



PLANNING & ZONING COMMISSION AGENDA

**Tuesday, July 28, 2020
6:00 PM**

*Under authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to social distancing protocol, the **Council Chambers Audience Occupancy Capacity is 15**. Social Distancing will be required.*

***The first 15 persons** who appear, in addition to the Planning & Zoning Commissioner's and staff, will be allowed in Council Chambers. All other persons may access the meeting via Live Streaming.*

***Live Streaming Instructions:** Members of the public may watch the June 9, 2020 Planning & Zoning Commission meeting via Facebook Live. The live feed will start at **6:00 PM** on the City of Kuna Idaho Facebook page linked below: <https://www.facebook.com/CityofKunaIdaho/>*

Public testimony will be received on the cases listed under Public Hearings within this Agenda. The instructions and options available for public testimony are listed below.

APPLICANT AND PUBLIC WRITTEN AND ORAL HEARING TESTIMONY PROCESS:

Written - In Advance to be included in the Agenda Packet that is distributed to the Decision-Making body.

1. Submit any option prior to 5:00 pm the Thursday before Public Hearing meeting. *Late submissions will not be included in the packet but will be provided at the meeting.*
2. Submit testimony via our website on the [Public Testimony Form](#). This form will email directly to the City for inclusion in the Agenda Packet.
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: City Clerk
PO Box 13
Kuna ID 83634

Written – Up to noon the day of the Public Hearing

1. Submit any option prior to noon the day of the Public Hearing meeting. *Late submissions will not be included.*
2. Submit testimony via our website on the [Public Testimony Form](#)
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: City Clerk
PO Box 13
Kuna ID 83634

Oral – Via electronic call during the Public Hearing

1. Submit request no later than noon the day of the Public Hearing meeting.
2. Email PublicHearingTestimony@KunaID.gov
 - ✓ Your name
 - ✓ Address
 - ✓ Phone Number you will be calling from to give testimony
 - ✓ Email Address
 - ✓ Date of Public Hearing
 - ✓ Case number or Identification of Public Hearing
3. Watch your email for a reply email with the information to join the meeting electronically. (Check your spam/junk folder as a precaution)
4. Follow the dial in information.
5. Call into the virtual lobby a minimum of 5 minutes prior to the meeting.

Oral – In Person Testimony during the Public Hearing. Due to social distancing protocol,

the Council Chambers Audience Occupancy Capacity is 15. Social Distancing will be required. The first 15 persons who appear, in addition to Mayor, City Council, and staff, will be allowed in Council Chambers. All other persons may access the meeting via Live Streaming on the City of Kuna Facebook page, <https://www.facebook.com/CityofKunaIdaho/>. All persons wishing to testify must, state their name and residential address. No person shall speak until recognized by the Mayor. A three (3) minute time limit will be placed on all testimonies.

Information provided at the public hearing will be available, upon request, five (5) days prior to the hearing. The hearing will be held in a facility that is accessible to persons with disabilities. Special accommodations will be available, upon request, five (5) days prior to the hearing in a format that is usable to persons with disabilities.

1. CALL TO ORDER AND ROLL CALL

COMMISSIONERS:

Chairman Lee Young

Commissioner Stephen Damron

Vice Chairman Dana Hennis

Commissioner John Laraway

Commissioner Cathy Gealy

2. CONSENT AGENDA: *All Listed Consent Agenda Items are Action Items*

A. Planning and Zoning Commission Meeting Minutes

1. July 14, 2020

B. Findings of Fact & Conclusions of Law

1. 20-01-CPF Ensign Subdivision No. 1 (Combination Preliminary & Final Plat)

3. PUBLIC HEARING:

- A. Case No. 20-01-AN (Annexation), 20-03-S (Preliminary Plat) & 20-07-DR (Design Review) Ledgestone South Subdivision - **ACTION ITEM**

Trilogy Development, Inc and Gem State Planning request to annex approximately 97 acres into Kuna City Limits with R-6 (Medium Density Residential) and R-8 (Medium Density Residential) zoning district classifications and to subdivide the 97 acres into 437 total lots (393 buildable lots and 44 common lots). The subject sites are located along North Locust Grove Road and future extensions of Ardell Road and Stroebel Road, within Section 18, Township 2 North, Range 1 East; (APNs: S1418123460, S1418123485, S1418427800 and S1418417200).

Kuna Planning and Zoning staff requests this item be tabled to a date certain due to non-receipt of final agency comments.

B. Case No. 19-14-AN (Annexation), 19-11-S (Preliminary Plat) & 19-332-DR (Design Review) Patagonia East, Ridge, & Lakes Subdivision – ACTION ITEM

Westpark Companies, requests annexation of approximately 163.60 acres into Kuna and to apply the following zones; R-4, R-6 and R-8. Applicant also requests preliminary plat approval in order to subdivide the approx. 163.60 acres into 574 total lots including a school site. The proposed gross density is 3.28 DUA, and the proposed net density is approximately 4.26 DUA with 12.4% (20.29 ac.) of common space. The project site is in Sections 7, 8, & 17 all T2N, R1E, on the northwest, northeast and southeast corner of Locust Grove and Hubbard Roads, Kuna, Id. 83634.

Kuna Planning and Zoning staff requests this item be tabled to a date certain due to non-receipt of final agency comments.

C. Case No. 19-11-AN (Annexation), 19-29-DR (Design Review) & 19-08-S (Preliminary Plat) Ashton Estates East – ACTION ITEM

Kuna East, LLC and KM Engineering requests to annex one 38.47-acre parcel into Kuna City Limits with an R-8 (Medium Density Residential) zoning district classification and to subdivide the 38.47 acres into 200 total lots (175 buildable lots, 25 common lots). The subject site is located at 2320 East Meadow View Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN: S1419241000).

4. BUSINESS ITEMS:

A. 20-02-DR (Design Review) Fossil Creek Subdivision – ACTION ITEM

Applicant requests Design Review approval for parcels located one quarter mile west of the Deer Flat and Ten Mile intersection, APN's: S1322212401, S1322120900, S1322121200 and S1322121300.

B. Findings of Fact & Conclusions of Law

I. 20-01-S (Preliminary Plat) & 20-02-DR (Design Review) Fossil Creek Subdivision

5. ADJOURNMENT:



**PLANNING & ZONING COMMISSION
MINUTES**

**Tuesday, July 14, 2020
6:00 PM**

*Under authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to social distancing protocol, the **Council Chambers Audience Occupancy Capacity was 15. Social Distancing was required.***

This meeting was also streamed Live on the City of Kuna Idaho Facebook page:

<https://www.facebook.com/CityofKunaIdaho/>

Public testimony will be received on the cases listed under Public Hearings within this Agenda. The instructions and options available for public testimony are listed below.

1. CALL TO ORDER AND ROLL CALL: 6:10 PM

COMMISSIONERS:

Chairman Lee Young
Vice Chairman Dana Hennis – Absent
Commissioner Cathy Gealy
Commissioner Stephen Damron – Absent
Commissioner John Laraway

CITY STAFF PRESENT:

Wendy Howell, Planning and Zoning Director
Troy Behunin, Senior Planner
Jessica Reid, Planning & Zoning Staff

2. CONSENT AGENDA:

All Listed Consent Agenda Items are Action Items

A. Planning and Zoning Commission Meeting Minutes

1. June 23, 2020

B. Findings of Fact & Conclusions of Law

1. Case No. 19-08-ZC (Rezone), 19-10-S (Preliminary Plat), 19-06-SUP (Special Use Permit) & 20-03-DR (Design Review) Monarch Landing Subdivision
2. Case No. 20-01-SUP (Special Use Permit) 3040 W. Pear Apple Street In-Home Daycare
3. Case No. 20-09-DR (Design Review) Francis Dental Office

Commissioner Cathy Gealy moved to approve the Consent Agenda. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

3. PUBLIC HEARING:

- A. Case No. 19-14-AN (Annexation), 19-11-S (Preliminary Plat) & 19-32-DR (Design Review) Patagonia East, Ridge & Lakes Subdivisions - **ACTION ITEM****

C/Young: Staff has asked that we table this to a date certain due to non-receipt of final agency comments. Is there a date we are anticipating or how far out we anticipate that?

Troy Behunin: Thank you Chairman Lee Young, for the record, Troy Behunin, planner for the Patagonia East, Ridge and Lakes subdivision. The contact at ACHD indicated they will have the report in time for the coming July 28th meeting; in time for staff to review and also for it to be in the packet. **C/Young:** Ok. **TB:** That is the date that staff would recommend but it is up to the Commission to decide. **C/Gealy:** At our previous meeting *unintelligible*.

Commissioner Cathy Gealy moved to table 19-14-AN (Annexation), 19-11-S (Preliminary Plat) and 19-32-DR (Design Review) for Patagonia East, Ridge, and Lakes Subdivision to July 28, 2020. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

B. Case No. 20-01-CPF (Combined Preliminary & Final Plat) Ensign Subdivision No. 1 – **ACTION ITEM**

Troy Behunin: Once again, thank you Commissioners; for the record, Troy Behunin, Kuna Planning and Zoning Staff, 751 W 4th Street, Kuna, Idaho. The application before you tonight 20-01-CPF, combination preliminary and final plat, for Ensign Subdivision No. 1 is a request from Emmett Partners, LLC group, owners of the property, and they are looking to resubdivide one of the lots within that commercial subdivision. Originally, they wanted to split the lot but as it is in a platted subdivision it would require a replat; that's what this process is designed to do. The subject property is Lot 1, Block 1 and they request that it be split into two different parcels so that the 3.09 acres are split into two separate parcels so that two separate businesses could purchase those. It is staff's understanding that there is a party interested in part of that site and the applicant would like to split that so the transaction could happen, but it does have to go through the public hearing process. It's a fairly simple and straightforward request, Brett Jensen with Emmet Partners, LLC is here tonight and I would stand for any questions you might have. **C/Young:** Are there any questions for staff at this time? **C/Gealy:** I do have one for clarification. In the staff analysis, staff requests that the applicant join the property owner's association; does that need to be included in the conditions of approval? **TB:** I have worked with Brett and his company on other projects and I know that they would be willing to join since it's already in place, we just want to make sure that cross connection and all of those other things that are required *unintelligible*.

C/Gealy: Thank you. **TB:** You bet. **C/Gealy:** That's the only question that I have. **C/Young:** Ok, is there anything that staff would like to add to that? No, then we'll open the public testimony at 6:12 PM. I don't see anybody on the sign-up sheet, is there anybody here that isn't signed up that would like to testify on this matter? Is there anyone on Zoom wanting to testify? **Jessica Reid:** No, there is not. **C/Young:** Seeing none I will close the public testimony at 6:14 PM and that will bring up our discussion. I feel like this is pretty straight forward case. **C/Gealy:** I agree, I don't have any concerns. **C/Laraway:** I think it's appropriate. **C/Young:** Ok, then I will stand for a motion.

Commissioner Cathy Gealy moved to approve 20-01-CPF (Combined Preliminary & Final Plat) for Ensign Subdivision No. 1 with the conditions as outlined in the staff report and including the additional condition that the applicant join the property owner's association. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

C. Case No. 20-01-S (Preliminary Plat) Fossil Creek Subdivision – ACTION ITEM

Troy Behunin: Good evening Commissioners, once again, Troy Behunin, Kuna Planner, 751 W 4th Street. The two letters that I just passed out to you folks are letters we received yesterday morning and yesterday afternoon, in response for the call for public comment on the Fossil Creek Subdivision; they were not submitted in time to make it into your packets. I would like to take special note that there are two letters in here, one from Mr. John and Clare Marsala which has signatures from their neighbors that feel the same way; the second is from a Mr. James A. Weuhler, I really hope I am not slaughtering his name. Mr. Weuhler resides at 2163 W Quilceda Street here in Kuna; the letter before you was submitted to our office while a moment before, an identical letter was submitted to the Mayor. The Mayor did not read the letter, in fact, he brought it down to our office so we could confirm if it was something he was or was not supposed to read; I have an electronic copy of that identical letter should you wish to see it to confirm that it is an identical letter. This project is on the southside of Deer Flat and just west Ten Mile Road, the application is for a preliminary plat approval and a design review approval for the common spaces; in fact, this is actually a redo of a plat that was submitted back in 2006, they have come back to us with changes. The applicant is proposing to subdivide the approximately the combined 66.75 acres creating a subdivision known as Fossil Creek. The area is presently zoned R-5 which we no longer have, that stems back to the 2003 application, the Future Land Use Map does designate this as a Medium Density zone.... I'm sorry, earlier I said 2006 but I meant 2003, I apologize. The Future Land Use Map and the Kuna Comprehensive Plan Map identifies this parcel as Medium Density which places it between four and eight dwelling units per acre. The application proposes 8.4 acres of useable open space or 12.5%, which includes trails along Ramsey Lateral and a future open space setup along Indian Creek, plus there are other open spaces and trails for the residents. Staff does agree this proposal is in concert with the Future land Use Map and Comp Plan. The applicant proposes 272 home lots and 11 common lots so, there would be a total of 283. Staff has confirmed with the applicant that they will work with Public Works Department to bring utilities to the site and throughout the site, and provide the stubs that are necessary for traffic and utilities to adjacent properties as to conform with Kuna City Code. Public utilities will be provided at the developers cost and will be extended to the site and through the site in sufficient sizes as Public Works deems. Staff has recommended that the applicant be conditioned to multiple items, including working with Kuna Rural Fire District for proper permanent secondary access; streetlights on streets, including the Deer Flat frontage; improve, widen and dedicate public roads with curb, gutter and sidewalk. Staff does find that the preliminary plat does appear to be in concert with Kuna City Code. A design review also accompanies this property and they seek approval for the landscaping, the trails, and the open spaces that are included inside the subdivision. The landscape plan appears to be in substantial compliance with Kuna City Code 5-17, and staff would like to point out that

any changes to the landscape or streetlight plans must receive staff approval prior to these changes being made in construction. At the time of inspections, if staff goes out and finds that conditions are different than the approved plans, changes will be required until the conditions are compliant and will be at the developer's expense. Staff has determined that these applications meet Kuna City Code and the Idaho State Statutes, Kuna Comprehensive Plan and the Future Land Use Map. Our recommendation to the Commission is approval for Case No. 20-01-S and 20-02-DR; I will stand for any questions you might have. **C/Young:** Are there any questions? **C/Gealy:** No questions. **C/Young:** Ok, thank you. Applicant, could you please come forward and state your name and address for the record please. **Jane Suggs:** Thank you Commissioners, I really appreciate you being here and allowing me to do this, I'm not quite used to that as I had another hearing last night *inaudible* showing everyone what we were trying to do so, thank you. My name is Jane Suggs with Gem State Planning, 9840 W. Overland Road, Suite 120, Boise, Idaho, 83709; I am here representing Fossil Creek Subdivision. Let me just start off by saying the proposed subdivision meets all of Kuna Code for the current zone, as Troy talked about, R-5 now R-6 in your code; and we agree with all the conditions of approval. We are doing everything we can to make sure this preliminary plat approved since it already follows the zone for this use and the Comprehensive Plan as well. As Troy presented, this property is already annexed and subdivided even some time ago, that plat did expire; we talked about bringing that plat back in but had realized that plat conditions had changed and the open space requirement has changed since 2006, sorry, 2003. We were also asked to do a Traffic Study because traffic has changed as well; due to all this we have brought in a new subdivision. If you look at the old subdivision you see cul-de-sacs, you see straight streets, we don't do so many cul-de-sacs anymore, so let's look at the landscape plan; you can see we have more connectivity, so no cul-de-sacs, a lot of connectivity, pathways that you can see here. This is a new project but generally the same layout, we will have 272 single family home lots on 66.75 acres. The smallest lots are closer to the park as you typically see, and the larger lots are down along the south boundary because we are adjacent to a rural subdivision in the county, the Secluded Court Subdivision. We are including the 8.2 acres of useable open space, of course that does not include the buffers or the endcaps, the landscape because that is not considered useable open space. If you look you can see a 5-acre park with a playground, a covered shelter and a half basketball court there in the west corner. We also have some additional just open areas, one along the Ramsey Lateral that is 2.5-acres, for open play; of course, sidewalks and pathways connect to these open spaces. We are building our streets to Kuna and ACHD standard and providing the stub streets, these stub streets go southwest, south, east, and connect to potential future development *inaudible*. We do expect this will take probably 5 years to build out, it may be a little longer because of the economy, we can't predict that. Again, we have designed Fossil Creek to meet Kuna Subdivision Code and we agree with the conditions of approval. There is one clarification on condition 13, it says this shall be approved (Condition 13 states, "The applicants proposed preliminary plat (dated 02/11/20) shall be considered a binding site plan or as modified and approved through the public hearing process.), we have just found out from ACHD that they are requesting additional 10 Feet of right-of-way on Deer Flat. Our plan does not show the additional right-of-way but, we have saved ourselves with that plat the 35 Feet of buffer space; that is much more than the required 20 – 25 Feet of buffer, so we have some room there to give ACHD their request. That is the only clarification I see so; this is the plat we are asking you to approve with the addition of the right-of-way ACHD requests. We have not changed anything other than the city construction drawings will show a little bit different (because of the additional right-of-way). We request that you approve our design review for our landscaping and amenities, and with the recommendation of approval to the City Council for our subdivision. Are there any questions? **C/Young:** Could you describe the

fencing types on the perimeters? **JS:** Generally, 6 Foot vinyl fence, not white, more beige in color; we've gone away from the white vinyl fencing. The entire area will be perimetered by the fence, the only way you would might not see the vinyl fence is if we are adjacent to some open spaces like the pathway in the middle going east and west in that northwest corner; you see a little pathway between some lots, we would put some open fencing there. It could be some fencing with lattice on the top or maybe even some wrought iron fencing; we don't like to put that 6 Foot fence that close together because we need something different along the pathway. Along the Ramsey Lateral we would like to keep that open but with the houses backing up to it, will likely have some special open fencing, maybe a 4 Foot fence; it's just enough so that if somebody is walking there you can see them. Generally, we will have the fence around the entire subdivision, including the stub streets; unless those stub streets connect into another subdivision, all stub streets will end in a fence. **C/Young:** Ok, some of my questions are going to be clarifications based on comments in the letter we have here and I just want to also get those on the public record. One of the comments in the letter that we received from John and Clare Marsala, I don't have these in the correct order but, a lot of the concerns that I have noted is the fall from north to south from the end; I know they've expressed concerns with irrigation waters staying on the correct sides of the property line. Could you just address that briefly? **JS:** Yes, we have had some previous discussions with Mr. Marsala about that. We don't have the details worked out about that, certainly we're not *unintelligible* the lay of the land so, we will be putting a pressurized irrigation system, there will be a fence there, and we may cut in a little berm so there's no water coming from the flood irrigation from his acres; we don't want the flood irrigation from the north and of course we don't want our irrigation to get on his property as well. Those are some of the guarantees we can give; I don't know if you can see in the plat, but there are *unintelligible* that we would like to see during construction *unintelligible* can be graded in a way to where there is no problem there. We don't have that yet but there are certain details in construction that can be built further down the line. **C/Young:** I just realized with his name on the letter here that he is listed to testify so, I won't need to go through these items here because I am sure they will be brought up during his testimony; I'll stop you here. I just wanted to make sure that if they were not here that their concerns were heard. Are there any questions? **C/Gealy:** I have no questions at this time. **C/Young:** Ok, thank you. **C/Gealy:** Mr. Chairman, I wonder if we could take some time to read the two letters before, we proceed? Before we proceed with the public hearing? **John Marsala:** (From the crowd) *Unintelligible*. **C/Young:** Is it contained to three minutes? If it's going to be read into the record then.... **C/Gealy:** *Unintelligible*. **C/Young:** I agree that maybe, just before we open up the public hearing, that we can take a moment. **C/Gealy:** Thank you. **C/Young:** We'll take a quick pause here. (Pause while letters were read.) Ok, then, we'll go ahead and open the public testimony at 6:34 PM. The first person that is listed to testify has three minutes to state whatever they'd like, and then the applicant then has a chance to come back and answer your questions, and that's how that works. With that, first I have listed, we'll start with those that are in opposition, to testify. Clare, could you please come up and state your name and address for the record please? **Clare Marsala:** Clare Marsala, 2150 Secluded Court, Kuna, Idaho, 83634. I don't want to insult your intelligence; you guys have a copy and I assume you've read about our concerns here. I do want to say that I am here on behalf of the twelve people that signed this letter. As a long time resident of Kuna, but someone who is ignorant of the political process; I think I speak for some of the others when I say it just feels like every single subdivision that comes along gets approved. Traffic is so bad on Ten Mile and Deer Flat right there; is there any consideration that is put into it? My goodness, we've got enough cars, we've got enough kids packed in the schools, you know, where are the schools going to be built? Corey Barton doesn't have enough money? I feel like our town is turning into Corey

Barton town. With six houses per acre, everything looks the same. Are there no large acreage lots anymore? Are there custom homes? It's just, I don't know. I'm certainly not the only citizen that talks this way, maybe others don't voice it but that is what the community says. When is it going to stop? When are we going to stop this cramming in new subdivisions? I'm assuming that this will naturally get approved as they all do, but I am hoping that....you know, we have no concerns about that stub street; we don't ever want a stub street coming through or people coming through our property because that stub street is right on our property. We don't want kids coming through and taking shortcuts across our property, going to the two schools that are right at the end of our road. I guess I would like to hear you guys speak to the overcrowding on all those roads, all the cars coming out on Deer Flat to the schools and such because I am unfamiliar with the process you guys have with approving these subdivisions. Thank you. **C/Young:** Ok, thank you. Next, I have listed John Marsala. Did you still want to testify? Ok, please step forward and state your name and address for the record please. **John Marsala:** John Marsala, 2150 W. Secluded Court, Kuna, Idaho, 83634. I am speaking on behalf of the issues with the new subdivision and Secluded Creek Estates. I have a list here real quick, I just want to mention these for the record. The property line surveyed is about three feet on the north side of the fence line, we have located those pins by electronic device so that we could ensure that they follow the correct property lines; my neighbor and I, we actually ran a string from one pin to the other, 722 Feet, so we want to make sure that they follow the correct property line. There are three in-ground swimming pools near the property line, they are concerned about the dust and the dirt going into those pools and clogging up those filters; we already have issues with the farming that goes on but we tolerate it because its Ag and we would prefer the fields instead of the houses. We are also concerned about the work starting too early in the morning, we already hear the back up beepers and safety beepers from all the heavy equipment at six o'clock in the morning traveling all the way over to our house, from a subdivision that is being built already. Also, we are very concerned about the changes to the irrigation water box on Ten Mile by Ramsey 577. We understand from our neighbors that they had issues over on Deer Flat where they had destroyed the water box and they could not get their irrigation water to their property; I have 110 trees on my property, 54 seventy foot Poplar trees along the property line that need water during the summer time, I'm really concerned about the irrigation water getting to my trees. Also in regards to the irrigation water, it flows a little bit north and a little bit west then flows to the Hintz's property into a small little collection area; it collects on both sides of the property line, sometimes it's a pretty good-sized pond. We want to be good neighbors to the neighbors that will eventually be behind us, we don't want our water flooding their backyards out so, we were asking if there could be a small 6 inch or 12 inch berm between the property lines built to control that water while irrigating. The last item is the stub street, Jane and I were talking and my neighbors are very, very concerned by the stub street. There's a precedence set back up *unintelligible* and they deleted the stub street; we are asking that the stub street be deleted and if not, we would like it moved down farther because right now where it's located, if it eventually came in, it would cut my property in half. We would like a lot of concern to the stub street. Also, already right now, we have people crossing the pastures to get to the pond that come across at random and we have to deal with that right now. So, those are the things we are concerned about; the kids jumping the fence and coming through the stub street, crossing our property, the Hintz's property, and the Jacobson's property. **C/Young:** Ok, thank you. Is there anybody on Zoom that is signed up to testify? **Jessica Reid:** No there is not. **C/Young:** Then, could you please come back up Ms. Suggs. **JS:** Jane Suggs, Gem State Planning, representing Fossil Creek Subdivision. As Mr. Marsala has said, we have talked, we talked previously and he was actually nice enough after our neighborhood meeting to provide me with a list of questions and I recently responded; I thought I had

responded earlier in an email but we have kind of responded to some of those questions with this communication between us. Let me tell you first, going through the letter, there were some concerns about traffic. We have done a traffic study and have found out through ACHD that both Deer Flat and Ten Mile have capacity. Now you might know from our traffic study with ACHD that eventually, there will be a single lane roundabout there; it's not funded and it's not going to come anytime soon, it's not in their work plan, the five year plan or the ten year plan but, that is something that they have an idea of what will be built there. In talking about the stub streets, (requests the map be shown on screen) I think I could move that over maybe two lots, I can't make it come down the north-south street, but I can move it over about two lots; I can't get it too close because we have to have an offset but that might move it enough so that it's not right in the middle of Mr. Marsala's. It can be made a condition that we move the stub street one, maybe two, lots over; they can slide over a little bit, I'll have to convince my engineer that's a good thing. We do break up the streets with intersections, we can't be too close, but we try to break up those long stretches of street with that.

Unintelligible where the property line is, we will follow that; sometimes of course, things get moved around and a fence isn't always on the property line. The property lines are actually three feet north of the fence but we will follow the pins of course. Yes, there are in-ground pools; when you're living next to somebody who's basically plowing up 66 acres creating dust, but we don't expect much worse than that. During construction we have water trucks and things that keep the dust down, then of course when the property gets developed, there will be noise just like everybody else has. I don't expect the dust to be even as bad as they experience now when there's someone out there in springtime doing the plowing. We talked about the fencing already, the vinyl fence is pretty typical; anything higher than that I don't have to do, six foot is standard, it's what the city asks us to do. We're going to try and make sure there aren't any step-holds for the kids to use to jump over, I haven't been able to jump over a vinyl fence ever. I need to refer to, as far as construction, Kuna's Ordinance. The Ordinance does say when construction can start and when it has to stop; something like 7 AM to 7 PM, we would certainly follow that noise Ordinance. Certainly, on days like in the summer, we would like to start earlier but we will follow the requirements of the City Code.

C/Young: Ok. Let's get back to the stub street and the fencing question and maybe address those more; I assume it's the intent to run that vinyl fence across the future stub street location so there's a continuous fence across that so there's not a gap in the fence or an opening, right? **JS:** There's not a gap. (*Comments from audience.*) I think the issue is, if I can share, the concern is if there is a stub street right there, that people are likely to spend some time there, to back their cars up, someone had said something about trash being thrown over the fence; I would hate to think that would happen even in someone's backyard, sometimes people cut the grass and dump it. I hear that sometimes from Ag(riculture) users that people come in with subdivisions and just think that that's a wasteland, so, CC and R's will certainly address that and address that. There isn't anyway you are required to improve the street like a regular street, all the way to the property line boundary and then put the fence in. We're just going to have to depend on the neighbors to be the eyes there and make sure kids aren't jumping over the fence; I mean, they could do that in somebody's backyard too but we are hoping that people don't do that. I think that has covered some of the things; the fact that there's dust in an area that nobody owns, that is open to the fence...I really don't have a way to control that, I think after awhile between the neighbors and the CC and R's, the neighborhood association would handle that. Let me finish up, I don't want to take all night here. I don't have the authority to specify one-story houses there, this is typically *unintelligible* these 10,000 Square Foot lots which is like a quarter of an acre, they're wide and they are typically two-story houses or if they're one, they have bonus rooms and upper stories and that type of thing. I don't have the authority to agree with that, it can be

conditioned but, I'm hoping with those lots that the builder, it's Corey Barton, with those lots will do some different styles on those wider lots. I just don't have the authority to suggest that. The Poplar trees, they're on Mr. Marsala's property; he does have a lot of trees, we walked through that whole area back in February. If they're on his property we won't be doing anything with them, if they are on the subject property (the subdivision property), they may have to be cut down but, I think with the trees because of where the fence is and that the property line is north of the fence, I don't think we would be doing anything to destroy his trees. And as you know, you've heard this before, state law does require us to maintain irrigation throughout the irrigation season. Our engineers and our contractors will make sure that nobody ends up without their water, in fact, you'll find out that in the next couple of weeks we will start working on our plans to submit to the irrigation companies for them to review so we can start our work when there is no irrigation water coming out. We talked a little bit about the possible berm, again, we don't have the details exactly of what that is going to look like on that south property boundary; of course, we don't want flood waters coming into the neighborhood and we don't want our water to flow into theirs. There is a requirement that we keep our runoff on our property. I also looked at the other letter but I don't really have any responses to the other letter that was sent; it's mostly about just *unintelligible* in general and it wasn't very specific to this project. Did I answer the questions? I know that you didn't have much time to review that. **C/Gealy:** Does the stub street have to be there? **JS:** It is a requirement of ACHD and the City of Kuna that all properties adjacent to it has to have some connectivity. We could go on with stories about how we don't do these things and then someone comes into Secluded, and it's very limited on how to get *unintelligible* protection. Let's say you don't have those streets, and I'm not saying Mr. Marsala is going to do this, someone came into these properties and wanted to subdivide and annex; they wouldn't be able to subdivide and build unless they continued the street for second access. Those are just the things from ACHD, they've looked at this plan and is says in the staff report we have to have those stubs in the infrastructure to the south. **C/Gealy:** You do have some flexibility? **JS:** I can't bring it straight down, they're already dinging us with some traffic calming so, to extend our straight streets we can't but I do have flexibility with maybe moving it over to the east; I think that's what Mr. Marsala wants to get it out of the middle of his property and to the end of his property. I could move it to.... I can commit to one but maybe two (lots). **C/Young:** Ok. Are there any others? **C/Gealy:** What about the second access? **JS:** Our first phase will be the western access from Deer Flat and we also have secondary access coming in off the subdivision being constructed now, I think it's called Pawnee. This street actually connects to a subdivision here that has access, so there's two. There's two there and then in the next phase we'll be taking the eastern access off of Deer Flat, then we'd move down to the southwest corner and then the southeast corner. That goes with phasing, there are four big phases that will open that up a little bit more; so, there's north; northwest; northeast; southwest; southeast. **C/Young:** Ok. Anymore questions? Thank you. **JS:** I just want to reiterate; this is already zoned for this; we are just doing a subdivision plat and meeting all of the codes. Thank you very much. **C/Young:** Thank you. **C/Gealy:** Mr. Chairman, could we please take a moment to read the second letter? I didn't get a chance. **C/Young:** Yes. I'll go ahead and close the public testimony then at 6:54 PM, then we'll just take a brief pause to do that. (Commissioners read the second letter that was submitted by Mr. and Mrs. Weuhler). And that brings up our discussion on the application; I don't know who would like to go first. **C/Gealy:** I actually have one more question for staff, if that's alright, it's in respect to the Comprehensive Trails Plan. It looks like part of the western edge bumps up to where the creek is, are there plans for some point for trail along that side of the creek? **TB:** That's a good question, thank you Commissioner Gealy; or the record, Troy Behunin. Yes, there is an intended trail on the plan along Indian Creek and this

property where it is adjacent to the creek, if you look in the southwest corner where there's green strip, that is the only part of the property that is adjacent to the creek. In between the two stub streets on the west side of the project, those are other properties, and that's as close as they get to the creek. **C/Gealy:** Thank you. **C/Young:** I guess for me with the topics, it is consistent with the city's Comprehensive Plan, it's already zoned as medium density and marked in the Comprehensive Plan that was approved last year. The traffic impact study was also reviewed by ACHD and they said the impact was acceptable I guess, for lack of a better word, as far as the increase in traffic at those intersections indicated in the traffic impact study. **C/Laraway:** I just want to add that ACHD, to me, puts us in a bad position. They report the existing traffic condition and the existing configuration of streets in the study areas, and they say roadways meets ACHD's minimum standard. *Unintelligible* it kind of puts us in a bad place because they're saying this is going to be minimum impact for these roads and it just doesn't make sense why they say minimum impact; it either meets a standard or it doesn't. **C/Young:** I think when they look at those studies they say, here is the threshold and it meets that threshold as this is.... hold on, I want to say this correctly.... in essence they are saying, based on the traffic impact study that the increase meets the minimum; it doesn't mean it's going to be an open freeway with fourteen lanes where everybody can go but there is a minimum requirement and it meets those whereas, at a minimum, you have to be able to accept this much traffic, at the minimum you have to be able to do X, Y and Z. They're saying, at a minimum, it meets those thresholds. **C/Laraway:** That's what I'm talking about, there's really no improvements for this until 2035, they're talking about most likely 2031 for improvements to Ten Mile. It's not the developers problem, they're following the guidelines given to them and getting approval from ACHD but I think that puts Kuna in a bad situation to where the citizens are going, "Ok, the traffics getting out of hand", and we all agree, but ACHD says we're good to go. There are projects that are so far down the road that they aren't supporting the subdivisions that they are approving; that's just my personal concern. Again, I know it's not the developers' issue but when you have citizens talking about the traffic, it is going to get worse. I can't tell Mr. Smith that he can't sell his 40-acres of agriculture to anybody when he has the right to sell it to anybody he wants, that's his right if he chooses to, and I understand that, but the traffic starts to get more and more where they are getting pushed down these major arteries of Hubbard, Ten Mile, and Deer Flat. The roads aren't made for it, not now, not today. I know the development probably isn't going to be going on for five years but that's why we need to be thinking five years ahead with what this is going to look like, and we have ACHD that we have to look to as our expert; it kind of puts us in a hard spot. **C/Young:** Yeah. I know there has been outreach from the Mayor to ACHD and Ada County and other local jurisdictions, in trying to come up with an overall county-wide, Treasure Valley-wide plan to address that; baby steps, I don't know. **C/Laraway:** That's just my two cents. **C/Young:** I don't disagree. **C/Laraway:** It looks like a nice subdivision, you know, *unintelligible*. The two-story buildings along the fence, that's something that again, I don't know if we can prevent that or if we should; I know it's a request from the local papers. Things to ponder. **C/Young:** Yeah. My point of view, I don't know that I feel comfortable telling somebody you can't build this here because I'm here first. I understand the privacy and that they're included in that but again, I think your going back to some private property rights and that I'm not comfortable mandating one or the other myself, or requesting a mandate. Again, addressing some of their concerns on the stub street, if we can get that shifted a little bit; again, those stub streets are required by us and ACHD, because yes, there's nothing there today and there will be a fence across the end of that, but twenty years from now, in not just this subdivision but in other subdivision; what's going to happen next and there's planning that goes along. **C/Laraway:** I feel your pain, I live on that spot in my subdivision where it's a dead end and there's a sign all over it that says end of existing road.

C/Young: But figuring out as things are going to grow, as they inevitably will, how we address that. As far as noise and new neighbors and the potential for items appearing on the wrong side of the fence, that is a City Code issue and if something like that happens, it's something that our Code Enforcement people address and put a stop to. **C/Laraway:** And there is a noise Ordinance, if that happens you can always call the police. **C/Young:** As far as dust mitigation, this is also addressed and there are requirements for them to wet down as much as possible throughout construction and maintain low levels of dust. I'll concede there is no way possible to stop hearing a backup beeper during construction. I feel your pain, I know, where I work, they are putting in an eight-story building across the street; I've heard pile driving for eight months, it's just part of construction. I'm not boo-hooing it in any way but it is temporary. I'm just kind of moving my way through the list of concerns, but I think Mrs. Suggs did a pretty good job of addressing those and I was trying to highlight some of that with the traffic impact study that has been looked at and approved by ACHD. I know the fire department, the schools, have also all looked at this and have had a chance to comment on the impacts of this subdivision. **C/Laraway:** I would love to be able to tell the citizens as far as the traffic, go to the Mayor and explain that you like to have a traffic enforcement added to the police department; there are other ways it can be prevented, just not here. **C/Young:** Again, to this particular application, for me it looks good; I like the open space, the parks, connectivity to those parks through different parts of the subdivision. As this one connects to the subdivision being built just to the northwest, staff has indicated there's connectivity to some of those future trails as well. For me, I think if we can get that stub street addressed and shifted to help, I don't have too much concern for this. **C/Gealy:** I also don't have any concerns. I did want to say that the City of Kuna does have a Comprehensive Plan that was redone and just approved within the past twelve months, to try and address some of the concerns in regards to growth. I think we all recognize the increased pressure for housing in the Treasure Valley and our City Code has been adjusted to reflect the wants, needs and desires of our citizens in the Comprehensive Plan. Through this plan process and through this hearing process, city staff and we, try to make sure that applications adhere to City Code and bring the best quality we can to Kuna. I've said it before and I'll say it again, I have two primary concerns when it comes to subdivisions: amenities for the people that live there, is it actually a livable community, and transitions to the existing and surrounding uses. I think in this case, and I want to say I appreciate, the efforts that the applicant has taken to provide the amenities for the people that will be living there and also to address the concerns of the neighbors to the south in providing larger lots in that location, for a better transition. In respect to the inconveniences of construction, I have the sense that the applicant is willing to work with the neighbors and if you don't have satisfaction, I encourage you to come staff with the code violation. With respect to irrigation, my understanding is that it is the responsibility of each landowner to keep their irrigation on their own property; you can work together with the neighbors to do that or you can do it independently. Again, I appreciate your willingness to work with the stub street. I do think.... in some neighborhoods I know you come to a stub street and there's just like a little post, like a field goal, that says street to be continued but from what I understand, this is going to be a six foot vinyl fence; that is going to be a little bit more of a deterrent to cross traffic. I have no concerns with this particular subdivision; it's well thought out, you have addressed concerns of the neighbor and the concerns of the city. **C/Young:** Any other thoughts? Ok, I would stand for a motion then.

Commissioner Cathy Gealy moved to approve 20-01-S (Preliminary Plat) for Fossil Creek Subdivision with the conditions as outlined in the staff report with the modification of condition No. 13 to recognize the right-of-way request from ACHD. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

Commissioner Cathy Gealy moved to approve 20-02-DR (Design Review) for Fossil Creek Subdivision with the conditions as outlined in the staff report. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

4. BUSINESS ITEMS:

5. ADJOURNMENT:

C/Young: Seeing nothing else on the agenda, is there anything that staff would wish to report at this time? Ok.

Commissioner Cathy Gealy moved to approve adjourn. Seconded by Commissioner John Laraway. Approved by the following roll call vote:

Voting Aye: Chairman Lee Young, Commissioner Cathy Gealy and Commissioner John Laraway.

Voting No: None

Absent: 2

Motion carried: 3-0-2

ATTEST:

Lee Young, Chairman
Kuna Planning and Zoning Commission

Wendy I. Howell, Planning and Zoning Director
Kuna Planning and Zoning Department



City of Kuna

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P&Z Findings of Fact and Conclusions of Law

To: Planning and Zoning Commission

Case Number(s): 20-01-CPF (Combo PP & FP)
Ensign Sub. No. 1

Location: South West Corner (SWC) of Meridian & Deer Flat Roads
Kuna, Idaho 83634

Planner: Troy Behunin, Planner III

Hearing Date: June 9, 2020
Tabled To: July 14, 2020
Findings: *July 28, 2020*

Owner: **Emmett Partners, LLC**
579 S. Moss Hill Dr.
Bountiful, UT 84010
435.881.9040
brett@ensigndevelopmentgroup.com

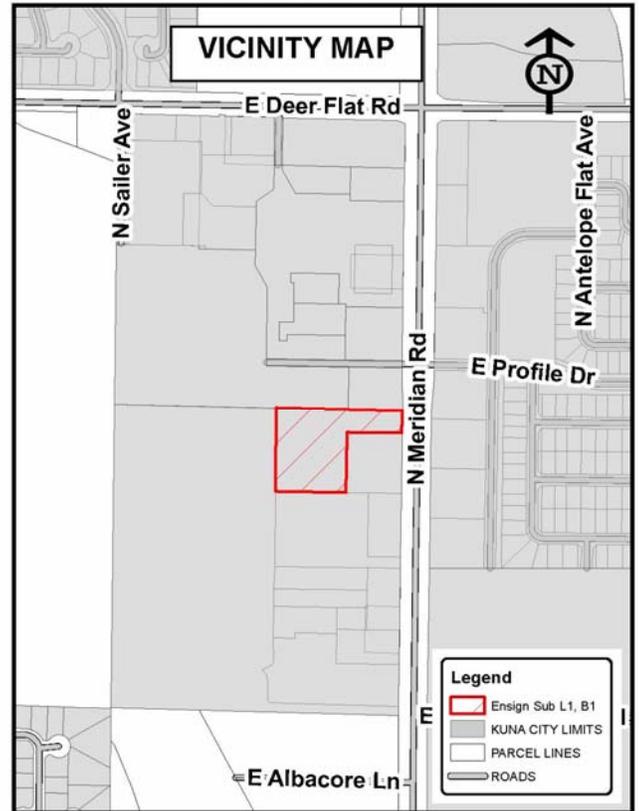


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- D. General Project Facts
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- H. Kuna City Code Analysis
- I. Decision by the Commission

A. Course of Proceedings

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that annexation and combination plat applications are designated as *public hearings*, with the Planning and Zoning Commission as the recommending body, and 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 June 29, 2020 (four persons attended)
- ii. Agencies March 20, 2020
- iii. 300' Property Owners May 29, 2020
- iv. Kuna, Melba Newspaper May 20, 2020
- v. Site Posted June 29, 2020

B. Applicant Request:

1. Applicant, Emmett Partners, LLC requests Preliminary Plat & Final Plat Combination Plat (Short Plat) request to Re-subdivide one lot within Ensign Subdivision No. 1. Applicant requests approval to subdivide Lot 1, Block

1 of Ensign Subdivision No. 1, into two pieces in this *Commercial* Subdivision within Kuna, City, ID 83634, Section 24, Township 2 North, Range 1 West; (APN: R2404320010).

C. Site History: The approx. 3.095 acre subject site is within a Commercial Subdivision known as the Ensign Subdivision and is known legally as Lot 1, Block 1 within the same which was created in 2017.

D. General Projects Facts:

1. **Comprehensive Plan Designation:** The City of Kuna’s Future Land Use Map identifies the subject site as a Commercial use. 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 Future Land Use Map (FLUM) is intended to serve as a *guide* for the decision-making body for the City. The FLUM indicates land use designations generally speaking, it is not the actual zone. The Future Land Use Map identifies the approx. 3.0975-acre site as Commercial.
3. **Kuna Recreation and Pathways Master Plan Map:**
The Kuna Recreation and Master Pathways Plan map does not identify a future trail in the general area.
4. **Surrounding Existing Land Uses and Zoning Designations:**

North	C-1	Commercial – Kuna City
South	C-1	Commercial – Kuna City
East	C-1	Commercial – Kuna City
West	R-6	Med. Den. Residential – Kuna City

5. **Parcel Sizes, Current Zoning, Parcel Numbers:**
 - Approx. 3.095 acres total
 - C-1 (Neighborhood Commercial) – Kuna City
 - Parcel # R2404320010
6. **Services:**
 - Sanitary Sewer– City of Kuna (*In the future*)
 - Potable Water – City of Kuna (*In the future*)
 - Irrigation District – Boise-Kuna Irrigation District (*In the future*)
 - Pressurized Irrigation – City of Kuna (KMID) (*In the future*)
 - 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 is no structure on site. This sites general slope is between 1.0 - 1.4%. The sites vegetation is consistent with a empty lot.
8. **Transportation / Connectivity:** The applicant proposes access from the two existing private driveways built for the site, and by extending the asphalt for their sites needs.
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.
10. **Agency Responses:** The following responding agency comments are included as exhibits with this case file

- City Engineer..... Exhibit B-1
- Ada County Highway District (ACHD)..... Exhibit B-2
- Central District Health Department (CDHD) Exhibit B-3
- Department of Environmental Quality (DEQ)..... Exhibit B-4
- Idaho Transportation Department (ITD)..... Exhibit B-5
- Kuna Rural Fire District (KRFD) Exhibit B-6

E. Staff Analysis:

Applicant requests approval to further subdivide the subject property known as Lot 1, Block 1 within existing Ensign No. 1 Subdivision creating a two-lot subdivision. Applicant intends to develop these two lots into commercial pads to be used for commercial purposes.

All required utilities were installed at time of site development for Ensign Sub No. 1. Applicant proposes access to the new lots by connecting to and extending the existing pavement from the private driveway to each of the proposed lots. Staff recommends that the applicant be conditioned to join the POA (Property Owners Association) and participate in the permanent and continuous maintenance and care of the private lane. With that assurance provided, then staff has no concerns with the private driveway. Staff recommends the applicant be conditioned to provide connection to adjacent lots and parcels for future internal circulation for all types of traffic without limit.

Staff has determined this application complies with Title 5 of the Kuna City Code; Idaho Statute §50-222; and the Kuna Comprehensive Plan; and forwards Case No. 20-01-CPF to the Commission with the recommended conditions of approval listed in section “I” of this report.

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. Comprehensive Plan Analysis:

Kuna Planning and Zoning Commission have accepted the Comprehensive Plan components, and have determined the proposed Combo plat request for the site *is* consistent with the following Comprehensive Plan components as described below:

Goal Area 1: Kuna will be economically diverse and vibrant.

Goal 1 A: Ensure Land use in Kuna will support economic development.

- 1 B: Support development of a skilled, talented and trained workforce.
- 1 C: Attract and encourage new and existing businesses.
- 1 D: Address and plan for economic expansion of the City and region.

Objectives:

- 1.A.2. Create commercial nodes and corridors that support development of economic opportunities that do not compete with downtown revitalization efforts.

Policies:

- 1A.2.d: Designate a sufficient quantity of land on the Future Land Use Map for commercial use.

Plan Implementation: (Pg. 18)

2. Develop true mixed-use areas and new commercial areas and employment centers.

Goal Area 3: Kuna’s land uses will support a desirable, distinctive and well-designed community.

Goal 3 C: Encourage development of commercial areas with good connectivity and character.

Goal Area 4: Kuna will be a connected community through strong transportation and infrastructure systems.

- Goal 4.B.2: Maintain and expand sidewalks and pedestrian facilities within the community.

Policies:

4.B.2.C. Promote the installation of off-system pedestrian pathways to create (neighborhood) connections and reduce the length of non-motorized transportation routes.

Objectives:

4.C.2.c: Promote the installation of off-system bicycle pathways to create neighborhood connections and reduce non-motorized transportation route lengths.

- Goal 4.D: Promote a connected street network that incorporates mid-mile collectors and crossing for improved (neighborhood) connectivity.

INTENT:

1. Reducing access to Meridian Road/Highway 69;
2. Improving connectivity, and
3. Providing viable access to the growing commercial/mixed-use corridor.

H. Kuna City Code Analysis:

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

Comment: *The proposed applications adhere to the applicable requirements of Title 5 and Title 6 of KCC.*

2. The Planning and Zoning Commission feels the site is physically suitable for the proposed development.

Comment: *The 3.095-acre approximate (approx.) site appears to be suitable for the proposed development.*

3. The combo plat 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.*

4. This application is 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 combo plat request considers the location of the property and adjacent uses. The adjacent uses are medium density residential and commercial (Kuna City) and rural residential (Ada County).*

6. The existing and proposed street and utility services in proximity to the site *are* suitable or adequate for a commercial development.

Comment: *Correspondence from ACHD and Kuna Public Works confirms that the streets and utility services are suitable and adequate for this project, however, per Kuna City Engineer, a commensurate impact of City services will result with this development.*

I. Recommendation by the Commission:

Based on 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 public hearing by the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby recommends approval to City Council for Case No's 20-01-CPFS, a Combo Preliminary and Final Plat request by Emmett Partners, LLC, with the following conditions of approval *at time of development*:

20-01-CPF (Combo Preliminary & Final Plat) During the public hearing by the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby recommended approval to City Council for Case No. 20-02-CPF, a Combo Preliminary & Final Plat request by Emmett Partners, LLC,, with the following conditions of approval:

- *Applicant shall follow the conditions outlined in the staff report,*
- *Applicant shall join the property owner's association.*

And;

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 all sewer connections and grading plans.
 - b. The City Engineer shall approve drainage and grading plans.
 - c. Central District Health Department requires the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".
 - d. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan by the City engineer.
 - e. 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.
 - f. The *Boise Project Board of Control* shall approval all modifications to the existing irrigation system.
 - g. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
 - h. All public rights-of-way shall be dedicated and constructed to standards of the City and 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 (KMIS).

5. Connection to City Services (Sewer, Water, Pressurized Irrigation) is required. The applicant shall conform all corresponding Master Plans.
6. Applicant shall work with staff in order to provide locations of street lights as required by Kuna City Code.
7. Street lights for the site shall be LED lighting and must comply with Kuna City Code and established Dark Skies practices.
8. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted).
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 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.
10. Landscaping cannot be placed within ten (10) feet of any and all meter pits, pressurized irrigation valves, and/or ACHD underground facilities and must honor all vision triangles.
11. Any revisions of the plat are subject to administrative determination to rule if the revision is substantial.
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 is conditioned to provide connection to adjacent lots and parcels for future internal circulation for all types of traffic without limit.
14. Developer/owner/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.



City of Kuna
Planning and Zoning Commission
Findings of Fact and Conclusions of Law

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
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Based upon the record contained in Case No. 20-01-CPF, including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Planning and Zoning Commission hereby recommends *approval* of the Findings of Fact and Conclusions of Law, and conditions of approval for Case No. 20-01-CPF a request for a combo/short plat approval by Emmett Partners, LLC:

1. *The Kuna Planning and Zoning Commission approves 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 applications on July 14, 2020, 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. 20-01-CPF, this proposal generally complies with the Comprehensive Plan and City Code.*

Comment: *The Comp Plan has listed numerous goals for promoting and supporting a diverse and sustainable economy that will allow more Kuna residents to work in their community and encouraging a balance of land uses to ensure that Kuna remains desirable, stable and a self-sufficient community.*

3. *Based on the evidence contained in Case No. 20-01-CPF, this proposal does generally comply with the Kuna City Code.*

Comment: *The applicant has submitted a complete application, and following staff review the application appears to be in general compliance with the design requirements, public improvement requirements, objectives and considerations listed in Kuna City Code Title 5 and Title 6.*

4. *The Kuna Planning and Zoning Commission has the authority to recommend approval to Council for Case No. 20-01-CPF.*

Comment: *On July 14, 2020, the Commission voted to recommend approval of Case No. 20-01-CPF.*

5. *The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.*

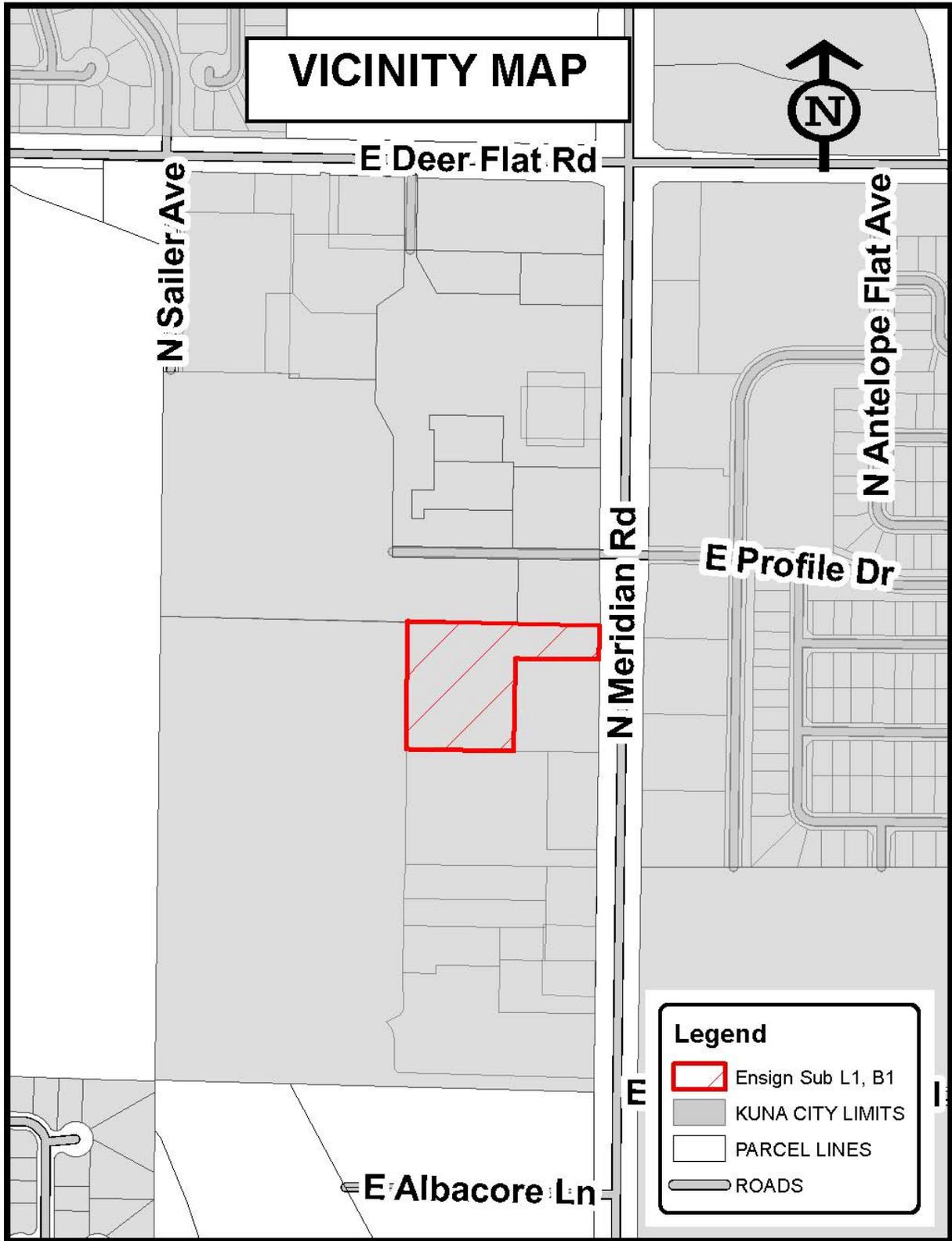
Comment: *Neighborhood Notices were mailed out to residents within 300-FT of the proposed project site on May 29, 2020, and a legal notice was published in the Kuna Melba Newspaper on May 20, 2020. The applicant placed a sign on the property on June 20, 2020.*

DATED: this 23rd day of June, 2020.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:

Troy Behunin, Planner III





City of Kuna

Planning and Zoning Commission

Staff Report

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To: Planning and Zoning Commission

Case Numbers: 19-11-AN (Annexation), 19-08-S (Preliminary Plat) & 19-29-DR (Design Review) **Ashton Estates East Subdivision**

Site Location: 2320 E. Meadow View Road, Kuna, ID 83634

Planner: Doug Hanson, Planner I

Hearing Date: July 28, 2020

Owner: Kuna East LLC
 P.O. Box 1939
 Eagle, ID 83616

Applicant: KM Engineering
 9233 West State Street
 Boise, ID 83714
 208.639.6939
kgrabo@kmengllp.com

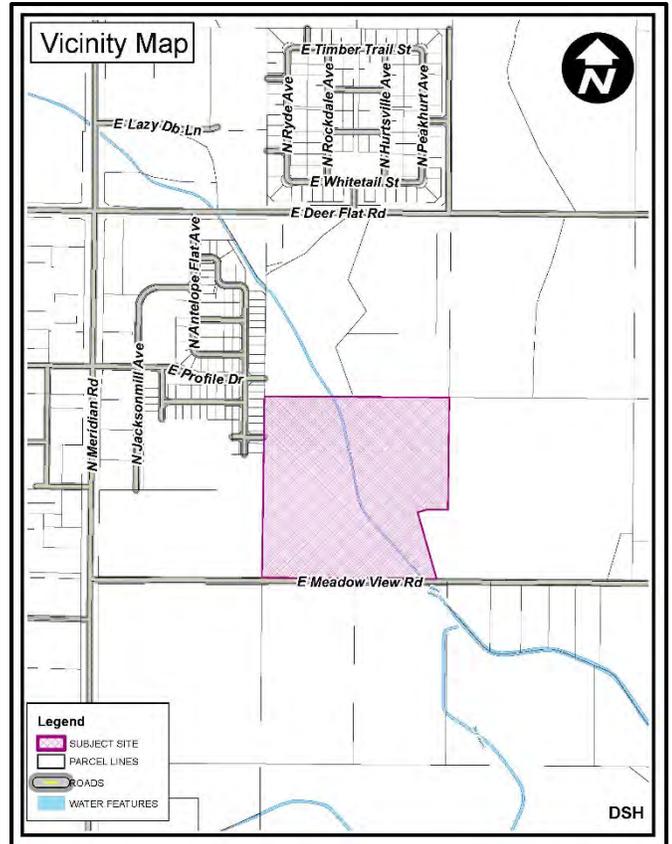


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| C. Site History | H. Proposed Kuna City Code Analysis |
| D. General Project Facts | I. Commission’s Recommendation |
| E. Staff Analysis | |

A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that design reviews are designated as *public meetings*, with the Planning and Zoning Commission (acting as the Design Review Board) as the decision-making body; and 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 | September 11, 2019 (5 people attended) |
| ii. Agency Comment Request | December 5, 2019 |
| iii. 400’ Property Owners Notice | July 8, 2020 |
| iv. Kuna Melba Newspaper | July 8, 2020 |
| v. Site Posted | July 9, 2020 |

B. Applicant’s Request:

Kuna East, LLC and KM Engineering requests to annex one 38.47-acre parcel into Kuna City Limits with an R-8 (Medium Density Residential) zoning district classification and to subdivide the 38.47 acres into 200 total lots (175 buildable lots, 25 common lots). The subject site is located at 2320 East Meadow View Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN: S1419241000).

C. Site History:

The parcel is currently zoned Rural Residential (RR) within unincorporated Ada County. Historically this parcel has served as farmland.

D. General Projects Facts:

1. **Comprehensive Plan Map:** The Future Land Use Map (FLUM) is intended to serve as a *guide* for the decision-making body for the City. The FLUM indicates land use designations generally speaking, it is not the actual zone. The Future Land Use Map identifies the 38.47-acre site as High Density Residential.

2. **Recreation and Pathways Map:** The Recreation and Pathways Master Plan Map does indicate a future pathway/trail through the subject site.

3. **Surrounding Land Uses:**

North	RR	Rural Residential – Ada County
South	A	Agriculture – Kuna City
East	RR	Rural Residential – Ada County
West	A R-6	Agriculture – Kuna City Medium Density Residential – Kuna City

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

Property Owner	Parcel Size	Current Zone:	Parcel Numbers
Kuna East, LLC	38.47 acres	RR (Rural Residential)	S1419241000

5. **Services:**

- Sanitary Sewer– City of Kuna
- Potable Water – City of Kuna
- Pressurized Irrigation – City of Kuna (KMIS)
- Fire Protection – City of Kuna (KRFD)
- Police Protection – Kuna Police (Ada County Sheriff’s office)
- Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**

The proposed project site currently contains one single-family home and two outbuildings. Vegetation on-site is consistent with that of farmland. The sites have an estimated average slope of 1% to 1.4%. Bedrock depth is estimated to be 20 to 40 inches according to the USDA Soil Survey for Ada County.

7. **Transportation / Connectivity:**

The applicant proposes a connection to the existing public street E Porter Street within Ashton Estates No. 3 Subdivision. The projects main ingress/egress will be S Stone Falls Avenue.

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:

- Central District Health Department Exhibit B-1
- Boise Project Board of Control Exhibit B-2
- Department of Environmental Quality Exhibit B-3
- Nampa & Meridian Irrigation District Exhibit B-4
- Idaho Transportation Department Exhibit B-5
- Ada County Highway District Exhibit B-6
- Kuna City Engineer Exhibit B-7
- Parks and Recreation Exhibit B-8
- COMPASS Exhibit B-9
- Ada County Development Services Exhibit B-10

E. Staff Analysis:

The applicant proposes to annex one parcel consisting of approximately 38.47 acres into Kuna City Limits with an R-8 (High Density Residential) zoning district classification and to subdivide the 38.47 acres into 200 total lots (175 buildable lots and 25 common lots). On August 8, 2019, Staff held a pre-application meeting with the applicant, Public Works, Kuna School District, and Kuna Rural Fire District to discuss the project. The applicant held a neighborhood meeting with residents within 400 feet of the subject site on September 11, 2019. There were five residents who attended the meeting. A recap of the neighborhood meeting was provided as a part of the application.

The project proposes to take its main access from S Stone Falls Avenue. Additionally, the applicant proposes connections into the existing stub street E Porter Street. The property’s southern border aligns with the proposed mid-mile collector, Meadow View Road. Staff would recommend that the applicant construct Meadow View Road as half of a 36 foot street section with vertical curb, gutter, 8-ft wide detached sidewalk, plus 12 feet of additional pavement widening, 3 foot wide shoulder and borrow ditch abutting the site. The property’s eastern border aligns with the proposed minor collector Stroebel Road. Staff recommends that Stroebel Road be constructed as half of a 36 foot street section with vertical curb, gutter, 8 foot wide detached sidewalk, plus 12 feet of additional pavement widening, 3 foot wide shoulder and borrow ditch abutting the site. ACHD has recommended that that the applicant terminate Barley Avenue at the Barley Ave/Cave Falls Street intersection and construct a new stub street to the east between Barley Avenue and Stout Way to reduce the length of the Barley Avenue roadway, staff supports this recommendation.

The installation of streetlights are a required public improvement (Kuna City Code 6-4-2). The applicant has not identified streetlight locations on the preliminary plat. Applicant will be required to work with staff in order to comply with Kuna City code and install street lights with a maximum spacing of 250 feet along the site’s frontage. The locations of street lights will be approved at the time of construction document review. Staff would note that these street lights must be designed and installed according to “Dark skies” standards and Kuna City Code.

Ashton Estates East sewage is anticipated to flow to the Danskin Lift Station. At this time, lift station capacity is over-committed. Staff would note that if the Commission recommends approval of this project, that the applicant be required to work with the Kuna City Engineer to provide a solution regarding the creation of additional capacity. This condition has been provided as condition number 6 in section “I” of this report.

Kuna's Comprehensive Plan (Comp Plan), encourages a variety of housing types for all income levels numerous times throughout the document. Additionally, the City attempts to balance all housing types within the City. Pertinent sections of the Comprehensive Plan that address housing types are included below, in Section "G" (Comprehensive Plan Analysis) of this report.

A design review application for common area landscaping and open space was included as a part of the overall application. The applicant has proposed approximately 15.7% useable open space, staff finds the proposed open space to be in substantial conformance with Kuna City Code 5-17-12. Staff finds the proposed landscaping and buffers to be in compliance with Kuna City Code. Staff notes that if this project is approved, at the time of civil plan development, landscaping cannot be placed within ten (10) feet of any and all meter pits, pressurized irrigation valves, and ACHD underground facilities.

The applicant has not proposed a subdivision sign, which will require a separate sign permit application. The proposed sign(s) shall be submitted in conformance with Kuna City Code 5-10.

Staff has determined the preliminary plat and design review generally complies with the goals and policies for Kuna City, Title 5 and Title 6 of Kuna City Code; Idaho Statute § 67-6511; and Kuna Comprehensive Plan. Staff recommends that if the Planning and Zoning Commission recommends approval of case nos. 19-11-AN (Annexation) and 19-08-S (Preliminary Plat) and approves case no. 19-29-DR (Design Review), the applicant be subject to the conditions of approval listed in section "I" of this report, as well as any additional conditions requested by the Planning and Zoning Commission.

F. Applicable Standards:

1. City of Kuna Zoning Ordinance Title 5.
2. City of Kuna Subdivision Ordinance Title 6.
3. City of Kuna Comprehensive Plan.
4. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

G. Proposed Comprehensive Plan Analysis:

Kuna Planning and Zoning Commission may (accept or reject) the Comprehensive Plan components, and shall determine if the proposed annexation and preliminary plat requests for the site (*are/are not*) consistent with the following Comprehensive Plan components as described below:

Goal Area 3: Kuna's land uses will support a desirable, distinctive and well-designed community.

- Goal 3.D: Encourage development of housing options and strong neighborhoods.
 - Objective 3.D.1: Encourage development of housing options for all citizens.
 - Policy 3.D.1.a: Encourage preservation and development of housing that meets demand for household sizes, lifestyles and settings.
- Goal 3.G: Respect and protect private property rights.
 - Objective 3.G.1: Ensure land use policies, restrictions, and fees do not violate private property rights.
 - Policy 3.G.1.b: Ensure City land use actions, decisions and regulations will not cause an unconstitutional regulatory taking of private property; and do not effectively eliminate all economic value of the subject property.
 - Policy 3.G.1.c: Ensure 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.

Goal Area 4: Kuna will be a connected community through strong transportation and infrastructure systems.

- Goal 4.D: Promote a connected street network that incorporates mid-mile collectors and crossing for improved neighborhood connectivity.
 - Objective 4.D.2: Ensure the continued expansion/development of mid-mile collector system throughout the community.

- Policy 4.D.2.a: Extend and expand mid-mile roads as growth occurs.
- Policy 4.D.1.b: Preserve adequate right-of-way along all mid-mile roads or other approved alternative locations to align roads.

H. Proposed Kuna City Code Analysis:

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

Comment: The proposed applications (adhere/do not adhere) to the applicable requirements of Title 5 and Title 6 of KCC.

2. The Planning and Zoning Commission feels the site (*is/is not*) physically suitable for the proposed development.

Comment: The 38.47-acre (approximate) site does appear to be suitable for the proposed development.

3. The preliminary plat 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.

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 agriculture (Kuna City), medium density residential (Kuna City) and rural residential (Ada County).

6. The existing and proposed street and utility services in proximity to the site are suitable or adequate for a commercial development.

Comment: Correspondence from ACHD confirms that the streets and utility services are suitable and adequate for this project. However, per Kuna City Engineer comments (exhibit B-7) and correspondence from Public Works, a commensurate impact of City services will result with this development. Danskin Lift Station capacity is over-committed and may be unable to support this project at this time.

I. Commission's Recommendation:

Note: These motions are for the approval, conditional approval or denial of the design review application and the recommendation of approval, conditional approval or denial of the annexation and preliminary plat applications to the City Council. However, if the planning and Zoning Commission wishes to approve or deny specific parts of these requests as detailed in the report, those changes must be specified.

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/conditional approval/denial*) of Case Nos. 19-11-AN

(Annexation) and 19-08-S (Preliminary Plat), a subdivision request from Accurate Surveyors requests to annex one parcel consisting of approximately 38.47 acres into Kuna City Limits with an R-8 (High Density Residential) zone and to subdivide the 38.47 acres into 200 total lots (175 buildable lots and 25 common lots); AND (approves/conditionally approves/denies) Case No. 19-29-DR (Design Review), subject to 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 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 shall be as required by Kuna Fire District.
 - e. The Kuna Municipal Irrigation System 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 shall be paid prior to *issuance* of any building permit.
 - 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.
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 annex the irrigation surface water rights appurtenant to the property to the Kuna Municipal Pressure Irrigation system.
5. Connection to City Services (Sewer, Water, Pressurized Irrigation) is required. The applicant shall conform all corresponding Master Plans.
6. The Developer/owner/applicant shall be required to participate, as determined by the City Engineer, in the development of additional lift station capacity.
7. Curb, gutter and sidewalk (attached and detached) shall be installed in accordance with Kuna City Code Title 5 Chapter 17.
8. Applicant shall work with staff in order to provide locations of street lights as required by Kuna City Code.
9. Street lights for the site shall be LED lighting, must comply with Kuna City Code and established Dark Skies practices.
10. Fencing within and around the site shall comply with Kuna City Code (Unless specifically approved otherwise and permitted).
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 approved from the public entities owning the property.
12. If any revisions are made, the applicant shall provide the Planning and Zoning Staff with a revised copy of the preliminary plat.

13. Any revisions of the plat are subject to administrative determination to rule if the revision is substantial.
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 the hearing processes.
15. Developer/owner/applicant shall follow staff, City engineers and other agency requirements as applicable.
16. Developer/owner/applicant shall comply with all local, state and federal laws.

DATED this 28th day of July, 2020



City of Kuna
Planning and Zoning Commission
Proposed Findings of Fact and Conclusions of Law

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Based upon the record contained in Case Nos. 19-11-AN, 19-08-S and 19-29-DR including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Commission hereby (approves/conditionally approves/denies) Case No. 19-29-DR and recommends (*approval/denial*) of the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 19-11-AN and 19-08-S, a request from KM Engineering to annex one parcel consisting of approximately 38.47 acres into Kuna City Limits with an R-8 (High Density Residential) zone and to subdivide the 38.47 acres into 200 total lots (one hundred seventy-five (175) buildable lots, twenty-five (25) common lots).

If the planning and Zoning Commission wishes to approve, deny or modify specific parts of the Findings of Facts and Conclusions of Law as detailed below, those changes must be specified.

1. *Based on the evidence contained in Case Nos. 19-11-AN, 19-08-S and 19-29-DR, this proposal does generally comply with the City Code.*

Staff Finding: *The applicant has submitted a complete application, and following staff review for technical compliance the application appears to be in general compliance with the design requirements, public improvement requirements, objectives and considerations listed in Kuna City Code Title 5 and Title 6.*

2. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

Staff Finding: *Neighborhood Notices were mailed out to residents within 400-FT of the proposed project site on July 8, 2020 and a legal notice was published in the Kuna Melba Newspaper on July 8, 2020. The applicant posted sign on the property on July 9, 2020.*

3. *Based on the evidence contained in Case Nos. 19-11-AN, 19-08-S and 19-29-DR, this proposal does generally comply with the Comprehensive Plan.*

Staff Finding: *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. The proposed zoning designation is R-8 (High Density Residential). The Comp Plan Map designates the property as High Density.*

4. The contents of the proposed preliminary plat application *does* contain all of the necessary requirements as listed in Kuna City Code 6-2-3: - Preliminary Plat.

Staff Finding: *Review by Staff of the proposed preliminary plat confirms all technical requirements listed in KCC 6-2-3 were provided.*

5. The availability of existing and proposed public services and streets *can* accommodate the proposed development.

Staff Finding: *Correspondence from ACHD and Kuna Public Works confirms that the streets and utility services and suitable and adequate to accommodate the proposed project. It should be noted that installation of this project will place a commensurate impact on City services.*

6. The proposed development *is* continuous with Master Utility Plans (Sewer/Water/Pressurized Irrigation).

Staff Finding: Correspondence from Kuna Public Works recommends the applicant be required to conform to the Master Sewer Plan, Master Water Plan and Master Pressurized Irrigation Plan, therefore satisfying this requirement.

7. The public *does* have the financial capability to provide supporting services to the proposed development.

Staff Finding: Throughout the development of the project and beyond, connection fees, impact fees (Fire, police, Park and Ada County Highway District), and property taxes will be collected, therefore satisfying the financial capability to provide supporting services.

8. The proposed project *does* consider health and safety of the public and the surrounding area's environment.

Staff Finding: Connection to City services, as well as other public improvements such as streetlights, fire hydrants, sidewalks, bike lanes, etc. are required to be implemented as a part of this project. No major wildlife habitats will be impacted by the proposed development.

9. All private landowners *have* consented to annexation.

Staff Finding: An affidavit of legal interest was signed by Don Newell allowing KM Engineering LLP to act on their behalf of this project, therefore consenting to the annexation of the proposed project site.

10. The proposed project lands *are* contiguous or adjacent to property within Kuna City Limits.

Staff Finding: The parcel is contiguous with City limits to the south and east.

DATED this 28th day of July, 2020.

ASHTON EAST VICINITY MAP

N Sailer Ave

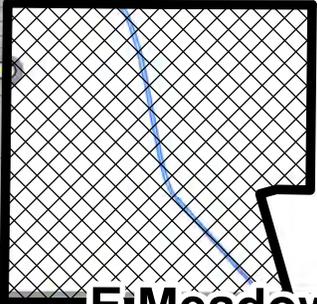
E Lazy Db Ln

E Deer Flat Rd

N Meridian Rd

N Jacksonmill Ave

N Warm River Ave



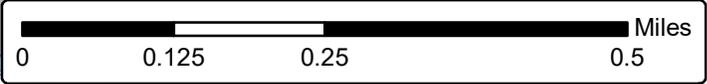
E Meadow View Rd

E Albacore Ln

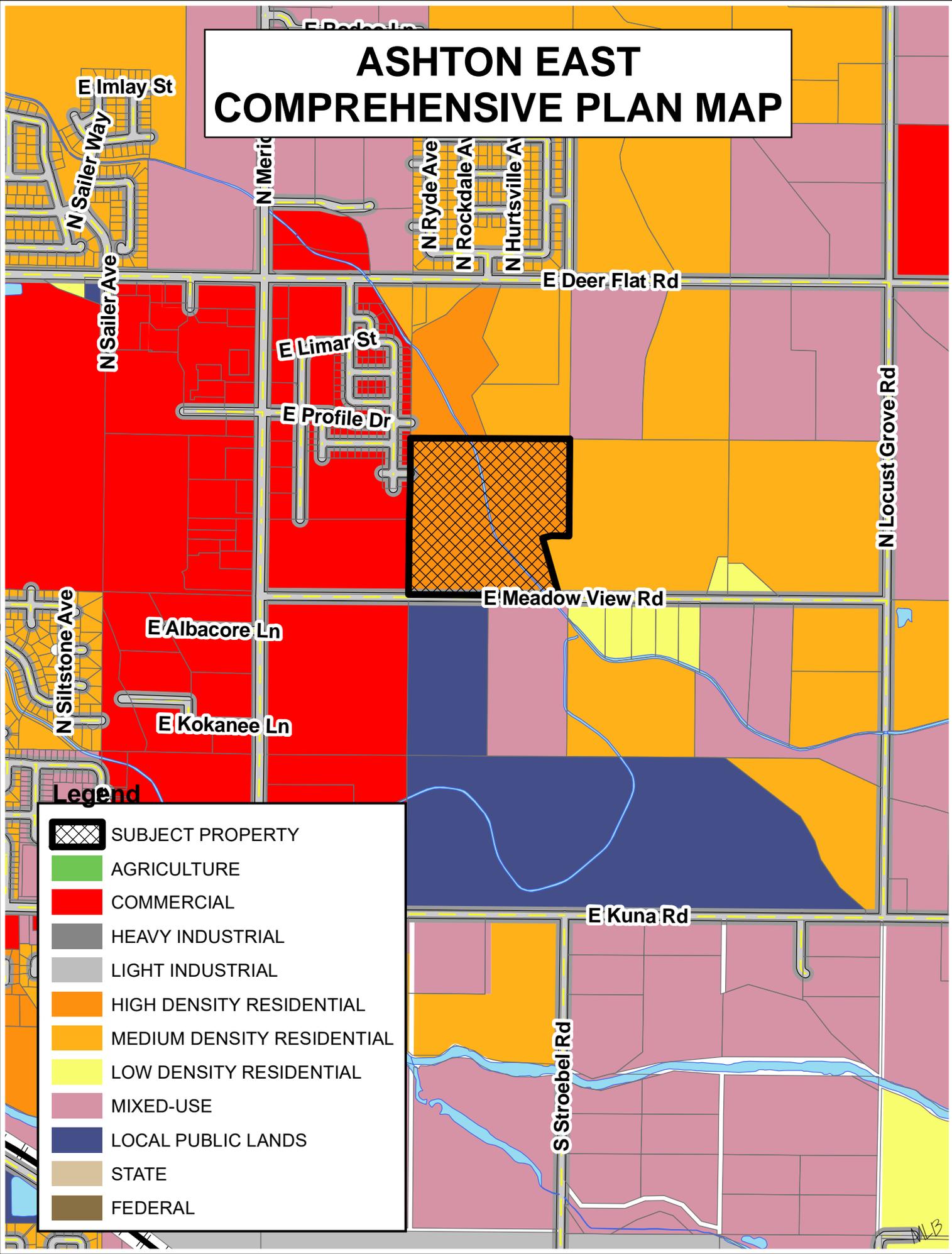
E Kuna Rd

LEGEND

-  SUBJECT PROPERTY
-  KUNA CITY LIMITS



ASHTON EAST COMPREHENSIVE PLAN MAP



Legend

- SUBJECT PROPERTY
- AGRICULTURE
- COMMERCIAL
- HEAVY INDUSTRIAL
- LIGHT INDUSTRIAL
- HIGH DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- LOW DENSITY RESIDENTIAL
- MIXED-USE
- LOCAL PUBLIC LANDS
- STATE
- FEDERAL

MLB

ASHTON EAST ZONING MAP

E Lazy Db Ln

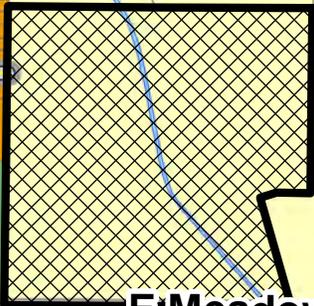
N Ry

E Deer Flat Rd

N Sailer Ave

N Meridian Rd

E Profile Dr



E Meadow View Rd

E Albacore Ln

E Kokanee Ln

E Kuna Rd

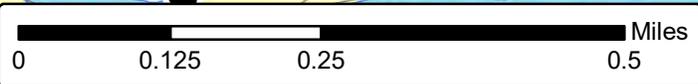
Stroebel Rd

LEGEND

 SUBJECT PROPERTY

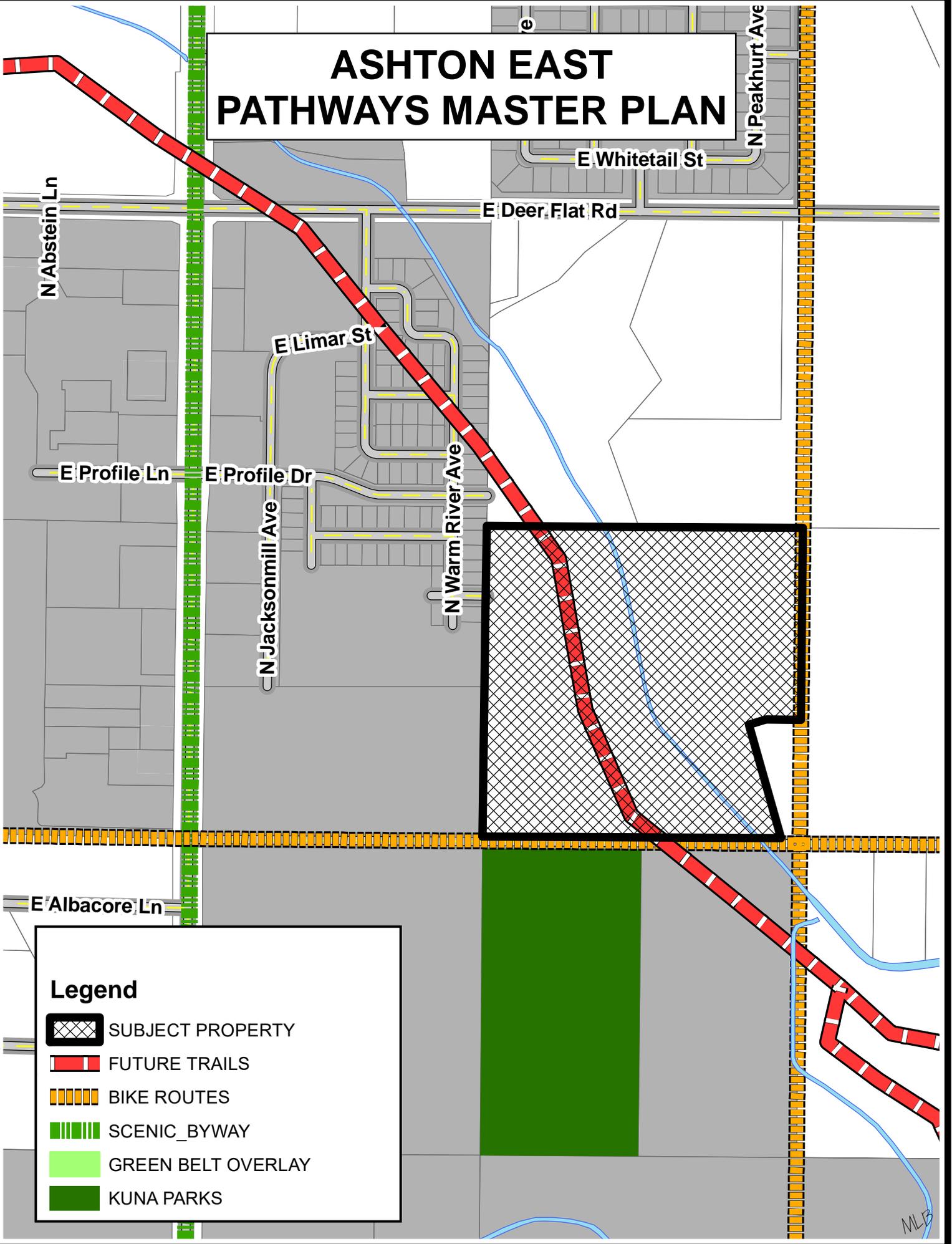
ZONING

-  RURAL RESIDENTIAL (COUNTY)
-  INDUSTRIAL M-2 (COUNTY)
-  AGRICULTURE
-  COMMERCIAL C-1
-  COMMERCIAL C-3
-  LOW DENSITY RESIDENTIAL
-  MEDIUM DENSITY RESIDENTIAL
-  HIGH DENSITY RESIDENTIAL



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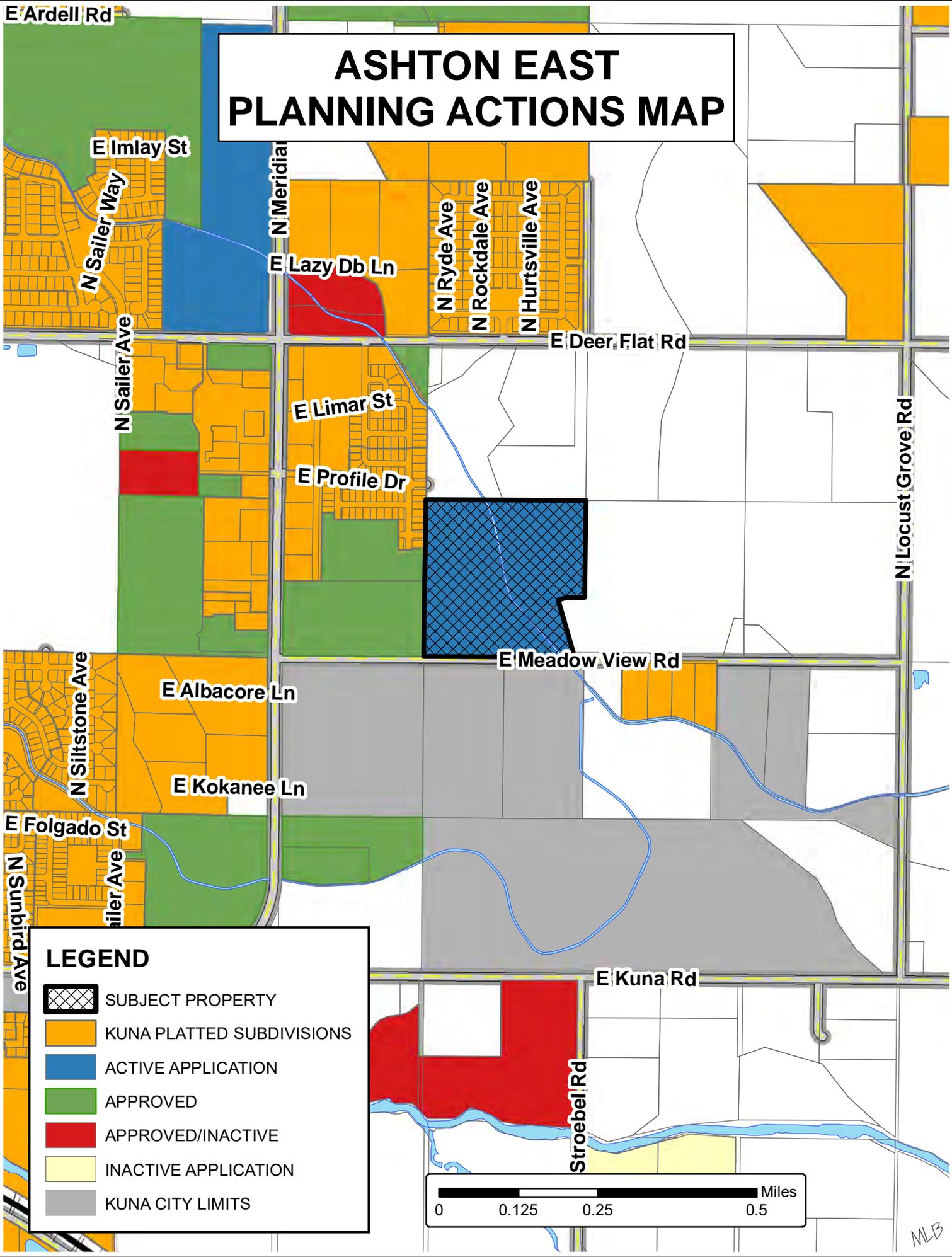
ASHTON EAST PATHWAYS MASTER PLAN



Legend

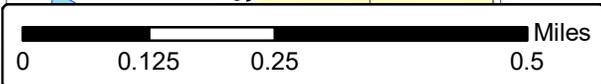
-  SUBJECT PROPERTY
-  FUTURE TRAILS
-  BIKE ROUTES
-  SCENIC_BYWAY
-  GREEN BELT OVERLAY
-  KUNA PARKS

ASHTON EAST PLANNING ACTIONS MAP



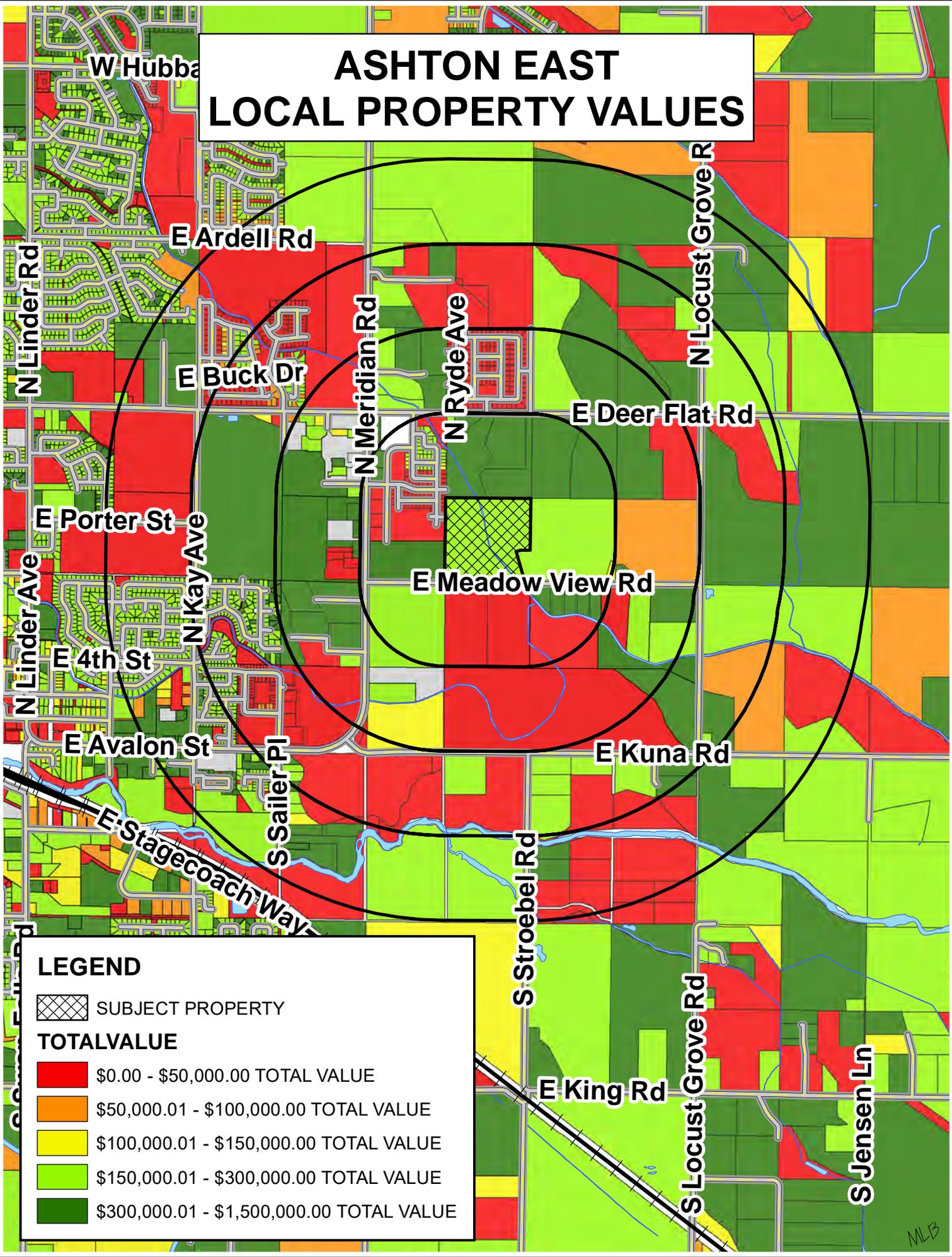
LEGEND

-  SUBJECT PROPERTY
-  KUNA PLATTED SUBDIVISIONS
-  ACTIVE APPLICATION
-  APPROVED
-  APPROVED/INACTIVE
-  INACTIVE APPLICATION
-  KUNA CITY LIMITS



MLB

ASHTON EAST LOCAL PROPERTY VALUES



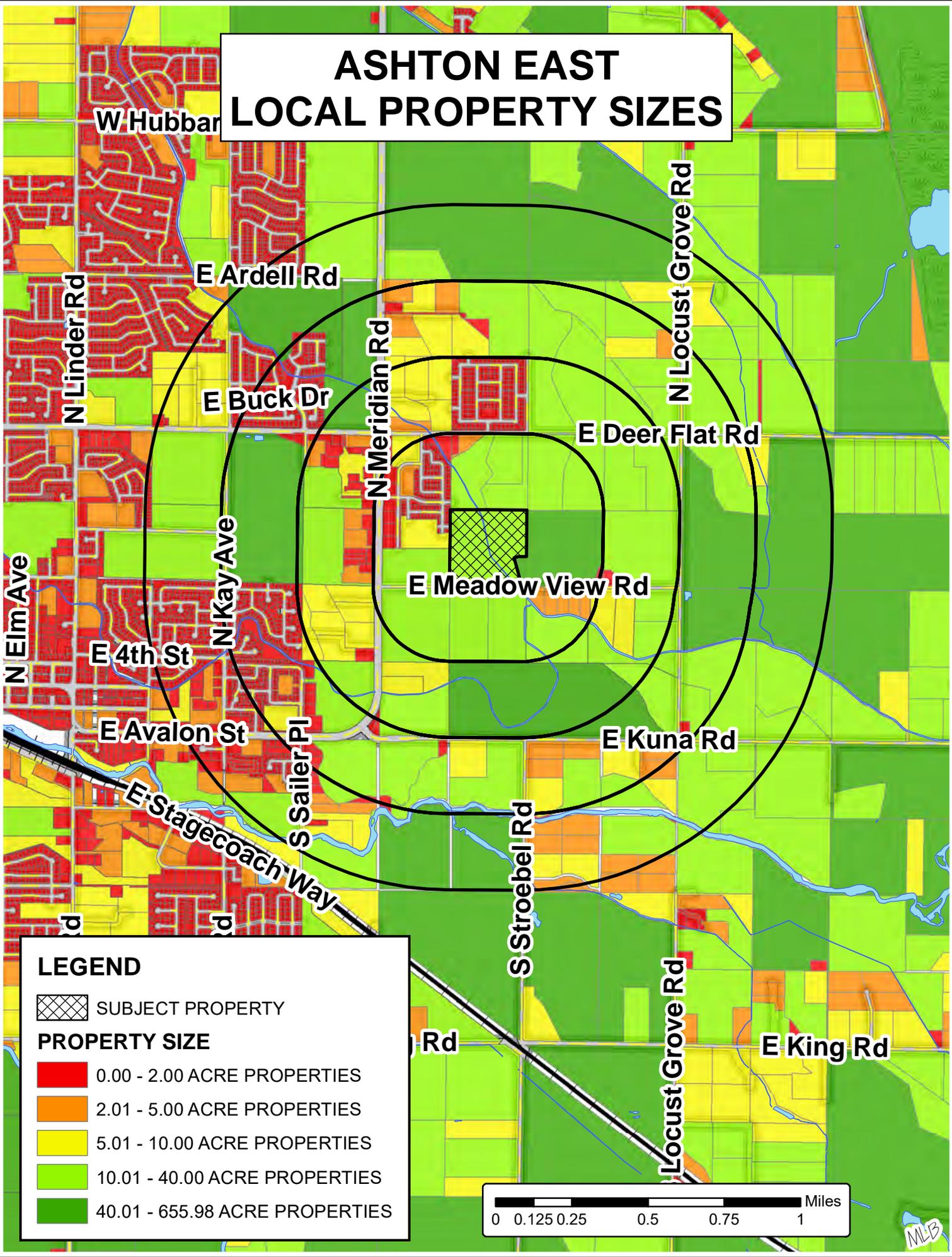
LEGEND

 SUBJECT PROPERTY

TOTAL VALUE

-  \$0.00 - \$50,000.00 TOTAL VALUE
-  \$50,000.01 - \$100,000.00 TOTAL VALUE
-  \$100,000.01 - \$150,000.00 TOTAL VALUE
-  \$150,000.01 - \$300,000.00 TOTAL VALUE
-  \$300,000.01 - \$1,500,000.00 TOTAL VALUE

ASHTON EAST LOCAL PROPERTY SIZES

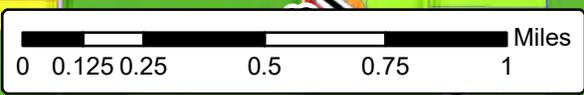


LEGEND

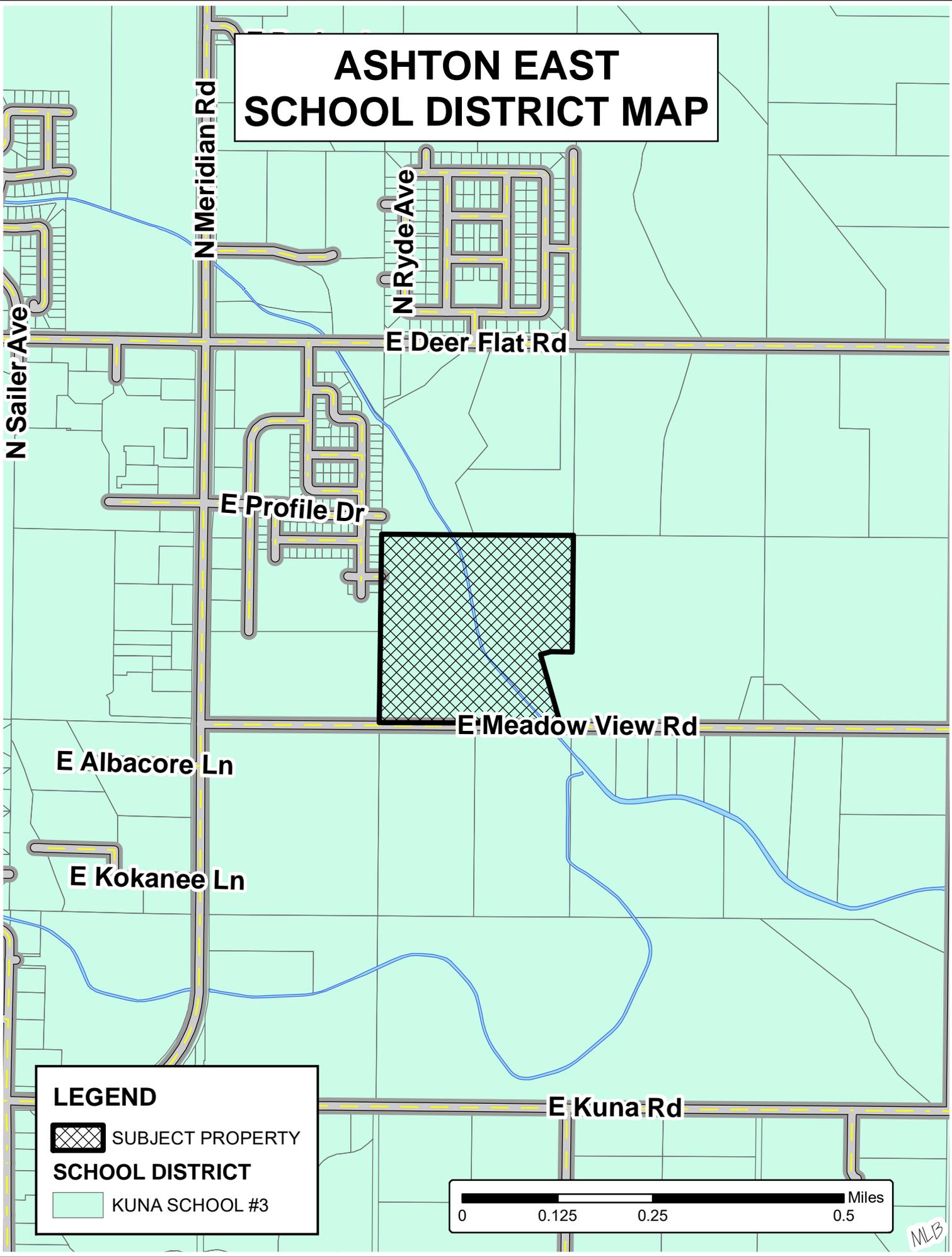
 SUBJECT PROPERTY

PROPERTY SIZE

-  0.00 - 2.00 ACRE PROPERTIES
-  2.01 - 5.00 ACRE PROPERTIES
-  5.01 - 10.00 ACRE PROPERTIES
-  10.01 - 40.00 ACRE PROPERTIES
-  40.01 - 655.98 ACRE PROPERTIES

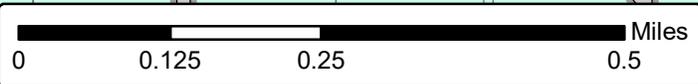


ASHTON EAST SCHOOL DISTRICT MAP



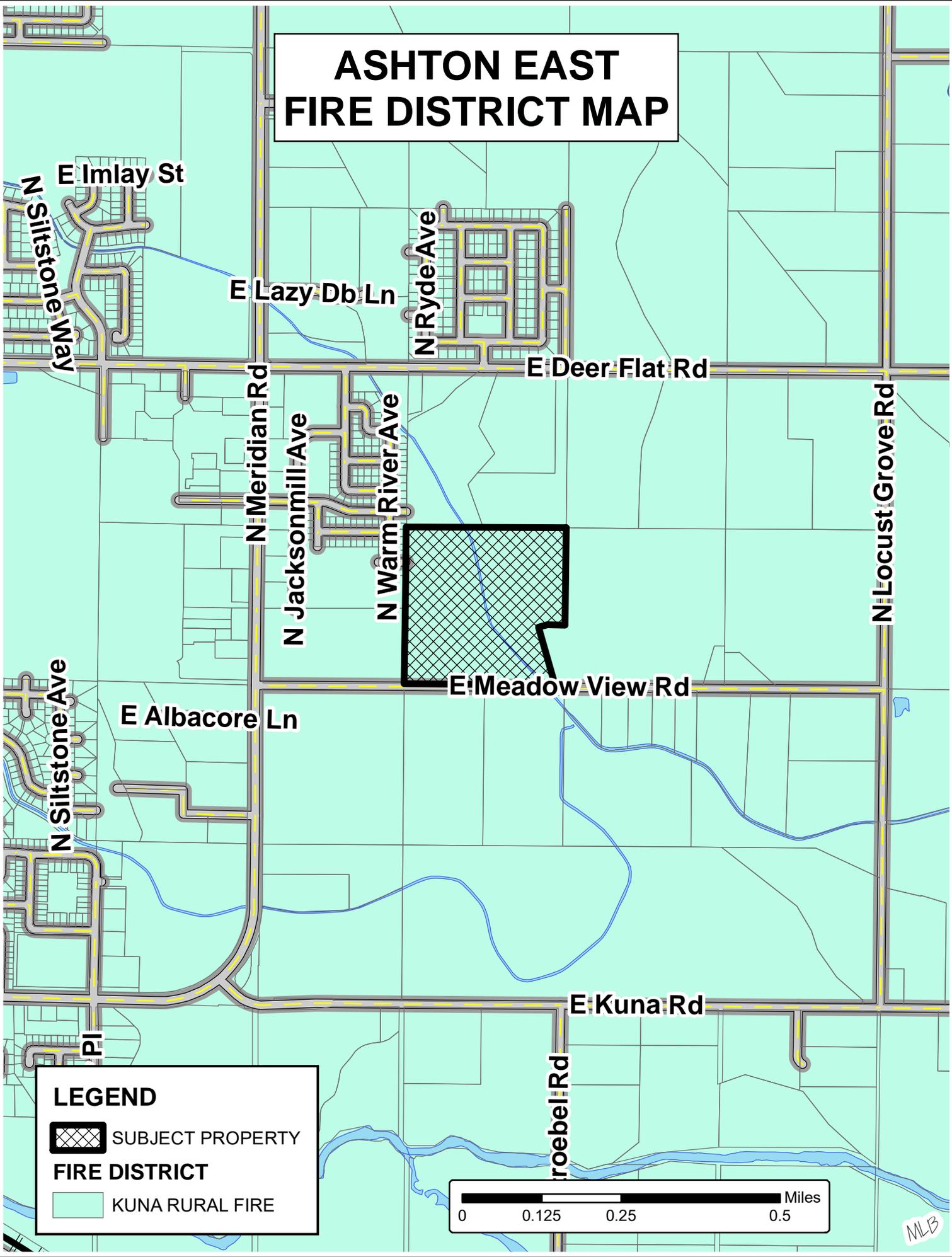
LEGEND

-  SUBJECT PROPERTY
- SCHOOL DISTRICT**
-  KUNA SCHOOL #3



MLB

ASHTON EAST FIRE DISTRICT MAP



LEGEND

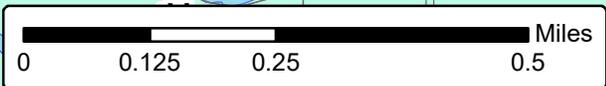


SUBJECT PROPERTY

FIRE DISTRICT

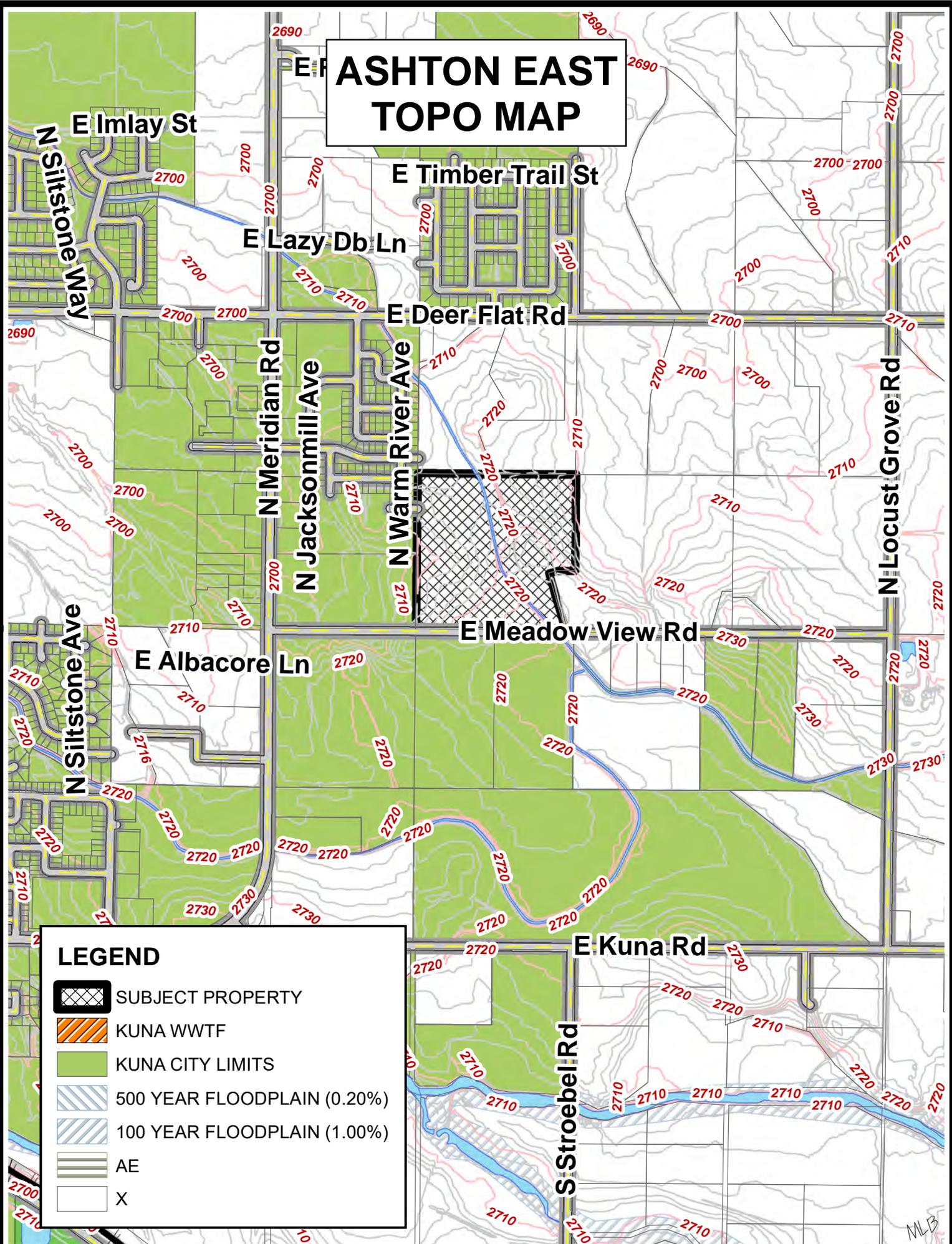


KUNA RURAL FIRE



MLB

ASHTON EAST TOPO MAP

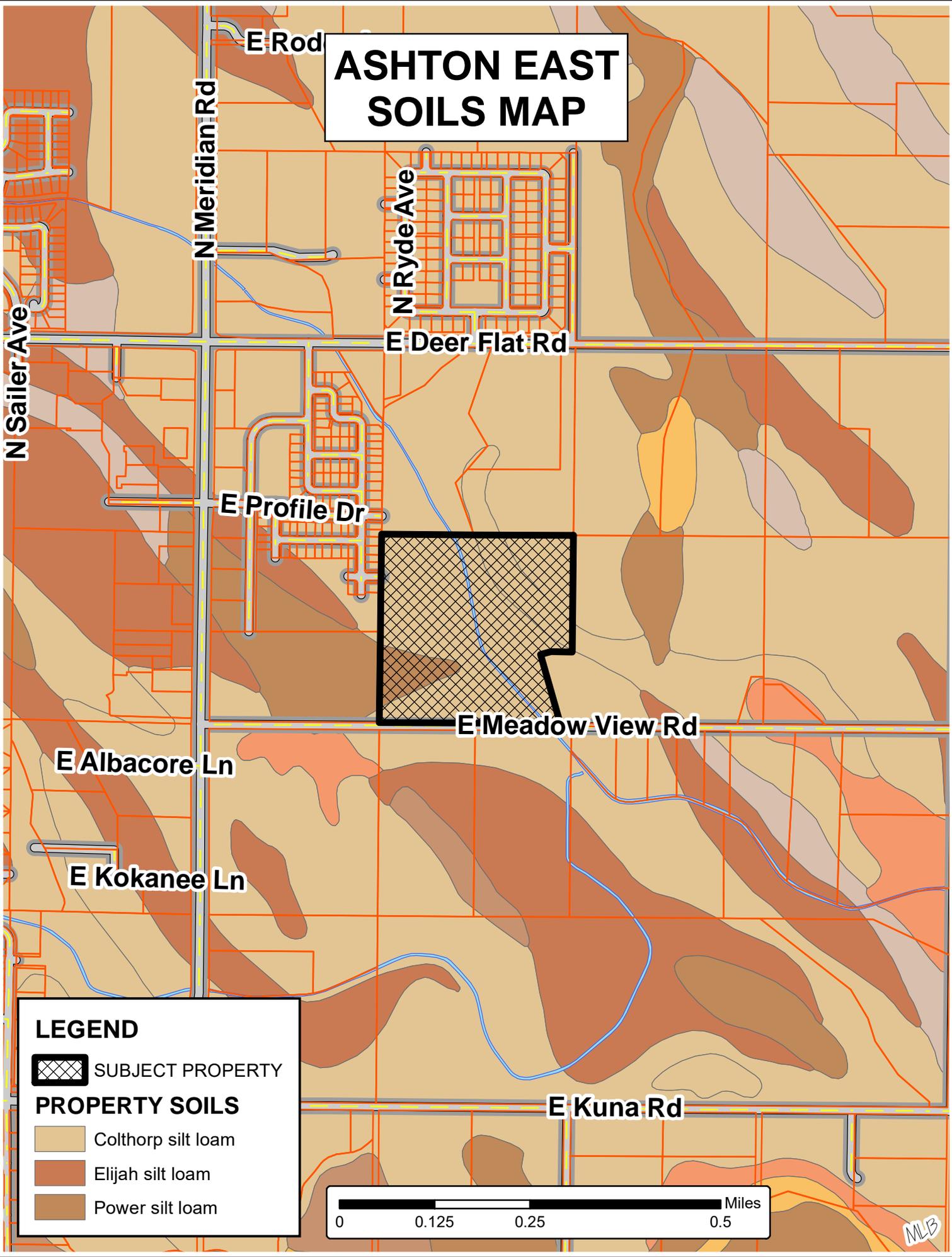


LEGEND

-  SUBJECT PROPERTY
-  KUNA WWTF
-  KUNA CITY LIMITS
-  500 YEAR FLOODPLAIN (0.20%)
-  100 YEAR FLOODPLAIN (1.00%)
-  AE
-  X

MLB

ASHTON EAST SOILS MAP

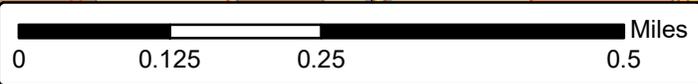


LEGEND

 SUBJECT PROPERTY

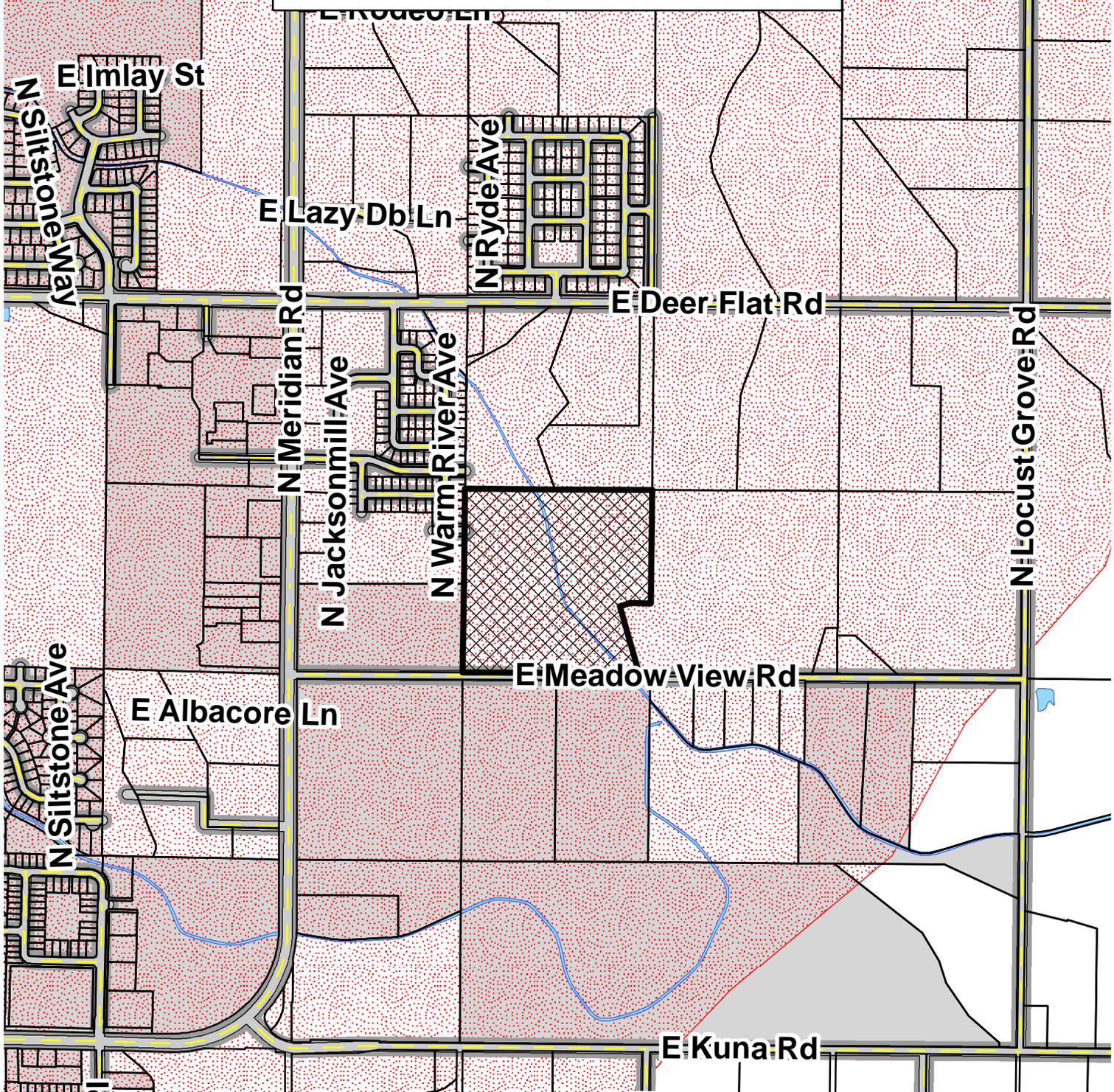
PROPERTY SOILS

-  Colthorp silt loam
-  Elijah silt loam
-  Power silt loam



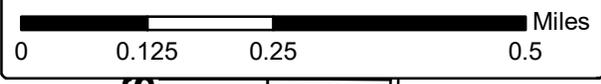
MLB

ASHTON EAST NITRATE PRIORITY MAP

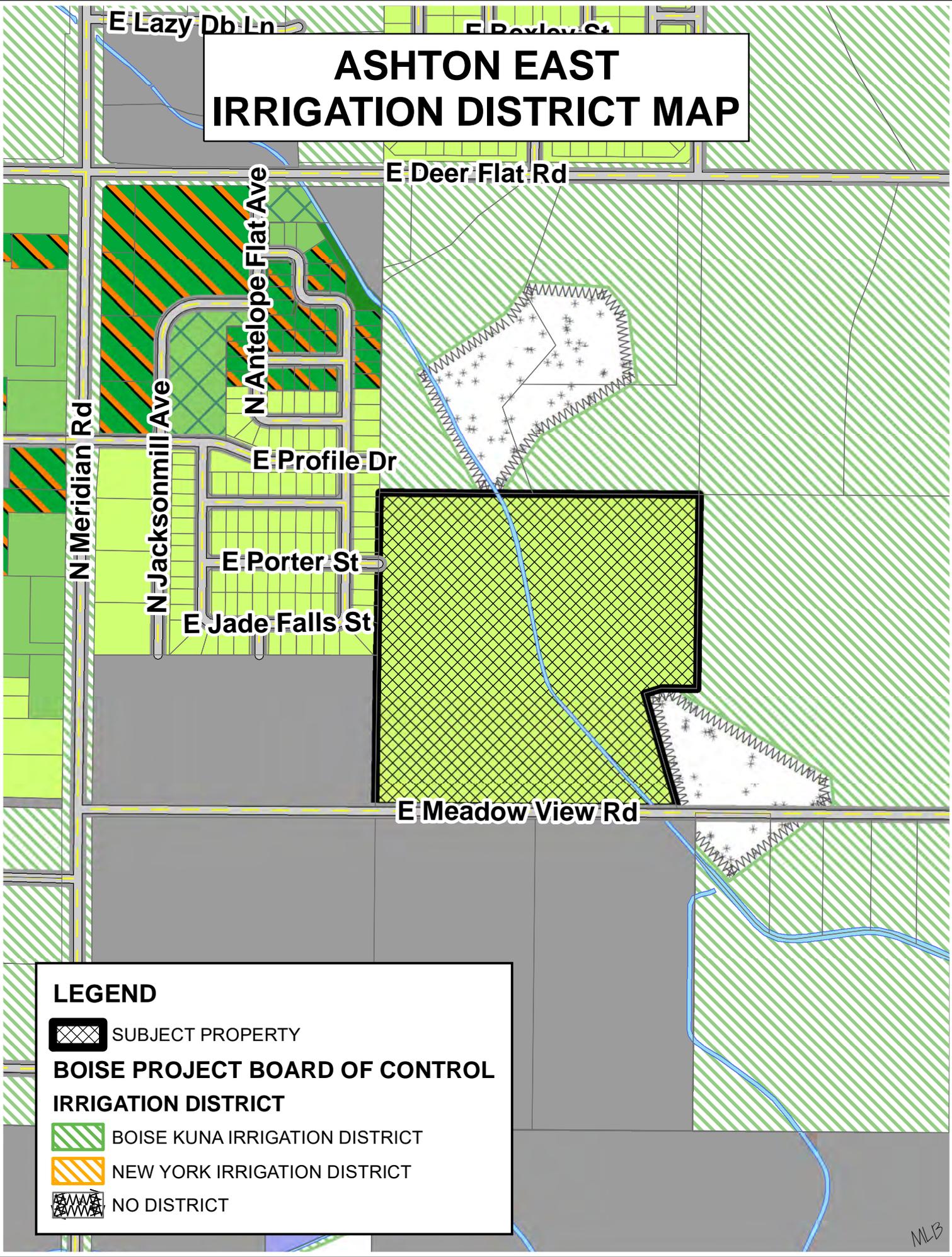


LEGEND

-  SUBJECT PROPERTY
-  NITRATE PRIORITY AREA
-  CITY LIMITS



ASHTON EAST IRRIGATION DISTRICT MAP



LEGEND

-  SUBJECT PROPERTY
- BOISE PROJECT BOARD OF CONTROL
IRRIGATION DISTRICT**
-  BOISE KUNA IRRIGATION DISTRICT
-  NEW YORK IRRIGATION DISTRICT
-  NO DISTRICT

NOT FOR PUBLIC DISSEMINATION

ASHTON EAST UTILITY MAP

E Lazy Dog Ln

E Deer Flat Rd

Meridian Rd

E Meadow View Rd

E Kuna Rd

LEGEND



SUBJECT PROPERTY



LIFT STATION



PRESSURE IRRIGATION



POTABLE WATER



SANITARY SEWER



GRAVITY IRRIGATION



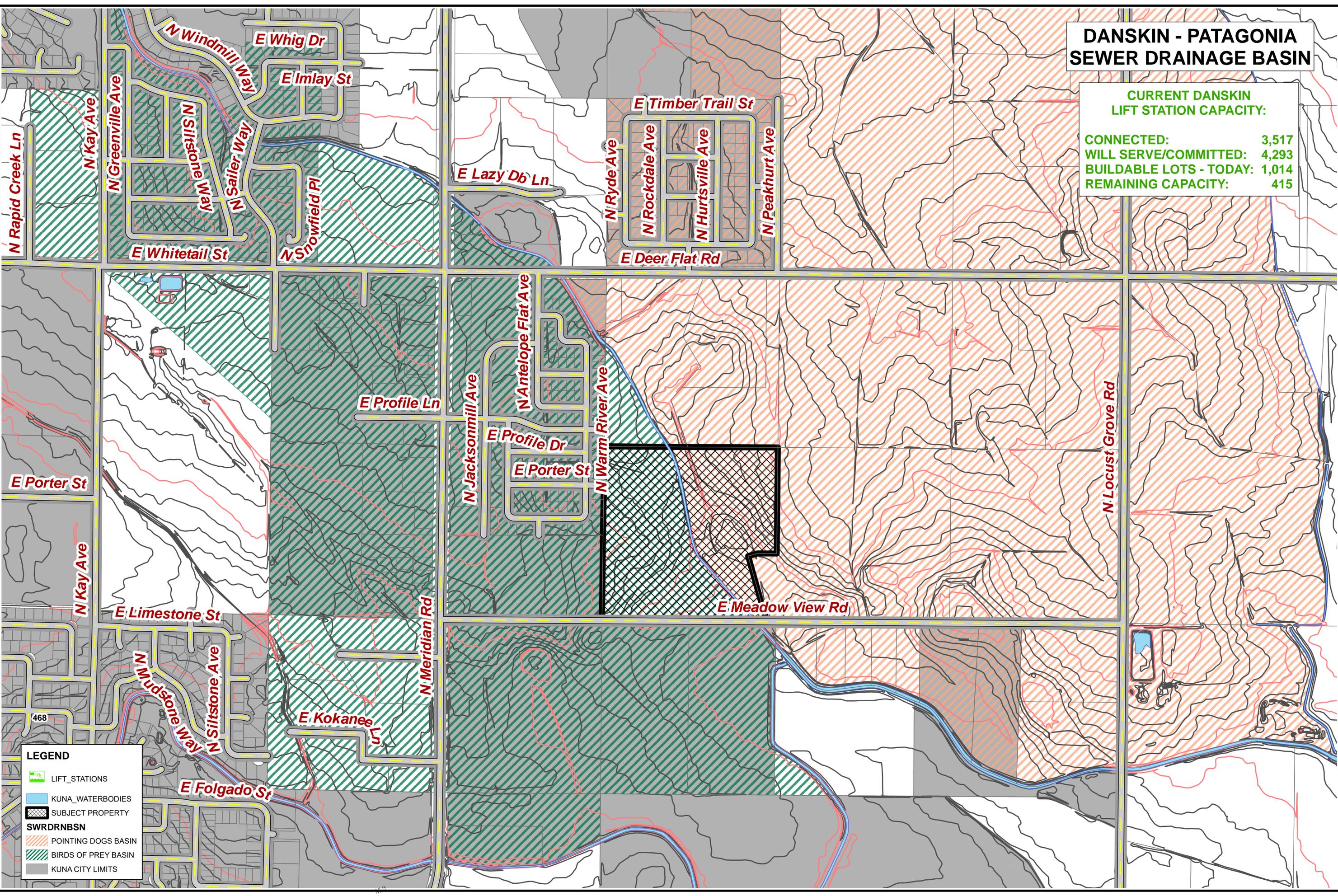
NOT FOR PUBLIC DISSEMINATION

MLB

DANSKIN - PATAGONIA SEWER DRAINAGE BASIN

**CURRENT DANSKIN
LIFT STATION CAPACITY:**

CONNECTED:	3,517
WILL SERVE/COMMITTED:	4,293
BUILDABLE LOTS - TODAY:	1,014
REMAINING CAPACITY:	415



LEGEND

- LIFT_STATIONS
- KUNA_WATERBODIES
- SUBJECT PROPERTY

SWDRNBSN

- POINTING DOGS BASIN
- BIRDS OF PREY BASIN
- KUNA CITY LIMITS

468



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

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

For Office Use Only	
File Number (s)	19-11-AN 19-08-S 19-29-DR
Project name	ASHTON ESTATES EAST SUB
Date Received	11/12/19
Date Accepted/ Complete	12/5/19
Cross Reference Files	
Commission Hearing Date	7/28/20
City Council Hearing Date	

Contact/Applicant Information

Owners of Record: <u>Kuna East, LLC</u>	Phone Number: _____
Address: <u>PO Box 1939</u>	E-Mail: _____
City, State, Zip: <u>Eagle, ID 83616</u>	Fax #: _____
Applicant (Developer): <u>same as owner</u>	Phone Number: _____
Address: _____	E-Mail: _____
City, State, Zip: _____	Fax #: _____
Engineer/Representative: <u>KM Engineering, LLP</u>	Phone Number: <u>208.639.6939</u>
Address: <u>9233 West State Street</u>	F-Mail: <u>kgrabo@kmengllp.com</u>
City, State, Zip: <u>Boise, ID 83714</u>	Fax #: <u>208.639.6930</u>

Subject Property Information

Site Address: <u>2320 East Meadow View Road</u>	
Site Location (Cross Streets): <u>Meridian Road & Meadow View Road</u>	
Parcel Number (s): <u>S1419241000</u>	
Section, Township, Range: <u>Sec. 19, T2N, R1E</u>	
Property size: <u>38.6 acres</u>	
Current land use: <u>Agricultural</u>	Proposed land use: <u>Single-family Residential</u>
Current zoning district: <u>RR (Ada County)</u>	Proposed zoning district: <u>R-8 (City)</u>

Project Description

Project / subdivision name: Ashton Estates East Subdivision
 General description of proposed project / request: Single-family residential subdivision

Type of use proposed (check all that apply):
 Residential single-family
 Commercial _____
 Office _____
 Industrial _____
 Other _____

Amenities provided with this development (if applicable): open space, master pathway, tot lot

Residential Project Summary (if applicable)

Are there existing buildings? Yes No
 Please describe the existing buildings: house and outbuildings
 Any existing buildings to remain? Yes No
 Number of residential units: 175 Number of building lots: 175
 Number of common and/or other lots: 21 common & 4 shared drives
 Type of dwellings proposed:
 Single-Family _____
 Townhouses _____
 Duplexes _____
 Multi-Family _____
 Other _____

Minimum Square footage of structure (s): _____
 Gross density (DU/acre-total property): 4.53 Net density (DU/acre-excluding roads): 6.07
 Percentage of open space provided: 15.7% Acreage of open space: 6.07 useable (7.73 total)
 Type of open space provided (i.e. landscaping, public, common, etc.): landscaped common lots and canal lot with walking path

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: [Signature] Date: 11.11.19



City of Kuna
Planning & Zoning
Department
 PO. Box 13
 Kuna, ID 83634
 208.922.5274
 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: Ashton Estates East Subdivision **Applicant:** Kuna East, LLC

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

Applicant (✓)	Description	Staff (✓)
<input checked="" type="checkbox"/>	Electronic copy of all required submittal items.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Completed and signed Commission & Council Review Application.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Vicinity map showing relationship of the proposed plat to the surrounding area with a 2-mile radius.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Homeowner's maintenance agreement for the care of landscaped common areas.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	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.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Proof of ownership—A copy of your deed and Affidavit of Legal Interest (for all interested parties involved).	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Letter of intent indicating reasons and details for preliminary plat.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Commitment of Property Posting form signed by the applicant/agent.	<input type="checkbox"/>
<input type="checkbox"/>	If preliminary plat includes 100 lots or more, please submit a traffic impact study.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	A letter from Ada County Engineer with the Subdivision Name reservation. A name change needs to be submitted and approved by the Planning & Zoning Director and Ada County Engineer.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Phasing Plan	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Landscape plan for subdivision entrances, buffers, common areas, etc.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Neighborhood meeting certification (certification & neighborhood meeting list forms shall accompany this application).	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8 1/2 x 11 proposed preliminary plat.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	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: <ul style="list-style-type: none"> ◇ Topography at two-foot (2') intervals ◇ Land uses (location, layout, types & dimensions): residential, commercial & industrial land uses. ◇ Street right-of-way: 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. 	<input type="checkbox"/>

*NOTE: 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.*



City of Kuna
 Planning & Zoning
 Department
 P.O. Box 13
 Kuna, Idaho 83634
 208.922.5274
 Fax: 208.922.5989
 Web: 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: Ashton Estates East Subdivision **Applicant:** Kuna East, LLC

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

Applicant (√)	Description	Staff (√)
x	Completed and signed Commission & Council Review Application.	
x	Letter of Intent indicating reasons for proposed annexation and the availability of public services.	
x	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.	
x	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.	
x	Recorded warranty deed for the property.	
x	Proof of ownership—A copy of your deed and Affidavit of Legal Interest (All parties involved)	
n/a	Development Agreement & Development Agreement Checklist	
x	Neighborhood meeting certification (certification & neighborhood meeting list forms shall accompany this application).	
x	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.



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 documents can be found online (www.cityofkuna.com) or are picked up in the City's Planning and zoning department is located at 751 W 4th Street, Kuna ID.

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
<input checked="" type="checkbox"/>	Date of pre- application meeting : <u>8.8.19</u> <i>Note: Pre-Applications are valid for a period of three (3) months.</i>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	A complete Design Review Application form <i>Note: It is the applicant's responsibility to use a current application.</i>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Detailed letter of explanation or justification for the application, describing the project and design elements, and how the project complies with Design Review standards.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	One (1) Vicinity Map (8 ½" x 11") at 1" = 300' scale (or similar), label the location of the property and adjacent streets.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	One 8 ½" x 11" colored aerial photo depicting proposed site, street names, and surrounding area within five-hundred feet (500').	<input type="checkbox"/>
<input checked="" type="checkbox"/>	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.	<input type="checkbox"/>

x

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:

- (2) 24" x 36" LARGE FORMAT PLANS
- (1) 11" X 17" PLAN REDUCTIONS
- (1) 8 1/2" x 11" PLAN 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.

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

North Arrow

Staff Use

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
<input checked="" type="checkbox"/>	North Arrow	<input type="checkbox"/>
<input checked="" type="checkbox"/>	To scale drawings	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Boundaries, property lines and dimensions	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Name of "Plan Preparer" with contact information	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Name of project and date	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Type and location of all plant materials and other ground covers. <i>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.</i>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Existing vegetation identified by specific size. Identify those which are proposed to be relocated or removed	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Method of irrigation <i>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.</i>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Location, description, materials, and cross-sections of special features, including berming, retaining walls, hedges, fences, fountains street/pathway furniture (benches, etc.), etc.	<input type="checkbox"/>
<input type="checkbox"/>	Sign locations <i>Note: A separate sign application must be submitted with this application</i>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Locations and uses for open spaces	<input type="checkbox"/>
<input type="checkbox"/>	Parking layout including spaces, driveways, curb cuts, circulation patterns, pedestrian walks and vision triangle	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Illustration that demonstrates adequate sight distance is provided for motor vehicles, pedestrians and bicycles	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Location and designations of all sidewalks	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Clearly identify pressurized irrigation lines and underground water storage	<input type="checkbox"/>
<input checked="" type="checkbox"/>	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.	<input type="checkbox"/>

Building Elevations

Applicant
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

Staff
Use

Lighting Plan

Applicant
Use

Exterior lighting including detailed cut sheets and photometric plan (pedestrian, vehicle, security, decoration)

Types and wattage of all light fixtures

Note: The City encourages use of "dark sky" lighting fixtures

Placement of all light fixtures shown on elevations and landscaping plans

Staff
Use

Roof Plans

Applicant
Use

Size and location of all roof top mechanical units

Staff
Use

Design Review Application

Applicant: Kuna East, LLC Phone: _____

Owner Representative

Fax/Email: _____

Applicant's Address: PO Box 1939

Eagle, Idaho Zip: 83616

Owner: same as applicant Phone: _____

Owner's Address: _____ Email: _____

Zip: _____

Represented By: *(if different from above)* KM Engineering, LLP- Kirsti Grabo Phone: 208.639.6939

Address: 9233 W. State Street Email: kgrab0@kmengllp.com

Boise, Idaho Zip: 83714

Address of Property: 2320 E. Meadow View Road

Kuna, Idaho Zip: _____

Distance from Major Street _____

Cross Street: approximately 1/4 of mile Name(s): Meridian Rd/Deer Flat Rd

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 Ashton Estates East Subdivision

1. Dimension of Property: 38.62 acres

2. Current Land Use(s): agricultural

3. What are the land uses of the adjoining properties?

North: Ada County- RR

South: City of Kuna- A

East: Ada County- RR

West: City of Kuna- R6 & A

4. Is the project intended to be phased, if so what is the phasing time period? Yes

Please explain: phasing will be market driven.

5. The number and use(s) of all structures: No existing structures will remain.
current preliminary plat proposes single family residential homes.

n/a 6. Building heights: _____ Number of stories: _____
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'	

n/a 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: _____ / _____

Walls: (State percentage of wall coverage for 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 material: _____ / _____

Trim, etc.: _____ / _____

Other: _____ / _____

n/a 9. Please identify Mechanical Units: _____

Type/Height: _____

Proposed Screening Method: _____

n/a 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? Kuna Canal/ Boise Project

12. Fencing: (Please provide information about new fencing material as well as any existing fencing material)

Farm fencing existing- to be removed.

Type: New Fencing-Tan vinyl & metal clear vision as indicated on Landscape plans.

Size: See attached landscape plans.
Location: See attached landscape plans.

(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.

14. Percentage of Site Devoted to Building Coverage: _____

% of Site Devoted to Landscaping: _____ Square Footage: 33,6195.27 sf- 7.72 acres
(Including landscaped rights-of-way) 19.98

% of Site that is Hard Surface: _____ Square Footage: 43,4867.45 sf- 9.99 acres
(Paving, driveways, walkways, etc.) 25.86

% of Site Devoted to other uses: 54.16 %- 911,0731 sf/20.92 acres

Describe: buildable lots

% of landscaping within the parking lot (landscaped islands, etc.): n/a

15. For details, please provide dimensions of landscaped areas within public rights-of-way:

See attached landscape plans.

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 trees with a four inch (4") or greater caliper whenever possible):*

Yes- around existing residence. Not desirable trees, they will be removed with residence.

n/a 17. Dock Loading Facilities:

Number of docking facilities and their location: _____

Method of screening: _____

18. Pedestrian Amenities: *(bike racks, receptacles, drinking fountains, benches, etc.)* _____

Sidewalks along streets & pathway along canal.

n/a 19. Setbacks of the proposed building from property lines:

Front _____ -feet Rear _____ -feet Side _____ -feet Side _____ -feet

n/a 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 RE-SCHEDULED BY THE CITY. APPLICANT/REPRESENTATIVE MUST ATTEND THE DESIGN REVIEW BOARD MEETING/PLANNING AND ZONING MEETINGS.

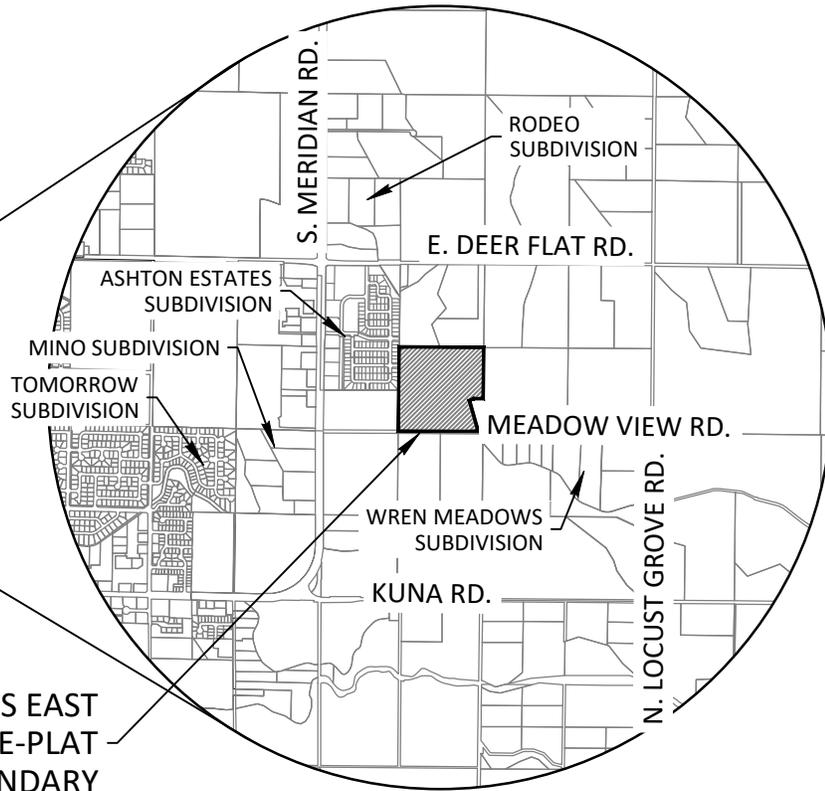
The Ada County Highway District may also conduct public meetings regarding this application. If you have questions about the meeting date or the traffic that this development may generate or the impact of that traffic on streets in the area, please contact the Ada County Highway District at 208.387.6170. In order to expedite your request, please have ready the file number indicated in this notice.

Signature of Applicant K. Gombos Date 11-6-19

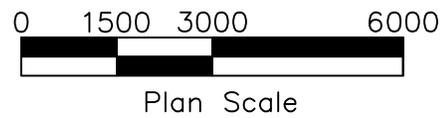
City staff comments:

Signature of receipt by City Staff _____ Date _____

FOR ADDITIONAL INFORMATION:
(Please list page number and item in reference)



ASHTON ESTATES EAST
SUBDIVISION PRE-PLAT
BOUNDARY



ENGINEERS . SURVEYORS . PLANNERS

9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

DATE: 11/11/19
PROJECT: 19-081

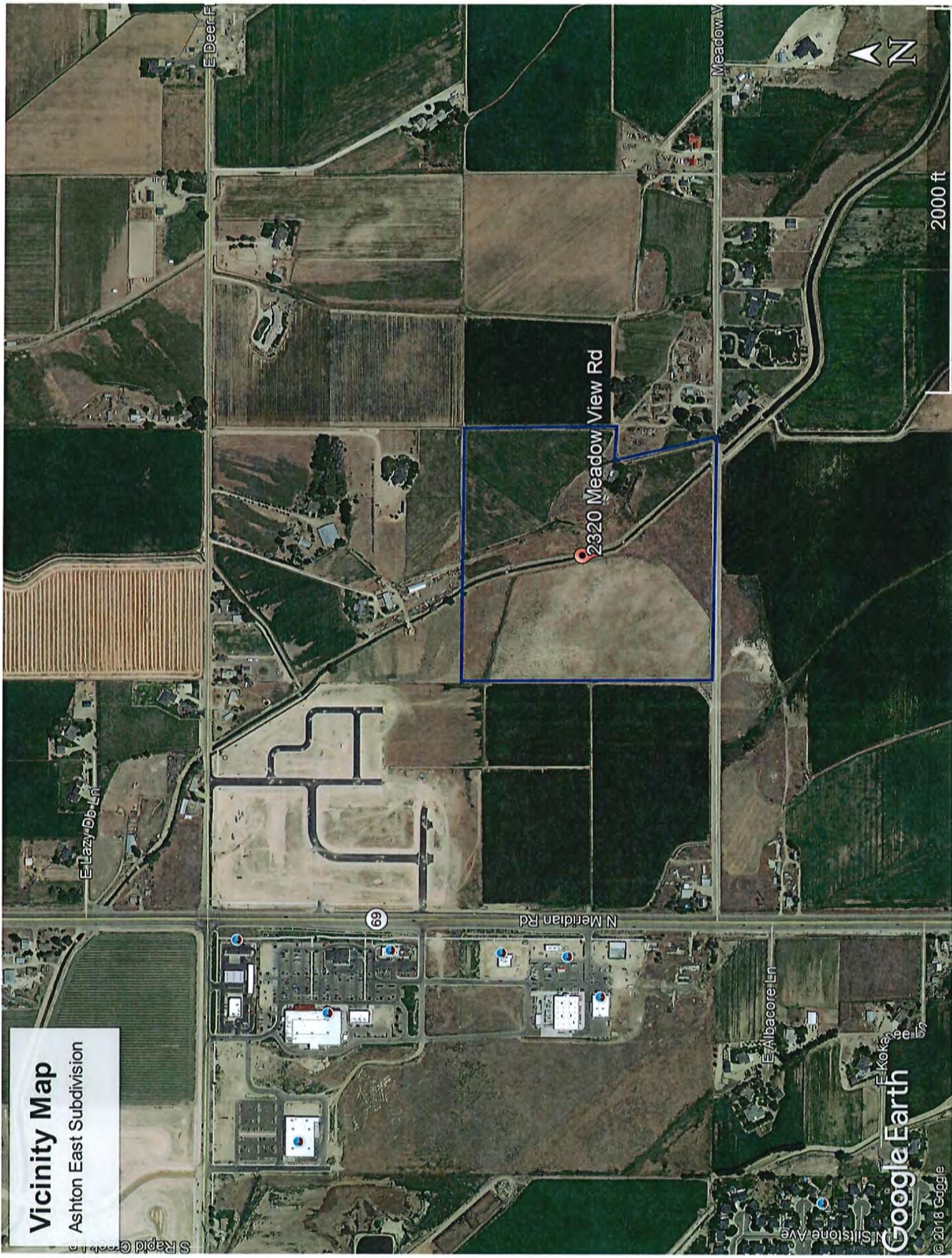
SHEET:
1 OF 1

ASHTON ESTATES EAST
KUNA, IDAHO

FIGURE 1 - VICINITY MAP

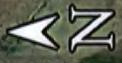
Vicinity Map

Ashton East Subdivision



2320 Meadow View Rd

2000 ft



Google Earth

© 2018 Google

Site Photos



Southwest Corner Looking Northeast



Mid-Site on Meadow View Looking North



Southeast Corner Looking North

**DECLARATION
OF
PROTECTIVE RESTRICTIONS
FOR
ASHTON ESTATES EAST SUBDIVISION**

NOTICE

THIS DOCUMENT IS A VERY IMPORTANT LEGAL DOCUMENT WHICH EACH POTENTIAL RESIDENT AND OWNER OF REAL PROPERTY WITHIN THE ASHTON ESTATES EAST SUBDIVISION SHOULD READ AND UNDERSTAND. THIS DOCUMENT DETAILS THE OBLIGATIONS AND RESPONSIBILITIES OF ALL OWNERS OF SUCH REAL PROPERTY.

THE DECLARANT EXPRESSLY DISCLAIMS ANY REPRESENTATIONS, WARRANTIES, STATEMENTS OR INFORMATION **NOT** SET FORTH HEREIN OR IN ANY WRITTEN DOCUMENT EXECUTED BY DECLARANT. ANY REPRESENTATIONS OR WARRANTIES MADE BY ANY REAL ESTATE BROKER OR AGENT OR OTHER PERSON CONCERNING THE TOTAL OR THE TYPES OF ASSESSMENTS TO BE LEVIED AGAINST AN OWNER SHOULD BE DISREGARDED IN THEIR ENTIRETY AND IN ALL EVENTS THE TERMS AND CONDITIONS OF THIS DECLARATION SHALL CONTROL.

POTENTIAL RESIDENTS AND OWNERS ARE ADVISED TO REVIEW THIS DECLARATION WITH THEIR LEGAL AND OTHER ADVISORS PRIOR TO ACQUIRING A LOT.

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EXHIBIT A – LEGAL DESCRIPTION

EXHIBIT B – Plat

EXHIBIT C – Bylaws of the Association

EXHIBIT D – Ashton Estates East Subdivision Phase 1 Operations & Maintenance Manual

DRAFT

**DECLARATION
OF
PROTECTIVE RESTRICTIONS
FOR
ASHTON ESTATES EAST SUBDIVISION**

THIS DECLARATION OF PROTECTIVE RESTRICTIONS FOR ASHTON ESTATES EAST SUBDIVISION (“Declaration”) is made this ___th day of _____, 20__, by Kuna East, LLC, an Idaho limited liability company (hereinafter referred to as “Declarant”).

**ARTICLE 1
RECITALS**

1.1. Property Covered.

The property subject to this Declaration is the property legally described on the attached Exhibit A and as depicted in the final Plat of the Ashton Estates East Subdivision Phase 1, recorded in the records of Ada County, Idaho, as Instrument Number _____ on _____th, _____, and attached hereto as Exhibit B, along with any Phases made subject to this Declaration by recorded Supplemental Declarations.

1.2. Purpose of Declaration.

The purpose of this Declaration is to set forth the basic restrictions, covenants, limitations, easements, conditions and equitable servitudes (collectively, the “Restrictions”) that will apply to the Subdivision and the use of any and all portions of the Subdivision. The Restrictions are designed to protect, enhance and preserve the value, amenities, desirability, and attractiveness of the Subdivision; to ensure a well-integrated, high quality development; and to guarantee adequate maintenance of the Common Area, including any improvements located thereon, in a cost effective and administratively efficient manner.

1.3. Residential Development.

Ashton Estates East Subdivision is planned as a residential and commercial subdivision that Declarant currently intends to develop in accordance with existing development approvals obtained by Declarant from the City of Kuna or any other development plans for which Declarant may from time to time obtain approval from the City of Kuna. Any development plans for the Real Property in existence prior to or following the effective date of this Declaration are subject to change at any time by Declarant, and impose no obligation on Declarant as to how the Real Property is to be developed or improved.

ARTICLE 2 DECLARATION

Declarant hereby declares that the Subdivision, and each Lot, parcel or portion thereof, is and/or shall be held, sold, conveyed, encumbered, hypothecated, leased, used, occupied and improved subject to the following terms 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 Subdivision, and to enhance the value, desirability and attractiveness of the Subdivision. The terms and Restrictions set forth herein shall run with the land constituting the Subdivision, and with each estate therein, and shall be binding upon any person having or acquiring any right, title or interest in the Subdivision or any Lot, parcel or portion thereof; shall inure to the benefit of every other Lot, parcel or portion of the Subdivision and any interest therein; and shall inure to the benefit of and be binding upon Declarant, each person or Owner having or holding an interest in the Subdivision and such person's or Owner's successors in interest, and may be enforced by Declarant, any Owner or Owner's successors in interest, any person having or holding an interest in the Subdivision or such person's successors in interest, or by the Association. In the event of any conflict between this Declaration and any other of the Project Documents, this Declaration shall control.

Notwithstanding anything herein to the contrary, until one hundred percent (100%) of all Lots in the Subdivision are transferred by Declarant, no provision of the Declaration shall be construed as to prevent or limit Declarant's right to complete development of Ashton Estates East Subdivision, including any subdivision or re-subdivision thereof, and to construct improvements thereon, nor Declarant's right to use and maintain model homes, construction, sales or leasing offices or similar facilities on any portion of the Real Property, including the Common Area, nor Declarant's right to post signs incidental to construction, sales or leasing.

ARTICLE 3 DEFINITIONS

"ADRC" shall mean the Architectural Design Review Committee as described in Section 11.1.

"Articles" shall mean the articles of incorporation of the Association.

"Association" shall mean Ashton Estates East Homeowners Association, Inc., an Idaho nonprofit corporation, or its successors, organized and established by Declarant to exercise the powers and carry out the duties set forth in this Declaration or any Supplemental Declaration.

"Assessments" shall mean those payments required of Owners, as Members, including Regular, Special or Limited Assessments as provided in this Declaration.

"Board of Directors" or **"Board"** shall mean any duly qualified board of directors, or other governing board or individual, if applicable of the Association.

“**Bylaws**” shall mean the Bylaws of the Association.

“**Common Area**” shall mean any or all parcels of real property in which the Association holds an interest or which is held or maintained for the benefit of the Association and its Members (including personal property, real property and/or improvements located thereon), including without limitation, all parcels that are designated on a recorded Plat or otherwise by Declarant as roads, common area lots, streets, drives, parking areas or drives, common open space, pastures, wildlife habitat, common landscaped areas, storage facilities, recreational facilities and other amenities and facilities. Common Area may be established from time to time by Declarant on any portion of the Real Property by describing such area on a recorded Plat, by granting or reserving it in a deed or other instrument, or by designating it as such in this Declaration. In addition, the Association may acquire any Common Area it deems necessary and/or beneficial to the Real Property. Common Area may include easement and/or license rights. Common Area includes Lots ___ and ___, Block ___, Lot ___ Block ___ and Lot ___ Block ___ and any improvements thereto.

“**Declarant**” shall mean the undersigned Kuna East, LLC, an Idaho limited liability company, or its successors in interest, or purchaser of undeveloped Lots in the Subdivision to whom Declarant’s rights under this Declaration are expressly transferred in accordance with Section 17.7 below.

“**Declaration**” shall mean this document as may be supplemented from time to time with a Supplemental Declaration, and shall include any amendment or restatement of this Declaration where the context requires.

“**Director**” or “**Directors**” shall mean members of the Board.

“**Lot**” shall mean any Lot within any Phase of Ashton Estates East Subdivision as specified or shown on a Plat or by Supplemental Declaration but excluding any Common Area. Each Lot is intended to be used for residential purposes and subject to the terms and conditions set forth herein.

“**Member**” shall mean an Owner holding a membership of the Association, including Declarant.

“**Owner**” shall mean the record owner, whether one or more persons or entities, including Declarant, of the fee simple title to any Lot, but excluding those having such interest merely as security for the performance of an obligation, and the Owner’s successors, heirs and assigns. Where any Lot is the subject of an installment contract of sale, the vendee under the contract shall be considered the Owner.

“**Phase**” shall mean a defined portion of the Real Property which has been designated as a Phase by Plat and/or recorded Supplemental Declaration. Each Phase shall contain one or more residential Lots and may, in Declarant’s discretion, be managed to the extent permitted herein or by Supplemental Declaration.

“**Plat**” shall mean any subdivision plat covering any portion of the Real Property as recorded in the Ada County, Idaho Recorder’s Office, particularly including but not limited to that certain Plat for Ashton Estates East Subdivision #1, attached as Exhibit B, recorded in the records of Ada County, Idaho, as amended and supplemented from time to time.

“**Pressurized Irrigation System**” shall mean that certain irrigation system for the Subdivision as further described in Article 12.

“**Project Documents**” shall mean the basic documents creating and governing the Real Property including, without limitation, this Declaration, any Supplemental Declaration, the Articles, the Bylaws, Design Guidelines and any procedures, rules, regulations or policies adopted under such documents by the Association, the Board or the ADRC.

“**Residence**” shall mean that portion or part of any Structure intended to be occupied by one family as a dwelling, together with attached or detached garage and the patios, porches, decks, and steps annexed thereto.

“**Structure**” shall mean the broadest legal definition attributable to the term “structure.” For purposes of construction, the term “Structure” shall mean, but not be limited to the building, construction, fabrication, assembly, or production of any manmade work artificially built up or composed of parts joined together in some definite manner whether of a permanent or temporary nature and whether movable or immovable.

“**Subdivision**” or “**Real Property**” shall mean the property legally described in Exhibit A subject to this Declaration and any property subject to this Declaration by recorded Supplemental Declarations, including without limitation, each lot, parcel and portion thereof and interest therein.

“**Supplemental Declaration**” shall mean any Supplemental Declaration including additional covenants, conditions and restrictions that may be adopted by Declarant with respect to any Phase or any portion of the Real Property or any property annexed and subject to this Declaration, as provided further herein.

“**Water Rights**” shall mean all water and all rights and entitlements to receive water that have been placed to beneficial use upon, or are otherwise appurtenant to or associated with the Real Property, including, without limitation, (1) all licenses, permits, claims, permit applications, contracts and storage entitlements; (2) all ditch or canal company shares and/or entitlements to receive water from any such company or from any irrigation district or other water delivery entity, and (3) all ditch rights, easements or rights-of-way associated with any irrigation or other water delivery ditch, canal, lateral or pipeline. Water Rights shall also specifically include the above-described rights to the use of water appurtenant to the Real Property as of the effective date of this Declaration, and all such rights hereafter acquired by the Declarant or the Association for the benefit of the Real Property.

ARTICLE 4 OWNERS' ASSOCIATION

4.1. Organization.

Declarant shall organize the Association as an Idaho nonprofit corporation under the provisions of the Idaho Code relating to nonprofit corporations. The Association shall be charged with the duties and invested with the powers prescribed by law and set forth in the Articles, Bylaws and this Declaration. Voluntary dissolution of the Association is prohibited without the approval of the City of Kuna. The Project Documents, as adopted and duly amended shall be deemed covenants running with the ownership of the Lots, and shall be binding upon the Owners as if recited verbatim herein. The Association shall be governed by a Board of Directors elected in the manner set forth in the Bylaws. Neither the Articles nor the Bylaws shall be amended or otherwise changed or interpreted so as to be inconsistent with this Declaration. Declarant grants the Association a revocable, non-exclusive license to use the name "Ashton Estates East Subdivision" for the sole purpose of identifying the Association.

4.2. Membership.

The Members of the Association shall be all Owners. No Owner, except Declarant, shall have more than one membership in the Association. Membership shall be appurtenant to and may not be transferred, pledged assigned, alienated or otherwise separated from ownership of a Lot. Ownership of a Lot shall be the sole qualification for membership. Each lessee, renter, or other occupant of a Lot not eligible for membership shall be subject to all obligations and responsibilities of membership with respect to the Project Documents, but shall not, at any time, be entitled to vote on any matter affecting the Association.

4.3. Powers.

The Association shall have all the powers of a non-profit corporation organized under the applicable provisions of the Idaho Code subject only to such limitations upon the exercise of such powers as are expressly set forth in the Project Documents. The Association shall have the power and authority 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 the Project Documents, and to do and perform any and all acts which may be necessary to, proper for, or incidental to the proper ownership, management and operation of the Common Area and the Association's other assets, including water rights received from Declarant, and the performance of the other responsibilities herein assigned, including, by way of illustration and not limitation:

4.3.1 Assessments. Levy Assessments and to enforce payment of such Assessments, all in accordance with the provisions of this Declaration. This power shall include the right of the Association to levy Assessments on any Owner of any portion of the Real Property to cover the operation and maintenance costs of the Common Area.

4.3.2 Right of Enforcement. The Association shall be the primary entity responsible for enforcement of this Declaration. The Association in its own name, on its own behalf, or on behalf of any Owner or Owners who consent thereto, shall have the right to commence and maintain actions and suits to restrain and enjoin any breach or threatened breach of the Project Documents, and to enforce by injunction or otherwise, all provisions hereof.

4.3.3 Delegation of Powers. Delegate its power and duties to committees, officers, employees, or to any Person to act as manager, and to contract for the maintenance, repair, replacement and operation of any 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. All contracts for management of any Common Area shall be for a term not exceeding one (1) year, and shall be subject to review by the Board upon the Class B Member Termination Date.

4.3.4 Association Rules. Adopt, amend and repeal by majority vote of the Board such rules and regulations as the Association deems reasonable and appropriate. The Association may govern the use of the Common Area by the Owners, their families, invitees, licensees, lessees or contract purchasers, including, without limitation, the use of Common Area for organized recreational activities; 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 such Association Rules are inconsistent with or less restrictive than any other provisions of this Declaration, the Articles, Bylaws and/or any design guidelines of the ADRC, the provisions of the Association Rules shall be deemed to be superseded by the provisions of this Declaration, the Articles, Bylaws or any design guidelines of the ADRC to the extent, but only to the extent, of any such inconsistency.

4.3.5 Improvements Within Public Right-of-Way. Maintain, improve, operate, repair and replace any facilities and improvements, including, without limitation, Common Area, drainage systems or facilities, bridge facades, pathways, landscape islands or median strips, and landscaping or landscaping improvements located in any public rights-of-way which the Association is obligated, or otherwise deems advisable, to maintain, operate, repair and replace pursuant to any Plat, or any license, easement or other agreement.

4.3.6 Emergency Powers. The power, exercised by the Association or by any person authorized by it, to enter upon any portion of the Real 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 and at the expense of the Association.

4.3.7 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 same, and for the preservation of the health, safety, convenience and the welfare of the Owners, for the purpose of constructing, erecting, operating or maintaining the following:

4.3.7.1 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;

4.3.7.2 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; and

4.3.7.3 Mailboxes and sidewalk abutments around such mailboxes or any service facility, berm, fencing and landscaping abutting Common Area, public and private streets or land conveyed for any public or quasi-public purpose including, without limitation, pedestrian and bicycle pathways.

4.3.8 Newsletter. If it so elects, prepare and distribute a newsletter on matters of general interest to Members of the Association, the cost of which shall be included in Regular Assessments;

4.3.9 Other. Such other and further powers as the Association Board deems reasonable and appropriate, it being the intent of Declarant that the Association have broad power and authority consistent with the Project Documents and applicable law.

4.4. Duties.

In addition to duties necessary and proper to carry out the powers delegated to the Association by the Project Documents, 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:

4.4.1 Operation and Maintenance of Common Area. Operate, maintain, and otherwise manage or provide for the operation, maintenance and management of the Common Area, including the repair and replacement of property damaged or destroyed by casualty loss, including any signs placed at the entrances to, or otherwise in the vicinity of the Real Property. The Association shall, at Declarant's discretion, operate and maintain all properties owned by Declarant

which are designated by Declarant for temporary or permanent use by Members of the Association.

4.4.2 Operation and Maintenance of Irrigation System. Operate and maintain or otherwise provide for the operation and maintenance of the Pressurized Irrigation System described in Article 12, including all facilities connected to the irrigation pump station.

4.4.3 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.

4.4.4 Maintenance of Berms and Retaining Walls. Maintain any berms, retaining walls, and water amenities within and abutting any Common Area.

4.4.5 Improvements in the Public Right-of-Way. Maintain, improve, operate, repair and replace the facilities and improvements described in Section 4.3.5.

4.4.6 Taxes and Assessments. Pay all real and personal property taxes and Assessments separately levied against the Common Area, the Association and/or any 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 and/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.

4.4.7 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 to own and/or manage for the benefit of the Subdivision all water rights and rights to receive water held by the Association, whether such rights are evidenced by license, permit, claim, decree, stock ownership or otherwise.

4.4.8 Rule Making. Make, establish, promulgate, amend and repeal such Association Rules as the Board shall deem advisable.

4.4.9 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 Project Documents and any and all laws, ordinances, rules and regulations of Ada County also including, without limitation, the recordation of any claim of lien with the Ada County Recorder's Office, as more fully provided herein.

4.5. Manager.

The Association may employ or contract for the services of a professional manager or management company ("Manager"), provided that no such employment or contract shall have a term of more than one (1) year, and each such contract shall be subject to cancellation by the Association with or without cause and without payment of a termination fee. The Manager so employed or contracted with shall not have the authority to make expenditures chargeable against the Association except upon specific prior written approval and direction by the Board. The Board shall not be liable for any omission or improper exercise by such Manager of any such duty, power or function so delegated by or on behalf of the Board. The Association may contract with Declarant or any affiliate of Declarant to act as Manager pursuant to the terms of this Section.

4.6. Personal Liability.

No Member of the Board, or member of any committee of the Association, or any officer of the Association or Declarant, 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 the Association, the Board, the Manager, if any, or any officer, committee, or other representative or employee of the Association, Declarant or the ADRC, 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.

ARTICLE 5 OWNERS' ASSOCIATION CONTROL

5.1. Control of Affairs of Association.

The Declarant shall appoint the Board and control the Association until administrative responsibility for the Subdivision is turned over to the Owners. On the date that is not later than ninety (90) days after the Class B Member Termination Date (defined below), Declarant shall call a meeting and at such meeting shall turn over administrative responsibility for the Subdivision to the Owners. At the meeting, the Declarant shall deliver to the Association:

5.1.1 The original or a photocopy of the recorded Declaration and copies of the Bylaws and the Articles of Incorporation of Ashton Estates East Homeowners Association Inc. and any supplements and amendments to the Articles or Bylaws;

5.1.2 The minute books, including all minutes, and other books and records of the Association and the Board of Directors;

5.1.3 All rules and regulations adopted by the Declarant;

5.1.4 Resignations of officers and members of the Board of Directors who are concurrently resigning;

5.1.5 Records of all property tax payments for the Common Area to be administered by the Association;

5.1.6 Copies of any income tax returns filed by the Declarant in the name of the Association, and supporting records for the returns;

5.1.7 A copy of the following, if available:

5.1.7.1 The as-built architectural, structural, engineering, mechanical, electrical and plumbing plans;

5.1.7.2 The original specifications, indicating all subsequent material changes;

5.1.7.3 The plans for underground site service, site grading, drainage and landscaping together with cable television drawings; and

5.1.7.4 A list of any general contractor and the electrical, heating and plumbing subcontractors responsible for construction or installation of any improvements on the Common Area;

5.1.8 Insurance policies;

5.1.9 Copies of any occupancy permits issued for the Subdivision;

5.1.10 A list of any written warranties on the Common Area that are in effect and the names of the contractor, subcontractor or supplier who made the installation for which the warranty is in effect;

5.1.11 Employment or service contracts in which the Association is one of the contracting parties or service contracts in which the Association or the Owners have an obligation or responsibility, directly or indirectly, to pay some or all of the fee or charge of the person performing the service; and

5.1.12 Any other contracts to which the Association is a party.

Declarant shall have administrative control of the Association by means of its Class B voting rights until those rights end and Declarant turns over control to the Owners by the election of a new Board of Directors in the manner prescribed in the Bylaws.

5.2. Voting Rights.

The Association shall have two classes of voting memberships:

5.2.1 Class A Members. Class A Members shall be the Owners of Lots designated in this Declaration, excluding the Declarant for so long as Declarant is the Class B Member. Until the Class B Member Termination Date (defined

below), the Class A Members shall not be entitled to vote upon any matter. Upon the Class B Member Termination Date, each Class A Member shall be entitled to one (1) vote for each Lot owned by such Class A Member. Upon the Class B Member Termination Date, Declarant shall become a Class A Member and shall be entitled to one (1) vote for each Lot owned by the Declarant.

5.2.2 Class B Member. Declarant, by and through Declarant's designated representative (hereinafter "**Declarant's Delegate**"), shall be the Class B Member, and shall be the sole voting Member of the Association entitled to one (1) vote for each Lot until the Class B Member Termination Date. The Class B Member shall cease to be a voting Member in the Association upon the earliest to occur of the following: (1) the date upon which the Declarant no longer owns any property or Lot within the Subdivision; (2) the date Declarant informs the Board in writing that Declarant no longer wishes to exercise its rights as the Class B Member hereunder; or (3) June 1, 2030. Such date shall be the "**Class B Member Termination Date.**"

ARTICLE 6 PROPERTY RIGHTS IN THE COMMON PROPERTIES

6.1. Members' Easement of Enjoyment.

The Declarant has conveyed or will convey the Common Area to the Association. Every Member shall have an easement for the use, protection, and maintenance of the Common Area. Such easements for the Common Area shall be appurtenant to and shall pass with the title to every Lot; subject, however, to the following limitations:

6.1.1 The right of the Association, acting by and through its Board, to grant easements for public utilities or for other public purposes consistent with the intended use of the Common Area. Such action shall be preceded by written notice of the action to every Class A Member not less than ten (10) nor more than ninety (90) days prior to such action.

6.1.2 The right of the Association to sell, convey or subject to a security interest any portion of the Common Area subject to such conditions as may be agreed to by the Members. No such sale, conveyance or creation of a security interest shall be effective unless an instrument signed by Members comprising no less than two-thirds (2/3) of the total voting power of the Association, if any, has been recorded in the appropriate records of Ada County, Idaho, agreeing to such sale, conveyance or creation of security interest. Written notice of the proposed action shall be sent to every Member not less than thirty (30) nor more than ninety (90) days prior to such vote.

6.1.3 The right of the Board of Directors of the Association to promulgate reasonable rules and regulations governing protection and maintenance of the Common Area.

6.1.4 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 same, and for the preservation of the health, safety, convenience and the welfare of the Owners, for the purpose of constructing, erecting, operating or maintaining the following:

6.1.4.1 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;

6.1.4.2 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; and

6.1.4.3 Mailboxes and sidewalk abutments around such mailboxes or any service facility, berm, fencing and landscaping abutting common areas, public and private streets or land conveyed for any public or quasi-public purpose including, without limitation, pedestrian and bicycle pathways.

ARTICLE 7 EASEMENTS

7.1. Easements of Access.

Declarant expressly reserves for the benefit of the Real Property and the Association reciprocal easements of ingress and egress for all Owners to and from their respective Lots for installation and repair of utility services, across and upon adjacent Lots and Common Area resulting from the normal use of adjoining Lots and Common Area, and for necessary maintenance and repair of any improvement thereon, including, without limitation, fencing, retaining walls, lighting facilities, mailboxes and sidewalk abutments, trees and landscaping. Such easements may be used by Declarant, and by all Owners, their guests, tenants and invitees, residing on or temporarily visiting the Real Property, for pedestrian walkways, vehicular access and such other purposes reasonably necessary for the use and enjoyment of a Lot or the Common Area.

7.2. Drainage and Utility Easements.

The Owners of Lots are hereby restricted and enjoined from constructing or altering any improvements upon any drainage or utility easement areas as shown on the Plat or otherwise designated in any recorded document, including those described in Article 9, below, which would interfere with or prevent the easement from being used for its intended purpose; provided, however that any Owner, Association, or the Declarant owning a Lot upon which such easement is located, shall be entitled to install and maintain landscaping on such easement areas, subject to approval by the ADRC and/or ACHD, so long as the same would not interfere with or prevent the easement areas from being used for their intended purposes. Any damage sustained to such improvements on the easement areas as a result of legitimate use of the easement area shall be

the sole and exclusive obligation of the Owner of the Lot where improvements were so damaged, or in the event the easement area where improvements were so damaged is located in a Common Area, the Association shall be responsible for the damage sustained and may impose a Special or Limited Assessment therefore.

7.3. General Landscaping.

An easement is hereby reserved to the Declarant and The Association, its contractors, employees, and agents, to enter those portions of Lots, for the purpose of installing, maintaining, replacing and restoring exterior landscaping, and natural vegetation and habitat. Such landscaping activity shall include, by way of illustration and not of limitation, the mowing of lawns, irrigation, sprinkling, tree and shrub trimming and pruning, walkway improvement, seasonal planting and such landscaping activities within the Real Property as the Association shall determine to be necessary from time to time.

7.4. Declarant's Rights Incident to Construction.

Declarant, for itself and its successors and assigns, hereby retains a right and easement of ingress and egress over, in, upon, under, and across the Real Property and the right to store materials thereon and to make such other use thereof as may be reasonably necessary or incident to the construction of the improvements on that portion of the Real Property owned by Declarant; provided, however, that no such rights shall be exercised by Declarant in such a way as to unreasonably interfere with the occupancy, use, enjoyment, or access to an Owner's Lot by that Owner or such Owner's family, tenants, employees, guests, or invitees.

7.5. Emergency Easement.

A general easement is hereby granted to all police, sheriff, fire protection, ambulance, and all other similar emergency agencies or persons to enter upon the Real Property in the proper performance of their duties.

7.6. Maintenance Easement.

An easement is hereby reserved to Declarant, which may be granted to the Association, and any member of its Board, and their respective officers, agents, employees, and assigns, upon, across, over, in, and under the Lots and a right to make such use of the Lots as may be necessary or appropriate to make emergency repairs or to perform the duties and functions which the Association is obligated or permitted to perform pursuant to the Project Documents, including the right to enter upon any Lot for the purpose of performing maintenance to the landscaping or the exterior of improvements to such Lot as required by the Project Documents.

**ARTICLE 8
COVENANT FOR ASSESSMENTS**

8.1. Purpose of Assessments.

The assessments levied by the Association shall be used exclusively for the purpose of promoting the recreation, health, safety, enjoyment, and protection of the Members and other

users of the Subdivision and in particular for the preservation and maintenance of Common Area and other property designated by the Board of Directors of the Association. Such purposes shall also include but not be limited to the cost to operate, maintain, and otherwise manage or provide for the operation, maintenance and management of the Common Area, including the repair and replacement of property damaged or destroyed by casualty loss, including any signs placed at the entrances to, or otherwise in the vicinity of the Real Property. All drainage areas, waterways and similar portions of the Real Property shall be maintained in accordance with sound hydrological principles. The Association shall, at Declarant's discretion, operate and maintain all properties owned by Declarant which are designated by Declarant for temporary or permanent use by Members of the Association.

8.2. 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.

8.2.1 Purpose of Regular Assessments. The proceeds from Regular Assessments are to be used to pay for all costs and expenses incurred by the Association, including legal and attorney's 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 Area and Water Rights, including all improvements located on such areas owned and/or managed and maintained by the Association, the payment and delivery of water supply to the Subdivision (the "Operating Expenses"), and an amount allocated to an adequate reserve fund to be used for repair, replacement, maintenance and improvement of those elements of the Common Area, the Water Rights, the Pressured Irrigation System or other property of the Association that must be replaced and maintained on a regular basis (the "Repair Expenses"). The Operating Expenses and the Repair Expenses, and any other expenses necessary to acquire all assets and services and to otherwise carry out the powers, duties and responsibilities of the Association, are collectively referred to herein as the "Expenses."

8.2.2 Computation of Regular Assessments. The Association shall compute the amount of its Expenses on an annual basis. The Board shall compute and levy the amount of Regular Assessments owed by its Members for the first fiscal year within six (6) months following the month in which the closing of the first sale of a Lot occurs in the Real Property for the purposes of the Association's Regular Assessment ("Initiation Date"). Thereafter, the computation of Regular Assessments by the Association shall take place not less than sixty (60) days before the beginning of each fiscal year of the Association. 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.

8.2.2.1 Amounts paid by Owners. The Board can require, in its discretion or as provided in the Project Documents, payment of Regular Assessments to the

Association in monthly, quarterly, semi-annual or annual installments. Regardless of the installment schedule adopted by the Board, the Board may bill for Assessments monthly, quarterly, semi-annually or annually, at its discretion. With respect to the Regular Assessments to be paid by any particular Owner for any given fiscal year, each Owner, except for the Declarant, shall be assessed and shall pay an amount computed by multiplying the Association's total advance estimate of Expenses by the fraction produced by dividing the Lots attributable to the Owner by the total number of Lots in the Real Property.

8.3. Special Assessments.

8.3.1 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, without limitation, costs of construction, improvement, protection, maintenance, repair, management and operation of 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 Real Property which shall be computed in the same manner as Regular Assessments. The Board shall, in its discretion, determine the schedule under which such Special Assessment will be paid.

8.3.2 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 for the Association.

8.4. Limited Assessments.

Notwithstanding the above provisions with respect to Regular and Special Assessments, the Board of the Association may levy a Limited Assessment against a Member and/or such Member's Lot as a remedy to reimburse the Association for costs incurred in bringing the Member and/or such Member's Lot into compliance with the provisions of the Project Documents, for damage caused by the Member, a Member's tenant, representative or invitee, or any member of the Member's family, to any Common Area or any other portion of the Real Property or for otherwise providing any goods or services benefiting less than all Members or such Members' Lots.

8.5. Notice and Assessment Due Date.

Except with regard to the first Assessment, thirty (30) days prior written notice of Regular and Special Assessments shall be sent to the Owner of every Lot subject thereto, and to any person in possession of such Lot by the Association. The Association shall determine if payments for all Assessments shall be due monthly, quarterly, semi-annually or annually. The Assessment installment schedule shall be the same for all Association Assessments. The due dates for installment payment of Regular Assessments and Special Assessments shall be the first

day of the month 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 date due. There may accrue, at the Board's discretion, with each delinquent installment payment a late charge equal to ten percent (10%) of the delinquent installment. In addition, each installment payment which is delinquent for more than twenty (20) days may accrue, at the Board's discretion, interest at the rate of 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 Lot as more fully provided herein. Each Owner is personally liable for Assessments, together with all interest, costs and attorneys' fees, and no Owner may be exempt from such liability by a waiver of the use and enjoyment of the Common Area, or by lease or abandonment of such Owner's Lot.

8.6. Reserve Account.

The Association may, but is not required to, 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. Any reserve account established under this Section shall be funded by separate reserve assessments against the Lots in such amount as the Owners may approve as a part of the annual Association budget. Any reserve account shall be established in the name of the Association. The Association shall be responsible for administering the account. Assessments paid into the reserve account are the property of the Association and are not refundable to sellers or Owners of Lots.

8.7. Special Assessments for Capital Improvements.

In addition to the annual assessments authorized above, the Board of Directors may levy in any assessment year a special assessment applicable to that year only, for the purposes of defraying, in whole or in part, the costs of any unexpected or unfunded maintenance for the Common Area. This Section shall not prohibit the Board from authorizing capital expenditures for replacement, repairs or improvements from funds generated by regular assessments.

8.8. Improvements in the Public Right-of-Way.

Maintain, improve, operate, repair and replace the facilities and improvements described in Section 4.3.5.

8.9. Taxes and Assessments.

Pay all real and personal property taxes and assessments separately levied against the Common Area or against the Real Property, 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 and/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.

8.10. Water and Other Utilities.

Acquire, provide and/or pay for water, sewer, garbage disposal, refuse and rubbish collection, electrical and/or gas and other necessary services for the Common Area, and to own and/or manage for the benefit of the Subdivision all water rights and rights to receive water held by the Association, whether such rights are evidenced by license, permit, claim, decree, stock ownership or otherwise.

8.11. 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, and to the extent possible to obtain, including, without limitation the following policies of insurance:

8.11.1 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;

8.11.2 Comprehensive public liability insurance insuring the Board, the Association, Declarant, and the individual grantees, tenants, agents and employees, invitees and guests of each of the foregoing against any liability incident to the ownership and/or use of the Common Area. Limits on liability of such coverage shall be as follows: Not less than One Million Dollars (\$1,000,000) per person and One Million Dollars (\$1,000,000) per occurrence with respect to personal injury or death, and One Million Dollars (\$1,000,000) per occurrence with respect to property damage as adjusted by the Board from time to time;

8.11.3 Full coverage directors' and officers' liability insurance with a limit of at least Two Hundred Fifty Thousand Dollars (\$250,000) as adjusted by the Board from time to time;

8.11.4 Such insurance as described in Section 12.6.1;

8.11.5 Such other insurance, including motor vehicle insurance and worker'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;

8.11.6 The Association shall be deemed trustee of the interests of all Owners in connection with any insurance proceeds paid to the Association under

such policies, and shall have full power to receive such Owner's interests in such proceeds and to deal therewith; and

8.11.7 Insurance premiums for the above insurance coverage shall be deemed a common expense to be included in the Regular Assessments levied by the Association.

8.12. Effect of Nonpayment of Assessments; Liens; Remedies of the Association.

8.12.1 Right to Enforce. The Association has the right to collect and enforce its Assessments, including any late charges and/or interest accrued thereon pursuant to the provisions hereof. Each Owner shall be deemed to covenant and agree to pay each and every Assessment provided for in this Declaration, including any late charges and/or interest accrued thereon, 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 attorneys' fees and costs, including the costs and expenses for any lien or lien releases, 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 commencement and maintenance of a suit at law or in equity, or the Board may exercise the power of foreclosure and sale pursuant to this Section to enforce the liens created pursuant to this Section. A suit to recover a money judgment for an unpaid Assessment shall be maintainable without foreclosing or waiving the lien hereinafter provided.

8.12.2 Assessment Liens.

8.12.2.1 Creation. There is hereby created a claim of lien with power of sale on each and every Lot to secure payment of any and all Assessments levied against such Lot pursuant to this Declaration together with interest thereon at the rate of twelve percent (12%) per annum, and all costs of collection which may be paid or incurred by the Association making the Assessment in connection therewith, including without limitation, reasonable attorneys' fees and or any fee charged by a trustee for conducting a foreclosure sale pursuant to any lien that is foreclosed upon, or any fee for title report, or other fees associated with a foreclosure. All sums assessed in accordance with the provisions of this Declaration shall constitute a lien on such respective Lot upon recordation of a notice of assessment with the Ada County Recorder. Such lien shall be prior and superior to all other liens or claims created subsequent to the recordation of the notice of assessment except for tax liens for real property taxes on any Lot and any assessment on any Lot in favor of any municipal or other governmental assessing body which, by law, would be superior thereto.

8.12.2.2 Notice of Assessment. Upon default of any Owner in the payment of any Assessments issued hereunder, upon approval of the Board, a member of

the Board may cause a notice of assessment to be recorded in the office of the Ada County Recorder. The notice shall state the amount of such assessment and other authorized charges (including the cost of recording such notice), a sufficient description of the Lot against which the same have been assessed, and the name of the record Owner thereof. Each assessment shall constitute a separate basis for a notice of assessment, but any number of assessments may be included within a single notice. Upon payment to the Association of such assessment and charges in connection therewith or other satisfaction thereof, the Board shall cause to be recorded a further notice stating the satisfaction and the release of the lien thereof. The Association may demand and receive the cost of preparing and recording such release before recording the same.

8.12.2.3 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 in deeds of trust or any other manner permitted by law. The Board is hereby authorized to appoint its attorney or any title company authorized to do business in Idaho as trustee for the purpose of conducting such sale or foreclosure.

8.12.2.4 Required Notice. No action may be brought to foreclose the lien created by recordation of the notice of assessment, whether judicially, by power of sale or otherwise, until the expiration of thirty (30) days after a copy of such notice of assessment has been deposited in the United States mail, certified or registered, postage prepaid, to the Owner (at the address of such Owner's Lot) described in such notice of assessment, and to the person in possession of such Condominium(s) and a copy thereof is recorded by the Association in the Ada County Recorder's Office.

8.12.2.5 Subordination to Certain Trust Deeds. The lien for the Assessments provided for herein in connection with a given Lot shall be subordinate to 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 Lot prior to the recordation of a claim of lien for the Assessments. The sale or transfer of any 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.

8.13. Exempt Property.

The following property which is subject to this Declaration shall be exempt from the assessments created herein: (a) all properties expressly dedicated to and accepted by a local public authority; and (b) all unimproved Lots owned by Declarant, and (c) any finished Lot owned by Declarant.

8.14. Set Up, Transfer Fee and Initial Regular Assessment.

Assessments shall commence as to each Lot upon the closing of the first sale of such Lot from Declarant, or as to the remaining Lots owned by Declarant, when such Lots are no longer offered for sale to the general public. At each such closing, the Owner thereof shall pay a set up fee in the amount of **Two Hundred Fifty Dollars (\$250.00)** and also such portion of the existing Regular Assessment, pro-rated for the remainder of the calendar year. These initial Assessments shall be paid to the Declarant to reimburse the Declarant the set up costs and the maintenance of the Common Area and related facilities and other Association costs incurred or to be incurred by the Declarant prior to the Class B Termination Date. The pro rata portion of the Regular Assessment will be paid to the Declarant for each closing that occurs prior to the Class B Termination Date and only be paid to the Association if the Association has conducted its first annual meeting, elected a Board of Directors and assumed the obligations and expenses of the Association. The Declarant shall have the exclusive use of the assessments for the purposes of discharging the duties and obligations of the Association until the Class B Termination Date. For each Lot that has been sold to a builder who subsequently conveys the Lot to a homeowner; or for each Lot that is purchased from the Declarant by a homeowner, there shall be assessed against such Lot a transfer fee in the sum of **Two Hundred Dollars (\$200.00)**, which fee shall be utilized by the Declarant to cover any management fee incurred in connection with the management of the affairs of the Association. The Association, upon its first meeting, shall initiate Assessments in accordance with this Declaration without regard to or an accounting of the initial deposits or other Assessments previously paid to the Declarant.

ARTICLE 9 STORM WATER DRAINAGE SYSTEM

9.1. Ada County Highway District Storm Water and Drainage Easement.

Lots ___ and ___, Block ___ are servient to and contain the Ada County Highway District (“ACHD”) storm water drainage system. **These Lots are encumbered by that certain Master Perpetual Storm Water Drainage Easement recorded on May 8, 2009 as Instrument No. 109053259, official records of Ada County, and incorporated herein by this reference as 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.**

Drainage. There shall be no interference with 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 ADRC and the Ada County Highway District. For the purpose 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 ADRC and/or ACHD, which may include drainage from Common Area over any Building Lot in the Property.

9.2. Operation and Maintenance of Storm Water Drainage System.

The Owners and the Association, as applicable, shall maintain the storm water drainage system in accordance with the Ashton Estates East Subdivision Phase 1 Operations & Maintenance Manual dated _____ (exhibit D). Required maintenance shall include, but not be limited to the following:

- A. Periodic inspection of the storm water drainage system for water spots and other erosion, on at least a monthly basis;
- B. Landscape maintenance including, but not limited to, mowing, trimming, fertilizing and irrigating, provided, however, any such irrigation shall not interfere with the operation of the storm water system; and
- C. Collection and disposal of any and all trash and debris found in and around the easement area.

9.3. Ada County Highway District Right of Inspection and Remedies.

In the event that ACHD determines in its sole discretion, that the Association or any Owner is not adequately maintaining the storm water system, then ACHD shall be permitted to do so. Except in cases of emergency, ACHD shall provide thirty (30) days advance written notice of its intention to do so and by which said notice shall specifically identify the maintenance which is then required. In the event the Association shall fail to complete the items of maintenance as specified in said notice within the thirty (30) day period provided, then in that event, ACHD may begin to undertake such maintenance. ACHD is hereby granted an irrevocable license and easement to enter upon any portion of the storm water and drainage easement area, with or without notice, to perform such maintenance and inspection of the storm water system. Should ACHD engage in maintenance of the storm water system to perform repairs necessitated by the Association's negligence or failure to perform its duties under Section 9.2, above, ACHD may first bill the Association for the cost of the said maintenance and, if said bill shall not be paid within sixty (60) days, then ACHD shall be entitled and empowered to file a taxable lien against all Lots within the subdivision with the power of sale as to each and every lot in order to secure any and all assessments levied against all Lots in the subdivision pursuant to this Declaration as if the said maintenance had been performed by the Association, together with interest at the rate which accrued on judgments thereon and all costs of collection which may be paid or incurred by ACHD. The Association, and all Lot owners, by accepting title to a Lot, agrees that all Lot owners in the subdivision are benefited property owners of such maintenance. The Association shall not be dissolved or relieved of its responsibility to maintain the storm water system without the prior written approval of ACHD.

ARTICLE 10 DEVELOPMENT STANDARDS AND USE RESTRICTIONS

10.1. Land and Building Type.

No Lot shall be used except for single family residential purposes. No Lot shall be subdivided or partitioned. No improvement shall be erected, altered, placed or permitted to

remain on any Lot other than one detached single family dwelling, with a garage, and a storage building if desired excepted as permitted by this Declaration and as approved by the ADRC. This Declaration is not intended to serve as authority for the ADRC to control the interior layout or design of residential Structures except to the extent necessitated by use, size and height restrictions. The Declaration is intended to serve as authority for the ADRC or its designate to use its judgment to see that all Structures and improvements conform and harmonize as to external design, quality and type of construction, architectural character, materials, location on the Real Property, height, grade and finished ground elevation, landscaping and all aesthetic considerations as set forth in this declaration or the design guidelines promulgated by the ADRC (the "Design Guidelines"). Plans and specifications shall be submitted to the Board for approval prior to the commencement of construction or earthwork. Plan and specification approval shall not be unreasonably withheld nor conditioned with respect to the construction of a Residence on a Lot in accordance with this Declaration. However, Declarant's use of any Residence on a Lot as a sales office or model home for purposes of sales in the Subdivision shall not be subject to the regulation of the Board during all times in which Declarant owns Lots within the Subdivision.

10.2. Plat Easements.

The easements shown on the Plat shall be permanent and shall benefit and burden the Real Property as indicated on the Plat. Such easements shall run under, over, and across the Real Property as shown on the Plat, for the purposes indicated upon the Plat. The public and private utility easements shown on the Plat shall be for the purpose of erecting, installing, constructing, maintaining and operating sewers and drainage and irrigating systems, and pipe, wires, cables and conduits for lighting, heating, power, telephone and any other method of conducting and performing any public or quasi-public utility service or function beneath, upon, or above the surface of such Real Property. Within these easements, no Structure, fence, planting or other materials shall be placed or permitted to remain which may damage or interfere with the installation or maintenance of such utilities or facilities, or which may change the direction of flow of water through a drainage channel or facilities in the easements or which may obstruct or retard the flow of water through drainage channels in the easements. However, with prior written approval by the Board, an Owner may place removable Structures or place surface coverings such as asphalt or concrete on this easement area or install fencing, plant shrubbery in this area or otherwise landscape this area, if the Owner agrees to remove same at Owner's expense whenever it is necessary to have access to the surface or sub-surface property within the easement for the purpose specified herein. Any utility facilities shall be maintained, repaired and replaced solely by the benefited party who placed them in the easement area except to the extent they are damaged through the fault of an Owner.

10.3. Setbacks.

No building or other structure (exclusive of fences and similar structures approved by the ADRC) shall be located on a Lot nearer to a Lot line than the distance permitted by (i) the ordinances of the City of Kuna applicable to the Real Property except as may be modified by a conditional use permit issued by the City of Kuna or (ii) the ADRC Design Guidelines or approval, whichever requires the greater distance. The ADRC shall have the right to stagger setbacks of the Lot in order to create a more pleasing appearance and to minimize the negative

visual appearance of a uniform building line. The front (and side, for corner Lots) lot lines may be located into the sidewalk.

10.4. Garages; Minimum Square Footage of Living Space.

Each Residence shall have an attached or detached fully enclosed garage having minimum capacity or square footage as set forth in the ADRC Design Guidelines or otherwise required by the ADRC. No carports will be allowed. The minimum square footage of living area within a Residence shall be as provided in the Design Guidelines and as approved by the ADRC in its sole and absolute discretion. The square footage of the living area shall be based upon the finished interior living space at or above the grade of the Lot, exclusive of basement, porches, patios and garage. THE OWNER (OR HIS/HER BUILDER) SHOULD REVIEW THE ADRC DESIGN GUIDELINES.

10.5. Temporary Structure.

No Structure of a temporary nature, nor any trailer, shall be used at any time as a Residence, either temporary or permanent. Notwithstanding the foregoing, this Section shall not be deemed to prevent the storage, during the course of construction of a Residence on a Lot, of construction materials and equipment on said Lot as may be necessary for such construction.

10.6. Landscaping.

A landscape plan is required to be submitted to the ADRC for approval. The Owner is required to follow all guidelines set forth for landscaping by the ADRC. All landscaping (including automatic sprinklers) on the front and side yards of a Lot, along with the rear fencing, must be completed upon substantial completion of construction of a Residence on the Lot, and other required landscaping of a Lot must be completed within ninety (90) days from substantial completion of a Residence. In the event of undue hardship due to weather conditions, this provision may be extended for a reasonable length of time, but only to the extent permitted by applicable law, upon written approval of the Board. Landscaping shall also include provisions for adequate surface water drainage to prevent unnecessary discharge onto adjoining Lots. The Board and or the ADRC may, from time to time, establish specific requirements related to the types of shrubbery or plants to be located on the Lots.

10.7. Parking.

No motor homes, trailers, boats, camper, recreational vehicles, and other mobile equipment, trailers, implements and vehicles (excluding automobiles) of all kinds or nature shall be parked or stored on any Lot, unless such items are fully screened or enclosed from view, and unless the ADRC has otherwise approved the location and/or screening of said items. No vehicle should be parked or stored for a period in excess of seventy-two (72) consecutive hours on any street, Lot or any other portion of the Real Property, including driveways. A minimum of two off street parking spaces for automobiles shall be provided on each Lot. The primary purpose of the garage required on each Lot is for the parking and storage of automobiles and other vehicles. The Owner shall provide sufficient garage space for all automobiles and other vehicles used by the occupants of the Lot, which vehicles shall be kept within the garage other than for temporary

purposes. No commercial vehicle, trucks with a capacity in excess of one (1) ton, shall be parked or stored upon any Lot or street within the subdivision.

No truck, truck camper, tent, garage, barn, shack or other outbuilding or vehicle shall at any time be used as a residence or living place on any part of Real Property.

10.8. Fences, Hedges and Trees.

Any fence or hedges installed in the front yard or on side Lot lines forward of the building line with the greatest setback on the Lot or the adjoining Lot, shall not exceed four (4) feet in height. Any fence or hedge installed on the remainder of the Lot shall not exceed six (6) feet in height. All other fences, including side yard fencing, must be vinyl solid fencing or view fencing as approved by the ADRC, and shall be a maximum height of six feet. There shall be no wood or chain link fences on any Lot or Common Area. Any fence that faces a street must meet the design criteria established by the Board and/or the ADRC. No building, wall, fence, paving, landscaping or other construction of any type shall be erected or maintained by an Owner so as to trespass or encroach upon any Common Area unless specifically approved by the Board in writing.

The Owner of any Lot, including, without limitation, Declarant or any successor Declarant, shall be obligated to plant, prior to the issuance of a certificate of occupancy for any Residence constructed on a Lot, and maintain in good condition thereafter, all trees or other plantings as may be required by the City of Kuna, the Board or the ADRC. Declarant shall be responsible for such planting and maintenance with respect to all trees and plantings in, on or about the Common Area in the time and manner required by the City of Star from time to time. The Owner of each Lot shall provide for the maintenance of all trees, plantings, and landscaping located on such Owner's Lot including, without limitation, all trees, plantings and landscaping located between the sidewalk and the street.

10.9. Offensive Activities.

No noxious or offensive activity shall be carried on upon any Lot, nor shall anything be done thereon which may be, or may become, an annoyance or a nuisance to other Owners. No Lot shall be used or maintained as a dumping ground for rubbish, garbage, or trash. All Garbage and other waste shall be kept in sanitary containers emptied weekly. All equipment for storage or disposal of such material shall be kept in a clean and sanitary condition, and comply with all local, state or Federal requirements.

10.10. Business and Commercial Use.

Except as otherwise provided herein, no trades, crafts, businesses, professions, commercial, or similar activities of any kind shall be conducted on any Lot, nor shall any goods, equipment, vehicles, materials, or supplies used in connection with any trade, service or business be kept or stored on any Lot, except for (i) one room offices which are not designated by exterior signs and do not create additional vehicle traffic, and (ii) any home builder or Declarant, who is constructing Residences on Lots, or storing construction materials and equipment on said Lots in the normal course of said construction and to use completed homes as sales models as provided herein.

10.11. Signs.

No sign of any kind shall be displayed to the public view on any Lot or improvement, except one professionally made of not more than four (4) square feet advertising the Lot for sale. This restriction shall not prohibit the temporary placement of political signs on any Lot by its Owner, or placement of a professionally made sign by Declarant, which complies with local applicable sign ordinances. This restriction does not apply to signs used by Declarant, builders, realtors or agents during construction and sales of Residences.

10.12. No Further Subdivision.

No Lot may be further subdivided unless expressly approved in writing by the Board or Declarant, so long as Declarant owns a Lot in the Subdivision. Any such further subdivision shall be consistent with all applicable city, county and state laws, rules, regulations and ordinances.

10.13. Declarant's Right of Development.

Nothing contained in this Declaration shall limit the right of Declarant to grant licenses, to reserve rights-of-ways and easements for utility companies, public agencies or others, or to complete excavation, grading and construction of improvements to and on any portion of the Real Property owned by Declarant, or to alter the foregoing and its construction plans and designs, or to construct such additional improvements as Declarant deems advisable in the course of development of the Real Property. Such right shall include, but shall not be limited to, erecting, constructing and maintaining on the Real Property such structures and displays as may be reasonably necessary for the conduct of Declarant's business of completing the work and disposing of the same by sales, lease or otherwise. Declarant shall have the right at any time prior to acquisition of title to a Lot by a purchaser to grant, establish and/or reserve on that Lot additional licenses, reservations and rights-of-way to utility companies, the Association, or to others as may from time to time be reasonably necessary for the proper development and disposal of the Real Property. Declarant may use any structures owned or controlled by Declarant on the Real Property as model home complexes or real estate sales or leasing offices. Declarant need not seek or obtain Association or ADRC approval of any improvement constructed or placed by Declarant, or its affiliated entities, on any portion of the Real Property. The rights of Declarant hereunder may be assigned by Declarant to any successor in interest in connection with Declarant's interest in any portion of the Real Property, by an express written assignment recorded in the Ada County Recorder's Office.

Each Owner by acceptance of a deed to any Lot or other portion of the Real Property agrees that such Owner shall not object to or oppose any development of any portion of the Real Property, or other property owned by Declarant and annexed to the Real Property. Such agreement not to oppose development is a material consideration to the conveyance of any portion of the Real Property by Declarant to any and all Owners.

No provision of this Declaration shall be construed as to prevent or limit Declarant's right to complete development of the Real Property, including any subdivision or resubdivision of the Real Property, or to construct improvements thereon, nor Declarant's right to maintain model

homes, construction, sales or leasing offices or similar facilities on any portion of the Real Property, including the Common Area or any public right-of-way, nor Declarant's right to post signs incidental to construction, sales or leasing.

10.14. Animals.

No animals, livestock, insects or poultry of any kind shall be raised, bred, or kept on any Lot, except dogs, cats, or other household pets may be kept, provided that they are not kept, bred, or maintained for any commercial purpose. The number of allowable household pets are limited to 2 each (no more than 2 dogs and or 2 cats)

10.15. Construction Completion.

Construction of any Residence shall be completed, including painting and exterior finish, within seven (7) months from the commencement of construction. In the event of undue hardship due to extraordinary weather conditions, this provision may be extended for a reasonable length of time upon written approval from the Board. All Lots shall, prior to and after construction of improvements thereon, be kept in a neat and orderly condition and free of brush, vines, weeds, and debris. Each Lot shall be maintained in order to prevent the creation of a nuisance or health hazard. All grass shall be cut and mowed at sufficient intervals to comply with the standard of maintenance prevailing in the Subdivision unless otherwise approved in writing by the Board.

10.16. Antennas and Service Facilities.

No exterior antennas, aerials or satellite dishes (except satellite dishes 19" or less in width) shall be permitted on any part of the Real Property. Clotheslines and other service facilities shall be screened so as not to be viewed from the street.

10.17. Exterior Finish.

The exterior of all Structures on any Lot shall be designed, built and maintained in such a manner as to blend in with the natural surroundings, existing Structures and landscaping in the Subdivision. Siding of either hardboard, concrete composite lap or shingle siding, stucco or "drivet" type siding, board and batten may be allowed by the ADRC provided that it is consistent with an overall style and design of the homes in the subdivision, or other material approved by the Board. Stucco board, T-111 type plywood, or other pressed wood sheet, or vinyl lap siding will not be permitted. Exterior colors must be approved in writing by the ADRC in accordance with the provisions of Article 11, and shall include a minimum of three (3) paint colors for the body, trim and accents unless otherwise determined by the ADRC. Exterior trim, fences, doors, railings, decks, eaves, gutters, and the exterior finish of garages and other accessory buildings shall be designed, built and maintained to be compatible with the exterior of the Structure they adjoin.

10.18. Roofing.

All Structures shall have roofs constructed of composite shingles with high definition ridges, with a 30 year architectural composition. All roof colors are subject to the approval of

the Board and are limited to black, weathered wood, gray and dark brown. Roof color may not be changed without prior written approval of the Board.

10.19. Windows.

All window frames on Residences shall be wood or vinyl. Exterior window wraps are required on all sides of homes.

10.20. Exterior Elevations.

All home exterior elevations, paint colors and stone colors are to be approved by the ADRC.

10.21. Trash.

All garbage, refuse and animal waste shall be properly and promptly cleaned and stored and appropriately removed from each Lot so as to prevent unsightliness, or unnecessary or unreasonable odors.

10.22. Agricultural Uses.

The Owners have been made aware that the Subject Property has been developed in an agricultural community and that there will continue to be agricultural uses of some of the surrounding properties. The agricultural uses of the surrounding properties, including the use of agricultural machinery, burning and chemical weed control and fertilization, and the raising of livestock, although restricted from the Subject Property are not necessarily restricted from the neighboring properties. This provision specifically puts the Owners on notice of such potential conditions.

10.23. Mailboxes.

All mailboxes shall be constructed or installed on any Lot only if in compliance with the ADRC Design Guidelines.

10.24. Basements.

Basements will not be allowed.

10.25. Outbuildings.

Outbuildings, separate garages, sheds and shelters may be constructed only simultaneously with or after a Residence has been constructed on the Owners Lot. All such outbuildings shall be constructed only after written approval thereof by the ADRC. All outbuildings shall be constructed of similar or compatible exterior materials with the Residence so as to be aesthetically compatible therewith. All outbuildings constructed on a Lot shall be in compliance with the applicable ordinance of the City of Kuna, Idaho.

10.26. Construction Time Frame.

All construction work on Residences shall be diligently and continuously pursued, and shall be completed within seven (7) months from the date constructed started.

10.27. 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 and the Ada County Highway District (“ACHD”). 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 and or ACHD, which may include drainage from Common Area over, any Building Lot in the Property.

10.28. Encroachments.

If any portion of a Residence or other Structure now or hereafter constructed upon any Lot encroaches upon any part of the Common Area or upon a Lot or Lots used or designated for use by an Owner of another Lot, such Residence or other Structure shall promptly be removed by its Owner.

ARTICLE 11 DESIGN REVIEW

11.1. Purpose and Authority of ADRC.

Declarant or the Association shall appoint an architectural design review committee (the “ADRC”) to review and approve all plans and specifications for Structures, and to provide for and require all improvements to be in harmony with the general plan of improvement of the Real Property in order to insure the highest possible quality of residential development. The Declarant will act as the ADRC until such time as a majority of the voting power of the Association is controlled by Members other than the Declarant. The approval of any plans and specifications submitted to the ADRC may be withheld not only because of their non-compliance with any of the specific conditions, covenants and restrictions contained in this Declaration, but also because of incompatibility with the design standards for the Subdivision. Considerations such as siting, shape, size, color, design, height, impairment of the view from other parts of the Subdivision, solar access, and other effects on the enjoyment of other parts of the Subdivision, including without limitation the Common Area, as well as any other factors which the ADRC reasonably determines to be relevant, may be taken into account by the ADRC in determining whether or not to approve any proposed Structure.

11.2. Membership.

Appointment and Removal. Until the Class B Member Termination Date, the ADRC shall consist of as many persons, but not less than three, as Declarant may from time to time appoint. Until the Class B Member Termination Date, Declarant may remove any member of the

ADRC from office at any time and may appoint new or additional members at any time. The Association shall keep on file at its principal office a list of the names and addresses of the members of the ADRC. Declarant may at any time delegate to the Board of Directors of the Association the right to appoint or remove members of the ADRC. In such event, or in the event Declarant fails to appoint an ADRC, the Board of Directors shall assume responsibility for appointment and removal of members of the ADRC, or if it fails to do so, the Board of Directors shall serve as the ADRC. Declarant shall retain the right to appoint members of the ADRC until the earlier of: the date Declarant delegates this right to the Board, or Declarant is no longer the owner of any Lot. No member of the ADRC shall receive any compensation or make any charge for his services in connection with design review and approval.

11.3. Approval of Plans by ADRC.

No Residence, building, garage, or any Structure or improvements of any kind or nature shall be commenced, erected, placed or altered on any Lot by an Owner (except the Declarant) until detailed construction plans and specifications showing the nature, shape, height, materials, colors and location of the proposed improvements shall have been submitted to and approved in writing by the ADRC. All plans and specifications must be submitted to the ADRC at least thirty (30) days prior to the start of construction unless such time period is waived by the ADRC.

11.4. Action.

Except as otherwise provided herein, at least two-thirds (2/3) of the members of the ADRC shall have the power to act on behalf of the ADRC without the necessity of meeting and without the necessity of consulting with the remaining member of the ADRC. The Owner shall also supply any additional information reasonably requested by any member of the ADRC. The ADRC may render its decision only by written instrument setting forth the action taken by the members consenting thereto.

11.5. Procedures.

In the event the ADRC fails to approve or disapprove plans and specifications within thirty (30) days after such plans and specifications have been submitted to it, approval will not be required and the related covenants shall be deemed to be complied with fully. The thirty (30) day time period for response shall be deemed complied with if the Board's notice is provided to the Owner in person or mailed within thirty (30) days as determined by the date of mailing by the ADRC. Such notice shall be delivered or mailed to the applicant at the address designated by the applicant for such purpose in his application.

11.6. Construction by Declarant.

This Article shall not govern construction of improvements or alterations by Declarant upon portions of the Real Property owned by Declarant. Declarant reserves the right to add improvements not described in this Declaration.

11.7. Non-Waiver.

Except as expressly provided for herein, the failure of the ADRC to enforce any provisions of this Declaration shall not constitute a waiver or negate the legal effect of any such requirement unless notice in writing of such failure to act is provided to the ADRC, they fail to institute measures to obtain compliance within one hundred eighty (180) days of such notice, and all other legal requirements to constitute waiver or to negate the legal effect of such requirement have occurred.

ARTICLE 12 PRESSURIZED IRRIGATION SYSTEM AND WATER RIGHTS

12.1. Pressurized Irrigation System.

It is contemplated that each Lot and the Common Area shall have access to a pressurized irrigation water system (the "Pressured Irrigation System") and irrigation water, when seasonably available, will be supplied through the irrigation system. The Pressurized Irrigation System shall be comprised of all improvements and components thereof, including, but not limited to, all pumps, pipes and any other conveyance apparatus. The Pressurized Irrigation System shall also include any interest in real or personal property, including but not limited to easement and/or license rights granted herein or by other instruments of record, for the installation, operation, maintenance, repair or replacement of the Pressurized Irrigation System. The Pressurized Irrigation System shall be stubbed at the property line of each Lot. It is contemplated that Declarant shall construct and operate the Pressurized Irrigation System in accordance with approvals and agreements with the **City of Kuna Irrigation District**, or any other applicable irrigation district or canal company, and that the Declarant may transfer the Pressurized Irrigation System to the Association by describing such on a recorded plat, or by grant or reservation in a deed or other instrument, or in this Declaration or in any Supplemental Declaration. Payments for water use, and all operation and maintenance costs, shall be made by the Association and paid for through Assessments. Use of the Pressurized Irrigation System, and Assessments in connection with the Pressurized Irrigation System shall be subject to such rule and regulations as may be adopted by the Association from time to time. The Association shall have the right to transfer, sell or convey the Pressurized Irrigation System to a public or private entity, conditioned only upon reasonable assurances that the system will be owned, operated and maintained in a manner that will provide service to the Owners on a continuing basis with quality of service equal to a community-wide standard.

12.2. Installation of Systems upon Lots.

The Pressurized Irrigation System shall be owned, operated, repaired, maintained and replaced by the Association up to the stub located on each Lot. The costs incurred installing, operating, maintaining repairing or replacing any components located within a Lot and beyond the stub shall be the responsibility of the Owner thereof.

12.3. Operation of System.

The Association shall have the power and responsibility to perform the duties and obligations set forth in any Agreement with the City of Kuna Irrigation District, or any other applicable irrigation district or canal company .

12.4. Maintenance.

The Association shall maintain, repair, and replace and otherwise be responsible for the Pressurized Irrigation System and the improvements and Water Rights related thereto, including, but not limited to, all drainage facilities.

12.5. Water Rights.

The Association shall have the power to acquire, provide and/or pay for Water Rights and manage the same for the benefit of the Subdivision, and the costs related to such Water Rights shall be included in the Regular Assessments.

12.6. Owner Acknowledgments.

12.6.1 Each Owner acknowledges that non-potable irrigation water supplied to the Real Property, including irrigation water for Common Area and Lots, will be supplied through a Pressurized Irrigation System that will be operated, maintained, repaired and replaced by the Association, up to the stub on each Lot. The costs incurred installing, operating, maintaining, repairing and replacing the components of the Pressurized Irrigation System located within a Lot shall be the sole responsibility of the Owner. Each Owner acknowledges that the Association may promulgate rules and regulations, including water use schedules or rotations, controlling the allocation, distribution and flow of water among the various Lots and each Owner hereby agrees to comply with such rules and regulations. Each Owner agrees to pay when due all Assessments levied by the Association for the operation, maintenance, insurance, repair and replacement of the Pressurized Irrigation System and delivery of irrigation water and any and all Assessments or related charges levied by the Association for the administration and enforcement of the rules, regulations and use schedules, whether or not such Owner actually used the water provided by the Pressurized Irrigation System. Each Owner acknowledges that he or she shall have no right, title or interest in the water located within the Pressurized Irrigation System.

12.6.2 Each Owner acknowledges that the Declarant hereby reserves unto itself any and all Water Rights appurtenant to the Real Property and, accordingly, Owners have no right, title or interest in any of such water or Water Rights.

12.7. Nature of Irrigation Water.

Each Owner acknowledges that the irrigation water delivered by the Pressure Irrigation System is subject to variability in availability from year to year, and generally only from approximately mid-April through mid-October each year. The irrigation water delivered by the

Association to the Lots is non-potable, and may contain weed seed, herbicides, pesticides or other contaminants over which the Declarant, the Association and the Irrigation District have no control.

12.8. Association’s Rights.

The Association shall have the right to enter into, and take any and all actions required by, any agreement entered into with the **City of Kuna Irrigation District** with respect to the Pressurized Irrigation System, including, without limitation, enabling or disabling the irrigation water supply to the Subdivision from the Pressurized Irrigation System from time to time as necessary to prevent damage to the Pressurized Irrigation System or to prevent the use, by or for the benefit of the surrounding properties and/or the owners/occupants thereof, of the Pressurized Irrigation System.

12.9. Watering Schedule.

Each Owner acknowledges and agrees to cause any Lot(s) that it owns to be subject to the watering schedule adopted by the Board of Directors as such schedule may from time to time be amended (the “Watering Schedule”), and agrees that it shall not cause or allow watering of such Lot(s) from the Pressurized Irrigation System more frequently than or on different days than those set forth on the Watering Schedule.

**ARTICLE 13
RESERVATION OF WATER RIGHTS BY DECLARANT**

Declarant owns certain Water Rights which are appurtenant to the Real Property and which may be used in the Pressurized Irrigation System. Upon conveyance of a Lot, Declarant shall reserve, and hereby reserves, to itself all of Declarant’s right title and interest in and to any and all Water Rights appurtenant to the Real Property, and accordingly, no Owner(s) shall have any right, title, or interest in any of the Water Rights

**ARTICLE 14
LEGAL COMPLIANCE**

14.1. General Compliance.

The Declarant and all Owners shall comply with all laws, rules and regulations applicable to the development of property in Kuna, Ada County, Idaho.

**ARTICLE 15
ENFORCEMENT**

15.1. Use of Common Area.

In the event any Owner shall violate any provision of this Declaration, the Bylaws or other rules adopted by the Association, then the Association, acting through the Board of Directors, shall notify the Owner in writing that the violation exists and that the Owner is responsible for the violation, and may (a) notify the Owner in writing that his voting rights and

his rights to use the Common Area and facilities thereon are suspended for the time that the violations remain unabated, (b) impose fines upon the Owner as such fines may be provided for in the Bylaws and rules of the Association, which fines shall become liens against the Lot in the manner set forth in Section 8.12, (c) enter the offending Lot (but not any Residence) and remove the cause of such violation, or alter, repair, or change the item which is in violation of this Declaration in such a manner as to make it conform thereto, in which case the Association may assess such Owner for 120% of the entire direct or indirect cost of the work done, which amounts shall immediately be payable to the Association, (d) bring suit or action against the Owner on behalf of the Association and other Owners to enforce the provisions of this Declaration, or (e) do any of the above in conjunction with any others. However, before the Association takes any of the actions described in (a) - (c) above, the Owner shall have the right to a hearing before the Board of Directors to contest their determination. If a hearing is requested by written notice delivered to the Association not more than fifteen (15) days from the Owner's receipt of the notice of violation, imposition of the applicable remedies will be withheld pending the Board's decision after hearing the Owner's testimony or evidence. If an emergency exists and is so determined by the Board of Directors, they may proceed with the remedies specified in (c) above pending the hearing or decision on the hearing. If a hearing is requested, it shall be held within fourteen (14) days of the date of receipt of the Owner's request by the Board of Directors at a location designated by the Board of Directors in a timely notice to the Owner. The Board of Directors shall make a decision on whether to proceed with the specified remedy or to abate their action and provide notice thereof to the Owner. All assessed fines shall be paid immediately to the Association and deposited into the Associations' general account.

15.2. Interest, Expenses and Attorney Fees.

Any amount not paid to the Association when due in accordance with this Declaration shall bear interest from the due date until paid at the following rate per annum: From the date thereof until the first annual meeting of Members, twelve percent (12%) per annum; and thereafter at a rate per annum which the Members shall establish at each such annual meeting to be in effect until the next such annual meeting, but not higher than the maximum rate allowed by law, and if no such rate is established by the Members, then the rate shall be twelve percent (12%) per annum. In the event the Declarant, the Association, or any Owner shall bring any suit or action to enforce this Declaration, the prevailing party shall be entitled to recover all costs and expenses incurred by him in connection with such suit or action, including the cost of a foreclosure title report, expert witness fees and such amounts as the court may determine to be reasonable as costs and attorneys' fees at trial and upon any appeal thereof. In addition to being the personal obligation of the Owner, the prevailing party shall have a lien upon any Lot owned by the losing party to secure payment of such costs and expenses.

15.3. Non-exclusiveness and Accumulation of Remedies.

An election by the Association to pursue any remedy provided for violation of this Declaration shall not prevent concurrent or subsequent exercise of any remedy permitted under this Declaration. The remedies provided in this Declaration are not exclusive but shall be in addition to all other remedies, including actions for damages and suits for injunctions and specific performance, available under applicable laws.

15.4. Effect of Breach.

The breach of any of the covenants, conditions, or restrictions contained in this Declaration shall not defeat or render invalid the lien of any mortgage or deed of trust made in good faith for value as to any Lot or Lots or portions of Lots, but these covenants, conditions and restrictions shall be binding upon and effective against any such mortgagee or trustee or Owner thereof, whose title thereto is or was acquired by foreclosure, trustee's sale or otherwise.

15.5. Delay and Non-Waiver.

No delay or omission on the part of Declarant, the Association, or the Owners of other Lots in exercising any right, power or remedy herein provided in the event of any breach of the covenants, conditions or restrictions herein contained shall be construed as a waiver thereof or acquiescence therein; and no right of action shall accrue nor shall any action be brought or maintained by any one whatsoever against Declarant and no right of action except specific performance shall accrue nor shall any other right of action be brought or maintained by anyone whatsoever against the Association on account of their failure to bring any action on account of any breach of these covenants, conditions or restrictions, or for imposing restrictions herein which may be unenforceable by Declarant or the Association.

15.6. Right of Enforcement.

Except as otherwise provided herein, any Owner, Association or Declarant shall have the right to enforce the provisions hereby against any portion of the Real Property and against the Owners thereof.

15.7. Violations and Nuisances.

The failure of any Owner of a Lot to comply with any provision hereof, or with any provision of the Project Documents, is hereby declared a nuisance and will give rise to a cause of action in Declarant, the Association or any Owner for recovery of damages or for negative or affirmative relief or both.

15.8. Violations of Law.

Any violation of any State, municipal or local law, ordinance or regulation pertaining to ownership, occupation or use of any portion of the Real Property is hereby declared to be a violation of this Declaration and subject to any and all enforcement procedures set forth in this Declaration.

15.9. Rights Cumulative.

Each remedy provided for herein is cumulative and not exclusive.

**ARTICLE 16
ANNEXATION OF OTHER PROPERTY**

16.1. Right of Declarant to Annex Other Properties.

Declarant reserves the right to annex any abutting, adjoining or contiguous real property into the Subdivision. Such annexation shall be accomplished by filing a Supplemental Declaration in the records of Ada County, Idaho, describing the property to be annexed (the "Annexed Property") and specifically subjecting such property to the terms of this Declaration, as may be modified to reflect any special circumstances in connection with such annexed property. Such Supplemental Declaration shall not require the consent of voting members, but shall require the consent of the owner of such property, if other than Declarant; provided, however, that the addition of any Annexed Property must be consistent with the general purposes and intent of the Project Documents. Declarant is not obligated in any manner by this Declaration to annex additional real property to the Real Property or to annex any particular tract, or to annex tracts in any particular sequence, or to annex contiguous tracts. Any such annexation shall be effective upon the recording of such Supplemental Declaration.

16.2. Supplement.

The additions authorized by the provisions of this Article shall be made by recording in the Ada County Recorder's office a Supplemental Declaration with respect to any Annexed Property, which shall extend the jurisdiction of this Declaration to the Annexed Property and shall be executed by the fee title holder(s) of such Annexed Property, as well as by Declarant. In addition, each supplement for Annexed Property shall contain such Restrictions as are not inconsistent with the intent and purpose of this Declaration. Upon recording any supplement for Annexed Property, the provisions of this Declaration (except as modified, altered, limited or supplemented in the supplement) shall apply to such Annexed Property as if such Annexed Property had been part of the Real Property upon the effective date of this Declaration.

16.3. De-Annexation.

Declarant may delete all or a portion of the property described on Exhibit A and any Annexed Property from coverage of this Declaration and the jurisdiction of the Association, so long as Declarant is the owner of all such property being de-annexed, and provided that a notice of de-annexation is filed in the records of Ada County, Idaho, describing the property to be de-annexed and specifically excepting such property from the terms of this Declaration.

16.4. Amendment.

This Article 16 shall not be amended without the prior written consent of the Declarant so long as Declarant owns any portion of the Subdivision.

**ARTICLE 17
GENERAL PROVISIONS**

17.1. Severability.

Invalidation of any one or more of the provisions of this Declaration by judgment or court order shall in no way affect any other provision which shall remain in full force and effect.

17.2. Duration and Amendment.

The provisions of this Declaration shall be perpetual, subject only to extinguishment by the holders of such restrictions as provided by law. Until the recordation of the first deed to a Lot, the provisions of this Declaration may be amended, modified, clarified, supplemented added to or terminated by Declarant by recordation of a written instrument setting forth such amendment. After the recordation of the first deed to a Lot, any amendment to this Declaration, other than to this Article 17, shall be by an instrument in writing signed by the president and secretary of the Association certifying that such amendment has been approved by the vote or written consent of seventy-five percent (75%) of the total voting power of the Association, and such amendment shall be effective upon its recordation in the records of Ada County, Idaho. Easements herein granted and reserved shall not be amended except by instrument signed and acknowledged by all of the Owners of the property concerned, and by the Association. 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 Real Property but shall not prohibit or unreasonably interfere with the allowed uses of such Owner's property which existed prior to the said amendment.

17.3. No Right of Reversion.

Nothing in this Declaration, or in any form of deed which may be used by Declarant, in selling the Subdivision, or any Lot or part thereof, shall be deemed to vest or reserve in Declarant or the Association any right of reversion or reentry for breach or violation of any one or more of the provisions hereof.

17.4. Rights of Mortgagees Relating to Maintenance.

At any time that any part of the Common Area, or any other part of the Subdivision, or any Structure, Residence, Lot, or other building or improvement located thereon is not in accordance with this Declaration or the Association's Bylaws or is not properly maintained and kept in good order and repair to the extent reasonably necessary to protect and preserve the appearance and value thereof and the appearance and value of the remainder of the Subdivision, then the record owner of any mortgage or trust deed upon any part of the Real Property or Residence or building thereon, upon giving written notice as hereinafter provided, shall be entitled to exercise the rights of the Owner-mortgagor of such property as a Member of the Association (to the exclusion of such Owner-Mortgagor) including the right to vote at all regular and special meetings of the Members of the Association for a period of one (1) year following the date of such notice. During said period of time mortgagees shall be given notice of all

regular and special meetings of the Association, and the Owner-mortgagor shall receive such notice also and may attend such meeting as an observer. Said notice shall quote this paragraph and shall be sent by certified United States mail, return receipt requested, to the Owner-mortgagor, with a copy by regular mail to the Association at the last-known address of each.

17.5. Loss of Property.

In order to protect and preserve the appearance and value of the Real Property, each Owner is required to immediately commence, and diligently pursue without delay, the repair or rebuilding of his Residence or other Structure after any loss to it.

17.6. Notices.

Unless otherwise provided herein, any notice required to be sent to any Member or Owner under the provisions of this Declaration shall be deemed to have been properly sent when mailed, prepaid, to the last address provided to the Association in writing by the person who appears as Member or Owner on the records of the Association at the time of such mailing.

17.7. Assignment.

If the Declarant conveys its title all or part of the Lots to a third party and designates in such conveyance that such party shall be the successor Declarant then such successor Declarant shall have all duties, rights, powers and reservations of the Declarant contained in this Declaration upon the acceptance and recording of such conveyance.

17.8. Conflicting Provisions.

In case of any conflict between this Declaration and the Bylaws, this Declaration shall control.

17.9. 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 first mortgage upon a 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 Lot shall remain subject to this Declaration.

17.10. Owners' Further Acknowledgements.

By accepting a deed to any Lot contained within the Real Property, each Owner acknowledges and agrees that Owner has read and understands the Project Documents.

[end of text]

EXHIBIT A
Legal Description

DRAFT

EXHIBIT B

Plat

DRAFT

EXHIBIT C

Bylaws of the Association

DRAFT

EXHIBIT D

Ashton Estates East Subdivision Phase 1 Operations & Maintenance Manual

DRAFT



November 11, 2019
Project No. 19-081

**Legal Description for proposed
Ashton Estates East Subdivision**

A parcel of land situated in a portion of the Southeast 1/4 of the Northwest 1/4 of Section 19, Township 2 North, Range 1 East, Boise Meridian, City of Kuna, Ada County, Idaho, and being more particularly described as follows:

Commencing at a found aluminum cap monument marking the west 1/4 corner of said Section 19, thence following the southerly line of Government Lot 2 of Section 19, S89°39'33"W a distance of 1,236.37 feet to the southeast corner of said Government Lot 2 and also being the southwest corner of said Southeast 1/4 of the Northwest 1/4 (C-W 1/16 corner) and being the **POINT OF BEGINNING**.

Thence leaving said southerly line and following the westerly line of said Southeast 1/4 of the Northwest 1/4, N00°45'15"E a distance of 1322.96 feet to a 1/2-inch rebar marking the northwest corner of said Southeast 1/4 of the Northwest 1/4 (NW 1/16 corner);

Thence leaving said westerly line and following the northerly line of said Southeast 1/4 of the Northwest 1/4, S89°39'57"E a distance of 1,326.72 feet to a 5/8-inch rebar marking the northeast corner of said Southeast 1/4 of the Northwest 1/4 (C-N 1/16 corner);

Thence leaving said northerly line and following the easterly line of said Southeast 1/4 of the Northwest 1/4, S00°35'26"W a distance of 807.09 feet to a 5/8-inch rebar;

Thence leaving said easterly line, N89°24'34"W a distance of 147.00 feet to a 5/8-inch rebar;

Thence S69°33'04"W a distance of 75.00 feet to a 5/8-inch rebar;

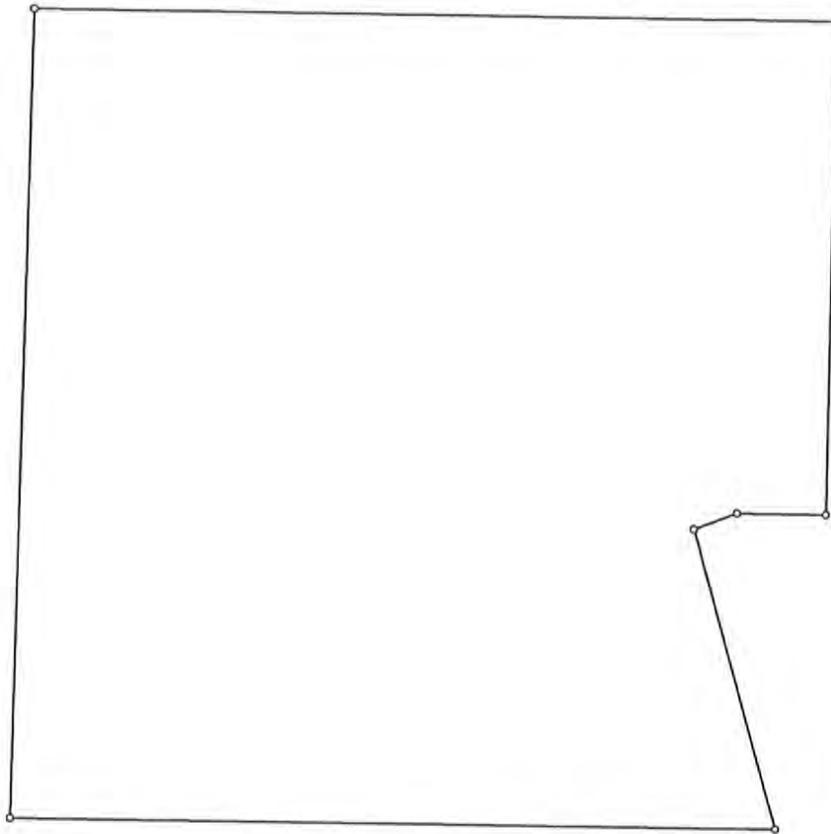
Thence S15°54'48"E a distance of 510.42 feet to a nail on the southerly line of said Southeast 1/4 of the Northwest 1/4 (nail bears N89°39'33"W a distance of 72.00 feet from an aluminum cap marking the center of said Section 19);

Thence following said southerly line N89°39'33"W a distance of 1,258.49 feet to the **POINT OF BEGINNING**.

Said parcel contains 38.617 acres, more or less.



11.11.2019



Title: Ashton Estates East Subdivision		Date: 11-11-2019
Scale: 1 inch = 300 feet	File:	
Tract 1: 38.617 Acres: 1682142 Sq Feet: Closure = n86.1739w 0.01 Feet: Precision = 1/804150: Perimeter = 5448 Feet		
001=n00.4515e 1322.96	004=n89.2434w 147.00	007=n89.3933w 1258.49
002=s89.3957e 1326.72	005=s69.3304w 75.00	
003=s00.3526w 807.09	006=s15.5448e 510.42	



November 11, 2019
Ashton Estates East
Project No. 19-081
Annexation and Zoning Legal

Exhibit A

A parcel of land situated in a portion of the Southeast 1/4 of the Northwest 1/4 of Section 19, Township 2 North, Range 1 East, Boise Meridian, City of Kuna, Ada County, Idaho, and being more particularly described as follows:

Commencing at a found aluminum cap monument marking the west 1/4 corner of said Section 19, thence following the southerly line of Government Lot 2 of Section 19, S89°39'33"W a distance of 1,236.37 feet to the southeast corner of said Government Lot 2 and also being the southwest corner of said Southeast 1/4 of the Northwest 1/4 (C-W 1/16 corner) and being the **POINT OF BEGINNING**.

Thence leaving said southerly line and following the westerly line of said Southeast 1/4 of the Northwest 1/4, N00°45'15"E a distance of 1322.96 feet to a 1/2-inch rebar marking the northwest corner of said Southeast 1/4 of the Northwest 1/4 (NW 1/16 corner);

Thence leaving said westerly line and following the northerly line of said Southeast 1/4 of the Northwest 1/4, S89°39'57"E a distance of 1,326.72 feet to a 5/8-inch rebar marking the northeast corner of said Southeast 1/4 of the Northwest 1/4 (C-N 1/16 corner);

Thence leaving said northerly line and following the easterly line of said Southeast 1/4 of the Northwest 1/4, S00°35'26"W a distance of 807.09 feet to a 5/8-inch rebar;

Thence leaving said easterly line, N89°24'34"W a distance of 147.00 feet to a 5/8-inch rebar;

Thence S69°33'04"W a distance of 75.00 feet to a 5/8-inch rebar;

Thence S15°54'48"E a distance of 510.42 feet to a nail on the southerly line of said Southeast 1/4 of the Northwest 1/4 (nail bears N89°39'33"W a distance of 72.00 feet from an aluminum cap marking the center of said Section 19);

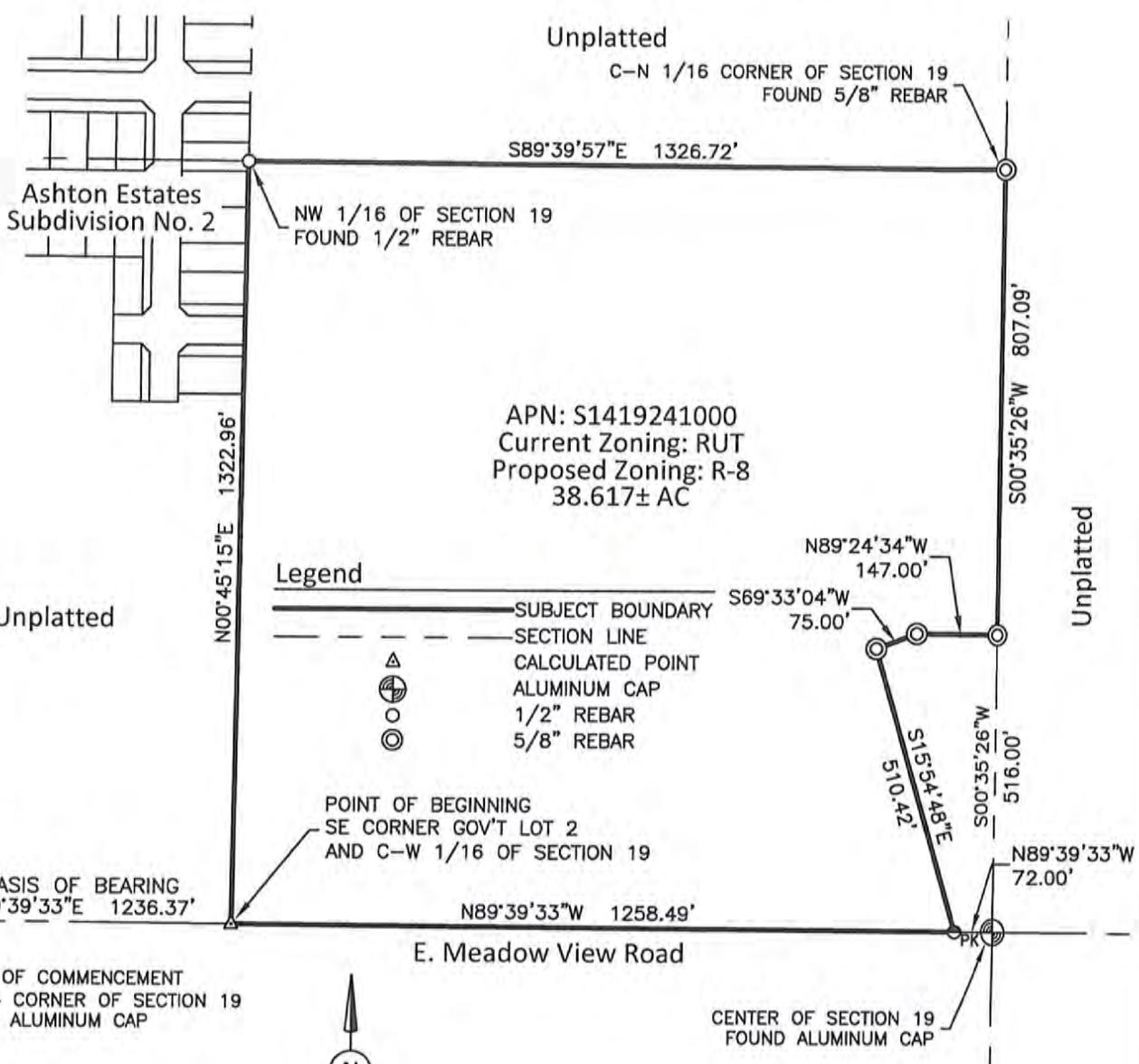
Thence following said southerly line N89°39'33"W a distance of 1,258.49 feet to the **POINT OF BEGINNING**.

Said parcel contains 38.617 acres, more or less.

Attached hereto is Exhibit B and by this reference is made a part hereof.



P:\19-081\CAD\SURVEY\EXHIBITS\19-081 ANNEXATION AND ZONING.DWG, AARON BALLARD, 11/11/2019, KYOCERA TASKALFA 4550CI KX.PC3, ----



km
ENGINEERING
ENGINEERS . SURVEYORS . PLANNERS
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

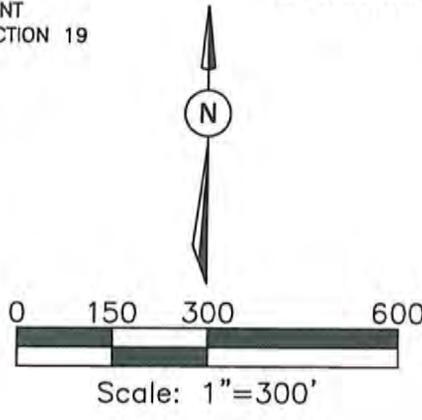
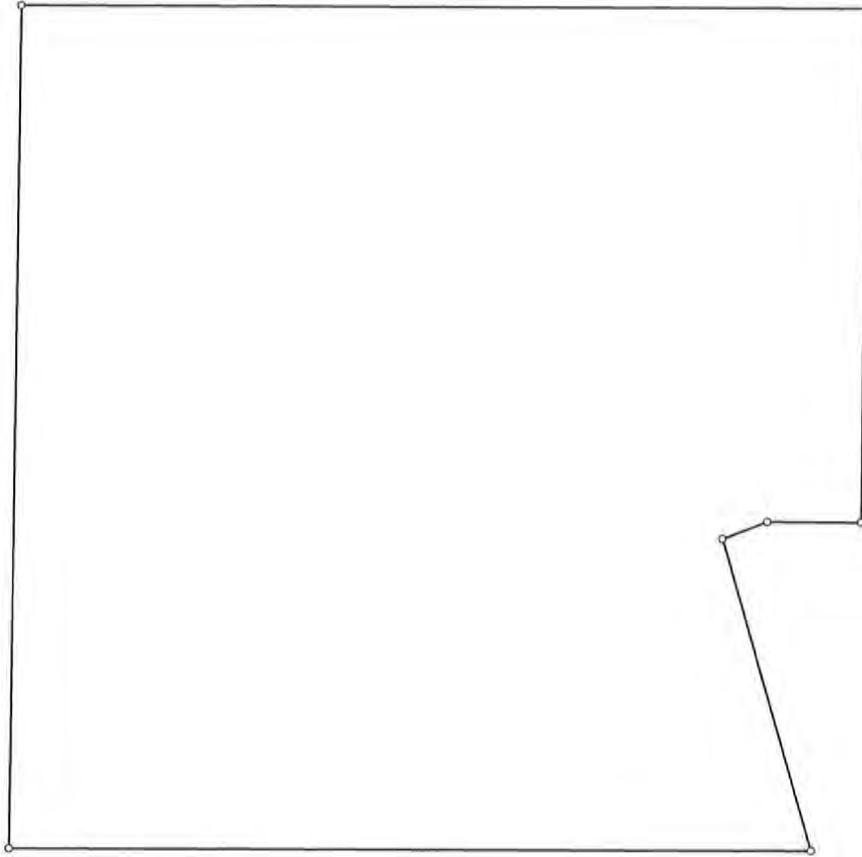


Exhibit B
Ashton Estates East Annexation and Zoning

Situated in a portion of the Southeast 1/4 of the Northwest 1/4 of Section 19, T.2N., R.1E., B.M., Ada County, Idaho

DATE:	November 2019
PROJECT:	19-081
SHEET:	1 of 1



Title: Ashton Estates East Subdivision		Date: 11-11-2019
Scale: 1 inch = 300 feet	File:	
Tract 1: 38.617 Acres: 1682142 Sq Feet: Closure = n86.1739w 0.01 Feet: Precision = 1/804150: Perimeter = 5448 Feet		
001=n00.4515e 1322.96	004=n89.2434w 147.00	007=n89.3933w 1258.49
002=s89.3957e 1326.72	005=s69.3304w 75.00	
003=s00.3526w 807.09	006=s15.5448e 510.42	



City of Kuna AFFIDAVIT OF LEGAL INTEREST

City of Kuna
Planning & Zoning
Department
P.O. Box 13
Kuna, ID 83634
208.922.5274
www.kunacity.id.gov

State of Idaho)) ss.
County of Ada)

I, Don Newell , P.O. Box 1939
Name Address
Eagle , Idaho 83616
City State 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 KM Engineering, LLP 9233 W. State Street, Boise, ID 83714
Name Address

to submit the accompanying application pertaining to that property.

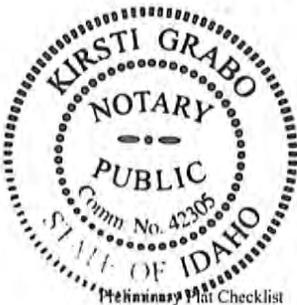
B. I agree to indemnify, defend and hold City of Kuna and its employees harmless from any claim or liability resulting from any dispute as to the statements contained herein or as to the ownership of the property which is the subject of the application.

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 4 day of October, 20 19

[Signature]
Signature for Kuna East, LLC

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



[Signature]
Notary Public for Idaho
Residing at: SM, ID
My commission expires: 2.20.21

November 11, 2019
Project No.: 19-081

Mr. Troy Behunin
Planning & Zoning Department
City of Kuna
751 West 4th Street
Kuna, ID 83634

**RE: Ashton Estates East Subdivision
Annexation and Preliminary Plat Applications**

Dear Mr. Behunin:

On behalf of Kuna East, LLC, we are pleased to submit the attached applications and required supplements for the annexation and preliminary plat for the project referenced above.

Site Information

The subject property is approximately 38.6 acres of agricultural ground identified as parcel number S1419241000 and located at 2320 East Meadow View Road. It is presently located in Ada County, but is contiguous to Kuna City limits on the west and south boundaries. The site is currently zoned Rural Residential (RR) in the County with a City of Kuna Comprehensive Plan designation of High-Density Residential (HDR).

Since 2016, the developers of this project have also been developing the Ashton Estates project at the southeast corner of Meridian and Deer Flat Roads. With that project, a number of new commercial businesses have been introduced to the area, in addition to new residential housing opportunities. With this new project, the developers envision an extension of the residential uses at Ashton Estates with an introduction of an additional housing type.



Annexation

As previously stated, the subject property is contiguous to City limits on both the west and south, and annexation into the City will provide enhanced development opportunities for this growing area. In conjunction with annexation, the developers are requesting the R-8 zoning designation. This zone is consistent with the

Comprehensive Plan designation of HDR, which allows for 8-20 units per acre, and is compatible with the adjacent R-6 zoning designation carried by the Ashton Estates project to the west.

Preliminary Plat

The Ashton Estates East preliminary plat proposes 175 buildable single-family residential lots, 21 common lots, and 4 shared driveway lots for a total of 200 lots. The lot sizes within the plat range between approximately 3,900 sf and 8,400 sf, with an average lot size of approximately 5,200 sf. This layout reflects a gross density of 4.5 units per acre and a net density of 6.1 units per acre, both of which are below the density allowed in the R-8 zone. While a lower residential zone would accommodate the desired density, the dimensional standards of the R-8 zone will allow for the proposed diversity of lot sizes and housing types, which is a goal of the City’s Comprehensive Plan.



Ashton Estates East includes approximately 7.7 acres of total open space with approximately 6 acres (+/- 15%) of “useable” open space located at central locations throughout the project. The Kuna Canal crosses the site from north to south, and the canal is proposed to remain open with a walking path installed along the west side pursuant to the City’s 2019 Pathways Master Plan. In addition, the developer anticipates inclusion of a tot lot in one of the two larger open space areas within the project and has incorporated a school bus pick-up area at the entrance of the subdivision along Meadow View Road as requested by the school district.

The open space within the subdivision will be owned and maintained by the Homeowners’ Association, and the attached draft CC&Rs include language regarding maintenance of these common lots.

Access & Roadways

Primary access for this project is proposed via a roadway connection to Meadow View Drive to the south. In addition, the project will tie into the Porter Street stub currently being constructed with Ashton Estates Subdivision No. 3 to the west. Two stub streets will also be provided to the north to allow for future connectivity as required by the City and the Ada County Highway District (ACHD).

The east boundary of Ashton Estates East falls on the mid-mile alignment between Meridian and Locust Grove Roads, so provisions will be made to accommodate future installation of the mid-mile collector as shown on the proposed plat. We will continue coordination with ACHD as the project progresses to determine if this section of the mid-mile collector should be constructed with this project or if a road trust should be provided instead. Until the future collector is installed and connects to either Meadow View Road to the south or Deer Flat Road to the north, a secondary emergency access is proposed via a connection between the terminus of Belgian Place and Meadow View Road as shown on the preliminary engineering plan.

Public Utilities

We have conducted multiple meetings with Kuna's Public Works Department to understand sewer, water and pressure irrigation facilities, all of which are available for connection with development of this site. As the project progresses, we will also work with the remaining public utilities to ensure that adequate services are provided.

Conclusion

With the proposals discussed herein, we feel that the new Ashton Estates East project complements the City's vision for growth by providing a variety of additional housing opportunities for this area. We look forward to working with staff to accomplish this great addition to the City of Kuna.

Should you have questions or require further information in order to process these applications, please feel free to contact me.

Sincerely,
KM Engineering, LLP

A handwritten signature in black ink, appearing to read 'K Grabo', written in a cursive style.

Kirsti Grabo
Operations Manager

cc: Kuna East, LLC



City of Kuna
**COMMITMENT TO
PROPERTY POSTING**

City of Kuna
P.O. Box 13
Kuna, Idaho 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
Web www.Kunacity.id.gov

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 Kuna City Code 5-1A-8



Applicant/agent signature

10-7-19

Date

TRAFFIC IMPACT STUDY

ASHTON ESTATES EAST SUBDIVISION

Kuna, Idaho
February 19, 2020



Prepared For:

Kuna East, LLC

Prepared By:



181 East 50th Street
Garden City, ID 83714
(208) 841-4996

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EXECUTIVE SUMMARY

CR Engineering, Inc. has been retained to prepare a traffic impact study (TIS) for the proposed Ashton Estates East Subdivision located north of Meadow View Road between Meridian Road (SH 69) and Locust Grove Road in Kuna, Idaho, as shown in **Figure 1.1**. The scope of this TIS was determined through coordination with the Ada County Highway District (ACHD) and Idaho Transportation Department, (ITD) with inputs from the Community Planning Association of Southwest Idaho (COMPASS).

The TIS evaluates the potential traffic impacts resulting from background traffic growth and the proposed development, and identifies improvements to mitigate the impacts if needed. Traffic impacts were evaluated based on the proposed land uses and access as shown in the preliminary site plan under weekday AM and PM peak hours traffic conditions. **Table 1** summarizes the improvements needed to mitigate the traffic impacts for the following analysis years traffic conditions:

- 2020 Existing traffic
- 2024 Build-out year background traffic
- 2024 Build-out year total traffic

Table 1 – Proposed Intersection Improvements Summary

Intersection		2020 Existing	2024 Build-Out Year	
			Background	Total
①	Hubbard Road and Locust Grove Road	None	None	None
②	Meridian Road and Deer Flat Road	Dual EB Left-Turn Lanes¹	SBR Overlap Phase¹	None beyond prior improvements ¹
③	Antelope Flat Road and Deer Flat Road	None	None	None
④	Deer Flat Road and Locust Grove Road	None	None	None
⑤	D&B Access and Meridian Road	None	None	None
⑥	Profile Drive and Meridian Road	None	None	None
⑦	Meadow View Road and Meridian Road	None	None	None
⑧	Stone Falls Avenue and Meadow View Road	na	na	Unsignalized T-intersection

¹ One or more lane group volume/capacity (v/c) ratios exceed 0.90 but less than 1.00

1.0 Proposed Development

- 1.1 Ashton Estates East Subdivision is estimated to contain 175 single-family dwelling units. The expected build-out year is 2024 but may change depending on market conditions.
- 1.2 Based on the procedures outlined in the *Trip Generation Handbook, 3rd Edition* and the *Trip Generation Manual, 10th Edition*, both published by the Institute of Transportation Engineers (ITE), the proposed development is estimated to generate approximately 1,740 trips per weekday with 129 trips during the AM peak hour and 174 trips during the PM peak hour.
- Based on the proposed land use, the development is not expected to retrain trips within the site
 - Based on the proposed land use, the development is not expected to attract pass-by trips
 - All trips generated by the development were assumed to be made by personal or commercial vehicles
- 1.3 The estimated site traffic distribution patterns are:
- 10% with origins/destinations west of the site
 - 10% with origins/destinations east of the site
 - 70% with origins/destinations north of the site
 - 10% with origins/destinations south of the site
- 1.4 Ashton Estates East Subdivision is proposing one access on Meadow View Road and stub connectivity to Porter Street within the existing Ashton Estates Subdivision for site access:
- Proposed approach onto Meadow View Road (Stone Falls Avenue)
 - Proposed as a full access located 1,610 feet east of Meridian Road
 - Meets ACHD access spacing on a local roadway and collector street
 - Is not expected to require turn lanes based on ACHD's turn-lane guidelines
 - Expected to meet ACHD's minimum operational thresholds with 2024 total traffic

2.0 Improvements Needed to Mitigate 2020 Existing Traffic

- 2.1 With 2020 existing traffic, all study area intersections meet minimum operational thresholds analyzed with the existing intersection control, signal timing, and lane configurations, with the exception of one intersection. The intersection, operational deficiencies, and mitigation improvements are:
- Deer Flat Road and Meridian Road intersection
 - The intersection meets minimum operational thresholds, with the exception of one lane group. The eastbound left-turn lane group operates with a volume to capacity (v/c) ratio of above 1.00 during the AM and PM peak hours based on the existing signal timing plan, exceeding ACHD's and ITD's minimum operational thresholds.
 - Construct one additional eastbound left-turn lane
 - Dual eastbound left-turn lanes are needed to accommodate the existing eastbound left-turn volume, which exceeds 470 vehicles per hour (vph) in the AM and exceeds 260 vph in the PM peak hour
 - The eastbound left-turn lane group is expected to operate with a v/c ratio of 0.93 in the AM peak hour with dual eastbound left-turn lanes, exceeding ITD's 0.90 threshold. However, the eastbound approach is under ACHD jurisdiction and meets their 1.00 threshold.
 - The intersection and all other lane groups are expected to meet minimum operational thresholds
- 2.2 With 2020 existing traffic, none of the study area intersection requires turn lanes based on ACHD's or ITD's turn-lane guidelines.

- 2.3 With 2020 existing traffic, all study area roadway segments meet ACHD's level of service planning thresholds with the existing lane configuration. Besides the intersection improvements, no roadway capacity improvements are needed to mitigate 2020 existing traffic operations.

3.0 Improvements Needed to Mitigate 2024 Background Traffic

- 3.1. With 2024 background traffic, all study area intersections are expected to meet minimum operational thresholds analyzed with the existing intersection control and lane configurations, or with the preceding improvements needed under 2020 existing traffic, with the exception of one intersection. The intersection, operational deficiencies, and mitigation improvements are:
- Deer Flat Road and Meridian Road intersection
 - The intersection meets minimum operational thresholds, with the exception of one lane group. The southbound right-turn lane group is expected to operate with a v/c ratio of 0.95 during the PM peak hour, which exceeds ITD's 0.90 threshold.
 - Modify the signal to allow the southbound right-turn movement to operate with an overlap phase
 - The southbound right-turn volume exceeds 350 vph in the AM peak hour and exceeds 550 vph in the PM peak hour
 - Overlap phase for an exclusive right-turn lane is generally recommended at 300 vehicles per hour
- 3.2. With 2024 background traffic, none of the study area intersection is expected to require turn lanes based on ACHD's and ITD's turn-lane guidelines.
- 3.3. With 2024 background traffic, all study area roadway segments are expected to meet ACHD's level of service planning thresholds with the existing lane configuration. Besides the signal modifications, no roadway capacity improvements are needed to mitigate 2024 background traffic operations.

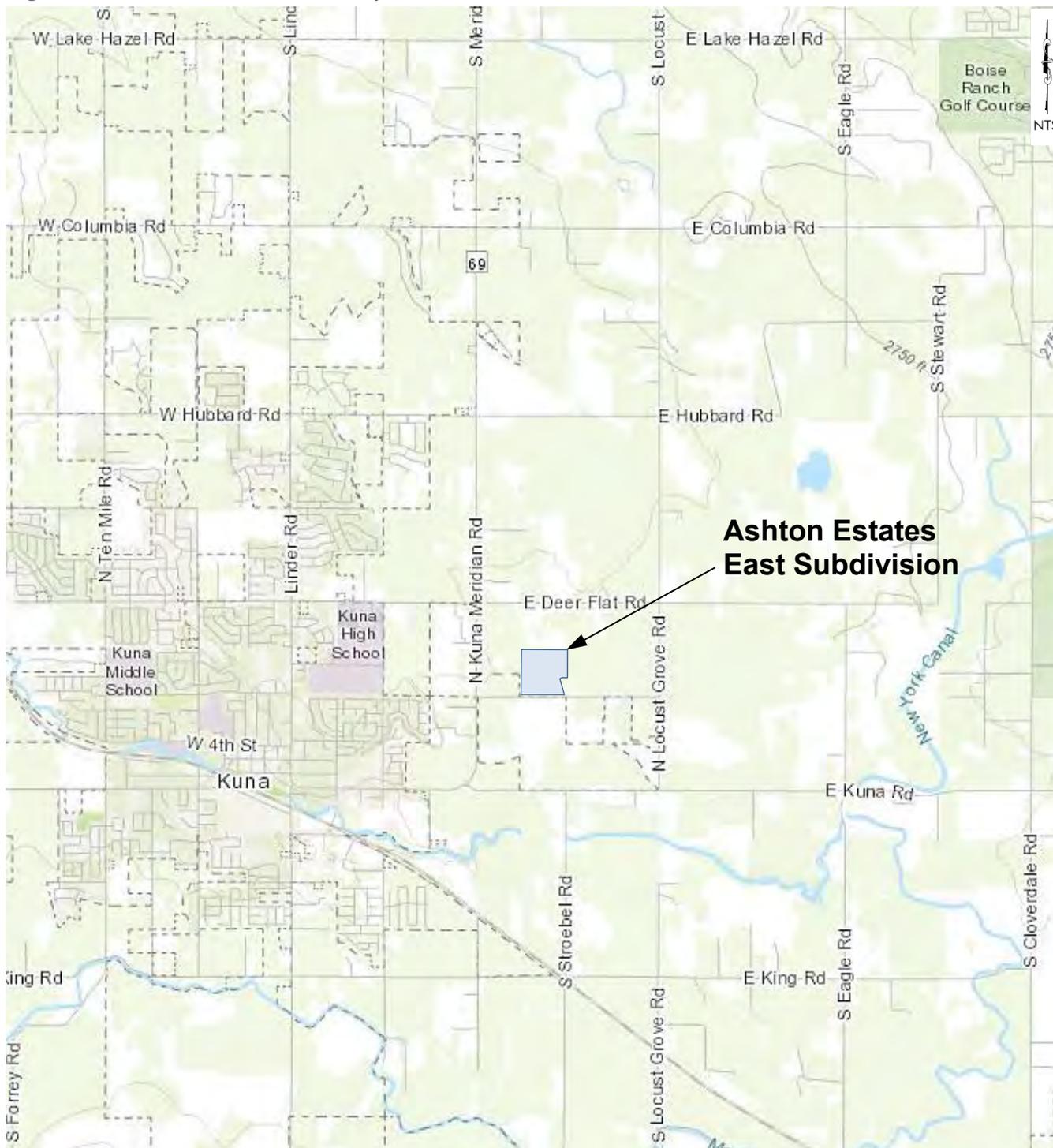
4.0 Improvements Needed to Mitigate 2024 Build-Out Year Total Traffic

- 4.1 With 2024 total traffic, all study area intersections are expected to meet minimum operational thresholds analyzed with the existing intersection control and lane configurations or with the preceding mitigation improvements. As a result, no additional improvements beyond the improvements needed to mitigate 2020 existing traffic and 2024 background traffic are proposed to mitigate 2024 total traffic.
- 4.2 The estimated site traffic as a percentage of the 2024 total traffic at the study area intersections are:
- Hubbard Road and Locust Grove Road intersection – AM peak = 4.2%, PM peak = 4.5%
 - Deer Flat Road and Meridian Road intersection – AM Peak = 3.9%, PM peak = 4.3%
 - None of the site traffic is expected in the eastbound left-turn lane or southbound right-turn lane
 - Antelope Flat Avenue and Deer Flat Road intersection – AM Peak = 2.1%, PM peak = 2.1%
 - Deer Flat Road and Locust Grove Road intersection – AM Peak = 8.5%, PM peak = 7.4%
 - D&B Access and Meridian Road intersection – AM peak = 7.4%, PM peak = 7.1%
 - Profile Drive and Meridian Road intersection – AM Peak = 3.8%, PM peak = 6.4%
 - Meadow View Road and Meridian Road intersection – AM Peak = 4.0%, PM peak = 3.8%
- 4.3 With 2024 total traffic, none of the study area intersection is expected to require turn lanes based on ACHD's and ITD's turn-lane guidelines.
- 4.4 With 2024 total traffic, all study area roadway segments are expected to meet ACHD's level of service planning thresholds with the existing lane configuration. No roadway capacity improvements are needed to mitigate 2024 total traffic operations.

1.0 INTRODUCTION

CR Engineering, Inc. has been retained to prepare a traffic impact study (TIS) for the proposed Ashton Estates East Subdivision located north of Meadow View Road between Meridian Road and Locust Grove Road in Kuna, Idaho. **Figure 1.1** shows the site location and its vicinity. The TIS evaluates the potential traffic impacts resulting from background traffic growth, the proposed development, and identifies improvements to mitigate the impacts if needed.

Figure 1.1 – Site Location and Vicinity



1.1 Proposed Development

Figure 1.2 shows the preliminary site development plan with the proposed access locations. The development is expected to contain 175 single-family dwelling units. The anticipated build-out year for the proposed development is 2024 but may change depending on the market conditions. Based on the preliminary site plan, the development is proposing one full access on Meadow View Road and connect to Porter Street within existing Ashton Estates Subdivision. Porter Street has connectivities to Meridian Road and Deer Flat Road.

Figure 1.2 – Preliminary Site Plan



1.2 Study Approach

The TIS was prepared in accordance with ACHD Policy, Section 7106 – Traffic Impact Studies and ITD IDAPA 39.03.42 – Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way. The scope of this TIS was determined through coordination with ACHD and ITD with inputs from the Community Planning Association of Southwest Idaho (COMPASS). Results from the COMPASS area of influence model runs are included in the appendix.

1.3 Study Area

The following study area roadway segments were identified by ACHD for traffic impact analysis:

- Locust Grove Road between Hubbard Road and Deer Flat Road
- Deer Flat Road between Antelope Flat Avenue and Locust Grove Road
- Antelope Flat Avenue south of Deer Flat Road
- Profile Drive between the site and Meridian Road
- Meadow View Road between Meridian Road and Locust Grove Road

The following study area intersections were identified by ACHD and ITD for collecting peak hour turning movement counts and traffic impact analysis:

1. Hubbard Road and Locust Grove Road
2. Deer Flat Road and Meridian Road (SH 69)
3. Antelope Flat Avenue and Deer Flat Road
4. Locust Grove Road and Deer Flat Road
5. D&B Access and Meridian Road
6. Profile Drive and Meridian Road
7. Meadow View Road and Meridian Road
8. Stone Falls Avenue and Meadow View Road (future site access intersection)

1.4 Study Period

The analysis periods will be weekday AM and PM peak hours of operation of the transportation system. The analysis years are:

- 2020 existing traffic
- 2024 build-out year background traffic
- 2024 build-out year total traffic

1.5 Analysis Methods and Performance Measure Thresholds

Roadway segments under ACHD's jurisdiction were evaluated based on the level of service (LOS) planning thresholds in accordance with Table 2 of ACHD Policy Manual, Section 7106. The roadway segment planning level of service is based on the maximum peak hour directional volume for different roadway functional classifications, the number of through lanes, and the left-turn type. The planning level of service is LOS E for arterial streets and LOS D for collector streets. No LOS or volume threshold for local streets was listed in the ACHD Policy Manual.

Intersection capacity analysis was performed using the Synchro 10 (Version 10.3.122.0), which utilizes HCM6 methodologies. All parameters used in the analysis were based on existing data when available or Synchro default values, when not available. Signal timing data for the existing signalized intersections was obtained from ACHD. For future conditions, the signal timing was increased to 150 seconds if the cycle length was less than 150 seconds.

According to ACHD Policy Manual, the minimum operational threshold for unsignalized intersections is a volume to capacity (v/c) ratio of 1.00 for the critical lane group. Unsignalized intersections that are projected to operate at LOS D or worse require signal warrant analysis based on MUTCD guidelines. The minimum operational threshold for signalized intersections is a v/c ratio of 0.90 for the overall intersection and 1.00 for a lane group. For intersections under ITD's jurisdiction, the minimum operational threshold is a v/c ratio of 0.90 for the overall intersection and lane group.

Synchro outputs utilizing the HCM 6th Edition methodology do not produce an overall intersection v/c ratio as a measure of effectiveness (MOE) for signalized intersections. For this study, the overall intersection v/c ratio was estimated using Synchro based on HCM 2000 methodologies.

2.0 EXISTING CONDITIONS

2.1 Roadway Network and Lane Configuration

Table 2.1 summarizes the study area roadway characteristics. The roadway functional classification is based on the COMPASS 2040 Functional Classification Map. The study area roadways are described below. **Figure 2.1** summarizes the existing intersection control and lane configuration.

Table 2.1 – Existing Roadway Characteristics

Roadway	Functional Classification	Number of Lanes	Posted Speed Limit (mph)	Pedestrian Facilities
Hubbard Road	Minor Arterial	2	50	<ul style="list-style-type: none"> No sidewalks or bicycle lanes
Locust Grove Road	Minor Arterial	2	50	<ul style="list-style-type: none"> No sidewalks or bicycle lanes
Meridian Road (SH 69)	Principal Arterial (Regional Route)	5	55	<ul style="list-style-type: none"> Sidewalks along developed frontages
Deer Flat Road	Minor Arterial	2 - 3	50	<ul style="list-style-type: none"> Sidewalk and EB bicycle lane along developed frontages
Antelope Flat Avenue	Collector Street	2 - 3	25	<ul style="list-style-type: none"> Sidewalks and bicycle lanes on both sides
Profile Drive	Private Street West Collector Street East	2 - 3	25	<ul style="list-style-type: none"> Sidewalk and bicycle lanes on both sides
Meadow View Road	Local Street (Future Collector)	2	50	<ul style="list-style-type: none"> No sidewalks or bicycle lanes

2.2 Existing Traffic Volumes

Weekday AM and PM peak hour turning movement traffic counts and 24-hour daily traffic counts were obtained between January 30 and February 4, 2020. The peak hour 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. Existing turning movement counts are included in the appendix. **Figure 2.2** and **Figure 2.3** summarize the existing peak hour traffic volumes for the AM and PM peak hours, respectively. The Average Daily Traffic (ADT) for the roadway segments within the study area are summarized in **Table 2.2**.

Table 2.2 – 2020 Existing ADT Summary

Roadway	Segment	ADT	Count Date
Locust Grove Road	Between Hubbard Road and Deer Flat Road	908	January 30, 2020
Deer Flat Road	East of Meridian Road	2,241	January 30, 2020
Antelope Flat Avenue	South of Deer Flat Road	449	February 4, 2020
Profile Drive	East of Meridian Road	1,368	February 4, 2020
Meadow View Road	East of Meridian Road	200	February 4, 2020

Figure 2.1 – Existing Intersection Control Lane and Configuration

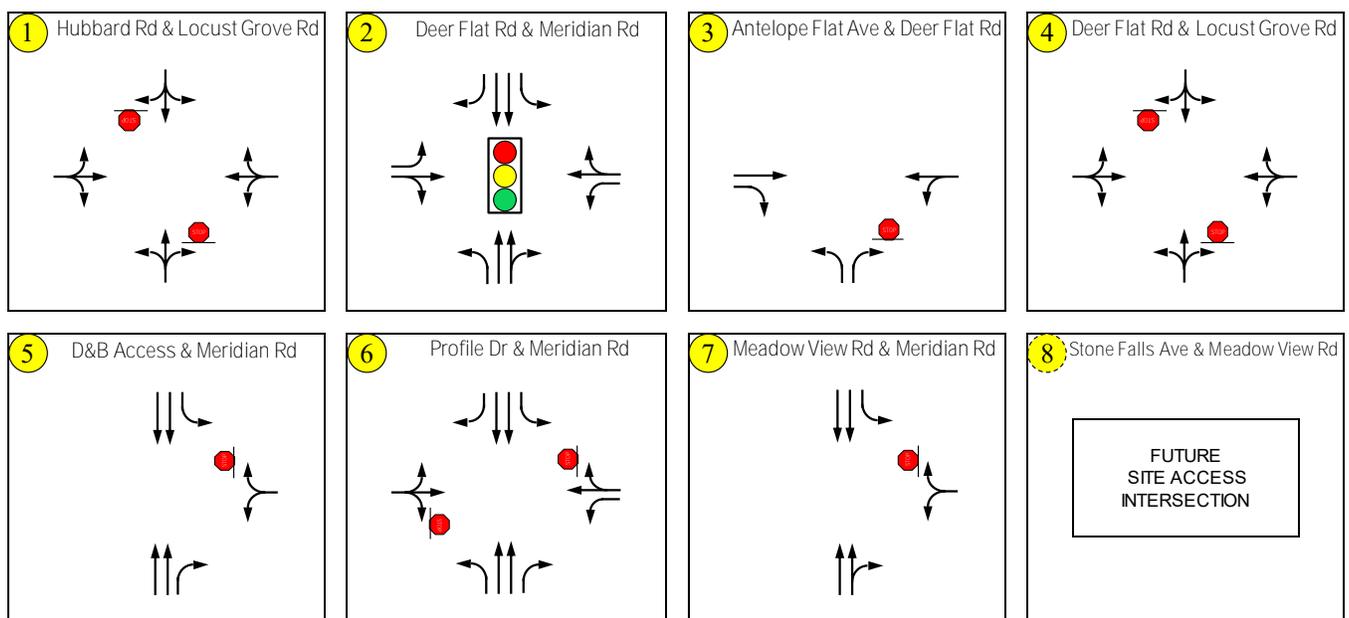
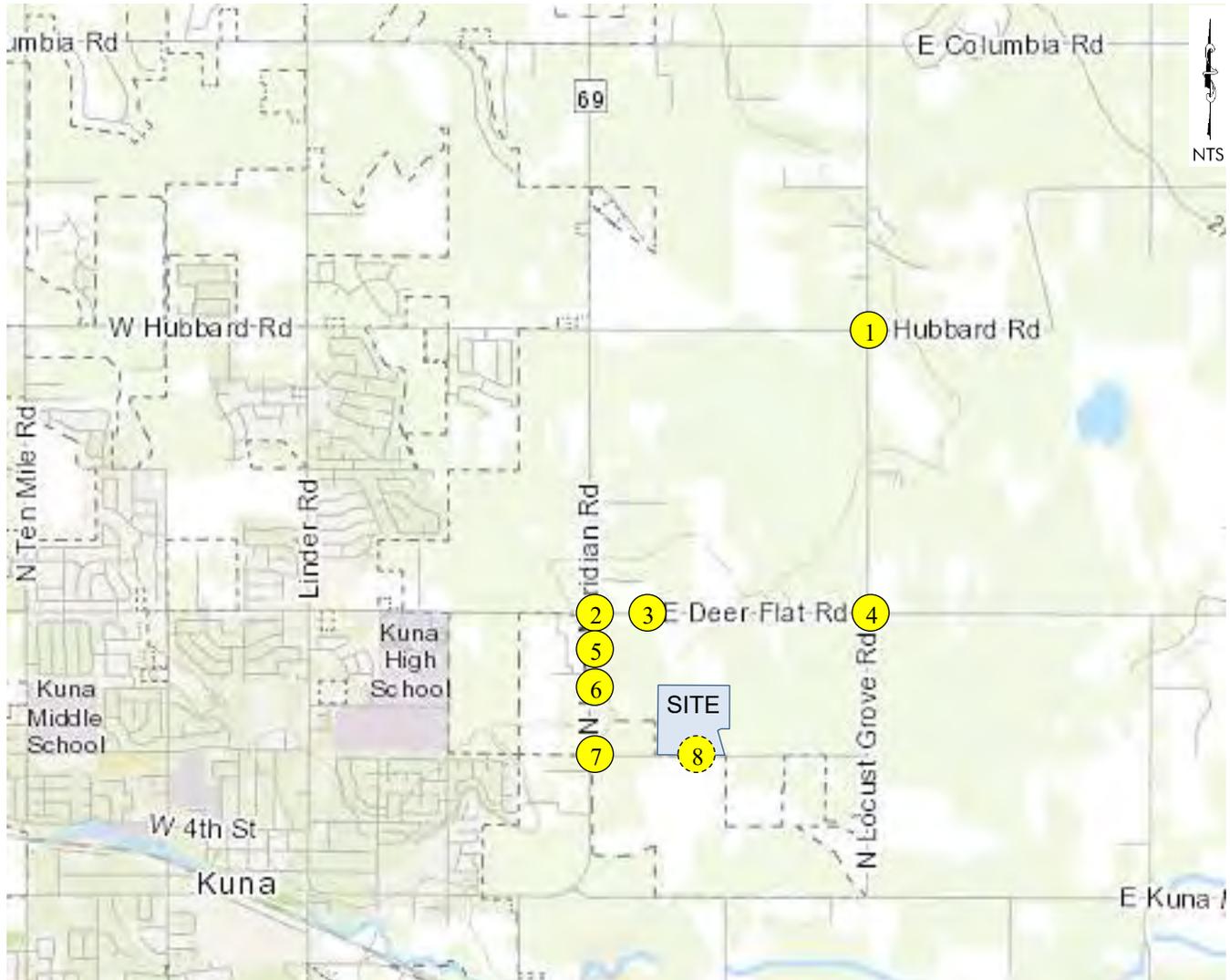


Figure 2.2 – 2020 Existing AM Peak Hour Traffic

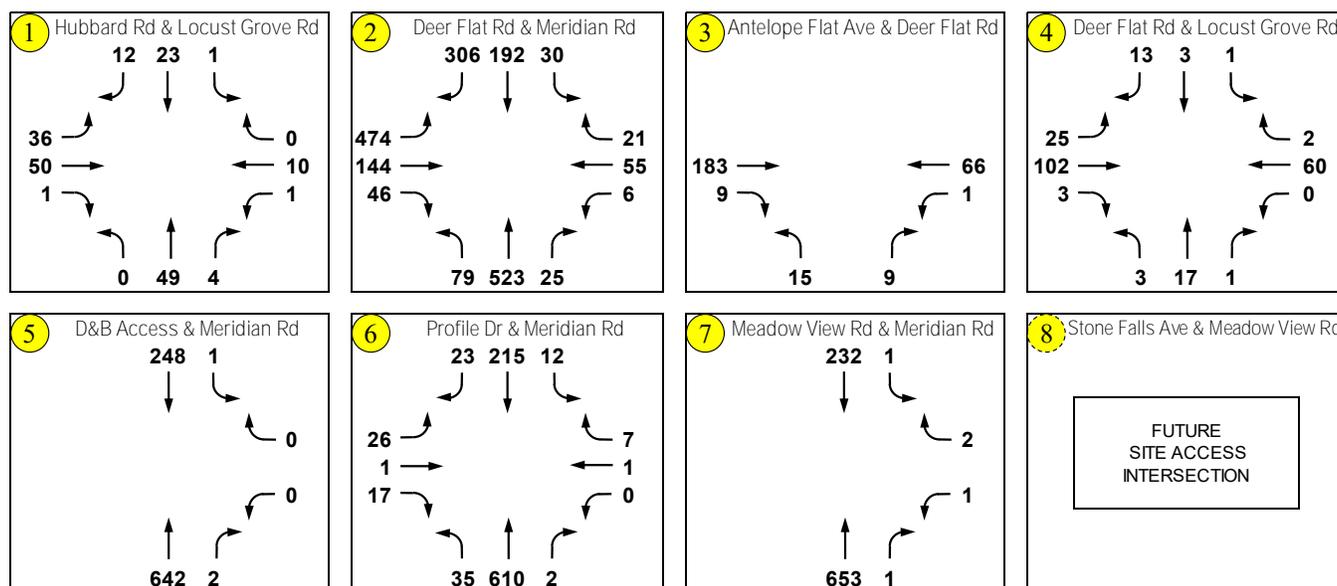
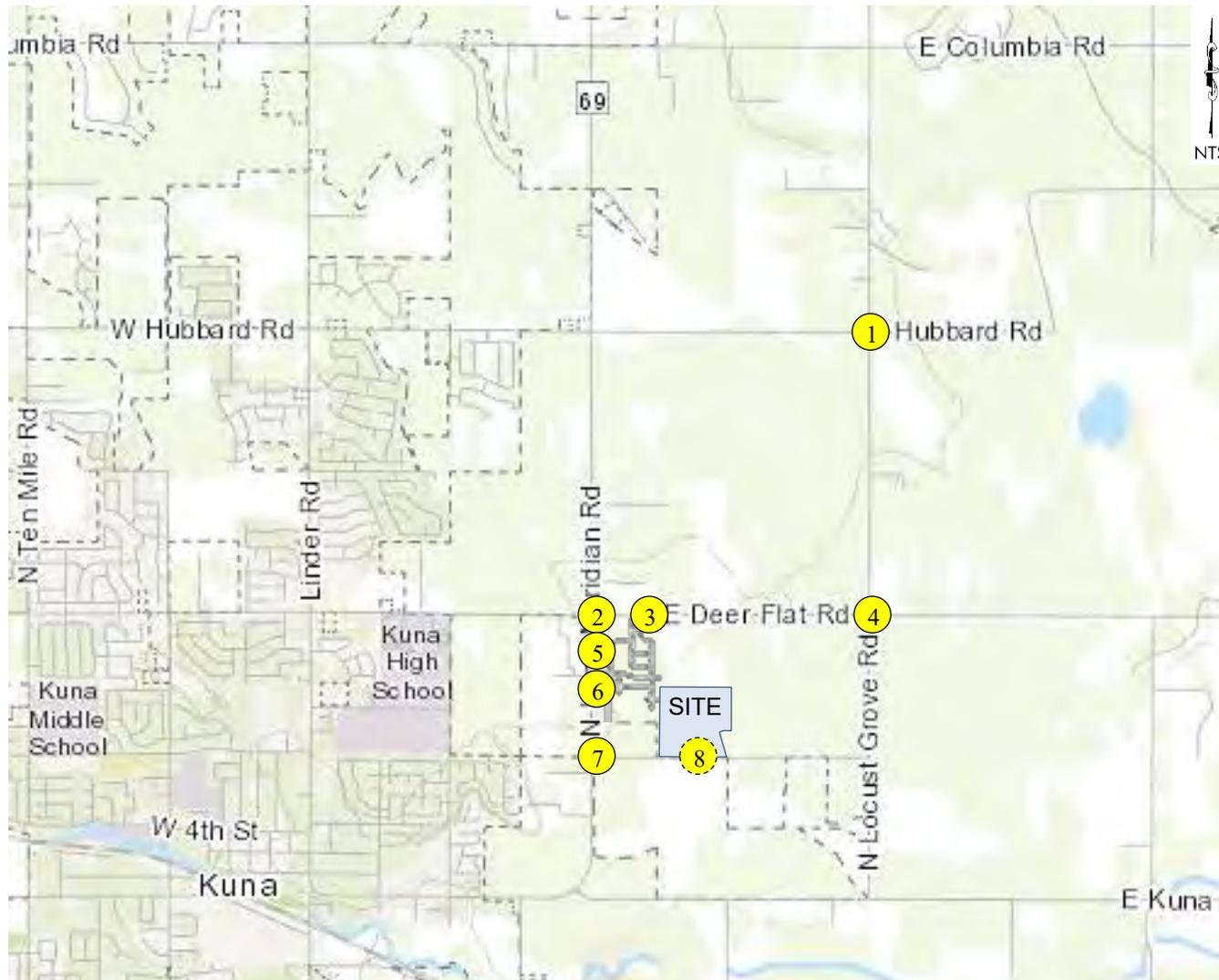
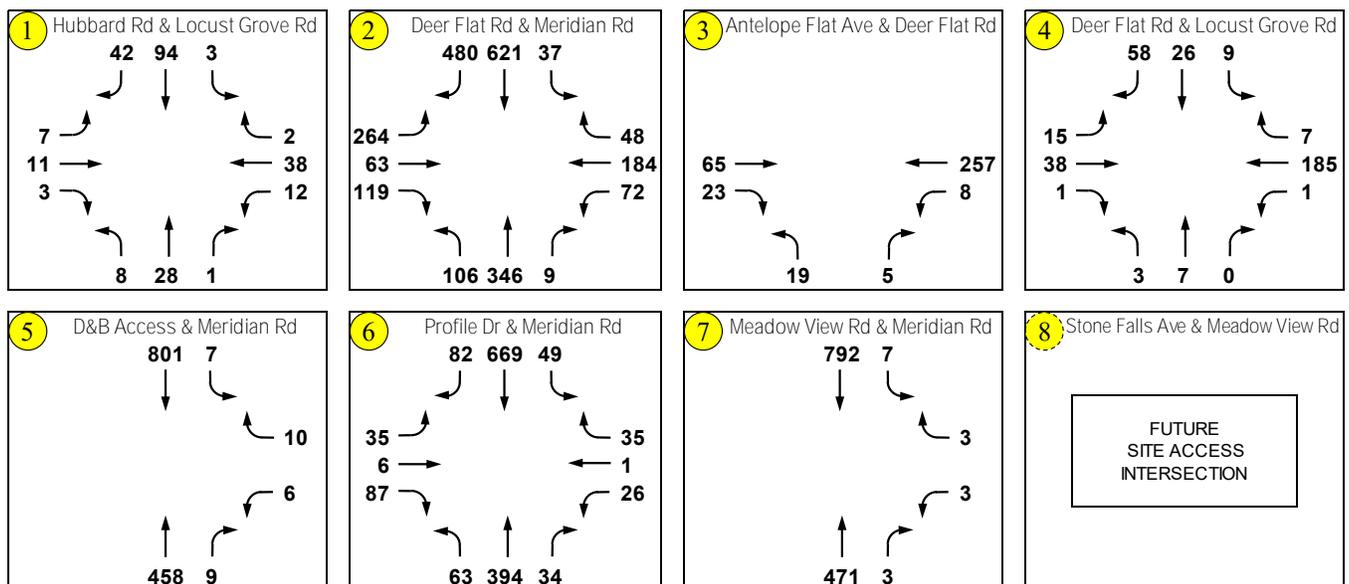
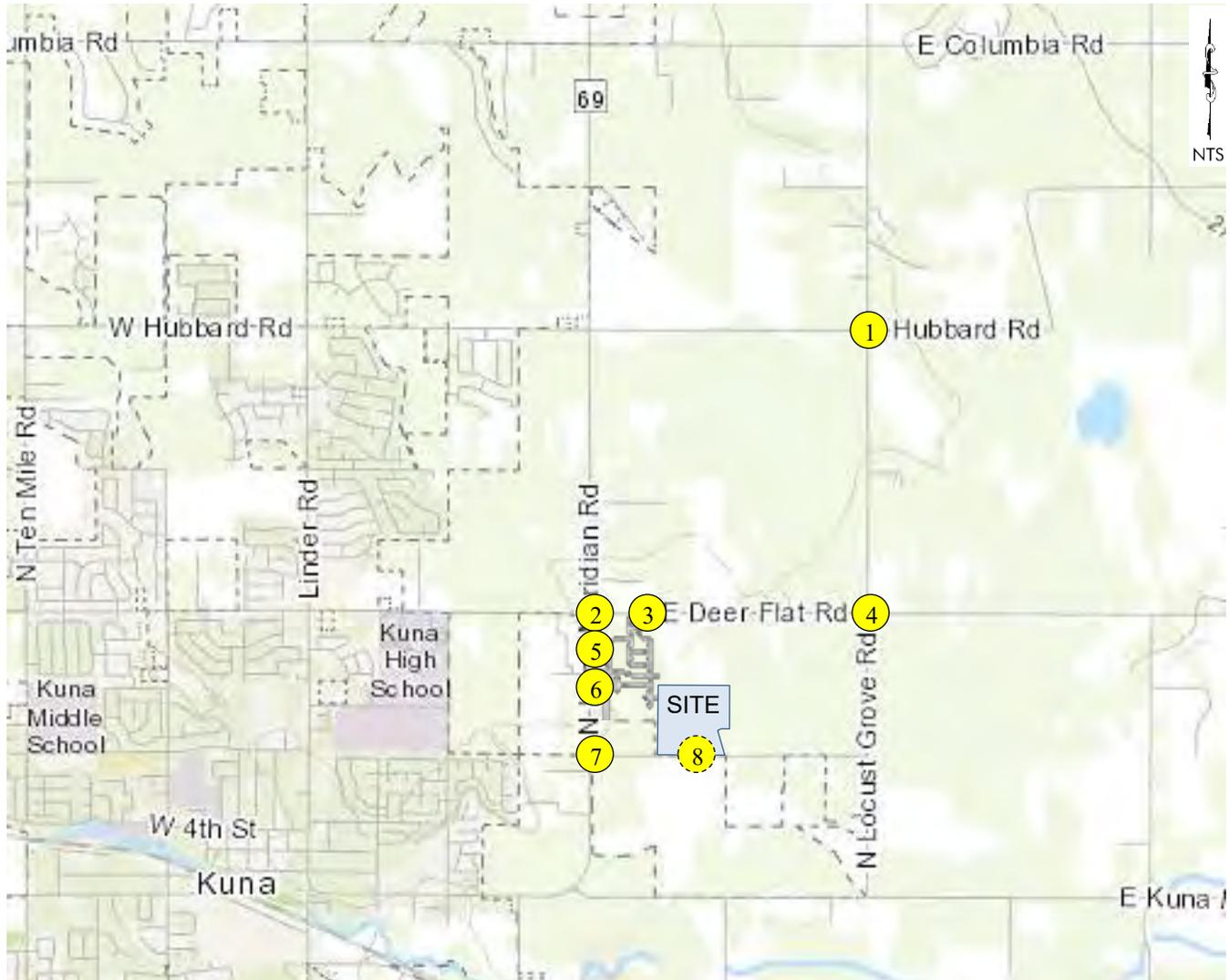


Figure 2.3 – 2020 Existing PM Peak Hour Traffic



2.3 Intersection Crash Data

The most current five-year crash data (2014-2018) was obtained from the Local Highway Technical Assistance Council (LHTAC) website (<http://gis.lhtac.org/safety/>). **Table 2.3** summarizes the crash data statistics for the study area intersections. The historical crash data shows:

- No fatal crashes were recorded at the study area intersections
- All five (5) crashes at the Hubbard Road and Locust Grove Road intersection were angle-turning crashes
- All six (6) crashes at the Deer Flat Road and Locust Grove Road intersection were angle-turning crashes
- The majority (80%) of crashes at the Deer Flat Road and Meridian Road intersection were due to inattentive driving, failing to yield, or following too close
 - A southbound right-turn lane has been constructed since the crash data was collected
 - Signals were installed along Meridian Road and Hubbard Road (1 mile north) and Lake Hazel Road (3 miles north) after the 2014-2018 crash data timeframe.

Table 2.3 – Intersection Crash Data (2014-2018)

Intersection	Total Crashes	Crash Severity			Notes
		PDO	Injury	Fatal	
① Hubbard Rd and Locust Grove Rd	5	2	3	0	100% Angle crashes 80% Failed to yield/obey stop sign
② Deer Flat Rd and Meridian Rd	24	10	14	0	50% Head-on turning crashes 42% in the eastbound direction 80% failed to yield/failed too close/ inattentive driving
③ Antelope Flat Rd and Deer Flat Rd	0	Intersection not in operation during time frame			
④ Deer Flat Rd and Locust Grove Rd	6	3	3	0	100% Angle crashes 67% of crashes occurred between 3 PM-6 PM
⑤ D&B Access and Meridian Rd	0	Intersection not in operation during time frame			
⑥ Profile Dr and Meridian Rd	1	1	0	0	Rear-end, failed to yield
⑦ Meadow View Rd and Meridian Rd	1	0	1	0	Asleep, Improper lane change

2.4 Roadway Segment Planning Level of Service

The study area roadway segments were evaluated based on ACHD’s level of service planning thresholds. **Table 2.4** summarizes the roadway segment level of service with existing traffic and lane configuration. The study area roadway segments currently meet ACHD’s level of service planning thresholds with 2020 existing traffic volumes.

Table 2.4 – Roadway Segment Level of Service – 2020 Existing Traffic

Roadway	Segment	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold [vph]	Peak Hour Directional Volume [vph]		Meets LOS Planning Threshold?
					AM Peak	PM Peak	
Locust Grove Rd	Between Hubbard Rd and Deer Flat Rd	Minor Arterial (2)	None	575	53	109	Yes
Deer Flat Rd	East of Meridian Rd	Minor Arterial (2 / 3)	Partial LT	575 / 720	192	266	Yes
Antelope Flat Ave	South of Deer Flat Rd	Collector (2 / 3)	Partial LT	425 / 525	24	31	Yes
Profile Dr	East of Meridian Rd	Collector (2 / 3)	Partial LT	425 / 525	15	89	Yes
Meadow View Rd	East of Meridian Rd	Local Road (2)	None	N/A	3	10	N/A

2.5 Intersection Operations

To determine the existing traffic operations, the study area intersections were analyzed with the existing intersection control, ACHD signal timing parameters, and lane configuration with 2020 existing peak hour traffic volumes. Copies of the analysis reports are included in the appendix. **Table 2.5** summarizes the intersection capacity analysis results. One study area intersection currently exceeds minimum operational thresholds under 2020 existing traffic conditions:

- Deer Flat Road and Meridian Road intersection
 - The eastbound left-turn lane group v/c ratio exceeds 1.00 during the AM and PM peak hours, which exceeds ACHD’s and ITD’s minimum operational thresholds

2.6 Roadway Segment Mitigation

All study area roadway segments currently meet ACHD’s level of service planning thresholds with the existing lane configuration. No roadway capacity improvements are needed to mitigate existing conditions.

Table 2.5 – Intersection Operations – 2020 Existing Traffic

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
① Hubbard Rd and Locust Grove Rd		EB	A	7	0.02	A	7	0.01
		WB	A	7	< 0.01	A	7	0.01
		NB	B	10	0.08	B	10	0.06
		SB	A	10	0.05	B	10	0.20

Table 2.5 – Intersection Operations – 2020 Existing Traffic (Continued)

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
② Deer Flat Rd and Meridian Rd		Intersection	F	84	0.77	E	57	0.66
		EBL	F	268	1.46	F	209	1.29
		EBTR	D	46	0.50	D	55	0.62
		WBL	E	57	0.05	D	48	0.33
		WBTR	E	74	0.80	E	77	0.90
		NBL	B	16	0.20	B	18	0.36
		NBT	C	22	0.38	C	20	0.21
		NBTR	C	22	0.38	C	20	0.21
		SBL	B	17	0.09	B	18	0.07
		SBT	B	19	0.14	C	24	0.38
③ Antelope Flat Ave and Deer Flat Rd		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBTL	A	8	< 0.01	A	7	0.01
		NBL	A	10	0.02	B	11	0.04
		NBR	A	9	0.01	A	9	0.01
④ Deer Flat Rd and Locust Grove Rd		EB	A	7	0.02	A	8	0.01
		WB	-	-	-	A	7	< 0.01
		NB	B	11	0.05	B	11	0.02
		SB	A	10	0.03	B	11	0.14
⑤ D&B Access and Meridian Rd		WB	-	-	-	B	10	0.02
		NBT	-	-	-	-	-	-
		NBR	-	-	-	-	-	-
		SBL	A	9	< 0.01	A	8	0.01
		SBT	-	-	-	-	-	-
⑥ Profile Dr and Meridian Rd		EB	B	14	0.11	B	15	0.26
		WBL	-	-	-	C	16	0.07
		WBTR	B	12	0.02	B	10	0.05
		NBL	A	8	0.03	A	8	0.06
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	9	0.02	A	8	0.05
		SBT	-	-	-	-	-	-
⑦ Meadow View Rd and Meridian Rd		WB	B	12	0.01	B	10	0.01
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	9	< 0.01	A	8	0.01
		SBT	-	-	-	-	-	-

2.7 Intersection Mitigation

Deer Flat Road and Meridian Road Intersection

The Deer Flat Road and Meridian Road intersection exceeds ACHD’s and ITD’s minimum operational thresholds in the AM and PM peak hours. The critical movement at the intersection is the eastbound left-turn movement with 474 vehicles in the AM peak hour and 264 vehicles in the PM peak hour. With these volumes, dual eastbound left-turn lanes are needed to mitigate 2020 existing traffic conditions. **Table 2.6** summarizes the intersection analysis results with the second eastbound left-turn lane. With the second eastbound left-turn lane, the eastbound left-turn lane group is expected to operate with a v/c ratio is 0.93 in the AM peak hour. This exceeds ITD’s 0.90 threshold but is below ACHD’s 1.00 threshold. Since the Deer Flat Road approaches are under ACHD jurisdiction, no additional improvements are needed to mitigate 2020 existing traffic operations.

Table 2.6 – Intersection Operations – 2020 Existing Traffic - Mitigation

Intersection	Mitigation	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
② Deer Flat Rd and Meridian Rd	One additional EB left-turn lane 	Intersection	D	39	0.51	D	44	0.57
		EBL	E	78	0.93	F	88	0.88
		EBTR	D	48	0.53	D	54	0.58
		WBL	E	60	0.05	D	49	0.31
		WBTR	E	71	0.70	E	77	0.89
		NBL	B	14	0.16	B	18	0.40
		NBT	B	19	0.33	B	20	0.22
		NBTR	B	19	0.33	B	20	0.22
		SBL	B	15	0.07	B	17	0.07
		SBT	B	17	0.12	C	24	0.41
		SBR	C	22	0.43	C	33	0.71

3.0 2024 BACKGROUND TRAFFIC CONDITIONS

3.1 Roadway Network

The study area roadways and intersections are expected to remain unchanged by year 2024 besides the improvements needed under existing conditions. **Table 3.1** summarizes the improvements planned within the study area vicinity from the ACHD 2016 Capital Improvements Plan (CIP). No roadway or intersection improvements within the study area were listed in the ACHD 2020-2024 Integrated Five-Year Work Plan (IFYWP) or the ITD FY2020-2026 Idaho Transportation Investment Program (ITIP). The intersection improvements at Deer Flat Road and Meridian Road as shown in the ACHD 2016 CIP will be considered as additional mitigation options to mitigate future traffic conditions if necessary.

Table 3.1 – Planned Improvements Summary

Transportation Plan	Project	Project Year	Funding
ACHD 2016 CIP	Intersection of Deer Flat Road and Meridian Road: Install dual left-turn and right-turn lanes on the Deer Flat approaches	2031-2035	Unfunded
	Deer Flat Road from Linder Road to Meridian Road: Reconstruct/widen from 3 to 5 lanes	2026-2030	Unfunded

3.2 Background Traffic

2024 background traffic was estimated by extrapolating the 2020 existing traffic counts by the following annual growth rates:

- 3.0% per year on Deer Flat Road
- 4.0% per year on Meridian Road and Meadow View Road
- 10.0% per year on Hubbard Road and Locust Grove Road
- No expected growth on D&B Access, Antelope Flat Avenue, and Profile Drive

These growth rates are based on COMPASS forecasts and historical counts within the area. In place of an annual growth rate along D&B Access, Antelope Flat Avenue, and Profile Drive, the remaining portion of Ashton Estates Subdivision was added as off-site traffic. The land use and locations of the remaining buildings in Ashton Estates Subdivision were obtained from the Ashton Estates TIS prepared by Thompson Engineers in 2016 and confirmed via field review.

The 2024 annual traffic growth was added to the 2024 off-site traffic volumes to result in the 2024 background traffic volumes. **Figure 3.1** and **Figure 3.2** summarize the 2024 build-out year peak hour background traffic for the AM and PM peak hours, respectively.

Figure 3.1 – 2024 Build-Out Year AM Peak Hour Background Traffic

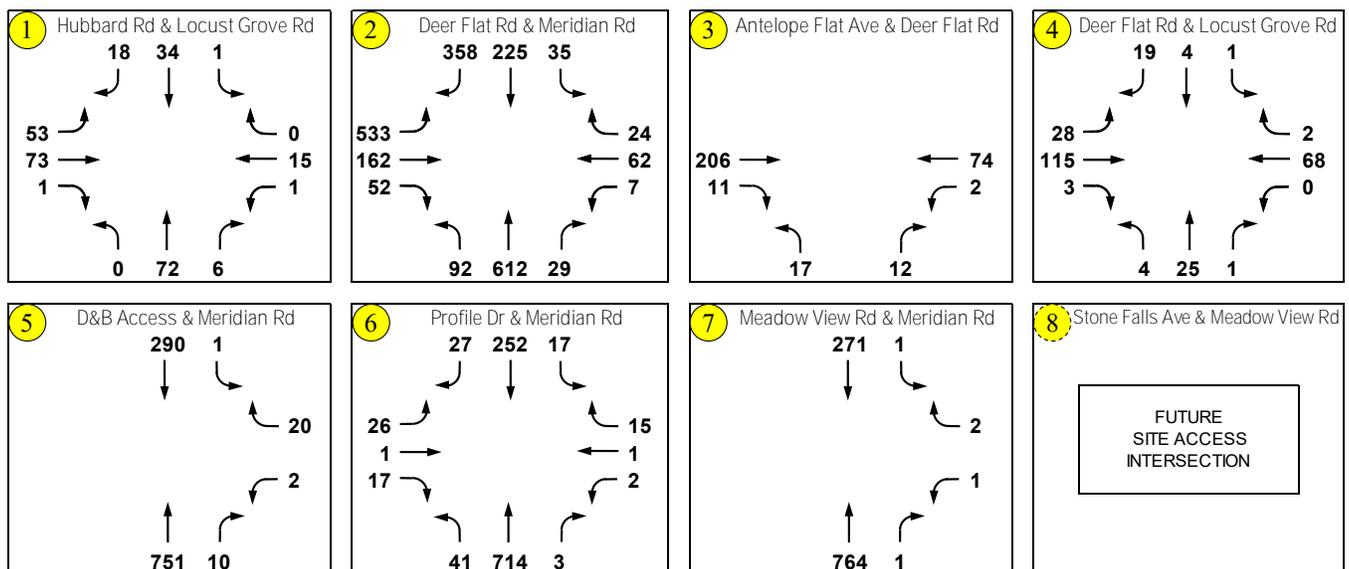
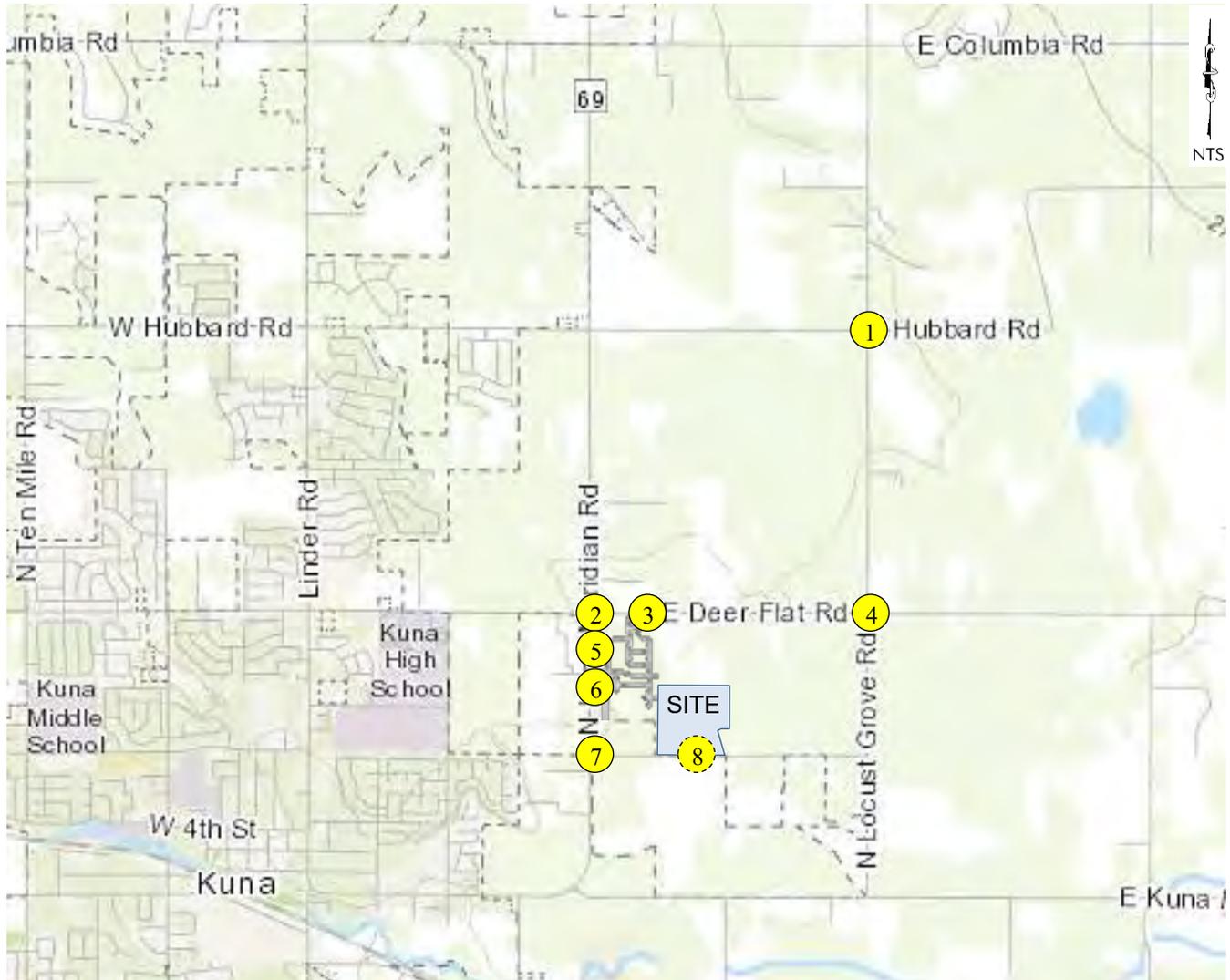
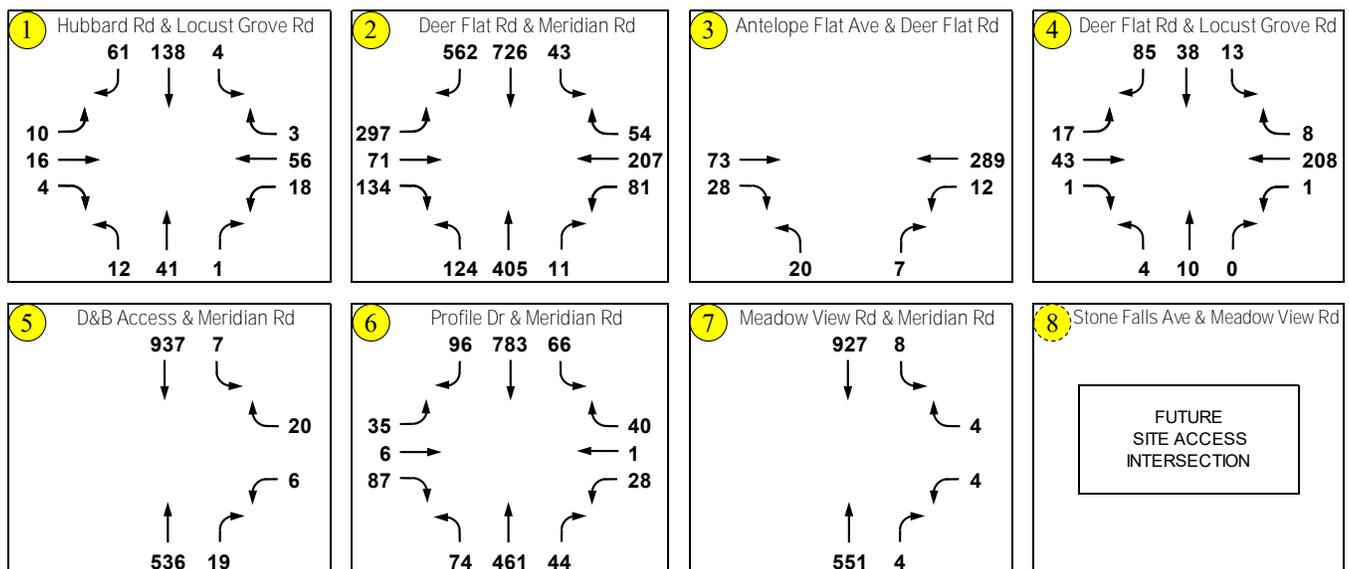
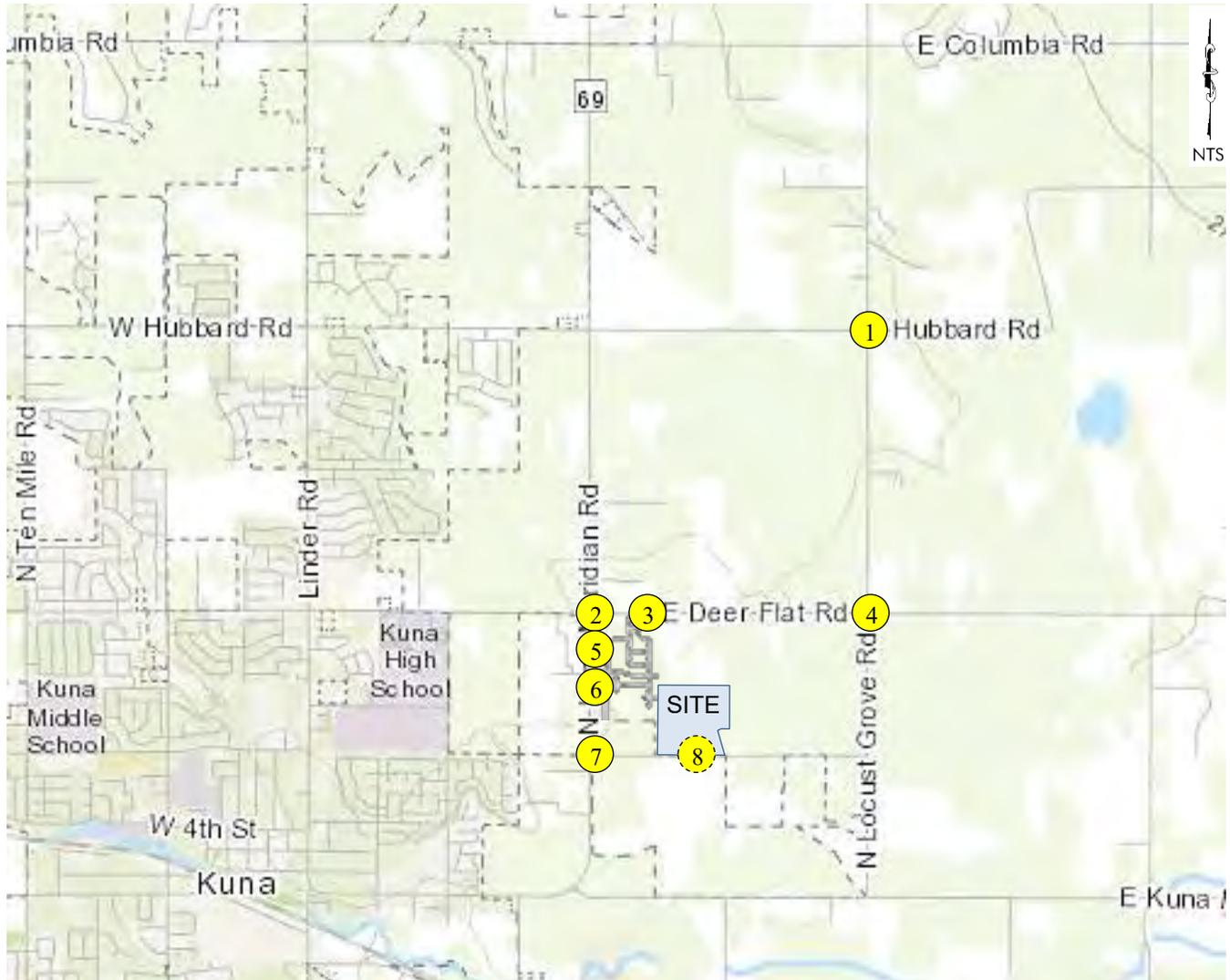


Figure 3.2 – 2024 Build-Out Year PM Peak Hour Background Traffic



3.3 Roadway Segment Planning Level of Service

The study area roadway segments were evaluated based on ACHD’s level of service planning thresholds. **Table 3.2** summarizes the roadway segment level of service with the existing lane configurations and 2024 background traffic volumes. The study area roadway segments are expected to meet ACHD’s level of service planning thresholds under 2024 background traffic conditions.

Table 3.2 – Roadway Segment Level of Service – 2024 Build-Out Year Background Traffic

Roadway	Segment	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold [vph]	Peak Hour Directional Volume [vph]		Meets LOS Planning Threshold?
					AM Peak	PM Peak	
Locust Grove Rd	Between Hubbard Rd and Deer Flat Rd	Minor Arterial (2)	None	575	78	160	Yes
Deer Flat Rd	East of Meridian Rd	Minor Arterial (2 / 3)	Partial LT	575 / 720	218	301	Yes
Antelope Flat Ave	South of Deer Flat Rd	Collector (2 / 3)	Partial LT	425 / 525	29	40	Yes
Profile Dr	East of Meridian Rd	Collector (2 / 3)	Partial LT	425 / 525	21	116	Yes
Meadow View Rd	East of Meridian Rd	Local Road (2)	None	N/A	3	12	N/A

3.4 Intersection Operations

To determine the 2024 background traffic operations, the study area intersections were analyzed with the existing intersection control and lane configuration or with the improvements needed under existing traffic conditions. In addition, the cycle length in the AM peak hour was increased to 150 seconds, based on ACHD Policy Manual Section 7106.4. Copies of the analysis reports are included in the appendix. **Table 3.3** summarizes the intersection capacity analysis results. One study area intersection is expected to exceed minimum operational thresholds:

- Deer Flat Road and Meridian Road intersection
 - The intersection is expected to operate at LOS E in the PM peak hour
 - The southbound right-turn lane group is expected to operate with a v/c ratio of 0.95 during the AM peak hour, which exceeds ITD’s 0.90 threshold

Table 3.3 – Intersection Operations – 2024 Build-Out Year Background Traffic

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
① Hubbard Rd and Locust Grove Rd		EB	A	7	0.04	A	8	0.01
		WB	A	7	< 0.01	A	7	0.01
		NB	B	11	0.12	B	11	0.09
		SB	B	10	0.07	B	11	0.29

Table 3.3 – Intersection Operations – 2024 Build-Out Year Background Traffic (Continued)

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
② Deer Flat Rd ¹ and Meridian Rd		Intersection	D	46	0.62	E	56	0.72
		EBL	E	78	0.93	F	109	0.98
		EBTR	D	49	0.55	D	54	0.61
		WBL	E	64	0.05	D	46	0.34
		WBTR	F	80	0.79	E	79	0.91
		NBL	F	86	0.84	F	100	0.87
		NBT	C	23	0.40	C	23	0.27
		NBTR	C	23	0.40	C	23	0.27
		SBL	F	82	0.79	E	78	0.79
		SBT	C	22	0.15	C	33	0.55
		SBR	C	30	0.55	E	62	0.95
③ Antelope Flat Ave and Deer Flat Rd		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBTL	A	8	< 0.01	A	8	0.01
		NBL	B	11	0.03	B	12	0.04
		NBR	A	10	0.02	A	9	0.01
④ Deer Flat Rd and Locust Grove Rd		EB	A	7	0.02	A	8	0.01
		WB	-	-	-	A	7	< 0.01
		NB	B	11	0.05	B	12	0.03
		SB	A	9	0.03	B	12	0.21
⑤ D&B Access and Meridian Rd		WB	B	12	0.04	B	10	0.04
		NBT	-	-	-	-	-	-
		NBR	-	-	-	-	-	-
		SBL	A	10	< 0.01	A	9	0.01
		SBT	-	-	-	-	-	-
⑥ Profile Dr and Meridian Rd		EB	B	15	0.12	C	19	0.34
		WBL	C	23	0.01	C	20	0.11
		WBTR	B	12	0.03	B	11	0.06
		NBL	A	8	0.03	A	9	0.07
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	10	0.02	A	9	0.07
		SBT	-	-	-	-	-	-
		SBR	-	-	-	-	-	
⑦ Meadow View Rd and Meridian Rd		WB	B	13	0.01	B	11	0.01
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	10	< 0.01	A	9	0.01
		SBT	-	-	-	-	-	-

¹ Exceed minimum operational thresholds with no-build

3.5 Roadway Segment Mitigation

All study area roadway segments are expected to continue to meet ACHD’s level of service planning thresholds with the existing lane configuration. No roadway capacity improvements are needed to mitigate 2024 background traffic conditions.

3.6 Intersection Mitigation

Deer Flat Road and Meridian Road Intersection

The Deer Flat Road and Meridian Road intersection is expected to exceed minimum operational thresholds with the improvements needed under 2020 existing traffic conditions. The intersection is programmed in the current ACHD CIP to be widened for dual left-turn lanes and exclusive right-turn lanes on the Deer Flat Road approaches. However, the expected volumes in these movements do not warrant these lanes beside the eastbound dual left-turn lanes needed to mitigate 2020 existing traffic operations.

The southbound right-turn volume in the AM peak hour exceeds 350 vehicles per hour and exceeds 550 vehicles per hour in the PM peak hour. Overlap phases for exclusive right-turn lanes are generally recommended at 300 vehicles per hour. Thus, an overall phase for the southbound right-turn movement is recommended. **Table 3.4** summarizes the intersection operations with an overlap phase for the southbound right-turn movement. With this signal adjustment, the intersection and all lane groups are expected to meet ACHD’s or ITD’s minimum operational thresholds. The eastbound left-turn lane group is expected to operate with a v/c ratio exceeding 0.90 but less than 1.00, which is within ACHD’s 1.00 threshold.

Table 3.4 – Intersection Operations – 2024 Build-Out Year Background Traffic Mitigation

Intersection	Mitigation	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
② Deer Flat Rd and Meridian Rd		Intersection	D	43	0.62	D	50	0.72
		EBL	E	78	0.93	F	109	0.98
		EBTR	D	49	0.55	D	53	0.61
		WBL	E	64	0.05	D	46	0.34
		WBTR	F	80	0.79	E	77	0.90
		NBL	F	86	0.84	F	100	0.87
		NBT	C	23	0.40	C	23	0.27
		NBTR	C	23	0.40	C	23	0.27
		SBL	F	82	0.79	E	78	0.79
		SBT	C	22	0.15	C	33	0.55
SBR	B	12	0.39	C	33	0.77		

4.0 2024 BUILD-OUT YEAR TOTAL TRAFFIC CONDITIONS

4.1 Site Traffic

4.1.1 Trip Generation

Site trip generation is estimated using the procedures recommended in the latest edition of the Trip Generation Manual (10th edition), published by the Institute of Transportation Engineers. **Table 4.1** summarizes the site trip generation. The proposed development is estimated to generate approximately 1,740 trips per weekday with 129 trips during the AM peak hour and 174 trips during the PM peak hour.

Table 4.1 – Build-Out Site Traffic Trip Generation Summary

Land Use	ITE Code	Size	Unit	Period	Total Trips	Entering		Exiting	
Single-Family Detached Housing	210	175	DU	Weekday Daily (vpd)	1,740	50%	870	50%	870
				AM Peak Hour (vph)	129	25%	32	75%	97
				PM Peak Hour (vph)	174	63%	110	37%	64

4.1.2 Trip Capture

Based on the proposed land use and ITE methodologies, the development is not expected to retain trips internally within the site. No reduction for internal trip capture was assumed in the traffic analysis.

4.1.3 Pass-by Trips

The development is not expected to generate pass-by trips. No pass-by trips were assumed in the traffic analysis.

4.1.4 Modal Split

For the traffic analysis purposes, all trips generated by the development were assumed to be made by personal and commercial vehicles.

4.1.5 Trip Distribution and Assignment

Site traffic was distributed and assigned to the external roadway system based on current travel patterns, site layout, and the general location of the site within the area. **Figure 4.1** summarizes the expected site traffic distribution patterns. **Figure 4.2** and **Figure 4.3** summarize the estimated build-out AM and PM peak hour site traffic, respectively.

4.2 Total Traffic

The site traffic is then added to the 2024 background traffic as determined above to obtain the 2024 total traffic. **Figure 4.4** and **Figure 4.5** summarize the estimated 2024 build-out year AM and PM peak hour total traffic, respectively.

Figure 4.1 – Site Traffic Distribution Patterns

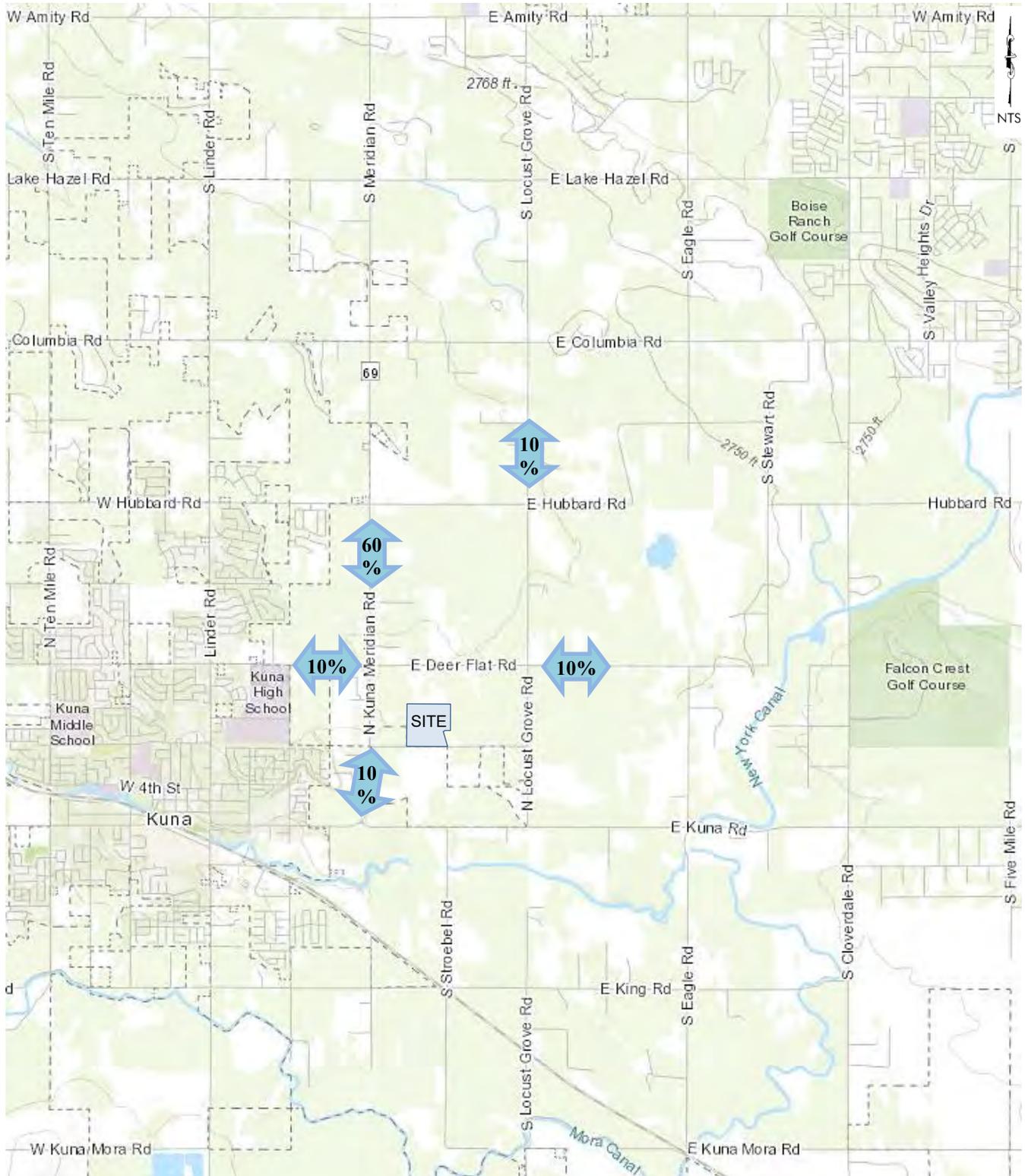


Figure 4.2 – 2024 Build-Out Year AM Peak Hour Site Traffic

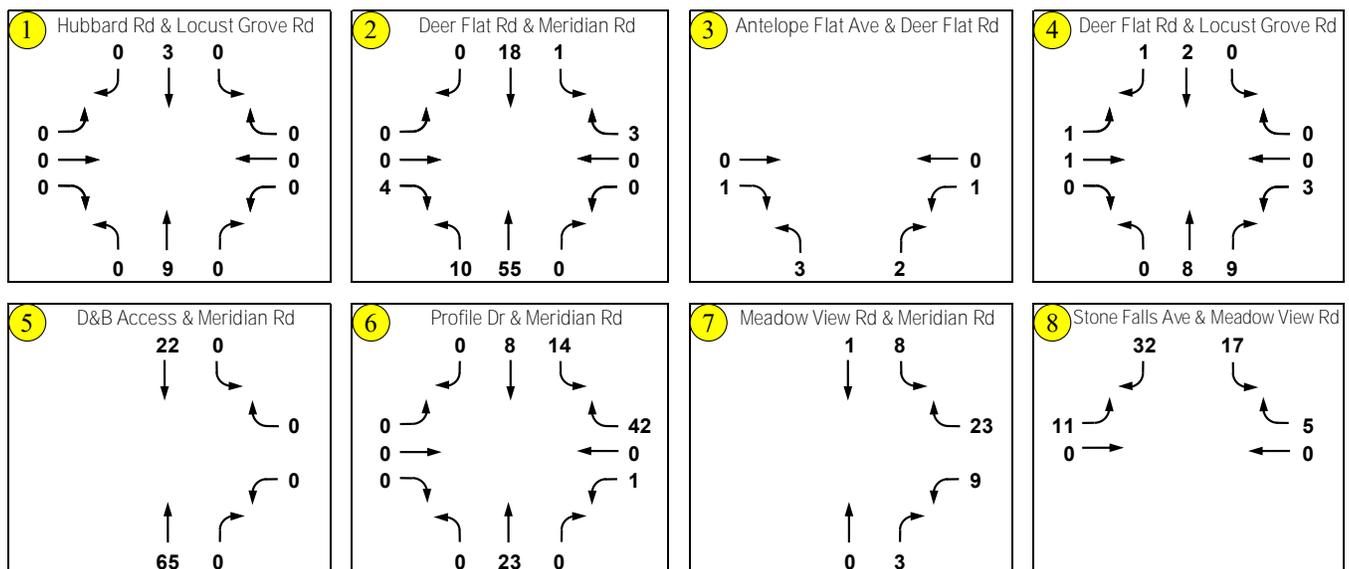
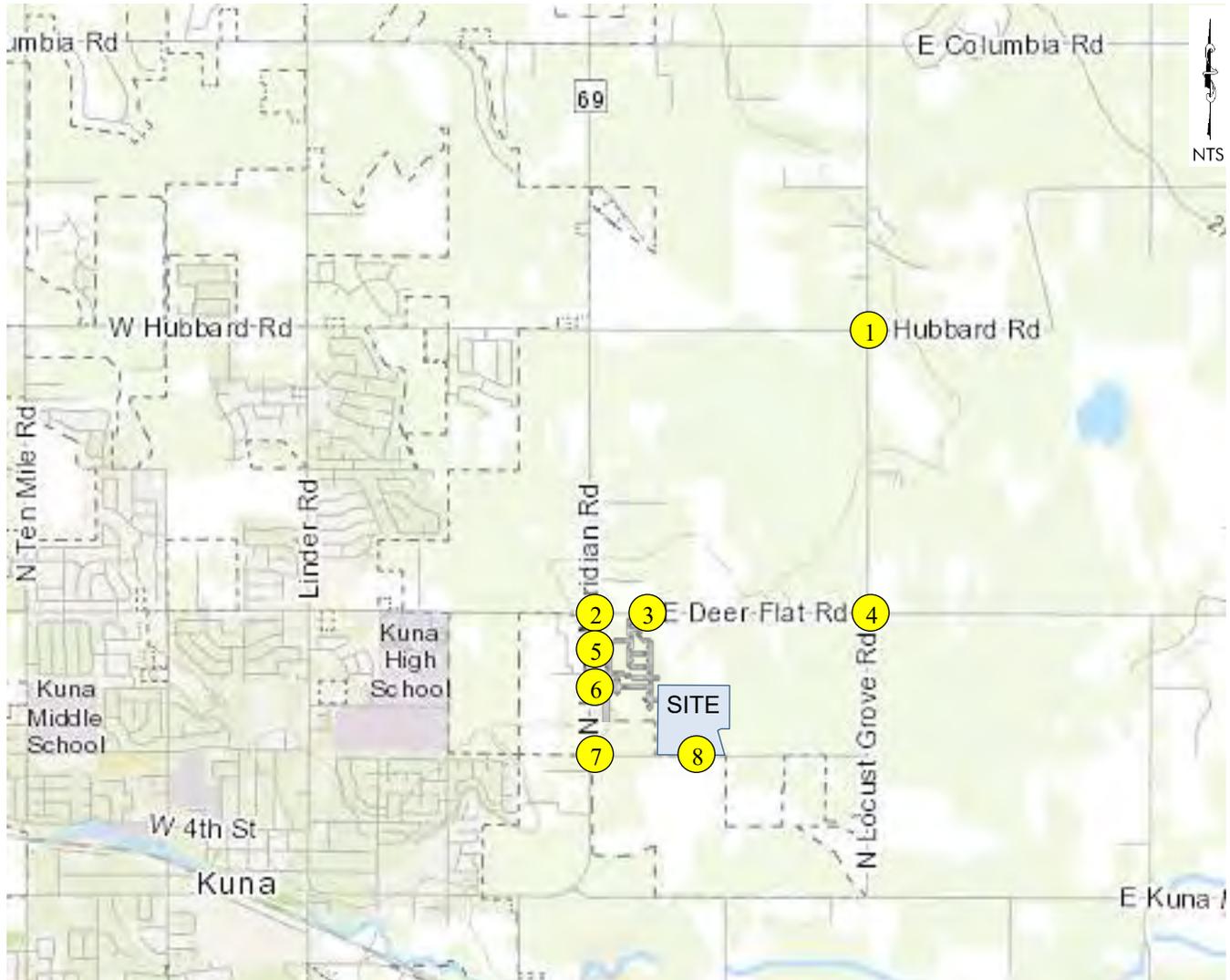


Figure 4.3 – 2024 Build-Out Year PM Peak Hour Site Traffic

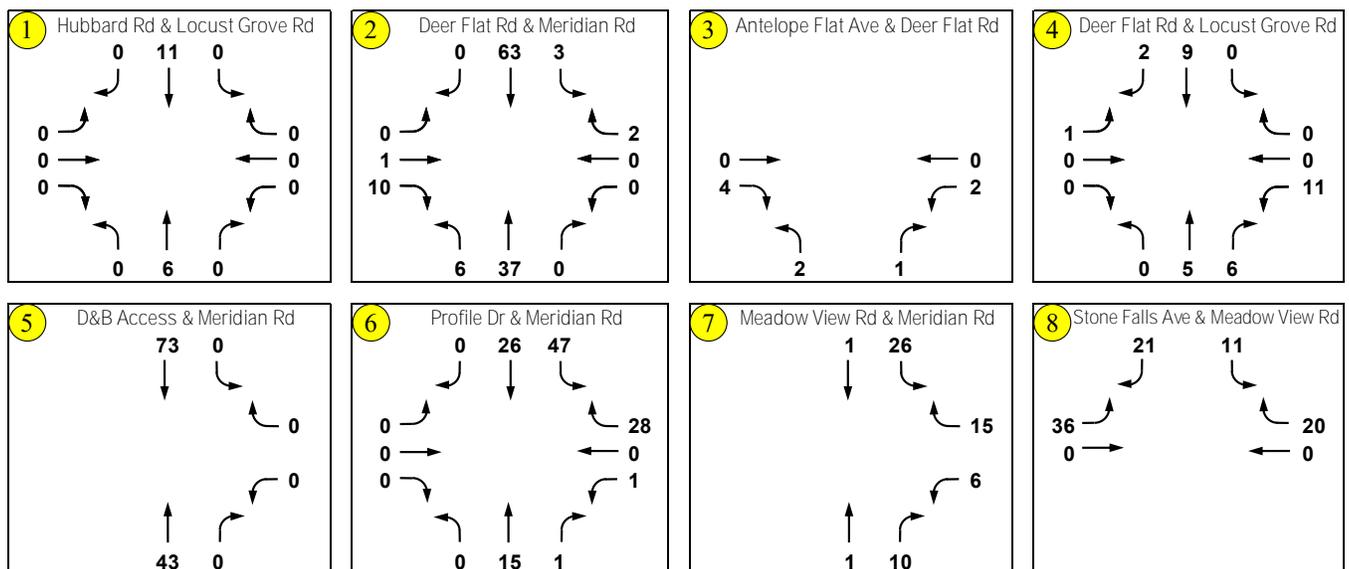
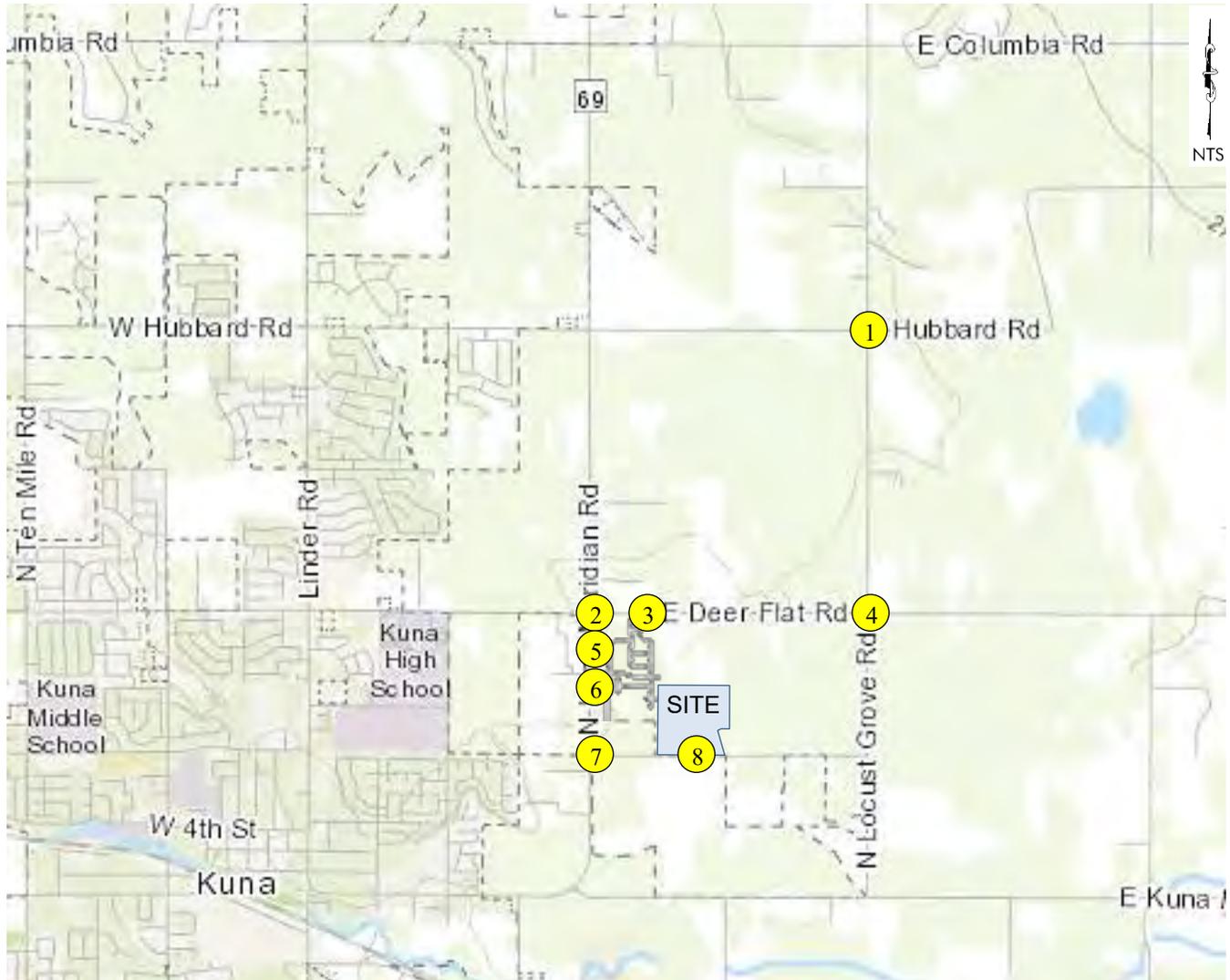


Figure 4.4 – 2024 Build-Out Year AM Peak Hour Total Traffic

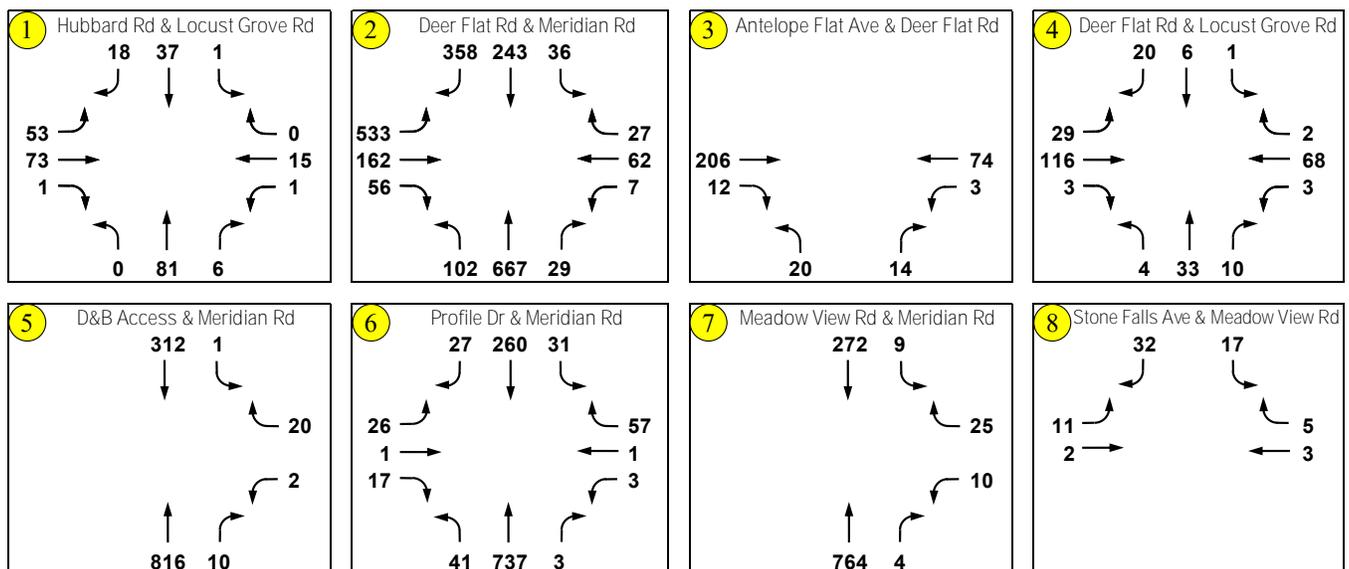
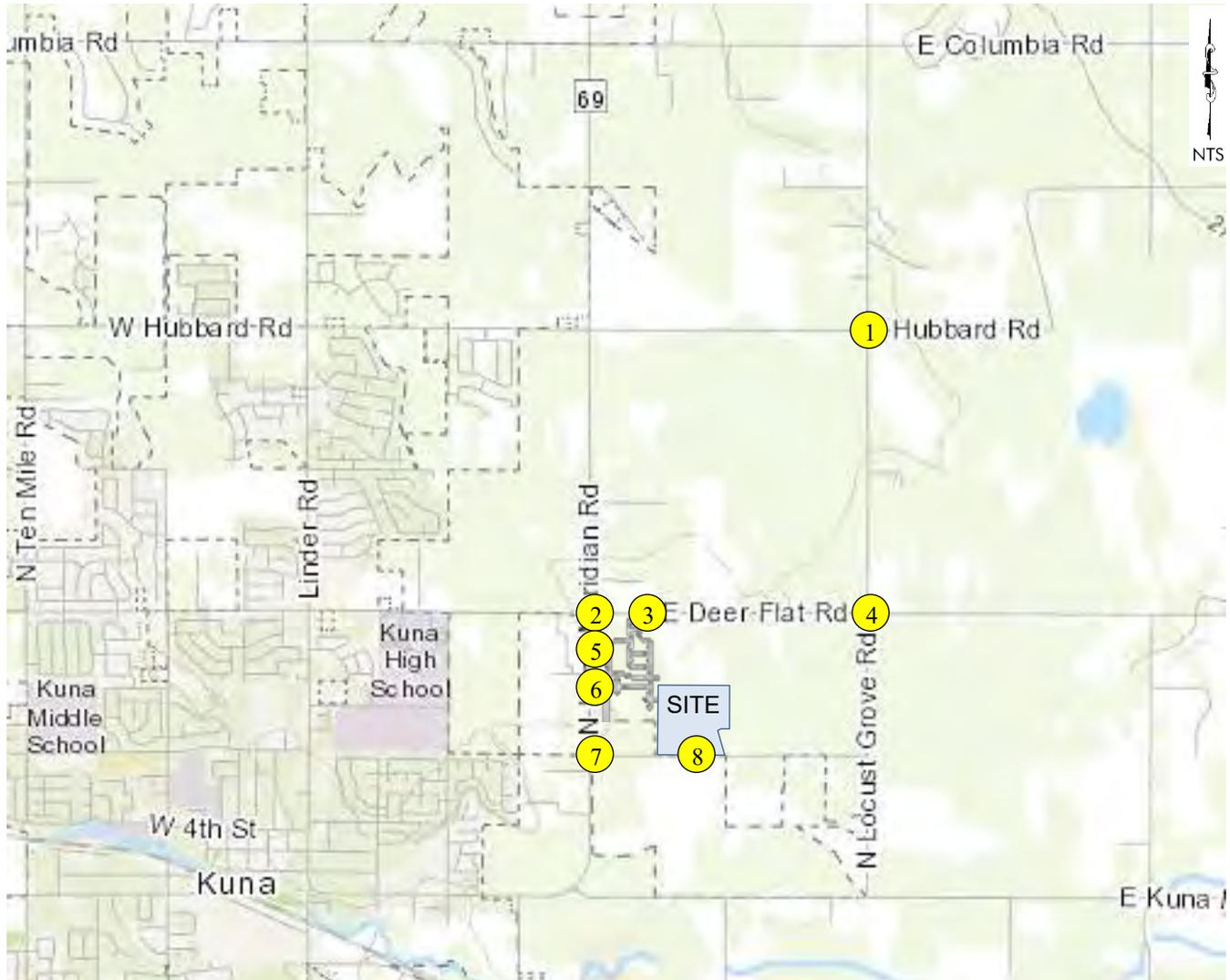
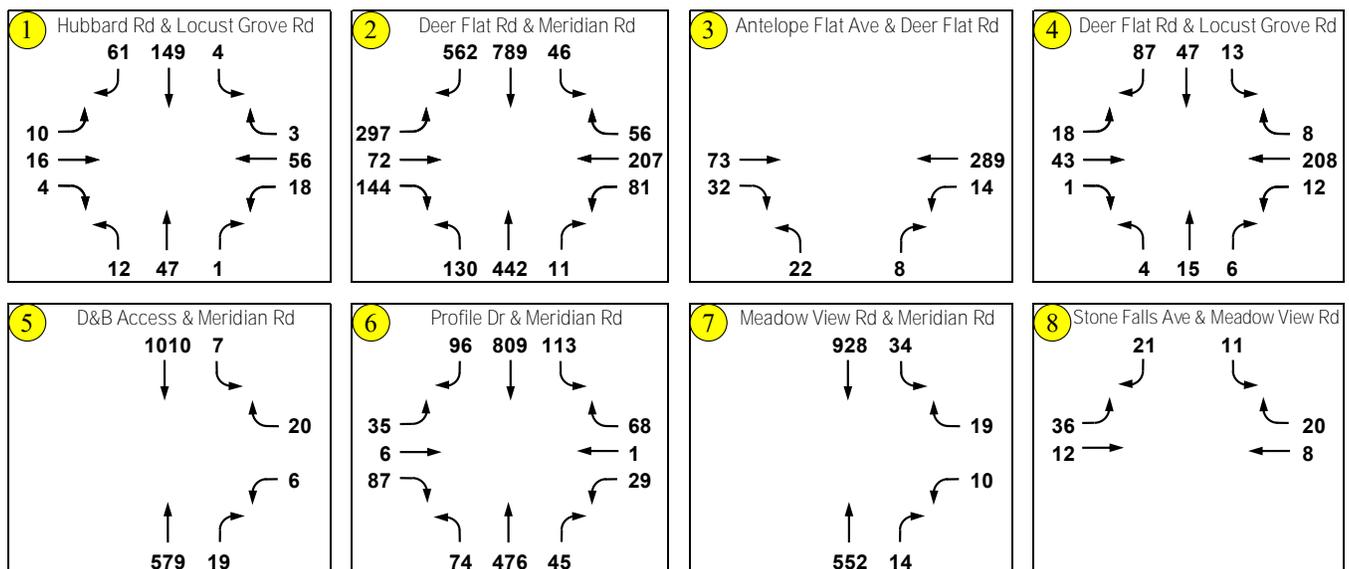
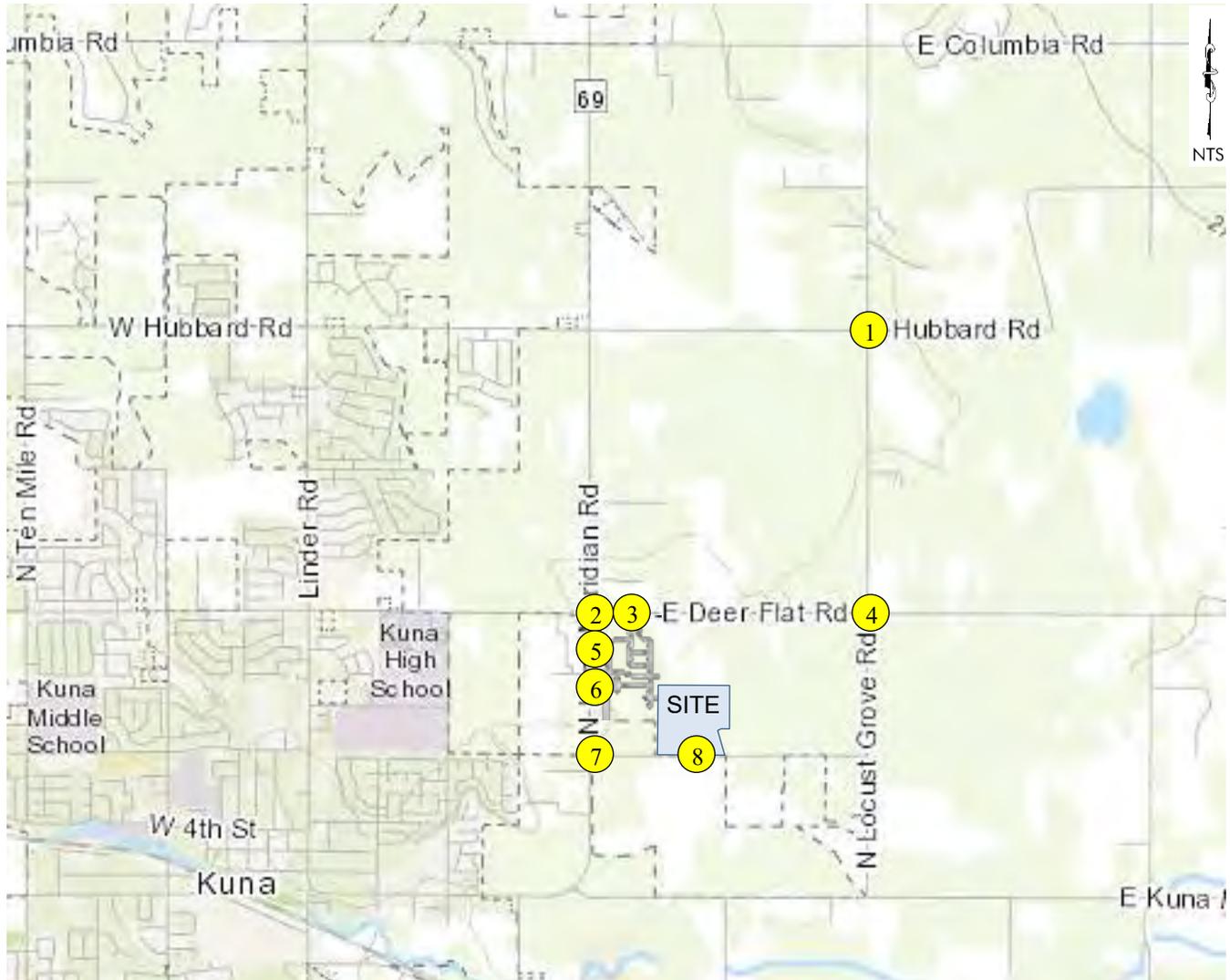


Figure 4.5 – 2024 Build-Out Year PM Peak Hour Total Traffic



4.3 Roadway Segment Planning Level of Service

The study area roadway segments were evaluated based on ACHD’s level of service planning thresholds. **Table 4.2** summarizes the roadway segment level of service with the existing lane configurations and 2024 total traffic volumes. The study area roadway segments are expected to meet ACHD’s level of service planning thresholds under 2024 total traffic conditions.

Table 4.2 – Roadway Segment Level of Service – 2024 Build-Out Year Total Traffic

Roadway	Segment	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold [vph]	Peak Hour Directional Volume [vph]		Meets LOS Planning Threshold?
					AM Peak	PM Peak	
Locust Grove Rd	Between Hubbard Rd and Deer Flat Rd	Minor Arterial (2)	None	575	87	171	Yes
Deer Flat Rd	East of Meridian Rd	Minor Arterial (2 / 3)	Partial LT	575 / 720	220	303	Yes
Antelope Flat Ave	South of Deer Flat Rd	Collector (2 / 3)	Partial LT	425 / 525	34	46	Yes
Profile Dr	East of Meridian Rd	Collector (2 / 3)	Partial LT	425 / 525	64	164	Yes
Meadow View Rd	East of Meridian Rd	Local Road (2)	None	N/A	35	48	N/A

4.4 Intersection Operations

To determine the 2024 total traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration with 2024 build-out total traffic volumes, or with the mitigation options proposed under 2020 existing and 2024 background traffic conditions. Copies of the analysis reports are included in the appendix. **Table 4.3** summarizes the intersection capacity analysis results. All study area intersections are expected to meet ACHD’s and/or ITD’s minimum operational thresholds. The eastbound left-turn lane group at the Deer Flat Road and Meridian Road intersection is expected to operate with a v/c ratio exceeding 0.90 but less than the ACHD 1.00 threshold during the peak hours. No additional improvements are needed to mitigate 2024 total traffic operations.

Table 4.3 – Intersection Operations – 2024 Build-Out Year Total Traffic

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
① Hubbard Rd and Locust Grove Rd		EB	A	7	0.04	A	8	0.01
		WB	A	7	< 0.01	A	7	0.01
		NB	B	11	0.14	B	11	0.10
		SB	B	10	0.08	B	12	0.30

Table 4.3 – Intersection Operations – 2024 Build-Out Year Total Traffic (Continued)

Intersection	Control / Lane	Intersection or Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
② Deer Flat Rd ¹ and Meridian Rd		Intersection	D	43	0.65	D	50	0.75
		EBL	E	78	0.93	F	109	0.98
		EBTR	D	49	0.55	D	54	0.64
		WBL	E	63	0.05	D	46	0.35
		WBTR	F	80	0.79	E	77	0.90
		NBL	F	83	0.85	F	102	0.88
		NBT	C	24	0.43	C	24	0.30
		NBTR	C	24	0.43	C	24	0.30
		SBL	F	82	0.79	E	77	0.79
		SBT	C	23	0.17	C	34	0.61
		SBR	B	13	0.40	C	34	0.78
③ Antelope Flat Ave and Deer Flat Rd		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBTL	A	8	< 0.01	A	8	0.01
		NBL	B	11	0.03	B	12	0.04
		NBR	A	10	0.02	A	9	0.01
④ Deer Flat Rd and Locust Grove Rd		EB	A	7	0.02	A	8	0.02
		WB	A	8	< 0.01	A	7	0.01
		NB	B	11	0.08	B	11	0.05
		SB	A	10	0.04	B	12	0.24
⑤ D&B Access and Meridian Rd		WB	B	12	0.05	B	11	0.04
		NBT	-	-	-	-	-	-
		NBR	-	-	-	-	-	-
		SBL	A	10	< 0.01	A	9	0.01
		SBT	-	-	-	-	-	-
⑥ Profile Dr and Meridian Rd		EB	C	17	0.14	C	24	0.42
		WBL	D	26	0.02	D	25	0.14
		WBTR	B	12	0.11	B	11	0.10
		NBL	A	8	0.03	A	9	0.07
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	10	0.04	A	9	0.11
		SBT	-	-	-	-	-	-
		SBR	-	-	-	-	-	
⑦ Meadow View Rd and Meridian Rd		WB	B	13	0.08	B	11	0.05
		NBT	-	-	-	-	-	-
		NBTR	-	-	-	-	-	-
		SBL	A	10	0.01	A	9	0.04
		SBT	-	-	-	-	-	-

¹ Exceed minimum operational thresholds with no-build

4.5 Roadway Segment Mitigation

All study area roadway segments are expected to meet ACHD’s level of service planning thresholds with the existing lane configuration. No roadway capacity improvements are needed to mitigate 2024 total traffic conditions. **Table 4.4** summarizes the proportionate share of the site traffic at each study area roadway segment.

Table 4.4 – Build-Out Site Traffic Percentage of 2024 Total Traffic Roadway Segments

Road or Intersection	% Site Traffic of 2024 Total Traffic		
	AM Peak	PM Peak	Average
Locust Grove Rd, Between Hubbard Rd and Deer Flat Rd	10.3%	6.4%	8.4%
Deer Flat Rd, East of Meridian Rd	0.9%	0.7%	0.8%
Antelope Flat Ave, South of Deer Flat Rd	14.7%	13.0%	13.9%
Profile Dr, East of Meridian Rd	68.3%	29.3%	48.8%
Meadow View Rd, East of Meridian Rd	91.4%	75.0%	83.2%

4.6 Intersection Mitigation

All study area intersections are expected to meet minimum operational thresholds with the mitigation improvements needed under existing and 2024 background traffic. Site traffic is expected to have minimal impacts on the study area roadways and intersections. **Table 4.5** summarizes the proportionate share of the site traffic at each study area intersection.

Table 4.5 – Build-Out Site Traffic Percentage of 2024 Total Traffic Intersections

Road or Intersection	% Site Traffic of 2024 Total Traffic		
	AM Peak	PM Peak	Average
① Hubbard Rd and Locust Grove Rd	4.2%	4.5%	4.3%
② Deer Flat Rd and Meridian Rd	4.0%	4.3%	4.1%
③ Antelope Flat Ave and Deer Flat Rd	2.1%	2.1%	2.1%
④ Deer Flat Rd and Locust Grove Rd	8.5%	7.4%	7.9%
⑤ D&B Access and Meridian Rd	7.5%	7.1%	7.3%
⑥ Profile Dr and Meridian Rd	7.3%	6.4%	6.9%
⑦ Meadow View Rd and Meridian Rd	4.1%	3.8%	3.9%

4.7 Site Access, Circulation, and Internal Roadway ADT

Figure 4.6 shows the proposed site access locations, circulation, and estimated ADTs on the internal roadways. Ashton Estates East Subdivision is proposing one full access on Meadow View Road and connecting to Porter Street, a stub road on the eastern edge of Ashton Estates Subdivision.

The Stone Falls Avenue approach onto Meadow View Road is located approximately 1,600 feet east of Meridian Road. According to ACHD Policy Section 7207.4.1, the minimum local street separation is 125 feet from the nearest local street intersection or 150 feet from the nearest arterial or collector street intersection. According to ACHD Policy Section 7206.4, the minimum public street spacing on a collector street is 330 feet. The proposed Stone Falls Avenue location meets ACHD’s minimum spacing requirements for public streets onto Meadow View Road, a 50-mph local roadway with future plans as a collector street.

All internal roadways are local roads with front-on housing and are expected to carry less than 1,000 vehicles per day.

The proposed Stone Falls Avenue and Meadow View Road intersection is not expected to meet ACHD’s turn-lane guidelines with 2024 total traffic. Turn lane warrant worksheets are included in the appendix.

Table 4.6 summarizes the site access intersection capacity analysis results. The proposed Stone Falls Avenue and Meadow View Road intersection is expected to meet minimum operational thresholds. Also, the proposed access site access intersection is located in a generally flat area and is expected to have adequate intersection sight distance, but should be verified during construction. Landscape design should not obstruct the intersection sight distance.

Table 4.6 – Site Access Intersection Operations

Intersection	Control / Lane	Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay [s/veh]	v/c Ratio	LOS	Delay [s/veh]	v/c Ratio
8 Stone Falls Ave and Meadow View Rd		EB	A	7	0.01	A	7	0.03
		WB	-	-	-	-	-	-
		SB	A	9	0.05	A	9	0.04

Figure 4.6 – Site Access, Circulation, and ADT



APPENDIX A: SCOPE

Ashton East Proposed Development

The following summarizes the results of an area of influence model run for a proposed development located northwest of State Highway 69 (Kuna-Meridian Road) and Meadow View Road. The proposed development will consist of 174 residential units. The anticipate build out is by 2025. See figure 1.

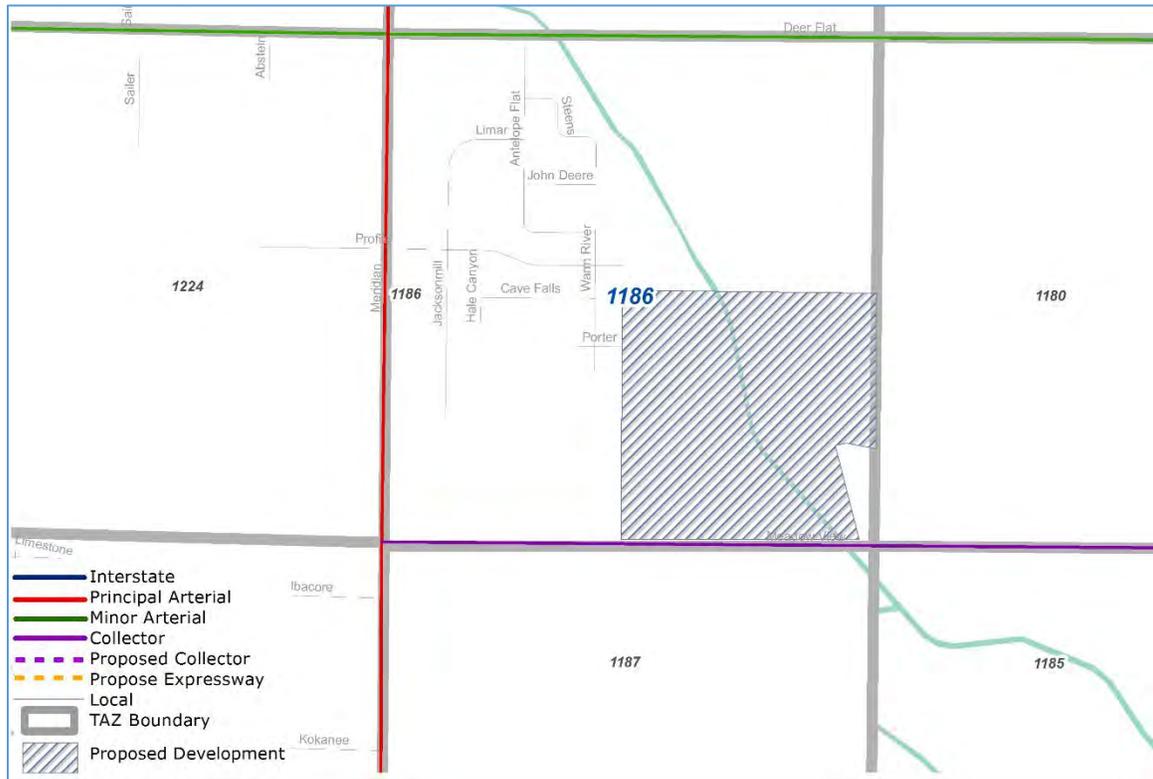


Figure 1

Table 1 provides the existing demographics for TAZ 1186 and the proposed development's demographics used for the area of influence model run. A cumulative analysis was also conducted to account for both Ashton Estates (entitled) and the proposed Ashton East. See figures 6 and 7.

Table 1

	2019		2025 with proposal		2040	
	HH	Jobs	HH	Jobs	HH	Jobs
TAZ 1186	29	10	238	59	206	180
<i>Surrounding TAZs</i>	22	10	24	11	31	14
<u>Total</u>	<u>312</u>	<u>90</u>	<u>874</u>	<u>226</u>	<u>2,189</u>	<u>319</u>

The 2025 demographic data set for 2025 included building permits issued in 2018 for Ashton Estates and a portion of the entitled units. Therefore, the additional proposed units for Ashton East were added to the 64 households in the 2025 data set.

Figure 2: area of influence results for the proposed development

Figures 3 and 4: peak hour results

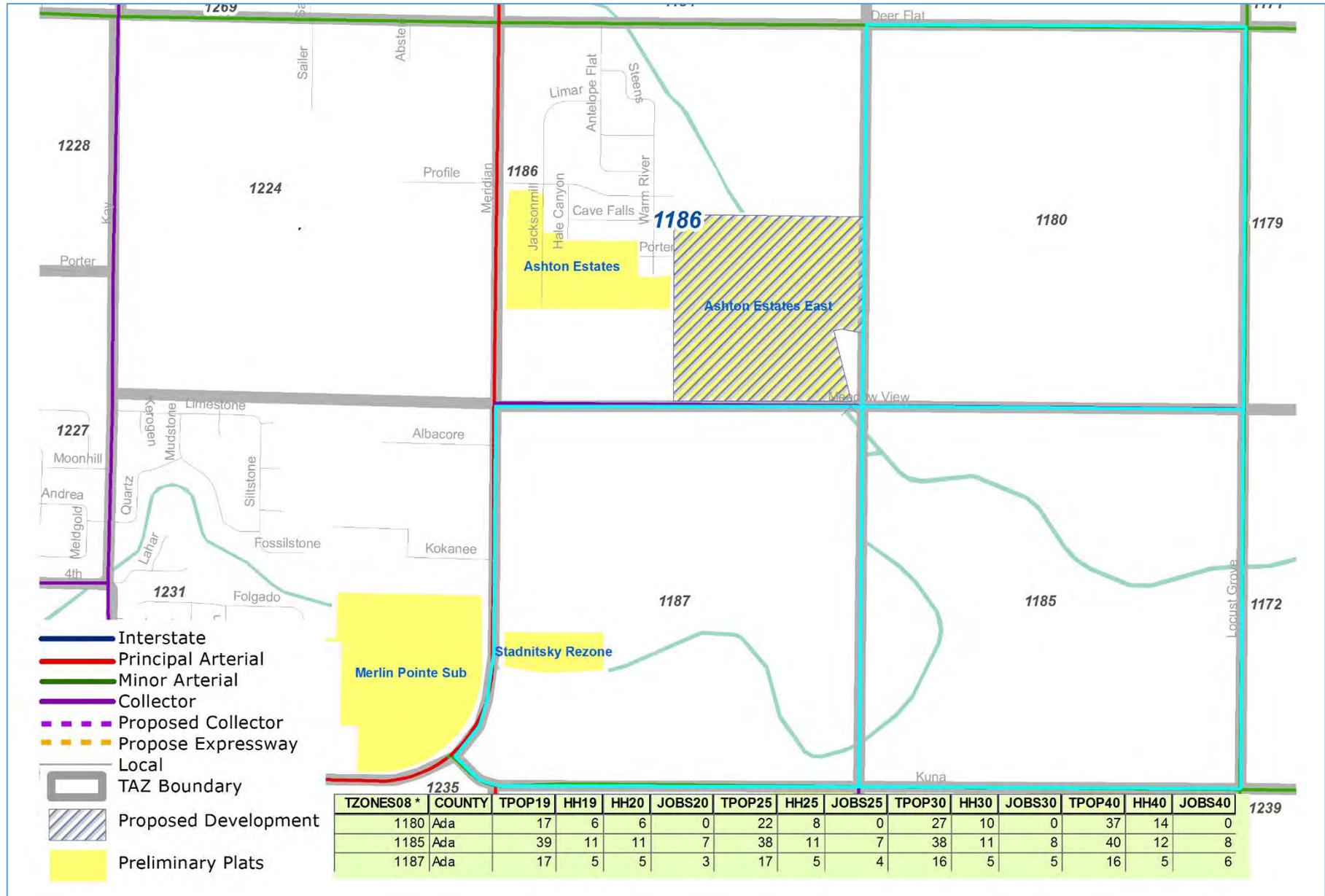
Figure 5: surrounding TAZs and demographics

Figures 6: cumulative area of influence results

Figures 7: cumulative peak hour results

Figures 8, 9, and 10: compounded annual growth rates

Figure 5: Surrounding Area TAZs

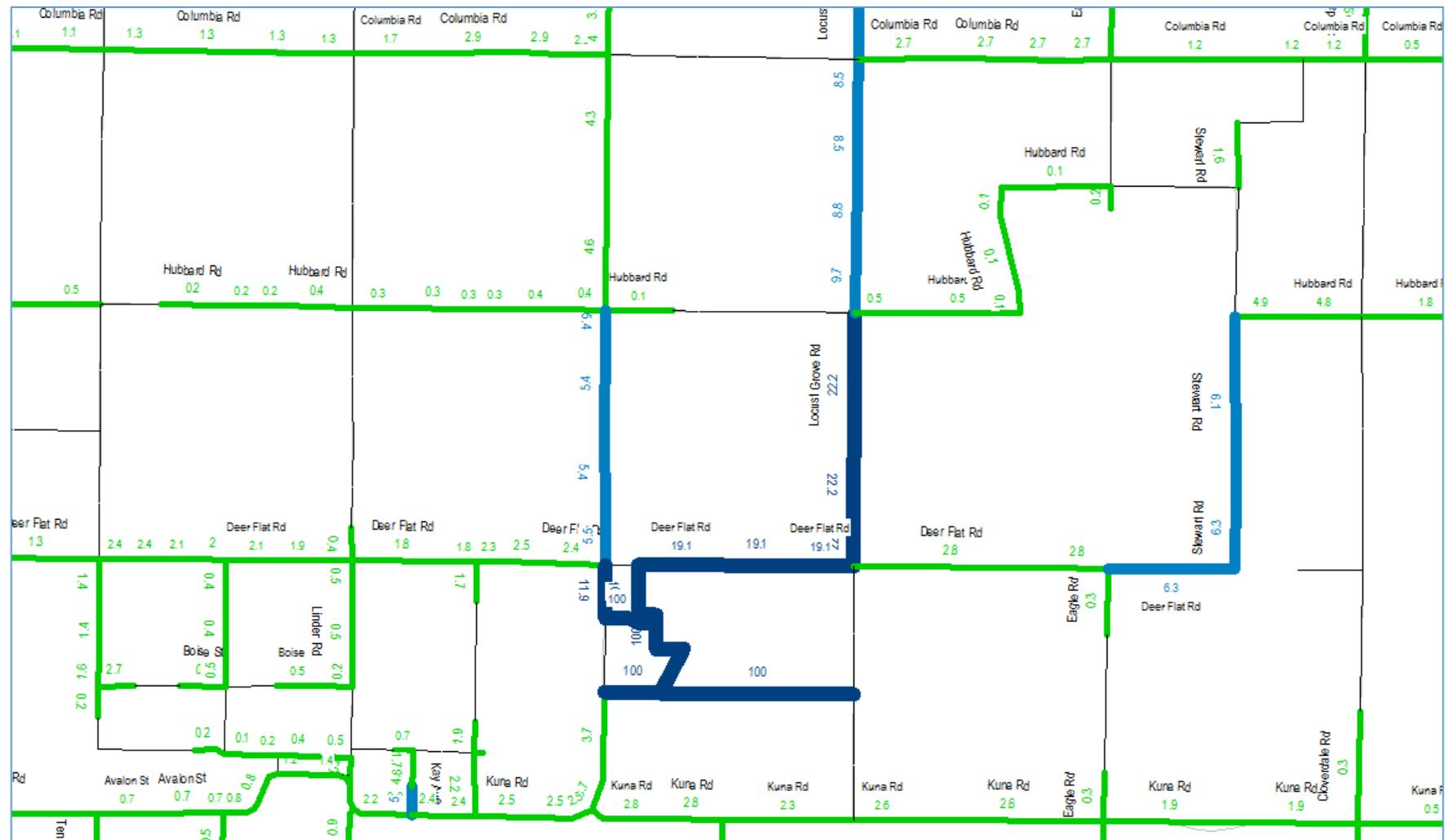


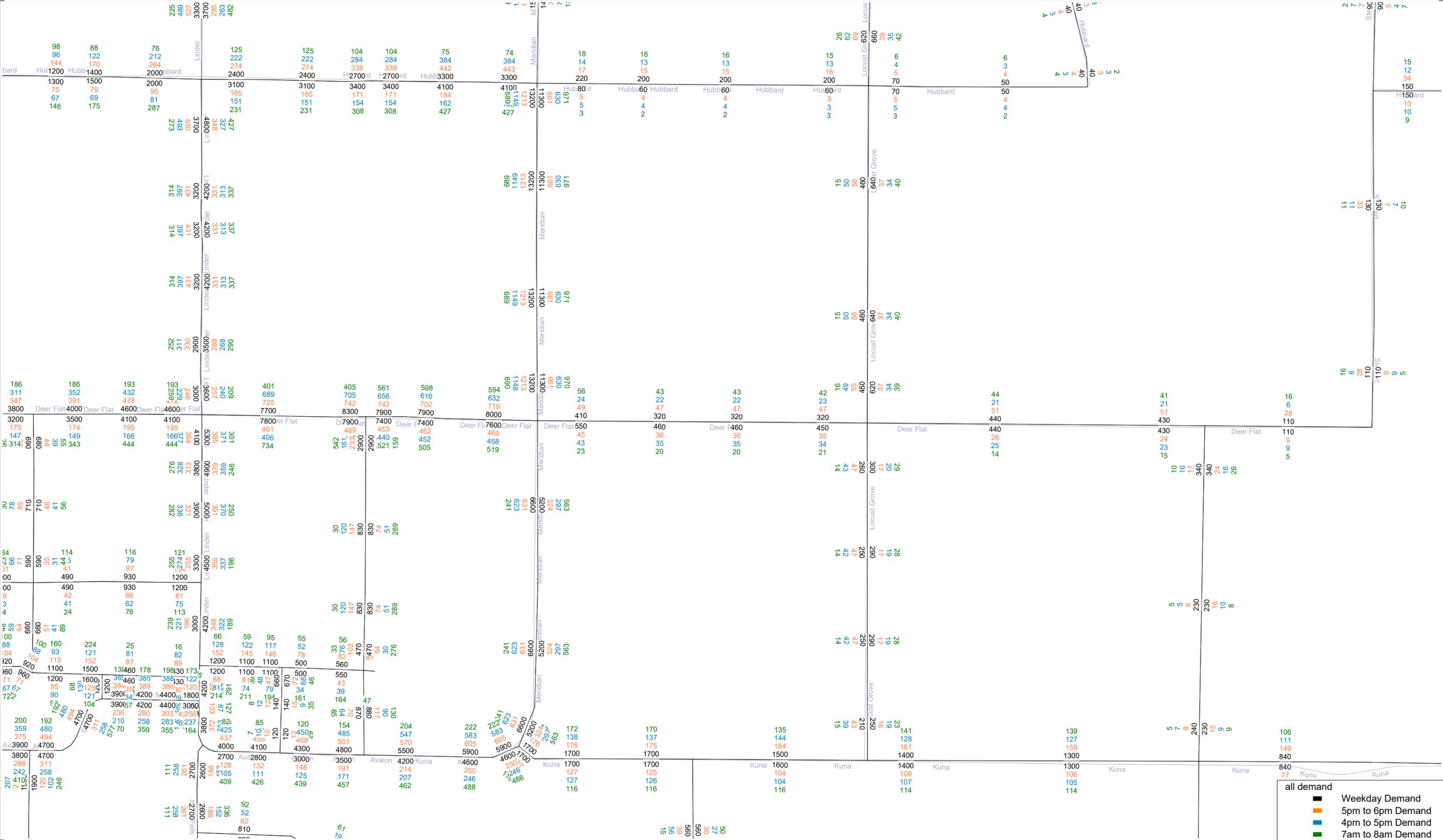
Cumulative Analysis

The following figures show the results of including both Ashton Estates (140 units) and Ashton East (174 units) demographics in TAZ 1186 by 2025.

TAZ 1186	2019		2025 Cumulative		2040	
	HH	Jobs	HH	Jobs	HH	Jobs
TAZ 1186	29	10	314	59	206	180

Figure 6:

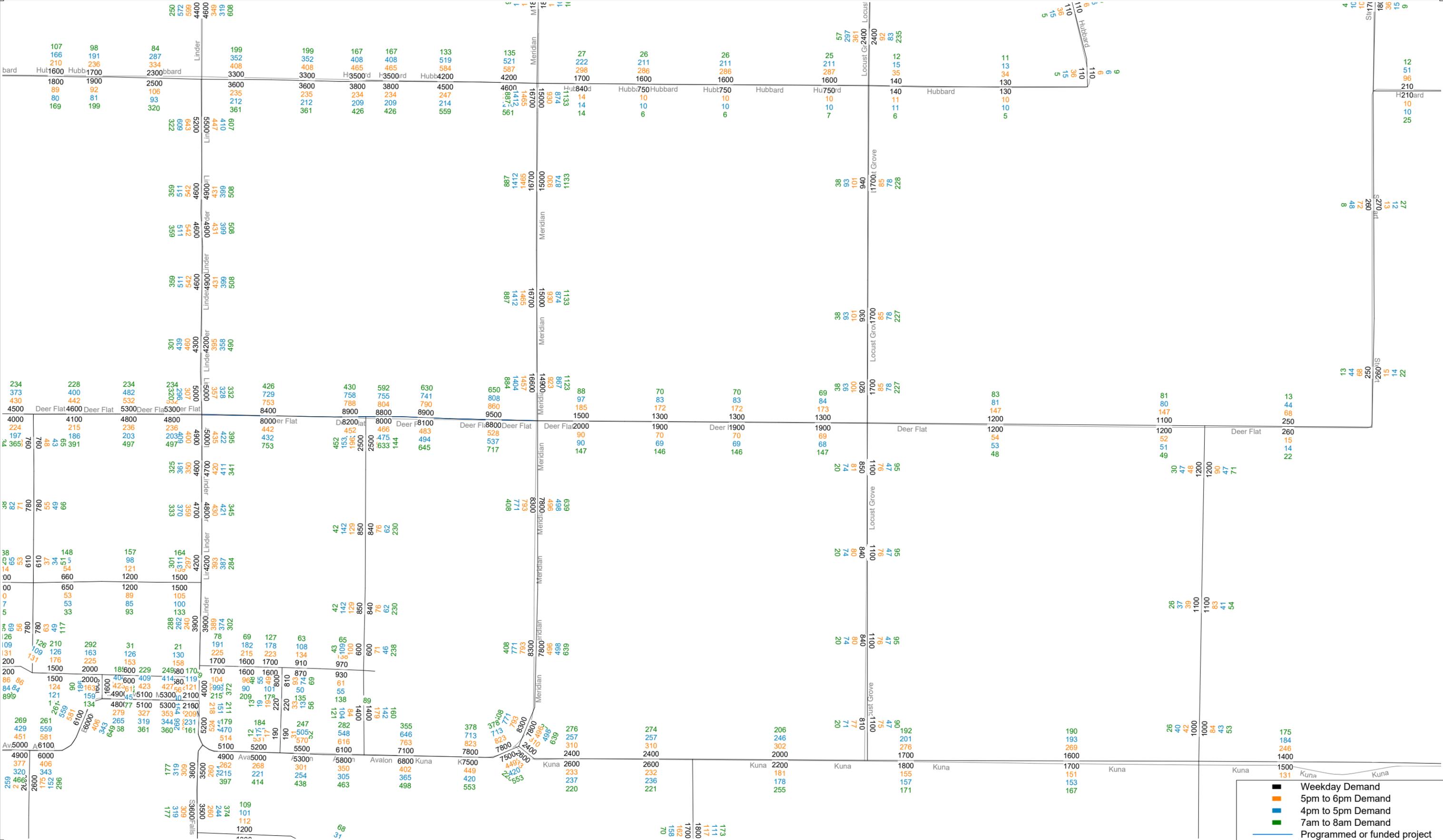




all demand

- Weekday Demand
- 5pm to 6pm Demand
- 4pm to 5pm Demand
- 7am to 8am Demand

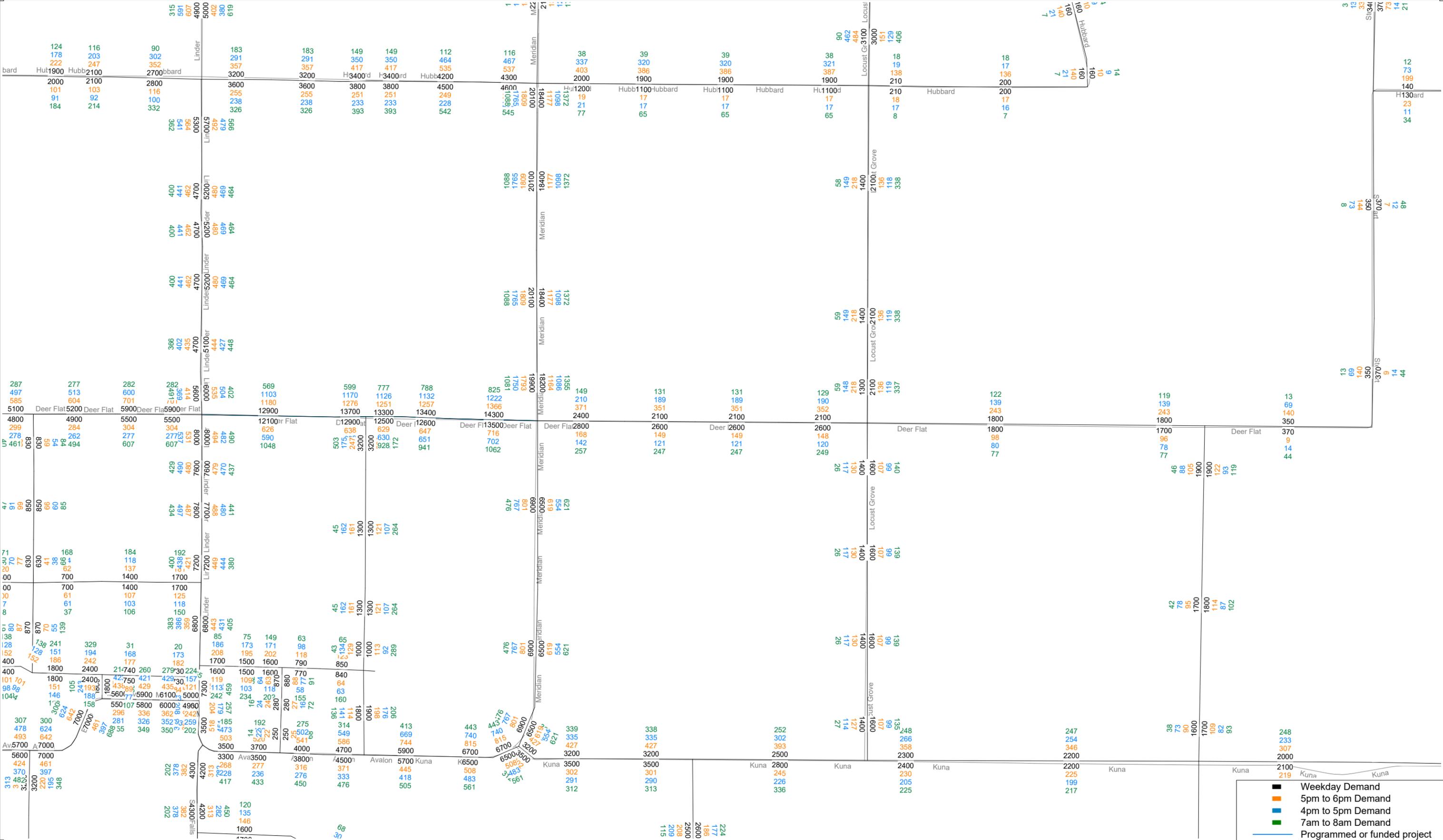




D:\UAG\2011Model\calibration\Base\TIP\FY2024R5\b2025\ALLDEMAND_b2025.NET
New Regional Model calibrated to 2011/12 conditions - completed in January 2015



2030 Build: 2030 Demographics and 2030 Funded Network
2/7/2020



- Weekday Demand
- 5pm to 6pm Demand
- 4pm to 5pm Demand
- 7am to 8am Demand
- Programmed or funded project

D:\UAG\2011Model\calibration\Base\TIP\FY2024R5\b2030\ALLDEMAND_b2030.NET
Roadway assumptions per CIM 2040 2.0 (Dec 2018) and reconciled demograhic data set as of April 2019



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APPENDIX B: TRAFFIC COUNTS

L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	1	1	0	0	2	0	3	1	0	4	0	9	0	0	9	0	7	12	0	19	34
07:15 AM	4	9	0	0	13	0	2	1	0	3	0	6	0	0	6	0	17	9	0	26	48
07:30 AM	3	5	0	0	8	0	3	0	0	3	3	15	0	0	18	0	14	7	0	21	50
07:45 AM	2	2	0	0	4	0	3	0	0	3	0	13	0	0	13	0	12	15	0	27	47
Total	10	17	0	0	27	0	11	2	0	13	3	43	0	0	46	0	50	43	0	93	179
08:00 AM	3	7	1	0	11	0	2	0	0	2	1	15	0	0	16	1	7	5	0	13	42
08:15 AM	3	3	2	0	8	0	3	0	0	3	0	11	1	0	12	0	8	11	0	19	42
08:30 AM	2	3	0	0	5	1	2	0	0	3	1	5	1	0	7	1	3	6	0	10	25
08:45 AM	2	5	0	0	7	0	0	0	0	0	1	9	0	0	10	0	5	5	0	10	27
Total	10	18	3	0	31	1	7	0	0	8	3	40	2	0	45	2	23	27	0	52	136

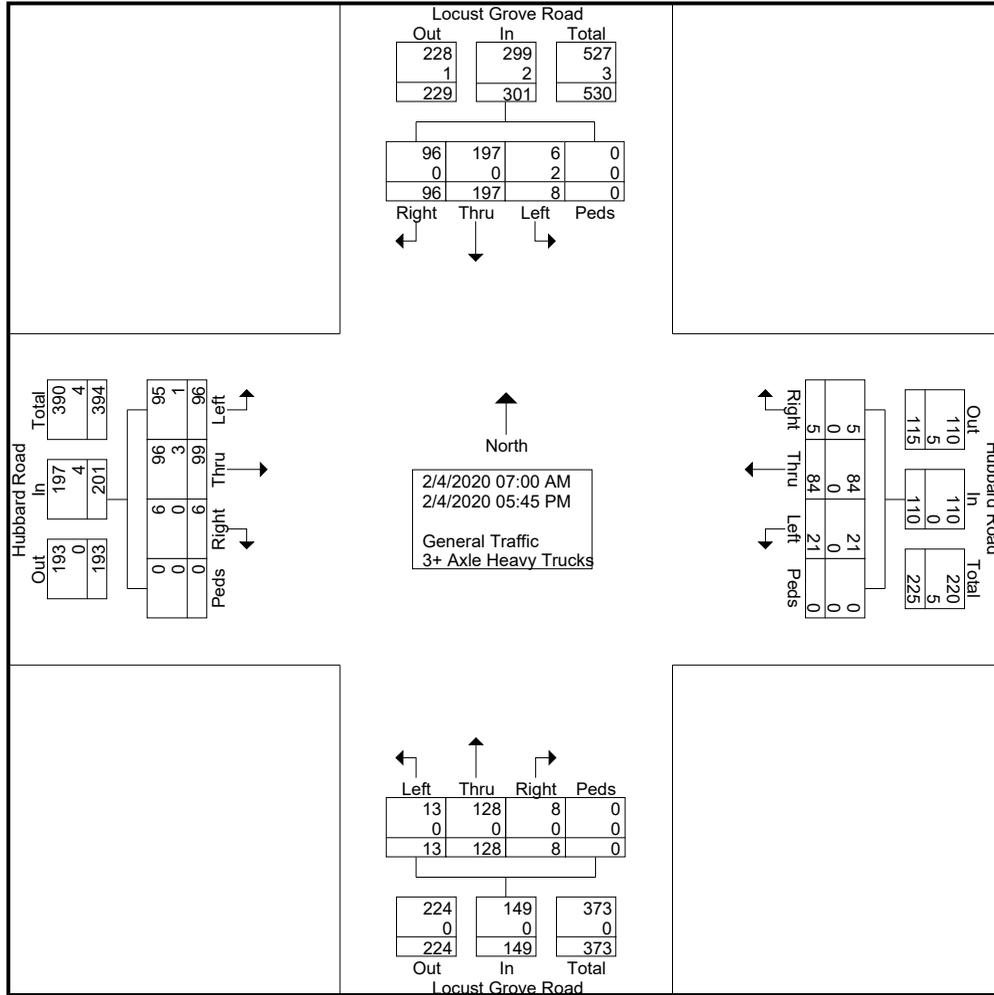
04:00 PM	8	12	1	0	21	0	3	1	0	4	0	4	1	0	5	0	4	6	0	10	40
04:15 PM	11	22	0	0	33	0	5	3	0	8	1	5	1	0	7	0	3	5	0	8	56
04:30 PM	7	18	1	0	26	2	9	3	0	14	0	5	0	0	5	1	6	6	0	13	58
04:45 PM	8	16	0	0	24	0	11	0	0	11	0	3	1	0	4	0	2	2	0	4	43
Total	34	68	2	0	104	2	28	7	0	37	1	17	3	0	21	1	15	19	0	35	197
05:00 PM	8	16	1	0	25	0	5	2	0	7	0	12	3	0	15	0	2	2	0	4	51
05:15 PM	9	30	1	0	40	1	8	2	0	11	0	6	0	0	6	0	2	2	0	4	61
05:30 PM	12	29	1	0	42	0	16	3	0	19	0	4	3	0	7	1	3	2	0	6	74
05:45 PM	13	19	0	0	32	1	9	5	0	15	1	6	2	0	9	2	4	1	0	7	63
Total	42	94	3	0	139	2	38	12	0	52	1	28	8	0	37	3	11	7	0	21	249
Grand Total	96	197	8	0	301	5	84	21	0	110	8	128	13	0	149	6	99	96	0	201	761
Apprch %	31.9	65.4	2.7	0		4.5	76.4	19.1	0		5.4	85.9	8.7	0		3	49.3	47.8	0		
Total %	12.6	25.9	1.1	0	39.6	0.7	11	2.8	0	14.5	1.1	16.8	1.7	0	19.6	0.8	13	12.6	0	26.4	
General Traffic	96	197	6	0	299	5	84	21	0	110	8	128	13	0	149	6	96	95	0	197	755
% General Traffic	100	100	75	0	99.3	100	100	100	0	100	100	100	100	0	100	100	97	99	0	98	99.2
3+ Axle Heavy Trucks	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	6
% 3+ Axle Heavy Trucks	0	0	25	0	0.7	0	0	0	0	0	0	0	0	0	0	0	3	1	0	2	0.8

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Locust Grove/ Hubbard Rd
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



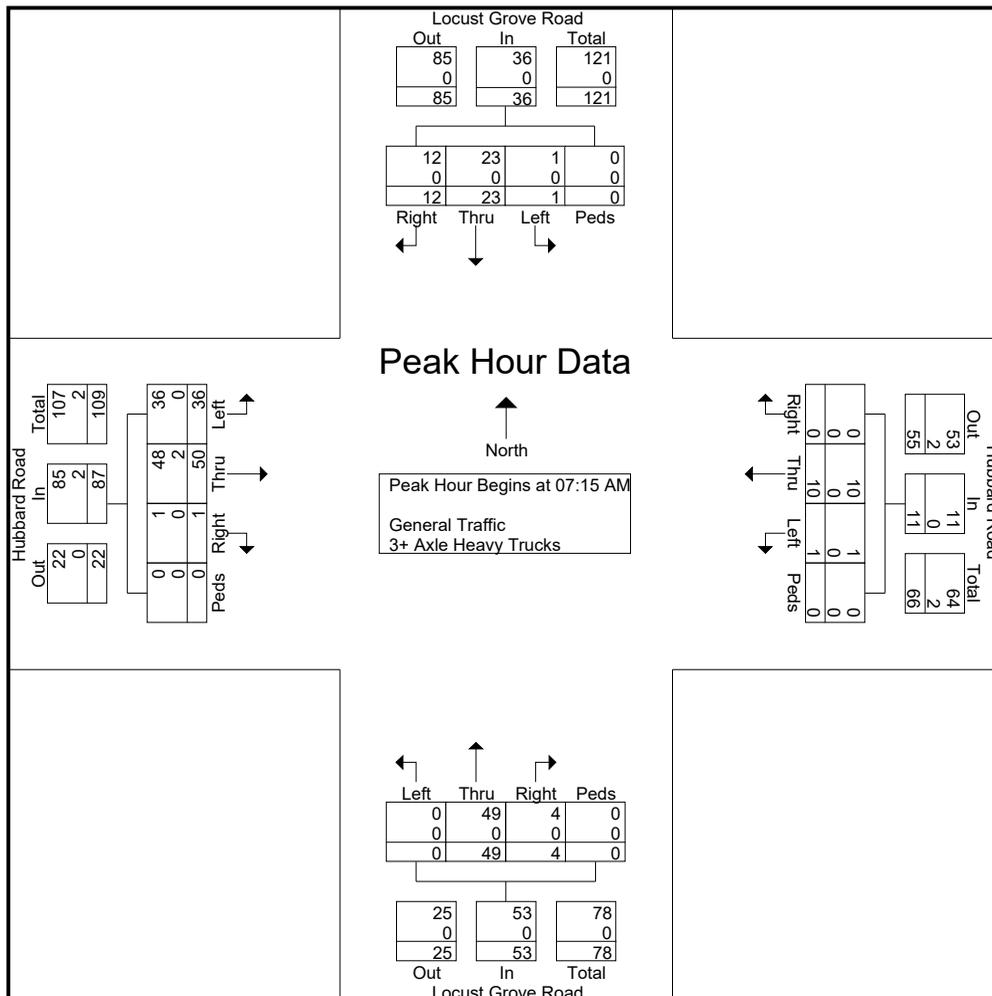
L2 Data Collection

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Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	4	9	0	0	13	0	2	1	0	3	0	6	0	0	6	0	17	9	0	26	48
07:30 AM	3	5	0	0	8	0	3	0	0	3	3	15	0	0	18	0	14	7	0	21	50
07:45 AM	2	2	0	0	4	0	3	0	0	3	0	13	0	0	13	0	12	15	0	27	47
08:00 AM	3	7	1	0	11	0	2	0	0	2	1	15	0	0	16	1	7	5	0	13	42
Total Volume	12	23	1	0	36	0	10	1	0	11	4	49	0	0	53	1	50	36	0	87	187
% App. Total	33.3	63.9	2.8	0		0	90.9	9.1	0		7.5	92.5	0	0		1.1	57.5	41.4	0		
PHF	.750	.639	.250	.000	.692	.000	.833	.250	.000	.917	.333	.817	.000	.000	.736	.250	.735	.600	.000	.806	.935
General Traffic																					
% General Traffic	100	100	100	0	100	0	100	100	0	100	100	100	0	0	100	100	96.0	100	0	97.7	98.9
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0	0	0	2.3	1.1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

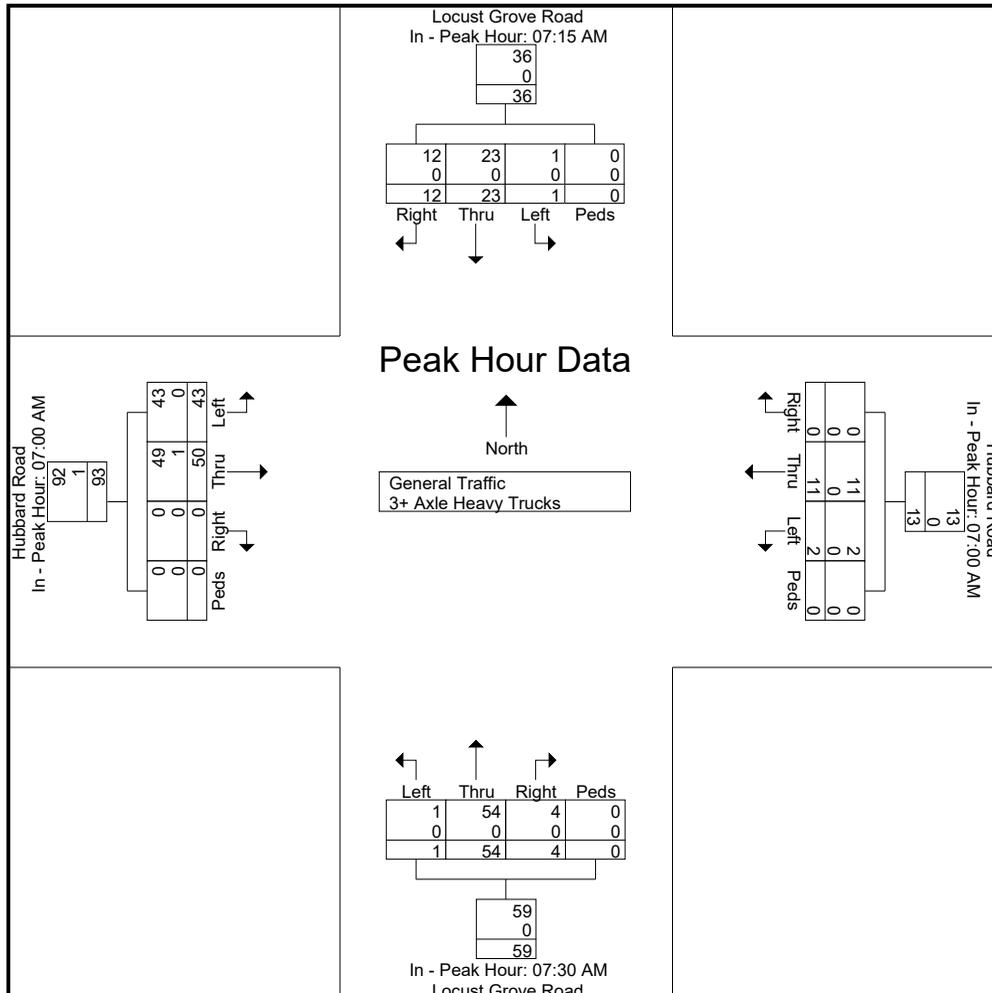
File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 4

Start Time	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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					07:00 AM					07:30 AM					07:00 AM				
+0 mins.	4	9	0	0	13	0	3	1	0	4	3	15	0	0	18	0	7	12	0	19
+15 mins.	3	5	0	0	8	0	2	1	0	3	0	13	0	0	13	0	17	9	0	26
+30 mins.	2	2	0	0	4	0	3	0	0	3	1	15	0	0	16	0	14	7	0	21
+45 mins.	3	7	1	0	11	0	3	0	0	3	0	11	1	0	12	0	12	15	0	27
Total Volume	12	23	1	0	36	0	11	2	0	13	4	54	1	0	59	0	50	43	0	93
% App. Total	33.3	63.9	2.8	0		0	84.6	15.4	0		6.8	91.5	1.7	0		0	53.8	46.2	0	
PHF	.750	.639	.250	.000	.692	.000	.917	.500	.000	.813	.333	.900	.250	.000	.819	.000	.735	.717	.000	.861
General Traffic	100	100	100	0	100	0	100	100	0	100	100	100	100	0	100	0	98	100	0	98.9
% General Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1.1
% 3+ Axle Heavy Trucks																				



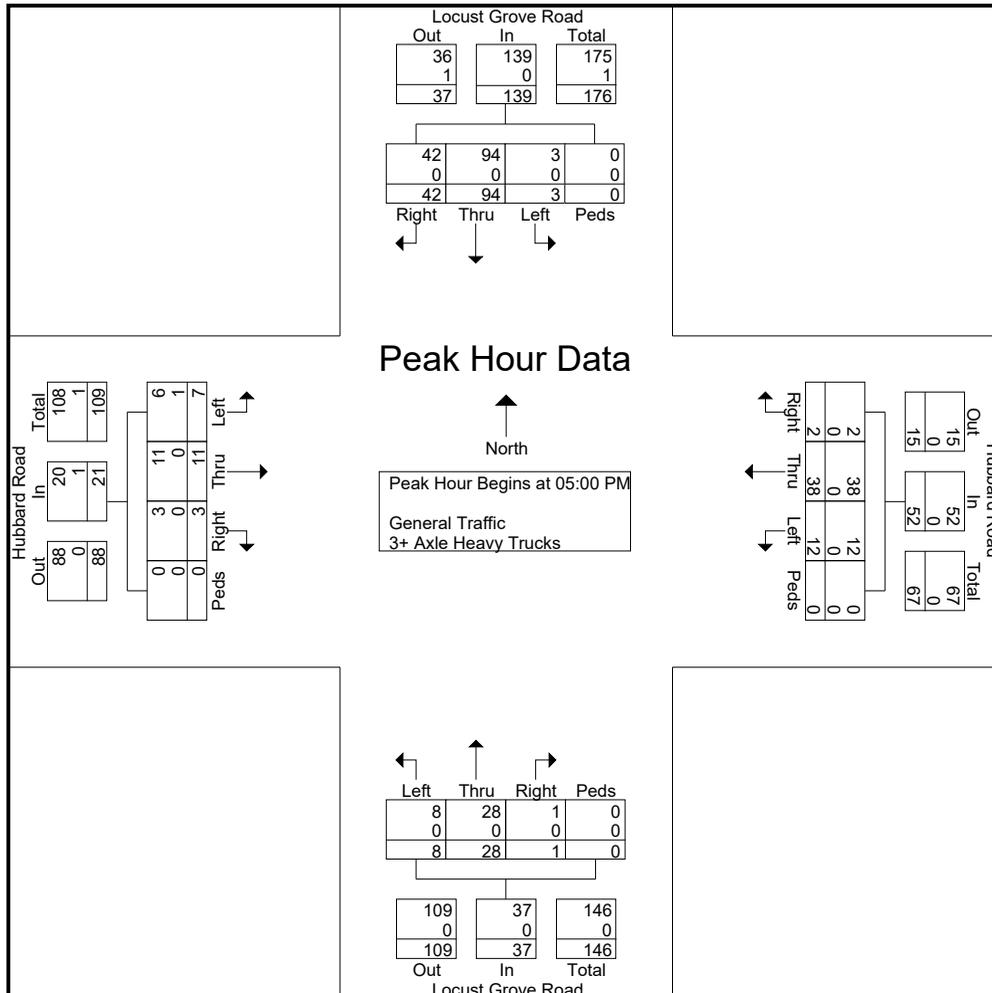
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 5

Start Time	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	8	16	1	0	25	0	5	2	0	7	0	12	3	0	15	0	2	2	0	4	51
05:15 PM	9	30	1	0	40	1	8	2	0	11	0	6	0	6	0	2	2	0	4	61	
05:30 PM	12	29	1	0	42	0	16	3	0	19	0	4	3	7	0	3	2	0	6	74	
05:45 PM	13	19	0	0	32	1	9	5	0	15	1	6	2	9	2	4	1	0	7	63	
Total Volume	42	94	3	0	139	2	38	12	0	52	1	28	8	37	3	11	7	0	21	249	
% App. Total	30.2	67.6	2.2	0		3.8	73.1	23.1	0		2.7	75.7	21.6	0	14.3	52.4	33.3	0			
PHF	.808	.783	.750	.000	.827	.500	.594	.600	.000	.684	.250	.583	.667	.000	.617	.375	.688	.875	.000	.750	.841
General Traffic																					
% General Traffic	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	85.7	0	95.2	99.6	
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.3	0	4.8	0.4	



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

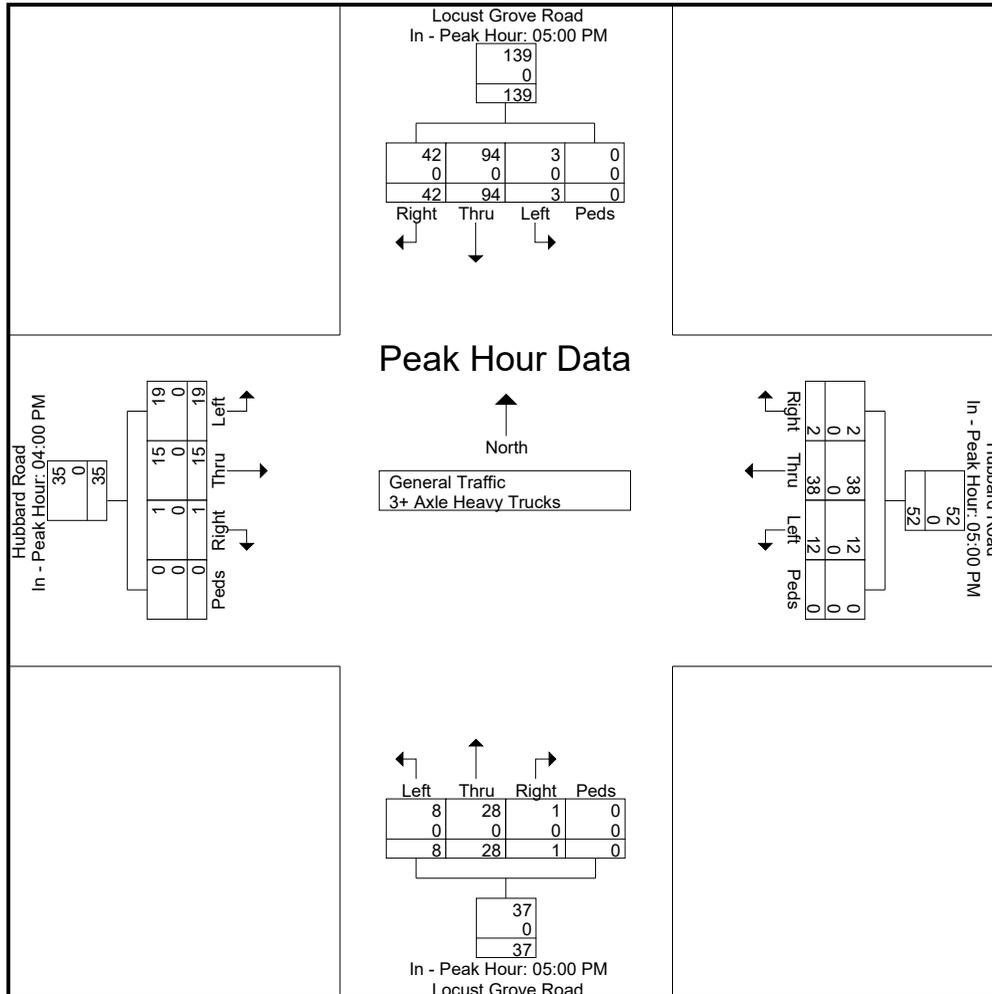
File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Locust Grove Road From North					Hubbard Road From East					Locust Grove Road From South					Hubbard Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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									
+0 mins.	8	16	1	0	25	0	5	2	0	7	0	12	3	0	15	0	4	6	0	10
+15 mins.	9	30	1	0	40	1	8	2	0	11	0	6	0	0	6	0	3	5	0	8
+30 mins.	12	29	1	0	42	0	16	3	0	19	0	4	3	0	7	1	6	6	0	13
+45 mins.	13	19	0	0	32	1	9	5	0	15	1	6	2	0	9	0	2	2	0	4
Total Volume	42	94	3	0	139	2	38	12	0	52	1	28	8	0	37	1	15	19	0	35
% App. Total	30.2	67.6	2.2	0		3.8	73.1	23.1	0		2.7	75.7	21.6	0		2.9	42.9	54.3	0	
PHF	.808	.783	.750	.000	.827	.500	.594	.600	.000	.684	.250	.583	.667	.000	.617	.250	.625	.792	.000	.673
General Traffic	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100
% General Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Locust Grove/ Hubbard Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Hubbard Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Signalized

File Name : Meridian Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Meridian Road From North					Deer Flat Road From East					Meridian Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	60	44	4	0	108	8	4	0	0	12	3	142	6	0	151	7	34	125	0	166	437
07:15 AM	90	39	7	0	136	2	19	3	0	24	11	124	26	0	161	10	36	110	0	156	477
07:30 AM	102	57	9	0	168	6	24	2	0	32	8	143	40	0	191	18	34	137	0	189	580
07:45 AM	54	52	10	0	116	5	8	1	0	14	3	114	7	0	124	11	40	102	0	153	407
Total	306	192	30	0	528	21	55	6	0	82	25	523	79	0	627	46	144	474	0	664	1901
08:00 AM	45	45	7	0	97	7	13	4	0	24	5	99	1	0	105	11	18	89	0	118	344
08:15 AM	28	60	5	0	93	4	7	1	0	12	2	110	10	0	122	7	22	80	0	109	336
08:30 AM	36	52	4	0	92	8	5	3	0	16	4	100	9	0	113	8	9	94	0	111	332
08:45 AM	41	34	5	0	80	6	7	1	0	14	2	85	6	0	93	8	14	88	0	110	297
Total	150	191	21	0	362	25	32	9	0	66	13	394	26	0	433	34	63	351	0	448	1309

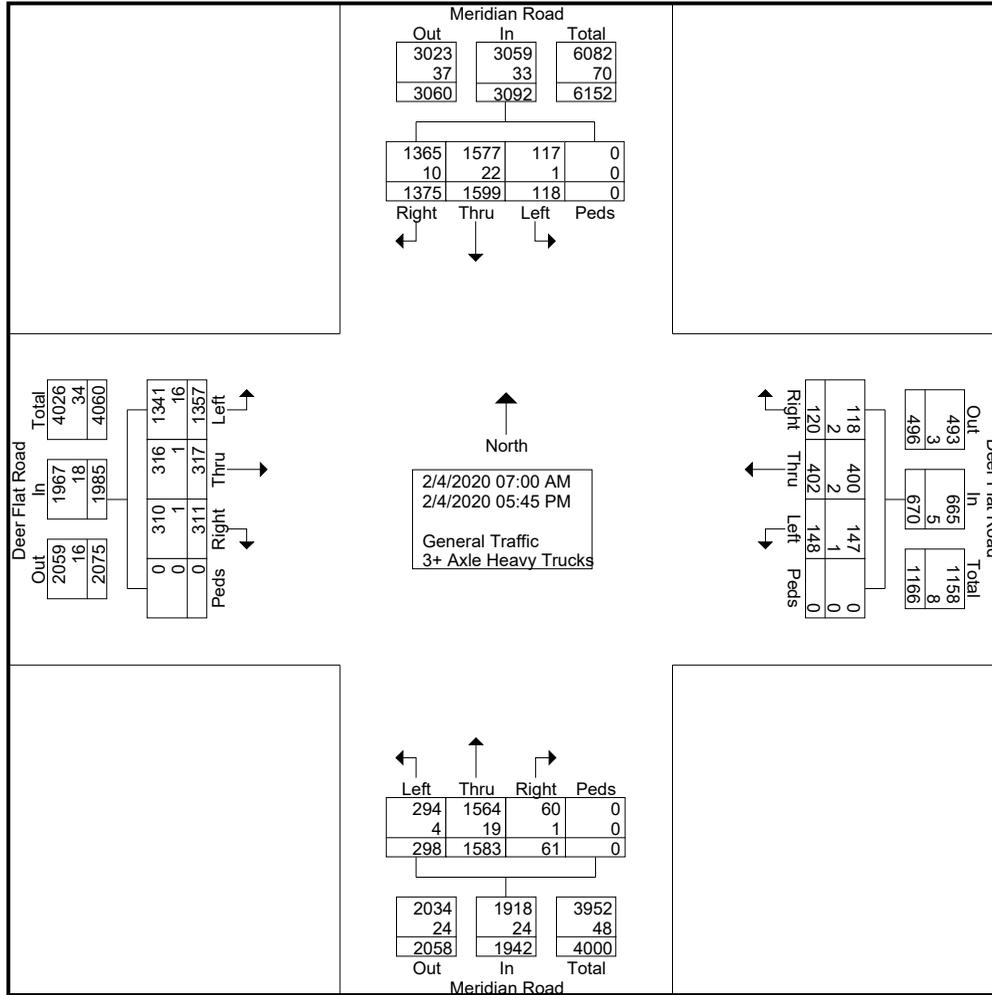
04:00 PM	110	119	9	0	238	12	34	16	0	62	4	77	21	0	102	34	9	72	0	115	517
04:15 PM	111	177	8	0	296	4	30	16	0	50	3	79	24	0	106	26	11	65	0	102	554
04:30 PM	112	154	9	0	275	3	36	18	0	57	1	96	21	0	118	22	12	61	0	95	545
04:45 PM	106	145	4	0	255	7	31	11	0	49	6	68	21	0	95	30	15	70	0	115	514
Total	439	595	30	0	1064	26	131	61	0	218	14	320	87	0	421	112	47	268	0	427	2130
05:00 PM	131	150	11	0	292	14	41	14	0	69	2	93	29	0	124	30	21	76	0	127	612
05:15 PM	106	155	7	0	268	13	48	22	0	83	3	85	17	0	105	22	10	60	0	92	548
05:30 PM	129	149	10	0	288	15	51	20	0	86	4	91	29	0	124	34	25	75	0	134	632
05:45 PM	114	167	9	0	290	6	44	16	0	66	0	77	31	0	108	33	7	53	0	93	557
Total	480	621	37	0	1138	48	184	72	0	304	9	346	106	0	461	119	63	264	0	446	2349
Grand Total	1375	1599	118	0	3092	120	402	148	0	670	61	1583	298	0	1942	311	317	1357	0	1985	7689
Apprch %	44.5	51.7	3.8	0		17.9	60	22.1	0		3.1	81.5	15.3	0		15.7	16	68.4	0		
Total %	17.9	20.8	1.5	0	40.2	1.6	5.2	1.9	0	8.7	0.8	20.6	3.9	0	25.3	4	4.1	17.6	0	25.8	
General Traffic	1365	1577	117	0	3059	118	400	147	0	665	60	1564	294	0	1918	310	316	1341	0	1967	7609
% General Traffic	99.3	98.6	99.2	0	98.9	98.3	99.5	99.3	0	99.3	98.4	98.8	98.7	0	98.8	99.7	99.7	98.8	0	99.1	99
3+ Axle Heavy Trucks	10	22	1	0	33	2	2	1	0	5	1	19	4	0	24	1	1	16	0	18	80
% 3+ Axle Heavy Trucks	0.7	1.4	0.8	0	1.1	1.7	0.5	0.7	0	0.7	1.6	1.2	1.3	0	1.2	0.3	0.3	1.2	0	0.9	1

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Meridian Rd / Deer Flat Rd
 City, State: Kuna, Idaho
 Control: Signalized

File Name : Meridian Rd & Deer Flat Rd
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Signalized

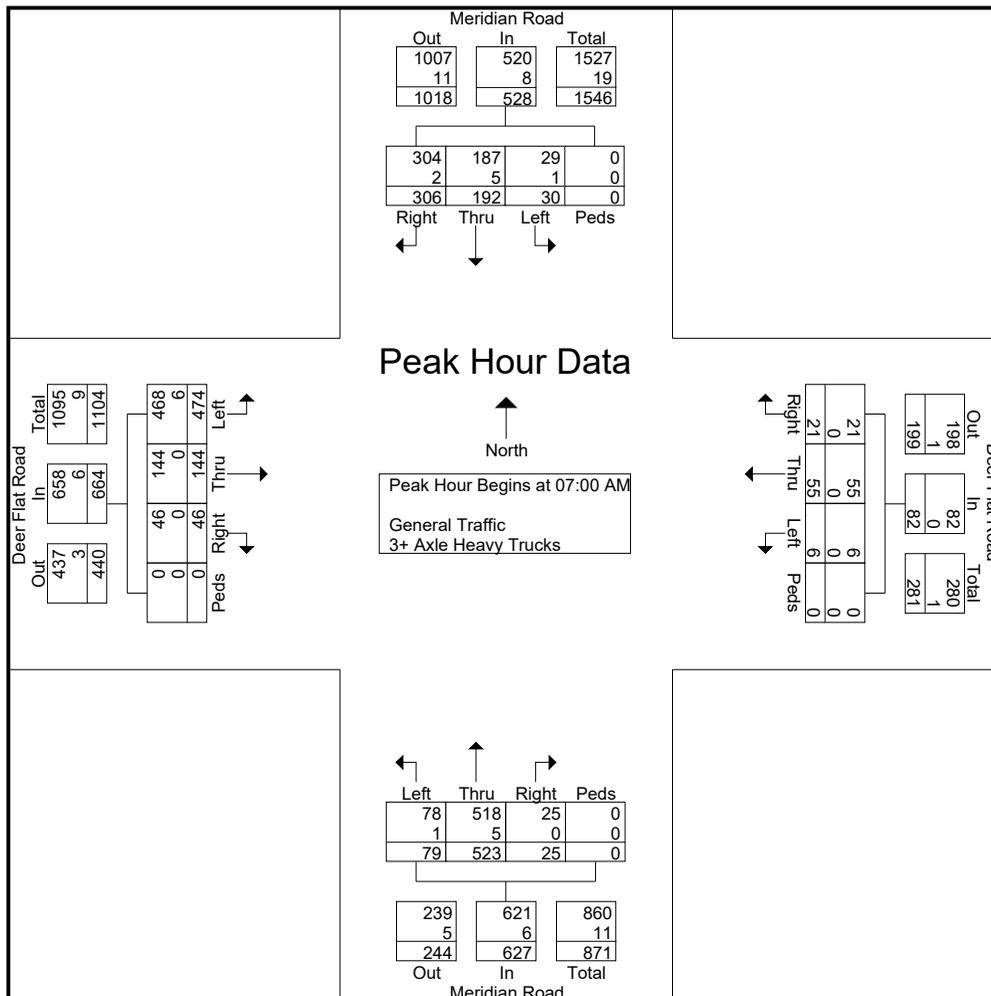
File Name : Meridian Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Meridian Road From North					Deer Flat Road From East					Meridian Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	60	44	4	0	108	8	4	0	0	12	3	142	6	0	151	7	34	125	0	166	437
07:15 AM	90	39	7	0	136	2	19	3	0	24	11	124	26	0	161	10	36	110	0	156	477
07:30 AM	102	57	9	0	168	6	24	2	0	32	8	143	40	0	191	18	34	137	0	189	580
07:45 AM	54	52	10	0	116	5	8	1	0	14	3	114	7	0	124	11	40	102	0	153	407
Total Volume	306	192	30	0	528	21	55	6	0	82	25	523	79	0	627	46	144	474	0	664	1901
% App. Total	58	36.4	5.7	0		25.6	67.1	7.3	0		4	83.4	12.6	0		6.9	21.7	71.4	0		
PHF	.750	.842	.750	.000	.786	.656	.573	.500	.000	.641	.568	.914	.494	.000	.821	.639	.900	.865	.000	.878	.819
General Traffic																					
% General Traffic	99.3	97.4	96.7	0	98.5	100	100	100	0	100	100	99.0	98.7	0	99.0	100	100	98.7	0	99.1	98.9
3+ Axle Heavy Trucks	2	5	1	0	8	0	0	0	0	0	0	5	1	0	6	0	0	6	0	6	20
% 3+ Axle Heavy Trucks	0.7	2.6	3.3	0	1.5	0	0	0	0	0	0	1.0	1.3	0	1.0	0	0	1.3	0	0.9	1.1



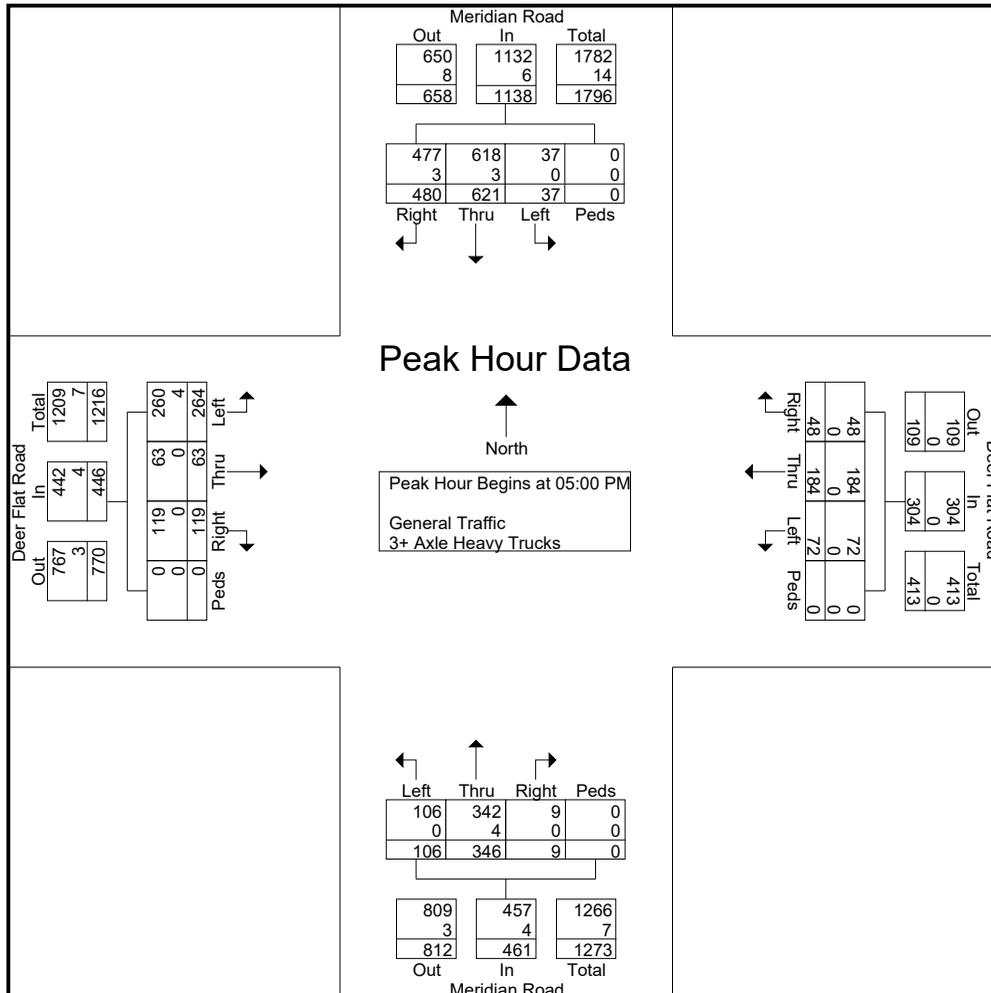
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Signalized

File Name : Meridian Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 5

Start Time	Meridian Road From North					Deer Flat Road From East					Meridian Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	131	150	11	0	292	14	41	14	0	69	2	93	29	0	124	30	21	76	0	127	612
05:15 PM	106	155	7	0	268	13	48	22	0	83	3	85	17	0	105	22	10	60	0	92	548
05:30 PM	129	149	10	0	288	15	51	20	0	86	4	91	29	0	124	34	25	75	0	134	632
05:45 PM	114	167	9	0	290	6	44	16	0	66	0	77	31	0	108	33	7	53	0	93	557
Total Volume	480	621	37	0	1138	48	184	72	0	304	9	346	106	0	461	119	63	264	0	446	2349
% App. Total	42.2	54.6	3.3	0		15.8	60.5	23.7	0		2	75.1	23	0		26.7	14.1	59.2	0		
PHF	.916	.930	.841	.000	.974	.800	.902	.818	.000	.884	.563	.930	.855	.000	.929	.875	.630	.868	.000	.832	.929
General Traffic																					
% General Traffic	99.4	99.5	100	0	99.5	100	100	100	0	100	100	98.8	100	0	99.1	100	100	98.5	0	99.1	99.4
3+ Axle Heavy Trucks	3	3	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	4	0	4	14
% 3+ Axle Heavy Trucks	0.6	0.5	0	0	0.5	0	0	0	0	0	0	1.2	0	0	0.9	0	0	1.5	0	0.9	0.6



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Signalized

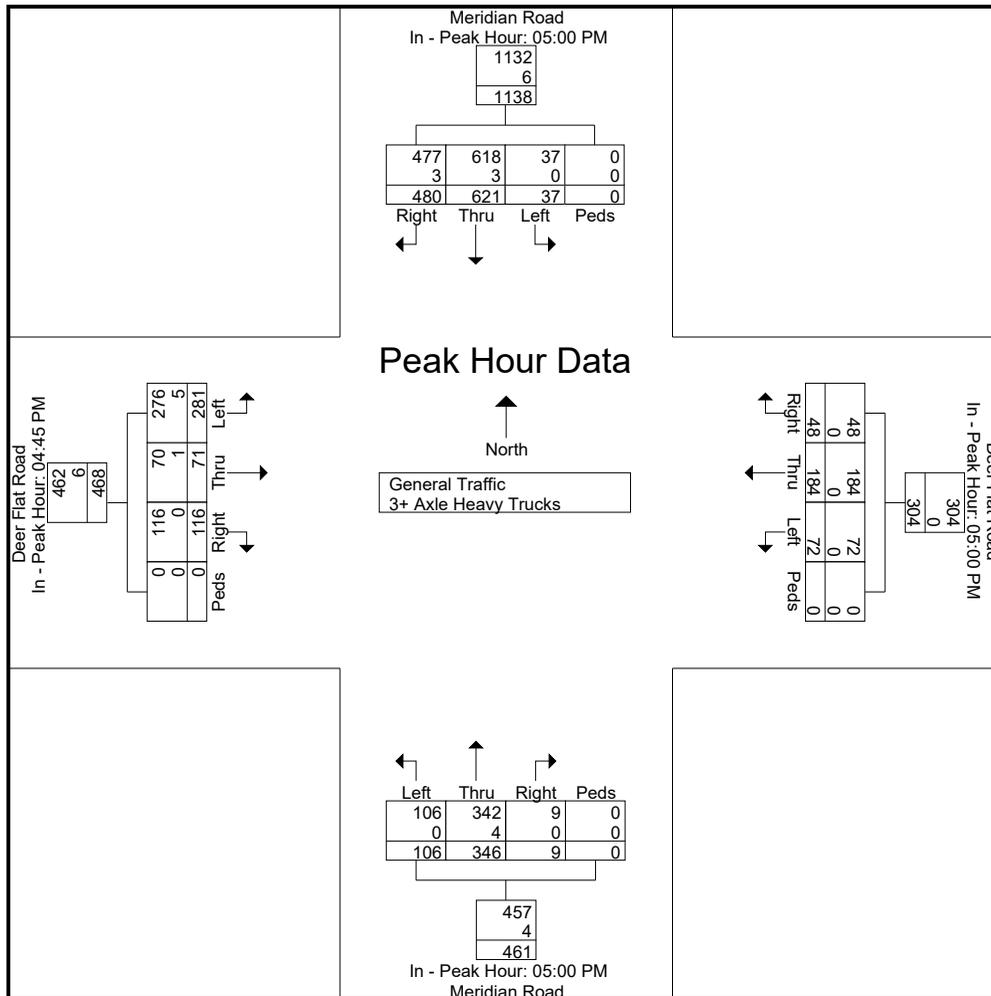
File Name : Meridian Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Meridian Road From North					Deer Flat Road From East					Meridian Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

Start Time	05:00 PM					05:00 PM					04:45 PM									
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total					
+0 mins.	131	150	11	0	292	14	41	14	0	69	2	93	29	0	124	30	15	70	0	115
+15 mins.	106	155	7	0	268	13	48	22	0	83	3	85	17	0	105	30	21	76	0	127
+30 mins.	129	149	10	0	288	15	51	20	0	86	4	91	29	0	124	22	10	60	0	92
+45 mins.	114	167	9	0	290	6	44	16	0	66	0	77	31	0	108	34	25	75	0	134
Total Volume	480	621	37	0	1138	48	184	72	0	304	9	346	106	0	461	116	71	281	0	468
% App. Total	42.2	54.6	3.3	0		15.8	60.5	23.7	0		2	75.1	23	0		24.8	15.2	60	0	
PHF	.916	.930	.841	.000	.974	.800	.902	.818	.000	.884	.563	.930	.855	.000	.929	.853	.710	.924	.000	.873
General Traffic																				
% General Traffic	99.4	99.5	100	0	99.5	100	100	100	0	100	100	98.8	100	0	99.1	100	98.6	98.2	0	98.7
3+ Axle Heavy Trucks	3	3	0	0	6	0	0	0	0	0	0	4	0	0	4	0	1	5	0	6
% 3+ Axle Heavy Trucks	0.6	0.5	0	0	0.5	0	0	0	0	0	0	1.2	0	0	0.9	0	1.4	1.8	0	1.3



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Deer Flat Rd
City, State: Kuna, Idaho
Control: Signalized

File Name : Meridian Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Private Drive From North					Deer Flat Road From East					Anelope Flat Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	1	0	0	0	1	0	7	0	2	9	4	0	6	0	10	1	38	0	0	39	59
07:15 AM	0	0	0	0	0	0	20	0	0	20	2	0	3	0	5	2	51	0	0	53	78
07:30 AM	0	0	0	0	0	0	32	1	0	33	2	0	3	0	5	5	45	0	0	50	88
07:45 AM	1	0	0	0	1	0	7	0	0	7	1	0	3	0	4	1	49	0	0	50	62
Total	2	0	0	0	2	0	66	1	2	69	9	0	15	0	24	9	183	0	0	192	287
08:00 AM	0	0	0	0	0	0	17	0	0	17	0	0	3	0	3	3	27	0	0	30	50
08:15 AM	0	0	0	0	0	0	12	1	0	13	1	0	1	0	2	1	25	0	0	26	41
08:30 AM	0	0	0	0	0	0	10	1	0	11	4	0	2	0	6	1	15	0	0	16	33
08:45 AM	0	0	0	0	0	1	8	3	0	12	1	0	6	0	7	1	17	0	0	18	37
Total	0	0	0	0	0	1	47	5	0	53	6	0	12	0	18	6	84	0	0	90	161

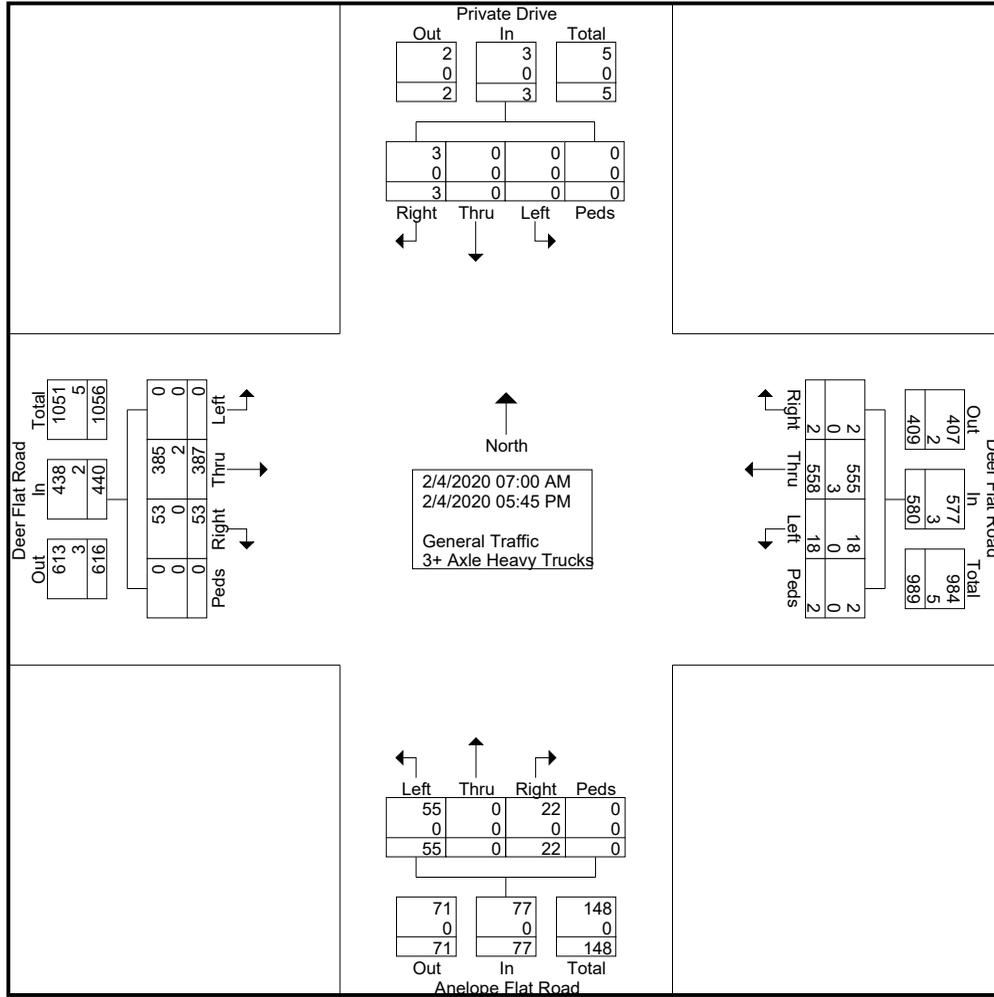
04:00 PM	1	0	0	0	1	0	51	0	0	51	1	0	0	0	1	6	13	0	0	19	72
04:15 PM	0	0	0	0	0	0	41	2	0	43	1	0	3	0	4	5	10	0	0	15	62
04:30 PM	0	0	0	0	0	0	55	0	0	55	0	0	1	0	1	2	14	0	0	16	72
04:45 PM	0	0	0	0	0	0	41	2	0	43	0	0	5	0	5	2	18	0	0	20	68
Total	1	0	0	0	1	0	188	4	0	192	2	0	9	0	11	15	55	0	0	70	274
05:00 PM	0	0	0	0	0	0	55	2	0	57	1	0	3	0	4	4	21	0	0	25	86
05:15 PM	0	0	0	0	0	0	73	2	0	75	2	0	6	0	8	6	14	0	0	20	103
05:30 PM	0	0	0	0	0	1	77	3	0	81	1	0	4	0	5	8	21	0	0	29	115
05:45 PM	0	0	0	0	0	0	52	1	0	53	1	0	6	0	7	5	9	0	0	14	74
Total	0	0	0	0	0	1	257	8	0	266	5	0	19	0	24	23	65	0	0	88	378
Grand Total	3	0	0	0	3	2	558	18	2	580	22	0	55	0	77	53	387	0	0	440	1100
Apprch %	100	0	0	0		0.3	96.2	3.1	0.3		28.6	0	71.4	0		12	88	0	0		
Total %	0.3	0	0	0	0.3	0.2	50.7	1.6	0.2	52.7	2	0	5	0	7	4.8	35.2	0	0	40	
General Traffic	3	0	0	0	3	2	555	18	2	577	22	0	55	0	77	53	385	0	0	438	1095
% General Traffic	100	0	0	0	100	100	99.5	100	100	99.5	100	0	100	0	100	100	99.5	0	0	99.5	99.5
3+ Axle Heavy Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0	0.5	0	0	0.5	0.5

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Antelope Flat / Deer Flat
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Antelope Flat Rd & Deer Flat Rd
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



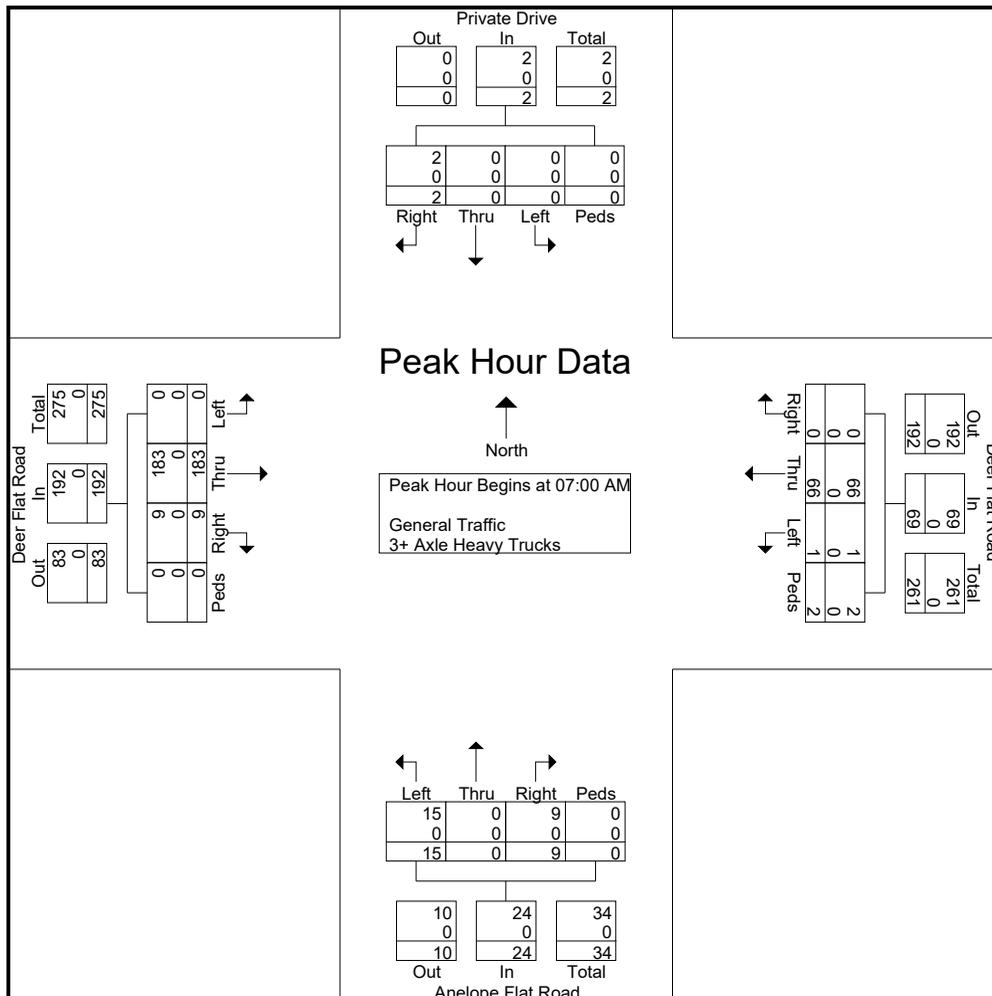
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Private Drive From North					Deer Flat Road From East					Anelope Flat Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	0	0	0	1	0	7	0	2	9	4	0	6	0	10	1	38	0	0	39	59
07:15 AM	0	0	0	0	0	0	20	0	0	20	2	0	3	0	5	2	51	0	0	53	78
07:30 AM	0	0	0	0	0	0	32	1	0	33	2	0	3	0	5	5	45	0	0	50	88
07:45 AM	1	0	0	0	1	0	7	0	0	7	1	0	3	0	4	1	49	0	0	50	62
Total Volume	2	0	0	0	2	0	66	1	2	69	9	0	15	0	24	9	183	0	0	192	287
% App. Total	100	0	0	0		0	95.7	1.4	2.9		37.5	0	62.5	0		4.7	95.3	0	0		
PHF	.500	.000	.000	.000	.500	.000	.516	.250	.250	.523	.563	.000	.625	.000	.600	.450	.897	.000	.000	.906	.815
General Traffic																					
% General Traffic	100	0	0	0	100	0	100	100	100	100	100	0	100	0	100	100	100	0	0	100	100
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

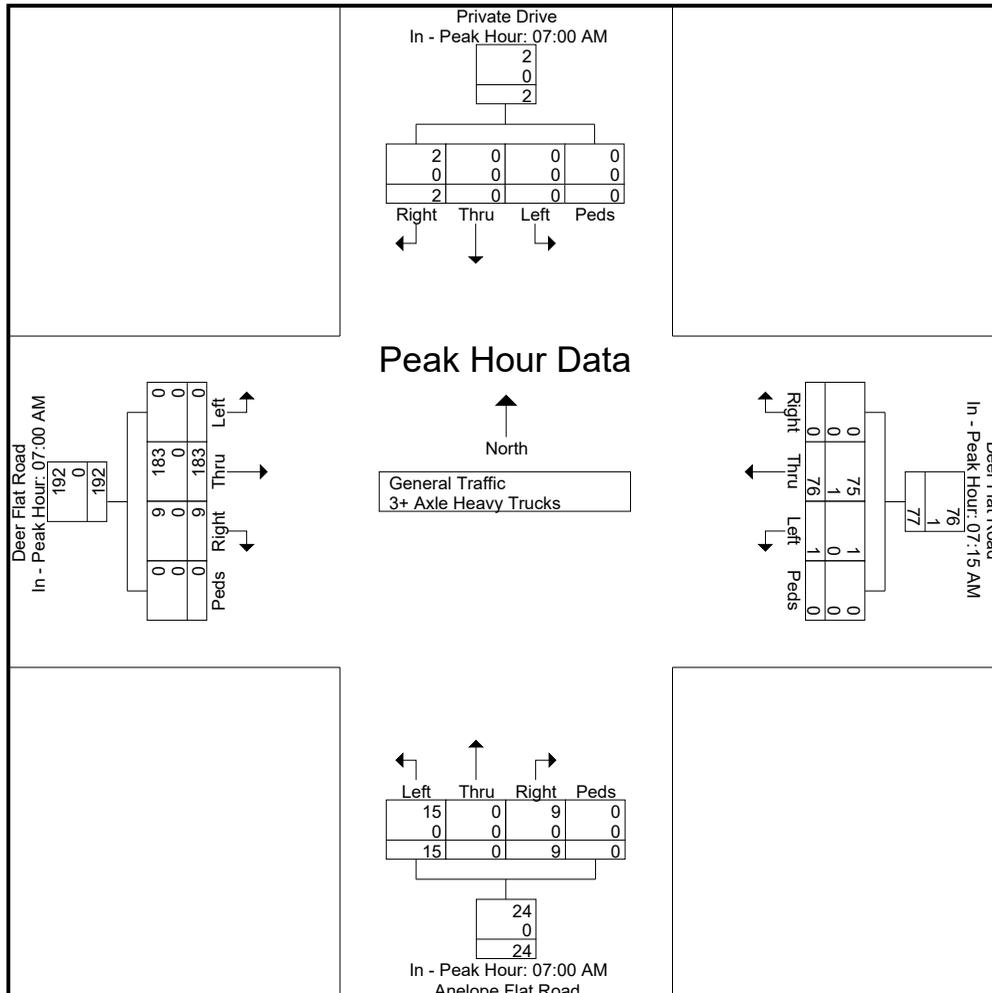
File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 4

Start Time	Private Drive From North					Deer Flat Road From East					Anelope Flat Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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.	1	0	0	0	1	0	20	0	0	20	4	0	6	0	10	1	38	0	0	39
+15 mins.	0	0	0	0	0	0	32	1	0	33	2	0	3	0	5	2	51	0	0	53
+30 mins.	0	0	0	0	0	0	7	0	0	7	2	0	3	0	5	5	45	0	0	50
+45 mins.	1	0	0	0	1	0	17	0	0	17	1	0	3	0	4	1	49	0	0	50
Total Volume	2	0	0	0	2	0	76	1	0	77	9	0	15	0	24	9	183	0	0	192
% App. Total	100	0	0	0		0	98.7	1.3	0		37.5	0	62.5	0		4.7	95.3	0	0	
PHF	.500	.000	.000	.000	.500	.000	.594	.250	.000	.583	.563	.000	.625	.000	.600	.450	.897	.000	.000	.906
General Traffic																				
% General Traffic	100	0	0	0	100	0	98.7	100	0	98.7	100	0	100	0	100	100	100	0	0	100
3+ Axle Heavy Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	1.3	0	0	1.3	0	0	0	0	0	0	0	0	0	0



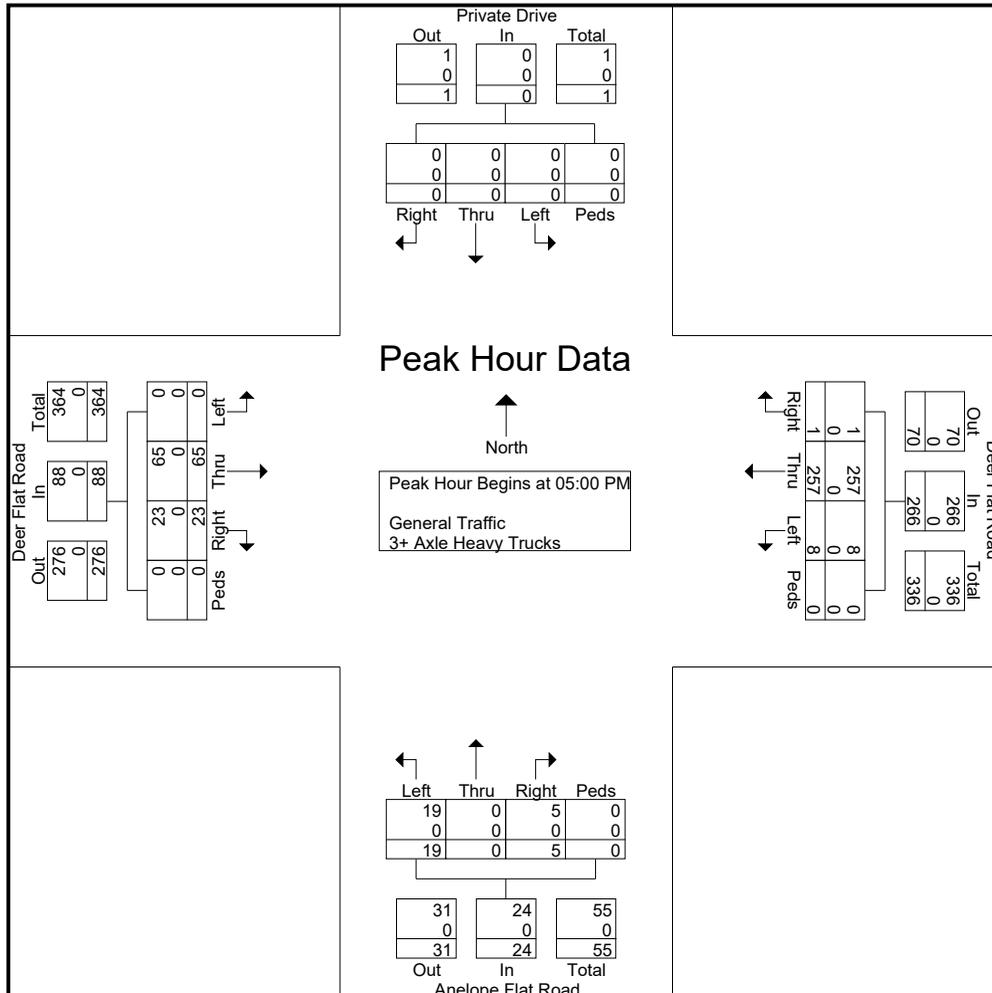
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 5

Start Time	Private Drive From North					Deer Flat Road From East					Anelope Flat Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	0	0	0	0	0	0	55	2	0	57	1	0	3	0	4	4	21	0	0	25	86
05:15 PM	0	0	0	0	0	0	73	2	0	75	2	0	6	0	8	6	14	0	0	20	103
05:30 PM	0	0	0	0	0	1	77	3	0	81	1	0	4	0	5	8	21	0	0	29	115
05:45 PM	0	0	0	0	0	0	52	1	0	53	1	0	6	0	7	5	9	0	0	14	74
Total Volume	0	0	0	0	0	1	257	8	0	266	5	0	19	0	24	23	65	0	0	88	378
% App. Total	0	0	0	0	0	0.4	96.6	3	0		20.8	0	79.2	0		26.1	73.9	0	0		
PHF	.000	.000	.000	.000	.000	.250	.834	.667	.000	.821	.625	.000	.792	.000	.750	.719	.774	.000	.000	.759	.822
General Traffic																					
% General Traffic	0	0	0	0	0	100	100	100	0	100	100	0	100	0	100	100	100	0	0	100	100
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

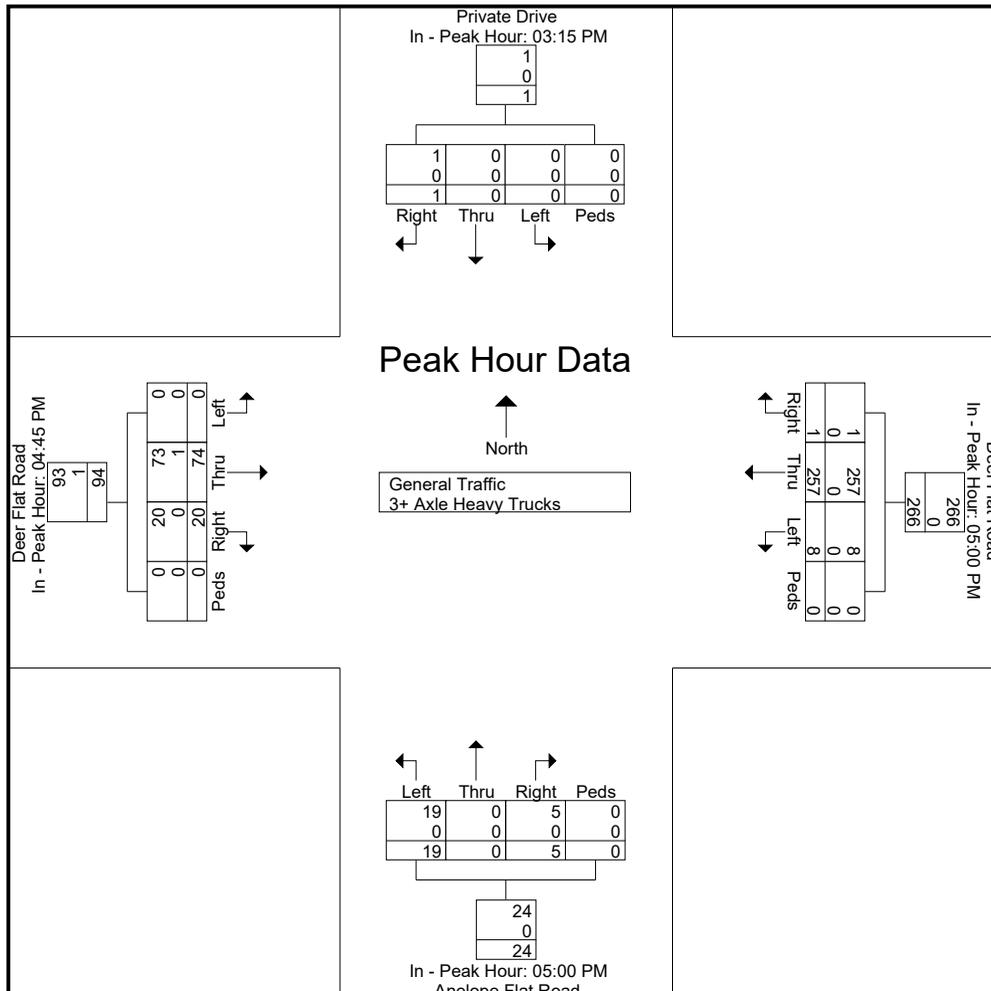
File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Private Drive From North					Deer Flat Road From East					Anelope Flat Road From South					Deer Flat Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM					05:00 PM					05:00 PM					04:45 PM				
+0 mins.	0	0	0	0	0	0	55	2	0	57	1	0	3	0	4	2	18	0	0	20
+15 mins.	0	0	0	0	0	0	73	2	0	75	2	0	6	0	8	4	21	0	0	25
+30 mins.	0	0	0	0	0	1	77	3	0	81	1	0	4	0	5	6	14	0	0	20
+45 mins.	1	0	0	0	1	0	52	1	0	53	1	0	6	0	7	8	21	0	0	29
Total Volume	1	0	0	0	1	1	257	8	0	266	5	0	19	0	24	20	74	0	0	94
% App. Total	100	0	0	0		0.4	96.6	3	0		20.8	0	79.2	0		21.3	78.7	0	0	
PHF	.250	.000	.000	.000	.250	.250	.834	.667	.000	.821	.625	.000	.792	.000	.750	.625	.881	.000	.000	.810
General Traffic																				
% General Traffic	100	0	0	0	100	100	100	100	0	100	100	0	100	0	100	100	98.6	0	0	98.9
3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
% 3+ Axle Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	0	0	1.1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Anelope Flat / Deer Flat
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Antelope Flat Rd & Deer Flat Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



**Deer Flat Road and Locust Grove Road
Kuna Idaho
01-30-2020 00:00:00**

Time	Southbound Locust Grove Road					Westbound Deer Flat Road					Northbound Locust Grove Road					Eastbound Deer Flat Road					TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	
12:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	4
12:15 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5
12:30 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	3
Hourly Total	0	2	3	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3	3	0	14
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	4
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
4:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Hourly Total	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	1	7	0	0	11
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	0	6
5:15 AM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	6	0	0	9
5:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	14	0	0	15
5:45 AM	0	0	1	3	0	0	0	1	1	0	0	0	0	0	0	3	12	0	0	0	21
Hourly Total	0	0	1	4	0	0	0	2	1	0	0	0	3	0	0	3	37	0	0	0	51
6:00 AM	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	1	17	0	0	0	22
6:15 AM	0	1	1	1	0	0	0	1	0	0	0	2	0	0	0	4	37	0	0	0	47
6:30 AM	0	0	0	1	0	0	0	6	1	0	0	6	1	0	0	3	42	1	0	0	61
6:45 AM	0	0	1	3	0	0	0	2	0	0	0	3	0	0	0	4	24	0	0	0	37
Hourly Total	0	1	2	6	0	0	0	9	1	0	0	1	13	1	0	12	120	1	0	0	167
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	6	0	0	0	10
7:15 AM	0	0	0	2	0	0	0	25	0	0	0	2	2	1	0	0	0	32	1	0	65
7:30 AM	0	0	1	6	0	0	0	18	0	0	0	0	4	0	0	0	14	32	2	0	77
7:45 AM	0	1	1	1	0	0	0	10	0	0	0	0	6	0	0	0	8	24	0	0	51
Hourly Total	0	1	2	9	0	0	0	54	0	0	0	2	12	1	0	0	25	94	3	0	203

**Deer Flat Road and Locust Grove Road
Kuna Idaho
01-30-2020 00:00:00**

Time	Southbound Locust Grove Road					Westbound Deer Flat Road					Northbound Locust Grove Road					Eastbound Deer Flat Road					TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	
8:00 AM	0	0	1	4	0	0	0	7	2	0	0	1	5	0	0	0	3	14	0	0	37
8:15 AM	0	1	0	5	0	0	1	11	1	0	0	0	1	0	0	0	10	14	2	0	46
8:30 AM	0	1	1	4	0	0	0	9	2	0	0	2	2	0	0	0	10	15	2	0	48
8:45 AM	0	0	2	1	0	0	0	12	2	0	0	0	3	2	0	0	2	10	3	0	37
Hourly Total	0	2	4	14	0	0	1	39	7	0	0	3	11	2	0	0	25	53	7	0	168
9:00 AM	0	0	3	5	0	0	0	9	0	0	0	0	3	1	0	0	2	14	0	0	37
9:15 AM	0	0	1	2	0	0	1	9	1	0	0	0	1	0	0	0	0	13	0	0	28
9:30 AM	0	1	1	2	0	0	0	6	0	0	0	0	0	0	0	0	1	9	0	0	20
9:45 AM	0	0	2	5	0	0	0	7	1	0	0	1	2	0	0	0	1	7	0	0	26
Hourly Total	0	1	7	14	0	0	1	31	2	0	0	1	6	1	0	0	4	43	0	0	111
10:00 AM	0	0	1	2	0	0	0	8	2	0	0	0	1	0	0	0	2	8	0	0	24
10:15 AM	0	1	1	2	0	0	0	6	0	0	0	0	3	0	0	0	1	6	0	0	20
10:30 AM	0	1	1	1	0	0	0	13	1	0	0	0	1	0	0	0	1	13	0	0	32
10:45 AM	0	1	5	3	0	0	0	8	1	0	0	0	0	0	0	0	2	13	0	0	33
Hourly Total	0	3	8	8	0	0	0	35	4	0	0	0	5	0	0	0	6	40	0	0	109
11:00 AM	0	0	2	1	0	0	0	8	1	0	0	0	3	0	0	0	3	10	2	0	30
11:15 AM	0	1	2	0	0	0	0	10	0	0	0	0	2	0	0	0	2	9	2	0	28
11:30 AM	0	0	0	4	0	0	0	14	1	0	0	0	1	0	0	0	1	7	0	0	28
11:45 AM	0	1	4	6	0	0	0	10	0	0	0	1	1	1	0	0	4	3	0	0	31
Hourly Total	0	2	8	11	0	0	0	42	2	0	0	1	7	1	0	0	10	29	4	0	117
12:00 PM	0	1	5	5	0	0	0	12	0	0	0	0	1	0	0	0	2	12	0	0	38
12:15 PM	0	0	1	6	0	0	0	8	0	0	0	0	0	0	0	0	0	7	0	0	22
12:30 PM	0	1	2	1	0	0	0	1	0	0	0	1	0	0	0	0	5	11	2	0	24
12:45 PM	0	0	3	4	0	0	0	6	0	0	0	0	2	0	0	0	1	13	0	0	29
Hourly Total	0	2	11	16	0	0	0	27	0	0	0	1	3	0	0	0	8	43	2	0	113
1:00 PM	0	1	1	3	0	0	0	13	2	0	0	1	4	0	0	0	8	13	0	0	46
1:15 PM	0	1	3	6	0	0	0	6	0	0	0	1	3	1	0	0	4	14	1	0	40
1:30 PM	0	0	2	3	0	0	0	13	1	0	0	1	0	0	0	0	4	10	0	0	34
1:45 PM	0	2	2	3	0	0	0	13	0	0	0	0	2	0	0	0	7	16	1	0	46
Hourly Total	0	4	8	15	0	0	0	45	3	0	0	3	9	1	0	0	23	53	2	0	166
2:00 PM	0	5	4	0	0	0	1	7	0	0	0	0	2	1	0	0	2	13	0	0	35
2:15 PM	0	0	4	9	0	0	0	10	2	0	0	1	2	0	0	0	1	8	0	0	37
2:30 PM	0	1	3	7	0	0	0	25	1	0	0	1	2	0	0	0	7	5	1	0	53
2:45 PM	0	0	3	3	0	0	0	16	0	0	0	0	1	0	0	0	1	15	1	0	40
Hourly Total	0	6	14	19	0	0	1	58	3	0	0	2	7	1	0	0	11	41	2	0	165
3:00 PM	0	0	5	13	0	0	0	14	0	0	0	0	0	0	0	0	5	23	0	1	60
3:15 PM	0	1	1	7	0	0	1	19	2	0	0	1	1	0	0	0	5	11	1	0	50
3:30 PM	0	1	7	5	0	0	0	17	1	0	0	1	7	0	0	0	1	7	1	0	48
3:45 PM	0	0	8	10	0	0	0	29	2	0	0	1	3	0	0	0	1	10	1	0	65
Hourly Total	0	2	21	35	0	0	1	79	5	0	0	3	11	0	0	0	12	51	3	1	223

**Deer Flat Road and Locust Grove Road
Kuna Idaho
01-30-2020 00:00:00**

Time	Southbound Locust Grove Road					Westbound Deer Flat Road					Northbound Locust Grove Road					Eastbound Deer Flat Road					TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	
4:00 PM	0	1	1	7	0	0	0	27	0	0	0	1	3	0	0	0	5	9	2	2	56
4:15 PM	0	1	7	17	0	0	1	25	0	0	0	1	3	0	0	0	4	6	0	0	65
4:30 PM	0	2	7	11	0	0	1	30	3	0	0	2	0	0	0	0	5	7	0	0	68
4:45 PM	0	1	5	13	0	0	1	46	2	0	0	0	1	0	0	0	4	9	0	0	82
Hourly Total	0	5	20	48	0	0	3	128	5	0	0	4	7	0	0	0	18	31	2	2	271
5:00 PM	0	4	8	18	0	0	0	45	2	0	0	2	3	0	0	0	4	14	0	0	100
5:15 PM	0	0	5	14	0	0	0	49	1	0	0	0	3	0	0	0	3	11	0	0	86
5:30 PM	0	4	8	13	0	0	0	45	2	0	0	1	0	0	0	0	4	4	1	0	82
5:45 PM	0	2	6	18	0	0	0	28	0	0	0	1	4	1	0	0	1	10	1	0	72
Hourly Total	0	10	27	63	0	0	0	167	5	0	0	4	10	1	0	0	12	39	2	0	340
6:00 PM	0	1	3	9	0	0	1	34	0	0	0	1	3	0	0	0	4	12	2	0	70
6:15 PM	0	2	2	3	0	0	1	28	0	0	0	4	2	0	0	0	5	7	1	0	55
6:30 PM	0	0	4	7	0	0	0	20	0	0	0	0	4	1	0	0	1	7	0	0	44
6:45 PM	0	0	1	5	0	0	0	9	1	0	0	0	3	0	0	0	1	6	0	0	26
Hourly Total	0	3	10	24	0	0	2	91	1	0	0	5	12	1	0	0	11	32	3	0	195
7:00 PM	0	0	0	3	0	0	0	4	0	0	0	0	1	0	0	0	2	5	0	0	15
7:15 PM	0	0	5	8	0	0	0	8	1	0	0	0	1	0	0	0	2	4	0	0	29
7:30 PM	0	0	1	3	0	0	0	8	0	0	0	0	0	0	0	0	1	5	0	0	18
7:45 PM	0	1	2	2	0	0	0	9	0	0	0	0	0	0	0	0	2	5	1	0	22
Hourly Total	0	1	8	16	0	0	0	29	1	0	0	0	2	0	0	0	7	19	1	0	84
8:00 PM	0	0	1	5	0	0	0	8	0	0	0	0	0	0	0	0	1	6	0	0	21
8:15 PM	0	0	4	1	0	0	0	4	0	0	0	1	1	0	0	0	4	5	0	0	20
8:30 PM	0	1	2	4	0	0	0	6	0	0	0	0	0	0	0	0	1	3	1	0	18
8:45 PM	0	0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	8
Hourly Total	0	1	8	11	0	0	0	22	0	0	0	1	1	0	0	0	6	16	1	0	67
9:00 PM	0	0	2	3	0	0	0	2	0	0	0	0	0	0	0	0	0	4	1	0	12
9:15 PM	0	1	0	2	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	8
9:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	10
9:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5
Hourly Total	0	1	4	7	0	0	0	5	0	0	0	0	0	0	0	0	5	12	1	0	35
10:00 PM	0	0	2	0	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	6
10:15 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	4
10:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	5
Hourly Total	0	0	4	1	0	0	0	7	0	0	0	1	0	0	0	0	1	2	0	0	16
11:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 PM	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3
11:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Hourly Total	0	0	1	3	0	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	8
DAILY TOTAL	0	47	173	326	0	0	9	877	42	0	0	33	120	10	0	0	200	768	37	3	2642
Cars	0	43	167	321	0	0	8	758	35	0	0	31	115	10	0	0	196	667	35	2	2386
Heavy Vehicles	0	4	6	5	0	0	1	119	7	0	0	2	5	0	0	0	4	101	2	1	256
Heavy Vehicle %	0.00%	8.51%	3.47%	1.53%	0.00%	0.00%	11.11%	13.57%	16.67%	0.00%	0.00%	6.06%	4.17%	0.00%	0.00%	0.00%	2.00%	13.15%	5.41%	33.33%	9.69%

Deer Flat Road and Locust Grove Road Kuna Idaho 01-30-2020 00:00:00

AM Peak Hour

Time	Southbound					Westbound					Northbound					Eastbound					VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	
7:15 AM	0	0	0	2	0	0	0	25	0	0	0	2	2	1	0	0	0	32	1	0	65
7:30 AM	0	0	1	6	0	0	0	18	0	0	0	0	4	0	0	0	14	32	2	0	77
7:45 AM	0	1	1	1	0	0	0	10	0	0	0	0	6	0	0	0	8	24	0	0	51
8:00 AM	0	0	1	4	0	0	0	7	2	0	0	1	5	0	0	0	3	14	0	0	37
Peak Hour Total	0	1	3	13	0	0	0	60	2	0	0	3	17	1	0	0	25	102	3	0	230
PHF	0.000	0.250	0.750	0.542	0.000	0.000	0.000	0.600	0.250	0.000	0.000	0.375	0.708	0.250	0.000	0.000	0.446	0.797	0.375	0.000	0.747
Heavy Vehicle %	0.00%	0.00%	33.33%	15.38%	0.00%	0.00%	0.00%	3.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.17%

PM Peak Hour

Time	Southbound					Westbound					Northbound					Eastbound					VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bicycles	
4:45 PM	0	1	5	13	0	0	1	46	2	0	0	0	1	0	0	0	4	9	0	0	82
5:00 PM	0	4	8	18	0	0	0	45	2	0	0	2	3	0	0	0	4	14	0	0	100
5:15 PM	0	0	5	14	0	0	0	49	1	0	0	0	3	0	0	0	3	11	0	0	86
5:30 PM	0	4	8	13	0	0	0	45	2	0	0	1	0	0	0	0	4	4	1	0	82
Peak Hour Total	0	9	26	58	0	0	1	185	7	0	0	3	7	0	0	0	15	38	1	0	350
PHF	0.000	0.563	0.813	0.806	0.000	0.000	0.250	0.944	0.875	0.000	0.000	0.375	0.583	0.000	0.000	0.000	0.938	0.679	0.250	0.000	0.875
Heavy Vehicle %	0.00%	0.00%	0.00%	1.72%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.29%

Total Vehicles On Leg 908					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
546			362		
Southbound					
Cars	321	167	43	0	0
Heavy	5	6	4	0	0
Total	326	173	47	0	0



Total Vehicles on Leg 2241	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total
	1005		2	1	3
			0	0	0
	Vehicles Exiting Intersection		196	4	200
	1236		667	101	768
	35	2	37		



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 1753
35	7	42		928	
758	119	877			
8	1	9		Vehicles Exiting Intersection	
0	0	0		825	
0	0	0			



Cars	0	0	31	115	10
Heavy	0	0	2	5	0
Total	0	0	33	120	10
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
163			219		
Total Vehicles On Leg 382					



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Existing App
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Existing Approach
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Meridian Road From North				Existing Approach From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
07:00 AM	52	0	0	52	0	0	0	0	0	155	0	155	207
07:15 AM	54	0	0	54	0	0	0	0	0	179	0	179	233
07:30 AM	70	1	0	71	0	0	0	0	1	191	0	192	263
07:45 AM	72	0	0	72	0	0	0	0	1	117	0	118	190
Total	248	1	0	249	0	0	0	0	2	642	0	644	893
08:00 AM	59	0	0	59	0	0	0	0	0	102	0	102	161
08:15 AM	70	1	0	71	1	0	0	1	1	123	0	124	196
08:30 AM	62	2	0	64	0	0	0	0	1	112	0	113	177
08:45 AM	43	0	0	43	0	0	0	0	0	96	0	96	139
Total	234	3	0	237	1	0	0	1	2	433	0	435	673

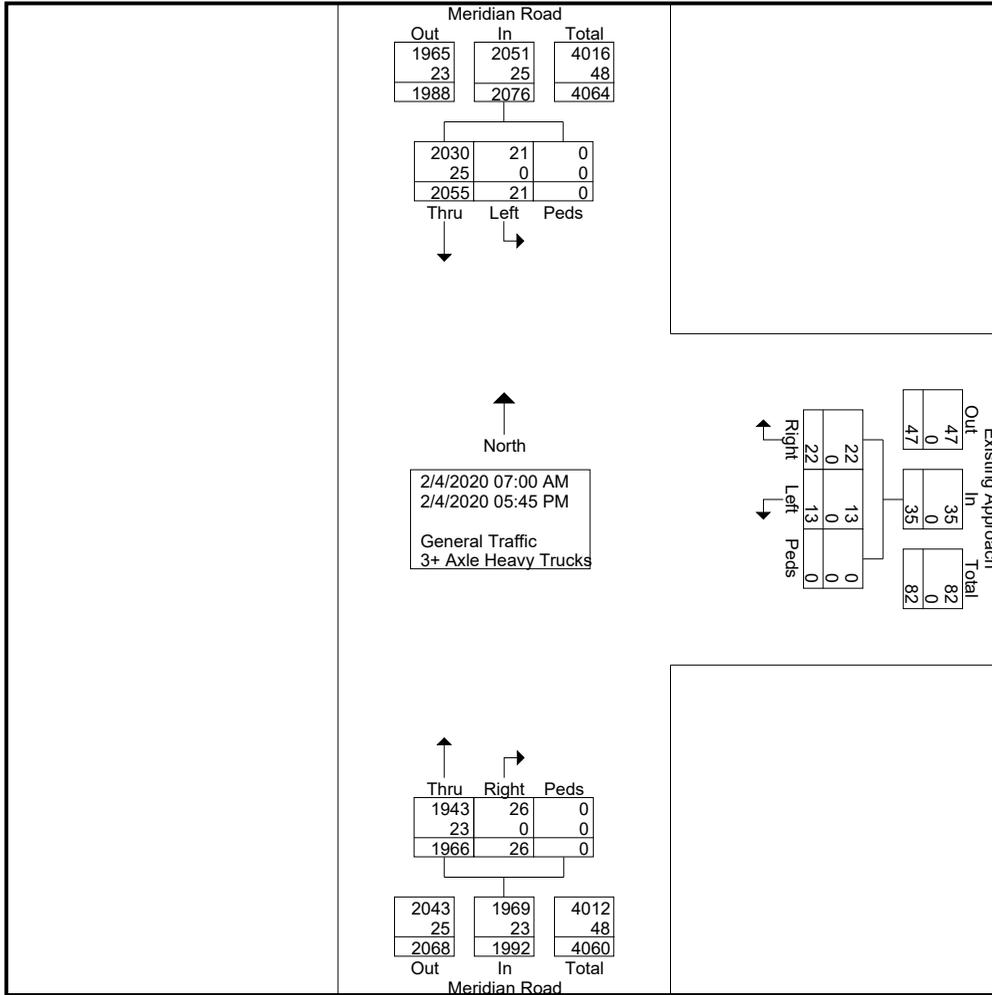
04:00 PM	173	3	0	176	4	1	0	5	3	101	0	104	285
04:15 PM	222	1	0	223	1	2	0	3	5	107	0	112	338
04:30 PM	190	3	0	193	4	2	0	6	3	128	0	131	330
04:45 PM	187	3	0	190	2	2	0	4	2	97	0	99	293
Total	772	10	0	782	11	7	0	18	13	433	0	446	1246
05:00 PM	193	3	0	196	4	3	0	7	0	119	0	119	322
05:15 PM	195	0	0	195	0	1	0	1	4	107	0	111	307
05:30 PM	203	3	0	206	1	0	0	1	3	125	0	128	335
05:45 PM	210	1	0	211	5	2	0	7	2	107	0	109	327
Total	801	7	0	808	10	6	0	16	9	458	0	467	1291
Grand Total	2055	21	0	2076	22	13	0	35	26	1966	0	1992	4103
Apprch %	99	1	0		62.9	37.1	0		1.3	98.7	0		
Total %	50.1	0.5	0	50.6	0.5	0.3	0	0.9	0.6	47.9	0	48.5	
General Traffic	2030	21	0	2051	22	13	0	35	26	1943	0	1969	4055
% General Traffic	98.8	100	0	98.8	100	100	0	100	100	98.8	0	98.8	98.8
3+ Axle Heavy Trucks	25	0	0	25	0	0	0	0	0	23	0	23	48
% 3+ Axle Heavy Trucks	1.2	0	0	1.2	0	0	0	0	0	1.2	0	1.2	1.2

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Meridian Rd / Existing App
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Meridian Rd & Existing Approach
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



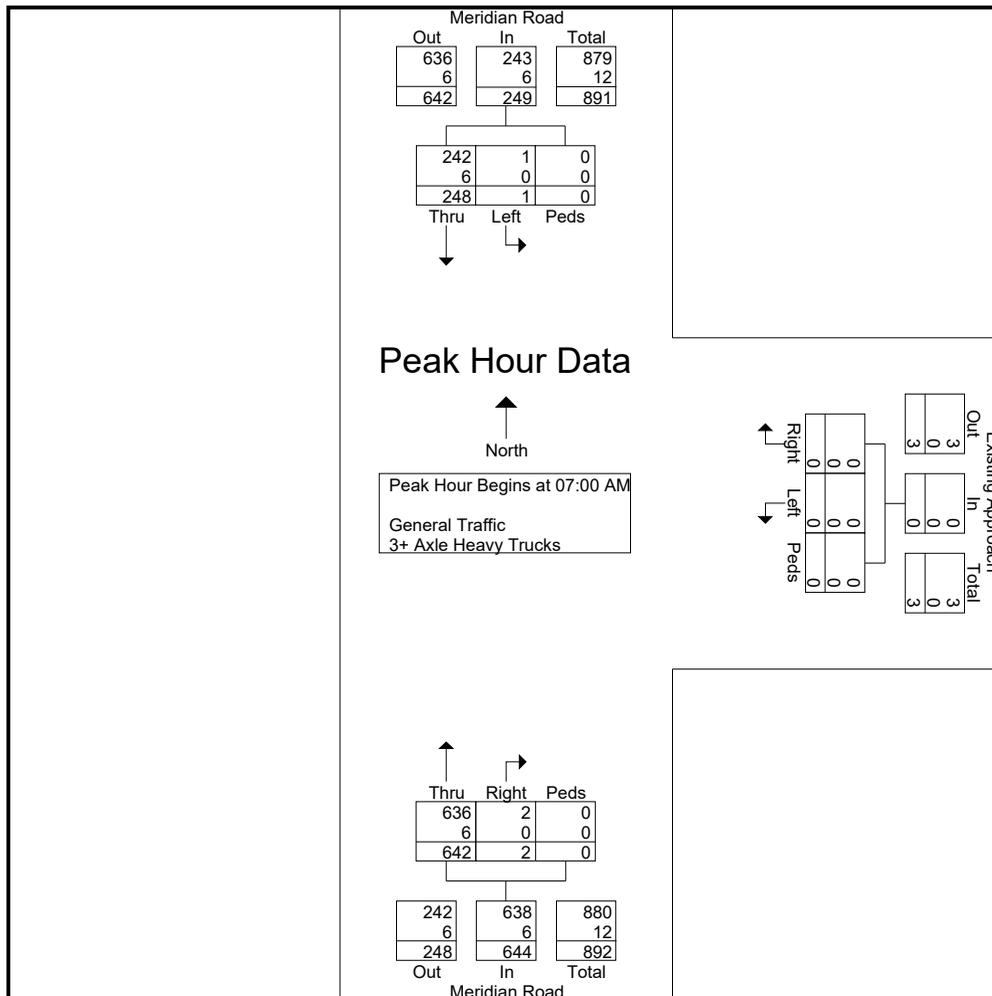
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Existing App
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Existing Approach
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Meridian Road From North				Existing Approach From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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	52	0	0	52	0	0	0	0	0	155	0	155	207
07:15 AM	54	0	0	54	0	0	0	0	0	179	0	179	233
07:30 AM	70	1	0	71	0	0	0	0	1	191	0	192	263
07:45 AM	72	0	0	72	0	0	0	0	1	117	0	118	190
Total Volume	248	1	0	249	0	0	0	0	2	642	0	644	893
% App. Total	99.6	0.4	0		0	0	0		0.3	99.7	0		
PHF	.861	.250	.000	.865	.000	.000	.000	.000	.500	.840	.000	.839	.849
General Traffic	242	1	0	243	0	0	0	0	2	636	0	638	881
% General Traffic	97.6	100	0	97.6	0	0	0	0	100	99.1	0	99.1	98.7
3+ Axle Heavy Trucks	6	0	0	6	0	0	0	0	0	6	0	6	12
% 3+ Axle Heavy Trucks	2.4	0	0	2.4	0	0	0	0	0	0.9	0	0.9	1.3



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Existing App
City, State: Kuna, Idaho
Control: Stop Sign

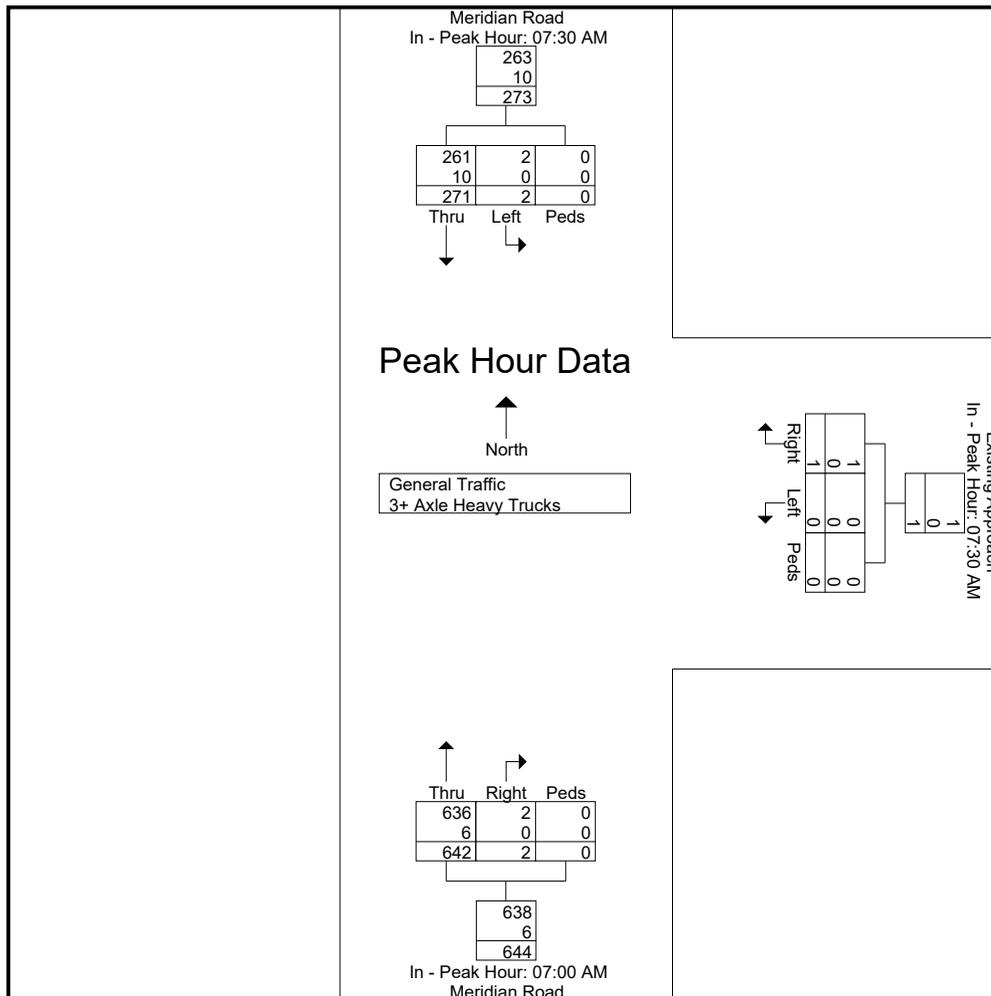
File Name : Meridian Rd & Existing Approach
Site Code : 00000000
Start Date : 2/4/2020
Page No : 4

Start Time	Meridian Road From North				Existing Approach From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:00 AM			
+0 mins.	70	1	0	71	0	0	0	0	0	155	0	155
+15 mins.	72	0	0	72	0	0	0	0	0	179	0	179
+30 mins.	59	0	0	59	0	0	0	0	1	191	0	192
+45 mins.	70	1	0	71	1	0	0	1	1	117	0	118
Total Volume	271	2	0	273	1	0	0	1	2	642	0	644
% App. Total	99.3	0.7	0		100	0	0		0.3	99.7	0	
PHF	.941	.500	.000	.948	.250	.000	.000	.250	.500	.840	.000	.839
General Traffic	261	2	0	263	1	0	0	1	2	636	0	638
% General Traffic	96.3	100	0	96.3	100	0	0	100	100	99.1	0	99.1
3+ Axle Heavy Trucks	10	0	0	10	0	0	0	0	0	6	0	6
% 3+ Axle Heavy Trucks	3.7	0	0	3.7	0	0	0	0	0	0.9	0	0.9



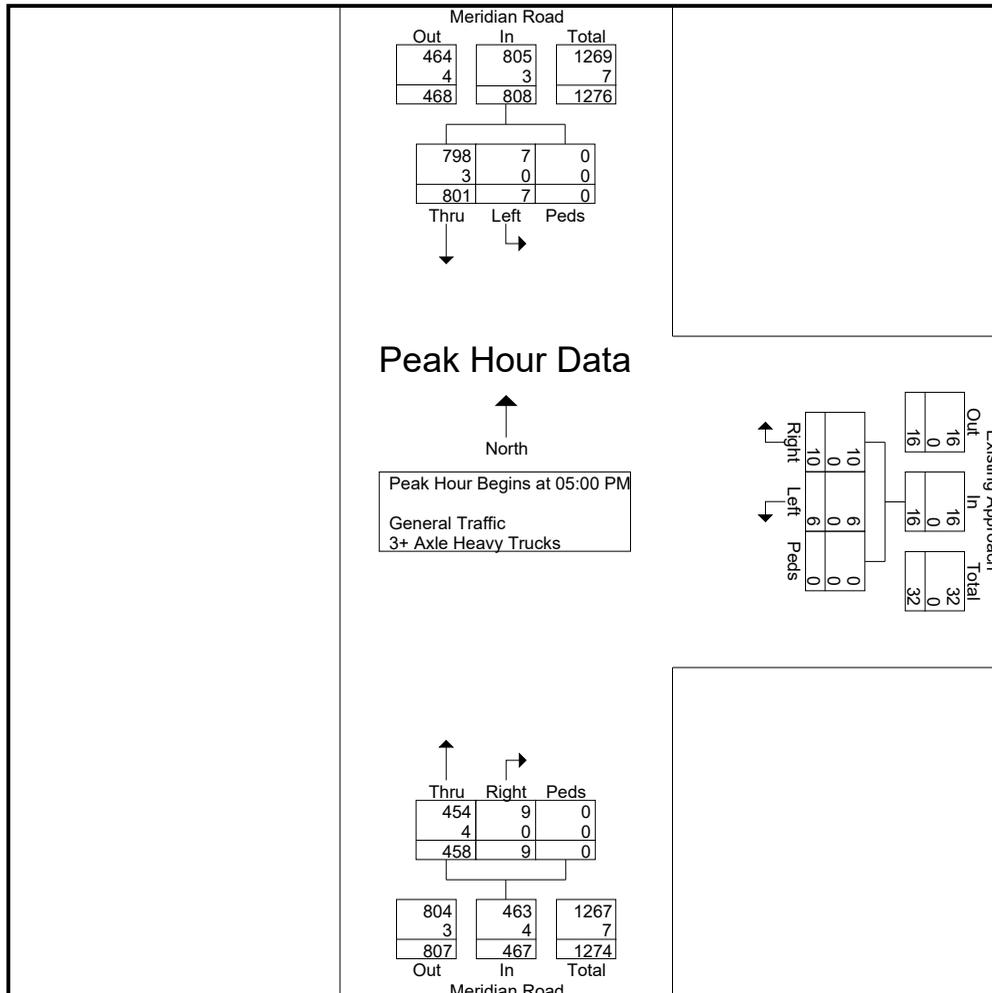
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Meridian Rd / Existing App
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Meridian Rd & Existing Approach
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 5

Start Time	Meridian Road From North				Existing Approach From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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	193	3	0	196	4	3	0	7	0	119	0	119	322
05:15 PM	195	0	0	195	0	1	0	1	4	107	0	111	307
05:30 PM	203	3	0	206	1	0	0	1	3	125	0	128	335
05:45 PM	210	1	0	211	5	2	0	7	2	107	0	109	327
Total Volume	801	7	0	808	10	6	0	16	9	458	0	467	1291
% App. Total	99.1	0.9	0		62.5	37.5	0		1.9	98.1	0		
PHF	.954	.583	.000	.957	.500	.500	.000	.571	.563	.916	.000	.912	.963
General Traffic	798	7	0	805	10	6	0	16	9	454	0	463	1284
% General Traffic	99.6	100	0	99.6	100	100	0	100	100	99.1	0	99.1	99.5
3+ Axle Heavy Trucks	3	0	0	3	0	0	0	0	0	4	0	0	4
% 3+ Axle Heavy Trucks	0.4	0	0	0.4	0	0	0	0	0	0.9	0	0.9	0.5



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Existing App
City, State: Kuna, Idaho
Control: Stop Sign

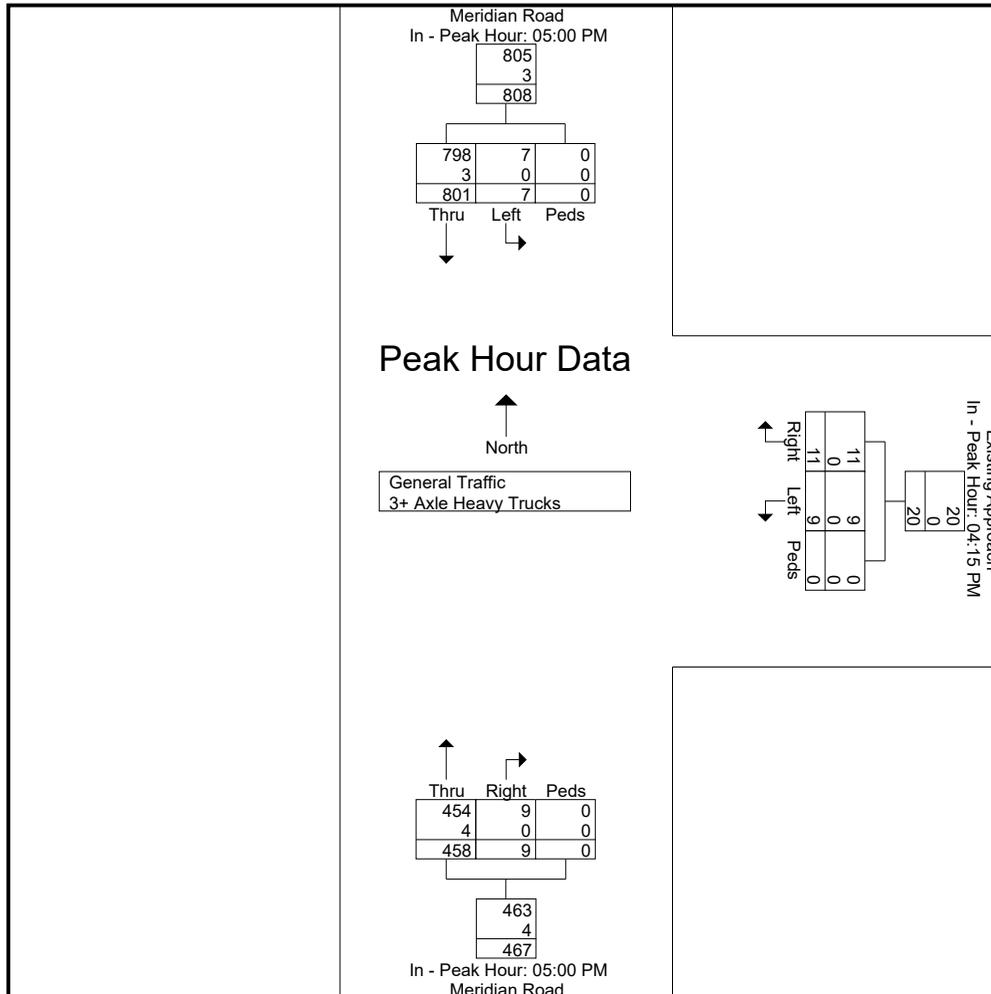
File Name : Meridian Rd & Existing Approach
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Meridian Road From North				Existing Approach From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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				04:15 PM				05:00 PM			
+0 mins.	193	3	0	196	1	2	0	3	0	119	0	119
+15 mins.	195	0	0	195	4	2	0	6	4	107	0	111
+30 mins.	203	3	0	206	2	2	0	4	3	125	0	128
+45 mins.	210	1	0	211	4	3	0	7	2	107	0	109
Total Volume	801	7	0	808	11	9	0	20	9	458	0	467
% App. Total	99.1	0.9	0		55	45	0		1.9	98.1	0	
PHF	.954	.583	.000	.957	.688	.750	.000	.714	.563	.916	.000	.912
General Traffic	798	7	0	805	11	9	0	20	9	454	0	463
% General Traffic	99.6	100	0	99.6	100	100	0	100	100	99.1	0	99.1
3+ Axle Heavy Trucks	3	0	0	3	0	0	0	0	0	4	0	4
% 3+ Axle Heavy Trucks	0.4	0	0	0.4	0	0	0	0	0	0.9	0	0.9



L2 Data Collection

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(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Existing App
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Existing Approach
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Profile Driv
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Meridian Road From North					Profile Drive From East					Meridian Road From South					Profile Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	10	37	2	0	49	2	1	0	0	3	0	151	7	0	158	3	0	5	0	8	218
07:15 AM	3	54	3	0	60	1	0	0	0	1	0	168	11	0	179	1	0	8	0	9	249
07:30 AM	7	60	4	0	71	2	0	0	0	2	1	182	8	0	191	6	0	9	0	15	279
07:45 AM	3	64	3	0	70	2	0	0	0	2	1	109	9	0	119	7	1	4	0	12	203
Total	23	215	12	0	250	7	1	0	0	8	2	610	35	0	647	17	1	26	0	44	949
08:00 AM	5	55	1	0	61	2	0	1	0	3	1	96	7	0	104	3	0	7	0	10	178
08:15 AM	11	57	2	0	70	2	2	0	0	4	1	116	4	0	121	8	1	3	0	12	207
08:30 AM	12	46	3	0	61	2	0	1	0	3	1	106	12	0	119	7	0	6	0	13	196
08:45 AM	9	34	1	0	44	4	0	0	0	4	1	87	13	0	101	6	0	6	0	12	161
Total	37	192	7	0	236	10	2	2	0	14	4	405	36	0	445	24	1	22	0	47	742

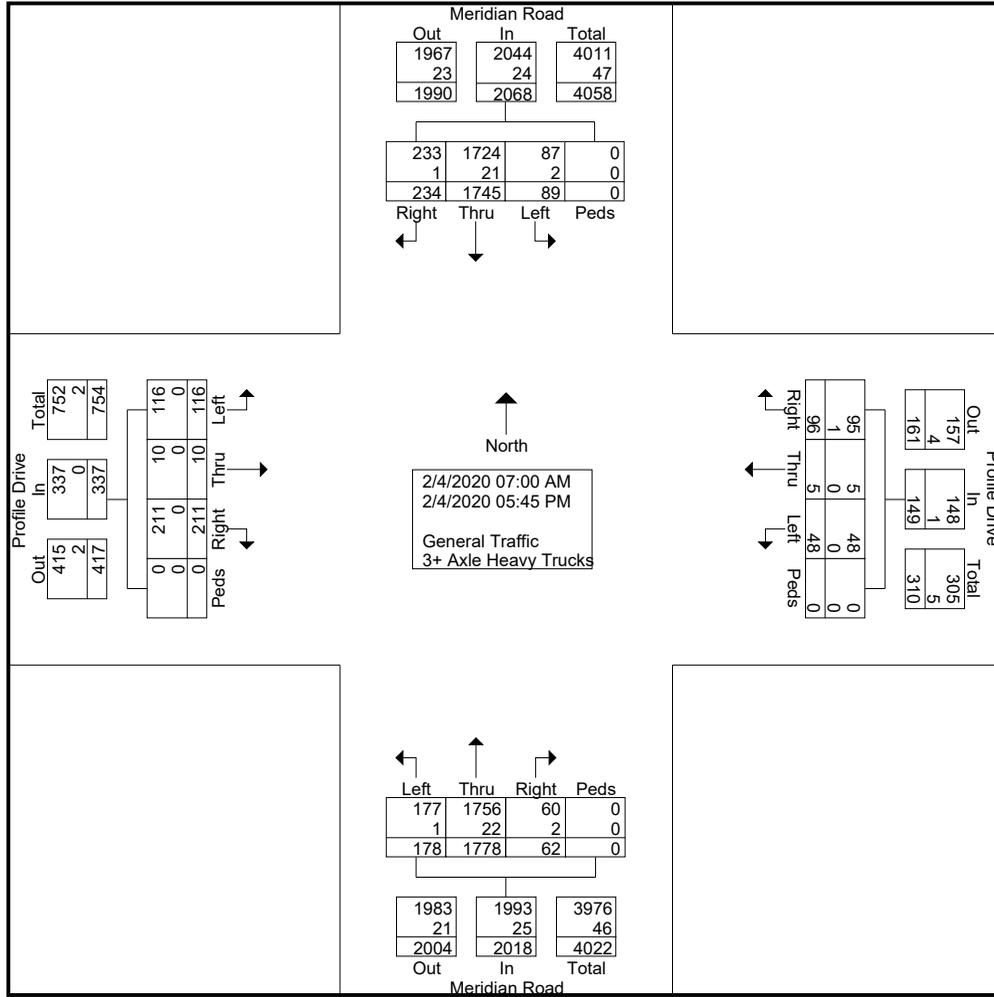
04:00 PM	22	145	8	0	175	7	0	5	0	12	5	87	10	0	102	18	1	10	0	29	318
04:15 PM	32	186	4	0	222	11	1	2	0	14	5	98	8	0	111	22	0	7	0	29	376
04:30 PM	19	176	3	0	198	18	0	6	0	24	6	100	11	0	117	25	0	9	0	34	373
04:45 PM	19	162	6	0	187	8	0	7	0	15	6	84	15	0	105	18	1	7	0	26	333
Total	92	669	21	0	782	44	1	20	0	65	22	369	44	0	435	83	2	33	0	118	1400
05:00 PM	17	161	14	0	192	4	0	4	0	8	6	109	11	0	126	22	0	6	0	28	354
05:15 PM	19	166	9	0	194	3	1	7	0	11	7	98	15	0	120	30	0	12	0	42	367
05:30 PM	26	163	13	0	202	13	0	7	0	20	12	101	14	0	127	13	4	11	0	28	377
05:45 PM	20	179	13	0	212	15	0	8	0	23	9	86	23	0	118	22	2	6	0	30	383
Total	82	669	49	0	800	35	1	26	0	62	34	394	63	0	491	87	6	35	0	128	1481
Grand Total	234	1745	89	0	2068	96	5	48	0	149	62	1778	178	0	2018	211	10	116	0	337	4572
Apprch %	11.3	84.4	4.3	0		64.4	3.4	32.2	0		3.1	88.1	8.8	0		62.6	3	34.4	0		
Total %	5.1	38.2	1.9	0	45.2	2.1	0.1	1	0	3.3	1.4	38.9	3.9	0	44.1	4.6	0.2	2.5	0	7.4	
General Traffic	233	1724	87	0	2044	95	5	48	0	148	60	1756	177	0	1993	211	10	116	0	337	4522
% General Traffic	99.6	98.8	97.8	0	98.8	99	100	100	0	99.3	96.8	98.8	99.4	0	98.8	100	100	100	0	100	98.9
3+ Axle Heavy Trucks	1	21	2	0	24	1	0	0	0	1	2	22	1	0	25	0	0	0	0	0	50
% 3+ Axle Heavy Trucks	0.4	1.2	2.2	0	1.2	1	0	0	0	0.7	3.2	1.2	0.6	0	1.2	0	0	0	0	0	1.1

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Meridian Rd / Profile Driv
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Meridian Rd & Profile Drive
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



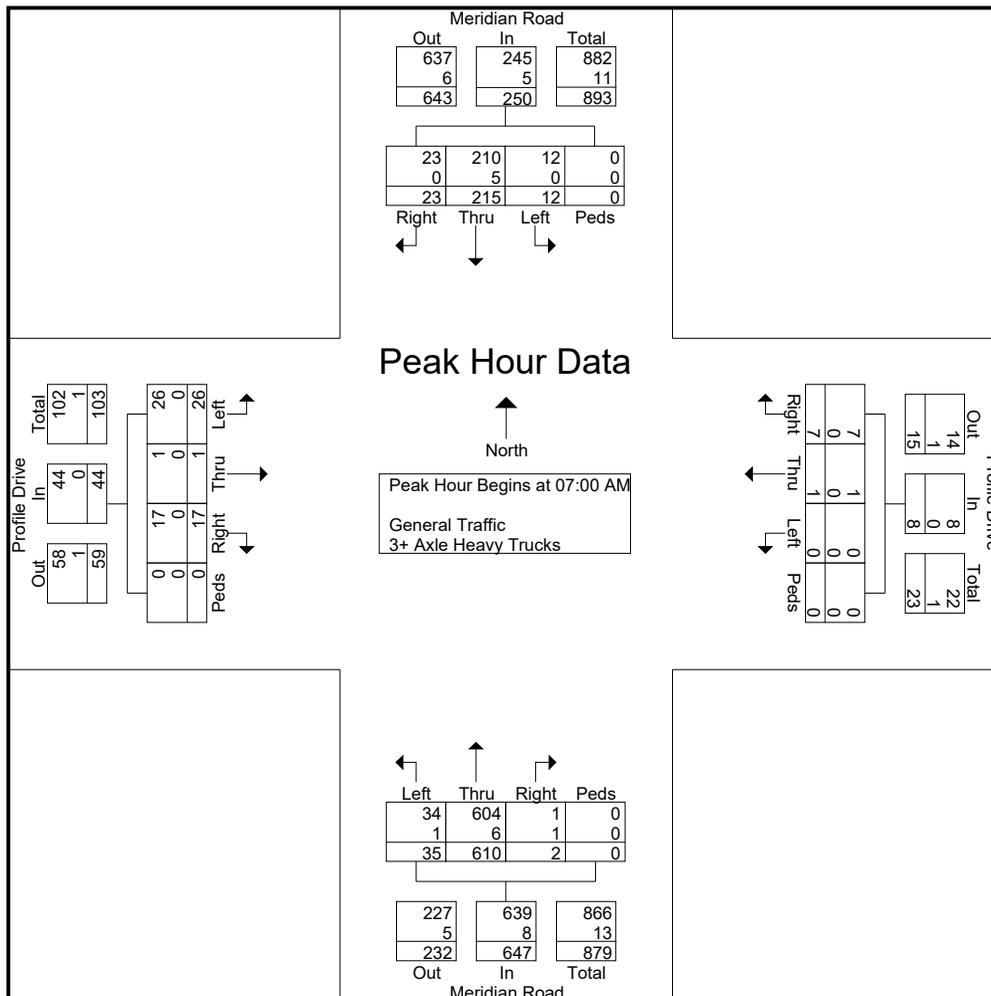
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Profile Drive
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Meridian Road From North					Profile Drive From East					Meridian Road From South					Profile Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	10	37	2	0	49	2	1	0	0	3	0	151	7	0	158	3	0	5	0	8	218
07:15 AM	3	54	3	0	60	1	0	0	0	1	0	168	11	0	179	1	0	8	0	9	249
07:30 AM	7	60	4	0	71	2	0	0	0	2	1	182	8	0	191	6	0	9	0	15	279
07:45 AM	3	64	3	0	70	2	0	0	0	2	1	109	9	0	119	7	1	4	0	12	203
Total Volume	23	215	12	0	250	7	1	0	0	8	2	610	35	0	647	17	1	26	0	44	949
% App. Total	9.2	86	4.8	0		87.5	12.5	0	0		0.3	94.3	5.4	0		38.6	2.3	59.1	0		
PHF	.575	.840	.750	.000	.880	.875	.250	.000	.000	.667	.500	.838	.795	.000	.847	.607	.250	.722	.000	.733	.850
General Traffic	100	97.7	100	0	98.0	100	100	0	0	100	50.0	99.0	97.1	0	98.8	100	100	100	0	100	98.6
% General Traffic	0	5	0	0	5	0	0	0	0	0	1	6	1	0	8	0	0	0	0	0	13
3+ Axle Heavy Trucks	0	2.3	0	0	2.0	0	0	0	0	0	50.0	1.0	2.9	0	1.2	0	0	0	0	0	1.4
% 3+ Axle Heavy Trucks																					



L2 Data Collection

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Study: CR0058
Intersection: Meridian Rd / Profile Drive
City, State: Kuna, Idaho
Control: Stop Sign

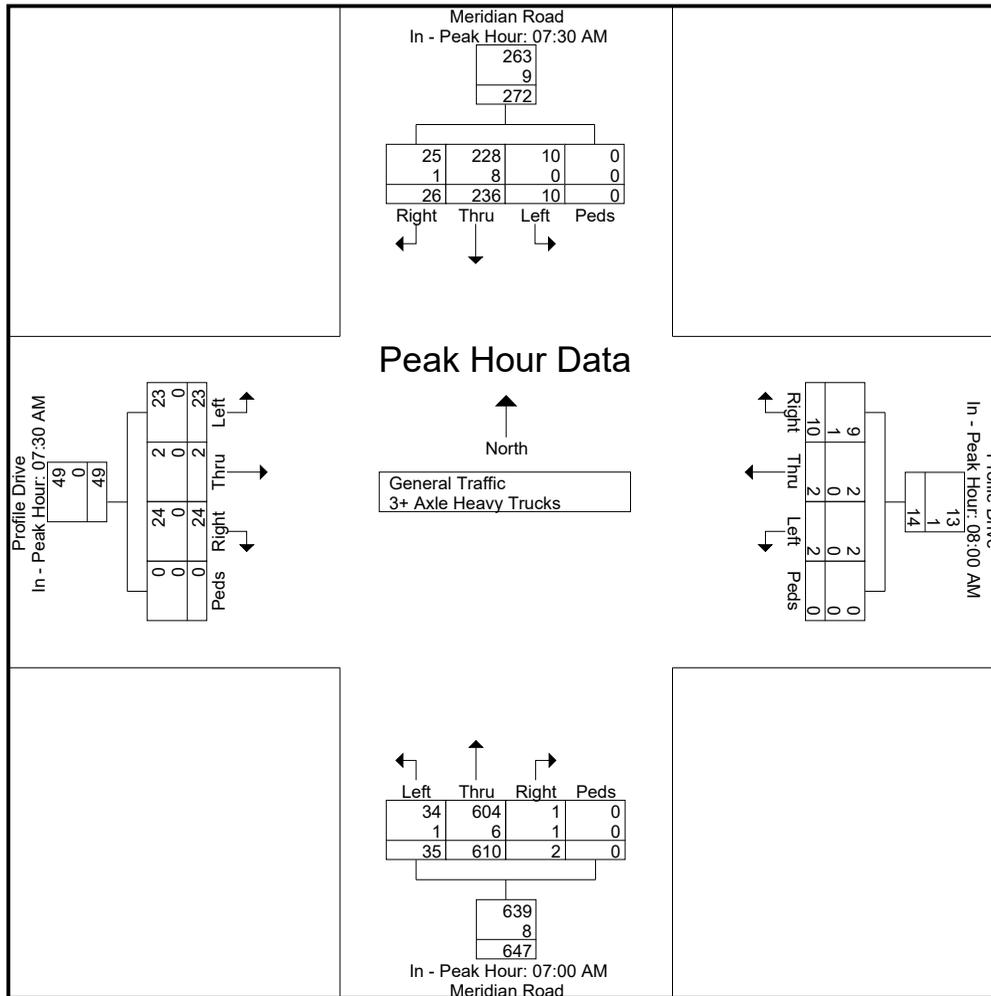
File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 4

Start Time	Meridian Road From North					Profile Drive From East					Meridian Road From South					Profile Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM					08:00 AM					07:00 AM					07:30 AM				
+0 mins.	7	60	4	0	71	2	0	1	0	3	0	151	7	0	158	6	0	9	0	15
+15 mins.	3	64	3	0	70	2	2	0	0	4	0	168	11	0	179	7	1	4	0	12
+30 mins.	5	55	1	0	61	2	0	1	0	3	1	182	8	0	191	3	0	7	0	10
+45 mins.	11	57	2	0	70	4	0	0	0	4	1	109	9	0	119	8	1	3	0	12
Total Volume	26	236	10	0	272	10	2	2	0	14	2	610	35	0	647	24	2	23	0	49
% App. Total	9.6	86.8	3.7	0		71.4	14.3	14.3	0		0.3	94.3	5.4	0		49	4.1	46.9	0	
PHF	.591	.922	.625	.000	.958	.625	.250	.500	.000	.875	.500	.838	.795	.000	.847	.750	.500	.639	.000	.817
General Traffic																				
% General Traffic	96.2	96.6	100	0	96.7	90	100	100	0	92.9	50	99	97.1	0	98.8	100	100	100	0	100
3+ Axle Heavy Trucks	1	8	0	0	9	1	0	0	0	1	1	6	1	0	8	0	0	0	0	0
% 3+ Axle Heavy Trucks	3.8	3.4	0	0	3.3	10	0	0	0	7.1	50	1	2.9	0	1.2	0	0	0	0	0



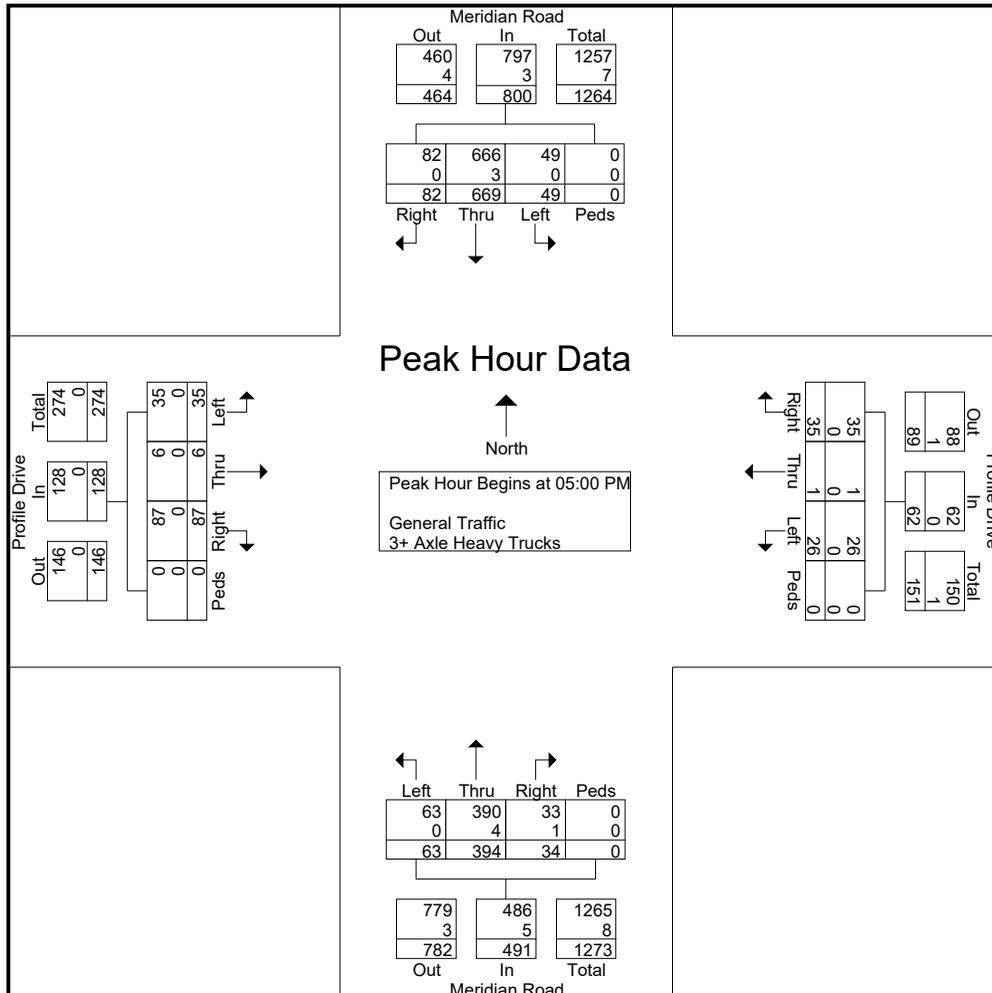
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Profile Driv
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 5

Start Time	Meridian Road From North					Profile Drive From East					Meridian Road From South					Profile Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	17	161	14	0	192	4	0	4	0	8	6	109	11	0	126	22	0	6	0	28	354
05:15 PM	19	166	9	0	194	3	1	7	0	11	7	98	15	0	120	30	0	12	0	42	367
05:30 PM	26	163	13	0	202	13	0	7	0	20	12	101	14	0	127	13	4	11	0	28	377
05:45 PM	20	179	13	0	212	15	0	8	0	23	9	86	23	0	118	22	2	6	0	30	383
Total Volume	82	669	49	0	800	35	1	26	0	62	34	394	63	0	491	87	6	35	0	128	1481
% App. Total	10.2	83.6	6.1	0		56.5	1.6	41.9	0		6.9	80.2	12.8	0		68	4.7	27.3	0		
PHF	.788	.934	.875	.000	.943	.583	.250	.813	.000	.674	.708	.904	.685	.000	.967	.725	.375	.729	.000	.762	.967
General Traffic																					
% General Traffic	100	99.6	100	0	99.6	100	100	100	0	100	97.1	99.0	100	0	99.0	100	100	100	0	100	99.5
3+ Axle Heavy Trucks	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	8
% 3+ Axle Heavy Trucks	0	0.4	0	0	0.4	0	0	0	0	0	2.9	1.0	0	0	1.0	0	0	0	0	0	0.5



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Profile Drive
City, State: Kuna, Idaho
Control: Stop Sign

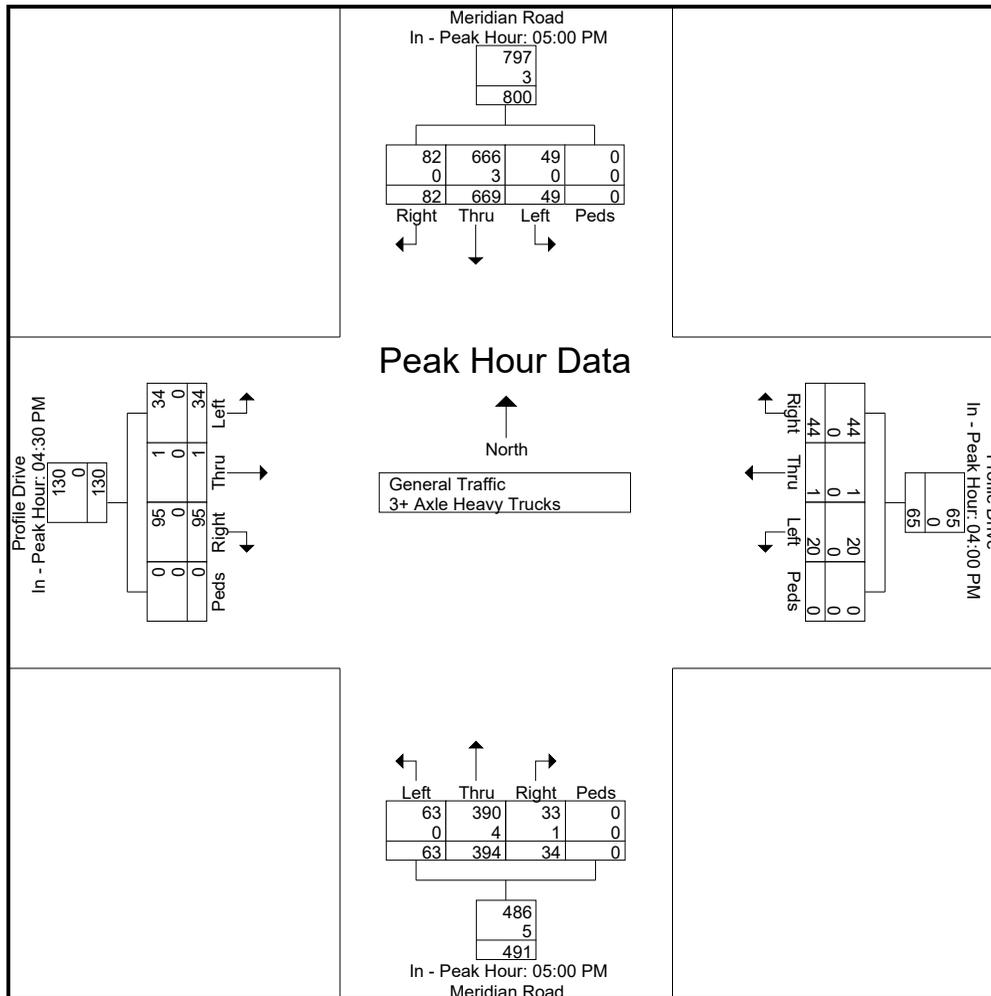
File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Meridian Road From North					Profile Drive From East					Meridian Road From South					Profile Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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					04:00 PM					05:00 PM					04:30 PM				
+0 mins.	17	161	14	0	192	7	0	5	0	12	6	109	11	0	126	25	0	9	0	34
+15 mins.	19	166	9	0	194	11	1	2	0	14	7	98	15	0	120	18	1	7	0	26
+30 mins.	26	163	13	0	202	18	0	6	0	24	12	101	14	0	127	22	0	6	0	28
+45 mins.	20	179	13	0	212	8	0	7	0	15	9	86	23	0	118	30	0	12	0	42
Total Volume	82	669	49	0	800	44	1	20	0	65	34	394	63	0	491	95	1	34	0	130
% App. Total	10.2	83.6	6.1	0		67.7	1.5	30.8	0		6.9	80.2	12.8	0		73.1	0.8	26.2	0	
PHF	.788	.934	.875	.000	.943	.611	.250	.714	.000	.677	.708	.904	.685	.000	.967	.792	.250	.708	.000	.774
General Traffic	100	99.6	100	0	99.6	100	100	100	0	100	97.1	99	100	0	99	100	100	100	0	100
% General Traffic	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0
3+ Axle Heavy Trucks	0	0.4	0	0	0.4	0	0	0	0	0	2.9	1	0	0	1	0	0	0	0	0
% 3+ Axle Heavy Trucks																				



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian Rd / Profile Driv
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Profile Drive
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 1

Groups Printed- General Traffic - 3+ Axle Heavy Trucks

Start Time	Meridian Road From North				Meadow View Road From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
07:00 AM	34	0	0	34	0	1	0	1	1	159	0	160	195
07:15 AM	62	0	0	62	1	0	0	1	0	180	0	180	243
07:30 AM	64	1	0	65	1	0	0	1	0	195	0	195	261
07:45 AM	72	0	0	72	0	0	0	0	0	119	0	119	191
Total	232	1	0	233	2	1	0	3	1	653	0	654	890
08:00 AM	55	0	0	55	1	1	0	2	1	100	0	101	158
08:15 AM	68	0	0	68	1	0	0	1	1	127	0	128	197
08:30 AM	48	1	0	49	2	0	0	2	0	112	0	112	163
08:45 AM	42	0	0	42	1	0	0	1	0	98	0	98	141
Total	213	1	0	214	5	1	0	6	2	437	0	439	659

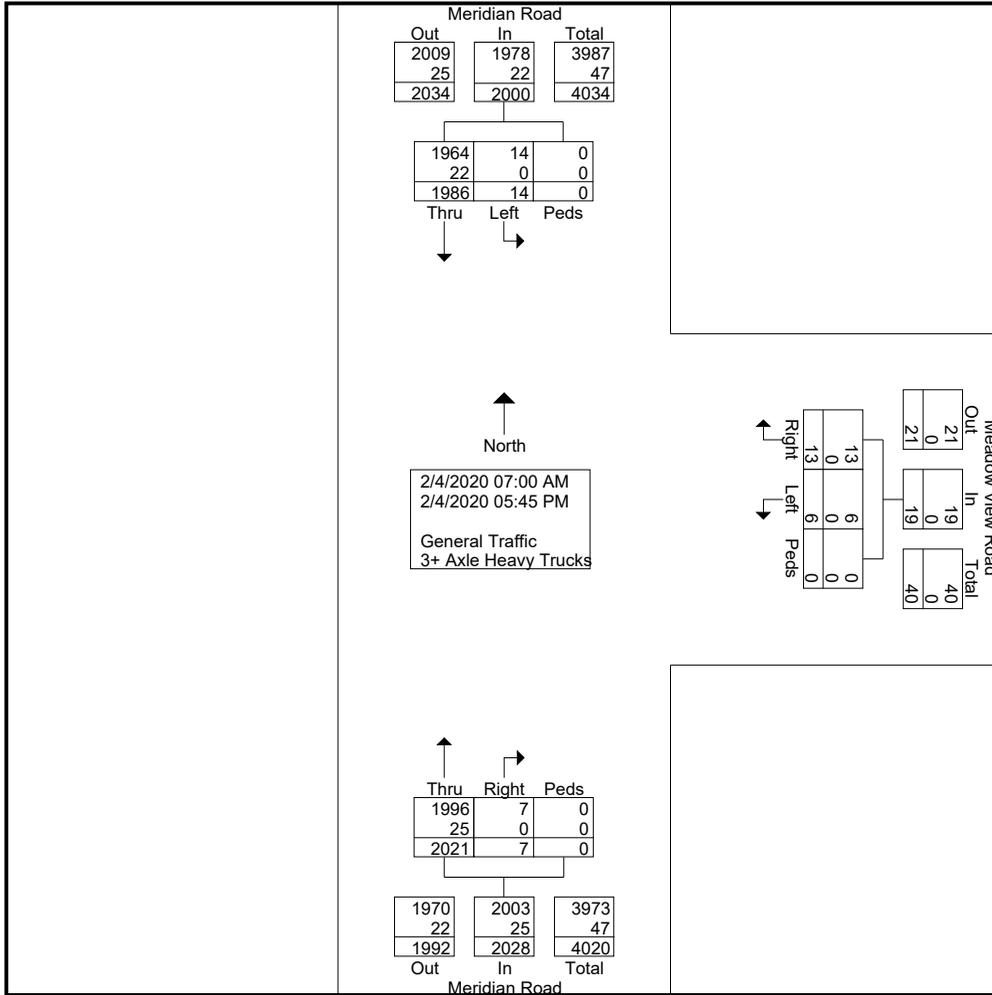
04:00 PM	171	0	0	171	0	0	0	0	0	107	0	107	278
04:15 PM	197	2	0	199	1	1	0	2	1	107	0	108	309
04:30 PM	211	1	0	212	0	2	0	2	2	116	0	118	332
04:45 PM	190	2	0	192	1	1	0	2	1	106	0	107	301
Total	769	5	0	774	2	4	0	6	4	436	0	440	1220
05:00 PM	184	2	0	186	1	0	0	1	0	127	0	127	314
05:15 PM	207	2	0	209	1	0	0	1	0	122	0	122	332
05:30 PM	179	0	0	179	1	0	0	1	0	124	0	124	304
05:45 PM	202	3	0	205	1	0	0	1	0	122	0	122	328
Total	772	7	0	779	4	0	0	4	0	495	0	495	1278
Grand Total	1986	14	0	2000	13	6	0	19	7	2021	0	2028	4047
Apprch %	99.3	0.7	0		68.4	31.6	0		0.3	99.7	0		
Total %	49.1	0.3	0	49.4	0.3	0.1	0	0.5	0.2	49.9	0	50.1	
General Traffic	1964	14	0	1978	13	6	0	19	7	1996	0	2003	4000
% General Traffic	98.9	100	0	98.9	100	100	0	100	100	98.8	0	98.8	98.8
3+ Axle Heavy Trucks	22	0	0	22	0	0	0	0	0	25	0	25	47
% 3+ Axle Heavy Trucks	1.1	0	0	1.1	0	0	0	0	0	1.2	0	1.2	1.2

L2 Data Collection

L2DataCollection.com
 (208) 860-7554 Utah (801) 413-2993

Study: CR0058
 Intersection: Meridian / Meadow View Rd
 City, State: Kuna, Idaho
 Control: Stop Sign

File Name : Meridian Rd & Meadow View Rd
 Site Code : 00000000
 Start Date : 2/4/2020
 Page No : 2



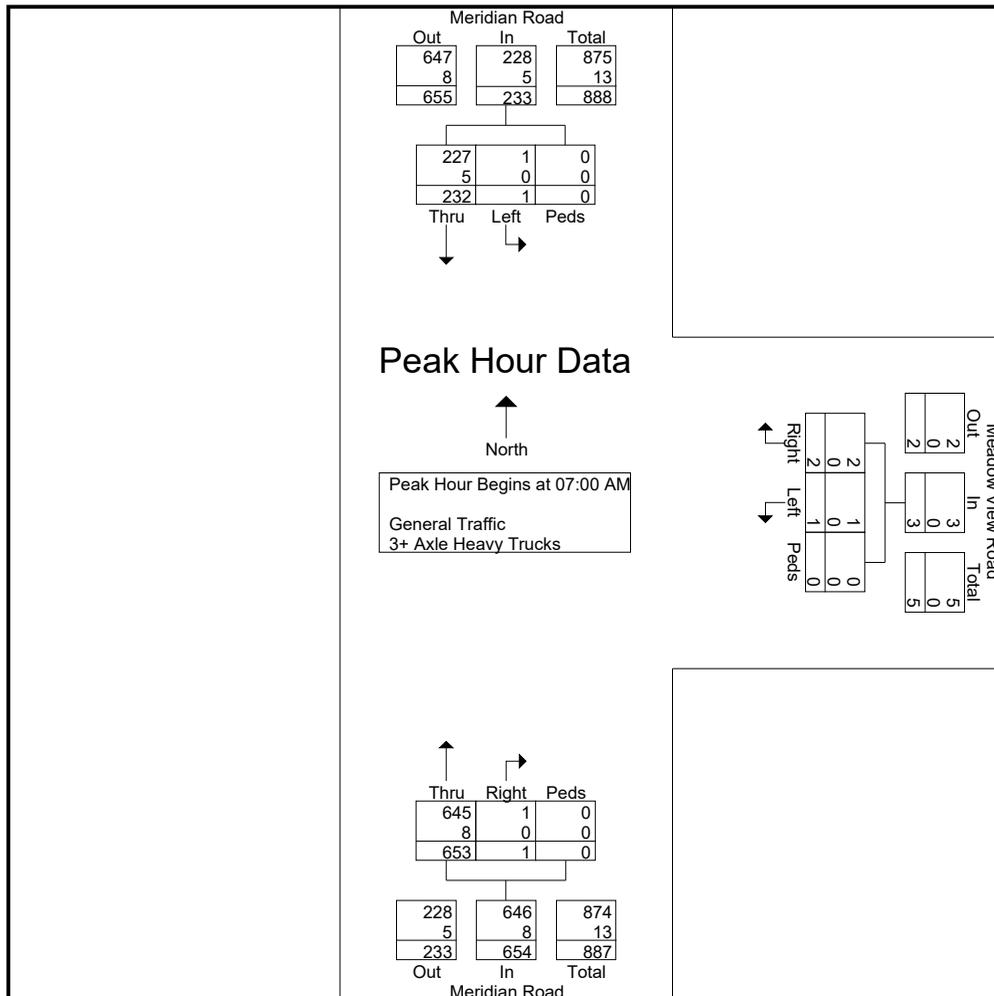
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 3

Start Time	Meridian Road From North				Meadow View Road From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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	34	0	0	34	0	1	0	1	1	159	0	160	195
07:15 AM	62	0	0	62	1	0	0	1	0	180	0	180	243
07:30 AM	64	1	0	65	1	0	0	1	0	195	0	195	261
07:45 AM	72	0	0	72	0	0	0	0	0	119	0	119	191
Total Volume	232	1	0	233	2	1	0	3	1	653	0	654	890
% App. Total	99.6	0.4	0		66.7	33.3	0		0.2	99.8	0		
PHF	.806	.250	.000	.809	.500	.250	.000	.750	.250	.837	.000	.838	.852
General Traffic	227	1	0	228	2	1	0	3	1	645	0	646	877
% General Traffic	97.8	100	0	97.9	100	100	0	100	100	98.8	0	98.8	98.5
3+ Axle Heavy Trucks	5	0	0	5	0	0	0	0	0	8	0	8	13
% 3+ Axle Heavy Trucks	2.2	0	0	2.1	0	0	0	0	0	1.2	0	1.2	1.5



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

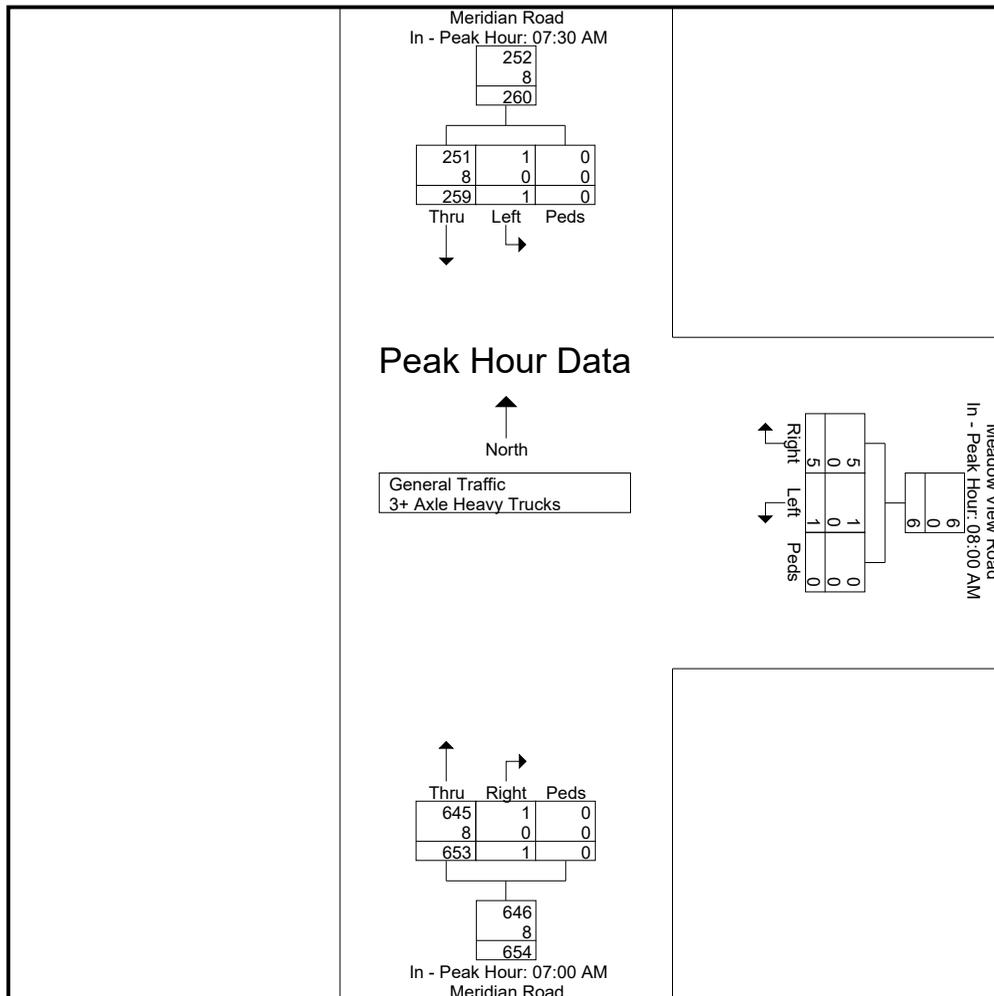
File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 4

Start Time	Meridian Road From North				Meadow View Road From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:00 AM			
+0 mins.	64	1	0	65	1	1	0	2	1	159	0	160
+15 mins.	72	0	0	72	1	0	0	1	0	180	0	180
+30 mins.	55	0	0	55	2	0	0	2	0	195	0	195
+45 mins.	68	0	0	68	1	0	0	1	0	119	0	119
Total Volume	259	1	0	260	5	1	0	6	1	653	0	654
% App. Total	99.6	0.4	0		83.3	16.7	0		0.2	99.8	0	
PHF	.899	.250	.000	.903	.625	.250	.000	.750	.250	.837	.000	.838
General Traffic	251	1	0	252	5	1	0	6	1	645	0	646
% General Traffic	96.9	100	0	96.9	100	100	0	100	100	98.8	0	98.8
3+ Axle Heavy Trucks	8	0	0	8	0	0	0	0	0	8	0	8
% 3+ Axle Heavy Trucks	3.1	0	0	3.1	0	0	0	0	0	1.2	0	1.2



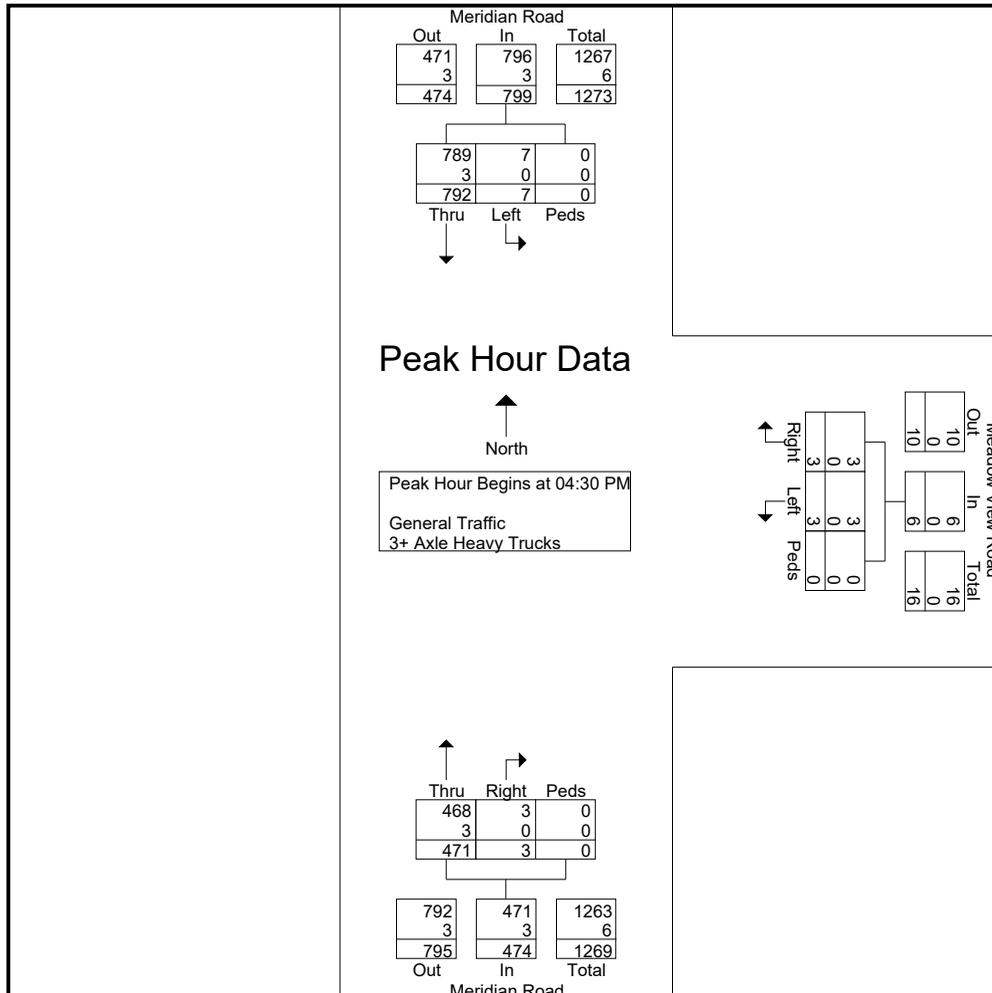
L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 5

Start Time	Meridian Road From North				Meadow View Road From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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	211	1	0	212	0	2	0	2	2	116	0	118	332
04:45 PM	190	2	0	192	1	1	0	2	1	106	0	107	301
05:00 PM	184	2	0	186	1	0	0	1	0	127	0	127	314
05:15 PM	207	2	0	209	1	0	0	1	0	122	0	122	332
Total Volume	792	7	0	799	3	3	0	6	3	471	0	474	1279
% App. Total	99.1	0.9	0		50	50	0		0.6	99.4	0		
PHF	.938	.875	.000	.942	.750	.375	.000	.750	.375	.927	.000	.933	.963
General Traffic	789	7	0	796	3	3	0	6	3	468	0	471	1273
% General Traffic	99.6	100	0	99.6	100	100	0	100	100	99.4	0	99.4	99.5
3+ Axle Heavy Trucks	3	0	0	3	0	0	0	0	0	3	0	3	6
% 3+ Axle Heavy Trucks	0.4	0	0	0.4	0	0	0	0	0	0.6	0	0.6	0.5



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

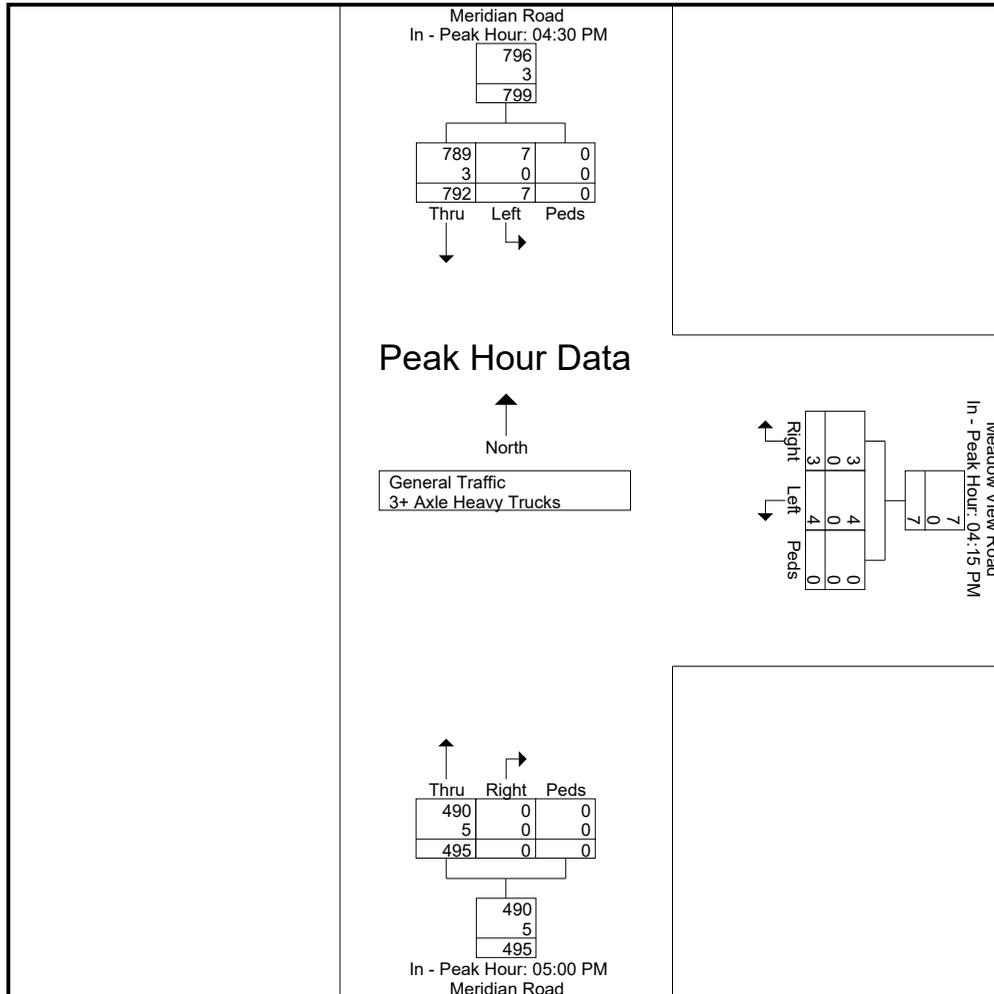
File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 6

Start Time	Meridian Road From North				Meadow View Road From East				Meridian Road From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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				04:15 PM				05:00 PM			
+0 mins.	211	1	0	212	1	1	0	2	0	127	0	127
+15 mins.	190	2	0	192	0	2	0	2	0	122	0	122
+30 mins.	184	2	0	186	1	1	0	2	0	124	0	124
+45 mins.	207	2	0	209	1	0	0	1	0	122	0	122
Total Volume	792	7	0	799	3	4	0	7	0	495	0	495
% App. Total	99.1	0.9	0		42.9	57.1	0		0	100	0	
PHF	.938	.875	.000	.942	.750	.500	.000	.875	.000	.974	.000	.974
General Traffic	789	7	0	796	3	4	0	7	0	490	0	490
% General Traffic	99.6	100	0	99.6	100	100	0	100	0	99	0	99
3+ Axle Heavy Trucks	3	0	0	3	0	0	0	0	0	5	0	5
% 3+ Axle Heavy Trucks	0.4	0	0	0.4	0	0	0	0	0	1	0	1



L2 Data Collection

L2DataCollection.com
(208) 860-7554 Utah (801) 413-2993

Study: CR0058
Intersection: Meridian / Meadow View Rd
City, State: Kuna, Idaho
Control: Stop Sign

File Name : Meridian Rd & Meadow View Rd
Site Code : 00000000
Start Date : 2/4/2020
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Antelope Flat S of Deer Flat Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Antelope Flat Rd south of Deer Flat Rd

Kuna, Idaho

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	3	5	0	2	0	0	0	0	0	0	0	0	0	10
08:00	0	3	3	1	3	0	0	0	0	0	0	0	0	0	10
09:00	0	4	3	0	1	0	0	0	0	0	0	0	0	0	8
10:00	0	6	3	1	2	0	0	0	0	0	0	0	0	0	12
11:00	0	3	1	0	4	0	0	1	0	0	0	0	0	0	9
12 PM	0	16	7	0	4	1	0	1	0	0	0	0	0	0	29
13:00	2	8	4	1	5	1	0	0	0	0	0	0	0	1	22
14:00	0	7	2	0	4	0	0	0	0	0	0	0	0	0	13
15:00	0	7	2	0	1	0	0	0	0	0	0	0	0	0	10
16:00	0	10	4	1	3	0	0	0	0	0	0	0	0	1	19
17:00	0	23	8	0	0	0	0	0	0	0	0	0	0	0	31
18:00	0	11	2	0	0	0	0	0	0	0	0	0	0	0	13
19:00	0	10	2	0	1	0	0	0	0	0	0	0	0	0	13
20:00	0	6	3	0	2	0	0	0	0	0	0	0	0	0	11
21:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	127	52	4	32	2	0	2	0	0	0	0	0	2	223
Percent	0.9%	57.0%	23.3%	1.8%	14.3%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	
AM Peak		10:00	07:00	08:00	11:00			11:00							
Vol.		6	5	1	4			1							
PM Peak	13:00	17:00	17:00	13:00	13:00	12:00		12:00						13:00	
Vol.	2	23	8	1	5	1		1						1	
Grand Total	2	127	52	4	32	2	0	2	0	0	0	0	0	2	223
Percent	0.9%	57.0%	23.3%	1.8%	14.3%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Antelope Flat S of Deer Flat Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Antelope Flat Rd south of Deer Flat Rd

Kuna, Idaho

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	7	4	0	2	0	0	0	0	0	0	0	0	0	13
07:00	0	20	5	0	0	0	0	0	0	0	0	0	0	0	25
08:00	0	13	3	0	2	0	0	0	0	0	0	0	0	0	18
09:00	0	6	2	0	1	0	0	0	0	0	0	0	0	0	9
10:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
11:00	0	12	2	0	1	0	0	0	0	0	0	0	0	0	15
12 PM	0	13	3	1	1	0	0	0	0	0	0	0	0	0	18
13:00	1	11	8	0	4	0	0	0	0	0	0	0	0	0	24
14:00	0	11	3	0	1	0	1	1	0	0	0	0	0	0	17
15:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
16:00	0	7	1	0	2	0	0	0	0	0	0	0	0	0	10
17:00	0	19	4	0	1	0	0	0	0	0	0	0	0	0	24
18:00	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
19:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
20:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	163	44	1	15	0	1	1	0	0	0	0	0	0	226
Percent	0.4%	72.1%	19.5%	0.4%	6.6%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00		06:00										
Vol.		20	5		2										
PM Peak	13:00	17:00	13:00	12:00	13:00		14:00	14:00							
Vol.	1	19	8	1	4		1	1							
Grand Total	1	163	44	1	15	0	1	1	0	0	0	0	0	0	226
Percent	0.4%	72.1%	19.5%	0.4%	6.6%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Antelope Flat S of Deer Flat Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Antelope Flat Rd south of Deer Flat Rd

Kuna, Idaho

Southbound, Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	7	5	0	2	0	0	0	0	0	0	0	0	0	14
07:00	0	23	10	0	2	0	0	0	0	0	0	0	0	0	35
08:00	0	16	6	1	5	0	0	0	0	0	0	0	0	0	28
09:00	0	10	5	0	2	0	0	0	0	0	0	0	0	0	17
10:00	0	10	5	1	2	0	0	0	0	0	0	0	0	0	18
11:00	0	15	3	0	5	0	0	1	0	0	0	0	0	0	24
12 PM	0	29	10	1	5	1	0	1	0	0	0	0	0	0	47
13:00	3	19	12	1	9	1	0	0	0	0	0	0	0	1	46
14:00	0	18	5	0	5	0	1	1	0	0	0	0	0	0	30
15:00	0	16	4	0	1	0	0	0	0	0	0	0	0	0	21
16:00	0	17	5	1	5	0	0	0	0	0	0	0	0	1	29
17:00	0	42	12	0	1	0	0	0	0	0	0	0	0	0	55
18:00	0	22	3	0	0	0	0	0	0	0	0	0	0	0	25
19:00	0	13	3	0	1	0	0	0	0	0	0	0	0	0	17
20:00	0	12	4	0	2	0	0	0	0	0	0	0	0	0	18
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	290	96	5	47	2	1	3	0	0	0	0	0	2	449
Percent	0.7%	64.6%	21.4%	1.1%	10.5%	0.4%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	
AM Peak		07:00	07:00	08:00	08:00			11:00							
Vol.		23	10	1	5			1							
PM Peak	13:00	17:00	13:00	12:00	13:00	12:00	14:00	12:00						13:00	
Vol.	3	42	12	1	9	1	1	1						1	
Grand Total	3	290	96	5	47	2	1	3	0	0	0	0	0	2	449
Percent	0.7%	64.6%	21.4%	1.1%	10.5%	0.4%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Antelope Flat S of Deer Flat Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Antelope Flat Rd south of Deer Flat Rd
 Kuna, Idaho

Start Time	04-Feb-20 Tue	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		0	0							0
01:15		0	0							0
01:30		0	0							0
01:45		0	0							0
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		0	1							1
04:30		0	1							1
04:45		0	2							2
05:00		0	1							1
05:15		0	0							0
05:30		0	1							1
05:45		2	1							3
06:00		1	2							3
06:15		0	3							3
06:30		0	4							4
06:45		0	4							4
07:00		1	11							12
07:15		2	5							7
07:30		6	5							11
07:45		1	4							5
08:00		3	3							6
08:15		2	2							4
08:30		2	6							8
08:45		3	7							10
09:00		3	1							4
09:15		1	3							4
09:30		1	4							5
09:45		3	1							4
10:00		2	1							3
10:15		5	3							8
10:30		2	1							3
10:45		3	1							4
11:00		4	3							7
11:15		1	2							3
11:30		3	7							10
11:45		1	3							4
Total		55	93							148
Percent		37.2%	62.8%							
Peak	-	10:15	06:45	-	-	-	-	-	-	07:00
Vol.	-	14	25	-	-	-	-	-	-	35
P.H.F.		0.583	0.568							0.729

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Antelope Flat S of Deer Flat Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Antelope Flat Rd south of Deer Flat Rd
 Kuna, Idaho

Start Time	04-Feb-20 Tue	SB	NB							Total
12:00 PM		5	2							7
12:15		6	6							12
12:30		9	4							13
12:45		9	6							15
01:00		3	5							8
01:15		9	7							16
01:30		8	7							15
01:45		2	5							7
02:00		3	2							5
02:15		4	4							8
02:30		1	5							6
02:45		5	6							11
03:00		1	2							3
03:15		1	2							3
03:30		2	5							7
03:45		6	2							8
04:00		6	1							7
04:15		7	3							10
04:30		2	1							3
04:45		4	5							9
05:00		5	4							9
05:15		9	8							17
05:30		10	5							15
05:45		7	7							14
06:00		5	2							7
06:15		3	3							6
06:30		3	2							5
06:45		2	5							7
07:00		4	0							4
07:15		5	1							6
07:30		2	1							3
07:45		2	2							4
08:00		3	1							4
08:15		2	1							3
08:30		1	4							5
08:45		5	1							6
09:00		2	0							2
09:15		0	0							0
09:30		4	3							7
09:45		0	0							0
10:00		0	2							2
10:15		0	0							0
10:30		0	0							0
10:45		1	0							1
11:00		0	1							1
11:15		0	0							0
11:30		0	0							0
11:45		0	0							0
Total		168	133							301
Percent		55.8%	44.2%							
Peak	-	17:00	12:45	-	-	-	-	-	-	17:00
Vol.	-	31	25	-	-	-	-	-	-	55
P.H.F.		0.775	0.893							0.809
Grand Total		223	226							449
Percent		49.7%	50.3%							

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Profile Drive E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Profile Drive east of Meridian Road

Kuna, Idaho

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	4	0	0	2	0	0	0	0	0	0	0	0	0	6
07:00	1	3	2	0	2	0	0	0	0	0	0	0	0	0	8
08:00	1	3	3	1	5	0	0	0	1	0	0	0	0	0	14
09:00	2	3	2	2	2	0	0	0	2	0	0	0	0	0	13
10:00	0	5	8	1	5	0	0	0	2	0	0	0	0	0	21
11:00	0	31	8	0	5	0	0	0	2	0	0	0	0	1	47
12 PM	1	41	29	1	8	0	0	1	1	0	0	0	0	4	86
13:00	2	36	13	1	11	3	0	2	1	0	0	0	0	0	69
14:00	0	21	8	1	7	2	0	0	1	0	0	0	2	2	44
15:00	0	29	8	0	3	0	0	0	0	0	0	0	0	0	40
16:00	0	34	18	1	12	0	0	0	0	0	0	0	0	0	65
17:00	1	36	23	0	1	0	0	0	0	0	0	0	0	0	61
18:00	0	59	17	0	7	0	0	0	0	0	0	0	0	2	85
19:00	0	36	19	0	5	1	0	0	0	0	0	0	0	0	61
20:00	0	23	7	0	4	0	0	1	0	0	0	0	0	0	35
21:00	0	12	4	0	0	0	0	0	0	0	0	0	0	0	16
22:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
Total	8	386	172	8	79	6	0	4	10	0	0	0	2	9	684
Percent	1.2%	56.4%	25.1%	1.2%	11.5%	0.9%	0.0%	0.6%	1.5%	0.0%	0.0%	0.0%	0.3%	1.3%	
AM Peak	09:00	11:00	10:00	09:00	08:00				09:00					11:00	
Vol.	2	31	8	2	5				2					1	
PM Peak	13:00	18:00	12:00	12:00	16:00	13:00		13:00	12:00				14:00	12:00	
Vol.	2	59	29	1	12	3		2	1				2	4	
Grand Total	8	386	172	8	79	6	0	4	10	0	0	0	2	9	684
Percent	1.2%	56.4%	25.1%	1.2%	11.5%	0.9%	0.0%	0.6%	1.5%	0.0%	0.0%	0.0%	0.3%	1.3%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Profile Drive E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Profile Drive east of Meridian Road

Kuna, Idaho

Eastbound															
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	6	2	0	3	0	0	0	0	0	0	0	0	0	11
07:00	0	4	7	1	2	0	0	0	1	0	0	0	0	0	15
08:00	1	2	5	2	2	1	0	1	0	0	0	0	0	0	14
09:00	1	5	3	0	3	0	1	0	1	0	0	0	0	3	17
10:00	1	14	7	0	0	0	0	0	1	0	0	0	0	0	23
11:00	1	38	14	0	4	1	0	0	1	0	0	0	0	0	59
12 PM	0	36	23	1	11	1	0	0	3	0	0	0	0	0	75
13:00	1	35	18	0	5	0	0	2	1	0	0	0	0	1	63
14:00	2	23	19	3	4	1	1	0	1	0	0	0	0	1	55
15:00	0	32	10	0	5	0	0	1	0	0	0	0	0	0	48
16:00	0	29	12	0	4	0	0	0	0	0	0	0	0	0	45
17:00	1	56	25	1	5	0	0	0	0	0	0	0	0	3	91
18:00	0	52	17	0	4	1	0	0	0	0	0	0	0	0	74
19:00	0	27	11	0	6	0	0	1	0	0	0	0	0	1	46
20:00	0	21	6	0	2	0	0	0	0	0	0	0	0	0	29
21:00	0	11	2	0	0	0	0	0	0	0	0	0	0	1	14
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	8	396	181	8	60	5	2	5	9	0	0	0	0	10	684
Percent	1.2%	57.9%	26.5%	1.2%	8.8%	0.7%	0.3%	0.7%	1.3%	0.0%	0.0%	0.0%	0.0%	1.5%	
AM Peak	08:00	11:00	11:00	08:00	11:00	08:00	09:00	08:00	07:00					09:00	
Vol.	1	38	14	2	4	1	1	1	1					3	
PM Peak	14:00	17:00	17:00	14:00	12:00	12:00	14:00	13:00	12:00					17:00	
Vol.	2	56	25	3	11	1	1	2	3					3	
Grand Total	8	396	181	8	60	5	2	5	9	0	0	0	0	10	684
Percent	1.2%	57.9%	26.5%	1.2%	8.8%	0.7%	0.3%	0.7%	1.3%	0.0%	0.0%	0.0%	0.0%	1.5%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Profile Drive E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Profile Drive east of Meridian Road

Kuna, Idaho

Westbound, Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	10	2	0	5	0	0	0	0	0	0	0	0	0	17
07:00	1	7	9	1	4	0	0	0	1	0	0	0	0	0	23
08:00	2	5	8	3	7	1	0	1	1	0	0	0	0	0	28
09:00	3	8	5	2	5	0	1	0	3	0	0	0	0	3	30
10:00	1	19	15	1	5	0	0	0	3	0	0	0	0	0	44
11:00	1	69	22	0	9	1	0	0	3	0	0	0	0	1	106
12 PM	1	77	52	2	19	1	0	1	4	0	0	0	0	4	161
13:00	3	71	31	1	16	3	0	4	2	0	0	0	0	1	132
14:00	2	44	27	4	11	3	1	0	2	0	0	0	2	3	99
15:00	0	61	18	0	8	0	0	1	0	0	0	0	0	0	88
16:00	0	63	30	1	16	0	0	0	0	0	0	0	0	0	110
17:00	2	92	48	1	6	0	0	0	0	0	0	0	0	3	152
18:00	0	111	34	0	11	1	0	0	0	0	0	0	0	2	159
19:00	0	63	30	0	11	1	0	1	0	0	0	0	0	1	107
20:00	0	44	13	0	6	0	0	1	0	0	0	0	0	0	64
21:00	0	23	6	0	0	0	0	0	0	0	0	0	0	1	30
22:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
Total	16	782	353	16	139	11	2	9	19	0	0	0	2	19	1368
Percent	1.2%	57.2%	25.8%	1.2%	10.2%	0.8%	0.1%	0.7%	1.4%	0.0%	0.0%	0.0%	0.1%	1.4%	
AM Peak	09:00	11:00	11:00	08:00	11:00	08:00	09:00	08:00	09:00					09:00	
Vol.	3	69	22	3	9	1	1	1	3					3	
PM Peak	13:00	18:00	12:00	14:00	12:00	13:00	14:00	13:00	12:00				14:00	12:00	
Vol.	3	111	52	4	19	3	1	4	4				2	4	
Grand Total	16	782	353	16	139	11	2	9	19	0	0	0	2	19	1368
Percent	1.2%	57.2%	25.8%	1.2%	10.2%	0.8%	0.1%	0.7%	1.4%	0.0%	0.0%	0.0%	0.1%	1.4%	

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Profile Drive E of Meridian Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Profile Drive east of Meridian Road
 Kuna, Idaho

Start Time	04-Feb-20 Tue	WB	EB							Total
12:00 AM		3	0							3
12:15		0	0							0
12:30		0	0							0
12:45		0	0							0
01:00		0	0							0
01:15		0	0							0
01:30		0	0							0
01:45		0	0							0
02:00		0	0							0
02:15		0	0							0
02:30		0	0							0
02:45		0	0							0
03:00		0	0							0
03:15		0	0							0
03:30		0	0							0
03:45		0	0							0
04:00		0	0							0
04:15		0	0							0
04:30		0	0							0
04:45		0	0							0
05:00		0	0							0
05:15		1	0							1
05:30		0	0							0
05:45		0	0							0
06:00		0	1							1
06:15		0	0							0
06:30		1	5							6
06:45		5	5							10
07:00		2	2							4
07:15		1	3							4
07:30		3	5							8
07:45		2	5							7
08:00		3	2							5
08:15		3	4							7
08:30		4	5							9
08:45		4	3							7
09:00		3	6							9
09:15		7	6							13
09:30		0	2							2
09:45		3	3							6
10:00		2	5							7
10:15		6	4							10
10:30		6	4							10
10:45		7	10							17
11:00		7	27							34
11:15		17	13							30
11:30		13	5							18
11:45		10	14							24
Total		113	139							252
Percent		44.8%	55.2%							
Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	47	59	-	-	-	-	-	-	106
P.H.F.		0.691	0.546							0.779

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Profile Drive E of Meridian Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Profile Drive east of Meridian Road
 Kuna, Idaho

Start Time	04-Feb-20 Tue	WB	EB							Total
12:00 PM		19	23							42
12:15		24	20							44
12:30		21	18							39
12:45		22	14							36
01:00		14	17							31
01:15		24	22							46
01:30		18	9							27
01:45		13	15							28
02:00		15	11							26
02:15		6	26							32
02:30		15	6							21
02:45		8	12							20
03:00		13	17							30
03:15		11	8							19
03:30		7	8							15
03:45		9	15							24
04:00		12	14							26
04:15		16	9							25
04:30		23	9							32
04:45		14	13							27
05:00		8	19							27
05:15		11	17							28
05:30		18	29							47
05:45		24	26							50
06:00		19	17							36
06:15		19	23							42
06:30		24	15							39
06:45		23	19							42
07:00		20	15							35
07:15		19	14							33
07:30		14	6							20
07:45		8	11							19
08:00		10	8							18
08:15		6	9							15
08:30		9	9							18
08:45		10	3							13
09:00		5	9							14
09:15		9	2							11
09:30		1	2							3
09:45		1	1							2
10:00		2	0							2
10:15		0	0							0
10:30		1	0							1
10:45		1	3							4
11:00		0	0							0
11:15		3	1							4
11:30		2	1							3
11:45		0	0							0
Total		571	545							1116
Percent		51.2%	48.8%							
Peak	-	12:00	17:30	-	-	-	-	-	-	17:30
Vol.	-	86	95	-	-	-	-	-	-	175
P.H.F.		0.896	0.819							0.875
Grand Total		684	684							1368
Percent		50.0%	50.0%							

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Meadow View Rd E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Meadow View Rd east of Meridian Rd

Kuna, Idaho

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
07:00	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
08:00	0	2	1	0	2	0	0	0	0	0	0	0	0	0	5
09:00	0	4	0	0	2	0	0	0	0	0	0	0	0	0	6
10:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
11:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
12 PM	0	6	9	1	5	1	0	0	0	0	0	0	0	0	22
13:00	0	17	1	0	6	0	0	1	0	0	0	0	0	0	25
14:00	0	19	6	1	5	0	0	0	0	0	0	0	0	0	31
15:00	0	4	1	0	1	0	0	0	0	0	0	0	0	1	7
16:00	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
17:00	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	67	24	2	25	1	0	1	0	0	0	0	0	1	121
Percent	0.0%	55.4%	19.8%	1.7%	20.7%	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	
AM Peak		09:00	10:00		08:00										
Vol.		4	2		2										
PM Peak		14:00	12:00	12:00	13:00	12:00		13:00						15:00	
Vol.		19	9	1	6	1		1						1	
Grand Total	0	67	24	2	25	1	0	1	0	0	0	0	0	1	121
Percent	0.0%	55.4%	19.8%	1.7%	20.7%	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Meadow View Rd E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Meadow View Rd east of Meridian Rd

Kuna, Idaho

Eastbound															
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
07:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
08:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
09:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
10:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
12 PM	0	5	1	0	1	0	0	0	0	0	0	0	0	0	7
13:00	0	10	3	0	6	0	0	0	0	0	0	0	0	0	19
14:00	0	5	1	0	3	0	0	0	0	0	0	0	0	0	9
15:00	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
16:00	0	5	2	0	2	0	0	0	0	0	0	0	0	0	9
17:00	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
18:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
19:00	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	44	13	1	21	0	0	0	0	0	0	0	0	0	79
Percent	0.0%	55.7%	16.5%	1.3%	26.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	11:00	08:00	08:00										
Vol.		2	2	1	2										
PM Peak		13:00	13:00		13:00										
Vol.		10	3		6										
Grand Total	0	44	13	1	21	0	0	0	0	0	0	0	0	0	79
Percent	0.0%	55.7%	16.5%	1.3%	26.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: CR0058

Type: Volume / Direction / Class

Tech: Judd / Klaren

Count: Vehicle Classification

Meadow View Rd E of Meridian Rd CLASS

Date Start: 04-Feb-20

Date End: 04-Feb-20

Meadow View Rd east of Meridian Rd

Kuna, Idaho

Westbound, Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
02/04/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	2	2	0	1	0	0	0	0	0	0	0	0	0	5
07:00	0	3	0	0	2	0	0	0	0	0	0	0	0	0	5
08:00	0	2	1	1	4	0	0	0	0	0	0	0	0	0	8
09:00	0	4	1	0	3	0	0	0	0	0	0	0	0	0	8
10:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
11:00	0	2	3	0	1	0	0	0	0	0	0	0	0	0	6
12 PM	0	11	10	1	6	1	0	0	0	0	0	0	0	0	29
13:00	0	27	4	0	12	0	0	1	0	0	0	0	0	0	44
14:00	0	24	7	1	8	0	0	0	0	0	0	0	0	0	40
15:00	0	8	1	0	2	0	0	0	0	0	0	0	0	1	12
16:00	0	9	3	0	3	0	0	0	0	0	0	0	0	0	15
17:00	0	6	0	0	2	0	0	0	0	0	0	0	0	0	8
18:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
20:00	0	3	0	0	1	0	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	111	37	3	46	1	0	1	0	0	0	0	0	1	200
Percent	0.0%	55.5%	18.5%	1.5%	23.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	
AM Peak		09:00	11:00	08:00	08:00										
Vol.		4	3	1	4										
PM Peak		13:00	12:00	12:00	13:00	12:00		13:00						15:00	
Vol.		27	10	1	12	1		1						1	
Grand Total	0	111	37	3	46	1	0	1	0	0	0	0	0	1	200
Percent	0.0%	55.5%	18.5%	1.5%	23.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Meadow View Rd E of Meridian Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Meadow View Rd east of Meridian Rd
 Kuna, Idaho

Start Time	04-Feb-20 Tue	WB	EB							Total	
12:00 AM		0	0							0	
12:15		0	0							0	
12:30		0	0							0	
12:45		0	0							0	
01:00		0	0							0	
01:15		0	1							1	
01:30		0	0							0	
01:45		0	0							0	
02:00		0	0							0	
02:15		0	0							0	
02:30		0	0							0	
02:45		0	0							0	
03:00		0	0							0	
03:15		0	0							0	
03:30		0	0							0	
03:45		0	0							0	
04:00		0	0							0	
04:15		0	0							0	
04:30		0	0							0	
04:45		0	0							0	
05:00		0	0							0	
05:15		1	0							1	
05:30		0	0							0	
05:45		0	0							0	
06:00		1	0							1	
06:15		1	1							2	
06:30		0	0							0	
06:45		0	2							2	
07:00		1	1							2	
07:15		1	0							1	
07:30		1	1							2	
07:45		0	0							0	
08:00		1	1							2	
08:15		1	1							2	
08:30		2	1							3	
08:45		1	0							1	
09:00		3	1							4	
09:15		0	0							0	
09:30		2	0							2	
09:45		1	1							2	
10:00		1	1							2	
10:15		1	1							2	
10:30		1	0							1	
10:45		0	0							0	
11:00		0	1							1	
11:15		0	1							1	
11:30		0	2							2	
11:45		2	0							2	
Total		22	17							39	
Percent		56.4%	43.6%								
Peak	-	08:15	06:15	-	-	-	-	-	-	-	08:15
Vol.	-	7	4	-	-	-	-	-	-	-	10
P.H.F.		0.583	0.500							0.625	

L2 Data Collection

Study: CR0058
 Type: Volume / Direction
 Tech: Judd / Klaren
 Count: Vehicle Volume

L2DataCollection.com
 Idaho (208) 860-7554 Utah (801) 413-2993

Meadow View Rd E of Meridian Rd VOL
 Date Start: 04-Feb-20
 Date End: 04-Feb-20
 Meadow View Rd east of Meridian Rd
 Kuna, Idaho

Start Time	04-Feb-20 Tue	WB	EB							Total
12:00 PM		1	1							2
12:15		4	0							4
12:30		8	3							11
12:45		9	3							12
01:00		7	4							11
01:15		8	5							13
01:30		6	8							14
01:45		4	2							6
02:00		6	3							9
02:15		5	2							7
02:30		11	1							12
02:45		9	3							12
03:00		0	2							2
03:15		3	2							5
03:30		3	1							4
03:45		1	0							1
04:00		0	0							0
04:15		2	3							5
04:30		2	3							5
04:45		2	3							5
05:00		1	2							3
05:15		1	1							2
05:30		1	0							1
05:45		0	2							2
06:00		0	0							0
06:15		1	1							2
06:30		0	0							0
06:45		0	1							1
07:00		0	1							1
07:15		0	0							0
07:30		1	1							2
07:45		1	2							3
08:00		1	2							3
08:15		0	0							0
08:30		1	0							1
08:45		0	0							0
09:00		0	0							0
09:15		0	0							0
09:30		0	0							0
09:45		0	0							0
10:00		0	0							0
10:15		0	0							0
10:30		0	0							0
10:45		0	0							0
11:00		0	0							0
11:15		0	0							0
11:30		0	0							0
11:45		0	0							0
Total		99	62							161
Percent		61.5%	38.5%							
Peak	-	12:30	12:45	-	-	-	-	-	-	12:45
Vol.	-	32	20	-	-	-	-	-	-	50
P.H.F.		0.889	0.625							0.893
Grand Total		121	79							200
Percent		60.5%	39.5%							

APPENDIX C: 2020 CAPACITY ANALYSIS REPORTS

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2020 Existing
AM Peak Hour

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	36	50	1	1	10	0	0	49	4	1	23	12
Future Vol, veh/h	36	50	1	1	10	0	0	49	4	1	23	12
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	53	1	1	11	0	0	52	4	1	24	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	54	0	0	162	143	54	171	143	11
Stage 1	-	-	-	-	-	-	130	130	-	13	13	-
Stage 2	-	-	-	-	-	-	32	13	-	158	130	-
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	1608	-	-	1551	-	-	803	748	1013	792	748	1070
Stage 1	-	-	-	-	-	-	874	789	-	1007	885	-
Stage 2	-	-	-	-	-	-	984	885	-	844	789	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1608	-	-	1551	-	-	758	729	1013	732	729	1070
Mov Cap-2 Maneuver	-	-	-	-	-	-	758	729	-	732	729	-
Stage 1	-	-	-	-	-	-	853	770	-	983	884	-
Stage 2	-	-	-	-	-	-	944	884	-	765	770	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3			0.7			10.2			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	745	1608	-	-	1551	-	-	816
HCM Lane V/C Ratio	0.076	0.024	-	-	0.001	-	-	0.047
HCM Control Delay (s)	10.2	7.3	0	-	7.3	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.1

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2020 Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	144	46	6	55	21	79	523	25	30	192	306
Future Volume (vph)	474	144	46	6	55	21	79	523	25	30	192	306
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
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	0.96		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	1691		1676	3330		1676	3353	1500
Flt Permitted	0.46	1.00		0.62	1.00		0.57	1.00		0.33	1.00	1.00
Satd. Flow (perm)	816	1701		1099	1691		997	3330		575	3353	1500
Peak-hour factor, PHF	0.88	0.88	0.88	0.64	0.64	0.64	0.82	0.82	0.82	0.79	0.79	0.79
Adj. Flow (vph)	539	164	52	9	86	33	96	638	30	38	243	387
RTOR Reduction (vph)	0	8	0	0	11	0	0	2	0	0	0	239
Lane Group Flow (vph)	539	208	0	9	108	0	96	666	0	38	243	148
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	57.3	49.6		21.2	20.0		65.6	57.1		58.8	53.7	53.7
Effective Green, g (s)	57.3	49.6		21.2	20.0		65.6	57.1		58.8	53.7	53.7
Actuated g/C Ratio	0.41	0.35		0.15	0.14		0.47	0.41		0.42	0.38	0.38
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	523	602		171	241		508	1358		281	1286	575
v/s Ratio Prot	c0.23	0.12		0.00	0.06		c0.01	c0.20		0.00	0.07	
v/s Ratio Perm	c0.20			0.01			0.08			0.05		0.10
v/c Ratio	1.03	0.35		0.05	0.45		0.19	0.49		0.14	0.19	0.26
Uniform Delay, d1	37.8	33.3		50.7	54.9		21.0	30.7		24.5	28.7	29.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.23	1.19	4.36
Incremental Delay, d2	47.4	0.4		0.0	1.5		0.1	1.3		0.1	0.3	1.1
Delay (s)	85.2	33.6		50.7	56.4		21.1	32.0		30.2	34.3	129.8
Level of Service	F	C		D	E		C	C		C	C	F
Approach Delay (s)		70.5			56.0			30.6			89.4	
Approach LOS		E			E			C			F	
Intersection Summary												
HCM 2000 Control Delay			62.0				HCM 2000 Level of Service				E	
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			140.0				Sum of lost time (s)			27.0		
Intersection Capacity Utilization			71.7%				ICU Level of Service			C		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2020 Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	144	46	6	55	21	79	523	25	30	192	306
Future Volume (veh/h)	474	144	46	6	55	21	79	523	25	30	192	306
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	539	164	52	9	86	33	96	638	30	38	243	387
Peak Hour Factor	0.88	0.88	0.88	0.64	0.64	0.64	0.82	0.82	0.82	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	370	325	103	171	107	41	491	1692	80	405	1694	756
Arrive On Green	0.17	0.25	0.25	0.01	0.09	0.09	0.04	0.52	0.52	0.03	0.50	0.50
Sat Flow, veh/h	1688	1289	409	1688	1220	468	1688	3274	154	1688	3367	1502
Grp Volume(v), veh/h	539	0	216	9	0	119	96	328	340	38	243	387
Grp Sat Flow(s),veh/h/ln	1688	0	1698	1688	0	1688	1688	1683	1744	1688	1683	1502
Q Serve(g_s), s	24.5	0.0	15.3	0.7	0.0	9.7	3.8	16.4	16.4	1.5	5.4	24.1
Cycle Q Clear(g_c), s	24.5	0.0	15.3	0.7	0.0	9.7	3.8	16.4	16.4	1.5	5.4	24.1
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	370	0	428	171	0	148	491	870	902	405	1694	756
V/C Ratio(X)	1.46	0.00	0.50	0.05	0.00	0.80	0.20	0.38	0.38	0.09	0.14	0.51
Avail Cap(c_a), veh/h	370	0	564	340	0	452	602	870	902	540	1694	756
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	48.8	0.0	44.9	57.2	0.0	62.7	15.5	20.3	20.3	16.6	18.6	23.3
Incr Delay (d2), s/veh	219.5	0.0	1.0	0.0	0.0	10.8	0.1	1.2	1.2	0.0	0.2	2.4
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	37.6	0.0	10.5	0.5	0.0	8.0	2.5	10.4	10.8	1.0	3.7	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	268.3	0.0	45.9	57.3	0.0	73.5	15.6	21.5	21.5	16.6	18.8	25.7
LnGrp LOS	F	A	D	E	A	E	B	C	C	B	B	C
Approach Vol, veh/h		755			128			764			668	
Approach Delay, s/veh		204.7			72.4			20.8			22.7	
Approach LOS		F			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	18.8	12.8	77.5	8.0	41.8	10.9	79.4				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	24.5	37.5	15.0	36.0	15.5	46.5	15.0	36.0				
Max Q Clear Time (g_c+I1), s	26.5	11.7	5.8	26.1	2.7	17.3	3.5	18.4				
Green Ext Time (p_c), s	0.0	0.6	0.1	3.6	0.0	1.2	0.0	6.1				
Intersection Summary												
HCM 6th Ctrl Delay			84.1									
HCM 6th LOS			F									

HCM 6th TWSC
3: Antelope View Avenue & Deer Flat Road

2020 Existing
AM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↖	↗
Traffic Vol, veh/h	183	9	1	66	15	9
Future Vol, veh/h	183	9	1	66	15	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	223	11	1	80	18	11

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	234	0	305	223
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	82	-
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	-	-	1359	-	752	902
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1359	-	751	902
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	751	902	-	-	1359	-
HCM Lane V/C Ratio	0.024	0.012	-	-	0.001	-
HCM Control Delay (s)	9.9	9	-	-	7.7	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2020 Existing
AM Peak Hour

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	25	102	3	0	60	2	3	17	1	1	3	13
Future Vol, veh/h	25	102	3	0	60	2	3	17	1	1	3	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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	3	2	2	2	2	2	33	15
Mvmt Flow	33	136	4	0	80	3	4	23	1	1	4	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	83	0	0	140	0	0	296	287	138	298	288	82
Stage 1	-	-	-	-	-	-	204	204	-	82	82	-
Stage 2	-	-	-	-	-	-	92	83	-	216	206	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.435
Pot Cap-1 Maneuver	1514	-	-	1443	-	-	656	623	910	654	573	943
Stage 1	-	-	-	-	-	-	798	733	-	926	770	-
Stage 2	-	-	-	-	-	-	915	826	-	786	677	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1514	-	-	1443	-	-	628	608	910	623	559	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	628	608	-	623	559	-
Stage 1	-	-	-	-	-	-	779	715	-	904	770	-
Stage 2	-	-	-	-	-	-	894	826	-	742	661	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			0			11.1			9.5		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	621	1514	-	-	1443	-	-	819
HCM Lane V/C Ratio	0.045	0.022	-	-	-	-	-	0.028
HCM Control Delay (s)	11.1	7.4	0	-	0	-	-	9.5
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

HCM 6th TWSC
5: Meridian Road & D&B Access

2020 Existing
AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↑	↑↑
Traffic Vol, veh/h	0	0	642	2	1	248
Future Vol, veh/h	0	0	642	2	1	248
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	-	-	200	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	755	2	1	292

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	903	378	0	0	757
Stage 1	755	-	-	-	-
Stage 2	148	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*336	620	-	-	850
Stage 1	*425	-	-	-	-
Stage 2	*937	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*336	620	-	-	850
Mov Cap-2 Maneuver	*402	-	-	-	-
Stage 1	*425	-	-	-	-
Stage 2	*936	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	850
HCM Lane V/C Ratio	-	-	-	0.001
HCM Control Delay (s)	-	-	0	9.2
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2020 Existing
AM Peak Hour

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↶		↵	↑↑	↶	↵	↑↑	↶
Traffic Vol, veh/h	26	1	17	0	1	7	35	610	2	12	215	23
Future Vol, veh/h	26	1	17	0	1	7	35	610	2	12	215	23
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	1	20	0	1	8	41	718	2	14	253	27

Major/Minor	Minor2		Minor1			Major1		Major2				
Conflicting Flow All	723	1083	127	955	1108	359	280	0	0	720	0	0
Stage 1	281	281	-	800	800	-	-	-	-	-	-	-
Stage 2	442	802	-	155	308	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	379	241	*1014	*251	232	638	1400	-	-	877	-	-
Stage 1	841	762	-	*345	395	-	-	-	-	-	-	-
Stage 2	564	395	-	*956	741	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	-	-	-	-	-	-
Mov Cap-1 Maneuver	360	230	*1014	*237	222	638	1400	-	-	877	-	-
Mov Cap-2 Maneuver	360	230	-	*237	222	-	-	-	-	-	-	-
Stage 1	817	750	-	*335	384	-	-	-	-	-	-	-
Stage 2	539	384	-	*921	729	-	-	-	-	-	-	-

Approach	EB		WB			NB		SB		
HCM Control Delay, s	13.6		12.1			0.4		0.4		
HCM LOS	B		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1400	-	-	471	-	517	877	-	-
HCM Lane V/C Ratio	0.029	-	-	0.11	-	0.018	0.016	-	-
HCM Control Delay (s)	7.6	-	-	13.6	0	12.1	9.2	-	-
HCM Lane LOS	A	-	-	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-	0.1	0	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2020 Existing
AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↓		Y	↑↑
Traffic Vol, veh/h	1	2	653	1	1	232
Future Vol, veh/h	1	2	653	1	1	232
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	-	-	-	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	2	768	1	1	273

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	908	385	0	0	769	0
Stage 1	769	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*318	613	-	-	841	-
Stage 1	*418	-	-	-	-	-
Stage 2	*957	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	*317	613	-	-	841	-
Mov Cap-2 Maneuver	*395	-	-	-	-	-
Stage 1	*418	-	-	-	-	-
Stage 2	*956	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	518	841
HCM Lane V/C Ratio	-	-	0.007	0.001
HCM Control Delay (s)	-	-	12	9.3
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2020 Existing
PM Peak Hour

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	11	3	12	38	2	8	28	1	3	94	42
Future Vol, veh/h	7	11	3	12	38	2	8	28	1	3	94	42
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	14	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	4	14	45	2	10	33	1	4	112	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	17	0	0	186	106	15	122	107	46
Stage 1	-	-	-	-	-	-	31	31	-	74	74	-
Stage 2	-	-	-	-	-	-	155	75	-	48	33	-
Critical Hdwy	4.24	-	-	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	2.326	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1487	-	-	1600	-	-	775	784	1065	853	783	1023
Stage 1	-	-	-	-	-	-	986	869	-	935	833	-
Stage 2	-	-	-	-	-	-	847	833	-	965	868	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1487	-	-	1600	-	-	649	773	1065	815	772	1023
Mov Cap-2 Maneuver	-	-	-	-	-	-	649	773	-	815	772	-
Stage 1	-	-	-	-	-	-	981	865	-	930	826	-
Stage 2	-	-	-	-	-	-	690	826	-	922	864	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.5			1.7			10.1			10.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	748	1487	-	-	1600	-	-	835
HCM Lane V/C Ratio	0.059	0.006	-	-	0.009	-	-	0.198
HCM Control Delay (s)	10.1	7.4	0	-	7.3	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.7

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2020 Existing
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	63	119	72	184	48	106	346	9	37	621	480
Future Volume (vph)	264	63	119	72	184	48	106	346	9	37	621	480
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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	1592		1676	1710		1676	3340		1676	3353	1500
Flt Permitted	0.23	1.00		0.62	1.00		0.30	1.00		0.53	1.00	1.00
Satd. Flow (perm)	413	1592		1096	1710		521	3340		927	3353	1500
Peak-hour factor, PHF	0.83	0.83	0.83	0.88	0.88	0.88	0.93	0.93	0.93	0.97	0.97	0.97
Adj. Flow (vph)	318	76	143	82	209	55	114	372	10	38	640	495
RTOR Reduction (vph)	0	43	0	0	7	0	0	1	0	0	0	294
Lane Group Flow (vph)	318	176	0	82	257	0	114	381	0	38	640	201
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	58.8	43.2		37.1	28.0		75.3	65.4		66.1	60.8	60.8
Effective Green, g (s)	58.8	43.2		37.1	28.0		75.3	65.4		66.1	60.8	60.8
Actuated g/C Ratio	0.39	0.29		0.25	0.19		0.50	0.44		0.44	0.41	0.41
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	366	458		306	319		337	1456		434	1359	608
v/s Ratio Prot	c0.14	0.11		0.02	0.15		c0.02	c0.11		0.00	c0.19	
v/s Ratio Perm	c0.20			0.05			0.15			0.04		0.13
v/c Ratio	0.87	0.38		0.27	0.81		0.34	0.26		0.09	0.47	0.33
Uniform Delay, d1	36.3	42.8		44.7	58.4		21.3	26.9		24.0	32.8	30.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.65	1.55	8.85
Incremental Delay, d2	18.5	0.6		0.2	14.1		0.2	0.4		0.0	1.0	1.2
Delay (s)	54.9	43.4		44.8	72.5		21.5	27.4		39.5	51.8	272.1
Level of Service	D	D		D	E		C	C		D	D	F
Approach Delay (s)		50.2			65.9			26.0			144.3	
Approach LOS		D			E			C			F	
Intersection Summary												
HCM 2000 Control Delay			90.9									F
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			150.0								27.0	
Intersection Capacity Utilization			75.6%									D
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: Meridian Road & Deer Flat Road

2020 Existing
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	63	119	72	184	48	106	346	9	37	621	480
Future Volume (veh/h)	264	63	119	72	184	48	106	346	9	37	621	480
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	318	76	143	82	209	55	114	372	10	38	640	495
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.93	0.93	0.93	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	123	232	251	233	61	315	1734	47	551	1676	748
Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.05	0.52	0.52	0.03	0.50	0.50
Sat Flow, veh/h	1688	550	1035	1688	1352	356	1688	3349	90	1688	3367	1502
Grp Volume(v), veh/h	318	0	219	82	0	264	114	187	195	38	640	495
Grp Sat Flow(s),veh/h/ln	1688	0	1586	1688	0	1708	1688	1683	1756	1688	1683	1502
Q Serve(g_s), s	15.5	0.0	18.6	5.9	0.0	22.7	5.0	9.0	9.1	1.6	17.7	37.0
Cycle Q Clear(g_c), s	15.5	0.0	18.6	5.9	0.0	22.7	5.0	9.0	9.1	1.6	17.7	37.0
Prop In Lane	1.00		0.65	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	246	0	355	251	0	294	315	872	909	551	1676	748
V/C Ratio(X)	1.29	0.00	0.62	0.33	0.00	0.90	0.36	0.21	0.21	0.07	0.38	0.66
Avail Cap(c_a), veh/h	246	0	396	338	0	427	405	872	909	675	1676	748
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	0.75	0.75	0.75
Uniform Delay (d), s/veh	49.6	0.0	52.4	47.9	0.0	60.8	18.1	19.6	19.6	17.5	23.3	28.2
Incr Delay (d2), s/veh	158.9	0.0	2.6	0.3	0.0	16.6	0.3	0.6	0.5	0.0	0.5	3.5
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	20.6	0.0	12.0	4.5	0.0	16.4	3.3	6.3	6.6	1.1	10.5	18.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	208.5	0.0	55.0	48.2	0.0	77.3	18.3	20.2	20.2	17.5	23.8	31.7
LnGrp LOS	F	A	D	D	A	E	B	C	C	B	C	C
Approach Vol, veh/h		537			346			496			1173	
Approach Delay, s/veh		145.9			70.4			19.7			26.9	
Approach LOS		F			E			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	32.4	14.0	81.7	14.2	40.1	11.0	84.7				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	37.5	15.0	55.0	15.5	37.5	15.0	55.0				
Max Q Clear Time (g_c+I1), s	17.5	24.7	7.0	39.0	7.9	20.6	3.6	11.1				
Green Ext Time (p_c), s	0.0	1.2	0.1	9.1	0.0	1.1	0.0	4.3				

Intersection Summary

HCM 6th Ctrl Delay	56.5
HCM 6th LOS	E

HCM 6th TWSC
3: Antelope View Avenue & Deer Flat Road

2020 Existing
PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↖	↗
Traffic Vol, veh/h	65	23	8	257	19	5
Future Vol, veh/h	65	23	8	257	19	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	28	10	313	23	6

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	107	0	412 79
Stage 1	-	-	-	-	79 -
Stage 2	-	-	-	-	333 -
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	-	-	1496	-	608 1017
Stage 1	-	-	-	-	964 -
Stage 2	-	-	-	-	726 -
Platoon blocked, %	-	-	1	-	1 1
Mov Cap-1 Maneuver	-	-	1496	-	603 1017
Mov Cap-2 Maneuver	-	-	-	-	603 -
Stage 1	-	-	-	-	964 -
Stage 2	-	-	-	-	720 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	603	1017	-	-	1496	-
HCM Lane V/C Ratio	0.038	0.006	-	-	0.007	-
HCM Control Delay (s)	11.2	8.6	-	-	7.4	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2020 Existing
PM Peak Hour

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	38	1	1	185	7	3	7	0	9	26	58
Future Vol, veh/h	15	38	1	1	185	7	3	7	0	9	26	58
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	43	1	1	210	8	3	8	0	10	30	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	218	0	0	44	0	0	342	298	44	298	294	214
Stage 1	-	-	-	-	-	-	78	78	-	216	216	-
Stage 2	-	-	-	-	-	-	264	220	-	82	78	-
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	1352	-	-	1564	-	-	612	614	1026	654	617	826
Stage 1	-	-	-	-	-	-	931	830	-	786	724	-
Stage 2	-	-	-	-	-	-	741	721	-	926	830	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1352	-	-	1564	-	-	537	605	1026	640	608	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	537	605	-	640	608	-
Stage 1	-	-	-	-	-	-	919	819	-	776	723	-
Stage 2	-	-	-	-	-	-	653	720	-	905	819	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			0			11.3			10.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	583	1352	-	-	1564	-	-	732
HCM Lane V/C Ratio	0.019	0.013	-	-	0.001	-	-	0.144
HCM Control Delay (s)	11.3	7.7	0	-	7.3	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.5

HCM 6th TWSC
5: Meridian Road & D&B Access

2020 Existing
PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	6	10	458	9	7	801
Future Vol, veh/h	6	10	458	9	7	801
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	-	-	200	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	10	477	9	7	834

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	908	239	0	0	486
Stage 1	477	-	-	-	-
Stage 2	431	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*711	762	-	-	1073
Stage 1	*590	-	-	-	-
Stage 2	*714	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*706	762	-	-	1073
Mov Cap-2 Maneuver	*673	-	-	-	-
Stage 1	*590	-	-	-	-
Stage 2	*709	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	726	1073
HCM Lane V/C Ratio	-	-	0.023	0.007
HCM Control Delay (s)	-	-	10.1	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2020 Existing
PM Peak Hour

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↑↑	↕	↕	↑↑	↕
Traffic Vol, veh/h	35	6	87	26	1	35	63	394	34	49	669	82
Future Vol, veh/h	35	6	87	26	1	35	63	394	34	49	669	82
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	3
Mvmt Flow	36	6	90	27	1	36	65	406	35	51	690	85

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1126	1363	345	986	1413	203	775	0	0	441	0	0
Stage 1	792	792	-	536	536	-	-	-	-	-	-	-
Stage 2	334	571	-	450	877	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	333	229	*817	*453	210	804	1173	-	-	1115	-	-
Stage 1	701	629	-	*496	522	-	-	-	-	-	-	-
Stage 2	653	503	-	*770	563	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	-	-	-	-	-	-
Mov Cap-1 Maneuver	293	207	*817	*364	189	804	1173	-	-	1115	-	-
Mov Cap-2 Maneuver	293	207	-	*364	189	-	-	-	-	-	-	-
Stage 1	662	600	-	*469	493	-	-	-	-	-	-	-
Stage 2	588	475	-	*647	537	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.7		12.4		1.1		0.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1173	-	-	502	364	737	1115	-	-
HCM Lane V/C Ratio	0.055	-	-	0.263	0.074	0.05	0.045	-	-
HCM Control Delay (s)	8.2	-	-	14.7	15.7	10.1	8.4	-	-
HCM Lane LOS	A	-	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1	0.2	0.2	0.1	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2020 Existing
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	3	3	471	3	7	792
Future Vol, veh/h	3	3	471	3	7	792
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	-	-	-	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	3	491	3	7	825

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	920	247	0	0	494
Stage 1	493	-	-	-	-
Stage 2	427	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*693	753	-	-	1066
Stage 1	*579	-	-	-	-
Stage 2	*714	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*688	753	-	-	1066
Mov Cap-2 Maneuver	*672	-	-	-	-
Stage 1	*579	-	-	-	-
Stage 2	*709	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	710	1066
HCM Lane V/C Ratio	-	-	0.009	0.007
HCM Control Delay (s)	-	-	10.1	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM Signalized Intersection Capacity Analysis
2: Meridian Road & Deer Flat Road

2020 Existing - Mitigation
AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	474	144	46	6	55	21	79	523	25	30	192	306	
Future Volume (vph)	474	144	46	6	55	21	79	523	25	30	192	306	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00	
Frt	1.00	0.96		1.00	0.96		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)	3252	1701		1676	1692		1676	3330		1676	3353	1500	
Flt Permitted	0.95	1.00		0.63	1.00		0.58	1.00		0.38	1.00	1.00	
Satd. Flow (perm)	3252	1701		1104	1692		1023	3330		677	3353	1500	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	527	160	51	7	61	23	88	581	28	33	213	340	
RTOR Reduction (vph)	0	8	0	0	11	0	0	2	0	0	0	193	
Lane Group Flow (vph)	527	203	0	7	73	0	88	607	0	33	213	147	
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	
Protected Phases	1	6		5	2		3	8		7	4		
Permitted Phases				2			8			4		4	
Actuated Green, G (s)	27.1	43.5		18.8	17.6		72.3	64.4		64.3	60.4	60.4	
Effective Green, g (s)	27.1	43.5		18.8	17.6		72.3	64.4		64.3	60.4	60.4	
Actuated g/C Ratio	0.19	0.31		0.13	0.13		0.52	0.46		0.46	0.43	0.43	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0	
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0	
Lane Grp Cap (vph)	629	528		153	212		565	1531		338	1446	647	
v/s Ratio Prot	c0.16	c0.12		0.00	0.04		c0.01	c0.18		0.00	0.06		
v/s Ratio Perm				0.01			0.07			0.04		0.10	
v/c Ratio	0.84	0.38		0.05	0.34		0.16	0.40		0.10	0.15	0.23	
Uniform Delay, d1	54.3	37.8		52.7	55.9		17.3	25.0		21.0	24.2	25.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.29	1.26	4.95	
Incremental Delay, d2	9.1	0.5		0.0	1.1		0.0	0.8		0.0	0.2	0.8	
Delay (s)	63.5	38.3		52.7	57.0		17.4	25.7		27.1	30.6	125.0	
Level of Service	E	D		D	E		B	C		C	C	F	
Approach Delay (s)		56.3			56.7			24.7			85.2		
Approach LOS		E			E			C			F		
Intersection Summary													
HCM 2000 Control Delay			53.9	HCM 2000 Level of Service						D			
HCM 2000 Volume to Capacity ratio			0.51										
Actuated Cycle Length (s)			140.0	Sum of lost time (s)						27.0			
Intersection Capacity Utilization			58.3%	ICU Level of Service						B			
Analysis Period (min)			15										

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2020 Existing - Mitigation
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	474	144	46	6	55	21	79	523	25	30	192	306
Future Volume (veh/h)	474	144	46	6	55	21	79	523	25	30	192	306
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	527	160	51	7	61	23	88	581	28	33	213	340
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	567	304	97	149	88	33	536	1755	84	449	1768	788
Arrive On Green	0.17	0.24	0.24	0.01	0.07	0.07	0.04	0.54	0.54	0.03	0.53	0.53
Sat Flow, veh/h	3274	1288	410	1688	1226	462	1688	3270	157	1688	3367	1502
Grp Volume(v), veh/h	527	0	211	7	0	84	88	299	310	33	213	340
Grp Sat Flow(s),veh/h/ln	1637	0	1698	1688	0	1689	1688	1683	1744	1688	1683	1502
Q Serve(g_s), s	22.2	0.0	15.2	0.5	0.0	6.8	3.4	14.0	14.0	1.3	4.5	19.5
Cycle Q Clear(g_c), s	22.2	0.0	15.2	0.5	0.0	6.8	3.4	14.0	14.0	1.3	4.5	19.5
Prop In Lane	1.00		0.24	1.00		0.27	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	567	0	401	149	0	121	536	903	936	449	1768	788
V/C Ratio(X)	0.93	0.00	0.53	0.05	0.00	0.70	0.16	0.33	0.33	0.07	0.12	0.43
Avail Cap(c_a), veh/h	573	0	564	322	0	452	654	903	936	587	1768	788
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	57.0	0.0	46.6	59.5	0.0	63.5	14.2	18.3	18.3	15.0	16.9	20.4
Incr Delay (d2), s/veh	21.3	0.0	1.2	0.0	0.0	7.9	0.1	1.0	1.0	0.0	0.1	1.7
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	15.9	0.0	10.5	0.4	0.0	5.6	2.2	9.1	9.4	0.8	3.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	0.0	47.8	59.6	0.0	71.4	14.3	19.3	19.2	15.0	17.0	22.1
LnGrp LOS	E	A	D	E	A	E	B	B	B	B	B	C
Approach Vol, veh/h		738			91			697			586	
Approach Delay, s/veh		69.6			70.5			18.6			19.8	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.8	16.5	12.2	80.5	7.7	39.6	10.6	82.1				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	24.5	37.5	15.0	36.0	15.5	46.5	15.0	36.0				
Max Q Clear Time (g_c+I1), s	24.2	8.8	5.4	21.5	2.5	17.2	3.3	16.0				
Green Ext Time (p_c), s	0.0	0.4	0.1	4.0	0.0	1.2	0.0	5.8				
Intersection Summary												
HCM 6th Ctrl Delay				39.0								
HCM 6th LOS				D								

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2020 Existing - Mitigation
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (vph)	264	63	119	72	184	48	106	346	9	37	621	480
Future Volume (vph)	264	63	119	72	184	48	106	346	9	37	621	480
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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)	3252	1592		1676	1710		1676	3340		1676	3353	1500
Flt Permitted	0.95	1.00		0.63	1.00		0.29	1.00		0.52	1.00	1.00
Satd. Flow (perm)	3252	1592		1105	1710		520	3340		917	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	293	70	132	80	204	53	118	384	10	41	690	533
RTOR Reduction (vph)	0	46	0	0	7	0	0	1	0	0	0	288
Lane Group Flow (vph)	293	156	0	80	250	0	118	393	0	41	690	245
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases				2			8			4		4
Actuated Green, G (s)	17.1	35.2		36.7	27.4		82.8	73.2		74.2	68.9	68.9
Effective Green, g (s)	17.1	35.2		36.7	27.4		82.8	73.2		74.2	68.9	68.9
Actuated g/C Ratio	0.11	0.23		0.24	0.18		0.55	0.49		0.49	0.46	0.46
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	370	373		305	312		361	1629		480	1540	689
v/s Ratio Prot	c0.09	0.10		0.02	c0.15		c0.02	0.12		0.00	c0.21	
v/s Ratio Perm				0.05			c0.16			0.04		0.16
v/c Ratio	0.79	0.42		0.26	0.80		0.33	0.24		0.09	0.45	0.36
Uniform Delay, d1	64.7	48.7		44.9	58.7		17.5	22.3		19.6	27.6	26.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.69	1.60	8.58
Incremental Delay, d2	10.3	0.8		0.2	14.0		0.2	0.4		0.0	0.8	1.2
Delay (s)	75.1	49.6		45.1	72.7		17.7	22.6		33.3	45.0	226.1
Level of Service	E	D		D	E		B	C		C	D	F
Approach Delay (s)		64.6			66.2			21.5			121.0	
Approach LOS		E			E			C			F	
Intersection Summary												
HCM 2000 Control Delay			83.7			HCM 2000 Level of Service		F				
HCM 2000 Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			150.0			Sum of lost time (s)		27.0				
Intersection Capacity Utilization			68.1%			ICU Level of Service		C				
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2020 Existing - Mitigation
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	264	63	119	72	184	48	106	346	9	37	621	480
Future Volume (veh/h)	264	63	119	72	184	48	106	346	9	37	621	480
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	293	70	132	80	204	53	118	384	10	41	690	533
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	121	227	258	228	59	299	1752	46	550	1693	755
Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.05	0.52	0.52	0.03	0.50	0.50
Sat Flow, veh/h	3274	549	1036	1688	1356	352	1688	3352	87	1688	3367	1502
Grp Volume(v), veh/h	293	0	202	80	0	257	118	193	201	41	690	533
Grp Sat Flow(s),veh/h/ln	1637	0	1585	1688	0	1708	1688	1683	1756	1688	1683	1502
Q Serve(g_s), s	13.2	0.0	17.1	5.8	0.0	22.1	5.1	9.2	9.3	1.8	19.2	41.0
Cycle Q Clear(g_c), s	13.2	0.0	17.1	5.8	0.0	22.1	5.1	9.2	9.3	1.8	19.2	41.0
Prop In Lane	1.00		0.65	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	333	0	348	258	0	287	299	880	918	550	1693	755
V/C Ratio(X)	0.88	0.00	0.58	0.31	0.00	0.89	0.40	0.22	0.22	0.07	0.41	0.71
Avail Cap(c_a), veh/h	338	0	396	347	0	427	388	880	918	673	1693	755
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	0.75	0.75	0.75
Uniform Delay (d), s/veh	66.5	0.0	52.4	48.4	0.0	61.1	18.0	19.3	19.3	17.1	23.3	28.7
Incr Delay (d2), s/veh	21.4	0.0	1.8	0.3	0.0	15.8	0.3	0.6	0.6	0.0	0.5	4.2
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(95%),veh/ln	10.5	0.0	11.1	4.4	0.0	15.9	3.4	6.5	6.8	1.2	11.2	20.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.8	0.0	54.2	48.6	0.0	76.9	18.3	19.9	19.8	17.1	23.9	32.9
LnGrp LOS	F	A	D	D	A	E	B	B	B	B	C	C
Approach Vol, veh/h		495			337			512			1264	
Approach Delay, s/veh		74.1			70.2			19.5			27.5	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.8	31.7	14.1	82.4	14.1	39.4	11.1	85.4				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	37.5	15.0	55.0	15.5	37.5	15.0	55.0				
Max Q Clear Time (g_c+I1), s	15.2	24.1	7.1	43.0	7.8	19.1	3.8	11.3				
Green Ext Time (p_c), s	0.0	1.1	0.1	7.9	0.0	1.0	0.0	4.4				
Intersection Summary												
HCM 6th Ctrl Delay			40.3									
HCM 6th LOS			D									

APPENDIX D: 2024 CAPACITY ANALYSIS REPORTS

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2024 Background
AM Peak Hour

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	53	73	1	1	15	0	0	72	6	1	34	18
Future Vol, veh/h	53	73	1	1	15	0	0	72	6	1	34	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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	78	1	1	16	0	0	77	6	1	36	19

Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	16	0	0	79	0	0	237	209	79	250	209	16
Stage 1	-	-	-	-	-	-	191	191	-	18	18	-
Stage 2	-	-	-	-	-	-	46	18	-	232	191	-
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	1602	-	-	1519	-	-	717	688	981	703	688	1063
Stage 1	-	-	-	-	-	-	811	742	-	1001	880	-
Stage 2	-	-	-	-	-	-	968	880	-	771	742	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1602	-	-	1519	-	-	655	662	981	619	662	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	655	662	-	619	662	-
Stage 1	-	-	-	-	-	-	781	715	-	964	879	-
Stage 2	-	-	-	-	-	-	911	879	-	659	715	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	3.1		0.5			11			10.1		
HCM LOS						B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	679	1602	-	-	1519	-	-	758
HCM Lane V/C Ratio	0.122	0.035	-	-	0.001	-	-	0.074
HCM Control Delay (s)	11	7.3	0	-	7.4	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.2

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Background
AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 			 	 		 	 		 	 	 	
Traffic Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358	
Future Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00	
Frt	1.00	0.96		1.00	0.96		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)	3252	1700		1676	1690		1676	3330		1676	3353	1500	
Flt Permitted	0.95	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3252	1700		1078	1690		1676	3330		1676	3353	1500	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	592	180	58	8	69	27	102	680	32	39	250	398	
RTOR Reduction (vph)	0	8	0	0	11	0	0	2	0	0	0	238	
Lane Group Flow (vph)	592	230	0	8	85	0	102	710	0	39	250	160	
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm	
Protected Phases	1	6		5	2		3	8		7	4		
Permitted Phases				2								4	
Actuated Green, G (s)	30.3	47.9		20.0	18.8		13.5	66.9		7.0	60.4	60.4	
Effective Green, g (s)	30.3	47.9		20.0	18.8		13.5	66.9		7.0	60.4	60.4	
Actuated g/C Ratio	0.20	0.32		0.13	0.13		0.09	0.45		0.05	0.40	0.40	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0	
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0	
Lane Grp Cap (vph)	656	542		148	211		150	1485		78	1350	604	
v/s Ratio Prot	c0.18	c0.14		0.00	0.05		c0.06	c0.21		0.02	0.07		
v/s Ratio Perm				0.01								0.11	
v/c Ratio	0.90	0.42		0.05	0.40		0.68	0.48		0.50	0.19	0.27	
Uniform Delay, d1	58.4	40.2		56.6	60.4		66.2	29.3		69.8	28.9	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.15	0.78	0.85	
Incremental Delay, d2	15.4	0.6		0.1	1.4		9.7	1.1		1.8	0.3	1.1	
Delay (s)	73.8	40.8		56.7	61.8		75.8	30.4		82.2	22.7	26.5	
Level of Service	E	D		E	E		E	C		F	C	C	
Approach Delay (s)		64.3			61.4			36.1			28.3		
Approach LOS		E			E			D			C		
Intersection Summary													
HCM 2000 Control Delay			44.6									HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.62										
Actuated Cycle Length (s)			150.0									Sum of lost time (s)	27.0
Intersection Capacity Utilization			62.8%									ICU Level of Service	B
Analysis Period (min)			15										

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: Meridian Road & Deer Flat Road

2024 Background
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
Future Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	592	180	58	8	69	27	102	680	32	39	250	398
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	330	106	147	88	34	122	1716	81	49	1621	723
Arrive On Green	0.19	0.26	0.26	0.01	0.07	0.07	0.07	0.52	0.52	0.03	0.48	0.48
Sat Flow, veh/h	3274	1284	414	1688	1212	474	1688	3274	154	1688	3367	1502
Grp Volume(v), veh/h	592	0	238	8	0	96	102	349	363	39	250	398
Grp Sat Flow(s),veh/h/ln	1637	0	1697	1688	0	1687	1688	1683	1744	1688	1683	1502
Q Serve(g_s), s	26.7	0.0	18.2	0.7	0.0	8.4	9.0	18.7	18.7	3.4	6.2	28.1
Cycle Q Clear(g_c), s	26.7	0.0	18.2	0.7	0.0	8.4	9.0	18.7	18.7	3.4	6.2	28.1
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	635	0	436	147	0	122	122	883	915	49	1621	723
V/C Ratio(X)	0.93	0.00	0.55	0.05	0.00	0.79	0.84	0.40	0.40	0.79	0.15	0.55
Avail Cap(c_a), veh/h	688	0	605	305	0	422	169	883	915	169	1621	723
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	59.5	0.0	48.2	63.5	0.0	68.4	68.7	21.4	21.4	72.4	21.8	27.4
Incr Delay (d2), s/veh	18.1	0.0	1.2	0.1	0.0	11.8	16.8	1.3	1.3	9.8	0.2	2.9
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(95%),veh/ln	18.1	0.0	12.2	0.5	0.0	7.1	7.7	11.7	12.1	2.9	4.4	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.6	0.0	49.4	63.6	0.0	80.2	85.5	22.7	22.7	82.2	22.0	30.4
LnGrp LOS	E	A	D	E	A	F	F	C	C	F	C	C
Approach Vol, veh/h		830			104			814			687	
Approach Delay, s/veh		69.5			78.9			30.6			30.3	
Approach LOS		E			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.6	17.4	17.8	79.2	7.9	45.0	11.4	85.7				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	31.5	37.5	15.0	39.0	15.5	53.5	15.0	39.0				
Max Q Clear Time (g_c+I1), s	28.7	10.4	11.0	30.1	2.7	20.2	5.4	20.7				
Green Ext Time (p_c), s	0.4	0.5	0.0	3.5	0.0	1.4	0.0	6.7				
Intersection Summary												
HCM 6th Ctrl Delay			45.8									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↖	↗
Traffic Vol, veh/h	206	11	2	74	17	12
Future Vol, veh/h	206	11	2	74	17	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	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	229	12	2	82	19	13

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	241	0	315	229
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	86	-
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	-	-	1326	-	678	810
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1326	-	677	810
Mov Cap-2 Maneuver	-	-	-	-	677	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	935	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	677	810	-	-	1326	-
HCM Lane V/C Ratio	0.028	0.016	-	-	0.002	-
HCM Control Delay (s)	10.5	9.5	-	-	7.7	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2024 Background
AM Peak Hour

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	115	3	0	68	2	4	25	1	1	4	19
Future Vol, veh/h	28	115	3	0	68	2	4	25	1	1	4	19
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	3	2	2	2	2	2	33	15
Mvmt Flow	31	128	3	0	76	2	4	28	1	1	4	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	78	0	0	131	0	0	282	270	130	283	270	77
Stage 1	-	-	-	-	-	-	192	192	-	77	77	-
Stage 2	-	-	-	-	-	-	90	78	-	206	193	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.435
Pot Cap-1 Maneuver	1520	-	-	1454	-	-	670	636	920	669	587	949
Stage 1	-	-	-	-	-	-	810	742	-	932	774	-
Stage 2	-	-	-	-	-	-	917	830	-	796	686	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1520	-	-	1454	-	-	641	622	920	635	574	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	641	622	-	635	574	-
Stage 1	-	-	-	-	-	-	792	726	-	911	774	-
Stage 2	-	-	-	-	-	-	891	830	-	748	671	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			0			11			9.4		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	631	1520	-	-	1454	-	-	840
HCM Lane V/C Ratio	0.053	0.02	-	-	-	-	-	0.032
HCM Control Delay (s)	11	7.4	0	-	0	-	-	9.4
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	2	20	751	10	1	290
Future Vol, veh/h	2	20	751	10	1	290
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	-	-	200	50	-
Veh in Median Storage, #	2	-	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	2	22	834	11	1	322

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	997	417	0	0	845
Stage 1	834	-	-	-	-
Stage 2	163	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*298	585	-	-	787
Stage 1	*387	-	-	-	-
Stage 2	*923	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*298	585	-	-	787
Mov Cap-2 Maneuver	*366	-	-	-	-
Stage 1	*387	-	-	-	-
Stage 2	*923	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	555	787
HCM Lane V/C Ratio	-	-	0.044	0.001
HCM Control Delay (s)	-	-	11.8	9.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2024 Background
AM Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	26	1	17	2	1	15	41	714	3	17	252	27
Future Vol, veh/h	26	1	17	2	1	15	41	714	3	17	252	27
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	1	19	2	1	17	46	793	3	19	280	30

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	807	1206	140	1064	1233	397	310	0	0	796	0	0
Stage 1	318	318	-	885	885	-	-	-	-	-	-	-
Stage 2	489	888	-	179	348	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	342	207	*999	*215	198	602	1394	-	-	822	-	-
Stage 1	835	754	-	*306	361	-	-	-	-	-	-	-
Stage 2	529	360	-	*942	730	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	-	-	-	-	-	-
Mov Cap-1 Maneuver	317	195	*999	*201	187	602	1394	-	-	822	-	-
Mov Cap-2 Maneuver	317	195	-	*201	187	-	-	-	-	-	-	-
Stage 1	807	737	-	*296	349	-	-	-	-	-	-	-
Stage 2	496	348	-	*901	714	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.6		13.2		0.4		0.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1394	-	-	422	201	529	822	-	-
HCM Lane V/C Ratio	0.033	-	-	0.116	0.011	0.034	0.023	-	-
HCM Control Delay (s)	7.7	-	-	14.6	23.1	12	9.5	-	-
HCM Lane LOS	A	-	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0.1	0.1	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2024 Background
AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↓		↘	↑↑
Traffic Vol, veh/h	1	2	764	1	1	271
Future Vol, veh/h	1	2	764	1	1	271
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	-	-	-	50	-
Veh in Median Storage, #	2	-	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	1	2	849	1	1	301

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1003	425	0	0	850
Stage 1	850	-	-	-	-
Stage 2	153	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*295	578	-	-	784
Stage 1	*379	-	-	-	-
Stage 2	*923	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*295	578	-	-	784
Mov Cap-2 Maneuver	*358	-	-	-	-
Stage 1	*379	-	-	-	-
Stage 2	*923	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	480	784
HCM Lane V/C Ratio	-	-	0.007	0.001
HCM Control Delay (s)	-	-	12.6	9.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2024 Background
PM Peak Hour

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	10	16	4	18	56	3	12	41	1	4	138	61
Future Vol, veh/h	10	16	4	18	56	3	12	41	1	4	138	61
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	14	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	18	4	20	62	3	13	46	1	4	153	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	65	0	0	22	0	0	256	147	20	170	148	64
Stage 1	-	-	-	-	-	-	42	42	-	104	104	-
Stage 2	-	-	-	-	-	-	214	105	-	66	44	-
Critical Hdwy	4.24	-	-	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	2.326	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1593	-	-	697	744	1058	794	743	1000
Stage 1	-	-	-	-	-	-	972	860	-	902	809	-
Stage 2	-	-	-	-	-	-	788	808	-	945	858	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1464	-	-	1593	-	-	536	728	1058	743	727	1000
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	728	-	743	727	-
Stage 1	-	-	-	-	-	-	964	853	-	895	798	-
Stage 2	-	-	-	-	-	-	586	797	-	886	851	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.5			1.7			10.8			11.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	678	1464	-	-	1593	-	-	792
HCM Lane V/C Ratio	0.088	0.008	-	-	0.013	-	-	0.285
HCM Control Delay (s)	10.8	7.5	0	-	7.3	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	1.2

HCM Signalized Intersection Capacity Analysis
2: Meridian Road & Deer Flat Road

2024 Background
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562
Future Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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)	3252	1592		1676	1710		1676	3340		1676	3353	1500
Flt Permitted	0.95	1.00		0.57	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3252	1592		1007	1710		1676	3340		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	330	79	149	90	230	60	138	450	12	48	807	624
RTOR Reduction (vph)	0	45	0	0	6	0	0	1	0	0	0	282
Lane Group Flow (vph)	330	183	0	90	284	0	138	461	0	48	807	342
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases				2								4
Actuated Green, G (s)	17.4	37.5		39.7	29.9		15.7	68.0		7.7	60.0	60.0
Effective Green, g (s)	17.4	37.5		39.7	29.9		15.7	68.0		7.7	60.0	60.0
Actuated g/C Ratio	0.12	0.25		0.26	0.20		0.10	0.45		0.05	0.40	0.40
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	377	398		310	340		175	1514		86	1341	600
v/s Ratio Prot	c0.10	0.11		0.02	c0.17		c0.08	0.14		0.03	c0.24	
v/s Ratio Perm				0.06								0.23
v/c Ratio	0.88	0.46		0.29	0.83		0.79	0.30		0.56	0.60	0.57
Uniform Delay, d1	65.2	47.7		42.9	57.7		65.5	26.0		69.5	35.6	35.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	1.52	3.01
Incremental Delay, d2	19.1	0.9		0.2	16.2		19.2	0.5		4.0	1.8	3.5
Delay (s)	84.4	48.6		43.1	73.9		84.7	26.5		60.4	55.9	108.9
Level of Service	F	D		D	E		F	C		E	E	F
Approach Delay (s)		69.8			66.6			39.9			78.4	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay			67.7									E
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			150.0							27.0		
Intersection Capacity Utilization			76.0%									D
ICU Level of Service												
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: Meridian Road & Deer Flat Road

2024 Background
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
Future Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	330	79	149	90	230	60	138	450	12	48	807	624
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	129	244	264	254	66	158	1653	44	61	1466	654
Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.09	0.49	0.49	0.04	0.44	0.44
Sat Flow, veh/h	3274	549	1036	1688	1355	353	1688	3350	89	1688	3367	1502
Grp Volume(v), veh/h	330	0	228	90	0	290	138	226	236	48	807	624
Grp Sat Flow(s),veh/h/ln	1637	0	1585	1688	0	1708	1688	1683	1756	1688	1683	1502
Q Serve(g_s), s	15.1	0.0	19.3	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	60.2
Cycle Q Clear(g_c), s	15.1	0.0	19.3	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	60.2
Prop In Lane	1.00		0.65	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	338	0	374	264	0	320	158	830	866	61	1466	654
V/C Ratio(X)	0.98	0.00	0.61	0.34	0.00	0.91	0.87	0.27	0.27	0.79	0.55	0.95
Avail Cap(c_a), veh/h	338	0	396	346	0	427	169	830	866	169	1466	654
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	0.75	0.75	0.75
Uniform Delay (d), s/veh	67.1	0.0	51.2	46.0	0.0	59.7	67.1	22.2	22.2	71.7	31.4	40.9
Incr Delay (d2), s/veh	42.0	0.0	2.7	0.3	0.0	19.2	32.7	0.8	0.8	6.3	1.1	21.2
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(95%),veh/ln	12.8	0.0	12.3	4.8	0.0	18.0	10.7	8.2	8.5	3.4	15.2	31.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.1	0.0	53.8	46.3	0.0	78.9	99.8	23.0	23.0	78.0	32.5	62.1
LnGrp LOS	F	A	D	D	A	E	F	C	C	E	C	E
Approach Vol, veh/h		558			380			600			1479	
Approach Delay, s/veh		86.5			71.2			40.7			46.5	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	34.6	21.1	72.3	14.7	41.8	12.4	81.0				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	37.5	15.0	55.0	15.5	37.5	15.0	55.0				
Max Q Clear Time (g_c+I1), s	17.1	26.9	14.1	62.2	8.4	21.3	6.2	13.8				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	1.1	0.0	5.3				
Intersection Summary												
HCM 6th Ctrl Delay			55.8									
HCM 6th LOS			E									

HCM 6th TWSC
 3: Antelope View Avenue & Deer Flat Road

2024 Background
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↖	↗
Traffic Vol, veh/h	73	28	12	289	20	7
Future Vol, veh/h	73	28	12	289	20	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	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	81	31	13	321	22	8

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	112	0	428 81
Stage 1	-	-	-	-	81 -
Stage 2	-	-	-	-	347 -
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	-	-	1478	-	584 979
Stage 1	-	-	-	-	942 -
Stage 2	-	-	-	-	716 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1478	-	578 979
Mov Cap-2 Maneuver	-	-	-	-	578 -
Stage 1	-	-	-	-	942 -
Stage 2	-	-	-	-	708 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	578	979	-	-	1478	-
HCM Lane V/C Ratio	0.038	0.008	-	-	0.009	-
HCM Control Delay (s)	11.5	8.7	-	-	7.5	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2024 Background
PM Peak Hour

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	43	1	1	208	8	4	10	0	13	38	85
Future Vol, veh/h	17	43	1	1	208	8	4	10	0	13	38	85
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	48	1	1	231	9	4	11	0	14	42	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	49	0	0	393	329	49	330	325	236
Stage 1	-	-	-	-	-	-	87	87	-	238	238	-
Stage 2	-	-	-	-	-	-	306	242	-	92	87	-
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	1327	-	-	1558	-	-	566	590	1020	623	593	803
Stage 1	-	-	-	-	-	-	921	823	-	765	708	-
Stage 2	-	-	-	-	-	-	704	705	-	915	823	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1327	-	-	1558	-	-	466	581	1020	606	584	803
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	581	-	606	584	-
Stage 1	-	-	-	-	-	-	907	811	-	754	707	-
Stage 2	-	-	-	-	-	-	584	704	-	889	811	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.2			0			11.8			11.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	543	1327	-	-	1558	-	-	707
HCM Lane V/C Ratio	0.029	0.014	-	-	0.001	-	-	0.214
HCM Control Delay (s)	11.8	7.8	0	-	7.3	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.8

HCM 6th TWSC
5: Meridian Road & D&B Access

2024 Background
PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↑	↑↑
Traffic Vol, veh/h	6	20	536	19	7	937
Future Vol, veh/h	6	20	536	19	7	937
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	-	-	200	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	21	558	20	7	976

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1060	279	0	0	578	0
Stage 1	558	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*656	718	-	-	992	-
Stage 1	*537	-	-	-	-	-
Stage 2	*656	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	*651	718	-	-	992	-
Mov Cap-2 Maneuver	*619	-	-	-	-	-
Stage 1	*537	-	-	-	-	-
Stage 2	*652	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	692	992
HCM Lane V/C Ratio	-	-	0.039	0.007
HCM Control Delay (s)	-	-	10.4	8.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2024 Background
PM Peak Hour

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	35	6	87	28	1	40	74	461	44	66	783	96
Future Vol, veh/h	35	6	87	28	1	40	74	461	44	66	783	96
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	3
Mvmt Flow	36	6	90	29	1	41	76	475	45	68	807	99

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1333	1615	404	1170	1669	238	906	0	0	520	0	0
Stage 1	943	943	-	627	627	-	-	-	-	-	-	-
Stage 2	390	672	-	543	1042	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	244	158	*776	*355	143	763	1087	-	-	1042	-	-
Stage 1	616	564	-	*438	474	-	-	-	-	-	-	-
Stage 2	606	453	-	*732	492	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	-	-	-
Mov Cap-1 Maneuver	206	137	*776	*273	124	763	1087	-	-	1042	-	-
Mov Cap-2 Maneuver	206	137	-	*273	124	-	-	-	-	-	-	-
Stage 1	573	527	-	*407	441	-	-	-	-	-	-	-
Stage 2	532	421	-	*598	460	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.7		14.4		1.1		0.6	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1087	-	-	393	273	678	1042	-	-
HCM Lane V/C Ratio	0.07	-	-	0.336	0.106	0.062	0.065	-	-
HCM Control Delay (s)	8.6	-	-	18.7	19.7	10.7	8.7	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.5	0.4	0.2	0.2	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2024 Background
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	4	4	551	4	8	927
Future Vol, veh/h	4	4	551	4	8	927
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	-	-	-	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	4	574	4	8	966

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1075	289	0	0	578	0
Stage 1	576	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*597	708	-	-	992	-
Stage 1	*525	-	-	-	-	-
Stage 2	*675	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	*593	708	-	-	992	-
Mov Cap-2 Maneuver	*554	-	-	-	-	-
Stage 1	*525	-	-	-	-	-
Stage 2	*670	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	622	992
HCM Lane V/C Ratio	-	-	0.013	0.008
HCM Control Delay (s)	-	-	10.9	8.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM Signalized Intersection Capacity Analysis
2: Meridian Road & Deer Flat Road

2024 Background - No Build
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358
Future Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
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	0.96		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	1700		1676	1690		1676	3330		1676	3353	1500
Flt Permitted	0.95	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1676	1700		1078	1690		1676	3330		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	592	180	58	8	69	27	102	680	32	39	250	398
RTOR Reduction (vph)	0	8	0	0	11	0	0	2	0	0	0	259
Lane Group Flow (vph)	592	230	0	8	85	0	102	710	0	39	250	139
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases				2								4
Actuated Green, G (s)	38.4	56.0		20.0	18.8		13.5	58.8		7.0	52.3	52.3
Effective Green, g (s)	38.4	56.0		20.0	18.8		13.5	58.8		7.0	52.3	52.3
Actuated g/C Ratio	0.26	0.37		0.13	0.13		0.09	0.39		0.05	0.35	0.35
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	429	634		148	211		150	1305		78	1169	523
v/s Ratio Prot	c0.35	c0.14		0.00	0.05		c0.06	c0.21		0.02	0.07	
v/s Ratio Perm				0.01								0.09
v/c Ratio	1.38	0.36		0.05	0.40		0.68	0.54		0.50	0.21	0.27
Uniform Delay, d1	55.8	34.1		56.6	60.4		66.2	35.2		69.8	34.4	35.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.15	0.80	1.02
Incremental Delay, d2	185.1	0.4		0.1	1.4		9.7	1.6		1.8	0.4	1.2
Delay (s)	240.9	34.5		56.7	61.8		75.8	36.9		82.4	28.0	37.1
Level of Service	F	C		E	E		E	D		F	C	D
Approach Delay (s)		181.7			61.4			41.8			36.4	
Approach LOS		F			E			D			D	
Intersection Summary												
HCM 2000 Control Delay			88.8	HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			150.0	Sum of lost time (s)				27.0				
Intersection Capacity Utilization			77.9%	ICU Level of Service				D				
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2024 Background - No Build
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
Future Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	592	180	58	8	69	27	102	680	32	39	250	398
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	350	113	147	88	34	122	1664	78	49	1567	699
Arrive On Green	0.21	0.27	0.27	0.01	0.07	0.07	0.07	0.51	0.51	0.03	0.47	0.47
Sat Flow, veh/h	1688	1284	414	1688	1212	474	1688	3274	154	1688	3367	1502
Grp Volume(v), veh/h	592	0	238	8	0	96	102	349	363	39	250	398
Grp Sat Flow(s),veh/h/ln	1688	0	1697	1688	0	1687	1688	1683	1744	1688	1683	1502
Q Serve(g_s), s	31.5	0.0	17.8	0.7	0.0	8.4	9.0	19.3	19.3	3.4	6.4	28.9
Cycle Q Clear(g_c), s	31.5	0.0	17.8	0.7	0.0	8.4	9.0	19.3	19.3	3.4	6.4	28.9
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	354	0	463	147	0	122	122	856	887	49	1567	699
V/C Ratio(X)	1.67	0.00	0.51	0.05	0.00	0.79	0.84	0.41	0.41	0.79	0.16	0.57
Avail Cap(c_a), veh/h	354	0	605	305	0	422	169	856	887	169	1567	699
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	59.3	0.0	46.1	63.5	0.0	68.4	68.7	22.9	22.9	72.4	23.2	29.2
Incr Delay (d2), s/veh	313.9	0.0	1.0	0.1	0.0	11.8	16.8	1.4	1.4	9.8	0.2	3.3
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(95%),veh/ln	67.9	0.0	11.9	0.5	0.0	7.1	7.7	12.1	12.5	2.9	4.5	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	373.1	0.0	47.1	63.6	0.0	80.2	85.5	24.3	24.3	82.2	23.4	32.4
LnGrp LOS	F	A	D	E	A	F	F	C	C	F	C	C
Approach Vol, veh/h		830			104			814			687	
Approach Delay, s/veh		279.7			78.9			32.0			32.0	
Approach LOS		F			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.0	17.4	17.8	76.8	7.9	47.4	11.4	83.3				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	31.5	37.5	15.0	39.0	15.5	53.5	15.0	39.0				
Max Q Clear Time (g_c+I1), s	33.5	10.4	11.0	30.9	2.7	19.8	5.4	21.3				
Green Ext Time (p_c), s	0.0	0.5	0.0	3.3	0.0	1.4	0.0	6.5				
Intersection Summary												
HCM 6th Ctrl Delay				118.4								
HCM 6th LOS				F								

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Background - No Build

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562
Future Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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	1592		1676	1710		1676	3340		1676	3353	1500
Flt Permitted	0.95	1.00		0.62	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1676	1592		1088	1710		1676	3340		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	330	79	149	90	230	60	138	450	12	48	807	624
RTOR Reduction (vph)	0	43	0	0	6	0	0	1	0	0	0	294
Lane Group Flow (vph)	330	185	0	90	284	0	138	461	0	48	807	330
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases				2								4
Actuated Green, G (s)	21.2	41.4		39.8	30.0		15.7	64.1		7.7	56.1	56.1
Effective Green, g (s)	21.2	41.4		39.8	30.0		15.7	64.1		7.7	56.1	56.1
Actuated g/C Ratio	0.14	0.28		0.27	0.20		0.10	0.43		0.05	0.37	0.37
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	236	439		327	342		175	1427		86	1254	561
v/s Ratio Prot	c0.20	0.12		0.02	c0.17		c0.08	0.14		0.03	c0.24	
v/s Ratio Perm				0.06								0.22
v/c Ratio	1.40	0.42		0.28	0.83		0.79	0.32		0.56	0.64	0.59
Uniform Delay, d1	64.4	44.5		42.8	57.5		65.5	28.5		69.5	38.7	37.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	1.49	3.01
Incremental Delay, d2	202.9	0.7		0.2	15.4		19.2	0.6		4.0	2.3	4.0
Delay (s)	267.3	45.2		42.9	73.0		84.7	29.1		60.4	60.0	117.6
Level of Service	F	D		D	E		F	C		E	E	F
Approach Delay (s)		176.5			65.8			41.9			84.3	
Approach LOS		F			E			D			F	
Intersection Summary												
HCM 2000 Control Delay			90.6									F
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			150.0							27.0		
Intersection Capacity Utilization			83.3%									E
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: Meridian Road & Deer Flat Road

2024 Background - No Build
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
Future Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	330	79	149	90	230	60	138	450	12	48	807	624
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	129	244	264	254	66	158	1653	44	61	1466	654
Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.09	0.49	0.49	0.04	0.44	0.44
Sat Flow, veh/h	1688	549	1036	1688	1355	353	1688	3350	89	1688	3367	1502
Grp Volume(v), veh/h	330	0	228	90	0	290	138	226	236	48	807	624
Grp Sat Flow(s),veh/h/ln	1688	0	1585	1688	0	1708	1688	1683	1756	1688	1683	1502
Q Serve(g_s), s	15.5	0.0	19.3	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	60.2
Cycle Q Clear(g_c), s	15.5	0.0	19.3	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	60.2
Prop In Lane	1.00		0.65	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	374	264	0	320	158	830	866	61	1466	654
V/C Ratio(X)	1.89	0.00	0.61	0.34	0.00	0.91	0.87	0.27	0.27	0.79	0.55	0.95
Avail Cap(c_a), veh/h	174	0	396	346	0	427	169	830	866	169	1466	654
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	0.75	0.75	0.75
Uniform Delay (d), s/veh	67.3	0.0	51.2	46.0	0.0	59.7	67.1	22.2	22.2	71.7	31.4	40.9
Incr Delay (d2), s/veh	422.4	0.0	2.7	0.3	0.0	19.2	32.7	0.8	0.8	6.3	1.1	21.2
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(95%),veh/ln	42.7	0.0	12.3	4.8	0.0	18.0	10.7	8.2	8.5	3.4	15.2	31.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	489.7	0.0	53.8	46.3	0.0	78.9	99.8	23.0	23.0	78.0	32.5	62.1
LnGrp LOS	F	A	D	D	A	E	F	C	C	E	C	E
Approach Vol, veh/h		558			380			600			1479	
Approach Delay, s/veh		311.6			71.2			40.7			46.5	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	34.6	21.1	72.3	14.7	41.8	12.4	81.0				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	37.5	15.0	55.0	15.5	37.5	15.0	55.0				
Max Q Clear Time (g_c+I1), s	17.5	26.9	14.1	62.2	8.4	21.3	6.2	13.8				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	1.1	0.0	5.3				

Intersection Summary

HCM 6th Ctrl Delay	97.5
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Background - Mitigation
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358	
Future Volume (vph)	533	162	52	7	62	24	92	612	29	35	225	358	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00	
Frt	1.00	0.96		1.00	0.96		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)	3252	1700		1676	1690		1676	3330		1676	3353	1500	
Flt Permitted	0.95	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3252	1700		1078	1690		1676	3330		1676	3353	1500	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	592	180	58	8	69	27	102	680	32	39	250	398	
RTOR Reduction (vph)	0	8	0	0	11	0	0	2	0	0	0	157	
Lane Group Flow (vph)	592	230	0	8	85	0	102	710	0	39	250	241	
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	pm+ov	
Protected Phases	1	6		5	2		3	8		7	4	1	
Permitted Phases				2								4	
Actuated Green, G (s)	30.3	47.9		20.0	18.8		13.5	66.9		7.0	60.4	90.7	
Effective Green, g (s)	30.3	47.9		20.0	18.8		13.5	66.9		7.0	60.4	90.7	
Actuated g/C Ratio	0.20	0.32		0.13	0.13		0.09	0.45		0.05	0.40	0.60	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5	
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	2.0	
Lane Grp Cap (vph)	656	542		148	211		150	1485		78	1350	907	
v/s Ratio Prot	c0.18	c0.14		0.00	0.05		c0.06	c0.21		0.02	0.07	0.05	
v/s Ratio Perm				0.01								0.11	
v/c Ratio	0.90	0.42		0.05	0.40		0.68	0.48		0.50	0.19	0.27	
Uniform Delay, d1	58.4	40.2		56.6	60.4		66.2	29.3		69.8	28.9	14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.16	0.77	2.21	
Incremental Delay, d2	15.4	0.6		0.1	1.4		9.7	1.1		1.8	0.3	0.1	
Delay (s)	73.8	40.8		56.7	61.8		75.8	30.4		82.5	22.7	30.8	
Level of Service	E	D		E	E		E	C		F	C	C	
Approach Delay (s)		64.3			61.4			36.1			30.8		
Approach LOS		E			E			D			C		
Intersection Summary													
HCM 2000 Control Delay			45.3									HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.62										
Actuated Cycle Length (s)			150.0									Sum of lost time (s)	27.0
Intersection Capacity Utilization			62.8%									ICU Level of Service	B
Analysis Period (min)			15										

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 2: Meridian Road & Deer Flat Road

2024 Background - Mitigation
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
Future Volume (veh/h)	533	162	52	7	62	24	92	612	29	35	225	358
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	592	180	58	8	69	27	102	680	32	39	250	398
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	330	106	147	88	34	122	1716	81	49	1621	1014
Arrive On Green	0.19	0.26	0.26	0.01	0.07	0.07	0.07	0.52	0.52	0.03	0.48	0.48
Sat Flow, veh/h	3274	1284	414	1688	1212	474	1688	3274	154	1688	3367	1502
Grp Volume(v), veh/h	592	0	238	8	0	96	102	349	363	39	250	398
Grp Sat Flow(s),veh/h/ln	1637	0	1697	1688	0	1687	1688	1683	1744	1688	1683	1502
Q Serve(g_s), s	26.7	0.0	18.2	0.7	0.0	8.4	9.0	18.7	18.7	3.4	6.2	17.6
Cycle Q Clear(g_c), s	26.7	0.0	18.2	0.7	0.0	8.4	9.0	18.7	18.7	3.4	6.2	17.6
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	635	0	436	147	0	122	122	883	915	49	1621	1014
V/C Ratio(X)	0.93	0.00	0.55	0.05	0.00	0.79	0.84	0.40	0.40	0.79	0.15	0.39
Avail Cap(c_a), veh/h	688	0	605	305	0	422	169	883	915	169	1621	1014
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	59.5	0.0	48.2	63.5	0.0	68.4	68.7	21.4	21.4	72.4	21.8	10.8
Incr Delay (d2), s/veh	18.1	0.0	1.2	0.1	0.0	11.8	16.8	1.3	1.3	9.8	0.2	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(95%),veh/ln	18.1	0.0	12.2	0.5	0.0	7.1	7.7	11.7	12.1	2.9	4.4	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.6	0.0	49.4	63.6	0.0	80.2	85.5	22.7	22.7	82.2	22.0	11.9
LnGrp LOS	E	A	D	E	A	F	F	C	C	F	C	B
Approach Vol, veh/h		830			104			814			687	
Approach Delay, s/veh		69.5			78.9			30.6			19.5	
Approach LOS		E			E			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.6	17.4	17.8	79.2	7.9	45.0	11.4	85.7				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	31.5	37.5	15.0	39.0	15.5	53.5	15.0	39.0				
Max Q Clear Time (g_c+I1), s	28.7	10.4	11.0	19.6	2.7	20.2	5.4	20.7				
Green Ext Time (p_c), s	0.4	0.5	0.0	5.5	0.0	1.4	0.0	6.7				
Intersection Summary												
HCM 6th Ctrl Delay			42.8									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Background - Mitigation
PM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 			 	 		 	 		 	 	 	
Traffic Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562	
Future Volume (vph)	297	71	134	81	207	54	124	405	11	43	726	562	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00	
Frt	1.00	0.90		1.00	0.97		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)	3252	1592		1676	1710		1676	3340		1676	3353	1500	
Flt Permitted	0.95	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3252	1592		1084	1710		1676	3340		1676	3353	1500	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	330	79	149	90	230	60	138	450	12	48	807	624	
RTOR Reduction (vph)	0	45	0	0	6	0	0	1	0	0	0	149	
Lane Group Flow (vph)	330	183	0	90	284	0	138	461	0	48	807	475	
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	pm+ov	
Protected Phases	1	6		5	2		3	8		7	4	1	
Permitted Phases				2								4	
Actuated Green, G (s)	19.1	39.7		40.0	30.3		16.1	65.9		7.7	57.5	76.6	
Effective Green, g (s)	19.1	39.7		40.0	30.3		16.1	65.9		7.7	57.5	76.6	
Actuated g/C Ratio	0.13	0.26		0.27	0.20		0.11	0.44		0.05	0.38	0.51	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5	
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	2.0	
Lane Grp Cap (vph)	414	421		327	345		179	1467		86	1285	766	
v/s Ratio Prot	c0.10	0.12		0.02	c0.17		c0.08	0.14		0.03	c0.24	0.08	
v/s Ratio Perm				0.06								0.24	
v/c Ratio	0.80	0.44		0.28	0.82		0.77	0.31		0.56	0.63	0.62	
Uniform Delay, d1	63.6	45.8		42.6	57.3		65.2	27.4		69.5	37.6	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.36	0.68	0.40	
Incremental Delay, d2	9.6	0.8		0.2	14.7		16.9	0.6		4.0	2.1	1.0	
Delay (s)	73.2	46.6		42.8	72.0		82.0	27.9		98.2	27.5	11.5	
Level of Service	E	D		D	E		F	C		F	C	B	
Approach Delay (s)		62.3			65.1			40.4			23.0		
Approach LOS		E			E			D			C		
Intersection Summary													
HCM 2000 Control Delay			39.0									HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.72										
Actuated Cycle Length (s)			150.0									Sum of lost time (s)	27.0
Intersection Capacity Utilization			75.6%									ICU Level of Service	D
Analysis Period (min)			15										

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2024 Background - Mitigation
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
Future Volume (veh/h)	297	71	134	81	207	54	124	405	11	43	726	562
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	330	79	149	90	230	60	138	450	12	48	807	624
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	130	245	265	255	66	158	1650	44	61	1464	808
Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.09	0.49	0.49	0.04	0.43	0.43
Sat Flow, veh/h	3274	549	1036	1688	1355	353	1688	3350	89	1688	3367	1502
Grp Volume(v), veh/h	330	0	228	90	0	290	138	226	236	48	807	624
Grp Sat Flow(s),veh/h/ln	1637	0	1585	1688	0	1708	1688	1683	1756	1688	1683	1502
Q Serve(g_s), s	15.1	0.0	19.2	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	49.2
Cycle Q Clear(g_c), s	15.1	0.0	19.2	6.4	0.0	24.9	12.1	11.8	11.8	4.2	26.7	49.2
Prop In Lane	1.00		0.65	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	338	0	375	265	0	321	158	829	865	61	1464	808
V/C Ratio(X)	0.98	0.00	0.61	0.34	0.00	0.90	0.87	0.27	0.27	0.79	0.55	0.77
Avail Cap(c_a), veh/h	338	0	417	347	0	450	169	829	865	169	1464	808
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	0.74	0.74	0.74
Uniform Delay (d), s/veh	67.1	0.0	51.1	45.9	0.0	59.6	67.1	22.3	22.3	71.7	31.5	27.4
Incr Delay (d2), s/veh	42.0	0.0	2.3	0.3	0.0	17.3	32.7	0.8	0.8	6.2	1.1	5.3
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(95%),veh/ln	12.8	0.0	12.3	4.8	0.0	17.7	10.7	8.2	8.5	3.4	15.2	23.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.1	0.0	53.4	46.2	0.0	76.9	99.8	23.1	23.1	77.9	32.6	32.7
LnGrp LOS	F	A	D	D	A	E	F	C	C	E	C	C
Approach Vol, veh/h		558			380			600			1479	
Approach Delay, s/veh		86.3			69.6			40.7			34.1	
Approach LOS		F			E			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	34.7	21.1	72.2	14.7	41.9	12.4	80.9				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	39.5	15.0	53.0	15.5	39.5	15.0	53.0				
Max Q Clear Time (g_c+I1), s	17.1	26.9	14.1	51.2	8.4	21.2	6.2	13.8				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.5	0.0	1.2	0.0	5.2				
Intersection Summary												
HCM 6th Ctrl Delay			49.6									
HCM 6th LOS			D									

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2024 Total
AM Peak Hour

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	53	73	1	1	15	0	0	81	6	1	37	18
Future Vol, veh/h	53	73	1	1	15	0	0	81	6	1	37	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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	78	1	1	16	0	0	86	6	1	39	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	79	0	0	238	209	79	255	209	16
Stage 1	-	-	-	-	-	-	191	191	-	18	18	-
Stage 2	-	-	-	-	-	-	47	18	-	237	191	-
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	1602	-	-	1519	-	-	716	688	981	698	688	1063
Stage 1	-	-	-	-	-	-	811	742	-	1001	880	-
Stage 2	-	-	-	-	-	-	967	880	-	766	742	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1602	-	-	1519	-	-	652	662	981	607	662	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	652	662	-	607	662	-
Stage 1	-	-	-	-	-	-	781	715	-	964	879	-
Stage 2	-	-	-	-	-	-	906	879	-	645	715	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.1			0.5			11.2			10.2		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	677	1602	-	-	1519	-	-	752
HCM Lane V/C Ratio	0.137	0.035	-	-	0.001	-	-	0.079
HCM Control Delay (s)	11.2	7.3	0	-	7.4	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.3

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Total
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	533	162	56	7	62	27	102	667	29	36	243	358
Future Volume (vph)	533	162	56	7	62	27	102	667	29	36	243	358
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5
Lane Util. Factor	0.97	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	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)	3252	1697		1676	1684		1676	3332		1676	3353	1500
Flt Permitted	0.95	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3252	1697		1074	1684		1676	3332		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	592	180	62	8	69	30	113	741	32	40	270	398
RTOR Reduction (vph)	0	9	0	0	12	0	0	2	0	0	0	160
Lane Group Flow (vph)	592	233	0	8	87	0	113	771	0	40	270	238
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases				2								4
Actuated Green, G (s)	30.0	47.7		20.1	18.9		14.4	67.0		7.1	59.7	89.7
Effective Green, g (s)	30.0	47.7		20.1	18.9		14.4	67.0		7.1	59.7	89.7
Actuated g/C Ratio	0.20	0.32		0.13	0.13		0.10	0.45		0.05	0.40	0.60
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	2.0
Lane Grp Cap (vph)	650	539		148	212		160	1488		79	1334	897
v/s Ratio Prot	c0.18	c0.14		0.00	0.05		c0.07	c0.23		0.02	0.08	0.05
v/s Ratio Perm				0.01								0.11
v/c Ratio	0.91	0.43		0.05	0.41		0.71	0.52		0.51	0.20	0.27
Uniform Delay, d1	58.7	40.4		56.5	60.4		65.7	29.9		69.7	29.6	14.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.11	0.79	1.91
Incremental Delay, d2	16.7	0.6		0.1	1.4		11.0	1.3		1.8	0.3	0.1
Delay (s)	75.4	41.1		56.6	61.8		76.7	31.2		79.1	23.8	27.6
Level of Service	E	D		E	E		E	C		E	C	C
Approach Delay (s)		65.4			61.4			37.0			29.1	
Approach LOS		E			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			45.2				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			27.0		
Intersection Capacity Utilization			64.4%				ICU Level of Service			C		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 2: Meridian Road & Deer Flat Road

2024 Total
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	533	162	56	7	62	27	102	667	29	36	243	358
Future Volume (veh/h)	533	162	56	7	62	27	102	667	29	36	243	358
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	592	180	62	8	69	30	113	741	32	40	270	398
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	326	112	149	87	38	133	1715	74	51	1591	1001
Arrive On Green	0.19	0.26	0.26	0.01	0.07	0.07	0.08	0.52	0.52	0.03	0.47	0.47
Sat Flow, veh/h	3274	1260	434	1688	1171	509	1688	3288	142	1688	3367	1502
Grp Volume(v), veh/h	592	0	242	8	0	99	113	379	394	40	270	398
Grp Sat Flow(s),veh/h/ln	1637	0	1694	1688	0	1680	1688	1683	1746	1688	1683	1502
Q Serve(g_s), s	26.7	0.0	18.5	0.7	0.0	8.7	9.9	20.9	20.9	3.5	6.9	18.0
Cycle Q Clear(g_c), s	26.7	0.0	18.5	0.7	0.0	8.7	9.9	20.9	20.9	3.5	6.9	18.0
Prop In Lane	1.00		0.26	1.00		0.30	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	635	0	439	149	0	125	133	878	911	51	1591	1001
V/C Ratio(X)	0.93	0.00	0.55	0.05	0.00	0.79	0.85	0.43	0.43	0.79	0.17	0.40
Avail Cap(c_a), veh/h	688	0	604	307	0	420	191	878	911	169	1591	1001
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	59.5	0.0	48.0	63.2	0.0	68.3	68.2	22.2	22.2	72.3	22.7	11.3
Incr Delay (d2), s/veh	18.1	0.0	1.2	0.1	0.0	11.8	15.2	1.6	1.5	9.6	0.2	1.2
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(95%),veh/ln	18.1	0.0	12.4	0.5	0.0	7.3	8.3	12.8	13.3	2.9	4.8	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.6	0.0	49.3	63.3	0.0	80.1	83.4	23.7	23.7	81.8	22.9	12.5
LnGrp LOS	E	A	D	E	A	F	F	C	C	F	C	B
Approach Vol, veh/h		834			107			886			708	
Approach Delay, s/veh		69.4			78.8			31.3			20.4	
Approach LOS		E			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.6	17.7	18.9	77.9	7.9	45.4	11.5	85.2				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	31.5	37.5	17.0	37.0	15.5	53.5	15.0	39.0				
Max Q Clear Time (g_c+I1), s	28.7	10.7	11.9	20.0	2.7	20.5	5.5	22.9				
Green Ext Time (p_c), s	0.4	0.5	0.0	5.4	0.0	1.5	0.0	6.8				

Intersection Summary												
HCM 6th Ctrl Delay			42.8									
HCM 6th LOS			D									

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th TWSC
3: Antelope View Avenue & Deer Flat Road

2024 Total
AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	↑
Traffic Vol, veh/h	206	12	3	74	20	14
Future Vol, veh/h	206	12	3	74	20	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	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	229	13	3	82	22	16

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	242	0	317
Stage 1	-	-	-	-	229
Stage 2	-	-	-	-	88
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1324	-	676
Stage 1	-	-	-	-	809
Stage 2	-	-	-	-	935
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1324	-	675
Mov Cap-2 Maneuver	-	-	-	-	675
Stage 1	-	-	-	-	809
Stage 2	-	-	-	-	933

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	675	810	-	-	1324	-
HCM Lane V/C Ratio	0.033	0.019	-	-	0.003	-
HCM Control Delay (s)	10.5	9.5	-	-	7.7	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2024 Total
AM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	116	3	3	68	2	4	33	10	1	6	20
Future Vol, veh/h	29	116	3	3	68	2	4	33	10	1	6	20
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	3	2	2	2	2	2	33	15
Mvmt Flow	32	129	3	3	76	2	4	37	11	1	7	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	78	0	0	132	0	0	293	279	131	302	279	77
Stage 1	-	-	-	-	-	-	195	195	-	83	83	-
Stage 2	-	-	-	-	-	-	98	84	-	219	196	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.435
Pot Cap-1 Maneuver	1520	-	-	1453	-	-	659	629	919	650	580	949
Stage 1	-	-	-	-	-	-	807	739	-	925	769	-
Stage 2	-	-	-	-	-	-	908	825	-	783	684	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1520	-	-	1453	-	-	625	613	919	601	566	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	625	613	-	601	566	-
Stage 1	-	-	-	-	-	-	788	722	-	904	767	-
Stage 2	-	-	-	-	-	-	877	823	-	717	668	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.5			0.3			10.9			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	661	1520	-	-	1453	-	-	810
HCM Lane V/C Ratio	0.079	0.021	-	-	0.002	-	-	0.037
HCM Control Delay (s)	10.9	7.4	0	-	7.5	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.1

HCM 6th TWSC
5: Meridian Road & D&B Access

2024 Total
AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	2	20	816	10	1	312
Future Vol, veh/h	2	20	816	10	1	312
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	-	-	200	50	-
Veh in Median Storage, #	2	-	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	2	22	907	11	1	347

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1083	454	0	0	918
Stage 1	907	-	-	-	-
Stage 2	176	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*272	553	-	-	739
Stage 1	*354	-	-	-	-
Stage 2	*904	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*271	553	-	-	739
Mov Cap-2 Maneuver	*335	-	-	-	-
Stage 1	*354	-	-	-	-
Stage 2	*903	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	522	739
HCM Lane V/C Ratio	-	-	0.047	0.002
HCM Control Delay (s)	-	-	12.2	9.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2024 Total
AM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↶		↵	↑↑	↶	↵	↑↑	↶
Traffic Vol, veh/h	26	1	17	3	1	57	41	737	3	31	260	27
Future Vol, veh/h	26	1	17	3	1	57	41	737	3	31	260	27
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	1	19	3	1	63	46	819	3	34	289	30

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	859	1271	145	1124	1298	410	319	0	0	822	0	0
Stage 1	357	357	-	911	911	-	-	-	-	-	-	-
Stage 2	502	914	-	213	387	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	312	188	*999	*193	181	591	1382	-	-	803	-	-
Stage 1	789	723	-	*295	351	-	-	-	-	-	-	-
Stage 2	520	350	-	*942	700	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	-	-	-	-	-	-
Mov Cap-1 Maneuver	261	174	*999	*178	167	591	1382	-	-	803	-	-
Mov Cap-2 Maneuver	261	174	-	*178	167	-	-	-	-	-	-	-
Stage 1	763	693	-	*285	339	-	-	-	-	-	-	-
Stage 2	447	338	-	*883	671	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.6	12.9	0.4	0.9
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1382	-	-	360	178	566	803	-	-
HCM Lane V/C Ratio	0.033	-	-	0.136	0.019	0.114	0.043	-	-
HCM Control Delay (s)	7.7	-	-	16.6	25.6	12.2	9.7	-	-
HCM Lane LOS	A	-	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.4	0.1	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2024 Total
AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	10	25	764	4	9	272
Future Vol, veh/h	10	25	764	4	9	272
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	-	-	-	50	-
Veh in Median Storage, #	2	-	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	11	28	849	4	10	302

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1022	427	0	0	853
Stage 1	851	-	-	-	-
Stage 2	171	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*286	576	-	-	782
Stage 1	*379	-	-	-	-
Stage 2	*923	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*283	576	-	-	782
Mov Cap-2 Maneuver	*358	-	-	-	-
Stage 1	*379	-	-	-	-
Stage 2	*911	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	491	782
HCM Lane V/C Ratio	-	-	0.079	0.013
HCM Control Delay (s)	-	-	13	9.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
8: Meadow View Road & Stone Falls Avenue

2024 Total
AM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	11	2	3	5	17	32
Future Vol, veh/h	11	2	3	5	17	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	12	2	3	6	19	36

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	9	0	-	0	32
Stage 1	-	-	-	-	6
Stage 2	-	-	-	-	26
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1611	-	-	-	982
Stage 1	-	-	-	-	1017
Stage 2	-	-	-	-	997
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1611	-	-	-	975
Mov Cap-2 Maneuver	-	-	-	-	975
Stage 1	-	-	-	-	1010
Stage 2	-	-	-	-	997

Approach	EB	WB	SB
HCM Control Delay, s	6.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1611	-	-	-	1039
HCM Lane V/C Ratio	0.008	-	-	-	0.052
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

HCM 6th TWSC
1: Locust Grove Road & Hubbard Road

2024 Total
PM Peak Hour

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	10	16	4	18	56	3	12	47	1	4	149	61
Future Vol, veh/h	10	16	4	18	56	3	12	47	1	4	149	61
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	14	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	18	4	20	62	3	13	52	1	4	166	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	65	0	0	22	0	0	263	147	20	173	148	64
Stage 1	-	-	-	-	-	-	42	42	-	104	104	-
Stage 2	-	-	-	-	-	-	221	105	-	69	44	-
Critical Hdwy	4.24	-	-	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	2.326	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1593	-	-	690	744	1058	790	743	1000
Stage 1	-	-	-	-	-	-	972	860	-	902	809	-
Stage 2	-	-	-	-	-	-	781	808	-	941	858	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1464	-	-	1593	-	-	522	728	1058	734	727	1000
Mov Cap-2 Maneuver	-	-	-	-	-	-	522	728	-	734	727	-
Stage 1	-	-	-	-	-	-	964	853	-	895	798	-
Stage 2	-	-	-	-	-	-	570	797	-	875	851	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.5			1.7			10.9			11.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	678	1464	-	-	1593	-	-	788
HCM Lane V/C Ratio	0.098	0.008	-	-	0.013	-	-	0.302
HCM Control Delay (s)	10.9	7.5	0	-	7.3	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	1.3

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Total
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (vph)	297	72	144	81	207	56	130	442	11	46	789	562
Future Volume (vph)	297	72	144	81	207	56	130	442	11	46	789	562
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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)	3252	1588		1676	1709		1676	3341		1676	3353	1500
Flt Permitted	0.95	1.00		0.57	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3252	1588		1002	1709		1676	3341		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	330	80	160	90	230	62	144	491	12	51	877	624
RTOR Reduction (vph)	0	48	0	0	7	0	0	1	0	0	0	148
Lane Group Flow (vph)	330	192	0	90	285	0	144	502	0	51	877	476
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases				2								4
Actuated Green, G (s)	18.3	39.0		40.3	30.5		16.5	66.2		8.0	57.7	76.0
Effective Green, g (s)	18.3	39.0		40.3	30.5		16.5	66.2		8.0	57.7	76.0
Actuated g/C Ratio	0.12	0.26		0.27	0.20		0.11	0.44		0.05	0.38	0.51
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	6.5
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	2.0
Lane Grp Cap (vph)	396	412		313	347		184	1474		89	1289	760
v/s Ratio Prot	c0.10	0.12		0.02	c0.17		c0.09	0.15		0.03	c0.26	0.08
v/s Ratio Perm				0.06								0.24
v/c Ratio	0.83	0.47		0.29	0.82		0.78	0.34		0.57	0.68	0.63
Uniform Delay, d1	64.4	46.7		42.4	57.1		65.0	27.5		69.3	38.5	26.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.33	0.70	0.42
Incremental Delay, d2	13.4	0.9		0.2	14.6		17.9	0.6		5.0	2.7	1.1
Delay (s)	77.7	47.7		42.6	71.7		82.9	28.2		97.1	29.5	12.4
Level of Service	E	D		D	E		F	C		F	C	B
Approach Delay (s)		65.1			64.8			40.3			24.8	
Approach LOS		E			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			40.2									D
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			150.0								27.0	
Intersection Capacity Utilization			77.2%									D
ICU Level of Service												D
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 2: Meridian Road & Deer Flat Road

2024 Total
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	 
Traffic Volume (veh/h)	297	72	144	81	207	56	130	442	11	46	789	562
Future Volume (veh/h)	297	72	144	81	207	56	130	442	11	46	789	562
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	330	80	160	90	230	62	144	491	12	51	877	624
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	125	251	256	254	69	164	1643	40	65	1448	801
Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.10	0.49	0.49	0.04	0.43	0.43
Sat Flow, veh/h	3274	527	1055	1688	1344	362	1688	3358	82	1688	3367	1502
Grp Volume(v), veh/h	330	0	240	90	0	292	144	246	257	51	877	624
Grp Sat Flow(s),veh/h/ln	1637	0	1582	1688	0	1707	1688	1683	1757	1688	1683	1502
Q Serve(g_s), s	15.1	0.0	20.4	6.4	0.0	25.1	12.6	13.1	13.1	4.5	30.1	49.8
Cycle Q Clear(g_c), s	15.1	0.0	20.4	6.4	0.0	25.1	12.6	13.1	13.1	4.5	30.1	49.8
Prop In Lane	1.00		0.67	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	338	0	376	256	0	323	164	823	860	65	1448	801
V/C Ratio(X)	0.98	0.00	0.64	0.35	0.00	0.90	0.88	0.30	0.30	0.79	0.61	0.78
Avail Cap(c_a), veh/h	338	0	417	338	0	449	169	823	860	169	1448	801
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	0.74	0.74	0.74
Uniform Delay (d), s/veh	67.1	0.0	51.4	45.9	0.0	59.5	66.8	22.9	22.9	71.5	32.9	27.9
Incr Delay (d2), s/veh	42.0	0.0	3.0	0.3	0.0	17.5	34.9	0.9	0.9	5.9	1.4	5.6
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(95%),veh/ln	12.8	0.0	12.9	4.8	0.0	17.9	11.2	8.9	9.2	3.6	16.9	23.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.1	0.0	54.3	46.2	0.0	77.0	101.7	23.8	23.8	77.4	34.3	33.5
LnGrp LOS	F	A	D	D	A	E	F	C	C	E	C	C
Approach Vol, veh/h		570			382			647			1552	
Approach Delay, s/veh		86.0			69.8			41.2			35.4	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	34.9	21.6	71.5	14.7	42.2	12.7	80.4				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	39.5	15.0	53.0	15.5	39.5	15.0	53.0				
Max Q Clear Time (g_c+I1), s	17.1	27.1	14.6	51.8	8.4	22.4	6.5	15.1				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.1	0.0	1.3	0.0	5.7				
Intersection Summary												
HCM 6th Ctrl Delay			49.9									
HCM 6th LOS			D									

HCM 6th TWSC
 3: Antelope View Avenue & Deer Flat Road

2024 Total
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↖	↗
Traffic Vol, veh/h	73	32	14	289	22	8
Future Vol, veh/h	73	32	14	289	22	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	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	81	36	16	321	24	9

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	117	0	434	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	353	-
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	-	-	1471	-	579	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1471	-	571	979
Mov Cap-2 Maneuver	-	-	-	-	571	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	571	979	-	-	1471	-
HCM Lane V/C Ratio	0.043	0.009	-	-	0.011	-
HCM Control Delay (s)	11.6	8.7	-	-	7.5	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

HCM 6th TWSC
4: Locust Grove Road & Deer Flat Road

2024 Total
PM Peak Hour

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	43	1	12	208	8	4	15	6	13	47	87
Future Vol, veh/h	18	43	1	12	208	8	4	15	6	13	47	87
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	48	1	13	231	9	4	17	7	14	52	97

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	49	0	0	425	355	49	363	351	236
Stage 1	-	-	-	-	-	-	89	89	-	262	262	-
Stage 2	-	-	-	-	-	-	336	266	-	101	89	-
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	1327	-	-	1558	-	-	540	571	1020	593	573	803
Stage 1	-	-	-	-	-	-	918	821	-	743	691	-
Stage 2	-	-	-	-	-	-	678	689	-	905	821	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1327	-	-	1558	-	-	433	557	1020	565	559	803
Mov Cap-2 Maneuver	-	-	-	-	-	-	433	557	-	565	559	-
Stage 1	-	-	-	-	-	-	904	809	-	732	684	-
Stage 2	-	-	-	-	-	-	545	682	-	867	809	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			0.4			11.3			11.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	595	1327	-	-	1558	-	-	682
HCM Lane V/C Ratio	0.047	0.015	-	-	0.009	-	-	0.239
HCM Control Delay (s)	11.3	7.8	0	-	7.3	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.9

HCM 6th TWSC
5: Meridian Road & D&B Access

2024 Total
PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	6	20	579	19	7	1010
Future Vol, veh/h	6	20	579	19	7	1010
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	-	-	200	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	21	603	20	7	1052

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1143	302	0	0	623
Stage 1	603	-	-	-	-
Stage 2	540	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*618	694	-	-	954
Stage 1	*509	-	-	-	-
Stage 2	*637	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*614	694	-	-	954
Mov Cap-2 Maneuver	*600	-	-	-	-
Stage 1	*509	-	-	-	-
Stage 2	*633	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	670	954
HCM Lane V/C Ratio	-	-	0.04	0.008
HCM Control Delay (s)	-	-	10.6	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: Meridian Road & Profile Lane/Profile Drive

2024 Total
PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↑↑	↕	↕	↑↑	↕
Traffic Vol, veh/h	35	6	87	29	1	68	74	476	45	113	809	96
Future Vol, veh/h	35	6	87	29	1	68	74	476	45	113	809	96
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									
Storage Length	-	-	-	75	-	-	50	-	200	50	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	3
Mvmt Flow	36	6	90	30	1	70	76	491	46	116	834	99

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1464	1755	417	1295	1808	246	933	0	0	537	0	0
Stage 1	1066	1066	-	643	643	-	-	-	-	-	-	-
Stage 2	398	689	-	652	1165	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	193	126	*756	*288	113	754	1095	-	-	1027	-	-
Stage 1	525	498	-	*428	467	-	-	-	-	-	-	-
Stage 2	599	445	-	*713	431	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	-	-	-
Mov Cap-1 Maneuver	150	104	*756	*210	93	754	1095	-	-	1027	-	-
Mov Cap-2 Maneuver	150	104	-	*210	93	-	-	-	-	-	-	-
Stage 1	489	442	-	*398	435	-	-	-	-	-	-	-
Stage 2	504	414	-	*550	383	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	24.4		15.1		1.1		1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1095	-	-	315	210	684	1027	-	-
HCM Lane V/C Ratio	0.07	-	-	0.419	0.142	0.104	0.113	-	-
HCM Control Delay (s)	8.5	-	-	24.4	25	10.9	9	-	-
HCM Lane LOS	A	-	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2	0.5	0.3	0.4	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
7: Meridian Road & Meadow View Road

2024 Total
PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	10	19	552	14	34	928
Future Vol, veh/h	10	19	552	14	34	928
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	-	-	-	50	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	20	575	15	35	967

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1137	295	0	0	590	0
Stage 1	583	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*523	701	-	-	982	-
Stage 1	*521	-	-	-	-	-
Stage 2	*675	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	*504	701	-	-	982	-
Mov Cap-2 Maneuver	*494	-	-	-	-	-
Stage 1	*521	-	-	-	-	-
Stage 2	*651	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	612	982
HCM Lane V/C Ratio	-	-	0.049	0.036
HCM Control Delay (s)	-	-	11.2	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
8: Meadow View Road & Stone Falls Avenue

2024 Total
PM Peak Hour

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	36	12	8	20	11	21
Future Vol, veh/h	36	12	8	20	11	21
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	40	13	9	22	12	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	31	0	-	0	113 20
Stage 1	-	-	-	-	20 -
Stage 2	-	-	-	-	93 -
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	1582	-	-	-	884 1058
Stage 1	-	-	-	-	1003 -
Stage 2	-	-	-	-	931 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1582	-	-	-	862 1058
Mov Cap-2 Maneuver	-	-	-	-	862 -
Stage 1	-	-	-	-	978 -
Stage 2	-	-	-	-	931 -

Approach	EB	WB	SB
HCM Control Delay, s	5.5	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1582	-	-	-	981
HCM Lane V/C Ratio	0.025	-	-	-	0.036
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM Signalized Intersection Capacity Analysis

2: Meridian Road & Deer Flat Road

2024 Total - No Build
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	533	162	55	7	62	27	102	667	29	36	243	358
Future Volume (vph)	533	162	55	7	62	27	102	667	29	36	243	358
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
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	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	1698		1676	1684		1676	3332		1676	3353	1500
Flt Permitted	0.48	1.00		0.61	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	856	1698		1075	1684		1676	3332		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	592	180	61	8	69	30	113	741	32	40	270	398
RTOR Reduction (vph)	0	8	0	0	12	0	0	2	0	0	0	253
Lane Group Flow (vph)	592	233	0	8	87	0	113	771	0	40	270	145
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	60.4	52.7		20.1	18.9		14.6	62.0		7.1	54.5	54.5
Effective Green, g (s)	60.4	52.7		20.1	18.9		14.6	62.0		7.1	54.5	54.5
Actuated g/C Ratio	0.40	0.35		0.13	0.13		0.10	0.41		0.05	0.36	0.36
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	536	596		148	212		163	1377		79	1218	545
v/s Ratio Prot	c0.26	0.14		0.00	0.05		c0.07	c0.23		0.02	0.08	
v/s Ratio Perm	c0.19			0.01								0.10
v/c Ratio	1.10	0.39		0.05	0.41		0.69	0.56		0.51	0.22	0.27
Uniform Delay, d1	41.3	36.6		56.5	60.4		65.5	33.6		69.7	33.1	33.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.13	0.81	0.91
Incremental Delay, d2	70.6	0.5		0.1	1.4		9.8	1.7		1.8	0.4	1.2
Delay (s)	111.9	37.0		56.6	61.8		75.4	35.2		80.3	27.1	31.8
Level of Service	F	D		E	E		E	D		F	C	C
Approach Delay (s)		90.3			61.4			40.4			32.8	
Approach LOS		F			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			55.5				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			0.87									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			27.0		
Intersection Capacity Utilization			79.5%				ICU Level of Service			D		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: Meridian Road & Deer Flat Road

2024 Total - No Build
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	533	162	55	7	62	27	102	667	29	36	243	358
Future Volume (veh/h)	533	162	55	7	62	27	102	667	29	36	243	358
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	592	180	61	8	69	30	113	741	32	40	270	398
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	424	348	118	149	87	38	133	1662	72	51	1537	686
Arrive On Green	0.21	0.28	0.28	0.01	0.07	0.07	0.08	0.51	0.51	0.03	0.46	0.46
Sat Flow, veh/h	1688	1266	429	1688	1171	509	1688	3288	142	1688	3367	1502
Grp Volume(v), veh/h	592	0	241	8	0	99	113	379	394	40	270	398
Grp Sat Flow(s),veh/h/ln	1688	0	1695	1688	0	1680	1688	1683	1746	1688	1683	1502
Q Serve(g_s), s	31.5	0.0	18.0	0.7	0.0	8.7	9.9	21.6	21.6	3.5	7.1	29.4
Cycle Q Clear(g_c), s	31.5	0.0	18.0	0.7	0.0	8.7	9.9	21.6	21.6	3.5	7.1	29.4
Prop In Lane	1.00		0.25	1.00		0.30	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	424	0	466	149	0	125	133	851	883	51	1537	686
V/C Ratio(X)	1.40	0.00	0.52	0.05	0.00	0.79	0.85	0.45	0.45	0.79	0.18	0.58
Avail Cap(c_a), veh/h	424	0	604	307	0	420	169	851	883	169	1537	686
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	0.98	0.98	0.98
Uniform Delay (d), s/veh	50.8	0.0	46.0	63.2	0.0	68.3	68.2	23.7	23.7	72.3	24.1	30.1
Incr Delay (d2), s/veh	192.5	0.0	1.0	0.1	0.0	11.8	22.3	1.7	1.6	9.6	0.2	3.5
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	55.2	0.0	12.1	0.5	0.0	7.3	8.6	13.3	13.7	2.9	5.0	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	243.2	0.0	47.0	63.3	0.0	80.1	90.5	25.4	25.3	81.8	24.3	33.6
LnGrp LOS	F	A	D	E	A	F	F	C	C	F	C	C
Approach Vol, veh/h		833			107			886			708	
Approach Delay, s/veh		186.5			78.8			33.6			32.8	
Approach LOS		F			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.0	17.7	18.8	75.5	7.9	47.8	11.5	82.8				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	31.5	37.5	15.0	39.0	15.5	53.5	15.0	39.0				
Max Q Clear Time (g_c+I1), s	33.5	10.7	11.9	31.4	2.7	20.0	5.5	23.6				
Green Ext Time (p_c), s	0.0	0.5	0.0	3.2	0.0	1.5	0.0	6.6				
Intersection Summary												
HCM 6th Ctrl Delay			85.5									
HCM 6th LOS			F									
Notes												
User approved pedestrian interval to be less than phase max green.												

HCM Signalized Intersection Capacity Analysis
2: Meridian Road & Deer Flat Road

2024 Total - No Build
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	297	72	144	81	207	56	130	442	11	46	789	562
Future Volume (vph)	297	72	144	81	207	56	130	442	11	46	789	562
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.90		1.00	0.97		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	1588		1676	1709		1676	3341		1676	3353	1500
Flt Permitted	0.21	1.00		0.60	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	373	1588		1052	1709		1676	3341		1676	3353	1500
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	330	80	160	90	230	62	144	491	12	51	877	624
RTOR Reduction (vph)	0	47	0	0	7	0	0	1	0	0	0	289
Lane Group Flow (vph)	330	193	0	90	285	0	144	502	0	51	877	335
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	56.1	39.8		39.8	30.0		16.1	65.4		8.0	57.3	57.3
Effective Green, g (s)	56.1	39.8		39.8	30.0		16.1	65.4		8.0	57.3	57.3
Actuated g/C Ratio	0.37	0.27		0.27	0.20		0.11	0.44		0.05	0.38	0.38
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	2.0	3.3		2.0	3.3		2.0	5.0		2.0	5.0	5.0
Lane Grp Cap (vph)	309	421		319	341		179	1456		89	1280	573
v/s Ratio Prot	c0.14	0.12		0.02	0.17		c0.09	0.15		0.03	c0.26	
v/s Ratio Perm	c0.26			0.06								0.22
v/c Ratio	1.07	0.46		0.28	0.84		0.80	0.34		0.57	0.69	0.59
Uniform Delay, d1	40.2	46.1		42.8	57.6		65.4	28.1		69.3	38.8	36.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.30	0.70	0.61
Incremental Delay, d2	70.4	0.9		0.2	16.2		21.3	0.6		5.0	2.7	3.9
Delay (s)	110.6	47.0		43.0	73.9		86.7	28.7		95.0	29.8	26.4
Level of Service	F	D		D	E		F	C		F	C	C
Approach Delay (s)		83.8			66.6			41.6			30.6	
Approach LOS		F			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			46.8			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			150.0			Sum of lost time (s)		27.0				
Intersection Capacity Utilization			85.6%			ICU Level of Service		E				
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Meridian Road & Deer Flat Road

2024 Total - No Build
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	72	144	81	207	56	130	442	11	46	789	562
Future Volume (veh/h)	297	72	144	81	207	56	130	442	11	46	789	562
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	330	80	160	90	230	62	144	491	12	51	877	624
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	125	250	255	254	68	164	1645	40	65	1450	647
Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.10	0.49	0.49	0.04	0.43	0.43
Sat Flow, veh/h	1688	527	1055	1688	1344	362	1688	3358	82	1688	3367	1502
Grp Volume(v), veh/h	330	0	240	90	0	292	144	246	257	51	877	624
Grp Sat Flow(s),veh/h/ln	1688	0	1582	1688	0	1707	1688	1683	1757	1688	1683	1502
Q Serve(g_s), s	15.5	0.0	20.5	6.4	0.0	25.1	12.6	13.1	13.1	4.5	30.1	60.7
Cycle Q Clear(g_c), s	15.5	0.0	20.5	6.4	0.0	25.1	12.6	13.1	13.1	4.5	30.1	60.7
Prop In Lane	1.00		0.67	1.00		0.21	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	245	0	375	255	0	322	164	825	861	65	1450	647
V/C Ratio(X)	1.35	0.00	0.64	0.35	0.00	0.91	0.88	0.30	0.30	0.79	0.60	0.96
Avail Cap(c_a), veh/h	245	0	396	337	0	427	169	825	861	169	1450	647
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	0.74	0.74	0.74
Uniform Delay (d), s/veh	47.8	0.0	51.5	46.0	0.0	59.6	66.8	22.9	22.9	71.5	32.9	41.6
Incr Delay (d2), s/veh	180.0	0.0	3.4	0.3	0.0	19.5	34.9	0.9	0.9	5.9	1.4	23.0
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	29.9	0.0	13.0	4.8	0.0	18.1	11.2	8.9	9.2	3.6	16.8	32.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	227.8	0.0	54.9	46.3	0.0	79.1	101.7	23.8	23.8	77.4	34.3	64.6
LnGrp LOS	F	A	D	D	A	E	F	C	C	E	C	E
Approach Vol, veh/h		570			382			647			1552	
Approach Delay, s/veh		155.0			71.3			41.1			47.9	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	34.8	21.6	71.6	14.7	42.0	12.7	80.5				
Change Period (Y+Rc), s	6.5	6.5	7.0	7.0	6.5	6.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	37.5	15.0	55.0	15.5	37.5	15.0	55.0				
Max Q Clear Time (g_c+I1), s	17.5	27.1	14.6	62.7	8.4	22.5	6.5	15.1				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	1.2	0.0	5.8				
Intersection Summary												
HCM 6th Ctrl Delay			68.7									
HCM 6th LOS			E									
Notes												
User approved pedestrian interval to be less than phase max green.												

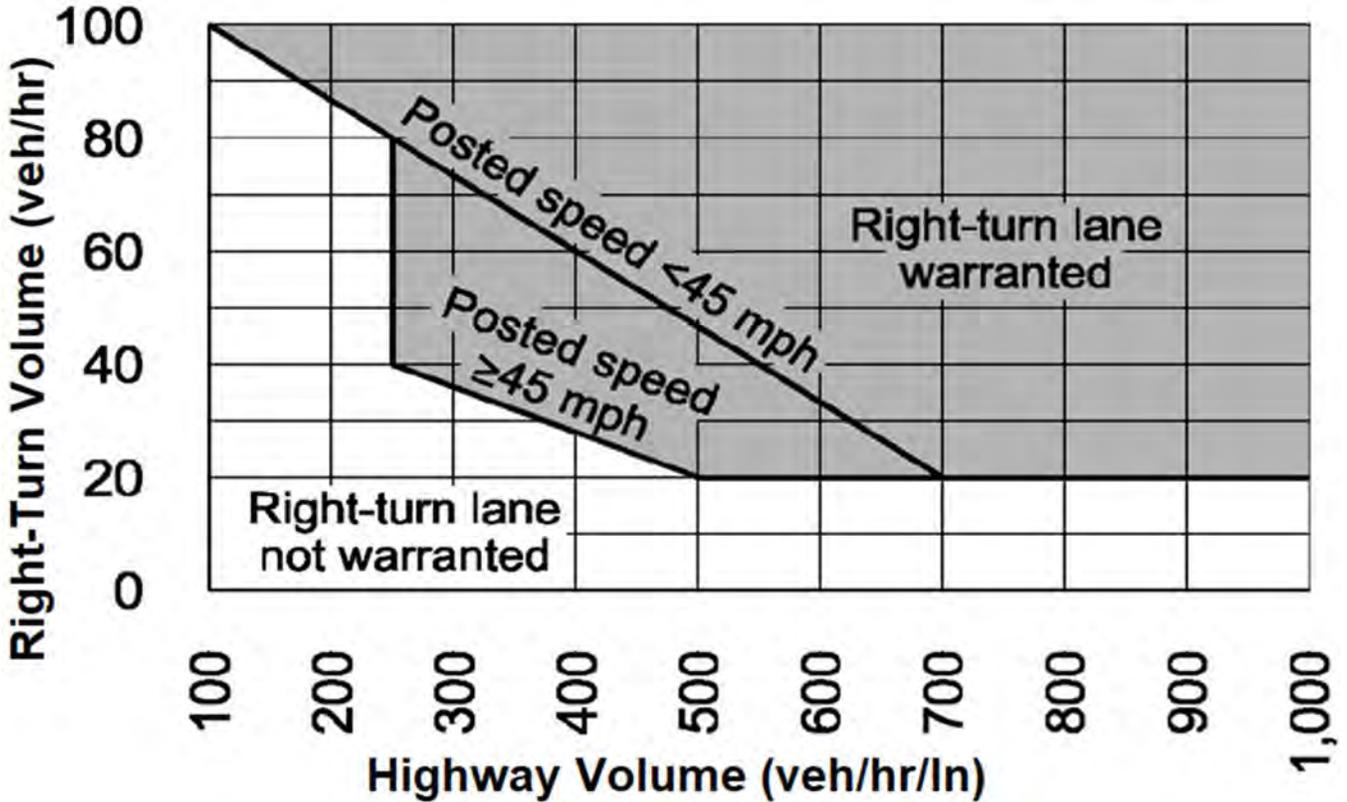
APPENDIX E: TURN LANE WARRANT WORKSHEETS

**Ashton Estates East Subdivision
Kuna, Idaho**

**ITD Right-Turn Lane Analysis
2020 Existing Traffic**

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vphpl)	Meet Warrant?
① Meadow View Rd & Meridian Rd	NB	55	AM	1	327	No*
			PM	3	237	No*

*Total approach volume less than 100 vph or right-turn volume < 20 vph = Not Warranted



AM Peak ①

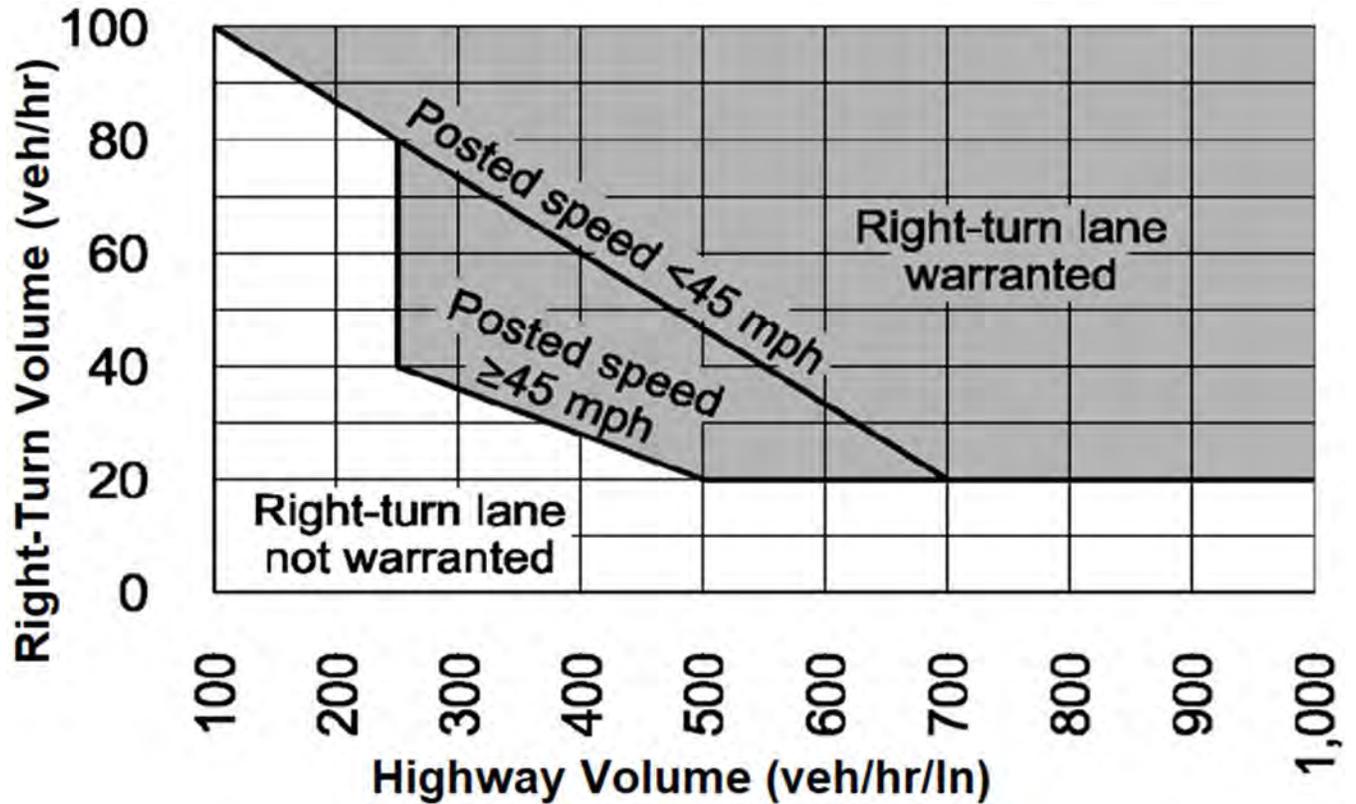
PM Peak ①

**Ashton Estates East Subdivision
Kuna, Idaho**

**ITD Right-Turn Lane Analysis
2024 Background Traffic**

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vphpl)	Meet Warrant?
① Meadow View Rd & Meridian Rd	NB	55	AM	1	383	No*
			PM	4	278	No*

*Total approach volume less than 100 vph or right-turn volume < 20 vph = Not Warranted



AM Peak ①

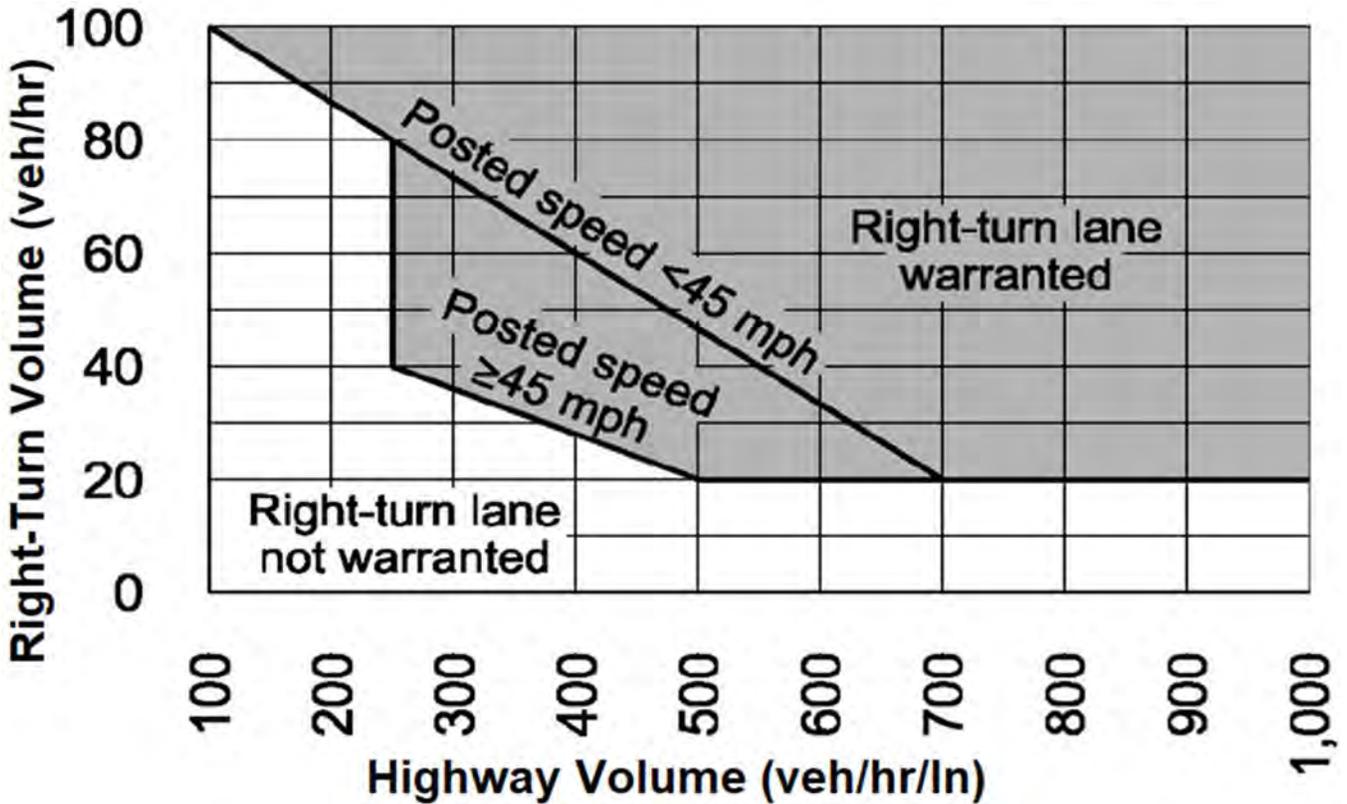
PM Peak ①

**Ashton Estates East Subdivision
Kuna, Idaho**

**ITD Right-Turn Lane Analysis
2024 Total Traffic**

Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vphpl)	Meet Warrant?
① Meadow View Rd & Meridian Rd	NB	55	AM	4	384	No*
			PM	14	283	No*

*Total approach volume less than 100 vph or right-turn volume < 20 vph = Not Warranted



AM Peak ①

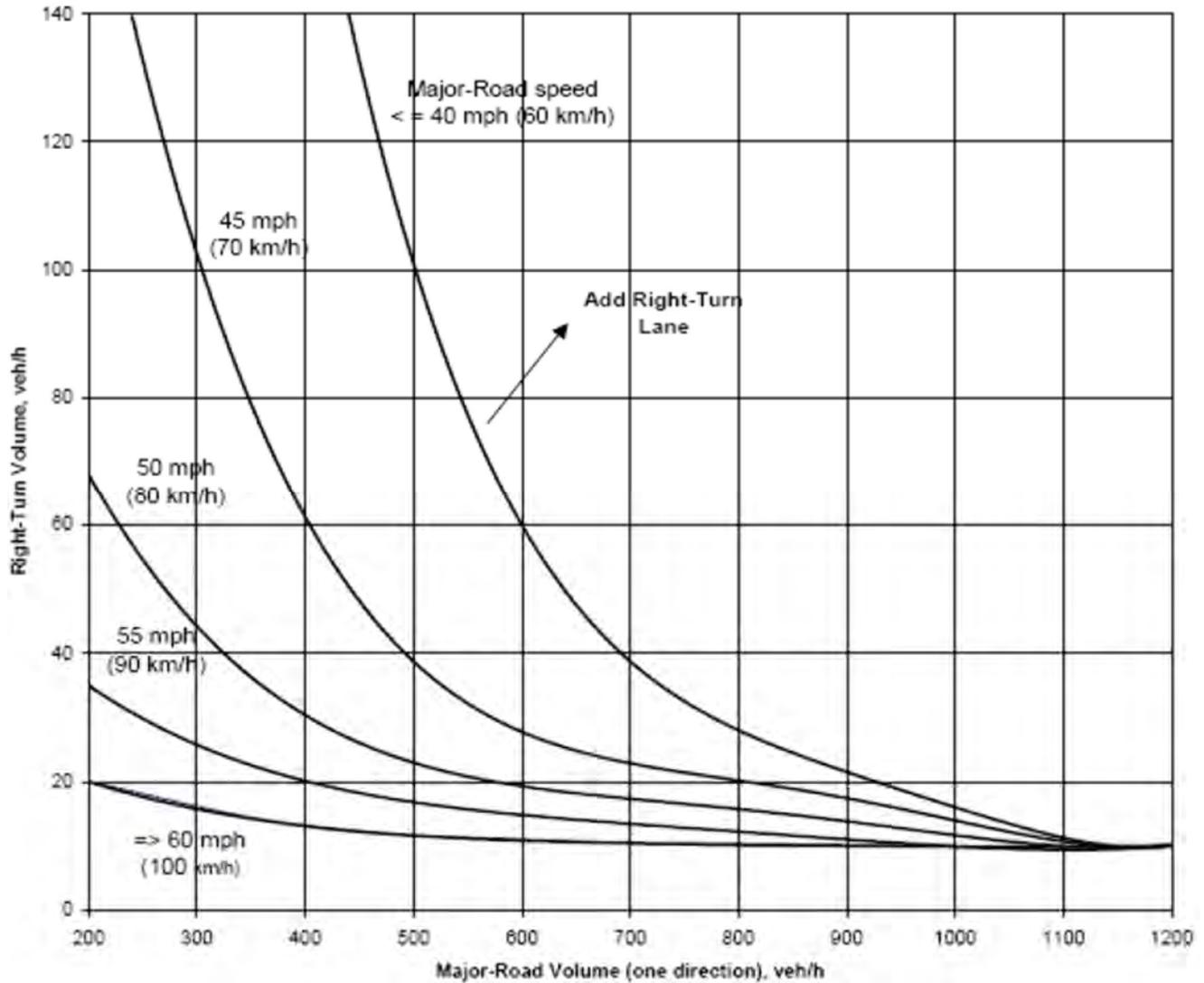
PM Peak ①

**Ashton Estates East Subdivision
Kuna, Idaho**

**ACHD Right-Turn Lane Guidelines for Two-Lane Roadways
2020 Existing Traffic**

	Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
①	Hubbard Road & Locust Grove Road	EB	50	AM	1	87	No*
				PM	3	21	No*
②	Hubbard Road & Locust Grove Road	WB	50	AM	0	11	No*
				PM	2	52	No*
③	Deer Flat Road & Locust Grove Road	EB	50	AM	3	130	No*
				PM	1	54	No*
④	Deer Flat Road & Locust Grove Road	WB	50	AM	2	62	No*
				PM	7	193	No*

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = Not Warranted



AM Peak ①

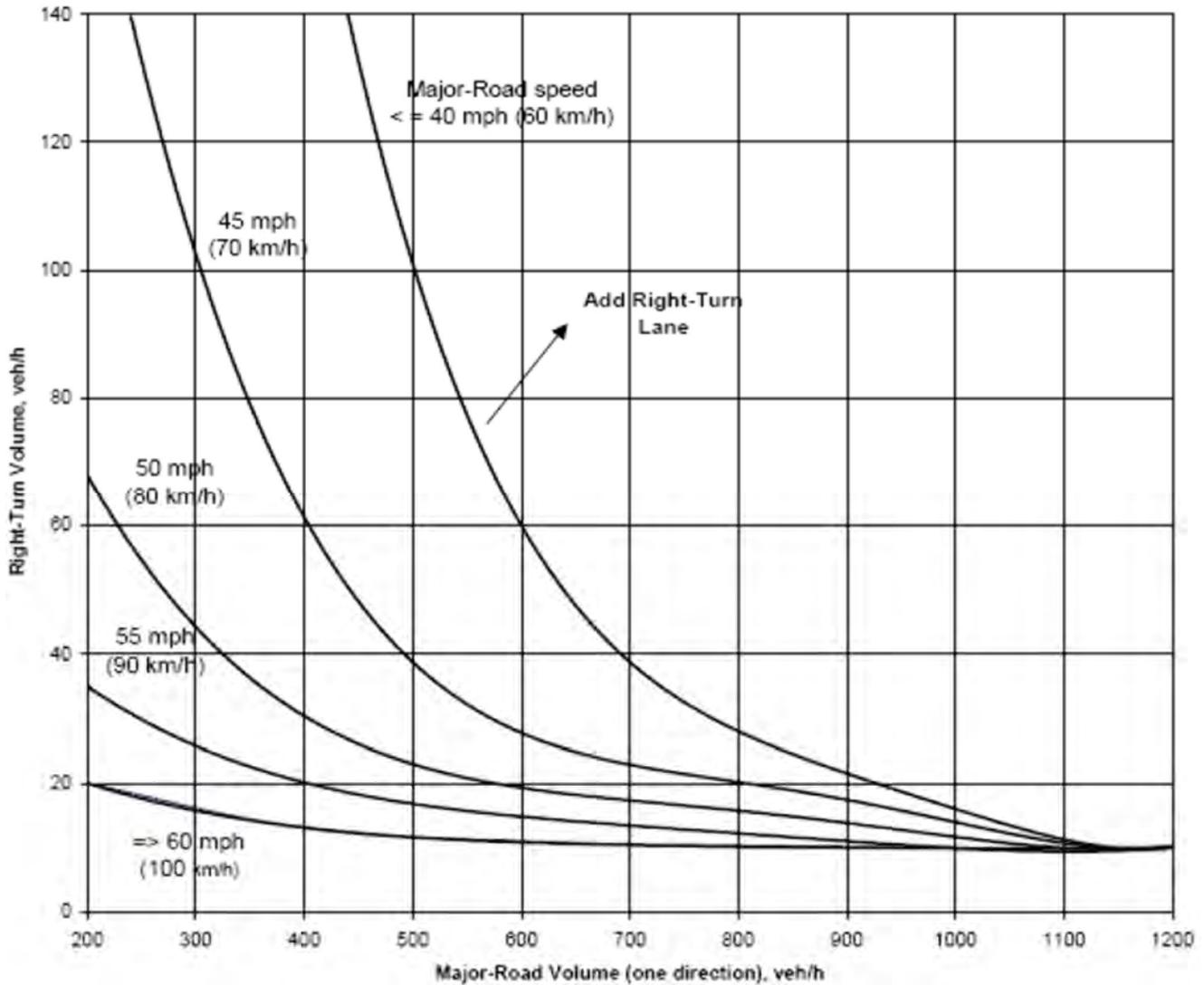
PM Peak ①

**Ashton Estates East Subdivision
Kuna, Idaho**

**ACHD Right-Turn Lane Guidelines for Two-Lane Roadways
2024 Background Traffic**

	Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
①	Hubbard Road & Locust Grove Road	EB	50	AM	1	127	No*
				PM	4	30	No*
②	Hubbard Road & Locust Grove Road	WB	50	AM	0	16	No*
				PM	3	77	No*
③	Deer Flat Road & Locust Grove Road	EB	50	AM	3	146	No*
				PM	1	61	No*
④	Deer Flat Road & Locust Grove Road	WB	50	AM	2	70	No*
				PM	8	217	No*

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = Not Warranted



AM Peak ①

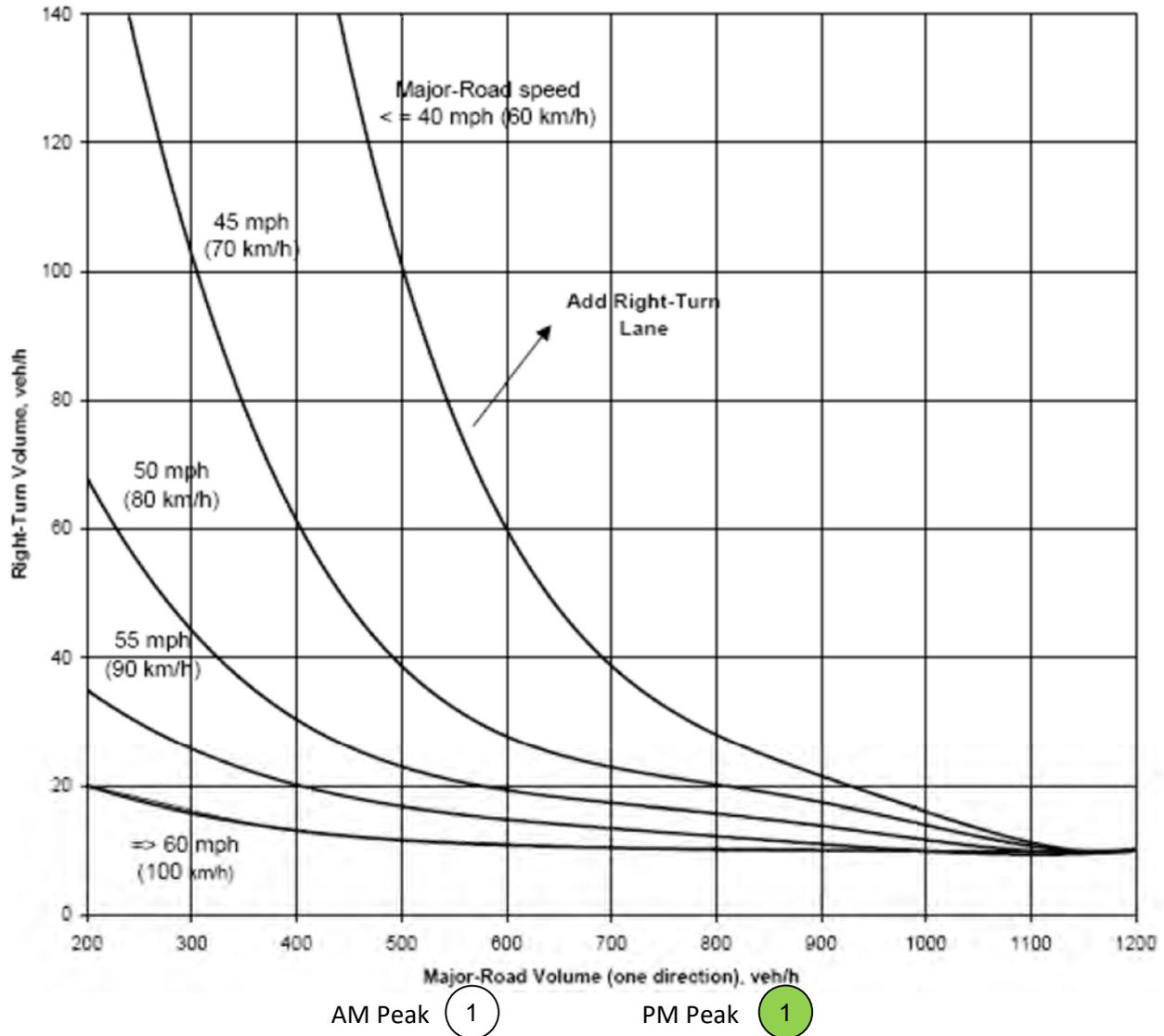
PM Peak ①

Ashton Estates East Subdivision Kuna, Idaho

ACHD Right-Turn Lane Guidelines for Two-Lane Roadways 2024 Total Traffic

	Intersection	Approach	Speed Limit (mph)	Peak Hour	Right-Turn Volume (vph)	Major Road Volume (vph)	Meet Warrant?
①	Hubbard Road & Locust Grove Road	EB	50	AM	1	127	No*
				PM	4	30	No*
②	Hubbard Road & Locust Grove Road	WB	50	AM	0	16	No*
				PM	3	77	No*
③	Deer Flat Road & Locust Grove Road	EB	50	AM	3	148	No*
				PM	1	62	No*
④	Deer Flat Road & Locust Grove Road	WB	50	AM	2	73	No*
				PM	8	228	No*
⑤	Stone Falls Avenue & Meadow View Road	WB	50	AM	5	8	No*
				PM	20	28	No*

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = Not Warranted

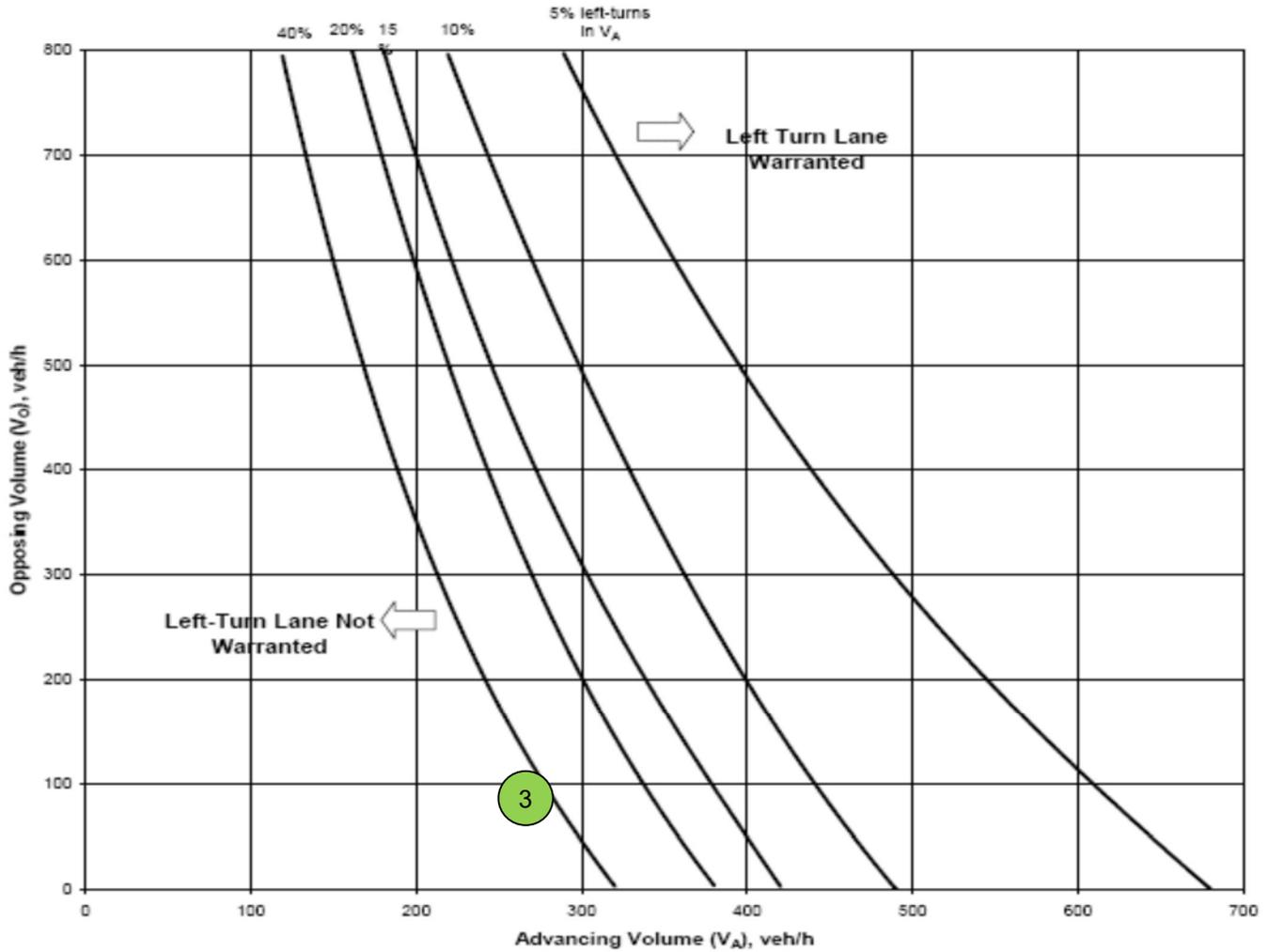


Ashton Estates East Subdivision Kuna, Idaho

ACHD Left-Turn Lane Analysis 2020 Existing Traffic

	Intersection	Approach	Speed Limit [mph]	Peak Hour	Advancing Volume [vph]	Opposing Volume [vph]	Left-Turn Volume (%)	Meet Warrant?
①	Hubbard Road & Locust Grove Road	EB	50	AM	87	10	41.4%	No*
				PM	21	40	33.3%	No*
②	Hubbard Road & Locust Grove Road	WB	50	AM	11	51	9.1%	No*
				PM	52	14	23.1%	No*
③	Antelope Flat Road & Deer Flat Road	WB	50	AM	67	192	1.5%	No*
				PM	266	88	3.0%	No
④	Deer Flat Road & Locust Grove Road	EB	50	AM	130	62	19.2%	No*
				PM	54	192	27.8%	No*
⑤	Deer Flat Road & Locust Grove Road	WB	50	AM	62	105	0.0%	No*
				PM	193	39	0.5%	No*

*Advancing and Opposing Volume < 225 vph = Not Warranted



AM Peak ①

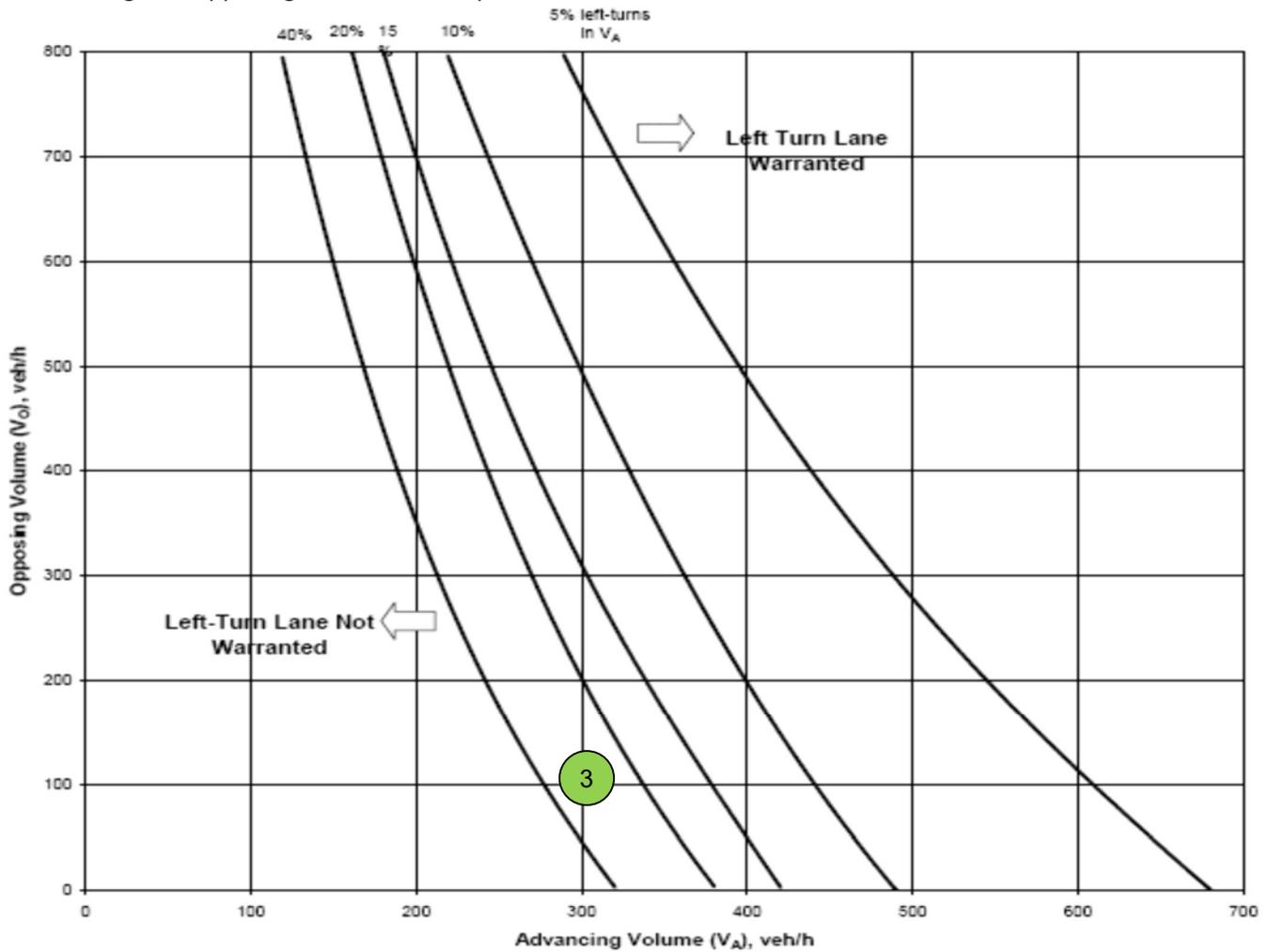
PM Peak ①

Ashton Estates East Subdivision Kuna, Idaho

ACHD Left-Turn Lane Analysis 2024 Background Traffic

Intersection	Approach	Speed Limit [mph]	Peak Hour	Advancing Volume [vph]	Opposing Volume [vph]	Left-Turn Volume (%)	Meet Warrant?
① Hubbard Road & Locust Grove Road	EB	50	AM	127	15	41.7%	No*
			PM	30	59	33.3%	No*
② Hubbard Road & Locust Grove Road	WB	50	AM	16	74	6.3%	No*
			PM	77	20	23.4%	No*
③ Antelope Flat Road & Deer Flat Road	WB	50	AM	76	217	2.6%	No*
			PM	301	101	4.0%	No
④ Deer Flat Road & Locust Grove Road	EB	50	AM	146	70	19.2%	No*
			PM	61	216	27.9%	No*
⑤ Deer Flat Road & Locust Grove Road	WB	50	AM	70	118	0.0%	No*
			PM	217	44	0.5%	No*

*Advancing and Opposing Volume < 225 vph = Not Warranted



AM Peak ①

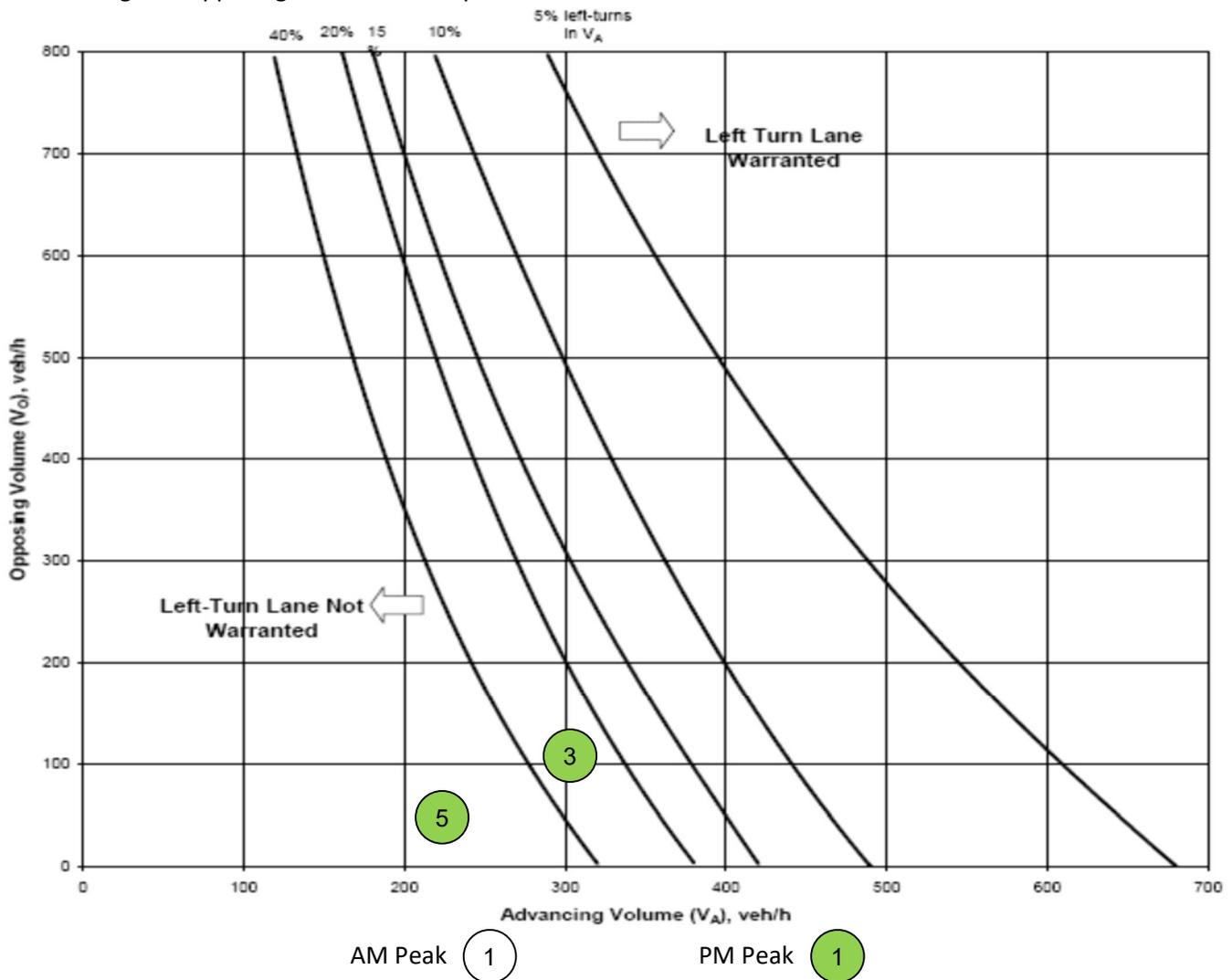
PM Peak ①

**Ashton Estates East Subdivision
Kuna, Idaho**

**ACHD Left-Turn Lane Analysis
2024 Total Traffic**

	Intersection	Approach	Speed Limit [mph]	Peak Hour	Advancing Volume [vph]	Opposing Volume [vph]	Left-Turn Volume (%)	Meet Warrant?
①	Hubbard Road & Locust Grove Road	EB	50	AM	127	15	41.7%	No*
				PM	30	59	33.3%	No*
②	Hubbard Road & Locust Grove Road	WB	50	AM	16	74	6.3%	No*
				PM	77	20	23.4%	No*
③	Antelope Flat Road & Deer Flat Road	WB	50	AM	77	218	3.9%	No*
				PM	303	105	4.6%	No
④	Deer Flat Road & Locust Grove Road	EB	50	AM	148	70	19.6%	No*
				PM	62	216	29.0%	No*
⑤	Deer Flat Road & Locust Grove Road	WB	50	AM	73	119	4.1%	No*
				PM	228	44	5.3%	No
⑥	Stone Falls Avenue & Meadow View Road	EB	50	AM	13	8	84.6%	No*
				PM	48	28	75.0%	No*

*Advancing and Opposing Volume < 225 vph = Not Warranted



Kirsti Grabo

From: Sub Name Mail <subnamemail@adacounty.id.gov>
Sent: Friday, November 8, 2019 3:45 PM
To: Kirsti Grabo
Subject: RE: Ashton Estates Sub Extension

Kirsti;

If this project will be adjacent to, and a continuation of Ashton Estates Subdivision, then it would simplify things if Don continues the Ashton Estates phasing.

From the Assessors mapping, it appears that in the future phase 3 will be Parcel S1419223145 (south of phase 2) so phase 4 and on would extend into Parcel S1419241000.

Kuna may want to identify it some other way for their internal use, but if they will acknowledge that whatever you submit is "to be platted as future phases of Ashton Estates" then it is cleaner in the recorded plats. You already have the name reserved, so we have no problems extending it onto adjacent ground.

Please contact me if I can be of assistance in getting Kuna to accept the current name.



Glen Smallwood
Surveying Technician
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7926 *office*
(208) 287-7909 *fax*

From: Kirsti Grabo <KGrabo@kmengllp.com>
Sent: Thursday, November 7, 2019 2:03 PM
To: Sub Name Mail <subnamemail@adacounty.id.gov>
Cc: Donna Wilson <DWilson@kmengllp.com>
Subject: [EXTERNAL] Sub Name Request

CAUTION: This email originated from outside Ada County email servers. Do not click on links or open attachments unless you recognize the sender and know the content is safe. Verify the sender by mouse-hovering over their display name in order to see the sender's full email address and confirm it is not suspicious. If you are unsure an email is safe, please report the email by using the 'Phish Alert' button in Outlook.

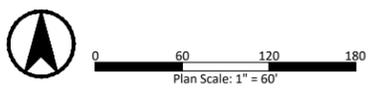
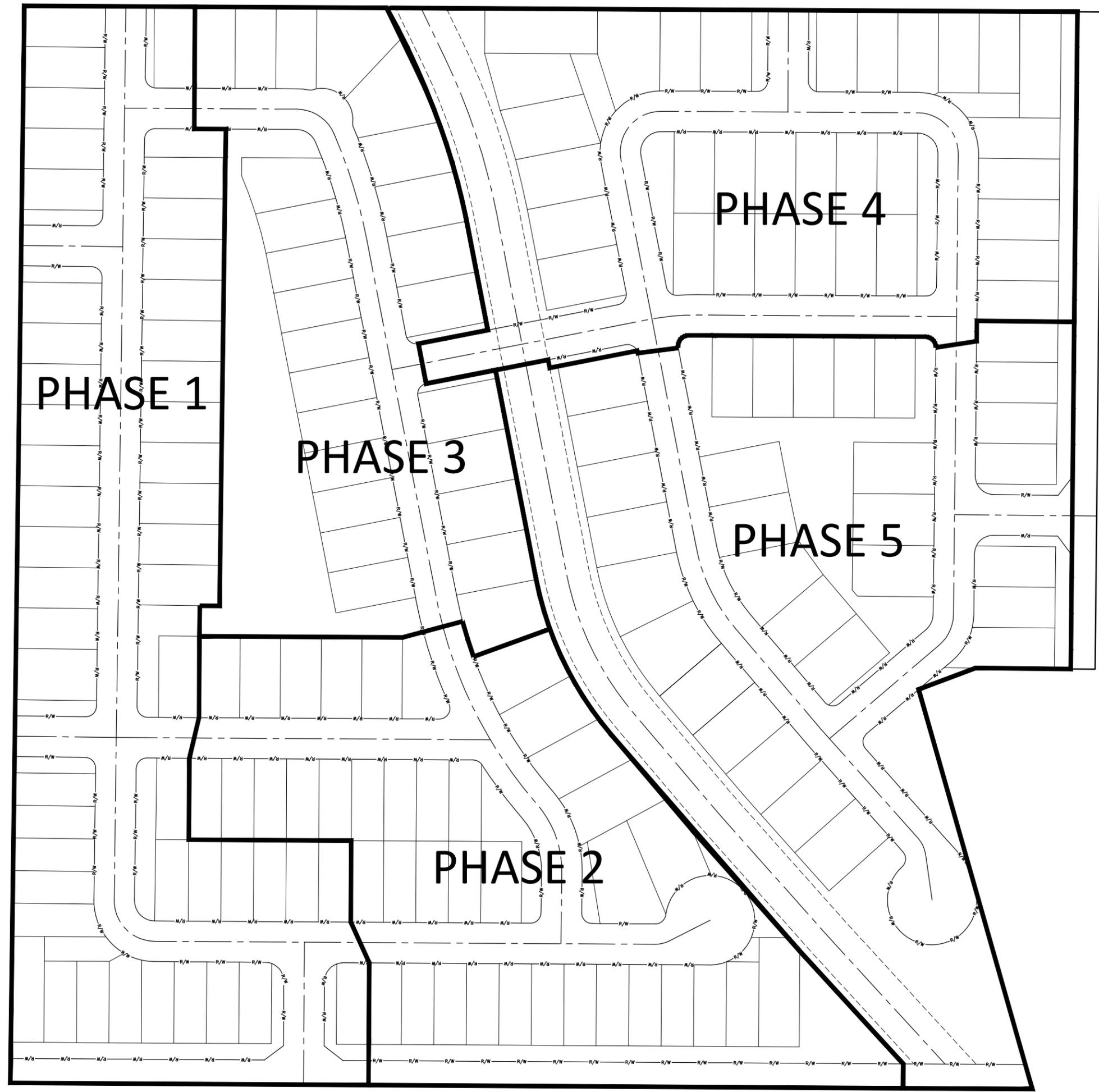
Hi Gents –

We are currently working on an extension of the Ashton Estates project in Kuna. The parcel number is S1419241000 and the property is +/- 38.5 acres. On behalf of the developer, Don Newell (who is also the developer of Ashton Estates), we would like to reserve the name Ashton Estates East Subdivision for this project.

Please let me know if this is acceptable.

Thanks,

P:\13\ASHTON\ASHTON ESTATES EAST PHASING PLAN.DWG, SCOTT MARSHALL, 1/17/2019, DWG TO PDF PLOT



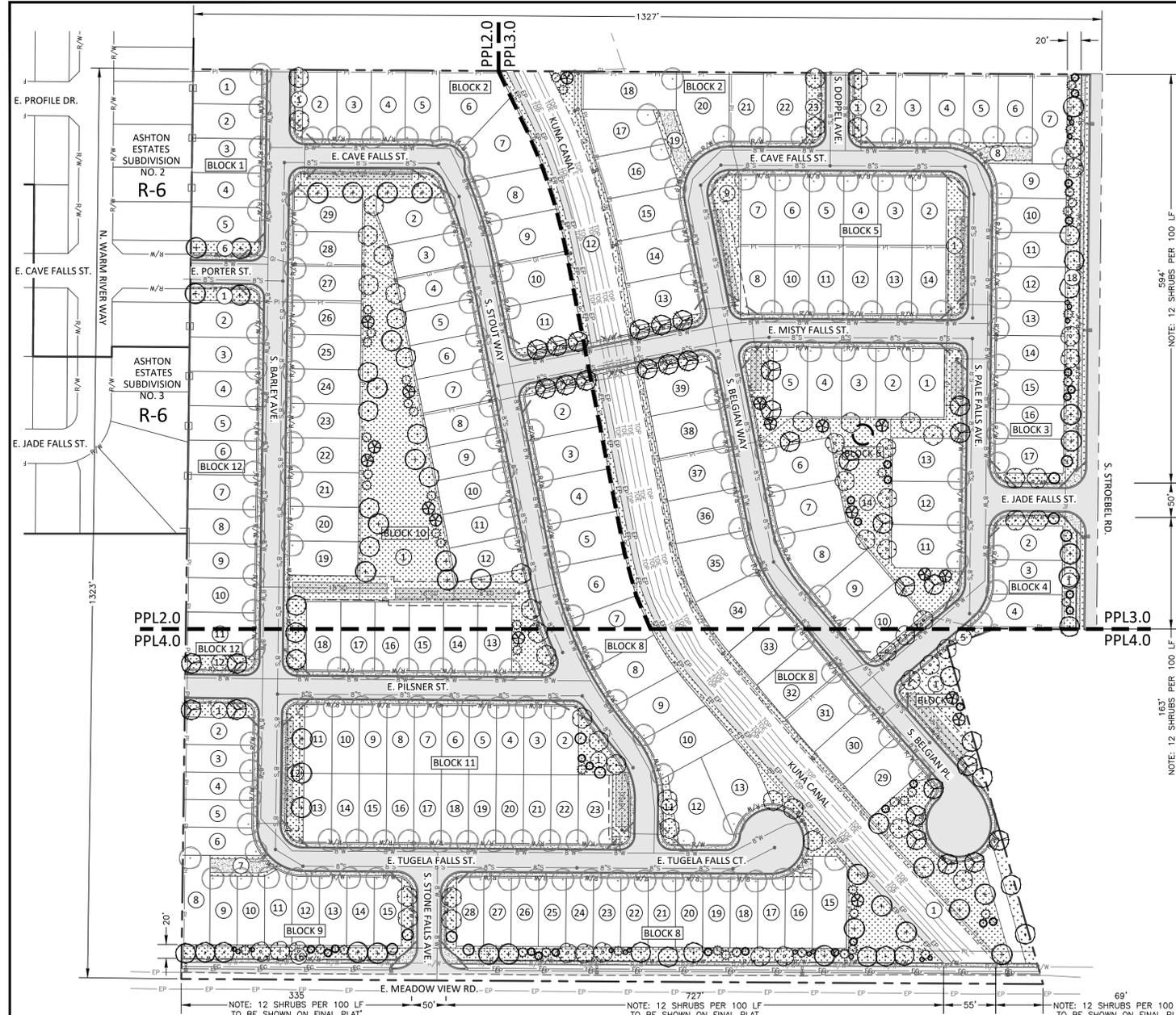
NOTES:
 A. THIS CONCEPTUAL PHASING PLAN IS FOR PRELIMINARY PLANNING PURPOSES, LOT LAYOUT IS SUBJECT TO CHANGE UPON FINAL PLAT.

PRELIMINARY NOT FOR CONSTRUCTION

**ASHTON ESTATES EAST SUBDIVISION
 CONCEPTUAL PHASING PLAN
 KUNA, IDAHO**

REVISIONS		
NO.	ITEM	DATE

DATE: 11/11/19
 PROJECT: 19-081
 SHEET NO. 1 OF 1



PLANT SCHEDULE

OTHER TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	175	INDIVIDUAL LOT TREES 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.		CLASS II
DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	35	ACER X FREEMANII 'JEFFSRED' TM AUTUMN BLAZE MAPLE	2" CAL. B&B	45'X30'	CLASS II
(Symbol)	26	CARPINUS BETULUS EUROPEAN HORNBEAM	2" CAL. B&B	30'X30'	CLASS I
(Symbol)	38	FRAXINUS AMERICANA 'AUTUMN PURPLE' AUTUMN PURPLE ASH	2" CAL. B&B	45'X30'	CLASS II
(Symbol)	32	FRAXINUS PENNSYLVANICA 'PATMORE' PATMORE ASH	2" CAL. B&B	30'X30'	CLASS II
(Symbol)	29	GLEDITSIA TRIACANTHOS 'SKYLINE' SKYLINE HONEY LOCUST	2" CAL. B&B	35'X30'	CLASS II
(Symbol)	10	PYRUS CALLERYANA 'CAPITAL' CAPITAL GALLERY PEAR	2" CAL. B&B	35'X15'	CLASS II
EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	18	PICEA OMORICA 'BRUNS' BRUNS SPRUCE	6"-8" B&B	30'X10'	
(Symbol)	18	PICEA PUNGENS COLORADO SPRUCE	6"-8" B&B	30'X20'	
(Symbol)	45	PICEA PUNGENS 'HOOPSII' HOOPSII BLUE SPRUCE	6"-8" B&B	35'X15'	
(Symbol)	30	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' VANDERWOLF'S PYRAMID PINE	10"-12" B&B	25'X15'	
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		
(Symbol)	273,112 SF	TURF SOD BLUEGRASS KENTUCKY BLUEGRASS	SEED		

OPEN SPACE TREE CALCULATIONS
1 TREE PER 1000SF OF QUALIFIED OPEN SPACE

BLOCK #	LOT #	LOT AREA (SF)	QUALIFIED OPEN SPACE	REQUIRED	PROVIDED
1	6	1891	0	0.00	2.00
2	1	1,000	0	0.00	2.00
2	12	34,510	12,130	12.00	9.00
2	23	1,964	0	0.00	2.00
3	1	964	0	0.00	2.00
3	18	12,873	1,407	1.00	3.00
4	1	4,258	EXCLUDES KUNA CANAL EASEMENT	1.00	3.00
4	5	525	EXCLUDES STROBEL RD. FRONTAGE	0.00	0.00
5	1	4,761	EXCLUDES STROBEL RD. FRONTAGE	0.00	0.00
5	9	5,096	0	0.00	0.00
6	14	33,962	33,962	34.00	34.00
7	1	9,875	9,875	10.00	10.00
8	1	125,375	53,890	52.00	43.00
8	11	1,438	0	0.00	2.00
9	1	1,964	0	0.00	2.00
9	16	7,900	1,390	1.00	3.00
10	1	73,421	73,421	74	53
11	1	5,649	0	0	8
11	12	4,864	0	0	2
12	1	1,964	0	0	3
12	9	1,941	0	0	3
TOTAL OPEN SPACE TREES				185.00	186.00

LOT CALCULATIONS
1 TREE PER RESIDENTIAL LOT

TOTAL RESIDENTIAL LOTS	REQUIRED	PROVIDED
175	175.00	175.00

STREET TREE CALCULATIONS
1 DECIDUOUS AND 2 EVERGREEN PER 100LF

STREET NAME	CALCULATION	REQUIRED	PROVIDED
MEADOW VIEW RD.	((1131 LF/100) * 2)	23.00	23.00
STROBEL RD.	((1131 LF/100) * 3)	34.00	34.00
	((757 LF/100) * 2)	15.00	15.00
	((757 LF/100) * 3)	23.00	23.00
TOTAL STREET TREES		95.00	95.00

TOTAL SITE TREES

TOTAL OPEN SPACE TREES	185.00	186.00
TOTAL STREET TREES	95.00	95.00
TOTAL SITE TREES	455.00	456.00

GENERAL LANDSCAPE NOTES

- 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.
- ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN NURSERYMAN STANDARDS FOR TYPE AND SIZE SHOWN.
- ALL PLANTED BEDS TO RECEIVE A MIN. 3" DEPTH ORGANIC PERMABARK. USE OF MULCH OR ROCK AS THE ONLY GROUND COVER IN REQUIRED PLANTING AREAS IS PROHIBITED. IF ROCK MULCH IS USED, INSTALL A PERMEABLE FABRIC WEED BARRIER UNDER ROCK MULCH. IMPERMEABLE PLASTIC WEED BARRIERS ARE PROHIBITED.
- 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.

ACHD LANDSCAPE NOTES

- 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.

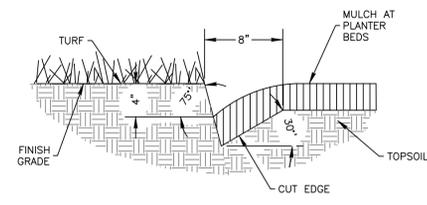
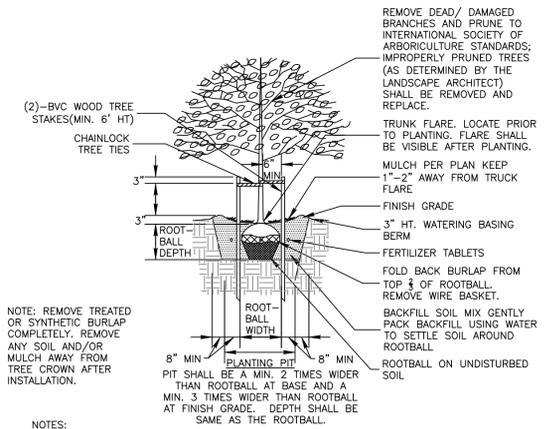
GENERAL IRRIGATION NOTES

- 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 PRESSURIZED IRRIGATION WATER, AND THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS.
- COVERAGE: THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE ONE HUNDRED PERCENT (100%) COVERAGE WITH HEAD TO HEAD SPACING OR TRIANGULAR SPACING AS APPROPRIATE.
- MATCHED PRECIPITATION RATES: SPRINKLER HEADS SHALL HAVE MATCHED PRECIPITATION RATES WITHIN EACH CONTROL VALVE.
- 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.
- OVERSPRAY: SPRINKLER HEADS SHALL BE ADJUSTED TO REDUCE OVERSPRAY ONTO IMPERVIOUS SURFACES SUCH AS STREETS, SIDEWALKS, DRIVEWAYS, AND PARKING AREAS.



DEVELOPER/OWNER
KUNA EAST, LLC.
P.O. BOX 1939
EAGLE, IDAHO 83616
CONTACT: DON NEWELL

LANDSCAPE ARCHITECT
KM ENGINEERING
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE: (208) 639-6939
CONTACT: ALYSSA YENSEN, P.L.A.
EMAIL: ayensen@kmengllp.com



1 DECIDUOUS TREE PLANTING AND STAKING DETAIL
NTS

2 6-FOOT HEIGHT VINYL FENCE
NTS

3 5-FOOT CLEAR VISION FENCE
NTS

4 SHOVEL CUT
NTS

PRELIMINARY NOT FOR CONSTRUCTION

ASHTON ESTATES EAST SUBDIVISION
PRELIMINARY PLANT LANDSCAPE COVER SHEET
KUNA, IDAHO

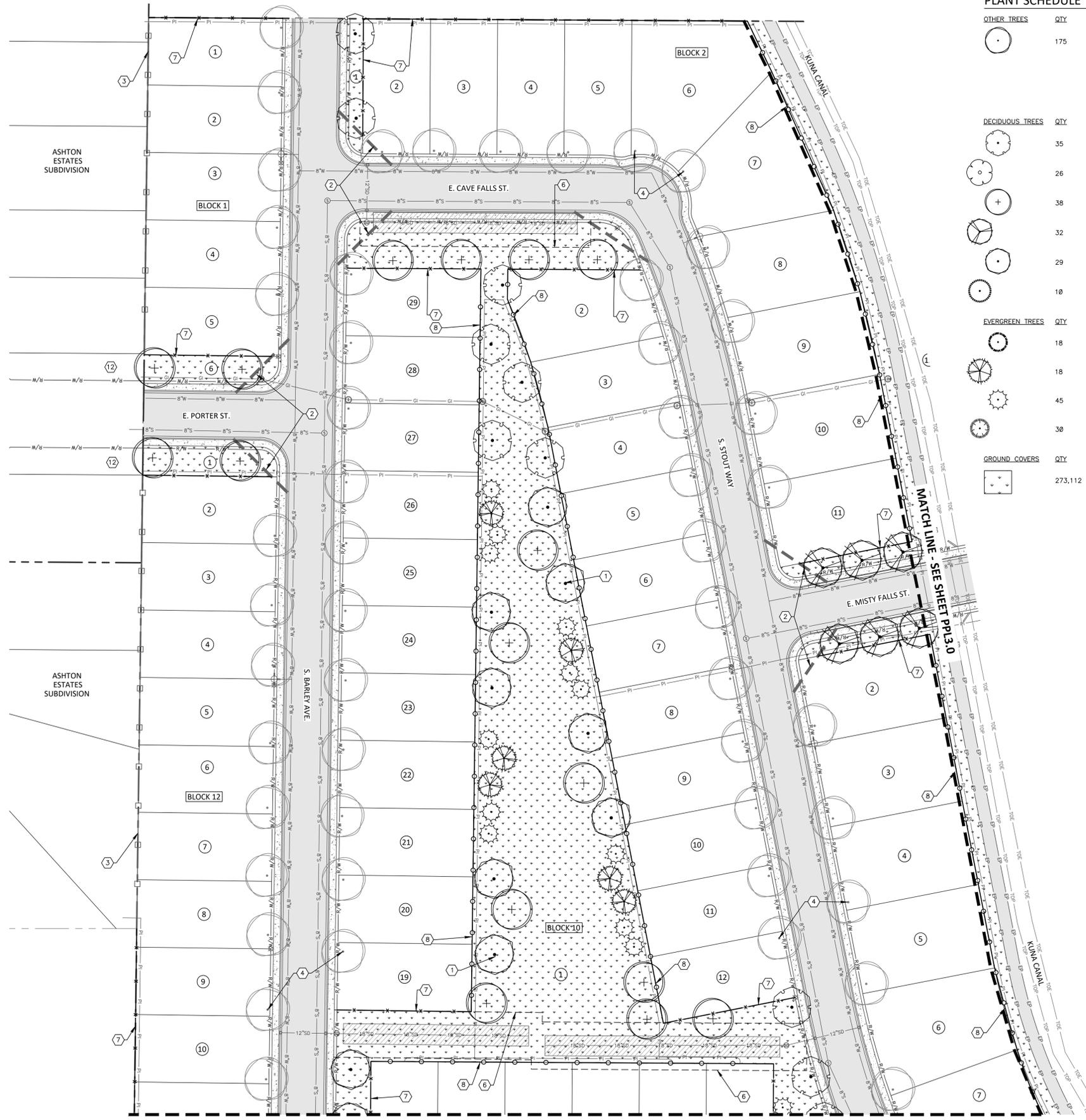
REVISIONS		
NO.	ITEM	DATE

km ENGINEERING
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

STATE OF IDAHO
ALYSSA YENSEN
LANDSCAPE ARCHITECT
LA-16579
11/29/19

DATE: 11/11/19
PROJECT: 19-081
SHEET NO. PPL1.0

P:\19-081\LANDSCAPE\REVISED\PRELIMINARY PLANT LANDSCAPE PLAN_NEW.DWG, ALYSSA YENSEN, 11/19/2019, DWG TO PDF, PCL, AIAKEL (1/1/19)



PLANT SCHEDULE

OTHER TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	175	INDIVIDUAL LOT TREES 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.		CLASS II
DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	35	ACER X FREEMANNI 'JEFFSRED' TM AUTUMN BLAZE MAPLE	2" CAL. B&B	45'X30'	CLASS II
(Symbol)	26	CARPINUS BETULLUS EUROPEAN HORNBEAM	2" CAL. B&B	30'X30'	CLASS I
(Symbol)	38	FRAXINUS AMERICANA 'AUTUMN PURPLE' AUTUMN PURPLE ASH	2" CAL. B&B	45'X30'	CLASS II
(Symbol)	32	FRAXINUS PENNSYLVANICA 'PATMORE' PATMORE ASH	2" CAL. B&B	30'X30'	CLASS II
(Symbol)	29	GLEDITSIA TRIACANTHOS 'SKYLINE' SKYLINE HONEY LOCUST	2" CAL. B&B	35'X30'	CLASS II
(Symbol)	10	PYRUS CALLERYANA 'CAPITAL' CAPITAL CALLERY PEAR	2" CAL. B&B	35'X15'	CLASS II
EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
(Symbol)	18	PICEA OMORICA 'BRUNS' BRUNS SPRUCE	6"-8" B&B	30'X10'	
(Symbol)	18	PICEA PUNGENS COLORADO SPRUCE	6"-8" B&B	30'X20'	
(Symbol)	45	PICEA PUNGENS 'HOOPSII' HOOPSII BLUE SPRUCE	6"-8" B&B	35'X15'	
(Symbol)	30	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' VANDERWOLF'S PYRAMID PINE	10"-12" B&B	25'X15'	
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		
(Symbol)	273,112 SF	TURF SOD BLUEGRASS KENTUCKY BLUEGRASS	SEED		

KEY NOTES (TYPICAL) (#)

- LANDSCAPE CONTRACTOR SHALL:
 - INSTALL 3" DIAMETER SHOVEL CUT TREE RING, WITH BARE EARTH SURFACE AT ALL TREES WITHIN TURF AREAS. SEE SHEET PPL1.0-4.
 - REMOVE ALL TWINE/ROPES AND BURLAP FROM ROOTBALLS.
 - REMOVE ALL WIRE BASKETS FROM THE TOP 1/2 OF ROOTBALLS.
- 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.
- EXISTING FENCE INSTALLED AS PART OF ASHTON ESTATES SUB. TO REMAIN.
- SCHEMATIC LOCATION OF TREES. TREES SHALL BE INSTALLED BY THE INDIVIDUAL HOME BUILDER IN CONJUNCTION WITH INDIVIDUAL LOT DEVELOPMENT. THESE TREES ARE NOT THE RESPONSIBILITY OF THE DEVELOPER.
- SCHEMATIC LOCATION OF TOT LOT - FINAL LOCATION AND DETAILS TO BE DETERMINED IN CONJUNCTION WITH FINAL PLAT AND ASSOCIATED GRADING AND DRAINAGE.
- ACHD CLEAR ZONE. TREES SHALL NOT BE PLANTED WITHIN THE 10' CLEAR ZONE OF ALL ACHD STORM DRAIN PIPES, STRUCTURES, OR FACILITIES.
- 6" SOLID VINYL FENCE. SEE SHEET PPL1.0-2.
- 5" WROUGHT IRON CLEAR VISION FENCE. SEE SHEET PPL1.0-3.
- 9" WIDE ASPHALT PATH. SEE CIVIL PLANS.
- CONCRETE PAD FOR FUTURE BUS STOP PER CITY OF KUNA.
- COMPACTED GRAVEL SHOULDER FROM EDGE OF PAVEMENT PER CIVIL PLANS.
- EXISTING LANDSCAPING AND IRRIGATION TO REMAIN. RETAIN AND PROTECT. CONTRACTOR SHALL FIELD VERIFY LIMITS OF DISTURBANCE AND PATCH BACK ALONG PHASE BOUNDARY AS NECESSARY. TRANSITION BETWEEN NEW AND EXISTING LANDSCAPE SHALL BE NON RECOGNIZABLE AND COHESIVE WHEN FINISHED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL EXISTING LANDSCAPE PLANTING AREAS AND IRRIGATION COMPONENTS DAMAGED AS A RESULT OF NEW CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT THE EXISTING IRRIGATION SYSTEM REMAINS OPERABLE DURING CONSTRUCTION AND THAT FOLLOWING CONSTRUCTION, THE EXISTING IRRIGATION SYSTEM OPERATES AS GOOD, OR BETTER THAN EXISTED PRIOR TO THIS PROJECT. CONTRACTOR SHALL REPLACE, AT NO ADDITIONAL COST TO THE OWNER, PLANT MATERIALS DAMAGED DURING EXECUTION OF THIS PROJECT OR DAMAGED DUE TO THE CONTRACTORS FAILURE TO MAINTAIN OPERATION OF THE EXISTING SYSTEM DURING THE COURSE OF CONSTRUCTION.
- FUTURE EMERGENCY ACCESS ROAD PER OWNER.



PRELIMINARY NOT FOR CONSTRUCTION

**ASHTON ESTATES EAST SUBDIVISION
PRELIMINARY PLAT LANDSCAPE PLAN
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
JESSA YENSEN
LICENSED LANDSCAPE ARCHITECT
LA-16597
11/2019

DATE: 11/11/19
PROJECT: 19-081
SHEET NO. PPL2.0

P:\19-081\LANDSCAPE\REVISED\19-081 PRELIMINARY PLAT LANDSCAPE PLAN_NEW.DWG, ANKSA YENSEN, 11/19/2019, DWG TO PDF, PCL, ARKLE (PPL)



PLANT SCHEDULE

OTHER TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
	175	INDIVIDUAL LOT TREES 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.		CLASS II
DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
	35	ACER X FREEMANII 'JEFFSRED'™ AUTUMN BLAZE MAPLE	2" CAL. B&B	45'X30'	CLASS II
	26	CARPINUS BETULUS EUROPEAN HORNBEEAM	2" CAL. B&B	30'X30'	CLASS I
	38	FRAXINUS AMERICANA 'AUTUMN PURPLE' AUTUMN PURPLE ASH	2" CAL. B&B	45'X30'	CLASS II
	32	FRAXINUS PENNSYLVANICA 'PATMORE' PATMORE ASH	2" CAL. B&B	30'X30'	CLASS II
	29	GLEDITSIA TRIACANTHOS 'SKYLINE' SKYLINE HONEY LOCUST	2" CAL. B&B	35'X30'	CLASS II
	18	PYRUS CALLERYANA 'CAPITAL' CAPITAL CALLERY PEAR	2" CAL. B&B	35'X15'	CLASS II
EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS
	18	PICEA OMORICA 'BRUNS' BRUNS SPRUCE	6'-8" B&B	30'X10'	
	18	PICEA PUNGENS COLORADO SPRUCE	6'-8" B&B	30'X20'	
	45	PICEA PUNGENS 'HOOPSI' HOOPSI BLUE SPRUCE	6'-8" B&B	35'X15'	
	30	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' VANDERWOLF'S PYRAMID PINE	10'-12" B&B	25'X15'	
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		
	273,112 SF	TURF SOD BLUEGRASS KENTUCKY BLUEGRASS	SEED		

KEY NOTES (TYPICAL) (#)

- LANDSCAPE CONTRACTOR SHALL:
 - INSTALL 3" DIAMETER SHOVEL CUT TREE RING, WITH BARE EARTH SURFACE AT ALL TREES WITHIN TURF AREAS. SEE SHEET PPL1.0-4.
 - REMOVE ALL TWIG/ROPE AND SURF LAP FROM ROOTBALLS
 - REMOVE ALL WIRE BASKETS FROM THE TOP 1/2 OF ROOTBALLS.
- 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.
- EXISTING FENCE INSTALLED AS PART OF ASHTON ESTATES SUB. TO REMAIN.
- SCHEMATIC LOCATION OF TREES. TREES SHALL BE INSTALLED BY THE INDIVIDUAL HOME BUILDER IN CONJUNCTION WITH INDIVIDUAL LOT DEVELOPMENT. THESE TREES ARE NOT THE RESPONSIBILITY OF THE DEVELOPER.
- SCHEMATIC LOCATION OF TOT LOT - FINAL LOCATION AND DETAILS TO BE DETERMINED IN CONJUNCTION WITH FINAL PLAT AND ASSOCIATED GRADING AND DRAINAGE.
- ACHD CLEAR ZONE. TREES SHALL NOT BE PLANTED WITHIN THE 10' CLEAR ZONE OF ALL ACHD STORM DRAIN PIPES, STRUCTURES, OR FACILITIES.
- 6" SOLID VINYL FENCE. SEE SHEET PPL1.0-2.
- 5" WROUGHT IRON CLEAR VISION FENCE. SEE SHEET PPL1.0-3.
- 9' WIDE ASPHALT PATH. SEE CIVIL PLANS.
- CONCRETE PAD FOR FUTURE BUS STOP PER CITY OF KUNA.
- COMPACTED GRAVEL SHOULDER FROM EDGE OF PAVEMENT PER CIVIL PLANS.
- EXISTING LANDSCAPING AND IRRIGATION TO REMAIN. RETAIN AND PROTECT. CONTRACTOR SHALL FIELD VERIFY LIMITS OF DISTURBANCE AND PATCH BACK ALONG PHASE BOUNDARY AS NECESSARY. TRANSITION BETWEEN NEW AND EXISTING LANDSCAPE SHALL BE NON-RECOGNIZABLE AND COHESIVE WHEN FINISHED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL EXISTING LANDSCAPE PLANTING AREAS AND IRRIGATION COMPONENTS DAMAGED AS A RESULT OF NEW CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT THE EXISTING IRRIGATION SYSTEM REMAINS OPERABLE DURING CONSTRUCTION AND THAT FOLLOWING CONSTRUCTION, THE EXISTING IRRIGATION SYSTEM OPERATES AS GOOD, OR BETTER THAN EXISTED PRIOR TO THIS PROJECT. CONTRACTOR SHALL REPLACE, AT NO ADDITIONAL COST TO THE OWNER, PLANT MATERIALS DAMAGED DURING EXECUTION OF THIS PROJECT OR DAMAGED DUE TO THE CONTRACTORS FAILURE TO MAINTAIN OPERATION OF THE EXISTING SYSTEM DURING THE COURSE OF CONSTRUCTION.
- FUTURE EMERGENCY ACCESS ROAD PER OWNER.

LANDSCAPE PLAN
 0 40 80 120
 Plan/Profile Scale: 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

ASHTON ESTATES EAST SUBDIVISION
 PRELIMINARY PLAT LANDSCAPE PLAN
 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
 JESSA YENSEN
 LICENSED LANDSCAPE ARCHITECT
 LA-16597
 11/2019

DATE: 11/11/19
 PROJECT: 19-081
 SHEET NO. PPL3.0

P:\19-081\LANDSCAPE\REVISED\19-081-001 PRELIMINARY PLAT LANDSCAPE PLAN_NEW.DWG, ANKSA YENSEN, 11/19/2019, DWG TO PDF, PCS, ANKSA YENSEN



LANDSCAPE PLAN
 0 40 80 120
 Plan/Profile Scale: 1" = 40'

PLANT SCHEDULE

OTHER TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW	CLASS	EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	MATURE HXW
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	26	CARPINUS BETULUS EUROPEAN HORNBEAM	2" CAL. B&B	30'X30'	CLASS I		273,112 SF	TURF SOD BLUEGRASS KENTUCKY BLUEGRASS	SEED	
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PRELIMINARY NOT FOR CONSTRUCTION

**ASHTON ESTATES EAST SUBDIVISION
 PRELIMINARY PLAT LANDSCAPE PLAN
 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
 JESSA YENSEN
 LICENSED LANDSCAPE ARCHITECT
 LA-16597
 11/2019

DATE: 11/11/19
 PROJECT: 19-081
 SHEET NO. PPL4.0

P:\18\1801\LANDSCAPE\PRELIM\ASHTON ESTATES EAST PRELIMINARY PLAT LANDSCAPE PLAN_KUN_IDAHO.dwg, ANKSA YENSEN, 11/19/2019, DWG TO PDF, PLOT, ANKSA YENSEN



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: Single family residential subdivision

Date and time of neighborhood meeting: September 11, 2019 at 6:45 pm

Location of neighborhood meeting: Kuna Library

SITE INFORMATION:

Location: Quarter: _____ Section: 19 Township: 2N Range: 1E Total Acres: 38.47

Subdivision Name: Ashton Estates East Subdivision Lot: _____ Block: _____

Site Address: 2320 E. Meadow View Road Tax Parcel Number(s): S1419241000

Kuna, ID

Please make sure to include **all** parcels & addresses included in your proposed use.

CURRENT PROPERTY OWNER:

Name: Kuna East, LLC

Address: PO Box 1939 City: Eagle State: ID Zip: 83616

CONTACT PERSON (Mail recipient and person to call with questions):

Name: Kirsti Grabo, Operations Manager Business (if applicable): KM Engineering, LLP

Address: 9233 W. State Street 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
<input checked="" type="checkbox"/> Annexation	<u>single family residential subdivision</u>
<input checked="" type="checkbox"/> Re-zone	
<input checked="" type="checkbox"/> Subdivision (Sketch Plat and/or Prelim. Plat)	
Special Use	
Variance	
Expansion of Extension of a Nonconforming Use	
Zoning Ordinance Map Amendment	

APPLICANT/Agent

Name: KM Engineering, LLP- Kirsti Grabo

Address: 9233 W. State Street

City: Boise State: ID Zip: 83714

Telephone: 208.639.6939 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 10-4-19

DATE: August 27, 2019
TO: Neighbors
FROM: SDN, LLC
RE: Ashton Estates East Subdivision
2320 East Meadow View Road – Kuna, ID

Dear Neighbor:

We are currently working on annexation, zoning and preliminary plat applications to the City of Kuna for the property located at 2320 East Meadow View Road, which is depicted on the enclosed vicinity map. This letter is notice of an opportunity to review and discuss the project as required by City Code; however, this is not a public hearing and public officials will not be present.

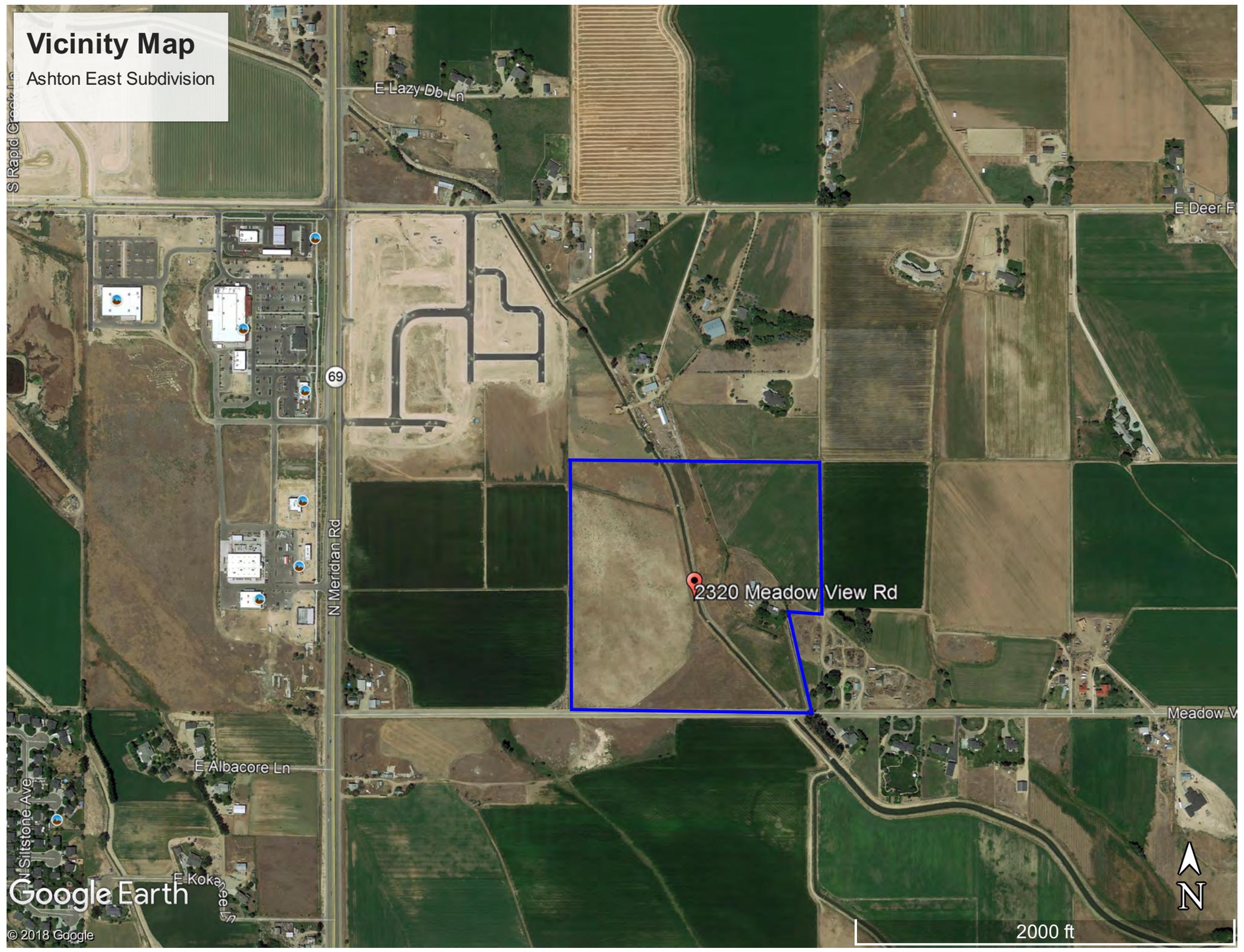
At this time, the anticipated development plan is to subdivide the +/- 38-acre property into single-family residential lots.

The neighborhood meeting will be held on Wednesday, September 11, 2019, at 6:45 p.m., at the Kuna Library, which is located at 457 North Locust Avenue in Kuna. The meeting will be held in the library's meeting room.

We look forward to seeing you there.

Vicinity Map

Ashton East Subdivision



Google Earth

© 2018 Google



2000 ft

CITY OF KUNA
PO BOX 13
KUNA, ID 83634

DEHEUS KAYLYN
2320 E MEADOW VIEW RD
KUNA, ID 83634

GIBSON FLORENCE E
2432 E MEADOW VIEW RD
KUNA, ID 83634

KOHN FAMILY TRUST
UTA 12/26/2018
2211 E DEER FLAT RD
KUNA, ID 83634

KOHN HARRY C
2211 E DEER FLAT RD
KUNA, ID 83634

MARKER BRIAN R
2429 E MEADOW VIEW RD
KUNA, ID 83634

POWERS DAVID
PO BOX 324
DILLINGHAM, AK 99576

ROSE SIX LLC
3880 E VANTAGE POINT LN
MERIDIAN, ID 83642

SDN LLC
P O BOX 1939
EAGLE, ID 83616

TANG SANH D
2725 E DEER FLAT RD
KUNA, ID 83634

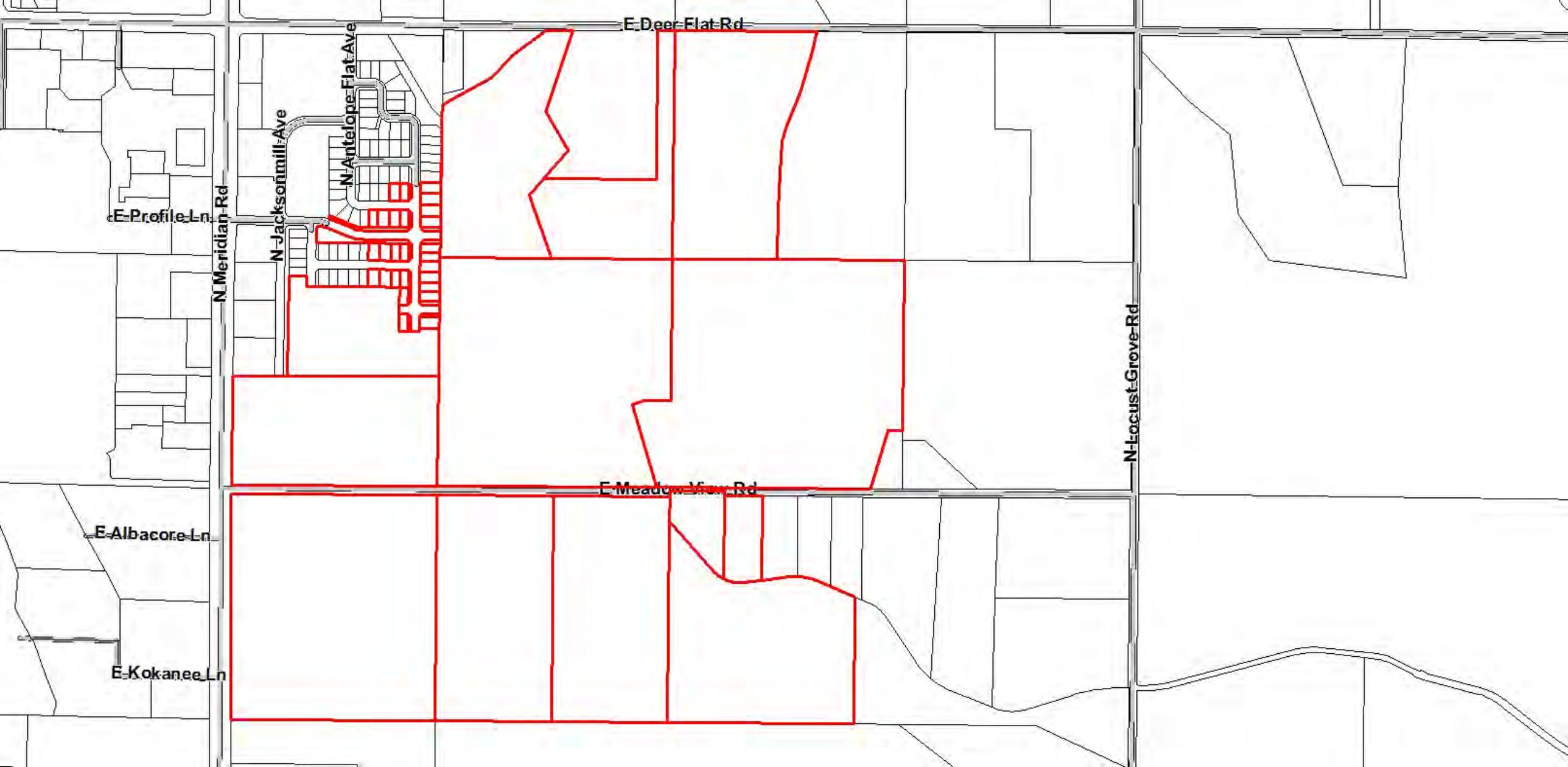
WANNER-BUCKNER PARTNERSHIP
1056 W SHEARWATER LN
EAGLE, ID 83616

WARD CHARLES L
2575 E MEADOW VIEW RD
KUNA, ID 83634

WIENS RODNEY & KAREN FAMILY
TRUST
2329 E DEER FLAT RD
KUNA, ID 83634

400' Owner List for Mailers without duplicates

PRIMOWNER	ADDCONCAT	STATCONCAT
CITY OF KUNA	PO BOX 13	KUNA, ID 83634
DEHEUS KAYLYN	2320 E MEADOW VIEW RD	KUNA, ID 83634
GIBSON FLORENCE E	2432 E MEADOW VIEW RD	KUNA, ID 83634
KOHN FAMILY TRUST UTA 12/26/2018	2211 E DEER FLAT RD	KUNA, ID 83634
KOHN HARRY C	2211 E DEER FLAT RD	KUNA, ID 83634
MARKER BRIAN R	2429 E MEADOW VIEW RD	KUNA, ID 83634
POWERS DAVID	PO BOX 324	DILLINGHAM, AK 99576
ROSE SIX LLC	3880 E VANTAGE POINT LN	MERIDIAN, ID 83642
SDN LLC	P O BOX 1939	EAGLE, ID 83616
TANG SANH D	2725 E DEER FLAT RD	KUNA, ID 83634
WANNER-BUCKNER PARTNERSHIP	1056 W SHEARWATER LN	EAGLE, ID 83616
WARD CHARLES L	2575 E MEADOW VIEW RD	KUNA, ID 83634
WIENS RODNEY & KAREN FAMILY TRUST	2329 E DEER FLAT RD	KUNA, ID 83634



E Deer Flat Rd

E Profile Ln

N Meridian Rd

N Jackson Mill Ave

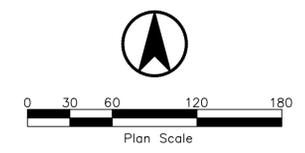
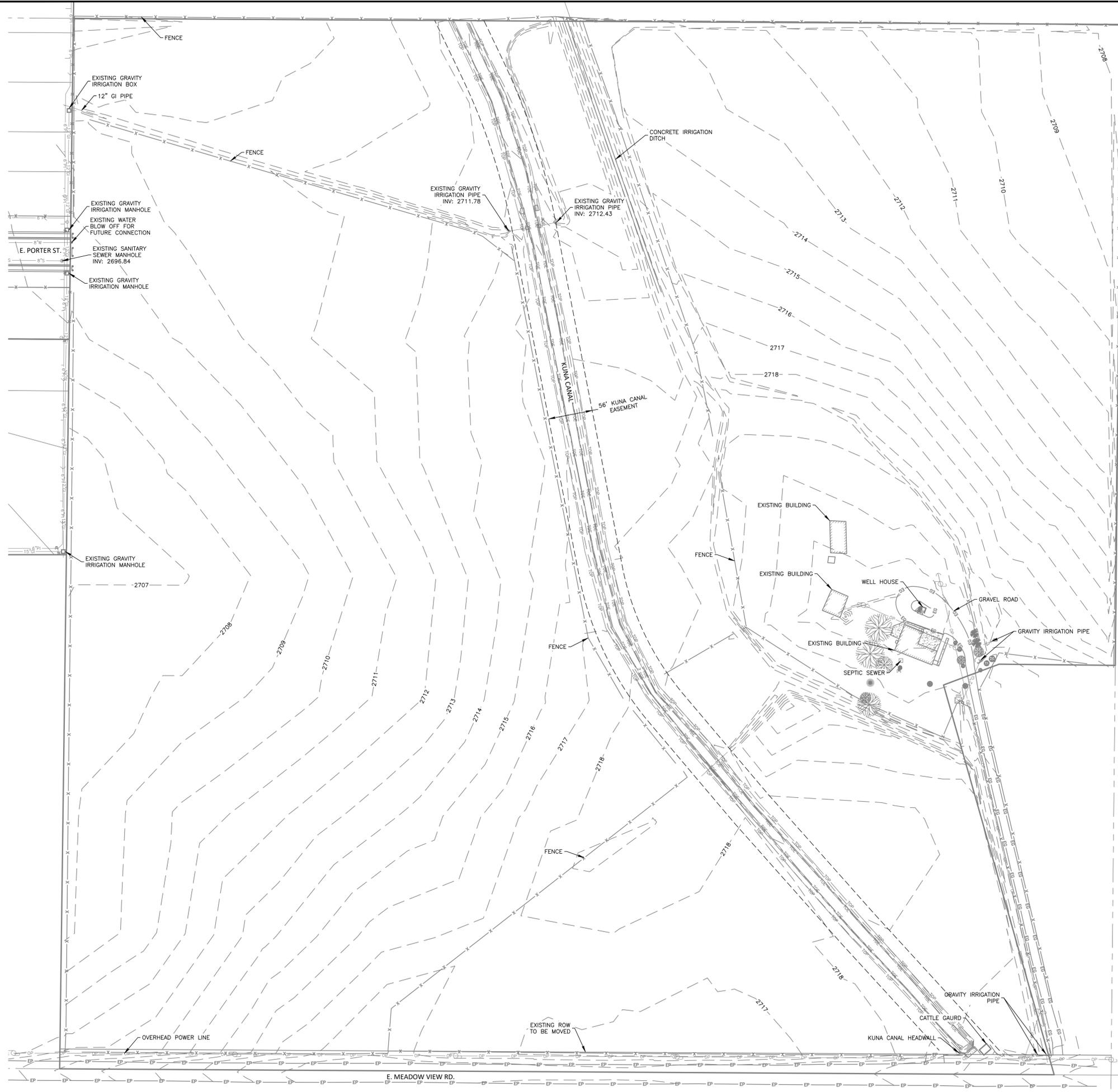
N Antelope Flat Ave

E Meadow View Rd

N Locust Grove Rd

E Albacore Ln

E Kokanee Ln



LEGEND

EXISTING FEATURES

—S—S—	SANITARY SEWER LINE
—W—W—	WATER LINE
—G—G—	GAS LINE
—OP—OP—	OVERHEAD POWER LINE
—GI—GI—	GRAVITY IRRIGATION LINE
⊙	SEWER MANHOLE
⊕	WATER VALVE
⊕	WATER METER
⊕	FIRE HYDRANT
⊕	POWER POLE
⊕	POWER BOX
—EP—EP—	EDGE OF PAVEMENT
—EG—EG—	EDGE OF DIRT

PRELIMINARY NOT FOR CONSTRUCTION

ASHTON ESTATES EAST SUBDIVISION
EXISTING CONDITIONS
KUNA, IDAHO

REVISIONS		
NO.	ITEM	DATE

km
ENGINEERING

9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

PROFESSIONAL ENGINEER
REGISTERED
10821
11-11-1980
STATE OF IDAHO
KEVIN P. MCCARTHY

DATE: 11/11/19
PROJECT: 19-081
SHEET NO. PP1.1

P:\19\ASHTON\PRELIM\19-081 PP EXISTING.DWG, SCOTT MARSHALL, 11/11/2015, AUTOCAD PLOT (GENERAL DOCUMENTATION) PLOT, 24X36, LPP1

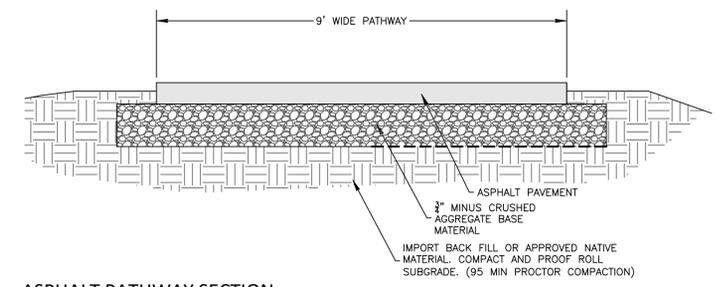
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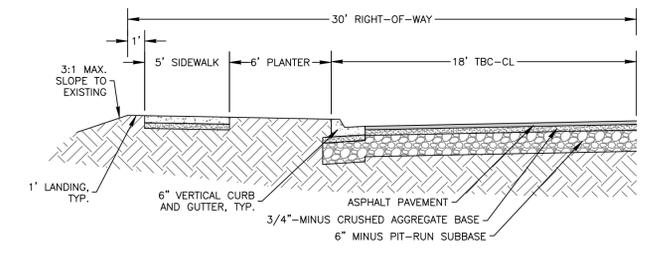
0 60 120 180
Plan/Profile Scale: 1" = 60'

NOTES

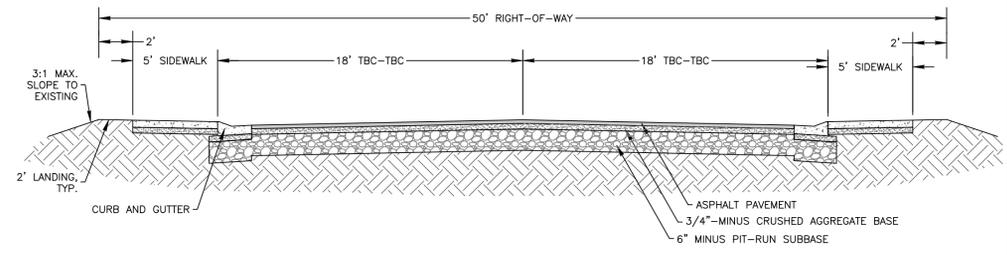
1. THE FOLLOWING LOTS ARE DESIGNATED AS COMMON LOTS, AND ARE TO BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION: BLOCK 1, LOT 6; BLOCK 2, LOTS 1, 12, 19 & 23; BLOCK 3, LOTS 1, 8, & 18; BLOCK 4, LOTS 1, & 5; BLOCK 5, LOTS 1 & 9; BLOCK 6, LOT 14; BLOCK 7, LOT 1; BLOCK 8, LOTS 1, 11, & 14; BLOCK 9, LOTS 1, 7, & 16; BLOCK 10, LOT 1; BLOCK 11 LOTS 1, & 12; BLOCK 12, LOTS 1 & 12.
2. A 10-FOOT JOINT UTILITY EASEMENT WILL BE PROVIDED ALONG ALL REAR LOT LINES.
3. A 10-FOOT JOINT UTILITY EASEMENT WILL BE PROVIDED ALONG ALL FRONT LOT LINES.
4. A 5-FOOT JOINT UTILITY EASEMENT WILL BE PROVIDED ALONG ALL SIDE LOT LINES.
5. INTERNAL LOT LINES ARE CONCEPTUAL ONLY AND MAY CHANGE DURING FINAL PLATTING BASED ON PHASING OF THE CONSTRUCTION.
6. LANDSCAPING AND BUILDINGS SHALL BE PER FUTURE APPROVED PLANS.
7. CROSS-ACCESS EASEMENTS AND STORM DRAINAGE EASEMENTS MAY BE PROVIDED ACROSS LOT LINES AS DETERMINED DURING FINAL DESIGN.



ASPHALT PATHWAY SECTION
NTS



TYPICAL COLLECTOR STREET SECTION (E. MEADOW VIEW RD./S. STROEBEL RD.)
SCALE: NTS



TYPICAL LOCAL STREET SECTION
SCALE: NTS

PRELIMINARY NOT FOR CONSTRUCTION

ASHTON ESTATES EAST SUBDIVISION
LAYOUT
KUNA, IDAHO

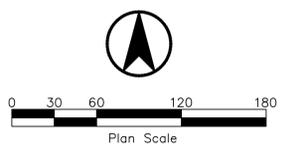
REVISIONS		
NO.	ITEM	DATE



PROFESSIONAL ENGINEER
REG. NO. 10821
STATE OF IDAHO
KEVIN P. MCCARTHY

DATE: 11/11/19
PROJECT: 19-081
SHEET NO.
PP.2.0

P:\19\ASHTON\PRELIM\19-081\19-081_LAYOUT.DWG, SCOTT MARSHALL, 11/11/2019, AUTOCAD PLOT (GENERAL DOCUMENTATION) PLOTTING



LEGEND

—	BOUNDARY LINE
---	OFFSITE BOUNDARY LINE
- - -	PROPOSED LOT LINE
○	FOUND 1/2 INCH REBAR
⊙	FOUND 5/8 INCH REBAR
⊗	SPIKE
PROPOSED IMPROVEMENTS	
—S—S—S—	SEWER LINE
—W—W—W—	WATER LINE
—G—G—G—	GRAVITY IRRIGATION LINE
—PI—PI—PI—	PRESSURE IRRIGATION LINE
—SD—SD—SD—	STORM DRAIN LINE
⊙	SEWER MANHOLE
⊙	GRAVITY IRRIGATION MANHOLE
⊙	STORM DRAIN MANHOLE
⊙	FIRE HYDRANT
⊙	STREET LIGHT
EXISTING FEATURES	
—S—S—S—	SANITARY SEWER LINE
—W—W—W—	WATER LINE
—G—G—G—	GAS LINE
—OP—OP—OP—	OVERHEAD POWER LINE
—G—G—G—	GRAVITY IRRIGATION LINE
⊙	SEWER MANHOLE
⊙	WATER VALVE
⊙	WATER METER
⊙	FIRE HYDRANT
⊙	POWER POLE
⊙	POWER BOX
—EP—EP—EP—	EDGE OF PAVEMENT
—EG—EG—EG—	EDGE OF GRAVEL

PRELIMINARY ENGINEERING NOTES

- DOMESTIC WATER SERVICE WILL BE PROVIDED BY CITY OF KUNA. WATER MAINS WILL BE LOOPED THROUGHOUT THE SUBDIVISION CONNECTING TO THE EXISTING WATER MAIN IN E. PORTER ST.
- SANITARY SEWER SERVICE WILL BE PROVIDED BY THE CITY OF KUNA. THE PROPERTY WILL BE SERVED BY THE CONNECTION AT E. PORTER ST.
- WATER AND SEWER LINE SIZES AND LOCATIONS ARE PRELIMINARY AND WILL BE REFINED DURING FINAL DESIGN.
- ALL DOMESTIC WATER MAINS AND SANITARY SEWER WILL BE INSTALLED IN ACCORDANCE WITH THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY AND CITY OF KUNA REQUIREMENTS.
- ALL STREETS SHALL BE DEDICATED TO ACHD AND THE PUBLIC. ROADWAYS WILL BE CONSTRUCTED TO AT LEAST MINIMUM ACHD STANDARDS. SEE THE PRELIMINARY ROADWAY CROSS-SECTIONS, SHEET PP-3.1.
- STORM DRAINAGE FROM PUBLIC ROADWAYS SHALL BE COLLECTED IN CURB AND GUTTER AND ROUTED TO THE STORM FACILITY DESIGNED TO ACHD STANDARDS. THE STORM RETENTION FACILITY TYPES, SIZES, AND LOCATIONS WILL BE DETERMINED DURING FINAL DESIGN.
- PRESSURE AND GRAVITY IRRIGATION IMPROVEMENTS SHALL BE DETERMINED DURING FINAL DESIGN.
- CONSTRUCTION OF THE FOLLOWING IMPROVEMENTS WILL BE IN COMPLIANCE WITH THE STANDARD KUNA CONSTRUCTION NOTES: WATER; DRAINAGE; SEWER; GRAVITY IRRIGATION; AND PRESSURE IRRIGATION.
- CITY OF KUNA SANITARY SEWER AND WATER EASEMENT LOCATIONS TO BE DETERMINED DURING FINAL DESIGN.

PRELIMINARY NOT FOR CONSTRUCTION

ASHTON ESTATES EAST SUBDIVISION CONCEPTUAL ENGINEERING PLAN KUNA, IDAHO																				
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>ITEM</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>				REVISIONS			NO.	ITEM	DATE											
REVISIONS																				
NO.	ITEM	DATE																		
		9233 WEST STATE STREET BOISE, IDAHO 83714 PHONE (208) 639-6939 FAX (208) 639-6930																		
DATE: 11/11/19 PROJECT: 19-081		SHEET NO. PP.3.0																		

P:\19-081\ASHTON ESTATES EAST SUBDIVISION\19-081-PP-3.0\19-081-PP-3.0.dwg (GENERAL DOCUMENTATION)\KUN, ASHES (PP) 11/11/2019 10:40:00 AM



City of Kuna
Planning & Zoning Department

City of Kuna
P.O. Box 13
Kuna, Idaho 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
www.kunacity.id.gov

Agency Transmittal

December 5, 2019

Notice is hereby given by the City of Kuna that the following action(s) are under consideration:

File Number & Case Name:	19-08-S (Preliminary Plat) & 19-11-AN (Annexation) – Ashton Estates East Subdivision.
Project Description	Kuna East, LLC requests to annex one 38.6-acre parcel into Kuna City Limits with an R-8 (Medium Density Residential) zoning district classification and to subdivide the 38.6 acres into 200 total lots (175 buildable lots, 21 common lots and four shared driveways). The subject site is located at 2320 East Meadow View Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN: S1419241000).
Site Location	2320 East Meadow View Road, Kuna, ID 83634
Applicant	Kuna East, LLC PO Box 1939 Eagle, ID 83616
Representative	KM Engineering, LLP 9233 West State Street Boise, ID 83714 208-639-6939 kgrabow@kmenllp.com
Public Hearing Date	Tuesday, February 25, 2020 6:00 pm Kuna City Hall is located at 751 W. 4 th 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.*



City of Kuna
Planning & Zoning Department

City of Kuna
P.O. Box 13
Kuna, Idaho 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
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Agency Transmittal

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CENTRAL DISTRICT HEALTH DEPARTMENT
Environmental Health Division

- Return to:
[] ACZ
[] Boise
[] Eagle
[] Garden City
[] Meridian
[X] Kuna
[] Star

Rezone # _____

Conditional Use # _____

Preliminary / Final / Short Plat 19-08-S

Ashton Estates East

- 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 [] waste flow characteristics
[] bedrock from original grade [] 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 approvals from appropriate entities are submitted, we can approve this proposal for:
[X] central sewage [] community sewage system [] community water well
[] interim sewage [X] central water
[] individual sewage [] individual water
9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
[X] central sewage [] community sewage system [] community water
[] sewage dry lines [X] 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:

[Signature]

Date: 12/19/19

CLINTON C. PLINE
CHAIRMAN OF THE BOARD

RON PLATT
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

09 December 2019

RECEIVED
DEC 11 2019
CITY OF KUNA

City of Kuna
751 W. 4th street
Kuna, Idaho 83634

RE: Ashton Estates East Sub
2320 East Meadow View Road
Boise Kuna Irrigation District
Kuna Canal 91+10
Sec. 19, T2N, R1E, BM.

19-081

BK-192 A

Troy Behunin:

The United States' Kuna Canal lies within the boundary of the above-mentioned location. The easement for this lateral is held in the name of the United States through the Bureau of Reclamation under the authority of the Act of August 30, 1890. (26 Stat. 391; 43 U.S.C. 945)

The Boise Project Board of Control is contracted to operate and maintain this lateral. We assert the federal easement 28 feet northeasterly and 25 feet southwesterly of the lateral's centerline. Whereas this area is for the operation and maintenance of our facility, no activity should hinder our ability to do so.

Please note the appropriate easements on all future preliminary/final plats.

Wording on the preliminary and final recorded plat needs to state that any proposed and/or future usage of the Boise Project Board of Control facilities are subject to Idaho Statutes, Title 42-1209.

Project facilities and/or easements that parallel, and are within and/or intended to be within road right-of-ways due to any development of this property must be relocated outside of road right-of-ways. The easements of Boise Project facilities will remain the same unless agreed upon and/or approved with written permission from Boise Project Board of Control.

The construction of any roadway crossings must be conducted only during the non-irrigation season when the lateral is dewatered. In any case no work shall take place

within the easement before the proper crossing agreements have been secured through the Bureau of Reclamation and the Boise Project Board of Control.

Utilities planning to cross any project facility must do so in accordance with the master policies now held between the Bureau of Reclamation and most of the utilities. In any case, no work shall take place within the easement before proper crossing agreements have been secured through both the Bureau of Reclamation and the Boise Project Board of Control.

Fencing (as may be required) must be constructed just off the canal easement, to ensure public safety and prevent encroachments.

Parking lots, curbing, light poles, signs, etc. and the placing of asphalt and/or cement over Project facility easements must be approved by Boise Project Board of Control prior to construction.

The Boise Project does not approve landscaping (other than grass or gravel) or pathways within its easements, as this will certainly increase our cost of maintenance. Easements must remain a flat drivable surface.

Boise Project Board of Control must approve any requests and/or relocation of delivery points prior to construction.

Storm Drainage and/or Street Runoff must be retained on site.

NO DISCHARGE into any live irrigation system is permitted.

Local irrigation/drainage ditches that cross this property, in order to serve neighboring properties, must remain unobstructed and protected by an appropriate easement.

This development is subject to Idaho Code 31-3805, in accordance, this office is requesting a copy of the irrigation and drainage plans.

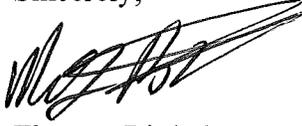
Whereas this property lies within the New York Irrigation District it is important that representatives of this development contact the NYID office as soon as possible to discuss the pressure system prior to any costly design work. If applicable, the irrigation system will have to be built to specific specifications as set by the District / Project.

Boise Project Board of Control must receive a written response from the New York Irrigation District as to who will own and operate the pressure irrigation system prior to review and approval of an irrigation plan by Boise Project Board of Control.

Whereas this development is in its preliminary stages, Boise Project Board of Control reserves the right to review plans and require changes when our easements and/or facilities are affected by unknown factors.

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, BPBC

tbr/tr

cc: Clint McCormick Watermaster, Div; 2 BPBC
Lauren Boehlke Secretary – Treasurer, BKID
File



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, ID 83706 • (208) 373-0550

Brad Little, Governor
John H. Tippets, Director

December 12, 2019

City of Kuna
Planning & Zoning Department
P.O. Box 13
Kuna, Idaho 83634

RE: Ashton Estates East Subdivision, 19-08-S/19-11-AN

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: deq.idaho.gov/assistance-resources/environmental-guide-for-local-govts.

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).

All property owners, developers, 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.

DEQ recommends the city/county require the development and submittal of a dust prevention and control plan prior to final plat approval. Dust prevention and control plans incorporate appropriate best management practices to control fugitive dust that may be generated at sites.

Information on fugitive dust control plans can be found at:
http://www.deq.idaho.gov/media/61833-dust_control_plan.pdf

- 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 Valerie Greear, Engineering Manager, at (208) 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: 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 Valerie Greear, Engineering Manager, at (208) 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 (208) 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 Conservation 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."

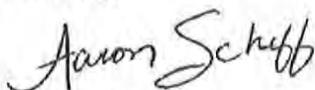
For questions, contact Albert Crawshaw, Waste & Remediation Manager, at (208) 373-0550.

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 (208) 373-0550, or visit the DEQ website 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.

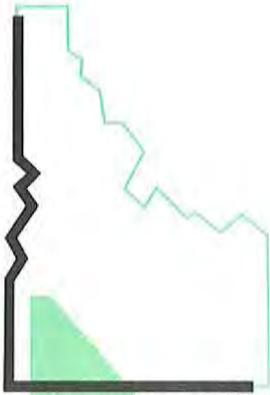
We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any of our technical staff at (208) 373-0550.

Sincerely,



Aaron Scheff
Regional Administrator
Boise Regional Office

ec: CM#2019AEK234



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

RECEIVED
DEC 16 2019
CITY OF KUNA

December 10, 2019

Jace Hellman, Planner II
City of Kuna
751 W. 4th Street
Kuna, ID 83634

RE: 19-08-S/ Ashton Estates East Subdivision; 2320 E. Meadow View Road

Dear Jace:

Nampa & Meridian Irrigation District (NMID) has no comment on the above referenced application as it lies outside of our district boundaries. Please contact Thomas Ritthaler, Boise Project- Board of Control, at 208-344-1141 or 2465 Overland Road Room 202 Boise, ID 83705-3173.

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
Asst. Water Superintendent
Nampa & Meridian Irrigation District
DTD/ gnf

Cc:

Office/ file
T. Ritthaler, Board of Control



APPROXIMATE IRRIGABLE ACRES
RIVER FLOW RIGHTS - 23,000
BOISE PROJECT RIGHTS - 40,000

B4



**Your Safety • Your Mobility
Your Economic Opportunity**

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

March 13, 2020

Troy Behunin
City of Kuna
751 W. 4th Street
Kuna, ID 83634

VIA EMAIL

RE: Ashton Estates East Subdivision – ITD Traffic Impact Study Acceptance Letter

Dear Mr. Behunin,

The Idaho Transportation Department (ITD) completed the review of the Ashton Estates East Subdivision Traffic Impact Study (TIS) dated February 19, 2020. The development is located east of SH-69 on Meadow View Road. The proposed subdivision does not directly abut the State Highway system. The proposed subdivision adds to the congested SH-69 corridor thus causing impacts to safety and mobility of the intersection of SH-69 / Deer Flat Road.

ITD requests the City of Kuna require Ashton Estates East Subdivision to mitigate impacts to the State Highway system. The following improvements are required prior to occupancy:

Intersection of SH-69 and Deer Flat Road

The TIS identified that in 2024 the intersection of Deer Flat Road and SH-69 is anticipated to exceed ITD's minimum operational thresholds. Congestion increases from trips generated by this development. The TIS recommended an additional eastbound left turn lane on Deer Flat Road be constructed to meet minimum operational thresholds.

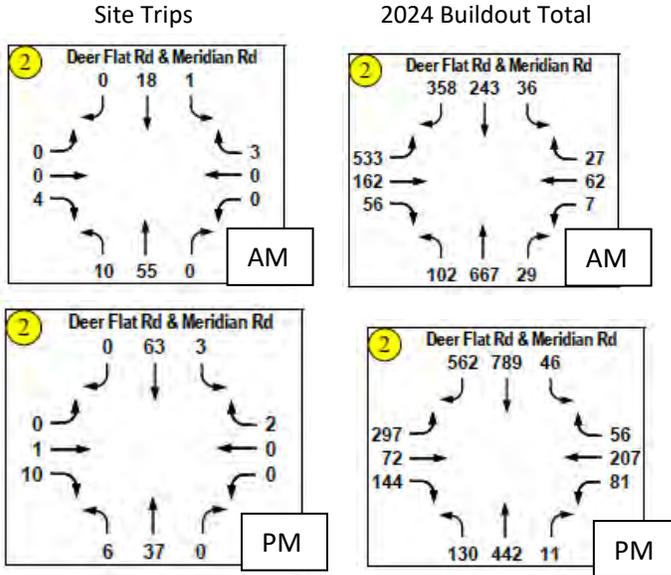
ITD is in the process of developing a SH-69 corridor plan to determine ultimate future width and intersection improvements along SH-69. The report is anticipated to be finalized in Spring 2020. ITD is uncertain if the existing signal will be the preferred intersection treatment identified in the SH-69 corridor plan, however an additional eastbound left turn lane on Deer Flat Road is a reasonable solution on which to base proportionate share contribution.

- ITD estimates the cost of the additional eastbound left turn lane design, installation, and construction to be \$943,332. See attached estimate.
- ITD requests the developer pay a proportionate share of \$37,261 (3.95%) to the future intersection treatment based off of total 2024 Deer Flat Rd intersection trips compared to total site trips.



**Your Safety • Your Mobility
Your Economic Opportunity**

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov



AM Site = 91	AM Total = 2,282	AM % = 4.0
PM Site = 122	PM Total = 2,837	PM % = 3.9
Proportionate Share for SH-69 / Deer Flat Road Intersection Improvement		Avg % = 3.95

ITD is in discussions with the City of Kuna regarding creation of an interagency agreement to hold the developer’s proportionate share contribution for use in a future project(s) on SH-69 within Kuna’s area of impact. We appreciate the opportunity to work with the City of Kuna in identifying priority projects on the SH-69 corridor once the SH-69 Corridor Plan is complete.

This letter acknowledges ITD’s acceptance of the Ashton Estates East Subdivision TIS. Maintaining safety and mobility for Idaho’s motorists is of the utmost importance to ITD. ITD encourages the City of Kuna to require the Ashton Estates East Subdivision to contribute a proportionate share of \$37,261 towards future improvements on SH-69 to mitigate for their impacts to the State Highway system. If you have any questions please do not hesitate to contact me at erika.bowen@itd.idaho.gov or 208-265-4312 extension #7.

Sincerely,

Erika R. Bowen, P.E.
ITD – District 3
Traffic Technical Engineer



**Your Safety • Your Mobility
Your Economic Opportunity**

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

cc.

Mindy Wallace – ACHD

Chhang Ream – CR Engineering, Inc

Intersection Widening - Conceptual Cost Estimate

Estimated By: **E. Bowen** Date: **3-13-2020**
 Checked By: Date:

Location: **Deer Flat Road and SH-69**
 Scope: **Additional eastbound left turn lane. Pavement widening on eastern leg to reposition lanes. Relocate two signal poles. One-half acre right-of-way acquisition.**

Item Description	Quantity	Unit Price	Cost	Source
SECTION 1				
201-010A CLEARING & GRUBBING	0.86 ACRE	\$ 6,833.00	\$ 5,879.37	KN 18872
203-015A REM OF BITUMINOUS SURF	1021.48 SY	\$ 9.67	\$ 9,877.73	KN 18872
203-130A REMOVAL OF PAV MARKINGS	6895.00 FT	\$ 1.00	\$ 6,895.00	KN 18852
205-005A EXCAVATION	3404.94 CY	\$ 15.25	\$ 51,925.31	KN 18872
301-005A GRANULAR SUBBASE	2296.08 TON	\$ 15.90	\$ 36,507.69	KN 18872
303-022A 3/4" AGGR TY B FOR BASE	1978.72 TON	\$ 18.30	\$ 36,210.62	KN 18872
401-020A CSS-1 DIL EMUL ASPH FOR TACK COAT	403.91 GAL	\$ 3.48	\$ 1,405.61	KN 18872
405-435A SUPERPAVE HMA PAV INCL ASPH&ADD CL SP-3	1082.99 TON	\$ 70.00	\$ 75,809.07	KN 18872
614-015A SIDEWALK	0.00 SY	\$ 80.00	-	KN 20294
614-025A CURB RAMP	0.00 SY	\$ 193.50	-	KN 19965
615-492A CURB & GUTTER TYPE 2	0.00 FT	\$ 50.00	-	KN 20294
621-005A SEED BED PREPARATION	0.54 ACRE	\$ 1,529.67	\$ 831.93	KN 18872
621-010A SEEDING	0.54 ACRE	\$ 1,663.33	\$ 904.62	KN 18872
615-651A TRAFFIC SEPARATOR TYPE 1	350.00 FT	\$ 20.00	\$ 7000.00	KN 19965 KN 20798
630-020A TRANSVERSE, WORD, SYMBOL, ARROW PAV MKG – WATERBORNE	356.00 SF	\$ 3.40	\$ 1,210.40	KN 13962
630-025A LONGITUDINAL PAVEMENT MARKING	9013.60 FT	\$ 1.05	\$ 9,464.28	KN 18872
656-005A TRAF SIGNAL INSTALLATION	0.50 LS	\$ 229,000.00	\$ 114,500.00	KN 18872
675-005A SURVEY	1.00 LS	\$ 20,000.00	\$ 20,000.00	KN 18872
Traffic Control	1.00 LS	\$ 73,000.00	\$ 73,000.00	KN 18872
Miscellaneous Minor Items	5%		\$ 22,571.08	
Mobilization	10%		\$ 45,142.16	
SECTION 1 Sub-Total			\$ 519,134.90	
SECTION 2				
CN Change Order / Quantity Variance	5%		\$ 25,956.74	
CN Non-Bid Items	3.5%		\$ 18,169.72	
SECTION 2 Sub-Total			\$ 44,126.46	
SUMMARY				
Sub-Total: SECTION 1 & SECTION 2			\$ 563,261.30	
Contingency - Scoping Level		30%	\$ 168,978.40	
TOTAL CONSTRUCTION COST			\$ 732,239.70	

Summary of Project Costs		Amount
Construction		\$ 732,239.70
Design Services	10%	\$ 73,223.97
Construction Services	12%	\$ 87,868.77
Right-of-Way	0.50 ACRES	\$ 50,000.00
Total Cost		\$ 943,332.50



Project/File: **Ashton Estates East/ KPP19-0011/ 19-11-AN/ 19-08-S**
This is an annexation with rezone to R-8 and preliminary plat application consisting of 200 lots on 38.6-acres.

Lead Agency: City of Kuna

Site address: 2320 E Meadow View Road

Staff Approval: April 17, 2020

Applicant: Kuna East, LLC
 Don Newell
 PO Box 1939
 Eagle ID 83616

Representative: KM Engineering, LLP
 Kirsti Garbo
 9233 W State Street
 Boise, ID 83714

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 rezone from RR (Residential Rural) to R-8 (Medium density Residential) and a preliminary plat application consisting of 175 single-family lots, 21 common lots and 4 shared driveway lots on 38.6-acres. The City of Kuna’s future land use map designates this area as High Density Residential.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Rural Residential (Ada County)	RR
South	Rural Urban Transition (Ada County)	RUT
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:
- Lugarno Terra, a 114 single-family lot development located north of the site was approved by ACHD in September 2018.

- Ashton Estates, a mixed-use development of commercial, multi-family, and single-family lots located east, and northeast of the site was approved by ACHD in June 2017.

5. **Transit:** Transit services are not available to serve this site.
6. **New Center Lane Miles:** The proposed development includes 1.9 centerline miles of new public road.
7. **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.
8. **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 1,731 additional vehicle trips per day (9 existing); 173 additional vehicle trips per hour in the PM peak hour (1 existing), based on the traffic impact study.
2. **Traffic Impact Study**
CR Engineering prepared a traffic impact study for the proposed Ashton Estates East. Below is an executive summary of the findings **as presented by CR Engineering**. 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.

Policy:

Level of Service Planning Thresholds: District Policy 7205.3.1 states that, Level of Service Planning Thresholds have been established for principal arterials and minor arterials within ACHD's Capital Improvement Plan and are also listed in section 7106. Unless otherwise required to provide a Traffic Impact Study under section 7106, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation for a roadway or intersection that currently exceeds the minimum acceptable level of service planning threshold or V/C ratio.

Staff Comments/Recommendations: Traffic Services and Planning Review staff have reviewed and generally agree with the findings and recommendations of the submitted traffic impact study.

All study area intersections and roadways are anticipated to operate at an acceptable planning level of service threshold under existing, 2024 background and 2024 total traffic conditions with the exception of the Deer Flat/ Meridian Road intersection as indicated below. Right-turn lanes are not warranted at any of the site access points.

The Deer Flat/Meridian Road intersection is anticipated to operate at an unacceptable level of service planning threshold under 2020 existing conditions and 2024 background traffic conditions. The traffic impact study recommended the following as mitigation:

- Dual eastbound left-turn lanes.
- Modify the signal at the Deer Flat/ Meridian Road intersection to allow the southbound right-turn movement to operate with an overlap phase.

The traffic impact study notes that the site generated traffic does not contribute to the eastbound left turning movement and that the site generated traffic is estimated to be 4.5% of the total traffic

entering the Deer Flat/Meridian Road intersection during the PM peak hour. Therefore, consistent with ACHD’s Level of Service Planning Threshold policy, no improvements are required.

In review of the traffic impact study, ACHD’s Traffic Services staff noted that the Warm River Avenue would qualify for traffic calming due to the additional trips generated from this development. Funding for a single speed hump on Warm River Avenue is recommended. The applicant should be required to provide a road trust deposit in the amount of \$5,000.00 to pay for the future installation of a speed hump on Warm River Avenue.

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
**State Highway 69/ Meridian Road	0-feet	Principal Arterial	1,295	N/A
Deer Flat Road	0-feet	Minor Arterial	220	Better than “E”
Locust Grove Road	0-feet	Minor Arterial	109	Better than “E”
Antelope Flat Avenue	0-feet	Collector	31	Better than “D”
Profile Drive	0-feet	Collector	89	Better than “D”
Meadow View Road	1,258-feet	Local (Future Collector)	10	N/A

* Acceptable level of service for a two-lane minor arterial is “E” (575 VPH).

* Acceptable level of service for a two-lane collector is “D” (425 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 Columbia Road was 22,582 on 03/15/2018.
- The average daily traffic count for Deer Flat Road east of Meridian Road was 2,241 on 01/30/2020.
- The average daily traffic count for Locust Grove Road north of Deer Flat Road was 908 on 01/30/2020
- The average daily traffic count for Antelope Flat Avenue south of Deer Flat Road was 449 on 02/04/2020
- The average daily traffic count for Profile Drive east of Meridian Road was 1,368 on 02/04/2020.
- The average daily traffic count for Meadow View Road east of Meridian Road was 200 on 02/04/2020.

C. Findings for Consideration

1. State Highway SH-69 / Meridian Road

SH-69/ Meridian Road is under the jurisdiction of the Idaho Transportation Department (ITD). The applicant, the City of Kuna, and ITD should work together to determine if additional right-of-way or improvements are necessary on SH-69/ Meridian Road.

Staff Comments/Recommendations: If allowed by the Idaho Transportation Department (ITD), the applicant should be required to construct an additional eastbound left-turn lane on SH-69/ Meridian Road at the Deer Flat/ Meridian Road intersection.

2. Meadow View Road

a. **Existing Conditions:** Meadow View Road is improved with 2-travel lanes, 24-feet of pavement, and no curb, gutter or sidewalk abutting the site. There is 50-feet of right-of-way for Meadow View Road (23-feet from centerline).

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.

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.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalk 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.

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. This segment of Meadow View Road is designated in the MSM as a Residential Collector with 2-lanes and on-street bike lanes, a 36-foot street section within 54-feet of right-of-way.

- c. **Applicant Proposal:** The applicant is proposing to construct Meadow View Road as ½ of 36-foot street section with vertical curb, gutter, 6-foot wide parkway strip, and 5-foot wide detached sidewalk within 30-feet of right-of-way.
- d. **Staff Comments/Recommendations:** The applicant's proposal meets District policy and should be approved as proposed. In addition, because Meadow View is identified as a collector street on the MSM, and as Stone Falls Avenue is proposed as an entrance street onto Meadow View Road; in order to provide for turning movements into the site, staff recommends that the applicant should be required to construct a center turn lane at the Meadow View/ Stone Falls Avenue intersection.

If street trees are desired, then an 8-foot wide planter strip should be provided. The applicant should be required to provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.

3. **Stroebel Road (New North-South Collector)**

- a. **Existing Conditions:** There are no streets 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.

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.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalk 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.

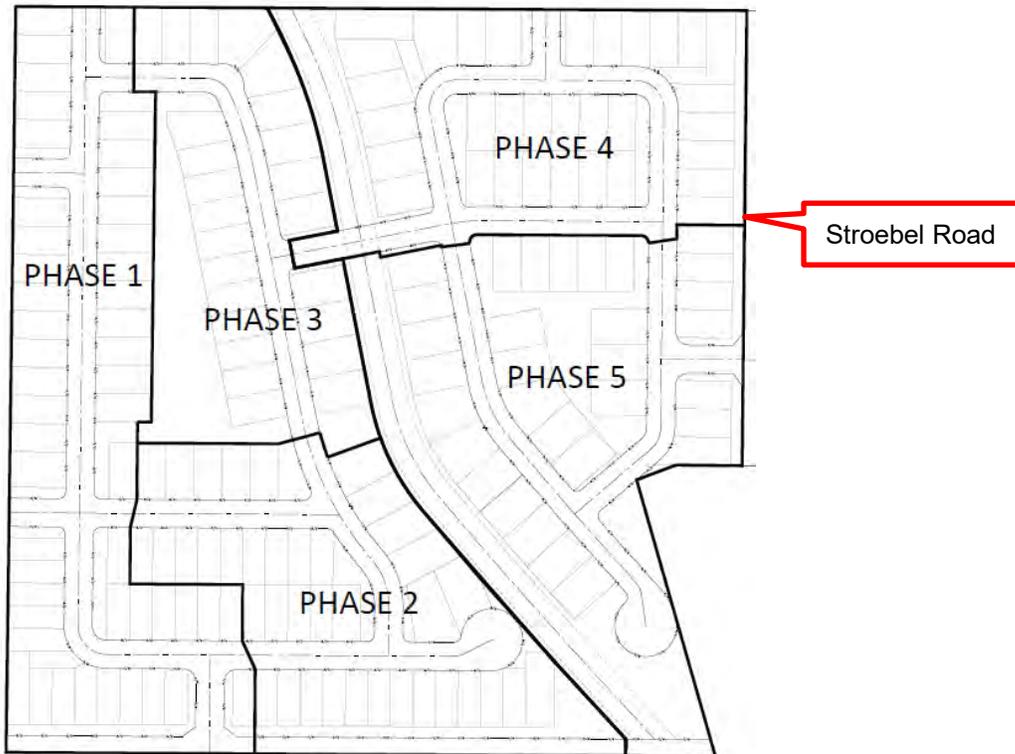
A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public 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 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 36-foot street section with vertical curb, gutter, 6-foot wide parkway strip, and 5-foot wide detached sidewalk within 30-feet of right-of-way.
- 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 Kuna Road. The applicant's proposal does not meet District Half-Street policy because the applicant's proposal does not include 12-feet of additional pavement widening with 3-foot wide gravel shoulder and borrow ditch on the unimproved side as required.

The new collector street, Stroebel Road is not proposed to connect to an existing public street to the north or south, therefore, staff is recommending that the applicant should be required to dedicate 40-feet of right-of-way and construct 5-foot wide detached concrete sidewalk for Stroebel Road located a minimum 26-feet from centerline of future roadway.

Prior to signing the final plats for Phase 4 and 5 abutting Stroebel Road, the applicant should coordinate with ACHD to determine what roadway improvements are required for Stroebel Road abutting the site. Based on the development patterns in the area, ACHD staff will determine if frontage improvements are required or if a road trust should be provided.



If it is determined that Stroebel Road should be improved, the applicant should be required to dedicate 40-feet of right-of-way for Stroebel Road abutting the site. Construct Stroebel Road as ½ of a 36-foot street section with vertical curb, gutter, 7-foot wide attached (5-foot wide detached) concrete sidewalk, plus 12-feet of additional pavement widening (30-feet of pavement), 3-foot wide gravel shoulder and borrow ditch on the unimproved side abutting the site. If street trees are desired, then an 8-foot wide planter strip should be provided. The applicant should be required to provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.

The applicant will not be compensated for any improvements or right-of-way dedication along Stroebel Road abutting the site, as this is a collector street segment.

4. Internal Local Streets

a. **Existing Conditions:** Porter Street is stubbed at the site’s west property line.

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.

- c. **Applicant's Proposal:** The applicant is proposing to continue Porter Street into the site and construct the internal local streets as 36-foot street section with curb, gutter, and 5-foot wide attached concrete sidewalk within 50-feet of right-of-way.

The applicant is proposing to construct a cul-de-sac at the terminus of Belgian Place and Tugela Falls Court.

- d. **Staff Comments/Recommendations:** The applicant's proposal meets District policy and should be approved, as proposed.

The applicant should be required to construct the two cul-de-sacs with a minimum 45-foot turning radius.

5. Roadway Offsets

- a. **Existing Conditions:** There are no streets within the site.

b. **Policy:**

Collector Offset Policy: District policy 7206.4.2 states that the preferred spacing for new collectors intersecting existing collectors is ¼ mile to allow for adequate signal spacing and alignment.

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 2,560-feet east of SH-69/Meridian Road (measured centerline to centerline).

The applicant is proposing to construct a new local road, Jade Falls Street, to intersect the proposed Stroebel Road, located approximately 700-feet north of Meadow View Road (measured centerline to centerline).

The applicant is proposing to construct a new local road, Stone Falls Avenue, to intersect Meadow View Road, located approximately 1,600-feet east of SH-69/Meridian 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.

6. Stub Streets

- a. **Existing Conditions:** Portal Street is stubbed at the site's west property line.

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 WIDENED 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.

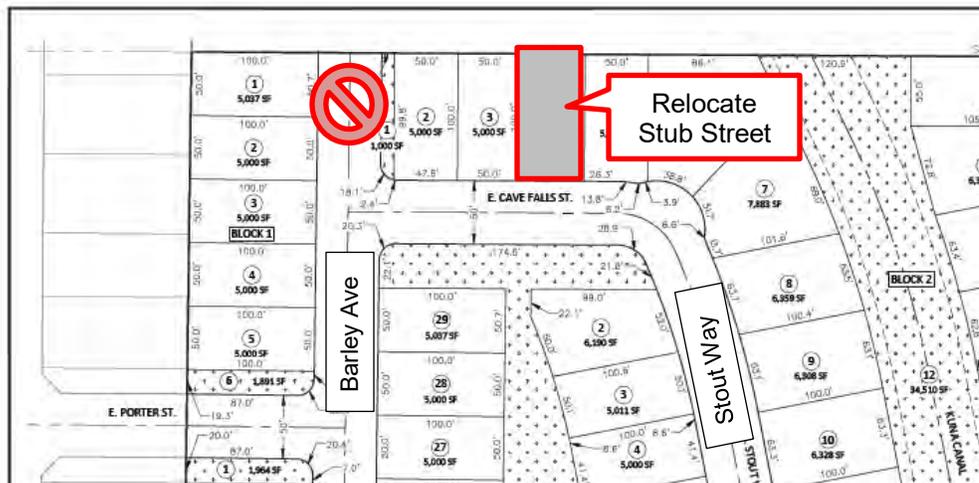
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

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 seven stub streets as follows:

- A collector stub street, Stroebel Road, to the north along the east property line, approximately 610-feet in length.
- A collector stub street, Stroebel Road, to the south along the east property line, approximately 180-feet in length.
- A local stub street, Doppel Avenue, to the north, located between Block 2, Lot 22 and Block 3, Lot 2, 102-feet in length.
- A local stub street, Jade Street, to the east, located between Block 3, Lot 17 and Block 4, Lot 2, 122-feet in length.
- A local stub street, Belgian Place, to the east, located 169-feet south of Place Falls Avenue at the terminus of the cul-de-sac.
- A local stub street, Pilsner Street, to the west, located between Block 12, Lot 11, 125-feet in length.
- A local stub street, Barley Avenue, to the north, located 124-feet north of Cave Falls Street.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed with the exception of Barley Avenue. Barley Avenue is over 850-feet in length between Tugela Falls Street and Cave Falls Street. Staff recommends that the applicant terminate Barley Avenue at the Barley Ave/Cave Falls Street intersection and construct a new stub street to the east between Barley Avenue and Stout Way to reduce the length of the Barley Avenue roadway.



The applicant should be required to provide signage at the terminus of the local stub streets stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

The applicant should be required to construct paved temporary turnarounds with minimum 45-foot turning radius at the terminus of the two collector stub streets, Stroebel Road to north and south. For those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. The applicant should provide a temporary easement for the turnaround and 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.

The applicant should be required to provide signage at the terminus of the two collector stub streets stating that, "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENED IN THE FUTURE."

7. Traffic Calming

Speed Control and Traffic Calming Policy (Local): District policy 7207.3.7 states that the design of local street systems should discourage excessive speeds by using passive design elements. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement.

- a. **Staff Comments/Recommendations:** Barley Avenue is a long, straight street that is greater than 1,000-feet in length between Tugela Falls Street and Cave Falls Street. This roadway will need to be redesigned to reduce the length of the roadway and/or to include the use of passive design elements.

Speed humps/bumps and valley gutter will not be accepted as traffic calming.

The applicant should be required to submit a revised preliminary plat showing the redesigned roadway for review and approval prior to ACHD's signature on the first final plat.

8. Bridge for Kuna Canal Crossing

The District will require that the applicant submit the bridge plans for the crossing of the Kuna Canal (Misty Falls Street) for review and approval prior to the pre-construction meeting and final plat approval. Note: all plan submittals for bridges or pipe crossings of irrigation facilities should be submitted to ACHD for review no later than December 15th for construction in the following year prior to irrigation season.

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

Meadow View Road and Stroebel Road 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. Provide a road trust deposit in the amount of \$5,000.00 to pay for the future installation of a speed hump on Warm River Avenue.
2. Construct Meadow View Road as ½ of 36-foot street section plus 12 additional feet of pavement to total 30-feet of pavement, with vertical curb, gutter, 6-foot wide parkway strip, and 5-foot wide detached sidewalk.
3. Construct a center turn lane on Meadow View Road at the Meadow View/Stone Falls Avenue intersection.
4. Dedicate 40-feet of right-of-way and construct 5-foot wide detached concrete sidewalk for Stroebel Road located a minimum 26-feet from centerline of future roadway.
5. Prior to signing the final plats for Phase 4 and 5 abutting Stroebel Road, coordinate with ACHD to determine what roadway improvements are required for Stroebel Road abutting the site. ACHD staff will determine if frontage improvements are required or if a road trust should be provided.
6. IF it is determined that Stroebel Road should be improved, construct Stroebel Road as ½ of a 36-foot street section plus 12-feet of additional pavement to total 30-feet of pavement, with vertical curb, gutter, 7-foot wide attached (5-foot wide detached) concrete sidewalk, 3-foot wide gravel shoulder and borrow ditch on the unimproved side abutting the site.
7. If street trees are desired, then an 8-foot wide planter strip should be provided. Provide a permanent right-of-way easement for detached sidewalks located outside of the dedicated right-of-way.
8. Continue Porter Street into the site and construct the internal local streets as 36-foot street sections with curb, gutter, and 5-foot wide attached concrete sidewalk within 50-feet of right-of-way.
9. Construct the two cul-de-sacs at the terminus of Belgian Place and Tugela Falls Court with a minimum 45-foot turning radius.
10. Construct a new mid-mile collector street, Stroebel Road, along the east property line, located approximately 2,560-feet east of SH-69/Meridian Road.
11. Construct a new local road, Jade Falls Street, to intersect the proposed Stroebel Road, located approximately 700-feet north of Meadow View Road.
12. Construct a new local road, Stone Falls Avenue, to intersect Meadow View Road, located approximately 1,600-feet east of SH-69/Meridian Road.
13. Construct the internal local streets with minimum 125-foot offsets.
14. Construct seven stub streets as follows:
 - A collector stub street, Stroebel Road, to the north along the east property line, approximately 610-feet in length.
 - A collector stub street, Stroebel Road, to the south along the east property line, approximately 180-feet in length.

- A local stub street, Doppel Avenue, to the north, located between Block 2, Lot 22 and Block 3, Lot 2, 102-feet in length.
 - A local stub street, Jade Street, to the east, located between Block 3, Lot 17 and Block 4, Lot 2, 122-feet in length.
 - A local stub street, Belgian Place, to the east, located 169-feet south of Place Falls Avenue at the terminus of the cul-de-sac.
 - A local stub street, Pilsner Street, to the west, located between Block 12, Lot 11, 125-feet in length.
 - Redesign the local stub street, Barley Avenue, to the east between Barley Avenue and Stout Way.
15. Provide signage at the terminus of the local stub streets stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."
 16. Construct paved temporary turnarounds with minimum 45-foot turning radius at the terminus of the two collector stub streets, Stroebel Road to north and south. For those portions of the cul-de-sac which extend beyond the dedicated street right-of-way, provide a temporary easement for the turnaround. 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.
 17. Provide signage at the terminus of the two collector stub streets stating that, "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENED IN THE FUTURE."
 18. Redesign Barley Avenue to reduce the length of the roadway and/or to include the use of passive design elements. Speed humps/bumps and valley gutter will not be accepted as traffic calming. Submit a revised preliminary plat showing the redesigned roadway for review and approval prior to ACHD's signature on the first final plat.
 19. Provide a road trust deposit in the amount of \$4,500 for future traffic calming on Warm River Avenue.
 20. Submit the bridge plans for the crossing of the Kuna Canal (Misty Falls Street) for review and approval prior to the pre-construction meeting and final plat approval.
 21. Other than the access specifically approved with this application, direct lot access is prohibited to Meadow View Road and Stroebel Road and should be noted on the final plat.
 22. 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.
 23. Payment of impact fees is due prior to issuance of a building permit.
 24. 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.

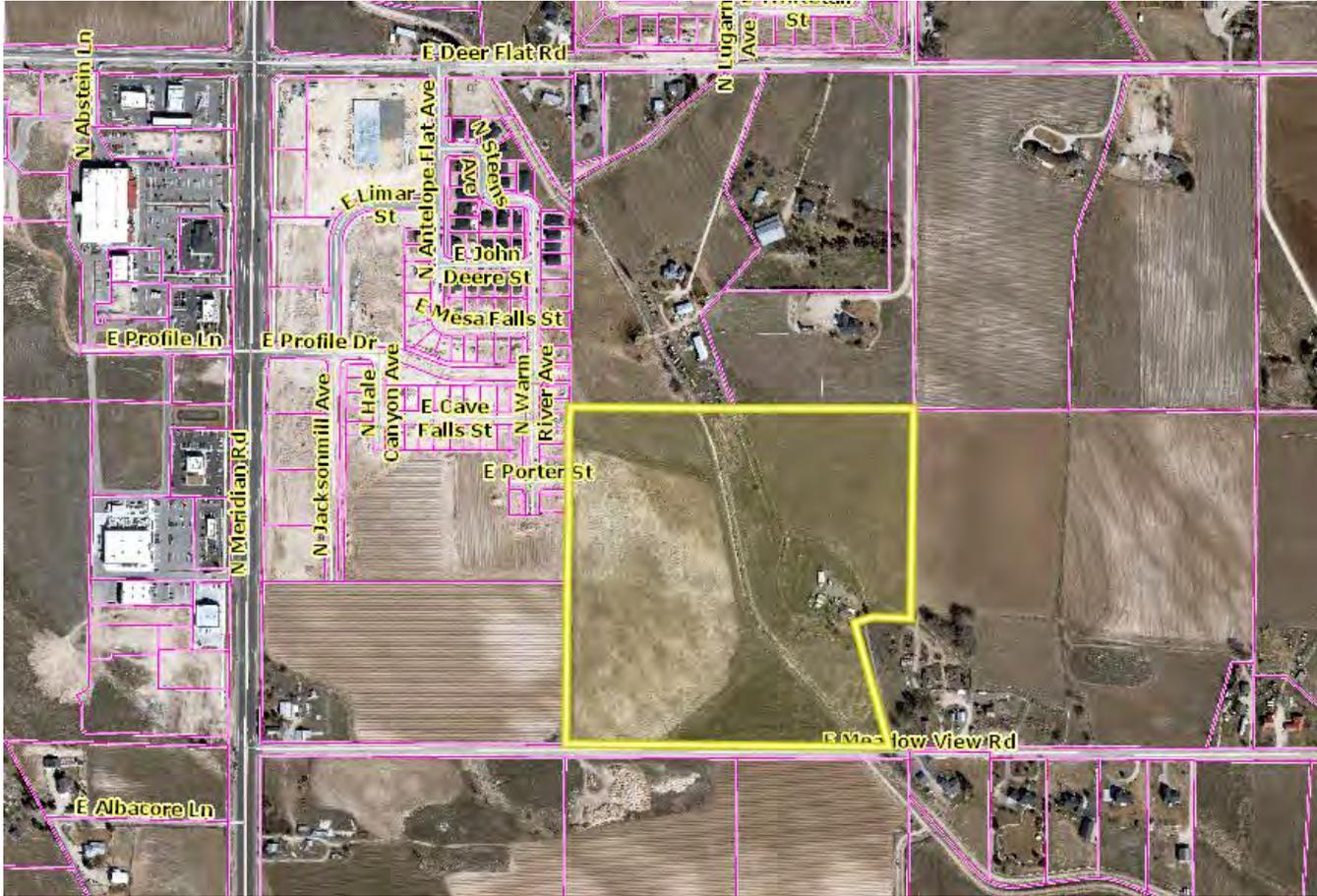
F. Conclusions of Law

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. Utility Coordinating Council
4. Development Process Checklist
5. Appeal Guidelines

VICINITY MAP



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.



CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.kunacity.id.gov

Paul A. Stevens, P.E.
Kuna City Engineer

MEMORANDUM

Date: 23 January 2020
From: Paul A. Stevens, P.E.
To: Wendy Howell, Planning and Zoning Director
RE: Ashton East 19-11-AN (Annexation) 19-08-S (Preliminary Plat)

The Ashton East 19-11-AN & 19-08-S dated 11 November 2019 has been reviewed. The application provides a narrative explaining the developers vision for the subdivision, vicinity map, legal description with exhibit, affidavit of legal interest, warranty deed, neighborhood meeting packet, and assorted pictures. These comments apply to the annexation request and proposed zoning as they affect public works infrastructure. Landscaping, population density, parking requirements, emergency access, pedestrian and vehicular traffic in the proposed R 8 zone and similar topics are evaluated by the Planning and Zoning Department. Review and evaluation of civil design drawings is accomplished separately, when received.

These comments may be expanded or refined based on future land-use actions. The following comments apply considering current, effective requirements:

1. General

- a. The Ashton East 19-11-AN & 19-08-S site is approximately 38.6 acres and is currently zoned RUT (ADA County Zone, Rural Urban Transition) as listed on the legal description Exhibit B and RR (ADA County Zone, Rural Residential) as listed on the application.
- b. Rezone requests:
 - a. 38.6 acres R-8 (City of Kuna (COK) Medium Density Residential).
 - b. An average Dwelling Units per Acre (DUA) for the overall project is shown as 6.07 with 175 single family lots.
- c. Equivalent Dwelling Units (EDU) are reckoned at approximately 3.18 people per household. The resultant projected population for this subdivision is approximately 557.
- d. The Ashton East 19-11-AN & 19-08-S is within the Danskin Lift Station sewer basin. The maximum number of sewer connections in this basin was projected at 3.5 EDU per acre. The proposed zoning density of R-8 or up to eight dwelling units per acre exceeds the projected zoning density.
- e. Sewage produced from Ashton East subdivision will be conveyed to the Danskin Lift Station. With the addition of 175 EDU from Ashton East Subdivision to the Danskin Lift Station the estimated maximum remaining capacity of Danskin Lift Station is approximately 474 EDU.

- f. Additional capacity is needed in Danskin Lift Station. The developer may be requested to participate in an engineered evaluation of Danskin Lift Station and proposed improvements to expand the lift station & force main capacity.
- g. Ashton East 19-11-AN & 19-08-S shall obtain pressurized irrigation by connecting to the City of Kuna's pressurized irrigation system and extending pressurized irrigation throughout the subdivision.
- h. Potable water will be provided to Ashton East 19-11-AN & 19-08-S by connection to the City of Kuna's potable water system.
- i. A commensurate impact to traffic volumes and densities will follow.
- j. Access to Ashton East 19-11-AN & 19-08-S is from N. Meridian Road.
- k. Areas for outside activities shall be incorporated into the project. Connection to the City of Kuna pathways presents a long-term goal that should be considered.
- l. A plan approval letter from local irrigation districts will be necessary if this project affects any local irrigation districts.
- m. All positional information shall be from the state plane coordinate system, latest version.
- n. Elevations shall be actual NAVD 88 datum elevations. A localized elevation system is not acceptable.
- o. State the vertical datum used for elevations on the construction drawings.
- p. Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties.
- q. The final inspection shall verify that slopes are not steeper than 3:1 on lots adjacent to a street or common lot and no steeper than 4:1 for lots with common rear lot lines.
- r. Provide engineering certification on all final engineering drawings.

2. Inspection Fees

- a. An inspection fee will be levied for City inspection of water, sewer and irrigation facilities constructed in associated with this development. The current inspection fee is \$1.00 per lineal foot of pressure irrigation, sewer, and water mainline pipe. Payment is due and payable prior to City's approval of final construction plans. Site work shall not begin until all fees are paid.
- b. The developer shall retain a qualified responsible, Idaho registered professional engineer to provide sufficient inspection to certify to DEQ that the project was completed in accordance with approved plans and specifications and to provide accurate as-built drawings to the City. IDAPA 10.01.02 lists the professional engineer's project responsibilities.
- c. The developer's engineer and the City's inspector are encouraged to coordinate inspections.

3. Right-of-Way

- a. The Kuna Fire Department shall review all road configurations to verify fire truck access and at least two entrances/exits.
- b. Ashton East 19-11-AN & 19-08-S will impact travel on Meridian Road, Deer Flat Road, and E. Meadow View Road.
 - a. All street construction must meet or exceed ACHD and City of Kuna development standards.
 - b. Sufficient right-of-way for existing and future classified streets shall be provided pursuant to City & ACHD standards.
 - c. Approaches onto classified streets must comply with ACHD and City of Kuna approach policies.
 - d. 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.
 - e. Easements shall be provided for all city mainlines crossing proposed lots, running along the back of lots and sides of lots, that allow the City of Kuna to access and maintain the utilities.

- f. All mainlines owned by the development shall be placed in easements large enough to allow maintenance and repairs.

4. Sanitary Sewer & Potable Water

- a. It is recommended that this application be conditioned to conform to the sewer and water master plans as applicable. Sewer and water master plans specify minimum pipe sizes and support the “to and through” utility policy.
- b. Improvements must meet or exceed the quality requirements of the City of Kuna.
- c. The applicant’s property is not connected to City services and is subject to connection fees for the ultimate connected sewer load 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.
- d. All sewer infrastructure must meet or exceed City of Kuna requirements.
- e. Sewer flows from this development are expected to be substantial and will add a considerable burden to Danskin Lift Station. It is expected that the development shall provide the additional lift station and force main capacity needed to serve the property.
- f. Water and sewer flow models will be required to verify adequate water supply, fire suppression and sewage removal.
- g. Sewer and water connection fees apply to each lot containing a home or other facility.
- h. All existing sewage treatment facilities (septic tank and drain field) must be decommissioned in accordance with Idaho Department of Environmental Quality requirements. Documentation shall be provided to the City of Kuna.
- i. Decommission wells as needed, in accordance with Idaho Department of Water Resources (IDWR) requirements. Provide documentation to the City of Kuna.

5. Pressurized Irrigation

- a. It is recommended that this application be conditioned to conform to the Pressure Irrigation Master Plan. The Pressurized Irrigation Master Plan specifies minimum pipe size and supports the “to and through” utility policy.
- b. The applicant’s property is not connected to the City’s pressurized irrigation system. Relying on drinking water for irrigation purposes conflicts with City Code (6-4-2).
- c. All pressurized irrigation infrastructure shall meet or exceed City of Kuna standards.
- d. Irrigation of Ashton East 19-11-AN & 19-08-S shall be an extension of the City of Kuna pressurized irrigation system.
- e. Existing irrigation ditches (supply & drain) must be relocated as needed and as approved by the irrigation ditch company/users.
- f. Pressurized irrigation flow model will be required to verify adequate pressurized irrigation supply.
- g. An additional irrigation storage pond and pumping station is needed in the vicinity of Ashton East Subdivision.

6. Grading and Storm Drainage

- a. Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties. Slopes shall not be steeper than 3:1 on lots adjacent to a street or common lot and no steeper than 4:1 for lots with common rear lot lines.
- b. 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.

- c. The City of Kuna relies on the ACHD Stormwater Policy Manual to establish the requirements for design of private storm water disposal systems.
- d. Provide a storm water disposal & treatment plan which accounts for increased storm water runoff volumes. Provide detailed drawings of drainage & treatment facilities with supporting calculations for review and approval.
- e. Runoff from public right-of-way is regulated by ACHD. On site storm water retention (if any) shall be reviewed by the City Engineer in conjunction with the Civil Engineering construction improvements review.

7. As-Built Drawings

- a. 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 legal description and representative figure of Ashton East 19-11-AN & 19-08-S with the application.

Doug Hanson

From: Jace Hellman
Sent: Friday, March 06, 2020 11:02 AM
To: Doug Hanson
Subject: FW: Comments for Ashton Estates East Due

Parks and Rec Comment

Jace Hellman
Planner II
751 W 4th St
Kuna, ID 83634
jhellman@kunaid.gov



From: Bobby Withrow <bwithrow@kunaid.gov>
Sent: Tuesday, January 14, 2020 2:30 PM
To: Jace Hellman <jhellman@kunaid.gov>
Subject: RE: Comments for Ashton Estates East Due

Jace,
It looks good on my end has for as open space goes.

Bobby Withrow
City of Kuna
Parks Director

The information contained in this message is intended only for the recipient, and may otherwise be privileged and confidential and protected from disclosure. If the reader of this message is not the intended recipient, or an employee or agent responsible for delivering this message to the intended recipient, please be aware that any dissemination or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by replying to the message and deleting it from your computer. The City of Kuna reserves the right, subject to applicable local law, to monitor and review the content of any electronic message or information sent to or from City of Kuna employee e-mail addresses without informing the sender or recipient of the message.

-----Original Appointment-----

From: Jace Hellman
Sent: Thursday, December 05, 2019 12:34 PM
To: Paul Stevens; Bobby Withrow; Bob Bachman
Subject: Comments for Ashton Estates East Due
When: Thursday, January 16, 2020 12:00 PM-5:00 PM (UTC-07:00) Mountain Time (US & Canada).
Where:
Importance: High

December 5, 2019

Notice is hereby given by the City of Kuna that the following action(s) are under consideration:

File Number & Case Name: 19-08-S (Preliminary Plat) & 19-11-AN (Annexation) – Ashton Estates East Subdivision.

Project Description Kuna East, LLC requests to annex one 38.6-acre parcel into Kuna City Limits with an R-8 (Medium Density Residential) zoning district classification and to subdivide the 38.6 acres into 200 total lots (175 buildable lots, 21 common lots and four shared driveways). The subject site is located at 2320 East Meadow View Road, Kuna, ID 83634, within Section 19, Township 2 North, Range 1 East; (APN: S1419241000).

Site Location 2320 East Meadow View Road, Kuna, ID 83634

Applicant **Kuna East, LLC**
PO Box 1939
Eagle, ID 83616

Representative **KM Engineering, LLP**
9233 West State Street
Boise, ID 83714
208-639-6939
kgrabo@kmengllp.com

Public Hearing Date Tuesday, **January 28, 2020**
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.*

<< File: Case Nos. 19-08-S and 19-11-AN Packet.pdf >>

Communities in Motion 2040 2.0 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 2.0* (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 2.0 goals.

Development Name: Ashton Estates East

Agency: Kuna

CIM Vision Category: Future Neighborhoods

New households: 175

New jobs: 0

Exceeds CIM forecast: No

	<p>CIM Corridor: None Pedestrian level of stress: N/A Bicycle level of stress: N/A</p>	<p>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.</p>
	<p>Housing within 1 mile: 440 Jobs within 1 mile: 570 Jobs/Housing Ratio: 1.3</p>	<p>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.</p>
	<p>Nearest police station: 2.5 miles Nearest fire station: 2.4 miles</p>	<p>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.</p>
	<p>Farmland consumed: Yes Farmland within 1 mile: 1,484 acres</p>	<p>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.</p>
	<p>Nearest bus stop: >4 miles Nearest public school: 0.9 miles Nearest public park: 1.4 miles Nearest grocery store: 0.4 miles</p>	<p>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.</p>

Recommendations

The proposal is on the fringe or urban development. This neighborhood is within a walkable distance to grocery and other retail across Highway 69, however, traversing a 5-lane highway can be dangerous. Consider approaches to encourage safe crossing of this highway to promote multi-modal travel. The proposal includes a pedestrian path along the Kuna Canal to encourage multi-modal connectivity.

The site is not currently served by public transportation. ValleyConnect 2.0 proposes bus service along Kay Street between downtown Kuna and northwest Boise with 20-minute frequencies in the peak hours. The closest bus stop would be less than 1 mile in distance when that route is operational. Safe connections to these future bus stops should be considered now to enable mobility options in the future.

More information about COMPASS and *Communities in Motion 2040 2.0*:

Web: www.compassidaho.org

Email info@compassidaho.org

More information about the development review process:

<http://www.compassidaho.org/dashboard/devreview.htm>



Megan M. Leatherman, MCRP
Director

Ada County Courthouse
200 West Front Street
Boise ID 83702
208.287.7900
Fax 208.287.7909
www.adacounty.id.gov

Department Divisions
Building
Community Planning
Engineering & Surveying
Permitting
Strategic Planning

Ada County Commissioners
Diana Lachiondo, First District
Rick Visser, Second District
Kendra Kenyon, Third District

ADA COUNTY Development Services Department

December 13, 2019

Via Email: jhellman@kunaaid.gov

Jace Hellman, Planner II
City of Kuna Planning & Zoning
751 W 4th Street
Kuna, ID 83634

RE: Annexation & Preliminary Plat / Ashton Estates East Subdivision /
2320 E Meadow View Rd / 19-11-AN & 19-08-S

Jace,

The City of Kuna has requested feedback regarding an annexation and preliminary plat for the Ashton Estates East Subdivision, consisting of 175 buildable lots on 38.6 acres located at 2320 E. Meadow View Road. The County thanks you for this opportunity and is in support of jurisdictions within the Treasure Valley working together to create a better quality of life for all residents.

Ada County supports the application due to the proximity of the site to existing public services and infrastructure, which were recently installed on the adjacent property to the west as part of the Ashton Estates No. 2 Subdivision. As the property is within close proximity to Downtown Kuna, future residents will have nearby access to existing parks, schools, commercial services and employment opportunities. The additional residents will also help to support Kuna's Downtown businesses.

The City of Kuna Comprehensive Plan currently adopted by Ada County designates the site as agriculture (irrigated), and lists farmland, cropland, vineyards, pastures and orchards as primary uses within this designation. Kuna has since adopted an updated comprehensive plan designating the site as high density residential. Ada County looks forward to working with city staff in the renegotiation and adoption of the updated comprehensive plan.

Thank you for this opportunity to provide feedback.

Sincerely,

Handwritten signature of Brent Moore in black ink.

Brent Moore, AICP
Community & Regional Planner
Ada County Development Services

cc: Megan Leatherman, Director, Ada County Development Services
Mitra Mehta-Cooper, Strategic Planning Manager, Ada County Development Services



City of Kuna PROOF OF PROPERTY POSTING

City of Kuna
P.O. Box 13
Kuna, Idaho 83634
Phone: (208) 922-5274
Fax: (208) 922-5989
Web: www.kunacity.id.gov

This notice shall confirm that the Public Hearing Notice for Ashton Estates East Subdivision (**NAME OF SUBDIVISION OR ADDRESS**) was posted as required per Kuna City Ordinance 5-1A-8. Sign posted Wednesday July 8th, 2020 (**DAY OF THE WEEK, MONTH, DATE AND YEAR**). This form is required to be returned three (3) calendar days subsequent to posting and signs are to be removed from the site three (3) calendar days after the hearing.

DATED this 9th day of July, 2020.

Signature,

Owner/Developer/Representative

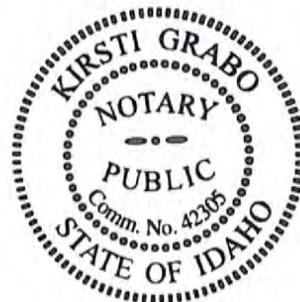
STATE OF IDAHO)
) : ss
County of Ada)

On this 9th day of July, 2020, before me the undersigned, a Notary Public in and for said State, personally appeared before me (Owner, Developer). Representative, Taylor Gyer.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public
Residing at Star, ID

Commission Expires 7-20-24





LEGAL NOTICE

Suggestions For Testifying at the Public Hearing:

Social distancing due to Covid-19...

Under the authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to required social distancing protocol, the Council Chambers Audience Occupancy Capacity is 15. The first 15 persons who appear, in addition to the Governing Body and Staff, will be allowed in Council Chambers. Virtual participation/ testimony via zoom is available (please see attached instructions for more details). All other persons may access the meeting via live streaming on the City of Kuna's Facebook page.

Be informed...

Review the proposal, staff report, applicable provisions of the ordinance, comprehensive plan and Idaho State Code (Title 67, Chapter 65).

All items pertaining to the application can be found the Friday prior to the hearing at <http://kunacity.id.gov/240/Agendas-and-Meeting-Minutes>.

Be on time...

Although the item you are interested in may not be first on the agenda, you never know when it will be heard. The governing body has authority to adjust the schedule according to its discretion. Thus, anticipate attending from the beginning.

Speak to the point...

The governing body appreciates pertinent, well organized, factual and concise comments. Redundant testimony is prohibited. The developer or their representative is given 10 minutes to present their project. Others wishing to testify are given three (3) minutes. The developer (or their representative) is given additional time for rebuttal to address issues raised during public testimony. Long stories, abstract complaints, or generalities may not be the best use of time. Neighborhood groups are encouraged to organize testimony and have one (1) person speak on behalf of the group. The group representative will receive 10 minutes to make comments.

If you don't wish to speak, write...

Written testimony submitted one (1) week prior to the hearing will be included in the packet that is distributed to the governing body prior to the hearing. Please submit all written testimony via mail, email or the City's website (<http://kunacity.id.gov/FormCenter/City-Clerk-13/Public-Testimony-Form-121>)

Late submissions will be presented to the governing body at time of hearing. As a reminder, it is unreasonable to submit extensive written comments or information at the hearing and expect them to be reviewed prior to a decision.



With the City Hall limited seating capacity to the public due to COVID-19, the Planning and Zoning Commission will be holding a virtual public hearing on 19-11-AN and 19-08-S; Ashton Estates East. The instructions and options available for public testimony are listed below.

APPLICANT PUBLIC WRITTEN AND ORAL HEARING TESTIMONY PROCESS:

Written - In Advance to be included in the Agenda Packet that is distributed to the Decision-Making body.

1. Submit any below stated option prior to 5:00 pm the Thursday before Public Hearing meeting. *Late submissions will not be included in the packet but will be provided at the meeting.*
2. Submit testimony via our website on the [Public Testimony Form](#). This form will email directly to the City for inclusion in the Agenda Packet.
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: Planning and Zoning Department
PO Box 13
Kuna ID 83634

Written – Up to noon the day of the Public Hearing

1. Submit any below stated option prior to noon the day of the Public Hearing meeting. *Late submissions will not be included.*
2. Submit testimony via our website on the [Public Testimony Form](#)
Kunacity.id.gov > *Doing Business* > *Forms and Applications* > *Frequently Requested Applications and Forms* > *ONLINE Public Testimony Form*
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: Planning and Zoning Department
PO Box 13
Kuna ID 83634

Oral – Via electronic call is allowed based on Governor Little’s Open Meeting Law suspension proclamation of March 13, 2020, until testimony in person is allowed.

1. Submit request no later than noon the day of the Public Hearing meeting.
2. Email PublicHearingTestimony@KunaID.gov
 - ✓ Your name
 - ✓ Address
 - ✓ Phone Number you will be calling from to give testimony
 - ✓ Email Address
 - ✓ Date of Public Hearing
 - ✓ Case number or Identification of Public Hearing
3. Watch your email for a reply email with the information to join the meeting electronically. (Check your spam/junk folder as a precaution)
4. Follow the dial in information.
5. Call into the virtual lobby a minimum of 5 minutes prior to the meeting.

BECHTOL KAREN A
1172 N WARM RIVER AVE
KUNA, ID 83634-0000

CITY OF KUNA
PO BOX 13
KUNA, ID 83634-0013

CRISMAN BRIANA D
1911 E MESA FALLS ST
KUNA, ID 83634-0000

DUBOIS NICOLE Y
1863 E MESA FALLS ST
KUNA, ID 83634-0000

FINLAY TYLER W
FINLAY KIMBERLY
1895 E MESA FALLS ST
KUNA, ID 83634-0000

FULLER DANIEL
FULLER SARAH A
1306 N WARM RIVER AVE
KUNA, ID 83634-0000

GIARDINO JEFFREY LOUIS
GIARDINO JANICE KATE
1882 E CAVE FALLS ST
KUNA, ID 83634-0000

GIBSON FLORENCE E
2432 E MEADOW VIEW RD
KUNA, ID 83634-1320

HAYDEN HOMES IDAHO LLC
2464 SW GLACIER PL STE 110
REDMOND, OR 97756-0000

JENSEN ELIZABETH
2725 E DEER FLAT RD
KUNA, ID 83634-0000

KOHN HARRY C
KOHN PENNY L
2211 E DEER FLAT RD
KUNA, ID 83634-0000

KUNA EAST LLC
PO BOX 1939
EAGLE, ID 83616-0000

MARKER BRIAN R
MARKER PAULINE M
2429 E MEADOW VIEW RD
KUNA, ID 83634-0000

MONTES AUSTIN
MONTES RODOLFO
1879 E MESA FALLS ST
KUNA, ID 83634-0000

MORA LEANN
MORA JUAN
3374 S FOX LEASH PL
EAGLE, ID 83616-0000

MUELLER WENDY
LUNCEFORD BARBARA J
1340 N WARM RIVER AVE
KUNA, ID 83634-0000

O'LEARY BRYAN
1866 E CAVE FALLS ST
KUNA, ID 83634-0000

OLSEN JAKE MERRILL
OLSEN RACHEL LEE
1914 E CAVE FALLS ST
KUNA, ID 83634-0000

POWERS DAVID
PO BOX 324
DILLINGHAM, AK 99576-0000

ROBERTS TRISTAN BRENT
ROBERTS IRIS RUBY PADILLA
1282 N WARM RIVER AVE
KUNA, ID 83634-0000

ROSAS ALMA
1230 N WARM RIVER AVE
KUNA, ID 83634-0000

ROSE SIX LLC
3880 E VANTAGE POINT LN
MERIDIAN, ID 83642-0000

SDN LLC
P O BOX 1939
EAGLE, ID 83616-0000

SHEPPARD JEREMY D
SHEPPARD AMANDA J
1264 N WARM RIVER AVE
KUNA, ID 83634-0000

UTEHS ADAM
1910 E MESA FALLS ST
KUNA, ID 83634-0000

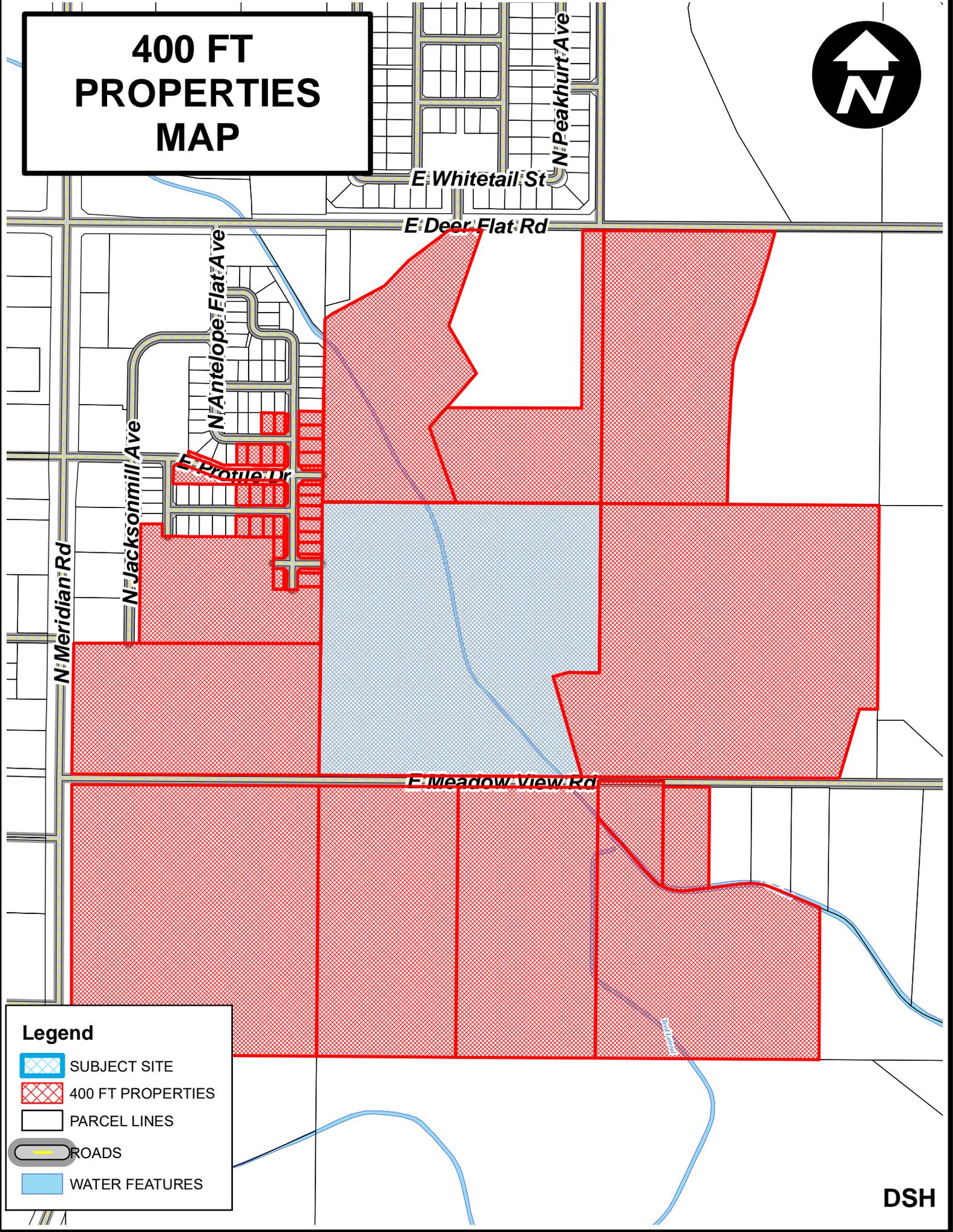
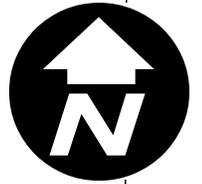
WANNER-BUCKNER PARTNERSHIP
1056 W SHEARWATER LN
EAGLE, ID 83616-0000

WARD CHARLES L
WARD LOLA M
2575 E MEADOW VIEW RD
KUNA, ID 83634-0000

WIENS RODNEY & KAREN FAMILY
TRUST
2329 E DEER FLAT RD
KUNA, ID 83634-0000

WILSON LOREN
1894 E MESA FALLS ST
KUNA, ID 83634-0000

400 FT PROPERTIES MAP



Legend

-  SUBJECT SITE
-  400 FT PROPERTIES
-  PARCEL LINES
-  ROADS
-  WATER FEATURES



CITY OF KUNA
PLANNING & ZONING DEPARTMENT

751 West 4th Street
P.O. Box 13
Kuna, ID 83634
Phone: 208-922-5274
Fax: 208-922-5989
www.kunacity.id.gov

CERTIFICATE OF MAILING

Date: 7/8/2020
To: 400' Property Owners Other _____
Planner: Doug Hanson, Planner I
Case Name: 19-08-S & 19-11-AN – Ashton Estates East Subdivision

I HEREBY CERTIFY that on this 8th day of July, 2020, I caused a true and correct copy of the foregoing instrument to be deposited in the United States mail, with prepaid postage.

Signature

Attest

LEGAL NOTICES



LEGAL NOTICE

**File # 20-01-ZC (Rezone)
20-02-S (Pre Plat),
Sera Sol Subdivision**

NOTICE IS HEREBY GIVEN, that the Planning and Zoning Commission will hold a public hearing, **Tuesday, August 11, 2020 at 6:00 pm**, or as soon as can be heard at Kuna City Hall, 751 W. 4th St, Kuna, ID; in connection with a **Rezone (ZC)** and a **Preliminary Plat (S)** request for Sera Sol Subdivision. Riley Planning Services, LLC, requests a rezone for approx. 19.22 acres from Agriculture TO R-6 (Med. Density Resid.) and a preliminary plat approval in order to subdivide the same lands into 89 total lots. The proposed densities are approx. 4.06 DUA (gross), and 5.62 (net) DUA respectively with 2.83 ac. of open space. The site is near the NWC of Swan Falls Rd. and Sunbeam, Kuna, Idaho, 83634. APN's are S1326141870 & S1326142025. The public is invited to present written or oral comments. Written testimony received by the close of business on **August 6, 2020** will be included in the packets distributed to the governing body. Late submissions (must include eight (8) copies) will be presented to the governing body at the time of the hearing. Please mail written comments to PO Box 13, Kuna,

ID 83634, or drop them off at City Hall: 751 West 4th Street, Kuna, ID.

Please do not contact anyone who would be involved in this decision making process, which would include the P&Z 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

July 8, 2020 2023293

LEGAL NOTICE

NOTICE TO CREDITORS
Case No. CV01-20-09591

IN THE DISTRICT COURT OF THE FOURTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF ADA

In the matter of the Estate of
PAMELA JEAN PIERSON,
Deceased.

NOTICE IS HEREBY GIVEN that **RANDI J. GRANADOS** has been appointed Personal Representative of the above-named estate. All persons having claims against the decedent's estate are required to present their claims within four (4) months after the date of the first publication of this Notice or said claims will be forever barred.

Claims must be presented to the undersigned Personal Representative of the estate's attorney, **Kristen R. Thompson** of **Thompson Law Firm** at 78 SW 5th Avenue, Suite 2, Meridian, Idaho, 83642 and they must be filed with the Clerk of the Court.

Dated this 29th day of June 2020.

Kristen R. Thompson
78 SW 5th Avenue, Suite 2
Meridian, Idaho 83642
Telephone: 208-888-7278

July 8, 15, 22, 2020 2024028

LEGAL NOTICE

File # 20-01-OA - City of Kuna, Zoning Ordinance Amendment

NOTICE IS HEREBY GIVEN that Kuna City Council will hold a public hearing on **Tuesday, July 21, 2020 at 6:00 pm**, or as soon as can be heard at Kuna City Hall, 751 W. 4th St, Kuna, ID. The public hearing is for the purpose of gaining input on the following ordinance amendment:

- MAKING CERTAIN FINDINGS; AND
- AMENDING SUBSECTION 2 OF SECTION 6, CHAPTER 1, TITLE 5 ADDING DEFINITIONS ASSOCIATED WITH SIGNAGE; AND
- REPEALING CHAPTER 10 OF TITLE 5; AND
- AMENDING TITLE 5 BY THE ADDITION OF A NEW CHAPTER 10; AND
- PROVIDING A SEVERABILITY CLAUSE; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

Under the authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to required social distancing protocol, the **Council Chambers Audience Occupancy Capacity is 15**. The first 15 persons who appear, in addition to the City Council and staff, will be allowed in Council Chambers. Virtual participation/testimony via Zoom and the submittal of written testimony are available as alternative forms of public testimony. Written testimony received by the close of business on **July 14, 2020** will be included in the packet that is distributed to the governing body prior to the hearing. Please submit written testimony via mail, email or the City's website (<http://kunacity.id.gov/FormCenter/City-Clerk-13/Public-Testimony-Form-121>). Late submissions will be presented to the governing body at time of the hearing. Mail written comments to PO Box 13, Kuna, ID 83634 or hand deliver them to City Hall. All other persons may access the meeting via live streaming on the City of Kuna's Facebook page.

If you have questions or require special accommodations, contact the Planning & Zoning Department prior to the meeting at (208) 922-5274.

Kuna Planning & Zoning Department

July 1, 8, 2020 2022798

To place an ad in our
Legal Section
Call 465-8129

LEGAL NOTICE

**File #'s 20-03-S & 20-01-AN,
Ledgestone South Subdivision**

NOTICE IS HEREBY GIVEN, that the Kuna Planning and Zoning Commission will hold a public hearing, **Tuesday, July 28, 2020 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 for Ledgestone South Subdivision. Trilogy Development, Inc and Gem State Planning request to annex four parcels consisting of approximately 97 acres into Kuna City Limits with R-6 (Medium Density Residential) and R-8 (Medium Density Residential) zoning district classifications and to subdivide the 97 acres into 437 total lots (393 buildable lots and 44 common lots). The subject sites are located along North Locust Grove Road and future extensions of Ardell Road and Stroebel Road, within Section 18, Township 2 North, Range 1 East; (APNs: S1418123460, S1418123485, S1418427800 and S1418417200).

Under the authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to required social distancing protocol, the **Council Chambers Audience Occupancy Capacity is 15**. The first 15 persons who appear, in addition to the Planning and Zoning Commission and staff, will be allowed in Council Chambers. Virtual participation/testimony via Zoom and the submittal of written testimony are available as alternative forms of public testimony (please see attached instructions for more details). Written testimony received by the close of business on July 22, 2020 will be included in the packet that is distributed to the governing body prior to the hearing. Please submit written testimony via mail, email or the City's website (<http://kunacity.id.gov/FormCenter/City-Clerk-13/Public-Testimony-Form-121>). Late submissions will be presented to the governing body at time of the hearing. Mail written comments to PO Box 13, Kuna, ID 83634 or hand deliver them to City Hall. All other persons may access the meeting via live streaming on the City of Kuna's Facebook page.

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

July 8, 2020 2024035

LEGAL NOTICE

**File #'s 19-11-AN & 19-08-S,
Ashton Estates East Subdivision**

NOTICE IS HEREBY GIVEN, that the Kuna Planning and Zoning Commission will hold a public hearing, **Tuesday, July 28, 2020 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 for Ashton Estates East Subdivision. KM Engineering requests to annex one parcel consisting of approximately 38.47 acres into Kuna City Limits with an R-8 (Medium Density Residential) zone and to subdivide the 38.47 acres into 200 total lots (one hundred seventy-five (175) buildable lots, twenty-five (25) common lots). The subject site is located at 2320 E. Meadow View Road, Kuna, ID 83634, within Section 26, Township 2 North, Range 1 East; (APN: S1419241000).

Under the authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to required social distancing protocol, the **Council Chambers Audience Occupancy Capacity is 15**. The first 15 persons who appear, in addition to the Planning and Zoning Commission and staff, will be allowed in Council Chambers. Virtual participation/testimony via Zoom and the submittal of written testimony are available as alternative forms of public testimony (please see attached instructions for more details). Written testimony received by the close of business on July 22, 2020 will be included in the packet that is distributed to the governing body prior to the hearing. Please submit written testimony via mail, email or the City's website (<http://kunacity.id.gov/FormCenter/City-Clerk-13/Public-Testimony-Form-121>). Late submissions will be presented to the governing body at time of the hearing. Mail written comments to PO Box 13, Kuna, ID 83634 or hand deliver them to City Hall. All other persons may access the meeting via live streaming on the City of Kuna's Facebook page.

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

July 8, 2020 2024025

LEGAL NOTICE

**City of Kuna
PUBLIC HEARING NOTICE**
A Public Hearing on the Status of Funded Grant Activities

The City of Kuna received an Idaho Community Development Block Grant (ICDBG) in the amount of \$500,000 from the Idaho Department of Commerce. This funding is allocated to the State of Idaho from the U.S. Department of Housing and Urban Development. These funds are currently being used to construct streetscape improvements along Main Street, from Avenue C to Avenue A.

The hearing will include a review of project activities and accomplishments to date, a summary of all expenditures to date, a general description of remaining work and any changes made to the scope of work, budget, schedule, location or beneficiaries.

The hearing will be held **Tuesday, July 21, 2020 at 6:00 PM** or as soon as can be heard, in the Council Chambers, Kuna City Hall, 751 W. 4th Street, Kuna, ID 83634.

The public is invited to provide written or oral testimony. Due to current health precautions associated with the Coronavirus, the City of Kuna is providing alternative ways for the community to submit comments at public hearings.

APPLICANT AND PUBLIC WRITTEN AND ORAL HEARING TESTIMONY PROCESS:

Written - In Advance to be included in the Agenda Packet that is distributed to the Decision-Making body.

1. Submit any option prior to 5:00 pm the Thursday before Public Hearing meeting. Late submissions will not be included in the packet but will be provided at the meeting.
2. Submit testimony via our website on the Public Testimony Form. This form will email directly to the City for inclusion in the Agenda Packet.
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: City Clerk
PO Box 13
Kuna ID 83634

Written - Up to noon the day of the Public Hearing

1. Submit any option prior to noon the day of the Public Hearing meeting. Late submissions will not be included.
2. Submit testimony via our website on the Public Testimony Form
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
City of Kuna
Attention: City Clerk
PO Box 13
Kuna ID 83634

Oral - Via electronic call during the Public Hearing

1. Submit request no later than noon the day of the Public Hearing meeting.
2. Email PublicHearingTestimony@KunaID.gov
 - ✓ Your name
 - ✓ Address
 - ✓ Phone Number you will be calling from to give testimony
 - ✓ Email Address
 - ✓ Date of Public Hearing
 - ✓ Case number or Identification of Public Hearing
3. Watch your email for a reply email with the information to join the meeting electronically. (Check your spam/junk folder as a precaution)
4. Follow the dial in information.
5. Call into the virtual lobby a minimum of 5 minutes prior to the meeting.

Oral - In Person Testimony during the Public Hearing. Due to social distancing protocol, the Council Chambers Audience Occupancy Capacity is 15. Social Distancing will be required. The first 15 persons who appear, in addition to Mayor, City Council, and staff, will be allowed in Council Chambers. All other persons may access the meeting via Live Streaming on the City of Kuna Facebook page, <https://www.facebook.com/CityofKunaIdaho/>. All persons wishing to testify must, state their name and residential address. No person shall speak until recognized by the Mayor. A three (3) minute time limit will be placed on all testimonies.

Information provided at the public hearing will be available, upon request, five (5) days prior to the hearing. The hearing will be held in a facility that is accessible to persons with disabilities. Special accommodations will be available, upon request, five (5) days prior to the hearing in a format that is usable to persons with disabilities.

If you have any questions or require special accommodation(s), please contact the Kuna City Clerk's Office before the meeting at (208) 387-7726.

Chris Engels, City Clerk
751 W 4th St.
Kuna, ID 83634

This Notice can be provided in a format accessible to persons with disabilities and/or persons with limited English proficiency upon request.

Se le puede proveer esta notificación en un formato accesible para las personas discapacidades y/o personas con conocimientos limitados del inglés a pedido.

July 8, 2020 2024232

IDAHO PRESS-TRIBUNE
EMMETT MERIDIAN KUNA BOISE WKLY
C/O ISJ PAYMENT PROCESSING CENTER
PO BOX 1570
POCATELLO ID 83204
(208)467-9251
Fax (208)475-2321

ORDER CONFIRMATION

Salesperson: LEGALS

Printed at 07/01/20 11:42 by sje14

Acct #: 345222

Ad #: 2024025

Status: New CHOLD

1 KUNA, CITY OF
P.O. BOX 13
KUNA ID 83634

Start: 07/08/2020 Stop: 07/08/2020
Times Ord: 1 Times Run: ***
LEG 2.00 X 55.00 Words: 383
Total LEG 110.00
Class: 0006 GOVERNMENT NOTICES
Rate: L2 Cost: 102.43
Affidavits: 1

Contact: CHRIS ENGLES
Phone: (208)387-7727
Fax#:
Email: awelker@kunaaid.gov; gsmith@k
Agency:

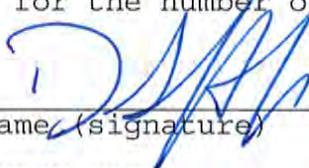
Ad Descrpt: 19-11-AN & 19-08-S
Given by: DOUG HANSON
P.O. #: 10239
Created: sje14 07/01/20 11:37
Last Changed: sje14 07/01/20 11:42

PUB ZONE EDT TP RUN DATES
KMN A 96 S 07/08

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.

DOUG HANSON
Name (print or type)


Name (signature)

(CONTINUED ON NEXT PAGE)

IDAHO PRESS-TRIBUNE
EMMETT MERIDIAN KUNA BOISE WKLY
C/O ISJ PAYMENT PROCESSING CENTER
PO BOX 1570
POCATELLO ID 83204
(208)467-9251
Fax (208)475-2321

ORDER CONFIRMATION (CONTINUED)

Salesperson: LEGALS

Printed at 07/01/20 11:42 by sje14

Acct #: 345222

Ad #: 2024025

Status: New CHOLD CHOI

LEGAL NOTICE

**File #'s 19-11-AN & 19-08-S,
Ashton Estates East Subdivision**

NOTICE IS HEREBY GIVEN, that the Kuna Planning and Zoning Commission will hold a public hearing, **Tuesday, July 28, 2020 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 for Ashton Estates East Subdivision. KM Engineering requests to annex one parcel consisting of approximately 38.47 acres into Kuna City Limits with an R-8 (Medium Density Residential) zone and to subdivide the 38.47 acres into 200 total lots (one hundred seventy-five (175) buildable lots, twenty-five (25) common lots). The subject site is located at 2320 E. Meadow View Road, Kuna, ID 83634, within Section 26, Township 2 North, Range 1 East; (APN: S1419241000).

Under the authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to required social distancing protocol, **the Council Chambers Audience Occupancy Capacity is 15**. The first 15 persons who appear, in addition to the Planning and Zoning Commission and staff, will be allowed in Council Chambers. Virtual participation/testimony via Zoom and the submittal of written testimony are available as alternative forms of public testimony (please see attached instructions for more details). Written testimony received by the close of business on July 22, 2020 will be included in the packet that is distributed to the governing body prior to the hearing. Please submit written testimony via mail, email or the City's website (<http://kunacity.id.gov/FormCenter/City-Clerk-13/Public-Testimony-Form-121>). Late submissions will be presented to the governing body at time of the hearing. Mail written comments to PO Box 13, Kuna, ID 83634 or hand deliver them to City Hall. All other persons may access the meeting via live streaming on the City of Kuna's Facebook page.

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

July 8, 2020

2024025

received
7.15.20

Rodney & Karen Wiens
2329 E Deer Flat Rd
Kuna, ID 83634-1325
661-345-6333
rwuens@yahoo.com

Re: **Ashton Estates East Subdivision** located at 2320 E Meadow View Rd

TO: City of Kuna **Planning and Zoning Commission**, public hearing 7/28/2020

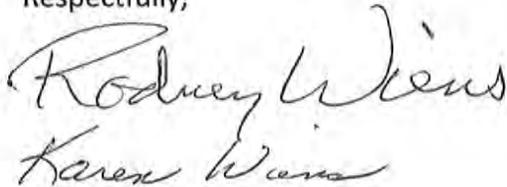
We have several concerns regarding **OUR IRRIGATION WATER**, which comes off of the Kuna Canal approx. 200 ft South of E Meadow View Rd; and, then runs North by North-West (via gravity flow) completely crossing the proposed Subdivision Property. This irrigation water supplies three customers: Rod & Karen Wiens, Deborah Schenk, and Harry Kohn (all living to the North of the proposed Subdivision Property).

In looking at the proposed Subdivision Map, we see no indication that the developer has taken our irrigation water into account! This is serious! Our **"Rights To"** and **"Access To"** our irrigation water must be **MAINTAINED** and **UNRESTRICTED** during the construction of, and upon completion of the project! **What is the developer (KM Engineering, LLP) proposing, that will address this issue?** We want to see that plan in writing.

And finally, there are three road "spurs" (for future roads) on the North side of the development. If the Subdivision Developer would construct a temporary fence at the North ends of those road spurs; it would definitely help to **prevent** future residents, their children, and their pets, from **trespassing** onto our fields to the North. This would be greatly appreciated.

It is our hope that the Subdivision Developer will be respectful and considerate of the property owners which boarder the subdivision; and thus we can hopefully avoid any costly litigations!

Respectfully,



Rodney and Karen Wiens
July 15, 2020



City of Kuna

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
Kunacity.id.gov

P & Z Commission Staff Report

To: Planning and Zoning Commission

Case Numbers: 20-02-DR (Design Review),
Fossil Creek Subdivision

Location: Near the Southwest Corner (SWC)
of Deer Flat & Ten Mile Road
Kuna, Idaho 83634

Planner: Troy Behunin, Planner III

Meeting Date: July 28, 2020

Representative: Gem State Planning, LLC
Jane Suggs
9840 W. Overland Rd. Ste 120
Boise, ID 83709
208.602.6941
Jane@gemstateplanning.com

Applicant: Trilogy Development, LLC
Shawn Brownlee
9839 W. Cable Car St. Ste. 101
Boise, ID 83709
shawn@trilogyidaho.com

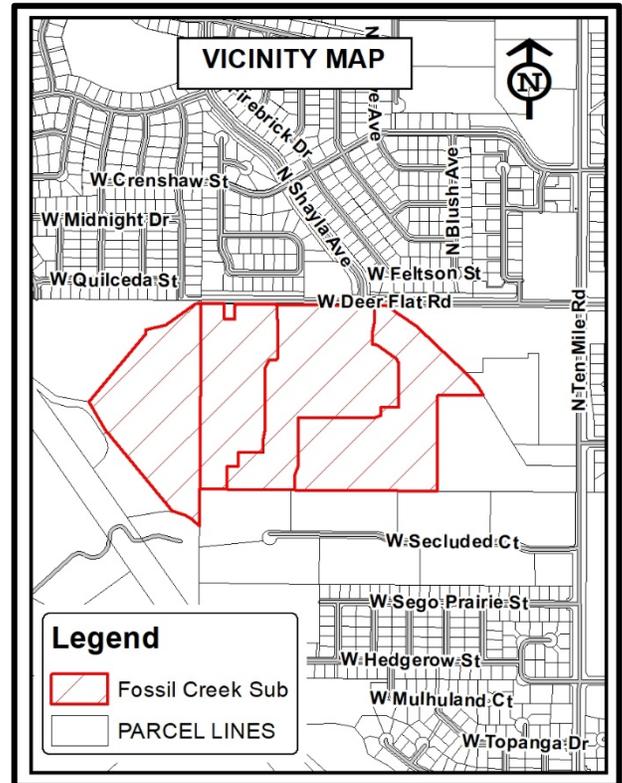


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| C. Site History | H. Proposed Comprehensive Plan Analysis |
| D. General Project Facts | I. Proposed Kuna City Code Analysis |
| E. Staff Analysis | J. Proposed Commission's Recommendation |

A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that design reviews are designated as *public meetings*, with the Planning and Zoning Commission (acting as the Design Review Committee) 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 | Feb. 4, 2020 (twelve persons attended) |
| ii. Agencies | March 27, 2020 |
| iii. 400' Property Owners | July 2, 2020 |
| iv. Kuna, Melba Newspaper | June 17, 2020 |
| v. Site Posted | July 3, 2020 |

B. Applicant Request:

1. The applicant, Gem State Planning, LLC requests Design Review approval for approx 66.75 acres to be divided into 283 total lots. The proposed includes 12.6% usable open space for a total 8.4 acres (ac.) of open space.

This is a revision to a previously approved pre plat site plan. The site is near the Southwest Corner (SWC) of Deer Flat and Ten Mile Road. Kuna, ID 83634; within Section 22 T2N, R1W, B.M., APN No's: S1322212401, S1322120900, S1322121200 and S1322121300

C. Site History: The subject site is approximately 66.75 acres in size and is currently zoned R-5 (MDR) and in Kuna City limits. The subject site has historically been used for agricultural purposes.

D. General Projects Facts:

1. **Comprehensive Plan Designation:** The Future Land Use Map (FLUM) 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 FLUM identifies the approximately 66.75 acre site as Medium Density Residential, or 4-8 DUA.
2. **Kuna Recreation and Pathways Master Plan Map:**
The Recreation and Pathways Master Plan Map indicates a future pathway / trail through the subject site in the Northeast Corner (NEC) along the Ramsey Lateral. Applicant has proposed a pathway and open space along the Ramsey Lateral.
3. **Surrounding Existing Land Uses and Zoning Designations:**

North	R-6, R-3, RUT	Low and Medium Density Residential: Kuna City, Rural Residential: Ada County
South	RR & RUT	Rural Residential & Rural Urban Transition: Ada County
East	C-1 & R-4	Neighborhood Comm. & Med. Density Residential: Kuna City
West	R-6 RR	Medium Density Residential: Kuna City, Rural Residential: Ada County

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

Property Owner	Parcel Size	Current Zone	Parcel Number
Corey D Barton	Approx 16.48 ac.	R-5 Med Den Res.	S1322212401
Corey D Barton	Approx 19.13 ac.	R-5 Med Den Res.	S1322120900
Corey D Barton	Approx 2.05 ac.	R-5 Med Den Res.	S1322121200
Corey D Barton	Approx 18.38 ac.	R-5 Med Den Res.	S1322121300

5. **Services:**

Sanitary Sewer – City of Kuna (COK)	Fire Protection – Kuna Rural Fire District (KRFD)
Potable Water – COK	Police Protection – Kuna City Police (ACSO)
Irrigation District – Boise-Kuna Irrigation District	Sanitation Services – J & M Sanitation
Pressure Irrigation–COK Municipal Irrig. System (KMIS)	

6. **Existing Structures, Vegetation and Natural Features:** Currently the properties listed above are used for agricultural purposes. There are no residential buildings on these lands. These parcels are generally flat and on-site vegetation is consistent with typical large Agriculture open fields. Bedrock depth according to the USGS, is approx 40” to 60” with an average of 1 - 1.4% slope across the site.

Transportation / Connectivity: The site has approx. 1,344’ of frontage along Deer Flat Road. Staff recommends the applicant be conditioned to satisfy Kuna City and ACHD’s requirements for roadway improvements for all on-site public roads and for the frontage along Deer Flat Road, including road widening and vertical/rolled curb, gutter and sidewalks at the appropriate widths. Deer Flat Road is a Collector Road.

7. **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.

8. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:

- | | |
|---|-------------|
| • City Engineer (Paul Stevens) | Exhibit B-1 |
| • Ada County Highway District (ACHD) | Exhibit B-2 |
| • Boise Project Board of Control | Exhibit B-3 |
| • Central District Health Department (CDHD) | Exhibit B-4 |
| • COMPASS (Comm. Planning Assoc.) | Exhibit B-5 |
| • Department of Environmental Quality (DEQ) | Exhibit B-6 |
| • ID Dept. of Water Resources (IDWR) | Exhibit B-7 |
| • Idaho Transportation Department (ITD) | Exhibit B-8 |
| • Kuna Rural Fire District (KRFD) | Exhibit B-9 |

E. Staff Analysis:

Applicant proposes to subdivide approx 66.75 acres to create a subdivision known as *Fossil Creek* Subdivision. The site is within Kuna City limits and is currently zoned R-5 (from the 2003 application) which is a Medium Density Residential [MDR] zone. The property was zoned with the original preliminary plat back in 2003.

A Design Review application accompanies this project and seeks approval for the landscaping, trails and open spaces included with this subdivision (20-02-DR). A Homeowners Association (HOA) must be established for the care and maintenance for all common lots. The landscape plans appear to be in substantial compliance with KCC 5-17. In the event that during phase development there is a valid reason to relocate trees and shrubs, staff recommends that the applicant be conditioned to relocate the affected items to another location rather than removal from the project. Acceptable reasons for relocating landscaping includes ACHD drainage and vision triangles at intersections. It is the responsibility of the developer to ensure that wire baskets, twine and other forms of non-biodegradable items are removed from trees and shrubs appropriately. Applicant is hereby notified that this project is subject to design review inspection fees. Required inspections (post construction), are to verify landscaping and street lights compliance prior to signature on the final plat. It is also noted that any changes to the landscape or street light plans must receive staff approval *prior* to changes being made. At the time of inspections, if field conditions are different than the approved plans, changes will be required until field conditions are compliant, and will be made at developers' expense.

Staff has determined this application complies with Title 5 of the Kuna City Code; Idaho Statute §50-222; and the Kuna Comprehensive Plan and FLUM; and forwards Case No. 20-02-DR, to the Commission with recommended conditions of approval listed in section 'J' of this report.

F. Applicable Standards:

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

G. Procedural Background:

On Tuesday July 28, 2020, the Commission **will/have considered** the *Fossil Creek* subdivision Case No. 20-02-DR, including the applications, agency comments, staff's report and public testimony presented or given.

H. Proposed Comprehensive Plan Analysis:

The Commission may accept or reject the Comprehensive Plan components, and have determined the proposed Design Review request for the site *is/is not* consistent with the following Comprehensive Plan components as described below:

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 their decision making for the City.

2.0 – Property Rights and Summary

Goal 1: 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. However, the applicant may request a takings analysis by the developer.

5.0 Economic Development Goals and Objectives - 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 unique set and arrangement of lot sizes, sidewalks and open space throughout to meet this goal.

6.0 Land Use Goals and Objectives - 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; landscaped open space, sidewalks, unique/varied housing densities and types and promotes desirable, cohesive community character and a possibility for a quality neighborhood as an in-fill development.

8.0 - Public Services, Facilities and Utilities Goals and Objectives - Summary:

Provide adequate services, facilities, and utilities for all City residents and *annex* contiguous properties who 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 services for this development and the authority to approve the request. This application will expand the City's sanitary sewer system, potable water and adds to the pressure irrigation mainline in an orderly fashion and adds amenities with open spaces and trails for its residents and the community.

9.0 - Transportation Goals and Objectives - Summary:

Work with Kuna City, ACHD and COMPASS 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: *The project meets the transportation goals of the City by improving the south side of Deer Flat Rd. with expanded rights-of-way along its frontage, adding sidewalks for public use and internal roads for transportation connections.*

12.0 - Housing Goals and Objectives - 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 283 total lots which will possibly contribute to high-quality lots of varied sizes to be developed in a logical and orderly manner. The development proposes varied and unique housing types, common lots, and possibly amenities, therefore creating a pleasant neighborhood environment that blends with the majority of the area.*

13.0 - Community Design Goals and Objectives - 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 subdivision incorporates sound community design and landscape features to integrate with surrounding uses to create a sense of place for the community and will foster neighborhood interactions and activities within its boundary.*

I. Proposed Kuna City Code Analysis:

1. 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 KCC. Staff also finds that the proposed project meets all applicable requirements of Title 6 of KCC.*
2. The site is physically suitable for a subdivision.
Comment: *The approx. 66.75 acre subdivision has sufficient size to include a mix of lot sizes, neighborhood landscaped common lot.*
3. The subdivision uses **are/are not** likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.
Comment: *The land to be subdivided is /is not used as wildlife habitat. Roads, homes and open space are planned for construction according the City requirements and best practices. Staff is not aware of any environmental damage or loss of habitat associated with the proposed development.*
4. The subdivision application **is/is not** likely to cause adverse public health problems.
Comment: *The subdivision of the property follows the zoning designation per Kuna Code 5-13-9. The Medium Density zone requires connection to public sewer and water, therefore eliminating the occurrence of adverse public health problems. Through correspondence with public service providers and application evaluation, this project appears to avoid detriment to surrounding uses.*
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 subdivision design did consider the location of the property, classified roadway (Deer Flat Rd.) and the system. The subject property can be connected to the City's public sewer, water and pressure irrigation facilities. The adjacent uses are complimentary uses as proposed in the Kuna Comprehensive Plan Future Land Use Map.*

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

J. Proposed Recommendation of the Commission:

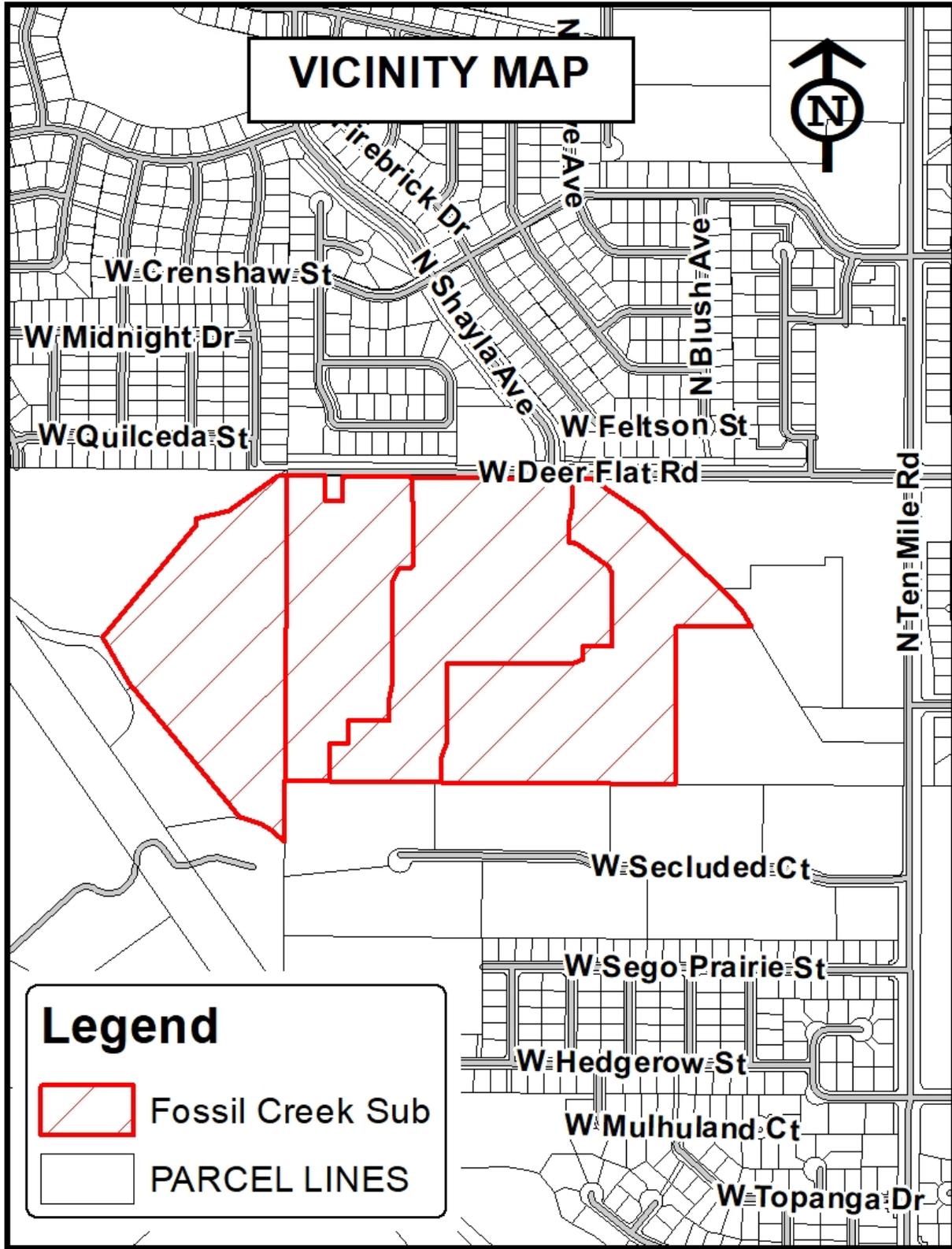
20-02-DR (Design Review), *Note: The proposed motion is to **approve or deny** the design review request. If the Planning and Zoning Commission wishes to approve or deny specific parts of the requests as detailed in the report, those changes must be specified.*

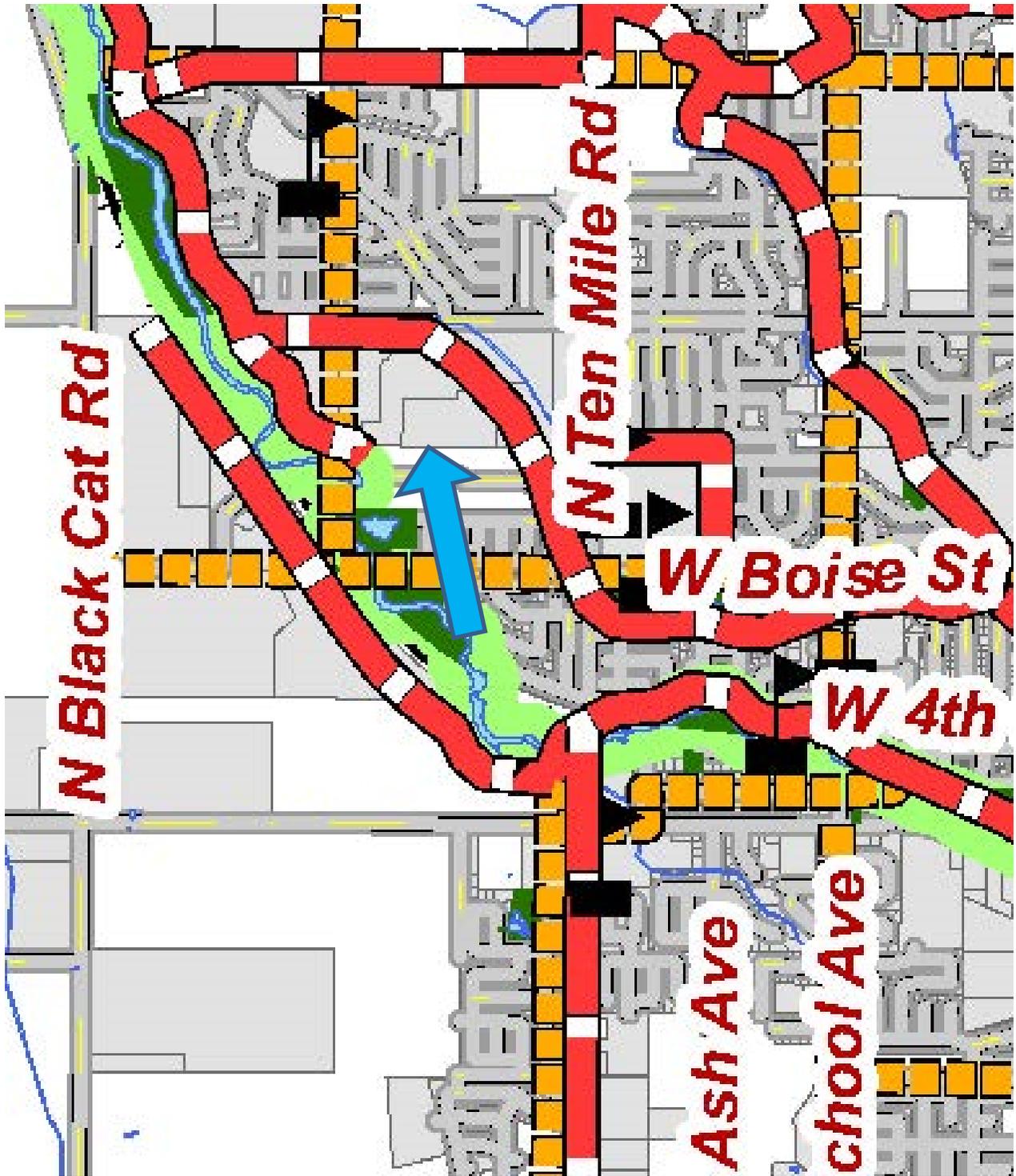
Based on the facts outlined in staff's memo, the Comp Plan, City Code, the record before the Commission, the applicant's presentation, public testimony and discussion during the public meeting by the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby votes to **approve/conditional approve/deny** Case 20-02-DR, a Design Review request by Gem State Planning, LLC with the following conditions of approval *at time of development*:

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 all sewer connections and grading plans.
 - b. The City Engineer shall approve drainage and grading plans.
 - c. Central District Health Department requires the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".
 - d. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan by the City engineer.
 - e. 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.
 - f. The *Boise Project Board of Control* shall approval all modifications to the existing irrigation system.
 - g. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
 - h. All public rights-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District.
2. Installation of utility service facilities shall comply with requirements of the public utility or irrigation district providing 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.
4. Street lighting shall use LED lights, with spacing and wattages meeting KCC 5-4-6; applicant shall coordinate a street light plan for P & Z Commission approval in concert with the prepared construction drawings for the project. Place street lighting at all intersections and near all fire hydrants.
5. Parking within the site shall comply with KCC 5-9-3.
6. Fencing within and around the site shall comply with Kuna City standards – KCC 5-5-5- A-J and KCC 6-4-2-E.
7. A sign permit is required prior to subdivision entrance sign construction and it shall comply with KCC 5-10-4. *Monument signs will require applicant to obtain design review approval.*
8. 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. And is required to meet KCC 5-17-7 standards. Maintenance and planting within public rights-of-way shall be approved and permitted by the public entities owning the property.

9. 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 (KMIS) prior to requesting final plat signature from the City Engineer.
10. Applicant shall work with the Public Works department to bring utilities to and thru the site and provide stubs to adjacent properties in conformance with KCC.
11. Applicant shall improve and widen Deer Flat Road with curb, gutter and sidewalk at the appropriate width.
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 Commission and Council, or seek amending them through the public hearing process.
13. The applicant's proposed preliminary plat (dated 02/11/20) shall be considered a binding site plan, or as modified and approved through the public hearing process.
14. The applicant's proposed landscape plan (dated 02/13/20) shall be considered a binding site plan, or as modified and approved through the public hearing process.
15. Applicant shall remedy any outstanding code enforcement issues prior to recordation of a final plat.
16. All streets shall be improved and dedicated as public roads.
17. Applicant shall work with KRFD to accommodate EMS access and all other requirements of the KRFD.
18. Applicant shall keep the subdivision name as presented and approved by Council and may not change it for marketing purposes unless approved by Council.
19. Applicant shall follow staff, city engineer and other agency recommended requirements as applicable.
20. Compliance with all local, state and federal laws is required.







City of Kuna

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
Kunacity.id.gov

P & Z Findings of Fact & Conclusions of Law

To: Planning and Zoning Commission

Case Numbers: 20-01-S (*Subdivision*) & 20-02-DR
(Design Review),
Fossil Creek Subdivision

Location: Near the Southwest Corner (SWC)
of Deer Flat & Ten Mile Road
Kuna, Idaho 83634

Planner: Troy Behunin, Planner III

Hearing Date: 20-01-S July 14, 2020

Public Meeting: 20-02-DR July 28, 2020

Findings of Fact: July 28, 2020

Representative: Gem State Planning, LLC
Jane Suggs 208.602.6941
9840 W. Overland Rd. Ste 120
Boise, ID 83709
Jane@gemstateplanning.com

Applicant: Trilogy Development, LLC
Shawn Brownlee
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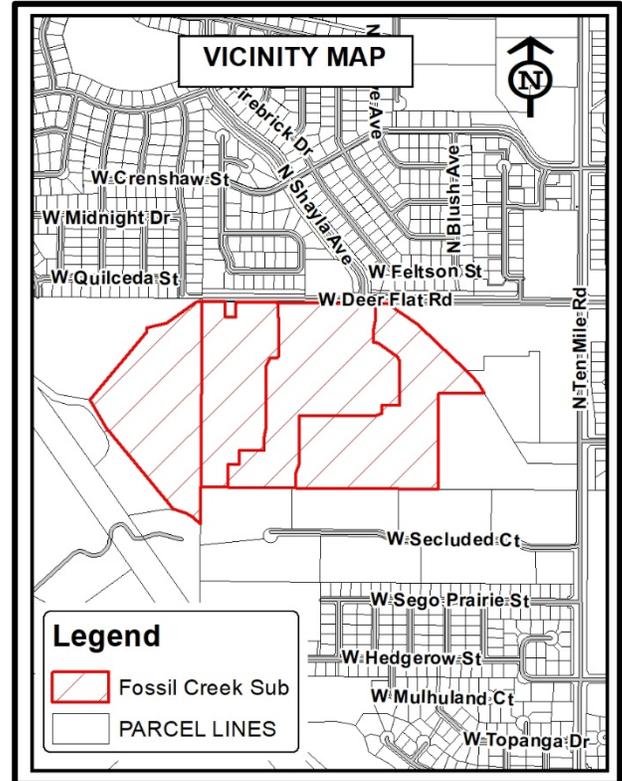


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| F. Applicable Standards | |

A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that design reviews are designated as *public meetings*, with the Planning and Zoning Commission (acting as the Design Review Committee) as the decision-making body; and that subdivision preliminary plat applications are designated as *public hearings*, with the Planning and Zoning Commission as the recommending body, and 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 | Feb. 4, 2020 (twelve persons attended) |
| ii. Agencies | March 27, 2020 |
| iii. 400' Property Owners | July 2, 2020 |
| iv. Kuna, Melba Newspaper | June 17, 2020 |

B. Applicant Request:

1. The applicant, Gem State Planning, LLC, requests preliminary plat approval to subdivide approx. 66.75 acres into 283 total lots. The proposed gross density is 4.07 DUA (Dwelling Units/Ac.), and the net density is approx. 6.28 DUA with 12.6% usable open space for a total 8.4 acres (ac.) of open space. This is a revision to a previously approved pre plat site plan. The site is near the Southwest Corner (SWC) of Deer Flat and Ten Mile Road. Kuna, ID 83634; within Section 22 T2N, R1W, B.M., APN No's: S1322212401, S1322120900, S1322121200 and S1322121300

C. Site History: The subject site is approximately 66.75 acres in size and is currently zoned R-6 (MDR) and in Kuna City limits. The subject site has historically been used for agricultural purposes.

D. General Projects Facts:

1. **Comprehensive Plan Designation:** The Future Land Use Map (FLUM) 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 FLUM identifies the approximately 66.75 acre site as Medium Density Residential, or 4-8 DUA.
2. **Kuna Recreation and Pathways Master Plan Map:** The Recreation and Pathways Master Plan Map indicates a future pathway / trail through the subject site in the Northeast Corner (NEC) along the Ramsey Lateral. Applicant has proposed a pathway and open space along the Ramsey Lateral.
3. **Surrounding Existing Land Uses and Zoning Designations:**

North	R-6, R-3, RUT	Low and Medium Density Residential: Kuna City, Rural Residential: Ada County
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5. **Services:**

Sanitary Sewer – City of Kuna (COK)	Fire Protection – Kuna Rural Fire District (KRFD)
Potable Water – COK	Police Protection – Kuna City Police (ACSO)
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6. **Existing Structures, Vegetation and Natural Features:** Currently the properties listed above are used for agricultural purposes. There are no residential buildings on these lands. These parcels are generally flat and on-site vegetation is consistent with typical large Agriculture open fields. Bedrock depth according to the USGS, is approx 40” to 60” with an average of 1 - 1.4% slope across the site.

Transportation / Connectivity: The site has approx. 1,344' of frontage along Deer Flat Road. Staff recommends the applicant be conditioned to satisfy Kuna City and ACHD's requirements for roadway improvements for all on-site public roads and for the frontage along Deer Flat Road, including road widening and vertical/rolled curb, gutter and sidewalks at the appropriate widths. Deer Flat Road is a Collector Road. The Applicant shall work with the Emergency Medical Services (EMS) to provide emergency access for the site at proper widths approved by the City of Kuna, ACHD the KRFD.

7. **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.

8. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:

- | | |
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| • Department of Environmental Quality (DEQ) | Exhibit B-6 |
| • ID Dept. of Water Resources (IDWR) | Exhibit B-7 |
| • Idaho Transportation Department (ITD) | Exhibit B-8 |
| • Kuna Rural Fire District (KRFD) | Exhibit B-9 |

E. Staff Analysis:

Applicant proposes to subdivide approx 66.75 acres to create a subdivision known as *Fossil Creek* Subdivision. The site is within Kuna City limits and is currently zoned R-5 (from the 2003 application) which is a Medium Density Residential [MDR] zone. The property was zoned with the original preliminary plat back in 2003.

The City of Kuna FLUM and the Comprehensive Plan for Kuna identifies this parcel as MDR, which equals four (4) to eight (8) dwelling units per acre (DUA). This application requests an approx. 4.07 gross DUA. This subdivision proposes 8.4 acres (12.5%) of usable open space including trails along the Ramsey Lateral, and a future open space segment along Indian Creek, plus other internal open spaces and trails. Staff views this proposal to be in concert with the FLUM and Comprehensive Plan. Applicant proposes 272 home lots and 11 common lot (283 total). Staff recommends the applicant be conditioned to work with the Public Works department to bring utilities to and thru the site and provide stubs to adjacent properties in conformance with KCC. Public utilities shall be provided at the developers cost and extended to the site in sufficient sizes. Staff recommends the applicant be conditioned to provide street lights throughout the Sub that comply with KCC for distance, style and wattage, including street lights at all intersections and near all fire hydrants. Staff recommends the applicant be conditioned to work with the KRFD for proper EMS access at the 31-lot threshold for permanent secondary access. Staff recommends that all streets (including Deer Flat Frontage) be improved widened and dedicated as public roads with curb, gutter and sidewalks at appropriate widths.

A Design Review application accompanies this project and seeks approval for the landscaping, trails and open spaces included with this subdivision (20-02-DR). A Homeowners Association (HOA) must be established for the care and maintenance for all common lots. The landscape plans appear to be in substantial compliance with KCC 5-17. In the event that during phase development there is a valid reason to relocate trees and shrubs, staff recommends that the applicant be conditioned to relocate the affected items to another location rather than removal from the project. Acceptable reasons for relocating landscaping includes ACHD drainage and vision triangles at intersections. It is the responsibility of the developer to ensure that wire baskets, twine and other forms of non-biodegradable items are removed from trees and shrubs appropriately. Applicant is hereby notified that this project is subject to design review inspection fees. Required inspections (post construction), are to verify

landscaping and street lights compliance prior to signature on the final plat. It is also noted that any changes to the landscape or street light plans must receive staff approval *prior* to changes being made. At the time of inspections, if field conditions are different than the approved plans, changes will be required until field conditions are compliant, and will be made at developers' expense.

Staff has determined these applications comply with Title 5 of the Kuna City Code; Idaho Statute §50-222; and the Kuna Comprehensive Plan and FLUM; and forwards Case No's 20-01-S and 20-02-DR, to the Commission with recommended conditions of approval listed in section 'J' of this report.

F. Applicable Standards:

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

G. Procedural Background:

On Tuesday July 14, 2020, the Commission *considered* the *Fossil Creek* subdivision project, Case No's 20-01-S & 20-02-DR, including the applications, agency comments, staff's report and public testimony presented or given.

H. Comprehensive Plan Analysis:

The Commission may accept or reject the Comprehensive Plan components, and have determined the proposed preliminary plat request for the site *is* consistent with the following Comprehensive Plan components as described below:

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 their decision making for the City.

2.0 – Property Rights and Summary

Goal 1: 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. However, the applicant may request a takings analysis by the developer.

5.0 Economic Development Goals and Objectives - 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 unique set and arrangement of lot sizes, sidewalks and open space throughout to meet this goal.

6.0 Land Use Goals and Objectives - 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; landscaped open space, sidewalks, unique/varied housing densities and types and promotes desirable, cohesive community character and a possibility for a quality neighborhood as an in-fill development.*

8.0 - Public Services, Facilities and Utilities Goals and Objectives - Summary:

Provide adequate services, facilities, and utilities for all City residents and annex contiguous properties who 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 services for this development and the authority to approve the request. This application will expand the City's sanitary sewer system, potable water and adds to the pressure irrigation mainline in an orderly fashion and adds amenities with open spaces and trails for its residents and the community.*

9.0 - Transportation Goals and Objectives - Summary:

Work with Kuna City, ACHD and COMPASS 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: *The project meets the transportation goals of the City by improving the south side of Deer Flat Rd. with expanded rights-of-way along its frontage, adding sidewalks for public use and internal roads for transportation connections.*

12.0 - Housing Goals and Objectives - 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 283 total lots which will possibly contribute to high-quality lots of varied sizes to be developed in a logical and orderly manner. The development proposes varied and unique housing types, common lots, and possibly amenities, therefore creating a pleasant neighborhood environment that blends with the majority of the area.*

13.0 - Community Design Goals and Objectives - 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 subdivision incorporates sound community design and landscape features to integrate with surrounding uses to create a sense of place for the community and will foster neighborhood interactions and activities within its boundary.*

I. Kuna City Code Analysis:

1. 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 KCC. Staff also finds that the proposed project meets all applicable requirements of Title 6 of KCC.*
2. The site is physically suitable for a subdivision.
Comment: *The approx. 66.75 acre subdivision has sufficient size to include a mix of lot sizes, neighborhood landscaped common lot.*
3. The subdivision uses *are 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. Roads, homes and open space are planned for construction according the City requirements and best practices. Staff is not aware of any environmental damage or loss of habitat associated with the proposed development.*
4. The subdivision application *is not* likely to cause adverse public health problems.
Comment: *The subdivision of the property follows the zoning designation per Kuna Code 5-13-9. The Medium Density zone requires connection to public sewer and water, therefore eliminating the occurrence of adverse public health problems. Through correspondence with public service providers and application evaluation, this project appears to avoid detriment to surrounding uses.*
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 subdivision design did consider the location of the property, classified roadway (Deer Flat Rd.) and the system. The subject property can be connected to the City's public sewer, water and pressure irrigation facilities. The adjacent uses are complimentary uses as proposed in the Kuna Comprehensive Plan Future Land Use Map.*
6. The existing and proposed street and utility services in proximity to the site are suitable and adequate for residential purposes.

J. Recommendation of the Commission:

Based on 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 public hearing by the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby recommends approval to City Council for Case No. 20-01-S, Preliminary Plat request, and votes to *approve Case No. 20-02-DR, a Design Review request* by Gem State Planning, LLC with the following conditions of approval *at time of development*:

20-01-S (Preliminary Plat), During the public hearing on July 14, 2020, the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby recommended approval to City Council for Case No's 20-01-S, a Preliminary Plat request by Gem State Planning, LLC, with the following conditions of approval:

- *Applicant shall follow the conditions outlined in the staff report,*
- *Modify condition No. 13 to recognize the right-of-way request from ACHD.*

20-02-DR (Design Review), During the public meeting on July 28, 2020, the Planning and Zoning Commission of Kuna, Idaho, voted to *approve Case No. 20-02-DR, a Design Review request* by Gem State Planning, LLC, with the following conditions of approval *at time of development*:

- *Applicant shall follow the conditions outlined in the staff report,*

And;

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 all sewer connections and grading plans.
 - b. The City Engineer shall approve drainage and grading plans.
 - c. Central District Health Department requires the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".
 - d. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan by the City engineer.
 - e. 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.
 - f. The *Boise Project Board of Control* shall approval all modifications to the existing irrigation system.
 - g. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
 - h. All public rights-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District.
2. Installation of utility service facilities shall comply with requirements of the public utility or irrigation district providing 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.
4. Street lighting shall use LED lights, with spacing and wattages meeting KCC 5-4-6; applicant shall coordinate a street light plan for P & Z Commission approval in concert with the prepared construction drawings for the project. Place street lighting at all intersections and near all fire hydrants.
5. Parking within the site shall comply with KCC 5-9-3.
6. Fencing within and around the site shall comply with Kuna City standards – KCC 5-5-5- A-J and KCC 6-4-2-E.
7. A sign permit is required prior to subdivision entrance sign construction and it shall comply with KCC 5-10-4. *Monument signs will require applicant to obtain design review approval.*
8. 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. And is required to meet KCC 5-17-7 standards. Maintenance and planting within public rights-of-way shall be approved and permitted by the public entities owning the property.
9. 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 (KMIS) prior to requesting final plat signature from the City Engineer.
10. Applicant shall work with the Public Works department to bring utilities to and thru the site and provide stubs to adjacent properties in conformance with KCC.
11. Applicant shall improve and widen Deer Flat Road with curb, gutter and sidewalk at the appropriate width.
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 Commission and Council, or seek amending them through the public hearing process.
13. The applicant's proposed preliminary plat (dated 02/11/20) shall be considered a binding site plan, or as modified and approved through the public hearing process.
14. The applicant's proposed landscape plan (dated 02/13/20) shall be considered a binding site plan, or as modified and approved through the public hearing process.

15. Applicant shall remedy any outstanding code enforcement issues prior to recordation of a final plat.
16. All streets shall be improved and dedicated as public roads.
17. Applicant shall work with KRFD to accommodate EMS access and all other requirements of the KRFD.
18. Applicant shall keep the subdivision name as presented and approved by Council and may not change it for marketing purposes unless approved by Council.
19. Applicant shall follow staff, city engineer and other agency recommended requirements as applicable.
20. Compliance with all local, state and federal laws is required.



City of Kuna
Planning and Zoning Commission
Findings of Fact and Conclusions of Law

P.O. Box 13
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K. Based upon the record contained in Case No's 20-01-S and 20-02-DR, including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Commission hereby recommends *approval* of the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 20-01-S and 20-02-DR a request for Preliminary Plat and Design Review approval by Gem State Planning, LLC:

1. *The Kuna Planning and Zoning Commission approves the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.*

Comment: *The Commission held a public hearing for 20-01-S on July 14, 2020, and a public meeting for 20-02-DR on July 28, 2020, 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's 20-01-S and 20-02-DR, this proposal generally complies with the Comprehensive Plan and City Code.*

Comment: *The Comp Plan has listed numerous goals for promoting and supporting a diverse and sustainable economy that will allow more Kuna residents to work in their community and encouraging a balance of land uses to ensure that Kuna remains desirable, stable and a self-sufficient community.*

3. *Based on the evidence contained in Case No's 20-01-S and 20-02-DR, this proposal generally complies with the Kuna City Code.*

Comment: *The applicant has submitted a complete application, and following staff review the application appears to be in general compliance with the design requirements, public improvement requirements, objectives and considerations listed in Kuna City Code Title 5 and Title 6.*

4. *The Kuna Planning and Zoning Commission has the authority to recommend approval to Council for Case No. 20-01-S, and authority to approve Case No. 20-02-DR.*

Comment: *On July 14, 2020, the Commission voted to recommend approval of Case No. 20-01-S and at a public meeting on July 28, 2020, voted to approve Case No. 20-02-DR.*

5. *The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.*

Comment: *Neighborhood Notices were mailed out to residents within 400-FT of the proposed project site on July 2, 2020, and a legal notice was published in the Kuna Melba Newspaper on June 15, 2020. The applicant placed a sign on the property on July 2, 2020. The Design Review application was noticed on the agenda for the July 28, 2020 meeting.*

DATED: this 28th day of July, 2020.

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:

Troy Behunin, Planner III

