

OUTPOST SUBDIVISION

STREET / WATER AND SEWER CONSTRUCTION PLANS

RECEIVED
SEP 24 2003
KUNA P & Z

Received 9/26/03

OUTPOST RECORD DWGS

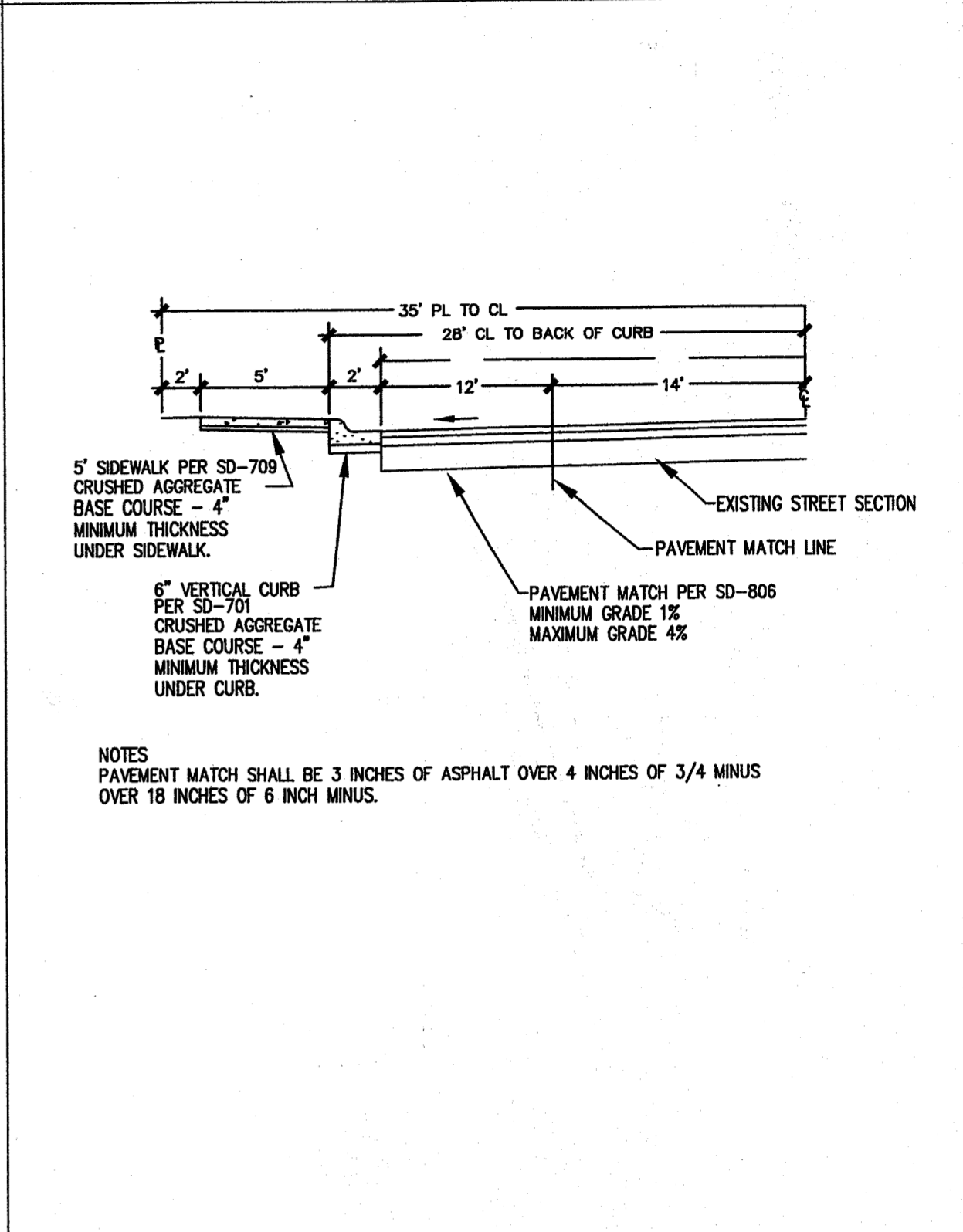
LEGEND

- = 6" C900 PVC WATER MAIN
- = STREET CENTERLINE
- = 8" SANITARY SEWER MAIN
- = CONSTRUCT 4" VALLEY GUTTER IN ACCORDANCE WITH ISPWIC STANDARD DRAWING SD-706. (PARTIAL OR FULL FILLET)
- = AND CONSTRUCT PEDESTRIAN RAMP IN ACCORDANCE WITH ISPWIC STANDARD DRAWING SD-712C.
- = NEW MANHOLE
- = STREET LIGHT
- = FIRE HYDRANT
- = NEW/EXISTING WATER VALVE SAME SIZE AS MAIN LINE
- = STREET CENTERLINE STATION
- = LOT NUMBER
- = 4" SANITARY SERVICE
- = WATER METER
- = SD-601 CATCH BASIN (OR EQUAL)
- = 1000 GALLON SEDIMENT TANK
- = PRESSURE IRRIGATION LOT SERVICE

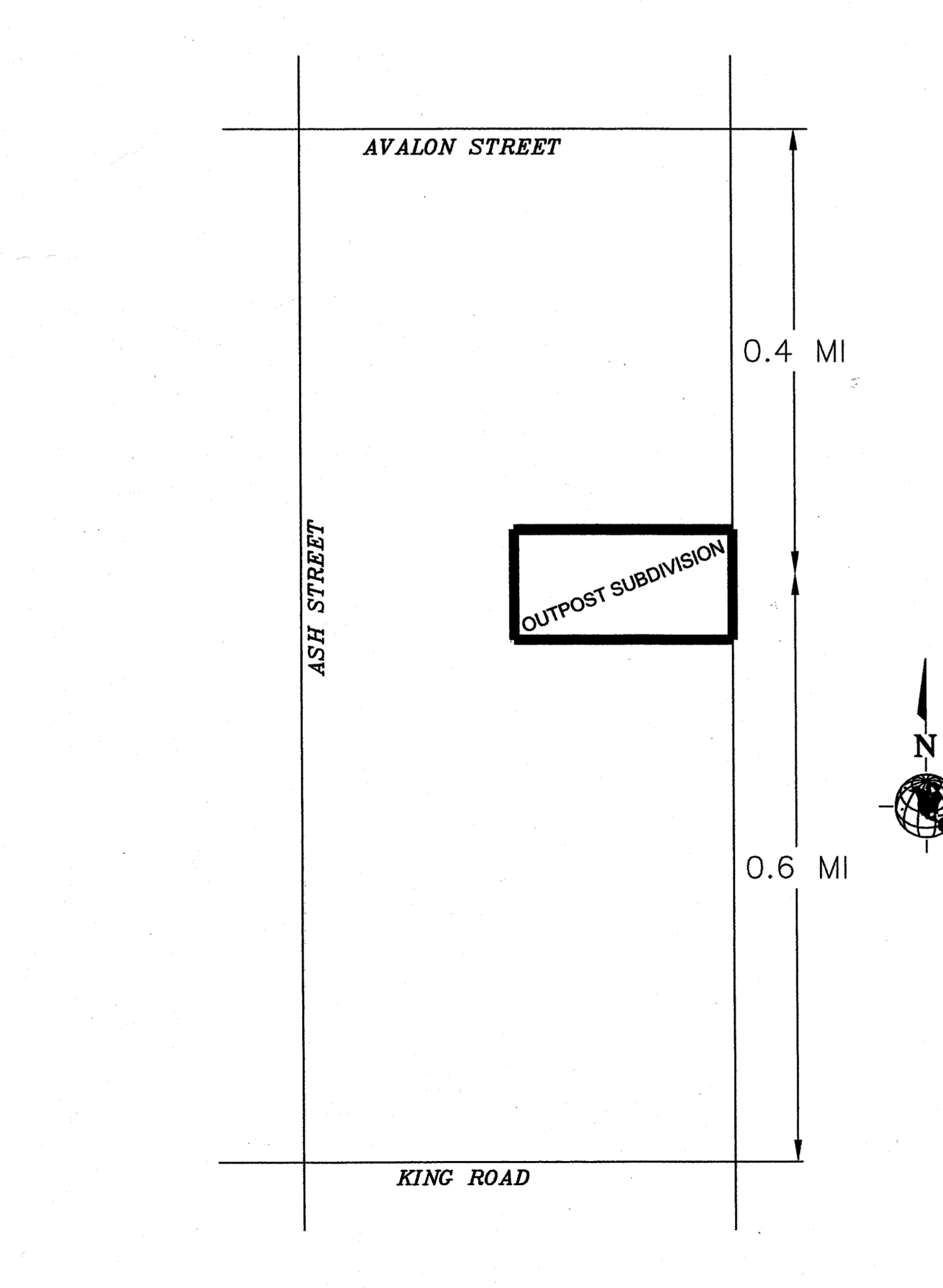
WATER AND SANITARY SEWER CONSTRUCTION NOTES

- ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO THE 2002 EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (I.S.P.W.C.), UNIFORM PLUMBING CODE (UPC), AND THE LAWS OF THE STATE OF IDAHO.
- ALL SEWER PIPE AND FITTINGS SHALL BE POLY-VINYL-CHLORIDE (PVC) CONFORMING TO THE PROVISIONS OF ASTM D-3034 SDR-35 FOR SIZES 4-INCH THROUGH 15-INCH. SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH I.S.P.W.C. STANDARD DRAWING NO. SD-511.
- ALL INSTALLED SEWER LINES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH SECTION 501 OF THE I.S.P.W.C. SPECIFICATIONS FOLLOWING INSTALLATION OF ALL UTILITIES AND PRIOR TO PAVING. THE TESTING MUST BE OBSERVED BY A REPRESENTATIVE OF THE CITY OF KUNA. DEFLECTION TESTS AND/OR TELEVISION INSPECTION MAY BE REQUIRED AT THE OPTION OF THE CITY OF KUNA.
- ALL WATER MAINS SHALL BE POLY-VINYL-CHLORIDE (PVC) CONFORMING TO THE PROVISIONS OF AWMA C-900, CLASS 150, SDR 18 OR CLASS 150 CEMENT MORTAR LINED DUCTILE IRON CONFORMING TO AWMA C-104 AND AWMA C-151. ALL FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON CONFORMING TO AWMA C-110. ALL PLASTIC PIPE SHALL BE INSTALLED WITH A #12 DIRECT BURIAL TRACER WIRE PLACED ALONG THE NORTH AND EAST SIDE OF THE MAIN. THE TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVE BOXES AND SHALL BE EXTENDED ALONG THE OUTSIDE OF THE LOWER PORTION OF THE VALVE BOX AND ALONG THE INSIDE OF THE UPPER PORTION. MINIMUM BURIAL DEPTHS FOR ALL WATER MAINS SHALL BE 4- FEET FROM FINISH GRADE TO THE TOP OF PIPE. THRUST BLOCKS SHALL CONFORM TO I.S.P.W.C. STANDARD DRAWING NO. SD-403.
- ALL MAIN LINE WATER VALVES SHALL BE RESILIENT-SEATED GATE VALVES CONFORMING TO AWMA C-509. ALL WATER VALVES SHALL BE FURNISHED WITH A STANDARD CAST IRON 5-1/4 INCH DIAMETER ADJUSTABLE VALVE BOX. THE CAST IRON COVER SHALL BE MARKED WITH THE WORD "WATER" AS AN INTEGRAL PART OF THE COVER.
- ALL FIRE HYDRANTS SHALL BE DRY BARREL HYDRANTS CONFORMING TO AWMA C-502. HYDRANTS SHALL HAVE:
 - A. 5-FOOT SETTING
 - B. 5-1/4 INCH VALVE OPENING MINIMUM
 - C. 150 PSI WORKING PRESSURE
 - D. ONE 4-1/2 INCH DIAMETER NATIONAL STANDARD PUMPER NOZZLE
 - E. TWO 2-1/2 INCH DIAMETER NATIONAL STANDARD THREAD FIRE HOSE NOZZLES
 THE VALVE OPERATOR SHALL OPEN LEFT (COUNTER-CLOCKWISE). THE HYDRANT SHALL BE EQUIPPED WITH A BREAKABLE TRAFFIC FLANGE, A DRAIN THAT AUTOMATICALLY OPENS WHEN THE HYDRANT IS CLOSED AND A 6-INCH MECHANICAL JOINT CONNECTION. THE HYDRANT SHALL BE EQUIPPED WITH A 6-INCH FLANGED BY MECHANICAL JOINT RESILIENT-SEAT GATE VALVE WITH CAST IRON VALVE BOX ATTACHED DIRECTLY TO THE MAIN LINE. THE HYDRANT SHALL BE INSTALLED SUCH THAT THE BREAKABLE TRAFFIC FLANGE IS SET 2-INCHES MINIMUM, 6-INCHES MAXIMUM ABOVE THE BACK OF THE SIDEWALK OR FINISH GRADE AS APPLICABLE. FIRE HYDRANTS SHALL BE CLOW MEDALLION, WATEROUS PACER 100, OR MUELLER AM23. NO OTHERS WILL BE ACCEPTED.
- INDIVIDUAL WATER SERVICES SHALL BE INSTALLED FOR EACH CONNECTION. THE WATER SERVICES SHALL CONSIST OF THE FOLLOWING:
 - A. PIPE SADDLE WITH 1-INCH CORPORATION STOP
 - B. 1-INCH CLASS 200, SDR 7.3 POLYETHYLENE PIPE CONFORMING TO AWMA C-901
 - C. 18-INCH TALL 5/8" x 3/4" COPPER METER SETTER WITH LOCKABLE SHUTOFF VALVE
 - D. 18-INCH DIAMETER BY 30-INCH TALL INSULATED METER BOX AS MANUFACTURED BY "MID-STATES PLASTICS, INC." OR EQUAL
 - E. CAST IRON FRAME AND COVER APPROVED BY THE CITY
 THE COVER SHALL BE TAPPED WITH A 1-INCH DIAMETER HOLE. WATER METERS SHALL BE FURNISHED AND INSTALLED BY THE CITY. MULTIPLE TAPS IN THE SAME PIPE JOINT SHALL BE STAGGERED BY A MINIMUM OF ONE FOOT. THE CENTERLINE OF THE METER SETTER SHALL BE LOCATED 18-INCHES BELOW FINISH GRADE. METERS SHALL BE PLACED 18-INCHES INSIDE THE PROPERTY LINE AND 18-INCHES AWAY FROM THE SIDE LOT LINE. A CAPPED AND MARKED MIN. 10-FOOT STUB OF WATER SERVICE LINE SHALL BE EXTENDED INTO EACH LOT, PAST OTHER UTILITIES, FROM THE METER BOX. DUAL SERVICES OFF OF ONE SERVICE LINE WILL NOT BE ALLOWED.
- THE CITY OF KUNA HAS THE RIGHT TO INSPECT THE WORK AT ANY TIME DURING CONSTRUCTION. ANY WORK THAT DOES NOT CONFORM TO THE APPROVED SET OF PLANS AND SPECIFICATIONS SHALL BE REJECTED.
- ALL INSTALLED WATER LINES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH SECTION 401 OF THE I.S.P.W.C. SPECIFICATIONS FOLLOWING INSTALLATION OF ALL UTILITIES AND PRIOR TO PAVING. OPEN EACH METER SETTER TO VERIFY CORPORATION STOP IS OPEN AND SERVICE IS FUNCTIONAL PRIOR TO PAVING. THE TESTING MUST BE OBSERVED BY A REPRESENTATIVE OF THE CITY. ALL INSTALLED WATER LINES SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 401 OF THE I.S.P.W.C. SPECIFICATIONS AND SATISFACTORILY PASS A BACTERIOLOGICAL TEST CONDUCTED BY THE CITY PRIOR TO BEING PUT INTO SERVICE. ANY ADHESIVES USED FOR DISINFECT ION SHALL BE NSF OR FDA APPROVED.
- THE SEPARATION REQUIREMENTS AS OUTLINED IN SECTION 405, SEPARATIONS OF WATER MAINS AND SEWERS, OF THE I.S.P.W.C. SPECIFICATIONS SHALL APPLY TO BOTH MAINLINES AND SERVICE LINES, WHERE SEWER MAINS AND SERVICES DO NOT CONFORM TO THE SEPARATION REQUIREMENTS WATER CLASS PIPE IS REQUIRED. THE TERM "SEWER" SHALL REFER TO ALL NON-POTABLE WATER, EG. STORM SEWER, IRRIGATION.
- IN AREAS WHERE ROCK EXCAVATION IS REQUIRED, ALL BLASTING FOR OTHER UTILITIES SHALL OCCUR PRIOR TO INSTALLATION OF ANY SEWER MAINS, WATER MAINS OR SERVICE LINE CROSSINGS.
- WHEN CONSTRUCTION IS SATISFACTORILY COMPLETED, CLEANED AND TESTED, THE DEVELOPER SHALL REQUEST A FINAL ACCEPTANCE INSPECTION BY THE CITY. THE FINAL ACCEPTANCE INSPECTION SHALL OCCUR AFTER ALL OTHER UTILITIES ARE INSTALLED. AT A MINIMUM, THE FINAL ACCEPTANCE INSPECTION SHALL CONSIST OF LAMPING ALL SEWER MAINS, VISUALLY INSPECTING EACH MANHOLE AND WITNESSING A FINAL SEWER AIR TEST AND WATER PRESSURE TEST CONDUCTED BY THE CONTRACTOR.
- CONTRACTOR (S) SHALL NOTIFY B&A ENGINEERS, INC., THE ADA COUNTY FIRE DISTRICT AND THE CITY OF KUNA DEPARTMENT OF PUBLIC WORKS PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE PLANS.
- CONTRACTOR (S) SHALL HAVE ALL BURIED UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. ALL CONTRACTORS SHALL MAKE THEMSELVES AWARE OF IDAHO CODE, CHAPTER 22, TITLE 55 REGARDING UNDERGROUND FACILITIES DAMAGE PREVENTION AND THE ONE-CALL LOCATION SERVICE TELEPHONE NUMBER. (1-444-2424).
- CONSTRUCTION INSPECTION SHALL BE PERFORMED BY B&A ENGINEERS, INC., THE ADA COUNTY HIGHWAY DISTRICT AND/OR THE CITY OF KUNA.
- ALL SEWER SERVICES AND TEMPORARY DEAD ENDS SHALL BE MARKED IN ACCORDANCE WITH I.S.P.W.C. STANDARD DRAWING NO. SD-512. SAID LOCATIONS SHALL BE VISIBLE AND IN PLACE FOR FINAL INSPECTION.
- SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH I.S.P.W.C. STANDARD DRAWING NO. SD-501, SD-502, SD-503 AND SD-509. CONCRETE RIM COLLARS SHALL BE SET BY OTHERS, WHERE PLASTIC PIPE ENTERS AND LEAVES MANHOLES, APPROVED BOOTS OR COLLARS OR APPROVED EQUIVALENT SHALL BE INSTALLED IN THE WALL OF THE MANHOLE TO INSURE A WATER TIGHT SEAL.
- CONTRACTOR SHALL VERIFY CONSTRUCTION STAKES WITH THE PROJECT BENCHMARK AND CONSTRUCTION PLANS PRIOR TO CONSTRUCTING THE IMPROVEMENTS REFERENCED BY THE CONSTRUCTION PLANS.
- FIRE HYDRANT LOCATION SHALL BE ONE (1) FOOT BEHIND THE PROPERTY LINE AND 18" OFF THE PROPERTY LINE.
- ALL PIPE, MAINS AND SERVICES, SHALL BE BEDDED WITH TYPE 1 BEDDING. IN AREAS OF ROCK EXCAVATION BEDDING SHALL BE 6-INCHES BELOW PIPE.
- 2-INCH WATER MAIN BLOW-OFF ASSEMBLY SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF KUNA MUNICIPAL WATER SYSTEM STANDARD DETAIL "BLOWOFF".
- ALL TEES, PLUGS, CAPS AND BENDS OF 1 1/4" AND GREATER, AND AT OTHER LOCATIONS WHERE UNBALANCED FORCES EXIST, SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN IN 2002-ISPWC STANDARD DRAWING SD-403.
- FINDER WIRE AND LOCATOR TAPE SHALL BE INSTALLED ALONG THE NORTH AND EAST SIDE OF THE PLASTIC PRESSURIZED IRRIGATION PIPE AS SPECIFIED IN 2002-ISPWC SECTIONS 900.2.11 AND 900.2.12.

TYPICAL STREET WIDENING CROSS-SECTION S. SCHOOL AVE.



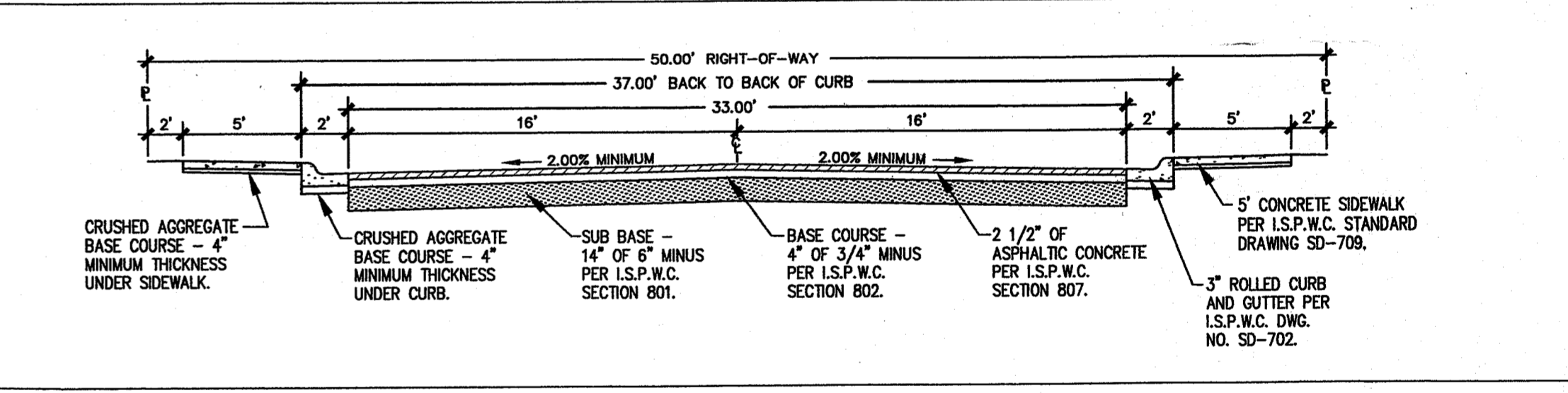
VICINITY MAP (Not to Scale)



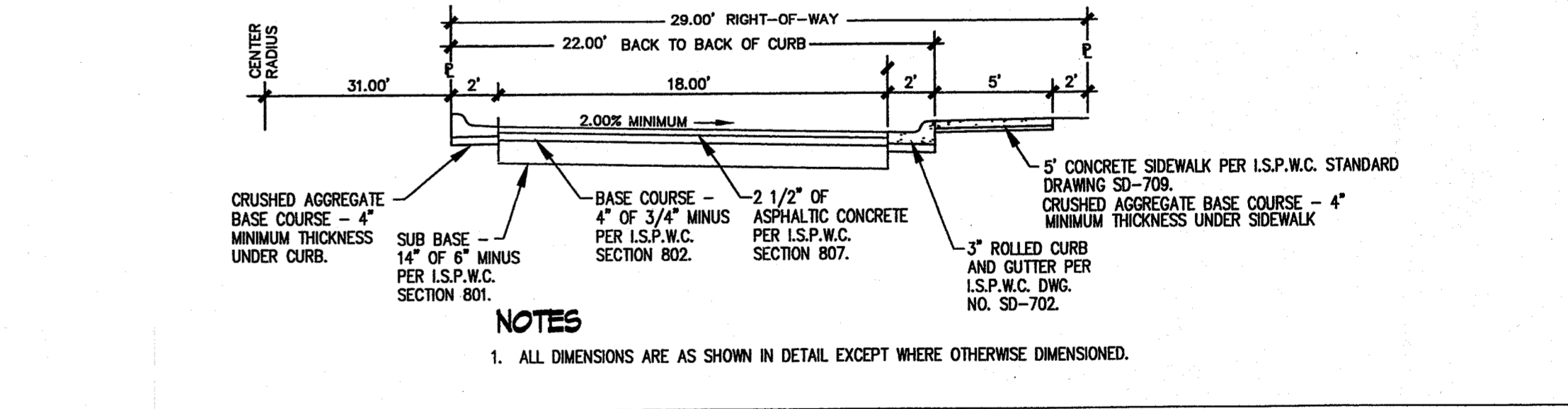
ROAD AND STORM SEWER CONSTRUCTION NOTES

- ALL MATERIALS, APPURTENANCES AND CONSTRUCTION SHALL CONFORM WITH THE 2002 EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (I.S.P.W.C.) AND THE LATEST A.C.H.D. SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS AND THE I.S.P.W.C. WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.
- CONTRACTOR (S) SHALL ATTEND A PRE-CONSTRUCTION CONFERENCE AT A PLACE AND TIME TO BE DETERMINED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR (S) SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE ADA COUNTY HIGHWAY DISTRICT AT LEAST 24 HOURS PRIOR TO COMMENCING CONSTRUCTION OF ANY OF THE IMPROVEMENTS SHOWN HEREON.
- CONTRACTOR (S) SHALL HAVE ALL BURIED UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION.
- SEE THE FINAL PLAT OF "OUTPOST SUBDIVISION" FOR MORE COMPLETE SURVEY INFORMATION.
- CONSTRUCTION INSPECTION SHALL BE PERFORMED BY THE ADA COUNTY HIGHWAY DISTRICT AND B&A ENGINEERS, INC.
- THE STREET CONTRACTOR SHALL SET SEWER MANHOLE COVERS, FRAMES AND GRADE RINGS TO FINISH GRADE AND PLACE CONCRETE COLLARS AFTER ASPHALT PAVEMENT HAS BEEN COMPLETED. COLLARS SHALL COMPLY WITH I.S.P.W.C. STANDARD DRAWING NO. SD-616.
- STORM SEWER MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH I.S.P.W.C. STANDARD DRAWING SD-612.
- PIPE BEDDING NOTE: ALL PIPE SHALL BE BEDDED WITH TYPE 1 BEDDING IN ACCORDANCE WITH I.S.P.W.C., SECTION 305. IN AREAS OF ROCK EXCAVATION, BEDDING SHALL BE 6-INCHES BELOW THE PIPE.
- CONTRACTOR SHALL VERIFY CONSTRUCTION STAKES WITH THE PROJECT BENCHMARK AND CONSTRUCTION PLANS PRIOR TO CONSTRUCTING THE IMPROVEMENTS REFERENCED BY THE CONSTRUCTION PLANS.

TYPICAL 50' STREET CROSS-SECTION W. RECESS COURT



TYPICAL ROUNDABOUT CROSS-SECTION W. RECESS COURT



RECORD CONSTRUCTION DRAWING
Date: July 22, 2003

These record drawings have been prepared by B & A Engineers Inc., based on information collected during construction, after construction, and provided by others. Discrepancies may exist between the information shown herein, and the actual improvements.

BENCH MARK DATA

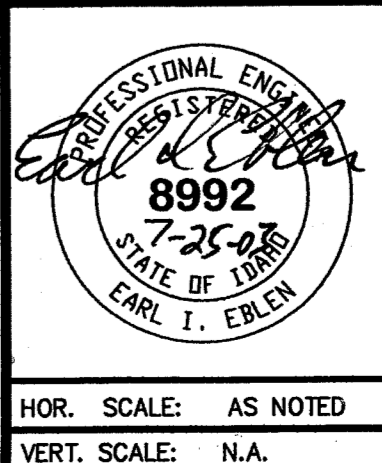
- D. 2-1 Elevation = 2670.07
R.R. spike in P.P. @ the NW cor. of the intersection of Cedar and Avalon.
- D. 2-3 Elevation = 2691.68
R.R. spike in P.P. @ the NE cor. of the intersection of School St. and Owyhee St.
- PBM 1 Elevation = 2689.45
1/2" rebar with an orange plastic cap located in the NW corner of the project ±50' E of W PL & ±57' S of N PL.
- PBM 2 Elevation = 2685.44
1/2" rebar with an orange plastic cap located behind the existing house on Lot 15, Block 3. The rebar is located ±22' W of the rear of the house & ±12' S of NW corner of the house.
- PBM 3 Elevation = 2686.00
Fire Hydrant Located On The West Side Of School Street ±60 Feet North Of Acelynn Subdivision
Bench Mark Location is On The South Side Of Top Flange, 1/2" Bolt Between The Words "Albert Zille"

SHEET INDEX

- TITLE SHEET AND CONSTRUCTION NOTES
- PLAT
- WEST RECESS STREET IMPROVEMENT PLAN
- SOUTH SCHOOL AVENUE IMPROVEMENT PLAN
- IRRIGATION PLAN AND DETAILS
- DRAINAGE PLAN AND DETAILS
- DRAINAGE DETAILS

REVISIONS

- 7/23/02 Revision A - Changes made as per comments by Tim Burgess Added Page 6 Of 6, Drainage Plan. By SDS.
- 10/29/02 Revision B - Changes made as per ACHD letter dated October 1, 2002. By SDS.
- 01/21/03 Revision C - Changes made as per ACHD letter dated December 19, 2002. And DEQ letter dated December 12, 2002. By SDS.
- 04/01/03 Revision G - Recess Court shift 9' North, Revised seepage bed to fit rock.

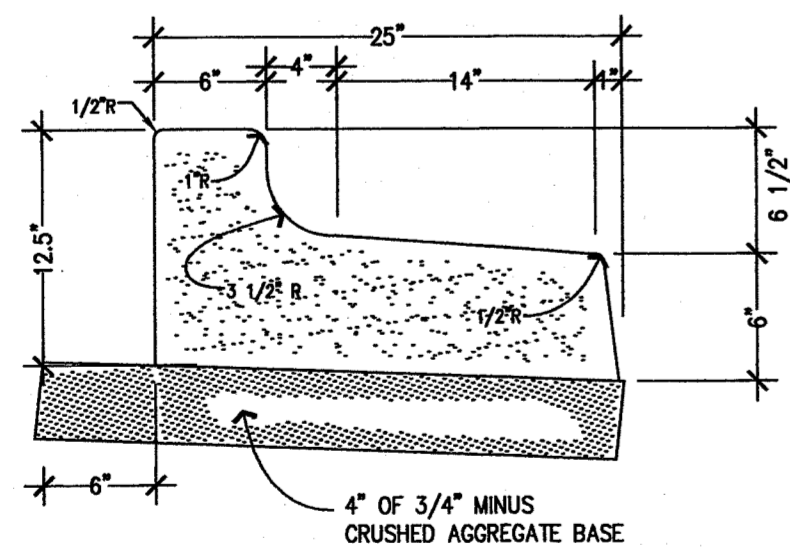
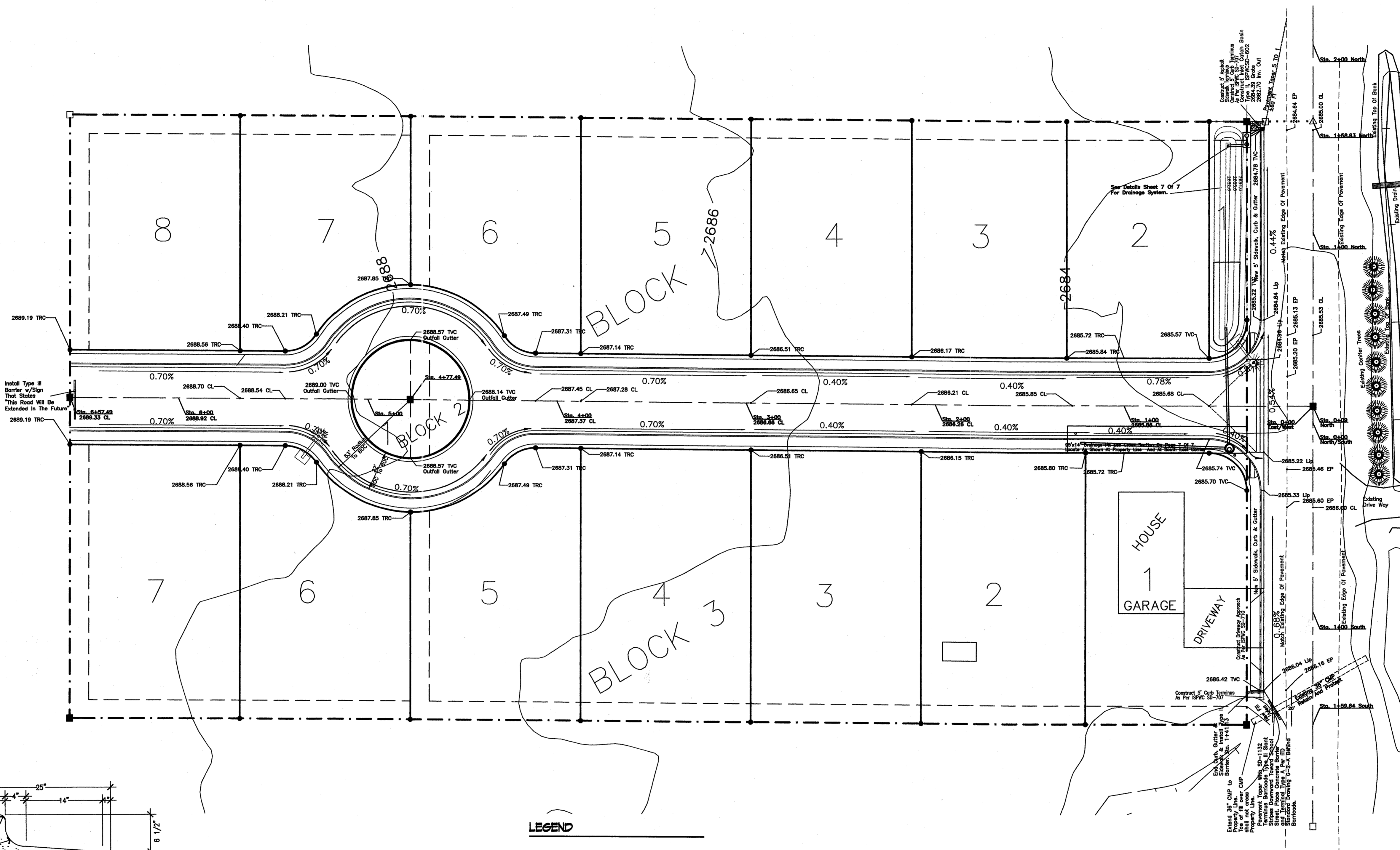


B & A Engineers, Inc.
5505 W. Franklin Rd. Boise, Idaho 83705 (208) 343-3381

OUTPOST SUBDIVISION

TITLE PAGE AND CONSTRUCTION NOTES

HOR. SCALE: AS NOTED DATE: MAY 20, 2002
VERT. SCALE: N.A. Drawn By: S.D.S. // Ckd: J.D.C.



NOTES

1. BASE: 4-INCH COMPACTED DEPTH OF 3/4-INCH MINUS CRUSHED GRAVEL BASE MATERIAL. COMPACTED TO EXCEED 95% OF STANDARD DENSITY. A MINIMUM WIDTH OF 3-FEET SHALL BE PLACED TO GRADE PRIOR TO SETTING FORMS.
2. 1/2" EXPANSION JOINT MATERIAL AT TERMINUS POINTS OF RADII.
3. CONTINUOUS PLACEMENT PREFERRED, SCORE INTERVAL MINIMUM 8-FEET.
4. MATERIALS AND CONSTRUCTION IN COMPLIANCE WITH I.S.P.W.C. STANDARDS.

TYPICAL 6" VERTICAL CURB & REVERSE GUTTER

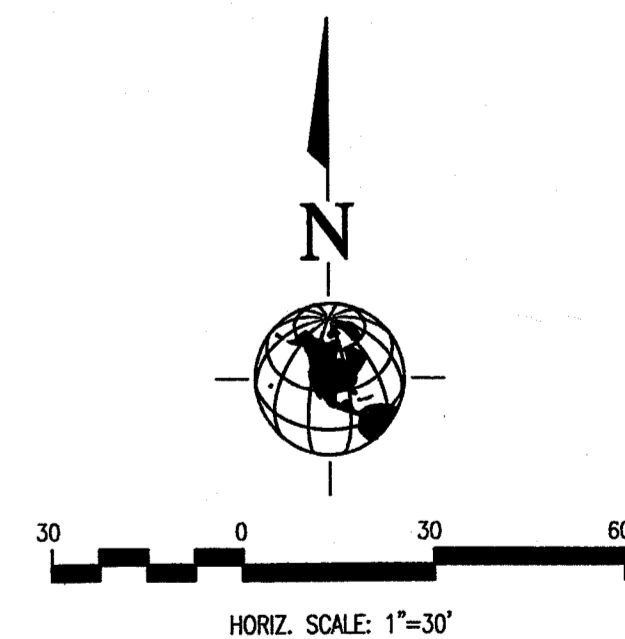
LEGEND

- Subdivision Boundary Line
- - - 10' Permanent City of Kuy Irrigation Easement
- - - Public R/W Center Line
- N 00°23'20" E
148.11' Lot Line w/ Bearing and
- 5 Lot Number
- Set 1/2"x24" Iron Pin With Plastic Cap LS-4116
- Set 5/8"x 30" Iron Pin w/Cap LS 4116
- Found 5/8" Pin, No Cap
- △ Calculated Point Not Set
- ⊗ Install New Street Light
- ⊕ Install New Fire Hydrant Unless Otherwise Noted
- ⊗ Install New Water Valve Unless Otherwise Noted

RECORD CONSTRUCTION DRAWING
 Date: July 22, 2003
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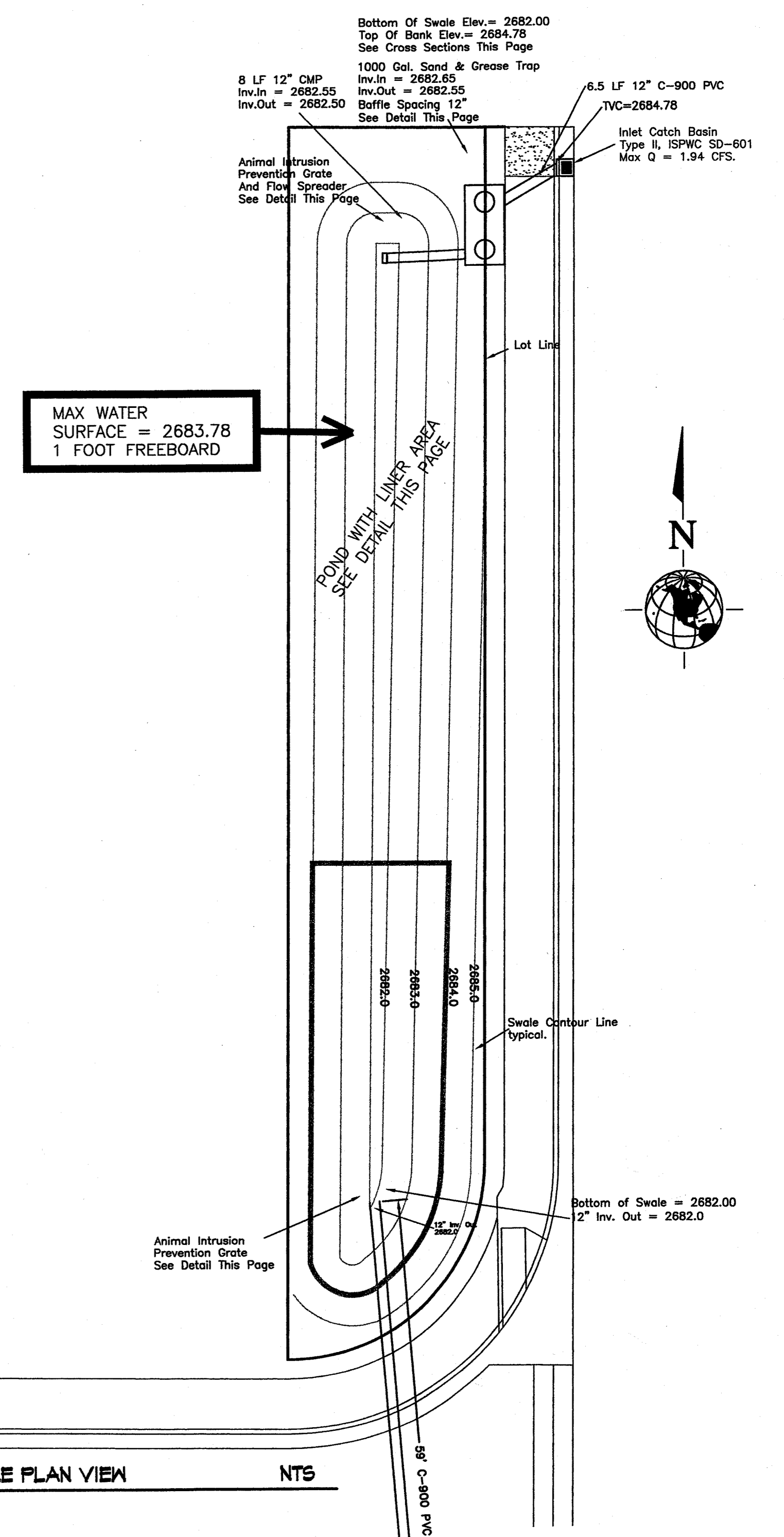
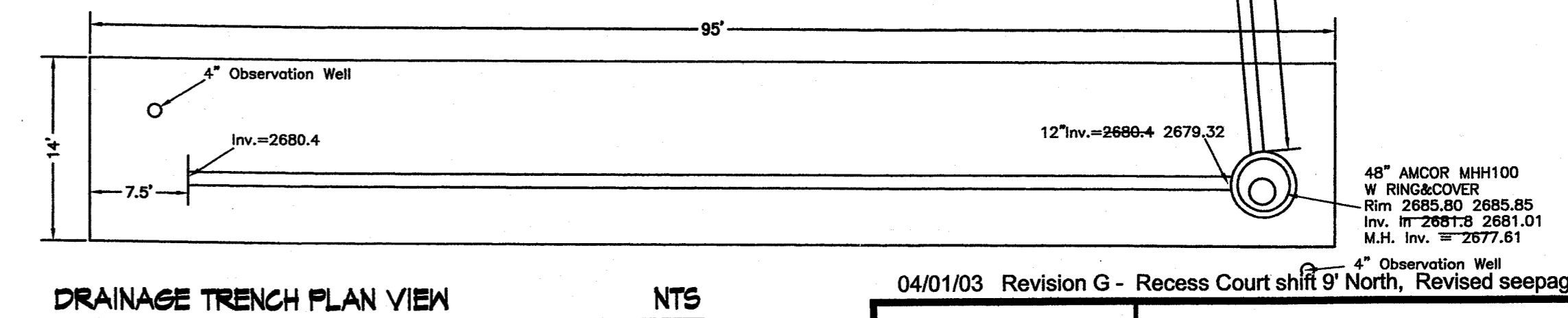
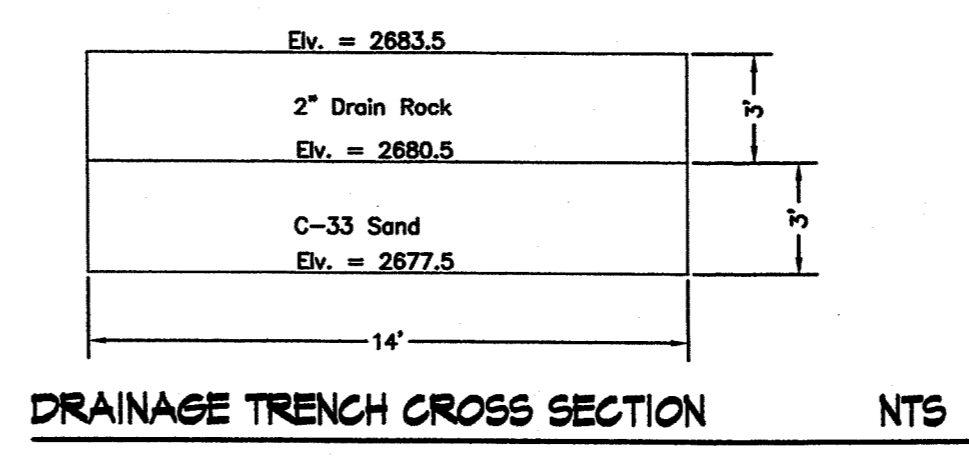
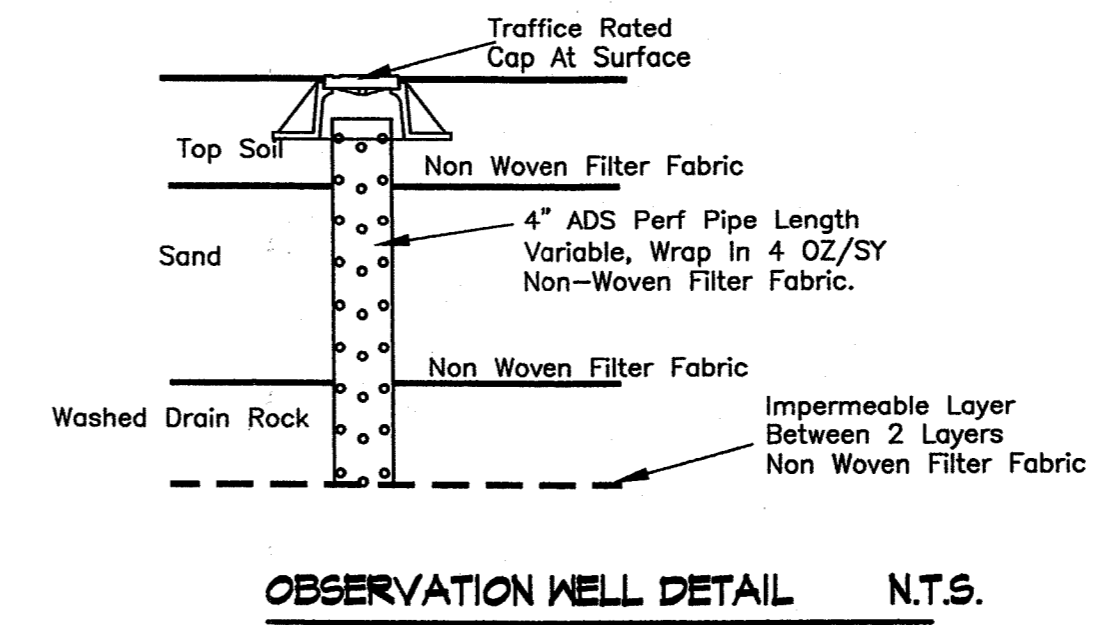
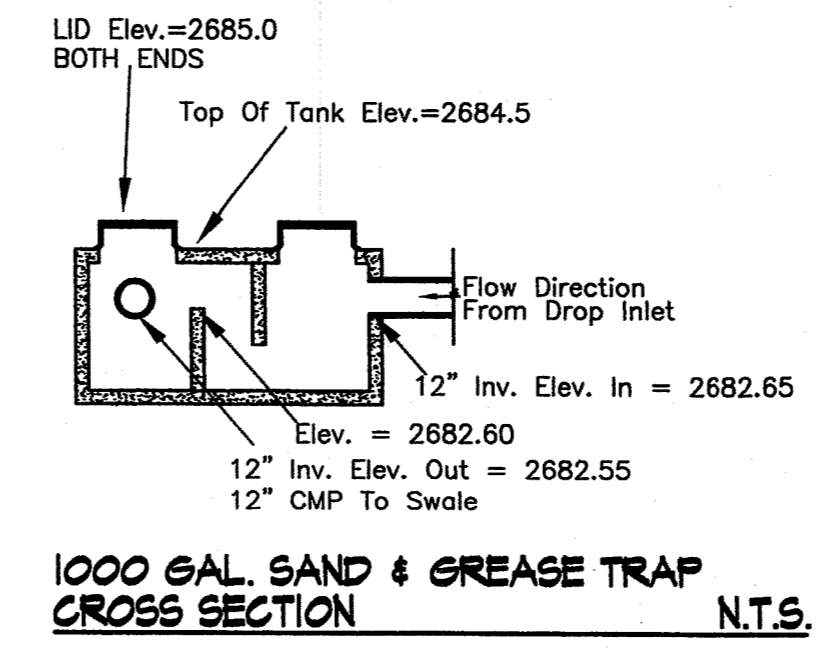
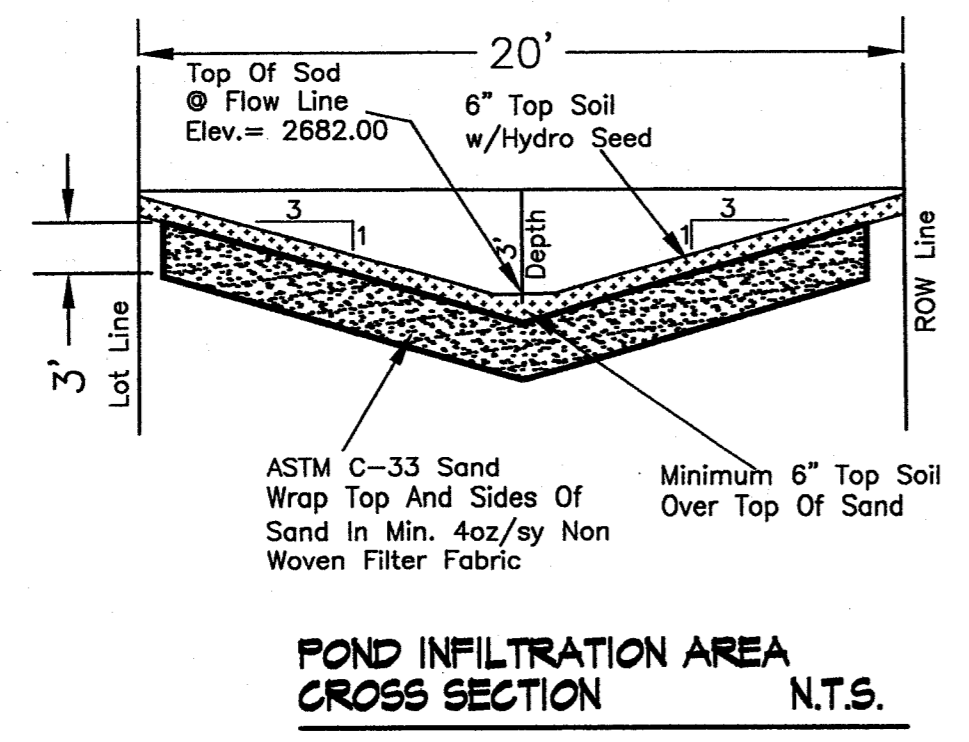
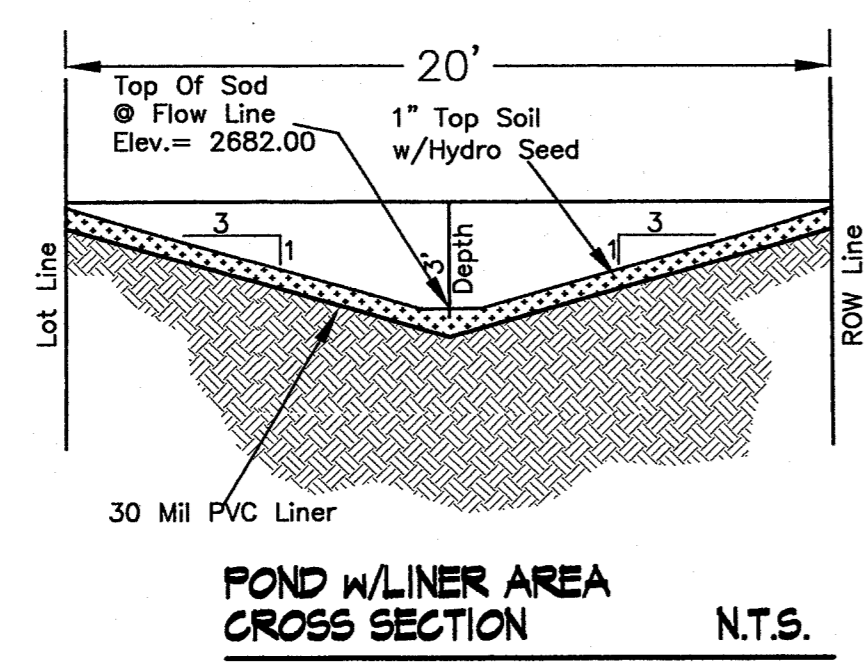
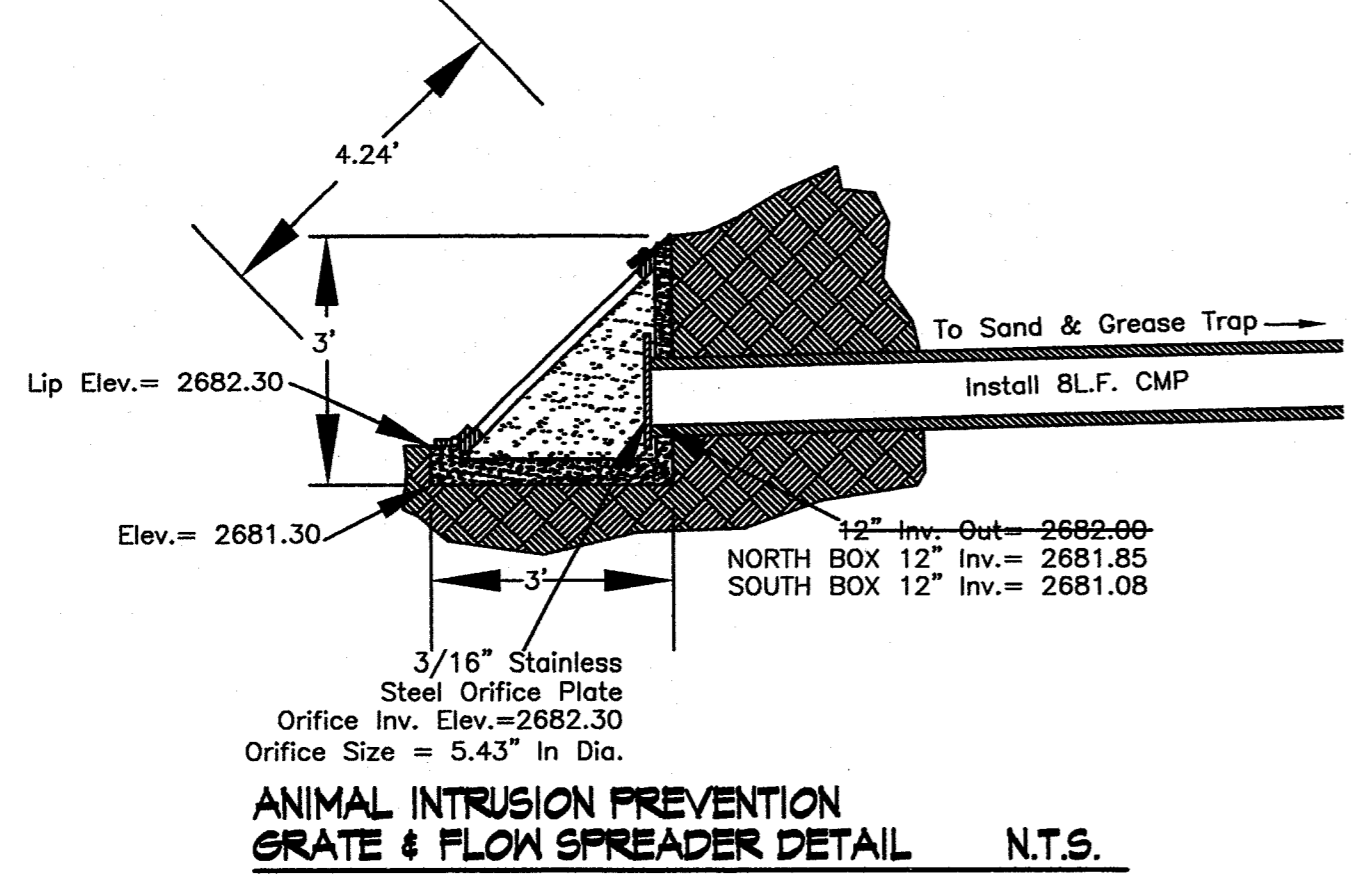
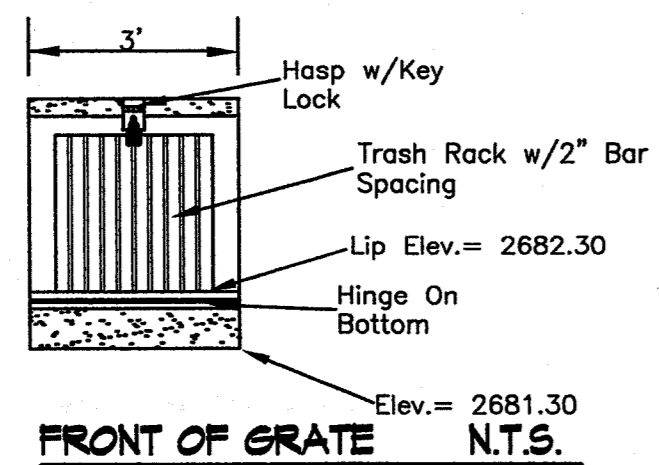
04/01/03 Revision G - Recess Court shift 9' North, Revised seepage bed to fit rock.

- 02/25/03 Revision F - ACHD CHANGES
- 02/14/03 Revision E - Changes made to drainage plan as per E.I.E. by S.D.S.
- 02/04/03 Revision D - Changes made as per E.I.E. by S.D.S.
- 01/21/03 Revision C - Changes made as per ACHD letter dated December 19, 2002. And DEQ letter dated December 12, 2002. By SDS.
- 10/29/02 Revision B - Changes made as per ACHD letter dated October 1, 2002. By SDS.
- 9/13/02 Revision B - Add site topography.



	B & A Engineers, Inc. 5505 W. Franklin Rd. Boise, Idaho 83705 (208) 343-3381	
	OUTPOST SUBDIVISION DRAINAGE PLAN AND DETAILS	
HOR. SCALE: 1" = 30' VERT. SCALE: N.A.	DATE: AUGUST 19, 2002 Drawn By: S.D.S. // Ckd: J.D.C.	Sheet 6 of 7 Dwg. No.: SDS-020819G

File Name: AM05PLAT.DWG



RECORD CONSTRUCTION DRAWING
 Date: July 22, 2003

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- 02/25/03 Revision F - ACHD CHANGES
- 02/14/03 Revision E - Changes made to drainage plan as per E.I.E. by S.D.S.
- 02/04/03 Revision D - Changes made as per E.I.E. by S.D.S.
- 01/21/03 Revision C - Changes made as per ACHD letter dated December 19, 2002. And DEQ letter dated December 12, 2002. By SDS.
- 10/29/02 Revision B - Changes made as per ACHD letter dated October 1, 2002. By SDS.
- 9/13/02 Revision B - Add site topography.

04/01/03 Revision G - Recess Court shift 9' North, Revised seepage bed to fit rock.

	B & A Engineers, Inc.	
	5505 W. Franklin Rd. Boise, Idaho 83705 (208) 343-3381	
OUTPOST SUBDIVISION		
DRAINAGE DETAILS		
HOR. SCALE: 1" = 30'	DATE: AUGUST 19, 2002	Sheet 7 of 7
VERT. SCALE: N.A.	Drawn By: S.D.S. // Ckd: J.D.C.	Dwg. No.: SDS-020819G

File Name: AM05PLAN.DWG