any construction waste is prohibited. The property owner, developer, and their contractor(s) are responsible for ensuring no prohibited open burning occurs during construction.

  For questions, contact David Luft, Air Quality Manager, at 373-0550.

2. *Wastewater and Recycled Water*

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects

Exhibit C5

require separate permits as well.

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*
- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.

3. Drinking Water

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*
- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  All projects for construction or modification of public drinking water systems require preconstruction approval.
- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*
- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*
- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*
- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  For questions, contact Todd Crutcher, Engineering Manager at 373-0550.

4. Surface Water

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*
- *Please contact DEQ to determine whether this project will require a National Pollution Discharge Elimination System (NPDES) Permit. If this project disturbs more than one*

acre, a stormwater permit from EPA may be required.

- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*

- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:*
  http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm

- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.

5. Hazardous Waste And Ground Water Contamination

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*

- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.*

- ***Water Quality Standards.*** *Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.

- ***Ground Water Contamination.*** *DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in*

accordance with a permit, consent order or applicable best management practice, best available method or best practical method."

For questions, contact Albert Crawshaw, Waste & Remediation Manager, at 373-0550.

6. ***Additional Notes***
   - *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*
   - *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.

Sincerely,

Aaron Scheff

Aaron Scheff
aaron.scheff@deq.idaho.gov
Regional Administrator
Boise Regional Office
Idaho Department of Environmental Quality

ec: TRIM 2018AEK119

CENTRAL DISTRICT HEALTH DEPARTMENT

CENTRAL DISTRICT HEALTH DEPARTMENT

Environmental Health Division

Return to:
- ☐ ACZ
- ☐ Boise
- ☐ Eagle
- ☐ Garden City
- ☒ Kuna
- ☐ Meridian
- ☐ Star

Rezone # _____

Conditional Use # _____

Preliminary / Final / Short Plat 18-03-S

Lugarno Terra

RECEIVED
AUG 31 2018
CITY OF KUNA

☐ 1. We have No Objections to this Proposal.

☐ 2. We recommend Denial of this Proposal.

☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.

☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.

☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
- ☐ high seasonal ground water
- ☐ bedrock from original grade
- ☐ waste flow characteristics
- ☐ other _____

☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.

☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.

☒ 8. After written approval from appropriate entities are submitted, we can approve this proposal for:
- ☒ central sewage
- ☐ community sewage system
- ☐ community water well
- ☐ interim sewage
- ☒ central water
- ☐ individual sewage
- ☐ individual water

☒ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
- ☒ central sewage
- ☐ community sewage system
- ☐ community water
- ☐ sewage dry lines
- ☒ central water

☐ 10. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.

☐ 11. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.

☐ 12. We will require plans be submitted for a plan review for any:
- ☐ food establishment
- ☐ swimming pools or spas
- ☐ child care center
- ☐ beverage establishment
- ☐ grocery store

☒ 13. Infiltration beds for storm water disposal are considered shallow injection wells. An application and fee must be submitted to CDHD.

☐ 14. _____ Reviewed By: Lou Bond

_____ Date: 8/27/18

Exhibit C6

Communities in Motion 2040 Development Review

The Community Planning Association of Southwest Idaho (COMPASS) is the metropolitan planning organization (MPO) for Ada and Canyon Counties. COMPASS has developed this review as a tool for local governments to evaluate whether land developments are consistent with the goals of *Communities in Motion 2040 (CIM 2040)*, the regional long-range transportation plan for Ada and Canyon Counties. This checklist is not intended to be prescriptive, but rather a guidance document based on CIM 2040 goals.

Development Name: Lugarno Terra (18-04-AN) **Agency: Kuna**

CIM Vision Category: Future Neighborhood

New households: 114 **New jobs: 0** **Exceeds CIM forecast: No**

CIM Corridor: **NA** Pedestrian level of stress: **R-Deer Flat Rd** Bicycle level of stress: **R-Deer Flat Rd**	Level of Stress considers facility type, number of vehicle lanes, and speed. Roads with **G or PG** ratings better support bicyclists and pedestrians of all ages and comfort levels.
Housing within 1 mile: **386** Jobs within 1 mile: **310** Jobs/Housing Ratio: **0.8**	A good jobs/housing balance – a ratio between **1 and 1.5** – reduces traffic congestion. Higher numbers indicate the need for more housing and lower numbers indicate an employment need.
Nearest police station: **2.8 miles** Nearest fire station: **1.9 miles**	Developments within **1.5 miles** of police and fire stations ensure that emergency services are more efficient and reduce the cost of these important public services.
Farmland consumed: **Yes** Farmland within 1 mile: **1,491**	Farmland contributes to the local economy, creates additional jobs, and provides food security to the region. Development in farm areas decreases the productivity and sustainability of farmland.
Nearest bus stop: **>4 miles** Nearest public school: **1 miles** Nearest public park: **1.3 mi** Nearest grocery store: **0.6 miles**	Residents who live or work less than **½ mile** from critical services have more transportation choices. Walking and biking reduces congestion by taking cars off the road, while supporting a healthy and active lifestyle.

Recommendations

This location is still in a largely farmland area. Nearby services, such as schools, parks, emergency services, grocery, and other stores are likely accessed only by vehicle and the site is not currently served by public transportation. ValleyConnect 2.0 has planned a bus route from downtown Kuna to the Boise Research Center with 20-minute frequencies in the peak hours. The nearest stop would be about ¾ mile from the site near Deer Flat Road & Kay Street when that route is operational.

Although the site is more than one mile from public parks, the development has provided open space and recreational amenities. The proposal provides existing stub roads to promote automobile and non-motorized connectivity.

More information about COMPASS and *Communities in Motion 2040*:
Web: www.compassidaho.org
Email info@compassidaho.org
More information about the development review process:
http://www.compassidaho.org/dashboard/devreview.htm

COMPASS
COMMUNITY PLANNING ASSOCIATION of Southwest Idaho

Exhibit C7

ORGANIZED 1904

Nampa & Meridian Irrigation District

1503 FIRST STREET SOUTH
FAX #208-463-0092

NAMPA, IDAHO 83651-4395
nmid.org

OFFICE: Nampa 208-466-7861
SHOP: Nampa 208-466-0663

August 31, 2018

RECEIVED
SEP 10 2018
CITY OF KUNA

Jace Hellman, Planner II
City of Kuna
751 W. 4th St.
Kuna, ID 83634

RE: 18-04-AN & 18-03-S/ Lugarno Terra; 1919 E. Deer Flat Road

Dear Jace:

Nampa & Meridian Irrigation District (NMID) has no comment on the above referenced application as it lies outside of our district boundaries. Therefore, no NMID facilities will be affected.

All private laterals and waste ways must be protected. All municipal surface drainage must be retained on-site. If any surface drainage leaves the site NMID must review drainage plans. Developers must comply with Idaho Code 31-3805.

Sincerely,

David T. Duvall
Crew Foreman
Nampa & Meridian Irrigation District
DTD/gnf

Cc: Office/ File



APPROXIMATE IRRIGABLE ACRES
RIVER FLOW RIGHTS - 23,000
BOISE PROJECT RIGHTS - 40,000

Exhibit
C8

ACHD
Committed to Service

Sara M. Baker, President
Rebecca W. Arnold, Vice President
Jim D. Hansen, Commissioner
Kent Goldthorpe, Commissioner
Paul Woods, Commissioner

September 26, 2018

To: Select Development & Contracting
Randy Fullmer
660 E Franklin Road, Ste. 270
Meridian, ID 83642

Subject: **Lugarno Terra/ KPP18-0009/ 18-04-AZ/ 18-03-S/ 18-22-DR**
1919 E Deer Flat Road

On September 26, 2018 the Ada County Highway District Commission acted on your application for the above referenced project. The attached report includes site specific conditions of approval.

If you have any questions, please feel free to contact me at (208) 387-6171.

Sincerely,

Stacey Yarrington

Stacey Yarrington
Planner III
Development Services
Ada County Highway District

CC: Project File
City of Kuna (via email)
Jonathan R Seel (via email)
Rock Solid Civil (via email)

Exhibit C9

Development Services Department

ACHD
Committed to Service

Project/File: **Lugarno Terra/ KPP18-0009/ 18-04-AZ/ 18-03-S/ 18-22-DR**
This is an annexation from RR to R-6 and R-4, a preliminary plat consisting of 114 single family lots, located on 41.73-acres.

Lead Agency: City of Kuna

Site address: 1919 E Deer Flat Road

Staff Approval: September 26, 2018

Applicant: Select Development & Contracting
Randy Fullmer
660 E Franklin Road, Ste. 270
Meridian, ID 83642

Representative: Select Development & Contracting
Billy Edwards
660 E Franklin Road, Ste. 270
Meridian, ID 83642

Staff Contact: Stacey Yarrington, Planner III
Phone: 387-6171
E-mail: syarrington@achdidaho.org



A. Findings of Fact

1. **Description of Application:** The applicant is requesting approval of an annexation with zoning from RR (Rural Residential) to R-6 and R-4 (Medium density Residential) and a preliminary plat consisting of 114 single family lots located on 41.73-acres. The site consists of 2 separate parcels along Deer Flat Road a 1.73-acre parcel on the south side of Deer Flat Road and a 40-acre parcel on the north side of Deer Flat Road.

   The City of Kuna's Future Land Use Map designates the smaller parcel as Medium density Residential and the larger parcel as Professional Office.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Rural Urban Transition, Rural Residential (Ada County)	RUT, RR
South	Medium density Residential (Kuna), Rural Residential (Ada County)	R-6, RR
East	Rural Residential (Ada County)	RR
West	Medium density Residential (Kuna), Rural Urban Transition (Ada County)	R-6, RUT

3. **Site History:** ACHD has not previously reviewed this site for a development application.

4. **Adjacent Development:** The following developments are pending or underway in the vicinity of the site:

   - Ashton Estates, a mixed-use development, located west of the site was approved by ACHD in July 2017.
   - Profile Ridge, a mixed-use development, located directly west of the site is in various phases of development and was approved by ACHD on November 7, 2007.
   - Winfield Springs Subdivision, located on the NWC of Deer Flat & SH-69, consisting of 348 single residential lots, is currently under review by ACHD.
   - KJ's Superstore, a convenient store/ gas station and carwash, located directly west of the site was approved by ACHD on June 21, 2017.

5. **Transit:** Transit services are not available to serve this site.

6. **Pathway Crossings:** United States Access Board R304.5.1.2 Shared Use Paths. In shared use paths, the width of curb ramps runs, and blended transitions shall be equal to the width of the shared use path.

   AASHTO's Guidelines for the Development of Bicycle Facilities 5.3.5 Other Intersection Treatments: The opening of a shared use path at the roadway should be at least the same width as the shared use path itself. If a curb ramp is provided, the ramp should be the full width of the path, not including any flared sides if utilized. . .. Detectable warnings should be placed across the full width of the ramp.

   FHWA's "Designing Sidewalks and Trails for Access" (1999) reflected common ADA-related concepts: Chapter 6, Page 16-6: The width of the ramp should be at least as wide as the average width of the trail to improve safety for users who will be traveling at various speeds. In addition, the overall width of the trail should be increased, so the curb ramp can be slightly offset to the side. The increased width reduces conflict at the intersection by providing more space for users at the bottom of the ramp.

7. **New Center Lane Miles:** The proposed development includes 1.04 centerline miles of new public road.

8. **Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time. The impact fee assessment will not be released until the civil plans are approved by ACHD.

9. **Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**

   There are no roadways, bridges or intersections in the general vicinity of the project that are in the Integrated Five Year Work Plan (IFYWP).

   - The intersection of Linder Road and Deer Flat Road is scheduled in the IFYWP to be widened to 5-lanes on the north leg, 4-lanes on the south, 5-lanes east, and 5-lanes on the west leg, and reconstructed/signalized in 2020.
   - Deer Flat Road is listed in the CIP to be widened to 5-lanes from Linder Road to SH-69/ Meridian Road between 2026 and 2030.
   - The intersection of Deer Flat Road and SH-69/ Meridian Road is listed in the CIP to be widened to 6-lanes on the north leg, 6-lanes on the south, 6-lanes east, and 6-lanes on the west leg, and signalized between 2031 and 2035.

B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 1,067 additional vehicle trips per day (9 existing); 113 additional vehicle trips per hour in the PM peak hour (1 existing), based on the Institute of Transportation Engineers Trip Generation Manual, 10th edition. The trip generation trips in the traffic impact study where based on the project having 122 single family dwelling units.

2. **Traffic Impact Study**
Thompson Engineers, Inc., prepared a traffic impact study for the proposed Lugarno Terra Subdivision. Below is an executive summary of the findings **as presented by Thompson Engineers, Inc**. The following executive summary is **not the opinion of ACHD staff**. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices and may have additional requirements beyond what is noted in the summary. ACHD Staff comments on the submitted traffic impact study can be found below under staff comments.

Executive Summary

Proposed Development

1. Lugarno Terra Subdivision is a proposed residential development containing 122 single family dwelling units with an expected 2025 build-out year.
2. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition), the development is estimated to generate approximately 1,152 trips per day, 91 trips during the AM peak hour and 121 trips during the PM peak hour.
    - The development is not expected to retain internal capture trips within the site or generate pass-by trips.
    - All trips generated by the development are assumed to be made by personal or commercial vehicles for the traffic analysis.
    - The estimated site traffic distribution patterns are:
        - 55% north of the site
        - 20% south of the site
        - 10% west of the site
        - 15% east of the site
3. The proposed driveway locations on Deer Flat Road meet ACHD's access spacing:
    - None of the proposed driveway intersections are expected to warrant turn lanes.
    - Intersection sight distances at both driveway intersections are estimated to exceed ACHD minimum requirement of 555 feet for a 50 mph posted speed. Building setback and landscaping should be located and designed to ensure adequate intersection sight distance.
4. All proposed internal roadways are projected to carry less than 1,000 vehicles per day (vpd), except for the East access approach with an estimated ADT of 1,076 vpd.

Improvements Needed to Mitigate 2018 Existing Traffic

5. All study area intersections meet ACHD's minimum operational thresholds with 2018 existing traffic conditions analyzed with the existing intersection control and lane configurations. No improvements are needed to mitigate 2018 existing traffic.

Improvements Needed to Mitigate 2025 (Build-Out Year) Background Traffic

6. The Winfield Springs Subdivision, a proposed off-site development located in the northwest quadrant of the Meridian Road and Deer Flat intersection, is required to construct a southbound

right-turn lane and signal modification at the Meridian Road and Deer Flat Road intersection. According to the Engineer for the project, these improvements are currently under design and awaiting ITD's review and approval. Therefore, these improvements are expected to be constructed by 2025 and were included in the 2025 background traffic analysis.

7. All study area intersections are projected to meet ACHD's minimum operational thresholds with 2025 background traffic conditions analyzed with the existing intersection control and lane configurations or with the required improvements at the Meridian Road and Deer Flat Road intersection needed to mitigate the Winfield Springs Subdivision impacts. As a result, no additional improvements are needed to mitigate 2025 background traffic.

Improvements Needed to Mitigate 2025 (Build-Out Year) Total Traffic

8. All study area intersections are projected to meet ACHD's minimum operational thresholds with 2025 total traffic conditions analyzed with the existing intersection control and lane configurations or with the required improvements at the Meridian Road and Deer Flat Road intersection needed to mitigate the Winfield Springs Subdivision impacts. As a result, no additional improvements are needed to mitigate 2025 total traffic.

Staff Comments/Recommendations: ACHD Traffic Services and Planning Review staff has reviewed and generally agree with the findings and conclusions of the submitted traffic impact study for Lugarno Terra Subdivision.

3. Condition of Area Roadways

Traffic Count is based on Vehicles per hour (VPH)

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service	Existing Plus Project
**State Highway 69/ Meridian Road	0-feet	Principal Arterial	1,032	N/A	N/A
Deer Flat Road	1,650-feet	Minor Arterial	140	Better than "E"	Better than "E"
Locust Grove Road	0-feet	Minor Arterial	59	Better than "E"	Better than "E"

* Acceptable level of service for a two-lane minor arterial is "E" (575 VPH).

** ACHD does not set level of service thresholds for State Highways.

4. Average Daily Traffic Count (VDT)

Average daily traffic counts are based on ACHD's most current traffic counts.

- The average daily traffic count for SH-69/ Meridian Road south of Hubbard Road was 18,402 on 10/26/2017.
- The average daily traffic count for Deer Flat Road west of Locust Grove Road was 1,750 on 01/24/20158 (24 hr. count).
- The average daily traffic count for Locust Grove Road north of Deer Flat Road was 542 on 01/24/2018 (24 hr. count).

C. Findings for Consideration

1. Deer Flat Road

a. **Existing Conditions:** Deer Flat Road is improved with 2-travel lanes, 24-feet of pavement, and no curb, gutter or sidewalk abutting the site. There is between 50 to 80-feet of right-of-way for Deer Flat Road (25 to 35-feet from centerline).

b. **Policy:**

Arterial Roadway Policy: District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Master Street Map and Typology Policy: District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the

Street Section and Right-of-Way Width Policy: District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

Right-of-Way Dedication: District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

Sidewalk Policy: District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Frontage Improvements Policy: District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Deer Flat Road is designated in the MSM as a Transitional/ Commercial Arterial with 5-lanes and on-street bike lanes, a 69-foot street section within 87-feet of right-of-way.

c. **Applicant Proposal:** The applicant is proposing to construct Deer Flat Road as ½ of a 36-foot wide street section with vertical curb, gutter, pavement widening, a 26-foot wide parkway strip, and 8-foot wide detached concrete sidewalk within 48-feet of right-of-way. Right-of-way is shown to middle of sidewalk with an easement for the remaining sidewalk.

d. **Staff Comments/Recommendations:** The applicant's proposal does not meet District policy because the applicant is proposing ½ of a 36-foot street section and Deer Flat Road is designated to be a 5-lane arterial. ACHD and the City of Kuna have an agreement in place

regarding arterial street sections within the City of Kuna's Impact Area since the City desires to have curb and gutter constructed prior to ACHD widening the roadway. On arterial streets that are planned as a future 5-lane street, but are not currently within ACHD's CIP, the arterial street is to be constructed as a 3-lane arterial roadway in the interim (attachment 3). Since this segment of Deer Flat Road is not in the CIP, improvements should be constructed along Deer Flat Road (north parcel only). Right-of-way will be compensated as ACHD is preserving for 5-lanes.

Therefore, if the City of Kuna requires the applicant to construct curb and gutter on Deer Flat Road, then the improvement should be constructed as ½ of a 49-foot street section with vertical curb, gutter, a 19-foot wide buffer, and detached 8-foot wide concrete sidewalk within 53.5 feet of right-of-way, or a minimum 37.5-feet of right-of-way with a permanent right of way easement to 2-feet behind back of sidewalk.

If the City does not require curb and gutter, then District policy requires improving Deer Flat Road abutting the site with 17-feet of pavement widening from centerline with 3-foot wide gravel shoulders, borrow ditch, and a detached minimum 5-foot wide concrete sidewalk within 48-feet of right-of-way.

A permanent easement to 2-feet behind back of sidewalk should be provided for any public sidewalk located outside of the dedicated right-of-way. Sidewalk is to be wholly within the dedicated right-of-way or within an easement.

Improvements are not required on the smaller southern parcel as there is no change in use proposed for that portion of the development.

2. Stroebel Road (New North-South Collector)

a. **Existing Conditions:** There are no existing roadways internal to the site.

b. **Policy:**

Collector Street Policy: District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

Master Street Map and Typologies Policy: District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

Street Section and Right-of-Way Policy: District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Residential Collector Policy: District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between

the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Half Street Policy: District Policy 7206.2.2 required improvements shall consist of pavement widening to one-half the required width, including vertical curb, gutter and concrete sidewalk (minimum 7-feet attached, or 5-foot detached), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side.

Minor Improvements Policy: District Policy 7203.3 states that minor improvements to existing streets adjacent to a proposed development may be required. These improvements are to correct deficiencies or replace deteriorated facilities. Included are sidewalk construction or replacement; curb and gutter construction or replacement; replacement of unused driveways with curb, gutter and sidewalk; installation or reconstruction of pedestrian ramps; pavement repairs; signs; traffic control devices; and other similar items.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. A new collector roadway was identified on the MSM with the street typology of Residential Collector. The new collector roadway should align with Stroebel Road on the south side of Kuna Road and continue through the property stubbing to the north. The Residential Collector typology as depicted in the Livable Street Design Guide recommends a 2-lane roadway with bike lanes, and on street parking, a 36-foot street section within 50-feet of right-of-way.

c. **Applicant Proposal:** The applicant is proposing to construct Stroebel Road as ½ of a 36-foot street section with vertical curb, gutter, detached 8-foot wide concrete sidewalk abutting the site; and 12-feet of additional pavement and 3-foot wide gravel shoulder with 5-foot wide borrow ditch within 40-feet of right-of-way along the east property line. The 8-foot wide detached sidewalk is proposed to be placed in a permanent right-of-way easement.

d. **Staff Comments/Recommendations:** There is a new mid-mile collector designated on the MSM along the east property line of this site, that will extend between Deer Flat Road and Hubbard Road. The applicant's proposal meets District policy and should be approved, as proposed.

   The permanent right-of-way easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk.

3. Internal Local Streets

a. **Existing Conditions:** There are no existing roadways internal to the site.

b. **Policy:**

Local Roadway Policy: District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

Standard Urban Local Street—33-foot Street Section and Right-of-way Policy: District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.

For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

Continuation of Streets Policy: District Policy 7207.2.4 states that an existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities. Benefits of connectivity include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases pedestrian and bicycle connectivity.
- Increases access for emergency services.
- Reduces need for additional access points to the arterial street system
- Promotes the efficient delivery of services including trash, mail and deliveries.
- Promotes appropriate intra-neighborhood traffic circulation to schools, parks, neighborhood commercial centers, transit stops, etc.
- Promotes orderly development.

Sidewalk Policy: District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Landscape Medians Policy: District policy 7207.5.16 states that landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12-feet maximum for a minimum distance of 150-feet. Beyond the 150-feet, the island may increase to a maximum width of 30-feet.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.

c. **Applicant's Proposal:** The applicant is proposing to construct the internal streets as 36-foot street sections with curb, gutter, and attached 5-foot wide sidewalk within 50-feet of right-of-way.

The applicant is proposing to construct the entrance of Lugarno Avenue with two 21-foot wide travel lanes, an 8-foot wide by 100-feet long landscape median, 8-foot wide parkway strip, and detached 5-foot wide concrete sidewalk within 80-feet of right-of-way.

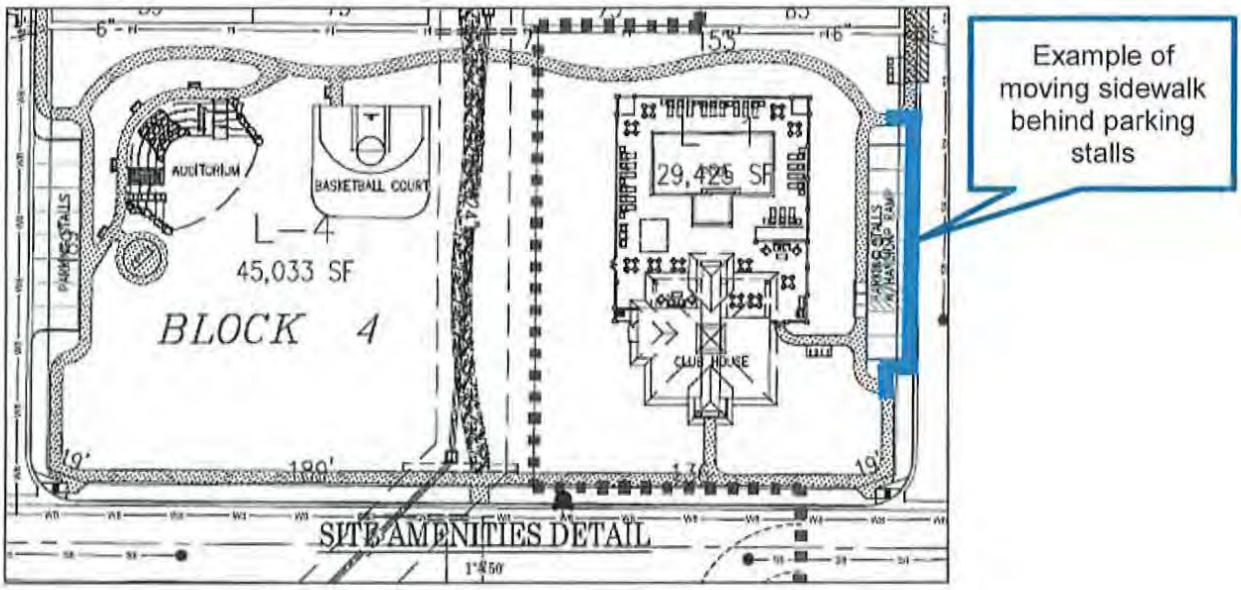
The applicant is proposing to construct parking stalls that back onto the local street from the open space/park area as shown below.

d. **Staff Comments/Recommendations:** The applicant's proposal to construct the internal streets as 36-foot street sections with curb, gutter, and attached 5-foot wide sidewalk within 50-feet of right-of-way; and to construct the entrance of Lugarno Avenue with two 21-foot wide travel lanes, an 8-foot wide by 100-feet long landscape median, 8-foot wide parkway strip, and detached 5-foot wide concrete sidewalk within 80-feet of right-of-way, meets District policy and should be approved as proposed.

The applicant should provide the District with a permanent right-of-way easement to 2-feet behind back of sidewalk for any sidewalk located outside of the dedicated right-of-way.

The applicant should plat the landscape median on Lugarno Avenue as right-of-way owned by ACHD; and the Developer or Homeowners Association should apply for a license agreement if landscaping is to be placed within the median.

The applicant's proposal to construct parking stalls that back onto the local street does not meet District policy because the stalls are shown to be half-in/half-out of the dedicated right-of-way. Therefore, the applicant should be required to construct the parking stalls out of the dedicated right-of-way and construct the 5-foot wide sidewalk around the rear of the parking stalls. Design should be coordinated with District staff.



4. Roadway Offsets

a. **Existing Conditions:** There are no existing streets onto Deer Flat Road from the site.

b. **Policy:**
Local Street Intersection Spacing on Minor Arterials: District policy 7205.4.3 states that new local streets should not typically intersect arterials. Local streets should typically intersect collectors. If it is necessary, as determined by ACHD, for a local street to intersect an arterial, the minimum allowable offset shall be 660-feet as measured from all other existing roadways as identified in Table 1a (7205.4.6).

Collector Offset Policy: District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting minor arterials is one half-mile.

Local Offset Policy: District policy 7206.4.5, requires local roadways to align or offset a minimum of 330-feet from a collector roadway (measured centerline to centerline).

District policy 7207.4.2, requires local roadways to align or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

c. **Applicant's Proposal:** The applicant is proposing to construct a new mid-mile collector street, Stroebel Road, along the east property line, located approximately 2,530-feet east of SH-69/Meridian Road (measured centerline to centerline).

The applicant is proposing to construct a new local road, Lugarno Avenue to intersect Deer Flat Road, located approximately 1,150-feet east of Magellan Avenue, and 678-feet west of the proposed Stroebel Road (measured centerline to centerline).

The applicant is proposing to construct a new local road, Bexley Street, to intersect the proposed Stroebel Road, located approximately 680-feet north of Deer Flat Road (measured centerline to centerline).

The applicant is proposing to construct the internal local streets with minimum 125-foot offsets.

d. **Staff Comments/Recommendations:** The applicant's proposal meets District policy and should be approved, as proposed.

5. Stub Streets

a. **Existing Conditions:** There are no existing stub streets to the site.

b. **Policy:**

Stub Street Policy: District policy 7206.2.4 (collector)/ 7207.2.4 (local) states that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7206.2.5.4 (collector)/ 7207.2.5.4 (local), except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE." or ("THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE.")

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

Temporary Dead-End Streets Policy: District policy 7206.2.4 (collector)/ 7207.2.4 (local) requires that the design and construction for cul-de-sac streets shall apply to temporary dead-end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

c. **Applicant Proposal:** The applicant is proposing to construct four stub streets as follows:

- A collector stub street, Stroebel Road, to the north along the east property line, approximately 660-feet in length.
- A local stub street, Mortdale Avenue, to the north, located between Block 7, Lot 1 and Block 2, Lot 21, 140-feet in length.
- A local stub street, Concord Street, to the west, located between Block 7, Lot 7 and Block 8, Lot 1, 140-feet in length.
- A local stub street, Manly Street, to the west, located between Block 8, Lot 8 and Block 9, Lot 1, 140-feet in length.

d. **Staff Comments/Recommendations:** The applicant's proposal meets District policy and should be approved, as proposed. The applicant should be required to install signs at the terminus of Mortdale Avenue, Concord Street, and Manly Street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE." A sign stating that "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE", should be installed at the terminus of Stroebel Road.

The applicant should be required to construct a temporary cul-de-sac turnaround at the terminus of Stroebel Road, as it extends greater than 150-feet in length. The temporary cul-de-sac turnaround should be paved with a minimum 45-foot turning radius. If the temporary turnaround extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

6. Driveways

Deer Flat Road

a. **Existing Conditions:** There are two existing residential driveways onto Deer Flat Road from the site.

b. **Policy**

Access Points Policy: District Policy 7205.4.1 states that all access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land use intensifies, changes, or the property redevelops.

Access Policy: District policy 7205.4.6 states that direct access to minor arterials is typically prohibited. If a property has frontage on more than one street, access shall be taken from the street having the lesser functional classification. If it is necessary to take access to the higher classified street due to a lack of frontage, the minimum allowable spacing shall be based on Table 1a under District policy 7205.4.6, unless a waiver for the access point has been approved by the District Commission.

Driveway Location Policy: District policy 7205.4.5 requires driveways located on minor arterial roadways from a signalized intersection with a single left turn lane shall be located a minimum of 330-feet from the nearest intersection for a right-in/right-out only driveway and a minimum of 660-feet from the intersection for a full-movement driveway.

Successive Driveways: District policy 7205.4.6 Table 1a, requires driveways located on minor arterial roadways with a speed limit of 50 MPH to align or offset a minimum of 425-feet from any existing or proposed driveway.

Driveway Width Policy: District policy 7205.4.8 restricts high-volume driveways (100 VTD or more) to a maximum width of 36-feet and low-volume driveways (less than 100 VTD) to a maximum width of 30-feet. Curb return type driveways with 30-foot radii will be required for high-volume driveways with 100 VTD or more. Curb return type driveways with 15-foot radii will be required for low-volume driveways with less than 100 VTD.

Driveway Paving Policy: Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7205.4.8, the applicant should be required to pave the driveway its full width and at least 30-feet into the site beyond the edge of pavement of the roadway and install pavement tapers in accordance with Table 2 under District Policy 7205.4.8.

Cross Access Easements/Shared Access Policy: District Policy 7202.4.1 states that cross access utilizes a single vehicular connection that serves two or more adjoining lots or parcels so that the driver does not need to re-enter the public street system.

c. **Applicant's Proposal:** The applicant is not proposing any change in use to the parcel located on the south side of Deer Flat Road; and therefore, is not proposing any change to the existing two driveways onto Deer Flat Road from the site.

d. **Staff Comments/Recommendations:** Staff recommends to the City of Kuna that 1 on the 2 driveways onto Deer Flat Road be required to be closed. The existing driveways do not meet District Successive Driveway policy because they do not meet the minimum offset of 425-feet from another driveway. However, staff recommends a modification of policy to allow one residential driveway, located approximately 240-feet west of an existing driveway to align with the driveway directly to the north, and 175-feet east of the west property line; due to the fact that the site does not have access to a lesser street. This is a 44% modification to the dimensional standard and is approved at the Development Services Manager's discretion.

IF the City of Kuna requires only one driveway to remain, then the applicant should be required to construct the driveway as a 30-foot wide curb return type driveway and pave it its entire width and at least 30-feet into the site beyond the edge of pavement of the roadway.

7. Tree Planters

Tree Planter Policy: Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

8. Landscaping

Landscaping Policy: A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

9. Other Access

Deer Flat Road is classified as a minor arterial roadway, Stroebel Road is classified as a collector roadway. Other than the access specifically approved with this application, direct lot access is prohibited to these roadways and should be noted on the final plat.

D. Site Specific Conditions of Approval

1. Comply with Shared Pathway Crossings requirements.
2. Dedicate 53.5 feet of right-of-way and construct Deer Flat Road as ½ of a 49-foot street section with vertical curb, gutter, a 19-foot wide buffer, and detached 8-foot wide concrete sidewalk, OR dedicate a minimum 37.5-feet of right-of-way with a permanent right of way easement to 2-feet behind back of sidewalk. Improvements should be constructed along Deer Flat Road (north side only) abutting the site. Right-of-way is to be compensated.
3. OR, construct Deer Flat Road with 17-feet of pavement widening from centerline abutting the site with 3-foot wide gravel shoulders, borrow ditch, and a detached minimum 5-foot wide concrete sidewalk within 48-feet of right-of-way. Right-of-way is to be compensated.
4. A permanent easement to 2-feet behind back of sidewalk should be provided for any public sidewalk located outside of the dedicated right-of-way. Sidewalk is to be wholly within the dedicated right-of-way or within an easement.
5. Construct Stroebel Road as ½ of a 36-foot street section with vertical curb, gutter, detached 8-foot wide concrete sidewalk abutting the site; and 12-feet of additional pavement and 3-foot wide gravel shoulder with 5-foot wide borrow ditch within 40-feet of right-of-way along the east property line. The 8-foot wide detached sidewalk is to be placed in a permanent right-of-way easement to 2-feet behind back of sidewalk.
6. Construct the internal streets as 36-foot street sections with curb, gutter, and attached 5-foot wide sidewalk within 50-feet of right-of-way.
7. Construct the entrance of Lugarno Avenue with two 21-foot wide travel lanes, an 8-foot wide by 100-feet long landscape median, 8-foot wide parkway strip, and detached 5-foot wide concrete sidewalk within 80-feet of right-of-way.
8. Provide the District with a permanent right-of-way easement to 2-feet behind back of sidewalk for any sidewalk located outside of the dedicated right-of-way.

9. Provide the District with a permanent right-of-way easement for the landscape island. The applicant should enter into a license agreement with the District for any landscaping in the proposed landscape island.

10. Construct the parking stalls out of the dedicated right-of-way and construct the 5-foot wide sidewalk around the rear of the parking stalls. Design should be coordinated with District staff.

11. Construct a new mid-mile collector street, Stroebel Road, along the east property line, located 2,530-feet east of SH-69/Meridian Road.

12. Construct a new local road, Lugarno Avenue to intersect Deer Flat Road, located 1,150-feet east of Magellan Avenue, and 678-feet west of the proposed Stroebel Road.

13. Construct a new local road, Bexley Street, to intersect the proposed Stroebel Road, located 680-feet north of Deer Flat Road.

14. Construct the internal local streets with minimum 125-foot offsets.

15. Construct a new collector stub street, Stroebel Road, to the north and north of Beckley Street along the east property line, 660-feet in length.

16. Construct a new local stub street, Mortdale Avenue, to the north, located between Block 7, Lot 1 and Block 2, Lot 21, 140-feet in length.

17. Construct a new local stub street, Concord Street, to the west, located between Block 7, Lot 7 and Block 8, Lot 1, 140-feet in length.

18. Construct a new local stub street, Manly Street, to the west, located between Block 8, Lot 8 and Block 9, Lot 1, 140-feet in length.

19. Construct a temporary cul-de-sac turnaround at the north terminus of Stroebel Road. The temporary cul-de-sac turnaround should be paved with a minimum 45-foot turning radius. If the temporary turnaround extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended. (If north section beyond Beckley Street is constructed.)

20. Install signs at the terminus of Mortdale Avenue, Concord Street, and Manly Street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

21. Install a sign at the terminus of Stroebel Road stating that "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE".

22. IF the City of Kuna requires only one driveway to remain on the southern portion of the site, then construct the driveway as a 30-foot wide curb return type driveway, located 175-feet east of the west property line; and pave it its entire width and at least 30-feet into the site beyond the edge of pavement of the roadway.

23. Direct lot access is prohibited to Deer Flat Road and Stroebel Road and shall be noted on the final plat.

24. Submit civil plans to ACHD Development Services for review and approval. The impact fee assessment will not be released until the civil plans are approved by ACHD.

25. Payment of impact fees is due prior to issuance of a building permit.

26. Comply with all Standard Conditions of Approval.

E. Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).
2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.
3. In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.
4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.
5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.
6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.
7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.
8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.
9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.
10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.
11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.
12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

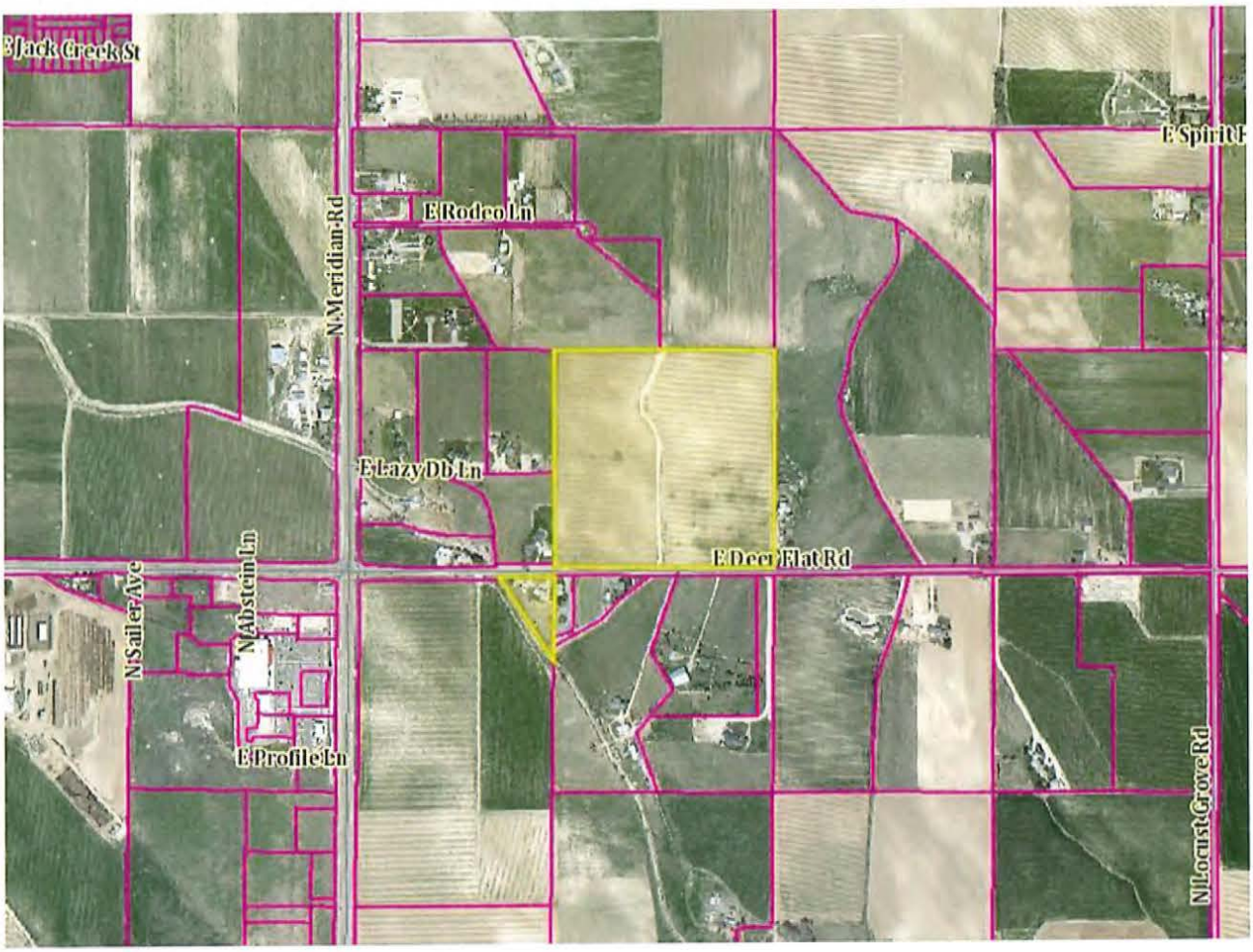
F. Conclusions of Law

1. The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.
2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

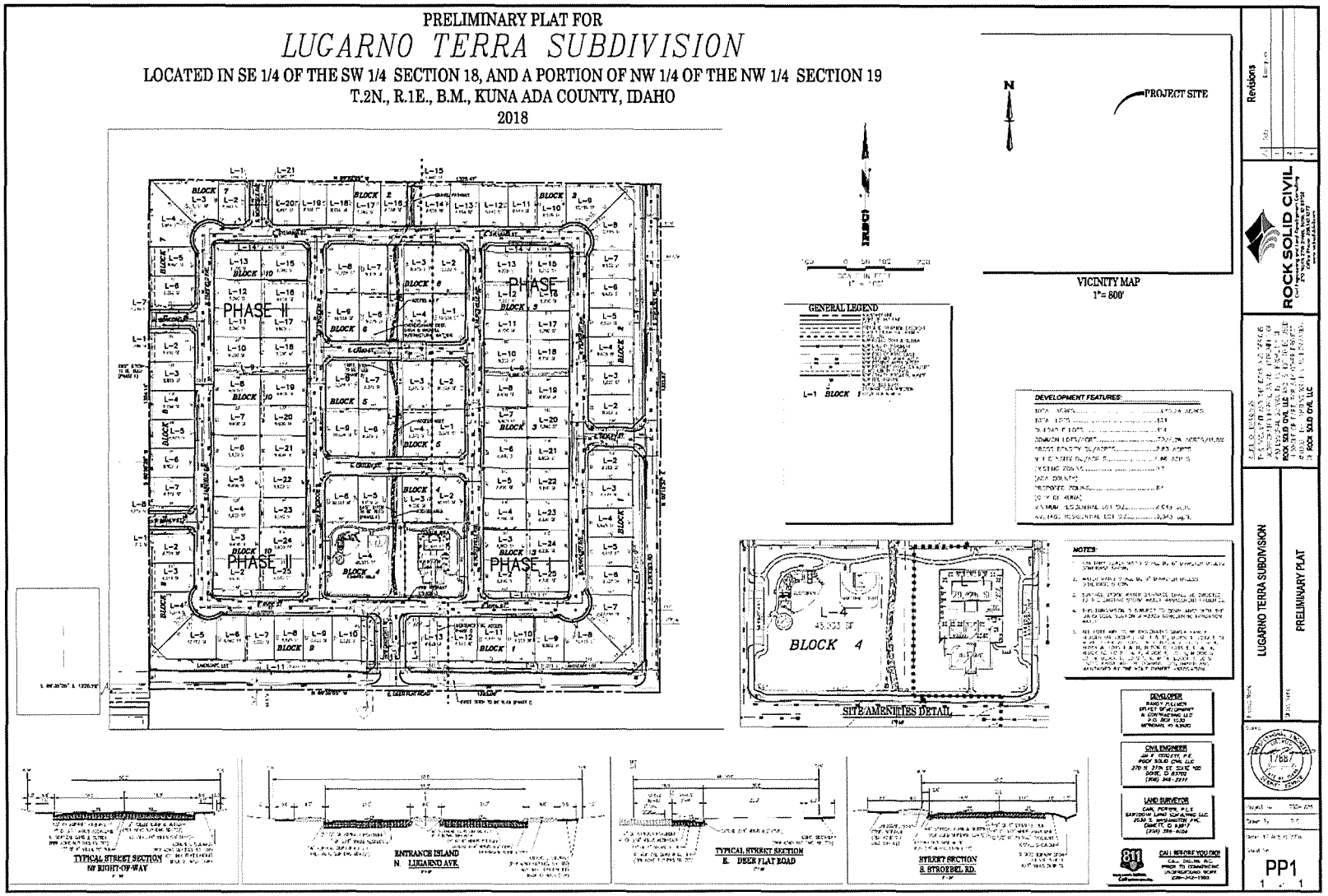
G. Attachments

1. Vicinity Map
2. Site Plan
3. Kuna Arterial Street Sections
4. Utility Coordinating Council
5. Development Process Checklist
6. Appeal Guidelines

VICINITY MAP

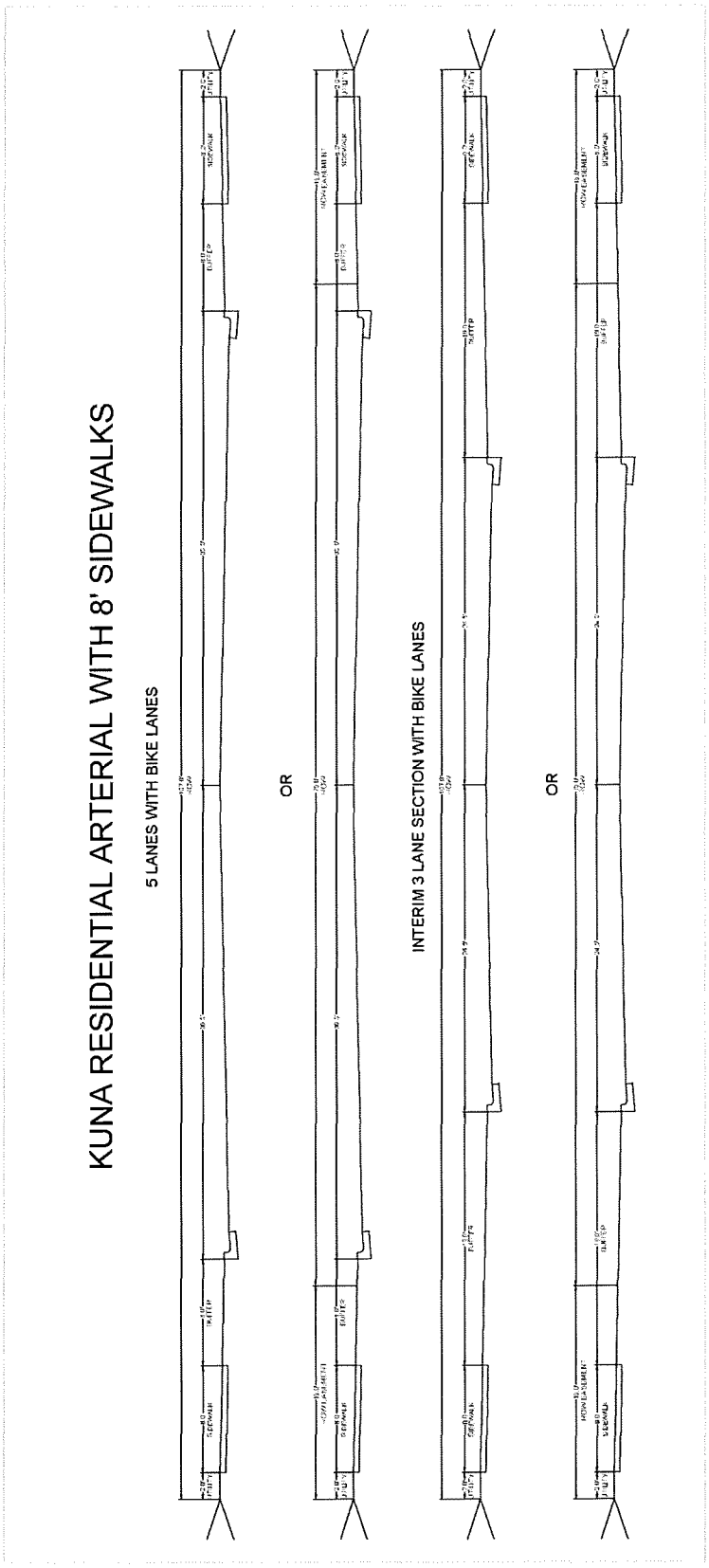


SITE PLAN



Lugarno Terra/ KPP18-0009/ 18-04-AZ/
18-03-S/ 18-22-DR

KUNA ARTERIAL STREET SECTIONS



Ada County Utility Coordinating Council

Developer/Local Improvement District
Right of Way Improvements Guideline Request

Purpose: To develop the necessary avenue for proper notification to utilities of local highway and road improvements, to help the utilities in budgeting and to clarify the already existing process.

1) **Notification:** Within five (5) working days upon notification of required right of way improvements by Highway entities, developers shall provide written notification to the affected utility owners and the Ada County Utility Coordinating Council (UCC). Notification shall include but not be limited to, project limits, scope of roadway improvements/project, anticipated construction dates, and any portions critical to the right of way improvements and coordination of utilities.

2) **Plan Review:** The developer shall provide the highway entities and all utility owners with preliminary project plans and schedule a plan review conference. Depending on the scale of utility improvements, a plan review conference may not be necessary, as determined by the utility owners. Conference notification shall also be sent to the UCC. During the review meeting the developer shall notify utilities of the status of right of way/easement acquisition necessary for their project. At the plan review conference each company shall have the right to appeal, adjust and/or negotiate with the developer on its own behalf. Each utility shall provide the developer with a letter of review indicating the costs and time required for relocation of its facilities. Said letter of review is to be provided within thirty calendar days after the date of the plan review conference.

3) **Revisions:** The developer is responsible to provide utilities with any revisions to preliminary plans. Utilities may request an updated plan review meeting if revisions are made in the preliminary plans which affect the utility relocation requirements. Utilities shall have thirty days after receiving the revisions to review and comment thereon.

4) **Final Notification:** The developer will provide highway entities, utility owners and the UCC with final notification of its intent to proceed with right of way improvements and include the anticipated date work will commence. This notification shall indicate that the work to be performed shall be pursuant to final approved plans by the highway entity. The developer shall schedule a preconstruction meeting prior to right of way improvements. Utility relocation activity shall be completed within the times established during the preconstruction meeting, unless otherwise agreed upon.

Notification to the Ada County UCC can be sent to: 50 S. Cole Rd. Boise 83707, or Visit iducc.com for e-mail notification information.

Development Process Checklist

Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☒Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

DID YOU REMEMBER:
Construction (Non-Subdivisions)

☐ **Driveway or Property Approach(s)**
- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**
- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

Construction (Subdivisions)

☐ **Sediment & Erosion Submittal**
- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**
- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

Request for Appeal of Staff Decision

1. **Appeal of Staff Decision:** The Commission shall hear and decide appeals by an applicant of the final decision made by the Development Services Manager when it is alleged that the Development Services Manager did not properly apply this section 7101.6, did not consider all of the relevant facts presented, made an error of fact or law, abused discretion or acted arbitrarily and capriciously in the interpretation or enforcement of the ACHD Policy Manual.

    a. Filing Fee: The Commission may, from time to time, set reasonable fees to be charged the applicant for the processing of appeals, to cover administrative costs.

    b. Initiation: An appeal is initiated by the filing of a written notice of appeal with the Secretary and Clerk of the District, which must be filed within ten (10) working days from the date of the decision that is the subject of the appeal. The notice of appeal shall refer to the decision being appealed, identify the appellant by name, address and telephone number and state the grounds for the appeal. The grounds shall include a written summary of the provisions of the policy relevant to the appeal and/or the facts and law relied upon and shall include a written argument in support of the appeal. The Commission shall not consider a notice of appeal that does not comply with the provisions of this subsection.

    c. Time to Reply: The Development Services Manager shall have ten (10) working days from the date of the filing of the notice of appeal to reply to the notice of the appeal, and may during such time meet with the appellant to discuss the matter, and may also consider and/or modify the decision that is being appealed. A copy of the reply and any modifications to the decision being appealed will be provided to the appellant prior to the Commission hearing on the appeal.

    d. Notice of Hearing: Unless otherwise agreed to by the appellant, the hearing of the appeal will be noticed and scheduled on the Commission agenda at a regular meeting to be held within thirty (30) days following the delivery to the appellant of the Development Services Manager's reply to the notice of appeal. A copy of the decision being appealed, the notice of appeal and the reply shall be delivered to the Commission at least one (1) week prior to the hearing.

    e. Action by Commission: Following the hearing, the Commission shall either affirm or reverse, in whole or part, or otherwise modify, amend or supplement the decision being appealed, as such action is adequately supported by the law and evidence presented at the hearing.

RICHARD DURRANT
CHAIRMAN OF THE BOARD

CLINTON PLINE
VICE CHAIRMAN OF THE BOARD

ROBERT D. CARTER
PROJECT MANAGER

THOMAS RITTHALER
ASSISTANT PROJECT MANAGER

APRYL GARDNER
SECRETARY-TREASURER

MARY SUE CHASE
ASSISTANT SECRETARY-TREASURER

BOISE PROJECT BOARD OF CONTROL

(FORMERLY BOISE U.S. RECLAMATION PROJECT)

2465 OVERLAND ROAD
BOISE, IDAHO 83705-3155

OPERATING AGENCY FOR 167,000 ACRES FOR THE FOLLOWING IRRIGATION DISTRICTS

NAMPA-MERIDIAN DISTRICT
BOISE-KUNA DISTRICT
WILDER DISTRICT
NEW YORK DISTRICT
BIG BEND DISTRICT

TEL: (208) 344-1141
FAX: (208) 344-1437

03 October 2018

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

RE: Lugarno Terra Subdivision **18-04-AN & 18-03-S**
1919 East Deer Flat Rd

Jace Hellman, PlannerII:

Boise Project approves of the plans for the Lugarno Terra Sub. We have worked out all the issues in question with the developer.

If you have any further questions or comments regarding this matter, please do not hesitate to contact me at (208) 344-1141.

Sincerely,

Thomas Ritthaler
Assistant Project Manager

tbr/tr

Exhibit
C11

received
10.1.18

Public Comment

2404 E Deer Flat Rd
Kuna, ID 83634
October 1, 2018

City of Kuna
Planning & Zoning Department
751 W 4th Street
Kuna, ID 83634

Subject: Concerns related to proposed Lugarno Terra Subdivision directly west of property located at 2404 E Deer Flat Rd, Kuna, Idaho

Our property located at 2404 E Deer Flat Rd lies immediately east of the proposed new Lugarno Terra Subdivision. We own 32.94 acres of property which includes our home, barn, several small outbuildings, and pasture for our livestock. We have lived here for 33 years. While a new 114 home subdivision brings prosperity to the city of Kuna, it will also bring significant change to our quiet rural lifestyle. We ask that you consider the following requests to lessen the impact of this development on us.

1. We currently receive irrigation water from ditches running east on both the north and south sides of the proposed subdivision. We have been told these ditches will be tiled. We request that our irrigation not be impeded and that we continue to have the flexibility to order our irrigation water when we need it and for how long we need it, and to receive the irrigation water by gravity flow for distribution via gated pipe or open ditch as we do currently.
2. We understand from the information available to us that Stroebel Road will be extended and run along our west property line which is 40 feet from our home. We request a solid, no less than six-foot-high fence be built along our west property line to separate our property from the proposed road and subdivision. This fence would protect our privacy and provide security from traffic on that road.
3. We request that all pole mounted street/night lighting installed in the subdivsion be directed in such manner that the light does not shine directly onto our home and property. Our preference is that all lighting be directed down and away from our property.
4. We request that all trees on or bordering our property be retained and protected since they are used annually by a pair of nesting red-tail hawks.

Thank you for allowing us the opportunity to express our concerns about the proposed subdivision. We ask that you seriously consider our requests to minimize the impact this new road and subdivision will have on our home and property.

Sincerely,

Daniel Grothaus

Shirley Grothaus

Exhibit
C10

751 West 4th Street
P.O. Box 13
Kuna, ID 83634
Phone: 208-922-5274
Fax: 208-922-5989
www.kunacity.id.gov

CITY OF KUNA

PLANNING & ZONING DEPARTMENT

CERTIFICATE OF MAILING

Date: October 31, 2018

To: ☒ 400' Property Owners ☐ Other _____

Planner: Jace Hellman, Planner II

Case Name: 18-04-AN (Annexation) & 18-03-S (Preliminary Plat) – Lugarno Terra Sub.

I HEREBY CERTIFY that on this 31st day of October 2018, I caused a true and correct copy of the foregoing instrument to be deposited in the United States mail, with prepaid postage.

_____
Signature

Dawn Stephens
Attest

Exhibit
03

David & Roslyn Andrus
1928 E Deer Flat Road
Kuna, ID 83634

Doll Familiy Revocable Trust Dated 12/8/11
Debra Doll Trustee
PO Box 56
Kuna, ID 83634

Jane Golden
1863 E Rodeo Ln
Kuna, ID 83634

Beth Grabinski
2151 E Deer Flat Road
Kuna, ID 83634

Daniel & Shirley Grothaus
2404 E Deer Flat Road
Kuna, ID 83634

Japheth LLC
715 W Blue Spruce Road
Apline, UT 84004

Thomas & Toni Jones
PO Box 231
Kuna, ID 83634

Christopher & Dannelle Kohn
2095 E Deer Flat Road
Kuna, ID 83634

Harry & Penny Kohn
2211 E Deer Flat Road
Kuna, ID 83634

Austin & Rosie Manning
2800 E Deer Flat Road
Kuna, ID 83634

Sandstone Farms LLC
1888 E Rodeo Ln
Kuna, ID 83634

Deborah Schenk
PO Box 721
Joseph, OR 97846

SDN LLC
PO Box 1939
Eagle, ID 83616

Select Development & Contracting LLC
PO Box 1030
Meridian, ID 83680

Sanh & Mimi Tang
2725 E Deer Flat Road
Kuna, ID 83634

Rodney & Karen Wiens Family Trust
Rodney Wiens Trustee
2329 E Deer Flat Road
Kuna, ID 83634

PRIMOWNER	SECOWNER	ADDCONCAT	STATCONCAT
ANDRUS DAVID L	ANDRUS ROSLYN	1928 E DEER FLAT RD	KUNA, ID 83634-1324
DOLL FAMILY REVOCABLE TRUST DATED 12/8/11	DOLL DEBRA A TRUSTEE	PO BOX 56	KUNA, ID 83634-0000
GOLDEN JANE C		1863 E RODEO LN	KUNA, ID 83634-0000
GRABINSKI BETH LYNNE		2151 E DEER FLAT RD	KUNA, ID 83634-0000
GROTHAUS DANIEL LEE &	GROTHAUS SHIRLEY LOUISE	2404 DEER FLAT	KUNA, ID 83634-0000
JAPHETH LLC		715 W BLUE SPRUCE RD	ALPINE, UT 84004-0000
JONES THOMAS	JONES TONI	PO BOX 231	KUNA, ID 83634-0231
KOHN CHRISTOPHER WILLIAM	KOHN DANNELLE	2095 E DEER FLAT RD	KUNA, ID 83634-0000
KOHN HARRY C	KOHN PENNY L	2211 E DEER FLAT RD	KUNA, ID 83634-0000
MANNING AUSTIN	MANNING ROSIE	2800 E DEER FLAT RD	KUNA, ID 83634-0000
SANDSTONE FARMS LLC		1888 E RODEO LN	KUNA, ID 83634-0000
SCHENK DEBORAH K		PO BOX 721	JOSEPH, OR 97846-0000
SDN LLC		P O BOX 1939	EAGLE, ID 83616-0000
SELECT DEVELOPMENT & CONTRACTING LLC		PO BOX 1030	MERIDIAN, ID 83680-0000
TANG SANH D	TANG MIMI	2725 E DEER FLAT RD	KUNA, ID 83634-0000
WIENS RODNEY & KAREN FAMILY TRUST	WIENS RODNEY H TRUSTEE	2329 E DEER FLAT RD	KUNA, ID 83634-0000

CITY OF KUNA
PLANNING & ZONING DEPARTMENT
PO Box 13 • 751 W. 4th St • Kuna, Idaho • 83634
Phone (208) 922-5274 • Fax: (208) 922-5989
www.kunacity.id.gov

Dear Property Owner:

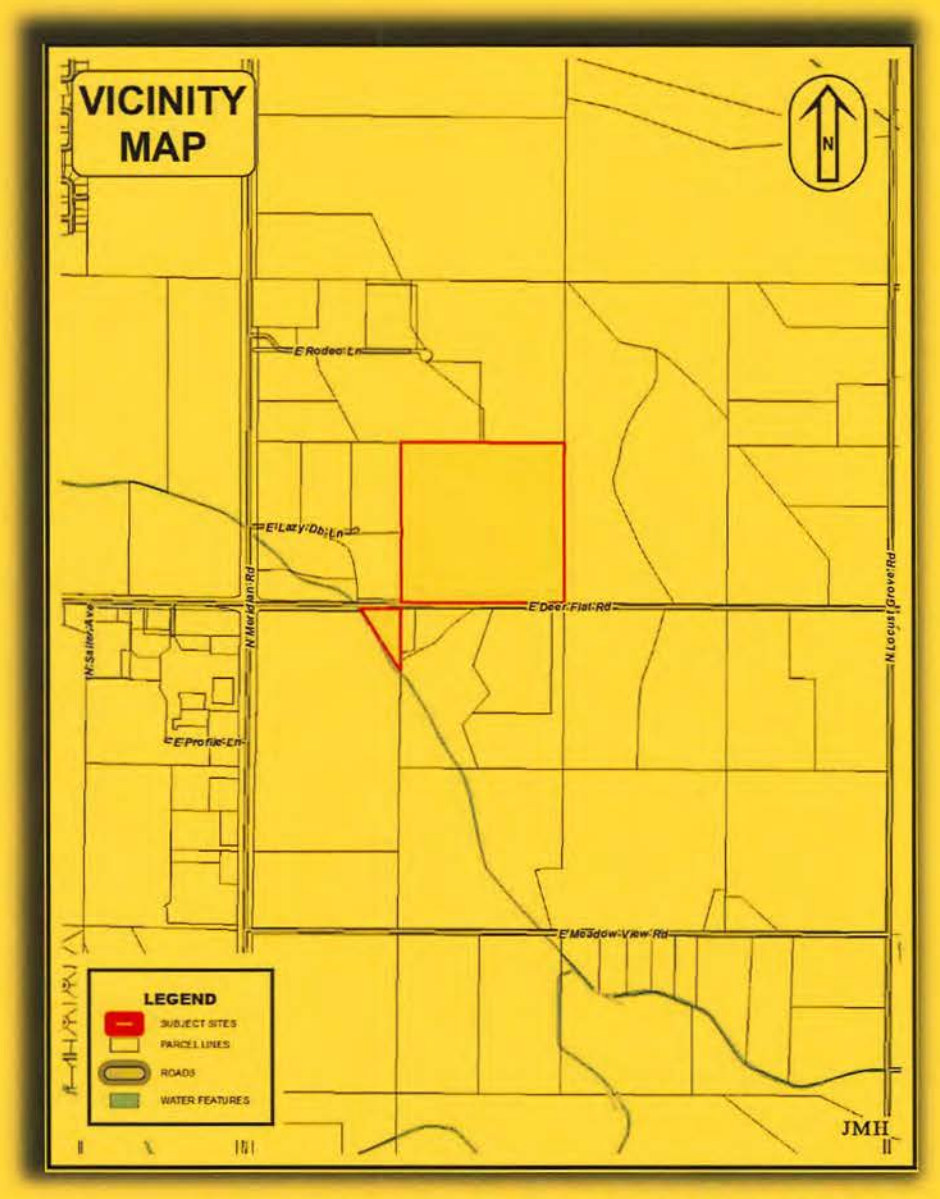
NOTICE IS HEREBY GIVEN that the City of Kuna **City Council** is scheduled to hold a public hearing on **November 20, 2018,** beginning **at 6:00 pm** on the following case:

An **Annexation (AN)** and **Preliminary Plat (S)** request from Billy Edwards, with Select Development and Contracting, LLC., to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

The hearing will be held **at 6:00 PM in the Council Chambers at City Hall located at 751 W. 4th Street, Kuna, Idaho.**

You are invited to provide oral or written comments at the hearing. Written testimony received by the close of business on ***November 14, 2018*** will be included in the packets that is distributed to the governing body prior to the hearing. Late submissions (must submit six (6) copies) will be presented to the governing body at time of the hearing. Please note oral comments made during the public hearing will be restricted to three (3) minutes per person. Mail written comments to PO Box 13, Kuna, ID 83634 or drop them off at City Hall, 751 West 4th Street, Kuna, ID.

If you have questions or need special assistance, please contact the Planning and Zoning Division at (208) 922-5274.



In all correspondence concerning this case, please refer to the case name: **18-04-AN (Annexation) & 18-03-S (Preliminary Plat) – Lugarno Terra Subdivision**

MAILED 10/31/18

CITY OF KUNA
PO Box 13 - Kuna, ID 83634
Phone: 208.922.5274 - Fax: 208.922.5989

File #'s 18-04-AN & 18-03-S, Lugarno Terra Subdivision

NOTICE IS HEREBY GIVEN, that the Kuna City Council will hold a public hearing, **Tuesday, November 20, 2018 at 6:00 pm**, or as soon as can be heard at Kuna City Hall, 751 W. 4th St, Kuna, ID; in connection with an **Annexation (AN)** and **Preliminary Plat (S)** request from Billy Edwards, with Select Development and Contracting, LLC., to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

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Please do not contact anyone who would be involved in this decision making process, which would include the Planning & Zoning Commissioners, City Council Members, or the Mayor; as such private conversations would be considered ex parte (one sided) and could jeopardize the public hearing process.

If you have any questions or require special accommodations, please contact the Kuna Planning & Zoning Department prior to the meeting at (208) 922-5274.

Kuna Planning & Zoning Department

(No need to print this portion) Please publish one time on October 31, 2018.

(Sent 10/2518)

Kuna P.O. #7733

Exhibit
04

Jace Hellman

From: Jace Hellman
Sent: Thursday, October 25, 2018 11:23 AM
To: 'IDAHO PRESS TRIBUNE'
Subject: City of Kuna Request for Legal Publication
Attachments: Lugarno Terra Legal Publication KMN10.31.18.docx

Greetings:

We would like to request that you publish the attached legal notification in the October 31st, 2018 cycle of the Kuna Melba News on behalf of the City of Kuna, Planning and Zoning Department. This notification needs to only be published for one (1) cycle.

The Kuna P.O. for these requests is #7733 (if you need it)
Thank you!

Jace Hellman
Planner II
751 W 4th St
Kuna, ID 83634
jhellman@kunaid.gov

Jace Hellman

From: IDAHO PRESS TRIBUNE <legals@idahopress.com>
Sent: Monday, October 29, 2018 9:36 AM
To: Jace Hellman
Cc: legals@idahopress.com
Subject: Confirmation: Ad 1829935 for 1 KUNA, CITY OF
Attachments: AD1829935_jnl.pdf

LEGAL E-MAIL FINAL APPROVAL RECIEPT

Good Day,
Attached is an invoice which shows proof, price and publication dates. Please check spelling and run dates for accuracy. PLEASE RESPOND by 11:00 am to confirm or make changes in order to meet deadline. You can simply reply to this email.

Idaho Press, Emmett Messenger-Index, Kuna-Melba News and Meridian Press-Tribune

Legal Clerk
legals@idahopress.com
208-465-8129
Monday through Friday 8:00am– 12:00pm

IDAHO PRESS TRIBUNE
MERIDIAN PRESS, KUNA MELBA NEWS
C/O ISJ PAYMENT PROCESSING CENTER
PO BOX 1570
POCATELLO ID 83204
(208)467-9251
Fax (208)475-2338

ORDER CONFIRMATION

Salesperson: LEGALS — Printed at 10/29/18 08:35 by sje14

Acct #: 345222 — Ad #: 1829935 — Status: New WHOLD

1 KUNA, CITY OF
P.O. BOX 13
KUNA ID 83634

Start: 10/31/2018 — Stop: 10/31/2018
Times Ord: 1 — Times Run: ***
LEG 1.00 X 79.00 — Words: 331
Total LEG 79.00
Class: 0006 GOVERNMENT NOTICES
Rate: LG — Cost: 63.46
Affidavits: 1

Contact: CHRIS ENGLES
Phone: (208)387-7727
Fax#:
Email: awelker@kunaid.gov; gsmith@k
Agency:

Ad Descrpt: 18-04-AN, 18-03-S
Given by: JACE HELLMAN
P.O. #:
Created: sje14 10/29/18 08:31
Last Changed: sje14 10/29/18 08:34

PUB	ZONE	EDT	TP	RUN DATES
KMN	A		96 S	10/31

AUTHORIZATION

Under this agreement rates are subject to change with 30 days notice. In the event of a cancellation before schedule completion, I understand that the rate charged will be based upon the rate for the number of insertions used.

Jace Hellman

Name (print or type) — Name (signature)

(CONTINUED ON NEXT PAGE)

IDAHO PRESS TRIBUNE
MERIDIAN PRESS, KUNA MELBA NEWS
C/O ISJ PAYMENT PROCESSING CENTER
PO BOX 1570
POCATELLO ID 83204
(208)467-9251
Fax (208)475-2338

ORDER CONFIRMATION (CONTINUED)

Salesperson: LEGALS Printed at 10/29/18 08:35 by sje14

Acct #: 345222 Ad #: 1829935 Status: New WHOLD WHOI

LEGAL NOTICE

File #'s 18-04-AN & 18-03-S, Lugarno Terra Subdivision

NOTICE IS HEREBY GIVEN, that the Kuna City Council will hold a public hearing, **Tuesday, November 20, 2018 at 6:00 pm,** or as soon as can be heard at Kuna City Hall, 751 W. 4th St, Kuna, ID; in connection with an **Annexation (AN) and Preliminary Plat (S)** request from Billy Edwards, with Select Development and Contracting, LLC., to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

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If you have any questions or require special accommodations, please contact the Kuna Planning & Zoning Department prior to the meeting at (208) 922-5274.

Kuna Planning & Zoning Department

October 31, 2018 1829935

Looks great!

RECEIVED
NOV 08 2018
CITY OF KUNA

345222 1829935

1 KUNA, CITY OF

P.O. BOX 13
KUNA ID 83634

LEGAL NOTICE

File #'s 18-04-AN & 18-03-S,
Lugarno Terra Subdivision

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Kuna Planning & Zoning Department

October 31, 2018 1829935

AFFIDAVIT OF PUBLICATION
STATE OF IDAHO)
)SS.
County of Ada)

Sharon Jessen
of Nampa, Canyon County, Idaho, being first duly sworn, deposes and says:

1. That I am a citizen of the United States, and at all times hereinafter mentioned was over the age of eighteen years, and not a party to the above entitled action.
2. That I am the Principle Clerk of the Kuna Melba News, a weekly newspaper published in the City of Kuna, in the County of Ada, State of Idaho; that the said newspaper is in general circulation in the said County of Ada, and in the vicinity of Kuna and Melba, and has been uninterruptedly published in said County during a period of seventy-eight consecutive weeks prior to the first publication of this notice, a copy of which is hereto attached.
3. That the notice, of which the annexed is a printed copy, was published in said newspaper 1 time(s) in the regular and entire issue of said paper, and was printed in the newspaper proper, and not in a supplement.

That said notice was published the following:
10/31/2018

Sharon Jessen

STATE OF IDAHO)
County of Canyon)
On this 31st day of October in the year of 2018 before me a Notary Public, personally appeared. Sharon Jessen, known or identified to me to be the person whose name is subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledge to me that he/she executed the same.

Colleen Nielsen

Notary Public for Idaho
Residing at Canyon County
My Commission expires 06/28/2023

COLLEEN R. NIELSEN
NOTARY PUBLIC
Comm No. 70215
STATE OF IDAHO

City of Kuna

City Council – Staff memo

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

To: **City Council**

File Numbers: **18-01-S** (Preliminary Plat)

Location: Northwest corner; Linder and Columbia Roads, Meridian, ID

Planner: Troy Behunin, Planner III

Hearing date: November 20, 2018

Owner: **Thistle Farm, LLC, and Vanderkooy Farm LLC's,**
6152 W. Half Moon Ln.
Eagle, ID, 83616
208.850.0591
Timothyeck@me.com

Engineer: **Bailey Engineers,**
Katie Miller
4242 Brookside Ln.
Boise, ID, 83713
208. 938.0013
Kmiller@baileyengineers.com

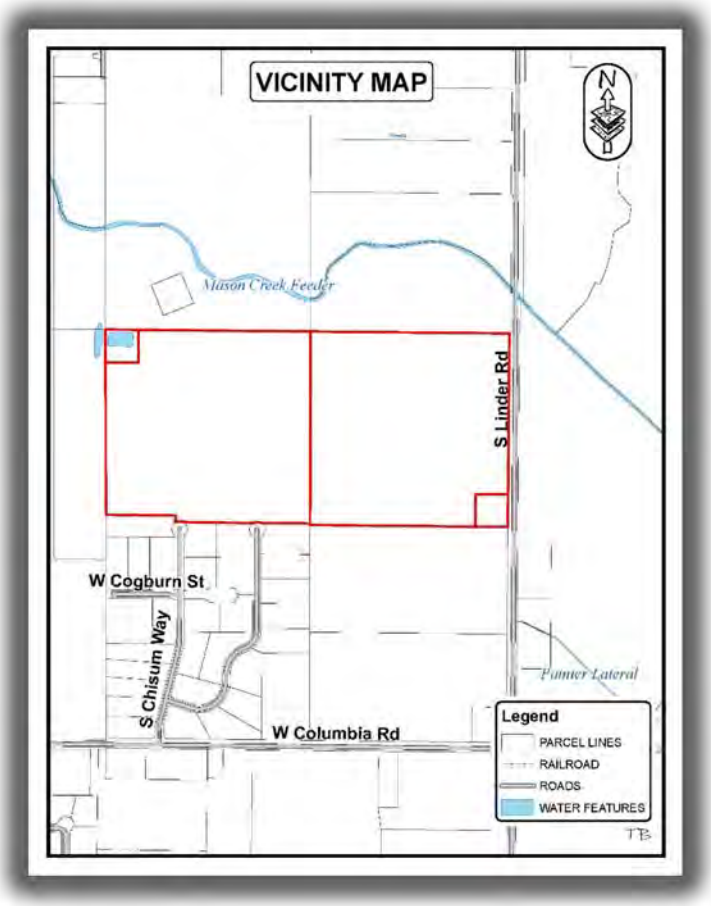


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A. Process and Noticing
B. Applicants Request
C. Aerial map
D. Site History
E. General Project Facts
F. Staff Analysis
G. Applicable Standards
H. Proposed Procedural Background
I. Proposed Findings of Fact for Council
J. Proposed Factual Summary
K. Proposed Comprehensive Plan Analysis
L. Proposed Kuna City Code Analysis
M. Proposed Conclusions of Law
N. Commission Recommendation to Council
O. Recommended Order of Decision by Council

A. Process and Noticing:

1. Kuna City Code 1-14-3 (KCC), Title 1, Chapter 14, Section 3, states that Preliminary Plats are designated as public hearings, with the Commission as the recommending body, and City Council as the decision making body, and the Commission as the decision making body for the Design Review. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65 Local Planning Act.

a. Notifications

i.	Neighborhood Meeting	August 8, 2018 (fourteen (14) persons attended)
ii.	Agency Comment Request	February 12, 2018
iii.	350' Property Owners	November 9, 2018

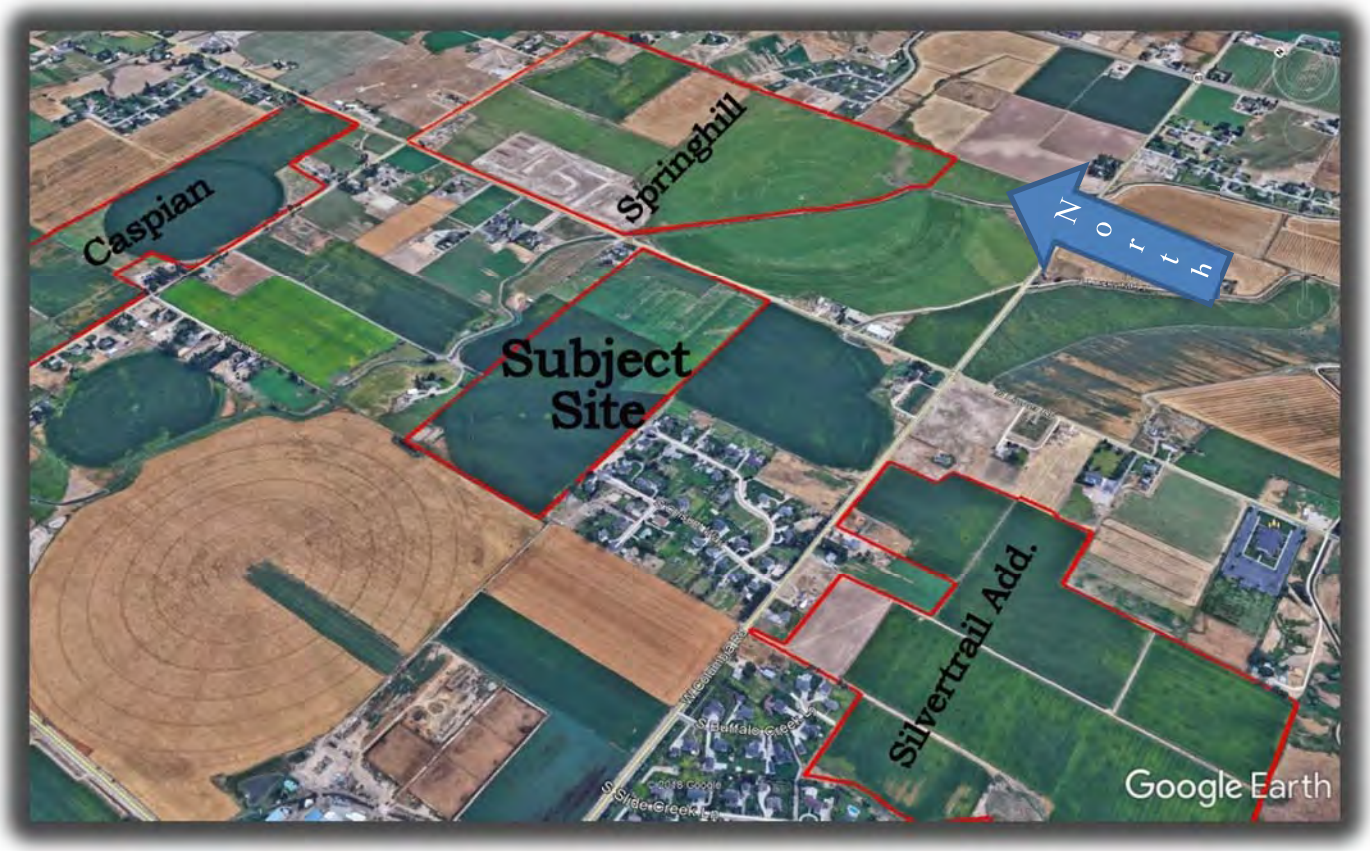
iv.	Kuna, Melba Newspaper	October 31, 2018
v.	Site Posted	November 1, 2018

B. Applicants Request:

1. **Request:**

Applicant, Katie Miller, with Bailey Engineers, on behalf of Thistle Farm, and Vanderkooy Farm, LLC's (Owner), requests approval to subdivide approximately 73.50 acres (previously zoned R-6 and four lots within Chisum Valley Subdivision No. 1 and 2) into 310 single home lots, an additional 38 common lots, following the Comprehensive Plan of MDR and the Council approved conditions of approval from the recent rezone. This site is located at the NWC Linder and Columbia Roads. APN No's; R1393850100, R1693860010, R1693860290, R1693860280.

C. Aerial Map:



©Copyrighted

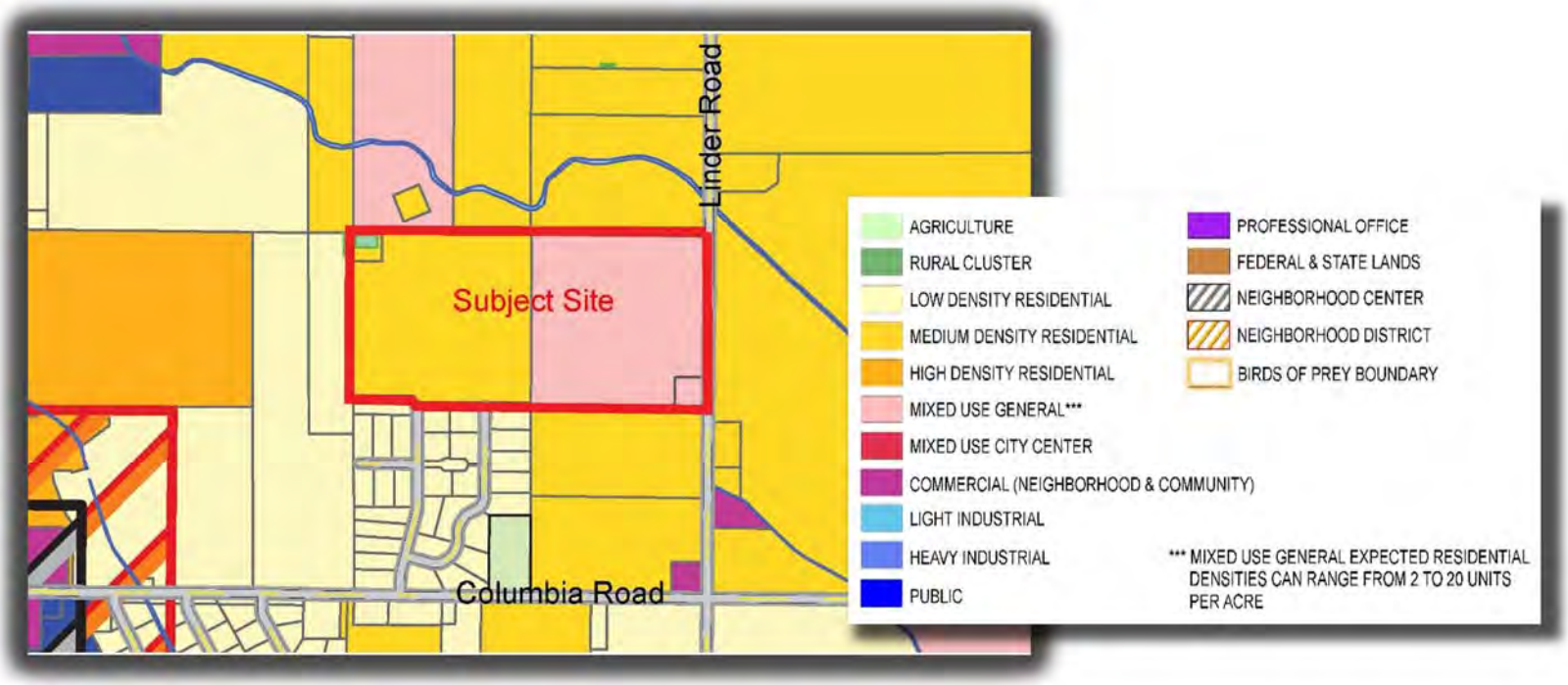
D. Site History:

These lots historically have been used for agricultural purposes and were rezoned from Agriculture (Ag.) *to* R-6 MDR (Medium Density Residential) on June 5, 2018, (18-04-ZC).

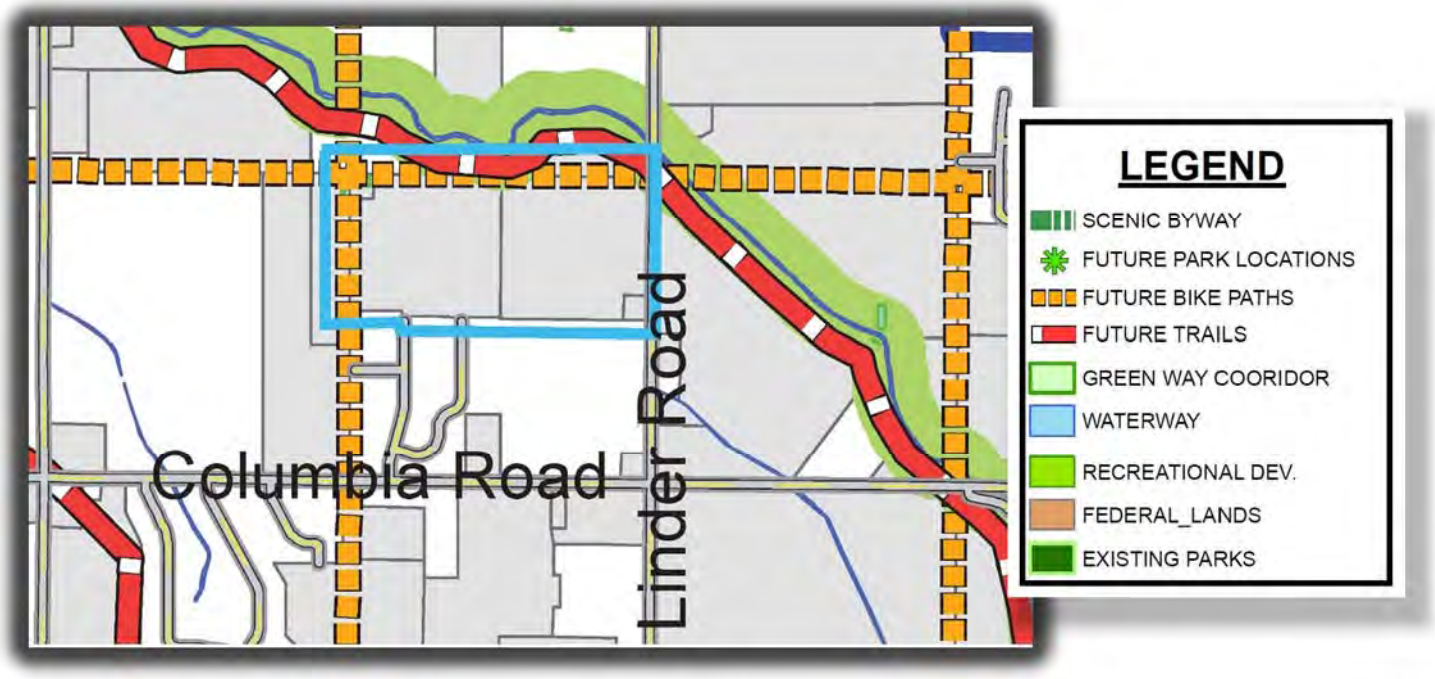
E. General Projects Facts:

1. **Comprehensive Plan Map:** The Comp Plan Map designation for this site is Medium Density Residential (MDR) for the west half, and Mixed-Use for the east half. Both uses encourage residential uses. The Future Land Use Map (Comprehensive Plan Map) is intended to serve as a guide for the decision making body. This

map indicates land use designations, it is not actual zoning. These land use designations have been in place since 2009, and were contemplated as such in early 2008.



2. **Recreation and Pathways Map:** The Rec. & Path Master Plan Map indicates a future trail along the Mason Creek, which is off-site. With this application, staff recommends that the applicant incorporate green and open spaces and should be considered a binding site plan.



3. **Surrounding Land Uses:**

North	AG, RR	Agriculture & Rural Residential – Kuna City & Ada County
South	RR	Rural Residential – Ada County
East	AG	Agriculture – Kuna City
West	AG	Agriculture – Kuna City

4. **Lot Sizes, Current Zoning, Parcel No's, and L & B No's:**

Lot Size (Approximately)	**Current Zone: (Ag.)**	**Parcel Number(s)**	**Chisum Valley Sub., Lot & Block Numbers**
1.00 acre	R-6	R1393850100	Lot 1, Block 1, Sub No. 1
35.77 acres	R-6	R1693860010	Lot 2, Block 1, Sub No. 2
35.38 acres	R-6	R1693860290	Lot 30, Block 1, Sub No. 2
1.00 acre	R-6	R1693860280	Lot 29, Block 1, Sub No. 2

5. **Services (at time of development):**

Sanitary Sewer– City of Kuna
Potable Water – City of Kuna
Irrigation District – Kuna Municipal Irrigation District (KMID)
Pressurized Irrigation – City of Kuna (KMID)
Fire Protection – Kuna Rural Fire District
Police Protection – Ada County Sheriff's office – Kuna Police
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**

There are no structures on site. The site has vegetation that is generally associated with an Agricultural field.

7. **Transportation / Connectivity:**

The site has significant Linder Road frontage. The applicant proposes two points of ingress/egress on Linder Road; one at the mid-mile between Columbia and Lake Hazel, and a second access approx. 820 feet south of that mid-mile. Applicant has proposed two points of ingress/egress along the future east-west mid-mile on the north side of the site and a single ingress/egress on the west side of the site. All points of access must follow City & ACHD standards.

8. **Environmental Issues:**

Staff is not aware of any environmental issues, health or safety conflicts. The site's topography is generally flat with less than 3 percent slope. This site is within the Nitrate Priority Area (NPA), and will be required to connect to Kuna City sanitary sewer, potable water and pressurized Irrigation services.

9. **Agency Responses:**

The following agencies returned comments are included with this case file:

- *City Engineer* *Exhibit B 1*
- *Ada County Highway District (ACHD)* *Exhibit B 2*
- *Boise Project Board of Control* *Exhibit B 3*
- *Central Dist. Health Dept. (CDHD)* *Exhibit B 4*
- *COMPASS* *Exhibit B 5*
- *Dept. of Environmental Quality (DEQ)* *Exhibit B 6*
- *ID Transportation Dept. (ITD)* *Exhibit B 7*

F. Staff Analysis:

The applicant rezoned four lots within Chisum Valley Subdivisions 1 and 2, as part of a previous application (18-01-ZC), and now submits an application for preliminary plat approvals and entitlements.

These four lots were rezoned last spring from Agriculture to the R-6 (MDR) zone. During the public hearings for said rezone, certain density and layout conditions were approved by City Council; "...actual density [shall] not exceed 4.25 DUA (dwelling units/acres), and provide a max 2 DUGA (Dwelling units/gross acre) along [the] border of existing homes in Chisum Valley Subdivision" (CCMM). Staff finds that this proposed subdivision conforms to said condition as outlined in the Findings of Fact and Conclusions of Law as ordered by Council.

In July of 2006 (06-14-AN), when these lots were annexed into Kuna city limits, all four lots were already in the Chisum Valley Subdivision with an Agriculture zone. Furthermore, these lots were annexed into Kuna with the Local Improvement District (LID). The applicant seeks approval for a preliminary plat for approximately 73.50 acre site to include 310 buildable lots and 38 common lots. The project is adjacent to Linder Road (a major arterial) and all public utilities are near, or adjacent to the site. Applicant has been made aware that development of these lots will require connection to all city services and will be subject to connection fees for that purpose. It is anticipated that it will require five (5) phases for complete build-out and applicant has provided a phasing plan illustrating the order.

Applicant originally proposed connection to only one of the two existing Chisum Valley stub streets even though Kuna City Code (KCC) 6-3-3-C, requires connections to all provided stub streets. The applicant also petitioned ACHD through a variance request to allow connection to only one of the two existing stub streets. However, the ACHD Commissioners voted to deny the variance request and conditioned a connection with both existing stub streets.

Kuna Classified Road Map states that a minor collector road be placed on the west side of this site. Due to the reasons stated within the ACHD report (Dated 9.26.2018; Item C. 4 pg. 7), staff supports the alignment and offset nature of the north/south minor collector. Staff agrees with the 'Site Specific Condition of Approval' D. 8 in the same ACHD report.

Based on the review Comprehensive Plan Map (CPM), staff views this request to be in concert with the CPM approved by Council. This request reflects the goals of the City leaders and its Citizens. This proposal fulfills the conditions of approval by Council and all technical requirements prescribed within Kuna City Code (KCC).

Staff has determined this application generally complies, or as conditioned, will follow Idaho Statutes §50-222 and §65-67 (LLUPA–Subs); Title 5 of the Kuna City Code; and the Kuna Comprehensive Plan; and forwards a recommendation of approval for Case No. 18-01-S subject to the recommended conditions of approval listed in Section 'O' of this report.

G. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5, Chapter 13,
2. City of Kuna Comprehensive Plan, adopted September 1, 2009,
3. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

H. Proposed Procedural Background:

On November 20, 2018, the Council will consider Case No. 18-01-S, including the applications, agency comments, staff's report, application exhibits and public testimony presented or given.

I. Proposed Findings of Fact for Councils Consideration:

Based on the record contained in Case No. 18-01-S, including the exhibits, staff's report and the public testimony at the public hearing, the City Council of Kuna, Idaho, hereby ***approves/conditionally approves/denies*** of the proposed Findings of Fact and Conclusions of Law, and Conditions of Approval for Case No. 18-01-S, for the *Thistle and Vanderkooy, Farm, LLC, Preliminary Plat* request.

The Council concludes that the Application ***does/does not*** *comply with the City of Kuna's Zoning regulations (Title 5) of KCC and/or regulations outlined in title 5 of KCC.*

1. In making a decision regarding the Subdivision application, the Council is to consider Idaho Code §67-6535 (2), which states the following:

The approval or denial of any application required or authorized pursuant to this chapter shall be in writing and accompanied by a reasoned statement that explains the criteria and standards considered relevant, states the relevant contested facts relied upon, and explains the rationale for the decision based on the applicable provisions of the comprehensive plan, relevant ordinance and statutory provisions, pertinent constitutional principles and factual information contained in the record.

In addition, Idaho Code §67-6535(2)(a), provides that:

Failure to identify the nature of compliance or noncompliance with express approval standards or failure to explain compliance or noncompliance with relevant decision criteria shall be grounds for invalidation of an approved permit or site-specific authorization, or denial of same, on appeal.

2. The Council has the authority to approve or deny Case No. 18-01-S. On November 20, 2018, Kuna's Council will vote to either ***approve/conditionally approve/deny*** Case No. 18-01-S.

Comment: *On November 20, 2018, Council will vote to* ***approve/conditionally approve/deny*** *Case No.* 18-01-S.

3. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances to hold a public hearing on November 20, 2018, with the Council.

4. The Kuna Council accepts the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.

Comment: *The Council* will hold *a public hearing on the subject application on November 20, 2018, to hear from the City staff, the applicant and to accept public testimony. The decision by the Council is based on the application, staff report and public testimony, both oral and written.*

5. Based on the evidence contained in Case No. 18-01-S, this proposal **does/does not** appear to *generally* comply with the Comprehensive Plan and Comp Plan Map as amended.

Comment: *The Comp Plan has listed numerous goals for providing a variety in housing options in Kuna. The Kuna Planning Map designates this property as Medium Density Residential and Mixed-Uses. As this request proposes MDR, the proposal follows the goals of the Comp Plan and the Comp Plan Map.*

6. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.

Comment: *As noted in the process and noticing sections, notice requirements were met to hold a public hearing on November 20, 2018.*

J. Proposed Factual Summary:

This approximately 73.50 acre site, is in Kuna City limits, zoned R-6, (MDR), with varying historical Ag. uses and is located at the northwest corner (NWC) of Linder and Columbia Roads. These lands are lots within the Chisum Valley Subdivision. These lands were included in the Local Improvement District (LID); whereby they were obligated to satisfy a sewer connection fee equivalent to 3 Dwelling Units an Acre (DUA) at a minimum. Applicant proposes a preliminary plat for these approximately 73.50 acre, to subdivide said property into 310 boilable lots and 38 common lots. This property is adjacent to Linder Road, a principle arterial road.

K. Proposed Comprehensive Plan Analysis:

The City Council accepts the Comprehensive Plan components as described below:

The designations of Medium Density Residential and Mixed-Use shown on the Planning Map (See Map above) for these lots were approved by Council. The proposed subdivision for the site is consistent with the following Comprehensive Plan components:

Community Vision Statement:
Residents hoped for the creation of business and light commercial use centers within neighborhoods. These centers would include restaurants, gas stations, churches, *multi-family* use facilities, and other mixed-use developments. (Page 21).

Housing:
Residents envisioned higher densities in the City's core to include opportunities for mixed residential and light commercial activity. *They expressed interest in a mix of residential type dwellings applications; including single- family, multi-family, apartments and condominiums*. *They were receptive to a greater mix of lot sizes and house prices to appeal to a variety of people.* A goal expressed by many was the preservation of large lots and rural cluster development in appropriate balance with a complement of other types of residential development (Page 21).

Comment: *The proposed Preliminary Plat follows the community vision and provides a way to achieve the housing goals as stated and adopted, by supplementing other existing large lot subdivisions nearby.*

Private Property Rights Goals and Objectives - Section 2 - Summary:
Ensure the City land use policies, restrictions, conditions and fees do not violate private property rights and ensure that land use actions, decisions, and regulations do not effectively eliminate all economic value of the subject property. Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right and staff shall evaluate with guidance from the City's attorney; the Idaho Attorney General's six criterion established to determine the potential for property taking.

Comment: *Utilizing the Idaho Attorney Generals criteria, and a review by the City Attorney, the proposed project does not constitute a "takings" and the economic value is intact.*

Economic Development Goals and Objectives - Section 5 - Summary:
Ensure an adequate supply of housing for all income levels and facilitate pedestrian connections, both visually and physically, to enhance pedestrian movement (Pg. 42 – 1.5 and Pg. 43 – 3.1).

Comment: *The proposed application complies with these elements of the comprehensive plan by providing an opportunity to supply varied housing types and provide pedestrian connections, thereby meeting this goal.*

Land Use Goals and Objectives - Section 6 - Summary:
Adopt a future land use plan and map that includes natural and developed open spaces, while providing a variety of housing densities and types to accommodate various lifestyles, ages and economic groups. Protect existing neighborhoods and ensure new development is sustainable and keeps Kuna desirable. Develop cohesive neighborhoods with character and quality while incorporating a variety of densities and styles (Pg. 64 – 3.1 & Goal 3 and Pg. 65 – 4.3).

Medium Density Residential:
This designation describes areas where residential development densities generally range from four to eight units per acre. These areas will be made up of single-family homes, but may include townhomes, row houses duplexes and other types of multi-family land uses. Areas featuring these densities are generally located within the City Center and around Neighborhood Centers (Page 88).

Comment: *The proposed Preliminary Plat requests an R-6 zone, for residential uses, conforming to the Comprehensive Plan and Planning Map approved by Council in August of 2015.*

Mixed-Uses:
The mixed use general land use designation pertains to a land parcel or combination of parcels that are planned and developed together. This comprehensive land use category may contain residential, commercial, office and technical uses, a variety of building types and densities, common open space variations, clustered development and recreational facilities (Page 105).

***Comment:** The proposed Preliminary Plat requests an R-6 zone, for residential uses, conforming to the Comprehensive Plan and Planning Map approved by Council in August of 2015.*

Housing Goals and Objectives - Section 12 - Summary:
Encourage developers to provide high-quality development with a variety of lot sizes, dwelling types, densities and price points to meet the needs of current and future population while creating safe and aesthetically-pleasing neighborhoods. Ensure housing is available throughout the community for all income levels and those with special needs. *Encourage logical and orderly residential development while discouraging developers from developing land divisions greater than one half acre because large lot subdivisions increase municipal costs*, require public subsidy and create sprawl (Pg. 155 – 1.2, Pg. 163 12.4 and Pg. 165 – 2.1).

Encourage mixed-use development that includes town centers, single-family, *multi-family*, accessory units, and other types of residential development. – Policy 1.1.2, Section 12, Housing (Page 155).

***Comment:** Applicant proposes medium density residential which will contribute to availability of varied types and home sizes in a logical and orderly manner with an opportunity to provide a quality development.*

Community Design Goals and Objectives - Section 13 - Summary:
Strengthen Kuna's Image through good community and urban design principles that create self-sufficient neighborhoods. Foster good community design concepts that incorporate landscape features to serve as buffers between incompatible uses while reducing scale and creates a sense of place.

Neighborhoods:
Kuna's updated Plan is an advocate for the development of self-sufficient neighborhoods. These neighborhoods are intended to be connected by transit and other non-motorized methods of transportation. Each neighborhood will have a center, a core and an edge. (Page 179).

***Comment:** With this development, the applicant will provide an extension of the sidewalk and roadway system which must comply with the Master Street Plan adopted by Kuna. Applicant has proposed connections to existing and future neighborhoods by adding pathways, sidewalks for pedestrian and non-motorized transportation, and adding and connecting to stub streets. Applicant appears prepared to propose a variety of housing densities thereby complying with approved land use designation outlined within the Comp Plan and Planning Map.*

L. Proposed Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with all Kuna City Codes (KCC).

Comment: *The proposed project meets the land use and area standards in Chapter 3, Title 5 of the Kuna City Code (KCC). Staff also finds that the proposed project meets all applicable requirements of Title 5 of the KCC.*

2. The site is physically suitable for the proposed R-6 new Preliminary Plat (subdivision).

Comment: *The 73.50 acre (approximate) project includes a request for subdividing the lands in 310 buildable lots and 38 common lots. The site appears to be compatible with the proposal.*

3. The Preliminary Plat **is/is not** likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.
   Comment: *The land to be subdivided is not used as wildlife habitat. Future roads, dwelling units and open spaces must be planned for construction according the City requirements and best practices and will therefore not cause environmental damage or loss of habitat.*

4. The Preliminary Plat proposal **is/is not** likely to cause adverse public health problems.

   Comment: *The proposed subdivision of the property appears to follows Kuna City Codes. All development requires connection to public sewer and potable water systems, therefore eliminating the occurrence of adverse public health problems.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

   Comment: *The* Council *did consider the location of the property and adjacent uses. The subject property is in Kuna City and will be connected to the Kuna City central sewer and potable and pressure irrigation water systems. The current adjacent uses are agriculture in nature uses and the site it adjacent to an arterial road.*

6. Based on the evidence contained in Case No. 18-01-S, Council finds Case No. 18-01-S **does/does not** adequately complies with Kuna City Code.

7. Based on the evidence contained in Case No. 18-01-S, Council finds Case No. 18-01-S, **does/does not** generally comply with Kuna's Zoning Code.

M. Proposed Conclusions of Law:

1. Based on the evidence contained in Case No. 18-01-S, Council finds Case No. 18-01-S generally **does/does not** comply with Kuna City Code.

2. Based on the evidence contained in Case No. 18-01-S, Council finds Case No. 18-01-S, generally **is/is not** consistent with Kuna's Comprehensive Plan and Comprehensive Plan Map.

3. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

N. Recommendation of the Commission to City Council:

On October 9, 2018, the Commission voted to recommend approval for Care No. 18-01-S to City Council, based on the facts outlined in staff's report, the Comp Plan, City Code, the record before the Commission, the applicant's presentation, public testimony and discussion during the public hearing by the Planning and Zoning Commission of Kuna, Idaho. Therefore, the Commission hereby recommends *approval* to Council for Case No. 18-01-S, a Preliminary Plat request, and voted to *approve Case No. 18-07-DR, a Design Review request* by Katie Miller (Bailey Engineers) on behalf of Thistle Farm, LLC and Vanderkooy Farm, LLC, with the following conditions of approval:

- Applicant shall follow the conditions stated in the staff report and related agency reports.

O. Proposed Order of Decision by the Council:

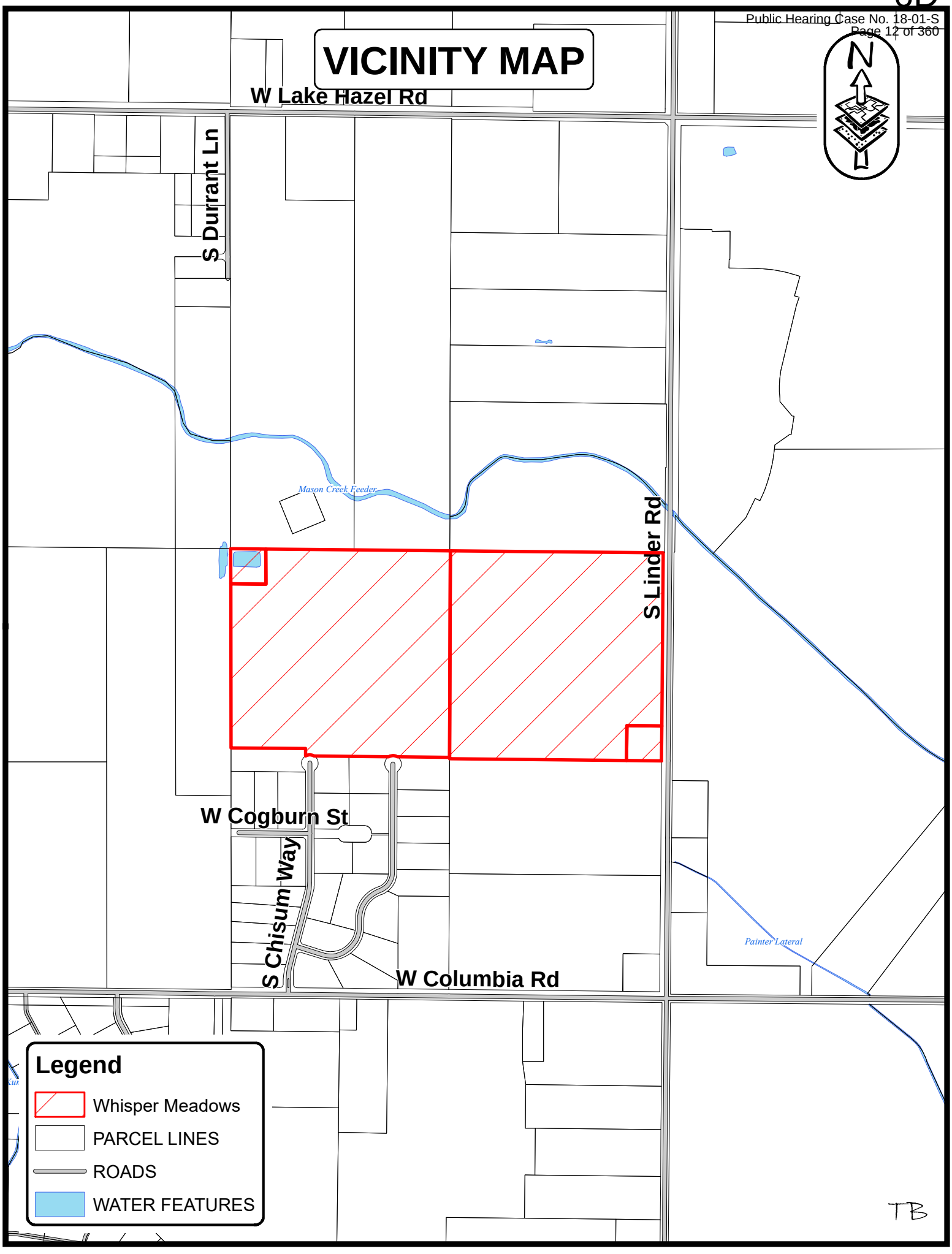
18-01-S (Preliminary Plat), *Note: This proposed motion is to recommend approval, conditional approval, or denial for this request to City Council. If the Commission wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.*

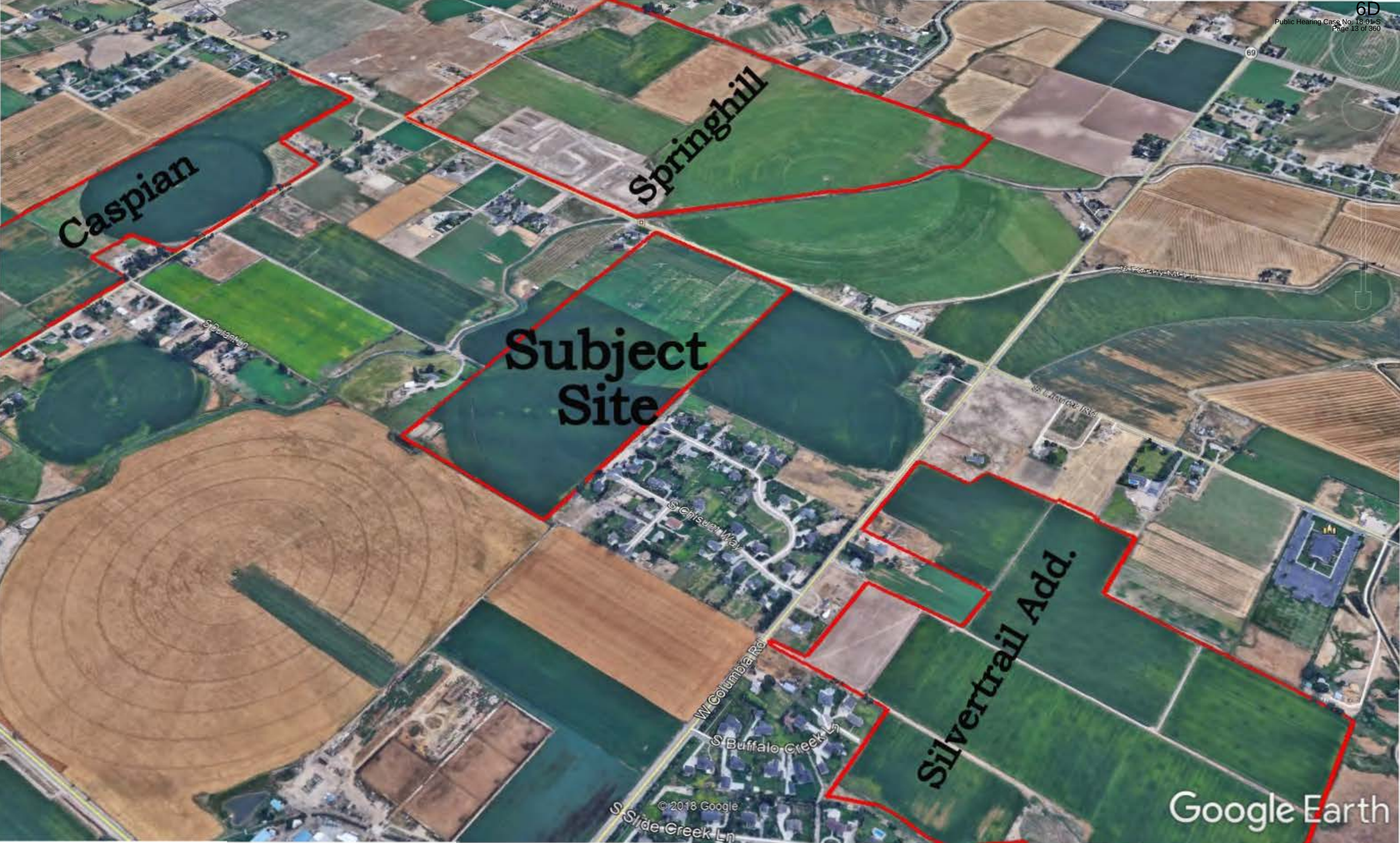
On November 20, 2018, the Council will vote to **approve/conditionally approve/deny** Case No. 18-01-S, based on the facts outlined in staff's memo, the Comp Plan, City Code, the record before the Council, the applicant's presentation, public testimony and discussion during the public hearing by the City Council of Kuna, Idaho, the Council hereby **approves / conditionally approves / denies** Case No. 18-01-S, a Preliminary Plat request by Katie Miller (Bailey Engineers) on behalf of Thistle Farm, LLC and Vanderkooy Farm, LLC, with the following conditions of approval *at time of development in the future*:

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve the drainage and grading plans. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties". No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    c. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    d. The *Boise-Kuna* Irrigation District shall approval any modifications to the existing irrigation system.
    e. Approval from Ada County Highway District (ACHD) shall be obtained and Impact Fees must be paid prior to *issuance* of any building permit(s).
2. All public rights-of-way shall be dedicated and constructed to standards of the City, Ada County Highway District and Idaho Transportation Department. No public street construction may commence without the approval and permit from Ada County Highway District and/or Idaho Transportation Department.
    2.1– At time of development and as necessary, dedicate right-of-way in sufficient amounts to follow City and ACHD standards and widths.
3. Installation of service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see **KCC 6-4-2-W**.
4. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
5. When required, submit a petition to the City (as necessary, confirmed with the City engineer) consenting to the pooling of irrigation surface water rights for delivery purposes and requesting to annex the irrigation surface water rights appurtenant to the property over to the Kuna Municipal Pressure Irrigation system of the City (KMID).
6. All street lighting within and for the site shall be LED lighting and must comply with Kuna City Code.
7. Parking within the site shall comply with Kuna City Code. (Unless specifically approved otherwise).
8. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted). Perimeter fencing (and permit) is required prior to requesting final plat signatures from Kuna City Clerk and Engineer.
9. All signage within/for the project shall comply with Kuna City Code.
10. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within 3 days or as the planting season permits as required to meet the standards of these requirements. Maintenance and planting within public rights-of-way shall be with approval from the public entities owning the property.
11. The land owner/applicant/developer, and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the City Council, or seek amending them through public hearing processes.
12. The applicant's proposed Preliminary Plat (Rev. dated 11/05/2018) shall be considered binding site plans, or as modified and approved through the public process.

13. The applicant's proposed landscape plan (dated 01/11&12/2018) shall be considered binding site plans, or as modified and approved through the public process.
14. Applicant shall follow staff, City engineers and other agency recommended requirements as applicable.
15. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED this ___, day of _____, 2018


VICINITY MAP
W Lake Hazel Rd
S Durrant Ln
Mason Creek Feeder
S Linder Rd
W Cogburn St
S Chisum Way
W Columbia Rd
Painter Lateral
N
Legend
Whisper Meadows
PARCEL LINES
ROADS
WATER FEATURES
TB


Caspian
Springhill
Subject Site
Silvertrail Add.
S Chisum Way
W Columbia Rd
S Buffalo Creek Ln
S Slide Creek Ln
69
© 2018 Google
Google Earth

received
1.12.18

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

Commission & Council Review Application

Note: Engineering fees shall be paid by the applicant if required.

*Please submit the appropriate checklist (s) with application

For Office Use Only	
File Number (s)	18-01-ZC 18-01-S 18-07-DR
Project name	
Date Received	1.12.18 & Complete on 1.29.18
Date Accepted/ Complete	
Cross Reference Files	
Commission Hearing Date	
City Council Hearing Date	

Type of Review (check all that apply):

- ☐ Annexation
- ☐ Appeal
- ☐ Comprehensive Plan Amendment
- ☒ Design Review
- ☐ Development Agreement
- ☐ Final Planned Unit Development
- ☐ Final Plat
- ☐ Lot Line Adjustment
- ☐ Lot Split
- ☐ Planned Unit Development
- [X Preliminary Plat
- [X Rezone
- ☐ Special Use
- ☐ Temporary Business
- ☐ Vacation
- ☐ Variance

Contact/Applicant Information

Owners of Record: Thistle Farm & Vanderkeoy Farm, LLC
Address: 6152 W. Half Moon Ln
City, State, Zip: Eagle ID 83616
E-Mail: timothyeck@me.com
Fax #:

Applicant (Developer): Vanderkooy Farm LLC
Address: 6152 W.Halfmoon Ln
City, State, Zip: Eagle, ID 83616
Phone Number: 208-938-0013
E-Mail: timothyeck@me.com
Fax #:

Engineer/Representative: Bailey Engineers
Address: 4242 N.Brookside Ln
City, State, Zip: Boise, ID 83713
Phone Number: 208-938-0013
E-Mail: kmiller@baileyengineers.com
Fax #:

Subject Property Information

Site Address: S. Linder Road, Kuna
Site Location (Cross Streets): S. Linder Rd north of Columbia
Parcel Number (s): R1693860010, R1393850100, R1693860290, R1693860280
Section, Township, Range: Section 2, T.2N, R.1W
Property size : 73.17 acres
Current land use: Ag
Proposed land use: Residential Sub
Current zoning district: A
Proposed zoning district: R6

Project Description

Project / subdivision name: Whisper Meadows

General description of proposed project / request: The applicant is requesting approval for a medium density residential subdivision

Type of use proposed (check all that apply):

- [X] Residential
- [ ] Commercial
- [ ] Office
- [ ] Industrial
- [ ] Other

Amenities provided with this development (if applicable): Large grass area which will contain enough room for 3 regulation size soccer fields. Nice connectivit throughout the development via pathway

Residential Project Summary (if applicable)

Are there existing buildings? [ ] Yes [X] No

Please describe the existing buildings: N/A

Any existing buildings to remain? [ ] Yes [X] No

Number of residential units: _____ Number of building lots: 310

Number of common and/or other lots: 38

Type of dwellings proposed:

- [X] Single-Family
- [ ] Townhouses
- [ ] Duplexes
- [ ] Multi-Family
- [ ] Other

Minimum Square footage of structure (s): 1,200sf

Gross density (DU/acre-total property): 4.25 Net density (DU/acre-excluding roads): _____

Percentage of open space provided: 15.05% Acreage of open space: 11.02

Type of open space provided (i.e. landscaping, public, common, etc.): landscaped buffers, pathways, parks/open space

Non-Residential Project Summary (if applicable)

Number of building lots: _____ Other lots: _____

Gross floor area square footage: _____ Existing (if applicable): _____

Hours of operation (days & hours): _____ Building height: _____

Total number of employees: _____ Max. number of employees at one time: _____

Number and ages of students/children: _____ Seating capacity: _____

Fencing type, size & location (proposed or existing to remain): _____

Proposed Parking:

a. Handicapped spaces: _____ Dimensions: _____
b. Total Parking spaces: _____ Dimensions: _____
c. Width of driveway aisle: _____

Proposed Lighting: _____

Proposed Landscaping (berms, buffers, entrances, parking areas, common areas, etc.): _____

Applicant's Signature: _____ Date: 1/10/18

Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD

January 11, 2018

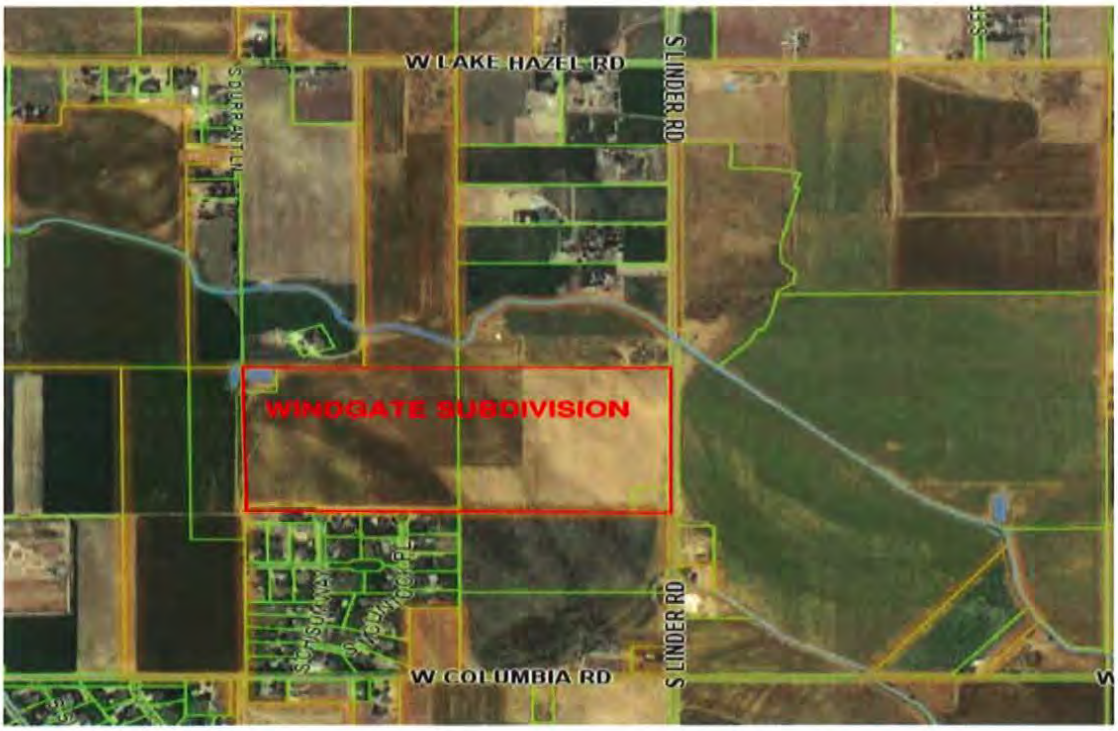
Troy Behunin, Senior Planner
Planning & Zoning Department
Kuna City Hall
751 W. 4th St.
Kuna, ID 83634

RE: **Whisper Meadows Subdivision – *Zoning and Preliminary Plat Application***

Dear Mr. Behunin:

Bailey Engineering Inc., in conjunction with Vanderkooy Farm LLC, is please to submit zoning and preliminary plat applications for the ***Whisper Meadows Subdivision,*** a 73.17 acre, 310 unit single-family residential development in northeast Kuna.

The project is located west of Linder Road, north of Columbia Road and south of Lake Hazel Road at the mid-mile as depicted below.



Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD

This site consists of four parcels which are currently used for agriculture.

Parcel #1 R1693860010
Parcel #2 R1393850100
Parcel #3 R1693860290
Parcel #4 R1693860280

Proposed Zoning

The City's *Medium Density Residential* (R-6) zone is proposed. The R-6 zone will *"blend"* the range of potential densities anticipated by the City's *Comprehensive Plan.* Applying the City's R-6 lot area, density, and setback standards throughout the entire project will provide consistency phase-to-phase and a smooth transition from the *Low Density Residential* (1-3 units/acre) that exists on the south west boarder of the site.

Adjoining Land Use

The properties that surround the subject lands are not all within the Kuna's city limits however, all adjoining properties are located within the city of Kuna's impact area and surrounded by City Limits.

North:	Agriculture and Rural Residential	A/ RR
South:	County Property, low residential	
East:	Medium Density and future High School Site	R6
West:	Agriculture	A

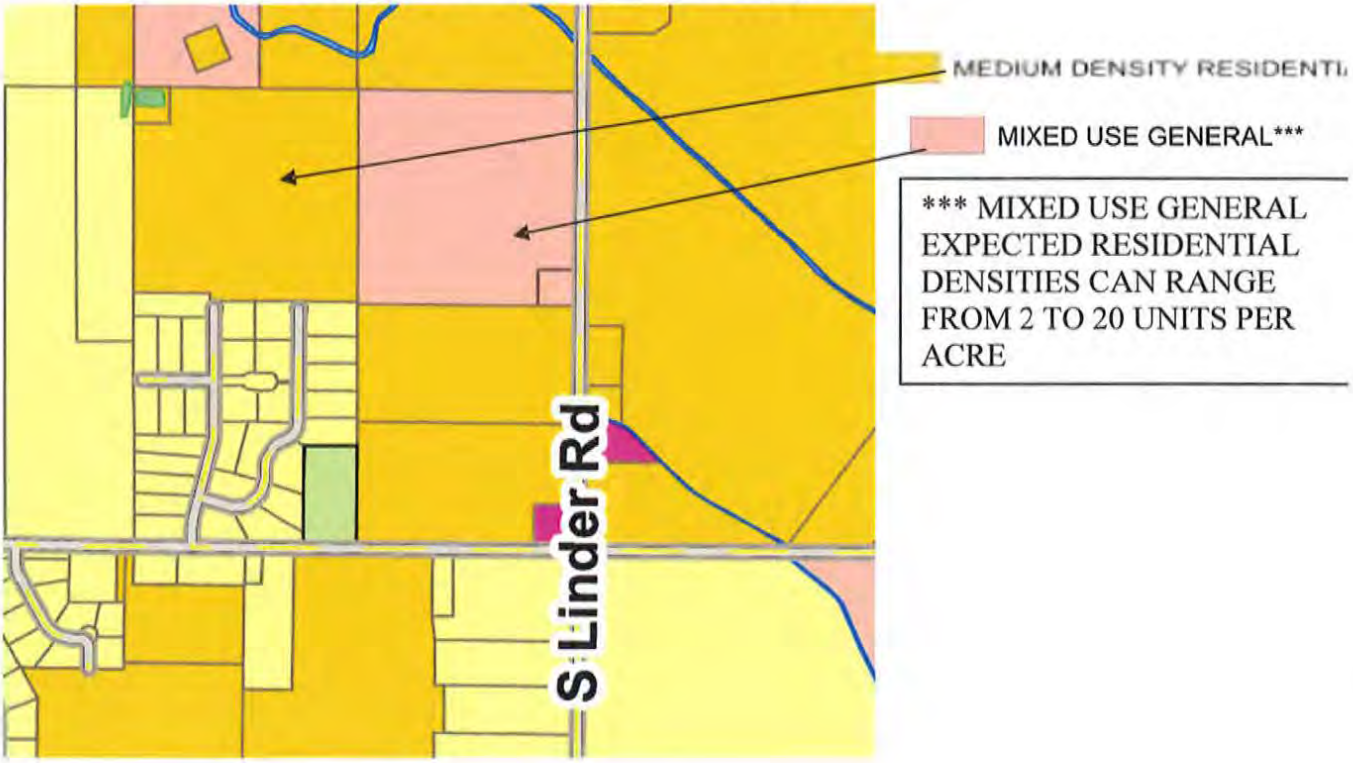
Comprehensive Plan

As depicted in the map below, the proposed development area spans two (2) residential land-use designations from the City of Kuna's Comprehensive Plan *Future Land Use Map*:

Medium Density Residential (R-6) averages 4-6 units/acre

Mixed Use General (R-8, R-12 & R-20) averages 2-20 units/acre

Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD



Neighborhood Meeting

A neighborhood meeting was held on November 14, 2017 at 6:30 p.m. at the Kuna Library. The neighborhood sign in sheet and certification has been included with this application.

The residents of Chisum Valley, directly to the south (County Property), have raised concerns about connecting to their development and the cut through traffic that may be generated. In addition, they are not supportive of the densities being proposed.

After hearing the neighbors' concerns, we met with ACHD and they are allowing us to only connect 1 of the 2 cul-de-sacs which were intended for future connection. The applicant has no desire to connect to the Chisum Valley Subdivision however, that decision is not up to the applicant. We chose to connect the culdesac furthest to the east to reduce cut through traffic. A majority of the traffic generated by the ***Whisper Meadows Subdivision*** will come from Linder Road and the future, mid-mile collector, Butterfly Street.

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The overall density for this project is 4.25 dwellings/acre. We have chosen to put larger lots along the southern border of the development to address the neighbors' concerns and create a nice transition between densities in the Chisum Valley Subdivision to Whisper Meadows Subdivision.

The density proposed for Whisper Meadows is in compliance with the City of Kuna's Comprehensive Plan.

Sewer and Water:

An 8" force main will run from our site to the Springhill Subdivision Sewer Lift Station. Water for this project will be provided via a tie in to a 12-inch water main located on Linder Road (eastern boundary of our project).

Pressure Irrigation

A 12" PIRR line will run from our site and tie into the Pressure Irrigation Pump Station in the Springhill Subdivision located north ease of our site.

Storm Drainage

Storm drainage will be mitigated by gutters, catch basins, storm drain piping, infiltration ponds, borrow ditches and seepage beds. All storm drainage will be in compliance with ACHD design criteria.

Project Features:

Open Space, Common Areas and Pathways

This site contains a total of 5.56 acres of open space. One of the main amenities is the 2.39 acre park which is large enough for two U6/U8 regulation size soccer fields, or one U14/U19 regulation size soccer field.

There are pathways throughout this development making pedestrian circulation safe, efficient and convenient.

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Traffic Circulation

- A traffic impact study has been conducted and submitted for review with this application.

- The primary entrance to ***Whisper Meadows Subdivision*** will initially be from of the future mid-mile collector, Butterfly Street. Phase 1 of the development will commence on the northern portion of the site. In Phase 1 two entrances will be built, Cardinal Avenue and Chisum Avenue.

Project Phasing

- The first of 5 phases of ***Whisper Meadows Subdivision,*** as depicted on the phasing plan submitted with this application, will commence on the northern boundary along future Butterfly Street and continue along the west boundary (Durant Lane) and move east from there (Phases 3-5). The development is projected to occur over the next 6 years.

Project/Preliminary Plat Information

- **Total Site Area**
  - Preliminary Plat — 73.17 Acres

- **Number of Lots**
  - Single-family Residential Lots — 310
  - Common Lots — 38
  - **Total Lots** — **348**

- **Density**
  - Gross — 4.24 Dwellings/Acre

- **Qualified Open Space**
  - Total Open Space — 5.56 Acres/ 7.59%
  - Street Buffers — 2.07 Acres/ 2.82%
  - Open Space with Pathways — 2.39 Acres/ 3.27%
  - End Caps — 1.00 Acres/ 1.37%

Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD

Summary

The proposed rezone and preliminary plat applications for the Whisper Meadows Subdivision carefully considered all aspects of the Kuna Zoning Ordinance, the Kuna Comprehensive Plan, site location and surrounding neighborhoods. We respectfully request your approval of these applications.

Sincerely,

Katie Miller
Project Manager

4242 N. Brookside Lane ◆ Boise, Idaho 83714 ◆ Tel.: 208-938-0013



PLANT PALETTE

SYM	COMMON NAME	BOTANICAL NAME
EVERGREEN TREES		
	AUSTRIAN PINE	PINUS NIGRA
CB	COLORADO BLUE SPRUCE	PICEA PUNGENS 'GLAUCA'
	MOONGLOW JUNIPER	JUNIPERUS SCOPULORUM 'MOONGLOW'
	NORWAY SPRUCE	PICEA ABIES
VP	VANDERWOLFS PINE	PINUS FLEXILIS 'VANDERWOLFS'
WH	WEEPING WHITE PINE	PICEA GLAUCA 'PENDULA'
STREET TREES (CLASS II & III)		
AF	AUTUMN PURPLE ASH	FRAXINUS AMERICANA 'AUTUMN PURPLE'
	SKYLINE HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'
	LITTLELEAF LINDEN	TILIA CORDATA
	LONDON PLANETREE	PLATANUS x ACERIFOLIA
RO	RED OAK	QUERCUS RUBRA
	AMERICAN SWEETGUM	LIQUIDAMBER STYRACIFLUA
TT	TULIP TREE	LIRIODENDRON TULIPIFERA
ORNAMENTAL TREES (CLASS I)		
AM	AMUR MAPLE	ACER GINNALA 'FLAME'
	CHANTICLEER PEAR	PYRUS CALLERYANA 'GLEN'S FORM'
GR	GOLDEN RAINDROPS CRABAPPLE	MALUS x 'SCHMIDTCUTLEAF'
RR	ROYAL RAINDROPS CRABAPPLE	MALUS x 'JFS-KW5'
	SPRINGSNOW CRABAPPLE	MALUS 'SPRINGSNOW'
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS		
BE	BLACK EYED SUSAN	RUDBECKIA FULGIDA 'GOLDSTRUM'
	BLUE RUG JUNIPER	JUNIPERUS HORIZONTALIS 'WILTONI'
	CREEPING MAHONIA	MAHONIA REPENS
	RED FLOWER CARPET ROSE	ROSA 'FLOWER CARPET- NOARE'
DF	DWARF FOUNTAIN GRASS	PENNISETUM ALOPECUROIDES 'HAMELN'
	DARTS GOLD NINEBARK	PHYSOCARPUS OPULIFOLIUS 'DARTS GOLD'
	STELLA D'ORO DAYLILY	HEMEROCALLIS 'STELLA D'ORO'
	EMERALD N' GOLD BUONYMUS	EUONYMUS FORTUNEI 'EMERALD N' GOLD'
	ENDLESS SUMMER HYDRANGEA	HYDRANGEA ARBORESCENS 'TERMI'
	FINE LINE BUCKTHORN	RHAMNUS FRAGULA 'RON WILLIAMS'
	GOLDFLAME SPIREA	SPIRAEA x BUMALDA 'GOLDFLAME'
GL	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
	KORT' HALO DOGWOOD	CORNUS ALBA 'BAILHALO'
	KARL FOERSTER REED GRASS	CALAMAGROSTIS ARUNDINACEA 'K.F.'
	LITTLE DEVIL NINEBARK	PHYSOCARPUS OPULIFOLIUS 'DONNA MAY'
	MIDCOTE BLUE ENGLISH LAVENDER	LAVANDULA ANGUSTIFOLIA 'MIDCOTE BLUE'
	OTTO LUYKEN LAUREL	PRUNUS LAUROCERASUS 'OTTO LUYKEN'
	P.J.M RHODODENDRON	RHODODRENDRON 'P.J.M'
	VALDEN GRASS	MISCANTHUS SINENSIS 'SPRACILLIMUS'
SN	SUMMERWINE NINEBARK	PHYSOCARPUS OPULIFOLIA 'SEWARD'
	LAWN	
	6' VINYL FENCE ALONG PERIMETER PROPERTY LINES AND SIDE LOTS (TYP) SEE DTL 4, THIS SHT	
	4' VINYL FENCE ADJACENT TO CONNECTION PATHWAYS AND COMMON AREAS (TYP). SEE DTL 4, THIS SHT	

LANDSCAPE CALCULATIONS

LANDSCAPE BUFFER ARE REQUIRED TO BE PLANTED WITH THE FOLLOWING PLANTS PER 100 LINEAR FEET: TWO (2) SHADE TREES, THREE (3) EVERGREEN TREES, AND TWELVE (12) SHRUBS. EACH REQUIRED SHADE TREE MAY BE SUBSTITUTED FOR TWO (2) FLOWERING/ORNAMENTAL TREES.

LOCATION	BUFFER WIDTH	LENGTH	REQUIRED	PROVIDED
S. LINDER ROAD	20'	710' / 100' = 7.1	16 TREES	23 TREES (14 SHADE TREES + 18 ORNAMENTAL TREES)
			24 EVERGREENS	27 EVERGREENS
			43 SHRUBS	126 SHRUBS
W. BUTTERFLY ST.	25'	2450' / 100' = 24.5	44 TREES	60.5 TREES (46 SHADE TREES + 39 ORNAMENTAL TREES)
			74 EVERGREENS	74 EVERGREENS
			244 SHRUBS	244 SHRUBS
S. DURANT LN.	20'	1030' / 100' = 10.3	21 TREES	21 TREES (14 SHADE TREES + 14 ORNAMENTAL TREES)
			31 EVERGREENS	31 EVERGREENS
			124 SHRUBS	138 SHRUBS

NUMBER OF TREES PROVIDED ON BUFFERS:	272
NUMBER OF TREES PROVIDED ON COMMON LOTS:	164
TOTAL NUMBER OF TREES:	436

THERE ARE NO EXISTING TREES ON SITE.

NOTES

1. ALL LANDSCAPE SHALL BE INSTALLED IN ACCORDANCE WITH KUNA CITY ORDINANCE REQUIREMENTS. ALL LOTS WILL COMPLY WITH KUNA CITY ORDINANCE REQUIRING ONE (1) TREE PER LOT (PROVIDED BY BUILDER AND/OR DEVELOPER).
2. ALL PLANTING AREAS TO BE WATERED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
3. TREES SHALL NOT BE PLANTED WITHIN THE 10-CLEAR ZONE OF ALL ACHD STORM DRAIN PIPE, STRUCTURES, OR FACILITIES. SEEPAGE BEDS MUST BE PROTECTED FROM ANY AND ALL CONTAMINATION DURING THE CONSTRUCTION AND INSTALLATION OF THE LANDSCAPE IRRIGATION SYSTEM.
4. NO TREES SHALL IMPEDE THE 40' STREET AND DEPARTURE VISION TRIANGLES AT ALL INTERSECTIONS. NO CONIFEROUS TREES OR SHRUBS OVER 3' HIGH AT MATURITY WILL BE LOCATED WITHIN VISION TRIANGLE OR ACHD ROW. AS TREES MATURE, THE OWNER SHALL BE RESPONSIBLE FOR PRUNING TREE CANOPIES TO MEET ACHD REQUIREMENTS FOR MAINTAINING CLEAR VISIBILITY WITHIN 40' STREET AND DEPARTURE VISION TRIANGLE. TREES SHALL BE PLANTED NO CLOSER THAN 50' FROM STOP SIGNS.
5. LANDSCAPE AND TREES IN FRONT OF BUILDING LOTS ON INTERIOR STREETS TO BE COMPLETED DURING CONSTRUCTION OF THESE LOTS. TREE LOCATIONS MAY BE ALTERED TO ACCOMMODATE DRIVEWAYS AND UTILITIES. TREES SHALL NOT BE PLANTED WITHIN 5' OF WATER METERS OR UTILITY LINES.
6. PLANT LIST IS REPRESENTATIVE AND SUBJECT TO SUBSTITUTIONS OF SIMILAR SPECIES BY OWNER, SUBJECT TO CITY FORESTER'S PRE-APPROVAL. PLANTING BED DESIGN AND QUANTITIES MAY BE ALTERED DURING FINAL PLAT LANDSCAPE PLAN DESIGN. BURLAP AND WIRE BASKETS TO BE REMOVED FROM ROOT BALL AS MUCH AS POSSIBLE, AT LEAST HALFWAY DOWN THE BALL OF THE TREE. ALL NYLON ROPES TO BE COMPLETELY REMOVED FROM TREES.

DEVELOPMENT DATA

TOTAL AREA	73.17 ACRES
TOTAL LOTS	348
BUILDABLE LOTS	310
COMMON LOTS	38
DENSITY D/ACRE	4.24
TOTAL OPEN SPACE	5.56 ACRES (15.49%)
STREET BUFFERS	2.01 ACRES (2.82%)
OPEN SPACE WITH PATHWAYS	2.34 ACRES (3.27%)
END CAPS	1.00 ACRES (1.37%)
EXISTING ZONING	A
PROPOSED ZONING	R8

WHISPER MEADOWS SUBDIVISION

KUNA, ID

PRELIMINARY PLAT LANDSCAPE PLAN

OWNER
VANDERMOOY FARM, LLC.
6152 N. HALT WOOD LANE
EAGLE, IDAHO 83616

JANUARY 11, 2018

NORTH

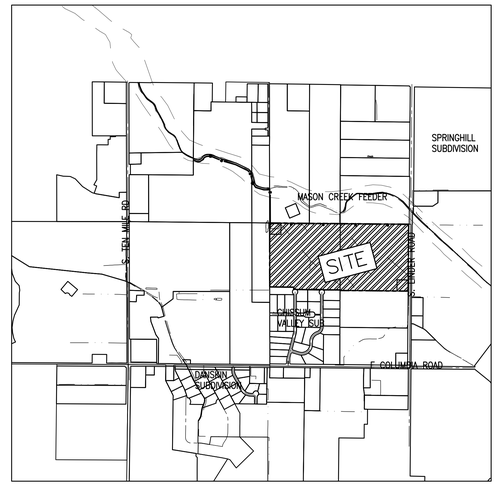
SCALE 1" = 120'

JENSENBELTS ASSOCIATES

PRELIMINARY PLAT FOR WHISPER MEADOWS SUBDIVISION

A RESUBDIVISION OF LOTS 1, BLOCK 1 OF CHISSUM VALLEY NO. 1, LOTS 2, 29 & 30, BLOCK 1 OF CHISSUM VALLEY SUBDIVISION NO. 2, LOCATED IN THE SE 1/4 OF SECTION 2, T.2N., R.1W., B.M., KUNA, ADA COUNTY, IDAHO
2018

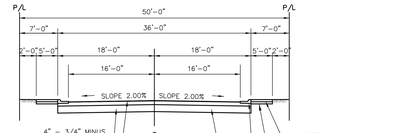




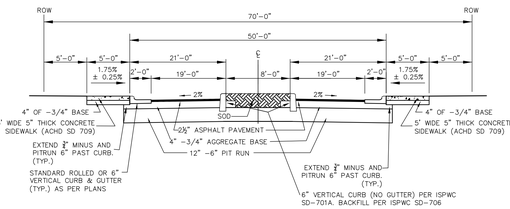
VICINITY MAP
N.T.S.

PLAN SHEET INDEX

SHEET	DESCRIPTION
PP-1	– COVER SHEET, INDEX, MAP, & NOTES
PP-2	– SUBDIVISION LAYOUT & DIMENSIONS
C-1	– CONCEPTUAL ENGINEERING PLAN
C-2	– CONCEPTUAL SEWER PLAN
C-3	– CONCEPTUAL SEWER PROFILES
C-4	– CONCEPTUAL SEWER PROFILES & LOT TABLES
C-5	– CONCEPTUAL CROSSINGS



50' RIGHT-OF-WAY
TYPICAL STREET SECTION
NOT TO SCALE



70' RIGHT-OF-WAY
TYPICAL STREET SECTION
NOT TO SCALE

NOTES:
1. ALL LOT LINES COMMON TO A PUBLIC RIGHT OF WAY HAVE A 10' UTILITY EASEMENT.
2. A 10' UTILITY EASEMENT IS LOCATED ADJACENT TO THE EXTERIOR BOUNDARY.
3. ALL SIDE YARD LOT LINES HAVE A 5' DRAINAGE & IRRIGATION EASEMENT ON EACH SIDE OF THE LOT LINE UNLESS OTHERWISE SHOWN.
4. MUNICIPAL SEWER AND WATER SERVICES SHALL BE PROVIDED TO EACH LOT.
5. DRAINAGE FOR THE PUBLIC STREETS WILL BE COLLECTED IN STORM DRAIN CATCH BASINS AND ROUTED THROUGH SAND AND GREASE TRAPS TO SEEPAGE BEDS OR STORM DRAINAGE PONDS.
6. ALL LOTS WITHIN THIS SUBDIVISION ARE SINGLE FAMILY RESIDENTIAL LOTS, WITH THE EXCEPTION OF COMMON LOTS AS SHOWN WHICH ARE COMMON AREA LOTS ALL OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. ALL SAID COMMON LOTS SHALL HAVE A BLANKET UTILITY AND DRAINAGE EASEMENT.
7. THIS SUBDIVISION IS SUBJECT TO COMPLIANCE WITH IDAHO CODE SECTION 31-3805(1)(b) CONCERNING IRRIGATION WATER, PRESSURE IRRIGATION WILL BE SUPPLIED TO ALL LOTS IN THIS SUBDIVISION FROM CITY OF KUNA MUNICIPAL IRRIGATION SYSTEM. EXISTING SHARES AND WATER RIGHTS SHALL BE TRANSFERRED TO THE CITY OF KUNA
8. NO DIRECT ACCESS TO LINDER ROAD WILL BE ALLOWED UNLESS APPROVED IN WRITING BY CITY OF KUNA AND ADA COUNTY HIGHWAY DISTRICT.
9. ALL EXISTING BUILDINGS ON SITE TO BE REMOVED.
10. THE SUBJECT PROPERTY DOES NOT FALL WITHIN ANY FEMA FLOOD HAZARD ZONE. REFERENCE FIRM PANEL 16001C0250J EFFECTIVE OCTOBER 2nd, 20013.

PLAT LEGEND

BOUNDARY
LOT LINES
ROAD CENTERLINE
RIGHT OF WAY
LOT NUMBER
LOT AREA
BLOCK NUMBER
EASEMENT
SETBACK
CURB GUTTER SW
STREET NAME
HANDICAP RAMP
SEWER LINE
WATER LINE
STORM DRAIN LINE
PRESSURE IRRIGATION
GRAVITY IRRIGATION
FLOW ARROW
PHASE LINE
FIRE HYDRANT
CATCH BASIN
FLOODWAY
100 YR FLOOD PLAIN



OPEN SPACE
TOTAL OPEN SPACE - 5.56 ACRES - 7.59%
STREET BUFFERS 2.07 ACRES - 2.82%
OPEN SPACE WITH PATHWAYS 2.39 ACRES - 3.27%
END CAPS - 1.00 ACRES - 1.37%

LOT SIZES
ALL LOTS MEET MINIMUM DIMENSIONS FOR R6 ZONE
MINIMUM BUILDABLE LOT SIZE - 5527 SF
MAXIMUM BUILDABLE LOT SIZE - 20430 SF
AVERAGE BUILDABLE LOT SIZE - 6965 SF

OWNER
VANDERKOOY FARM LLC
6152 W HALF MOON LANE
EAGLE, ID 83616

ENGINEER
DAVID A. BAILEY, P.E.
BAILEY ENGINEERING, INC.
4242 N BROOKSIDE LANE
BOISE, ID 83714
938-0013

PLANNER
KATIE MILLER
BAILEY ENGINEERING, INC.
4242 N BROOKSIDE LANE
BOISE, ID 83714
938-0013

DEVELOPMENT FEATURES

ACREAGE
TOTAL PARCEL - 73.17 ACRES
TOTAL LOTS - 348
BUILDABLE LOTS - 310
COMMON LOTS - 38
DENSITY DU/ACRE - 4.24

ZONING
EXISTING - A
PROPOSED - R6

SEWAGE DISPOSAL
KUNA CITY SEWER

WATER SUPPLY
KUNA CITY WATER

CITY
KUNA

SCHOOL DISTRICT
KUNA

FIRE DISTRICT
KUNA

IRRIGATION DISTRICT
BOISE-KUNA IRRIGATION DISTRICT

Parcel Table			
Lot	Area	Perimeter	
BLOCK 1 Lot 1 OPEN	21065	2196	BUFFER
BLOCK 2 Lot 1 OPEN	36050	3187	BUFFER
BLOCK 2 Lot 14 OPEN	5059	459	PATHWAY
BLOCK 2 Lot 19 OPEN	2140	456	ENDCAP
BLOCK 3 Lot 1 OPEN	34389	3277	BUFFER
BLOCK 3 Lot 13 OPEN	2735	315	PATHWAY
BLOCK 4 Lot 1 OPEN	4916	754	BUFFER
BLOCK 4 Lot 14 OPEN	1471	399	ENDCAP
BLOCK 5 Lot 5 OPEN	2009	431	ENDCAP
BLOCK 5 Lot 10 OPEN	3300	470	PATHWAY
BLOCK 5 Lot 15 OPEN	2060	440	ENDCAP
BLOCK 6 Lot 5 OPEN	2040	436	ENDCAP
BLOCK 6 Lot 10 OPEN	3300	470	PATHWAY
BLOCK 6 Lot 15 OPEN	2060	440	ENDCAP
BLOCK 7 Lot 6 OPEN	2054	442	ENDCAP

Parcel Table			
Lot	Area	Perimeter	
BLOCK 7 Lot 12 OPEN	3300	470	PATHWAY
BLOCK 7 Lot 17 OPEN	2285	484	ENDCAP
BLOCK 9 Lot 10 OPEN	2150	458	ENDCAP
BLOCK 9 Lot 20 OPEN	3450	490	PATHWAY
BLOCK 9 Lot 26 OPEN	2111	451	ENDCAP
BLOCK 10 Lot 1 OPEN	1873	399	ENDCAP
BLOCK 10 Lot 6 OPEN	1558	336	ENDCAP
BLOCK 11 Lot 1 OPEN	1570	338	ENDCAP
BLOCK 11 Lot 6 OPEN	4342	479	PATHWAY
BLOCK 11 Lot 15 OPEN	2111	451	ENDCAP
BLOCK 11 Lot 34 OPEN	1070	238	ENDCAP
BLOCK 12 Lot 1 OPEN	2140	456	ENDCAP
BLOCK 12 Lot 10 OPEN	2109	451	ENDCAP
BLOCK 13 Lot 8 OPEN	2109	451	ENDCAP
BLOCK 13 Lot 15 OPEN	67843	1693	PARK/OPEN

Parcel Table			
Lot	Area	Perimeter	
BLOCK 13 Lot 22 OPEN	2322	493	ENDCAP
BLOCK 13 Lot 35 OPEN	2291	488	ENDCAP
BLOCK 14 Lot 11 OPEN	2111	451	ENDCAP
BLOCK 14 Lot 20 OPEN	3362	480	PATHWAY
BLOCK 14 Lot 28 OPEN	4336	475	PATHWAY
BLOCK 14 Lot 40 OPEN	2110	451	ENDCAP
BLOCK 15 Lot 1 OPEN	8630	1013	BUFFER
BLOCK 15 Lot 12 OPEN	1070	238	END CAP

80 0 40 80 160
SCALE IN FEET
1" = 80'

REVISED		
NO.	DATE	DESCRIPTION
1.	08-13-2018	SOUTH BOUNDARY LOTS
2.	10-03-2018	STREET CONNECTION TO CHISUM PER ACHD REMOVE BULB OUTS AND CHICANES
3.	11-05-2018	LOT 7 BLOCK 1 – 310 BUILDABLE

Bailey Engineering, Inc.
CIVIL ENGINEERING | PLANNING | CADD
4242 N. BROOKSIDE LANE
BOISE, ID 83714
TEL 208-938-0013
www.baileyengineers.com

DRAWN BY: DAB | CHECKED BY: DAVID A. BAILEY P.E. | PROJECT: C2016-026 | DATE: 01-12-2018

PRELIMINARY PLAT
WHSIPER MEADOWS SUBDIVISION
VANDERKOOY FARMS LLC
SHEET PP-1

PRELIMINARY PLAT FOR
WHISPER MEADOWS SUBDIVISION

A RESUBDIVISION OF LOTS 1, BLOCK 1 OF CHISSUM VALLEY NO. 1, LOTS 2, 29 & 30, BLOCK 1 OF CHISSUM VALLEY SUBDIVISION NO. 2, LOCATED IN THE SE 1/4 OF SECTION 2, T.2N., R.1W., B.M., KUNA, ADA COUNTY, IDAHO
2018



PLAT LEGEND

- BOUNDARY
- LOT LINES
- ROAD CENTERLINE
- RIGHT OF WAY
- LOT NUMBER
- LOT AREA
- BLOCK NUMBER — BLOCK 7
- EASEMENT
- SETBACK
- CURB GUTTER SW
- STREET NAME — W. ASHTON DR.
- HANDICAP RAMP
- SEWER LINE
- WATER LINE
- STORM DRAIN LINE
- PRESSURE IRRIGATION
- GRAVITY IRRIGATION
- FLOW ARROW
- PHASE LINE — PHASE
- FIRE HYDRANT
- CATCH BASIN
- FLOODWAY
- 100 YR FLOOD PLAIN

Curve Table		
Curve #	Radius	Length
C1	50.00	78.02
C2	50.00	79.06
C3	300.00	57.40
C4	300.00	57.40
C5	50.00	78.02
C6	300.00	94.44
C7	300.00	94.18
C8	50.00	79.10
C9	50.00	79.06
C10	50.00	78.47
C11	50.00	78.65
C12	50.00	77.97
C13	50.00	78.02
C18	325.00	102.03
C19	275.00	1.23
C20	275.00	85.34
C21	50.00	7.63

Curve Table		
Curve #	Radius	Length
C22	54.00	52.96
C23	54.00	48.05
C24	54.00	42.16
C25	54.00	13.59
C26	25.00	15.83
C27	25.00	23.18
C28	54.00	49.24
C29	54.00	22.05
C30	54.00	25.90
C31	54.00	59.74
C200	54.00	39.90
C201	54.00	38.48
C202	54.00	32.96
C203	54.00	25.28
C204	54.00	20.14
C206	25.00	23.18
C207	25.00	15.83

Curve Table		
Curve #	Radius	Length
C208	54.00	23.38
C209	54.00	25.23
C210	54.00	29.85
C211	54.00	38.48
C212	54.00	38.15
C213	54.00	1.83
C215	25.00	23.18
C216	25.00	16.35
C217	54.00	32.14
C218	54.00	38.27
C219	54.00	20.12
C220	54.00	37.30
C221	54.00	29.01
C223	25.00	23.18
C224	25.00	16.06
C225	54.00	48.09
C226	54.00	33.11

Curve Table		
Curve #	Radius	Length
C227	54.00	31.00
C228	54.00	44.66
C230	25.00	39.32
C236	25.00	15.81
C237	25.00	23.18
C238	54.00	20.51
C239	54.00	37.70
C240	54.00	33.71
C241	54.00	20.59
C242	54.00	34.92
C243	54.00	9.33
C253	25.00	16.37
C254	25.00	23.18
C262	25.00	16.35
C263	25.00	23.18
C264	54.00	16.26
C265	54.00	20.43

Curve Table		
Curve #	Radius	Length
C266	54.00	31.89
C267	54.00	38.41
C268	54.00	35.71
C269	54.00	14.17
C270	50.00	78.65
C271	25.00	16.14
C272	25.00	23.18
C273	55.00	59.69
C274	55.00	36.46
C275	55.00	15.05
C276	55.00	36.20
C277	55.00	60.32
C287	54.00	6.06
C288	54.00	42.05
C289	54.00	20.12
C290	54.00	27.23
C291	54.00	50.31

Curve Table		
Curve #	Radius	Length
C292	54.00	11.17
C293	335.00	64.10
C294	470.00	11.00
C295	470.00	52.19
C296	470.00	26.74
C297	130.00	24.87
C298	54.00	52.06
C299	54.00	33.37
C300	54.00	50.99
C301	54.00	20.35
C302	355.00	11.00
C303	355.00	52.33
C304	355.00	4.59
C305	245.00	1.17
C306	245.00	45.71
C307	275.00	52.62
C308	25.00	22.96

Curve Table		
Curve #	Radius	Length
C309	25.00	15.83
C310	325.00	28.64
C311	325.00	51.63
C312	325.00	22.04
C313	275.00	27.67
C314	265.00	9.43
C315	265.00	41.27

60 0 30 60 120
SCALE IN FEET
1" = 60'

REVISED	
NO.	DATE DESCRIPTION
1.	08-13-2018 SOUTH BOUNDARY REMOVE 1 LOT
2.	10-03-2018 STREET CONNECTION TO CHISUM PER ACHD
	REMOVE BULB-OUTS AND CHICANES
3.	11-05-2018 LOT 7 BLOCK 1 310 LOTS

Bailey Engineering, Inc.
CIVIL ENGINEERING | PLANNING | CADD
4242 N. BROOKSIDE LANE
BOISE, ID 83714
TEL 208-938-0013
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DRAWN BY: DAB | CHECKED BY: DAVID A. BAILEY P.E. | PROJECT: C2016-026 | DATE: 01-12-2018

PRELIMINARY PLAT
WHISPER MEADOWS SUBDIVISION
VANDERKOOY FARMS LLC
SHEET: PP-2

Exhibit B-1

CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
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MEMORANDUM

TO: Director of Kuna Planning and Zoning

FROM: Bob Bachman ~ Public Works Director
Paul Stevens ~ City Engineer
Mike Borzick ~ GIS Manager/Plan Review

RE: Whispering Meadows

DATE: April 23rd, 2018

The City of Kuna's Engineering department has reviewed the Preliminary Plat of Whispering Meadows Subdivision dated January 12, 2018. The preliminary development drawings provided show 310 single family lots and 38 common lots for a total of 348 lots. The following comments pertain to the Whispering Meadows Preliminary Plat application:

1. **Sanitary Sewer Needs**

   a) The applicant's property is presently used for agricultural purposes, is not connected to City services and shall be subject to connection fees for the demand of the ultimate connected load as provided in the City's Standard Table. City Code (6-4-2O) requires connection to the City sewer system for all sanitary sewer needs.

   b) The property is located within the Mason Creek sewer shed which discharges to the Springhill Lift Station and ultimately to the Memory Ranch Lift Station and thence to the North Wastewater Treatment Plant.

   c) When connecting to the sewer system, the applicant shall abide by all sewer reimbursement policies and agreements and related connection fees in place at the time of development/construction.

   d) For any connected load, it is recommended that this application be conditioned to conform to the sewer master plan, particularly to the providing of sewer mains and trunk lines in the master plan. The Engineering Department recommends that a gravity

sewer collection main line be constructed along the northern boundary of the property in the right of way pertaining to W. Butterfly Street. This modification complies with the Sewer Master Plan (2017) and eliminates a lift station.

e) The nearest Sewer Main capable of serving this property lies within Springhill Subdivision. The applicant proposes the construction of a lift station to serve the development. The construction drawings for the lift station shall be part of the approved plans for Phase 1 and shall show the implied service area for sizing purposes.

f) At all reasonable locations where sewer service could be extended to adjoining properties, sewer mains should be stubbed to the property line or extended in right-of-way in or adjacent to the project – both at useable depths.

g) For assistance in locating existing facilities and understanding issues associated with connection, please contact the GIS Manager at 208-287-1726.

2. Potable Water Needs

a) The applicant's property is presently used for agricultural purposes, it is not connected to City water service and would be subject to connection fees for the demand of the ultimate connected load as provided in the City's Standard Table. City Code (6-4-2X) requires connection to the City water system for all potable water needs. The City currently has sufficient potable water supply to serve this site.

b) The nearest point of water connection for the property lies within Linder Road. Construction drawings to bring the water main to the site shall be part of the approved construction drawings for Phase 1.

c) The Developer shall provide adequate fire protection as required by the Kuna Fire District.

d) For any connected load, it is recommended this application be conditioned to conform to the water master plan. Specifically, 12-inch water mains are required in the portions of the project within W Butterfly St and S Durrant Lane.

e) The minimum size for internal subdivision street water mains, installed by the developer, is 8-inch diameter.

f) Redundancy of water transmission in the general area of this site is not provided by existing facilities. This matter is under consideration in the City's CIP.

g) Buildable lots shall be limited until a loop from Ten Mile – Lake Hazel – Linder is completed.

h) For assistance in locating existing facilities, please contact the GIS Manager at 208-287-1726.

3. Pressure Irrigation

a) The property's irrigation needs are presently served by local canals from surface water rights. The applicant's property is not connected to the City pressure irrigation system. Relying on drinking water for irrigation purposes is contrary to City Code (6-4-2I) and the public interest, is not accounted for in the approved Water Master Plan and the City Engineer recommends connection to existing City pressurized irrigation facilities. When connecting to the pressure irrigation system, the applicant shall comply with relevant irrigation reimbursement policies, agreements, and any relevant connection fees.

b) It is recommended this project be conditioned to require connection and annexation to the City Pressure Irrigation system at the time of development. It is further recommended that annexation into the municipal irrigation district and pooling of water rights is a requirement at the time of final platting.

c) The development is subject to connection fees based on number of dwellings and lot size for the residential area and based on ultimate landscaped area and lot size for the commercial area and common lots, as provided in City Resolutions.

d) Does the applicant propose the construction of a pressure irrigation basin and pump station? Construction drawings for the pump station and pond shall be included in the approved plans for Phase 1. Would the applicant propose to use the existing pond? The new pond will need to be constructed prior to reaching the development of 310 lots.

e) For any connected load, it is recommended this application be conditioned to conform to the Pressure Irrigation Master Plan. The Master Plan designates 12" diameter trunk lines within W. Butterfly Street and S. Durrant Lanes respectively.

f) It is recommended that conformity with approved City PI standards is required, including the providing of adequately sized internal and boundary loop lines.

g) For assistance in locating existing facilities, please contact the GIS Manager at 208-287-1726.

4. Grading and Storm Drainage

The following is required because alteration of surface features is proposed (such as grading or paving) in connection with this application:

a) Runoff from public right-of-way is regulated by ACHD or ITD, depending on the agency responsible for the right-of-way. Plans are required to conform to the appropriate agency standards.

b) Exclusive of public right-of-way, any increase in quantity or rate of runoff or decrease in quality of runoff compared to historical conditions must be detained, treated and released at rates no greater than historical amounts. In the alternative, offsite disposal of storm water in excess of historical rates or conditions or disposal at locations different than provided historically, approval of the operating entity is required. The City of Kuna relies on the ACHD Storm water Policy Manual to establish the requirements for design of any private disposal system.

c) The city is now requiring with every new development, a documentation map that illustrates the surface and sub-surface water irrigation supply as well as drainage ways that exist in the applicant's property and in the right-of-way adjacent to the proposed development to be submitted as part of construction plans. The map must include 2-foot contours, a layout and essential features of existing irrigation ditches, drainage ditches and pipelines within and adjacent to the proposed development. Open and piped facilities should be noted. The map should include any proposed changes to the systems.

d) All upstream drainage rights and downstream water delivery rights are to be preserved as a condition of development. Constructed facilities to preserve these rights must be designed by a licensed professional engineer, plans provided with the project plan set for review by the City Engineer and constructed in a manner and with materials acceptable to the City Engineer. Facilities provided must be accessible (easements or right-of-way) for continued maintenance, repair, and replacement.

5. General

a) With the addition of this property into the corporate limits of Kuna and its potential connection to water and irrigation services, this property will be placing demand not only on constructed facilities but on water rights provided by others. It is the reasonable expectation, in return, that this property transfer to the City, at time of connection, any conveyable water rights via the IDWR deed and "Change of Ownership" form. The domestic water right associated solely with a residence and ½ acre or less is not conveyable. The water right held in trust by an irrigation district is also not conveyable.

b) A plan approval letter will be required if this project affects any local irrigation districts or its facilities.

c) The City reserves the right of prior approval to all agreements involving the applicant (or its successors) and the irrigation or drainage district related to the property of this application and any attempt to abandon surface water rights.

d) Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties.

e) State the vertical datum used for elevations on all drawings.

f) Provide engineering certification on all final engineering drawings.

g) Provide a Master Utility Plan for all phases of the project site. This will allow a comprehensive review of City utilities so that sizes and looping can be reviewed before construction of Phase 1. Depths and inverts are not as high of a concern at this point as the City intends to just review the overall layout and insure adequate sizes are provided to comply with City Standards and the associated Master Plan.

h) The submittals attached to the application include some alignments for City infrastructure. This information is helpful but has not been reviewed in detail and has not received City Engineer approval. The applicant is advised that detailed review and plan approval occurs at the time of approval of the official project construction drawings.

6. **Inspection Fees**

An inspection fee will be required for City inspection of the construction of any public or community water, sewer and irrigation facility associated with this development. The developer will still require a qualified responsible engineer to do sufficient inspection to justly certify to DEQ the project was completed in accordance with approved plans and specifications and to provide accurate as-built drawings to the City. The developer's engineer and the City's inspector are permitted to coordinate inspections as much as possible. The current City inspection fee is $1.00 per lineal foot of sewer, water and irrigation related pipe and payment is due and payable prior to City's scheduling of a pre-construction conference.

7. **Right-of-Way**

The subject property fronts on its north and west side by section line principal arterial street (W Butterfly St and S Durrant Lane - ACHD). The following conditions are related to these classified streets and future quarter line classified streets and apply at the time of development:

a) Sufficient half right-of-way on the quarter line and section line for existing and future classified streets should be provided pursuant to City and ACHD standards.

b) Approaches onto the classified streets shall comply with ACHD approach policies.

c) Sidewalk, curb and gutter, street widening and any related storm drainage facilities, consistent with city code and policies, shall be provided in connection with property development.

d) Residential Easements – City Code (6-3-8) requires a 10-foot front and back lot line easements and side-lot easements, as necessary. The City Engineer recommends the following:

a. 10-foot minimum subdivision boundary easement – typically City of Kuna;

b. 10-foot minimum street frontage easement – Public Utility and City of Kuna;

c. 10-foot back lot line easement as required in code – typically City of Kuna;

d. 10-foot minimum side lot line easement and wider easements in instances where underground pipelines are constructed in them – typically City of Kuna;

a. Additional easements as needed for facilities not in right-of-way - of width and alignment acceptable to the City Engineer.

8. **As-Built Drawings**

As-built/Record drawings are required at the conclusion of any public facility construction project and are the responsibility of the developer's engineer. The city may help track changes but will not be responsible for the finished product. As-built drawings will be required before occupancy or final plat approval is granted.

9. Phasing of Development

a) Any phasing plan, to be acceptable, must extend city services, extend transportation facilities and extend other utilities in a manner to maintain reliable service to the buildable lots in the subdivision and not disrupt service to neighboring properties.

b) A phasing plan, to be acceptable, must not delay expenditures for infrastructure to burden with expenses in a disproportionate manner the later phases of a project.

c) Irrespective of compliance with the above conditions, the City Engineer in general does not approve or reject phasing plans without the advice and consent of the Planning and Zoning Director.

10. Property Description

a) The applicant provided a metes and bounds property description of the subject parcel.

Cc:

- Kuna Planning and Zoning Dept.
- Kuna Fire Department

Development Services Department

Project/File: **Whisper Meadows Subdivision/ KPP1-0002/ 18-01-S**
This is a preliminary plat application to allow for the development of 310 single family building lots and 38 common lots on 73 acres.

Lead Agency: City of Kuna

Site address: West side of Linder Road between Lake Hazel Road and Columbia Road

Commission Hearing: September 26, 2018
Regular Agenda

Commission Approval: September 26, 2018

Applicant: Tim Eck
Vanderkooy Farm, LLC
6152 W. Half Moon Ln.
Eagle, ID 83616

Representative: Katie Miller
Bailey Engineers
4242 N. Brookside Lane
Boise, ID 83713

Staff Contact: Mindy Wallace, AICP
Phone: 387-6178
E-mail: mwallace@achdidaho.org

A. Findings of Fact

1. **Description of Application:** The applicant is requesting approval of a preliminary plat application to allow for the development of 310 single family building lots and 38 common lots on 73 acres. The City of Kuna annexed and rezoned this site from Agriculture to Medium Density Residential in the spring of 2018.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Agricultural/rural residential	A/RR
South	Agricultural/rural residential	A/RR
East	Agricultural	A
West	Agricultural	A

3. **Site History:** ACHD has not previously reviewed this site for a development application.

4. **Transit:** Transit services are not available to serve this site.

5. **New Center Lane Miles:** The proposed development includes 2.41 centerline miles of new public road.

6. **Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time.

7. **Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**

   There are currently no roadways, bridges or intersections in the general vicinity of the project that are currently in the Integrated Five Year Work Plan (IFYWP) or the District's Capital Improvement Plan (CIP).

   - The intersection of Lake Hazel Road and SH-69/Meridian Road is scheduled in the IFYWP to be signalized in 2021.
   - Lake Hazel Road is listed in the CIP to be widened to 3-lanes from Ten Mile Road to Linder Road between 2026 and 2030.
   - Lake Hazel Road is listed in the CIP to be widened to 3-lanes from Linder Road to SH-69/Meridian Road between 2026 and 2030.
   - The intersection of Lake Hazel Road and Linder Road is listed in the CIP to be widened to a single lane roundabout between 2026 and 2030.
   - The intersection of Lake Hazel Road and SH-69/Meridian Road is listed in the CIP to be widened to a 7 X 7 intersection, and signalized between 2026 and 2030.

B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 2,983 vehicle trips per day; 292 vehicle trips per hour in the PM peak hour, based on the traffic impact study.

2. **Traffic Impact Study**

   Kittelson & Associates prepared a traffic impact study for the proposed Whisper Meadows Subdivision. The executive summary of the findings as presented by **Kittelson & Associates** can be found as attachment 3. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices, and may have additional requirements beyond what is noted in the summary. ACHD Staff comments on the submitted traffic impact study can be found below under staff comments.

   Staff Comments/Recommendations: ACHD Traffic Services and Planning Review staff has reviewed and generally agree with the finding and conclusions of the submitted traffic impact study for Whisper Meadows Subdivision.

   - The TIS notes that under current conditions (2017 background) the SH-69/Lake Hazel Road intersection operates at an unacceptable level of service (LOS). This intersection is scheduled in the IFYWP to be signalized in the fall of 2018in cooperation with an Idaho Transportation Department (ITD) maintenance project. Staff does not recommend improvements to the SH-69/Lake Hazel Road intersection as part of this application, as the poor LOS at the SH-69/Lake Hazel Road intersection is an existing condition and ACHD and ITD have plans to signalize the intersection in the fall of 2018.
   - The traffic impact study notes that 262 homes could be built before the Amity Road/Linder Road intersection exceeds acceptable LOS "E". Therefore staff recommends that prior to ACHD's signature on the final plat which contains the 262st lot that the applicant be required to submit an intersection analysis of the Amity Road/Linder Road intersection. If it determined through the analysis that improvements are needed then the applicant should be required to install an interim signal within the existing right-of-way at the Amity

Road/Linder Road intersection, prior to ACHD's signature on the final plat that contains the 262st lot.

As part of ACHD's 2017 actions on Caspian and Gran Prado Subdivision, the installation of an interim signal prior to ACHD's signature on the final plat of Caspian that contains the 280th building lot and the final plat of Gran Prado that contains the 350th lot was required. The interim signal should be installed by the development that necessitates the improvement first.

- The study recommends the construction of a southbound right turn lane on Linder Road at the new mid-mile collector roadway, Butterfly Street.

3. Condition of Area Roadways

Traffic Count is based on Vehicles per hour (VPH)

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
Lake Hazel Road (Linder to SH-69)	N/A	Principal Arterial	67	Better than "E"
Linder Road (Amity to Lake Hazel)	N/A	Minor Arterial	161	Better than "E"
Linder Road (Lake Hazel to Columbia)	1,250-feet	Minor Arterial	159	Better than "E"

* Acceptable level of service for a two-lane principal arterial is "E" (690 VPH).

* Acceptable level of service for a two-lane minor arterial is "E" (575 VPH).

4. Average Daily Traffic Count (VDT)

Average daily traffic counts are based on ACHD's most current traffic counts.

- The average daily traffic count for Lake Hazel Road west of SH-69 was 1,257 on 6/7/17.
- The average daily traffic count for Linder Road south of Amity Road was 2,421 on 11/15/2017.
- The average daily traffic count for Linder Road south of Lake Hazel was 2,620 on 1/27/2016.

C. Findings for Consideration

1. Amity Road/Linder Road Intersection

The traffic impact study notes that 262 homes could be built before the Amity Road/Linder Road intersection exceeds acceptable LOS "E". ACHD does not have improvements programed for this intersection. Therefore staff recommends that prior to ACHD's signature on the final plat which contains the 262st lot that the applicant be required to install an interim signal within the existing right-of-way at the Amity Road/Linder Road intersection. Additionally, the applicant will need to obtain plan approval and enter into a signal agreement with ACHD.

The signal agreement should include requirements that the intersection be designed as a 3 X 3 intersection with three 12-foot wide travel lanes: one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach; that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement by ACHD.

In order to ensure the Amity/Linder intersection will be improved when warranted, the following items must be in place prior to plans acceptance for the final plat which necessitates the improvement based on the findings of the updated traffic impact study:

- Signal Agreement;
- Full design and approved plans for the intersection.

As part of ACHD's 2017 actions on Caspian and Gran Prado Subdivision, the installation of an interim signal prior to ACHD's signature on the final plat of Caspian that contains the 280th building lot and the final plat of Gran Prado that contains the 350th lot was required. The interim signal should be installed by the development that necessitates the improvement first.

2. Linder Road

a. Existing Conditions: Linder Road is improved with 2-travel lanes and no curb, gutter or sidewalk abutting the site. There is 65-feet of right-of-way for Linder Road (40-feet from centerline).

b. Policy:

Arterial Roadway Policy: District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Master Street Map and Typology Policy: District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

Street Section and Right-of-Way Width Policy: District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

Right-of-Way Dedication: District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

Sidewalk Policy: District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-

of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Frontage Improvements Policy: District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Linder Road is designated in the MSM as a Residential Arterial with 5-lanes and on-street bike lanes, a 72-foot street section within 96-feet of right-of-way.

c. **Applicant Proposal:** The applicant has proposed to construct a 5-foot wide detached concrete sidewalk located 28-feet from the center line of Linder Road abutting the site.

d. **Staff Comments/Recommendations:** The applicant should be required to dedicate additional right-of-way to total 48-feet from the centerline of Linder Road abutting the site. The applicant's proposal to construct a 5-foot wide detached concrete sidewalk meets District policy and should be approved, as proposed. The sidewalk should be located a minimum of 41-feet from the centerline of Linder Road abutting the site. If detached sidewalks are constructed outside of the dedicated right-of-way, then the applicant should be required to provide a permanent right-of-way easement.

Consistent with ACHD's Frontage Improvement policy, the applicant should be required to widen the pavement on Linder Road to a minimum width of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site.

Additionally, the applicant should be required to construct a southbound right turn lane on Linder Road at the new mid-mile collector roadway, Butterfly Street.

3. Butterfly Street

a. **Existing Conditions:** There are no collector roadways abutting the site.

b. **Policy:**

Collector Street Policy: District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

Master Street Map and Typologies Policy: District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

Street Section and Right-of-Way Policy: District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Residential Collector Policy: District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking

into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. A new collector roadway was identified on the MSM with the street typology of Residential Collector. The new collector roadway should intersect Linder Road at the half mile and continue west through the property stubbing to the west property line. The Residential Collector typology as depicted in the Livable Street Design Guide recommends a 2-lane roadway with bike lanes, a 36-foot street section within 54-feet of right-of-way.

Stub Street Policy: District policy 7206.2.4 states that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7206.2.5.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."*

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

Temporary Dead End Streets Policy: District policy 7206.2.4 requires that the design and construction for cul-de-sac streets shall apply to temporary dead end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

c. Applicant Proposal: The applicant has proposed to construct Butterfly Street along the north property line from Linder Road through the site stubbing to the west as ½ of a 36-foot resident collector section with 30-feet of pavement, curb, gutter, and a 5-foot wide detached concrete sidewalk abutting the site and a 3-foot gravel shoulder and barrow ditch on the other side of the roadway.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed. If the sidewalks are detached then the right-of-way may

extend from the barrow ditch to 2-feet behind the back of curb on the south side of the roadway. Provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.

Staff recommends that the right-of-way for Butterfly Street extend to the site's west property line, but that the improvements terminate at the Chisum Avenue intersection and that the applicant provide a road trust deposit in the amount of $65,200.00 (400-feet X $163.00) for the remainder of the roadway.

The applicant should be required to install a sign on the west side of Butterfly Street at Chisum Avenue which states that, *"THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."*

A temporary turnaround isn't required as Butterfly Street terminates at an intersection.

4. North/South Collector (Durant Lane)

a. Existing Conditions: There are no collector roadways abutting the site.

b. Policy:

Collector Street Policy: District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

Master Street Map and Typologies Policy: District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

Street Section and Right-of-Way Policy: District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Residential Collector Policy: District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

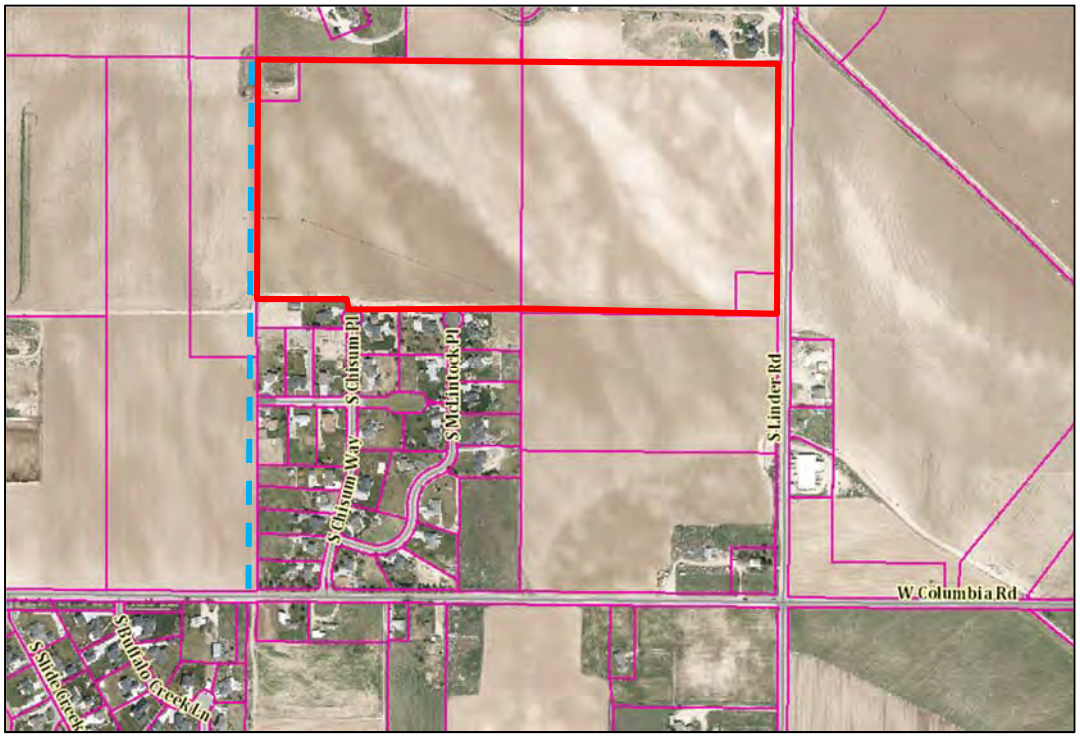
Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. A new collector roadway was identified on the MSM with the street typology of Residential Collector. The new collector roadway should intersect Columbia Road at the half mile and continue north intersecting Lake Hazel Road. The Residential Collector typology as depicted in the Livable Street Design Guide recommends a 2-lane roadway with bike lanes, a 36-foot street section within 54-feet of right-of-way.

c. **Applicant Proposal:** The applicant hasn't proposed any improvements to Durant Lane abutting the site.

d. **Staff Comments/Recommendations:** Chisum Valley Subdivision, platted in 1999 is located south of the site and has lots that abut the half mile because the site was platted before the adoption of the MSM. Because of this, the north/south collector roadway is anticipated to be shifted to the west to reduce the impacts to the adjacent parcels.



Based on the location of Chisum Valley Subdivision a majority of the roadway will be constructed on the adjacent parcel, and as such the adjoining property owner (Durrant Home Place, LLC) will be responsible for construction of all of the collector roadway, but are only financially obligated for half of the street with vertical curb, gutter, and sidewalk, plus 12-additonal feet of pavement to total 30-feet adjacent to the site.

To complete the east side of the street when the adjacent parcel develops, staff recommends that the applicant dedicate additional right-of-way from their west property line to a minimum 2-feet behind future curb abutting the site and provide the District with a permanent right-of-way easement for any portion of the future sidewalk located outside of right-of-way. Additionally, the applicant should be required to provide the District with a road trust deposit in the amount of $106,800.00 for the construction of 4-feet of pavement, curb, gutter and sidewalk abutting the site for the future North/South Collector.

5. Butterfly Street/Durant Lane Intersection

a. Policy:

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, roundabout requirements, and specific roadway features required through development. A new roundabout was identified on the MSM. The new single lane roundabout is planned at the mid-mile at the Butterfly Street and Durant Lane intersection.

b. Staff Comments/Recommendations: As noted above, the intersection of Butterfly Street and Durant Lane is shown as a single lane roundabout on the MSM. The applicant should be required to dedicate right-of-way at the Butterfly Street/North/South Collector Road intersection consistent with the template shown on attachment 4 to accommodate the future construction of the single lane roundabout at the intersection.

6. Internal Local Streets

a. Existing Conditions: There are no internal local streets within the site.

b. Policy:

Local Roadway Policy: District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

Standard Urban Local Street—33-foot Street Section and Right-of-way Policy: District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.
For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

Continuation of Streets Policy: District Policy 7207.2.4 states that an existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities. Benefits of connectivity include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases pedestrian and bicycle connectivity.
- Increases access for emergency services.
- Reduces need for additional access points to the arterial street system
- Promotes the efficient delivery of services including trash, mail and deliveries.
- Promotes appropriate intra-neighborhood traffic circulation to schools, parks, neighborhood commercial centers, transit stops, etc.
- Promotes orderly development.

Sidewalk Policy: District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities

of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Cul-de-sac Streets Policy: District policy 7207.5.8 requires cul-de-sacs to be constructed to provide a minimum turning radius of 45-feet; in rural areas or for temporary cul-de-sacs the emergency service providers may require a greater radius. Landscape and parking islands may be constructed in turnarounds if a minimum 29-foot street section is constructed around the island. The pavement width shall be sufficient to allow the turning around of a standard AASHTO SU design vehicle without backing. The developer shall provide written approval from the appropriate fire department for this design element.

The District will consider alternatives to the standard cul-de-sac turnaround on a case-by-case basis. This will be based on turning area, drainage, maintenance considerations and the written approval of the agency providing emergency fire service for the area where the development is located.

Landscape Medians Policy: District policy 7207.5.16 states that landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12-feet maximum for a minimum distance of 150-feet. Beyond the 150-feet, the island may increase to a maximum width of 30-feet.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.

c. Applicant's Proposal: The applicant has proposed to construct 2 entry roadways, Indra Street and Cardinal Avenue, with two 21-foot wide travel lanes, an 8-foot wide center landscape island, rolled curb, gutter, and 5-foot wide attached concrete sidewalk within 70-feet of right-of-way.

The applicant has proposed to construct all of the internal local streets as 36-foot street sections with rolled curb, gutter, and 5-foot attached concrete sidewalks within 50-feet of right-of-way.

The applicant has proposed to construct 1 cul-de-sac turnaround at the terminus of Cardinal Place and 10 knuckles throughout the site.

d. Staff Comments/Recommendations: The applicant's proposal for the entry roadways, Indra Street and Cardinal Avenue, meets District policy and should be approved, as proposed. The applicant should be required to plat the islands as right-of-way owned by ACHD. The applicant or the homeowners association may enter into a license agreement for any landscaping proposed within the islands. The right-of-way may be reduced to 2-feet behind the back of the sidewalk.

The applicant's proposal to construct the internal local streets as 36-foot sections meets District policy and should be approved, as proposed.

The applicant's proposal to construct 1 cul-de-sac turnaround at the terminus of Cardinal Place meets District policy and should be approved, as proposed. The cul-de-sac should be constructed to provide a minimum radius of 45-feet.

The 10 knuckles should be constructed, as proposed.

7. Roadway Offsets

a. Existing Conditions: There are no roadway offsets within the site.

b. Policy:

Local Street Intersection Spacing on Minor Arterials: District policy 7205.4.3 states that new local streets should not typically intersect arterials. Local streets should typically intersect collectors. If it is necessary, as determined by ACHD, for a local street to intersect an arterial, the minimum allowable offset shall be 660-feet as measured from all other existing roadways as identified in Table 1a (7205.4.6).

Collector Offset Policy: District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting minor arterials is one half-mile.

District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting principal arterials is one half-mile.

Local Offset Policy: District policy 7206.4.5, requires local roadways to align or offset a minimum of 330-feet from a collector roadway (measured centerline to centerline).

District policy 7207.4.2, requires local roadways to align or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

c. Applicant's Proposal: The applicant has proposed to construct one collector roadway, Butterfly Street, to intersect Linder Road at the half mile between Lake Hazel and Columbia Roads.

The applicant has proposed to construct one local street, Indrea Street to intersect Linder Road, located approximately 810-feet south of the proposed mid-mile collector, Butterfly Street.

The applicant has proposed to construct one local street, Thunder Street to intersect the future North/South Collector Roadway, located approximately 610-feet south of Butterfly Street.

d. Staff Comments/Recommendations: The applicant's proposal is consistent with the MSM and meets District policy and should be approved, as proposed.

8. Stub Streets

a. Existing Conditions: There are two stub streets that were platted and constructed in 1999 to the site's south property line with Chisum Valley Subdivision, Chisum Place and McLintock Place.

b. Policy:

Stub Street Policy: District policy 7207.2.4 states that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7207.2.5.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

Temporary Dead End Streets Policy: District policy 7207.2.4 requires that the design and construction for cul-de-sac streets shall apply to temporary dead end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

c. Applicant Proposal: The applicant has proposed to construct 1 stub street to the south, Bungalow Avenue, located approximately 510-feet west of Linder Road.

The applicant has proposed to extend Chisum Place into the site, and is requesting a Waiver of Policy to not extend McLintock Place into the site. In lieu of a vehicular connection the applicant has proposed to construct a pedestrian pathway between the site and McLintock Place.

The applicant notes that McLintock terminates in a cul-de-sac turnaround, that the roadway isn't needed to serve the site, and that residents of Chisum Valley Subdivision are opposed to the extension of the stub streets as reasons why it should not be extended.



d. Staff Comments/Recommendations: The applicant's proposal to construct 1 stub street to the south, Bungalow Avenue, meets District policy and should be approved, as proposed. The applicant should be required to install a sign at the terminus of the stub street stating that, ""THIS ROAD WILL BE EXTENDED IN THE FUTURE.". A temporary turnaround is not required at the terminus of the stub street, as it is not 150-feet in length.

The applicant's proposal to not extend McLintock Place into the site does not meet ACHD's Continuation of Streets policy, which requires stub streets to be extended. The City of Kuna is supportive of the applicant's proposal noting that the City does not require the extension of stub streets.

Staff recommends approval of the applicant's proposal to not extend McLintock Place into the site, as it is not desired by the City of Kuna and a pedestrian connection will be provided to provide connectivity between the two developments. The street is not necessary to serve the site, and the turnaround is fully improved.

Commission Action: During the Commission hearing, the Commission heard testimony from staff and the applicant's representative regarding the requested waiver of policy. After hearing the testimony and a brief discussion the Commission voted to deny the applicant's request for a waiver of the Continuation of Streets policy and required the extension of McLintock Place into the site.

9. Tree Planters

Tree Planter Policy: Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

10. Landscaping

Landscaping Policy: A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

11. Other Access

Linder Road classified as a minor arterial roadway. Butterfly Street and the North/South Collector roadway, are classified as collector roadways. Other than the access specifically approved with this application, direct lot access is prohibited to these roadways and should be noted on the final plat.

D. Site Specific Conditions of Approval

1. Prior to ACHD's signature on the final plat which contains the 262nd lot the applicant should be required to submit an intersection analysis for the Amity Road/ Linder Road intersection. If it is determined through the intersection analysis that improvements are needed at the Amity Road/Linder Road intersection, then install an interim signal within the existing right-of-way at the Amity Road/Linder Road intersection.

2. Enter into a signal agreement with ACHD for the installation of the interim signal at the Amity Road/Linder Road intersection. The signal agreement shall include that the intersection be designed to provide a 3 X 3 intersection with three 12-foot wide travel lanes: one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach; that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement by ACHD.

In order to ensure the Amity Road/Linder Road intersection will be improved when warranted, the following items must be in place prior plans acceptance for the final plat which contains the 262nd building lot:

- Signal Agreement
- Full design and approved plans for the intersection

3. Dedicate additional right-of-way to total 48-feet from the centerline of Linder Road abutting the site. Construct a 5-foot wide detached concrete sidewalk located a minimum of 41-feet from the centerline of Linder Road abutting the site. Provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.

4. Widen the pavement on Linder Road to a minimum width of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site.

5. Construct a southbound right turn lane on Linder Road at the Butterfly Street intersection.

6. Construct Butterfly Street from Linder Road west to Chisum Avenue as ½ of a 36-foot collector section with 30-feet of pavement, curb, gutter, and a 5-foot wide detached concrete sidewalk abutting the site and a 3-foot gravel shoulder and barrow ditch on the other side of the north side

of the roadway. The right-of-way should encompass the barrow ditch and extend south a minimum of 2-feet behind the curb for detached sidewalks. Extend the right-of-way dedication to the west property line.

7. Provide a road trust deposit in the amount of $65,200.00 (400-feet X $163.00) to allow for the future construction of Butterfly Street between Chisum Avenue and the west property line, if the north-south collector has not been constructed.

8. Provide a road trust deposit in the amount of $106,800.00 for the construction of 4-feet of pavement, curb, gutter and sidewalk abutting the site for the future North/South Collector.

9. Dedicate right-of-way at the Butterfly Street/North/South Collector Road intersection consistent with the template shown on attachment 4 to accommodate the future construction of the single lane roundabout at the intersection.

10. Construct Indrea Street to intersect Linder Road, located 810-feet south of Butterfly Street, as proposed.

11. Construct Cardinal Avenue to intersect Butterfly Street, located 790-feet west of Linder Road, as proposed.

12. Construct Chisum Avenue to intersect Butterfly Street, located 2,210-feet west of Linder Road, as proposed.

13. Construct Thunder Street to intersect the North/South Collector, located, 610-feet south of Butterfly Street.

14. Construct the entry portion of Indra Street and Cardinal Avenue, with two 21-foot wide travel lanes, an 8-foot wide center landscape island, rolled curb, gutter, and 5-foot wide attached concrete sidewalk within 70-feet of right-of-way, as proposed.

15. Extend 2 stub streets into the site, Chisum Place and McLintock Place.

16. Construct all of the internal local streets as 36-foot wide local street sections with rolled curb, gutter, and 5-foot attached concrete sidewalks within 50-feet of right-of-way, as proposed.

17. Construct 1 stub street to the south, Bungalow Avenue, located 510-feet west of Linder Road. Install a sign at the terminus of the stub street stating that, ""THIS ROAD WILL BE EXTENDED IN THE FUTURE."

18. Other than access specifically approved as part of this development application direct lot access Linder Road, Butterfly Street, and the North/South Collector is prohibited and shall be noted on the final plat.

19. Payment of impact see is due prior to issuance of a building permit.

20. Comply with all Standard Conditions of Approval.

E. Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).

2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.

3. In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act

(ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.

4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.

5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.

6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.

7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.

8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.

9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.

10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.

11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.

12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

F. Conclusions of Law

1. The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.

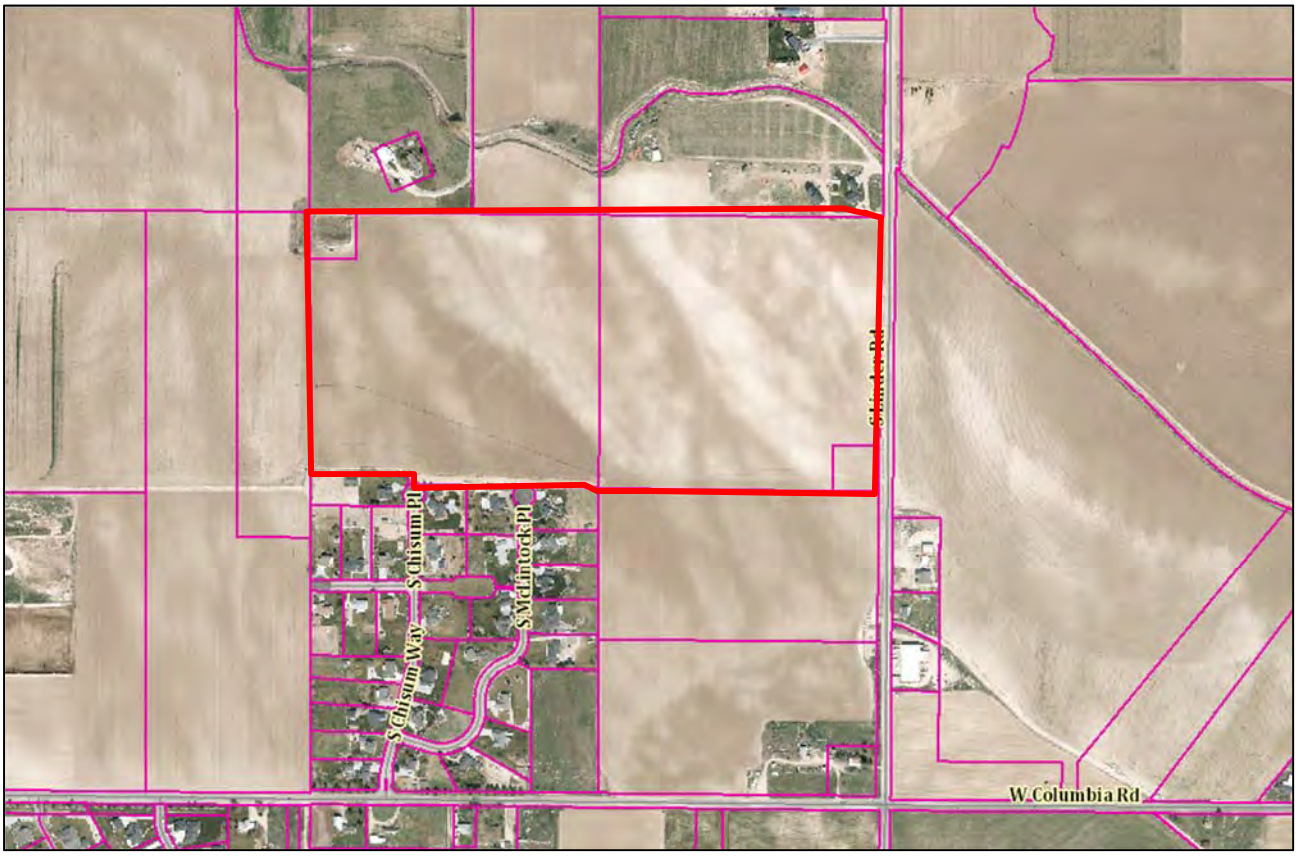
2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

Exhibit B-2

G. Attachments

1. Vicinity Map
2. Site Plan
3. Traffic Impact Study Summary
4. Single Lane Roundabout Template
5. Utility Coordinating Council
6. Development Process Checklist
7. Request for Reconsideration Guidelines

VICINITY MAP



SITE PLAN



EXECUTIVE SUMMARY

Vanderkooy Farms, LLC is proposing to develop Whisper Meadows Subdivision, a 311 single-family unit housing development situated on approximately 73 acres of land in Kuna, Idaho. The development is located on the west side of Linder Road approximately midway between Lake Hazel Road and Columbia Road.

The parcels of land proposed for the new subdivision are identified as Agriculture by the City of Kuna's *City Zoning Map*. These parcels will have to be rezoned for the development of single-family residential units. The parcels in the immediate vicinity of the site are also zoned as Agriculture, as well as Rural Residential and Low Density Residential (R4) by the City of Kuna.

Access to the Whisper Meadows Subdivision is proposed via one new mid-mile collector on the west side of Linder Road between Lake Hazel Road and Columbia Road, as well as a new local street connection to Linder Road, approximately 1,830 feet north of Columbia Road and approximately 810 feet south of the proposed collector. The new collector is identified on the ACHD Master Street Map. The preliminary site plan also provides four stub street connections, two to the west for connection to a future development, which is not anticipated to occur until after full build-out of the site, as well as two stub street connections to the south. One of the southern stub streets is proposed to connect to Chisum Way and the other is to connect to a future development, not expected to be built-out until after completion of the Whisper Meadows Subdivision.

Currently, the site is undeveloped. The development is planned to be completed in five phases, with a projected full build-out in year 2026. The TIS addresses the existing (2017), background (2026), and the development's impacts in the build-out year 2026 and provides the approximate number of homes that can be built before the proposed mitigations are necessary.

FINDINGS

Existing Conditions

- The study evaluated four off-site intersections during the a.m. and p.m. peak period of a typical weekday (Tuesday – Thursday).
- All study intersections were found to operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours with the exceptions of:
    - **Lake Hazel Road & Meridian Road (SH 69) (AM & PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards.
        - A planning level signal warrant analysis concludes that a traffic signal is warranted under existing traffic volumes.

- This intersection is identified as a future traffic signal in ACHD's *2018-2022 Five Year Work Plan (FYWP)* with a scheduled construction in year 2018. A traffic signal at the intersection as described in the *FYWP* is expected to operate at LOS B with a v/c ratio of 0.65 or better and LOS B with a v/c ratio of 0.66 or better during the existing a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments operate at acceptable levels of service.
- Crash data at the study intersections for the most recent five years (2011-2015) was analyzed for any existing crash trends, below are the findings:
  - The unsignalized intersection of Lake Hazel Road & Meridian Road (SH 69) averaged more than four reported crashes per year, with angle crashes accounting for approximately 57% of all crashes at the intersection. All angle crashes occurred between eastbound or westbound vehicles on Lake Hazel Road crossing or turning onto Meridian Road. The angle crashes should be reduced with the construction of the signal planned for later this year.
  - There was one fatality crash reported at the Lake Hazel Road & Meridian Road (SH 69) intersection. The fatality involved a bicyclist crossing Meridian Road, where there are currently no crosswalks on any approach at the intersection.
  - There were no reported roadway segment crashes along Linder Road between Lake Hazel Road and Columbia Road (location of proposed Site Access A & B).

Year 2026 Background Traffic Conditions

- Year 2026 background traffic volumes were forecasted using a 3% annual growth rate and included the addition of in-process traffic from Caspian Subdivision and Phases 1 and 2 of the proposed Springhill Subdivision.
- Year 2026 background traffic analysis (without inclusion of site-generated traffic) found that all study intersections are expected to operate at acceptable operating standards during the weekday a.m. and p.m. peak hours with the exceptions of:
  - **Linder Rd & Amity Road (PM Peak Hour)** – During the weekday p.m. peak hour, the westbound approach exceeds capacity and the intersection experiences an LOS E, falling below ACHD standards. ACHD's *2016 Capital Improvement Plan (2016 CIP)* has a roundabout planned as part of *2016 CIP* #IN2016-5, during the year 2031-2035 timeframe.

- A traffic signal warrant analysis was conducted and the intersection meets the four-hour warrant (Warrant #2) and the peak-hour warrant (Warrant #3) based on 2026 background vehicular volumes (without any traffic from Whisper Meadows). The Caspian Development (on NW corner of Lake Hazel Road/Linder Road) is conditioned to study the intersection at their 280th lot and install and interim signal.
    - By signalizing the intersection with a temporary signal, with left-turn lanes on each approach, operations are expected to be LOS B with a v/c ratio of 0.67 and 0.60 during the a.m. and p.m. peak hour, respectively.

- **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – With the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:
    - A sensitivity analysis found that the ACHD's *2016 CIP*, or other interim improvements, will be needed in approximately year 2025, without traffic from Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 conditions if constructed in that timeframe.
    - If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):
        - An additional eastbound left-turn lane (dual left-turns),
        - A westbound right-turn lane, and
        - A southbound right-turn lane.
    - By signalizing the intersection with the additional turn lanes listed above, the intersection is expected to operate at LOS D with a v/c

ratio of 0.88 and at LOS C with a v/c ratio of 0.82 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Trip Generation and Distribution

- The *ITE Trip Generation Manual, 9th Edition* was used to estimate the trip generation for the proposed Whisper Meadows Subdivision.
- The proposed Whisper Meadows Subdivision development, with 311 single-family homes in the buildout year of 2026, is estimated to generate a total of 2,938 daily net new trips, 227 weekday a.m. peak hour net new trips (57 inbound / 170 outbound) and 292 weekday p.m. peak hour net new trips (184 inbound / 108 outbound).
- The distribution pattern for site-generated trips was developed by evaluating existing traffic patterns and major trip origins and destinations within the study area, as well as a select zone analysis from COMPASS' regional travel demand model.

Year 2026 Total Traffic Conditions

- Year 2026 total traffic conditions found that the site-generated trips do not impact any additional intersection not previously identified in the background traffic conditions. All study intersections will continue to operate at acceptable levels of service during the weekday a.m. and p.m. peak hours with the exception of:
    - **Amity Road & Linder Road (PM Peak Hour)** – Per the 2026 background conditions, during the weekday p.m. peak hour the westbound approach is projected to reach capacity. Additionally, a traffic signal was found to be warranted under 2026 background conditions and will continue to be warranted. While ACHD's *2016 CIP* (IN2016-5) has a roundabout planned as for the year 2031-2035 timeframe, installation of an interim signal has already been included in the conditions of the Caspian Subdivision Development.
        - By signalizing the intersection with left-turn lanes on each approach, operations are expected to be LOS C and LOS B with a v/c ratio of 0.70 and 0.60 during the a.m. and p.m. peak hour, respectively.
    - **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – Similar to 2026 background conditions, the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound

approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:

- A sensitivity analysis found that ACHD's *2016 CIP* (IN2016-60), or other interim improvements, will be needed in approximately year 2025, with or without Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 total traffic conditions if constructed in that timeframe. At that time Whisper Meadows is anticipated to have 286 units occupied at the time mitigation is needed.
- If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):
  - An additional eastbound left-turn lane (dual left-turns),
  - A westbound right-turn lane, and
  - A southbound right-turn lane.
- With the recommended lane configuration as identified above and in year 2026 background mitigations, the intersection is expected to operate at LOS D with a v/c ratio of 0.89 and at LOS C with a v/c ratio of 0.83 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Site Access Evaluation

- The turn lane analysis using ACHD procedures resulted in turn lane warrants at the following site access streets:
  - New Collector Road & Linder Road (Site Access A) :
    - Southbound right-turn lane.
      - A sensitivity analysis found that a southbound right-turn lane is warranted at in approximately year 2021 with the build-out of 144 Whisper Meadows housing units.

- The results from the queuing analysis found that the 95th percentile queue lengths can be accommodated.
    - Each site accesses provides at least 100 feet of roadway length without driveway and/or internal street interference.
- The intersection sight distance evaluation identified that intersection sight distance can be achieved at all the site intersections with the following actions:
    - Remove miscellaneous vegetation and shrubbery, and potential obstructions along Linder Road as necessary to obtain and maintain adequate intersection sight distance.
    - Site accesses along Linder Road should match the existing grade of Linder Road at least for one car length to intersection sight distance.
    - Shrubbery and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.
- There are three proposed local street access points to the Whisper Meadows Subdivision, as well as a new collector road at the mid-mile along Linder Road between Lake Hazel Road and Columbia Road. Additionally, there is one stub street connection to an existing subdivision to the south and three proposed stub streets for connections to future developments. Following is a summary of each access with respect to ACHD Policy:
    - **Linder Road & New Collector Road (Site Access A):** This access, a proposed collector, is located on Linder Road approximately 2,640 feet, or approximately one-half mile, south of Lake Hazel Road and north of Columbia Road. This collector forms the east side of the future mid-mile collector which is identified on the *Ada County Master Street Map*. The access should be considered by ACHD for the following reasons:
        - The proposed collector is on the ACHD Master Street Map.
        - The proposed collector meets ACHD spacing requirements for a collector, with the exception of two existing driveways to an existing home at the Linder Farms site. Given that the proposed collector road is planned and being required by ACHD to allow the adjacent properties to utilize the collector for access instead of direct access to Linder Road, the following should be considered with regard to the Linder Farms access driveways:
            - Move the south driveway to access the collector since it is directly adjacent to the collector.

- Review options to close the north driveway, located approximately 200 feet north of the collector road and connect through the site via the south driveway to the collector.

  - Without the collector street access, site-generated trips would increase the ADT at the southeast access on Linder Road to over the ACHD 2,000 ADT threshold for a local street.

  - The collector street would provide access to adjacent parcels which will minimize future development directly accessing the minor arterial (Linder Road).

  - This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Linder Road & Southeast Access (Site Access B):** This access, a proposed local street, accesses Linder Road approximately 810 feet south of the proposed mid-mile collector and approximately 1,830 feet north of Columbia Road. The access should be considered by ACHD for the following reasons:

  - The proposed access meets ACHD spacing requirements for a local street (660 feet) on a minor arterial and will function acceptably as an unsignalized full access (without turn lanes).

  - Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, forcing approximately 90% of the site's trips to enter and exit the subdivision via the proposed collector road and potentially causing some streets to exceed the ACHD 2,000 ADT threshold for a local street and the 1,000 ADT threshold for local stub street.

    - Additionally, not allowing this access could promote a higher percentage of vehicles using Chisum Way (Site Access E) and cutting-through the residential subdivision to the south.

  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Northeast Access & New Collector Road (Site Access C):** This access, a proposed local street, accesses the new collector street approximately 600 feet west of Linder Road and 1,150 feet east of the proposed Northwest Access (Site Access D). This access is proposed to be full access; however, the

majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:

- The access meets ACHD local street spacing requirements for collector streets.
- Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northwest Access.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Northeast Access & New Collector Road (Site Access D):** This access, a proposed local street, accesses the new collector street approximately 1,150 feet west of the proposed Northeast Access (Site Access C). The proposed collector street will stub approximately 340 feet to the west of the Northwest Access. This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:
  - The access meets ACHD local street spacing requirements for collector streets.
  - Without this access, approximately 1,020 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northeast Access.
  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Southwest Access & Chisum Way (Site Access E):** This access ties into an existing cul-de-saq and provides a connection to the Chisum Valley Subdivsion to the south. Chisum Way would extend past the current cul-de-sac to tie in with Whisper Meadows Subdivision, approximately 500 feet north of Cogburn Street. Chisum Way would continue as a single lane local street in both directions. Based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to

provide access to adjoining properties." The access should be considered by ACHD for the following reasons:

- The access adheres to ACHD local street and stub street requirements.
- The access is not the primary access to the site, with an estimated 140 daily vehicles on Chisum Way.
- The with the additional traffic from the development, the ADT on Chisum Way at the highest volume segment north of Columbia Road is projected to be well under the ACHD volume thresholds for a local street.
- Chisum Way provides an alternative connection for southbound vehicles accessing Columbia Road.
- This access is an extension of an existing local street and will only serve residential trips as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Stub Streets:** The proposed three stub streets access would connect to a future development west and south of the site. These proposed stub streets are based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Whisper Meadows Subdivision site. The stub streets have the following benefits:
  - The stub street would provide future access to an adjoining property west of the site and therefore reduce the need for additional access routes to Linder Road or Columbia Road.
  - The streets adhere to ACHD stub street requirements.
  - The stub streets are not the primary access to the site, with limited trips into and out of the site.
  - The stub streets would only serve residential trips, reducing vehicle miles traveled and increasing access for emergency response and city services.

RECOMMENDATIONS

Based on the report's analyses and evaluation findings, recommendations were developed accordingly for time scenario's conditions.

Existing Traffic Condition Mitigations

The following mitigation is recommended based on existing traffic volumes. Traffic volumes do not include background growth or site-generated trips from the proposed Whisper Meadows Subdivision.

Lake Hazel Road & Meridian Road (SH 69)

- ITD construct the traffic signal per IN205-70 of ACHD's *2018 – 2022 Five Year Fiscal Work Plan,* programmed for construction in year 2018.

Year 2026 Background Traffic Condition Mitigation

The following mitigations are recommended for year 2026 background traffic volumes. Traffic volumes include nine years of background growth and do not include site-generated trips from the proposed Whisper Meadows Subdivision.

Amity Road & Linder Road

- Conduct a traffic study in approximately 2023 to determine if an interim signal is needed. If a signal is needed, construct and interim traffic signal with left-turn lanes. This assumes that right-of-way and funding would not be available for the single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) planned for year 2031-2035.

Lake Hazel Road & Meridian Road (SH 69)

- Widen and reconstruct the signalized intersection per ACHD *2016 CIP* (IN2016-60), which includes dual left-turn lanes and a dedicated right-turn lane on each approach, with two through lanes in the eastbound and westbound directions on Lake Hazel Road. This is estimated to be needed in 2025, which is slightly before the 2026 to 2030 timeframe outlined in the *2016 CIP*. If ACHD and ITD determine that interim improvements should be considered due to the time horizon for funding moving out beyond the 2026-2030 timeframe and interim improvements are considered, the following improvements would mitigate the 2026 time horizon:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.

Mitigations Needed for Whisper Meadows Subdivision

The following mitigations are recommended due to the inclusion of Whisper Meadows Subdivision's site generated trips.

Linder Road & New Collector Road

- Construct a southbound right-turn lane with approximately 100 feet of vehicle storage.
    - A sensitivity analysis found that a southbound right-turn lane would be warranted in approximately year 2021 with the build-out of 144 Whisper Meadows units.
- If possible, relocate the existing residential access driveway to Linder Farms, located adjacent to the proposed collector street, such that it accesses the proposed collector street.

Linder Road & Amity Road

- Per background conditions prepare an updated traffic study in approximately 2023 to determine if an interim traffic signal is needed. At that time Whisper Meadows is anticipated to have approximately 262 occupied single family housing units.
    - If an interim traffic signal is found to be needed, construct an interim traffic signal with left-turn lanes. Optionally, construction of the ultimate single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) and planned for year 2031-2035 could be considered.

Lake Hazel Road & Meridian Road (SH 69)

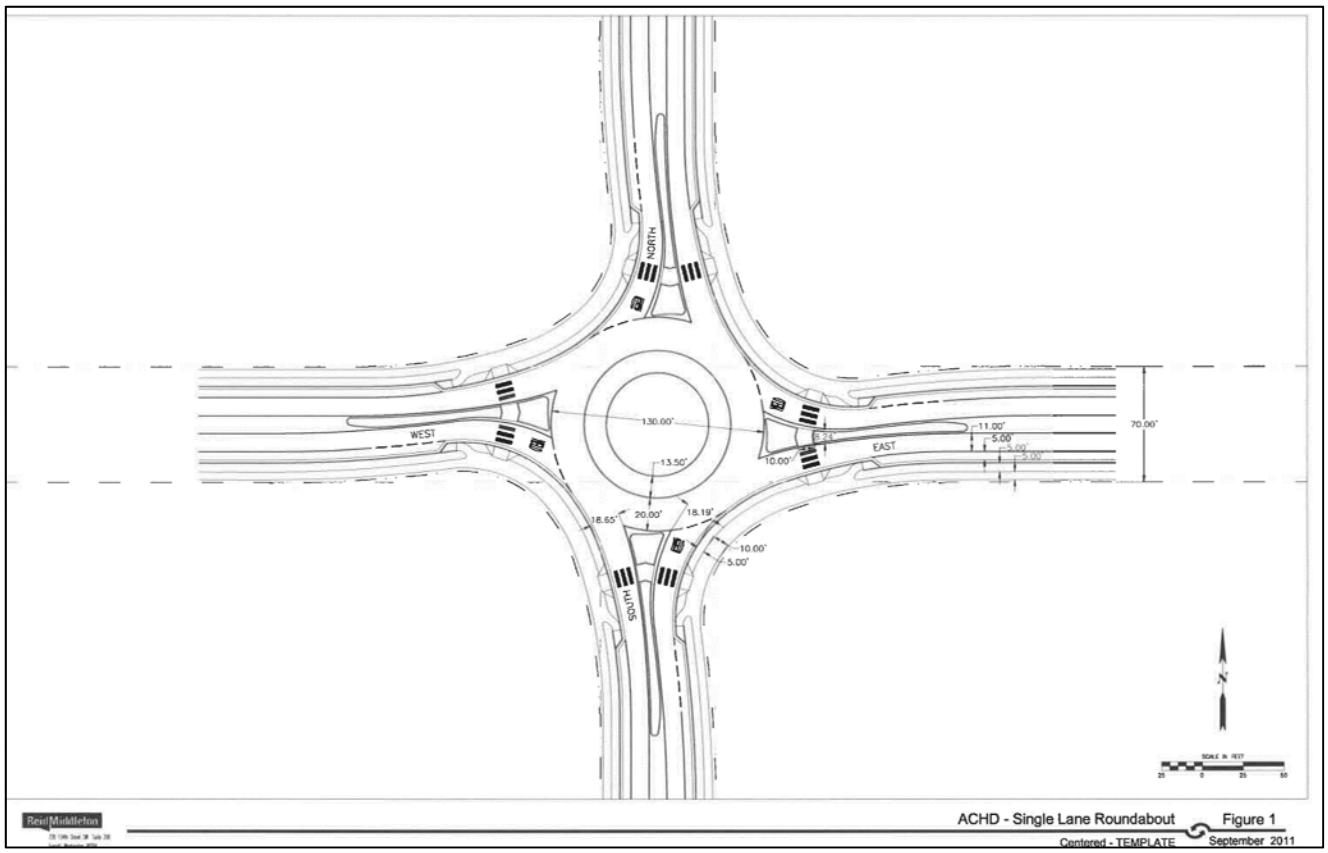
- Widen and reconstruct the signalized intersection per ACHD's *2016 CIP* (IN2016-60). If ACHD and ITD determine that interim improvements should be considered due to the time horizon for the *2016 CIP* funding is moved out beyond the 2026-2030 timeframe, the following interim improvements could be considered to mitigate the 2026 background and total traffic condition:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.
- The above improvements are expected to be needed in approximately 2025 with, or without, the Whisper Meadows development. At that time, Whisper Meadows is anticipated to have approximately 286 units occupied at the time mitigation is needed.

Site Accesses

- With approval from ACHD, construct all accesses to the development to allow full access on the public street approaches with the following designations:
    - All local streets within the development should be constructed with one travel lane in each direction.
    - Site driveways with access to public streets should provide sufficient stacking distance for four vehicles (100 feet) to ensure acceptable operation and accommodate larger vehicles, including utility service and delivery vehicles.
    - Site accesses along Linder Road should match the existing grade of Linder Road at the intersection to ensure the best possible sight distance.
    - All accesses and internal streets should be designed to provide adequate intersection site distance. Shrubbery and landscaping near the intersection and site access point should be maintained to ensure adequate sight distance is maintained.

Exhibit B-2

Single Lane Roundabout



Development Process Checklist

Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☐Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

DID YOU REMEMBER:
Construction (Non-Subdivisions)
☐ **Driveway or Property Approach(s)**

- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**

- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

Construction (Subdivisions)
☐ **Sediment & Erosion Submittal**

- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**

- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

Request for Reconsideration of Commission Action

1. **Request for Reconsideration of Commission Action:** A Commissioner, a member of ACHD staff or any other person objecting to any final action taken by the Commission may request reconsideration of that action, provided the request is not for a reconsideration of an action previously requested to be reconsidered, an action whose provisions have been partly and materially carried out, or an action that has created a contractual relationship with third parties.

    a. Only a Commission member who voted with the prevailing side can move for reconsideration, but the motion may be seconded by any Commissioner and is voted on by all Commissioners present.

    If a motion to reconsider is made and seconded it is subject to a motion to postpone to a certain time.

    b. The request must be in writing and delivered to the Secretary of the Highway District no later than 11:00 a.m. 2 days prior to the Commission's next scheduled regular meeting following the meeting at which the action to be reconsidered was taken. Upon receipt of the request, the Secretary shall cause the same to be placed on the agenda for that next scheduled regular Commission meeting.

    c. The request for reconsideration must be supported by written documentation setting forth new facts and information not presented at the earlier meeting, or a changed situation that has developed since the taking of the earlier vote, or information establishing an error of fact or law in the earlier action. The request may also be supported by oral testimony at the meeting.

    d. If a motion to reconsider passes, the effect is the original matter is in the exact position it occupied the moment before it was voted on originally. It will normally be returned to ACHD staff for further review. The Commission may set the date of the meeting at which the matter is to be returned. The Commission shall only take action on the original matter at a meeting where the agenda notice so provides.

    e. At the meeting where the original matter is again on the agenda for Commission action, interested persons and ACHD staff may present such written and oral testimony as the President of the Commission determines to be appropriate, and the Commission may take any action the majority of the Commission deems advisable.

    f. If a motion to reconsider passes, the applicant may be charged a reasonable fee, to cover administrative costs, as established by the Commission.

RICHARD DURRANT
CHAIRMAN OF THE BOARD

CLINTON PLINE
VICE CHAIRMAN OF THE BOARD

TIMOTHY M. PAGE
PROJECT MANAGER

ROBERT D. CARTER
ASSISTANT PROJECT MANAGER

APRYL GARDNER
SECRETARY-TREASURER

JERRI FLOYD
ASSISTANT SECRETARY-TREASURER

BOISE PROJECT BOARD OF CONTROL

(FORMERLY BOISE U.S. RECLAMATION PROJECT)

2465 OVERLAND ROAD
BOISE, IDAHO 83705-3155

OPERATING AGENCY FOR 167,000 ACRES FOR THE FOLLOWING IRRIGATION DISTRICTS

NAMPA-MERIDIAN DISTRICT
BOISE-KUNA DISTRICT
WILDER DISTRICT
NEW YORK DISTRICT
BIG BEND DISTRICT

TEL: (208) 344-1141
FAX: (208) 344-1437

16 February 2018

RECEIVED
MAR 05 2018
CITY OF KUNA

City of Kuna
751 W. 4th Street
Kuna, Idaho 83634

RE: Bailey Engineers- Whisper Meadows **18-01-ZC/S**
W. of Linder & N. of Columbia Rd.
Boise-Kuna Irrigation District BK-1229, BK- 247 A1
Painter Lateral 71+10
Sec. 02, T2N, R1W, BM.

Troy Behunin,Planner III:

There are no Project facilities located on the above-mentioned property; however, it does in fact possess a valid water right.

Storm Drainage and/or Street Runoff must be retained on site.

Local irrigation/drainage ditches that cross this property, in order to serve neighboring properties, must remain unobstructed and protected by appropriate easements.

This property is serviced by the Painter Lateral and you are proposing to tie into the Springhill Subdivision, which is serviced by the Mason Creek Feeder. Representatives of this development must set up a meeting with our office to discuss the possible changing of delivery points and capacity capabilities in our system.

If you have any further questions or comments regarding this matter, please do not hesitate to contact me at (208) 344-1141.

Sincerely,

Bob Carter
Assistant Project Manager, BPBC

bdc/bc
cc: Clint McCormick Watermaster, Div; 2 BPBC
Lauren Boehlke Secretary-Treasurer, BKID
File

CENTRAL DISTRICT HEALTH DEPARTMENT

Environmental Health Division

RECEIVED
FEB 27 2018
CITY OF KUNA

Return to:
- ☐ ACZ
- ☐ Boise
- ☐ Eagle
- ☐ Garden City
- ☒ Kuna
- ☐ Meridian
- ☐ Star

Rezone # 18-01-ZC
Conditional Use # _____
Preliminary / Final / Short Plat 18-01-S
Whisper Meadows

☐ 1. We have No Objections to this Proposal.

☐ 2. We recommend Denial of this Proposal.

☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.

☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.

☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
- ☐ high seasonal ground water
- ☐ bedrock from original grade
- ☐ waste flow characteristics
- ☐ other _____

☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.

☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.

☑ 8. After written approval from appropriate entities are submitted, we can approve this proposal for:
- ☑ central sewage
- ☐ interim sewage
- ☐ individual sewage
- ☐ community sewage system
- ☑ central water
- ☐ individual water
- ☐ community water well

☑ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
- ☑ central sewage
- ☐ sewage dry lines
- ☐ community sewage system
- ☑ central water
- ☐ community water

☐ 10. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.

☐ 11. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.

☐ 12. We will require plans be submitted for a plan review for any:
- ☐ food establishment
- ☐ beverage establishment
- ☐ swimming pools or spas
- ☐ grocery store
- ☐ child care center

☑ 13. Infiltration beds for storm water disposal are considered shallow injection wells. An application and fee must be submitted to CDHD.

☐ 14. _____

Reviewed By: Lou Bodyfelt

Date: 2/22/18

Exhibit B-4

Review Sheet

15726-001EH1111

Exhibit B-5

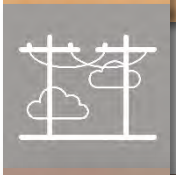
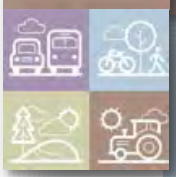
Communities in Motion 2040 Development Review

The Community Planning Association of Southwest Idaho (COMPASS) is the metropolitan planning organization (MPO) for Ada and Canyon Counties. COMPASS has developed this review as a tool for local governments to evaluate whether land developments are consistent with the goals of *Communities in Motion 2040 (CIM 2040)*, the regional long-range transportation plan for Ada and Canyon Counties. This checklist is not intended to be prescriptive, but rather a guidance document based on CIM 2040 goals.

Development Name: Whisper Meadows **Agency: Kuna**

CIM Vision Category: Future Neighborhoods

New households: 310 **New jobs: 0** **Exceeds CIM forecast: YES**

 CIM Corridor: **N/A** Pedestrian level of stress: **R-Linder** Bicycle level of stress: **R-Linder**	Level of Stress considers facility type, number of vehicle lanes, and speed. Roads with **G or PG** ratings better support bicyclists and pedestrians of all ages and comfort levels.
 Housing within 1 mile: **200** Jobs within 1 mile: **70** Jobs/Housing Ratio: **0.4**	A good jobs/housing balance – a ratio between **1 and 1.5** – reduces traffic congestion. Higher numbers indicate the need for more housing and lower numbers indicate an employment need.
 Nearest police station: **3.9 miles** Nearest fire station: **3 miles**	Developments within **1.5 miles** of police and fire stations ensure that emergency services are more efficient and reduce the cost of these important public services.
 Farmland consumed: **Yes** Farmland within 1 mile: **1,251 acres** Farmland Value: **N/A**	Farmland contributes to the local economy, creates additional jobs, and provides food security to the region. Development in farm areas decreases the productivity and sustainability of farmland.
 Nearest bus stop: **>4 miles** Nearest public school: **2.1 miles** Nearest public park: **1.4 miles** Nearest grocery store: **3.3 miles**	Residents who live or work less than **½ mile** from critical services have more transportation choices. Walking and biking reduces congestion by taking cars off the road, while supporting a healthy and active lifestyle.

Recommendations

This proposal extends urban development north into a largely farmland area, is several miles from public transportation and emergency services, and exceeds growth forecasted for this area. Transportation infrastructure may not be able to support the new transportation demands.

The proposal utilizes existing stub roads to promote automobile and non-motorized connectivity. The site plan shows good internal circulation for pedestrians; encourage improved pathways within internal open space to promote walkability. Linder Road and the extension of Durant Lane and have been identified as a future bicycle lanes.

More information about COMPASS and *Communities in Motion 2040*:
Web: www.compassidaho.org
Email info@compassidaho.org
More information about the development review process:
http://www.compassidaho.org/dashboard/devreview.htm

COMPASS
COMMUNITY PLANNING ASSOCIATION
of Southwest Idaho

Exhibit B-6

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

DEQ Response to Request for Environmental Comment

Date:	*February 22, 2018*
Agency Requesting Comments:	*City of Kuna*
Date Request Received:	*February 12, 2018*
Applicant/Description:	*18-01-ZC (Rezone) & 18-01-S (Preliminary Plat) Whisper Meadows Residential Subdivision*

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. Air Quality

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  The property owner, developer, and their contractor(s) must ensure that reasonable controls to prevent fugitive dust from becoming airborne are utilized during all phases of construction activities per IDAPA 58.01.01.651.

  Per IDAPA 58.01.01.600-617, the open burning of any construction waste is prohibited. The property owner, developer, and their contractor(s) are responsible for ensuring no prohibited open burning occurs during construction.

  For questions, contact David Luft, Air Quality Manager, at 373-0550.

2. Wastewater and Recycled Water

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects

require separate permits as well.

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*
- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.

3. Drinking Water

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*
- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  All projects for construction or modification of public drinking water systems require preconstruction approval.

- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*
- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*
- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*
- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  For questions, contact Todd Crutcher, Engineering Manager at 373-0550.

4. Surface Water

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*
- *Please contact DEQ to determine whether this project will require a National Pollution Discharge Elimination System (NPDES) Permit. If this project disturbs more than one*

Exhibit B-6

acre, a stormwater permit from EPA may be required.

- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*

- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:*
  http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm

- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

  For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.

5. Hazardous Waste And Ground Water Contamination

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*

- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.*

- ***Water Quality Standards.*** *Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.

- ***Ground Water Contamination.*** *DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in*

accordance with a permit, consent order or applicable best management practice, best available method or best practical method."

For questions, contact Albert Crawshaw, Waste & Remediation Manager, at 373-0550.

6. Additional Notes

- *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*

- *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.

Sincerely,



Aaron Scheff
aaron.scheff@deq.idaho.gov
Regional Administrator
Boise Regional Office
Idaho Department of Environmental Quality

ec: TRIM 2018AEK24

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028
Boise, ID 83707-2028

(208) 334-8300
itd.idaho.gov

March 5, 2018

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

VIA EMAIL

RE: 18-01-ZC, 18-01-S WHISPER MEADOWS SUBDIVISION

The Idaho Transportation Department has reviewed the referenced rezone and preliminary plat applications by Katie Miller with Bailey Engineering for the Whisper Meadows Subdivision consisting of 310 single family lots and 38 common lots located west of South Linder Road and north of West Columbia Road, west of SH-69 milepost 5.50. ITD has the following comments:

1. This property does not abut the State highway system.

2. This development will gain access to the State Highway system at the SH-69/ Columbia Rd and SH-69/Lake Hazel Rd intersections. The Idaho Administrative Procedures Act (IDAPA) governs access to state highways. Per IDAPA 39.03.42 rules, when a development generates 100 or more new trips in the peak hour, 1000 or more new trips per day, or the new volume of trips will result from development that equals or exceeds the threshold values in Table 2, a traffic impact study shall be required, unless waived by the District Engineer. The applicant will be responsible to construct any mitigation identified by the traffic impact study.

IDAPA Table 2	
LAND USE TYPE	**THRESHOLD VALUE**
Residential	100 Dwelling Units
Retail	35,000 square feet
Office	50,000 square feet
Industrial	70,000 square feet
Lodging	100 rooms
School (K-12)	All (Sections 67-6508 & 67-6519, Idaho Code)

3. Due to the anticipated trip generations that this development will add to the intersections of SH-69/ Columbia Road and SH-69/Lake Hazel Road, a traffic impact study will be required.

4. The City is reminded that the SH-69 corridor is already congested. This project will increase the number of vehicle trips in the corridor. As the City continues to add additional trips to the corridor through development, the congestion will worsen until the roadway system is ultimately overloaded and fails. ITD has no current funding assigned to mitigate traffic congestion in the SH-69 corridor in this area.

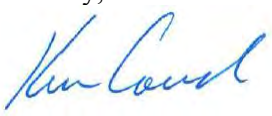
5. Idaho Code 40-1910 does not allow advertising within the right-of-way of any State highway.

6. IDAPA 39.03.60 rules govern advertising along the State highway system. The applicant can contact Justin Pond, Program Manager for ITD's Headquarters Right-of-Way Section at 334-8832 for more information.

7. ITD does not object to the proposed subdivision provided all traffic concerns have been addressed with ITD Staff.

If you have any questions, you may contact Shona Tonkin at 334-8341 or me at 332-7190.

Sincerely,



Ken Couch
Development Services Coordinator
Ken.Couch@itd.idaho.gov

January 9, 2018

Description For
Whisper Meadows Subdivision
Preliminary Plat

A re-subdivision of Lot 1, Block 1 of Chisum Valley Subdivision No. 1 as filed in Book 73 of Plats at Pages 7,579 and 7,580, records of Ada County, Idaho and Lots 2, 29 and 30, Block 1 of Chisum Valley Subdivision No. 2 as filed in Book 78 of Plats at Pages 8,195 and 8,196, records of Ada County, Idaho located in the SE1/4 of Section 2, T.2N., R.1W., B.M., Kuna, Ada County, Idaho, more particularly described as follows:

Commencing the E1/4 corner of said Section 2 from which the SE corner of said Section 1 bears South 00°27'12" West, 2669.24 feet;

thence along the East-West centerline of said Section 2 North 89°28'20" West, 40.00 feet to the NE corner of said Lot 30, said point being the **REAL POINT OF BEGINNING**;

thence along the East boundary line of said Lots 30 and 29 South 00°27'12" West, 1,246.70 feet to the SE corner of said Lot 29;

thence along the South boundary line of said Lots 29 and 30 North 89°25'21" West, 1,269.09 feet to the SW corner of said Lot 30;

thence along the West boundary line of said Lot 30 North 00°11'31" East, 8.60 feet to the SE corner of said Lot 2;

thence along the southerly boundary line of said Lot 2 the following 5 course and distances:

thence North 89°25'21" West, 313.20 feet;

thence 52.23 feet along the arc of a non-tangent curve to the left, said curve having a radius of 50.00 feet, a central angle of 59°51'16" and a long chord which bears North 89°25'21" West, 49.89 feet;

thence North 89°25'21" West, 448.54 feet;

thence 52.86 feet along the arc of a non-tangent curve to the left, said curve having a radius of 50.00 feet, a central angle of 60°34'11" and a long chord which bears North 89°47'09" West, 50.43 feet;

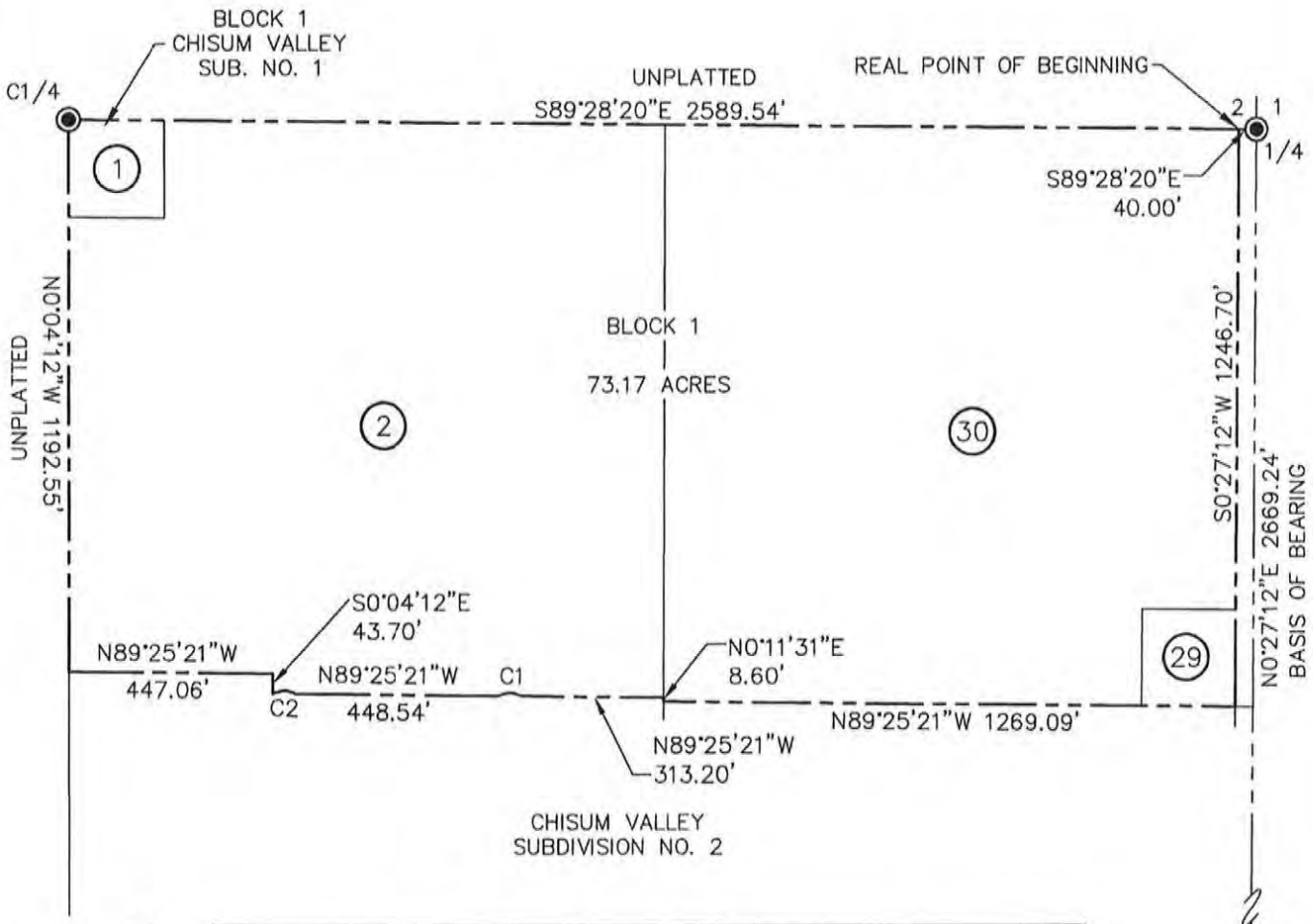
thence North 00°04'12" West, 43.70 feet;

thence North 89°25'21" West, 447.06 feet to the SW corner of said Lot 2;

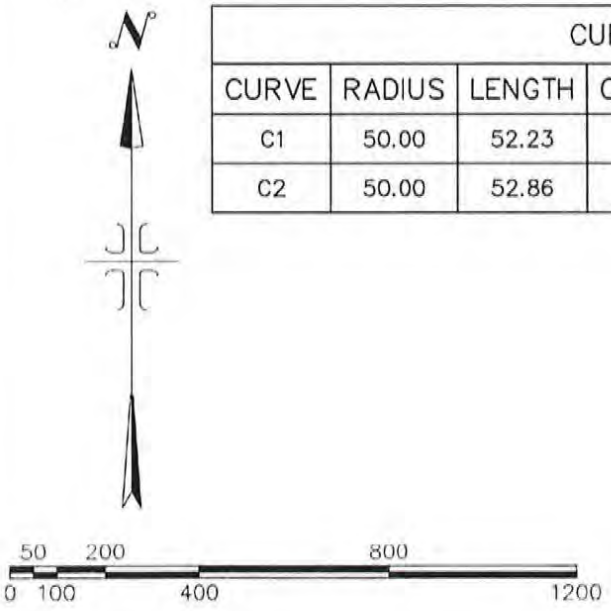
thence along the West boundary line of said Lots 2 and 1 North 00°04'12" West, 1,192.55 feet to the NW corner of said Lot 1;

thence along the North boundary line of said Lots 1, 2 and 30 South 89°28'20" East, 2,589.54 feet to the **REAL POINT OF BEGINNING**. Containing 73.17 acres, more or less.





CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD DIST.	CHORD BRG.	DELTA
C1	50.00	52.23	49.89	N89°25'21"W	59°51'16"
C2	50.00	52.86	50.43	N89°47'09"W	60°34'11"



SCALE: 1" = 400'



IDAHO SURVEY GROUP, LLC — 1450 E. WATERTOWER ST. SUITE 130 MERIDIAN, IDAHO 83642 (208) 846-8570	REZONE EXHIBIT DRAWING FOR WHISPER MEADOWS SUBDIVISION LOCATED IN THE SE ¼ OF SECTION 2 T.2N., R.1W., B.M., ADA COUNTY, IDAHO	JOB NO. 17-124 SHEET NO. 1 DWG. DATE 1/9/2018

Neighborhood Meeting Certification – PP / PdZ

CITY OF KUNA PLANNING & ZONING * 763 W. Avalon, Kuna, Idaho, 83634 * www.kunacity.id.gov * (208) 922-5274 * Fax: (208) 922-5989

GENERAL INFORMATION:

You must conduct a neighborhood meeting prior to application for variance, conditional use, zoning ordinance map amendment, expansion or extension of a nonconforming use, and/or a subdivision. Please see Section 8-7A-3 of the Kuna City Code or ask one of our planners for more information on neighborhood meetings.

The meeting must be held either on a weekend between 10 a.m. and 7 p.m., or a weekday between 6 p.m. and 8 p.m. Meetings cannot be conducted on holidays, holiday weekends, or the day before or after a holiday or holiday weekend. The meeting must be held at one of the following locations:

- The Subject Property;
- The nearest available public meeting place (Examples include fire stations, libraries and community centers);
- An office space within a 1-mile radius of the subject property.

The meeting cannot take place more than 2 months prior to acceptance of the application and the application will not be accepted before the neighborhood meeting is conducted. You are required to send written notification of your meeting, allowing a reasonable amount of time before your meeting for property owners to plan to attend. Contacting and/or meeting individually with residents will not fulfill Neighborhood Meeting requirements.

You may request a list of the people you need to invite to the neighborhood meeting from our department. This list includes property owners within 300 feet of the subject property. Once you have held your neighborhood meeting, please complete this certification form and include it with your application.

Please Note: The neighborhood meeting must be conducted in one location for attendance by all neighboring residents. Contacting and/or meeting individually with residents does not comply with the neighborhood meeting requirements.

Please include a copy of the sign-in sheet for your neighborhood meeting, so we have written record of who attended your meeting and the letter of intent sent to each recipient. In addition, provide any concerns that may have been addressed by individuals that attended the meeting.

Description of proposed project: New subdivision

Date and time of neighborhood meeting: 8/29/18 6:30 pm

Location of neighborhood meeting: Kuna Public

SITE INFORMATION:

Location: Quarter: SE Section: 2 Township: 2N Range: 1W Total Acres: 73.17

Subdivision Name: Whisper Meadows Lot: Block:

Site Address: Linder Rd. north of Columbia Rd. Tax Parcel Number(s): R1693860010, R1393850100 R1693860290, R1693860280

Please make sure to include **all** parcels & addresses included in your proposed use.

CURRENT PROPERTY OWNER:

Name: Vanderkoy Farms LLC & Thistle Farms LLC

Address: 6152 Half Moon Ln City: Eagle State: ID Zip: 83616

CONTACT PERSON (Mail recipient and person to call with questions):

Name: Katie Miller Business (if applicable): Bailey Engineering

Address: 4242 N. Brookside Ln City: Boise State: ID Zip: 83714

PROPOSED USE:

I request a neighborhood meeting list for the following proposed use of my property (check all that apply):

Application Type	***Brief Description***
Annexation	
Re-zone	
Subdivision (Sketch Plat and/or Prelim. Plat)	347 lot new subdivision
Special Use	
Variance	
Expansion of Extension of a Nonconforming Use	
Zoning Ordinance Map Amendment	

APPLICANT:

Name: Katie Miller

Address: 4242 N. Brookside Ln.

City: Boise State: ID Zip: 83714

Telephone: 208-412-3478 Fax:

I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accord with Section 5-1A-2 of the Kuna City Code

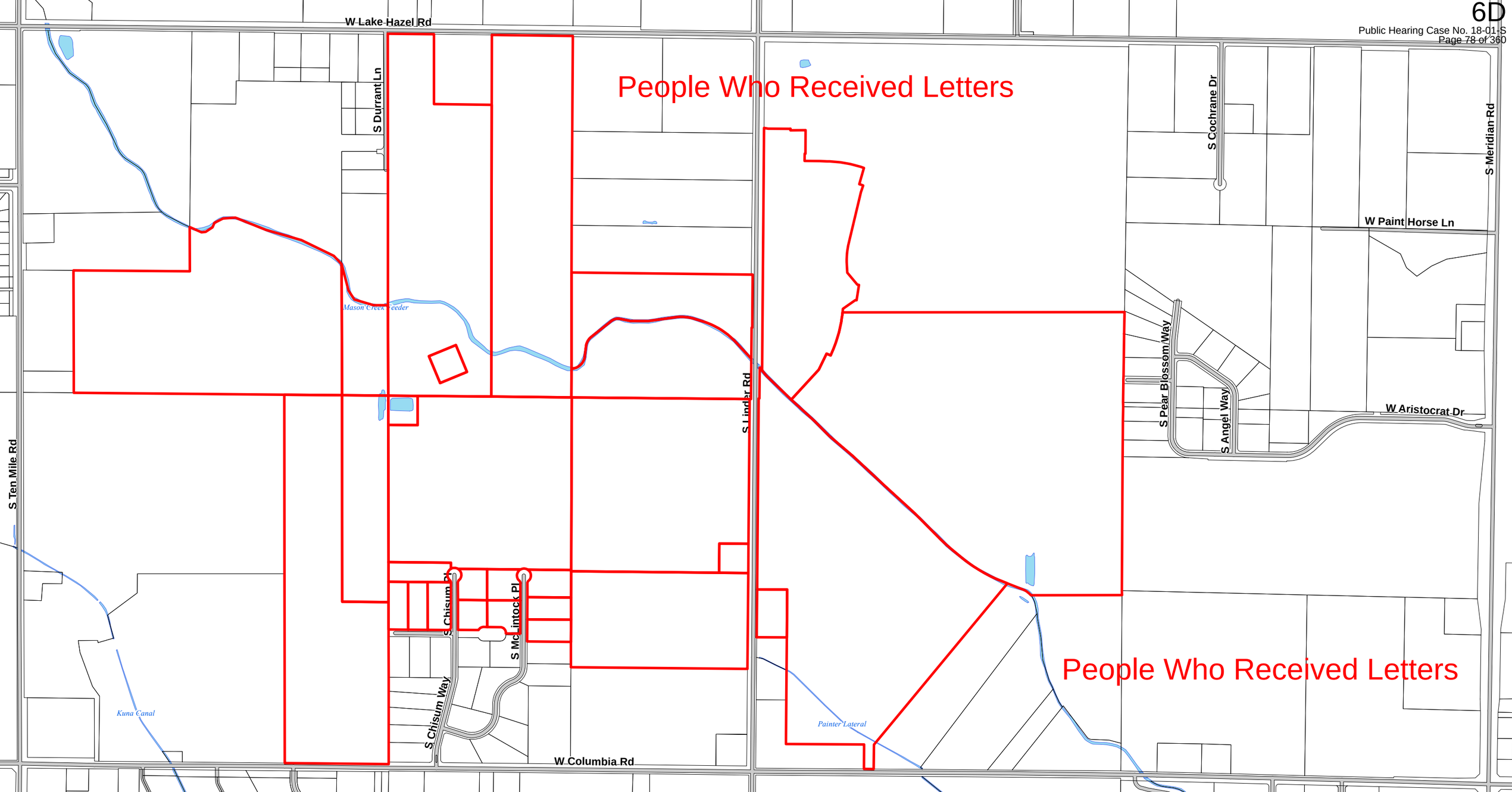
Signature: (Applicant) Date 8/31/18

SIGN IN SHEET

PROJECT NAME: Whisper Meadows

Date: 8/29/18

	Name	Address	Zip	Phone
1	Stephen Kennedy	7638 S. McLintock	83642	870-4904
2	Nick Smith			871-2209
3	RANDY KATHY COLSON	2344 COOBURN		562-1177
4	Geoff Hinrichsen	7636 S Chisum Pl	83642	869.9943
5	Bryan Luckie	7714 S McLintock Pl	" "	391-8295
6	Shannon Luckie	7714 S. McLintock	" "	859-2892
7	Virginia Jeppesen	7901 S Chisum Way	83642	(208)794-3091
8	Kelley Stevenson	7751 S McLintock Pl	83642	2088889774
9	Richard Dunat	7590 S Tenmile Rd	83642	888-5264
10	ALANA OLSON	7790 S McLINTOCK	83642	860-2189
11	Vern Bastow	7979 S. Chisum	83642	860-2484
12	Rick Willis	2345 Coburn	83642	887-3755
13	Bissie Hall	7675 S. McLintock	83642	208 407-0462
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People Who Received Letters
People Who Received Letters
W Lake Hazel Rd
S Durrant Ln
S Cochrane Dr
S Meridian Rd
W Paint Horse Ln
Mason Creek Feeder
S Linder Rd
S Pear Blossom Way
S Angel Way
W Aristocrat Dr
S Ten Mile Rd
S Chisum Pl
S McLintock Pl
S Chisum Way
Kuna Canal
Painter Lateral
W Columbia Rd

Letter of Opposition

April 5, 2018

Kuna Planning and Zoning Commission
Kuna City Hall, Council Chamber
751 W. 4th Street
Kuna, Idaho 83634

RE: Opposition to Whisper Meadows Subdivision

To Whom It May Concern:

I write on behalf of Chisum Valley Subdivision which is located directly to the south of the proposed location for Whisper Meadows Subdivision. The Planning and Zoning Commission (hereafter the "**Commission**") received the Whisper Meadows application on or about January 12, 2018. According to the application, the developer, Vanderkooy Farm LLC, requests the Commission to rezone the described property from agricultural to medium-density residential and to develop 310 single-family residential lots over 73.17 acres (4–6 units per acre).

A public hearing is scheduled before the Commission for April 10, 2018. The law requires the Commission to base its approval or denial of the application on a variety of factors including: the proposed development's consistency with the applicable comprehensive plan, relevant statutory provisions and ordinances, and the facts contained in the record.[1]

While we do not oppose development of the property in general, we do oppose the proposed development for the following reasons:

- The proposed plat is neither consistent with Kuna's Comprehensive Plan nor with its residents' vision for development.
- Connecting South Chisum Place to the proposed subdivision will compromise the safety of Chisum Valley residents.
- The proposed development will financially harm Chisum Valley property owners.

The proposed development is inconsistent with Kuna's Comprehensive Plan.

We understand that Kuna is growing at a very rapid pace. However, Kuna has historically been a farming community. Kuna's small-town feel and rural character have helped it maintain its own sense of community instead of becoming a suburban extension of Boise. Those same attributes keep residents in, or coming back to, Kuna as they age. In his Idaho

[1] Idaho Code § 67-6535(2)

Statesman article, *Growing pains in Kuna: Small-town, rural feel attracting more people*, Bill Roberts wrote:

> People who've lived in Kuna and return say they're called back by the echoes of rural life and small-town America. Kuna, they say, is the kind of place where you can still buy eggs fresh from the farm and where much of the community turns out for events and festivals. 'It still has outlying farms and agriculture-type people around,' said Kara Medrano, who lived in Kuna for 18 years and returned in March. 'Kuna is still keeping true to its roots.'[2]

Kuna's Comprehensive Plan (hereafter "**Comprehensive Plan**") and the Envision Kuna Listening & Learning Summary Report (hereafter "**Summary Report**"), which detail the community's concerns and hopes for Kuna's development, are consistent with the views expressed throughout Roberts' article.[3]

According to the Comprehensive Plan, Kuna's residents desire to "preserve Kuna's high quality of life and strengthen the character and image of the community as a family-oriented place with small-town character."[4] Further, agriculture is important to Kuna's heritage and its residents are, therefore, interested in "preserving large tracts of working agricultural land within the city for clustered, large-lot, rural residential development."[5]

The Comprehensive Plan and development goals highlighted therein are replete with references to Kuna residents' "strong interest in maintaining a small-town atmosphere with a strong local business base" and community feel.[6] In fact, according to the Summary Report the only thing more important to Kuna's residents than its "small-town" feel are the people themselves.[7]

According to the Comprehensive Plan, it is extremely important to Kuna residents that their community not be "overtaken by a fast-paced, heavily urbanized development pattern."[8] They believe that the best way to grow the community is by strengthening its core and creating mixed-use neighborhoods and rural cluster-agricultural areas."[9] Residents expressed the same concerns when interviewed during the first phase of the current comprehensive planning process. According to the Summary Report, residents

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[2] Article available at: *http://www.idahostatesman.com/news/local/article148959059.html*.
[3] Of note, the Envision Kuna project team prepared the Summary Report in December 2017, after completing phase one of the Envision Kuna Project. The project team's goal is to complete a revised version of Kuna's comprehensive plan before the end of the year. Phase one of the plan was the "Listening and Learning" phase during which the team sought to gain an understanding of the community's "needs, desire, and vision" from its residents.
[4] Comprehensive Plan at 63.
[5] Comprehensive Plan at 10.
[6] Comprehensive Plan at 10.
[7] Summary Report at 21.
[8] Comprehensive Plan at 10.
[9] Comprehensive Plan at 10.

interviewed in 2017 "continually stated [that they] would like large lots and larger homes, and to not just be viewed as a community made up of starter homes."[10]

Pursuant to the Comprehensive Plan, development in Kuna should occur "in an orderly fashion and for purposes of fostering a sense of community and neighborhood connection."[11] It should also "preserve open space" and "protect the quality of existing neighborhoods to ensure that their character and quality is preserved."[12] Infill development of "vacant or underutilized land to create greater densities in the core of the city" is encouraged.[13] So is the reduction of "urban sprawl."[14]

The Whisper Meadows subdivision does not achieve those objectives. The proposed subdivision consists of 310 single-family residential lots and just enough open space for one U14/U19 regulation size soccer field.[15] The subdivision offers neither the sense of community nor the small-town rural feel that makes Kuna unique. Instead Whisper Meadows is a bedroom community designed to provide housing for people looking for a new starter home.[16] Similar sprawl is being developed all around Kuna and is exactly the type of development that will destroy Kuna's unique rural character.

Opening South Chisum Place compromises safety in Chisum Valley.

Whisper Meadows will link to Chisum Valley via South Chisum Place, which currently runs through Chisum Valley and dead ends in a cul-de-sac at the edge of Whisper Meadows.

South Chisum Place is a narrow, unmarked road, without signage or a posted speed limit. It's predominately used by a few Chisum Valley residents. There are under fifteen homes along the entire road.

The Traffic Impact Study completed for Whisper Meadows states that South Chisum Place is not the primary point of access to the proposed subdivision site and estimates that 140 additional cars will travel on South Chisum Place daily as a result of the development.

Although we understand that the South Chisum Place is considered a "stub street" which is required to provide circulation to adjoining properties, an additional 140 vehicles travelling through Chisum Valley daily is a major change to our subdivision.

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[10] Summary Report at 26.
[11] Comprehensive Plan at 63.
[12] Comprehensive Plan at 64.
[13] Comprehensive Plan at 64.
[14] Comprehensive Plan at 154.
[15] 01/11/18 correspondence from Bailey Engineering to Troy Behunin re: Whisper Meadows Subdivision–Zoning and Preliminary Plat Application
[16] New homes in the subdivision are estimated to cost $260,000 on average whereas the average cost of new home in Ada county is over $350,00.

Signature: Josh Ricciardi
Josh Ricciardi (Apr 5, 2018)

Email: joshuaricciardi77@gmail.com

Many of our children walk and ride bikes to each other's homes along South Chisum Place. We believe that, without protective measures, the significant traffic increase will present a safety hazard to our residents. ADHD policy states that developers are responsible for developing local street frontages adjacent to the development site.[17] These improvements can include the placement of sidewalks or pathways and the implementation of passive traffic measures.[18]

As property owners and parents, we believe that protective measures are essential due to the increased traffic flow that will result from the proposed subdivision and ask that that, if the subdivision is developed, the developer be required to implement those measures in a manner that is consistent with the style and quality of the land abutting South Chisum Place.

The proposed development will cause financial harm to the residents of Chisum Valley.

Lastly, as discussed above, the proposed subdivision is the type of sprawl that turns a neighborhood into a bedroom community. It won't help Kuna to maintain its "small-town feel," or the agricultural, open quality that helps Kuna "keep true to its roots" as it grows.[19] Instead, it's exactly the type of "fast-paced, heavily urbanized development pattern" Kuna's residents rejected.[20]

Chisum Valley is, on the other hand, a beautiful neighborhood with a strong sense of community and civic pride. Its lots are large and unique. It also exemplifies an open space/ rural living style. Those virtues enhance the quality of life for our residents and add to the resale value of our property. The proposed subdivision will undermine the benefits of living in Chisum Valley and will undoubtedly lower the value of the homes within the community.

For these reasons, we strongly oppose development of Whisper Meadows subdivision. The development will damage our community. Kuna can and should grow in a way that is true to its residents' vision for its future. Therefore, we request that the Commission deny the application.

Sincerely,

Joshua Riccardi

[17] ADHD Policy 7207.2.
[18] ADHD Policy 7207.2.3.
[19] Comprehensive Plan at 10.
[20] Comprehensive Plan at 10.

received
4.9.2018

Geoff Hinrichsen

7636 So. Chisum Place, Merdian Id. 83642
Telephone: (208) 869-9943
E-Mail: gbh763601@gmail.com

April 10, 2018

To the members of the Kuna Planning and Zoning Commission,

I am writing this letter to let you know my concerns about the proposed development (Whisper Meadows) on the land just to the north of my property which is in Chisum Valley Subdivision. I am not against development in general but feel that what has been planned so far is not a responsible approach.

I feel the residents of Chisum Valley will have their safety put in jeopardy by allowing the residents of the new subdivision to come and go on our lightly used street(s). The streets are narrow without sidewalks. This is fine to provide for the 30 families inside the subdivision but not when over 300 homes are added.

I also feel that allowing 4-6 homes per acre and putting them across a fence from our subdivision will lower our property values. Our views will be compromised and the proximity of smaller lower priced "Starter Homes" will reduce the value of the open spacious properties in Chisum Valley.

Another concern is drainage of irrigation water. Events caused by the irrigation of the properties on the South side of Columbia road have allowed runoff from those properties to flood the lots of some of our residents. It was resolved by trenching a path for the water to soak in to the ground in the area proposed for development. I feel this needs to be addressed in any development in this area to avoid damage on anyone's property.

Easements are another concern. Piping and valves from our community irrigation system are buried in the area between Chisum Valley and the proposed new development. The lines will have to be relocated or an easement granted for future repair and maintenance of the system. Perhaps a lower density, development could grant easements through backyards or a park built in that area. This would also mitigate the drainage issues mentioned above.

Thank you for considering my concerns. Please contact me if you have any questions or concerns.

Regards,

Geoff Hinrichsen

24 May 2018

Kuna City Council
Kuna, Idaho 83634

RECEIVED
MAY 29 2018
CITY OF KUNA

Dear Mayor and Council members,

I am writing in regards to the application going in north of Chisum Valley estates. We have not heard from ACHD about how they plan to address all of the traffic, in all these project, the city Council has approved in the last several months. The new high school, the addition to the SilverTrails subdivision to the south of Chisum Valley Subdivision and now the application for 300 more homes north of Chisum Valley. So far there only solution is to stub the roadways through Chisum Valley. Our road was not designed to handle that much traffic, and if you do go through Chisum Valley then what. There is a continuous flow of traffic down Columbia from 6:00 a.m. to 9:00 a.m. and again in the afternoon. Without a light you are creating a traffic hazard for people trying to turn onto Columbia from Chisum Road.
These housing projects should be self-contained and not relay on other subdivisions to solve their traffic problems. There is plenty of frontage roadway on Linder to put roadways to support this project.

The density of homes in this project is not consistent with the surrounding area. The quality of construction from this builder is not consistent with homes in this area. I know the city fathers want more development as that will bring more business, but we need diversity in construction methods, construction materials and home design so our community deteriorates at different rate and doesn't look exactly the same. We want higher end developments. In the Kuna News each week it shows the different real estate sales. We have lots of homes in the $ 150,000-$250,000 market but very few in the $ 300,000-400,000 range. As families move up in their careers and economics, and want a nicer home, we are not providing that market here in Kuna, and families are looking elsewhere for nicer housing to reflect their economics. We are not doing anything to promote families to stay in our community.

I would like this petition denied due to lack of roadway to support their project. I would like it denied because it is too dense for the surrounding area. I would like it denied because there is no diversity in the homes or builder, it is just the same as it has been for the last 2 decades, we need a new community plan. Bring the Parade of homes to Kuna.
Thank you for your consideration of why this petition should be denied as presently platted.

Respectfully submitted

Thora Willis

Thora Willis
2345 Cogburn Street
Meridian, Idaho 83642
208-887-3955

3 enclosures

Letter of Opposition

WEEKLY REAL ESTATE SALES

Closing Date	Status	Asking Price	Price	Address	City	# Beds	# Baths	Apx SqFt	# Acres	Days On MLS	Price per SQFT
11/9/17	Sold	$149,900	$148,500	560 N Locust Ave.	Kuna	2	2	1110	0.15	33	$135.05
11/6/17	Sold	$149,500	$149,500	526 E Blue Sky Dr	Kuna	3	1	1148	0.17	54	$130.23
11/8/17	Sold	$170,000	$158,000	1235 W Crenshaw	Kuna	3	2	1536	0.188	17	$110.68
11/6/17	Sold	$164,900	$167,500	460 N Shady Grove Way	Kuna	3	2	1276	0.25	3	$129.23
11/6/17	Sold	$169,900	$170,500	1547 N Deerhorn	Kuna	3	2	1201	0.16	5	$141.47
11/8/17	Sold	$169,900	$176,000	706 N Quarter Moon Ave	Kuna	3	2	1227	0.184	3	$138.47
11/9/17	Sold	$191,900	$185,000	1367 N Dredge Ave	Kuna	3	2	1367	0.17	11	$140.38
11/9/17	Sold	$214,900	$211,900	713 E Red Bud	Kuna	3	2	1802	0.19	15	$119.26
11/6/17	Sold	$198,789	$215,000	560 E Wild Primrose Ct.	Kuna	3	2	1752	0.213	1	$113.46
11/7/17	Sold	$219,900	$218,900	1039 W Omphale St	Kuna	4	2.5	2327	0.247	35	$94.50
11/8/17	Sold	$219,900	$219,900	910 Rumney	Kuna	3	2	1699	0.16	18	$129.43
11/8/17	Sold	$234,900	$230,000	555 S Red Oak Ave	Kuna	4	2.5	1948	0.21	17	$120.59
11/8/17	Sold	$242,900	$234,000	684 S Stibnite	Kuna	3	2.5	2206	0.16	53	$110.11
11/9/17	Sold	$239,990	$239,990	2168 N Doe Ave.	Kuna	3	2	1848	0.163	86	$129.86
11/9/17	Sold	$249,900	$249,900	702 N Olivine	Kuna	5	2.5	2818	0.2	3	$88.68
11/7/17	Sold	$302,282	$302,282	9556 S Rock Cliffs Pl	Kuna	3	2	2100	0.226	0	$143.94
11/10/17	Sold	$414,900	$410,000	11894 Dynamite Lane	Kuna	3	3	2515	0.75	7	$164.97

WEEKLY REAL ESTATE SALES

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11/9/17	Sold	$239,990	$239,990	2168 N Doe Ave.	Kuna	3	2	1848	0.163	86	$129.86
11/9/17	Sold	$249,900	$249,900	702 N Olivine	Kuna	5	2.5	2818	0.2	3	$88.68
11/7/17	Sold	$302,282	$302,282	9556 S Rock Cliffs Pl	Kuna	3	2	2100	0.226	0	$143.94
11/10/17	Sold	$414,900	$410,000	11894 Dynamite Lane	Kuna	3	3	2515	0.75	7	$164.97

WEEKLY REAL ESTATE SALES

Closing Date	Status	Asking Price	Price	Address	City	# Beds	# Baths	Apx SqFt	# Acres	DOM	Price per SQFT
3/29/18	Sold	$114,990	$90,000	144 W 4TH	Kuna	2	1	1910	0.143	22	$60.20
3/26/18	Sold	$169,900	$167,000	185 S Ash	Kuna	3	1	1080	0.38	5	$157.31
3/26/18	Sold	$199,900	$199,900	686 E Great Bear	Kuna	3	2.5	1338	0.15	10	$149.40
3/29/18	Sold	$205,000	$205,000	2092 N Rosedust	Kuna	3	2	1330	0.161	7	$154.14
3/30/18	Sold	$204,900	$208,000	2153 N. Firebrick Dr	Kuna	3	2	1340	0.203	1	$152.91
3/27/18	Sold	$190,000	$210,000	1245 N Forty Niner Ave	Kuna	4	2.5	1591	0.16	1	$119.42
3/29/18	Sold	$239,990	$239,990	109 W Screech Owl Dr.	Kuna	3	2	1699	0.163	64	$141.25
3/29/18	Sold	$249,990	$248,990	1071 S Rumney Ave.	Kuna	4	2.5	1934	0.198	167	$129.26
3/29/18	Sold	$248,490	$251,490	1044 E. Sailer Shores Way	Kuna	3	2.5	2250	0.116	285	$110.44
3/26/18	Sold	$259,900	$259,900	261 E Northridge Dr	Kuna	5	2.5	2785	0.252	33	$93.32
3/30/18	Sold	$291,000	$277,920	2086 N Van Dyke Ave.	Kuna	5	2.5	2710	0.16	47	$107.38
3/29/18	Sold	$298,990	$298,990	2794 W Crenshaw	Kuna	5	2.5	2710	0.227	104	$110.33
3/26/18	Sold	$337,780	$337,780	841 W Sagwon	Kuna	3	2.5	2510	0.201	0	$134.57
3/30/18	Sold	$357,800	$362,928	9421 S Palena Ave.	Kuna	4	2.5	2375	0.23	321	$150.65

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L. Edward Miller
Patrick J. Miller
Judson B. Montgomery
Emily G. Mueller
Deborah E. Nelson
W. Hugh O'Riordan, II.M.
Randall A. Peterman
Jack W. Relf
Michael O. Roe
Jamie Caplan Smith
P. Mark Thompson
Jeffrey A. Warr
Robert B. White

Kenneth L. Pursley (1940-2015)
James A. McClure (1924-2011)
Raymond D. Givens (1917-2008)

May 9, 2018

Via email tbehunin@kunaid.gov
Mayor Joe Stear and Kuna City Council
751 West 4th Street
Kuna, ID 83634

Re: Recommended Conditions of Approval for 18-01-ZC (Rezone)

Dear Mayor Stear and Council Members:

This firm represents Thistle Farm, LLC and Vanderkooy Farm LLC (collectively, "**Applicant**") in connection with rezoning 73.50 acres of property ("**Property**") in the City of Kuna from Ag to R-6. Rezoning the Property to R-6 is proper because the R-6 designation is supported by Kuna's comprehensive plan.

On April 10, the Planning and Zoning Commission ("**Commission**") took up Applicant's rezone application ("**Application**") and voted to recommend approval of the Application subject to the staff report and two additional conditions:

1. Limit the overall density of the Property to 4.25 units per acre, as offered by Applicant; and

2. Only connect to one of the two public roads stubbed to the south of the Property and work with Ada County Highway District ("**ACHD**") to eliminate both street connections, as requested by the Commission.

Applicant requests the Council approve the Application without the Commission recommended Condition 2. Condition 2 is premature because the Application only requests a rezone at this time. A subsequent subdivision application will address access, road orientation, and circulation.

Condition 2 is also outside the jurisdiction of the City and the control of Applicant. Two public roads are stubbed at the southern boundary of the Property. The Commission proposes conditioning the rezone of the Property on only one of these public streets continuing into the Property. The Applicant cannot comply with Condition 2 without ACHD's consent. ACHD has jurisdiction over the stubbed public roads. *See* I.C. § 50-1330 (ACHD has "exclusive general supervisory authority over all public streets and public rights of way" in Ada County). ACHD also considers and approves all plat applications "as to continuity of highway pattern, widths, drainage provisions, right-of-way construction standards, traffic flow, the traffic volume demand occasioned by the proposed subdivision...." I.C. § 40-1415(6). Given ACHD's control over the public roads at issue and given that ACHD will not make any final decisions about access until it reviews a subdivision application, Condition 2 creates uncertainty for the City and Developer on the rezone of the Property. Specifically, if ACHD, in the future, requires connectivity for both stubbed public roads, does the Property revert to Ag?

The Applicant requests the Council approve the Application without the Commission's recommended Condition 2. Connectivity and access issues should be addressed when an application to subdivide the Property is presented, and ACHD makes specific findings related to the stubbed public roads. Thank you for your consideration of this request.

Sincerely,



Jeff Bower

/JWB
cc: Client
14189932_2.docx [13707-5]

City of Kuna

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

P &Z Findings of Fact & Conclusions of Law

To: **P & Z Commission**

File Numbers: **18-01-S** (Preliminary Plat) and **18-07-DR** (Sub Design Review)

Location: Northwest corner; Linder and Columbia Roads, Meridian, ID

Planner: Troy Behunin, Planner III

Hearing date: October 9, 2018
Findings of Fact: *October 23, 2018*

Owner: **Thistle Farm, LLC, and Vanderkooy Farm LLC's,**
6152 W. Half Moon Ln.
Eagle, ID, 83616
208.850.0591
Timothyeck@me.com

Engineer: **Bailey Engineers,**
Katie Miller
4242 Brookside Ln.
Boise, ID, 83713
208. 938.0013
Kmiller@baileyengineers.com

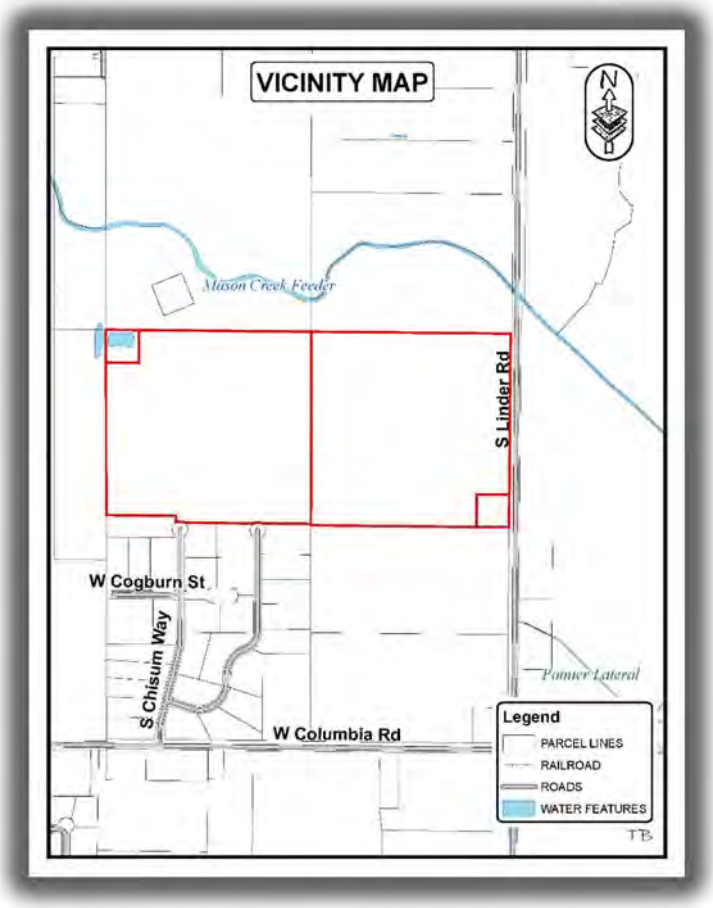


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H. Procedural Background
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J. Factual Summary
K. Comprehensive Plan Analysis
L. Kuna City Code Analysis
M. Conclusions of Law
N. Recommendation to City Council

A. Process and Noticing:

1. Kuna City Code 1-14-3 (KCC), Title 1, Chapter 14, Section 3, states that Preliminary Plats are designated as public hearings, with the Commission as the recommending body, and City Council as the decision making body, and the Commission as the decision making body for the Design Review. These land use applications were given proper public notice and followed the requirements set forth in Idaho Code, Chapter 65 Local Planning Act.

a. Notifications

i. Neighborhood Meeting August 8, 2018 (fourteen (14) persons attended)

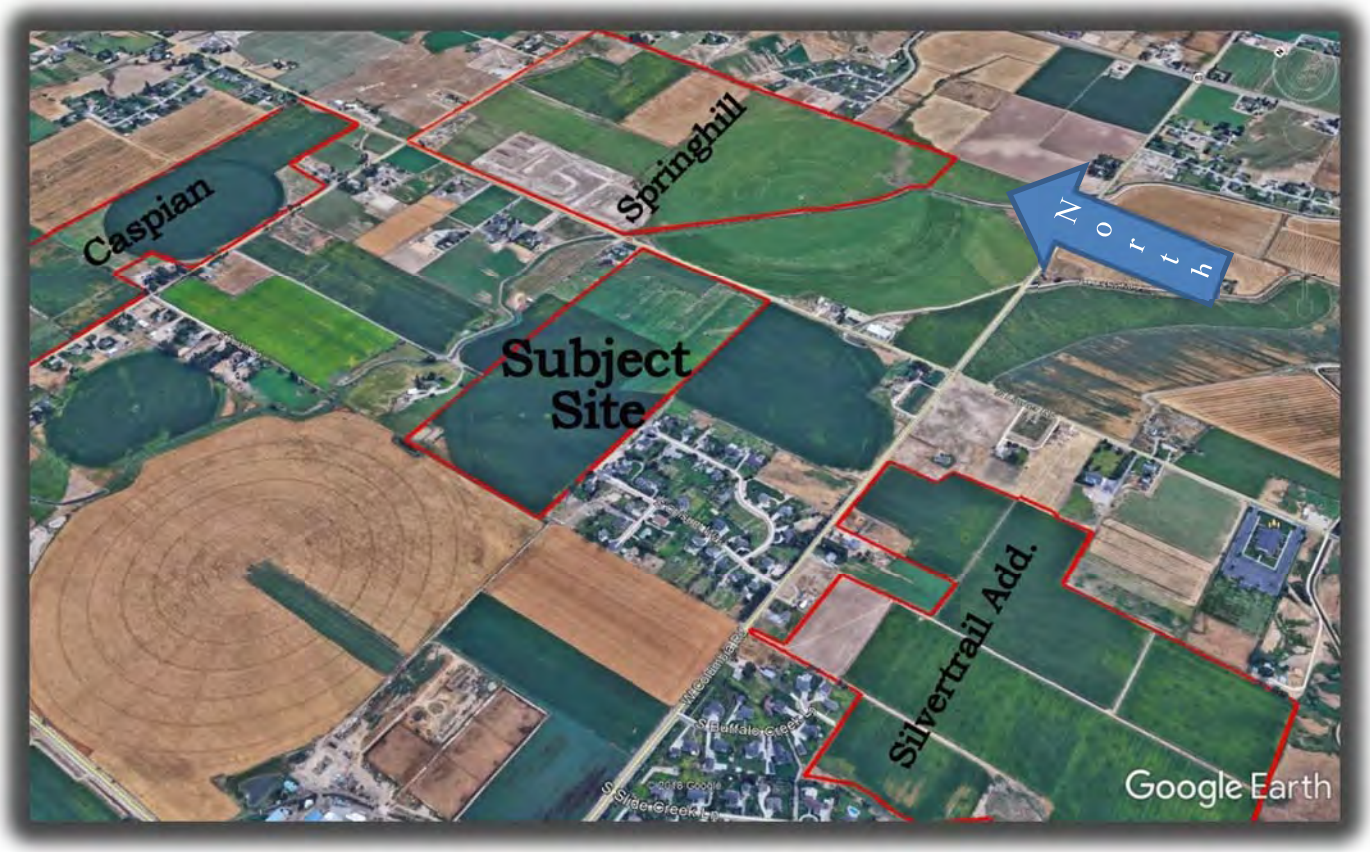
ii.	Agency Comment Request	February 12, 2018
iii.	350' Property Owners	August 31, 2018
	COURTESY MAILING NOTICE	*October 1, 2018*
iv.	Kuna, Melba Newspaper	August 16, 2018
v.	Site Posted	August 31, 2018

B. Applicants Request:

1. **Request:**

Applicant, Katie Miller, with Bailey Engineers, on behalf of Thistle Farm, and Vanderkooy Farm, LLC's (Owner), requests approval to subdivide approximately 73.50 acres (previously zoned R-6 and four lots within Chisum Valley Subdivision No. 1 and 2) into 310 single home lots, an additional 38 common lots, following the Comprehensive Plan of MDR and the Council approved conditions of approval from the recent rezone. This site is located at the NWC Linder and Columbia Roads. APN No's; R1393850100, R1693860010, R1693860290, R1693860280.

C. Aerial Map:



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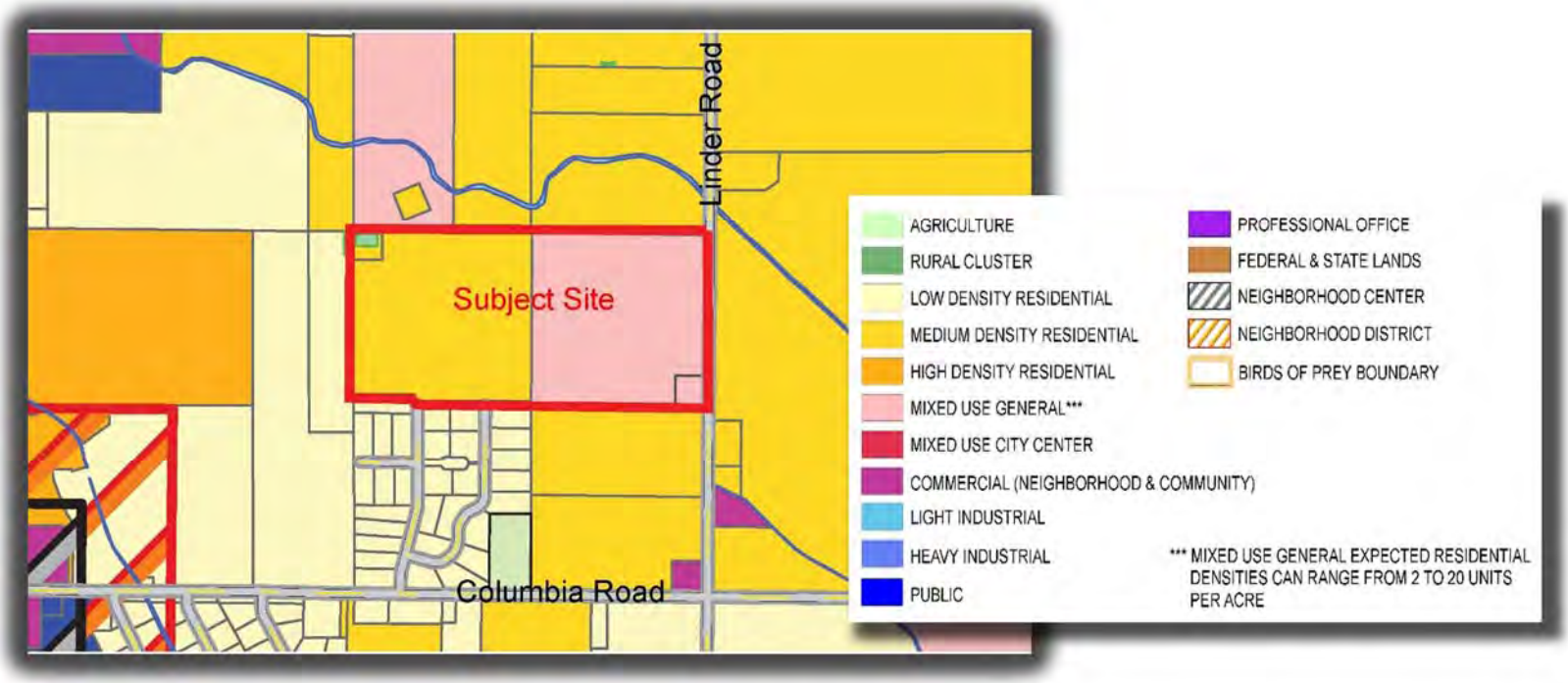
D. Site History:

These lots historically have been used for agricultural purposes and were rezoned from Agriculture (Ag.) *to* R-6 MDR (Medium Density Residential) on June 5, 2018, (18-04-ZC).

E. General Projects Facts:

1. **Comprehensive Plan Map:** The Comp Plan Map designation for this site is Medium Density Residential (MDR) for the west half, and Mixed-Use for the east half. Both uses encourage residential uses. The Future

Land Use Map (Comprehensive Plan Map) is intended to serve as a guide for the decision making body. This map indicates land use designations, it is not actual zoning. These land use designations have been in place since 2009, and were contemplated as such in early 2008.



2. **Recreation and Pathways Map:** The Rec. & Path Master Plan Map indicates a future trail along the Mason Creek, which is off-site. With this application, staff recommends that the applicant incorporate green and open spaces and should be considered a binding site plan.



3. **Surrounding Land Uses:**

North	AG, RR	Agriculture & Rural Residential – Kuna City & Ada County
South	RR	Rural Residential – Ada County
East	AG	Agriculture – Kuna City
West	AG	Agriculture – Kuna City

4. **Lot Sizes, Current Zoning, Parcel No's, and L & B No's:**

Lot Size (Approximately)	**Current Zone: (Ag.)**	**Parcel Number(s)**	**Chisum Valley Sub., Lot & Block Numbers**
1.00 acre	R-6	R1393850100	Lot 1, Block 1, Sub No. 1
35.77 acres	R-6	R1693860010	Lot 2, Block 1, Sub No. 2
35.38 acres	R-6	R1693860290	Lot 30, Block 1, Sub No. 2
1.00 acre	R-6	R1693860280	Lot 29, Block 1, Sub No. 2

5. **Services (at time of development):**

Sanitary Sewer– City of Kuna
Potable Water – City of Kuna
Irrigation District – Kuna Municipal Irrigation District (KMID)
Pressurized Irrigation – City of Kuna (KMID)
Fire Protection – Kuna Rural Fire District
Police Protection – Ada County Sheriff's office – Kuna Police
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**

There are no structures on site. The site has vegetation that is generally associated with an Agricultural field.

7. **Transportation / Connectivity:**

The site has significant Linder Road frontage. The applicant proposes two points of ingress/egress on Linder Road; one at the mid-mile between Columbia and Lake Hazel, and a second access approx. 820 feet south of that mid-mile. Applicant has proposed two points of ingress/egress along the future east-west mid-mile on the north side of the site and a single ingress/egress on the west side of the site. All points of access must follow City & ACHD standards.

8. **Environmental Issues:**

Staff is not aware of any environmental issues, health or safety conflicts. The site's topography is generally flat with less than 3 percent slope. This site is within the Nitrate Priority Area (NPA), and will be required to connect to Kuna City sanitary sewer, potable water and pressurized Irrigation services.

9. **Agency Responses:**

The following agencies returned comments are included with this case file:

- *Ada County Highway District (ACHD)* *Exhibit B 2*
- *Boise Project Board of Control* *Exhibit B 3*
- *Central Dist. Health Dept. (CDHD)* *Exhibit B 4*
- *COMPASS* *Exhibit B 5*
- *Dept. of Environmental Quality (DEQ)* *Exhibit B 6*
- *ID Transportation Dept. (ITD)* *Exhibit B 7*

F. Staff Analysis:

The applicant rezoned four lots within Chisum Valley Subdivisions 1 and 2, as part of a previous application (18-01-ZC), and now submits an application for preliminary plat and subdivision design review approvals and entitlements.

These four lots were rezoned last spring from Agriculture to the R-6 (MDR) zone. During the public hearings for said rezone, certain density and layout conditions were approved by City Council; "...actual density [shall] not exceed 4.25 DUA (dwelling units/acres), and provide a max 2 DUGA (Dwelling units/gross acre) along [the] border of existing homes in Chisum Valley Subdivision". Staff finds that this proposed subdivision conforms to said condition as outlined in the Findings of Fact and Conclusions of Law as ordered by Council.

In July of 2006 (06-14-AN), when these lots were annexed into Kuna city limits, all four lots were already in the Chisum Valley Subdivision with an Agriculture zone. Furthermore, these lots were annexed into Kuna with the Local Improvement District (LID). The applicant seeks approval for a preliminary plat for approximately 73.50 acre site to include 310 buildable lots and 38 common lots. The project is adjacent to Linder Road (a major arterial) and all public utilities are near, or adjacent to the site. Applicant has been made aware that development of these lots will require connection to all city services and will be subject to connection fees for that purpose. It is anticipated that it will require five (5) phases for complete build-out and applicant has provided a phasing plan illustrating the order.

Applicant proposes connection to only one of the two existing Chisum Valley stub streets even though Kuna City Code (KCC) 6-3-3-C, requires connections to all provided stub streets. The applicant also petitioned ACHD through a variance request to allow connection to only one of the two existing stub streets. However, the ACHD Commissioners voted to deny the variance request and conditioned a connection with both existing stub streets.

Kuna Classified Road Map states that a minor collector road be placed on the west side of this site. Due to the reasons stated within the ACHD report (Dated 9.26.2018; Item C. 4 pg. 7), staff supports the alignment and offset nature of the north/south minor collector. Staff agrees with the 'Site Specific Condition of Approval' D. 8 in the same ACHD report.

Based on the review Comprehensive Plan Map (CPM), staff views this request to be in concert with the CPM approved by Council. This request reflects the goals of the City leaders and its Citizens.

This application includes a request for subdivision landscape design review. Staff finds the proposed landscaping for common areas appears to be in substantial conformance with KCC Title 5 chapter 17, Kuna's Landscaping Ordinance (KCC 5-17). Staff recommends that the applicant be conditioned to provide a code compliant scheme. Staff would like to highlight that this landscape plan (if approved), will be considered a binding plan, and shall be followed as presented and not changed or substitutions made without *prior* approval, except to bring it into conformance. Design Review for a subdivision monument(s) was not applied for, with this project, however, if a monument sign(s) is/are desired, Design Review is required.

Staff has determined this application generally complies, or as conditioned, will follow Idaho Statutes §50-222 (Annex) and §65-67 (LLUPA–Subs); Title 5 of the Kuna City Code; and the Kuna Comprehensive Plan; and forwards a recommendation of approval for Case No. 18-01-S and 18-07-DR subject to the recommended conditions of approval listed in Section 'N' of this report.

G. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5, Chapter 13,
2. City of Kuna Comprehensive Plan, adopted September 1, 2009,
3. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

H. Procedural Background:

On October 9, 2018, the Commission considered Case No. 18-01-S and 18-07-DR, including the applications, agency comments, staff's report, application exhibits and public testimony presented or given.

I. Findings of Fact for Councils Consideration:

Based on the record contained in Case No. 18-01-S and 18-07-DR, including the exhibits, staff's report and the public testimony at the public hearing, the Commission of Kuna, Idaho, hereby recommends a*pproval* of the proposed Findings of Fact and Conclusions of Law, and Conditions of Approval for Case No's 18-01-S and 18-07-DR, for the *Thistle and Vanderkooy, Farm, LLC, r*ezone request.

The Commission concludes that the Application does comply with the City of Kuna's Zoning regulations (Title 5) of KCC and/or regulations outlined in title 5 of KCC.

1. In making a decision regarding the Subdivision application, the Council is to consider Idaho Code §67-6535 (2), which states the following:

The approval or denial of any application required or authorized pursuant to this chapter shall be in writing and accompanied by a reasoned statement that explains the criteria and standards considered relevant, states the relevant contested facts relied upon, and explains the rationale for the decision based on the applicable provisions of the comprehensive plan, relevant ordinance and statutory provisions, pertinent constitutional principles and factual information contained in the record.

In addition, Idaho Code §67-6535(2)(a), provides that:

Failure to identify the nature of compliance or noncompliance with express approval standards or failure to explain compliance or noncompliance with relevant decision criteria shall be grounds for invalidation of an approved permit or site-specific authorization, or denial of same, on appeal.

2. The Commission has the authority to recommend approval or denial for Case No. 18-01-ZC and approve or deny Case No. 18-7-DR. On October 9, 2018, Kuna's Commission voted to recommend *approval for* Case No. 18-01-S; and voted to *approve Case No. 18-07-DR.*

Comment: *On October 9, 2018, Commission voted to recommend approval for Case No.* 18-01-S, to Council and *approved Case No. 18-07-DR*.

3. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances to hold a public hearing on October 9, 2018, with the Commission.

4. The Kuna Commission accepts the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.

Comment: *The Commission held a public hearing on the subject application on October 9, 2018, to hear from the City staff, the applicant and to accept public testimony. The decision by the Commission is based on the application, staff report and public testimony, both oral and written.*

5. Based on the evidence contained in Case No. 18-01-S and 18-07-DR, this proposal appears to *generally* comply with the Comprehensive Plan and Comp Plan Map as amended.

Comment: *The Comp Plan has listed numerous goals for providing a variety in housing options in Kuna. The Kuna Planning Map designates this property as Medium Density Residential and Mixed-Uses. As this request proposes MDR, the proposal follows the goals of the Comp Plan and the Comp Plan Map.*

6. The public notice requirements were met and the public hearing was conducted within the guidelines of applicable Idaho Code and City Ordinances.

Comment: *As noted in the process and noticing sections, notice requirements were met to hold a public hearing on October 9, 2018.*

J. Factual Summary:

This approximately 73.50 acre site, is in Kuna City limits, zoned R-6, (MDR), with varying historical Ag. uses and is located at the northwest corner (NWC) of Linder and Columbia Roads. These lands are lots within the Chisum Valley Subdivision. These lands were included in the Local Improvement District (LID); whereby they were obligated to satisfy a sewer connection fee equivalent to 3 Dwelling Units an Acre (DUA) at a minimum. Applicant proposes a preliminary plat for these approximately 73.50 acre, to subdivide said property into 310 boilable lots and 38 common lots. This property is adjacent to Linder Road, a principle arterial road.

K. Comprehensive Plan Analysis:

The Kuna Commission accepts the Comprehensive Plan components as described below:

The designations of Medium Density Residential and Mixed-Use shown on the Planning Map (See Map above) for these lots were approved by Council. The proposed subdivision for the site is consistent with the following Comprehensive Plan components:

Community Vision Statement:
Residents hoped for the creation of business and light commercial use centers within neighborhoods. These centers would include restaurants, gas stations, churches, *multi-family* use facilities, and other mixed-use developments. (Page 21).

Housing:
Residents envisioned higher densities in the City's core to include opportunities for mixed residential and light commercial activity. *They expressed interest in a mix of residential type dwellings applications; including single- family, multi-family, apartments and condominiums*. *They were receptive to a greater mix of lot sizes and house prices to appeal to a variety of people.* A goal expressed by many was the preservation of large lots and rural cluster development in appropriate balance with a complement of other types of residential development (Page 21).

Comment: *The proposed rezone follows the community vision and provides a way to achieve the housing goals as stated and adopted, by supplementing other existing large lot subdivisions nearby.*

Private Property Rights Goals and Objectives - Section 2 - Summary:
Ensure the City land use policies, restrictions, conditions and fees do not violate private property rights and ensure that land use actions, decisions, and regulations do not effectively eliminate all economic value of the subject property. Ensure that City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right and staff shall evaluate with guidance from the City's attorney; the Idaho Attorney General's six criterion established to determine the potential for property taking.

Comment: *Utilizing the Idaho Attorney Generals criteria, and a review by the City Attorney, the proposed project does not constitute a "takings" and the economic value is intact.*

Economic Development Goals and Objectives - Section 5 - Summary:
Ensure an adequate supply of housing for all income levels and facilitate pedestrian connections, both visually and physically, to enhance pedestrian movement (Pg. 42 – 1.5 and Pg. 43 – 3.1).

Comment: *The proposed application complies with these elements of the comprehensive plan by providing an opportunity to supply varied housing types and provide pedestrian connections, thereby meeting this goal.*

Land Use Goals and Objectives - Section 6 - Summary:
Adopt a future land use plan and map that includes natural and developed open spaces, while providing a variety of housing densities and types to accommodate various lifestyles, ages and economic groups. Protect existing neighborhoods and ensure new development is sustainable and keeps Kuna desirable. Develop cohesive neighborhoods with character and quality while incorporating a variety of densities and styles (Pg. 64 – 3.1 & Goal 3 and Pg. 65 – 4.3).

Medium Density Residential:
This designation describes areas where residential development densities generally range from four to eight units per acre. These areas will be made up of single-family homes, but may include townhomes, row houses duplexes and other types of multi-family land uses. Areas featuring these densities are generally located within the City Center and around Neighborhood Centers (Page 88).

Comment: *The proposed rezone requests an R-6 zone, for residential uses, conforming to the Comprehensive Plan and Planning Map approved by Council in August of 2015.*

Mixed-Uses:
The mixed use general land use designation pertains to a land parcel or combination of parcels that are planned and developed together. This comprehensive land use category may contain residential, commercial, office and technical uses, a variety of building types and densities, common open space variations, clustered development and recreational facilities (Page 105).

Comment: *The proposed rezone requests an R-6 zone, for residential uses, conforming to the Comprehensive Plan and Planning Map approved by Council in August of 2015.*

Housing Goals and Objectives - Section 12 - Summary:
Encourage developers to provide high-quality development with a variety of lot sizes, dwelling types, densities and price points to meet the needs of current and future population while creating safe and aesthetically-pleasing neighborhoods. Ensure housing is available throughout the community for all income levels and those with special needs. *Encourage logical and orderly residential development while discouraging developers from developing land divisions greater than one half acre because large lot subdivisions increase municipal costs*, require public subsidy and create sprawl (Pg. 155 – 1.2, Pg. 163 12.4 and Pg. 165 – 2.1).

Encourage mixed-use development that includes town centers, single-family, *multi-family*, accessory units, and other types of residential development. – Policy 1.1.2, Section 12, Housing (Page 155).

Comment: *Applicant proposes medium density residential which will contribute to availability of varied types and home sizes in a logical and orderly manner with an opportunity to provide a quality development.*

Community Design Goals and Objectives - Section 13 - Summary:
Strengthen Kuna's Image through good community and urban design principles that create self-sufficient neighborhoods. Foster good community design concepts that incorporate landscape features to serve as buffers between incompatible uses while reducing scale and creates a sense of place.

Neighborhoods:
Kuna's updated Plan is an advocate for the development of self-sufficient neighborhoods. These neighborhoods are intended to be connected by transit and other non-motorized methods of transportation. Each neighborhood will have a center, a core and an edge. (Page 179).

Comment: *With this development, the applicant will provide an extension of the sidewalk and roadway system which must comply with the Master Street Plan adopted by Kuna. Applicant has proposed connections to existing and future neighborhoods by adding pathways, sidewalks for pedestrian and non-motorized transportation, and*

adding and connecting to stub streets. Applicant appears prepared to propose a variety of housing densities thereby complying with approved land use designation outlined within the Comp Plan and Planning Map.

L. Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with all Kuna City Codes (KCC).

   Comment: *The proposed project meets the land use and area standards in Chapter 3, Title 5 of the Kuna City Code (KCC). Staff also finds that the proposed project meets all applicable requirements of Title 5 of the KCC.*

2. The site is physically suitable for the proposed R-6 new subdivision.

   Comment: *The 73.50 acre (approximate) project includes a request for subdividing the lands in 310 buildable lots and 38 common lots. The site appears to be compatible with the proposal.*

3. The Preliminary Plat is not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.

   Comment: *The land to be subdivided is not used as wildlife habitat. Future roads, dwelling units and open spaces must be planned for construction according the City requirements and best practices and will therefore not cause environmental damage or loss of habitat.*

4. The Preliminary Plat proposal is not likely to cause adverse public health problems.

   Comment: *The proposed subdivision of the property appears to follows Kuna City Codes. All development requires connection to public sewer and potable water systems, therefore eliminating the occurrence of adverse public health problems.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.

   Comment: *The Commission did consider the location of the property and adjacent uses. The subject property is in Kuna City and will be connected to the Kuna City central sewer and potable and pressure irrigation water systems. The current adjacent uses are agriculture in nature uses and the site it adjacent to an arterial road.*

6. Based on the evidence contained in Case No's 18-01-S and 18-07-DR, Commission finds Case No's 18-01-S 18-07-DR adequately comply with Kuna City Code.

7. Based on the evidence contained in Case No's 18-01-S and 18-07-DR, Commission finds Case No's 18-01-S and 18-07-DR, generally comply with Kuna's Zoning Code.

M. Conclusions of Law:

1. Based on the evidence contained in Case No's 18-01-S and 18-07-DR, Commission finds Case No's 18-01-S and 18-07-DR generally does comply with Kuna City Code.

2. Based on the evidence contained in Case No's 18-01-S and 18-07-DR, Commission finds Case No's 18-01-S and 18-07-DR, generally are consistent with Kuna's Comprehensive Plan and Comprehensive Plan Map.

3. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

N. Recommendation of the Commission to City Council:

18-01-S (Preliminary Plat), *Note: This proposed motion is to recommend approval, conditional approval, or denial for this request to City Council. If the Commission wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.*

18-07-DR (Design Review), *Note: The proposed motion is to approve or deny the design review request. If the Planning and Zoning Commission wishes to approve or deny specific parts of the requests as detailed in the report, those changes must be specified.*

On October 9, 2018, the Commission voted to recommend approval for Care No. 18-01-S to City Council, based on the facts outlined in staff's report, the Comp Plan, City Code, the record before the Commission, the applicant's presentation, public testimony and discussion during the public hearing by the Planning and Zoning Commission of Kuna, Idaho. Therefore, the Commission hereby recommends *approval* to Council for Case No. 18-01-S, a Preliminary Plat request, and voted to *approve Case No. 18-07-DR, a Design Review request* by Katie Miller (Bailey Engineers) on behalf of Thistle Farm, LLC and Vanderkooy Farm, LLC, with the following conditions of approval:

- - Applicant shall follow the conditions stated in the staff report and related agency reports.

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve the drainage and grading plans. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties". No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    c. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    d. The *Boise-Kuna* Irrigation District shall approval any modifications to the existing irrigation system.
    e. Approval from Ada County Highway District (ACHD) shall be obtained and Impact Fees must be paid prior to *issuance* of any building permit(s).
2. All public rights-of-way shall be dedicated and constructed to standards of the City, Ada County Highway District and Idaho Transportation Department. No public street construction may commence without the approval and permit from Ada County Highway District and/or Idaho Transportation Department.
    2.1– At time of development and as necessary, dedicate right-of-way in sufficient amounts to follow City and ACHD standards and widths.
3. Installation of service facilities shall comply with the requirements of the public utility or irrigation district providing the services. All utilities shall be installed underground, see **KCC 6-4-2-W**.
4. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site. Compliance with the requirements of the Boise Project Board of Control is required.
5. When required, submit a petition to the City (as necessary, confirmed with the City engineer) consenting to the pooling of irrigation surface water rights for delivery purposes and requesting to annex the irrigation surface water rights appurtenant to the property over to the Kuna Municipal Pressure Irrigation system of the City (KMID).
6. All street lighting within and for the site shall be LED lighting and must comply with Kuna City Code.

7. Parking within the site shall comply with Kuna City Code. (Unless specifically approved otherwise).
8. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted). Perimeter fencing (and permit) is required prior to requesting final plat signatures from Kuna City Clerk and Engineer.
9. All signage within/for the project shall comply with Kuna City Code.
10. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within 3 days or as the planting season permits as required to meet the standards of these requirements. Maintenance and planting within public rights-of-way shall be with approval from the public entities owning the property.
11. The land owner/applicant/developer, and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the City Council, or seek amending them through public hearing processes.
12. Applicant is conditioned to follow the these planting notes for all trees on site:
    12.1 – *Landscape contractor shall remove all twine/ropes and burlap from root balls.*
    12.2 – *Landscape contractor shall remove the wire basket from the top 1/2 of the root ball.*
13. The applicant's proposed landscape plan (dated 01/11&12/2018) shall be considered binding site plans, or as modified and approved through the public process.
14. Applicant shall follow staff, City engineers and other agency recommended requirements as applicable.
15. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED this 23rd, day of October, 2018.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:
Troy Behunin, Planner III,
Kuna Planning and Zoning Department

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PZ COMMISSION MEMBER	PRESENT	CITY STAFF PRESENT:	PRESENT
Chairman Lee Young	X	Wendy Howell, Planning Director	X
Commissioner Dana Hennis	X	Troy Behunin, Senior Planner	X
Commissioner Cathy Gealy	X	Jace Hellman, Planner II	X
Commissioner Stephen Damron	Absent	Sam Weiger, Planner I	X
Commissioner John Laraway	Absent		

6:00 pm – COMMISSION MEETING & PUBLIC HEARING

Chairman Young called the meeting to order at **6:00 pm.**

Call to Order and Roll Call

1. **CONSENT AGENDA**
   a. Meeting Minutes for September 25, 2018.

   Commissioner Gealy Motions to approve the consent agenda; Commissioner Hennis Seconds, all aye and motion carried 2-0.

2. **PUBLIC HEARING**
   18-03-AN (Annexation), 18-01-CPM (Comprehensive Map Change), 18-04-ZC (Rezone), 18-02-PUD (Planned Unit Development), 18-04-S (Preliminary Plat) & 18-20-DR (Design Review) – Falcon Crest Subdivision; Scott Wonders with JUB Engineers, on behalf of M3 Companies- Mark Tate (Owner), requests approval to Annex approximately 996 acres into Kuna City limits. Change the Comprehensive Plan Map (CPM) from Agriculture to Mixed-Use for approximately 163 acres, for a Planned Unit Development (PUD) for approx. 1,028 acres, to rezone approx. 20 acres and subdivide approx. 137 acres into 409 residential lots, 51 common lots, four common driveway lots, two well lots and one private road. This site is located at the NEC of Cloverdale and Kuna Roads, Kuna, Idaho. Please see the application for a list of parcel numbers affected by this application.
   - **Staff requests this case be tabled until October 23, 2018 – a date certain, to confer with legal counsel.**

   Commissioner Gealy motions to table Case No. 18-03-AN, 18-01-CPM, 18-04-ZC, 18-02-PUD, 18-04-S & 18-20-DR to October 23, 2018; Commissioner Hennis Seconds, all aye and motion carried 2-0.

   18-01-S (Preliminary Plat) & 18-07-DR (Design Review) – Whisper Meadows Subdivision; Katie Miller, with Bailey Engineers, on behalf of Thistle Farm, and Vanderkooy Farm, LLC's (Owner), requests approval to subdivide approximately 73.50 acres (previously zoned R-6 and four lots within Chisum Valley Subdivision No. 1 and 2) into 310 single home lots, an additional 38 common lots, following the Comprehensive Plan of MDR and the Council approved conditions of approval from the recent rezone. This site is located at the NWC Linder and Columbia Roads. APN No's; R1393850100, R1693860010, R1693860290, R1693860280.

   Katie Miller: Katie Miller with Bailey Engineers, 4242 N. Brookside Ln, Boise, Idaho 83714. Before you tonight, we have the preliminary plat for Whisper Meadows Subdivision, and here is a vicinity map. The site consists of 73.17 acres, which was rezoned on June 5 from agriculture to R-6, medium density residential. The site is located on South Linder Road, North of Columbia Road and South of Lake Hazel. Surrounding land uses to the north are agriculture and rural residential in the county. To the south is Chisum Valley Subdivision, which is rural residential and in the

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county. To the west is the new high school site. There is a proposed total of 348 lots. 309 are buildable, and 39 are common lots. Dwelling units per acre is 4.22, and our minimum buildable lot size is 5,527 square feet. Our maximum is 20,430 square feet, and the average size is 6,965. Per the order of decision by City Council on June 5, we had conditions set upon us not to exceed 4.25 units per acre. We are to provide a max of two dwelling units per gross acre on the south boundary bordering the existing homes in the Chisum Valley Subdivision. We have met that condition. There will be two accesses, one on Linder Road to the north which will be a mid-mile collector. 820 feet south, off of Linder Road, there will be another access into the development. We've got two streets to the north that access the site and one to the west, should Durant Lane ever be improved. We have two proposed to the south and the neighbors are strongly opposed. We've gone back and forth about this. We put it in the waiver to ACHD to only connect one, which was the westernmost connection point. Staff was in support of only doing a connection. We did go to ACHD Commission on September 26 and we were denied. We have to do both points per ACHD. The open space for this site is 5.56 acres for a total of 7.59 percent. We've got two acres of this dedicated to the park as you can see in the northeast there. It's got meandering sidewalks all the way around it. We've got the capability to put one U-6 or U-8 regulation-sized soccer fields in there, or one U-12 field there. Remaining open space consists of street buffers and connectivity in pathways throughout the development. On Linder Road, we have a 20-foot landscape buffer with a five-foot detached sidewalk. On the north boundary, we have a 25-foot landscape buffer and five-foot detached sidewalk. We have meandering pathways making connectivity and accessibility throughout the development very user-friendly. Should Durant Lane ever be improved, per ACHD's staff report, the applicant is required to dedicate the district with an additional right-of-way easement for future improvements along with the road trust deposit. This will be to do construction of four feet of pavement, again if and when that north-south collector ever gets improved. That is part of our conditions of approval. Our phasing plan has changed a little bit. We initially looked at five phases, but now we have the ability to do six. We're proposing an assumed start date of phase one for 2019 sometime. Phase one will occur at the northeast corner, and phase two will be to the west and will consist of 54 lots. Phase three will continue south below the park and will consist of 52 lots. Phase four will have 55 lots and go back up to the northwest and will finish the second connection on the northern collector street. Phase five will be the southeastern corner with 48 lots. We are saving phase six, because of the neighbors' position on this, to around 2027. Sewer and water connections will come from Linder Road. Our pressure irrigation will be via pressure irrigation line from our site to the Spring Hill pressure irrigation station, which is already up and operational. With that, I will stand for any questions. **C/Gealy:** What was your percentage of open space? **Katie Miller:** 7.56 percent. **C/Gealy:** What's the size of the park? **Katie Miller:** Two acres. **Troy Behunin:** Good evening Commissioners, for the record, Troy Behunin, Planner III, Kuna Planning and Zoning, 751 W 4th Street. The application before you tonight is presented for your vote to recommend approval, conditional approval or denial to the City Council for the Preliminary Plat and your decision for the Design Review. Staff just received today three letters from Ann Durrant, Richard Durrant and Joel and Michelle Van Lithe. Those three letters have been submitted for the Commission to read tonight. Staff has also passed out the updated preliminary plat the reflects the connection to the two stub streets and Chisum Valley Subdivision. I believe there's been a reduction in the overall lot count, so there's 310 buildable lots and 38 common lots. All of the noticing procedures have been followed. The subject site has recently been rezoned to residential. The four lots involved with this application are in Chisum Valley No. 1 and No. 2 Subdivision. The request does match the Comprehensive Plan Map, which is Medium Density Residential. On the east half as Mixed-Use General, as this application conforms to. The project is located at the Northwest Corner of Linder and Columbia Roads here in Kuna. The project has significant Frontage already on Linder Road. They do propose a half-mile collector from the north for at least their proportionate share. Dedication for a segment on the west side of the project has the ACHD report details. Staff does agree with the ACHD report and the conditions that are proposed for that west side collector. This application does pattern with the rezone that did take place earlier this year, 18-01-ZC. They are limited to a specific density of 4.35 dwelling units per acre and 2 dwelling units per gross acre. The applicant initially proposed just one connection to Chisum Valley, and staff was torn on how we support that. Code actually says that developers are to provide and continue stub streets that are provided. It is a little irrelevant at this point, however. The applicant went before the ACHD Commission through a variance process

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and they were denied. ACHD then required they connect to both stub streets. I'm not saying the city would have agreed to only one connection, but it really doesn't matter at this point. The applicant was trying to be a good neighbor. The Chisum Valley Subdivision is not in our jurisdiction, so the matter is not ours to decide. Since the request does follow the Comprehensive Plan, staff forwards a recommendation of approval to the Commission for the preliminary plat. Staff has also reviewed the Design Review component of the subdivision, and we do find that the applicant has proposed a significantly compliant plan. We would just like to maintain that the buffers on Linder Road, Butterfly Road, and the west side for the future collector follow the patterns that have been set forth. We know that there is some discussion on water rights, and that's what the letters are detailed about. Staff would stand for any questions you may have. **C/Young**: Regarding the letter from the Van Lithe's, have they had any contact with Bailey Engineers regarding the delivery of water. Currently, what we're talking about with the subdivision that will become Whisper Meadows, is there any current agreements between the adjacent property owners and with this subdivision in terms of water rights? **Troy Behunin**: Staff did have a conversation with Richard Durrant. In regards to the pivot that is on Whisper Meadows right now, at least according to Richard Durrant, the pivot does service the Van Lithe and Connelly property. I don't know if there's any agreement for that, but according to Richard, the pivot swings and provides water for those lands. **C/Young**: Neither the Durrants or Van Lithe's own the property that the pivot sits on. **C/Hennis**: I read that there was a pre-existing ditch that the pivot replaced. They want to make sure that was continued if the pivot was taken away. If I remember right, isn't there a note from the Control Board that says that those have to be maintained. Isn't that a condition they have to follow anyhow? **Troy Behunin**: There's state law. State law requires that valid water rights for delivery and waste have to be maintained and honored. The developer is aware of that law, and is prepared to have his engineer prepare those requirements. I had that discussion with the developer today, and he's prepared to follow state law and follow whatever is required by law. **C/Hennis**: The phasing plan that you handed out is not the current one with phase six, so is this not the current one? **Troy Behunin**: Katie will hand out her most updated version to the Commission. **C/Gealy**: I had read that staff was requesting a condition to be code compliant. **Troy Behunin**: In the past five months or so, some projects have not found it necessary to run substitutions through staff, not numbers or sizes but types. They're still code compliant but they're not what was presented. They were minor changes, because it's substituting one plant for another. We want them to know that the Design Review approval is what they need to live by, not something that your landscaper tells you. A lot of times, availability becomes an issue. This developer is not one of those who had the landscaping change on them. We just want to make sure everyone understands that this is the approved landscape plan. If it is a major issue, then Wendy will say that they need to bring it back to this decision-making body. **C/Gealy**: The plan they submitted was code compliant, but staff would like to review the changes? **Troy Behunin**: We need to see the changes and the substitutions. **C/Hennis**: We wouldn't want to word it as such that they need to abide by the landscape plan, we don't want to just state it being code compliant. We want the actual review document to be established. **Troy Behunin**: You'll notice that we said that the landscaping plan would be a binding site plan. **C/Hennis**: That was in the staff report. **Troy Behunin**: Yes, item 13. This developer does not have the problem, but if you apply to one you have to apply to all. **C/Gealy**: It would seem to me that condition 13 addresses that concern. I don't see the additional need for code compliant. **Troy Behunin**: They're coming to us saying we didn't know, and we'll say you saw the staff report. **C/Young**: We will open the public testimony. Drew Wright: Drew Wright, 7828 South McClintock Place. Kuna City Ordinance 6-1-3 provides that the purpose of subdivision regulation is for the Commission to consider whether the subdivision provides safety and welfare among other things. The harmonious development is not existing in this proposal. The Comprehensive Plan says that Kuna should continue to grow at a slow living pace as it expands. The is interest in retaining agriculture and large lot residential development. Staff should not recommend clustered larger lot rural residential developments if services can be provided to developments in an efficient and cost-effective manner. Larger lot are provided to keep a harmoniousness of the area. Page 13 in the Comprehensive Plan said a goal for the people is to cluster the development of other city residential development. Page 63 says Kuna needs to preserve a high quality of life. Page 64 Goal 3 says to ensure that new residential development is sustainable. Provide a variety of housing for Kuna residents. This is straight from the minutes of City Council. Briana Buban Vonder Haar moved to approve 18-01-ZC with the conditions of approval

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as listed in the packet, as well as ensuring the actual density would not exceed 4.25 dwellings per acre. In other words, no lot in the subdivision should be 10,249 square feet. The application that Tim Eck submitted should not be approved and should be reworked. **Jenna Vonderay:** Jenna Vonderay, 7601 S Chisum Place, Meridian. We're a neighborhood of only 30 homes. This new subdivision will threaten our safety, because the subdivision is very large. With the traffic report they did, they are estimating 2,973 trips that will generate, and 292 during the peak hour. Mr. Eck stated that he would be a good neighbor. Mr. Eck, what are your plans to mitigate accidents? Mr. Eck, could you please give the square footage of each lot? It's hard to see in the plan the square footage of those south side lots. They say they're meeting code, but we have yet to see that. Why would there be no south side buffer for our neighborhood? With phase six, is there any you can cede road development for phase six with regard to connection to stub streets in Chisum Valley? As a mom of four kids down there, the traffic going on our street onto Columbia is a major concern for me. Given sixty cars are probably in our neighborhood now, we're talking about going up to 292 cars when development is in full operation. **Sharon Luckey:** Sharon Luckey, 7741 S McClintock. My concerns like my neighbors are regarding easements needed and safety concerns of the increased traffic. Kuna City Ordinance 6-1-3 says the subdivision must promote general welfare and provide a harmonious environment. The proposed subdivision does not do so. It causes safety concerns, because there are no sidewalks in Chisum Valley. Our neighborhood consists of many families with small children to play along the road. There's no relief, and the streets are lined with steep barrow pits. At times, these barrow pits have water in them due to rain or snow melt or the irrigation runoff. It's a straight shot on Chisum Valley. It seems too high already and the ACHD report states the plan was to extend McClintock as a pedestrian walkway. Chisum would be the through street. The ACHD staff agreed with this proposal, but the ACHD board stated that McClintock and Chisum Valley needed to go in as streets. The traffic study included an estimate of the total of 2,938 daily net new trips from the new development. They're projecting 140 daily vehicles from Chisum. The traffic study did not include projections from McClintock, but you could assume another 140 would come off McClintock. The bus stop for our children is at the corner of Chisum Place and Columbia, and right at that intersection, we also have a berm divider there. It narrows that roadway more significantly and there's barrow pits on the sides. That's where our kids catch the bus. There could be potential of an additional 280 cars. **Stephanie Kennedy:** Stephanie Kennedy, 7638 S McClintock, thank you for hearing our testimony and our concerns. We were disappointed to learn that Tim Eck has no common easement area between his proposed subdivision and our existing property line. In our last meeting, Tim stated that Chisum Valley would be financially responsible for our water line, which at this point will lie on the parameter of and underneath the property of those homeowners, whose property will back up against our existing fence lines. The pipe, which has many upright valves, the homeowners will be planting and digging outbuildings on and sprinkler systems. When this line ruptures again, Tim said that Chisum Valley will be responsible for taking out the fences, sod, outbuildings, and the sprinkler systems. We will be responsible, because it's our line, we're stating that we'll be grandfathered in for fifteen years. Our original plat shows that there is an easement which is still in place. Those costs would bankrupt the subdivision, therefore I object to Tim's proposed plat. I'm asking that my questions be documented in your books as to how to have a community easement or common area that can be mandated. Also, the proposed subdivision would be held financially responsible if they rupture our waterlines. Also, there has been no discussion between Tim and ourselves as to that waterway. He said that we would be financially responsible for our irrigation line. Is there a grandfather act? We've been there for 15 years. We are also concerned about the safety of our children. There are no sidewalks at this point. With the proposed additional cars, we would ask that you would help us with the children and anyone who walks on the street at that point. **Virginia Jepsen:** 7901 South Chisum Way. I'd like to start by saying that I'm not opposed to growth. I think we all realize that it's coming. I'm opposed to the density of the subdivision, and I respectfully request that you not approve this preliminary plat application. As a resident who walks, bikes and jogs, and is a mother of two kids, I have major safety concerns with the amount of traffic that Whisper Meadows will bring. The Chisum Valley Subdivision was not designed for sidewalks. Therefore, when we walk and bike, we do so with the 300 homes of Whisper Meadows, I will not feel safe doing these anymore. I previously recommended at the previous meeting that the subdivision be a lower density. Kuna is a rural community, and most of us moved here for that reason. I'd like to reference Kuna's Comprehensive Plan that specifies that Kuna should grow at a slower

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living pace as the city expands. There is interest in preserving agricultural land within the city, not for a clustered, large lot, residential development. I would like for the City Council to address whether the Whisper Meadows Subdivision is adhering to the Kuna Comprehensive Plan. I would also like to know how the Whisper Meadows Subdivision plans to address the safety concerns of the existing Chisum Valley Subdivision. Since ACHD has already determined that both roads will connect, when will the developer be releasing detailed plans for the exponential growth and traffic that will be coming through our preexisting subdivision? I again respectfully request that until these issues have been addressed that the pre-plat not be approved. **Rick Willis:** I live at 2345 West Cogburn Street. The last time we met, it was a long discussion about small lots versus large lots. Obviously, the developer wanted the small lots. Part of his argument was that the City of Kuna spent millions of dollars designing and planning a sewer system. He stated that one of the engineers had informed him that in order for this line to function properly, a lot of rooftops would be necessary for sufficient flow. I suspect that if the system is designed properly, then that's probably the case. Shortly after the last meeting in a couple weeks, there was an article in the Kuna Melba News. The article stated that there were problems on the south side of Kuna. There were too many houses. My question is about all of these subdivisions going up in a two to three-mile radius in your treatment plant. What assurances do you have that the problems that you're experiencing in south Kuna don't migrate to north Kuna? **Jeff Henrickson:** I live at 7636 South Chisum Place. I was the irrigation manager of our subdivision for quite a bit of time, so I have some experience with these things. If you look at the first concern, it regards our pressurized irrigation (PI) system where the piping is actually on the outside of the fence. This would put it on the new property. I just want to know what provisions will be made to ensure that we have access for the mains and the operation of that system. Also, is there a possibility that the new pressurized irrigation system would tie into our mains and it would be fed all through the city? The second part of my handout outlines the problems from a gravity irrigation system that was mentioned earlier. I believe that ditch did used to go across the field, with the addition of the pivot. It just falls into a drain area that is called the ACHD easement on our plat. I attached some pictures of what that turns into doesn't hurt anything right now. Our concerns are if it is built up, it could back up and cause problems in our subdivision or somewhere else. If it's allowed to stay there, then it could be a problem for the new subdivision. The last part refers to the ACHD easement that's at the north end of our property. I'm one of the original owners, and it was explained to me that in conjunction with our barrow ditches, provide storm drainage. It's not really on our property, is it or isn't it and, where is the water going to go? I know that our developer has engineers, but again I'd like to see specific action before our plat is approved. **Alana Ellison:** I live at 7790 South McClintock Way. I would like to have the subdivision reconsidered that is by our backyards. I wanted to reiterate a few things per Kuna City Ordinance 6-1-3. The purpose of the regulations is to provide public health, safety and general welfare for the public. Safety is a big concern for our subdivision. The development for our area is not harmonious, it will be impacting our streets. It will be impacting through ways that will increase traffic. Not only do we not have sidewalks, but the streets are very narrow as it is. When you're driving through there, you can barely get two cars to pass side by side. For adding sidewalks later on, impacting the way that people move around. The irrigation is a huge concern of mine. Done the road, with the potential of having a catastrophic event, it could very well bankrupt our subdivision. There are only 30 homes that we can pass that cost along to. I really feel that a win-win situation would be if we could tie our irrigation into the new subdivision, this would eliminate the need for any kind of easements for Tim Eck. It would eliminate any issues for us as far as when there is a main break, or if something happens then we're not responsible for it. It's not going to be an effective solution to have us try to fix something. **Jared Allen:** I live at 7980 South Chisum Way in Meridian. For good reason, an R-1 shouldn't be connected to an R-6, because we don't have the infrastructure that puts the safety concerns in mind. We're putting money over the importance of safety in some of these situations. With our comprehensive plan set in place, we wanted this growth and it's happened. At some point we have to readjust it and make some better decisions on how this can be sustained long term. We need better lots and nicer homes in there, acquire money into our system. The roads were originally designed for the Chisum Valley Subdivision No. 2. There was going to be less traffic, so with this change to our new plat, we need to get going on those roads as well. We know they made their decision, but I'm the first house in that subdivision and there's a lot of safety concerns. We have kids getting off the bus, and I'm only 66 feet off that Chisum Road. A car going 30 miles per hour will have

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to stop going around that corner. As we watch traffic, people are going in over that speed. With neighborhood kids coming to visit us, I don't want to see an accident happen, because the infrastructure isn't in place. Let's postpone and change this plat until we can actually take care of the things we need to keep our community safe. **Brian Luckey:** I live at 7714 South McClintock. I want to agree with all of the neighbors in here, but I really want to emphasize when my last neighbor, Jared, was talking. For the structure of the streets, there is no center divider to keep people going in the opposite directions of their own side of the road. As you enter the subdivision, it's 55 miles per hour on Columbia Road. He's the first house on the right. He's got two young girls, and a lot of kids in this neighborhood like to conglomerate around this area. They're taking that corner pretty fast. We're talking about a lot of teenagers from this subdivision coming in this way and leaving this way. We don't have sidewalks. When you get to McClintock, you get a big "S" turn. Chisum is a straight line. We struggle with speed already with the existing neighbors, and we have over the last 19 years. When you hit South McClintock, you're going to take that big "S" turn. You have big trees that make it hard to see around that corner. You don't realize how much caution it takes when you come around the corner with oncoming traffic, because you have no divider or sidewalks. These kids are going to be in the streets. We have no speed control, no speed bumps and no sidewalks for our kids to at least get off the street and get a safe zone. I know ACHD, and we've watched Meridian Road come in to a five-lane highway. As I raised my kids, I forbid them from going down Columbia Road. I made them go down to Amity and get on Meridian Road because of the stoplight. ACHD tends to be reactive to a lot of stuff for putting in four-way intersections. I do not want to see that in our subdivision. What would you do to keep your kids safe from that incoming traffic? **Tim Eck:** I live at 6152 W Half Moon Lane. The Comprehensive Plan gave us a land use designation of medium density residential and mixed-use general. Mixed-use general dictates up to 20 units per acre. Maximum density on these two parcels would be 1152 lots. We're at 310, and we've always been at 310. The general density is 4.25 per gross acre. I don't believe Kuna has any provisions requiring density calculations to be done per acre. We did agree to limit the density contiguous to the northernmost lot. We got it down to two units per gross acre, and we can provide that calculation. We have gone through our traffic study and the ACHD process. We fought long and hard to try to achieve a single connection. Knowing that the ACHD policy and the city code requires these developments to have stub streets. They are stubbed through them to provide connectivity to the adjoining properties. When we come in later, we're required to connect to those. It's not an option not to connect. We agreed to try and mitigate that and went through the process of getting a variance. The city was neutral on it, and I was able to convince ACHD staff to agree. Then it went to a public hearing at ACHD Commission, and voted against granting the variance. For approving the project, they have to connect to both streets. They are a signing body on the plat. If we don't comply with their requirements, they don't sign the plat. The traffic and back study to Columbia. That connection is currently an LOSA. At total buildout, that connection is an LOSA. Additional traffic counts on Chisum Way is well over the ACHD monument thresholds. There's a lot of concern about easements and water conveyance, and drainage. We can't take any of that away. Through the platting process, we have to ensure the delivery of water plats to properties with water rights delivered from a diversion. We can reroute it, but we have to preserve it. It's very easy to reroute the gravity waters. Around, through under or over our plat to get to the Van Lithe property to get to the Linder Farms property. The same goes for the drainage. You don't do that until you're doing your construction drawings. Once you've surveyed the whole property and designed all the infrastructure, you're engineering the sewer and water and the surface irrigation supply. All of that is done at that time. We can't get our construction plans approved by preserving that. We have pipelines that run around their property and along the boundary of their property. I don't know if there's an easement there or not. It's their pipeline, just like when it's in the city's pipeline and it bursts in someone's backyard. There are risers on there that provided irrigation connections that we will remove, because we will not be needing them. I don't want four-inch PI risers coming from their system that I can't use. I'm in the city, so I have to connect the city's PI system. I have no choice, I cannot connect to theirs. The wires are unused, so we'll remove them to avoid potential damage. They are all required to have a 10-foot PI easement on the back of every lot. If their PI main breaks, then they have to go through those backyards. They need to remove the fence, fix the problem, and put everything back in the position it was when they entered. They're not losing their PI facility, but they could connect the city's pressurized irrigation system. They can only do that if they annex. Irrigation water cannot be

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shared between the city and non-annexed property. It's illegal. If their septic tanks all fail and they can't get permits to fix it, they'll be able to connect to our sewer. Our domestic water will be stubbed there. If they have failures in their domestic water wells. They're a lot of benefits for the improvements that they're putting in. He talked about the seven million-dollar wastewater treatment plant. The developments that were around it and the comp plan. We have an R-6 zone with an additional restriction. That limits us to 310 gross lots. Right now, we're at 309 because we lost one to accommodate the two gross layer density in Chisum Valley. We're playing with an in-depth sewer setting right now, and there's a possibility that we might not need a lift station. We want to gravity back to the 2100-unit sewer lift station right now. If we can do that, we can reclaim the one lot that we lost because we don't need a lot for our lift station. As a result of ACHD's decision to grant the variance, we've come out with the phasing that you see now. Phase six, our very last phase, will get the connections to Chisum Valley. We will not connect to them until our very last phase. If we do one a year that six years, and if we have a slow down it could be 10 years. It's right now in the very last phase. The stormwater that comes off the end of that street, the easement, is an ACHD easement that will contain stormwater that will come off of the ACHD approved streets in their subdivision. Those are ACHD streets, they're not private. Stormwater that comes off of that comes into the easement. We have to design to take it, our system will all be sub-terrain. Their stormwater in that street will go right into drop inlets and go right into our storm drain systems. The roads in their subdivision are standard ACHD approved local roads. The trees in the sight triangle have to be preserved when you're coming around the intersection. It's the property owner's responsibility to maintain that sight triangle. If the trees are blocking their view, then the trees need to be trimmed to maintain them. If somebody complained to the highway district, then they would come and enforce that. We're consistent with the Comprehensive Plan. We're exactly 100% compliant with the zoning that was granted by the Planning and Zoning and City Council. Our density is exactly what we proposed at both of those meetings. We had a couple trees that were planted and were different species. The neighbors go out to buy them and they can't get the right trees, so we have to go through the process of getting them approved. We're trying to make sure that our landscapers stay further enough ahead it, so that if they can't meet the plan exactly, then we're coming in for a request for our modification well in advance. I'll stand for any questions that the Commission may have. **C/Young:** Just to try and adjust another one of their concerns, all of the runoff has to be designed to stay within the subdivision? **Tim Eck:** All of our stormwater has to be contained on site, because they have an easement on our property. We have to take care of that. I have a very rough grading layout that I can leave with you that shows a corridor right around the boundary where the gravity irrigation is. Normally you don't do this stuff until you're engineering for construction. I've just done a rough layout of what the grades will be. We can easily run the gravity irrigation all the way around the property, however Charlie takes all of his off of Ten Mile. **C/Young:** I'll close the public testimony at 7:16. **C/Hennis:** The pre-plat conforms to what the City Council has required. **C/Young:** Unfortunately, ACHD did not want to do what City Council was requesting, but they do have to sign off on the final plat as well. **C/Hennis:** I do like the fact that at least phase it into the last absolute time frame to keep it at least out of there. **C/Gealy:** The primary concerns that I hear about are about traffic and safety. The second one is basically water, discussion about the drainage. If they choose to annex, they can hook up to the city irrigation. If they choose not to, they can still access the pipe they have that's on an easement, the subdivision property, if they need to repair it. In terms of drainage, their drainage drains into the subdivision property and the subdivision will handle it. I don't see an issue with drainage. **C/Young:** If there is an easement, then it has to be maintained and the new property owners have to encroach on that, the buildings and things like that. **C/Hennis:** It's also any of the water rights with regards to the easement they have to maintain. **C/Gealy:** That will be indicated on the plat and the new owners would be aware that there is a new easement that has to go across their property. **C/Hennis:** That takes a couple of issues presented by Mr. Henricksen, and they're going to have to be designed inside the stormwater issues. If they're not farming those fields, then they're not going to have a lot of water flowing that way. They still have to maintain the gravity drains. I think that if these construction documents are presented, then they'll answer those questions a little more specifically. **C/Young:** In regards to design review, I think that the landscape has presented in the required buffers streets that all meet city code. I don't see any issues with what's been presented. The landscaping goes with the Design Review side of things. **C/Gealy:** As far as the traffic and the safety, I appreciate your efforts to try to limit

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it to one access point. I do know that ACHD is concerned with connectivity between and among development. I wonder if there would be some traffic mitigation that would be possible to encourage people to leave the subdivision by another route. I do know that often winding streets will slow down speed as opposed to straight streets. Somebody tonight mentioned speed bumps. I had the opportunity to live overseas for a while. When traffic got too bad, they would just put a concrete planter in there and that slowed people down. **C/Hennis:** I think we tried that, and ACHD shot us down. I'm looking for someone with more experience and more creativity to look at what kinds of things could be done in Chisum. What kinds of things could be done in Whisper Meadows to mitigate the traffic concerns. **C/Young:** That's something that ACHD provides. It's not something that we condition. **Troy Behunin:** It's true. It's not something that we have jurisdiction over, but I do know that speed bumps will not be entertained by ACHD. **C/Hennis:** How do we see this in today's streets somewhere else, like over in Boise? ACHD has it in their jurisdiction, but we have it in several streets that I know of up along Mitchell. **Troy Behunin:** Standards vary from year to year. Stuff from five years ago is not allowed today. The actual way that a grandfathered right works is you put it in place legally and then code changes after it's been placed. Then it gets to remain as it was designed and built. You can't change it, you can't alter it, you can't move it. You can't do anything with it. If there were speed bumps in subdivisions in other cities, then they were probably legal at that time. They don't do that anymore. It's unrealistic to expect a developer who doesn't own property to extend sidewalks through a subdivision that's not even in the city. That's an unrealistic expectation. **C/Hennis:** We were just looking to see if there was a possible idea of mitigating the connection between the two, seeing how ACHD has overruled us. **C/Young:** I think that will temporarily help some of that. The connection point, as the last phases are being built out. The first five phases as people go through or tried to hit the lower south connections up to the north and the east. It's not available in the beginning. You kind of get drained going in the direction. **C/Hennis:** Who knows, policy might change by then. It's obviously changed before. This conforms to the zoning and policy set forth by the City Council. The developer has done the best he can to beat the traffic. Water rights need to be maintained legally, state requires it.

Commissioner Hennis motions to approve Case No. 18-01-S and 18-07-DR with the conditions as outlined in the staff report. Commissioner Gealy Seconds; Motion carried 3-0.

18-04-AN (Annexation), 18-03-S (Preliminary Plat) & 18-23-DR (Design Review) – Lugarno Terra Subdivision; Billy Edwards, with Select Development and Contracting, LLC., requests to annex a 40-acre parcel on East Deer Flat Road into Kuna City Limits with an R-4 zoning designation and to subdivide the 40-acres into 134 total lots, consisting of 114 single family buildable lots, and 20 Common lots. The subject site is located at East Deer Flat Road, Kuna, ID 83634, within Section 18, Township 2 North, Range 1 East; (APN# S1418346600). Additionally, the applicant also requests to annex a 1.725-acre parcel into Kuna City Limits with an R-6 zoning designation. The subject site is located at 1919 East Deer Flat Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN# S1419223000).

Jonathan Steele: I'm representing Select Development and our address is 2501 State Avenue, Meridian. The application shows two parcels. To the south of this side of Deer Flat is a triangular piece which is about 1.75 acres. That's the path for annexation for this application. Right now, for that particular parcel, there are no plans for the development of it. It's simply an annexation. In the future, if the applicant knows what he wants to submit with it, it would be a separate application for that. We just wanted to clarify. The one we're focused on is right here, and this is referred to as Lugarno Subdivision. In the center of the plan, there is an irrigation ditch. That irrigation ditch goes basically in a north-south direction. We submitted applications to both the Bureau of Reclamation and Boise Projects to relocate that. We submitted that application back in June. We were told sometimes that the process could take a year. We were optimistic in talking with him and working with him. Hopefully we will get approval by the end of this year or possibly January of next year. If we do, that project will be completed in one phase. If we're not successful with that, then we'll complete it in two phases. The first phase would be the easterly half with the westerly half done, once the irrigation ditches get piled. As I mentioned, it's 40 acres. It has 114 single family homes. They average

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from 8,000 to 13,000 square feet. The price range for the homes on these lots will be around $340,000. The common area totals 1.6, and we'll get to that in a few minutes. Dedicated landscaping is approximately 11 percent of the area. The plan is to tile that ditch, and right now, you can see the center south direction, a pathway. We would love to put a pathway in there. They're pushing for that to basically be a maintenance road. I want to clarify that right now, this shows up as a pathway. It's highly unlikely, but I wanted to make sure that I was clear on that. There will be strong CC&Rs with this, and we think that this project is well maintained. As far as Deer Flat, Deer Flat will remain as two lanes. We will put in a curb and gutter to the property lines for the single-family homes. There will be a detached sidewalk that is 10 feet in width. On Strobel, that will also be improved along with 12 feet of asphalt. There will be curb and gutter on the west side, a 25-foot landscape buffer and an eight-foot sidewalk. We have two options with ACHD. We think that we can take the road which takes that stub to Strobel midway up. We could stop it there and do a road trust to ensure that the balance of that road is complete once development continues to the north. I think that the reality is that we would do a road trust on that. All of the streets on that would be local streets constructed at ACHD standards. The entrance off of Deer Flat is here, and this shows 1.6 acres of common area. Below that is a 1700 square foot clubhouse. It'll have a dedicated sales office and a community room. It'll also have 850 feet of outdoor covered seating area. To the north of that will be a pool with a patio seating area. To the left will be a basketball court, and to the west there is a climbing play area. There will be a series of amenities here for this. The applicant feels that this is very important. One of the reasons I am addressing this is because the parking off of both of those streets is perpendicular to those streets. We are proposing parking to accommodate residents or people who want to come in and meet with them. We understand that staff says it's not within your policy. We're asking simply for a variance. The other option if we have to put it on there is we have to lose open space. I think like any city in this state, you want to preserve as much common area for your residents. This is maybe counter to the code, but we believe that it should not be a huge issue. We're hopeful that it's not. We've talked to ACHD about it, and ACHD accepts it. What they'll do is take the sidewalk around the parking, so it will be where the cars park into the front. We would ask for a variance in this one, so we can provide parking. We can preserve or maximize as much open area as possible. Another thing that we think is very attractive is that we use a select group for maybe four, five or six builders. We want to ensure that we have quality builders who build houses with quality construction and diversity of design, and we go through a project that's going well, we talk it all the way through. It's probably going to look like a subdivision where each one looks differently. We've done that in the past, and we think it's very successful. We intend to it in this one. We will also do six-foot vinyl fencing around the entire perimeter within, as well as people in the surrounding area. As far as the staff report, we're in agreement with the staff with the exception that we get a variance for the parking, so that we can do it as designed here. We think this can be beneficial and again we can maximize providing 1.6 acres of common area. In closing, the applicant Select Management is here to go beyond what is just the requirement. It's easy to satisfy the city and call it good. I think here with the common areas and the pathways and added landscaping, hopefully they're demonstrating to you that they want to build a quality project that you'll feel proud about. We are here to represent Kuna. I will stand for any questions you might have. **Jace Hellman**: Jace Hellman, Kuna Planning and Zoning Staff, 751 W 4th Street. As stated previously, the application before you this morning is for preliminary plat, annexation and design review. The applicant has requested to annex a 40-acre site into Kuna City Limits with an R-4 medium density residential zoning. The applicant proposes to subdivide that 40 acres into 134 total lots. There are 114 single-family buildable lots and 20 common lots. There density breaker is supposed to be approximately 2.8 residential units per acre, with lot sizes ranging from 8,000 square feet to 13,000 square feet. Applicant proposes to build on Strobel Road along the east property line. It is listed as a north-south collector in the City of Kuna Street Circulation Map. Staff would recommend that the applicant work with the staff and ACHD to ensure that the streets get constructed to standards. There are several stub streets that have been provided in this project. There are two to the west and two to the north. This includes the future stub of Strobel Road as well. The applicant will be required to install a sign that states the roads will continue in the future. Staff would defer the comments to ACHD for the language for those signs. In your application packet there is a Design Review Application packet with landscaping and open space. The applicant has proposed and dedicated the landscaping strips and buffers throughout the project that actually make about 12 percent of the

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entire project. Staff would find that the proposed landscaping requirements comply with Kuna City Code. There is the 1.6-acre common area that was proposed. As he stated, those were the amenities that are anticipated. Staff would like to make the applicant aware that after bringing forth those amenities such as the pool and the clubhouse, they will need to go for design review approval. Our series of lots along the west side, according to Kuna City 5-9-2-G, which is standards for parking states that parking shall be designed in such a manner that any vehicle leaving or entering the area onto a public or private street shall be traveling in a forward motion. This does not comply with Kuna City Code. Staff would recommend that the applicant work with staff to provide a parking area that is code compliant. Additionally, to create their path of annexation, they are requesting to annex a 1.25-acre parcel into Kuna City Limits which was on the southwest corner of the property that would give them their touch to annex the larger property. That property is contiguous to city limits to the western side of the property, which is Ashton Estates. The applicant of the representative stated that there is no development that is proposed for the area at this time. Staff would determine the preliminary plat and annexation comply with the goals and policies of Kuna City. Kuna City Code Title 5 and 6, Idaho Statute 67-65, the Land Use Planning Act, and the Kuna Comprehensive Plan. Staff would forward a recommendation for a recommendation of approval for Case No. 18-04-AN and 18-03-S. Staff would also recommend approval for 18-23-DR subject to any conditions of approval outlined by Kuna's Planning and Zoning Commission and any additional conditions added by the Commission as well. I'll stand for any questions you may have. **C/Young:** We'll open the public testimony at 7:46. **Shirley Grothouse:** 2404 East Deer Flat Road, we own approximately 3 acres and it borders the east boundary of this proposed subdivision. We have several concerns, one is the water rights. We get our irrigation from a ditch on the north and the south side of this property. I was talking to Mr. Edwards, and he assured me that our irrigation wouldn't be impeded with the tile ditches, so we could still do our gravity irrigation. I just wanted to reiterate that hopefully that will be done. My other concern is with the lights on the subdivision. That pole mounted night-lighting, are they going to be pointed downward or upward? The proposed Strobel Road will come right down beside our driveway. I heard him say that there is a sidewalk and some barriers along the east side of the road and the west side of Strobel. What will be on the west side, can we get a fence between our property, because it just borders all the way down our place. I'm looking at our driveway and Strobel Road, with nothing in between. I know the fence is going to be on the other side of Strobel Road. We have huge cottonwood trees that the red-tailed hawks nest in. I believe that would be on the border between this subdivision and us. This is where Strobel Road is going to go, I just wondered if they could move the road a little bit. I have these big trees, they're about 90 years old and the hawks do nest in there every year. I was concerned with the traffic also. Also, if this is annexed into the city, will this be pressurized city water or will they dig more wells? David Anders: I live at 1920 East Deer Flat Road, it borders the west side of this property as well. The boundary to this property will be within 30 feet of my house. I've lived in Kuna for 25 years on five acres, and I'm not thrilled about it going in right next to us. The next concern is about property, lighting, and it's quite a bit lower than my property. A six-foot fence between my property and this property will be equivalent to about three feet. This is not enough privacy at all. There are no trees or anything between the two properties. The edge of my property and the back fence and the homes behind me. Another concern that I have is about stub of this subdivision. I don't want it coming in my backyard. There's also water runoff between our two properties. On the west side of my property is the high point canal that runs between the Ashton Estates that they talked about. There are 124 homes coming in. The low-point is between our two properties, which is on the east side of me. I don't know about that water runoff, I don't know how that's being handled. I just have a concern about that, as well as the well. I'm curious which way that the sewer is running on this. Is it running east or is it running north? Is it running downhill? Is it running uphill on or between the west side of property. I'm not concerned about the Comprehensive Plan, but I'm not concerned about that. I'm not concerned about the traffic. There are already 144 homes being built that are coming in on the Ashton Estates coming into Deer Flat. There are 114 that are coming in to dwell. The traffic really hasn't mattered a lot. My main concerns are lighting and the privacy to my property and the fence privacy, I'd like to avoid weeds and plants encroaching on my property. **Jonathan Steele:** I'm with Select Development, my first regard is to what Shirley said with respect to the tree. As you can appreciate, that's going to be right of way. I like to keep trees, but I think this call goes on ACHD and not us. This goes back to the last project you heard. If the tree can be preserved, they will

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do it, but we just don't have any control over that. We don't want to impede the vision triangle. It will be determined at another point, until the east is developed. As far as the road goes, we're improving half of it plus a 12-foot section. On our side, there's a 25-foot buffer from the curb and gutter. As far as privacy goes, I think this should accomplish it. As far as lighting, I've now done something within the City of Kuna. I know photometrics is typically required. These street lights will be downcast on any other subdivision. We're all sensitive to that obviously. This is not just for the surrounding community, but for this community itself. With respect to the gentleman on the side, I can respect his concern. We don't have a lot of control over the height of the property. We will maintain an irrigation ditch to ensure that the water does not flow into his property. All water rights will be maintained that are existing, that's a state law. As far as traffic goes, every project creates traffic. This is not a high density, this is 2.8 units per acre. This could have been zoned as office, which would have created for more traffic than any residential. I appreciate the fact that it creates traffic, but there's not a development in the world that doesn't. With that I'll stand for any questions you may have. **C/Young**: As far as the stub streets go, the stub stops at the property line. If you sell that land at some point, and that land gets subdivided and the street goes through, that's when that would happen. It then stops at the property line. Jonathan Steele: As long as he lives in that house, that stub street will not impact you. It's when you sell it, ACHD will then extend the road. Right now, it stops and doesn't go beyond that. **C/Young**: Do we have any graphic that shows where the stub street is in relation to his house? **Derek Kerner**: 270 North 27th Street, Boise, Rock Solid Civil Engineering. I would a look at some of these. It looks at 350 feet, we'll see how far north that stub street is going to be. **C/Hennis**: It looks like it's going to be in his rear field. **Jonathan Steele**: That street will not be extended until something to that parcel happens. **C/Hennis**: It appears that it's on the northern side of that backyard. Jonathan Steele: This is where his property is, and this is where the stub street will be. It's about 350 feet. **C/Gealy**: There was a request from the school district for a place to students to wait for the bus and when they're dropped off. Jonathan Steele: I'm not personally aware of that, but I suspect that we can work with the school district on that. **Wendy Howell**: Typically, the school district will pick them up at the common areas. **C/Gealy**: It would be inside the subdivision? **Wendy Howell**: It would, in this case. **C/Gealy**: ACHD was talking about Deer Flat in the report. I assumed there was some curb and gutter off Deer Flat? **Jonathan Steele**: Yes, it is two lane asphalt as you know with just gravel on the edges. ACHD wants us to put curb and gutter in that existing asphalt. What we can do is either dedicate the right of way or do it through an easement. We have approximately 30 feet from the curb and gutter. If you're going towards the subdivision, 30 feet from the curb and gutter to the sidewalk which is 10 feet. There is a 35-foot landscape buffer behind that. We'll landscape that entire thing someday, not now. It's not in the five-year capital plans. Realistically they're saying 20 years, but who knows. Then they'll come in and take that right-of-way. They will potentially construct a five-lane road. You will go down it now, or you will go down it. It will be entirely landscaped. **C/Gealy**: There was some discussion of an existing driveway? **Jonathan Steele**: There is an existing driveway with a 1.75-acre parcel which is on the south side, the triangle. Right now, there is an existing driveway. What ACHD is saying in the staff report is that's fine, we can make improvements over there but we the driveway to line up with the gentlemen's house across the street. We want to get rid of one of the driveways and simply keep one. We'll go from two to one. That's with you seeing the staff report. One more thing that I'd like to say and emphasize is if the City of Kuna can work with us on the parking and the common area. We think that's very important. You can imagine if you look at that amenity area, which is 1.6 acres. You have to go in and put parking within it. You're going to lose so much open area. I don't think it is a safety factor, in fact if you think about it, it's a little bit different. We all walk behind cars all the time. We all have cars backing perpendicular to the drive. We're hoping here that there's a degree of flexibility so we can keep it out there, divide the parking, but also maximize the amount of open area that I think is more important than putting parking in the project itself. We sincerely ask for that. **C/Young**: I'll close the public testimony at 8:06. **C/Hennis**: I think it's a really nice subdivision. They're putting some amenities in that we request for a lot of subdivisions. I like the large lots, the low density. It's something that we've been trying to balance everything with. **C/Young**: You also addressed someone's question our there that the subdivision does tie into city water. There won't be any new wells dug for the subdivision. They tie into city water. **C/Hennis**: I think everything's provided well and the irrigation's going to have to be maintained for the neighbors. Obviously state law. **C/Gealy**: What about the parking for the common area? **C/Hennis**: I personally don't see too

much of a trouble with it. I would think that we just condition them to work with the city to resolve what they want. I would prefer an open area. I think they will configure that parking lot like that, it's going to be difficult. **C/Gealy:** ACHD, I don't know if they recommend it, but they have adjusted moving the sidewalk behind the stalls. But then there would have to be a drive lane. **C/Hennis:** Maybe it can be brought in a little bit more, so instead of backing into the street, they back into another area. Instead of bringing it straight into the public, they can back into here and pull out onto the street. You'll have parking stalls, and let's say that's the street. We actually move these in slightly so that you have a thing that you can pull. **C/Young:** With people pulling in and out, I'd almost be wanting to side with staff a little bit. Just because I'm not sure what this would be, if any. **C/Gealy:** I think Commissioner Hennis means moving the parking into the common area enough so that people could back out without people backing into the street. Instead of having a sidewalk behind. **C/Hennis:** Well I like the idea of having a sidewalk behind, because then you've got people have to walk between cars pulling out and people driving by. I don't think that's at all any safer. **C/Young:** I kind of agree with staff to mandate a more traditional code. **C/Hennis:** Well I think the city's trying to do something where they have to pull in and pull back out into traffic. You'd have a whole separate parking lot that is off-street. That's going to take out a whole common area versus just a length of the street. There has to be an easier way to do it than that. As city code mandates, you have to pull people in and then pull out front-wise into traffic. That means you'd have a parking lot coming off of right of way. **C/Young:** You're potentially suggesting moving the parking lot and the walkway west about 20 feet to create a drive aisle right along that walkway. I don't know if that's legal, but that's what I'm thinking. We're seeing it in different places, that's why an open area there as opposed to a whole parking lot on each side. You're going to have to do the same over here too. We see this all the time. It's not a public area, this isn't a city park. You're going to have limited traffic. **C/Young:** You're suggesting a recommendation of approval as a variance to council. That's not necessarily a full drive aisle to work with. **Wendy Howell:** Just for clarification, a variance was not requested. There's not a variance application in procedure. It's just a deviation from code. **C/Hennis:** Essentially, you're saying that it just needs to get done? **Wendy Howell:** If that's what you're choosing to do, just condition it as such. It will go with the recommendations to council for final decision. **C/Young:** I think the size of the lots and what they're wanting to do would be a good asset.

Commissioner Hennis motions to recommend approval of Case No. 18-04-AN and 18-03-S and to approve 18-23-DR with the conditions as outlined in the staff report; With a condition that the applicant request a deviation from code; And a condition that the applicant work with staff to come to an agreement; Commissioner Gealy Seconds; Motion carried 2-0.

18-11-SUP (Special Use Permit) & 18-27-DR (Design Review) – Pinson's Muffler Shop; Applicant Darrell Pinson, requests special use permit approval in order to operate an automobile maintenance shop within the Central Business District. The subject sites are located at 156 and 120 West Main Street, Kuna, ID 83634, within Section 23, Township 2 North, Range 1 West; (APN# R5070000315 and R5070000350).

Marcellus Clark: I am a project manager for BRS Architects at 1010 South Allante Place, Boise, Idaho. I am representing Darrell Pinson, who is the developer as he is looking to purchase the property for this use. I would like to start out by saying that Pinson and myself both live in Kuna. I know a lot of developers come in from outside the city and try to develop what they want. We both drive through that roundabout in downtown quite a bit and anybody who drive through it sees this big concrete box right on the corner. We're planning to repurpose that to an auto maintenance shop. The overall purpose is to extend the bays and the roof a little bit. We want the bays to be long enough to enclose that front area. That would allow the business developer to operate that building. With that proposed design for the building, it's a tightly designed site plan. One of the constraints that led to the design was the fire apparatus access path of travel that you might be able to see on the site plan. This is coming into the front entry and out of the back alley. That kind of limited the use of the site and the extension of the building. With some design, we found that it would be able to work and we have the ability to keep the 10-foot

landscaping buffer along the Linder and Main Street intersection. The proposed landscaping falls within the required landscaping requirements with the proper planting and trees. With the building itself, we will not leave it grey. We would like to spiff it up with some added color, texture and materials. The front entry will be cladded with even storefront material. The back entrance will be built with a CMU block, split face with access to tie in the existing smooth face structure. We're trying to keep it attractive and keep the existing structure there and utilize it. We feel that it's an appropriate use for that existing facility. We feel that it's an attractive accent for the city and for that corner lot. With that I can answer any questions you may have. **Jace Hellman:** Good evening Chairman and Commissioners, Jace Hellman, Planning and Zoning Staff, 751 West Fourth Street. According to Kuna City Code, in order to operate an automobile shop within the Central Business District (CBD), a Special Use Permit and Design Review are required. The subject site is located in Downtown Kuna on the northwest corner of the roundabout. At the intersection of North Main and Linder Road, street lights, curb gutter and sidewalk we're installed in that part of this project in 2016. Staff would note that these parcels are included in phase two of Kuna's revitalization project. As a result of the overall revitalization, there has been a specific list of plants that's been created to be used within the Downtown area. The applicant does have a 10-foot landscape buffer along Linder Road and an additional landscape island on the side. There is an ingress and egress from Main Street. The applicant provides one shade tree and five shrubs for every 35 feet of street frontage. This project does conform with Kuna City Code. However, as part of this Downtown revitalization is requiring the applicant to work with staff to make some changes to the landscape plan. As far as the detail for what kind of plants come in, they are in conformance with the plant list for the revitalization project. According to the site plan dated August 23, 2018, there are 14 parking spaces. This does exceed Kuna City Code, which requires two spaces for each service bay. In a CBD, off-street parking is required where physically possible to get it behind the structure. The majority of proposed parking is in the rear, and staff would just recommend that the applicant keep the project cars working in the back of the lot. Also, it is important to reserve those for parking customers. J&M Sanitation commented, saying that the proposed location of the site does meet the needs, however, staff would require that the applicant work with J&M Sanitation to lower that enclosure to their standards. Staff would note that the applicant included a new site plan. Originally, they showed one that had vinyl fencing. They were made aware that this wasn't ok. They have submitted once a CMU that shows the brick enclosure with the steel gates. Staff has determined that this application does comply with Kuna City Code. I can answer any questions you may have. **C/Gealy:** I'm vaguely aware that automobile repair needs specific requirements for a disposal of waste. Is that something that is required by another agency? **Jace Hellman:** Department of Environmental Quality does have a list of comments. There is also existing drainage at the bottom, and thank you for bringing this up. There is existing drainage that is under this car wash. I'll add as a recommendation that the applicant be recommended to work with the Public Works Department staff on how to cap that drainage. Sludge and things do not drain into the water system. **C/Young:** I'll open the public testimony at 8:27 and I will close the public testimony at 8:28. They did a nice job fitting it into the location, but I think the redress of the building will be useful. I agree that the change-up of materials is appropriate. **C/Hennis:** It sounds like the drainage systems and recommendations will work with staff and the engineer. Jace Hellman: I was going to add that there is a condition to get drainage plans approved through the City Engineer, but if we want to add additional restriction, then I guess that it would probably be beneficial.

Commissioner Hennis motions to approve Case No. 18-11-SUP and 18-27-DR with the conditions as outlined in the staff report and a condition to work with staff to make sure that the landscape buffer complies with the revitalization effort and work with the City Engineer to make sure the appropriate existing drainage system is capped or relocated. Commissioner Gealy Seconds; Motion carried 2-0.

3. COMMISSION REPORTS

4. ADJOURNMENT

CITY OF KUNA
PLANNING & ZONING COMMISSION

MEETING MINUTES
Tuesday, October 9, 2018

Commissioner Gealy motions to adjourn; Commissioner Hennis Seconds, all aye and motion carried 4-0.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:

Wendy I. Howell, Planning and Zoning Director
Kuna Planning and Zoning Department

OFFICIALS

Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

CITY OF KUNA

Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634

City Council Meeting
MINUTES
Tuesday, June 5, 2018

~~6:00 P.M. REGULAR CITY COUNCIL~~

1. *Call to Order and Roll Call*

COUNCIL MEMBERS PRESENT:
Mayor Joe Stear
Council President Briana Buban-Vonder Haar
Council Member Richard Cardoza
Council Member Warren Christensen
Council Member Greg McPherson – Absent

CITY STAFF PRESENT:
Chris Engels, City Clerk
Bob Bachman, Public Works Director
Bobby Withrow, Parks Director
Wendy Howell, Planning & Zoning Director
Richard Roats, City Attorney
Bill Jackson, Deputy City Treasurer
Lisa Holland, Economic Development Director

2. ***Invocation:*** Dean Herring, South Valley Baptist Church

3. ***Pledge of Allegiance:*** Mayor Stear

4. ***Consent Agenda:*** ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

(Timestamp 00:00:01)

All items listed under the Consent Agenda are considered to be routine and are acted on with one motion by the City Council. There will be no separate discussion on these items unless the Mayor, Council Member, or City Staff requests an item to be removed from the Consent Agenda for discussion. Items removed from the Consent Agenda will be placed on the Regular Agenda under Business or as instructed by the City Council.

A. City Council Meeting Minutes:

1. Regular City Council Minutes, May 16, 2018

NOTE: Copies of all agenda material are available for public review in the Office of the City Clerk. Persons who have questions concerning any agenda item may call the City Clerk's Office at 922-5830. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at 922-5830 at least forty-eight (48) hours prior to the meeting to allow the City to provide such services. Assistance aids must be obtained by the person with a disability.

B. Accounts Payable Dated May 31, 2018 in the Amount of $386,233.11

C. Resolutions

~~*1.* Consideration to approve Resolution No. R33-2018~~

~~A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO REPEALING CITY OF KUNA RESOLUTION NO. R18-2017 THAT AUTHORIZED CERTAIN SIGNATURES ON THE SIGNATURE CARD FOR BANKING SERVICES ON BEHALF OF THE CITY OF KUNA, SETTING FORTH A NEW PROCEDURE FOR SIGNATURES ON THE SIGNATURE CARD OF AUTHORIZED PUBLIC OFFICIALS TO BE APPROVED BY CITY COUNCIL ON AN ANNUAL BASIS AT THE SECOND MEETING IN JANUARY, ALLOWING THE MAYOR TO REVOKE THE SIGNATURE OF AN AUTHORIZED PUBLIC OFFICIAL, AND PROVIDING AN EFFECTIVE DATE.~~

~~*2.* Consideration to approve Resolution No. R34-2018~~

~~A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPOINTING CERTAIN CITY OF KUNA, IDAHO OFFICIALS AS PERSONS AUTHORIZED TO SIGN FOR BANKING SERVICES ON BEHALF OF THE CITY OF KUNA, IDAHO AND PROVIDING THAT THE SIGNATURES ARE VALID FOR THE 2018 YEAR OR UNTIL REVOKED BY ACTION OF THE MAYOR, AS PROVIDED FOR IN RESOLUTION NO. R33-2018.~~

3. Consideration to approve Resolution No. R35-2018

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING AND ADOPTING AN AMENDMENT TO THE CITY OF KUNA, IDAHO PERSONNEL MANUAL SECTION 10.1.1C BY ADDING ECONOMIC DEVELOPMENT DIRECTOR TO THE LIST OF APPOINTED OFFICIALS, AND STRIKING FROM THE LIST THE FACILITIES DIRECTOR; REQUIRING THE CITY CLERK TO DISTRIBUTE COPIES TO THE HOLDERS OF THE PERSONNEL POLICY; AND PROVIDING AN EFFECTIVE DATE.

D. Final Plats

1. Consideration to approve Case No. 18-08-FP (Final Plat) for Memory Ranch Subdivision No. 2

2. Consideration to approve Case No. 18-11-FP (Final Plat) for Patagonia No. 3

Council Member Cardoza moved to move items 4.C.1 and 4.C.2 to Business as item 7.D. Seconded by Council President Buban-Vonder Haar. Motion carried 3-0. Council Member McPherson absent.

Council President Buban-Vonder Haar moved to approve the Consent Agenda as amended. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

5. *Community Reports or Requests:*

A. Kuna City Police Fiscal Year 2019 Budget and Annual Police Report Presentation – Police Chief Jon McDaniel – ACTION ITEM
(Timestamp 00:01:24)

Mayor Stear explained this item could be just informational but it was at the pleasure of the Council if they would like to take any action.

Police Chief Jon McDaniel reviewed the 2017 Police Report. He felt the investment made by Council for 2017 really paid off and he thanked Council for their support. Overall the crime rate was slightly down and Code 3 emergency response times were within the acceptable level. He explained why some numbers were higher or lower than previous years. The School Check number was down due to a change in the way they categorized that activity but other than that everything looked good.

Chief McDaniel reviewed Kuna's Code Enforcement calls and how they were split between the Sheriff's Office Code Enforcement Officers and the Kuna City Patrol Teams. Based on the breakdown, he anticipated in the next few years Kuna would need a Kuna Code Enforcement Officer.

Chief McDaniel moved on to the summary of Service Calls and response times. There was not much of a difference between response times north of the rail line and south of the rail line.

Lastly, Chief McDaniel explained the budget and funding request which included 2 detectives; 1 Persons Crime Detective and 1 Juvenile Detective. He reviewed the need for these new detectives as well as the remaining cost of an additional School Resource Officer that the School District could not completely cover. It was about 6.7% of the cost of that School Resource Officer and it would allow for that officer to be there for the whole 9 months. The budget also included the 3% COLA the BOCC had tentatively approved for all the Ada County employees. If the request was accepted the roughly $100.00 per resident cost for police services would still be less than half the average in Ada County and was still over 20% cheaper than Burley

which was around 14,000 or 15,000 and also contracted with their Sheriff's Office. With that he stood for questions.

Mayor Stear added that he and Chief McDaniel had many discussions on this and he felt the additional funding for the School Resource Officer took enough burden off the City Officers to be well worth it and would increase their effectiveness.

Chief McDaniel shared how it could also help with response times.

Council Member Christensen asked if the $143,958.50 listed for vehicles was just replacement or if it included new vehicles for the added staff.

Chief McDaniel explained it did and how that $143,958.50 broke down. He offered to get the breakdowns to Council.

Council President Buban-Vonder Haar said that would be great.

Council Member Cardoza asked for clarification regarding the number off to the side, 538, on the Support Line Item.

Chief McDaniel responded that was the total of their Society, Persons, and Property Crimes. He explained how that reporting and cost association worked.

Ada County Sheriff's Office Planning and Resource Manager Christopher Saunders further explained that break down.

Council Member Cardoza asked what Kuna paid the previous year for the Less Shared Credit.

Chief McDaniel replied 7% and explained what that shared services credit covered. The plan was for that to remain a flat 7% fee every year.

Council Member Cardoza asked if the 3% COLA was locked in with the County Commissioners.

Chief McDaniel believed it was pretty solid based on everything he had heard.

Council thanked him for his presentation.

B. Ada County Prosecutor's Office funding request for Fiscal Year 2019 – Tamera Kelly, Ada County Deputy Prosecutor – ACTION ITEM
(Timestamp 00:24:26)

Ada County Deputy Prosecutor Tamera Kelly presented their request for $55,570.00. She explained how they came to that number and what that request covered. It was a bit more money than the previous year. That was mostly because the amount of

misdemeanors decreased and the cost for each attorney went up a little. All of the deputies had received a small cost of living increase the previous year and they add that in the following year. She stood for questions.

Council thanked her for her presentation.

6. *Public Hearings:* (6:00 p.m. or as soon thereafter as matters may be heard.)

A. Public Hearing and Consideration to approve 18-01-ZC (Rezone) - Troy Behunin, Planner III – ACTION ITEM
(Timestamp 00:28:28)

Applicant, Katie Miller, with Bailey Engineers, on behalf of Thistle Farm and Vanderkooy Farm, LLC's (Owner), requests approval for a rezone of approximately 73.50 acres of four lots within Chisum Valley Subdivision No. 1 and 2, from Agriculture (Ag.) TO an R-6 (Medium Density Residential) MDR zone, following the Comprehensive Plan. This site is located at the NWC Linder and Columbia Roads. APN Nos; R1393850100, R1693860010, R1693860290, R1693860280.

Katie Miller with Bailey Engineering, 4242 N Brookside Lane, Boise, Idaho 83714, presented the application on behalf of Thistle Farm and Vanderkooy Farm, LLC. Ms. Miller stressed that this request was for a rezone and rezone only. She pointed out one opposition they would be hearing from the neighbors to the south of their project would be that there was not enough low density residential in the City of Kuna. She pointed out the areas that were zoned low density residential in Kuna's Comprehensive Plan and that what they were asking for that night was very conservative and in compliance with the comprehensive plan. She noted the subdivisions that were R-6 designations that had recently been rezoned and approved and were consistent with the Comprehensive Plan. She reviewed the infrastructure that had been going in that would support this subdivision and stood for questions.

There were none.

Mayor Stear made sure that all who wanted to testify were signed up and that those who did sign up had signed up for the correct public hearing. Those that signed up for the Public Hearing on Ordinance No. 2018-21 had actually meant to sign up for this hearing so that change would be made.

Planner III Troy Behunin presented the staff report on the application. He reiterated that this application was only for a rezone. He noted that all noticing procedures had been met and in fact they had extended the land owner letters from 300 feet to 400 feet given the nature of the project. He stated that while some would like to discuss the pre-plat they would only be talking about the rezone that night. He reviewed the application and noted staff put forward a recommendation of approval. He stood for questions.

Council President Buban-Vonder Haar wanted clarification on the rezone to R-6 and the stipulation set forth in the Planning & Zoning Minutes of the intent to build 4.25.

Mr. Behunin confirmed that was still what was being asked for. He added that staff did receive a letter from a citizen the previous afternoon and would like a minute to read that into the record.

Council President Buban-Vonder Haar moved to open the public hearing. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Support: None

Against:

Stephanie Kennedy provided Council with photos which were assigned as Exhibit C-7 and thanked Council for allowing them the opportunity to chat with them. Ms. Kennedy was a resident of Chisum Valley neighborhood and lived at the northeast corner of the subdivision. Ms. Kennedy expressed concerns regarding losing views, wide open spaces, solitude, and peacefulness. Most importantly she was concerned about safety. She felt becoming a thoroughfare would negatively impact their young children and their elderly with mobility issues. She felt traffic congestion would compromise their safety and emergency service response times. Lastly, there was an issue with the easement. The main water line was ruptured at the back corner of her property and there was a huge back hoe and end loader that had to come in. They had to take out the entire back corner of her property and both proposed property lines were impacted. There was equipment that had to be brought in to repair the pipes and a huge mess. There was no way the small easement they were asking for could ever have compensated for the amount of equipment and mess that was there. This could potentially happen again and with the very close proposed property lines the homes and yards could be flooded in both neighborhoods. She asked that Council reconsider the proposed plans.

Mayor Stear asked what she would recommend if there was a different type of development out there.

She proposed a larger easement. She stated she had discussed this with Tim and suggested they put a common area back there.

Virginia Jeppson, 7901 S Chisum Way, Meridian, Idaho 83642, stated she shared many of the concerns her neighbors had. They realized growth was coming and they couldn't stop it. Her goal was not to stop it but to find a compromise both sides would be happy with. She had significant concerns with an R-4 to R-6 subdivision being built adjacent to theirs and tying into it. They did not have the infrastructure to support that increase in population. She was concerned about safety, especially in regards to the number of children and pets in their subdivision, their lack of sidewalks, and that they ride their bicycles in the streets. She noted how much she

and her husband enjoy owning a small piece of land and that there was not much opportunity for that in the valley. She proposed they build an R-1 instead of an R-6 subdivision which there seemed to be plenty of. This would bring more affluence to Kuna. She did not believe there would be any issue selling the larger lots considering how quickly they were selling in their subdivision.

Ms. Jeppson replied to an earlier comment regarding the fact that there was always a plan to add on to their subdivision. She stated there was but they had understood that it was to be R-1. She felt R-1 would leave more than enough access off Linder and no need to tie into their subdivision. It also would not negatively impact their property value. She encouraged Council to raise the bar instead of approving another R-4 to R-6 subdivision of cookie cutter homes.

Jenna Von Der Ehe, 7901 S Chisum Way, Meridian, Idaho 83634, pointed out that Ms. Miller had failed to include the Silver Trail Subdivision that had infiltrated part of that yellow low density area as well as the high school property with all of those homes just north of the high school. She noted, in regards to infrastructure, there was no mention of the high school and the impact to the congestion created when just their 25 homes were trying to get out onto Columbia to head west in the mornings, which was nearly impossible. She shared her amazement at people's memories of open spaces shared with her when they looked at the historical photos of Kuna she had up in her local store.

Ms. Von Der Ehe stated growth was inevitable but, with the rapid growth of track homes and nothing approved that was less than an R-4, what legacy would they be leaving for their kids. She was not opposed to the growth but was opposed to using their subdivision as a thoroughfare. She agreed with Ms. Jeppson in her recommendation of an R-1 subdivision and that there should be no problem selling lots that size. Everyone wanted a piece of land to call their own and it would raise the bar. She thanked Council.

Lauri Allen, 7980 S Chisum Way, Meridian, Idaho 83642, shared concerns regarding the increase in traffic and risks they were already dealing with including going around a blind corner from Columbia, which had a 50 MPH speed limit, to the subdivision, which had a 25 MPH speed limit. Drivers' speeds were still high as they came into the subdivision. They had many children entering and leaving their subdivision which they could only do by crossing through oncoming traffic at that blind corner. Their subdivision had meetings regularly to discuss these issues. The increase in traffic from allowing a connection road through their subdivision would significantly increase their risk of having a fatal accident involving one of their children which was unacceptable. They did not currently have sidewalks or walk paths to handle that traffic safely. She noted an incident would come back to the City or Highway District for not protecting its citizens. She strongly urged Council to ensure that they did not have connections through their subdivision. She felt an R-1 should never connect to an R-6. She encouraged the Sheriff to come out and test the

amount of traffic their subdivision could actually handle. She stated it was not possible to bring all of that traffic through their subdivision. She thanked Council.

Jeff Hinrichsen sent a letter via email but it didn't arrive. He had an existing letter in the packet though.

Josh Riccardi, 7752 S McLintock Place, Meridian, Idaho 83642, stated their subdivision was more like an estate in the Comprehensive Plan. He felt, instead of rezoning around them, it would be better to keep the same profile and standing they had with their established community and connect on to it. The community was concerned about the number of R-6 and R-8 subdivisions that were being approved through the City. He cited the current Comprehensive Plan Survey. He noted the Comprehensive Plans previously approved did not really take into consideration already established communities and felt that was why there was so much kick back on the R-6 and R-8 approvals. He reviewed the lack of infrastructure in their rural R-1 community and the number of kids everywhere. He touched on the traffic issues that would be brought about by putting a higher density subdivision in next to them. He wanted to see an R-1 or R-2 instead.

Mayor Stear mentioned the City was in the middle of a Comprehensive Plan rewrite called Envision Kuna. There were several things in the current Comprehensive Plan that they felt did not get enough community input.

Alana Eyolfson, 7790 S McLintock Place, Meridian, Idaho 83642, stated she was glad they were looking at changing the Comprehensive Plan. The plan was developed over 10 years prior and there had been a lot of changes. She had moved to Chisum Valley Subdivision for a certain type of lifestyle. The proposed plan for the north part of their subdivision would change all of the dynamics of their subdivision. They were not there to talk about safety or water issues; just the density. They felt there were already a lot of high density homes in the area and they asked that they reevaluate that, particularly the direct impact to their subdivision. She reiterated Mr. Riccardi's comments regarding the Comprehensive Plan Survey and the comments of other testimonies regarding putting in an R-1 subdivision instead. She thanked Council.

Curtis Ward, 7941 S Chisum Way, Meridian, Idaho 83642, echoed the sentiments of the other testimonies especially in regards to traffic concerns, safety, and putting in R-1 or R-2. He also suggested they not connect the subdivisions.

Stephanie Shank, 7825 S Chisum Way, Meridian, Idaho 83642, shared why she had moved to the Chisum Valley Subdivision. Her concerns had been covered in the previous testimonies. She added that they had chosen their rural lifestyle and they should be allowed to continue with it.

Planner III Troy Behunin read into the record a letter received on June 4, 2018 in opposition. The letter echoed the thoughts of the other testimonies given in

opposition and stated they did not believe ACHD required the subdivisions to connect. The letter cited the ACHD Policy Manual and requested that all steps be taken to avoid connecting their subdivision with Wisper Meadows.

Dru Wright, 7828 S McLintock Place, Meridian, Idaho 83642, brought up that the developer indicated in the Planning & Zoning Meeting that it was not possible to zone this new subdivision at an R-1 or an R-2. Mr. Wright used Star as an example of being able to support an R-1 or an R-2 with the sewer lines. He wanted Council to be aware of that and thanked them.

Neutral: None

Rebuttal:

Tim Eck, the applicant, reviewed the application was for rezone only and all issues pertaining to the preliminary plat would be differed until the preliminary plat was brought before Council. He explained the zoning of the project areas in the Comprehensive Plan and how their request complied with that. He stated Kuna had planned for this type of growth when the Comprehensive Plan was approved 10 years prior to this.

The applicant shared plans to buffer the Chisum Valley Subdivision with larger lots at 2 homes per gross acre along their south edge which would be confirmed when they came forward with their preliminary plat.

Mr. Eck addressed the statement regarding sewer mains supporting lower density. The previous City Engineer, Mr. Law who had retired, discouraged plats that consisted of excessive low density and would not support a plat of half acre or larger lots. Sewer mains required volume to scour. Insufficient flow resulting from lower densities would result in sewer flows inadequate to scour the pipes and require excessive maintenance.

The applicant moved on to the cost of 1acre lots. Mr. Eck stated that people fail to understand how few people can actually afford these larger lots. There simply was not a market for lots or homes at that price in Kuna. He gave the examples of Arrow Rock and Mineral Springs for large lot development failures. He also noted that Chisum Valley was not annexed into the City of Kuna and did not pay City Tax Assessments. He explained it was through a loop hole that the subdivision was able to be built and why that type of development was now prohibited in the city and no longer an option. Mr. Eck explained the spec homes they were building were not entry level or starter homes and the property tax values generated by Whisper Meadows were 3 times the property tax values generated by Chisum Valley.

Mr. Eck stated he had comments and answers regarding traffic concerns that he would be glad to share but the traffic concerns were a transportation issue that

should be reviewed at the preliminary plat application not the zoning application. He stood for questions and invited his attorney to come forward to finish his rebuttal.

Jeff Bower, the attorney for the applicant, clarified the conditions of approval. The applicant did accept all of the conditions of approval in section O of that night's application. The applicant accepted the Planning & Zoning Commission's recommendation of the limitation of 4.25 units per acre. However, they asked that Council reject the recommendations for limitations on connectivity. They felt it was premature and they had not put forth any street design. He listed various reasons for rejecting the limitations on connectivity including ACHD's comment letter stating they would weigh in on it in the future.

Mr. Eck stood again for questions. He reiterated traffic questions were really outside of a zoning application but if they wanted to inquire about it he would be glad to provide answers.

Council Member Christensen asked the applicant if he took in consideration the surrounding viewpoints and impact to the scenery of the area when rezoning a piece of land.

Mr. Eck responded they looked at the comp plan which anticipated, expected and told them what to do. They were at the very bottom of the zoning expectation in their comp plan designation. He explained how this was a way to try to remain contiguous to Chisum Valley and reiterated how their plan met with the plans and expectations set forth by the City of Kuna in the Comprehensive Plan.

Council Member Christensen clarified there was no chance in convincing him to do a lower designated zone.

Mr. Eck replied R-4 was already at the bottom. They were already assessed 3 EDUs an acre and were guaranteed with the LID. The R-1 didn't work. He was told the sewer mains would not support it by the previous City Engineer, Mr. Law. There was also no market for 1 acre lots in Kuna.

Council Member Christensen thanked Mr. Eck for using the other examples. He asked where Mineral Springs was located.

Mr. Eck stated it was on the corner of School Street and Ardell.

Council President Buban-Vonder Haar clarified its location.

Audience members asked if they could ask questions.

Mayor Stear replied sorry but no.

An audience member asked if they could have an extra minute like the applicant.

Mayor Stear replied sorry but no.

City Clerk Chris Engels clarified the applicant had remaining time left from their original presentation so that was where their extra minute came from.

Council President Buban-Vonder Haar moved to close the public hearing. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
(Timestamp 01:34:32)

Council Member Cardoza asked Planning and Zoning Director Wendy Howell if the least they could go on this was an R-4.

Planning & Zoning Director Wendy Howell nodded.

Council Member Cardoza shared his concerns regarding Kuna's roads. He felt they were inadequate. He stated he was very happy with other subdivisions Mr. Eck had done and he felt Mr. Eck was very agreeable to most of the neighbors to his subdivisions. He wanted to see the minimum of an R-4 there since their hands were tied with the Comprehensive Plan.

Council President Buban-Vonder Haar clarified the 4.25 was acceptable to Council Member Cardoza or did he want it to be 4.0.

Council Member Cardoza had mixed emotions because he felt Mr. Eck was trying to be a good neighbor by putting 2 homes per acre along the edge but that meant some of the other acres would be at 5 homes per acre. It had to be made up somewhere. Until the Comprehensive Plan was reevaluated their hands were tied and Mr. Eck was trying to be agreeable. Council Member Cardoza would be fine with the 4.25 per acre as long as the buffer zone was 2 homes per acre.

Council Member Christensen echoed a lot of what Council Member Cardoza said. He had very mixed emotions and felt it was a tough situation over all.

Mayor Stear asked if there was anything that would make it one way or the other for him.

Council Member Christensen stated it was the first step in what they were seeing in Kuna and he felt they had to take responsibility for what was going on out there. He knew it was a rezone and would stay away from preliminary plat stuff but at some point just saying their hands were tied because of a Comprehensive Plan written 10 years ago just didn't sit well. They needed to look at what had happened over the last

10 years and go from there on decisions like that. He felt he just needed to take responsibility sometimes and it made decisions tough.

Council President Buban-Vonder Haar said the proposal complied with the Comp Plan and appreciated that despite the fact the current zoning allowed for much higher density Mr. Eck was willing to go with a density at the much lower end of the existing densities. She felt 4.25 was a fair compromise especially with the 2 homes per gross acre as a boarder. She was 1 of the people who wanted larger lot sizes and an opportunity for people to have the next step up from their starter homes. She did not think that Mineral Springs hit that point. She was hoping the homes in the .2 - .25 range would provide that. She knew a lot of the other concerns would be appropriately addressed in the platting stages. The request complied with the Comprehensive Plan so she was inclined to grant the request with the conditions of approval they had discussed.

Council President Buban-Vonder Haar stated the request met the comp plan goal of providing a greater variety of residential options. This would also provide greater pedestrian connectivity and add additional open spaces. All requirements regarding noticing were met and the request complied with the Comp Plan and City Code.

Council President Buban-Vonder Haar moved to approve Case No. 18-01-ZC (Rezone) with the conditions of approval as listed in the packet as well as insuring the actual density would not exceed 4.25 homes per acre and a density of 2 homes per gross acre along the border with the existing subdivision be enforced in the plat when brought before Council to provide an ease of transition. Seconded by Council Member Cardoza. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Buban-Vonder Haar
Voting No: Council Member Christensen
Absent: Council Member McPherson
Motion carried 2-1.

B. Public Hearing and Consideration to approve Ordinance No. 2018-21 – Richard Roats, City Attorney – ACTION ITEM
(Timestamp 01:45:48)

AN ORDINANCE OF THE CITY COUNCIL FOR KUNA, IDAHO AMENDING TITLE 6, CHAPTER 2, SECTION 4 KUNA CITY CODE TITLED FINAL PLATS TO ALLOW FOR THE CITY ENGINEER TO SIGN THE FINAL PLAT PRIOR TO CERTAIN SUBDIVISION IMPROVEMENTS AND CONDITIONS BEING COMPLETED AND SET FORTH THE PROCEEDURE FOR THE CITY TO ACCEPT A FINANCIAL GUARANTEE TO INSURE THE COMPLETION, INSPECTION AND ACCEPTANCE OF THE IMPROVEMENTS AND CONDITONS THAT ARE BEING DEFFERED; AND PROVIDING AN EFFECTIVE DATE.

Consideration to waive three readings of ordinance
Consideration to approve ordinance
Consideration to approve summary publication of ordinance

City Attorney Richard Roats explained the changes to be made to City Code. He handed out a document to Council that made 2 minor changes to the document that was in the packet; adding under I.3. the landscaping that was deleted erroneously and 6 was moved up. He asked for their approval of those changes and stood for questions.

Council President Buban-Vonder Haar moved to open the public hearing. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Support: None

Against: None

Neutral: None

Council President Buban-Vonder Haar moved to close the public hearing. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-21 with changes. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-21 with the 2 changes as suggested. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

Council President Buban-Vonder Haar moved to approve summary publication of Ordinance No. 2018-21. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

7. *Business Items:*

A. Introduce new Economic Development Director Lisa Holland – Mayor Stear
(Timestamp 01:52:35)

Mayor Stear invited the City of Kuna's new Economic Development Director to come up and introduce herself. He shared his excitement to have her on board.

Economic Development Director Lisa Holland stated she was excited and humbled to work with the City of Kuna and gave some brief background on herself. She stood for questions.

Council welcomed her.

B. Police Impact Fee Study and Committee Request – Jon McDaniel, Police Chief – ACTION ITEM
(Timestamp 01:54:00)

Request to convene the Fire Impact Fee Committee to function as a Police Impact Fee Committee to advise on potential police impact fee and request for up to $2,000.00 for a police fee impact study.

Police Chief Jon McDaniel presented the request. He explained the need to plan for a police department. They had adequate space but there were some issues with parking and safety. He had asked the 5 members of the current Fire District Impact Fee Committee if they would be willing to be part of the Police Impact Fee Committee if Council approved it and they all agreed.

Chief McDaniel explained the cost of the impact fee study and mentioned the $2,000.00 fee was reimbursable with the first impact fee if the committee and Council felt there was a need and chose to do that. He asked for permission to convene that committee and stood for questions.

Mayor Stear added a bit more background on the City's relationship with Galena Consulting and how the discounted rate of $2,000.00 came about.

Council Member Cardoza suggested taking it out of the $200,000.00 and the City would reimburse it when they got the money back.

Chief McDaniel wished state code allowed them to use some of the impact fees for staffing.

Council Member Cardoza felt the Council all agreed growth should pay for itself and an impact fee was a very fair imposition. He had no problem with the $2,000.00.

Chief McDaniel shared they were in preliminary talks regarding other potential stakeholders such as South County. They would love to have combined spaces within city limits and were looking into the possibilities.

Council Member Cardoza stated the Fire Department was looking for a north plant. He suggested the Police Department add to that facility so they would be available with the Fire Department in the same complex. He asked Mayor Stear if that was legally available.

Mayor Stear replied they could do that. They wanted to look at all different options to see what would work out the best.

Chief McDaniel added Chief Palmer had been very gracious in offering a space for an officer to work out of and stay in their area unless there was a major emergency elsewhere but what they were looking for was more of a central police station that would be closer to Kuna's schools, banks, and downtown businesses.

Council President Buban-Vonder Haar clarified the committee would have to determine whether or not to reimburse the City.

Mayor Stear stated the committee would have to expend the funds.

City Attorney Richard Roats explained the process of the reimbursement.

Council President Buban-Vonder Haar cited the ever increasing need for more police and the Council's interest in growth paying for itself.

Council President Buban-Vonder Haar moved to authorize the expenditure of up to $2,000.00 from the contingency fund to be used to reconvene the Fire Impact Fee Committee to function as a Police Impact Fee Committee to advise on potential Police Impact Fee. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

C. Discussion on Parking Area Off Stroebel Road with Funding Request – Bobby Withrow, Parks Director – ACTION ITEM
(Timestamp 02:01:07)

Parks Director Bobby Withrow apologized for sending Council proposed property upgrades instead of his memo. He reviewed the parking situation at Stroebel Road and asked Council for funds to get the parking up and going and to cover the Anderson's request for a lease. He explained the potential lease agreement, requested $10,000.00, and permission to start working with City Attorney Richard Roats on the lease agreement with the Andersons.

Council President Buban-Vonder Haar asked if there was a reason they couldn't wait to approve the funds until after Council could review the lease.

Mr. Withrow replied no.

Council Member Christensen felt it would be good to wait until after seeing the lease. He asked if parking was really that bad on Stroebel.

Mayor Stear and Mr. Withrow both stated it was.

Council Member Cardoza asked if the parking would be available year round.

Mr. Withrow responded they could put in year round use.

Council Member Cardoza noted the creek only had water in it for 3 months so in essence they would be paying $10,000.00 for 3 months. He wanted it understood that if Mr. Anderson used it to park his equipment he would have to pay the City rent back. He felt $10,000.00 was excessive.

Mr. Withrow stated the City could look into purchasing the property but at the moment a lease was the easy way to get the cars off the road and make that area safer until they could come up with something better and safer.

Council Member Cardoza thought a bus would be safer but also thought that would probably cost more than $10,000.00. He didn't have a better answer that that though. He concluded he wanted to see the lease and what it encompassed.

No action was taken.

D. Signatures for Banking Services – moved from the Consent Agenda

1. Consideration to approve Resolution No. R33-2018 - ACTION ITEM
(Timestamp 02:06:24)

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO REPEALING CITY OF KUNA RESOLUTION NO. R18-2017 THAT AUTHORIZED CERTAIN SIGNATURES ON THE SIGNATURE CARD FOR BANKING SERVICES ON BEHALF OF THE CITY OF KUNA, SETTING FORTH A NEW PROCEDURE FOR SIGNATURES ON THE SIGNATURE CARD OF AUTHORIZED PUBLIC OFFICIALS TO BE APPROVED BY CITY COUNCIL ON AN ANNUAL BASIS AT THE SECOND MEETING IN JANUARY, ALLOWING THE MAYOR TO REVOKE THE SIGNATURE OF AN AUTHORIZED PUBLIC OFFICIAL, AND PROVIDING AN EFFECTIVE DATE.

City Attorney Richard Roats stood for questions.

Council Member Cardoza was worried about the line in the resolution allowing the Mayor to revoke the signature of an authorized public official.

Mr. Roats clarified the reason for that line.

Council Member Cardoza asked if it would be better to have all 4 council members authorized to sign the second signature. He then asked if the Council and Mayor were bonded for any money that might be misappropriated.

City Clerk Chris Engels stated she was not aware of any bonding in that circumstance. She did know the bank required the City to provide them with a copy of the resolution and the signature cards together in order to provide signature authority.

Council Member Cardoza felt anyone who was authorized to sign should be bonded.

Ms. Engels replied that question would need to go to ICRMP.

Mr. Roats stated ICRMP provided coverage for that so there was no need to bond.

Council Member Cardoza asked him to confirm that.

Mr. Roats replied he would.

Council Member Cardoza reiterated his desire to have all 4 council members on the signature card if the Mayor was going to be allowed to revoke the signature of any authorized public official.

Council President Buban-Vonder Haar suggested modifying to give the Mayor authority to revoke a signature for a 2 week period that was subject to Council either concurring the revocation or authorizing a new signatory. She was concerned about somebody leaving before a council meeting convened and their signing authority needing to be revoked immediately. Her suggestion would cover that concern but she asked if Council Member Cardoza felt it covered his concern.

Council Member Cardoza didn't have a problem with that but wanted all 4 council members' signatures on the card. He wanted any council member to be able to sign in case others weren't available.

Mr. Roats explained how the second signature worked. The Mayor was the second signature and it was the Council President's duty to step in as signature if the Mayor was unavailable. He did not recommend delegating that all the way down.

Council Member Christensen stated he liked Council President Buban-Vonder Haar's suggestion and thought it was a good idea.

Mr. Roats suggested the language "to revoke in an emergency and said action upon the concurrence of Council at the regularly scheduled meeting".

Council President Buban-Vonder Haar suggested making it a second sentence.

Mr. Roats reviewed the intent of this resolution.

Council President Buban-Vonder Haar moved to approve Resolution No. R33-2018 with the changes discussed. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

2. Consideration to approve Resolution No. R34-2018 - ACTION ITEM
(Timestamp 02:19:25)

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPOINTING CERTAIN CITY OF KUNA, IDAHO OFFICIALS AS PERSONS AUTHORIZED TO SIGN FOR BANKING SERVICES ON BEHALF OF THE CITY OF KUNA, IDAHO AND PROVIDING THAT THE SIGNATURES ARE VALID FOR THE 2018 YEAR OR UNTIL REVOKED BY ACTION OF THE MAYOR, AS PROVIDED FOR IN RESOLUTION NO. R33-2018.

There were no questions regarding Resolution No. R34-2018.

Council President Buban-Vonder Haar moved to approve Resolution No. R34-2018. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

8. *Ordinances:*

A. Consideration to approve Ordinance No. 2018-22 – ACTION ITEM
(Timestamp 02:19:53)

AN ORDINANCE OF THE CITY COUNCIL OF KUNA, IDAHO AMENDING TITLE 12, CHAPTER 2, SECTION 15 OF THE KUNA CITY CODE PROVIDING FOR:

- ESTABLISHING THE JOINT DEVELOPMENT IMPACT FEE ADVISORY COMMITTEE;
- THE COMMITTEE NAME;
- THE MEMBERSHIP;
- THE COMMITTEE ORGANIZATION;
- THE COMMITTEE REPORTING; AND

AMENDING TITLE 12, CHAPTER 2, SUBSECTION 17 M TO STATE THAT THE JOINT ADVISORY COMMITTEE CREATED DURING THE

PREPARATION OF THE CAPITAL IMPROVEMENT PLAN BECOMES THE JOINT ADVISORY COMMITTEE CREATED BY THIS ORDINANCE AND PROVIDING FOR AN EFFECTIVE DATE AND PUBLICATION.

Consideration to waive three readings of ordinance
Consideration to approve ordinance
Consideration to approve summary publication of ordinance

City Attorney Richard Roats explained the reason for the ordinance.

Council Member Cardoza asked if this would include the Police Impact Fee Committee.

Mr. Roats replied it did not. The Police Impact Fee Committee would have its own mechanism.

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-22. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-22 Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

Council President Buban-Vonder Haar moved to approve summary publication of Ordinance No. 2018-22. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

B. Consideration to approve Ordinance No. 2018-23 – ACTION ITEM
(Timestamp 02:23:04)

AN ORDINANCE OF THE CITY OF KUNA, IDAHO AMENDING TITLE 7, CHAPTER 6, SECTION 3 TITLED SERVICE CONNECTION CHARGES PROVIDING FOR:

- CERTAIN CLARIFICATIONS REGARDING THE SEWER CONNECTION CHARGES AND THE DEFINITION OF EDU;
- THE DEFINITION OF THE "EDU USE" TO CONFORM WITH THE CALCULATION CONTAINED IN THE CURRENTLY ADOPTED CITY OF KUNA SEWER MASTER PLAN;
- A REVISION TO THE EDU EVALUATION PROCESS FOR NON-RESIDENTIAL USES;

• A DEFINITION TO THE EDU CALCULATION FOR MULTI-USE PROPERTIES;
• A MECHANISM TO REVIEW EDU USE AFTER JANUARY 1, 2018, AND ALLOWING THE CITY TO REQUEST THE REVIEW, AND SETTING FORTH THREE YEARS AS THE TIME TO REVIEW PAST ACCOUNTS;
• A PROCEDURE TO DETERMINE THE EDU CALCULATIONS FOR BUSINESS CHANGES; AND

AMENDING TITLE 7, CHAPTER 6, SECTION 4 TITLED MONTHLY SERVICE CHARGES PROVIDING FOR:

• CLARIFICATION TO THE MINIMUM MONTHLY SERVICE CHARGES DEFINITION;
• A REVIEW BY THE CITY TREASURER OR ACCOUNT HOLDER OF THE ACCOUNT; AND
• PROVIDING AN EFFECTIVE DATE AND PUBLICATION.

Consideration to waive three readings of ordinance
Consideration to approve ordinance
Consideration to approve summary publication of ordinance

City Attorney Richard Roats explained the changes this ordinance would make to City Code and stood for questions.

Mayor Stear asked if this allowed for fixture counts so that it would not be such a burden for people to open a business in an old existing structure. He was worried not allowing fixture counts would negatively impact the downtown area.

Mr. Roats replied the system for evaluation was set up on averages that a business uses. They all pay that amount and then they have the ability to come in after a year of use to let the City know how much they actually used and the City would then be able to adjust it. He had tried to consider how to deal with the downtown core versus newer businesses fairly. They could talk about some options. The concern was being responsible in regards to the capacity of the plant and being fair to all business owners.

Mayor Stear stated there were tried and true methods of figuring this out so it would not be random. There would be legitimacy to what they were talking about but he was concerned about pricing business owners out of downtown.

Public Works Director Bob Bachman requested to have more time to look deeper into this and bring Council a few ideas. He wanted to come up with a plan that was viable, especially for downtown.

Council President Buban-Vonder Haar asked if he wanted it tabled or slow-tracked.

City Clerk Chris Engels suggested tabling to allow businesses who had expressed interest in participating in this ordinance the opportunity to be in attendance.

Mr. Bachman's preference was to table it as well. It would take some time to put the data together and he did not think 3 readings would be enough.

Council President Buban-Vonder Haar asked if there was any urgency for any other part of this that would need to be enacted sooner rather than later.

Mr. Roats stated section 2 of the ordinance should have been done a long time ago and it did not deal with the downtown businesses other than their actual use. It seemed to be pretty non-controversial. He felt they needed to move forward with that portion.

Council President Buban-Vonder Haar clarified he was referring to 7-6-4 Monthly Service Charges.

Mr. Roats replied he was.

Council President Buban-Vonder Haar asked if everyone was ok with implementing a portion and tabling the rest.

Council Member Cardoza asked Mr. Bachman if that was agreeable.

Mr. Bachman asked if that would give them the ability to talk to people and work with them to fix their issues instead of just throwing a bill at them for the maximum amount.

Mr. Roats explained the intent would be to let them know what was going on.

Mr. Bachman was concerned about a business that had been established in 1999 or 2000 that would suddenly get 47 or 46 EDUs of usage charges. That would be a pretty big shock. He felt it would be better to let them know it was coming and help them find alternatives to fix the problem so they wouldn't be using excessive amounts of water and creating excessive amounts of waste. If this gave the ability to do that he was volunteering to be that guy.

Council President Buban-Vonder Haar stated maybe people would change out of the goodness of their hearts but if there was never a penalty for excessive use and there was no incentive she didn't know why. She felt as a City they tried to be reasonable with setting up payment plans and things of that nature when necessary. She didn't know how quickly they would roll this out and start conducting audits but she was on board with giving people a heads up and, depending on what the charges looked like, not enforcing the entire amount right away. On the flip side, if they had been using 47 EDUs of water and only paying for 3, the amount of free service they had

been getting on the backs of Kuna taxpayers made her not feel too bad. However there was a gentle way to do that.

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-23 noting the only portion they would currently be changing would be section 7-6-4. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-23 as applies to section 7-6-4 only. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar
Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

Council President Buban-Vonder Haar moved to approve summary publication of Ordinance No. 2018-23 section 7-6-4. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

C. Consideration to approve Ordinance No. 2018-24 – ACTION ITEM
(Timestamp 02:45:45)

AN ORDINANCE OF THE CITY OF KUNA, IDAHO, ANNEXING ALL OF PARCEL S1303111700 OWNED BY CHALLENGER DEVELOPMENT INC., AND REFERRED TO AS MEMORY RANCH SUBDIVISION NO. 2, INTO THE KUNA MUNICIPAL IRRIGATION DISTRICT FROM THE NAMPA~MERIDIAN IRRIGATION DISTRICT; CHANGING THE RESPECTIVE BOUNDARIES OF SAID DISTRICTS; DECLARING WATER RIGHTS APPURTENANT THERETO ARE POOLED FOR DELIVERY PURPOSES; DIRECTING THAT COPIES OF THIS ORDINANCE BE RECORDED AS PROVIDED BY LAW; AND PROVIDING AN EFFECTIVE DATE.

Consideration to waive three readings of ordinance
Consideration to approve ordinance
Consideration to approve summary publication of ordinance

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2018-24. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2018-24 Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar

Voting No: None
Absent: Council Member McPherson
Motion carried 3-0.

Council President Buban-Vonder Haar moved to approve summary publication of Ordinance No. 2018-24. Seconded by Council Member Christensen. Motion carried 3-0. Council Member McPherson absent.

9. Mayor/Council Announcements:
(Timestamp 02:47:15)

Mayor reminded Council about the joint meeting with ACHD on Thursday, June 7, 2018 at noon in the ACHD Public Meeting Room. He was planning to leave City Hall for the meeting at 11:20 A.M. if anyone wanted to ride together.

Council President Buban-Vonder Haar and Council Member Cardoza would be carpooling from City Hall. Council Member Christensen would meet them there.

Council President Buban-Vonder Haar confirmed the special meeting for Thursday evening, June 7, 2018, was cancelled.

Mayor Stear replied it was.

10. Executive Session: *None*

11. Adjournment: 8:48 P.M.

Briana Buban-Vonder Haar, Acting Mayor
Pursuant to Idaho Code §50-608

ATTEST:

Chris Engels, City Clerk

CITY OF KUNA CORPORATE SEAL STATE OF IDAHO

Minutes prepared by Ariana Welker, Deputy City Clerk
Date Approved: CCM 06.19.2018

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5274
Fax: (208) 922-5989 • www.Kunacity.Id.gov

SIGN-UP SHEET

June 5, 2018 – Council, Public Hearing

Case Name: Rezone, Thistle Farm & Vanderkooy Farm, LLC.; Request by Katie Miller, Bailey Engineers

Case Type: Applicant requests approval for a rezone of approximately 73.50 acres of four lots within Chisum Valley Subdivision No. 1 and 2, from Agriculture (Ag.) *TO* an R-6 (Medium Density Residential) MDR zone, following the Comprehensive Plan. This site is located at the NWC Linder and Columbia Roads. APN No's; R1393850100, R1693860010, R1693860290, R1693860280.

Case No.: 18-01-ZC (Rezone) - A Rezone of Approx. 73.50 acres from Agric. to R-6 MDR.

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission/Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☒ Testify ☐ Not Testify
Print Name	Print Name	Print Name: Stephanie Kennedy
Print Address	Print Address	Print Address: 7638 S. McLintock
City State, Zip	City State, Zip	City (Kuna): Meridian ID 83642
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☑ Testify ☐ Not Testify
Print Name	Print Name	Print Name: Virginia Jeppesen
Print Address	Print Address	Print Address: 7901 S Chisum Way
City State, Zip	City State, Zip	City: Meridian State, Zip: ID 83642
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☑ Testify ☐ Not Testify
Print Name	Print Name	Print Name: JENNA VONDER EHE
Print Address	Print Address	Print Address: 7681 S Chisum Pl
City State, Zip	City State, Zip	City: MERIDIAN State, Zip: ID 83642
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☑ Testify ☐ Not Testify
Print Name	Print Name	Print Name: Lauri Allen
Print Address	Print Address	Print Address: 7960 S Chisum Way
City State, Zip	City State, Zip	City: Meridian State, Zip: Id 83642

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	Sent letter ☐ Testify ☒ Not Testify
Print Name	Print Name	Geoff Hinrichsen
Print Address	Print Address	7636 S Chisum Pl
City State, Zip	City State, Zip	Meridian Id 83642 City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☒ Not Testify
Print Name	Print Name	RANDY COLSON
Print Address	Print Address	2344 COGBURN
City State, Zip	City State, Zip	MERIDIAN ID 83642 City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☒ Testify ☐ Not Testify
Print Name	Print Name	✓ JOSH RICCIARDI
Print Address	Print Address	7752 S McLintock PL
City State, Zip	City State, Zip	Meridian ID City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☒ Testify ☐ Not Testify
Print Name	Print Name	✓ ALANA EVOLFSON
Print Address	Print Address	7790 S. MCLINTOCK PL
City State, Zip	City State, Zip	MERIDIAN ID 83642 City State, Zip
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	✓ ☒ Testify ☐ Not Testify
Print Name	Print Name	Curtis Ward
Print Address	Print Address	7941 S. Chisum Way
City State, Zip	City State, Zip	Meridian ID 83642 City State, Zip

✓ ☒ Testify
Stephanie Shank
7825 S. Chisum Way
Meridian, ID 83642

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☑ Testify ☐ Not Testify
Print Name	Print Name	DAN WRIGHT
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City State, Zip	City State, Zip	TEMPE AZ 85283
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Print Name	Print Name	Print Name
Print Address	Print Address	Print Address
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City State, Zip	City State, Zip	City State, Zip

CITY OF KUNA

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Fax: (208) 922-5989 • www.kunacity.ld.gov

SIGN-UP SHEET

Case Name: ~~18-04-ZOA~~ 18-01-ZC -cont.-
Case Type: ~~Final Plat Subdivision Ordinance Amendment~~

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☑ Not Testify
Print Name	Print Name	Kelley Stevenson
Print Address	Print Address	1751 S McLintock PL
City State, Zip	City State, Zip	Meridian ID
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☑ Not Testify
Print Name	Print Name	Pam Thurston
Print Address	Print Address	7675 S. McLintock Pl.
City State, Zip	City State, Zip	Meridian Id 83642
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☑ Not Testify
Print Name	Print Name	Cheryl Hainsworth
Print Address	Print Address	7826 S. Chisum Way
City State, Zip	City State, Zip	Meridian ID 83642
		Letter
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☑ Not Testify
Print Name	Print Name	Rick Wills
Print Address	Print Address	2345 Cosbern St
City State, Zip	City State, Zip	Meridian 83642

Kuna Planning and Zoning Commission
Kuna City Hall, Council Chamber
751 W. 4th Street
Kuna, Idaho 83634

RE: Opposition to Required Connection to Whisper Meadows Subdivision.

To Whom It May Concern:

I write on behalf of Chisum Valley Subdivision which is located directly to the south of the proposed location for the Whisper Meadows Subdivision. I first wrote to oppose the development of Whisper Meadows Subdivision in a letter to the Planning and Zoning Commission on April 5, 2018. I addressed many of Chisum Valley's concerns in that letter.

Along with several other individuals from my subdivision, I attended the Planning and Zoning Commission meeting on April 10, 2018. During that meeting the commission discussed its concerns with allowing a major subdivision, like Whisper Meadows, to connect to our R-1 subdivision that does not have sidewalks or any other pedestrian-friendly paths. Ultimately, it found that the Whisper Meadows developer should work with ACHD and the city to avoid connecting to our subdivision.

While I understand that this issue will be addressed during the preliminary plat hearings, I wanted to provide my input at this time as well because planning and zoning did consider the issue during the rezone hearing and recommended the above-stated course of action.

Chisum Valley residents are concerned because the Whisper Meadows subdivision developer has suggested that connection between the two subdivisions is required by ACHD. We, however, disagree. According to ACHD Policy Manual Section 7207.2.4, "[t]he street design in a proposed development ***shall cause no undue hardship to adjoining property***. An adequate and convenient access to adjoining property for use in future development ***may*** be required."

This section only provides that connections may be required between subdivisions, but in absolute terms states that such connections must not cause undue hardship to adjoining property. Connecting our subdivision to Whisper Meadows would undoubtedly cause undue hardship to our subdivision. Again, we are a very rural subdivision. We don't have sidewalks and our roads are, for the most part, unmarked. We are concerned that, because of the size of the proposed Whisper Meadows subdivision, traffic through Chisum Valley will increase substantially. This would be very harmful to us.

Further, ACHD Policy Manual Section 7207.2.4, provides several items ACHD is to consider in determining whether to extend streets between adjoining subdivisions. Those factors relate, in a large part, to the neighborhood needs and provision of services. It is unnecessary for our subdivision to be connected to Whisper Meadows in this situation

Exhibit
C-6

(VIA EMAIL)
received
6.9.2018

because there are other more convenient and direct access points to the Whisper Meadows subdivision. Whisper Meadows will connect to Linder Road in various places, including through a new collector road midway between Columbia and Lake Hazel Road. These connections allow for necessary travel and provision of services.

I cannot express enough my concern that linking to our road would be detrimental to our community. We don't have the safety features necessary to support such a large traffic increase through our subdivision, and the connection would endanger our children.

For these reasons, we support the Commission's finding that there should be no connection between the subdivisions and request that all steps be taken to avoid connecting our subdivision with Whisper Meadows.

We appreciate your consideration of this matter.

Sincerely,

/s/ Josh Ricciardi

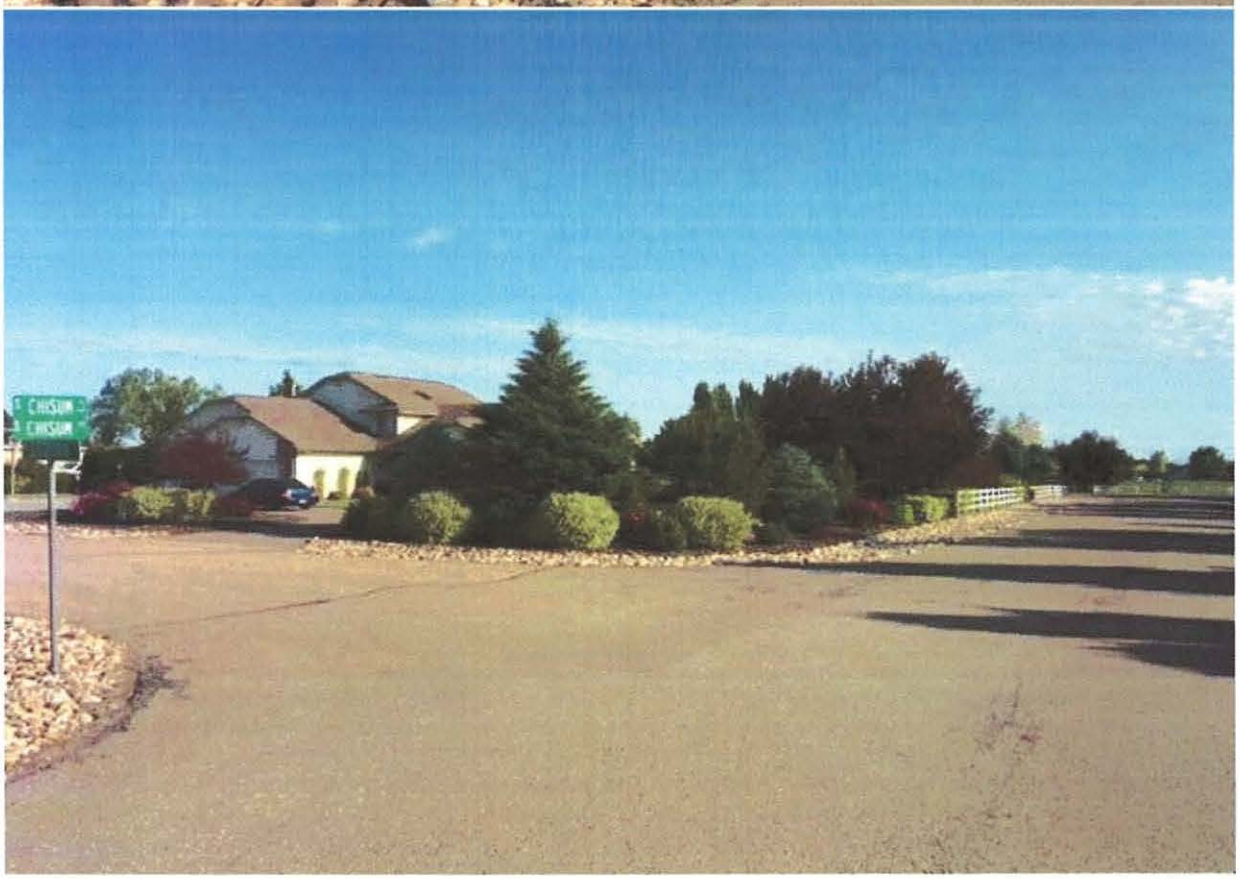
Josh Ricciardi on behalf of
Chisum Valley Subdivision



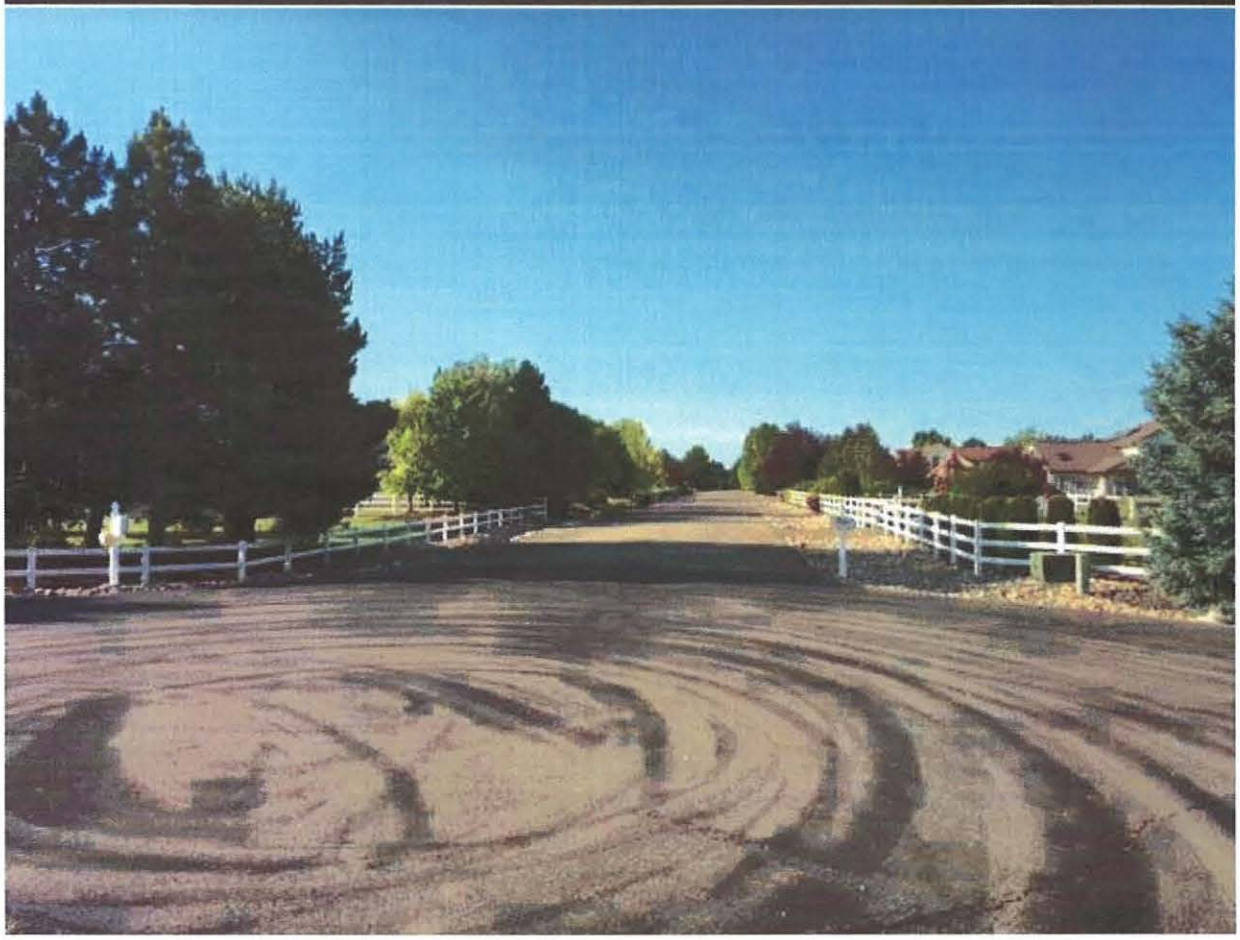


Exhibit C-7


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CITY OF KUNA
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SIGN-UP SHEET

Case Name: 18-04-ZOA
Case Type: Final Plat Subdivision Ordinance Amendment

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

IN FAVOR	NEUTRAL	IN OPPOSITION
☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify	☐ Testify ☐ Not Testify
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ORDINANCE NO.
CITY OF KUNA, IDAHO

AN ORDINANCE OF THE CITY COUNCIL FOR KUNA, IDAHO AMENDING TITLE 6, CHAPTER 2, SECTION 4 KUNA CITY CODE TITLED FINAL PLATS TO ALLOW FOR THE CITY ENGINEER TO SIGN THE FINAL PLAT PRIOR TO CERTAIN SUBDIVISION IMPROVEMENTS AND CONDITIONS BEING COMPLETED AND SET FORTH THE PROCEEDURE FOR THE CITY TO ACCEPT A FINANCIAL GUARANTEE TO INSURE THE COMPLETION, INSPECTION AND ACCEPTANCE OF THE IMPROVEMENTS AND CONDITONS THAT ARE BEING DEFFERED; AND PROVIDING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KUNA, ADA COUNTY, IDAHO, as follows:
Section 1.

Amending Chapter 2 titled Final Plat to Title 6, of the Kuna City Code.

TITLE 6, CHAPTER 2

6-2-4: - FINAL PLAT:

Note: Subdivider and developer are intended to be interchangeable terms.

The city engineer shall not sign the final plat Mylar if any City Code violations exist on the subject property at the time of requested signature.

The following procedures shall apply to the filing for final plat approval of any City of Kuna subdivision:

A. Application: After the approval or conditional approval of the preliminary plat by the city council, the subdivider may cause the subdivision, or any part thereof, to be surveyed and a final plat prepared in accordance with the approved preliminary plat. The subdivider shall submit to the planning staff the following:

1. Final plat application along with a title report that is less than six (6) months old, warranty deed or other acceptable evidence, including but not limited to an affidavit that demonstrates the subdivider's ownership or legal interest in the land included in the final plat.

2. Payment of fees equivalent to the amount of material and labors expended by city staff for plat review. Fees shall be paid for all costs associated with the review of the preliminary plat, final plat and construction drawings. The subdivider will be notified of the amount owed and the basis for the fees charged. All plat related fees shall be paid prior to city approval.

3. Three (3) paper copies (24"x36") and a digital copy in a PDF format of the final plat and signature page.

4. Three (3) paper copies and a digital copy in a PDF format of the final engineering construction drawings for streets, water, sewer, sidewalk, pressure irrigation and other public improvements as provided for in KCC 6-4-3.

5. Other items as specified, and required by the city during the application process.

B. Content of final plat: The final plat shall be in compliance with all items required in Idaho Code Title 50, Chapter 13; the final plat shall include the following:

1. Final plat check-off list with all items completed;

2. Proof of current ownership of the real property and written consent of the final plat owners of record;

3. All easements shall be shown on all lot lines for lots in the subdivision;

4. All subdivisions that contain a homeowners' association shall have the following language: "The Homeowners' Association (HOA), its ownership and maintenance commitments cannot be dissolved without the express written consent of the City of Kuna, Idaho. All improved individual lots are subject to a fractional share of the irrigation assessment for each HOA common lot(s) that receive(s) municipal irrigation. If the assessment is not paid by the HOA, the individual improved lots are subject to a lien for non-payment";

5. Other information the planning and zoning director, city engineer or city attorney deem necessary to establish ownership and signing authority;

6. A statement and other supporting evidence demonstrating the final plat conform to the approved preliminary plat;

7. A statement of compliance with provisions of this title;

8. A statement confirming that the final plat meets established engineering practices and local standards.

C. Planning staff review:

1. The planning and zoning director shall certify, and date stamp the application for purpose of establishing its completeness relative to all noted final plat requirements.

2. The planning and zoning director shall review the final plat for compliance with the approved or conditionally approved preliminary plat. If the planning and zoning director or assigned person determines there are substantial differences between the preliminary

and final plat, the subdivider may be required to submit the final plat to the city council as it was portrayed at the time of the preliminary plat process.

3. After the planning and zoning director's determination that the final plat is in compliance with the preliminary plat and all conditional requirements have been met, the planning and zoning director or assigned person shall place the final plat on the council agenda within forty-five (45) days from its receipt and acceptance. Acknowledgement of final plat acceptance shall be conveyed by way of written confirmation.

D. Agency review: The planning and zoning director or assigned person shall transmit final plat documents to other reviewing city staff and agencies for evaluation and comment. The reviewer shall evaluate the final plat improvements for consistency with construction standards, health protocols, cost estimates and legal requirements.

E. Council action: At the public meeting scheduled for the final plat review the city council shall consider comments from agencies. The city council shall approve, approve conditionally, disapprove the final plat or table it for purposes of acquiring and reviewing additional information and then approve, approve conditionally or disapprove the final plat after review of this supplementary information within thirty (30) days of the date of the regular meeting at which the plat is first considered. A copy of the approved plat shall be filed with the planning and zoning department. Upon granting or denying the final plat, the city council shall specify:

1. The ordinance and standards relied upon to evaluate the application;

2. The reasons for approval or denial; and

3. The action(s), if any, the applicant could take to obtain a permit.

F. Approval period:

1. The final subdivision plat shall be filed with the county recorder within two (2) years after the city council's signing of the findings of fact; otherwise, the plat approval shall become null and void unless prior to the two-year expiration date the subdivider applies for a time extension. A final plat time extension is heard by the city council. The subdivider shall provide the city council sufficient reason(s) for continuing the final plat application as a basis for the granting of a time extension. The city council is under no obligation to approve a final plat time extension. The city council reserves the right to add additional conditions of approval to the final plat as part of a time extension.

2. In the event the city council does not approve a time extension request, the plat shall become null and void. If the plat becomes null and void the subdivider shall resubmit the plat for preliminary plat approval. The subdivider will receive credit for improvements previously installed and approved. The subdivider shall pay the current preliminary plat application fees and furnish staff an updated preliminary plat.

3. The resubmitted plat shall be subject to rules or regulations in place at time of reapplication. If a city rule or regulation has been instituted since the preliminary plat was initially approved and that regulatory change would require significant alteration to improvements previously installed and approved, the city engineer may recommend to the city council the regulatory provision be set aside. The city council has the discretion to set them aside, provided they do not affect public health or safety. Time extensions are valid for one (1) year from the city council's approval based on the initial one-year time period established at the signing of the preliminary findings of fact.

G. Prior to requesting the city engineer's signature on the final plat Mylar, the developer shall either:

1. Provide the necessary documentation to show that all required improvements, infrastructure, public utilities, public improvements, have been installed and conditions of approval have been met and inspected and approved by the city; including all record drawing requirements, submittal of engineer or record inspection logs, submittal of the engineer of record certification and receipt of the dedication request, and memorandum from the city engineer has been issued stating as much; or:

2. Provide the necessary documentation to show that the required improvements and conditions that have not been completed have approved financial guarantees, as provided for in this section and KCC 6-4-3.

3. The city engineer shall not sign, nor release the final plat for recording until the city has received the financial guarantee, as provided for in KCC 6-4-3 in compliance with the provisions of this chapter and the city council has approved the final plat.

H. The following items <u>are not eligible for financial guarantees</u> as provided for in KCC 6-4-3 and shall be completed by the subdivider and inspected and approved by the city engineer and/or their legal designee and other approving agencies, prior to the subdivider submitting for final plat approval:

1. Construction of the domestic water system, including successful pressure testing. Bacteria tests and final City of Kuna inspections and approvals may be delayed until roadways are completed;

2. Installation of fire hydrants according to the current International Fire Code standards and supporting fire flows according to standards established by the Kuna Fire District;

3. Construction of the sanitary sewer system with evidence of acceptable pipe sloping and, completion of all work within the base of the manholes. However the pressure test and television camera inspection, followed by any additional City of Kuna inspections and approvals must be completed prior to the paving of the all-weather roadway;

4. Construction of permanent roads shall be complete to the extent that all road base is installed such that it provides an temporary all-weather road service to all buildings to be constructed pursuant to subsection G(1) above. These improvements shall be to ACHD and City of Kuna standards and receive Kuna Fire Chief approval. If the permanent roads are not improved to this level of completion then construction of temporary roads with an all-weather road surface shall be installed to service all buildings, subject to approval from the Kuna Fire Department.

5. For items 1 through 4 above, the city engineer's approval shall be in the form of a memorandum confirming the completion of the items.

6. The subdivider shall dedicate all sanitary sewer and domestic water facilities and provide all applicable documentation as required by the city engineer.

I. The following items may provide the necessary financial guarantees as provided for in KCC 6-4-3, and as approved by the city engineer, city attorney and city planning and zoning director, and adopted by the City Council. The subdivider shall pay any additional fees associated with the request for financial guarantees, as approved and adopted by the City Council.

1. Completion of the construction of an all-around weather road system built to ACHD specifications, and subject to the Kuna Fire Chief and Ada County Highway District (ACHD) inspections and approvals. The city shall review the financial guarantees provided for by and between the developer and ACHD, and the city attorney shall determine if the city's interests are adequately protected.

2. Installation of street signs followed by city engineer, Kuna Fire District and ACHD inspections and approvals.

3. Installation of required landscaping, amenities and improvements.

4. Construction of that portion of the pressure irrigation system that will be dedicated to the city by the subdivider. Said system shall be tested by the subdivider, and inspected and approved by the city's engineering staff.

5. Provide permanent approved perimeter fencing along the subdivisions outer perimeter, which shall require a building permit.

6. The city engineer shall monitor the construction of any improvements or conditions that are being constructed pursuant to the financial guarantees of KCC 6-4-3.

7. If the city attorney determines that it is necessary, any improvement or condition that is being constructed pursuant to the financial guarantees of KCC 6-4-3 shall be recorded against the property in a development agreement, as approved and adopted by the City Council.

8. The developer may construct up to three (3) model homes if the project size is up to fifty (50) acres, or up to five (5) model homes if the project size is greater than fifty (50) acres. The developer shall be solely responsible for locating the model home within any required City of Kuna setbacks and easements. As provided for in subsection 9, below, no certificate of occupancy shall be issued on any of the model homes until all improvements and conditions that are subject to financial guarantees are completed, inspected and approved by the appropriate agencies.

9. Other than the model homes constructed in subsection 8, no other homes may be constructed, and no certificate of occupancy shall be issued until all improvements and conditions that are subject to a financial guarantee are completed, inspected and approved by the appropriate agencies.

J. Prior to the roads being paved and the sidewalks being constructed, the city must receive documentation requesting that the system be annexed into the Kuna Municipal Irrigation District if annexation is applicable. All applicable fees must be submitted with the annexation request. The annexation of water rights to the city in sufficient quantities to offset the subdivisions potential water demands as determined by the city engineer.

K. Method of recording: After the city council grants final plat approval and subject to the prepayment of recording fees, posting an acceptable irrevocable guarantee and the inclusion of the following signatures on the final plat, the applicant shall submit the final plat to the county recorder for recording:

1. Certification and signature of the city council verifying that the subdivision has been approved;

2. Certification and signature of the city clerk, if required, and the city engineer verifying that the subdivision meets the city requirements and has been approved by the city council; and

3. Certification of the sanitation restrictions on the face of the plat pursuant to Idaho Code §50-1326.

Section 2.

This ordinance shall become effective upon passage and publication as required by law.

ADOPTED this____ day of April 2018.

CITY COUNCIL OF THE CITY OF KUNA
Ada County, Idaho

Joe L. Stear, Mayor

ATTEST:

Chris Engels, City Clerk

KITTELSON & ASSOCIATES

Transportation Impact Study

Whisper Meadows Subdivision

Kuna, Idaho

February 2018

PREPARED FOR:
Vanderkooy Farms, LLC
Mr. Tim Eck
6152 W Half Moon Lane
Eagle, Idaho 83616

PREPARED BY:
KITTELSON & ASSOCIATES, INC.
101 S Capitol Boulevard, Suite 301
Boise, ID 83706
208.338.2683

Transportation Impact Study

Whisper Meadows Subdivision

Kuna, Idaho

Prepared For:
Vanderkooy Farms, LLC
6152 W Half Moon Lane
Eagle, Idaho 83616

Prepared By:
Kittelson & Associates, Inc.
101 South Capitol Boulevard, Suite 301
Boise, Idaho 83702
(208) 338-2683

Project Principal: John Ringert, PE
Project Manager: Brett Korporaal
Project Analyst: Mark Heisinger

Project No. 22046

February 2018



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Appendix I – Year 2026 Mitigated Total Traffic Operation Worksheets

Appendix J – Site Access Evaluation Worksheets

Appendix K – Off-Site Mitigation Threshold Worksheets

Note: Whisper Meadows Subdivision was previously referred to as Gripentrog Subdivision. Some appendices use the Gripentrog Subdivision name.

Section 1
Executive Summary

EXECUTIVE SUMMARY

Vanderkooy Farms, LLC is proposing to develop Whisper Meadows Subdivision, a 311 single-family unit housing development situated on approximately 73 acres of land in Kuna, Idaho. The development is located on the west side of Linder Road approximately midway between Lake Hazel Road and Columbia Road.

The parcels of land proposed for the new subdivision are identified as Agriculture by the City of Kuna's *City Zoning Map*. These parcels will have to be rezoned for the development of single-family residential units. The parcels in the immediate vicinity of the site are also zoned as Agriculture, as well as Rural Residential and Low Density Residential (R4) by the City of Kuna.

Access to the Whisper Meadows Subdivision is proposed via one new mid-mile collector on the west side of Linder Road between Lake Hazel Road and Columbia Road, as well as a new local street connection to Linder Road, approximately 1,830 feet north of Columbia Road and approximately 810 feet south of the proposed collector. The new collector is identified on the ACHD Master Street Map. The preliminary site plan also provides four stub street connections, two to the west for connection to a future development, which is not anticipated to occur until after full build-out of the site, as well as two stub street connections to the south. One of the southern stub streets is proposed to connect to Chisum Way and the other is to connect to a future development, not expected to be built-out until after completion of the Whisper Meadows Subdivision.

Currently, the site is undeveloped. The development is planned to be completed in five phases, with a projected full build-out in year 2026. The TIS addresses the existing (2017), background (2026), and the development's impacts in the build-out year 2026 and provides the approximate number of homes that can be built before the proposed mitigations are necessary.

FINDINGS

Existing Conditions

- The study evaluated four off-site intersections during the a.m. and p.m. peak period of a typical weekday (Tuesday – Thursday).
- All study intersections were found to operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours with the exceptions of:
    - **Lake Hazel Road & Meridian Road (SH 69) (AM & PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards.
        - A planning level signal warrant analysis concludes that a traffic signal is warranted under existing traffic volumes.

- This intersection is identified as a future traffic signal in ACHD's *2018-2022 Five Year Work Plan (FYWP)* with a scheduled construction in year 2018. A traffic signal at the intersection as described in the *FYWP* is expected to operate at LOS B with a v/c ratio of 0.65 or better and LOS B with a v/c ratio of 0.66 or better during the existing a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments operate at acceptable levels of service.
- Crash data at the study intersections for the most recent five years (2011-2015) was analyzed for any existing crash trends, below are the findings:
    - The unsignalized intersection of Lake Hazel Road & Meridian Road (SH 69) averaged more than four reported crashes per year, with angle crashes accounting for approximately 57% of all crashes at the intersection. All angle crashes occurred between eastbound or westbound vehicles on Lake Hazel Road crossing or turning onto Meridian Road. The angle crashes should be reduced with the construction of the signal planned for later this year.
    - There was one fatality crash reported at the Lake Hazel Road & Meridian Road (SH 69) intersection. The fatality involved a bicyclist crossing Meridian Road, where there are currently no crosswalks on any approach at the intersection.
    - There were no reported roadway segment crashes along Linder Road between Lake Hazel Road and Columbia Road (location of proposed Site Access A & B).

Year 2026 Background Traffic Conditions

- Year 2026 background traffic volumes were forecasted using a 3% annual growth rate and included the addition of in-process traffic from Caspian Subdivision and Phases 1 and 2 of the proposed Springhill Subdivision.
- Year 2026 background traffic analysis (without inclusion of site-generated traffic) found that all study intersections are expected to operate at acceptable operating standards during the weekday a.m. and p.m. peak hours with the exceptions of:
    - **Linder Rd & Amity Road (PM Peak Hour)** – During the weekday p.m. peak hour, the westbound approach exceeds capacity and the intersection experiences an LOS E, falling below ACHD standards. ACHD's *2016 Capital Improvement Plan (2016 CIP)* has a roundabout planned as part of *2016 CIP* #IN2016-5, during the year 2031-2035 timeframe.

- A traffic signal warrant analysis was conducted and the intersection meets the four-hour warrant (Warrant #2) and the peak-hour warrant (Warrant #3) based on 2026 background vehicular volumes (without any traffic from Whisper Meadows). The Caspian Development (on NW corner of Lake Hazel Road/Linder Road) is conditioned to study the intersection at their 280th lot and install and interim signal.
    - By signalizing the intersection with a temporary signal, with left-turn lanes on each approach, operations are expected to be LOS B with a v/c ratio of 0.67 and 0.60 during the a.m. and p.m. peak hour, respectively.

- **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – With the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:
    - A sensitivity analysis found that the ACHD's *2016 CIP*, or other interim improvements, will be needed in approximately year 2025, without traffic from Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 conditions if constructed in that timeframe.
    - If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):
        - An additional eastbound left-turn lane (dual left-turns),
        - A westbound right-turn lane, and
        - A southbound right-turn lane.
    - By signalizing the intersection with the additional turn lanes listed above, the intersection is expected to operate at LOS D with a v/c

ratio of 0.88 and at LOS C with a v/c ratio of 0.82 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Trip Generation and Distribution

- The *ITE Trip Generation Manual, 9th Edition* was used to estimate the trip generation for the proposed Whisper Meadows Subdivision.
- The proposed Whisper Meadows Subdivision development, with 311 single-family homes in the buildout year of 2026, is estimated to generate a total of 2,938 daily net new trips, 227 weekday a.m. peak hour net new trips (57 inbound / 170 outbound) and 292 weekday p.m. peak hour net new trips (184 inbound / 108 outbound).
- The distribution pattern for site-generated trips was developed by evaluating existing traffic patterns and major trip origins and destinations within the study area, as well as a select zone analysis from COMPASS' regional travel demand model.

Year 2026 Total Traffic Conditions

- Year 2026 total traffic conditions found that the site-generated trips do not impact any additional intersection not previously identified in the background traffic conditions. All study intersections will continue to operate at acceptable levels of service during the weekday a.m. and p.m. peak hours with the exception of:
    - **Amity Road & Linder Road (PM Peak Hour)** – Per the 2026 background conditions, during the weekday p.m. peak hour the westbound approach is projected to reach capacity. Additionally, a traffic signal was found to be warranted under 2026 background conditions and will continue to be warranted. While ACHD's *2016 CIP* (IN2016-5) has a roundabout planned as for the year 2031-2035 timeframe, installation of an interim signal has already been included in the conditions of the Caspian Subdivision Development.
        - By signalizing the intersection with left-turn lanes on each approach, operations are expected to be LOS C and LOS B with a v/c ratio of 0.70 and 0.60 during the a.m. and p.m. peak hour, respectively.
    - **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – Similar to 2026 background conditions, the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound

approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:

- A sensitivity analysis found that ACHD's *2016 CIP* (IN2016-60), or other interim improvements, will be needed in approximately year 2025, with or without Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 total traffic conditions if constructed in that timeframe. At that time Whisper Meadows is anticipated to have 286 units occupied at the time mitigation is needed.
- If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):
  - An additional eastbound left-turn lane (dual left-turns),
  - A westbound right-turn lane, and
  - A southbound right-turn lane.
- With the recommended lane configuration as identified above and in year 2026 background mitigations, the intersection is expected to operate at LOS D with a v/c ratio of 0.89 and at LOS C with a v/c ratio of 0.83 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Site Access Evaluation

- The turn lane analysis using ACHD procedures resulted in turn lane warrants at the following site access streets:
  - New Collector Road & Linder Road (Site Access A) :
    - Southbound right-turn lane.
      - A sensitivity analysis found that a southbound right-turn lane is warranted at in approximately year 2021 with the build-out of 144 Whisper Meadows housing units.

- The results from the queuing analysis found that the 95th percentile queue lengths can be accommodated.
    - Each site accesses provides at least 100 feet of roadway length without driveway and/or internal street interference.
- The intersection sight distance evaluation identified that intersection sight distance can be achieved at all the site intersections with the following actions:
    - Remove miscellaneous vegetation and shrubbery, and potential obstructions along Linder Road as necessary to obtain and maintain adequate intersection sight distance.
    - Site accesses along Linder Road should match the existing grade of Linder Road at least for one car length to intersection sight distance.
    - Shrubbery and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.
- There are three proposed local street access points to the Whisper Meadows Subdivision, as well as a new collector road at the mid-mile along Linder Road between Lake Hazel Road and Columbia Road. Additionally, there is one stub street connection to an existing subdivision to the south and three proposed stub streets for connections to future developments. Following is a summary of each access with respect to ACHD Policy:
    - **Linder Road & New Collector Road (Site Access A):** This access, a proposed collector, is located on Linder Road approximately 2,640 feet, or approximately one-half mile, south of Lake Hazel Road and north of Columbia Road. This collector forms the east side of the future mid-mile collector which is identified on the *Ada County Master Street Map*. The access should be considered by ACHD for the following reasons:
        - The proposed collector is on the ACHD Master Street Map.
        - The proposed collector meets ACHD spacing requirements for a collector, with the exception of two existing driveways to an existing home at the Linder Farms site. Given that the proposed collector road is planned and being required by ACHD to allow the adjacent properties to utilize the collector for access instead of direct access to Linder Road, the following should be considered with regard to the Linder Farms access driveways:
            - Move the south driveway to access the collector since it is directly adjacent to the collector.

- Review options to close the north driveway, located approximately 200 feet north of the collector road and connect through the site via the south driveway to the collector.

- Without the collector street access, site-generated trips would increase the ADT at the southeast access on Linder Road to over the ACHD 2,000 ADT threshold for a local street.

- The collector street would provide access to adjacent parcels which will minimize future development directly accessing the minor arterial (Linder Road).

- This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Linder Road & Southeast Access (Site Access B):** This access, a proposed local street, accesses Linder Road approximately 810 feet south of the proposed mid-mile collector and approximately 1,830 feet north of Columbia Road. The access should be considered by ACHD for the following reasons:

  - The proposed access meets ACHD spacing requirements for a local street (660 feet) on a minor arterial and will function acceptably as an unsignalized full access (without turn lanes).

  - Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, forcing approximately 90% of the site's trips to enter and exit the subdivision via the proposed collector road and potentially causing some streets to exceed the ACHD 2,000 ADT threshold for a local street and the 1,000 ADT threshold for local stub street.

    - Additionally, not allowing this access could promote a higher percentage of vehicles using Chisum Way (Site Access E) and cutting-through the residential subdivision to the south.

  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Northeast Access & New Collector Road (Site Access C):** This access, a proposed local street, accesses the new collector street approximately 600 feet west of Linder Road and 1,150 feet east of the proposed Northwest Access (Site Access D). This access is proposed to be full access; however, the

majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:

- The access meets ACHD local street spacing requirements for collector streets.
- Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northwest Access.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Northeast Access & New Collector Road (Site Access D):** This access, a proposed local street, accesses the new collector street approximately 1,150 feet west of the proposed Northeast Access (Site Access C). The proposed collector street will stub approximately 340 feet to the west of the Northwest Access. This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:
  - The access meets ACHD local street spacing requirements for collector streets.
  - Without this access, approximately 1,020 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northeast Access.
  - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Southwest Access & Chisum Way (Site Access E):** This access ties into an existing cul-de-saq and provides a connection to the Chisum Valley Subdivsion to the south. Chisum Way would extend past the current cul-de-sac to tie in with Whisper Meadows Subdivision, approximately 500 feet north of Cogburn Street. Chisum Way would continue as a single lane local street in both directions. Based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to

provide access to adjoining properties." The access should be considered by ACHD for the following reasons:

- The access adheres to ACHD local street and stub street requirements.
- The access is not the primary access to the site, with an estimated 140 daily vehicles on Chisum Way.
- The with the additional traffic from the development, the ADT on Chisum Way at the highest volume segment north of Columbia Road is projected to be well under the ACHD volume thresholds for a local street.
- Chisum Way provides an alternative connection for southbound vehicles accessing Columbia Road.
- This access is an extension of an existing local street and will only serve residential trips as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Stub Streets:** The proposed three stub streets access would connect to a future development west and south of the site. These proposed stub streets are based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Whisper Meadows Subdivision site. The stub streets have the following benefits:
  - The stub street would provide future access to an adjoining property west of the site and therefore reduce the need for additional access routes to Linder Road or Columbia Road.
  - The streets adhere to ACHD stub street requirements.
  - The stub streets are not the primary access to the site, with limited trips into and out of the site.
  - The stub streets would only serve residential trips, reducing vehicle miles traveled and increasing access for emergency response and city services.

RECOMMENDATIONS

Based on the report's analyses and evaluation findings, recommendations were developed accordingly for time scenario's conditions.

Existing Traffic Condition Mitigations

The following mitigation is recommended based on existing traffic volumes. Traffic volumes do not include background growth or site-generated trips from the proposed Whisper Meadows Subdivision.

Lake Hazel Road & Meridian Road (SH 69)

- ITD construct the traffic signal per IN205-70 of ACHD's *2018 – 2022 Five Year Fiscal Work Plan,* programmed for construction in year 2018.

Year 2026 Background Traffic Condition Mitigation

The following mitigations are recommended for year 2026 background traffic volumes. Traffic volumes include nine years of background growth and do not include site-generated trips from the proposed Whisper Meadows Subdivision.

Amity Road & Linder Road

- Conduct a traffic study in approximately 2023 to determine if an interim signal is needed. If a signal is needed, construct and interim traffic signal with left-turn lanes. This assumes that right-of-way and funding would not be available for the single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) planned for year 2031-2035.

Lake Hazel Road & Meridian Road (SH 69)

- Widen and reconstruct the signalized intersection per ACHD *2016 CIP* (IN2016-60), which includes dual left-turn lanes and a dedicated right-turn lane on each approach, with two through lanes in the eastbound and westbound directions on Lake Hazel Road. This is estimated to be needed in 2025, which is slightly before the 2026 to 2030 timeframe outlined in the *2016 CIP*. If ACHD and ITD determine that interim improvements should be considered due to the time horizon for funding moving out beyond the 2026-2030 timeframe and interim improvements are considered, the following improvements would mitigate the 2026 time horizon:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.

Mitigations Needed for Whisper Meadows Subdivision

The following mitigations are recommended due to the inclusion of Whisper Meadows Subdivision's site generated trips.

Linder Road & New Collector Road

- Construct a southbound right-turn lane with approximately 100 feet of vehicle storage.
    - A sensitivity analysis found that a southbound right-turn lane would be warranted in approximately year 2021 with the build-out of 144 Whisper Meadows units.
- If possible, relocate the existing residential access driveway to Linder Farms, located adjacent to the proposed collector street, such that it accesses the proposed collector street.

Linder Road & Amity Road

- Per background conditions prepare an updated traffic study in approximately 2023 to determine if an interim traffic signal is needed. At that time Whisper Meadows is anticipated to have approximately 262 occupied single family housing units.
    - If an interim traffic signal is found to be needed, construct an interim traffic signal with left-turn lanes. Optionally, construction of the ultimate single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) and planned for year 2031-2035 could be considered.

Lake Hazel Road & Meridian Road (SH 69)

- Widen and reconstruct the signalized intersection per ACHD's *2016 CIP* (IN2016-60). If ACHD and ITD determine that interim improvements should be considered due to the time horizon for the *2016 CIP* funding is moved out beyond the 2026-2030 timeframe, the following interim improvements could be considered to mitigate the 2026 background and total traffic condition:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.
- The above improvements are expected to be needed in approximately 2025 with, or without, the Whisper Meadows development. At that time, Whisper Meadows is anticipated to have approximately 286 units occupied at the time mitigation is needed.

Site Accesses

- With approval from ACHD, construct all accesses to the development to allow full access on the public street approaches with the following designations:
    - All local streets within the development should be constructed with one travel lane in each direction.
    - Site driveways with access to public streets should provide sufficient stacking distance for four vehicles (100 feet) to ensure acceptable operation and accommodate larger vehicles, including utility service and delivery vehicles.
    - Site accesses along Linder Road should match the existing grade of Linder Road at the intersection to ensure the best possible sight distance.
    - All accesses and internal streets should be designed to provide adequate intersection site distance. Shrubbery and landscaping near the intersection and site access point should be maintained to ensure adequate sight distance is maintained.

Section 2
Introduction

INTRODUCTION

Kittelson & Associates, Inc. (KAI) has conducted a Transportation Impact Study (TIS) per requirements of Ada County Highway District's (ACHD) *Policy Manual Section 7106* (Reference 1) for the proposed Whisper Meadows Subdivision in Kuna, Idaho. This TIS examines the current transportation network and addresses the transportation impacts associated with background growth and the proposed development.

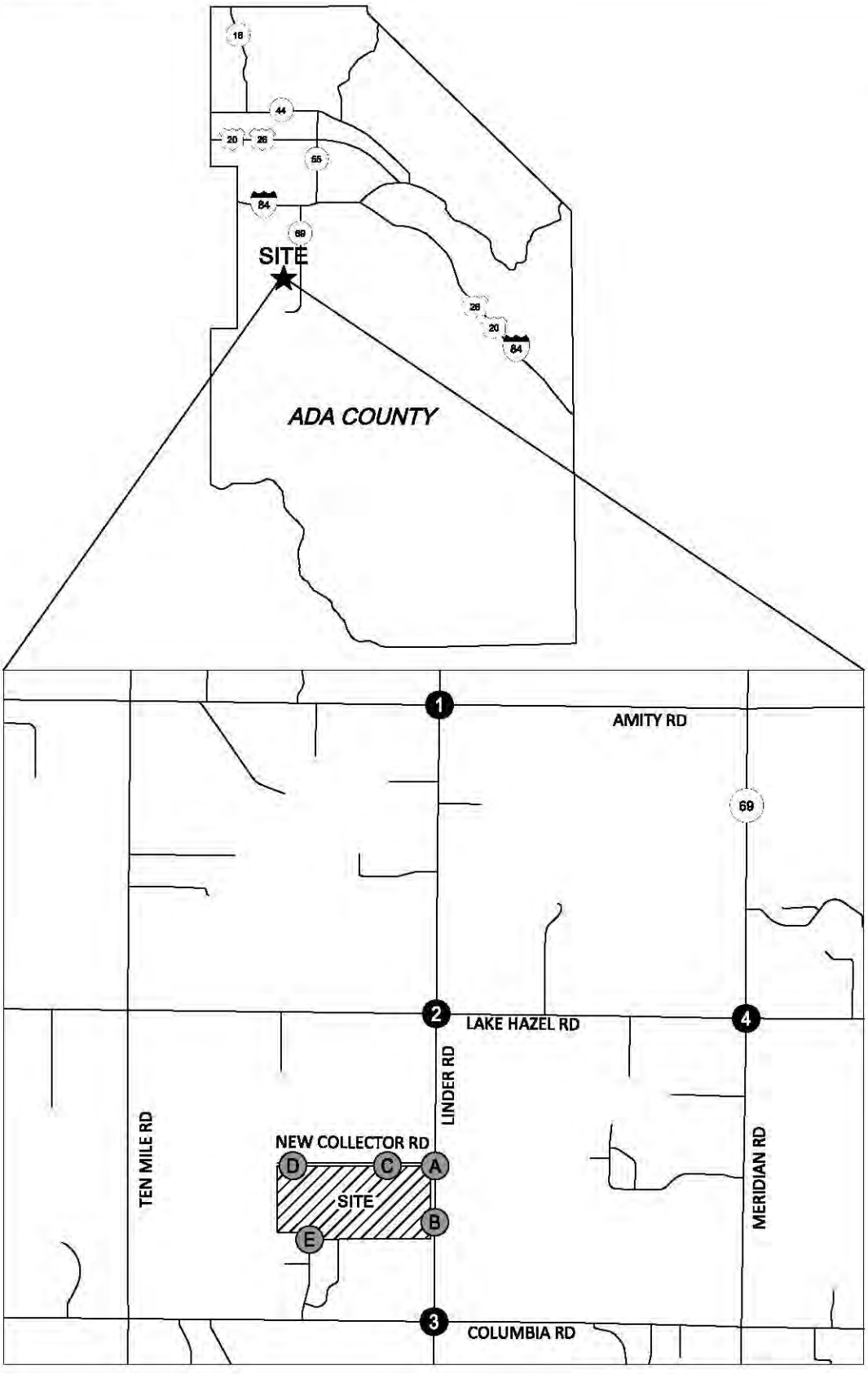
PROJECT DESCRIPTION

Vanderkooy Farms, LLC is proposing to develop Whisper Meadows Subdivision, a 311 single-family unit housing development situated on approximately 73 acres of land in Kuna, Idaho. The development is located on the west side of Linder Road approximately midway between Lake Hazel Road and Columbia Road. Figure 1 illustrates the site's vicinity in Ada County, Idaho.

The parcels of land proposed for the new subdivision are identified as Agriculture by the City of Kuna's *City Zoning Map* (Reference 2). These parcels will have to be rezoned for the development of single-family residential units. The parcels in the immediate vicinity of the site are also zoned as Agriculture, as well as Rural Residential and Low Density Residential (R4) by the City of Kuna.

Access to the Whisper Meadows Subdivision is proposed via one new mid-mile collector on the west side of Linder Road between Lake Hazel Road and Columbia Road, as well as a new local street connection to Linder Road, approximately 1,830 feet north of Columbia Road. The preliminary site plan, shown in Figure 2, provides four stub street connections, two to the west for connection to a future development, which is not anticipated to occur until after full build-out of the site, as well as two stub street connections to the south. One of the southern stub streets is proposed to connect to Chisum Way and the other is to connect to a future development, which is not expected to be built-out until after completion of the Whisper Meadows Subdivision.

Currently, the site is undeveloped. The development is planned to be completed in five phases, with a projected full build-out in year 2026. The TIS addresses the existing (2017), background (2026), and the development's impacts in the build-out year 2026 and provides the approximate number of homes that can be built before the proposed mitigations are necessary.



LEGEND

(##) - Study Intersections

(X) - Site Access

Site Vicinity
Kuna, Idaho

Figure 1

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KITTELSON & ASSOCIATES



Note: Preliminary site plan from Bailey Engineering, Inc. dated October 2017.

LEGEND

(X) - Site Access

Preliminary Site Plan
Kuna, Idaho

Figure
2

H:\22\22046 - Schlentrog Subdivision TIS\dwgs\22046_Figures.dwg Feb 06, 2018 - 1:56pm - bkirkpatrick Layout Tab: Fig 2 - SitePlan

KITTELSON & ASSOCIATES

SCOPE OF THE REPORT

The scope, methodology, and key assumptions within the TIS were reviewed and agreed upon by ACHD in November 2017. *Appendix "A" includes the Proposed Scope of Work for the Transportation Impact Analysis memorandum and the emails from ACHD.*

This report evaluates the following transportation issues:

- Existing land-use, and transportation system conditions, including intersection and roadways within the site vicinity for a typical weekday (Tuesday – Thursday) a.m. and p.m. peak hour;
- Planned developments and transportation improvements for the area surrounding the Whisper Meadows Subdivision development;
- An annual growth rate of 3% was applied to the existing traffic volumes to estimate the local and regional growth in the study area for future year background analyses;
- Intersection and segment analysis of year 2026 background (existing counts plus nine years of regional growth and in-process development trips) traffic conditions during the weekday a.m. and p.m. peak hours;
- Trip generation, distribution, and trip assignment estimates were developed for the proposed Whisper Meadows subdivision;
- Intersection and segment analysis of year 2026 total (year 2026 background traffic plus site-generated trips) traffic conditions during the weekday a.m. and p.m. peak hours;
- Evaluation of site access intersections;
- Identified transportation improvement mitigations at the study intersections impacted by site-generated trips;
- Estimates of development thresholds for needed improvements; and
- Findings and recommendations.

TRAFFIC STUDY METHODOLOGY

The intersection operational analysis for signalized, stop-controlled, and yield-controlled intersections conducted for the TIS was prepared using Synchro 10 and following the *2010 Highway Capacity Manual* (HCM 2010) (Reference 3) analysis procedures. Sidra 6.1 was used to evaluate roundabouts in accordance with ACHD Roundabout Policy 5108 for roundabout analysis.

All of the study intersections are currently stop controlled. Therefore, ACHD was not asked to provide current signal timing for signalized intersections via their updated countywide Synchro model within the vicinity of the site. ACHD default analysis values were used for the ideal saturation flow rate (1,800 vphpl), while other inputs were gathered from field data (including truck percentages, peak hour factor, posted speeds, storage lengths, and pedestrian volumes). As per Policy 7106.6.2 in ACHD's *Policy*

Manual, the existing peak hour factor was used for future conditions analyses if an existing intersection's PHF was greater than ACHD default of 0.90 and no capacity improvements were planned.

All intersection level of service (LOS) analyses use the peak 15-minute flow rate during the weekday a.m. and p.m. peak hour. Using the peak 15-minute flow rate ensures that this analysis is based on a reasonable worst-case scenario. For this reason, the analysis reflects conditions that are only likely to occur for 15 minutes out of each average peak hour. Therefore, the transportation system will likely operate better than the conditions described in this report during all other time periods throughout the day.

The guidance in the *Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition* (Reference 4) was used for signal warrant analyses when determining the appropriate mitigation for an impacted unsignalized study intersection.

PERFORMANCE MEASURES

The operating standards of ACHD were used to assess the traffic operations of the study intersections. The study intersection of Meridian Road (SH 69) & Lake Hazel Road also needs to adhere to Idaho Transportation Department (ITD) standards.

Intersection Operating Standards

ACHD uses performance standards based on LOS. All LOS analyses described in this report were performed in accordance with the procedures stated in the *HCM 2010*. *HCM 2010* defines LOS as a quality measure describing operational conditions within a traffic stream, generally in terms such as speed, delay, and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. When analyzing traffic conditions, LOS is used as a measure of performance (corresponding to delay) at an intersection with values ranging from LOS "A", indicating good operations and low vehicle delay, to LOS "F", which indicates an intersection at, or over capacity with high vehicle delay.

The analyses were performed in accordance with the methodologies stated in Section 7106.6 of the *ACHD Policy Manual* and include consideration of separate left- and right-turn lanes as well as queuing impacts. Intersection and segment LOS is reported per ACHD thresholds on their roadway facilities.

ACHD requires that roadway segments operate at a minimum of LOS E for Principal Arterials and Minor Arterials and at LOS D for Collectors. The acceptable volume-to-capacity ratio for signalized intersections is 0.90 for the overall intersection and 1.00 for each lane group. The acceptable volume-to-capacity ratio is 1.00 for the critical lane group at unsignalized intersections. All unsignalized intersections that have a projected LOS D or worse were evaluated to determine if a signal or roundabout is warranted. Additionally, Section 5108.6.4 identifies a maximum volume-to-capacity ratio at a roundabout to be 0.85, which is also reviewed for mitigations involving roundabouts.

As mentioned previously, the study intersection of Meridian Road (SH 69) & Lake Hazel Road needs to adhere to ITD and ACHD standards. ITD standards state that an intersection must operate at LOS D or better with the same standard of volume-to-capacity ratios as ACHD mentioned above. Table 1 summarizes the LOS standards for the study area intersections (signalized and unsignalized).

Table 1. Study Intersections and Corresponding Operational Standards

ID	Study Intersection	Agency	Traffic Control	Operating Standard
1	Amity Road & Linder Road	ACHD	All-Way Stop Controlled (AWSC)	LOS D and lane group v/c ratio ≤ 1.00
2	Lake Hazel Road & Ten Mile Road	ACHD	All-Way Stop Controlled (AWSC)	LOS D and lane group v/c ratio ≤ 1.00
3	Lake Hazel Road & Linder Road	ACHD	All-Way Stop Controlled (AWSC)	LOS D and lane group v/c ratio ≤ 1.00
4	Lake Hazel Road & SH 69 (Meridian Road)	ACHD/ITD	Two-Way Stop Controlled (TWSC)	LOS E (ACHD) Intersection v/c ratio ≤ 0.90 (ACHD) Lane Group v/c < 1.00 (ACHD)
				LOS D (ITD) Intersection v/c ratio ≤ 0.90 (ITD) Lane Group v/c ratio < 0.90 (ITD)

Section 3
Existing Conditions

EXISTING CONDITIONS

The existing conditions analysis identifies the current site conditions, including operational and geometric characteristics of the roadways within the study area. Existing traffic counts at the study intersections were collected in August 2016 and October 2016. Counts collected in 2016 were verified and approved for use in the TIS during the scoping process with ACHD. In addition, KAI staff visited and inventoried the proposed subdivision development site and surrounding study area in December 2017. At that time, KAI collected information regarding site conditions, adjacent land uses, and transportation facilities in the study area.

STUDY AREA INTERSECTIONS

Based on knowledge of the transportation network within the site vicinity and verification with ACHD staff, the following four intersections were analyzed:

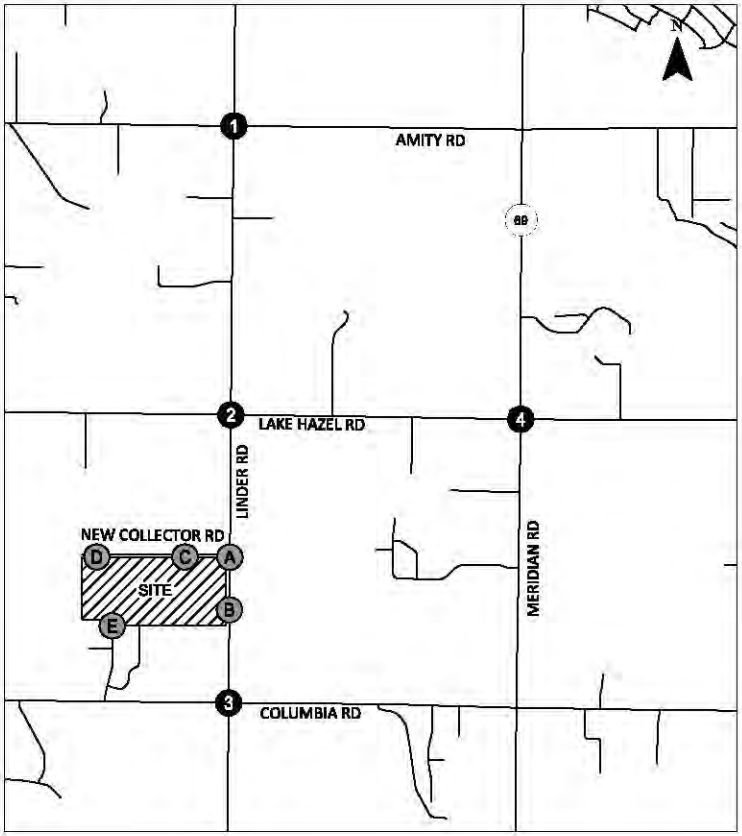
1. Linder Road & Amity Road
2. Linder Road & Lake Hazel Road
3. Linder Road & Columbia Road
4. Meridian Road (SH 69) & Lake Hazel Road

The study intersections and their existing lane configurations and traffic control devices are presented in Figure 3.

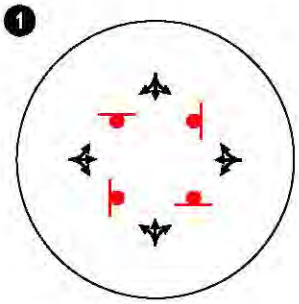
SITE CONDITIONS AND ADJACENT LAND USES

The proposed site's eastern frontage is along Linder Road, approximately one-half mile south of Lake Hazel Road and one-quarter mile north of Columbia Road. Properties surrounding the site are privately owned and consist of agricultural fields and rural residential lots, with a small residential subdivision south of the southwest corner of the site.

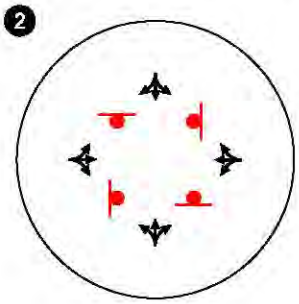
The parcels of land proposed for the new subdivision is identified as Agriculture by the City of Kuna's *City Zoning Map*. These parcels will have to be rezoned for the development of single-family residential units. The parcels in the immediate vicinity of the site are also zoned as Agriculture, as well as Rural Residential and Low Density Residential (R4) by the City of Kuna.



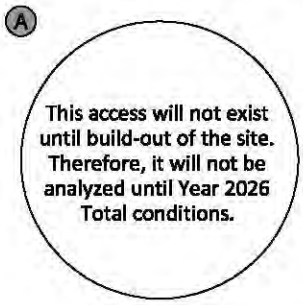
LINDER RD & AMITY RD



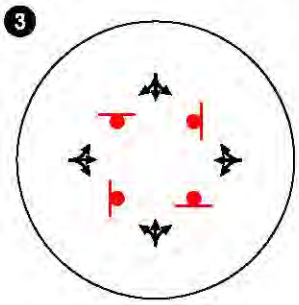
LINDER RD & LAKE HAZEL RD



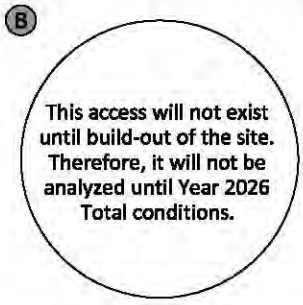
LINDER RD & NEW COLLECTOR RD



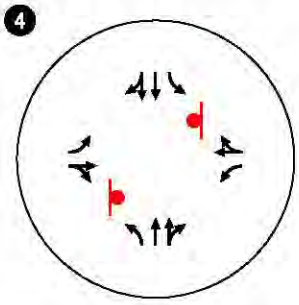
LINDER RD & COLUMBIA RD



LINDER RD & SOUTHEAST ACCESS



MERIDIAN RD & LAKE HAZEL RD



LEGEND

- (##) - Study Intersections
- (X) - Site Access
- - Stop Sign

Existing Lane Configurations and Traffic Control Devices Kuna, Idaho

Figure 3

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TRANSPORTATION FACILITIES

The transportation system inventory identifies the current characteristics of roadways within the study area. Major roadways within the study area were identified and catalogued, including transit facilities as well as pedestrian and bicycle infrastructure.

Roadway Facilities

Table 2 provides a summary of the existing roadway facilities included in this study within the vicinity of the site.

Table 2. Existing Study Transportation Facilities and Roadways

Roadway	Functional Classification[1]	Number of Lanes	Posted Speed (mph[2])	Sidewalks	Bicycle Lanes	On-Street Parking
Amity Road	Minor Arterial	2	50	No	No	No
Lake Hazel Road	Principal Arterial	2	50	No	No	No
Linder Road	Minor Arterial	2	50	No	No	No
Columbia Road	Minor Arterial	2	50	No	No	No
Meridian Road (SH 69)	Principal Arterial	5	50	No	No	No

Notes: [1] Per COMPASS 2040 Functional Street Classification Map (Reference 5); System; [2] mph represents miles per hour.

Transit Facilities

Valley Regional Transit (VRT) is a public transportation service provider that provides fixed route buses, and paratransit services within Ada and Canyon County. VRT's central bus station is located in downtown Boise and provides county and intercounty connections within the Treasure Valley.

There are no bus routes servicing the immediate vicinity of the site. The nearest bus route location is for Route 40 – Nampa/Meridian Express, which picks up and drops off at Ten Mile Road and Overland Road, roughly 3.5 miles northwest of the site. This bus access location includes a designated Park & Ride, which allows carpoolers to be served by ValleyRide's intercounty express bus service and/or by the Commuteride vanpool program.

Pedestrian and Bicycle Facilities

Within the site's vicinity, there are no pedestrian and bicycle facilities. Currently, Amity Road, Lake Hazel Road, and Columbia Road within the vicinity of the proposed development are two lane roads, with speed limits of 50 miles per hour, there are no sidewalks or bicycle facilities.

EXISTING TRAFFIC CONDITIONS

Data collection at the study intersections included turning movement counts, pedestrian counts, and heavy vehicle counts collected during a typical midweek (Tuesday through Thursday) a.m. peak period (7:00 a.m. – 9:00 a.m.) and p.m. peak period (4:00 p.m. – 6:00 p.m.). Intersection volumes collected on different dates were checked against the downstream and/or upstream intersections for vehicular volume consistency when identifying the each intersection's peak hour. *Appendix "B" includes the existing weekday a.m. and p.m. peak period counts at each of the study intersections.*

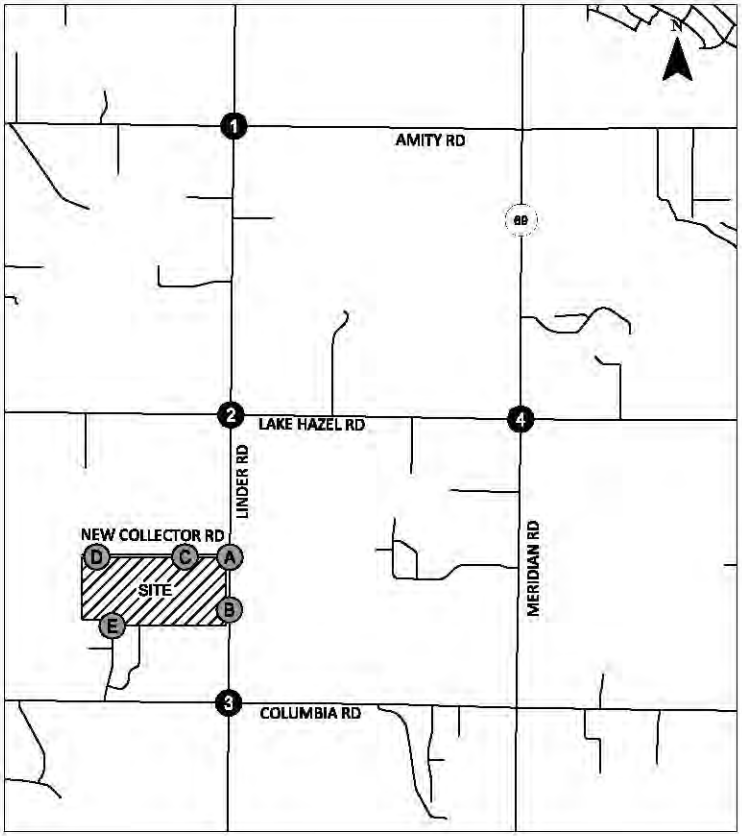
Weekday AM and PM Peak Hour Intersection Operations

Existing peak hour traffic operations were analyzed for a typical mid-weekday a.m. peak hour and p.m. peak hour. Generally, the a.m. peak hour was found to occur from 7:00 a.m. to 8:00 a.m., while the p.m. peak hour occurred from 5:00 p.m. to 6:00 p.m.

Table 3 presents the traffic operation results for each intersection and its corresponding lane groups under existing weekday a.m. and p.m. peak hours, while Figure 4 presents the a.m. and p.m. peak hour traffic volumes at each of the study intersections. *Appendix "C" includes the traffic operation worksheets for the existing traffic conditions of the typical weekday a.m. and p.m. peak hour scenarios.*

All of the study intersections operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours with the exception of:

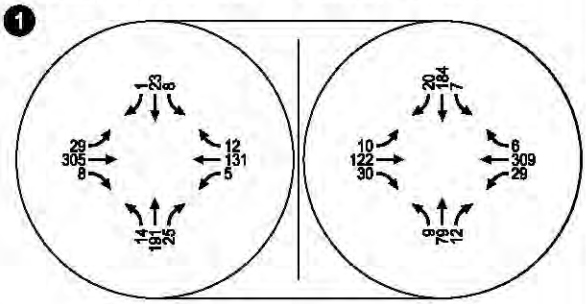
- **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards.



LINDER RD & AMITY RD

Weekday AM Peak Hour | Weekday PM Peak Hour

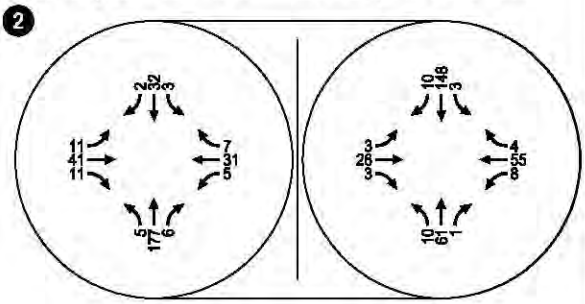
1



LINDER RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

2



LINDER RD & NEW COLLECTOR RD

Weekday AM Peak Hour | Weekday PM Peak Hour

A

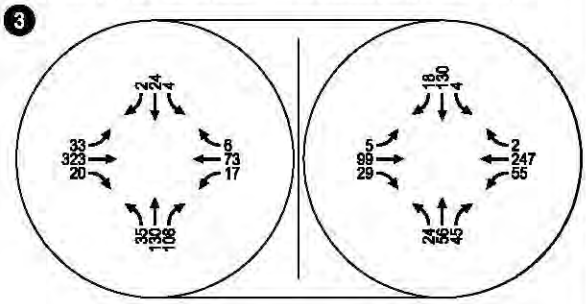
This access will not exist until build-out of the site. Therefore, it is has not been analyzed under existing conditions.

This access will not exist until build-out of the site. Therefore, it is has not been analyzed under existing conditions.

LINDER RD & COLUMBIA RD

Weekday AM Peak Hour | Weekday PM Peak Hour

3



LINDER RD & SOUTHEAST ACCESS

Weekday AM Peak Hour | Weekday PM Peak Hour

B

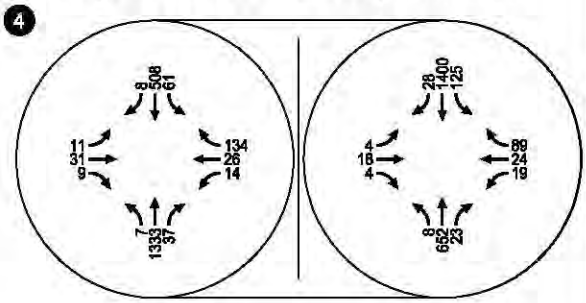
This access will not exist until build-out of the site. Therefore, it is has not been analyzed under existing conditions.

This access will not exist until build-out of the site. Therefore, it is has not been analyzed under existing conditions.

MERIDIAN RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

4



LEGEND

(##) - Study Intersections

(X) - Site Access

Existing Traffic Volumes
Weekend AM and PM Peak Hour
Kuna, Idaho

Figure
4

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KITTELSON & ASSOCIATES

Table 3. Existing Intersection Operations – Weekday AM and PM Peak Hour

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Linder Rd & Amity Rd	AWSC	N/A	B (B)	12.0 (12.3)	EBLTR	0.52	B	13.4	0.25	B	10.2
					WBLTR	0.24	A	9.9	0.52	B	13.6
					NBLTR	0.38	B	11.5	0.17	A	9.9
					SBLTR	0.06	A	9.4	0.38	B	12.9
Linder Rd & Lake Hazel Rd	AWSC	N/A	A (A)	8.2 (8.1)	EBLTR	0.09	A	7.9	0.05	A	8.3
					WBLTR	0.06	A	8.1	0.09	A	7.9
					NBLTR	0.24	A	8.5	0.09	A	7.8
					SBLTR	0.05	A	7.6	0.20	A	8.3
Linder Rd & Columbia Rd	AWSC	N/A	B (B)	12.0 (10.9)	EBLTR	0.53	B	13.2	0.21	A	9.5
					WBLTR	0.15	A	9.2	0.47	B	12.4
					NBLTR	0.41	B	9.4	0.20	A	9.6
					SBLTR	0.05	A	11.6	0.25	B	10.1
Meridian Rd (SH 69) & Lake Hazel Rd	TWSC	N/A	N/A	N/A	EBL	***1.03***	***F***	***684.7***	***>1.00***	***F***	***>80.0***
					EBTR	***1.05***	***F***	***297.6***	***0.81***	***F***	***302.4***
					WBL	***>1.00***	***F***	***>80.0***	***1.19***	***F***	***598.6***
					WBLTR	***1.28***	***F***	***228.3***	***1.21***	***F***	***238.6***
					NBL	0.01	A	8.6	0.02	B	14.5
					SBL	0.17	C	15.7	0.15	A	9.8

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold, *italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

Existing Condition Roadway Segment Analysis

Peak hour roadway segment volumes were based on the traffic count data collected at the study intersections. Table 4 details peak hour, peak direction roadway segment volumes, and resultant LOS per ACHD District Policy 7106.3.3 for the ACHD roadway facilities. As shown in Table 4, all of the existing roadway segments currently meet ACHD standards and operate at acceptable LOS during the weekday a.m. and p.m. peak hour.

Table 4. Existing Roadway Segment Operations – Weekday AM and PM Peak Hour

Roadway Segment	Classification	Travel Lanes[1]	Two-Way Average Daily Traffic / (Date)	ACHD Peak Hour Std. Volume (One-Way)	Weekday AM Peak Hour		Weekday PM Peak Hour	
					One-Way Volume/ Direction	Meets Std.?	One-Way Volume/ Direction	Meets Std.?
Lake Hazel Road (Linder Rd to SH 69)	Principal Arterial	2	1,257 / (6/07/2017)[2]	690	50 / EB	Yes	67 / WB	Yes
Linder Rd (Amity Rd to Lake Hazel Rd)	Minor Arterial	2	2,421 / (11/15/2017)	575	195 / NB	Yes	161 / SB	Yes
Linder Rd (Lake Hazel Rd to Columbia Rd)	Minor Arterial	2	2,620 / (1/27/2016)[2]	575	188 / NB	Yes	159 / SB	Yes

Notes: [1] Travel lanes include the total number of lanes across the roadway's respective cross section; [2] Two-way average daily traffic counts were provided by ACHD.

MITIGATION

This section outlines the mitigation needed at the existing intersection falling below ACHD's and ITD's traffic operation standards. *Appendix "D" contains the mitigated traffic operation worksheets for existing conditions at the intersections outlined below.*

Lake Hazel Road & Meridian Road (SH 69)

As highlighted in Table 3, the Lake Hazel Road & Meridian Road (SH 69) intersection does not meet ACHD and ITD operating standards under existing conditions during the weekday a.m. and p.m. peak hours. This is due to the very high northbound and southbound traffic volumes on SH 69, which result in very few gaps in traffic for left-turning and through movements on Lake Hazel Road. This finding is consistent with the Caspian Subdivision and Springhill Subdivision transportation impact studies. ACHD's *2018 – 2022 Integrated Five Year Work Plan (FYWP)* (Reference 6) includes a joint project with ITD to signalize the existing intersection with construction planned in year 2018 (IN205-70).

ACHD's *2016 Capital Improvement Plan* (*2016 CIP*) (Reference 7) also identifies further improvements to the intersection of Lake Hazel Road & SH 69 (IN2016-60), including reconstructing and widening the approaches to add a traffic signal. The footprint of the full-build out of the intersection is planned to include two left-turn lanes, two through lanes, and one right turn on each approach. This project is currently scheduled for the year 2026 – 2030 time frame and therefore is not assumed to occur within the planned buildout timeframe for this development. Therefore, an evaluation was conducted to determine if a signal is warranted and should be installed earlier than the current ACHD timeframe.

While a signal is currently being designed by ITD and is scheduled for construction in 2018, based on discussions with ACHD, a signal warrant analysis was also required for this TIS. The MUTCD signal warrant analysis was performed using 24-hour counts from each approach at the intersection. These counts were provided by ACHD. A 3% annual compound growth rate for traffic counts that were over one year old was applied. This growth rate is consistent with the growth rate assumed for future condition scenarios in this TIS. Additionally, no reductions in volumes for minor street right-turning vehicles were made due to shared through/right lanes on the approaches and high volumes on SH 69. The signal warrant analysis concluded that the eight-hour warrant, four-hour warrant, and peak hour warrant were all met under existing traffic conditions. The signal warrant volumes and findings for the eight-hour and four-hour warrant are presented in Table 5.

By converting the two-way stop-controlled intersection to be a traffic signal with the existing lane configurations (per the ACHD/ITD project), the intersection is expected to operate at LOS B with a v/c ratio of 0.65 or better and LOS B with a v/c ratio of 0.66 or better during the a.m. and p.m. peak hour, respectively.

Table 5. Existing Year 2017 Eight-Hour & Four-Hour Warrant Thresholds at Lake Hazel Road & Meridian Road

Hour	Warrant #1 (Eight-Hour Warrant)			Warrant #2 (Four-Hour Warrant)			
	SH 69 NB & SB Combined[1]	Lake Hazel Rd (Higher Street Approach)[2]	Condition Met? (A and/or B)	SH 69 NB & SB Combined[1]	Lake Hazel Rd (Higher Street Approach)[2]	Threshold	Threshold Met? (Yes or No)
12:00	122	3	No	122	3	381	No
1:00	69	3	No	69	3	420	No
2:00	67	3	No	67	3	421	No
3:00	93	2	No	93	2	402	No
4:00	215	5	No	215	5	317	No
5:00	617	15	No	617	15	124	No
6:00	**1,330**	**69**	B	1,330	69	60	Yes
7:00	***2,093***	***133***	A & B	2,093	133	60	Yes
8:00	***1,409***	***119***	A & B	1,409	119	60	Yes
9:00	**1,221**	**83**	B	1,221	83	60	Yes
10:00	**1,134**	**66**	B	1,134	66	60	Yes
11:00	**1,228**	**59**	B	1,228	59	60	No
12:00	**1,267**	**77**	B	1,267	77	60	Yes
13:00	**1,309**	**67**	B	1,309	67	60	Yes
14:00	**1,412**	**63**	B	1,412	63	60	Yes
15:00	**1,898**	**81**	B	1,898	81	60	Yes
16:00	***2,084***	***112***	A & B	2,084	112	60	Yes
17:00	***2,453***	***126***	A & B	2,453	126	60	Yes
18:00	**2,025**	**99**	B	2,025	99	60	Yes
19:00	**1,389**	**62**	B	1,389	62	60	Yes
20:00	1,023	38	No	1,023	38	60	No
21:00	759	32	No	759	32	87	No
22:00	451	19	No	451	19	188	No
23:00	236	7	No	236	7	304	No

Notes: [1] The combined northbound and southbound volumes along SH 69 represent the 24-hour counts collected by ACHD. [2] Represents the highest volume on either minor street approach for that particular hour, which was from the 24-hour counts provided by ACHD. *Italics* indicates volumes meeting Condition A thresholds. **Bold** indicates volumes meeting Condition B volume thresholds. ***Bold and italics*** indicate volumes meeting Condition A and Condition B volume thresholds. Highlighted cells indicate the hours in which thresholds of Condition A and/or Condition B are met, as well as hours in which thresholds are met for Warrant #2.

Based on the existing mitigation analysis at this intersection, a traffic signal is needed under existing conditions. A traffic signal would also potentially improve the Amity Road & SH 69 intersection by providing and addition signalized connection to SH 69. The recommended traffic signal and existing lane configuration is consistent with the interim traffic signal improvement listed in ACHD's *2018–2022 FYWP*.

CRASH HISTORY

Crash data was provided by the Idaho Transportation Department for the previous five years (2011-2015) of complete crash data. Crash data included crash reports at each of the study intersections and along each of the study roadways adjacent to the site. This data was used to evaluate and document any potential crash trends occurring at study intersections and along study roadways. *Appendix "E" contains the crash data reports provided by ITD.*

Table 6 presents the crash type and severity at each study intersection. Angle crashes were the most common crash type, accounting for approximately 58% of all crashes. The unsignalized intersection of Lake Hazel Road & Meridian Road reported an average of four crashes per year since 2011, one of resulted in a fatality when a bicyclist crossed Meridian Road. There are currently no crosswalks on any approach at the intersection. Angle crashes accounted for 57% of all crashes at the intersection. All angle crashes occurred between eastbound or westbound vehicles on Lake Hazel Road crossing or turning onto Meridian Road. There were also three head-on turning crashes reported at the intersection, two of which occurred between vehicles heading in the eastbound and westbound direction. Signalization would likely reduce the angle crashes at this intersection, and provide a safer crossing for pedestrian and bicyclists.

Table 6. Study Intersection Crash Type and Severity (2011-2015) Summary

Intersection	Rear-End	Left the Roadway	Head-on Turning	Angle	Sideswipe	Ped/Bike	Total	PDO[1]	PI[2]	Fatality
Amity Rd & Linder Rd	-	1	-	1	-	-	**2**	1	1	-
Lake Hazel Rd & Linder Rd	1	-	-	-	-	-	**1**	1	-	-
Columbia Rd & Linder Rd	-	-	-	2	-	-	**2**	2	-	-
Lake Hazel Rd & Meridian Rd	4	1	3	12	-	1	**21**	11	9	1
Total	**5**	**2**	**3**	**15**	**-**	**1**	**26**	**15**	**10**	**1**

Notes: [1] PDO = property damage only crash; [2] PI = personal injury crash.

Table 7 presents the crash type and severity along the study roadway (Linder Road) adjacent to the proposed site. To avoid double counting crashes, study intersection crashes were removed from roadway segment crash data. There were no reported crashes within the past five years along Linder Road from Lake Hazel Road to Columbia Road.

Table 7. Roadway Segment Crash Type and Severity (2011-2015) Summary

Roadway Segment	Rear-End	Left the Roadway	Head-on Turning	Angle	Sideswipe	Animal (Domestic)	Total	PDO[1]	PI[2]	Fatality
Linder Rd from Lake Hazel Rd to Columbia Rd	-	-	-	-	-	-	**0**	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**-**	**-**	**-**

Notes: [1] PDO = property damage only crash; [2] PI = personal injury crash.

Section 4
Year 2026 Background and Total Traffic Conditions

YEAR 2026 BACKGROUND AND TOTAL TRAFFIC CONDITIONS

This section identifies how the study area's transportation system will operate under year 2026 traffic conditions without, and with, the proposed subdivision. Year 2026 represents a ten-year build-out of the subdivision. The impact of site-generated trips by the proposed development during the weekday a.m. and p.m. peak hour was examined as follows:

- Other planned in-process developments and transportation improvements within the study area were documented;
- General background growth in the area was estimated;
- Year 2026 background conditions were analyzed to determine any impacts at study intersection due to the inclusion of site-generated trips;
- Site-generated trips were estimated for all five phases (or 311 single family housing units) of the development;
- The trip distribution patterns were estimated based on a COMPASS select zone analysis, routing to and from Interstate-84, and other trip attractions and destinations within in the region; and
- Year 2026 conditions were analyzed with the addition of site-generated traffic at each of the study intersections and site-access points during the weekday a.m. and p.m. peak hours.

PLANNED ROADWAY IMPROVEMENTS

The ACHD *2016 CIP* and *FYWP* were reviewed for future roadway and intersection improvement projects to be assumed within the study area. Based on our review of the *2016 CIP* and *FYWP*, several improvements were found in the study area.

- Year 2018 Improvement (*FYWP*): T*o be included in year 2026 background and total scenarios due to funding and timeframe of the improvement.*
    - Lake Hazel Road & Meridian Road (SH 69): *FYWP*# IN205-70 – Install an interim signal in cooperation with ITD maintenance program. (Joint ITD/ACHD project). It should be noted that this project may include additional turn lanes, but the details of the design are unknown at this time.
- Year 2026 – 2030 Improvements (*2016 CIP*): *Not to be included in background due to timeframes extending after 2026. Will be used for reference.*
    - Lake Hazel Road Widening: *2016 CIP*# RD2016-61,62,63,64 – Reconstruct Lake Hazel Road from two lanes to three lanes between Black Cat Road and Meridian Road (SH 69).

- Lake Hazel Road & Linder Road: *2016 CIP*# IN2016-54 – Reconstruct and widen the approaches to install a single-lane roundabout.

- Lake Hazel Road & Meridian Road (SH 69): *2016 CIP*# IN2016-60 – Reconstruct and widen approaches to the traffic signal installed as part of *FYWP* # IN205-70. Reconstruction to include dual left-turn lanes, dual through lanes and a single right-turn lane on each approach.

- Year 2031 – 2035 Improvements (*2016 CIP*): *Not to be included in background due to timeframes extending after 2026. Will be used for reference*.

    - *2016 CIP*# IN2016-4 – Reconstruct the stop controlled intersection of Amity Road & Linder Road to include a single-lane roundabout with a westbound right-turn bypass lane. This project is currently scheduled for the year 2031 – 2035 time frame.

BACKGROUND GROWTH

The annual growth rate the study used to account for general growth and buildout of unknown developments along each of the study roadways is discussed below. The growth rates are estimated using historical traffic counts and information used for other traffic impacts studies in the area.

In general, historical growth rates in the area have been in the range of 2-3% per year (exponential). The growth rates derived from COMPASS Regional Travel Demand Model vary significantly among the roads serving the vicinity of the site (e.g. Lake Hazel Road projects a 10-20% per year growth rate).

New developments, along with very low existing traffic volumes, result in the variability of high yearly growth rate. If we were to assume a high growth rate and add all of the new developments, we would essentially be double-counting the trips. Therefore, based on our review of the data and previous discussions with ACHD, we proposed to use a growth rate of 3% per year (exponential) for use in the TIS.

Background developments as well as site generated traffic from the proposed development will be added which will result in a much higher overall growth rate when we consider future total traffic conditions and will likely reflect a percentage similar to the COMPASS projections on Lake Hazel Road for the primary roadways providing access to the site.

PLANNED IN-PROCESS DEVELOPMENTS

In-process development plans were verified by ACHD. Smaller developments further to the south of the site are assumed to be included in the annual growth rate due to the distance those developments are away from the Whisper Meadows Subdivision. The in-process developments assumed in this study include the Springhill Subdivision development, located in the southeast quadrant of Lake Hazel Road &

Linder Road intersection, and the Caspian Subdivision located between Ten Mile Road and Linder Road along Lake Hazel Road. This study assumes the following buildout levels for those developments:

- Springhill Subdivision: The TIS identified a 2026 buildout of approximately 500 single family homes with full buildout of the site occurring in 2031. (Reference 8)
- Caspian Subdivision: The TIS identified buildout of the entire project in 2026 with approximately 497 single-family unit homes. (Reference 9)

YEAR 2026 BACKGROUND TRAFFIC CONDITIONS

The year 2026 background scenario analyzed how the study area's transportation system will operate without the Whisper Meadows Subdivision's site-generated traffic in year 2026. Year 2026 background traffic conditions were analyzed during the weekday a.m. and p.m. peak hours.

Traffic Volumes

Year 2026 background traffic volumes reflect existing traffic counts plus 9 years of 3% annual growth and the inclusion of the site-generated traffic from the in-process developments described above (Springhill Subdivision and Caspian Subdivision).

Weekday AM and PM Peak Hour Intersection Operations

Table 8 presents the traffic operation results for each study intersection and its corresponding lane groups under 2026 background conditions during the weekday a.m. and p.m. peak hours. Figure 5 presents the a.m. and p.m. peak hour traffic volumes at each of the study intersections. *Appendix "F" includes the traffic operation worksheets for year 2026 background traffic conditions for the weekday a.m. and p.m. peak hour scenarios.*

All of the study intersections operate at acceptable operating standards during year 2026 background weekday a.m. and p.m. peak hours with the exception of the following intersections:

- **Linder Rd & Amity Road (PM Peak Hour)** – During the weekday p.m. peak hour, the westbound approach exceeds capacity and the intersection experiences an LOS E, falling below ACHD standards. This is without the ACHD improvements programmed for 2031 – 2035 that will convert the intersection into a roundabout. *Note: The Caspian Subdivision was conditioned by ACHD to restudy the intersection prior to approval of their 280th lot and install an interim traffic signal, if it is determined through the study that improvements will be needed.*
- **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards.

- Anticipating that the intersection will be built as described in ACHD's *2018-2022 FYWP,* the intersection is expected to operate at capacity during the a.m. and p.m. peak hours with the westbound shared through/right lane and southbound shared through/right lane operating over capacity.

Table 8. Year 2026 Background Intersection Operations – Weekday AM and PM Peak Hour

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Linder Rd & Amity Rd	AWSC	N/A	D (E)	29.0 (40.9)	EBLTR	0.87	E	37.5	0.47	C	16.5
					WBLTR	0.46	C	15.3	***1.00***	***F***	***69.0***
					NBLTR	0.79	D	28.9	0.43	C	16.2
					SBLTR	0.13	B	11.9	0.69	D	25.9
Linder Rd & Lake Hazel Rd	AWSC	N/A	B (B)	12.3 (12.3)	EBLTR	0.41	B	12.1	0.29	B	11.1
					WBLTR	0.20	B	10.1	0.42	B	12.7
					NBLTR	0.53	B	13.9	0.28	B	11.0
					SBLTR	0.15	A	9.5	0.48	B	13.3
Linder Rd & Columbia Rd	AWSC	N/A	C (C)	21.5 (18.8)	EBLTR	0.81	D	28.0	0.37	B	13.2
					WBLTR	0.24	B	11.5	0.76	D	25.6
					NBLTR	0.63	C	18.9	0.39	B	13.9
					SBLTR	0.19	B	11.3	0.47	C	15.4
Meridian Rd (SH 69) & Lake Hazel Rd	TWSC	N/A	N/A	N/A	EBL	***>1.00***	***F***	***>80.0***	***>1.00***	***F***	***>80.0***
					EBTR	***15.4***	***F***	***7,155.9***	***16.3***	***F***	***8,084.3***
					WBL	***>1.00***	***F***	***>80.0***	***>1.00***	***F***	***>80.0***
					WBTR	***9.51***	***F***	***4,101.9***	***31.5***	***F***	***14,637***
					NBL	0.02	A	9.5	0.13	C	22.9
					SBL	0.33	C	24.8	0.24	B	11.4
	Interim Traffic Signal (Described in ACHD's *2018-2022 FYWP*)	1.01 (1.00)	E (D)	56.3 (48.5)	EBL	0.95	F	92.2	0.86	B	87.0
					EBTR	0.43	D	49.7	0.31	D	53.0
					WBL	0.08	D	53.8	0.11	D	52.8
					WBTR	***1.25***	***F***	***209.4***	***1.08***	***F***	***145.8***
					NBL	0.04	B	12.0	0.35	D	40.5
					NBTR	0.97	D	48.8	0.44	B	14.9
					SBL	0.81	E	64.7	0.42	B	11.4
					SBTR	0.40	B	14.8	***1.02***	***F***	***57.3***

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

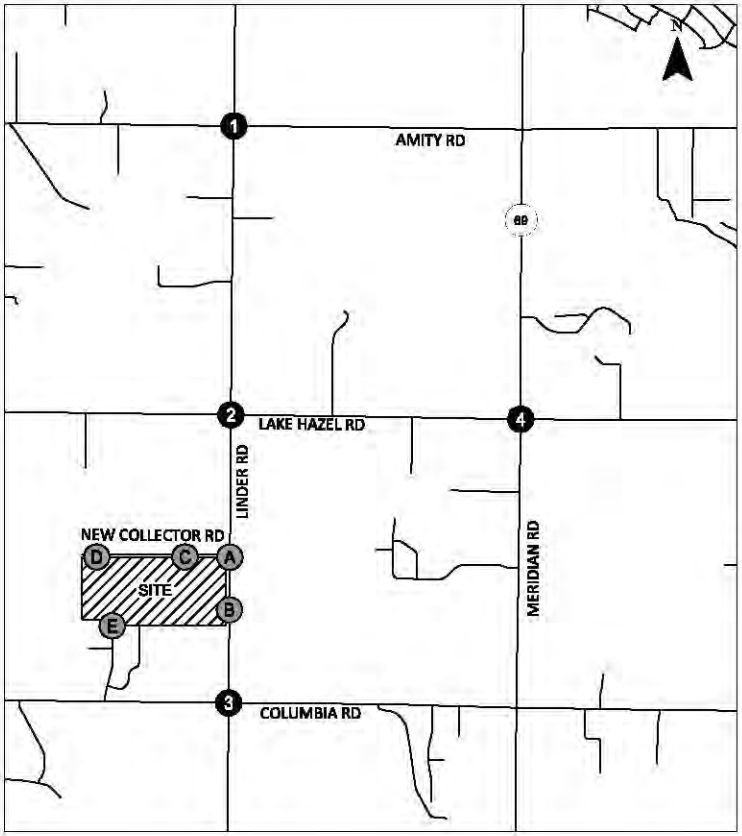
Year 2026 Background Roadway Segment Analysis

Roadway segment volumes were based on year 2026 background volumes at the study intersections. Table 9 details peak hour, peak direction roadway segment volumes, and resultant LOS per ACHD District Policy 7106.3.3 for the ACHD roadway facilities. As shown in Table 9, all of the year 2026 background roadway segments currently meet ACHD standards.

Table 9. Year 2026 Background Roadway Segment Operations - Weekday AM and PM Peak Hour

Roadway Segment	Classification	Travel Lanes[1]	ACHD Peak Hour Std. Volume (One-Way)	Weekday AM Peak Hour		Weekday PM Peak Hour	
				One-Way Volume/ Direction	Meets Std.?	One-Way Volume/ Direction	Meets Std.?
Lake Hazel Rd (Linder Rd to SH 69)	Principal Arterial	2	690	208 / EB	Yes	244 / WB	Yes
Linder Rd (Amity Rd to Lake Hazel Rd)	Minor Arterial	2	575	336 / NB	Yes	300 / SB	Yes
Linder Rd (Lake Hazel Rd to Columbia Rd)	Minor Arterial	2	575	337 / NB	Yes	319 / SB	Yes

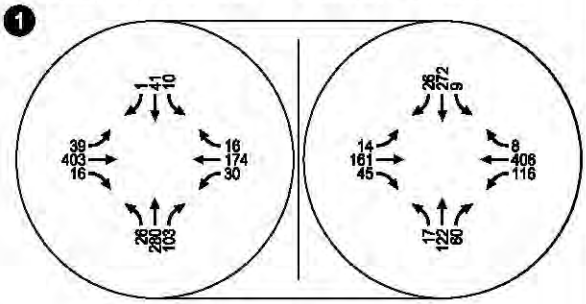
Notes: [1] Travel lanes include the total number of lanes across the roadway's respective cross section.



LINDER RD & AMITY RD

Weekday AM Peak Hour | Weekday PM Peak Hour

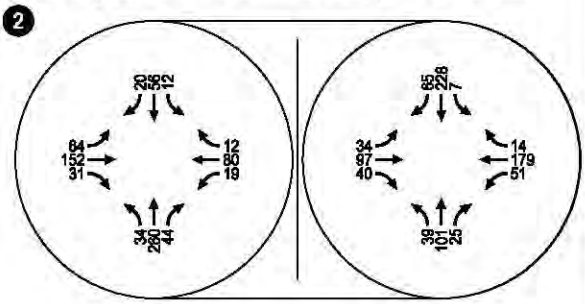
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LINDER RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

2



LINDER RD & NEW COLLECTOR RD

Weekday AM Peak Hour | Weekday PM Peak Hour

A

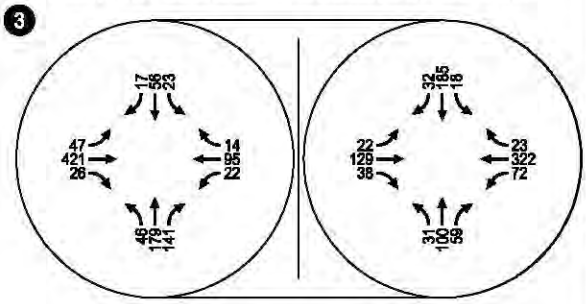
This access will not exist until build-out of the site. Therefore, it is has not been analyzed under Year 2026 Background conditions.

This access will not exist until build-out of the site. Therefore, it is has not been analyzed under Year 2026 Background conditions.

LINDER RD & COLUMBIA RD

Weekday AM Peak Hour | Weekday PM Peak Hour

3



LINDER RD & SOUTHEAST ACCESS

Weekday AM Peak Hour | Weekday PM Peak Hour

B

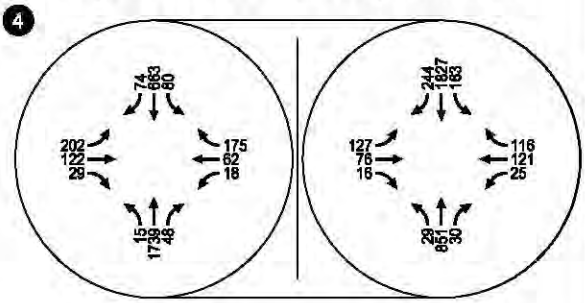
This access will not exist until build-out of the site. Therefore, it is has not been analyzed under Year 2026 Background conditions.

This access will not exist until build-out of the site. Therefore, it is has not been analyzed under Year 2026 Background conditions.

MERIDIAN RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

4



LEGEND

(##) - Study Intersections

(X) - Site Access

Year 2026 Background Traffic Volumes
Weekend AM and PM Peak Hour
Kuna, Idaho

Figure 5

H:\22\122046 - Gripentrog Subdivision TIS\dwgs\122046_Figures.dwg Feb 06, 2018 - 1:57pm - bkorporaal Layout Tab: Fig 5_Background

MITIGATION

This section highlights the mitigation needed at each of year 2026 background intersections falling below ACHD's traffic operation standards. *Appendix "G" contains year 2026 background mitigated traffic operation worksheets for the intersections outlined below, including the findings from the signal warrant analysis.*

Amity Road & Linder Road

Year 2026 background analysis findings indicate that the westbound approach at the Amity Road & Linder Road all-way stop controlled intersection is expected to operate with a volume-to-capacity ratio above 1.00 during the p.m. peak hour. This finding is consistent with the Caspian Subdivision TIS and Springhill Subdivision TIS.

This intersection has been identified in ACHD's *2016 CIP* (IN2016-5) as a planned reconstruction of the stop controlled intersection to include a single-lane roundabout with a southbound right-turn bypass lane, as shown in Exhibit 1. This project is currently scheduled for the year 2031 – 2035 time frame. Implementation of a single-lane roundabout in 2026 would improve intersection operations within ACHD's intersection standards.

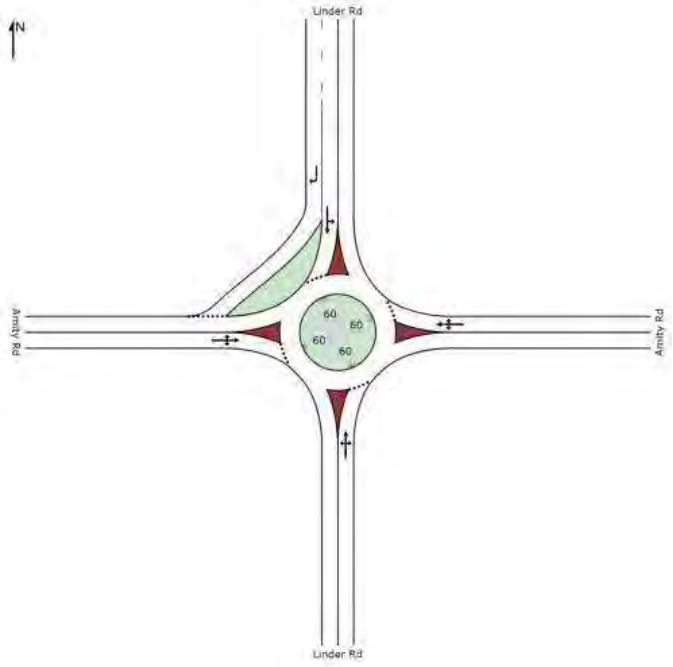


Exhibit 1. Linder Rd & Amity Rd Roundabout Layout as Described in ACHD's *2016 CIP (IN2016-5)*

An alternative to converting the stop-controlled intersection to a single-lane roundabout as described in ACHD's *2016 CIP,* would be to install a traffic signal and widen each approach to include a left-turn lane at the intersection. Installation of an interim traffic signal has already been conditioned on the Caspian Subdivision by ACHD.

KAI completed a signal warrant analysis for the Amity Road & Linder Road intersection based on 24-hour counts for each approach of the intersection provided by ACHD and recent KAI 24-hour counts for south leg of the intersection. The counts were used to develop an hourly profile for arrivals throughout each hour of the day. The 70% warrant factor was applied because the speeds on both approaches are in excess of 40 miles per hour. Table 10 shows the results for two of the volume signal warrants.

Table 10. Year 2026 Background Eight-Hour and Four-Hour Warrant Thresholds at Amity Road & Linder Road

Hour	Warrant #1 (Eight-Hour Warrant)			Warrant #2 (Four-Hour Warrant)			
	Amity Road EB & WB Combined[1]	Linder Road (Highest Street Approach)[2]	Condition Met? (A and/or B)	Amity Road EB & WB Combined[1]	Linder Road (Highest Street Approach)[2]	Threshold	Threshold Met? (Yes or No)
12:00	25	10	No	25	10	376	No
1:00	9	5	No	9	5	388	No
2:00	7	7	No	7	7	390	No
3:00	9	9	No	9	9	388	No
4:00	25	14	No	25	14	376	No
5:00	81	50	No	81	50	336	No
6:00	263	170	No	263	170	225	No
7:00	***678***	***409***	A & B	678	409	75	Yes
8:00	341	185	No	341	185	186	No
9:00	247	115	No	247	115	234	No
10:00	258	84	No	258	84	228	No
11:00	241	106	No	241	106	237	No
12:00	253	100	No	253	100	231	No
13:00	280	129	No	280	129	216	No
14:00	282	133	No	282	133	215	No
15:00	*361*	*156*	A	361	156	177	No
16:00	***511***	***210***	A	511	210	118	Yes
17:00	***750***	***307***	A & B	750	307	64	Yes
18:00	*404*	*163*	A	404	163	158	Yes
19:00	249	87	No	249	87	233	No
20:00	203	74	No	203	74	259	No
21:00	192	47	No	192	47	265	No
22:00	90	22	No	90	22	330	No
23:00	64	15	No	64	15	348	No

Notes: [1] The combined northbound and southbound volumes along SH 69 represent the 24-hour counts collected by ACHD. [2] Represents the highest volume on either minor street approach for that particular hour, which was from the 24-hour counts provided by ACHD. *Italics* indicates volumes meeting Condition A thresholds. **Bold** indicates volumes meeting Condition B volume thresholds. ***Bold and italics*** indicate volumes meeting Condition A and Condition B volume thresholds. Highlighted cells indicate the hours in which thresholds of Condition A and/or Condition B are met, as well as hours in which thresholds are met for Warrant #2.

As shown in Table 10, Condition A of Warrant #1 is only met for five hours during the day, while Condition B is only met for two. Because neither Condition A nor Condition B is met for at least eight hours throughout the day, Warrant #1 was not met. The vehicle-based volume thresholds for the four-hour warrant (Warrant #2), was met for four hours of the day, meeting Warrant #2 conditions.

While the estimated background year 2026 volumes do not warrant a traffic signal under Warrant #1 (eight-hour) conditions, both Warrant #2 (four-hour) and the Warrant #3 (peak-hour) was met. The peak hour coincides with the p.m. peak hour operating below ACHD unsignalized intersection standards. A single-lane roundabout, as described in ACHD's *2016 CIP* (IN2016-5), or a traffic signal with

left-turns lane at each approach would satisfy ACHD intersection operating standards. The results for either option during the year 2026 background conditions are presented in Table 11.

Table 11. Year 2026 Mitigated Background Intersection Operations at Amity Road & Linder Road

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Amity Rd & Linder Rd	Single-Lane Roundabout w/SBR Turn Bypass Lane	0.57 (0.48)	A (A)	9.0 (7.8)	EBLTR	0.41	A	7.0	0.26	A	6.8
					WBLTR	0.27	A	6.8	0.48	A	8.4
					NBLTR	0.57	B	13.0	0.19	A	4.9
					SBLT	0.06	A	3.9	0.39	A	9.7
					SBR	0.01	A	3.4	0.03	A	4.5
Amity Rd & Linder Rd	Traffic Signal w/left-turn lanes on each approach	0.67 (0.60)	B (B)	19.0 (15.9)	EBL	0.09	B	12.2	0.05	B	13.1
					EBTR	0.78	B	19.9	0.47	B	15.6
					WBL	0.12	B	13.9	0.25	B	11.2
					WBTR	0.37	B	15.4	0.73	B	16.1
					NBL	0.05	B	13.9	0.06	B	13.6
					NBTR	0.80	C	21.7	0.42	B	15.4
					SBL	0.05	B	15.8	0.03	B	13.4
					SBTR	0.09	B	15.4	0.69	B	18.3

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

Lake Hazel Road & Meridian Road (SH 69)

Assuming ITD and ACHD only signalizes the intersection without adding additional turn lanes before year 2026, the improvements expected to be completed as outlined in ACHD's *2018-2022 FYWP* at the intersection are expected to be inadequate to provide operating standards within ACHD's and ITD's standards during the year 2026 background a.m. and p.m. peak hours. Because of the anticipated background growth along Lake Hazel Road, additional improvements are needed in order to satisfy individual lane group standards for ACHD and ITD at the intersection.

A sensitivity analysis found that the ACHD *2016 CIP* (IN2016-60), or other interim improvements, will be needed in approximately year 2025, without traffic from Whisper Meadows Subdivision. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* (IN2016-60) improvements will mitigate the 2026 conditions if constructed in that timeframe.

If ACHD's *2016 CIP* (IN2016-60) improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in the *2018-2022 FYWP*):

- An additional eastbound left-turn lane (dual left-turns),
- A westbound right-turn lane, and
- A southbound right-turn lane.

By converting the two-way stop controlled intersection to be a traffic signal with the additional lane configuration listed above, the intersection is expected to operate at LOS D with a v/c ratio of 0.88 and at LOS C with a v/c ratio of 0.82 during the a.m. and p.m. peak hour, respectively. All lane groups are

expected to operate within ACHD and ITD standards, as shown in Table 12. In order to keep the overall intersection under a 0.90 vehicle-to-capacity ratio in the long-term, additional through lanes on SH 69 will likely be needed, as well as the implementation of the intersection improvements outlined in ACHD's *2016 CIP* (IN2016-60).

Table 12. Year 2026 Mitigated Background Intersection Operations Lake Hazel Road & Meridian Road

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Lake Hazel Rd & Meridian Rd ▪ w/dual EBL turn lanes ▪ w/WBR turn lane ▪ w/SBR turn lane	Traffic Signal	0.88 (0.82)	D (C)	40.9 (21.8)	EBL	0.84	F	86.5	0.74	E	69.9
					EBTR	0.48	D	52.0	0.42	D	53.9
					WBL	0.61	F	88.1	0.66	F	80.9
					WBT	0.27	E	56.2	0.71	E	63.6
					WBR	0.91	F	97.4	0.81	E	74.7
					NBL	0.04	B	10.4	0.22	C	20.9
					NBTR	0.94	D	40.3	0.41	B	10.8
					SBL	0.74	D	51.8	0.39	A	8.3
					SBT	0.35	B	12.5	0.84	B	18.2
					SBR	0.09	B	10.3	0.25	A	8.2

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

WHISPER MEADOWS SUBDIVISION ESTIMATED TRIP GENERATION

The projected weekday daily, a.m., and p.m. peak hour vehicle trips for the proposed development were estimated based on the *Trip Generation Manual, 9th Edition* (Reference 10). Internal trip and pass-by trips are not applicable for this development. Based on data provided for single-family detached housing the *Trip Generation Handbook, 3rd Edition* (Reference 11) recommended the use of the fitted curve equations to determine weekday daily, a.m., and p.m. peak hour vehicle trips. Table 13 summarizes the estimated trip generation for the proposed Whisper Meadows Subdivision development.

Table 13. Whisper Meadows Subdivision Estimated Trip Generation

Land Use	ITE Code	Units	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Single-Family House	210	311	2,983	227	57	170	292	184	108

Notes: Fitted curve equation used based on data provided by ITE.

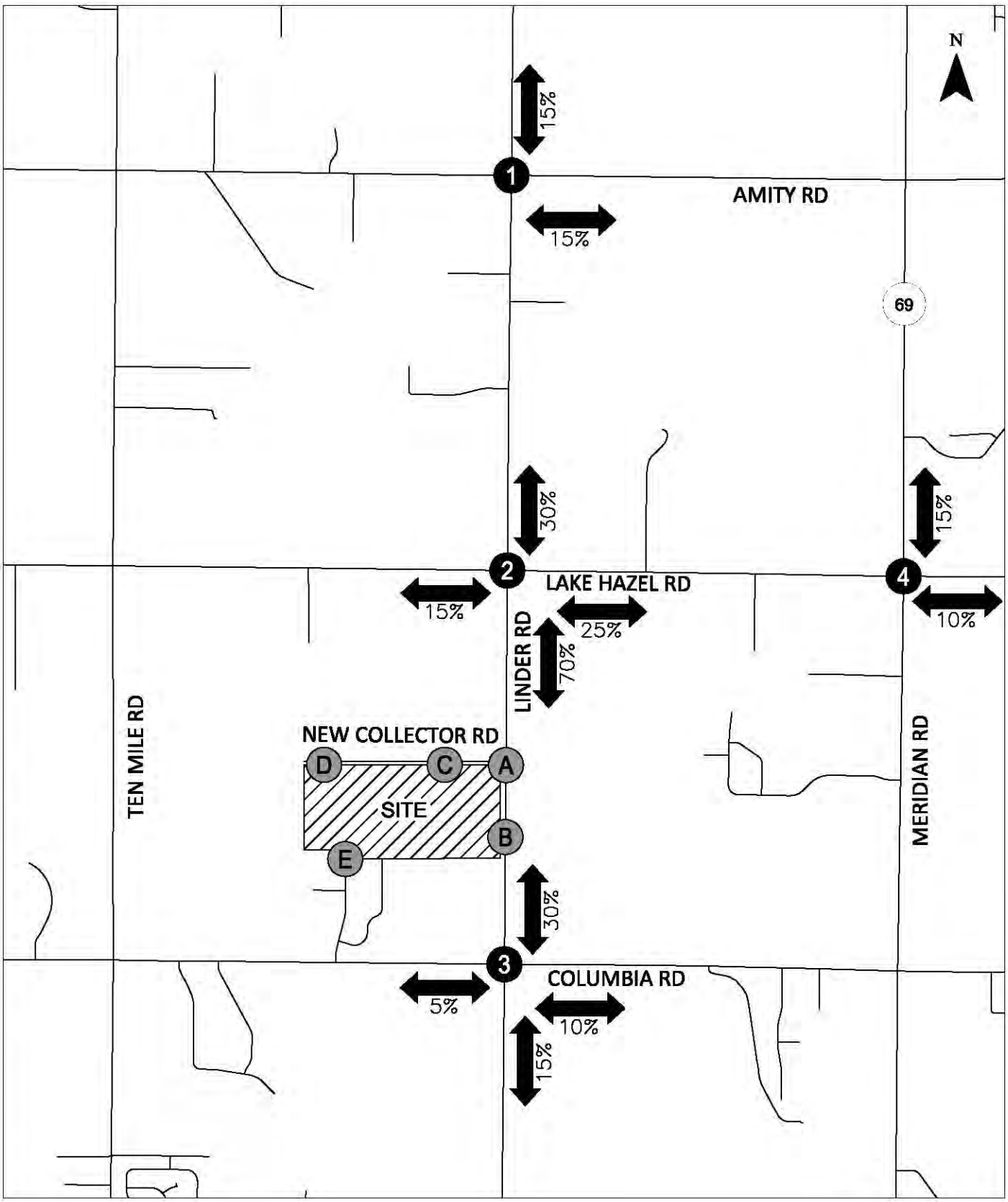
As shown in Table 13, the full-build out the proposed Whisper Meadows Subdivision development is estimated to generate a total of 2,938 daily net new trips, 227 weekday a.m. peak hour net new trips (57 inbound / 170 outbound) and 292 weekday p.m. peak hour net new trips (184 inbound / 108 outbound).

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The trip distribution patterns are based on the access connections to and from the proposed development and their attraction/destination characteristics. The COMPASS 2040 regional travel demand model was used as a starting point to understand the general trip distribution patterns assumed for this site.

Figure 6 illustrates the trip distribution patterns for the proposed development. The major trip distribution patterns are approximately 45% to the north, dispersed between Meridian Road and Linder Road; and 20% to the east and west on Lake Hazel Road, and Columbia Road. While Ten Mile Road is not shown, a significant portion of the trips to the west will also go north on Ten Mile Road.

The trip assignment for year 2026 site-generated trips is provided in Figure 7 and Figure 8. These trips reflect the trip generation of the 311 single-family housing units during a typical weekday a.m. and p.m. peak hour. Based on the preliminary site plan and phase coordination, year 2026 total traffic conditions assumes two accesses for the development on Linder Road including a new collector road as the northern boundary of the site.



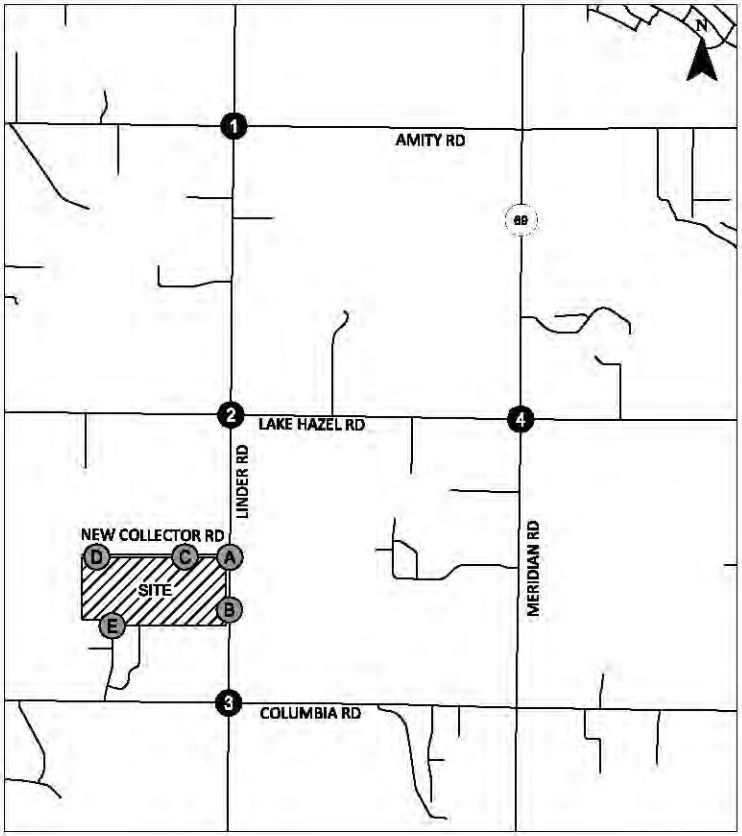
LEGEND
(##) - Study Intersections
(X) - Site Access
XX% - Trip Distribution Percentage

Estimated Trip Distribution
Kuna, Idaho

Figure
6

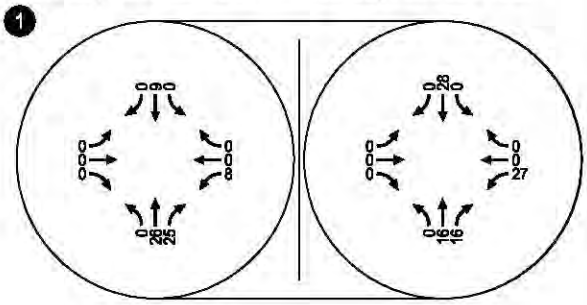
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KITTELSON & ASSOCIATES



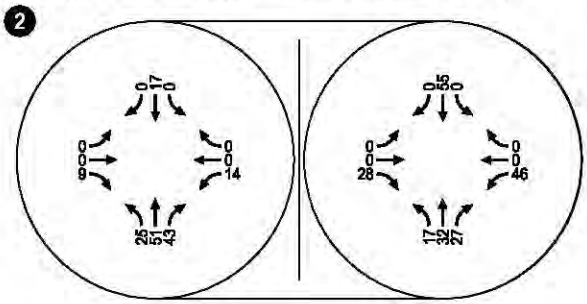
LINDER RD & AMITY RD

Weekday AM Peak Hour | Weekday PM Peak Hour



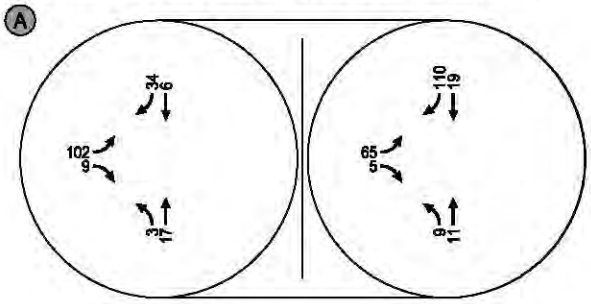
LINDER RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour



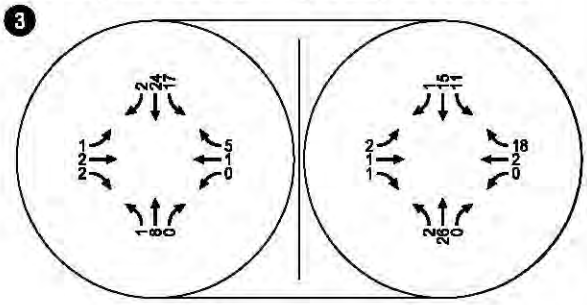
LINDER RD & NEW COLLECTOR RD

Weekday AM Peak Hour | Weekday PM Peak Hour



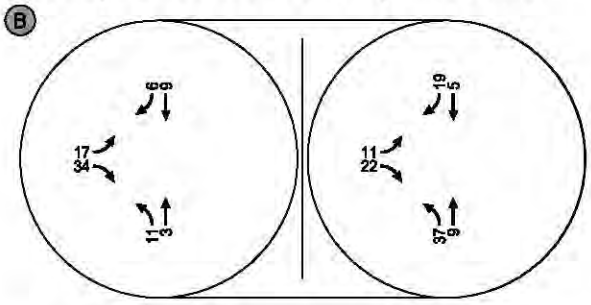
LINDER RD & COLUMBIA RD

Weekday AM Peak Hour | Weekday PM Peak Hour



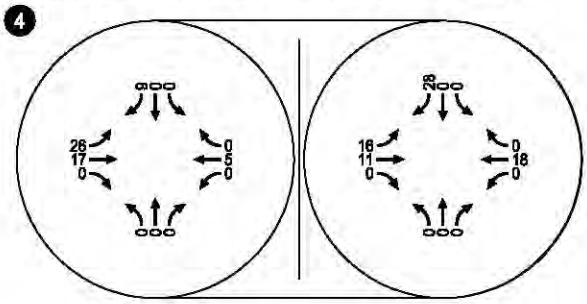
LINDER RD & SOUTHEAST ACCESS

Weekday AM Peak Hour | Weekday PM Peak Hour



MERIDIAN RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour



LEGEND

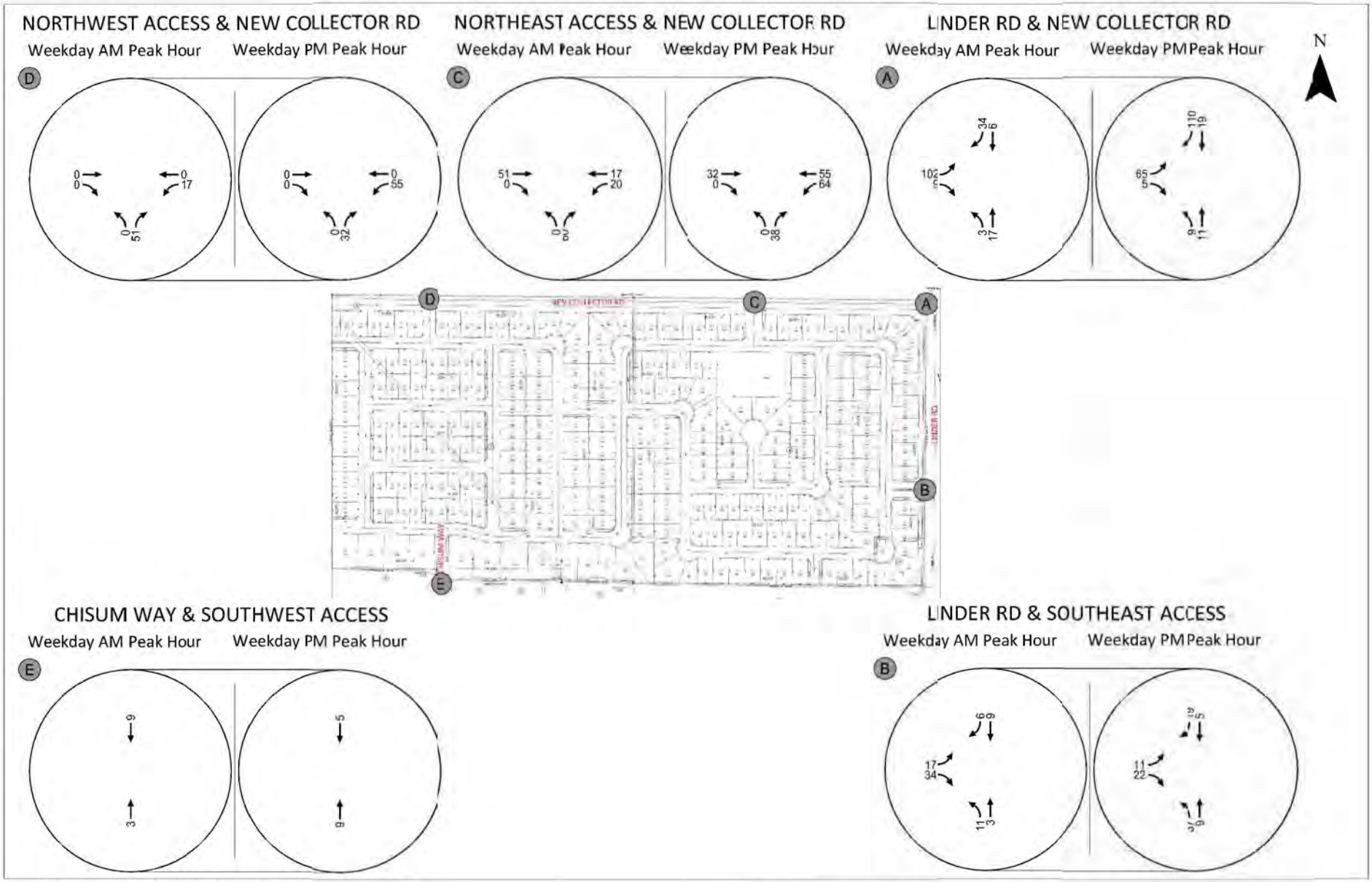
(##) - Study Intersections

(X) - Site Access

Site-Generated Trips
Weekend AM and PM Peak Hour
Kuna, Idaho

Figure **7**

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Note: Preliminary site plan from Bailey Engineering, Inc. dated October 2017.

Site-Generated Trips at Site Accesses
AM and PM Peak Hour
Kuna, Idaho

Figure
8

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YEAR 2026 TOTAL TRAFFIC CONDITIONS

The year 2026 total traffic scenario analyzed how the study area's transportation system will operate with the site-generated trips from the build-out of the 311 single-family unit homes from the proposed Whisper Meadows Subdivision development.

Traffic Volumes

Site-generated trips (shown in Figure 7 and Figure 8) were added to the year 2026 background weekday a.m. and p.m. peak hour traffic volumes to arrive at year 2026 total traffic volumes shown in Figure 9.

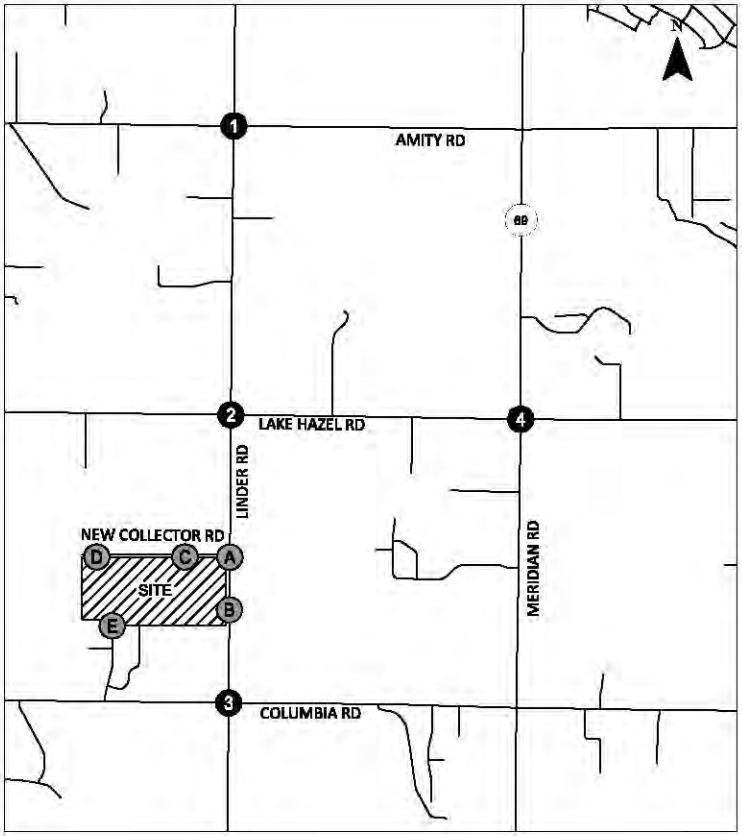
Weekday AM and PM Peak Hour Intersection Operations

Table 14 presents the traffic operation results for each intersection and its corresponding lane groups under 2026 total traffic conditions during the weekday a.m. and p.m. peak hours. *Appendix "H" includes the traffic operation worksheets for year 2026 total traffic conditions during the weekday a.m. and p.m. peak hour scenarios.*

The site-generated trips did not impact any additional intersections not previously mentioned. Similar to year 2026 background traffic conditions, all study intersections operate at acceptable operating standards during year 2026 total traffic condition weekday a.m. and p.m. peak hours with the exception of the following intersections:

- **Amity Road & Linder Road (PM Peak Hour)** – During the weekday p.m. peak hour the westbound approach is projected to reach capacity which was found to occur under year 2026 background conditions.
- **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards. This is without the ACHD signalized improvement programmed for 2018 that will provide a traffic signal and the additional lane improvements programmed for 2026 – 2030 that will widen the approaches at the intersections.
    - With the traffic signal installed as described in the *FYWP*, the intersection is projected to operate at LOS E and LOS D with the eastbound and westbound approaches operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. Additionally, the southbound shared through/right movement operates above capacity during the p.m. peak hour.

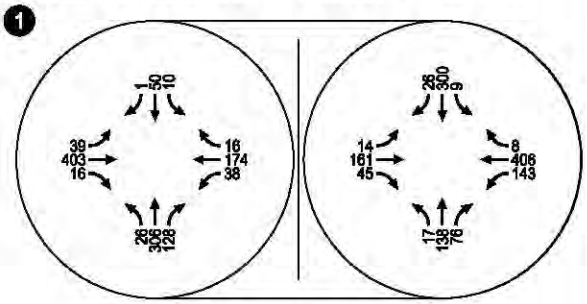
Potential mitigation for each of these intersections is described in a following section.



LINDER RD & AMITY RD

Weekday AM Peak Hour | Weekday PM Peak Hour

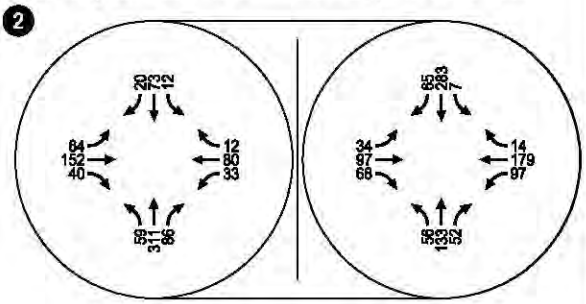
1



LINDER RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

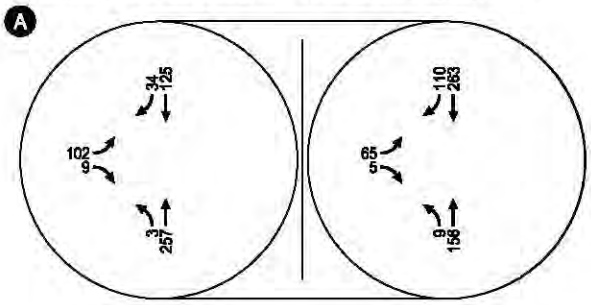
2



LINDER RD & NEW COLLECTOR RD

Weekday AM Peak Hour | Weekday PM Peak Hour

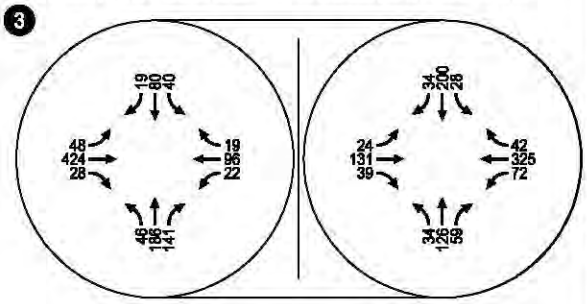
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LINDER RD & COLUMBIA RD

Weekday AM Peak Hour | Weekday PM Peak Hour

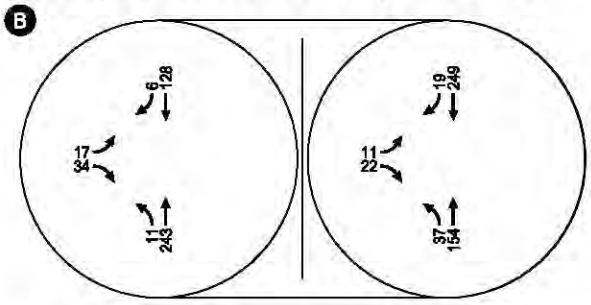
3



LINDER RD & SOUTHEAST ACCESS

Weekday AM Peak Hour | Weekday PM Peak Hour

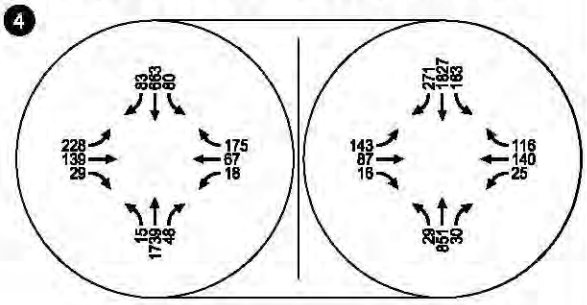
B



MERIDIAN RD & LAKE HAZEL RD

Weekday AM Peak Hour | Weekday PM Peak Hour

4



LEGEND

(##) - Study Intersections

(X) - Site Access

Year 2026 Total Traffic Volumes
Weekend AM and PM Peak Hour
Kuna, Idaho

Figure 9

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KITTELSON & ASSOCIATES

Table 14. Year 2026 Total Intersection Operations – AM and PM Peak Hour

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Linder Rd & Amity Rd	AWSC	N/A	E (F)	38.6 (51.2)	EBLTR	0.92	E	46.7	0.49	C	17.5
					WBLTR	0.50	C	17.3	***1.09***	***F***	***93.1***
					NBLTR	0.91	E	44.5	0.52	C	18.3
					SBLTR	0.15	B	12.6	0.72	D	26.5
Linder Rd & Lake Hazel Rd	AWSC	N/A	C (C)	17.2 (16.9)	EBLTR	0.46	B	13.9	0.39	B	13.7
					WBLTR	0.24	B	11.2	0.56	C	17.5
					NBLTR	0.75	C	22.2	0.46	B	14.8
					SBLTR	0.20	B	10.5	0.65	C	19.8
Linder Rd & Columbia Rd	AWSC	N/A	C (C)	24.2 (23.1)	EBLTR	0.86	D	34.6	0.41	B	14.6
					WBLTR	0.27	B	12.2	0.85	D	34.2
					NBLTR	0.66	C	20.3	0.47	C	15.8
					SBLTR	0.28	B	12.6	0.55	C	18.0
Meridian Rd (SH 69) & Lake Hazel Rd	TWSC (Existing)	N/A	N/A	N/A	EBL	***>1.00***	***F***	***>80.0***	***>1.00***	***F***	***>80.0***
					EBTR	***17.16***	***F***	***7,936.8***	***>1.00***	***F***	***>80.0***
					WBL	***>1.00***	***F***	***>80.0***	***>1.00***	***F***	***>80.0***
					WBLTR	***9.06***	***F***	***3,883.9***	***>1.00***	***F***	***>80.0***
					NBL	0.02	A	9.6	0.13	C	22.5
					SBL	0.31	C	23.0	0.24	B	11.4
	Interim Traffic Signal (Planned for Construction by ITD/ACHD in 2018)	1.03 (1.03)	E (D)	60.8 (54.4)	EBL	0.97	F	94.2	0.91	F	95.6
					EBTR	0.44	D	48.5	0.32	D	52.0
					WBL	0.08	D	53.9	0.10	D	52.1
					WBTR	***1.24***	***F***	***206.6***	***1.11***	***F***	***152.2***
					NBL	0.05	B	13.2	0.34	D	40.0
					NBTR	0.99	E	55.6	0.44	B	15.7
					SBL	0.81	E	70.2	0.43	B	12.1
					SBTR	0.41	B	16.1	***1.04***	***F***	***65.5***

Year 2026 Total Roadway Segment Analysis

Roadway segment volumes were based on year 2026 total volumes at the study intersections. Table 15 details peak hour, peak direction roadway segment volumes, and resultant LOS per ACHD District Policy 7106.3.3 for the ACHD roadway facilities. As shown in Table 15, all of the existing roadway segments currently meet ACHD standards and operate at acceptable LOS during the year 2026 total weekday a.m. and p.m. peak hour.

Table 15. Year 2026 Total Roadway Segment Operations - Weekday AM and PM Peak Hour

Roadway Segment	Classification	Travel Lanes[1]	ACHD Peak Hour Std. Volume (One-Way)	Weekday AM Peak Hour		Weekday PM Peak Hour	
				One-Way Volume/ Direction	Meets Std.?	One-Way Volume/ Direction	Meets Std.?
Lake Hazel Rd (Linder Rd to SH 69)	Principal Arterial	2	690	251 / EB	Yes	290 / WB	Yes
Linder Rd (Amity Rd to Lake Hazel Rd)	Minor Arterial	2	575	387 / NB	Yes	355 / SB	Yes
Linder Rd (Lake Hazel Rd to Columbia Rd)	Minor Arterial	2	575	456 / NB	Yes	448 / SB	Yes

Notes: [1] Travel lanes include the total number of lanes across the roadway's respective cross section.

Year 2026 Site Access Operations

Primary access to the site will be via the new collector roadway, a new local street connection to Linder Road, and a connection to Chisum Way. Additionally, there will be two internal local street accesses to the new collector road. The fifth site access location is a connection to an existing stub street, which does not include any turning movements and therefore does not record a level of service. Due to the very low volumes projected to use Chisum Way level of service on Chisum Way was not evaluated.

The year 2026 analysis did not assume any access restrictions into and out of the site. Each access was analyzed as an unsignalized intersection with the stop-control on the minor street/subdivision approach. The assumed base lane configuration used for the operations analysis at each access included one lane for the minor street approach and no dedicated turn lanes into the site. The need for turn lanes is evaluated separately in a later section of this report.

Table 16 presents the expected operations at the site accesses during the year 2026 weekday a.m. and p.m. peak hour. All four site accesses operate above the ACHD's level of service standard during the weekday a.m. and p.m. peak hour.

Table 16. Year 2026 Site Access Operations - AM and PM Peak Hour

Site Access	Intersection Control	Lane Group	AM Peak Hour			PM Peak Hour		
			V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
A. Linder Road/New Collector Rd	TWSC	EBLR	0.21	B	12.8	0.15	B	13.4
		NBL	0.01	A	7.6	0.01	A	8.1
B. Linder Road/Southeast Access	TWSC	EBLR	0.08	B	10.1	0.06	B	11.0
		NBL	0.01	A	7.5	0.03	A	7.9
C. Northeast Access/New Collector	TWSC	WBL	0.01	A	7.3	0.05	A	7.4
		NBLR	0.07	A	8.8	0.04	A	8.6
D. Northwest Access/New Collector	TWSC	WBL	0.01	A	7.2	0.04	A	7.3
		NBLR	0.05	A	8.5	0.04	A	8.4

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

MITIGATION

This section highlights the mitigation needed at each of the intersections and segments falling below ACHD's traffic operational standards under 2026 total traffic conditions. *Appendix "I" contains year 2026 total mitigated traffic operation worksheets for the intersections outlined below.*

Amity Road & Linder Road

As outlined previously, the westbound approach at the Amity Road & Linder Road all-way stop controlled intersection is expected to operate with a volume-to-capacity ratio above 1.00 during the p.m. peak hour. The intersection is estimated to reach the ACHD capacity threshold under 2026 background conditions. With the inclusion of site-generated trips, a signal warrant analysis found that year 2026 total traffic volumes do not meet Warrant #1 (eight-hour) conditions. Volumes do meet Warrant #2 (four-hour) thresholds for five hours throughout the day. Additionally, as found in year 2026 background conditions, Warrant #3 (peak-hour) warrant is met as well.

This intersection has been identified in ACHD's *2016 CIP* (IN2016-5) as a planned reconstruction of the stop controlled intersection to include a single-lane roundabout with a southbound right-turn bypass lane. This project is currently scheduled for the year 2031 – 2035 time frame. Implementation of a single-lane roundabout in 2026 would improve intersection operations to an acceptable level. As discussed in the background mitigation an alternative to a roundabout at the intersection could include a traffic signal with left-turn lanes for each approach. Table 17 provides the expected operations at the intersection under either improvement.

Table 17. Year 2026 Mitigated Total Intersection Operations at Amity Road & Linder Road

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Amity Rd & Linder Rd	Single-Lane Roundabout w/SBR Turn Bypass Lane	0.64 (0.52)	B (A)	10.1 (8.5)	EBLTR	0.42	A	7.2	0.28	A	7.4
					WBLTR	0.29	A	7.2	0.52	A	9.1
					NBLTR	0.64	C	15.2	0.22	A	5.2
					SBLT	0.07	A	7.2	0.44	B	10.9
					SBR	0.01	A	7.2	0.03	A	4.5
Amity Rd & Linder Rd	Traffic Signal w/left-turn lanes on each approach	0.70 (0.60)	C (B)	20.6 (16.3)	EBL	0.10	B	13.6	0.05	B	14.0
					EBTR	0.80	C	22.3	0.49	B	16.8
					WBL	0.16	B	15.5	0.32	B	11.9
					WBTR	0.36	B	17.0	0.73	B	16.8
					NBL	0.05	B	13.8	0.06	B	13.4
					NBTR	0.83	C	22.8	0.46	B	15.5
					SBL	0.05	B	16.4	0.03	B	13.2
					SBTR	0.10	B	15.4	0.70	B	18.2

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

Lake Hazel Road & Meridian Road (SH 69)

Similar to the year 2026 background condition analysis findings, even with signalization described in the *2018–2022 FYWP*, the Lake Hazel Road & Meridian Road intersection does not meet ACHD and ITD operating standards under year 2026 total conditions during the weekday a.m. and p.m. peak hours.

A sensitivity analysis found that the ACHD *2016 CIP* (IN2016-60), or other interim improvements, will be needed in approximately year 2025, with or without traffic from Whisper Meadows Subdivision. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* (IN2016-60) improvements will mitigate the 2026 conditions if constructed in that timeframe. At that time Whisper Meadows is anticipated to have 286 units occupied at the time mitigation is needed.

If ACHD's *2016 CIP* (IN2016-60) improvements are not constructed, the site-generated trips do not require any additional mitigation from the background mitigation findings. The additional lanes needed to meet ACHD and ITD standards are the same as 2026 background mitigation analyses which identified the following additional improvements (in addition to signalization scheduled in 2018):

- An additional eastbound left-turn lane (to create dual left-turns)
- A westbound right-turn lane
- A southbound right-turn lane

Table 18 presents the year 2026 total traffic operations at the Lake Hazel Road & Meridian Road intersection with the additional lane recommendations listed above. As seen in the table the intersection's overall vehicle-to-capacity ratio is approaching capacity. In order to keep the overall intersection under a 0.90 vehicle-to-capacity ratio in the long-term, additional through lanes on SH 69 will likely be needed, as well as the implementation of the intersection improvements outlined in ACHD's *2016 CIP* (IN2016-60).

Table 18. Year 2026 Mitigated Total Intersection Operations at Lake Hazel Rd & Meridian Rd

Intersection	Intersection Control	Intersection AM (PM)			Lane Group	AM Peak Hour			PM Peak Hour		
		V/C[1]	LOS[2]	Delay[3]		V/C[1]	LOS[2]	Delay[3]	V/C[1]	LOS[2]	Delay[3]
Lake Hazel Rd & Meridian Rd ▪ w/dual EBL turn lanes ▪ w/WBR turn lane ▪ w/SBR turn lane	Traffic Signal	0.89 (0.83)	D (C)	41.3 (22.7)	EBL	0.86	F	85.9	0.75	E	69.7
					EBTR	0.52	D	52.9	0.45	D	53.6
					WBL	0.61	F	88.4	0.66	F	80.9
					WBT	0.31	E	57.7	0.81	E	71.1
					WBR	0.95	F	109.7	0.79	E	70.4
					NBL	0.04	B	10.4	0.22	C	21.1
					NBTR	0.93	D	39.2	0.41	B	11.2
					SBL	0.71	d	48.5	0.39	A	8.6
					SBT	0.34	B	12.6	0.84	B	18.7
					SBR	0.10	B	10.5	0.28	A	8.7

Notes: [1] V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; [2] LOS = Level of Service; [3] Delay is reported in seconds per vehicle; and **Bold *and italics*** and highlighted cells indicate an intersection and/or lane group operating below its jurisdiction's standards.

SITE ACCESS EVALUATION

This section evaluates the need for turn lanes, queueing, intersection sight distance, and the access location and operation with respect to ACHD policy. All analyses and evaluation in this section is based on full build-out of the site in year 2026. *Appendix "J" contains the worksheets for the turn lane warrant, queueing and additional operation analyses for site access evaluation.*

The preliminary site plan shows eight site accesses for the proposed development; however, three of those accesses include future stub street connections which are not anticipated to connect to future developments until after the build-out of the Whisper Meadows Subdivision.

In year 2026, the site proposes five accesses upon build-out of the site. The preliminary site plan proposes two accesses to Linder Road, one including the new collector road and the other a local street connection. Two accesses will include local road connections to the new collector road and there will be one stub street connection to Chisum Way which will provide access through an existing subdivision to the south and out to Columbia Road.

Exhibit 2 shows the proposed site plan over an aerial with callouts of the proposed access locations with respect to their locations along Linder Road and the proposed new collector road. The north border of the site is proposed to be the new "mid-mile" collector street as shown in ACHD's Master Street Map. A review of the ACHD Master Street map shows a proposed east-west residential connector at the approximate location as depicted collector in the preliminary site plan. All of the internal streets are proposed to be local streets.

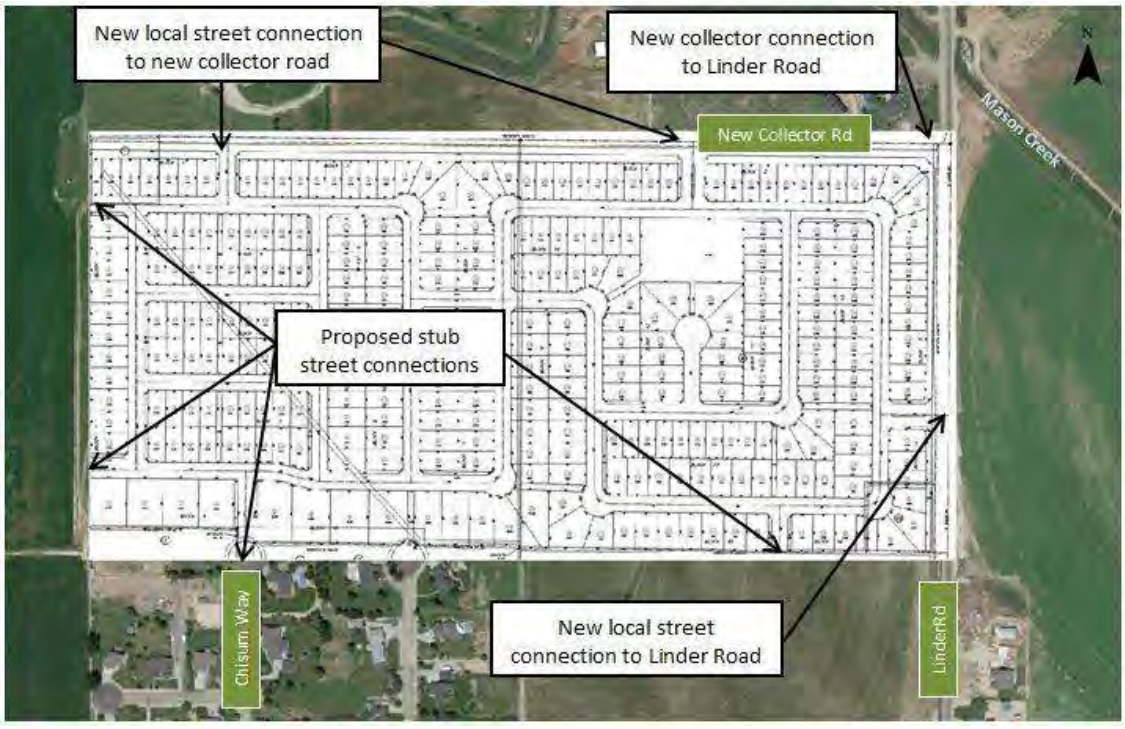


Exhibit 2. Proposed Site Access Locations

Turn Lane Warrant Analysis

An analysis of the need for left-turn and right-turn lanes was performed for the site accesses along Linder Road and the new collector road. All off-site intersections are all-way-stop-controlled or signalized in which turn lanes are evaluated based on traffic operations. Therefore the off-site intersections were not included in this evaluation. The warrant analysis used the ACHD guidelines as presented in Section of 7106.4.3 of the *ACHD Policy Manual*.

Table 19 shows the results of the turn lane analysis at the site access locations.

Table 19. Turn Lane Analysis Results

Site Access	Turn Lane	Warranted / Storage?
A. Linder Road & New Collector Road	SB Right Turn Lane NB Left-Turn Lane	Yes / 100 feet No
B. Linder Road & Southeast Access	SB Right Turn Lane NB Left Turn Lane	No No
C. Northeast Access & New Collector Road	EB Right Turn Lane WB Left Turn Lane	No No
D. Northwest Access & New Collector Road	EB Right Turn Lane WB Left Turn Lane	No No

Based on the analysis, the following turn lanes are warranted at the site accesses based on *ACHD's Policy Manual*:

- Linder Road & New Collector Road (Site Access A) :
    - Southbound right-turn lane
        - A sensitivity analysis found that a southbound right-turn lane will be warranted in approximately year 2021 with the build-out of approximately 144 Whisper Meadows housing units.

Queuing Analysis

A queuing analysis was performed at the access points on Linder Road and New Collector Road for vehicles entering and exiting the proposed Whisper Meadows Subdivision. Estimates of the 95th percentile queue are based on the Synchro analysis. Table 20 shows the results of the queuing analysis.

As shown in Table 20, no queue length is projected to be beyond one car length. The preliminary site plan proposes all internal site driveways are to be built with approximately 100 feet of storage without front-on housing. There are no single-unit house driveways that front any of the proposed site accesses. Therefore, queue storage is adequate at each of the site accesses.

Table 20. 95th Percentile Queue Results (2026 Total Traffic Conditions)

Site Access	Movement	Available Storage (ft.)	Estimated Weekday PM 95th Percentile Queue Rounded to 25ft Car Length (ft.) (Critical Period)	Storage is adequate? / Recommended (ft.)
A. Linder Road & New Collector Road	EBLR	600' (until next access)	25'	Yes
	NBL	None	Not Stopped	Yes
	SBR	None	Not Stopped	No / 100'[1]
B. Linder Road & Southeast Access	EBLR	100' (no driveways)	25'	Yes
	NBL	None	Not Stopped	Yes
	SBR	None	Not Stopped	Yes
C. Northeast Access & New Collector Road	NBLR	100' (no driveways)	25'	Yes
	WBL	None	Not Stopped	Yes
	EBR	None	Not Stopped	Yes
D. Northwest Road & New Collector Road	NBLR	100' (no driveways)	25'	Yes
	WBL	None	Not Stopped	Yes
	EBR	None	Not Stopped	Yes

Note: [1] Storage length based on warrants from ACHD's turn lane analysis.

Intersection Sight Distance

Intersection sight distance was reviewed at the proposed access locations on Linder Road. Sight distance was not evaluated for on the planned internal roadways since these have yet to be designed or constructed. A general observation made was that Linder Road has sag and crest vertical curves roadway between Lake Hazel Road and Columbia Road. The curves are very gradual with the sag curve near the location of the mid-mile collector, as seen in Exhibit 3. The vertical curves were gradual enough that they did not affect sight distance at either of the site accesses along Linder Road.



Exhibit 3. Linder Road between Lake Hazel Road & Columbia Road

Linder Road & New Collector Road (Site Access A)

Looking to the north on Linder Road, there is adequate sight distance (over 1,000 feet). To the south, there is also over 1,000 feet of intersection sight distance. There is a shallow crest vertical curve, but it does not impede sight distance from the elevation of the edge of the existing road. The location of the proposed mid-mile collector provides adequate sight distance to the north and south are both above the 555 feet required by AASHTO for the posted speed of 50 mph along Linder Road from the elevation at the edge of the existing pavement. Exhibit 4 provides the view of Linder Road to the north and south at the proposed mid-mile collector location. To ensure adequate site distance it is recommended that roadside landscaping and shrubbery be maintained. Additionally the new approach should be at the same elevation or higher than edge of pavement for at least one car length.

Looking north on Linder Road



Looking east on Amity Road

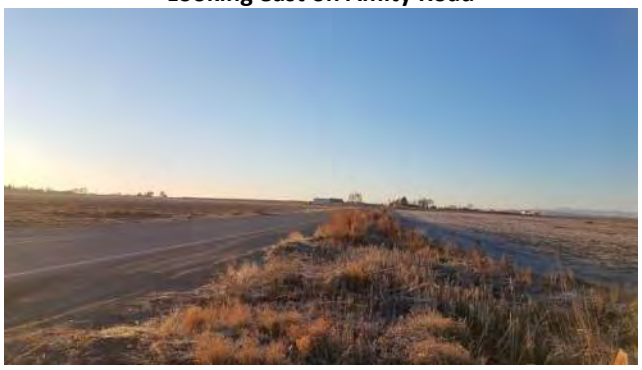


Exhibit 4. Sight Distance at the Proposed Linder Road & New Collector Road

Linder Road & Southeast Access (Site Access B)

Looking north on Linder Road, sight distance exceeds 1,000 feet. Looking south, there is a slight upward slope of Linder Road with low lying vegetation and shrubbery along the edge of the road which must be maintained in order to keep the available sight distance. Sight distance to the south is in excess of 1,000, which extends as far as the Columbia Road intersection. The sight distances looking to the north and south along Linder Road exceed the AASHTO minimum intersection sight distance of 555 feet for 50 mph roadways. Exhibit 5 provides the view to the north and south along Linder Road from the proposed access.

Looking north on Ten Mile Road



Looking south on Ten Mile Road



Exhibit 5. Sight Distance at the Proposed Linder Road & Southeast Access

The following recommendations have been identified to ensure adequate safety and operation at the site access points, internal intersections, and roadways:

- Remove miscellaneous vegetation and shrubbery, and potential obstructions along Linder Road as necessary to obtain and maintain adequate intersection sight distance.
- Site accesses along Linder Road should match the existing grade of Linder Road at the intersection and back at least one car length.
- Shrubbery, weeds, and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.
- If widening occurs along Linder Road, care should be taken to ensure adequate intersection sight distance is maintained.

Access Evaluation

Each access location was reviewed with respect the operations, queueing, and the ACHD access policy.

Traffic Volume Threshold Evaluation

Table 21 shows the estimated average daily traffic (ADT) on the site access roadways as compared with the ACHD policy for maximum traffic on a local street or collected street. One issue that comes up when a development provides stub street connections to future development is the unknown amount of traffic than might come from future development and therefore increase volumes on the local streets within the development. Therefore, ACHD has a general threshold of 2,000 ADT for local streets and a lower threshold of 1,000 ADT for local streets that connect to stub streets.

As shown in Table 21, no accesses/internal roadways exceed the ACHD maximum criteria of 2,000 ADT. But the north access (Site Access C) is projected to exceed the 1,000 ADT threshold for a local street that is stubbed to future development. Given that the street serving Site Access C is not a stub street itself, ACHD may not require it may not need to meet the 1,000 ADT criteria. Additionally, Site Access C is very close to meeting the 1,000 ADT criteria.

Therefore, the local street and collector ADT maximum thresholds are not expected to be exceeded, although the 1,000 ADT threshold for local streets that are stub streets is projected to be exceeded. Because the 1,000 ADT is barely exceeded and providing additional connections to the new collector street is not needed to serve the development. Therefore, no changes are recommended.

Table 21. 2026 Daily Traffic Estimates on Internal Roadways

Street	Estimated Existing ADT[1]	Estimated 2026 Total ADT[2]	ACHD ADT Classification / Planning ADT Threshold	Meets ACHD Criteria?
New Collector Road / (Site Access A)	0	1,940	New Collector / No Limit	Yes
Southeast Access / (Site Access B)	0	895	Local / 2,000 (Local Stubbed Street/ 1,000)	Yes
Northeast Access / (Site Access C)	0	1,045	Local / 2,000 (Local Stubbed Street/ 1,000)	Yes (No, if Considered a Stub Street)
Northwest Access / (Site Access D)	0	895	Local / 2,000 (Local Stubbed Street/ 1,000)	Yes
Chisum Way / (Site Access E)(N. of Columbia)	310[2]	460 (150 from development)	Local / 2,000 (Local Stubbed Street/ 1,000)	Yes

Notes: [1]There are no existing public streets within the proposed Whisper Meadows Subdivision development; [2]Estimted based on trip generation for the existing 31 homes; [3]ADT based on full build-out of the development (311 single-family unit homes).

Linder Road & New Collector Road (Site Access A)

This access, a proposed collector, is located on Linder Road approximately 2,640 feet, or one-half mile, south of Lake Hazel Road and north of Columbia Road. This collector forms the east side of the future mid-mile collector which is identified on the *Ada County Master Street Map* (Reference 12) as shown in Exhibit 6.

ACHD's spacing criteria for a full access collector road on a minor arterial is one half-mile. However, the minimum separation for an unsignalized collector is 1,320 feet. Therefore, the proposed access meets the public street spacing requirement on Linder Road.

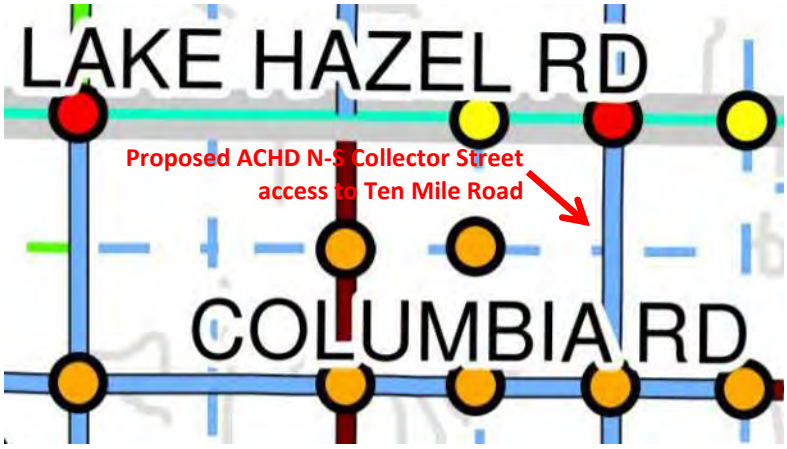


Exhibit 6. Access Connection on ACHD Master Street Map

There are four private driveways and one local street located to the north of the proposed collector road within the 1,320-foot spacing criteria, which include:

- Private Driveway 1: One driveway to the house at Linder Farms approximately 35 feet north of the new collector. This driveway is assumed to ultimately be relocated to the new collector but may require future re-development of the Linder Farms site for ACHD to require the driveway relocation.
- Private Driveway 2: A second residential driveway to the Linder Farms house is located approximately 200 feet north of the collector road access that serves the same property at Private Driveway 1. This driveway cannot be moved further north due the canal. If removed, a new access connection would need to be from the proposed collector.

- Private Driveway 3: A third private driveway located approximately 800 feet north of the proposed collector.
- New Local Street for the Springhill Subdivision: There is a planned local street to be located on the east side of Linder Road, approximately 815-830 feet north of the proposed collector.
- Private Driveway 4: A fourth private driveway located approximately 1,230 feet north of the proposed collector.

With the exception of the first two driveways to Linder Farms, the driveways listed above meet the minimum spacing criteria of 425 feet for driveways on Minor Arterials. The only driveways in which the spacing will conflict with the new collector are the first two driveways which access the property directly north of the collector road. Therefore, consideration should be given to providing access to that home and property via the collector.

To the south, the only access with be the proposed local street connection (Site Access B) located approximately 810 feet south of the proposed collector street. Therefore, the new local street would be less than the 1,320-foot spacing but beyond the 660-foot ACHD criteria for local street spacing. This is further discussed in the next section.

Based on this evaluation, the new collector street should be approved by ACHD for the following reasons:

- The proposed collector is identified on the Master Street Map and meets ACHD spacing requirements, with the exception of the driveways to the Linder Farms parcel directly north of the collector that could potentially be closed and the property accessed via the collector.
- The intersection on Linder Road will function acceptably as an unsignalized full access (with a recommended southbound right-turn lane).
- Without the collector street access, site-generated trips would increase the ADT at the southeast access on Linder Road to over 2,000 ADT, exceeding ACHD's volume threshold for a local street.
- The collector street would provide access to adjacent parcels which will minimize future development directly accessing the minor arterial (Linder Road).
- This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

Therefore the following is recommended:

- Allow the new collector street as full access with a southbound right-turn lane. If possible, access the Linder Farms property on the northwest corner of the Linder Road/Site Access A intersection via the new collector and close the accesses to Linder Road. This may require ACHD to work with that property owner or wait for redevelopment of that site.

Linder Road & Southeast Access (Site Access B)

This access, a proposed local street, accesses Linder Road approximately 810 feet south of the proposed mid-mile collector and approximately 1,830 feet north of Columbia Road. The nearest driveway to the south appears to be approximately 725 feet, although there are some locations that appear to be farm accesses. ACHD's spacing criteria for a full access public street on a minor arterial is 660 feet. Therefore, the proposed access meets the spacing requirement for Linder Road in regards to the spacing requirements on Linder Road.

Based on this evaluation, the access should be approved by ACHD for the following reasons:

- The proposed access meets ACHD spacing requirements for a local street on a minor arterial and will function acceptably as an unsignalized full access (without turn lanes).
- Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, forcing approximately 90% of the site's trips to enter and exit the subdivision via the proposed collector road.
    - Additionally, not allowing this access could promote a higher percentage of vehicles using Chisum Way (Site Access E) and cutting-through the residential subdivision to the south.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

Therefore the following is recommended:

- Allow the driveway as full access.

Northeast Access & New Collector Road (Site Access C)

This access, a proposed local street, accesses the new collector street approximately 600 feet west of Linder Road and 1,150 feet east of the proposed Northwest Access (Site Access D). This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. ACHD minimum spacing requirements for local streets along a collector street is 330 feet.

Based on this evaluation, the access should be approved by ACHD for the following reasons:

- The access meets ACHD local street spacing requirements for collector streets.
- Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Site Access D once the stub streets are connected in the future.

- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

Therefore the following is recommended:

- Allow the driveway as full access.

Northeast Access & New Collector Road (Site Access D)

This access, a proposed local street, accesses the new collector street approximately 1,150 feet west of the proposed Northeast Access (Site Access C). The proposed collector street will stub approximately 340 feet to the west of the Northwest Access. This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. ACHD minimum spacing requirements for local streets along a collector street is 330 feet.

Based on this evaluation, the access should be approved by ACHD for the following reasons:

- The access meets ACHD local street spacing requirements for collector streets.
- Without this access, approximately 1,020 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy thresholds of 1,000 ADT for a local stub street and 2,000 ADT maximum for a local street. While it may not exceed 2,000 ADT initially, it would likely exceed the maximum ADT once the stub streets in the development are connected.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

Therefore the following is recommended:

- Allow the driveway as full access.

Southwest Access & Chisum Way (Site Access E)

This access ties into an existing cul-de-saq and provides a connection to the Chisum Valley Subdivsion to the south. Chisum Way would extend past the current cul-de-sac to tie in with Whisper Meadows Subdivision, approximately 500 feet north of Cogburn Street.

There are currently approximately 31 homes that access Chisum Way at Columbia Road via Chisum Way and McLintock Place.

There is no stop or yield control at this tie in location. Chisum Way would continue as a single lane local street in both directions. Based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties."

Based on this evaluation, the access should be approved by ACHD for the following reasons:

- The access adheres to ACHD local street and stub street requirements.
- The access is not the primary access to the site, with an estimated 140 daily vehicles on Chisum Way.
- Chisum Way provides an alternative connection for southbound vehicles accessing Columbia Road.
- This access is an extension of an existing local street and will only serve residential trips as well as provide increased accessibility for emergency response vehicles and public services vehicles.
- The maximum ADT on Chisum Way is not projected to exceed the local street maximum ADT.

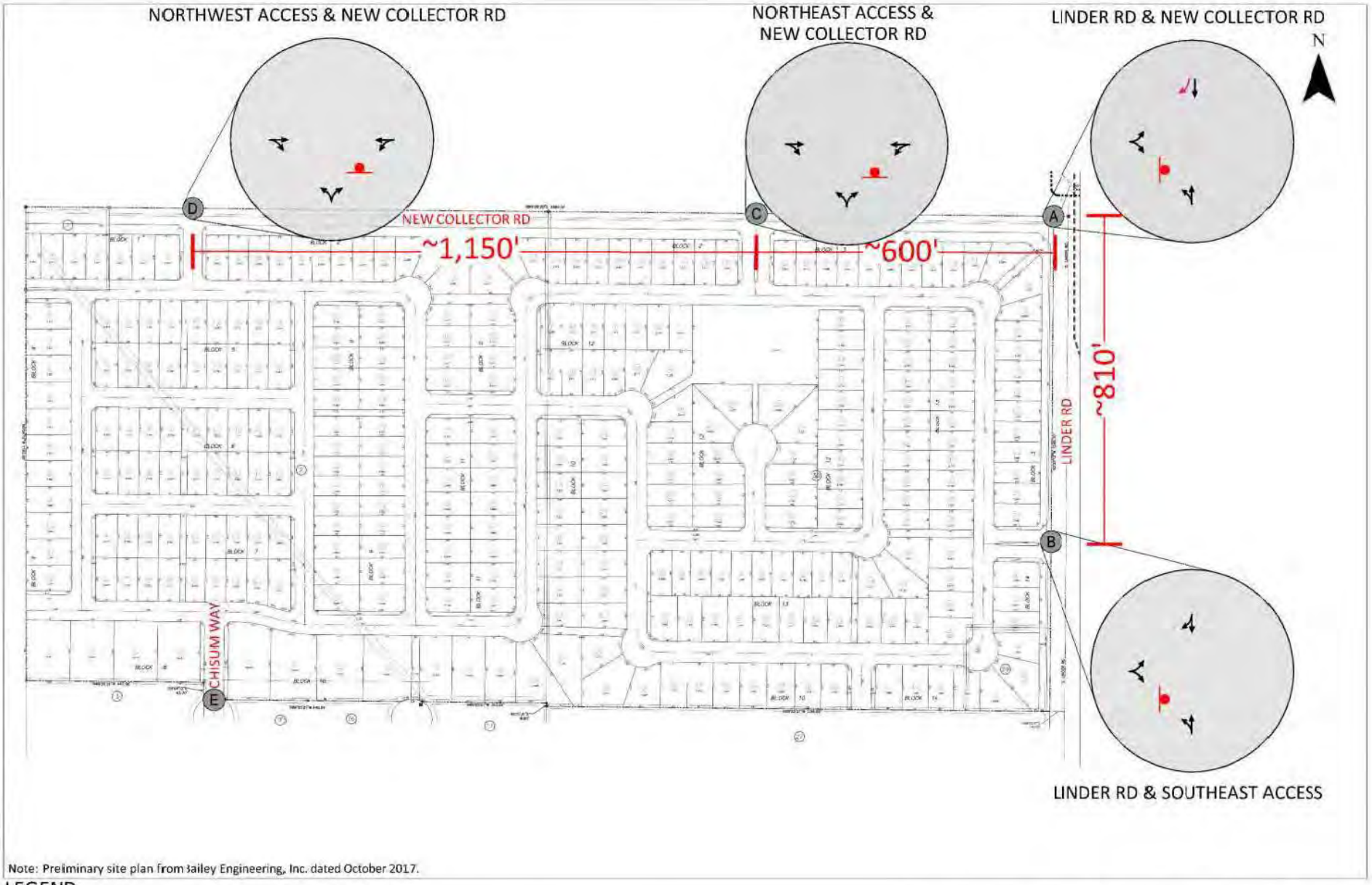
Therefore the following is recommended:

- Allow the connection to Chisum Way.

Stub Streets

The stub street to the south and two stub streets to the west are proposed to address ACHD requirements. Based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Whisper Meadows Subdivision site.

Figure 10 presents access spacing findings and recommended lane configuration at each of the proposed accesses.



Note: Preliminary site plan from Bailey Engineering, Inc. dated October 2017.

LEGEND

(X) - Site Access

- Stop Sign

- Southbound right-turn lane warranted with the build-out of approximately 144 Whisper Meadows housing units

Site Access Evaluation
Kuna, Idaho

Figure
10

H:\92\92046 - Gripentrog Subdivision TIS\dwgs\92046_Figures.dwg, Mar 01, 2018 - 7:25am - bkorpinal, Layout Tab: Fig 10_SiteAccessEval

KITTELSON & ASSOCIATES

OFF-SITE IMPROVEMENT MITIGATION THRESHOLD ANALYSIS

Table 22 shows a summary of each deficiency, study year, mitigation, and an estimate of the year and number of units that can be built prior to the deficiency. It should be noted that the deficiencies identified in the TIS were generally at intersections and with only one segment being identified. *Appendix "K" contains additional information regarding the calculations for determining the number of units for off-site mitigations.*

Table 22. Off-Site Improvement Mitigation Thresholds

Deficiency	Identified Mitigations and Timeframes		
	Study Year	Mitigation	Projected Number of Units Prior to Deficiency/Mitigation
Lake Hazel Road & Meridian Road (SH 69)			
Eastbound and westbound approach exceeds capacity during the weekday a.m. and p.m. peak hours	2017 Existing	Option 1: Install traffic signal per a ACHD 2016 FYWP (IN205-70) Construction in 2018	None – Existing Deficiency
Eastbound, westbound and southbound approach exceeds capacity during the weekday a.m. and p.m. peak hours	2026 Background & Total	Install an additional eastbound left-turn lane (to create dual left-turns), a westbound right-turn lane, and a southbound right-turn lane	Approximately 2025 Whisper Meadows - 286 Units
Amity Road & Linder Road			
Westbound approach exceeds capacity during weekday p.m. peak hour	2026 Background & Total	Traffic Signal or ACHD Roundabout Per CIP IN2016-5 (2031-2035)	Approximately 2023 Whisper Meadows - 262 Units
New Collector Road & Linder Road			
Southbound right-turn lane warranted	2026 Total	Install southbound right-turn lane	Approximately 2021 with Whisper Meadows Whisper Meadows – 144 Units

As shown in Table 22, most of the deficiencies at the off-site intersections are either existing deficiencies or the result of the incremental yearly growth in background traffic. Additionally, most of the intersections have future projects planned by ACHD as part of the *2018-2022 Five Year Work Plan (FYWP)* or the *2016 Capital Improvement Plan (2016 CIP)*, although in most cases the anticipated timing for the improvements is after the need. This situation creates a dilemma for new development since the traffic growth and resulting deficiency will occur before the mitigation is scheduled to be in place. While these deficiencies are not directly caused by the development, they can be addressed in one of the following ways:

- ***Allow new development to occur and wait for the improvements:*** Development would continue to be allowed and ACHD and the public would need to accept that there will be a gap in time between when the deficiency occurs and when the mitigation will be in place. The gap may vary from 3-7 years at intersections.
- ***Don't allow additional development to occur until improvements are done:*** This option would restrict new development adding trips to subject intersections until the improvements are completed by ACHD and/or ITD. A challenge with this particular area is that most of the traffic creating the need for mitigation is through traffic to and from the south from the City of Kuna and therefore similar restriction on development would likely

be necessary in a much larger area for this approach to be effective at delaying the need for mitigation.

- ***Developer installs the improvements in coordination with their development:*** This option ensures the mitigation is in place at the appropriate time, but puts the onus on the developer to install the improvement. In some cases the cost could be partially reimbursed by ACHD if the improvement is part of the *FYWP* or *2016 CIP*. A challenge with this approach is that developers don't have the same ability to acquire right-of-way as a public agency. ACHD has required temporary improvements in some cases where right-of-way is not available. This approach can result in one developer paying for improvements that are ultimately serving many other developments if the improvements are not reimbursable.

Section 5
Findings & Recommendations

FINDINGS & RECOMMENDATIONS

The results of the traffic impact analysis indicate that the proposed Whisper Meadows Subdivision development can be constructed while maintaining acceptable levels of service and safety on the surrounding transportation system as long as the appropriate mitigations are in place. The findings of this analysis and recommendations are discussed below.

FINDINGS

Existing Conditions

- The study evaluated four off-site intersections during the a.m. and p.m. peak period of a typical weekday (Tuesday – Thursday).
- All study intersections were found to operate at acceptable operating standards during the existing weekday a.m. and p.m. peak hours with the exceptions of:
    - **Lake Hazel Road & Meridian Road (SH 69) (AM & PM Peak Hour)** – During the weekday a.m. and p.m. peak hour both lane groups on the eastbound and westbound approach operate with a lane group v/c ratio of greater than 1.00, resulting in LOS F, falling below ITD and ACHD operational standards.
        - A planning level signal warrant analysis concludes that a traffic signal is warranted under existing traffic volumes.
        - This intersection is identified as a future traffic signal in ACHD's *2018-2022 Five Year Work Plan (FYWP)* with a scheduled construction in year 2018. A traffic signal at the intersection as described in the *FYWP* is expected to operate at LOS B with a v/c ratio of 0.65 or better and LOS B with a v/c ratio of 0.66 or better during the existing a.m. and p.m. peak hour, respectively.
- All ACHD study roadway segments operate at acceptable levels of service.
- Crash data at the study intersections for the most recent five years (2011-2015) was analyzed for any existing crash trends, below are the findings:
    - The unsignalized intersection of Lake Hazel Road & Meridian Road (SH 69) averaged more than four reported crashes per year, with angle crashes accounting for approximately 57% of all crashes at the intersection. All angle crashes occurred between eastbound or westbound vehicles on Lake Hazel Road crossing or turning onto Meridian Road. The angle crashes should be reduced with the construction of the signal planned for later this year.

- There was one fatality crash reported at the Lake Hazel Road & Meridian Road (SH 69) intersection. The fatality involved a bicyclist crossing Meridian Road, where there are currently no crosswalks on any approach at the intersection.

- There were no reported roadway segment crashes along Linder Road between Lake Hazel Road and Columbia Road (location of proposed Site Access A & B).

Year 2026 Background Traffic Conditions

- Year 2026 background traffic volumes were forecasted using a 3% annual growth rate and included the addition of in-process traffic from Caspian Subdivision and Phases 1 and 2 of the proposed Springhill Subdivision.
- Year 2026 background traffic analysis (without inclusion of site-generated traffic) found that all study intersections are expected to operate at acceptable operating standards during the weekday a.m. and p.m. peak hours with the exceptions of:
    - **Linder Rd & Amity Road (PM Peak Hour)** – During the weekday p.m. peak hour, the westbound approach exceeds capacity and the intersection experiences an LOS E, falling below ACHD standards. ACHD's *2016 Capital Improvement Plan (2016 CIP)* has a roundabout planned as part of *2016 CIP* #IN2016-5, during the year 2031-2035 timeframe.
        - A traffic signal warrant analysis was conducted and the intersection meets the four-hour warrant (Warrant #2) and the peak-hour warrant (Warrant #3) based on 2026 background vehicular volumes (without any traffic from Whisper Meadows). The Caspian Development (on NW corner of Lake Hazel Road/Linder Road) is conditioned to study the intersection at their 280th lot and install and interim signal.
            - By signalizing the intersection with a temporary signal, with left-turn lanes on each approach, operations are expected to be LOS B with a v/c ratio of 0.67 and 0.60 during the a.m. and p.m. peak hour, respectively.
    - **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – With the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has

planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:

- A sensitivity analysis found that the ACHD's *2016 CIP*, or other interim improvements, will be needed in approximately year 2025, without traffic from Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 conditions if constructed in that timeframe.
- If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):
  - An additional eastbound left-turn lane (dual left-turns),
  - A westbound right-turn lane, and
  - A southbound right-turn lane.
- By signalizing the intersection with the additional turn lanes listed above, the intersection is expected to operate at LOS D with a v/c ratio of 0.88 and at LOS C with a v/c ratio of 0.82 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Trip Generation and Distribution

- The *ITE Trip Generation Manual, 9th Edition* was used to estimate the trip generation for the proposed Whisper Meadows Subdivision.
- The proposed Whisper Meadows Subdivision development, with 311 single-family homes in the buildout year of 2026, is estimated to generate a total of 2,938 daily net new trips, 227 weekday a.m. peak hour net new trips (57 inbound / 170 outbound) and 292 weekday p.m. peak hour net new trips (184 inbound / 108 outbound).
- The distribution pattern for site-generated trips was developed by evaluating existing traffic patterns and major trip origins and destinations within the study area, as well as a select zone analysis from COMPASS' regional travel demand model.

Year 2026 Total Traffic Conditions

- Year 2026 total traffic conditions found that the site-generated trips do not impact any additional intersection not previously identified in the background traffic conditions. All study intersections will continue to operate at acceptable levels of service during the weekday a.m. and p.m. peak hours with the exception of:
    - **Amity Road & Linder Road (PM Peak Hour)** – Per the 2026 background conditions, during the weekday p.m. peak hour the westbound approach is projected to reach capacity. Additionally, a traffic signal was found to be warranted under 2026 background conditions and will continue to be warranted. While ACHD's *2016 CIP* (IN2016-5) has a roundabout planned as for the year 2031-2035 timeframe, installation of an interim signal has already been included in the conditions of the Caspian Subdivision Development.
        - By signalizing the intersection with left-turn lanes on each approach, operations are expected to be LOS C and LOS B with a v/c ratio of 0.70 and 0.60 during the a.m. and p.m. peak hour, respectively.
    - **Lake Hazel Road & Meridian Road (SH 69) (AM and PM Peak Hour)** – Similar to 2026 background conditions, the traffic signal to be installed by ITD in 2018, as described in the *FYWP*, the intersection is projected operate at LOS E and LOS D with the westbound approach operating with a v/c ratio above 1.00 during the a.m. and p.m. peak hours, respectively. The southbound approach is projected to operate with a v/c ratio above 1.00 during the weekday p.m. peak hour. ACHD has planned intersection improvements as part of the *2016 CIP* (IN2016-60) in the 2026-2030 timeframe which will mitigate the intersection. A detailed analysis identified the following:
        - A sensitivity analysis found that ACHD's *2016 CIP* (IN2016-60), or other interim improvements, will be needed in approximately year 2025, with or without Whisper Meadows. This is close to the 2026 timeframe outlined in the *2016 CIP* and therefore the *2016 CIP* improvements will mitigate the 2026 total traffic conditions if constructed in that timeframe. At that time Whisper Meadows is anticipated to have 286 units occupied at the time mitigation is needed.
        - If ACHD's *2016 CIP* improvements are not constructed by 2026 and planned construction year has been moved out such that interim improvements are considered, the following improvements are recommended (in addition to signalization scheduled in 2018):

- An additional eastbound left-turn lane (dual left-turns),
- A westbound right-turn lane, and
- A southbound right-turn lane.

- With the recommended lane configuration as identified above and in year 2026 background mitigations, the intersection is expected to operate at LOS D with a v/c ratio of 0.89 and at LOS C with a v/c ratio of 0.83 during the a.m. and p.m. peak hour, respectively.

- All ACHD study roadway segments are projected to continue operating at acceptable levels of service.

Site Access Evaluation

- The turn lane analysis using ACHD procedures resulted in turn lane warrants at the following site access streets:
  - New Collector Road & Linder Road (Site Access A) :
    - Southbound right-turn lane.
      - A sensitivity analysis found that a southbound right-turn lane is warranted at in approximately year 2021 with the build-out of 144 Whisper Meadows housing units.

- The results from the queuing analysis found that the 95th percentile queue lengths can be accommodated.
  - Each site accesses provides at least 100 feet of roadway length without driveway and/or internal street interference.

- The intersection sight distance evaluation identified that intersection sight distance can be achieved at all the site intersections with the following actions:
  - Remove miscellaneous vegetation and shrubbery, and potential obstructions along Linder Road as necessary to obtain and maintain adequate intersection sight distance.
  - Site accesses along Linder Road should match the existing grade of Linder Road at least for one car length to intersection sight distance.
  - Shrubbery and landscaping near the internal intersections and site access points should be maintained to ensure adequate sight distance.

- There are three proposed local street access points to the Whisper Meadows Subdivision, as well as a new collector road at the mid-mile along Linder Road between Lake Hazel Road and Columbia Road. Additionally, there is one stub street connection to an existing subdivision to the south and three proposed stub streets for connections to future developments. Following is a summary of each access with respect to ACHD Policy:
    - **Linder Road & New Collector Road (Site Access A):** This access, a proposed collector, is located on Linder Road approximately 2,640 feet, or approximately one-half mile, south of Lake Hazel Road and north of Columbia Road. This collector forms the east side of the future mid-mile collector which is identified on the *Ada County Master Street Map*. The access should be considered by ACHD for the following reasons:
        - The proposed collector is on the ACHD Master Street Map.
        - The proposed collector meets ACHD spacing requirements for a collector, with the exception of two existing driveways to an existing home at the Linder Farms site. Given that the proposed collector road is planned and being required by ACHD to allow the adjacent properties to utilize the collector for access instead of direct access to Linder Road, the following should be considered with regard to the Linder Farms access driveways:
            - Move the south driveway to access the collector since it is directly adjacent to the collector.
            - Review options to close the north driveway, located approximately 200 feet north of the collector road and connect through the site via the south driveway to the collector.
        - Without the collector street access, site-generated trips would increase the ADT at the southeast access on Linder Road to over the ACHD 2,000 ADT threshold for a local street.
        - The collector street would provide access to adjacent parcels which will minimize future development directly accessing the minor arterial (Linder Road).
        - This access is proposed as a collector street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Linder Road & Southeast Access (Site Access B):** This access, a proposed local street, accesses Linder Road approximately 810 feet south of the proposed mid-mile collector and approximately 1,830 feet north of Columbia Road. The access should be considered by ACHD for the following reasons:
    - The proposed access meets ACHD spacing requirements for a local street (660 feet) on a minor arterial and will function acceptably as an unsignalized full access (without turn lanes).
    - Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, forcing approximately 90% of the site's trips to enter and exit the subdivision via the proposed collector road and potentially causing some streets to exceed the ACHD 2,000 ADT threshold for a local street and the 1,000 ADT threshold for local stub street.
        - Additionally, not allowing this access could promote a higher percentage of vehicles using Chisum Way (Site Access E) and cutting-through the residential subdivision to the south.
    - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
- **Northeast Access & New Collector Road (Site Access C):** This access, a proposed local street, accesses the new collector street approximately 600 feet west of Linder Road and 1,150 feet east of the proposed Northwest Access (Site Access D). This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:
    - The access meets ACHD local street spacing requirements for collector streets.
    - Without this access, approximately 870 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northwest Access.
    - This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.
- **Northeast Access & New Collector Road (Site Access D):** This access, a proposed local street, accesses the new collector street approximately 1,150

feet west of the proposed Northeast Access (Site Access C). The proposed collector street will stub approximately 340 feet to the west of the Northwest Access. This access is proposed to be full access; however, the majority of movements will consist of left-in and right-out movements because of its connection to Linder Road via the new collector street to the east. The access should be considered by ACHD for the following reasons:

- The access meets ACHD local street spacing requirements for collector streets.
- Without this access, approximately 1,020 vehicles per day would be redistributed on the site's internal streets, potentially exceeding the ACHD policy threshold of 2,000 ADT for a local street at the Northeast Access.
- This access is proposed as a local street and will only serve residential trips, as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Southwest Access & Chisum Way (Site Access E):** This access ties into an existing cul-de-saq and provides a connection to the Chisum Valley Subdivsion to the south. Chisum Way would extend past the current cul-de-sac to tie in with Whisper Meadows Subdivision, approximately 500 feet north of Cogburn Street. Chisum Way would continue as a single lane local street in both directions. Based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." The access should be considered by ACHD for the following reasons:
  - The access adheres to ACHD local street and stub street requirements.
  - The access is not the primary access to the site, with an estimated 140 daily vehicles on Chisum Way.
  - The with the additional traffic from the development, the ADT on Chisum Way at the highest volume segment north of Columbia Road is projected to be well under the ACHD volume thresholds for a local street.
  - Chisum Way provides an alternative connection for southbound vehicles accessing Columbia Road.

- This access is an extension of an existing local street and will only serve residential trips as well as provide increased accessibility for emergency response vehicles and public services vehicles.

- **Stub Streets:** The proposed three stub streets access would connect to a future development west and south of the site. These proposed stub streets are based on the *ACHD Policy Manual, Section 7207.2.4.3,* "a stub street will be required to provide circulation or to provide access to adjoining properties." Presently, the timing of a future development tying into this stub street is unknown and is not anticipated to occur until sometime after full build-out of the Whisper Meadows Subdivision site. The stub streets have the following benefits:

    - The stub street would provide future access to an adjoining property west of the site and therefore reduce the need for additional access routes to Linder Road or Columbia Road.

    - The streets adhere to ACHD stub street requirements.

    - The stub streets are not the primary access to the site, with limited trips into and out of the site.

    - The stub streets would only serve residential trips, reducing vehicle miles traveled and increasing access for emergency response and city services.

RECOMMENDATIONS

Based on the report's analyses and evaluation findings, recommendations were developed accordingly for time scenario's conditions.

Existing Traffic Condition Mitigations

The following mitigation is recommended based on existing traffic volumes. Traffic volumes do not include background growth or site-generated trips from the proposed Whisper Meadows Subdivision.

Lake Hazel Road & Meridian Road (SH 69)

- ITD construct the traffic signal per IN205-70 of ACHD's *2018 – 2022 Five Year Fiscal Work Plan,* programmed for construction in year 2018.

Year 2026 Background Traffic Condition Mitigation

The following mitigations are recommended for year 2026 background traffic volumes. Traffic volumes include nine years of background growth and do not include site-generated trips from the proposed Whisper Meadows Subdivision.

Amity Road & Linder Road

- Conduct a traffic study in approximately 2023 to determine if an interim signal is needed. If a signal is needed, construct and interim traffic signal with left-turn lanes. This assumes that right-of-way and funding would not be available for the single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) planned for year 2031-2035.

Lake Hazel Road & Meridian Road (SH 69)

- Widen and reconstruct the signalized intersection per ACHD *2016 CIP* (IN2016-60), which includes dual left-turn lanes and a dedicated right-turn lane on each approach, with two through lanes in the eastbound and westbound directions on Lake Hazel Road. This is estimated to be needed in 2025, which is slightly before the 2026 to 2030 timeframe outlined in the *2016 CIP*. If ACHD and ITD determine that interim improvements should be considered due to the time horizon for funding moving out beyond the 2026-2030 timeframe and interim improvements are considered, the following improvements would mitigate the 2026 time horizon:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.

Mitigations Needed for Whisper Meadows Subdivision

The following mitigations are recommended due to the inclusion of Whisper Meadows Subdivision's site generated trips.

Linder Road & New Collector Road

- Construct a southbound right-turn lane with approximately 100 feet of vehicle storage.
    - A sensitivity analysis found that a southbound right-turn lane would be warranted in approximately year 2021 with the build-out of 144 Whisper Meadows units.
- If possible, relocate the existing residential access driveway to Linder Farms, located adjacent to the proposed collector street, such that it accesses the proposed collector street.

Linder Road & Amity Road

- Per background conditions prepare an updated traffic study in approximately 2023 to determine if an interim traffic signal is needed. At that time Whisper Meadows is anticipated to have approximately 262 occupied single family housing units.
    - If an interim traffic signal is found to be needed, construct an interim traffic signal with left-turn lanes. Optionally, construction of the ultimate single-lane roundabout with a southbound right-turn bypass lane as defined in the ACHD *2016 CIP* (IN2016-5) and planned for year 2031-2035 could be considered.

Lake Hazel Road & Meridian Road (SH 69)

- Widen and reconstruct the signalized intersection per ACHD's *2016 CIP* (IN2016-60). If ACHD and ITD determine that interim improvements should be considered due to the time horizon for the *2016 CIP* funding is moved out beyond the 2026-2030 timeframe, the following interim improvements could be considered to mitigate the 2026 background and total traffic condition:
    - An additional eastbound left-turn lane (dual left-turns),
    - A westbound right-turn lane, and
    - A southbound right-turn lane.
- The above improvements are expected to be needed in approximately 2025 with, or without, the Whisper Meadows development. At that time, Whisper Meadows is anticipated to have approximately 286 units occupied at the time mitigation is needed.

Site Accesses

- With approval from ACHD, construct all accesses to the development to allow full access on the public street approaches with the following designations:
    - All local streets within the development should be constructed with one travel lane in each direction.
    - Site driveways with access to public streets should provide sufficient stacking distance for four vehicles (100 feet) to ensure acceptable operation and accommodate larger vehicles, including utility service and delivery vehicles.
    - Site accesses along Linder Road should match the existing grade of Linder Road at the intersection to ensure the best possible sight distance.
    - All accesses and internal streets should be designed to provide adequate intersection site distance. Shrubbery and landscaping near the intersection and site access point should be maintained to ensure adequate sight distance is maintained.

REFERENCES

1. Ada County Highway District. *Policy Manual, 2012.*
2. City of Kuna. *City Zoning Map,* March 22, 2016.
3. Transportation Research Board. *Highway Capacity Manual 2010,* Transportation Research Board of the National Academies of Science, Washington, D.C., 2010.
4. Federal Highway Administration. *Manual on Uniform Traffic Control Devices,* 2009 Edition, Washington D.C., June 2012.
5. Community Planning Association of Southwest Idaho. *2040 Functional Classification Map,* 2015.
6. Ada County Highway District. *2018-2021 Five Year Work Plan (FYWP),* Adopted September 27, 2017.
7. Ada County Highway District. *Capital Improvements Plan (2016 CIP),* October 1, 2016.
8. Kittelson & Associates, Inc. *Springhill Subdivision Traffic Impact Study,* January 2017.
9. Kittelson & Associates, Inc. Caspian *Subdivision Traffic Impact Study,* January 2017.
10. Institute of Transportation Engineers. *Trip Generation Manual, 9th Edition, Washington, D.C., 2012.*
11. Institute of Transportation Engineers. *Trip Generation Handbook, 3rd Edition, Washington, D.C., August 2014.*
12. Ada County Highway District. *Ada County Master Street Map*, Adopted January 10, 2010, Amended February 27, 2013.

Appendix A
Proposed Scope of Work Memorandum

KITTELSON & ASSOCIATES
101 S CAPITOL BOULEVARD, SUITE 301
BOISE, ID 83702
P 208.338.2683 F 208.338.2685

MEMORANDUM

Date: November 10, 2017

Project #: 22046.1

To: Mindy Wallace
Ada County Highway District
3775 Adams Street
Garden City, Idaho 83714

From: Brett Korporaal and John Ringert, P.E.

Project: Gripentrog Subdivision

Subject: Transportation Impact Study Scope of Work and Assumptions

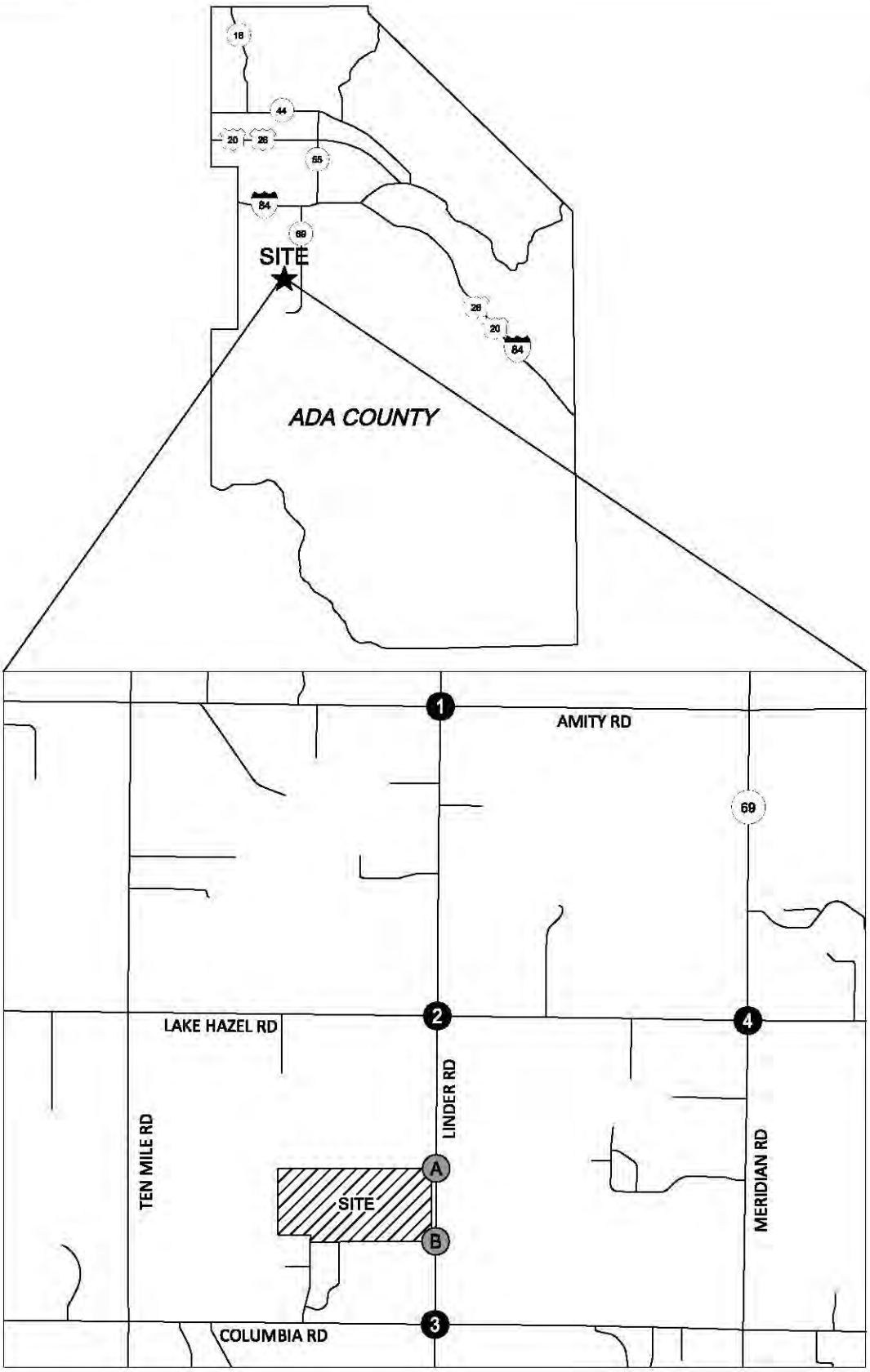
This memorandum documents the scope of work and summarizes the assumptions for the transportation impact study (TIS) for the proposed Gripentrog Subdivision, located between Lake Hazel Road and Columbia Road with Linder Road serving as its eastern boundary in Kuna, Idaho. The information presented in this memorandum was developed based on conversations with Bailey Engineering, Inc. (civil engineer and planner) and Ada County Highway District (ACHD). Figure 1 shows the site vicinity of the proposed development.

This memorandum addresses the following items:

- Project Description
- Analysis Scenarios and Study Assumptions
- Analysis Tools
- Background Roadway Projects

PROJECT DESCRIPTION

The proposed Gripentrog Subdivision development is situated on approximately 73 acres of land roughly a quarter mile north of Columbia Road and half a mile south of Lake Hazel Road, directly east of Linder Road in Kuna, Idaho. The development is proposing to construct 311 single-family housing units, approximately 4.25 dwelling units per acre. Figure 2 provides the preliminary site plan for the development. Full build-out of the site is anticipated to occur in year 2026. Upon build-out of the site, two accesses will be available to residents on Linder Road at approximately the half-mile and quarter mile north of Columbia Road. The preliminary site also shows four stub street for future connections, as shown in Exhibit 1.



LEGEND
(#) - Study Intersections
(X) - Site Access

Site Vicinity
Kuna, Idaho

Figure 1

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Note: Preliminary site plan from Bailey Engineering, Inc. dated October 2017.

Preliminary Site Plan
Kuna, Idaho

Figure
2

H:\22\22046 - Gripentrog Subdivision TIS\dwgs\22046_Figures.dwg Nov 10, 2017 - 9:07am - bkorporaal Layout Tab: Fig 2 - SitePlan

KITTELSON & ASSOCIATES

Exhibit 1 shows the proposed site plan over an aerial with callouts of the proposed access locations with respect to their locations along Linder Road and the proposed new collector road. All of the internal streets are proposed to be local streets. However, the north border of the site is proposed to be the new "mid-mile" collector street as shown in ACHD's master street map. A review of the ACHD Master Street map shows a proposed east-west residential connector at the approximate location as depicted collector in the preliminary site plan.

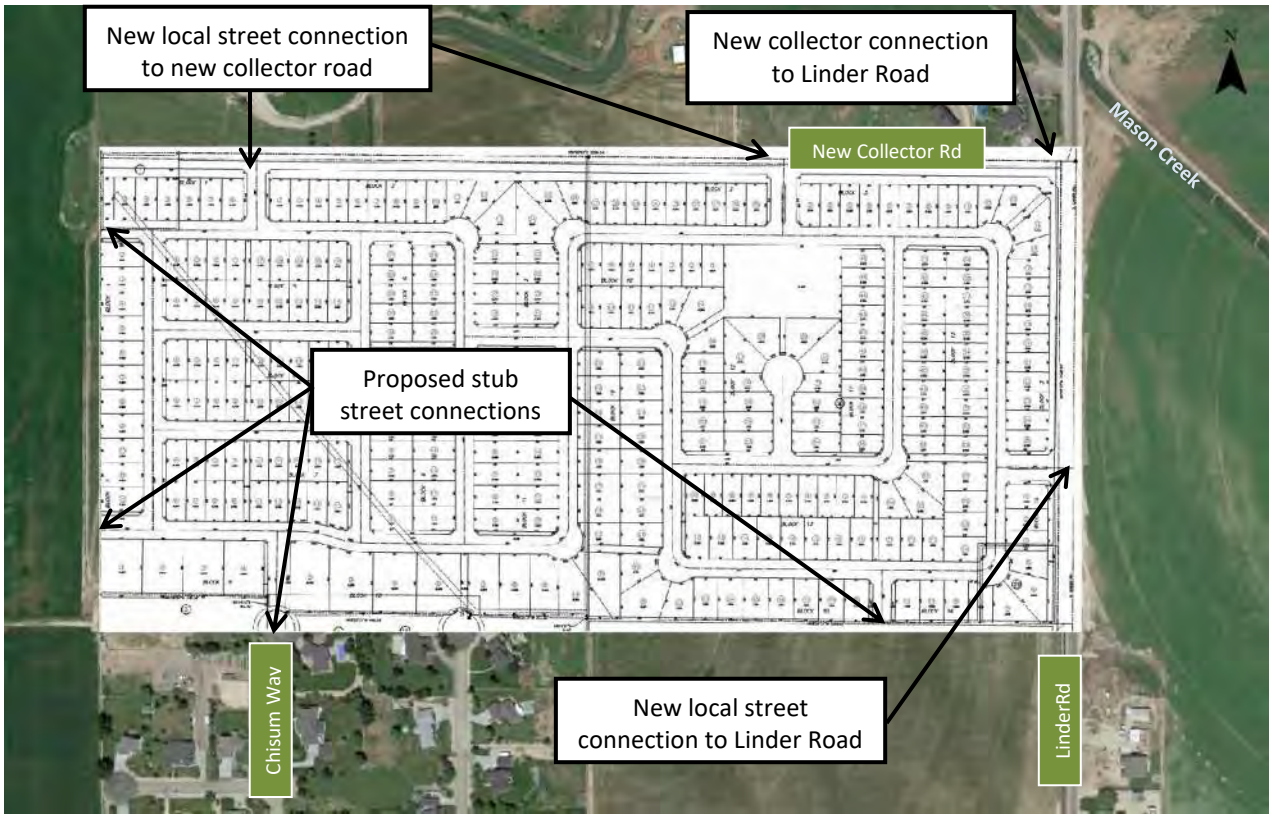


Exhibit 1. Proposed Site Access Locations

ESTIMATED TRIP GENERATION

The projected weekday daily, a.m., and p.m. peak hour vehicle trips for the proposed development were estimated based on the *Trip Generation Manual, 9th Edition* (Reference 1). Internal trip and pass-by trips are not applicable for this development. Based on data provided for single-family detached housing the *Trip Generation Handbook, 3rd Edition* (Reference 2) recommended the use of the fitted curve equations to determine weekday daily, a.m., and p.m. peak hour vehicle trips. Table 1 summarizes the estimated trip generation for the proposed Gripentrog Subdivision development.

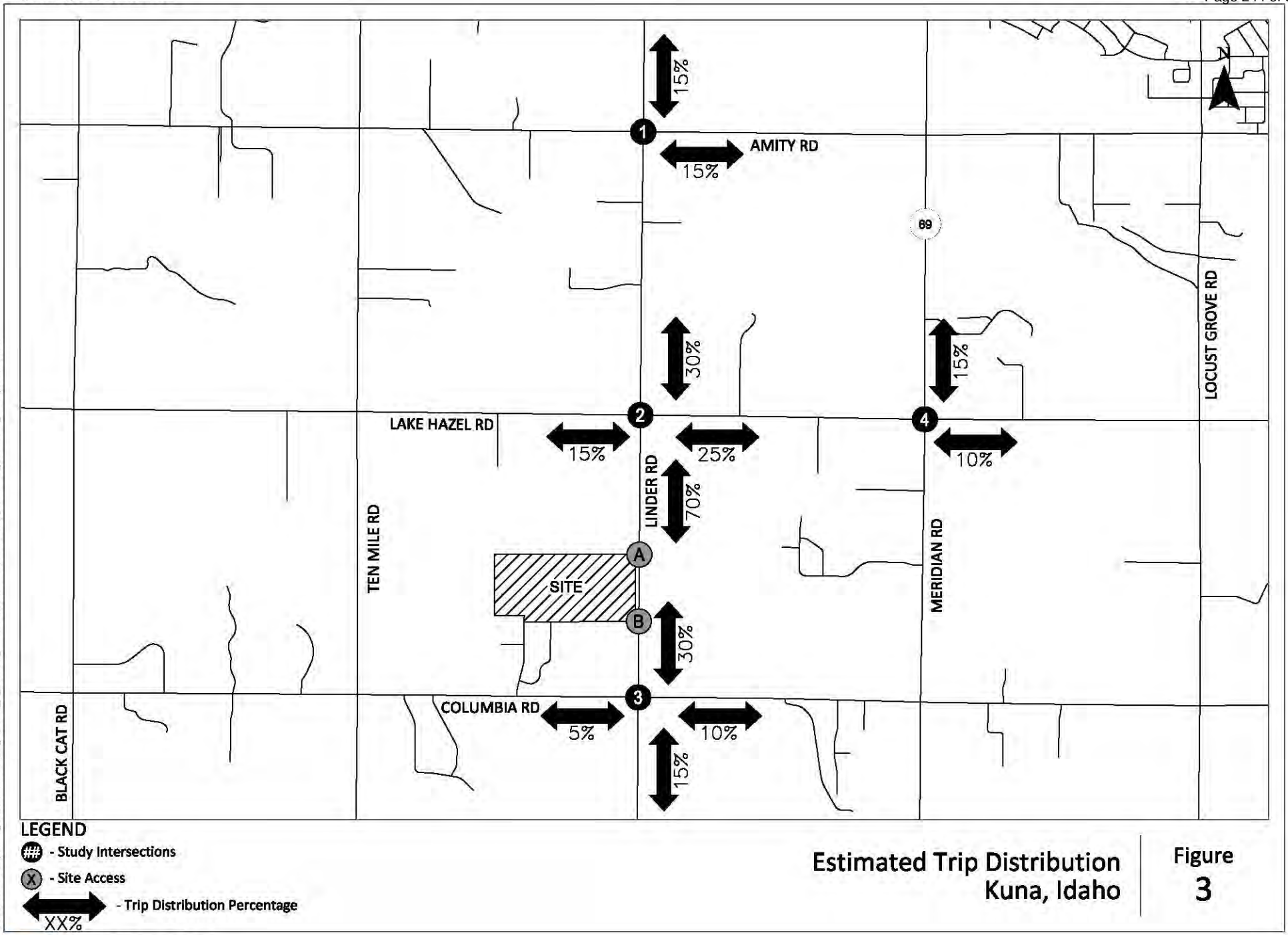
Table 1. Proposed Trip Generation of Gripentrog Subdivision

Land Use	ITE Code	Units	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Single-Family House	210	311	2,983	227	57	170	292	184	108

As shown in Table 1, the proposed Gripentrog Subdivision development is estimated to generate a total of 2,983 daily net new trips, 227 net new weekday a.m. peak hour trips (57 inbound / 170 outbound), and 292 weekday p.m. peak hour net new trips (184 inbound / 108 outbound).

TRIP DISTRIBUTION

The distribution of site generated trips onto the roadway system was based on the site's access connections to nearby collectors and arterials. Additionally, a COMPASS model containing the assumed land use for the select zone analysis was reviewed for consistency. The trip distribution pattern is consistent with recently completed area of impact model runs for larger subdivisions within Kuna and in the vicinity of the site (Gran Prado Subdivision and Springhill Subdivision). Figure 3 illustrates the proposed trip distribution patterns for the proposed development.



Estimated Trip Distribution
Kuna, Idaho

Figure
3

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KITTELSON & ASSOCIATES

ANALYSIS SCENARIOS & STUDY ASSUMPTIONS

The proposed assumptions for the analysis include:

- Time Periods:
  - Weekday AM Peak Hour (7-9 a.m.)
  - Weekday PM Peak Hour (4-6 p.m.)
- Study Intersections:
  - Linder Road & Amity Road (Counts collected in October 2016)
  - Linder Road & Lake Hazel Road (Counts collected in August 2016)
  - Linder Road & Columbia Road (Counts to be collected in November 2017)
  - Meridian Road (SH 69) & Lake Hazel Road (Counts collected in August 2016)
  - Please verify that counts collected in 2016 can be used for this study
- Study Accesses:
  - Linder Road & New Collector Road (north access located at the half mile between Lake Hazel Road and Columbia Road)
  - Linder Road & South Access (south access located a quarter mile north of Columbia Road)
- Roadway Segments:
  - Linder Road
    - Columbia Road to Lake Hazel Road (ACHD ADT Count 1/27/2016 – Use this count)
    - Lake Hazel Road to Amity Road (ACHD ADT Count 2011 – Obtain new ADT count)
  - Lake Hazel Road
    - Linder Road to SH 69 (ACHD ADT Count 6/7/2017)
  - Internal Collector Roads (currently not built-out)
- Study Years
  - Existing traffic conditions (Year 2017)
  - Year 2026 (build-out year) background traffic conditions (includes regional growth and in-process developments but no site development traffic).
  - Year 2026 total traffic conditions (includes background traffic volumes plus site-generated trips of the proposed Gripentrog Subdivision development).
- Improvement Triggers/Phasing

- For any mitigated improvements identified in the buildout year (2021), the approximate number of units will be estimated to determine an approximate trigger/time frame for the needed improvement. This will be done similar to the methodology used for the Cazador Subdivision and Gran Prado Subdivision TIS and will include the following:
    - The deficiency
    - The mitigation necessary
    - The projected number of units prior to the deficiency estimated based on the trip generation and the background traffic growth

ANALYSIS TOOLS AND OPERATING STANDARDS

The intersection operational analysis will be performed using the *2010 Highway Capacity Manual* analysis procedures (Reference 4). To ensure that this analysis is based on a reasonable worst-case scenario, the peak 15-minute flow rate during the weekday a.m. and p.m. peak hours will be used in the evaluation of all intersection level or service (LOS) and vehicle-to-capacity (V/C) ratios. The signalized and stop-controlled intersection operations analyses presented in this report will be completed using Synchro 10 software, and if needed for supplemental analysis, HCS 2010 software (version 6.90). For a signalized intersection's overall V/C ratios, the HCM 2000 procedure will be utilized since the HCM 2010 procedure doesn't produce an intersection V/C ratio. However, all study intersections are currently stop-controlled.

The analysis will be performed in accordance with the methodologies stated in Section 7106.6 of the *ACHD Policy Manual* (Reference 5) and include consideration of separate left-and right-turn lanes as well as queuing impacts. Intersection and segment level of service will be reported per ACHD 2016 CIP thresholds.

ACHD requires that signalized intersections operate at a minimum of LOS E for Principal Arterials and Minor Arterials and LOS D for Collectors. All unsignalized intersections that have a projected level of service D or worse shall be evaluated to determine if a signal or roundabout is warranted. The acceptable volume-to-capacity ratio for signalized intersections is 0.90 for the overall intersection and 1.0 for each lane group. The acceptable volume-to-capacity ratio is 1.0 for the critical lane group at unsignalized intersections.

BACKGROUND GROWTH AND IN-PROCESS DEVELOPMENTS

The annual growth rate the study proposes to use to account for general growth and buildout of unknown developments along each of the study roadways is discussed below. The growth rates are estimated using historical traffic counts and information used for other traffic impacts studies in the area.

In general, historical growth rates in the area have been in the range of 2-3% per year (exponential). The growth rates derived from COMPASS Regional Travel Demand Model vary significantly among the roads serving the vicinity of the site (e.g. Lake Hazel Road projects a 10-20% per year growth rate).

New developments, along with very low existing traffic volumes, result in the variability of high yearly growth rate. If we were to assume a high growth rate and add all of the new developments, we would essentially be double-counting the trips. Therefore, based on our review of the data and previous discussions with ACHD, we proposed to use a growth rate of 3% per year (exponential) for use in the TIS.

Background developments as well as site generated traffic from the proposed development will be added which will result in a much higher overall growth rate when we consider future total traffic conditions and will likely reflect a percentage similar to the COMPASS projections on Lake Hazel Road for the primary roadways providing access to the site.

Background In-Process Developments

In addition to background growth, we are requesting ACHD to provide any completed studies for developments within the immediate vicinity of the site. There are three relatively large subdivisions within the vicinity of the site. The traffic from the Caspian Subdivision, Gran Prado Subdivision and Springhill Subdivision will be included as in-process trips and be included in the background scenarios. Smaller developments further to the south are assumed to be included in the annual growth rate due to the distance those developments are away from the Gripentrog Subdivision.

If ACHD knows of any other nearby developments that should be considered as in-process, please provide information about the developments as part of the approval of this scoping memorandum.

BACKGROUND ROADWAY IMPROVEMENT PROJECTS

The *2016 ACHD Capital improvement Plan* (CIP, Reference 6) and ACHD's *Integrated Five Year Work Plan* (FYWP, Reference 7) was reviewed for future roadway and intersection improvement projects to be assumed within the study area. Based on our review of the CIP and FYWP, several improvements were found in the study area.

Please provide direction if we can assume the 2016 CIP timeframes which would move all the key roadway and intersection improvements beyond the 2026 study horizon year.

- Year 2018 Improvement (FYWP): T*o be included in year 2026 background and total scenarios due to funding and timeframe of the improvement.*
    - SH 69/Hubbard Road: FYWP# IN205-66 – Install an interim signal in cooperation with ITD maintenance program. (Joint ITD/ACHD project)

- SH 69/Lake Hazel Road: FYWP# IN205-70 – Install an interim signal in cooperation with ITD maintenance program. (Joint ITD/ACHD project)

- Year 2026 – 2030 Improvements (2016 CIP): *Not to be included in background due to timeframes extending after 2026. Will be used for reference.*
  - Lake Hazel Road Widening: CIP# RD2016-61,62,63,64 – Reconstruct Lake Hazel Road from two lanes to three lanes between Black Cat Road and Meridian Road (SH 69).
  - Lake Hazel Road/Linder Road: CIP# IN2016-54 – Reconstruct and widen the approaches to install a single-lane roundabout.
  - SH 69/Lake Hazel Road: CIP# IN2016-60 – Reconstruct and widen approaches to the traffic signal installed as part of FYWP # IN205-70. Reconstruction to include dual left-turn lanes, dual through lanes and a single right-turn lane on each approach.
  - Ten Mile Road/Lake Hazel Road: CIP# IN2016-61 – Install and traffic signal and reconstruct and widen the approaches to include left-turn lanes for all movements and right-turn lanes for the southbound and westbound approaches.

- Year 2031 – 2035 Improvements (2016 CIP): *Not to be included in background due to timeframes extending after 2026. Will be used for reference.*
  - Ten Mile Road/Columbia Road: CIP# IN2016-21 – Reconstruct and widen the approaches of the stop controlled intersection of Columbia Road & Ten Mile Road to include a single-lane roundabout. This project is currently scheduled for the year 2031 – 2035 time frame.

IMPROVEMENT PHASING EVALUATION

While the project evaluation is not proposed to be phased in the TIS, the thresholds/trigger for each improvement identified in the buildout year will be estimated. This will be done similar to the methodology used for the used for the Cazador Subdivision and Gran Prado Subdivision TIS and will include the following:

- The identified deficiency or problem.
- The mitigation or improvement necessary to resolve the deficiency.
- The projected number of units prior to the deficiency estimated based on the trip generation and the background traffic growth.

ACCESS EVALUATION

For each of the study access locations, the following will be reviewed:

- Access spacing versus ACHD criteria.
- Whether the access meets ACHD criteria for granting an additional access.
- Projected daily traffic demand at buildout for each access location and comparison to the ACHD policy ADT's for that roadway classification.
- Adequate site distance is provided for the proposed site access location.

NEXT STEPS

We request ACHD reviews this scoping memo and provide a response on the study assumptions so that we can move forward with the study. Please contact Brett Korporaal at 208.338.2683 or email bkorporaal@kittelson.com if you have any questions or comments on the information presented in this memorandum.

REFERENCES

1. Institute of Transportation Engineers. *Trip Generation Manual, 9th Edition*. 2012.
2. Institute of Transportation Engineers. *Trip Generation Handbook, 3rd Edition*. August 2014.
3. Ada County Highway District. *Master Street Map,* February 24, 2016.
4. Transportation Research Board. *Highway Capacity Manual*. Washington D.C. 2010.
5. Ada County Highway District. *Policy Manual*. 2010.
6. Ada County Highway District. *Capital Improvements Plan*. August 24, 2016.

Appendix B
Existing Traffic Count Data

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 1

Groups Printed- General Traffic - 3+ Axle Trucks

	Linder Road From North					Amity Road From East					Linder Road From South					Amity Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	1	0	0	2	0	18	3	0	21	4	32	2	0	38	6	48	9	0	63	124
07:15 AM	1	7	0	0	8	0	29	1	0	30	6	57	6	0	69	0	69	9	0	78	185
07:30 AM	0	8	1	0	9	5	38	0	0	43	12	56	2	0	70	2	79	6	0	87	209
07:45 AM	0	3	6	0	9	2	32	1	0	35	6	47	4	0	57	1	89	5	0	95	196
Total	2	19	7	0	28	7	117	5	0	129	28	192	14	0	234	9	285	29	0	323	714
08:00 AM	0	5	1	0	6	5	32	3	0	40	1	31	2	0	34	5	68	9	0	82	162
08:15 AM	0	4	1	0	5	1	22	2	0	25	3	21	4	0	28	4	75	2	0	81	139
08:30 AM	3	4	3	0	10	1	24	1	0	26	3	21	3	0	27	2	39	2	0	43	106
08:45 AM	1	2	1	0	4	0	25	0	0	25	4	14	1	0	19	4	44	10	0	58	106
Total	4	15	6	0	25	7	103	6	0	116	11	87	10	0	108	15	226	23	0	264	513

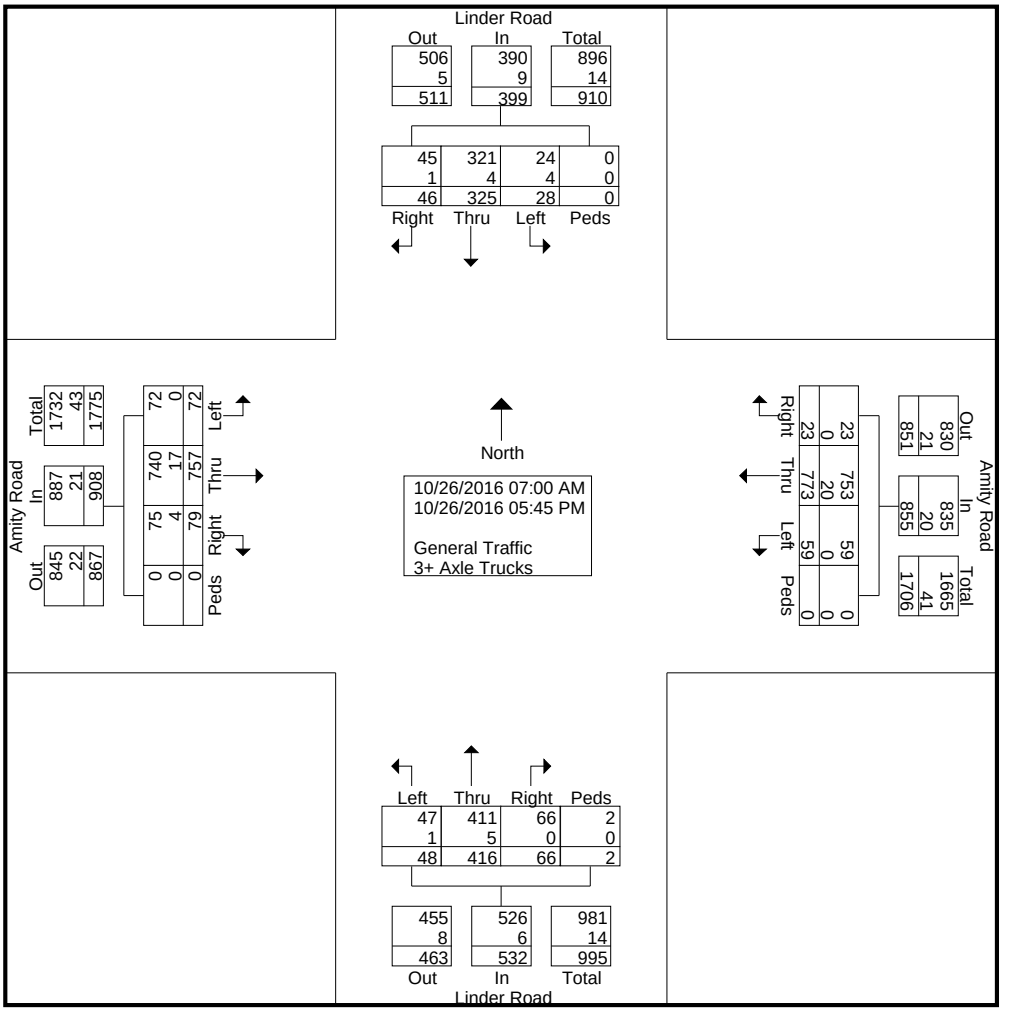
04:00 PM	2	19	3	0	24	1	52	4	0	57	4	14	3	0	21	3	34	3	0	40	142
04:15 PM	5	36	0	0	41	0	60	3	0	63	1	11	4	0	16	5	24	3	0	32	152
04:30 PM	8	22	3	0	33	0	67	7	0	74	4	17	4	0	25	12	28	2	0	42	174
04:45 PM	5	30	2	0	37	2	65	5	0	72	6	16	4	2	28	5	38	2	0	45	182
Total	20	107	8	0	135	3	244	19	0	266	15	58	15	2	90	25	124	10	0	159	650
05:00 PM	5	41	3	0	49	2	82	3	0	87	7	14	4	0	25	7	30	2	0	39	200
05:15 PM	6	54	2	0	62	3	78	4	0	85	2	21	2	0	25	6	33	1	0	40	212
05:30 PM	5	51	1	0	57	1	63	13	0	77	2	17	1	0	20	10	30	3	0	43	197
05:45 PM	4	38	1	0	43	0	86	9	0	95	1	27	2	0	30	7	29	4	0	40	208
Total	20	184	7	0	211	6	309	29	0	344	12	79	9	0	100	30	122	10	0	162	817
Grand Total	46	325	28	0	399	23	773	59	0	855	66	416	48	2	532	79	757	72	0	908	2694
Apprch %	11.5	81.5	7	0		2.7	90.4	6.9	0		12.4	78.2	9	0.4		8.7	83.4	7.9	0		
Total %	1.7	12.1	1	0	14.8	0.9	28.7	2.2	0	31.7	2.4	15.4	1.8	0.1	19.7	2.9	28.1	2.7	0	33.7	
General Traffic	45	321	24	0	390	23	753	59	0	835	66	411	47	2	526	75	740	72	0	887	2638
% General Traffic	97.8	98.8	85.7	0	97.7	100	97.4	100	0	97.7	100	98.8	97.9	100	98.9	94.9	97.8	100	0	97.7	97.9
3+ Axle Trucks	1	4	4	0	9	0	20	0	0	20	0	5	1	0	6	4	17	0	0	21	56
% 3+ Axle Trucks	2.2	1.2	14.3	0	2.3	0	2.6	0	0	2.3	0	1.2	2.1	0	1.1	5.1	2.2	0	0	2.3	2.1

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 2



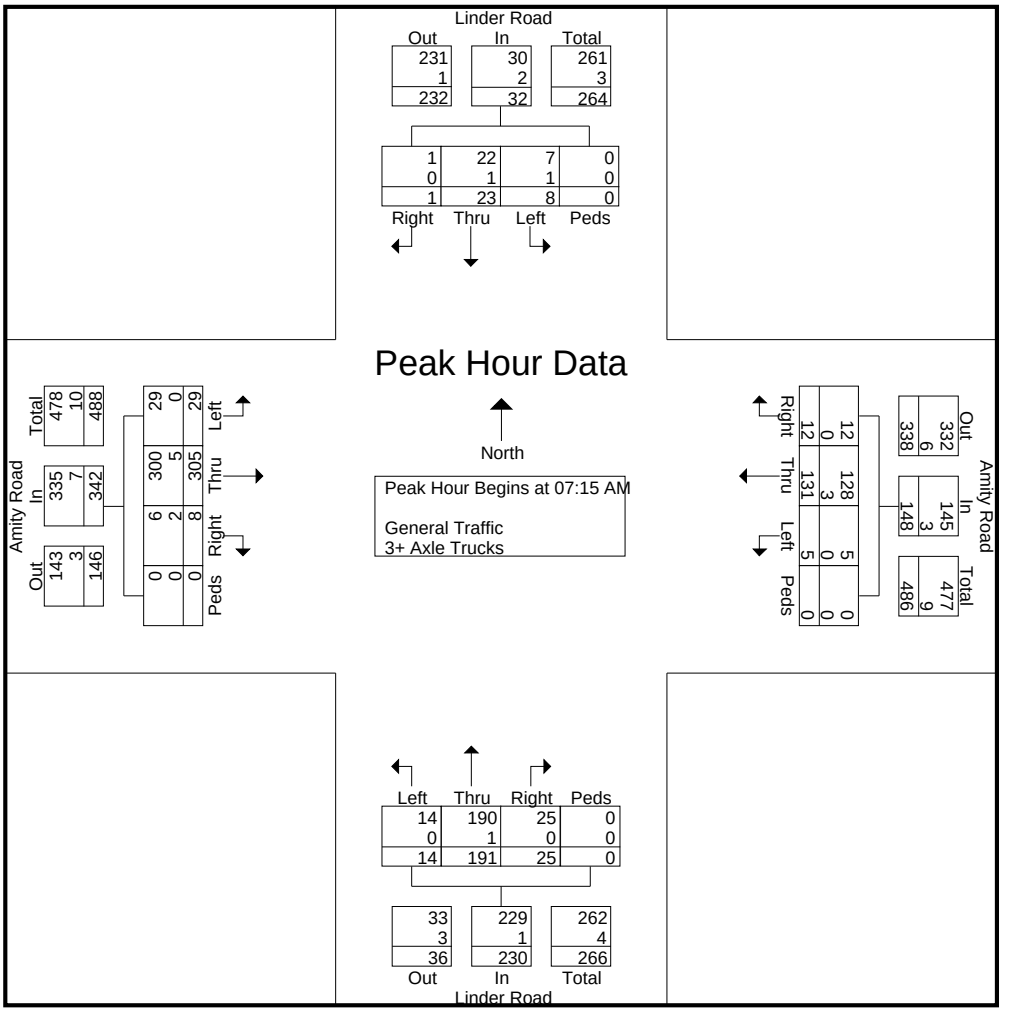
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 3

	Linder Road From North					Amity Road From East					Linder Road From South					Amity Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**1**	7	0	0	8	0	29	1	0	30	6	**57**	**6**	0	69	0	69	**9**	0	78	185
07:30 AM	0	**8**	1	0	**9**	**5**	**38**	0	0	**43**	**12**	56	2	0	**70**	2	79	6	0	87	**209**
07:45 AM	0	3	**6**	0	9	2	32	1	0	35	6	47	4	0	57	1	**89**	5	0	**95**	196
08:00 AM	0	5	1	0	6	5	32	**3**	0	40	1	31	2	0	34	**5**	68	9	0	82	162
Total Volume	1	23	8	0	32	12	131	5	0	148	25	191	14	0	230	8	305	29	0	342	752
% App. Total	3.1	71.9	25	0		8.1	88.5	3.4	0		10.9	83	6.1	0		2.3	89.2	8.5	0		
PHF	.250	.719	.333	.000	.889	.600	.862	.417	.000	.860	.521	.838	.583	.000	.821	.400	.857	.806	.000	.900	.900
General Traffic																					
% General Traffic	100	95.7	87.5	0	93.8	100	97.7	100	0	98.0	100	99.5	100	0	99.6	75.0	98.4	100	0	98.0	98.3
3+ Axle Trucks	0	1	1	0	2	0	3	0	0	3	0	1	0	0	1	2	5	0	0	7	13
% 3+ Axle Trucks	0	4.3	12.5	0	6.3	0	2.3	0	0	2.0	0	0.5	0	0	0.4	25.0	1.6	0	0	2.0	1.7



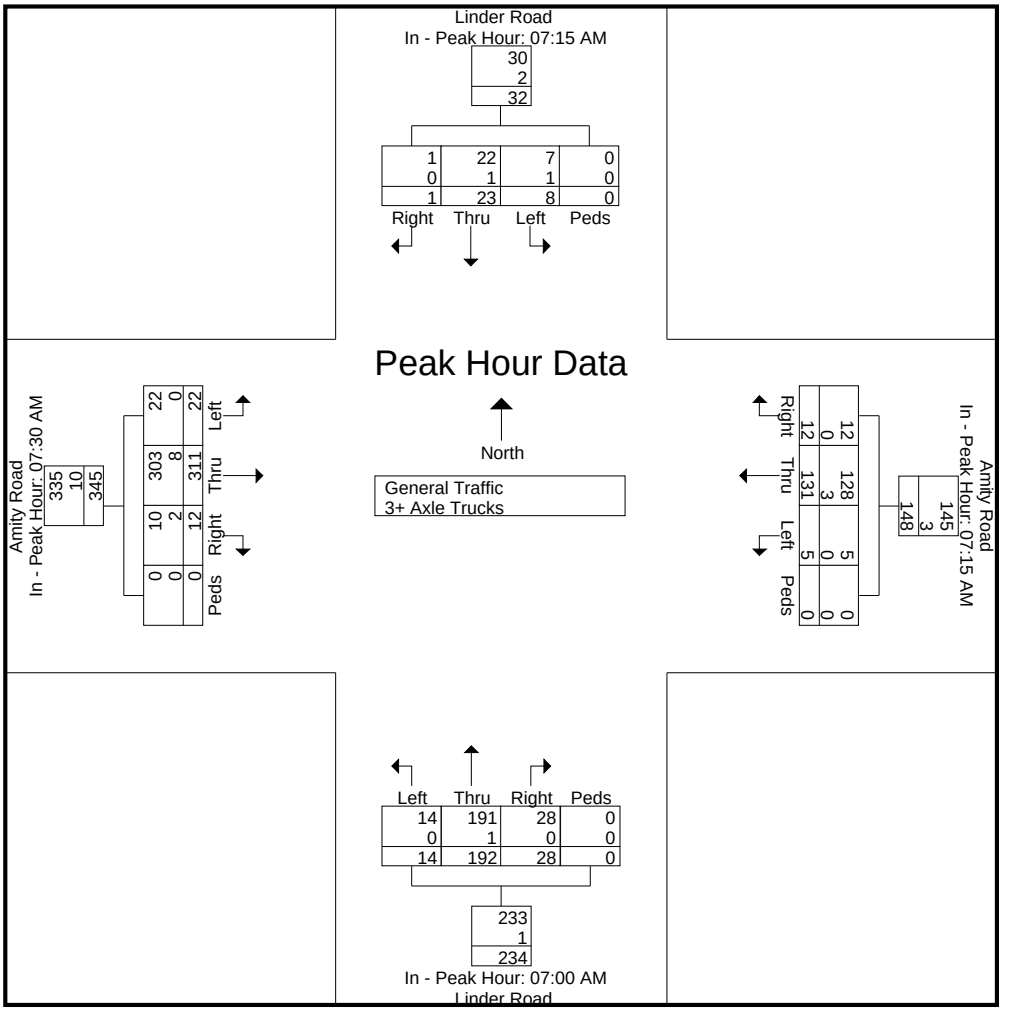
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 4

	Linder Road From North					Amity Road From East					Linder Road From South					Amity Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15 AM					07:15 AM					07:00 AM					07:30 AM					
+0 mins.	**1**	7	0	0	8	0	29	1	0	30	4	32	2	0	38	2	79	6	0	87	
+15 mins.	0	**8**	1	0	**9**	**5**	**38**	0	0	**43**	6	**57**	**6**	0	69	1	**89**	5	0	**95**	
+30 mins.	0	3	**6**	0	9	2	32	1	0	35	**12**	56	2	0	**70**	**5**	68	**9**	0	82	
+45 mins.	0	5	1	0	6	5	32	**3**	0	40	6	47	4	0	57	4	75	2	0	81	
Total Volume	1	23	8	0	32	12	131	5	0	148	28	192	14	0	234	12	311	22	0	345	
% App. Total	3.1	71.9	25	0		8.1	88.5	3.4	0		12	82.1	6	0		3.5	90.1	6.4	0		
PHF	.250	.719	.333	.000	.889	.600	.862	.417	.000	.860	.583	.842	.583	.000	.836	.600	.874	.611	.000	.908	
General Traffic																					
% General Traffic	100	95.7	87.5	0	93.8	100	97.7	100	0	98	100	99.5	100	0	99.6	83.3	97.4	100	0	97.1	
3+ Axle Trucks	0	1	1	0	2	0	3	0	0	3	0	1	0	0	1	2	8	0	0	10	
% 3+ Axle Trucks	0	4.3	12.5	0	6.2	0	2.3	0	0	2	0	0.5	0	0	0.4	16.7	2.6	0	0	2.9	



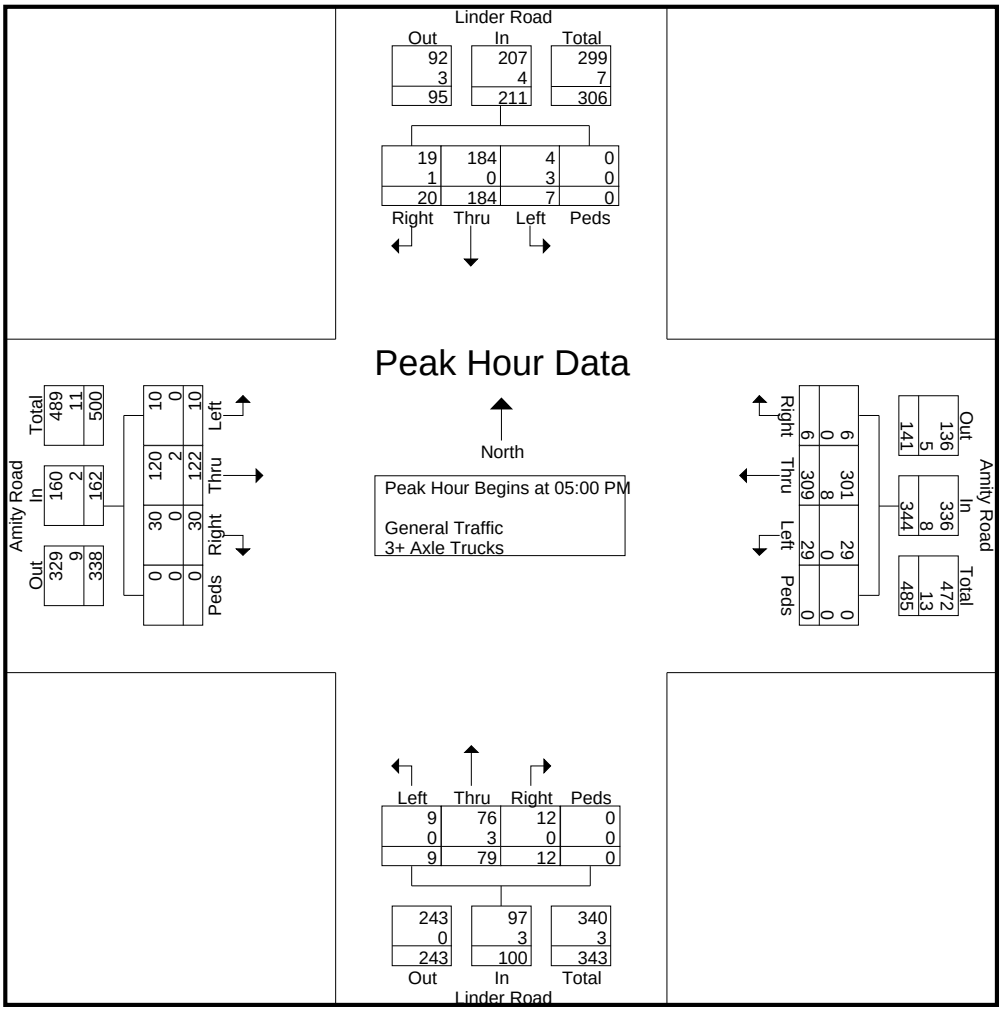
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 5

	Linder Road From North					Amity Road From East					Linder Road From South					Amity Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	5	41	**3**	0	49	2	82	3	0	87	**7**	14	**4**	0	25	7	30	2	0	39	200
05:15 PM	**6**	**54**	2	0	**62**	**3**	78	4	0	85	2	21	2	0	25	6	**33**	1	0	40	**212**
05:30 PM	5	51	1	0	57	1	63	**13**	0	77	2	17	1	0	20	**10**	30	3	0	**43**	197
05:45 PM	4	38	1	0	43	0	**86**	9	0	**95**	1	**27**	2	0	**30**	7	29	**4**	0	40	208
Total Volume	20	184	7	0	211	6	309	29	0	344	12	79	9	0	100	30	122	10	0	162	817
% App. Total	9.5	87.2	3.3	0		1.7	89.8	8.4	0		12	79	9	0		18.5	75.3	6.2	0		
PHF	.833	.852	.583	.000	.851	.500	.898	.558	.000	.905	.429	.731	.563	.000	.833	.750	.924	.625	.000	.942	.963
General Traffic																					
% General Traffic	95.0	100	57.1	0	98.1	100	97.4	100	0	97.7	100	96.2	100	0	97.0	100	98.4	100	0	98.8	97.9
3+ Axle Trucks	1	0	3	0	4	0	8	0	0	8	0	3	0	0	3	0	2	0	0	2	17
% 3+ Axle Trucks	5.0	0	42.9	0	1.9	0	2.6	0	0	2.3	0	3.8	0	0	3.0	0	1.6	0	0	1.2	2.1



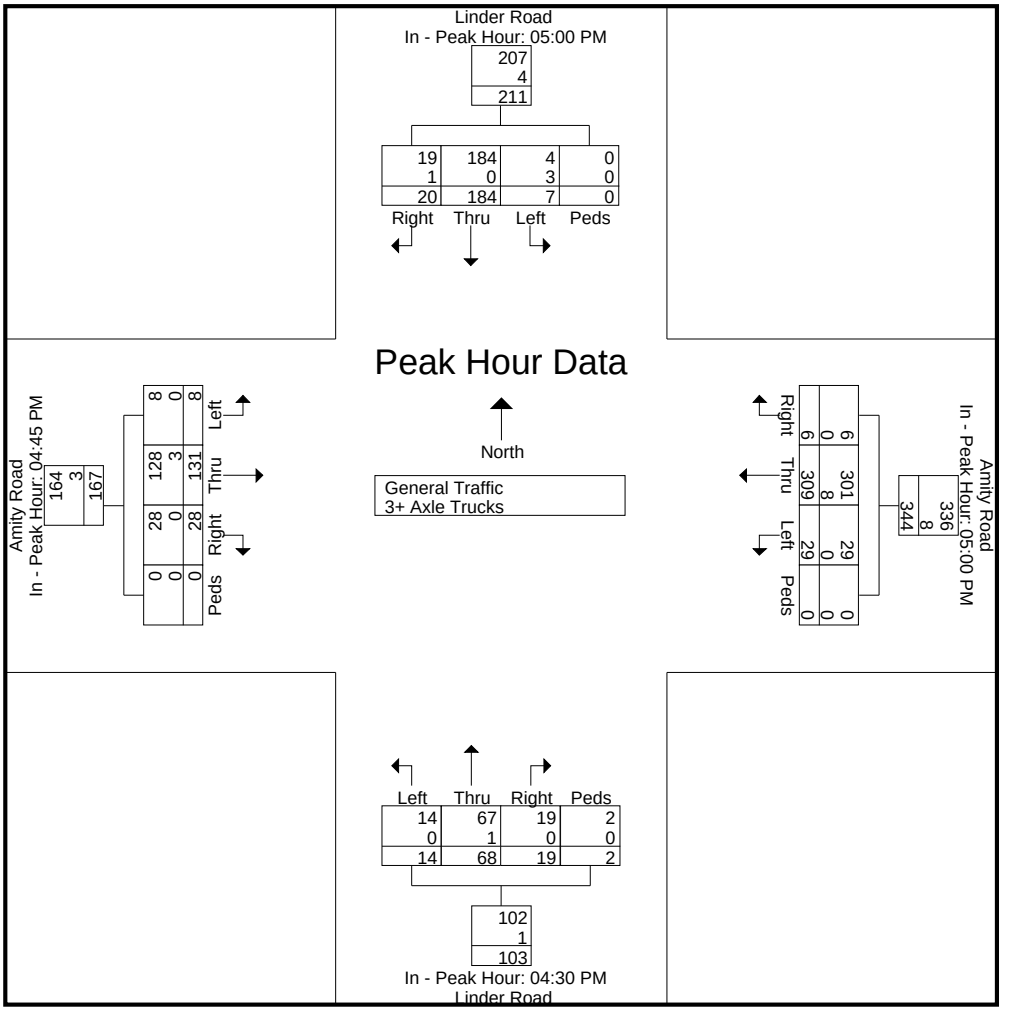
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 6

	Linder Road From North					Amity Road From East					Linder Road From South					Amity Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					04:30 PM					04:45 PM					
+0 mins.	5	41	**3**	0	49	2	82	3	0	87	4	17	**4**	0	25	5	**38**	2	0	**45**	
+15 mins.	**6**	**54**	2	0	**62**	**3**	78	4	0	85	6	16	4	**2**	**28**	7	30	2	0	39	
+30 mins.	5	51	1	0	57	1	63	**13**	0	77	**7**	14	4	0	25	6	33	1	0	40	
+45 mins.	4	38	1	0	43	0	**86**	9	0	**95**	2	**21**	2	0	25	**10**	30	**3**	0	43	
Total Volume	20	184	7	0	211	6	309	29	0	344	19	68	14	2	103	28	131	8	0	167	
% App. Total	9.5	87.2	3.3	0		1.7	89.8	8.4	0		18.4	66	13.6	1.9		16.8	78.4	4.8	0		
PHF	.833	.852	.583	.000	.851	.500	.898	.558	.000	.905	.679	.810	.875	.250	.920	.700	.862	.667	.000	.928	
General Traffic																					
% General Traffic	95	100	57.1	0	98.1	100	97.4	100	0	97.7	100	98.5	100	100	99	100	97.7	100	0	98.2	
3+ Axle Trucks	1	0	3	0	4	0	8	0	0	8	0	1	0	0	1	0	3	0	0	3	
% 3+ Axle Trucks	5	0	42.9	0	1.9	0	2.6	0	0	2.3	0	1.5	0	0	1	0	2.3	0	0	1.8	



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0072
Intersection: Amity Rd / Linder Rd
City: Meridian, Idaho
Control: All Stop

File Name : Amity & Linder
Site Code : 00000000
Start Date : 10/26/2016
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

	Linder Road From North					Columbia Road From East					Linder Road From South					Columbia Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	12	1	0	13	0	14	5	0	19	36	34	6	0	76	13	45	5	0	63	171
07:15 AM	1	7	1	0	9	1	17	6	0	24	24	35	6	0	65	10	81	9	0	100	198
07:30 AM	1	10	1	0	12	3	12	2	0	17	30	38	9	0	77	4	81	9	0	94	200
07:45 AM	0	5	2	0	7	0	27	5	0	32	31	38	12	0	81	2	74	7	0	83	203
Total	2	34	5	0	41	4	70	18	0	92	121	145	33	0	299	29	281	30	0	340	772
08:00 AM	0	2	0	0	2	2	17	4	0	23	23	19	11	0	53	4	87	8	0	99	177
08:15 AM	1	11	0	0	12	0	12	2	0	14	22	22	8	0	52	12	51	5	0	68	146
08:30 AM	1	4	0	0	5	0	9	0	0	9	21	12	4	0	37	6	53	1	0	60	111
08:45 AM	2	5	1	0	8	0	8	3	0	11	10	15	5	0	30	7	31	2	0	40	89
Total	4	22	1	0	27	2	46	9	0	57	76	68	28	0	172	29	222	16	0	267	523

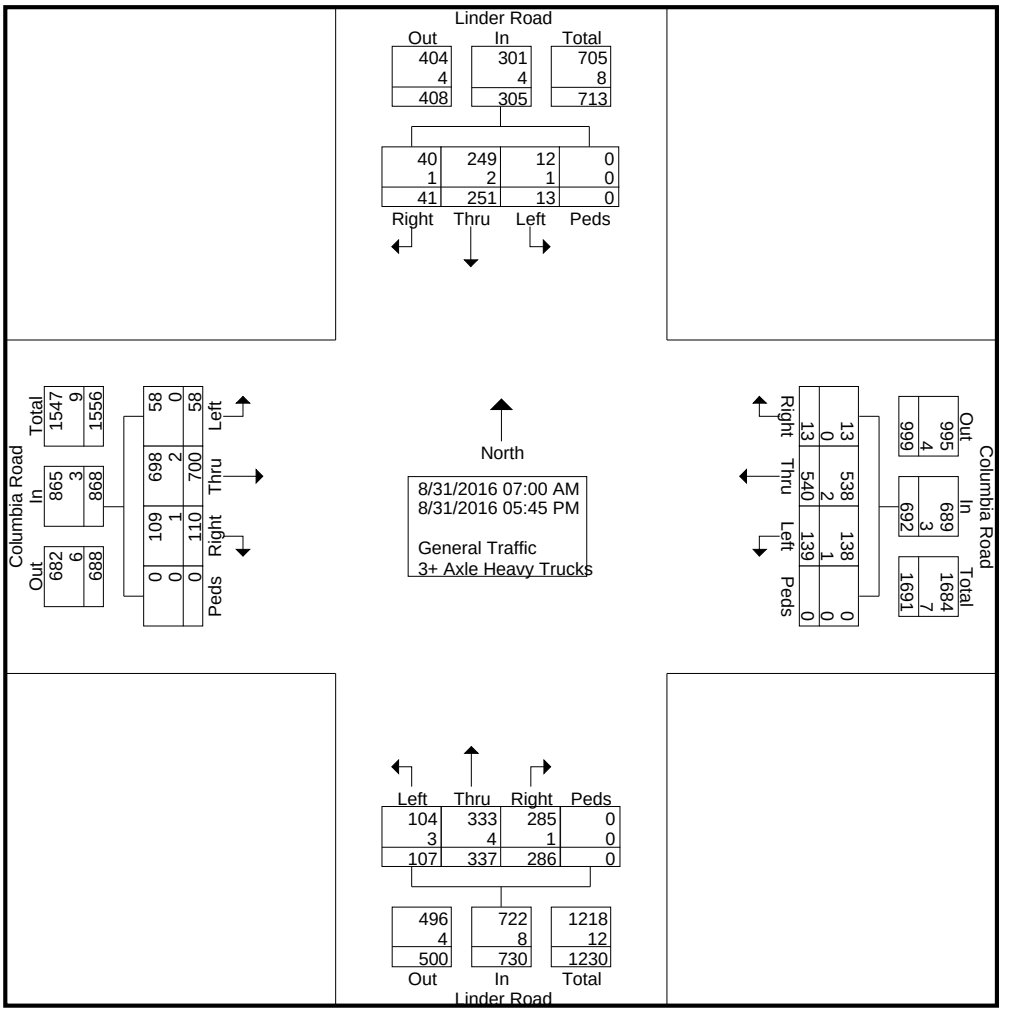
04:00 PM	4	19	0	0	23	1	36	16	0	53	12	11	3	0	26	5	20	3	0	28	130
04:15 PM	7	21	2	0	30	0	39	16	0	55	12	15	3	0	30	4	32	1	0	37	152
04:30 PM	1	12	1	0	14	4	51	6	0	61	13	22	8	0	43	9	23	1	0	33	151
04:45 PM	5	13	0	0	18	0	51	19	0	70	7	19	8	0	34	5	23	2	0	30	152
Total	17	65	3	0	85	5	177	57	0	239	44	67	22	0	133	23	98	7	0	128	585
05:00 PM	5	35	0	0	40	0	65	11	0	76	16	11	3	0	30	3	17	0	0	20	166
05:15 PM	4	27	1	0	32	0	73	18	0	91	12	14	8	0	34	5	34	2	0	41	198
05:30 PM	4	37	0	0	41	0	57	14	0	71	7	17	6	0	30	8	23	0	0	31	173
05:45 PM	5	31	3	0	39	2	52	12	0	66	10	15	7	0	32	13	25	3	0	41	178
Total	18	130	4	0	152	2	247	55	0	304	45	57	24	0	126	29	99	5	0	133	715
Grand Total	41	251	13	0	305	13	540	139	0	692	286	337	107	0	730	110	700	58	0	868	2595
Apprch %	13.4	82.3	4.3	0		1.9	78	20.1	0		39.2	46.2	14.7	0		12.7	80.6	6.7	0		
Total %	1.6	9.7	0.5	0	11.8	0.5	20.8	5.4	0	26.7	11	13	4.1	0	28.1	4.2	27	2.2	0	33.4	
General Traffic	40	249	12	0	301	13	538	138	0	689	285	333	104	0	722	109	698	58	0	865	2577
% General Traffic	97.6	99.2	92.3	0	98.7	100	99.6	99.3	0	99.6	99.7	98.8	97.2	0	98.9	99.1	99.7	100	0	99.7	99.3
3+ Axle Heavy Trucks	1	2	1	0	4	0	2	1	0	3	1	4	3	0	8	1	2	0	0	3	18
% 3+ Axle Heavy Trucks	2.4	0.8	7.7	0	1.3	0	0.4	0.7	0	0.4	0.3	1.2	2.8	0	1.1	0.9	0.3	0	0	0.3	0.7

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 2



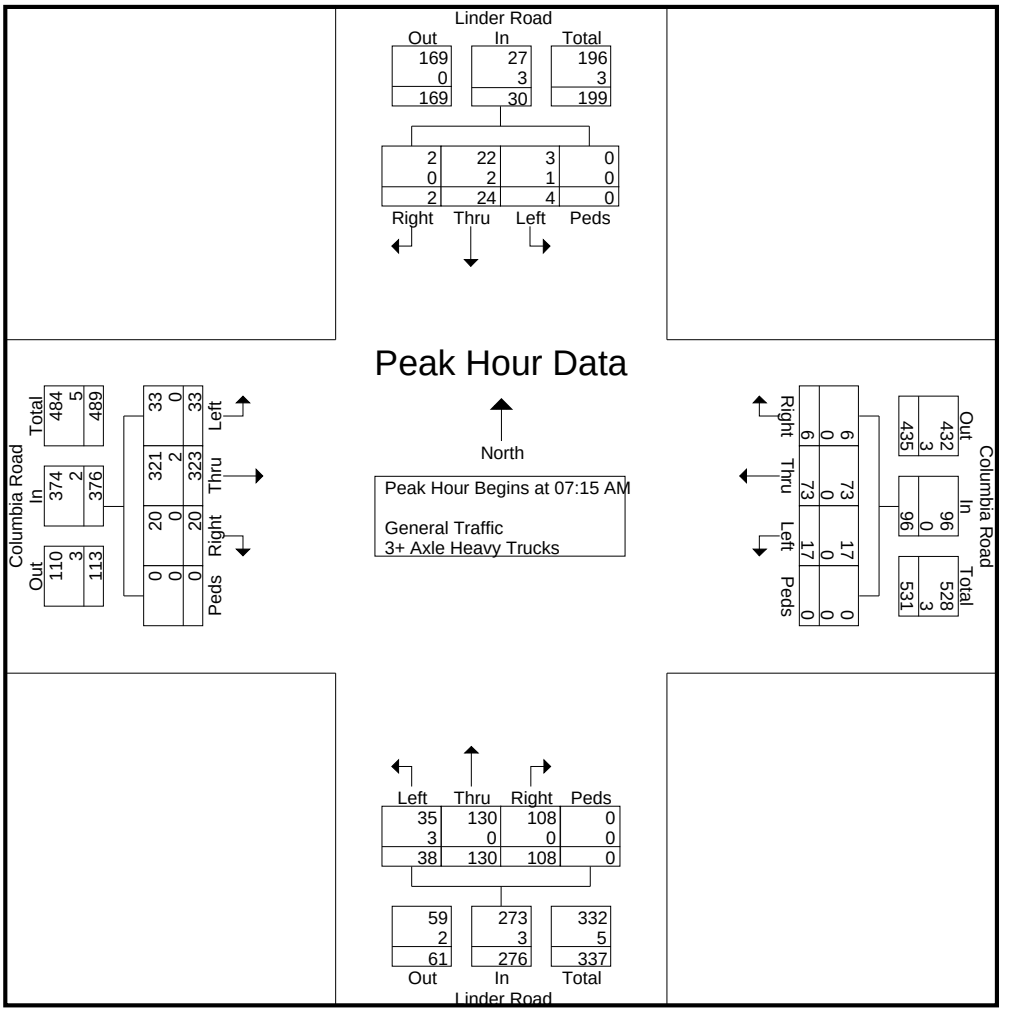
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 3

	Linder Road From North					Columbia Road From East					Linder Road From South					Columbia Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**1**	7	1	0	9	1	17	**6**	0	24	24	35	6	0	65	**10**	81	**9**	0	**100**	198
07:30 AM	1	**10**	1	0	**12**	**3**	12	2	0	17	30	**38**	9	0	77	4	81	9	0	94	200
07:45 AM	0	5	**2**	0	7	0	**27**	5	0	**32**	**31**	38	**12**	0	**81**	2	74	7	0	83	**203**
08:00 AM	0	2	0	0	2	2	17	4	0	23	23	19	11	0	53	4	**87**	8	0	99	177
Total Volume	2	24	4	0	30	6	73	17	0	96	108	130	38	0	276	20	323	33	0	376	778
% App. Total	6.7	80	13.3	0		6.2	76	17.7	0		39.1	47.1	13.8	0		5.3	85.9	8.8	0		
PHF	.500	.600	.500	.000	.625	.500	.676	.708	.000	.750	.871	.855	.792	.000	.852	.500	.928	.917	.000	.940	.958
General Traffic	2	22	3	0	27	6	73	17	0	96	108	130	35	0	273	20	321	33	0	374	770
% General Traffic	100	91.7	75.0	0	90.0	100	100	100	0	100	100	100	92.1	0	98.9	100	99.4	100	0	99.5	99.0
3+ Axle Heavy Trucks	0	2	1	0	3	0	0	0	0	0	0	0	3	0	3	0	2	0	0	2	8
% 3+ Axle Heavy Trucks	0	8.3	25.0	0	10.0	0	0	0	0	0	0	0	7.9	0	1.1	0	0.6	0	0	0.5	1.0



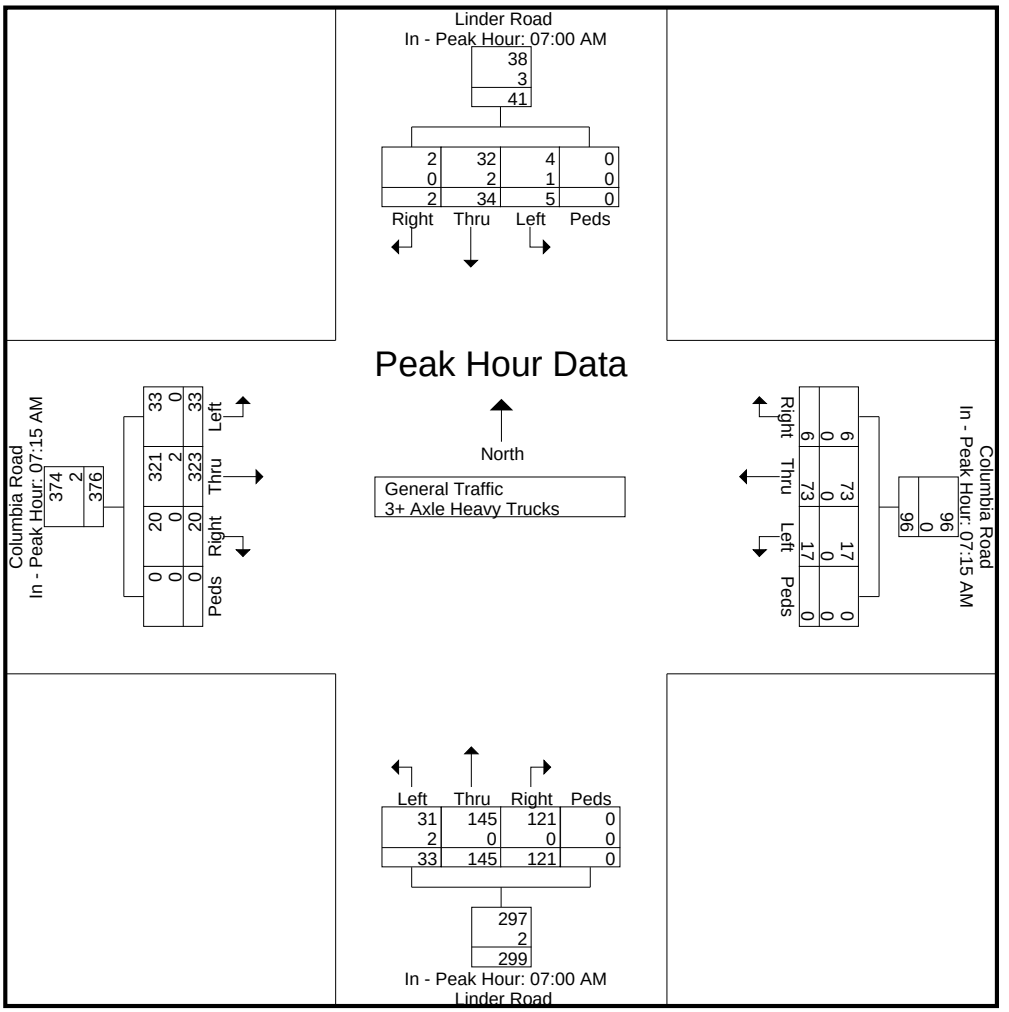
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 4

	Linder Road From North					Columbia Road From East					Linder Road From South					Columbia Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00 AM					07:15 AM					07:00 AM					07:15 AM					
+0 mins.	0	**12**	1	0	**13**	1	17	**6**	0	24	**36**	34	6	0	76	**10**	81	**9**	0	**100**	
+15 mins.	**1**	7	1	0	9	**3**	12	2	0	17	24	35	6	0	65	4	81	9	0	94	
+30 mins.	1	10	1	0	12	0	**27**	5	0	**32**	30	**38**	9	0	77	2	74	7	0	83	
+45 mins.	0	5	**2**	0	7	2	17	4	0	23	31	38	**12**	0	**81**	4	**87**	8	0	99	
Total Volume	2	34	5	0	41	6	73	17	0	96	121	145	33	0	299	20	323	33	0	376	
% App. Total	4.9	82.9	12.2	0		6.2	76	17.7	0		40.5	48.5	11	0		5.3	85.9	8.8	0		
PHF	.500	.708	.625	.000	.788	.500	.676	.708	.000	.750	.840	.954	.688	.000	.923	.500	.928	.917	.000	.940	
General Traffic	2	32	4	0	38	6	73	17	0	96	121	145	31	0	297	20	321	33	0	374	
% General Traffic	100	94.1	80	0	92.7	100	100	100	0	100	100	100	93.9	0	99.3	100	99.4	100	0	99.5	
3+ Axle Heavy Trucks	0	2	1	0	3	0	0	0	0	0	0	0	2	0	2	0	2	0	0	2	
% 3+ Axle Heavy Trucks	0	5.9	20	0	7.3	0	0	0	0	0	0	0	6.1	0	0.7	0	0.6	0	0	0.5	



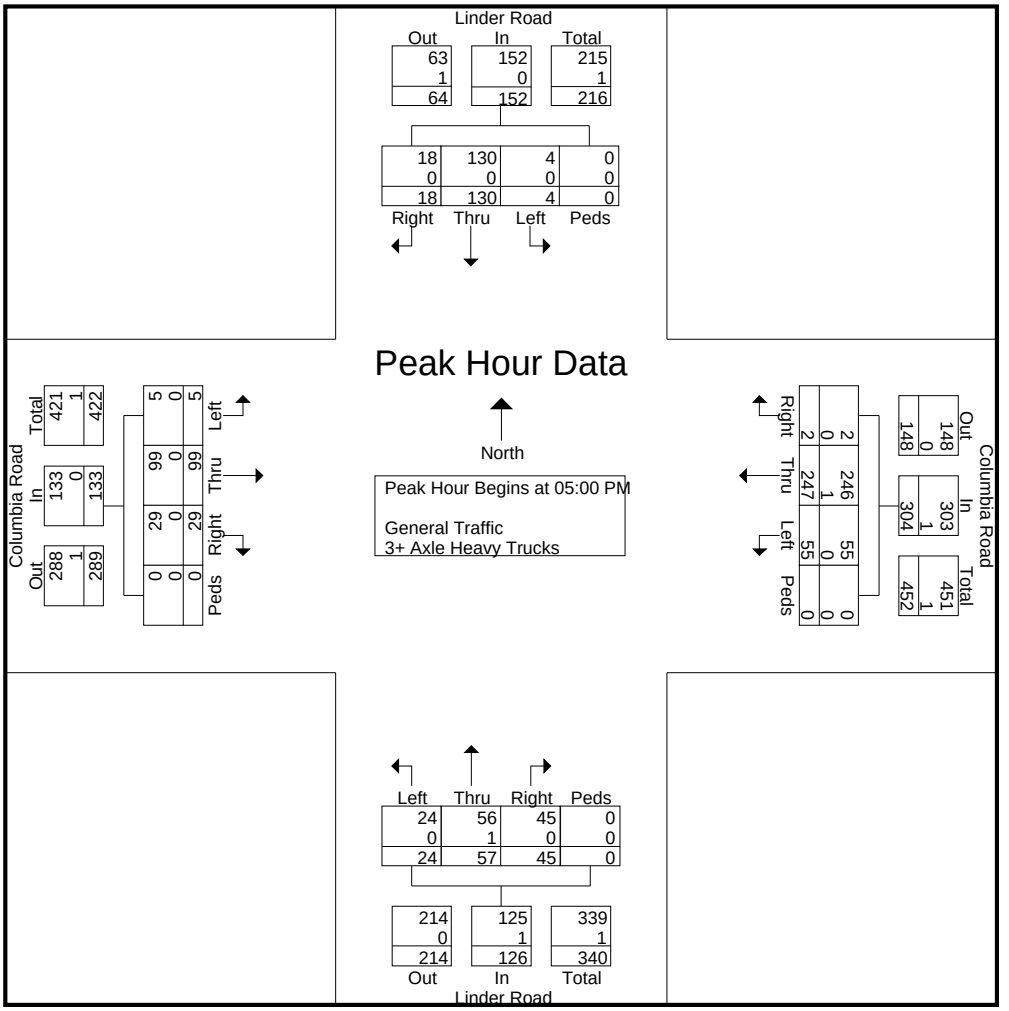
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 5

	Linder Road From North					Columbia Road From East					Linder Road From South					Columbia Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**5**	35	0	0	40	0	65	11	0	76	**16**	11	3	0	30	3	17	0	0	20	166
05:15 PM	4	27	1	0	32	0	**73**	**18**	0	**91**	12	14	**8**	0	**34**	5	**34**	2	0	**41**	**198**
05:30 PM	4	**37**	0	0	**41**	0	57	14	0	71	7	**17**	6	0	30	8	23	0	0	31	173
05:45 PM	5	31	**3**	0	39	**2**	52	12	0	66	10	15	7	0	32	**13**	25	**3**	0	41	178
Total Volume	18	130	4	0	152	2	247	55	0	304	45	57	24	0	126	29	99	5	0	133	715
% App. Total	11.8	85.5	2.6	0		0.7	81.2	18.1	0		35.7	45.2	19	0		21.8	74.4	3.8	0		
PHF	.900	.878	.333	.000	.927	.250	.846	.764	.000	.835	.703	.838	.750	.000	.926	.558	.728	.417	.000	.811	.903
General Traffic	18	130	4	0	152	2	246	55	0	303	45	56	24	0	125	29	99	5	0	133	713
% General Traffic	100	100	100	0	100	100	99.6	100	0	99.7	100	98.2	100	0	99.2	100	100	100	0	100	99.7
3+ Axle Heavy Trucks	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0.4	0	0	0.3	0	1.8	0	0	0.8	0	0	0	0	0	0.3



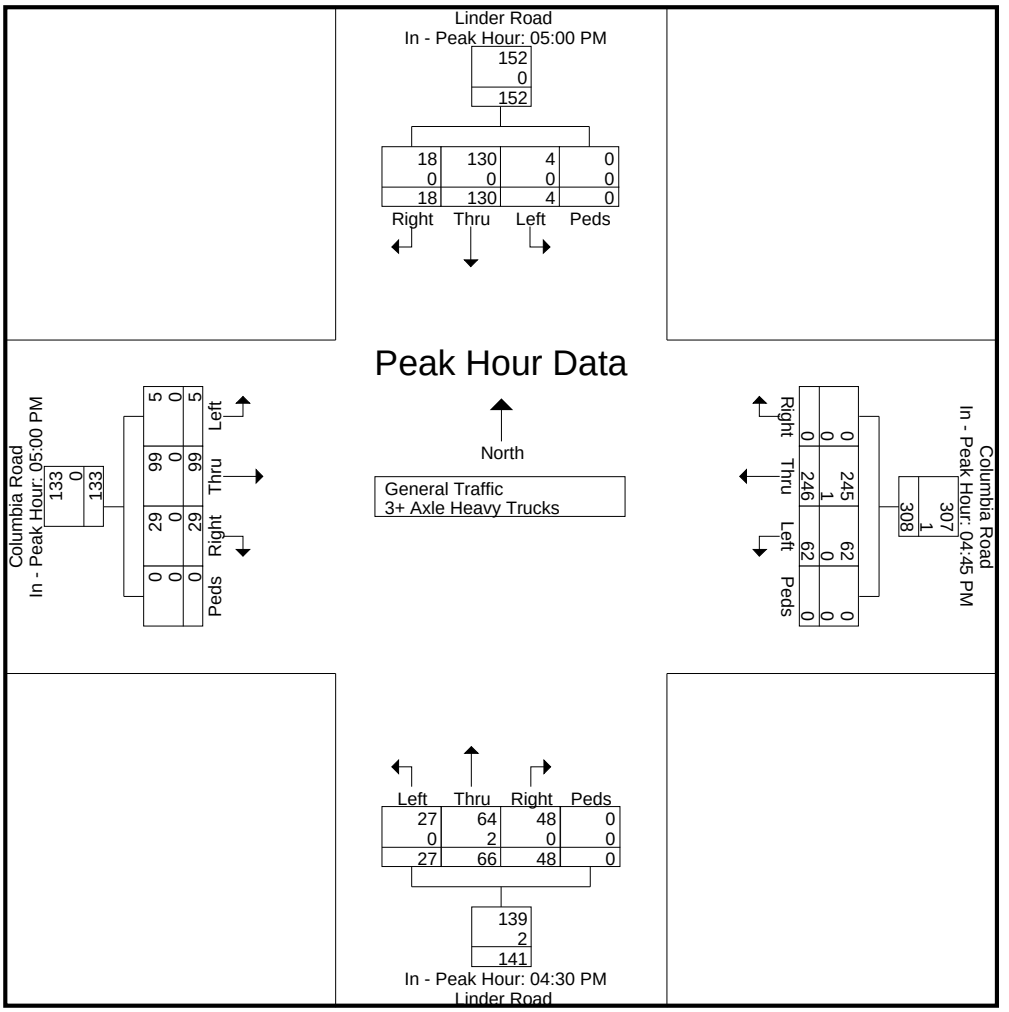
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 6

	Linder Road From North					Columbia Road From East					Linder Road From South					Columbia Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					04:45 PM					04:30 PM					05:00 PM					
+0 mins.	**5**	35	0	0	40	0	51	**19**	0	70	13	**22**	**8**	0	**43**	3	17	0	0	20	
+15 mins.	4	27	1	0	32	0	65	11	0	76	7	19	8	0	34	5	**34**	2	0	**41**	
+30 mins.	4	**37**	0	0	**41**	0	**73**	18	0	**91**	**16**	11	3	0	30	8	23	0	0	31	
+45 mins.	5	31	**3**	0	39	0	57	14	0	71	12	14	8	0	34	**13**	25	**3**	0	41	
Total Volume	18	130	4	0	152	0	246	62	0	308	48	66	27	0	141	29	99	5	0	133	
% App. Total	11.8	85.5	2.6	0		0	79.9	20.1	0		34	46.8	19.1	0		21.8	74.4	3.8	0		
PHF	.900	.878	.333	.000	.927	.000	.842	.816	.000	.846	.750	.750	.844	.000	.820	.558	.728	.417	.000	.811	
General Traffic	18	130	4	0	152	0	245	62	0	307	48	64	27	0	139	29	99	5	0	133	
% General Traffic	100	100	100	0	100	0	99.6	100	0	99.7	100	97	100	0	98.6	100	100	100	0	100	
3+ Axle Heavy Trucks	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0.4	0	0	0.3	0	3	0	0	1.4	0	0	0	0	0	



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder Rd / Columbia Rd
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Columbia 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

	Linder Road From North					Lake Hazel Road From East					Linder Road From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	11	2	0	13	2	3	0	0	5	1	40	1	0	42	4	3	3	0	10	70
07:15 AM	0	10	0	0	10	1	13	2	0	16	1	38	3	0	42	3	18	2	0	23	91
07:30 AM	1	6	1	0	8	1	12	3	0	16	1	54	0	0	55	2	9	2	0	13	92
07:45 AM	1	5	0	0	6	3	3	0	0	6	3	45	1	0	49	2	11	4	0	17	78
Total	2	32	3	0	37	7	31	5	0	43	6	177	5	0	188	11	41	11	0	63	331
08:00 AM	1	1	0	0	2	2	12	0	0	14	1	22	0	0	23	1	2	2	1	6	45
08:15 AM	0	7	0	0	7	2	2	0	0	4	2	21	2	0	25	4	10	4	0	18	54
08:30 AM	0	3	0	0	3	2	10	0	0	12	0	12	3	0	15	2	5	1	1	9	39
08:45 AM	1	6	1	0	8	1	5	0	0	6	2	16	0	0	18	1	6	3	0	10	42
Total	2	17	1	0	20	7	29	0	0	36	5	71	5	0	81	8	23	10	2	43	180

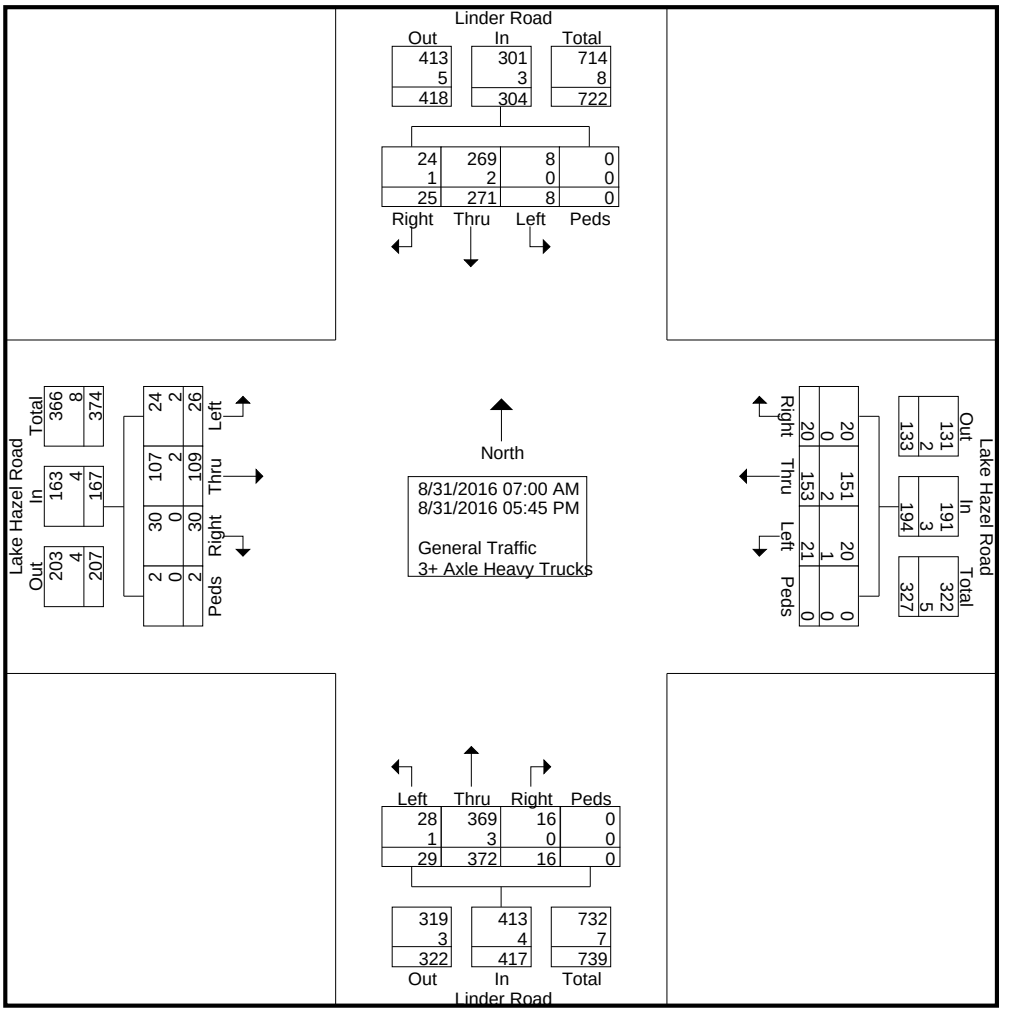
04:00 PM	1	20	1	0	22	1	8	1	0	10	1	14	0	0	15	1	9	0	0	10	57
04:15 PM	4	19	0	0	23	0	12	4	0	16	2	11	4	0	17	4	6	0	0	10	66
04:30 PM	3	11	0	0	14	0	9	1	0	10	0	22	3	0	25	2	2	1	0	5	54
04:45 PM	3	24	0	0	27	1	9	2	0	12	1	16	2	0	19	1	2	1	0	4	62
Total	11	74	1	0	86	2	38	8	0	48	4	63	9	0	76	8	19	2	0	29	239
05:00 PM	2	34	2	0	38	2	12	2	0	16	0	15	2	0	17	0	6	1	0	7	78
05:15 PM	2	42	1	0	45	0	14	1	0	15	0	16	2	0	18	0	11	0	0	11	89
05:30 PM	4	36	0	0	40	0	17	2	0	19	0	16	3	0	19	3	2	1	0	6	84
05:45 PM	2	36	0	0	38	2	12	3	0	17	1	14	3	0	18	0	7	1	0	8	81
Total	10	148	3	0	161	4	55	8	0	67	1	61	10	0	72	3	26	3	0	32	332
Grand Total	25	271	8	0	304	20	153	21	0	194	16	372	29	0	417	30	109	26	2	167	1082
Apprch %	8.2	89.1	2.6	0		10.3	78.9	10.8	0		3.8	89.2	7	0		18	65.3	15.6	1.2		
Total %	2.3	25	0.7	0	28.1	1.8	14.1	1.9	0	17.9	1.5	34.4	2.7	0	38.5	2.8	10.1	2.4	0.2	15.4	
General Traffic	24	269	8	0	301	20	151	20	0	191	16	369	28	0	413	30	107	24	2	163	1068
% General Traffic	96	99.3	100	0	99	100	98.7	95.2	0	98.5	100	99.2	96.6	0	99	100	98.2	92.3	100	97.6	98.7
3+ Axle Heavy Trucks	1	2	0	0	3	0	2	1	0	3	0	3	1	0	4	0	2	2	0	4	14
% 3+ Axle Heavy Trucks	4	0.7	0	0	1	0	1.3	4.8	0	1.5	0	0.8	3.4	0	1	0	1.8	7.7	0	2.4	1.3

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 2



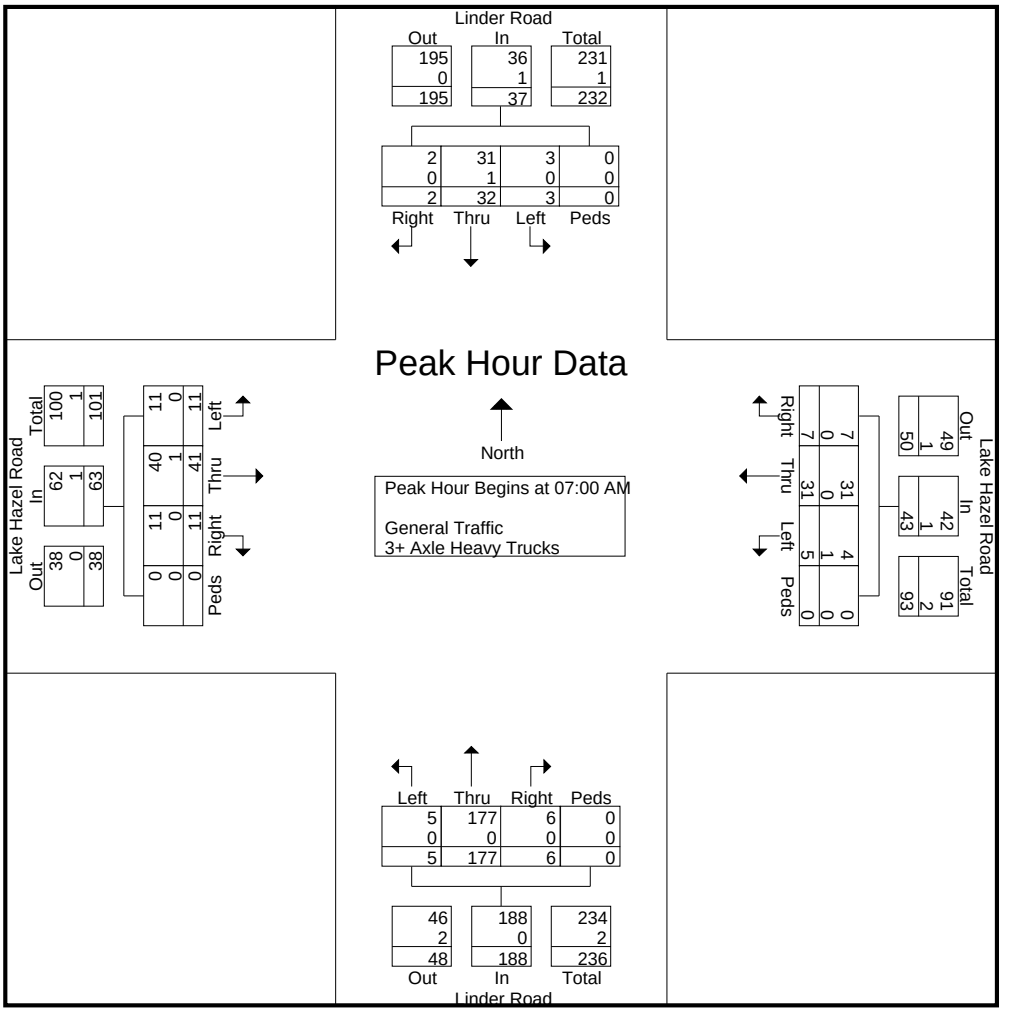
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 3

	Linder Road From North					Lake Hazel Road From East					Linder Road From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	**11**	**2**	0	**13**	2	3	0	0	5	1	40	1	0	42	**4**	3	3	0	10	70
07:15 AM	0	10	0	0	10	1	**13**	2	0	**16**	1	38	**3**	0	42	3	**18**	2	0	**23**	91
07:30 AM	**1**	6	1	0	8	1	12	**3**	0	16	1	**54**	0	0	**55**	2	9	2	0	13	**92**
07:45 AM	1	5	0	0	6	**3**	3	0	0	6	**3**	45	1	0	49	2	11	**4**	0	17	78
Total Volume	2	32	3	0	37	7	31	5	0	43	6	177	5	0	188	11	41	11	0	63	331
% App. Total	5.4	86.5	8.1	0		16.3	72.1	11.6	0		3.2	94.1	2.7	0		17.5	65.1	17.5	0		
PHF	.500	.727	.375	.000	.712	.583	.596	.417	.000	.672	.500	.819	.417	.000	.855	.688	.569	.688	.000	.685	.899
General Traffic	2	31	3	0	36	7	31	4	0	42	6	177	5	0	188	11	40	11	0	62	328
% General Traffic	100	96.9	100	0	97.3	100	100	80.0	0	97.7	100	100	100	0	100	100	97.6	100	0	98.4	99.1
3+ Axle Heavy Trucks	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	3
% 3+ Axle Heavy Trucks	0	3.1	0	0	2.7	0	0	20.0	0	2.3	0	0	0	0	0	0	2.4	0	0	1.6	0.9



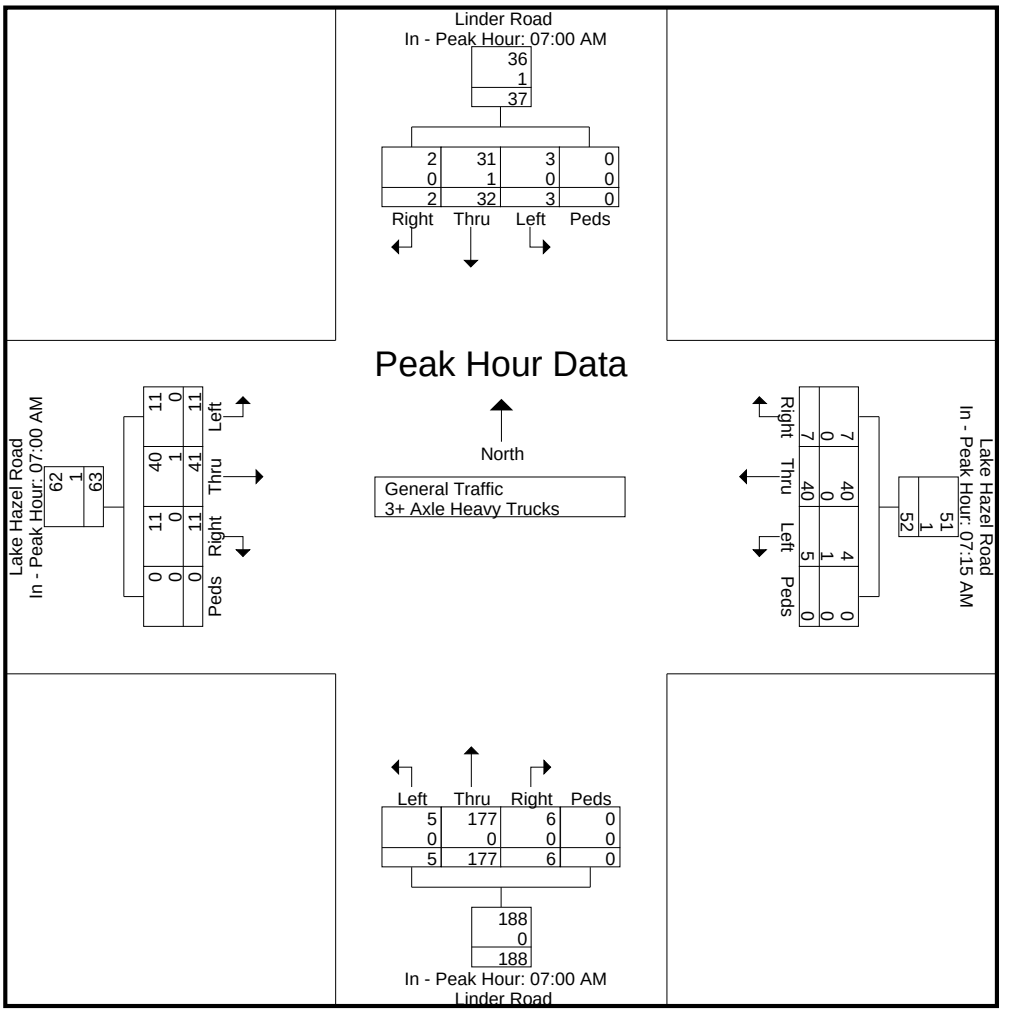
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 4

	Linder Road From North					Lake Hazel Road From East					Linder Road From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00 AM					07:15 AM					07:00 AM					07:00 AM					
+0 mins.	0	**11**	**2**	0	**13**	1	**13**	2	0	**16**	1	40	1	0	42	**4**	3	3	0	10	
+15 mins.	0	10	0	0	10	1	12	**3**	0	16	1	38	**3**	0	42	3	**18**	2	0	**23**	
+30 mins.	**1**	6	1	0	8	**3**	3	0	0	6	1	**54**	0	0	**55**	2	9	2	0	13	
+45 mins.	1	5	0	0	6	2	12	0	0	14	**3**	45	1	0	49	2	11	**4**	0	17	
Total Volume	2	32	3	0	37	7	40	5	0	52	6	177	5	0	188	11	41	11	0	63	
% App. Total	5.4	86.5	8.1	0		13.5	76.9	9.6	0		3.2	94.1	2.7	0		17.5	65.1	17.5	0		
PHF	.500	.727	.375	.000	.712	.583	.769	.417	.000	.813	.500	.819	.417	.000	.855	.688	.569	.688	.000	.685	
General Traffic	2	31	3	0	36	7	40	4	0	51	6	177	5	0	188	11	40	11	0	62	
% General Traffic	100	96.9	100	0	97.3	100	100	80	0	98.1	100	100	100	0	100	100	97.6	100	0	98.4	
3+ Axle Heavy Trucks	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	
% 3+ Axle Heavy Trucks	0	3.1	0	0	2.7	0	0	20	0	1.9	0	0	0	0	0	0	2.4	0	0	1.6	



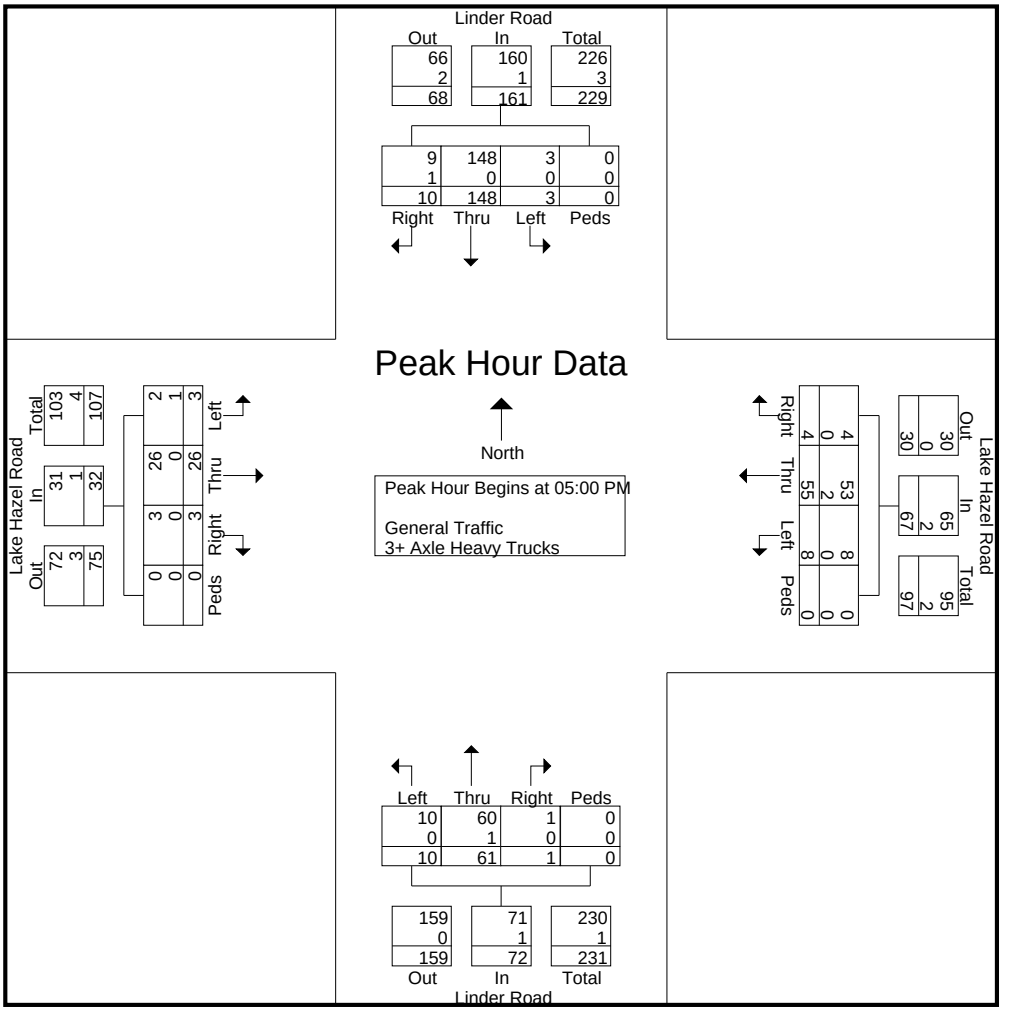
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 5

	Linder Road From North					Lake Hazel Road From East					Linder Road From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	34	**2**	0	38	**2**	12	2	0	16	0	15	2	0	17	0	6	**1**	0	7	78
05:15 PM	2	**42**	1	0	**45**	0	14	1	0	15	0	**16**	2	0	18	0	**11**	0	0	**11**	**89**
05:30 PM	**4**	36	0	0	40	0	**17**	2	0	**19**	0	16	**3**	0	**19**	**3**	2	1	0	6	84
05:45 PM	2	36	0	0	38	2	12	**3**	0	17	**1**	14	3	0	18	0	7	1	0	8	81
Total Volume	10	148	3	0	161	4	55	8	0	67	1	61	10	0	72	3	26	3	0	32	332
% App. Total	6.2	91.9	1.9	0		6	82.1	11.9	0		1.4	84.7	13.9	0		9.4	81.2	9.4	0		
PHF	.625	.881	.375	.000	.894	.500	.809	.667	.000	.882	.250	.953	.833	.000	.947	.250	.591	.750	.000	.727	.933
General Traffic	9	148	3	0	160	4	53	8	0	65	1	60	10	0	71	3	26	2	0	31	327
% General Traffic	90.0	100	100	0	99.4	100	96.4	100	0	97.0	100	98.4	100	0	98.6	100	100	66.7	0	96.9	98.5
3+ Axle Heavy Trucks	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1	0	0	1	0	1	5
% 3+ Axle Heavy Trucks	10.0	0	0	0	0.6	0	3.6	0	0	3.0	0	1.6	0	0	1.4	0	0	33.3	0	3.1	1.5



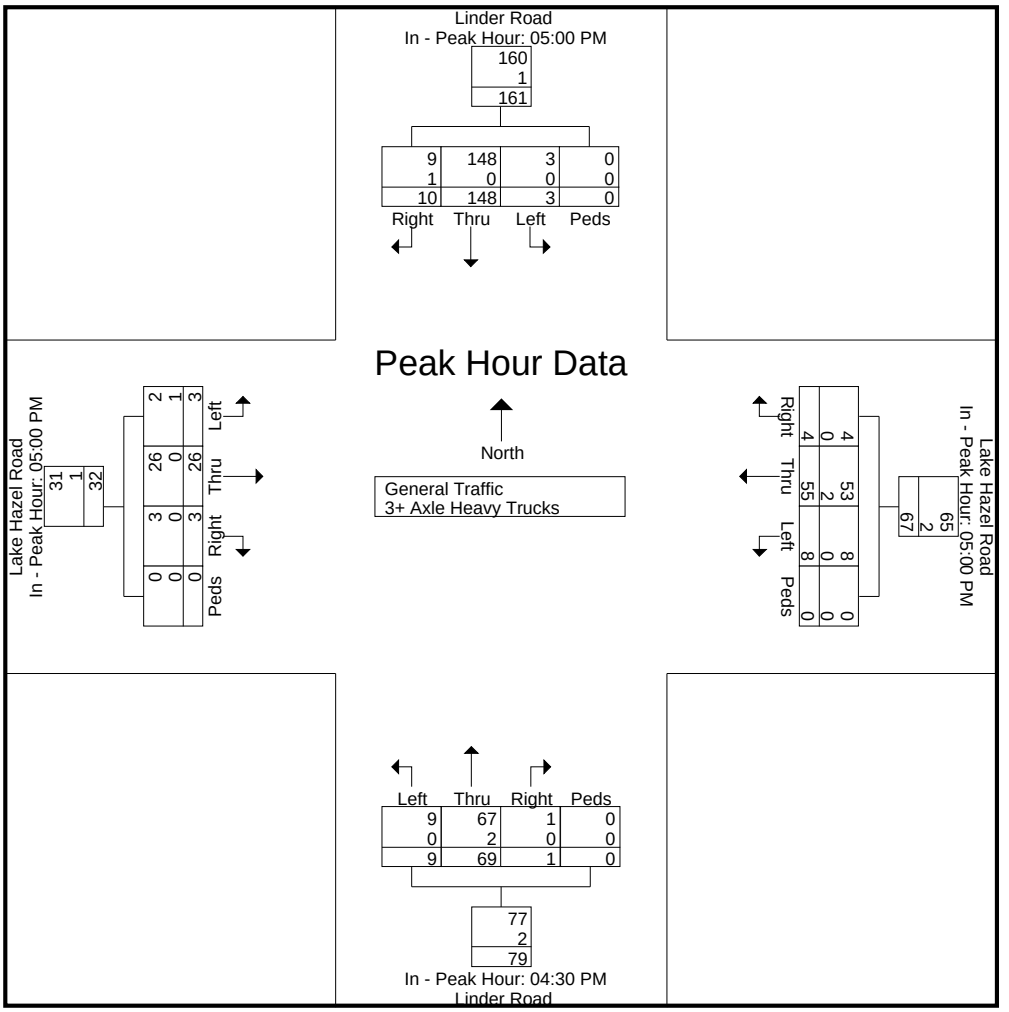
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 6

	Linder Road From North					Lake Hazel Road From East					Linder Road From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					04:30 PM					05:00 PM					
+0 mins.	2	34	**2**	0	38	**2**	12	2	0	16	0	**22**	**3**	0	**25**	0	6	**1**	0	7	
+15 mins.	2	**42**	1	0	**45**	0	14	1	0	15	**1**	16	2	0	19	0	**11**	0	0	**11**	
+30 mins.	**4**	36	0	0	40	0	**17**	2	0	**19**	0	15	2	0	17	**3**	2	1	0	6	
+45 mins.	2	36	0	0	38	2	12	**3**	0	17	0	16	2	0	18	0	7	1	0	8	
Total Volume	10	148	3	0	161	4	55	8	0	67	1	69	9	0	79	3	26	3	0	32	
% App. Total	6.2	91.9	1.9	0		6	82.1	11.9	0		1.3	87.3	11.4	0		9.4	81.2	9.4	0		
PHF	.625	.881	.375	.000	.894	.500	.809	.667	.000	.882	.250	.784	.750	.000	.790	.250	.591	.750	.000	.727	
General Traffic	9	148	3	0	160	4	53	8	0	65	1	67	9	0	77	3	26	2	0	31	
% General Traffic	90	100	100	0	99.4	100	96.4	100	0	97	100	97.1	100	0	97.5	100	100	66.7	0	96.9	
3+ Axle Heavy Trucks	1	0	0	0	1	0	2	0	0	2	0	2	0	0	2	0	0	1	0	1	
% 3+ Axle Heavy Trucks	10	0	0	0	0.6	0	3.6	0	0	3	0	2.9	0	0	2.5	0	0	33.3	0	3.1	



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: Linder / Lake Hazel
City: Meridian, Idaho
Control: All Stop

File Name : Linder & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

	SH-69 (Meridian Road) From North					Lake Hazel Road From East					SH-69 (Meridian Road) From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	92	11	0	104	22	4	4	0	30	3	340	0	0	343	1	2	1	0	4	481
07:15 AM	3	122	25	0	150	45	7	1	0	53	6	378	2	0	386	3	13	4	0	20	609
07:30 AM	3	149	9	0	161	40	11	3	0	54	15	353	1	0	369	1	8	0	0	9	593
07:45 AM	1	145	16	0	162	27	4	6	0	37	13	262	4	0	279	4	8	6	0	18	496
Total	8	508	61	0	577	134	26	14	0	174	37	1333	7	0	1377	9	31	11	0	51	2179
08:00 AM	4	109	22	0	135	19	11	4	0	34	10	291	0	0	301	1	3	3	0	7	477
08:15 AM	2	78	9	0	89	21	2	7	0	30	2	229	0	0	231	4	4	4	0	12	362
08:30 AM	5	72	8	0	85	19	11	3	0	33	5	217	2	0	224	1	2	3	0	6	348
08:45 AM	0	92	10	0	102	16	3	2	0	21	4	196	0	0	200	1	7	1	0	9	332
Total	11	351	49	0	411	75	27	16	0	118	21	933	2	0	956	7	16	11	0	34	1519

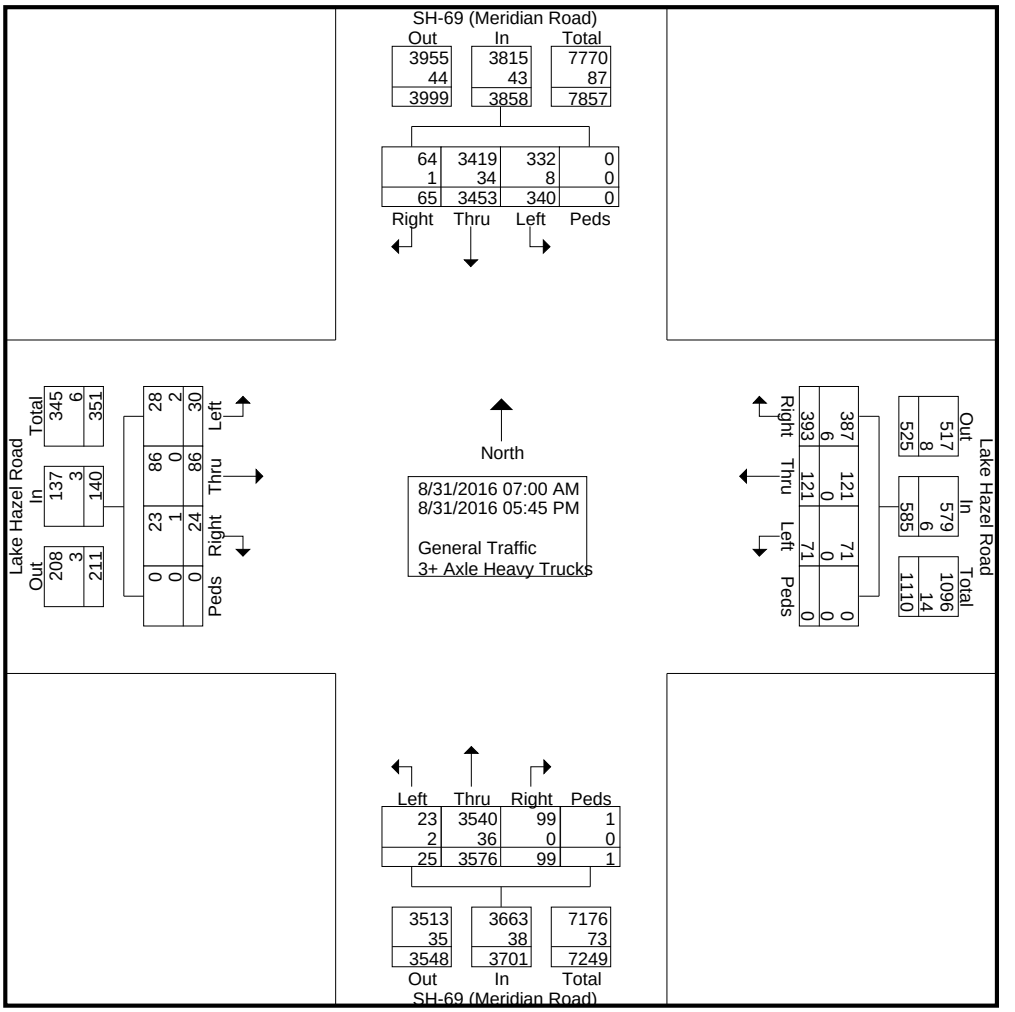
04:00 PM	4	261	17	0	282	17	8	3	0	28	5	173	2	0	180	2	5	2	0	9	499
04:15 PM	4	267	27	0	298	27	9	5	0	41	5	199	3	1	208	2	9	2	0	13	560
04:30 PM	5	340	25	0	370	27	6	7	0	40	4	184	0	0	188	0	2	0	0	2	600
04:45 PM	5	315	28	0	348	23	6	3	0	32	5	142	4	0	151	1	2	1	0	4	535
Total	18	1183	97	0	1298	94	29	18	0	141	19	698	9	1	727	5	18	5	0	28	2194
05:00 PM	8	391	31	0	430	15	5	5	0	25	8	151	1	0	160	2	5	1	0	8	623
05:15 PM	10	354	41	0	405	24	7	4	0	35	6	175	3	0	184	1	9	2	0	12	636
05:30 PM	7	320	29	0	356	29	14	7	0	50	2	142	1	0	145	0	1	0	0	1	552
05:45 PM	3	346	32	0	381	22	13	7	0	42	6	144	2	0	152	0	6	0	0	6	581
Total	28	1411	133	0	1572	90	39	23	0	152	22	612	7	0	641	3	21	3	0	27	2392
Grand Total	65	3453	340	0	3858	393	121	71	0	585	99	3576	25	1	3701	24	86	30	0	140	8284
Apprch %	1.7	89.5	8.8	0		67.2	20.7	12.1	0		2.7	96.6	0.7	0		17.1	61.4	21.4	0		
Total %	0.8	41.7	4.1	0	46.6	4.7	1.5	0.9	0	7.1	1.2	43.2	0.3	0	44.7	0.3	1	0.4	0	1.7	
General Traffic	64	3419	332	0	3815	387	121	71	0	579	99	3540	23	1	3663	23	86	28	0	137	8194
% General Traffic	98.5	99	97.6	0	98.9	98.5	100	100	0	99	100	99	92	100	99	95.8	100	93.3	0	97.9	98.9
3+ Axle Heavy Trucks	1	34	8	0	43	6	0	0	0	6	0	36	2	0	38	1	0	2	0	3	90
% 3+ Axle Heavy Trucks	1.5	1	2.4	0	1.1	1.5	0	0	0	1	0	1	8	0	1	4.2	0	6.7	0	2.1	1.1

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 2



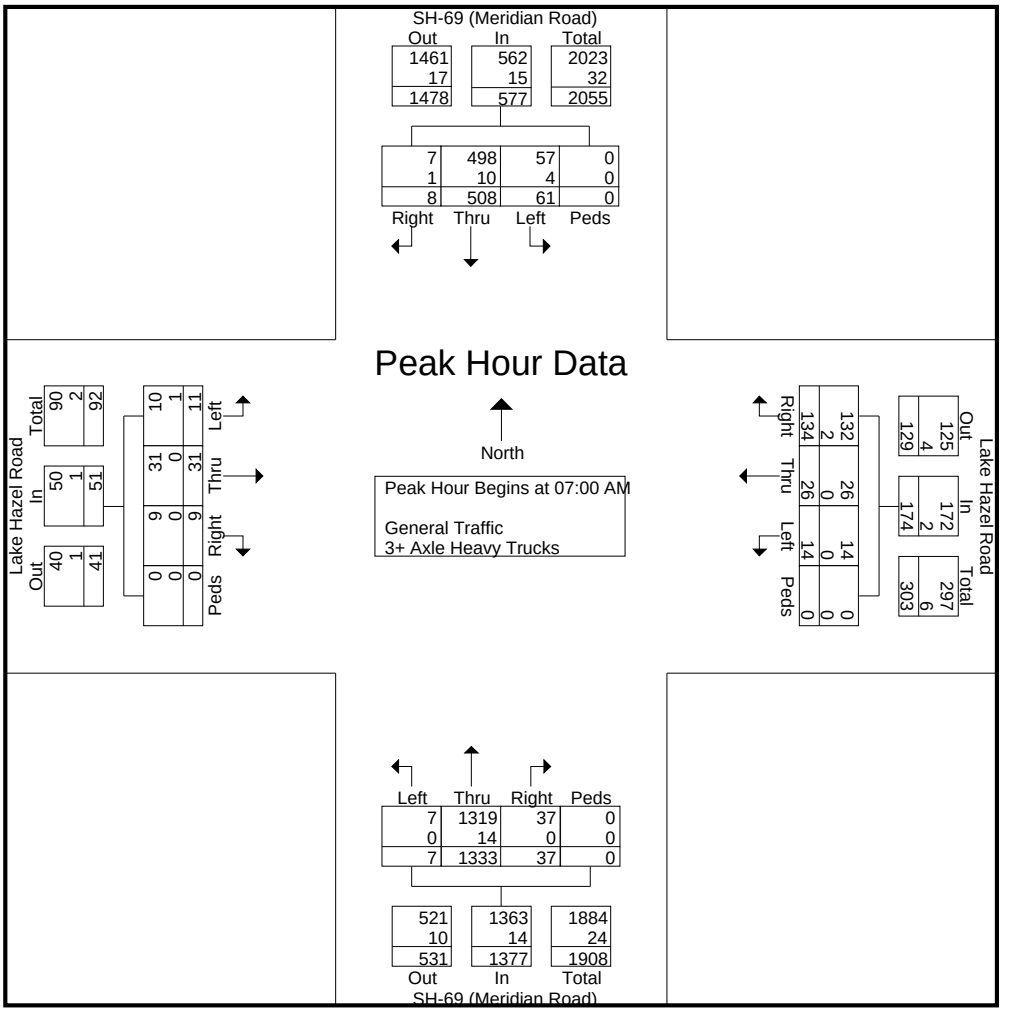
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 3

	SH-69 (Meridian Road) From North					Lake Hazel Road From East					SH-69 (Meridian Road) From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	92	11	0	104	22	4	4	0	30	3	340	0	0	343	1	2	1	0	4	481
07:15 AM	**3**	122	**25**	0	150	**45**	7	1	0	53	6	**378**	2	0	**386**	3	**13**	4	0	**20**	**609**
07:30 AM	3	**149**	9	0	161	40	**11**	3	0	**54**	**15**	353	1	0	369	1	8	0	0	9	593
07:45 AM	1	145	16	0	**162**	27	4	**6**	0	37	13	262	**4**	0	279	**4**	8	**6**	0	18	496
Total Volume	8	508	61	0	577	134	26	14	0	174	37	1333	7	0	1377	9	31	11	0	51	2179
% App. Total	1.4	88	10.6	0		77	14.9	8	0		2.7	96.8	0.5	0		17.6	60.8	21.6	0		
PHF	.667	.852	.610	.000	.890	.744	.591	.583	.000	.806	.617	.882	.438	.000	.892	.563	.596	.458	.000	.638	.894
General Traffic	7	498	57	0	562	132	26	14	0	172	37	1319	7	0	1363	9	31	10	0	50	2147
% General Traffic	87.5	98.0	93.4	0	97.4	98.5	100	100	0	98.9	100	98.9	100	0	99.0	100	100	90.9	0	98.0	98.5
3+ Axle Heavy Trucks	1	10	4	0	15	2	0	0	0	2	0	14	0	0	14	0	0	1	0	1	32
% 3+ Axle Heavy Trucks	12.5	2.0	6.6	0	2.6	1.5	0	0	0	1.1	0	1.1	0	0	1.0	0	0	9.1	0	2.0	1.5



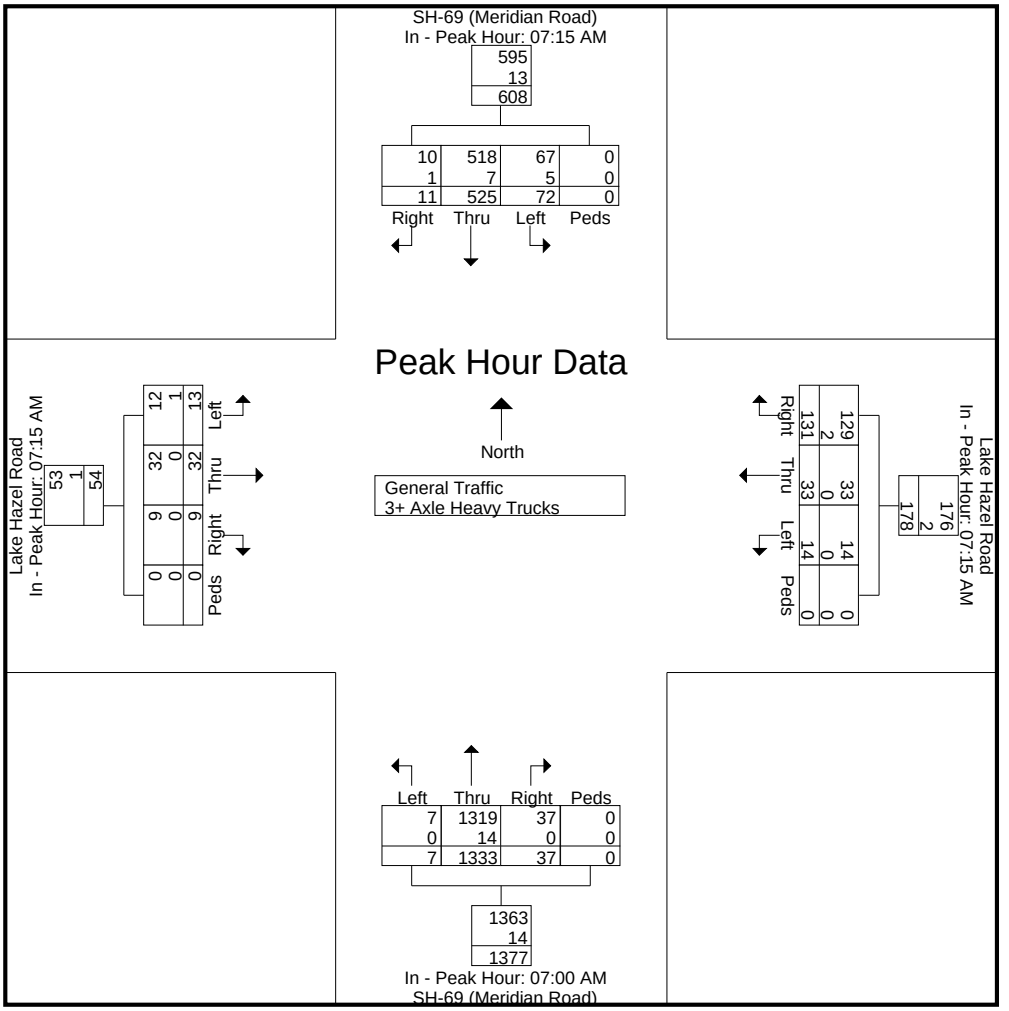
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 4

	SH-69 (Meridian Road) From North					Lake Hazel Road From East					SH-69 (Meridian Road) From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15 AM					07:15 AM					07:00 AM					07:15 AM					
+0 mins.	3	122	**25**	0	150	**45**	7	1	0	53	3	340	0	0	343	3	**13**	4	0	**20**	
+15 mins.	3	**149**	9	0	161	40	**11**	3	0	**54**	6	**378**	2	0	**386**	1	8	0	0	9	
+30 mins.	1	145	16	0	**162**	27	4	**6**	0	37	**15**	353	1	0	369	**4**	8	**6**	0	18	
+45 mins.	**4**	109	22	0	135	19	11	4	0	34	13	262	**4**	0	279	1	3	3	0	7	
Total Volume	11	525	72	0	608	131	33	14	0	178	37	1333	7	0	1377	9	32	13	0	54	
% App. Total	1.8	86.3	11.8	0		73.6	18.5	7.9	0		2.7	96.8	0.5	0		16.7	59.3	24.1	0		
PHF	.688	.881	.720	.000	.938	.728	.750	.583	.000	.824	.617	.882	.438	.000	.892	.563	.615	.542	.000	.675	
General Traffic	10	518	67	0	595	129	33	14	0	176	37	1319	7	0	1363	9	32	12	0	53	
% General Traffic	90.9	98.7	93.1	0	97.9	98.5	100	100	0	98.9	100	98.9	100	0	99	100	100	92.3	0	98.1	
3+ Axle Heavy Trucks	1	7	5	0	13	2	0	0	0	2	0	14	0	0	14	0	0	1	0	1	
% 3+ Axle Heavy Trucks	9.1	1.3	6.9	0	2.1	1.5	0	0	0	1.1	0	1.1	0	0	1	0	0	7.7	0	1.9	



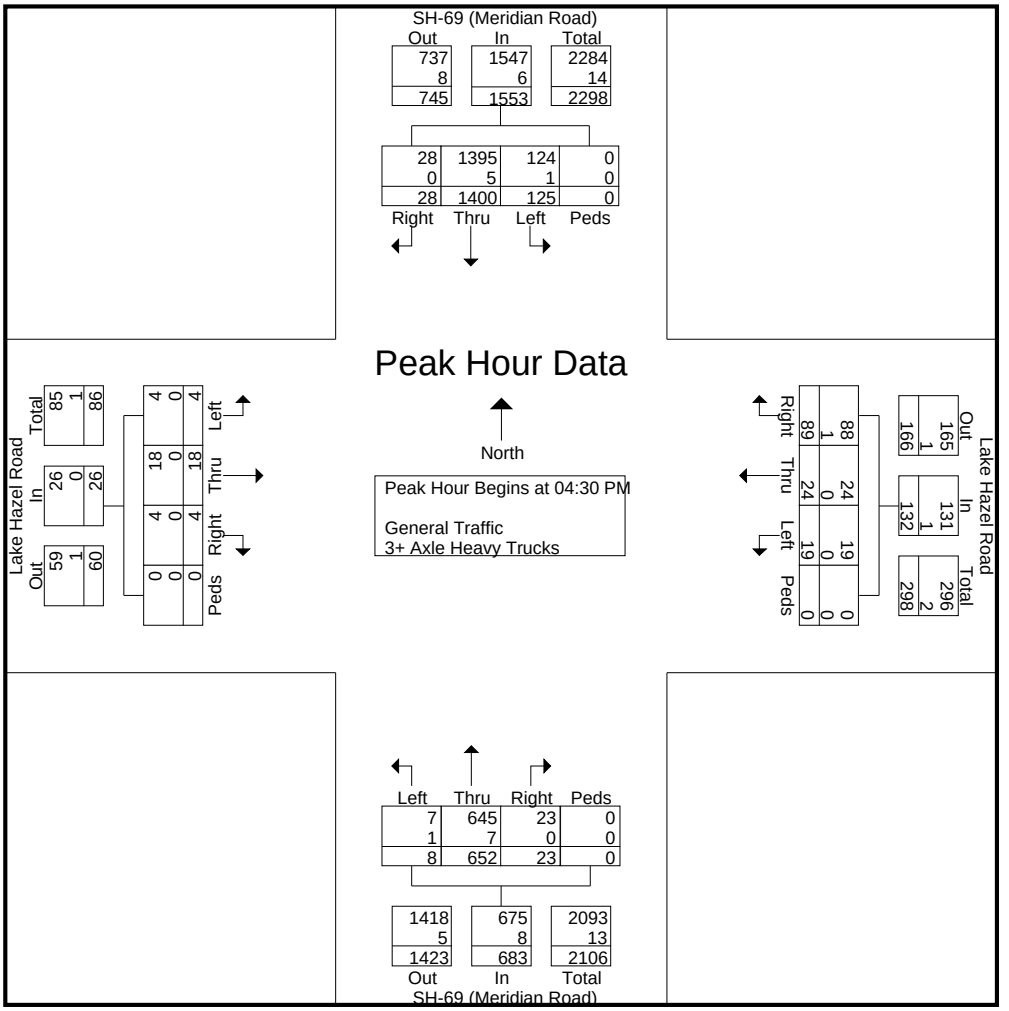
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 5

	SH-69 (Meridian Road) From North					Lake Hazel Road From East					SH-69 (Meridian Road) From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	5	340	25	0	370	**27**	6	**7**	0	**40**	4	**184**	0	0	**188**	0	2	0	0	2	600
04:45 PM	5	315	28	0	348	23	6	3	0	32	5	142	**4**	0	151	1	2	1	0	4	535
05:00 PM	8	**391**	31	0	**430**	15	5	5	0	25	**8**	151	1	0	160	**2**	5	1	0	8	623
05:15 PM	**10**	354	**41**	0	405	24	**7**	4	0	35	6	175	3	0	184	1	**9**	**2**	0	**12**	**636**
Total Volume	28	1400	125	0	1553	89	24	19	0	132	23	652	8	0	683	4	18	4	0	26	2394
% App. Total	1.8	90.1	8	0		67.4	18.2	14.4	0		3.4	95.5	1.2	0		15.4	69.2	15.4	0		
PHF	.700	.895	.762	.000	.903	.824	.857	.679	.000	.825	.719	.886	.500	.000	.908	.500	.500	.500	.000	.542	.941
General Traffic	28	1395	124	0	1547	88	24	19	0	131	23	645	7	0	675	4	18	4	0	26	2379
% General Traffic	100	99.6	99.2	0	99.6	98.9	100	100	0	99.2	100	98.9	87.5	0	98.8	100	100	100	0	100	99.4
3+ Axle Heavy Trucks	0	5	1	0	6	1	0	0	0	1	0	7	1	0	8	0	0	0	0	0	15
% 3+ Axle Heavy Trucks	0	0.4	0.8	0	0.4	1.1	0	0	0	0.8	0	1.1	12.5	0	1.2	0	0	0	0	0	0.6



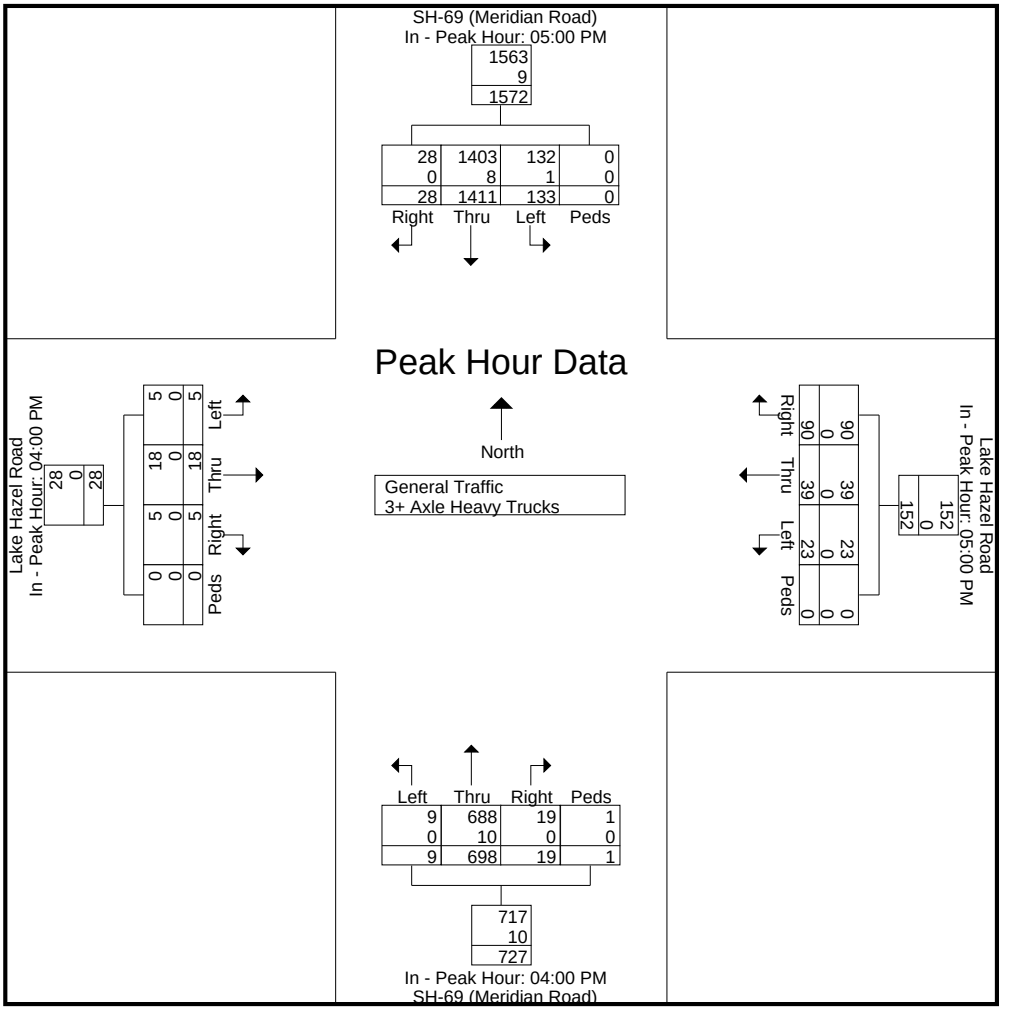
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 6

	SH-69 (Meridian Road) From North					Lake Hazel Road From East					SH-69 (Meridian Road) From South					Lake Hazel Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					04:00 PM					04:00 PM					
+0 mins.	8	**391**	31	0	**430**	15	5	5	0	25	**5**	173	2	0	180	**2**	5	**2**	0	9	
+15 mins.	**10**	354	**41**	0	405	24	7	4	0	35	5	**199**	3	**1**	**208**	2	**9**	2	0	**13**	
+30 mins.	7	320	29	0	356	**29**	**14**	**7**	0	**50**	4	184	0	0	188	0	2	0	0	2	
+45 mins.	3	346	32	0	381	22	13	7	0	42	5	142	**4**	0	151	1	2	1	0	4	
Total Volume	28	1411	133	0	1572	90	39	23	0	152	19	698	9	1	727	5	18	5	0	28	
% App. Total	1.8	89.8	8.5	0		59.2	25.7	15.1	0		2.6	96	1.2	0.1		17.9	64.3	17.9	0		
PHF	.700	.902	.811	.000	.914	.776	.696	.821	.000	.760	.950	.877	.563	.250	.874	.625	.500	.625	.000	.538	
General Traffic	28	1403	132	0	1563	90	39	23	0	152	19	688	9	1	717	5	18	5	0	28	
% General Traffic	100	99.4	99.2	0	99.4	100	100	100	0	100	100	98.6	100	100	98.6	100	100	100	0	100	
3+ Axle Heavy Trucks	0	8	1	0	9	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	
% 3+ Axle Heavy Trucks	0	0.6	0.8	0	0.6	0	0	0	0	0	0	1.4	0	0	1.4	0	0	0	0	0	



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: KITT0070
Intersection: SH-69 / Lake Hazel
City: Meridian, Idaho
Control: Stop Sign

File Name : SH-69 & Lake Hazel 083116
Site Code : 00000000
Start Date : 8/31/2016
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: KITT0101
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Linder Rd b Amity and Lake Hazel VOL
Date Start: 15-Nov-17
Date End: 16-Nov-17
Linder Road between Amity & Lake Hazel
Kuna, Idaho

Start Time	15-Nov-17 Wed	SB	NB							Total
12:00 AM		*	*							*
12:15		*	*							*
12:30		*	*							*
12:45		*	*							*
01:00		*	*							*
01:15		*	*							*
01:30		*	*							*
01:45		*	*							*
02:00		*	*							*
02:15		*	*							*
02:30		*	*							*
02:45		*	*							*
03:00		*	*							*
03:15		*	*							*
03:30		*	*							*
03:45		*	*							*
04:00		*	*							*
04:15		*	*							*
04:30		*	*							*
04:45		*	*							*
05:00		*	*							*
05:15		*	*							*
05:30		*	*							*
05:45		*	*							*
06:00		2	6							8
06:15		3	14							17
06:30		4	31							35
06:45		7	44							51
07:00		8	**50**							**58**
07:15		**15**	**78**							**93**
07:30		**12**	**67**							**79**
07:45		**14**	**63**							**77**
08:00		**14**	40							54
08:15		11	28							39
08:30		4	25							29
08:45		11	10							21
09:00		9	17							26
09:15		16	12							28
09:30		8	21							29
09:45		5	14							19
10:00		2	12							14
10:15		10	16							26
10:30		14	10							24
10:45		8	9							17
11:00		18	16							34
11:15		7	15							22
11:30		10	14							24
11:45		7	14							21
Total		219	626							845
Percent		25.9%	74.1%							
Peak	-	07:15	07:00	-	-	-	-	-	-	07:00
Vol.	-	55	258	-	-	-	-	-	-	307
P.H.F.		0.917	0.827							0.825

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: KITT0101
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Linder Rd b Amity and Lake Hazel VOL
Date Start: 15-Nov-17
Date End: 16-Nov-17
Linder Road between Amity & Lake Hazel
Kuna, Idaho

Start Time	15-Nov-17 Wed	SB	NB	Total
12:00 PM		22	8	30
12:15		12	12	24
12:30		14	16	30
12:45		12	20	32
01:00		14	15	29
01:15		13	18	31
01:30		8	22	30
01:45		8	17	25
02:00		18	14	32
02:15		14	20	34
02:30		17	18	35
02:45		15	22	37
03:00		25	16	41
03:15		28	26	54
03:30		20	24	44
03:45		19	21	40
04:00		40	25	65
04:15		29	24	53
04:30		42	26	68
04:45		**33**	**30**	**63**
05:00		**50**	**25**	**75**
05:15		**59**	**23**	**82**
05:30		**52**	**37**	**89**
05:45		32	26	58
06:00		40	16	56
06:15		36	30	66
06:30		22	27	49
06:45		10	18	28
07:00		15	12	27
07:15		17	8	25
07:30		14	7	21
07:45		14	12	26
08:00		19	9	28
08:15		5	8	13
08:30		17	10	27
08:45		10	4	14
09:00		8	4	12
09:15		11	4	15
09:30		7	6	13
09:45		6	6	12
10:00		2	4	6
10:15		7	2	9
10:30		4	1	5
10:45		2	4	6
11:00		1	1	2
11:15		2	4	6
11:30		5	2	7
11:45		2	0	2
Total		872	704	1576
Percent		55.3%	44.7%	
Peak	-	16:45	16:45	16:45
Vol.	-	194	115	309
P.H.F.		0.822	0.777	0.868

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: KITT0101
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Linder Rd b Amity and Lake Hazel VOL
Date Start: 15-Nov-17
Date End: 16-Nov-17
Linder Road between Amity & Lake Hazel
Kuna, Idaho

Start Time	16-Nov-17 Thu	SB	NB	Total
12:00 AM		3	1	4
12:15		3	2	5
12:30		0	1	1
12:45		1	0	1
01:00		0	0	0
01:15		0	1	1
01:30		1	1	2
01:45		0	1	1
02:00		0	0	0
02:15		0	0	0
02:30		0	3	3
02:45		1	1	2
03:00		0	1	1
03:15		0	2	2
03:30		1	1	2
03:45		0	1	1
04:00		0	0	0
04:15		1	3	4
04:30		2	1	3
04:45		0	4	4
05:00		**0**	**2**	**2**
05:15		**0**	**4**	**4**
05:30		**2**	**12**	**14**
05:45		**6**	**10**	**16**
06:00		*	*	*
06:15		*	*	*
06:30		*	*	*
06:45		*	*	*
07:00		*	*	*
07:15		*	*	*
07:30		*	*	*
07:45		*	*	*
08:00		*	*	*
08:15		*	*	*
08:30		*	*	*
08:45		*	*	*
09:00		*	*	*
09:15		*	*	*
09:30		*	*	*
09:45		*	*	*
10:00		*	*	*
10:15		*	*	*
10:30		*	*	*
10:45		*	*	*
11:00		*	*	*
11:15		*	*	*
11:30		*	*	*
11:45		*	*	*
Total		21	52	73
Percent		28.8%	71.2%	
Peak	-	05:00	05:00	05:00
Vol.	-	8	28	36
P.H.F.		0.333	0.583	0.563
Grand Total		1112	1382	2494
Percent		44.6%	55.4%	

Appendix C
Existing Traffic Operation Worksheets

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	305	8	5	131	12	14	191	25	8	23	1
Future Vol, veh/h	29	305	8	5	131	12	14	191	25	8	23	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	2	25	0	2	0	0	1	0	13	4	0
Mvmt Flow	32	339	9	6	146	13	16	212	28	9	26	1
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.4	9.9	11.5	9.4
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	8%	3%	25%
Vol Thru, %	83%	89%	89%	72%
Vol Right, %	11%	2%	8%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	342	148	32
LT Vol	14	29	5	8
Through Vol	191	305	131	23
RT Vol	25	8	12	1
Lane Flow Rate	256	380	164	36
Geometry Grp	1	1	1	1
Degree of Util (X)	0.376	0.527	0.238	0.059
Departure Headway (Hd)	5.303	4.989	5.215	6.01
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	680	726	689	595
Service Time	3.335	2.989	3.245	4.053
HCM Lane V/C Ratio	0.376	0.523	0.238	0.061
HCM Control Delay	11.5	13.4	9.9	9.4
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.7	3.1	0.9	0.2

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	41	11	5	31	7	5	177	6	3	32	2
Future Vol, veh/h	11	41	11	5	31	7	5	177	6	3	32	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	2	0	20	0	0	0	0	0	0	3	0
Mvmt Flow	12	46	12	6	34	8	6	197	7	3	36	2
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.1	8.5	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	17%	12%	8%
Vol Thru, %	94%	65%	72%	86%
Vol Right, %	3%	17%	16%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	188	63	43	37
LT Vol	5	11	5	3
Through Vol	177	41	31	32
RT Vol	6	11	7	2
Lane Flow Rate	209	70	48	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.239	0.086	0.064	0.05
Departure Headway (Hd)	4.121	4.446	4.805	4.382
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	856	810	749	821
Service Time	2.221	2.45	2.809	2.39
HCM Lane V/C Ratio	0.244	0.086	0.064	0.05
HCM Control Delay	8.5	7.9	8.1	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.3	0.2	0.2

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	33	323	20	17	73	6	35	130	108	4	24	2
Future Vol, veh/h	33	323	20	17	73	6	35	130	108	4	24	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	1	0	0	0	0	9	0	0	25	8	0
Mvmt Flow	34	336	21	18	76	6	36	135	113	4	25	2
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.2	9.2	11.6	9.4
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	9%	18%	13%
Vol Thru, %	48%	86%	76%	80%
Vol Right, %	40%	5%	6%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	273	376	96	30
LT Vol	35	33	17	4
Through Vol	130	323	73	24
RT Vol	108	20	6	2
Lane Flow Rate	284	392	100	31
Geometry Grp	1	1	1	1
Degree of Util (X)	0.401	0.526	0.148	0.053
Departure Headway (Hd)	5.073	4.832	5.322	6.062
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	700	736	677	594
Service Time	3.172	2.916	3.326	4.068
HCM Lane V/C Ratio	0.406	0.533	0.148	0.052
HCM Control Delay	11.6	13.2	9.2	9.4
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.9	3.1	0.5	0.2

Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	31	9	14	26	134	7	1333	37	61	508	8
Future Vol, veh/h	11	31	9	14	26	134	7	1333	37	61	508	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	9	0	0	0	0	1	0	1	0	7	2	13
Mvmt Flow	12	35	10	16	29	151	8	1498	42	69	571	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1491	2267	290	1974	2251	770	580	0	0	1539	0	0
Stage 1	712	712	-	1534	1534	-	-	-	-	-	-	-
Stage 2	779	1555	-	440	717	-	-	-	-	-	-	-
Critical Hdwy	7.68	6.5	6.9	7.5	6.5	6.92	4.1	-	-	4.24	-	-
Critical Hdwy Stg 1	6.68	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.68	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4	3.3	3.5	4	3.31	2.2	-	-	2.27	-	-
Pot Cap-1 Maneuver	80	41	713	38	42	345	1004	-	-	404	-	-
Stage 1	374	439	-	124	180	-	-	-	-	-	-	-
Stage 2	340	176	-	571	437	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 12	~ 34	713	-	35	345	1004	-	-	404	-	-
Mov Cap-2 Maneuver	~ 12	~ 34	-	-	35	-	-	-	-	-	-	-
Stage 1	371	364	-	123	179	-	-	-	-	-	-	-
Stage 2	159	175	-	422	362	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 381.1		0	1.7
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1004	-	-	12	43	-	141	404	-	-
HCM Lane V/C Ratio	0.008	-	-	1.03	1.045	-	1.275	0.17	-	-
HCM Control Delay (s)	8.6	-	-	-$ 684.7	297.6	-	228.3	15.7	-	-
HCM Lane LOS	A	-	-	F	F	-	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	2.2	4.2	-	11	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	122	30	29	309	6	9	79	12	7	184	20
Future Vol, veh/h	10	122	30	29	309	6	9	79	12	7	184	20
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	2	0	0	3	0	0	4	0	43	0	5
Mvmt Flow	10	127	31	30	322	6	9	82	13	7	192	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	13.6	9.9	12.9
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	6%	8%	3%
Vol Thru, %	79%	75%	90%	87%
Vol Right, %	12%	19%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	162	344	211
LT Vol	9	10	29	7
Through Vol	79	122	309	184
RT Vol	12	30	6	20
Lane Flow Rate	104	169	358	220
Geometry Grp	1	1	1	1
Degree of Util (X)	0.165	0.251	0.515	0.377
Departure Headway (Hd)	5.694	5.357	5.174	6.174
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	628	670	695	582
Service Time	3.744	3.4	3.209	4.216
HCM Lane V/C Ratio	0.166	0.252	0.515	0.378
HCM Control Delay	9.9	10.2	13.6	12.9
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	1	3	1.7

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	26	3	8	55	4	10	61	1	3	148	10
Future Vol, veh/h	3	26	3	8	55	4	10	61	1	3	148	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	33	0	0	0	4	0	0	2	0	0	0	10
Mvmt Flow	3	28	3	9	59	4	11	66	1	3	159	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	7.9	7.8	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	9%	12%	2%
Vol Thru, %	85%	81%	82%	92%
Vol Right, %	1%	9%	6%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	32	67	161
LT Vol	10	3	8	3
Through Vol	61	26	55	148
RT Vol	1	3	4	10
Lane Flow Rate	77	34	72	173
Geometry Grp	1	1	1	1
Degree of Util (X)	0.094	0.048	0.09	0.203
Departure Headway (Hd)	4.357	5.065	4.488	4.218
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	825	708	800	857
Service Time	2.369	3.084	2.504	2.218
HCM Lane V/C Ratio	0.093	0.048	0.09	0.202
HCM Control Delay	7.8	8.3	7.9	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.3	0.8

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	99	29	55	247	2	24	56	45	4	130	18
Future Vol, veh/h	5	99	29	55	247	2	24	56	45	4	130	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	6	110	32	61	274	2	27	62	50	4	144	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	12.4	9.6	10.1
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	4%	18%	3%
Vol Thru, %	45%	74%	81%	86%
Vol Right, %	36%	22%	1%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	133	304	152
LT Vol	24	5	55	4
Through Vol	56	99	247	130
RT Vol	45	29	2	18
Lane Flow Rate	139	148	338	169
Geometry Grp	1	1	1	1
Degree of Util (X)	0.203	0.209	0.47	0.249
Departure Headway (Hd)	5.252	5.1	5.009	5.31
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	683	703	723	676
Service Time	3.287	3.133	3.009	3.345
HCM Lane V/C Ratio	0.204	0.211	0.467	0.25
HCM Control Delay	9.6	9.5	12.4	10.1
HCM Lane LOS	A	A	B	B
HCM 95th-tile Q	0.8	0.8	2.5	1

Intersection	
Int Delay, s/veh	16.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	18	4	19	24	89	8	652	23	125	1400	28
Future Vol, veh/h	4	18	4	19	24	89	8	652	23	125	1400	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	13	1	0	1	0	0
Mvmt Flow	4	19	4	20	26	95	9	694	24	133	1489	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2147	2505	760	1743	2508	359	1519	0	0	718	0	0
Stage 1	1770	1770	-	723	723	-	-	-	-	-	-	-
Stage 2	377	735	-	1020	1785	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.21	-	-
Pot Cap-1 Maneuver	28	29	353	57	29	643	386	-	-	886	-	-
Stage 1	88	138	-	388	434	-	-	-	-	-	-	-
Stage 2	622	428	-	257	135	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	24	353	~ 17	~ 24	643	386	-	-	886	-	-
Mov Cap-2 Maneuver	-	24	-	~ 17	~ 24	-	-	-	-	-	-	-
Stage 1	86	117	-	379	424	-	-	-	-	-	-	-
Stage 2	487	418	-	180	115	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		290.4	0.2	0.8
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	386	-	-	-	29	17	99	886	-	-
HCM Lane V/C Ratio	0.022	-	-	-	0.807	1.189	1.214	0.15	-	-
HCM Control Delay (s)	14.5	-	-	-	$ 302.4	$ 598.6	238.6	9.8	-	-
HCM Lane LOS	B	-	-	-	F	F	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	2.6	3	8.2	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix D
Mitigated Existing Traffic Operation Worksheets

KITTELSON & ASSOCIATES, INC.
610 SW Alder, Suite 700
Portland, Oregon 97205
(503) 228-5230

Project #: 22046
Project Name: Gripentrog Subdivision
Analyst: BXK
Date: 2/6/2018
File: H:\22\22046 - Gripentrog Subdivision TIS\excel\signal warrant analyses\[Lake Hazel-SH69 EX Signal Warrant Analysis.xls]Warrant Summary(70%)
Intersection: Lake Hazel Rd & SH 69
Scenario: Year 2017 Existing Conditions

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
12:00 AM	1:00 AM	31	91	2	3
1:00 AM		20	49	0	3
2:00 AM		27	40	1	3
3:00 AM		67	26	2	0
4:00 AM		151	64	5	5
5:00 AM		466	151	11	15
6:00 AM		1064	266	29	69
7:00 AM		1422	671	53	133
8:00 AM		992	417	38	119
9:00 AM		771	450	26	83
10:00 AM		664	470	30	66
11:00 AM		663	565	21	59
12:00 PM		651	616	25	77
1:00 PM		590	719	22	67
2:00 PM		614	798	19	63
3:00 PM		829	1069	26	81
4:00 PM		701	1383	33	112
5:00 PM		746	1707	40	126
6:00 PM		694	1331	32	99
7:00 PM		475	914	18	62
8:00 PM		320	703	26	38
9:00 PM		196	563	11	32
10:00 PM		142	309	10	19
11:00 PM		83	153	4	7

Warrant Summary

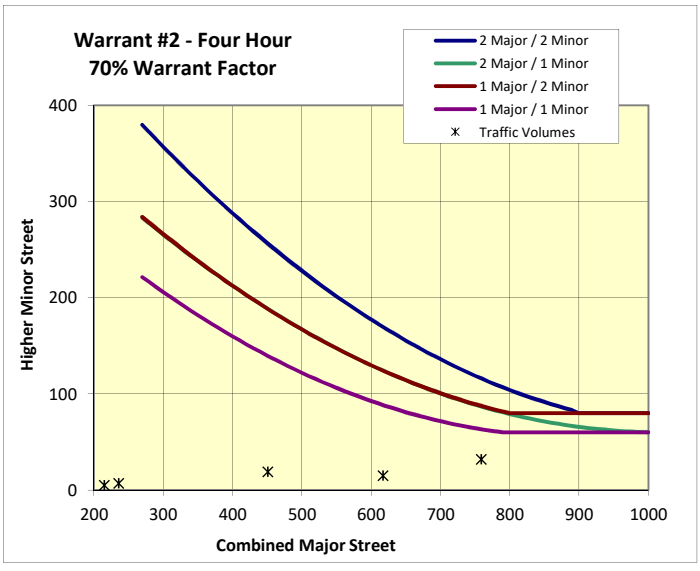
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	Yes
#2	Four-Hour Vehicular volume	Yes	Yes
#3	Peak Hour	Yes	Yes
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-
#9	Intersection Near a Grade Crossing	No	-

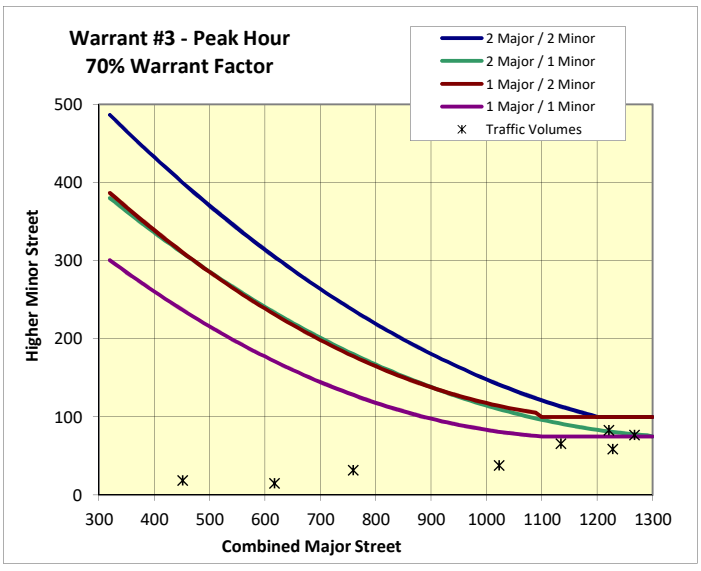
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	Yes
Population < 10,000?	No
Warrant Factor	70%
Peak Hour or Daily Count?	Daily

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**Yes**
	B	900	75	8	Yes	
80%	A	480	120	2	No	**Yes**
	B	720	60	13	Yes	
70%	A	420	105	4	No	**Yes**
	B	630	53	14	Yes	
56%	A	336	84	5	No	**Yes**
	B	504	42	14	Yes	





HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	31	9	14	26	134	7	1333	37	61	508	8
Future Volume (veh/h)	11	31	9	14	26	134	7	1333	37	61	508	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1651	1800	1800	1800	1785	1800	1800	1783	1800	1682	1762	1800
Adj Flow Rate, veh/h	12	35	10	16	29	151	8	1498	42	69	571	9
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	9	0	0	0	0	0	0	1	1	7	2	2
Cap, veh/h	151	190	54	280	36	189	524	1878	53	234	2017	32
Arrive On Green	0.01	0.14	0.14	0.02	0.15	0.15	0.01	0.56	0.56	0.05	0.60	0.60
Sat Flow, veh/h	1573	1347	385	1714	251	1304	1714	3365	94	1602	3373	53
Grp Volume(v), veh/h	12	0	45	16	0	180	8	753	787	69	283	297
Grp Sat Flow(s),veh/h/ln	1573	0	1732	1714	0	1555	1714	1694	1766	1602	1674	1752
Q Serve(g_s), s	0.5	0.0	1.8	0.6	0.0	8.7	0.2	27.4	27.6	1.3	6.4	6.4
Cycle Q Clear(g_c), s	0.5	0.0	1.8	0.6	0.0	8.7	0.2	27.4	27.6	1.3	6.4	6.4
Prop In Lane	1.00		0.22	1.00		0.84	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	151	0	244	280	0	226	524	945	986	234	1001	1048
V/C Ratio(X)	0.08	0.00	0.18	0.06	0.00	0.80	0.02	0.80	0.80	0.29	0.28	0.28
Avail Cap(c_a), veh/h	240	0	502	369	0	451	628	2041	2129	371	2125	2225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	29.4	27.7	0.0	32.1	7.3	13.6	13.7	12.6	7.6	7.6
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.1	0.0	6.3	0.0	1.6	1.5	0.7	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.9	0.3	0.0	4.1	0.1	13.0	13.8	0.7	3.0	3.1
LnGrp Delay(d),s/veh	28.5	0.0	29.7	27.7	0.0	38.4	7.3	15.2	15.2	13.3	7.7	7.7
LnGrp LOS	C		C	C		D	A	B	B	B	A	A
Approach Vol, veh/h		57			196			1548			649	
Approach Delay, s/veh		29.5			37.5			15.2			8.3	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	47.8	6.0	15.4	5.3	50.9	5.6	15.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	93.5	5.5	22.5	5.5	98.5	5.5	22.5
Max Q Clear Time (g_c+I1), s	3.3	29.6	2.6	3.8	2.2	8.4	2.5	10.7
Green Ext Time (p_c), s	0.1	13.7	0.0	0.1	0.0	3.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	18	4	19	24	89	8	652	23	125	1400	28
Future Volume (veh/h)	4	18	4	19	24	89	8	652	23	125	1400	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1593	1783	1800	1782	1800	1800
Adj Flow Rate, veh/h	4	19	4	20	26	95	9	694	24	133	1489	30
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	13	1	1	1	0	0
Cap, veh/h	168	128	27	262	36	133	211	1727	60	517	1985	40
Arrive On Green	0.01	0.09	0.09	0.02	0.11	0.11	0.01	0.52	0.52	0.07	0.58	0.58
Sat Flow, veh/h	1714	1443	304	1714	340	1241	1517	3341	115	1697	3429	69
Grp Volume(v), veh/h	4	0	23	20	0	121	9	352	366	133	742	777
Grp Sat Flow(s),veh/h/ln	1714	0	1746	1714	0	1581	1517	1694	1762	1697	1710	1788
Q Serve(g_s), s	0.1	0.0	0.7	0.6	0.0	4.5	0.2	7.7	7.7	2.0	19.5	19.6
Cycle Q Clear(g_c), s	0.1	0.0	0.7	0.6	0.0	4.5	0.2	7.7	7.7	2.0	19.5	19.6
Prop In Lane	1.00		0.17	1.00		0.79	1.00		0.07	1.00		0.04
Lane Grp Cap(c), veh/h	168	0	155	262	0	169	211	875	911	517	990	1035
V/C Ratio(X)	0.02	0.00	0.15	0.08	0.00	0.72	0.04	0.40	0.40	0.26	0.75	0.75
Avail Cap(c_a), veh/h	315	0	620	377	0	561	331	2585	2690	742	2808	2936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	25.5	24.2	0.0	26.2	8.9	8.9	8.9	5.8	9.5	9.5
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.1	0.0	5.5	0.1	0.3	0.3	0.3	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	0.3	0.0	2.2	0.1	3.6	3.7	1.0	9.4	9.8
LnGrp Delay(d),s/veh	25.1	0.0	25.9	24.3	0.0	31.7	9.0	9.2	9.2	6.0	10.6	10.6
LnGrp LOS	C		C	C		C	A	A	A	A	B	B
Approach Vol, veh/h		27			141			727			1652	
Approach Delay, s/veh		25.8			30.6			9.2			10.3	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	35.8	5.9	9.9	5.2	39.6	4.8	11.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	92.5	5.5	21.5	5.5	99.5	5.5	21.5
Max Q Clear Time (g_c+I1), s	4.0	9.7	2.6	2.7	2.2	21.6	2.1	6.5
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	13.5	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Appendix E
ITD Crash Data

Whisper Meadows Subdivision - Crash Data

ITD Reported Crash Data @ Study Intersections and Roadway
Dates: 2011 - 2015

Linder Road & Amity Road																		
Accident #	**Street1**	**Street2**	**Accident Date**	**Serial #**	**Light**	**Weather**	**Wet/Dry**	**Units**	**Severity**	**UnitId**	**Direction**	**Unit Type**	**Action**	**Milepost**	**Event**	**Contrib Circ**	**Latitude**	**Longitude**
1	Linder Rd	Amity Rd	5/7/2015 13:47	15C397197	Day	Cloudy	Wet	2	A Injury Accident	15941648	W	Pickup	Going Straight	8.0140	Utility/Light Support	Failed to Obey Stop Sign	43.56104400	-116.41377160
2	Amity Rd	Linder Rd	7/14/2014 15:55	14C375211	Day	Clear	Dry	2	Property Dmg Report	15181552	S	Pickup	Starting in Traffic	5.9880	Angle	Inattention	43.56104400	-116.41377160
Linder Road & Lake Hazel Road																		
Accident #	**Street1**	**Street2**	**Accident Date**	**Serial #**	**Light**	**Weather**	**Wet/Dry**	**Units**	**Severity**	**UnitId**	**Direction**	**Unit Type**	**Action**	**Milepost**	**Event**	**Contrib Circ**	**Latitude**	**Longitude**
1	Lake Hazel Rd	Linder Rd	6/18/2013 11:14	13C347376	Day	Clear	Dry	2	C Injury Accident	14210261	W	Car	Going Straight	6.0020	Rear-End	Failed to Obey Stop Sign	43.54651010	-116.41379300
Linder Road & Columbia Road																		
Accident #	**Street1**	**Street2**	**Accident Date**	**Serial #**	**Light**	**Weather**	**Wet/Dry**	**Units**	**Severity**	**UnitId**	**Direction**	**Unit Type**	**Action**	**Milepost**	**Event**	**Contrib Circ**	**Latitude**	**Longitude**
1	Columbia Rd	Linder Rd	5/27/2015 09:06	15C400082	Day	Clear	Dry	2	Property Dmg Report	16041332	N	SUV/Crossover	Starting in Traffic	103.0500	Angle	Failed to Obey Stop Sign	43.53203360	-116.41381750
2	Columbia Rd	Linder Rd	4/3/2014 15:21	14C367894	Day	Clear	Dry	2	Property Dmg Report	14915046	E	SUV/Crossover	Going Straight	103.0500	Angle Turning		43.53203360	-116.41381750
Meridian Road (SH 69) & Lake Hazel Road																		
Accident #	**Street1**	**Street2**	**Accident Date**	**Serial #**	**Light**	**Weather**	**Wet/Dry**	**Units**	**Severity**	**UnitId**	**Direction**	**Unit Type**	**Action**	**Milepost**	**Event**	**Contrib Circ**	**Latitude**	**Longitude**
1	Meridian Rd	Lake Hazel Rd	10/16/2015 7:44	15C409989	Day	Cloudy	Dry	**2**	B Injury Accident	16387483	W	Pickup	Going Straight	6.187	Angle	Inattention	43.54631732	-116.3938718
2	SH 69	Lake Hazel Rd	9/16/2015 18:08	15C407131	Day	Cloudy	Dry	**3**	B Injury Accident	16288548	W	SUV/Crossover	Starting in Traffic	6.131	Angle	Failed to Yield	43.5463699	-116.3937735
3	Meridian Rd	Lake Hazel Rd	7/2/2015 20:41	15C401866	Day	Clear	Dry	**2**	A Injury Accident	16102168	S	Truck - 2 Axle	Turning Left	6.131	Head-On Turning	Inattention	43.54636299	-116.3937618
4	SH 69	Lake Hazel Rd	6/26/2015 13:57	15C401205	Day	Clear	Dry	**2**	B Injury Accident	16077414	W	Car	Starting in Traffic	6.131	Angle	Failed to Obey Stop Sign	43.54640771	-116.3937296
5	Lake Hazel Rd	SH 69	5/12/2015 21:38	15C397214	Dark	Rain	Wet	**2**	Property Dmg Report	15941668	W	SUV/Crossover	Going Straight	7.051	Rear-End	Inattention	43.54645637	-116.3937375
6	Lake Hazel Rd	Meridian Rd	4/11/2015 16:36	15C396172	Day	Rain	Wet	**2**	C Injury Accident	15905033	W	Car	Turning Left	7.007	Head-On Turning	Failed to Yield	43.54637055	-116.3937722
7	Meridian Rd	Lake Hazel Rd	3/25/2015 18:00	15C394730	Day	Clear	Dry	**2**	Property Dmg Report	15852721	S	SUV/Crossover	Going Straight	6.131	Angle		43.5464427	-116.3937886
8	Meridian Rd	Lake Hazel Rd	11/28/2014 16:48	14C394310	Day	Cloudy	Dry	**2**	Fatal Accident	15836608	N	Car	Going Straight	6.131	Pedalcycle	Distracted IN or ON Vehicle	43.54641548	-116.3936653
9	SH 69	Lake Hazel Rd	2/21/2015 16:07	15C392733	Day	Clear	Dry	**1**	Property Dmg Report	15782749	S	Car	Turning Left	6.131	Fence	Inattention	43.54636882	-116.3937779
10	Meridian Rd	Lake Hazel Rd	9/9/2014 7:20	14C378715	Day	Clear	Dry	**2**	Property Dmg Report	15307728	W	Car	Going Straight	6.131	Angle	Failed to Obey Stop Sign	43.54636688	-116.3937725
11	SH 69	Lake Hazel Rd	8/28/2014 8:12	14C378186	Dark	Clear	Dry	**2**	C Injury Accident	15286815	E	Van	Starting in Traffic	6.131	Angle Turning	Failed to Obey Stop Sign	43.54637077	-116.3937699
12	Meridian Rd	Lake Hazel Rd	12/14/2013 12:34	13C359792	Day	Cloudy	Dry	**2**	A Injury Accident	14638860	W	Car	Going Straight	6.131	Angle	Failed to Obey Stop Sign	43.54641548	-116.3937618
13	Lake Hazel Rd	Meridian Rd	4/22/2013 8:24	13C344771	Day	Clear	Dry	**2**	C Injury Accident	14116768	W	Car	Starting in Traffic	7.05	Head-On Turning	Failed to Obey Stop Sign	43.54644073	-116.3937736
14	Lake Hazel Rd	Meridian Rd	4/1/2013 08:00	13C342323	Day	Clear	Dry	2	Property Dmg Report	14036330	W	Pickup	Slowing in Traffic	7.0500	Rear-End	Inattention	43.54642518	-116.39376283
15	SH 69	Lake Hazel Rd	3/3/2013 01:55	13C340652	Dark	Cloudy	Dry	2	A Injury Accident	13981367	W	SUV/Crossover	Going Straight	6.1310	Angle	Alcohol Impaired	43.54642518	-116.39375746
16	Meridian Rd	Lake Hazel Rd	7/13/2012 19:24	12C324416	Day	Clear	Dry	2	B Injury Accident	13420992	E	Car	Starting in Traffic	6.1310	Angle	Failed to Yield	43.54642518	-116.39375210
17	Lake Hazel Rd	Meridian Rd	5/1/2012 18:31	12C318129	Day	Clear	Dry	2	Property Dmg Report	13208087	E	Pickup	Going Straight	7.0070	Rear-End Turning	Alcohol Impaired	43.54642810	-116.39375450
18	Meridian Rd	Lake Hazel Rd	2/10/2012 07:23	12C313630	Dark	Clear	Dry	2	Property Dmg Report	13054386	NE	Car	Turning Left	6.1310	Rear-End Turning	Improper Use of Turn Lane	43.54658849	-116.39366627
19	SH 69	Lake Hazel Rd	1/19/2012 07:18	12C311774	Dark	Rain	Wet	2	Property Dmg Report	12992878	W	SUV/Crossover	Going Straight	6.1310	Angle	Failed to Yield	43.54637075	-116.39379501
20	Meridian Rd	Lake Hazel Rd	10/21/2011 20:42	11C305710	Dark	Clear	Dry	2	Property Dmg Report	12795961	W	Pickup	Going Straight	6.1310	Angle	Failed to Yield	43.54637075	-116.39383793
21	SH 69	Lake Hazel Rd	10/5/2011 13:43	11C305095	Day	Cloudy	Wet	2	B Injury Accident	12783766	N	Car	Turning Left	6.1310	Angle Turning	Failed to Yield	43.54598000	-116.39379400

Linder Road - Columbia Road to Lake Hazel Road															
Accident #	**Milepost**	**Vehicle Type**	**Driver Action**	**Lane Directio**	**Directio**	**Event**	**Contrib Cir**	**onditio**	**Weather**	**Light**	**Serial #**	**Accident Date**	**Severity**	**Latitude**	**Longitude**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix F
Year 2026 Background Traffic Operation Worksheets

Intersection	
Intersection Delay, s/veh	29
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	39	403	16	30	174	16	26	280	103	10	41	1
Future Vol, veh/h	39	403	16	30	174	16	26	280	103	10	41	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	1	12	0	2	0	0	0	0	10	2	0
Mvmt Flow	43	448	18	33	193	18	29	311	114	11	46	1
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	37.5	15.3	28.9	11.9
HCM LOS	E	C	D	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	9%	14%	19%
Vol Thru, %	68%	88%	79%	79%
Vol Right, %	25%	3%	7%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	409	458	220	52
LT Vol	26	39	30	10
Through Vol	280	403	174	41
RT Vol	103	16	16	1
Lane Flow Rate	454	509	244	58
Geometry Grp	1	1	1	1
Degree of Util (X)	0.789	0.871	0.454	0.124
Departure Headway (Hd)	6.251	6.163	6.688	7.742
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	577	585	535	460
Service Time	4.304	4.22	4.759	5.84
HCM Lane V/C Ratio	0.787	0.87	0.456	0.126
HCM Control Delay	28.9	37.5	15.3	11.9
HCM Lane LOS	D	E	C	B
HCM 95th-tile Q	7.5	9.9	2.3	0.4

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	64	152	31	19	80	12	34	260	44	12	56	20
Future Vol, veh/h	64	152	31	19	80	12	34	260	44	12	56	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	1	0	5	0	0	0	0	0	0	2	0
Mvmt Flow	71	169	34	21	89	13	38	289	49	13	62	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.1	10.1	13.9	9.5
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	26%	17%	14%
Vol Thru, %	77%	62%	72%	64%
Vol Right, %	13%	13%	11%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	338	247	111	88
LT Vol	34	64	19	12
Through Vol	260	152	80	56
RT Vol	44	31	12	20
Lane Flow Rate	376	274	123	98
Geometry Grp	1	1	1	1
Degree of Util (X)	0.533	0.409	0.195	0.149
Departure Headway (Hd)	5.112	5.359	5.688	5.498
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	706	672	630	651
Service Time	3.145	3.393	3.731	3.543
HCM Lane V/C Ratio	0.533	0.408	0.195	0.151
HCM Control Delay	13.9	12.1	10.1	9.5
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	3.2	2	0.7	0.5

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	47	421	26	22	95	14	46	179	141	23	56	17
Future Vol, veh/h	47	421	26	22	95	14	46	179	141	23	56	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0	7	0	0	4	4	0
Mvmt Flow	49	439	27	23	99	15	48	186	147	24	58	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	28	11.5	18.9	11.3
HCM LOS	D	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	10%	17%	24%
Vol Thru, %	49%	85%	73%	58%
Vol Right, %	39%	5%	11%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	366	494	131	96
LT Vol	46	47	22	23
Through Vol	179	421	95	56
RT Vol	141	26	14	17
Lane Flow Rate	381	515	136	100
Geometry Grp	1	1	1	1
Degree of Util (X)	0.636	0.803	0.243	0.187
Departure Headway (Hd)	6.003	5.736	6.416	6.737
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	606	633	561	534
Service Time	4.003	3.736	4.448	4.764
HCM Lane V/C Ratio	0.629	0.814	0.242	0.187
HCM Control Delay	18.9	28	11.5	11.3
HCM Lane LOS	C	D	B	B
HCM 95th-tile Q	4.5	8	0.9	0.7

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	202	122	29	18	62	175	15	1739	48	80	663	74
Future Vol, veh/h	202	122	29	18	62	175	15	1739	48	80	663	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	1	0	1	0	5	2	1
Mvmt Flow	227	137	33	20	70	197	17	1954	54	90	745	83

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2013	3009	414	2636	3023	1004	828	0	0	2008	0	0
Stage 1	967	967	-	2015	2015	-	-	-	-	-	-	-
Stage 2	1046	2042	-	621	1008	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.92	4.1	-	-	4.2	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.31	2.2	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 35	~ 14	593	~ 12	~ 13	242	812	-	-	270	-	-
Stage 1	277	335	-	62	104	-	-	-	-	-	-	-
Stage 2	248	~ 101	-	446	321	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 9	593	-	~ 8	242	812	-	-	270	-	-
Mov Cap-2 Maneuver	-	~ 9	-	-	~ 8	-	-	-	-	-	-	-
Stage 1	271	223	-	61	102	-	-	-	-	-	-	-
Stage 2	~ 14	~ 99	-	108	214	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.1	2.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	812	-	-	-	11	-	28	270	-	-
HCM Lane V/C Ratio	0.021	-	-	-	15.424	-	9.51	0.333	-	-
HCM Control Delay (s)	9.5	-	-	-	$ 7155.9	-	$ 4101.9	24.8	-	-
HCM Lane LOS	A	-	-	-	F	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	22.6	-	32.8	1.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	122	29	18	62	175	15	1739	48	80	663	74
Future Volume (veh/h)	202	122	29	18	62	175	15	1739	48	80	663	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1787	1800	1800	1783	1800	1714	1766	1800
Adj Flow Rate, veh/h	227	137	33	20	70	197	17	1954	54	90	745	83
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	1	1	5	2	2
Cap, veh/h	240	319	77	239	56	158	390	2013	55	111	1873	209
Arrive On Green	0.11	0.23	0.23	0.02	0.14	0.14	0.02	0.60	0.60	0.03	0.62	0.62
Sat Flow, veh/h	1714	1403	338	1714	414	1166	1714	3367	93	1633	3046	339
Grp Volume(v), veh/h	227	0	170	20	0	267	17	978	1030	90	410	418
Grp Sat Flow(s),veh/h/ln	1714	0	1740	1714	0	1581	1714	1694	1766	1633	1678	1707
Q Serve(g_s), s	16.5	0.0	12.4	1.5	0.0	20.0	0.6	81.5	83.3	3.2	18.5	18.5
Cycle Q Clear(g_c), s	16.5	0.0	12.4	1.5	0.0	20.0	0.6	81.5	83.3	3.2	18.5	18.5
Prop In Lane	1.00		0.19	1.00		0.74	1.00		0.05	1.00		0.20
Lane Grp Cap(c), veh/h	240	0	396	239	0	213	390	1012	1056	111	1032	1050
V/C Ratio(X)	0.95	0.00	0.43	0.08	0.00	1.25	0.04	0.97	0.98	0.81	0.40	0.40
Avail Cap(c_a), veh/h	240	0	396	266	0	213	420	1018	1061	127	1032	1050
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	49.0	53.6	0.0	64.1	12.0	28.4	28.7	36.9	14.5	14.5
Incr Delay (d2), s/veh	43.7	0.0	0.7	0.1	0.0	145.5	0.0	20.4	21.7	27.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	6.0	0.7	0.0	17.3	0.3	43.5	46.7	3.1	8.6	8.8
LnGrp Delay(d),s/veh	92.3	0.0	49.7	53.8	0.0	209.5	12.0	48.8	50.4	64.7	14.8	14.8
LnGrp LOS	F		D	D		F	B	D	D	E	B	B
Approach Vol, veh/h		397			287			2025			918	
Approach Delay, s/veh		74.1			198.7			49.3			19.7	
Approach LOS		E			F			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	93.1	7.3	38.2	7.0	95.6	21.0	24.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	89.0	5.1	31.4	5.1	90.4	16.5	20.0
Max Q Clear Time (g_c+I1), s	5.2	85.3	3.5	14.4	2.6	20.5	18.5	22.0
Green Ext Time (p_c), s	0.0	3.3	0.0	2.1	0.0	41.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.3
HCM 2010 LOS	E

Intersection	
Intersection Delay, s/veh	40.9
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	161	45	116	406	8	17	122	60	9	272	26
Future Vol, veh/h	14	161	45	116	406	8	17	122	60	9	272	26
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	1	4	0	2	0	0	2	0	33	0	4
Mvmt Flow	15	168	47	121	423	8	18	127	63	9	283	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.5	69	16.2	25.9
HCM LOS	C	F	C	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	6%	22%	3%
Vol Thru, %	61%	73%	77%	89%
Vol Right, %	30%	20%	2%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	199	220	530	307
LT Vol	17	14	116	9
Through Vol	122	161	406	272
RT Vol	60	45	8	26
Lane Flow Rate	207	229	552	320
Geometry Grp	1	1	1	1
Degree of Util (X)	0.427	0.459	1.018	0.68
Departure Headway (Hd)	7.612	7.378	6.636	7.826
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	477	490	552	464
Service Time	5.612	5.378	4.636	5.826
HCM Lane V/C Ratio	0.434	0.467	1	0.69
HCM Control Delay	16.2	16.5	69	25.9
HCM Lane LOS	C	C	F	D
HCM 95th-tile Q	2.1	2.4	15	5

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	97	40	51	179	14	39	101	25	7	228	65
Future Vol, veh/h	34	97	40	51	179	14	39	101	25	7	228	65
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	3	1	0	2	1	0	0	1	0	0	0	2
Mvmt Flow	37	104	43	55	192	15	42	109	27	8	245	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.1	12.7	11	13.3
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	20%	21%	2%
Vol Thru, %	61%	57%	73%	76%
Vol Right, %	15%	23%	6%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	171	244	300
LT Vol	39	34	51	7
Through Vol	101	97	179	228
RT Vol	25	40	14	65
Lane Flow Rate	177	184	262	323
Geometry Grp	1	1	1	1
Degree of Util (X)	0.28	0.292	0.412	0.481
Departure Headway (Hd)	5.689	5.716	5.659	5.365
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	628	625	632	668
Service Time	3.756	3.781	3.718	3.421
HCM Lane V/C Ratio	0.282	0.294	0.415	0.484
HCM Control Delay	11	11.1	12.7	13.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	1.2	2	2.6

Intersection	
Intersection Delay, s/veh	18.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	129	38	72	322	23	31	100	59	18	185	32
Future Vol, veh/h	22	129	38	72	322	23	31	100	59	18	185	32
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	2	0	0	0	0	10	1	0	6	1	0
Mvmt Flow	24	143	42	80	358	26	34	111	66	20	206	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.2	25.6	13.9	15.4
HCM LOS	B	D	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	12%	17%	8%
Vol Thru, %	53%	68%	77%	79%
Vol Right, %	31%	20%	6%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	189	417	235
LT Vol	31	22	72	18
Through Vol	100	129	322	185
RT Vol	59	38	23	32
Lane Flow Rate	211	210	463	261
Geometry Grp	1	1	1	1
Degree of Util (X)	0.389	0.371	0.763	0.473
Departure Headway (Hd)	6.635	6.358	5.93	6.526
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	540	565	607	551
Service Time	4.7	4.42	3.978	4.586
HCM Lane V/C Ratio	0.391	0.372	0.763	0.474
HCM Control Delay	13.9	13.2	25.6	15.4
HCM Lane LOS	B	B	D	C
HCM 95th-tile Q	1.8	1.7	7	2.5

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	127	76	16	25	121	116	29	851	30	163	1827	244
Future Vol, veh/h	127	76	16	25	121	116	29	851	30	163	1827	244
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	0	0	0	0	2	3	1	0	1	1	0
Mvmt Flow	135	81	17	27	129	123	31	905	32	173	1944	260

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2999	3419	1102	2342	3533	469	2204	0	0	937	0	0
Stage 1	2420	2420	-	983	983	-	-	-	-	-	-	-
Stage 2	579	999	-	1359	2550	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.5	6.9	7.5	6.5	6.94	4.16	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4	3.3	3.5	4	3.32	2.23	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 6	~ 7	210	~ 20	~ 6	541	232	-	-	733	-	-
Stage 1	~ 33	~ 64	-	271	329	-	-	-	-	-	-	-
Stage 2	470	324	-	159	~ 55	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 5	210	-	~ 4	541	232	-	-	733	-	-
Mov Cap-2 Maneuver	-	~ 5	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	~ 29	~ 49	-	235	285	-	-	-	-	-	-	-
Stage 2	172	281	-	-	~ 42	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.7	0.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	232	-	-	-	6	-	8	733	-	-
HCM Lane V/C Ratio	0.133	-	-	-	16.312	-	31.516	0.237	-	-
HCM Control Delay (s)	22.9	-	-	-	$ 8084.3	-	$ 14637.2	11.4	-	-
HCM Lane LOS	C	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-	14.1	-	33.4	0.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Gripentrog Subdivision TIS
Background 2026 PM Peak Hour Traffic Conditions - Interim Signal

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	76	16	25	121	116	29	851	30	163	1827	244
Future Volume (veh/h)	127	76	16	25	121	116	29	851	30	163	1827	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1782	1800	1800	1800	1783	1800	1748	1783	1800	1782	1784	1800
Adj Flow Rate, veh/h	135	81	17	27	129	123	31	905	32	173	1944	260
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	0	0	0	0	0	3	1	1	1	1	1
Cap, veh/h	157	265	56	256	119	114	89	2075	73	409	1955	256
Arrive On Green	0.06	0.18	0.18	0.02	0.14	0.14	0.02	0.62	0.62	0.05	0.65	0.65
Sat Flow, veh/h	1697	1444	303	1714	840	801	1664	3338	118	1697	3015	394
Grp Volume(v), veh/h	135	0	98	27	0	252	31	459	478	173	1074	1130
Grp Sat Flow(s),veh/h/ln	1697	0	1747	1714	0	1641	1664	1694	1762	1697	1695	1715
Q Serve(g_s), s	9.5	0.0	7.2	2.0	0.0	21.1	1.0	20.9	20.9	5.3	90.2	96.3
Cycle Q Clear(g_c), s	9.5	0.0	7.2	2.0	0.0	21.1	1.0	20.9	20.9	5.3	90.2	96.3
Prop In Lane	1.00		0.17	1.00		0.49	1.00		0.07	1.00		0.23
Lane Grp Cap(c), veh/h	157	0	320	256	0	233	89	1053	1095	409	1099	1112
V/C Ratio(X)	0.86	0.00	0.31	0.11	0.00	1.08	0.35	0.44	0.44	0.42	0.98	1.02
Avail Cap(c_a), veh/h	157	0	320	276	0	233	106	1053	1095	488	1099	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	0.0	52.5	52.6	0.0	63.7	38.2	14.6	14.6	10.7	25.0	26.1
Incr Delay (d2), s/veh	35.1	0.0	0.5	0.2	0.0	82.1	2.3	0.3	0.3	0.7	21.6	31.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	3.5	1.0	0.0	14.8	0.8	9.8	10.2	2.6	48.4	54.7
LnGrp Delay(d),s/veh	87.0	0.0	53.0	52.8	0.0	145.8	40.5	14.9	14.9	11.4	46.7	57.3
LnGrp LOS	F		D	D		F	D	B	B	B	D	F
Approach Vol, veh/h		233			279			968			2377	
Approach Delay, s/veh		72.7			136.8			15.7			49.2	
Approach LOS		E			F			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	96.8	7.9	31.7	8.1	100.8	14.0	25.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.5	86.9	5.1	25.5	5.1	96.3	9.5	21.1
Max Q Clear Time (g_c+I1), s	7.3	22.9	4.0	9.2	3.0	98.3	11.5	23.1
Green Ext Time (p_c), s	0.2	47.2	0.0	1.6	0.0	0.0	0.0	0.0

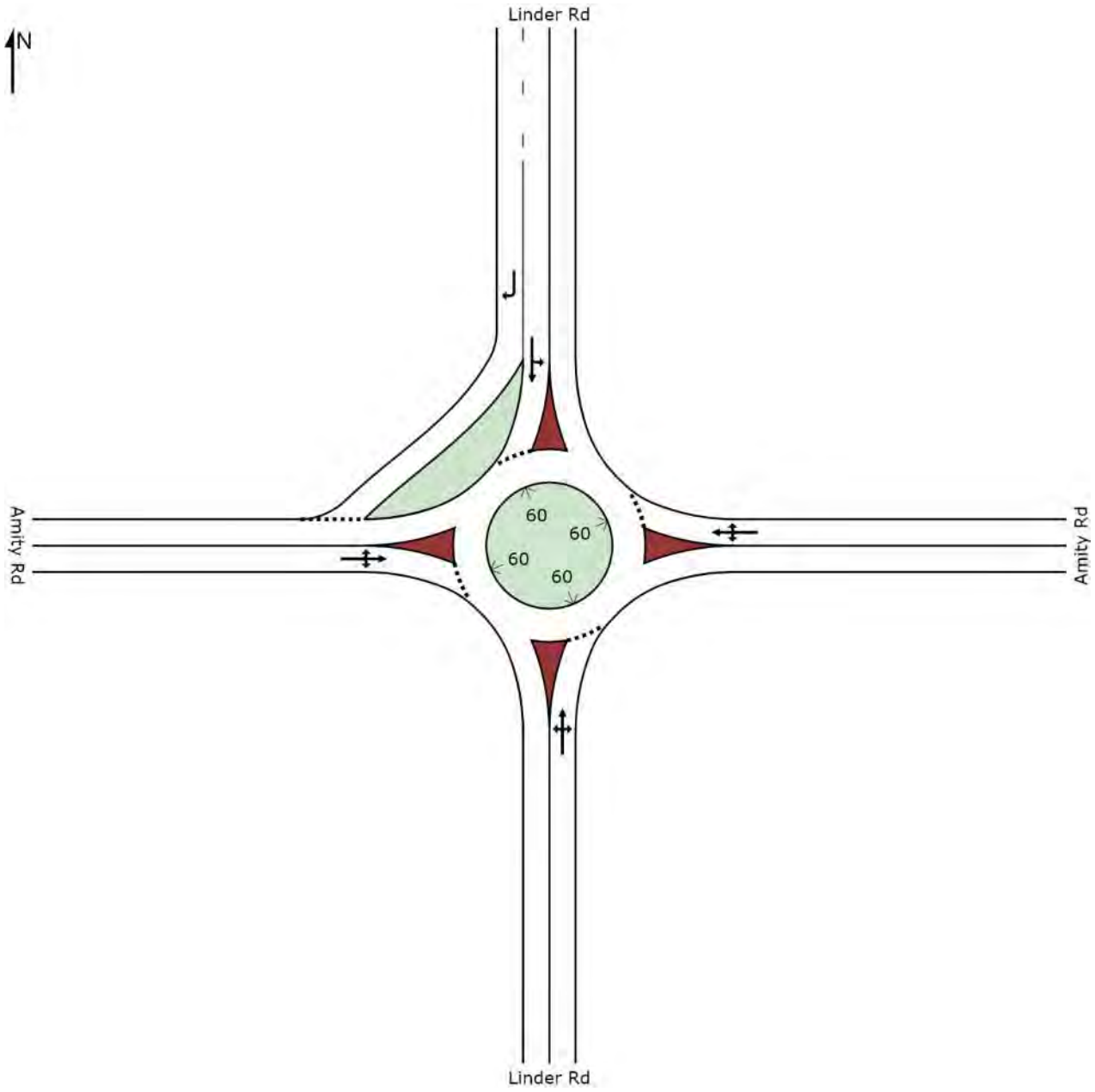
Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Appendix G
Year 2026 Mitigated Background Traffic Operation Worksheets

SITE LAYOUT

Site: Amity Rd & Linder Rd - Layout

Year 2026 Background AM & PM Peak Hour
Roundabout



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MOVEMENT SUMMARY

Site: Amity Rd & Linder Rd

Year 2026 Background AM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Linder Rd											
3	L2	29	2.0	0.566	13.0	LOS B	3.9	99.2	0.75	1.62	39.0
8	T1	311	2.0	0.566	13.0	LOS B	3.9	99.2	0.75	1.62	39.0
18	R2	114	2.0	0.566	13.0	LOS B	3.9	99.2	0.75	1.62	39.0
Approach		454	2.0	0.566	13.0	LOS B	3.9	99.2	0.75	0.81	39.0
East: Amity Rd											
1	L2	33	2.0	0.269	6.8	LOS A	1.3	32.2	0.54	0.94	35.0
6	T1	193	2.0	0.269	6.8	LOS A	1.3	32.2	0.54	0.94	35.0
16	R2	18	2.0	0.269	6.8	LOS A	1.3	32.2	0.54	0.94	35.0
Approach		244	2.0	0.269	6.8	LOS A	1.3	32.2	0.54	0.47	35.0
North: Linder Rd											
7	L2	11	2.0	0.055	3.9	LOS A	0.2	5.7	0.38	0.49	35.8
4	T1	46	2.0	0.055	3.9	LOS A	0.2	5.7	0.38	0.49	35.8
14	R2	1	2.0	0.001	3.4	LOS A	0.0	0.1	0.34	0.28	36.1
Approach		58	2.0	0.055	3.9	LOS A	0.2	5.7	0.38	0.24	35.8
West: Amity Rd											
5	L2	43	2.0	0.413	7.0	LOS A	2.7	67.5	0.33	0.35	35.0
2	T1	448	2.0	0.413	7.0	LOS A	2.7	67.5	0.33	0.35	35.0
12	R2	18	2.0	0.413	7.0	LOS A	2.7	67.5	0.33	0.35	35.0
Approach		509	2.0	0.413	7.0	LOS A	2.7	67.5	0.33	0.17	35.0
All Vehicles		1266	2.0	0.566	9.0	LOS A	3.9	99.2	0.53	0.46	36.4

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: Amity Rd & Linder Rd

Year 2026 Background PM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Linder Rd											
3	L2	18	2.0	0.187	4.9	LOS A	0.9	22.3	0.37	0.48	42.2
8	T1	127	2.0	0.187	4.9	LOS A	0.9	22.3	0.37	0.48	42.2
18	R2	63	2.0	0.187	4.9	LOS A	0.9	22.3	0.37	0.48	42.2
Approach		207	2.0	0.187	4.9	LOS A	0.9	22.3	0.37	0.24	42.2
East: Amity Rd											
1	L2	121	2.0	0.482	8.4	LOS A	3.2	81.9	0.48	0.64	34.3
6	T1	423	2.0	0.482	8.4	LOS A	3.2	81.9	0.48	0.64	34.3
16	R2	8	2.0	0.482	8.4	LOS A	3.2	81.9	0.48	0.64	34.3
Approach		552	2.0	0.482	8.4	LOS A	3.2	81.9	0.48	0.32	34.3
North: Linder Rd											
7	L2	9	2.0	0.388	9.7	LOS A	1.9	49.3	0.67	1.38	34.3
4	T1	283	2.0	0.388	9.7	LOS A	1.9	49.3	0.67	1.38	34.3
14	R2	27	2.0	0.032	4.5	LOS A	0.1	3.1	0.49	0.71	35.7
Approach		320	2.0	0.388	9.3	LOS A	1.9	49.3	0.66	0.66	34.4
West: Amity Rd											
5	L2	15	2.0	0.260	6.8	LOS A	1.2	30.6	0.56	0.98	35.0
2	T1	168	2.0	0.260	6.8	LOS A	1.2	30.6	0.56	0.98	35.0
12	R2	47	2.0	0.260	6.8	LOS A	1.2	30.6	0.56	0.98	35.0
Approach		229	2.0	0.260	6.8	LOS A	1.2	30.6	0.56	0.49	35.0
All Vehicles		1308	2.0	0.482	7.8	LOS A	3.2	81.9	0.52	0.42	35.6

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Amity Road & Linder Road Signal Warrant Analysis

Northbound Volume Development

Existing Count PM Peak	111
2026 Estimate PM Peak	199
2026 PM BK Peak Growth Factor	1.7927928
Tube Count AM Peak =	258
2026 AM BK Peak Growth Factor =	409
Adj to AM Peak Per TIS Vol	1.5852713

Site Trips PM PK 32
Site Trips AM PK 51

Time	NB Avg	Profiles %Day	Note: Use PM Peak to Factor for Background Growth % of PM PK	2026 BK by PM Pk Profile	2026 BK by Percentage	Site Trips round	Site Trips Profile	2026 Total
12:00	4	0.3%	3.6%	7	7	7	1	8
1:00	3	0.2%	2.7%	5	5	5	1	6
2:00	4	0.3%	3.6%	7	7	7	1	8
3:00	5	0.4%	4.5%	9	9	9	1	10
4:00	8	0.6%	7.2%	14	14	14	2	16
5:00	28	2.0%	25.2%	50	50	50	8	58
6:00	95	6.9%	85.6%	170	170	170	27	197
7:00	258	18.7%	232.4%	463	409	409	51	460
8:00	103	7.5%	92.8%	185	185	185	30	215
9:00	64	4.6%	57.7%	115	115	115	18	133
10:00	47	3.4%	42.3%	84	84	84	14	98
11:00	59	4.3%	53.2%	106	106	106	17	123
12:00	56	4.1%	50.5%	100	100	100	16	116
13:00	72	5.2%	64.9%	129	129	129	21	150
14:00	74	5.4%	66.7%	133	133	133	21	154
15:00	87	6.3%	78.4%	156	156	156	25	181
16:00	105	7.6%	94.6%	188	188	188	30	218
17:00	111	8.0%	100.0%	199	199	199	32	231
18:00	91	6.6%	82.0%	163	163	163	26	189
19:00	39	2.8%	35.1%	70	70	70	11	81
20:00	31	2.2%	27.9%	56	56	56	9	65
21:00	20	1.4%	18.0%	36	36	36	6	42
22:00	11	0.8%	9.9%	20	20	20	3	23
23:00	7	0.5%	6.3%	13	13	13	2	15
	1382							

Southbound Volume Development

Tube Count PM Peak	211
2026 Estimate PM Peak	307
2026 PM BK Peak Growth Factor	1.4549763
Tube Count AM Peak =	32
2026 AM BK Peak Growth Factor =	52
Adj to AM Peak Per TIS Vol	1.625

Site Trips PM PK 28
Site Trips AM PK 9

Time	SB Avg	Profiles %Day	Note: Use PM Peak to Factor for Background Growth % of PM PK	2026 BK by PM Pk Profile	2026 BK by Percentage	Site Trips round	Site Trips	2026 Total
12:00	7	0.6%	3.3%	10	10	10	1	11
1:00	1	0.1%	0.5%	1	1	1	0	1
2:00	1	0.1%	0.5%	1	1	1	0	1
3:00	1	0.1%	0.5%	1	1	1	0	1
4:00	3	0.3%	1.4%	4	4	4	0	4
5:00	8	0.7%	3.8%	12	12	12	1	13
6:00	16	1.4%	7.6%	23	23	23	2	25
7:00	32	2.9%	15.2%	47	52	52	9	61
8:00	40	3.6%	19.0%	58	58	58	5	63
9:00	38	3.4%	18.0%	55	55	55	5	60
10:00	34	3.1%	16.1%	49	49	49	5	54
11:00	42	3.8%	19.9%	61	61	61	6	67
12:00	60	5.4%	28.4%	87	87	87	8	95
13:00	43	3.9%	20.4%	63	63	63	6	69
14:00	64	5.8%	30.3%	93	93	93	8	101
15:00	92	8.3%	43.6%	134	134	134	12	146
16:00	144	12.9%	68.2%	210	210	210	19	229
17:00	211	19.0%	100.0%	307	307	307	28	335
18:00	108	9.7%	51.2%	157	157	157	14	171
19:00	60	5.4%	28.4%	87	87	87	8	95
20:00	51	4.6%	24.2%	74	74	74	7	81
21:00	32	2.9%	15.2%	47	47	47	4	51
22:00	15	1.3%	7.1%	22	22	22	2	24
23:00	10	0.9%	4.7%	15	15	15	1	16
	1113							

Eastbound Volume Development

Existing PM Peak	162
2026 Estimate PM Peak	220
2026 PM BK Peak Growth Factor	1.3580247
Tube Count AM Peak =	342
2026 AM BK Peak Growth Factor =	458
Adj to AM Peak Per TIS Vol	1.3391813

Site Trips PM PK 0
Site Trips AM PK 0

Time	EB Avg	Profiles %Day	Note: Use PM Peak to Factor for Background Growth % of PM PK	2026 BK by PM Pk Profile	2026 BK by Percentage	Site Trips round	Site Trips	2026 Total
12:00	11	0.5%	6.5%	14	14	14	0	14
1:00	3	0.1%	1.5%	3	3	3	0	3
2:00	3	0.1%	1.9%	4	4	4	0	4
3:00	4	0.2%	2.5%	5	5	5	0	5
4:00	15	0.7%	9.0%	20	20	20	0	20
5:00	49	2.3%	29.9%	66	66	66	0	66
6:00	134	6.4%	82.4%	181	181	181	0	181
7:00	342	16.5%	211.1%	464	458	458	0	458
8:00	169	8.1%	104.0%	229	229	229	0	229
9:00	112	5.4%	68.8%	151	151	151	0	151
10:00	109	5.3%	67.3%	148	148	148	0	148
11:00	89	4.3%	54.6%	120	120	120	0	120
12:00	97	4.6%	59.6%	131	131	131	0	131
13:00	105	5.1%	64.8%	143	143	143	0	143
14:00	98	4.7%	60.5%	133	133	133	0	133
15:00	103	5.0%	63.6%	140	140	140	0	140
16:00	102	4.9%	62.7%	138	138	138	0	138
17:00	162	7.8%	100.0%	220	220	220	0	220
18:00	109	5.2%	67.0%	147	147	147	0	147
19:00	73	3.5%	45.1%	99	99	99	0	99
20:00	75	3.6%	46.0%	101	101	101	0	101
21:00	67	3.2%	41.0%	90	90	90	0	90
22:00	32	1.5%	19.4%	43	43	43	0	43
23:00	20	0.9%	12.0%	26	26	26	0	26
	2076							

Westbound Volume Development

Existing Count PM Peak	344
2026 Estimate PM Peak	530
2026 PM BK Peak Growth Factor	1.5406977
Tube Count AM Peak =	148
2026 AM BK Peak Growth Factor =	220
	1.4864865

Site Trips PM PK 27
Site Trips AM PK 8

Time	WB Avg	Profiles %Day	Note: Use PM Peak to Factor for Background Growth % of PM PK	2026 BK by PM Pk Profile	2026 BK by Percentage	Site Trips round	Site Trips	2026 Total
12:00	7	0.4%	2.0%	11	11	11	1	12
1:00	4	0.2%	1.2%	6	6	6	0	6
2:00	2	0.1%	0.6%	3	3	3	0	3
3:00	3	0.1%	0.7%	4	4	4	0	4
4:00	4	0.2%	1.0%	5	5	5	0	5
5:00	10	0.5%	2.9%	15	15	15	1	16
6:00	53	2.7%	15.4%	82	82	82	4	86
7:00	148	7.5%	43.0%	228	220	220	8	228
8:00	73	3.7%	21.2%	112	112	112	6	118
9:00	62	3.2%	18.0%	96	96	96	5	101
10:00	72	3.6%	20.8%	110	110	110	6	116
11:00	79	4.0%	22.8%	121	121	121	6	127
12:00	79	4.0%	23.0%	122	122	122	6	128
13:00	89	4.5%	25.9%	137	137	137	7	144
14:00	97	4.9%	28.2%	149	149	149	8	157
15:00	144	7.3%	41.7%	221	221	221	11	232
16:00	242	12.3%	70.3%	373	373	373	19	392
17:00	344	17.5%	100.0%	530	530	530	27	557
18:00	167	8.5%	48.4%	257	257	257	13	270
19:00	98	5.0%	28.3%	150	150	150	8	158
20:00	67	3.4%	19.3%	102	102	102	5	107
21:00	66	3.4%	19.2%	102	102	102	5	107
22:00	31	1.6%	8.9%	47	47	47	2	49
23:00	25	1.2%	7.1%	38	38	38	2	40
	1961							

KITTELSON & ASSOCIATES, INC.
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(503) 228-5230

Project #: 22046
Project Name: Gripentrog Subdivision
Analyst: BXK
Date: 2/8/2018
File: H:\22\22046 - Gripentrog Subdivision TIS\excel\signal warrant analyses\[Amity-Linder BK Signal Warrant Analysis.xls]War #1 - 8 HR
Intersection: Amity Road/Linder Road
Scenario: Year 2026 Background Conditions

Warrant Summary

Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	Yes
#3	Peak Hour	Yes	Yes
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-
#9	Intersection Near a Grade Crossing	No	-

Input Parameters

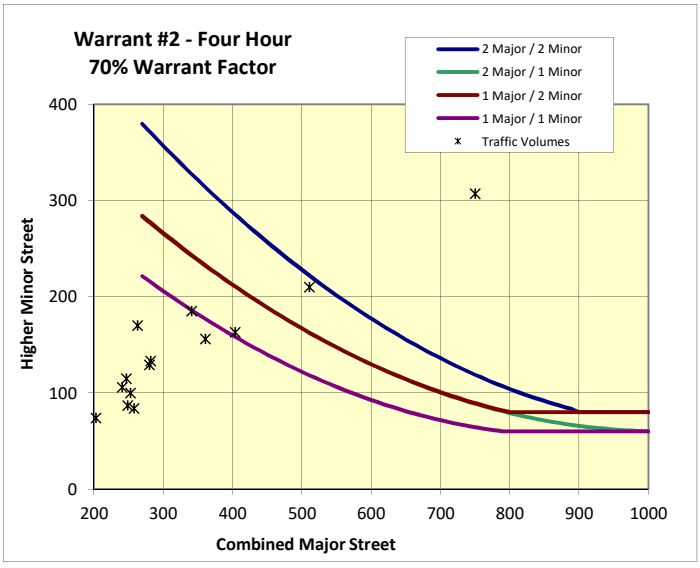
Volume Adjustment Factor =	1.0
North-South Approach =	Minor
East-West Approach =	Major
Major Street Thru Lanes =	1
Minor Street Thru Lanes =	1
Speed > 40 mph?	Yes
Population < 10,000?	No
Warrant Factor	70%
Peak Hour or Daily Count?	Daily

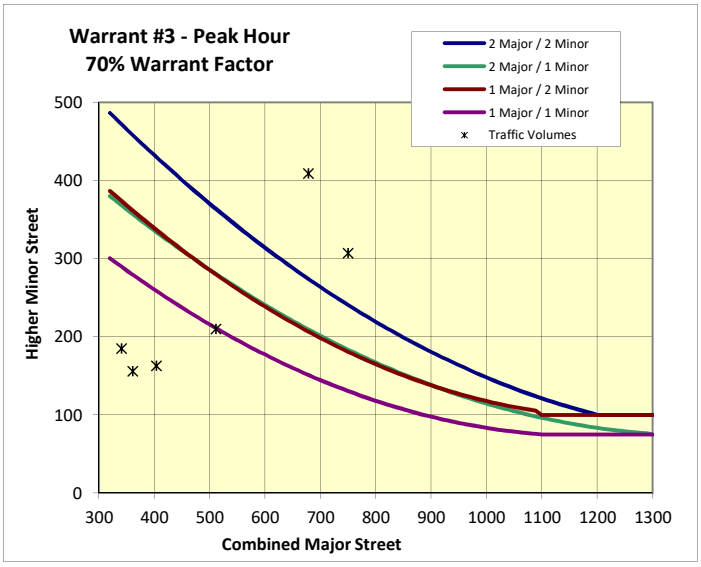
Analysis Traffic Volumes

Hour Begin	Hour End	Major Street EB	Major Street WB	Minor Street NB	Minor Street SB
12:00 AM	1:00 AM	14	11	7	10
1:00 AM		3	6	5	1
2:00 AM		4	3	7	1
3:00 AM		5	4	9	1
4:00 AM		20	5	14	4
5:00 AM		66	15	50	12
6:00 AM		181	82	170	23
7:00 AM		458	220	409	52
8:00 AM		229	112	185	58
9:00 AM		151	96	115	55
10:00 AM		148	110	84	49
11:00 AM		120	121	106	61
12:00 PM		131	122	100	87
1:00 PM		143	137	129	63
2:00 PM		133	149	133	93
3:00 PM		140	221	156	134
4:00 PM		138	373	188	210
5:00 PM		220	530	199	307
6:00 PM		147	257	163	157
7:00 PM		99	150	70	87
8:00 PM		101	102	56	74
9:00 PM		90	102	36	47
10:00 PM		43	47	20	22
11:00 PM		26	38	13	15

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	500	150	3	No	**No**
	B	750	75	1	No	
80%	A	400	120	4	No	**No**
	B	600	60	2	No	
70%	A	350	105	5	No	**No**
	B	525	53	2	No	
56%	A	280	84	8	Yes	**Yes**
	B	420	42	3	No	





HCM 2010 Signalized Intersection Summary
1: Linder Rd & Amity Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	403	16	30	174	16	26	280	103	10	41	1
Future Volume (veh/h)	39	403	16	30	174	16	26	280	103	10	41	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1775	1800	1800	1768	1800	1800	1800	1800	1636	1765	1800
Adj Flow Rate, veh/h	43	448	18	33	193	18	29	311	114	11	46	1
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	0	2	2	0	0	0	10	2	2
Cap, veh/h	464	573	23	272	527	49	530	387	142	211	499	11
Arrive On Green	0.04	0.34	0.34	0.04	0.33	0.33	0.03	0.31	0.31	0.01	0.29	0.29
Sat Flow, veh/h	1714	1695	68	1714	1593	149	1714	1258	461	1558	1721	37
Grp Volume(v), veh/h	43	0	466	33	0	211	29	0	425	11	0	47
Grp Sat Flow(s),veh/h/ln	1714	0	1763	1714	0	1741	1714	0	1719	1558	0	1759
Q Serve(g_s), s	1.0	0.0	14.1	0.7	0.0	5.5	0.7	0.0	13.4	0.3	0.0	1.2
Cycle Q Clear(g_c), s	1.0	0.0	14.1	0.7	0.0	5.5	0.7	0.0	13.4	0.3	0.0	1.2
Prop In Lane	1.00		0.04	1.00		0.09	1.00		0.27	1.00		0.02
Lane Grp Cap(c), veh/h	464	0	596	272	0	576	530	0	529	211	0	509
V/C Ratio(X)	0.09	0.00	0.78	0.12	0.00	0.37	0.05	0.00	0.80	0.05	0.00	0.09
Avail Cap(c_a), veh/h	550	0	1506	371	0	1488	635	0	1468	334	0	1503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	17.6	13.7	0.0	15.1	13.8	0.0	18.8	15.7	0.0	15.3
Incr Delay (d2), s/veh	0.1	0.0	2.3	0.2	0.0	0.4	0.0	0.0	2.9	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.1	0.4	0.0	2.6	0.3	0.0	6.8	0.1	0.0	0.6
LnGrp Delay(d),s/veh	12.2	0.0	19.9	13.9	0.0	15.4	13.9	0.0	21.7	15.8	0.0	15.4
LnGrp LOS	B		B	B		B	B		C	B		B
Approach Vol, veh/h		509			244			454			58	
Approach Delay, s/veh		19.2			15.2			21.2			15.5	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	22.7	6.6	24.5	6.4	21.6	7.0	24.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	50.5	5.5	50.5	5.5	50.5	5.5	50.5
Max Q Clear Time (g_c+I1), s	2.3	15.4	2.7	16.1	2.7	3.2	3.0	7.5
Green Ext Time (p_c), s	0.0	2.8	0.0	3.9	0.0	2.8	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	122	29	18	62	175	15	1739	48	80	663	74
Future Volume (veh/h)	202	122	29	18	62	175	15	1739	48	80	663	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1782	1800	1783	1800	1714	1765	1782
Adj Flow Rate, veh/h	227	137	33	20	70	197	17	1954	54	90	745	83
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	1	0	1	1	5	2	1
Cap, veh/h	270	287	69	33	257	216	417	2085	57	121	2131	963
Arrive On Green	0.08	0.20	0.20	0.02	0.14	0.14	0.02	0.62	0.62	0.03	0.64	0.64
Sat Flow, veh/h	3326	1403	338	1714	1800	1515	1714	3367	93	1633	3353	1515
Grp Volume(v), veh/h	227	0	170	20	70	197	17	978	1030	90	745	83
Grp Sat Flow(s),veh/h/ln	1663	0	1740	1714	1800	1515	1714	1694	1766	1633	1676	1515
Q Serve(g_s), s	9.8	0.0	12.5	1.7	5.1	18.7	0.5	75.9	77.6	3.0	15.2	3.1
Cycle Q Clear(g_c), s	9.8	0.0	12.5	1.7	5.1	18.7	0.5	75.9	77.6	3.0	15.2	3.1
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	356	33	257	216	417	1049	1094	121	2131	963
V/C Ratio(X)	0.84	0.00	0.48	0.61	0.27	0.91	0.04	0.93	0.94	0.74	0.35	0.09
Avail Cap(c_a), veh/h	272	0	356	60	268	226	448	1064	1110	144	2148	970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	0.0	51.0	70.9	55.7	61.5	10.3	25.0	25.3	36.0	12.4	10.2
Incr Delay (d2), s/veh	20.5	0.0	1.0	17.2	0.6	35.9	0.0	14.2	15.0	15.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	6.1	1.0	2.5	10.0	0.3	39.5	42.0	2.8	7.0	1.3
LnGrp Delay(d),s/veh	86.5	0.0	52.0	88.1	56.2	97.4	10.4	39.2	40.3	51.8	12.5	10.3
LnGrp LOS	F		D	F	E	F	B	D	D	D	B	B
Approach Vol, veh/h		397			287			2025			918	
Approach Delay, s/veh		71.7			86.7			39.5			16.2	
Approach LOS		E			F			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	94.7	7.3	34.3	7.0	97.1	16.3	25.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.9	91.5	5.1	28.5	5.1	93.3	11.9	21.7
Max Q Clear Time (g_c+I1), s	5.0	79.6	3.7	14.5	2.5	17.2	11.8	20.7
Green Ext Time (p_c), s	0.0	10.6	0.0	1.5	0.0	44.1	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary
1: Linder Rd & Amity Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	161	45	116	406	8	17	122	60	9	272	26
Future Volume (veh/h)	14	161	45	116	406	8	17	122	60	9	272	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1771	1800	1800	1765	1800	1800	1776	1800	1353	1794	1800
Adj Flow Rate, veh/h	15	168	47	121	423	8	18	127	62	9	283	27
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	0	2	2	0	2	2	33	0	0
Cap, veh/h	289	361	101	475	578	11	286	300	147	312	412	39
Arrive On Green	0.02	0.27	0.27	0.08	0.33	0.33	0.02	0.27	0.27	0.01	0.26	0.26
Sat Flow, veh/h	1714	1332	373	1714	1727	33	1714	1128	551	1289	1613	154
Grp Volume(v), veh/h	15	0	215	121	0	431	18	0	189	9	0	310
Grp Sat Flow(s),veh/h/ln	1714	0	1705	1714	0	1760	1714	0	1679	1289	0	1767
Q Serve(g_s), s	0.3	0.0	5.1	2.4	0.0	10.5	0.4	0.0	4.5	0.3	0.0	7.7
Cycle Q Clear(g_c), s	0.3	0.0	5.1	2.4	0.0	10.5	0.4	0.0	4.5	0.3	0.0	7.7
Prop In Lane	1.00		0.22	1.00		0.02	1.00		0.33	1.00		0.09
Lane Grp Cap(c), veh/h	289	0	462	475	0	588	286	0	447	312	0	452
V/C Ratio(X)	0.05	0.00	0.47	0.25	0.00	0.73	0.06	0.00	0.42	0.03	0.00	0.69
Avail Cap(c_a), veh/h	450	0	1799	667	0	2001	441	0	1565	442	0	1647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	14.9	10.9	0.0	14.3	13.5	0.0	14.8	13.4	0.0	16.4
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.3	0.0	1.8	0.1	0.0	0.6	0.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.5	1.1	0.0	5.3	0.2	0.0	2.2	0.1	0.0	3.9
LnGrp Delay(d),s/veh	13.1	0.0	15.6	11.2	0.0	16.1	13.6	0.0	15.4	13.4	0.0	18.3
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		230			552			207			319	
Approach Delay, s/veh		15.4			15.0			15.3			18.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	17.5	8.5	17.7	5.6	17.0	5.4	20.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	45.5	9.5	51.5	5.5	45.5	5.5	55.5
Max Q Clear Time (g_c+I1), s	2.3	6.5	4.4	7.1	2.4	9.7	2.3	12.5
Green Ext Time (p_c), s	0.0	2.8	0.1	3.8	0.0	2.8	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	76	16	25	121	116	29	851	30	163	1827	244
Future Volume (veh/h)	127	76	16	25	121	116	29	851	30	163	1827	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1782	1800	1800	1800	1800	1765	1748	1783	1800	1782	1782	1800
Adj Flow Rate, veh/h	135	81	17	27	129	123	31	905	32	173	1944	260
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	0	0	0	0	2	3	1	1	1	1	0
Cap, veh/h	183	191	40	41	181	151	139	2197	78	441	2309	1043
Arrive On Green	0.06	0.13	0.13	0.02	0.10	0.10	0.03	0.66	0.66	0.05	0.68	0.68
Sat Flow, veh/h	3293	1444	303	1714	1800	1500	1664	3338	118	1697	3386	1530
Grp Volume(v), veh/h	135	0	98	27	129	123	31	459	478	173	1944	260
Grp Sat Flow(s),veh/h/ln	1646	0	1747	1714	1800	1500	1664	1694	1762	1697	1693	1530
Q Serve(g_s), s	5.3	0.0	6.8	2.1	9.2	10.6	0.8	16.8	16.8	4.3	56.7	8.6
Cycle Q Clear(g_c), s	5.3	0.0	6.8	2.1	9.2	10.6	0.8	16.8	16.8	4.3	56.7	8.6
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	232	41	181	151	139	1115	1160	441	2309	1043
V/C Ratio(X)	0.74	0.00	0.42	0.66	0.71	0.81	0.22	0.41	0.41	0.39	0.84	0.25
Avail Cap(c_a), veh/h	237	0	275	87	245	204	159	1178	1226	517	2547	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	52.7	64.0	57.6	58.3	20.1	10.6	10.6	7.7	15.7	8.1
Incr Delay (d2), s/veh	8.4	0.0	1.2	16.8	6.0	16.4	0.8	0.2	0.2	0.6	2.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	3.4	1.2	4.9	5.1	0.6	7.9	8.2	2.0	27.0	3.7
LnGrp Delay(d),s/veh	69.9	0.0	53.9	80.9	63.6	74.7	20.9	10.8	10.8	8.3	18.2	8.2
LnGrp LOS	E		D	F	E	E	C	B	B	A	B	A
Approach Vol, veh/h		233			279			968			2377	
Approach Delay, s/veh		63.2			70.2			11.2			16.4	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	91.6	7.6	22.0	7.9	94.7	11.9	17.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	92.0	6.7	20.8	5.0	99.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.3	18.8	4.1	8.8	2.8	58.7	7.3	12.6
Green Ext Time (p_c), s	0.2	47.4	0.0	1.1	0.0	31.5	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Appendix H
Year 2026 Total Traffic Operation Worksheets

HCM 2010 AWSC
1: Linder Rd & Amity Rd

Gripentrog Subdivision TIS
Total 2026 AM Peak Hour Traffic Conditions

Intersection	
Intersection Delay, s/veh	38.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	39	403	16	38	174	16	26	306	128	10	50	1
Future Vol, veh/h	39	403	16	38	174	16	26	306	128	10	50	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	43	448	18	42	193	18	29	340	142	11	56	1
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	46.7	17.3	44.5	12.6
HCM LOS	E	C	E	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	9%	17%	16%
Vol Thru, %	67%	88%	76%	82%
Vol Right, %	28%	3%	7%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	460	458	228	61
LT Vol	26	39	38	10
Through Vol	306	403	174	50
RT Vol	128	16	16	1
Lane Flow Rate	511	509	253	68
Geometry Grp	1	1	1	1
Degree of Util (X)	0.909	0.919	0.505	0.153
Departure Headway (Hd)	6.406	6.504	7.183	8.102
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	562	555	504	445
Service Time	4.502	4.604	5.191	6.12
HCM Lane V/C Ratio	0.909	0.917	0.502	0.153
HCM Control Delay	44.5	46.7	17.3	12.6
HCM Lane LOS	E	E	C	B
HCM 95th-tile Q	10.9	11.2	2.8	0.5

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	64	152	40	33	80	12	59	311	86	12	73	20
Future Vol, veh/h	64	152	40	33	80	12	59	311	86	12	73	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	71	169	44	37	89	13	66	346	96	13	81	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.9	11.2	22.2	10.5
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	25%	26%	11%
Vol Thru, %	68%	59%	64%	70%
Vol Right, %	19%	16%	10%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	456	256	125	105
LT Vol	59	64	33	12
Through Vol	311	152	80	73
RT Vol	86	40	12	20
Lane Flow Rate	507	284	139	117
Geometry Grp	1	1	1	1
Degree of Util (X)	0.744	0.462	0.239	0.193
Departure Headway (Hd)	5.289	5.85	6.182	5.94
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	612	576	599
Service Time	3.349	3.922	4.27	4.03
HCM Lane V/C Ratio	0.747	0.464	0.241	0.195
HCM Control Delay	22.2	13.9	11.2	10.5
HCM Lane LOS	C	B	B	B
HCM 95th-tile Q	6.7	2.4	0.9	0.7

Intersection	
Intersection Delay, s/veh	24.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	424	28	22	96	19	46	186	141	40	80	19
Future Vol, veh/h	48	424	28	22	96	19	46	186	141	40	80	19
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	50	442	29	23	100	20	48	194	147	42	83	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	34.6	12.2	20.3	12.6
HCM LOS	D	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	10%	16%	29%
Vol Thru, %	50%	85%	70%	58%
Vol Right, %	38%	6%	14%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	373	500	137	139
LT Vol	46	48	22	40
Through Vol	186	424	96	80
RT Vol	141	28	19	19
Lane Flow Rate	389	521	143	145
Geometry Grp	1	1	1	1
Degree of Util (X)	0.659	0.857	0.265	0.276
Departure Headway (Hd)	6.108	5.921	6.697	6.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	591	609	534	521
Service Time	4.161	3.967	4.767	4.932
HCM Lane V/C Ratio	0.658	0.856	0.268	0.278
HCM Control Delay	20.3	34.6	12.2	12.6
HCM Lane LOS	C	D	B	B
HCM 95th-tile Q	4.9	9.5	1.1	1.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	228	139	29	18	67	175	15	1739	48	80	663	83
Future Vol, veh/h	228	139	29	18	67	175	15	1739	48	80	663	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	256	156	33	20	75	197	17	1954	54	90	745	93

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2019	3013	419	2645	3033	1004	838	0	0	2008	0	0
Stage 1	971	971	-	2015	2015	-	-	-	-	-	-	-
Stage 2	1048	2042	-	630	1018	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 35	~ 14	589	~ 12	~ 13	244	805	-	-	289	-	-
Stage 1	275	334	-	62	104	-	-	-	-	-	-	-
Stage 2	~ 247	~ 101	-	441	317	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 9	589	-	~ 9	244	805	-	-	289	-	-
Mov Cap-2 Maneuver	-	~ 9	-	-	~ 9	-	-	-	-	-	-	-
Stage 1	269	230	-	61	102	-	-	-	-	-	-	-
Stage 2	~ 12	~ 99	-	92	218	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.1	2.2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	805	-	-	-	11	-	30	289	-	-
HCM Lane V/C Ratio	0.021	-	-	-	17.16	-	9.064	0.311	-	-
HCM Control Delay (s)	9.6	-	-	-	$ 7936.8	-	$ 3883.9	23	-	-
HCM Lane LOS	A	-	-	-	F	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	25	-	33.3	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	102	9	3	257	125	34
Future Vol, veh/h	102	9	3	257	125	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	113	10	3	286	139	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	450	158	177	0	-	0
Stage 1	158	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	571	893	1411	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	569	893	1411	-	-	-
Mov Cap-2 Maneuver	569	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1411	-	586	-	-
HCM Lane V/C Ratio	0.002	-	0.21	-	-
HCM Control Delay (s)	7.6	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	34	11	243	128	6
Future Vol, veh/h	17	34	11	243	128	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	38	12	270	142	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	440	146	149	0	-	0
Stage 1	146	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	578	906	1445	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	572	906	1445	-	-	-
Mov Cap-2 Maneuver	572	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	758	-	-
HCM Lane V/C Ratio	0.008	-	0.075	-	-
HCM Control Delay (s)	7.5	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	51	0	20	17	0	60
Future Vol, veh/h	51	0	20	17	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	57	0	22	19	0	67

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	57	0	120	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	63	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1560	-	880	1015
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1560	-	868	1015
Mov Cap-2 Maneuver	-	-	-	-	868	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	951	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1015	-	-	1560	-
HCM Lane V/C Ratio	0.066	-	-	0.014	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	17	0	0	51
Future Vol, veh/h	0	0	17	0	0	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	19	0	0	57

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	39	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1635	-	978	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1635	-	966	1090
Mov Cap-2 Maneuver	-	-	-	-	966	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	978	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.052	-	-	0.012	-
HCM Control Delay (s)	8.5	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	139	29	18	68	175	15	1739	48	80	663	83
Future Volume (veh/h)	228	139	29	18	68	175	15	1739	48	80	663	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	256	156	33	20	76	197	17	1954	54	90	745	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	264	352	75	239	61	158	374	1974	54	110	1833	229
Arrive On Green	0.13	0.24	0.24	0.02	0.14	0.14	0.02	0.58	0.58	0.04	0.60	0.60
Sat Flow, veh/h	1714	1441	305	1714	444	1152	1714	3400	94	1714	3061	382
Grp Volume(v), veh/h	256	0	189	20	0	273	17	978	1030	90	416	422
Grp Sat Flow(s),veh/h/ln	1714	0	1746	1714	0	1597	1714	1710	1783	1714	1710	1733
Q Serve(g_s), s	18.8	0.0	13.7	1.5	0.0	20.5	0.6	83.7	85.5	3.4	19.2	19.3
Cycle Q Clear(g_c), s	18.8	0.0	13.7	1.5	0.0	20.5	0.6	83.7	85.5	3.4	19.2	19.3
Prop In Lane	1.00		0.17	1.00		0.72	1.00		0.05	1.00		0.22
Lane Grp Cap(c), veh/h	264	0	427	239	0	219	374	993	1035	110	1024	1038
V/C Ratio(X)	0.97	0.00	0.44	0.08	0.00	1.24	0.05	0.99	0.99	0.81	0.41	0.41
Avail Cap(c_a), veh/h	264	0	427	265	0	219	403	993	1035	120	1024	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	47.7	53.7	0.0	64.3	13.1	30.7	31.1	38.5	15.9	15.9
Incr Delay (d2), s/veh	46.5	0.0	0.7	0.1	0.0	142.2	0.0	25.0	26.6	31.6	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	6.7	0.7	0.0	17.7	0.3	46.0	49.4	4.6	9.1	9.2
LnGrp Delay(d),s/veh	94.2	0.0	48.5	53.9	0.0	206.6	13.2	55.6	57.7	70.2	16.1	16.1
LnGrp LOS	F		D	D		F	B	E	E	E	B	B
Approach Vol, veh/h		445			293			2025			928	
Approach Delay, s/veh		74.8			196.1			56.3			21.4	
Approach LOS		E			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	91.1	7.3	41.0	7.0	93.9	23.3	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.1	86.6	5.1	34.2	5.1	87.6	18.8	20.5
Max Q Clear Time (g_c+I1), s	5.4	87.5	3.5	15.7	2.6	21.3	20.8	22.5
Green Ext Time (p_c), s	0.0	0.0	0.0	2.3	0.0	40.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	60.8
HCM 2010 LOS	E

HCM 2010 AWSC
1: Linder Rd & Amity Rd

Gripentrog Subdivision TIS
Total 2026 PM Peak Hour Traffic Conditions

Intersection	
Intersection Delay, s/veh	51.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	161	45	143	406	8	17	138	76	9	300	26
Future Vol, veh/h	14	161	45	143	406	8	17	138	76	9	300	26
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	168	47	149	423	8	18	144	79	9	313	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	17.5	93.1	18.3	26.5
HCM LOS	C	F	C	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	6%	26%	3%
Vol Thru, %	60%	73%	73%	90%
Vol Right, %	33%	20%	1%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	231	220	557	335
LT Vol	17	14	143	9
Through Vol	138	161	406	300
RT Vol	76	45	8	26
Lane Flow Rate	241	229	580	349
Geometry Grp	1	1	1	1
Degree of Util (X)	0.497	0.472	1.095	0.702
Departure Headway (Hd)	7.837	7.746	6.792	7.572
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	462	468	534	482
Service Time	5.837	5.746	4.851	5.572
HCM Lane V/C Ratio	0.522	0.489	1.086	0.724
HCM Control Delay	18.3	17.5	93.1	26.5
HCM Lane LOS	C	C	F	D
HCM 95th-tile Q	2.7	2.5	18.1	5.4

Intersection	
Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	97	68	97	179	14	56	133	52	7	283	65
Future Vol, veh/h	34	97	68	97	179	14	56	133	52	7	283	65
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	104	73	104	192	15	60	143	56	8	304	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.7	17.5	14.8	19.8
HCM LOS	B	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	23%	17%	33%	2%
Vol Thru, %	55%	49%	62%	80%
Vol Right, %	22%	34%	5%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	241	199	290	355
LT Vol	56	34	97	7
Through Vol	133	97	179	283
RT Vol	52	68	14	65
Lane Flow Rate	259	214	312	382
Geometry Grp	1	1	1	1
Degree of Util (X)	0.46	0.387	0.559	0.647
Departure Headway (Hd)	6.387	6.506	6.454	6.101
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	562	550	555	588
Service Time	4.46	4.584	4.523	4.165
HCM Lane V/C Ratio	0.461	0.389	0.562	0.65
HCM Control Delay	14.8	13.7	17.5	19.8
HCM Lane LOS	B	B	C	C
HCM 95th-tile Q	2.4	1.8	3.4	4.7

Intersection	
Intersection Delay, s/veh	23.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	131	39	72	325	42	34	126	59	28	200	34
Future Vol, veh/h	24	131	39	72	325	42	34	126	59	28	200	34
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	146	43	80	361	47	38	140	66	31	222	38
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.6	34.2	15.8	18
HCM LOS	B	D	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	12%	16%	11%
Vol Thru, %	58%	68%	74%	76%
Vol Right, %	27%	20%	10%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	194	439	262
LT Vol	34	24	72	28
Through Vol	126	131	325	200
RT Vol	59	39	42	34
Lane Flow Rate	243	216	488	291
Geometry Grp	1	1	1	1
Degree of Util (X)	0.467	0.411	0.841	0.553
Departure Headway (Hd)	6.913	6.869	6.323	6.844
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	523	524	576	530
Service Time	4.927	4.905	4.323	4.856
HCM Lane V/C Ratio	0.465	0.412	0.847	0.549
HCM Control Delay	15.8	14.6	34.2	18
HCM Lane LOS	C	B	D	C
HCM 95th-tile Q	2.5	2	8.9	3.3

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	143	87	16	25	140	116	29	851	30	163	1827	271
Future Vol, veh/h	143	87	16	25	140	116	29	851	30	163	1827	271
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	330	-	-	410	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	152	93	17	27	149	123	31	905	32	173	1944	288

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3024	3434	1116	2348	3562	469	2232	0	0	937	0	0
Stage 1	2435	2435	-	983	983	-	-	-	-	-	-	-
Stage 2	589	999	-	1365	2579	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 6	~ 7	205	~ 20	~ 6	546	236	-	-	739	-	-
Stage 1	~ 33	~ 63	-	271	329	-	-	-	-	-	-	-
Stage 2	466	324	-	158	~ 53	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 5	205	-	~ 4	546	236	-	-	739	-	-
Mov Cap-2 Maneuver	-	~ 5	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	~ 29	~ 48	-	235	286	-	-	-	-	-	-	-
Stage 2	~ 150	281	-	-	~ 41	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.7	0.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	236	-	-	-	6	-	7	739	-	-
HCM Lane V/C Ratio	0.131	-	-	-	18.262	-	38.906	0.235	-	-
HCM Control Delay (s)	22.5	-	-	-	$ 8963	$	18089.3	11.4	-	-
HCM Lane LOS	C	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-	15.6	-	36	0.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	65	5	9	156	263	110
Future Vol, veh/h	65	5	9	156	263	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	72	6	10	173	292	122

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	546	353	414	0	-	0
Stage 1	353	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	502	695	1156	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	497	695	1156	-	-	-
Mov Cap-2 Maneuver	497	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1156	-	507	-	-
HCM Lane V/C Ratio	0.009	-	0.153	-	-
HCM Control Delay (s)	8.1	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	22	37	154	249	19
Future Vol, veh/h	11	22	37	154	249	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	12	24	41	171	277	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	540	287	298	0	-	0
Stage 1	287	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	506	757	1275	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	488	757	1275	-	-	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1275	-	639	-	-
HCM Lane V/C Ratio	0.032	-	0.057	-	-
HCM Control Delay (s)	7.9	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	0	64	55	0	38
Future Vol, veh/h	32	0	64	55	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	36	0	71	61	0	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	239	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1588	-	754	1042
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1588	-	719	1042
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	798	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1042	-	-	1588	-
HCM Lane V/C Ratio	0.041	-	-	0.045	-
HCM Control Delay (s)	8.6	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	55	0	0	32
Future Vol, veh/h	0	0	55	0	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	61	0	0	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	123	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1635	-	877	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1635	-	845	1090
Mov Cap-2 Maneuver	-	-	-	-	845	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.033	-	-	0.037	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	87	16	25	140	116	29	851	30	163	1827	271
Future Volume (veh/h)	143	87	16	25	140	116	29	851	30	163	1827	271
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	152	93	17	27	149	123	31	905	32	173	1944	288
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	167	288	53	260	135	111	90	2057	73	406	1913	277
Arrive On Green	0.07	0.19	0.19	0.02	0.15	0.15	0.02	0.61	0.61	0.05	0.64	0.64
Sat Flow, veh/h	1714	1481	271	1714	913	754	1714	3370	119	1714	3000	434
Grp Volume(v), veh/h	152	0	110	27	0	272	31	459	478	173	1087	1145
Grp Sat Flow(s),veh/h/ln	1714	0	1752	1714	0	1667	1714	1710	1779	1714	1710	1723
Q Serve(g_s), s	10.3	0.0	8.0	2.0	0.0	21.9	1.0	21.2	21.2	5.5	94.0	94.7
Cycle Q Clear(g_c), s	10.3	0.0	8.0	2.0	0.0	21.9	1.0	21.2	21.2	5.5	94.0	94.7
Prop In Lane	1.00		0.15	1.00		0.45	1.00		0.07	1.00		0.25
Lane Grp Cap(c), veh/h	167	0	340	260	0	246	90	1044	1086	406	1090	1099
V/C Ratio(X)	0.91	0.00	0.32	0.10	0.00	1.11	0.34	0.44	0.44	0.43	1.00	1.04
Avail Cap(c_a), veh/h	167	0	340	281	0	246	107	1044	1086	482	1090	1099
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	51.4	52.0	0.0	63.3	37.8	15.4	15.4	11.4	26.8	26.9
Incr Delay (d2), s/veh	44.0	0.0	0.5	0.2	0.0	88.9	2.2	0.3	0.3	0.7	26.5	38.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.9	0.9	0.0	16.1	0.8	10.0	10.4	2.6	52.1	56.7
LnGrp Delay(d),s/veh	95.6	0.0	52.0	52.1	0.0	152.2	40.0	15.7	15.7	12.1	53.3	65.5
LnGrp LOS	F		D	D		F	D	B	B	B	D	F
Approach Vol, veh/h		262			299			968			2405	
Approach Delay, s/veh		77.3			143.2			16.5			56.1	
Approach LOS		E			F			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	95.1	7.9	33.3	8.1	99.2	14.8	26.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.3	85.5	5.1	27.1	5.1	94.7	10.3	21.9
Max Q Clear Time (g_c+I1), s	7.5	23.2	4.0	10.0	3.0	96.7	12.3	23.9
Green Ext Time (p_c), s	0.2	46.9	0.0	1.8	0.0	0.0	0.0	0.0

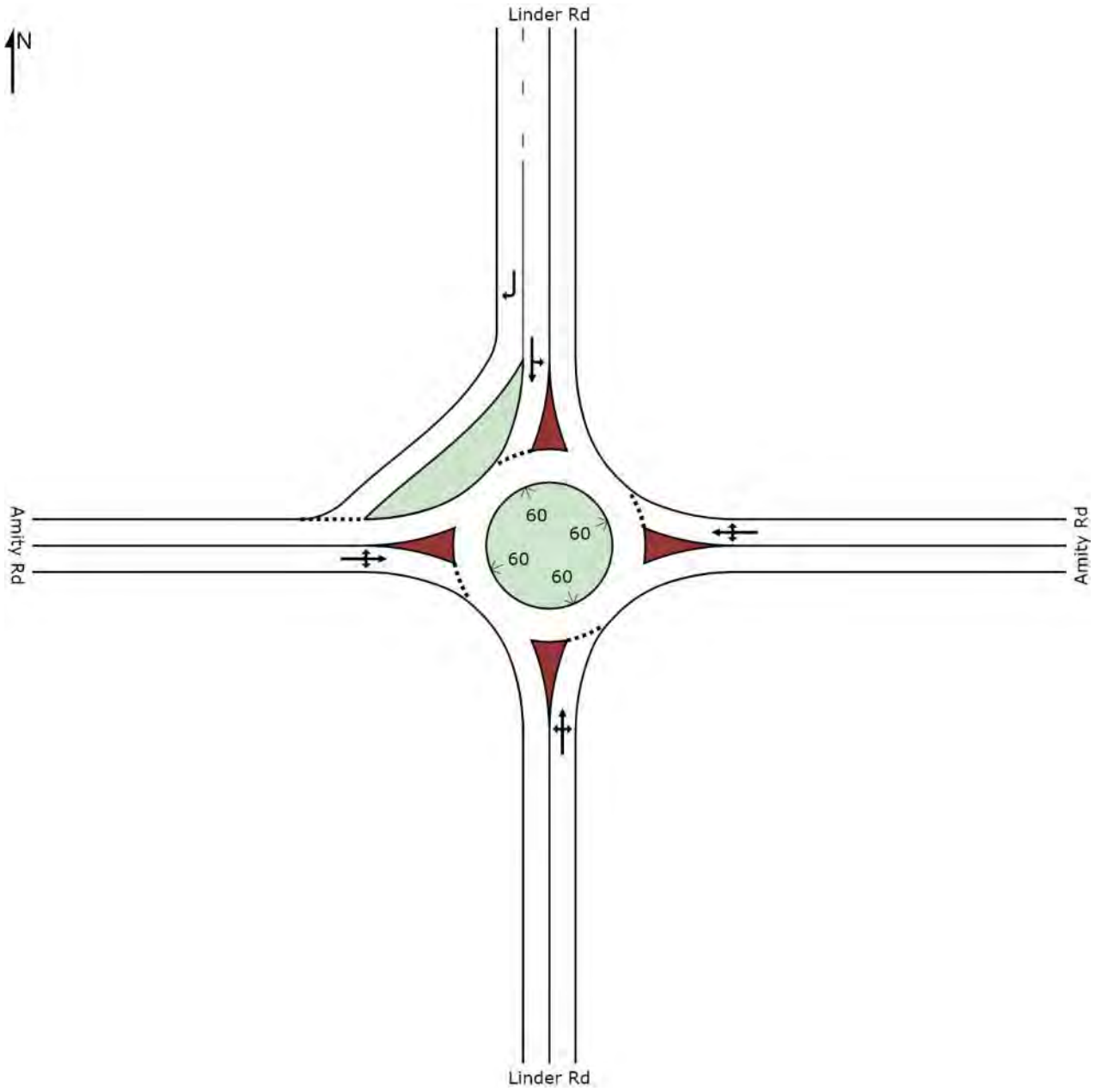
Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Appendix I
Year 2026 Mitigated Total Traffic Operation Worksheets

SITE LAYOUT

Site: Amity Rd & Linder Rd - Layout

Year 2026 Total AM & PM Peak Hour
Roundabout



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MOVEMENT SUMMARY

Site: Amity Rd & Linder Rd

Year 2026 Total AM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Linder Rd											
3	L2	29	2.0	0.637	15.2	LOS C	5.0	127.2	0.80	1.77	38.2
8	T1	340	2.0	0.637	15.2	LOS C	5.0	127.2	0.80	1.77	38.2
18	R2	142	2.0	0.637	15.2	LOS C	5.0	127.2	0.80	1.77	38.2
Approach		511	2.0	0.637	15.2	LOS C	5.0	127.2	0.80	0.88	38.2
East: Amity Rd											
1	L2	42	2.0	0.288	7.2	LOS A	1.4	34.5	0.57	1.01	34.8
6	T1	193	2.0	0.288	7.2	LOS A	1.4	34.5	0.57	1.01	34.8
16	R2	18	2.0	0.288	7.2	LOS A	1.4	34.5	0.57	1.01	34.8
Approach		253	2.0	0.288	7.2	LOS A	1.4	34.5	0.57	0.51	34.8
North: Linder Rd											
7	L2	11	2.0	0.065	4.1	LOS A	0.3	6.8	0.39	0.52	35.8
4	T1	56	2.0	0.065	4.1	LOS A	0.3	6.8	0.39	0.52	35.8
14	R2	1	2.0	0.001	3.4	LOS A	0.0	0.1	0.34	0.28	36.1
Approach		68	2.0	0.065	4.1	LOS A	0.3	6.8	0.39	0.26	35.8
West: Amity Rd											
5	L2	43	2.0	0.421	7.2	LOS A	2.7	68.6	0.37	0.42	34.9
2	T1	448	2.0	0.421	7.2	LOS A	2.7	68.6	0.37	0.42	34.9
12	R2	18	2.0	0.421	7.2	LOS A	2.7	68.6	0.37	0.42	34.9
Approach		509	2.0	0.421	7.2	LOS A	2.7	68.6	0.37	0.21	34.9
All Vehicles		1341	2.0	0.637	10.1	LOS B	5.0	127.2	0.57	0.52	36.1

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: Amity Rd & Linder Rd

Year 2026 Total PM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Linder Rd											
3	L2	18	2.0	0.217	5.2	LOS A	1.1	26.7	0.38	0.50	42.1
8	T1	144	2.0	0.217	5.2	LOS A	1.1	26.7	0.38	0.50	42.1
18	R2	79	2.0	0.217	5.2	LOS A	1.1	26.7	0.38	0.50	42.1
Approach		241	2.0	0.217	5.2	LOS A	1.1	26.7	0.38	0.25	42.1
East: Amity Rd											
1	L2	149	2.0	0.515	9.1	LOS A	3.6	90.4	0.52	0.73	34.1
6	T1	423	2.0	0.515	9.1	LOS A	3.6	90.4	0.52	0.73	34.1
16	R2	8	2.0	0.515	9.1	LOS A	3.6	90.4	0.52	0.73	34.1
Approach		580	2.0	0.515	9.1	LOS A	3.6	90.4	0.52	0.36	34.1
North: Linder Rd											
7	L2	9	2.0	0.439	10.9	LOS B	2.4	60.2	0.70	1.48	33.9
4	T1	313	2.0	0.439	10.9	LOS B	2.4	60.2	0.70	1.48	33.9
14	R2	27	2.0	0.032	4.5	LOS A	0.1	3.1	0.49	0.71	35.7
Approach		349	2.0	0.439	10.4	LOS B	2.4	60.2	0.69	0.71	34.0
West: Amity Rd											
5	L2	15	2.0	0.276	7.4	LOS A	1.3	32.2	0.59	1.10	34.9
2	T1	168	2.0	0.276	7.4	LOS A	1.3	32.2	0.59	1.10	34.9
12	R2	47	2.0	0.276	7.4	LOS A	1.3	32.2	0.59	1.10	34.9
Approach		229	2.0	0.276	7.4	LOS A	1.3	32.2	0.59	0.55	34.9
All Vehicles		1399	2.0	0.515	8.5	LOS A	3.6	90.4	0.55	0.46	35.4

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project #: 22046
Project Name: Gripentrog Subdivision
Analyst: BXK
Date: 2/8/2018
File: H:\22\22046 - Gripentrog Subdivision TIS\excel\signal warrant analyses\[Amity-Linder TT Signal Warrant Analysis.xls]Data Input
Intersection: Amity Road/Linder Road
Scenario: Year 2026Total Conditions

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	EB	WB	NB	SB
12:00 AM	1:00 AM	14	12	8	11
1:00 AM		3	6	6	1
2:00 AM		4	3	8	1
3:00 AM		5	4	10	1
4:00 AM		20	5	16	4
5:00 AM		66	16	58	13
6:00 AM		181	86	197	25
7:00 AM		458	228	460	61
8:00 AM		229	118	215	63
9:00 AM		151	101	133	60
10:00 AM		148	116	98	54
11:00 AM		120	127	123	67
12:00 PM		131	128	116	95
1:00 PM		143	144	150	69
2:00 PM		133	157	154	101
3:00 PM		140	232	181	146
4:00 PM		138	392	218	229
5:00 PM		220	557	231	335
6:00 PM		147	270	189	171
7:00 PM		99	158	81	95
8:00 PM		101	107	65	81
9:00 PM		90	107	42	51
10:00 PM		43	49	23	24
11:00 PM		26	40	15	16

Warrant Summary

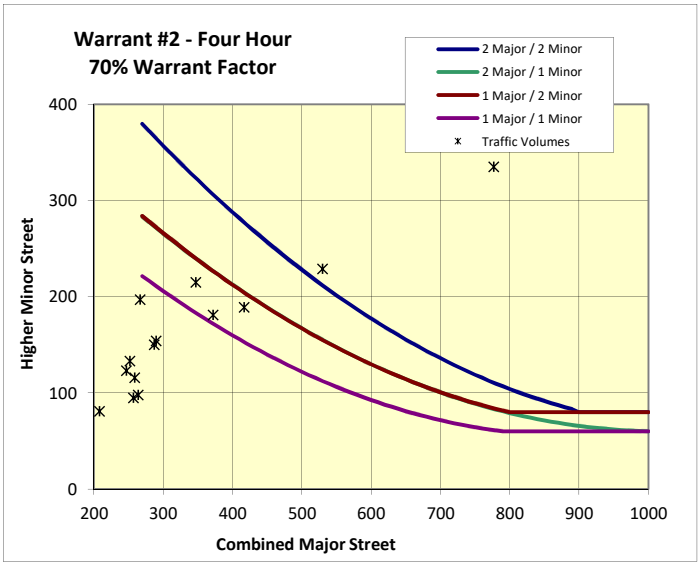
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	Yes
#3	Peak Hour	Yes	Yes
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-
#9	Intersection Near a Grade Crossing	No	-

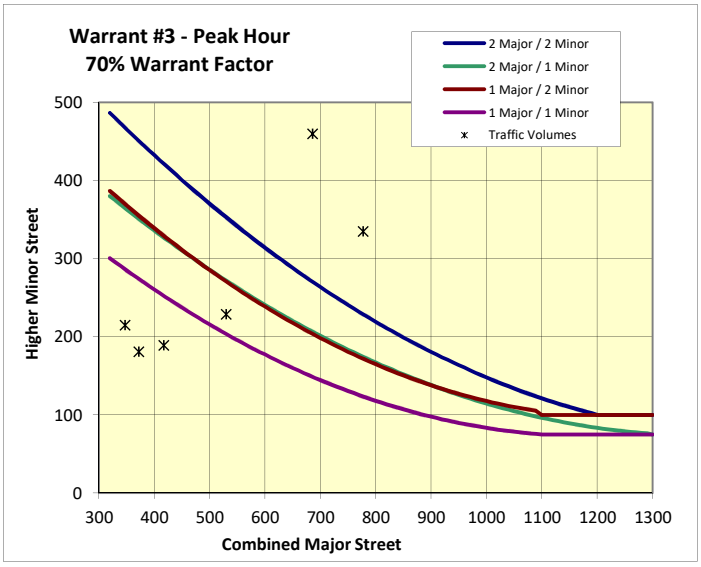
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Minor
East-West Approach =	Major
Major Street Thru Lanes =	1
Minor Street Thru Lanes =	1
Speed > 40 mph?	Yes
Population < 10,000?	No
Warrant Factor	70%
Peak Hour or Daily Count?	Daily

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	500	150	3	No	**No**
	B	750	75	1	No	
80%	A	400	120	4	No	**No**
	B	600	60	2	No	
70%	A	350	105	5	No	**No**
	B	525	53	3	No	
56%	A	280	84	8	Yes	**Yes**
	B	420	42	3	No	





HCM 2010 Signalized Intersection Summary
1: Linder Rd & Amity Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	403	16	38	174	16	26	306	128	10	50	1
Future Volume (veh/h)	39	403	16	38	174	16	26	306	128	10	50	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	43	448	18	42	193	18	29	340	142	11	56	1
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	448	563	23	262	531	49	554	410	171	206	568	10
Arrive On Green	0.04	0.33	0.33	0.04	0.33	0.33	0.03	0.34	0.34	0.01	0.32	0.32
Sat Flow, veh/h	1714	1719	69	1714	1622	151	1714	1207	504	1714	1763	31
Grp Volume(v), veh/h	43	0	466	42	0	211	29	0	482	11	0	57
Grp Sat Flow(s),veh/h/ln	1714	0	1788	1714	0	1773	1714	0	1711	1714	0	1794
Q Serve(g_s), s	1.1	0.0	15.4	1.0	0.0	5.9	0.7	0.0	16.8	0.3	0.0	1.4
Cycle Q Clear(g_c), s	1.1	0.0	15.4	1.0	0.0	5.9	0.7	0.0	16.8	0.3	0.0	1.4
Prop In Lane	1.00		0.04	1.00		0.09	1.00		0.29	1.00		0.02
Lane Grp Cap(c), veh/h	448	0	586	262	0	580	554	0	581	206	0	578
V/C Ratio(X)	0.10	0.00	0.80	0.16	0.00	0.36	0.05	0.00	0.83	0.05	0.00	0.10
Avail Cap(c_a), veh/h	523	0	1316	348	0	1316	640	0	1402	322	0	1470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	19.8	15.2	0.0	16.7	13.8	0.0	19.7	16.3	0.0	15.4
Incr Delay (d2), s/veh	0.1	0.0	2.5	0.3	0.0	0.4	0.0	0.0	3.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.9	0.5	0.0	2.9	0.3	0.0	8.4	0.1	0.0	0.7
LnGrp Delay(d),s/veh	13.6	0.0	22.3	15.5	0.0	17.0	13.8	0.0	22.8	16.4	0.0	15.4
LnGrp LOS	B		C	B		B	B		C	B		B
Approach Vol, veh/h		509			253			511			68	
Approach Delay, s/veh		21.6			16.8			22.3			15.6	
Approach LOS		C			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	26.5	7.2	25.7	6.5	25.4	7.2	25.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.3	53.1	5.9	47.7	5.3	53.1	5.5	48.1
Max Q Clear Time (g_c+I1), s	2.3	18.8	3.0	17.4	2.7	3.4	3.1	7.9
Green Ext Time (p_c), s	0.0	3.2	0.0	3.9	0.0	3.3	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	139	29	18	68	175	15	1739	48	80	663	83
Future Volume (veh/h)	228	139	29	18	68	175	15	1739	48	80	663	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	256	156	33	20	76	197	17	1954	54	90	745	93
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	299	298	63	33	245	208	414	2100	58	126	2168	970
Arrive On Green	0.09	0.21	0.21	0.02	0.14	0.14	0.02	0.62	0.62	0.03	0.63	0.63
Sat Flow, veh/h	3326	1441	305	1714	1800	1530	1714	3400	94	1714	3420	1530
Grp Volume(v), veh/h	256	0	189	20	76	197	17	978	1030	90	745	93
Grp Sat Flow(s),veh/h/ln	1663	0	1746	1714	1800	1530	1714	1710	1783	1714	1710	1530
Q Serve(g_s), s	11.1	0.0	14.1	1.7	5.6	18.7	0.5	74.7	76.4	2.8	14.9	3.5
Cycle Q Clear(g_c), s	11.1	0.0	14.1	1.7	5.6	18.7	0.5	74.7	76.4	2.8	14.9	3.5
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	299	0	361	33	245	208	414	1056	1101	126	2168	970
V/C Ratio(X)	0.86	0.00	0.52	0.61	0.31	0.95	0.04	0.93	0.93	0.71	0.34	0.10
Avail Cap(c_a), veh/h	307	0	361	81	245	208	445	1075	1121	147	2188	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	0.0	51.5	71.2	56.9	62.6	10.4	25.0	25.3	35.8	12.5	10.4
Incr Delay (d2), s/veh	20.3	0.0	1.4	17.2	0.7	47.1	0.0	13.2	13.9	12.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	6.9	1.0	2.8	10.6	0.3	38.9	41.7	2.7	7.1	1.5
LnGrp Delay(d),s/veh	85.9	0.0	52.9	88.4	57.7	109.7	10.4	38.2	39.2	48.5	12.6	10.5
LnGrp LOS	F		D	F	E	F	B	D	D	D	B	B
Approach Vol, veh/h		445			293			2025			928	
Approach Delay, s/veh		71.9			94.7			38.4			15.9	
Approach LOS		E			F			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	94.8	7.3	34.8	7.0	97.2	17.6	24.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.7	91.9	6.9	26.5	5.1	93.5	13.5	19.9
Max Q Clear Time (g_c+I1), s	4.8	78.4	3.7	16.1	2.5	16.9	13.1	20.7
Green Ext Time (p_c), s	0.0	11.9	0.0	1.4	0.0	44.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.3
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary
1: Linder Rd & Amity Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	161	45	143	406	8	17	138	76	9	300	26
Future Volume (veh/h)	14	161	45	143	406	8	17	138	76	9	300	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	15	168	47	149	423	8	18	144	79	9	312	27
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	345	97	467	576	11	284	311	171	359	448	39
Arrive On Green	0.02	0.25	0.25	0.09	0.33	0.33	0.02	0.28	0.28	0.01	0.27	0.27
Sat Flow, veh/h	1714	1354	379	1714	1761	33	1714	1094	600	1714	1634	141
Grp Volume(v), veh/h	15	0	215	149	0	431	18	0	223	9	0	339
Grp Sat Flow(s),veh/h/ln	1714	0	1733	1714	0	1794	1714	0	1694	1714	0	1775
Q Serve(g_s), s	0.3	0.0	5.3	3.0	0.0	10.7	0.4	0.0	5.5	0.2	0.0	8.6
Cycle Q Clear(g_c), s	0.3	0.0	5.3	3.0	0.0	10.7	0.4	0.0	5.5	0.2	0.0	8.6
Prop In Lane	1.00		0.22	1.00		0.02	1.00		0.35	1.00		0.08
Lane Grp Cap(c), veh/h	281	0	442	467	0	587	284	0	482	359	0	487
V/C Ratio(X)	0.05	0.00	0.49	0.32	0.00	0.73	0.06	0.00	0.46	0.03	0.00	0.70
Avail Cap(c_a), veh/h	436	0	1567	771	0	1907	434	0	1599	527	0	1675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	15.9	11.5	0.0	15.0	13.3	0.0	14.8	13.1	0.0	16.4
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.4	0.0	1.8	0.1	0.0	0.7	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.6	1.4	0.0	5.6	0.2	0.0	2.6	0.1	0.0	4.5
LnGrp Delay(d),s/veh	14.0	0.0	16.8	11.9	0.0	16.8	13.4	0.0	15.5	13.2	0.0	18.2
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		230			580			241			348	
Approach Delay, s/veh		16.6			15.5			15.4			18.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	18.8	9.1	17.3	5.6	18.3	5.4	21.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	47.5	13.5	45.5	5.5	47.5	5.5	53.5
Max Q Clear Time (g_c+I1), s	2.2	7.5	5.0	7.3	2.4	10.6	2.3	12.7
Green Ext Time (p_c), s	0.0	3.2	0.2	3.7	0.0	3.2	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.3
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
4: SH 69 & Lake Hazel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	87	16	25	140	116	29	851	30	163	1827	271
Future Volume (veh/h)	143	87	16	25	140	116	29	851	30	163	1827	271
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	152	93	17	27	149	123	31	905	32	173	1944	288
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	206	38	41	184	157	139	2195	78	441	2310	1033
Arrive On Green	0.06	0.14	0.14	0.02	0.10	0.10	0.03	0.65	0.65	0.05	0.68	0.68
Sat Flow, veh/h	3326	1481	271	1714	1800	1530	1714	3370	119	1714	3420	1530
Grp Volume(v), veh/h	152	0	110	27	149	123	31	459	478	173	1944	288
Grp Sat Flow(s),veh/h/ln	1663	0	1752	1714	1800	1530	1714	1710	1779	1714	1710	1530
Q Serve(g_s), s	6.0	0.0	7.6	2.1	10.7	10.4	0.8	16.9	16.9	4.4	56.6	10.0
Cycle Q Clear(g_c), s	6.0	0.0	7.6	2.1	10.7	10.4	0.8	16.9	16.9	4.4	56.6	10.0
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	202	0	244	41	184	157	139	1114	1159	441	2310	1033
V/C Ratio(X)	0.75	0.00	0.45	0.66	0.81	0.79	0.22	0.41	0.41	0.39	0.84	0.28
Avail Cap(c_a), veh/h	264	0	295	87	252	214	160	1171	1218	516	2533	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	0.0	52.3	64.1	58.1	58.0	20.3	11.0	11.0	8.0	16.2	8.6
Incr Delay (d2), s/veh	8.5	0.0	1.3	16.8	12.9	12.4	0.8	0.2	0.2	0.6	2.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	3.8	1.2	6.0	4.9	0.6	8.0	8.3	2.1	27.3	4.2
LnGrp Delay(d),s/veh	69.7	0.0	53.6	80.9	71.1	70.4	21.1	11.2	11.2	8.6	18.7	8.7
LnGrp LOS	E		D	F	E	E	C	B	B	A	B	A
Approach Vol, veh/h		262			299			968			2405	
Approach Delay, s/veh		62.9			71.7			11.5			16.8	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	90.7	7.6	22.9	7.9	93.9	12.5	18.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.4	90.6	6.7	22.3	5.0	98.0	10.5	18.5
Max Q Clear Time (g_c+I1), s	6.4	18.9	4.1	9.6	2.8	58.6	8.0	12.7
Green Ext Time (p_c), s	0.2	47.1	0.0	1.3	0.0	30.8	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Appendix J
Site Access Evaluation Worksheets

ACHD Turn Lane Analysis
From *ACHD Policy Manual*, Section 7106.4.4
Year 2026 Total Traffic Conditions (AM and PM Peak Hour)
Posted Speeds: 30 mph (New Collector Road west of Linder Road); and 50 mph (Linder Road)

Directions:

(Left-Turn Analysis)

The following data are required:

1. Opposing Volume (veh/hr) - VO - The opposing volume is to include only the right-turn and through movements in the opposite direction of the left-turning vehicle.

2. Advancing Volume (veh/hr) - VA - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the left-turning vehicle.

3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

4. Percentage of left-turns in VA

Left-turn lane is not needed for left-turn volume less than 10 vph. However, criteria other than volume, such as crash experience, may be used to justify a left-turn lane.

The appropriate trend line is identified on the basis of the percentage of left-turns in the advancing volume, rounded up to the nearest percentage trend line. If the advancing and opposing volume combination intersects above or to the right of this trend line, a left-turn lane is appropriate.

(Right-Turn Analysis)

The following data are required:

1. Advancing Volume (veh/hr) - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the right-turning vehicle.

2. Right-Turning Volume (veh/hr) - The right-turning volume is the number of advancing vehicles turning right.

3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

Note: Right-turn lane is not needed for right-turn volume less than 10 vph. However, criteria other than volume, e.g. crash experience, may be used to justify a right-turn lane.

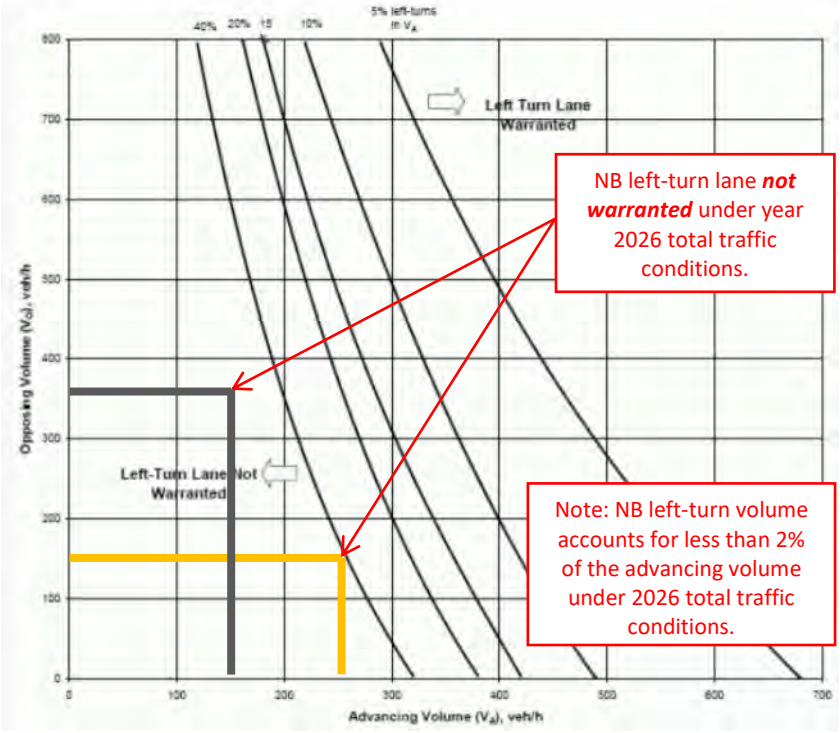
If the combination of major road approach volume and right-turn volume intersects above or to the right of the speed trend line corresponding to the major road operating speed, then a right-turn lane is appropriate.

Legend:

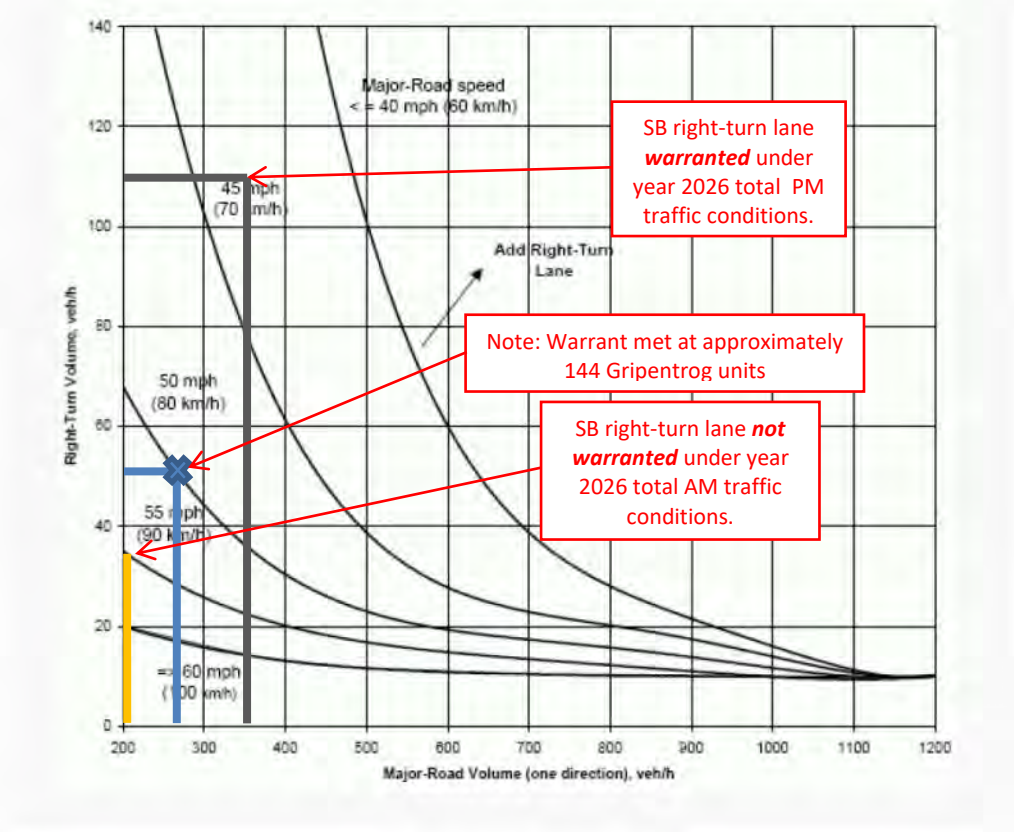
Year 2026 Background AM =
Year 2026 Background PM =
Year 2026 Total AM =
Year 2026 Total PM =

Not applicable as no access will be used prior to build-out of the site.

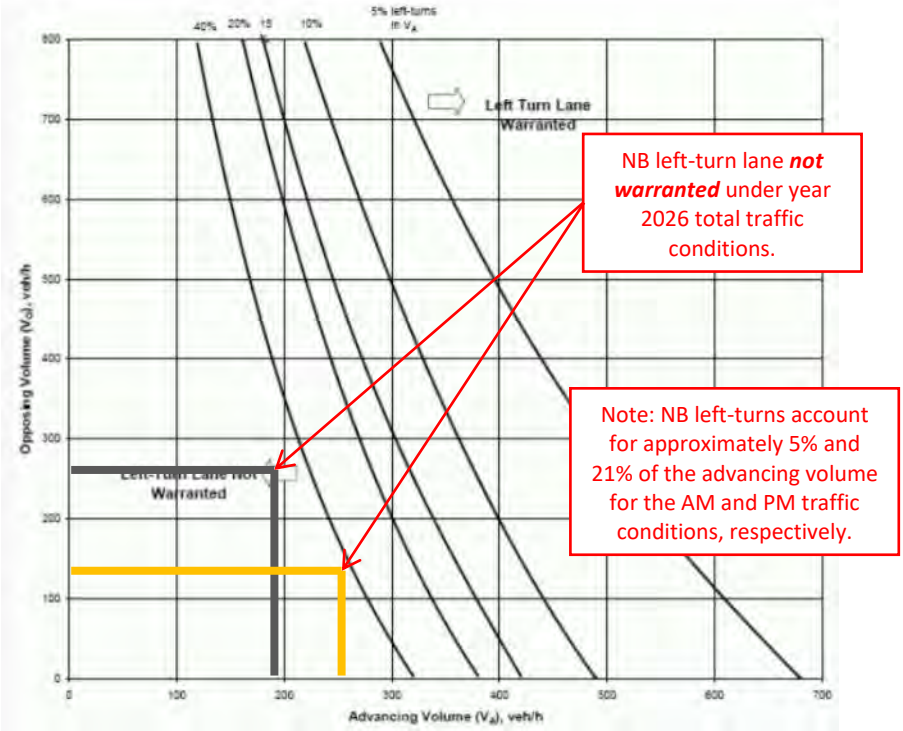
A. New Collector Road & Linder Road



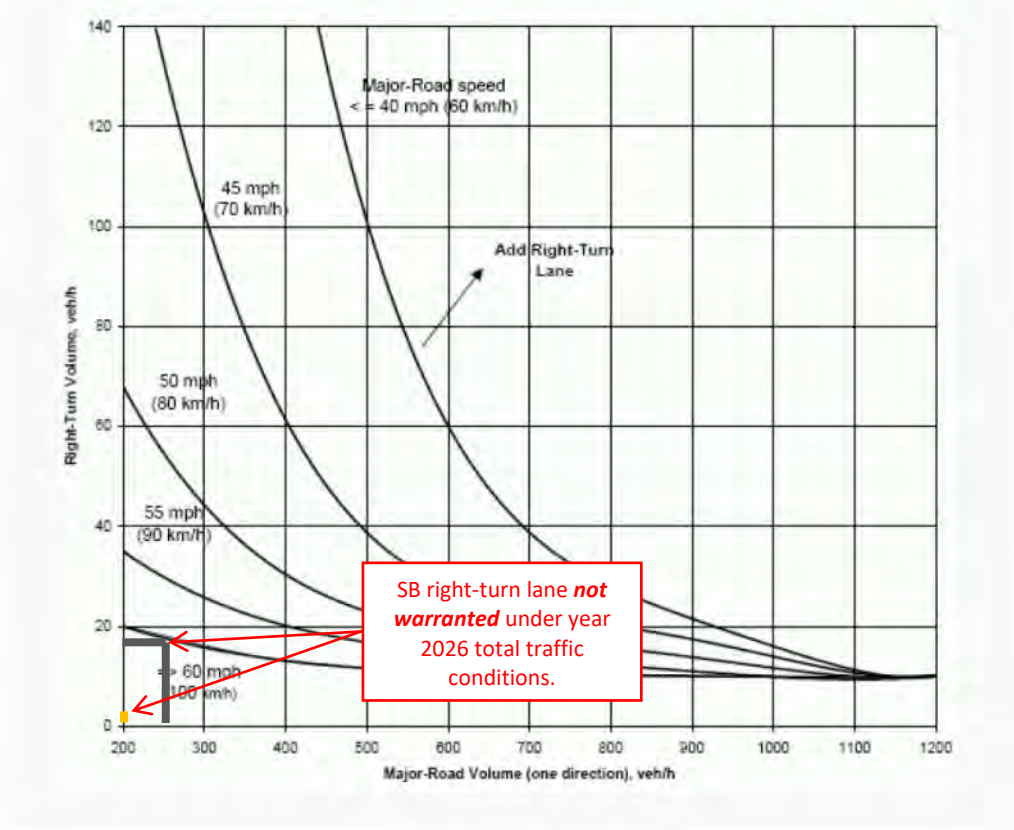
Peak Hour	NB Left-Turn Lane Warrant?	SB Right Turn Lane Warrant?
AM Peak Hour	No	No
PM Peak Hour	No	Yes (Total)



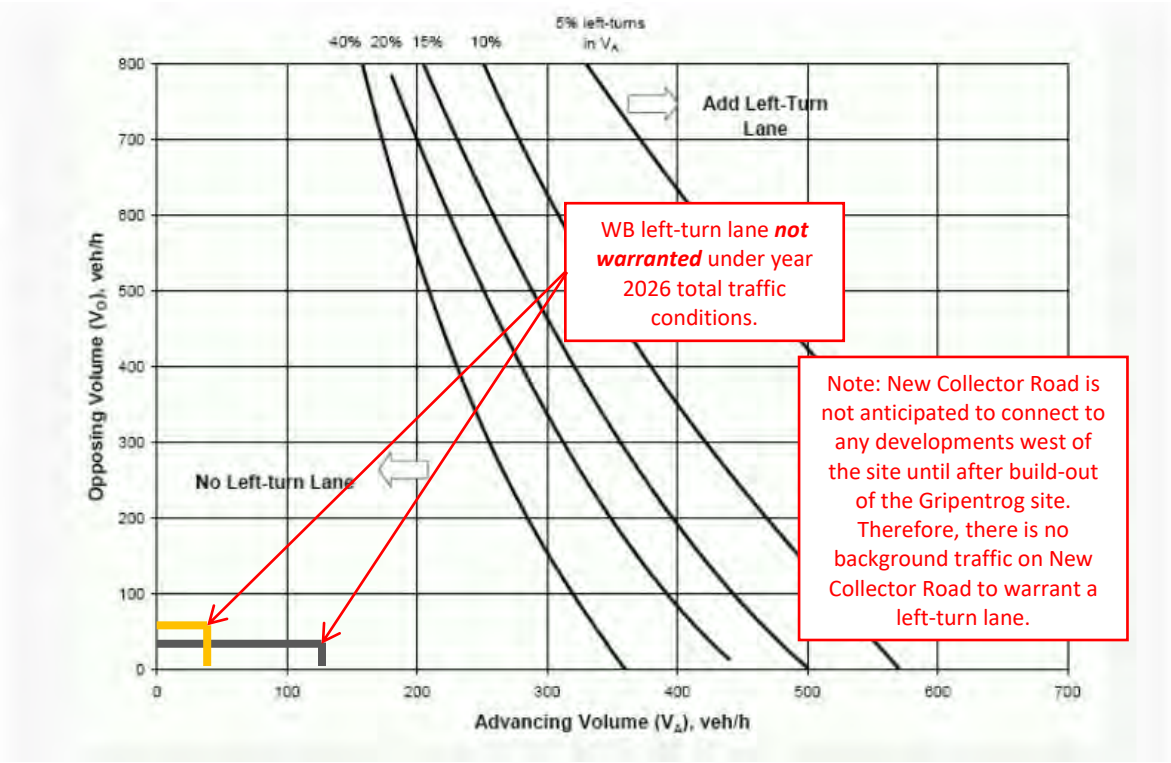
B. Southeast Access & Linder Road



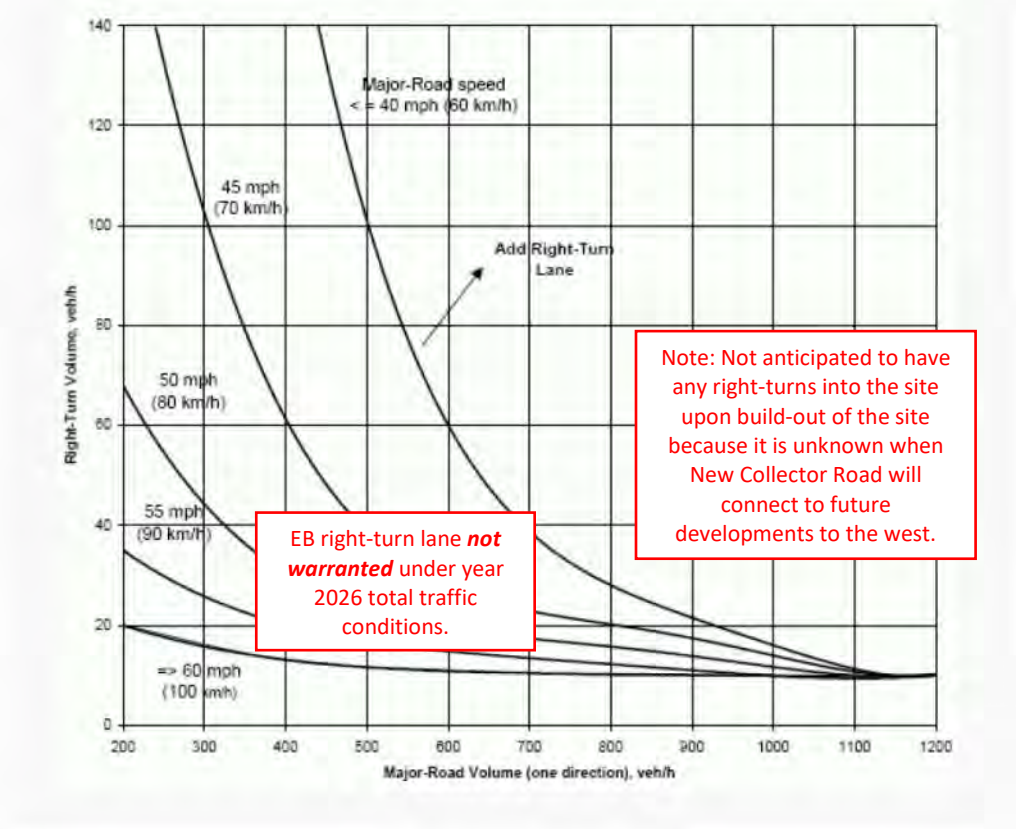
Peak Hour	NB Left-Turn Lane Warrant?	SB Right Turn Lane Warrant?
AM Peak Hour	No	No
PM Peak Hour	No	No



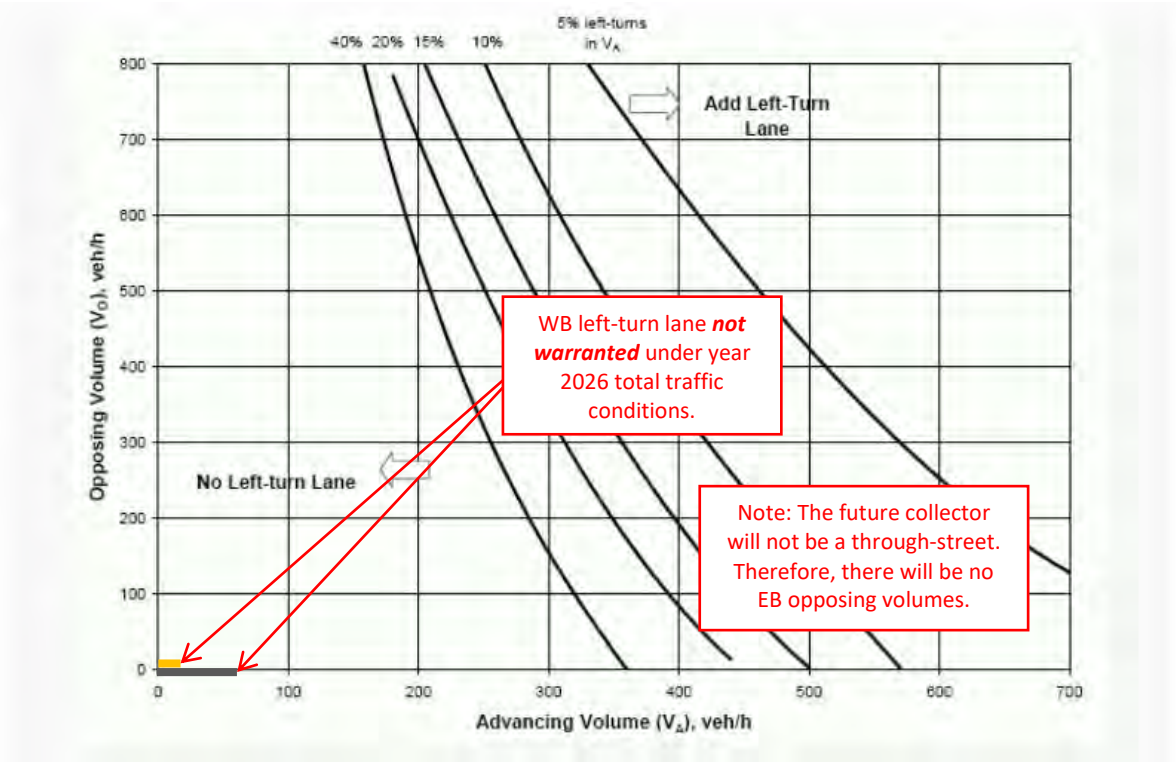
C. Northeast Access & New Collector Road



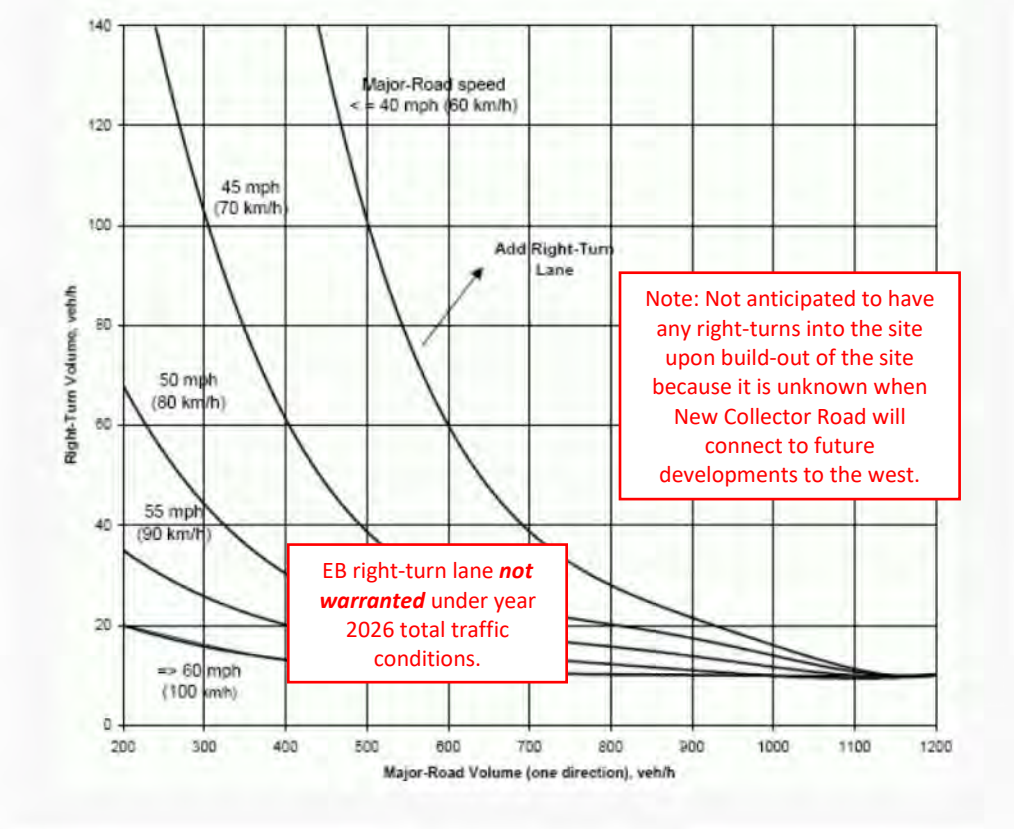
Peak Hour	WB Left-Turn Lane Warrant?	Right Turn Lane Warrant?
AM Peak Hour	No	No
PM Peak Hour	No	No



D. Northwest Access & New Collector Road



Peak Hour	Left-Turn Lane Warrant?	Right Turn Lane Warrant?
AM Peak Hour	No	No
PM Peak Hour	No	No



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	65	5	9	156	263	110
Future Vol, veh/h	65	5	9	156	263	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	72	6	10	173	292	122

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	546	353	414	0	-	0
Stage 1	353	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	502	695	1156	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	497	695	1156	-	-	-
Mov Cap-2 Maneuver	497	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1156	-	507	-	-
HCM Lane V/C Ratio	0.009	-	0.153	-	-
HCM Control Delay (s)	8.1	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	22	37	154	249	19
Future Vol, veh/h	11	22	37	154	249	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	12	24	41	171	277	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	540	287	298	0	-	0
Stage 1	287	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	506	757	1275	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	488	757	1275	-	-	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1275	-	639	-	-
HCM Lane V/C Ratio	0.032	-	0.057	-	-
HCM Control Delay (s)	7.9	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	0	64	55	0	38
Future Vol, veh/h	32	0	64	55	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	36	0	71	61	0	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	239	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1588	-	754	1042
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1588	-	719	1042
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	798	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1042	-	-	1588	-
HCM Lane V/C Ratio	0.041	-	-	0.045	-
HCM Control Delay (s)	8.6	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	55	0	0	32
Future Vol, veh/h	0	0	55	0	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	61	0	0	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	123	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1635	-	877	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1635	-	845	1090
Mov Cap-2 Maneuver	-	-	-	-	845	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.033	-	-	0.037	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Appendix K
Off-Site Mitigation Threshold Worksheets

Amity Road & Linder Road

Amity Road & Linder Road Estimate of Year Capacity is Exceeded

Movement that Fails	WBLTR fails in p.m. peak hour	
Mitigation	Single-lane roundabout (IN2016-5) or traffic	
V/C in 2017	0.52	2017
V/C in 2026 Background	1.00	2026
Approximate Year Movement Reaches Capacity in Background	**2026.0**	
V/C in 2026 with Site	1.09	2026
Year Movement Reaches Capacity with Development	**2024.6**	
Total Units	311	2026
Number of units at Year Capacity is Reached	**262**	
Approximate Year Units will hit Number	NA	

Lake Hazel Road & Meridian Road (SH 69)

Lake Hazel Road & SH 69 Estimate of Year Capacity is Exceeded

Movement that Fails	WBLTR fails in p.m. peak hour	
Mitigation	Traffic Signal (IN2016-60)	
V/C in 2017	0.66	2017
V/C in 2026 Background	1.00	2026
Approximate Year Movement Reaches Capacity in Background	**2026.0**	
V/C in 2026 with Site	1.03	2026
Year Movement Reaches Capacity with Development	**2025.3**	
Total Units	311	2026
Number of units at Year Capacity is Reached	**286**	
Approximate Year Units will hit Number	NA	

Linder Road & New Collector Road

Southbound Right Turn Lane Warrant / Estimate of Units Warrant is Met

Movement	SBR		
Mitigation	Southbound Right-Turn Lane		
Total Buildout units	311		2026
Total SBRT Volume at Full Buildout	110	Trips	
Approximate SBRT Lane Trip Threshold	51	Trips	
Approximate Percentage of Occupied Units to Trigger Threshold	46%		
Approximate Number of Units	144.2		
Approximate Year Movement Reaches Capacity in Background	**2021.7**		

763 W. Avalon Road
P.O. Box 13
Kuna, ID 83634
Phone: 208-922-5274
Fax: 208-922-5989
www.kunacity.id.gov

CITY OF KUNA

PLANNING & ZONING DEPARTMENT

MEMO

DATE: November 20, 2018

TO: Kuna City Council

FROM: Wendy I. Howell, PCED

RE: Planning and Zoning Commissioner

Attached is an email from John Laraway requesting to be reappointed for a three-year term. Mr. Laraway was originally appointed to the Commission on May 2, 2017 replacing a former member of the Commission in the middle of their term. If approved, Mr. Laraway's term will expire on November 1, 2021.

Wendy Howell

Subject: FW: Commission Appointment

From: John Laraway <jblaraway@gmail.com>
Sent: Monday, November 5, 2018 2:53 PM
To: Wendy Howell <whowell@kunaid.gov>
Subject: RE: Commission Appointment

November 5, 2018

Wendy Howell, Director of Planning and Zoning Director
City of Kuna
751 W 4th St.
Kuna, Id 83634

Please accept my letter of interest for reappointment for the position on the Planning and Zoning Commission 5.

I have come to understand the zoning regulations and the importance of land use and the impacts on infrastructure. I still believe my experience in law enforcement has and will provide a unique perspective to the Planning and Zoning Commission. In the last year I have learned more about Zoning and its importance for the growth of our town.

I welcome the opportunity to represent my neighbors and continue my service to my community. I have served on the Kuna Planning and Zoning commission since May 2017. I still believe I have a well-rounded outlook on the growth for Kuna and would ask to be reappointed for another term.

Thank you for your consideration. Please contact me at jblaraway@gmail.com or my cell phone at (208) 870-8419 if you have any questions.

Sincerely,

John B. Laraway

Sent from Mail for Windows 10

(Space above reserved for recording)

ORDINANCE NO. 2018-40
CLAY WOOD & VERA STREICHIK
KUNA MUNICIPAL IRRIGATION ANNEXATION

AN ORDINANCE OF THE CITY OF KUNA, IDAHO, ANNEXING SEVERAL PROPERTIES ON SOUTH ASH AVENUE OWNED BY CLAY WOOD & VERA STREICHIK, INTO THE KUNA MUNICIPAL IRRIGATION DISTRICT FROM THE BOISE~KUNA IRRIGATION DISTRICT; THUS, CHANGING THE BOUNDARY OF THE KUNA MUNICIPAL IRRIGATION DISTRICT; DECLARING WATER RIGHTS APPURTENANT THERETO ARE POOLED FOR DELIVERY PURPOSES; DIRECTING THAT COPIES OF THIS ORDINANCE BE RECORDED AS PROVIDED BY LAW; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Kuna operates a municipal irrigation system, generally referred to as Kuna Municipal Irrigation District (KMID), as authorized by Title 50, Chapter 18, Idaho Code; and

WHEREAS, the above-mentioned parcels are connected to the Kuna Municipal Irrigation District system; and

WHEREAS, the Kuna City Council has deemed annexation of said properties into the Kuna Municipal Irrigation District to be in the best interest of the City of Kuna;

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF KUNA, Ada County, Idaho, as follows:

Section 1: That the following described real properties be and the same hereby is annexed into the Kuna Municipal Irrigation District of the City of Kuna, State of Idaho and the boundaries adjusted accordingly, said property being described as follows in Exhibit A.

Section 2: Declaring the water rights appurtenant thereto are hereby pooled for delivery purposes

Section 3: The City Clerk is hereby directed to record, in the office of the recorder for Ada County, a certified copy of this ordinance as required by Section 50-1832, Idaho Code.

Section 4: The City Engineer is hereby directed to give notice of this action by forwarding a certified copy of this Ordinance to Boise~Kuna Irrigation District.

Section 5: That this Ordinance, or a summary thereof in compliance with Section 50-901A, Idaho Code, shall be published once in the official newspaper of the City, and shall take effect immediately upon its passage, approval, and publication.

DATED this 20th day of November 2018.

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

EXHIBIT A
LEGAL DESCRIPTION FOR WATER RIGHTS ON
433, 597 & 599 S ASH AVE

A portion of Lot 22 of Kuna Orchard Tracts lying in the Northwest ¼ of Section 26, Township 2 North, Range 1 West, Boise Meridian, City of Kuna, Ada County, Idaho

Commencing at the West 1/16 Corner of Sections 23 & 26 thence South 00 degrees 36 minutes 58 seconds West, 1454.66 feet to a point;

Thence North 89 degrees 32 minutes 53 seconds West, 20.00 feet to the Point of Beginning for this Ordinance;

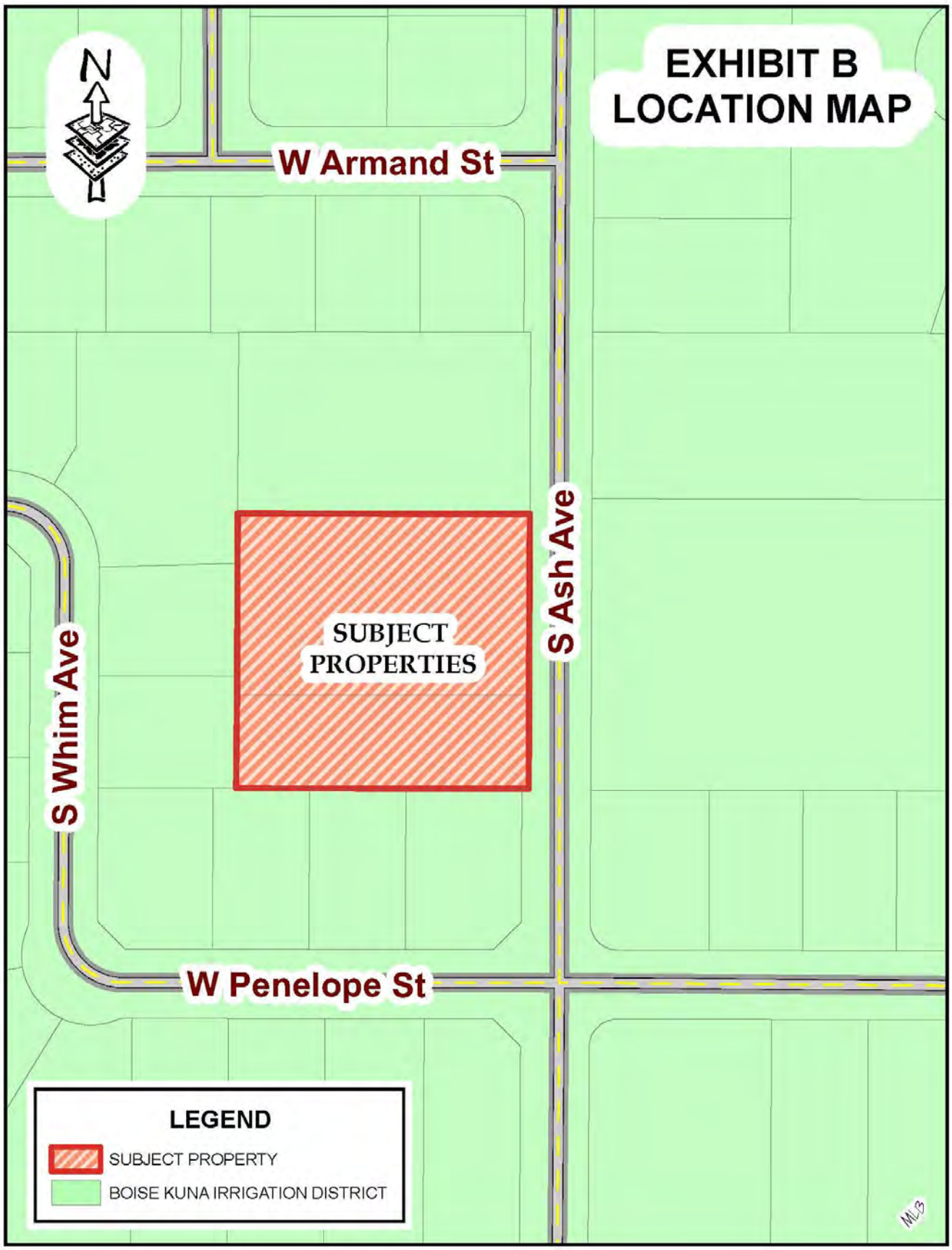
Thence continuing North 89 degrees 32 minutes 53 seconds West, 232.32 feet to the eastern boundary of Placerville Subdivision as recorded in Book 99 Page 12726-12728;

Thence along the eastern boundary of said Subdivision South 00 degrees 36 minutes 58 seconds West, 198.50 feet to northerly boundary of said Subdivision;

Thence South 89 degrees 32 minutes 53 seconds East; 212.32 feet along said northerly boundary of said Subdivision to the western rights-of-way of South Ash Street;

Thence along said rights-of-way North 00 degrees 36 minutes 58 seconds East, 198.50 feet to the Point of Beginning.

Said parcels contain 0.96 acres more or less.


EXHIBIT B
LOCATION MAP
N
W Armand St
S Ash Ave
S Whim Ave
SUBJECT
PROPERTIES
W Penelope St
LEGEND
SUBJECT PROPERTY
BOISE KUNA IRRIGATION DISTRICT