

GENERAL

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR REQUIREMENTS OF BOISE CITY PUBLIC WORKS DEPARTMENT, THE ADA COUNTY HIGHWAY DISTRICT, AND/OR THE ISPCW (CURRENT EDITION)
2. A PRE CONSTRUCTION CONFERENCE WILL BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR UTILITY CONTRACTORS SHOULD BE PRESENT.
3. ALL LOT, BLOCK, STREET RIGHT-OF-WAY, AND EASEMENT DIMENSIONS SHALL BE TAKEN FROM THE FINAL PLAT OF PINE TREE VILLAGE SUBDIVISION NO. 5.
4. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND SUCH MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATION OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
5. SURVEY CONTROL POINTS WHICH ARE CRITICAL TO THE CONSTRUCTION OF THE PROJECT ARE LOCATED WITHIN THE LIMITS OF WORK. THE CONTRACTOR SHALL TAKE PRECAUTION TO PROTECT THE POINTS IN PLACE.
6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
7. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE CONSTRUCTION AREA.
8. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.
9. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE.
10. CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF ITEM #8 AT THE REQUEST OF THE AGENCY AND/OR THE ENGINEER.
11. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT-OF-WAY PERMIT FROM ACHD AT LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION.
12. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER.
13. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.
14. THE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS AND SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
15. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY CONFLICTS NOT SHOWN ON PLANS. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL DIG-LINE 1-800-342-1585.
16. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY NECESSARY NPDES PERMITS, FILING ANY NO's, AND PREPARING A POLLUTION PREVENTION PLAN (PPP) IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY. CONTACT THE EPA AT (208)378-5748 FOR THE REQUIRED INFORMATION. A SHORT TERM ACTIVITY EXEMPTION FOR DETERMINING SHALL BE OBTAINED IN ACCORDANCE WITH DEQ REQUIREMENTS. CONTACT DEQ AT (208) 373-0557. SAID PERMIT SHALL BE PRESENTED TO THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
17. ALL UTILITIES INCLUDING SERVICE LINES WITHIN THE STREET TRAVEL WAYS SHALL BE IN PLACE PRIOR TO CURB, GUTTER, SIDEWALKS AND STREET CONSTRUCTION.
18. THE PIPE CONTRACTOR SHALL REPLACE ALL PAVEMENT AND CONCRETE REMOVED FOR THE INSTALLATION OF WATER, SEWER, OR IRRIGATION PIPE. ALL PAVEMENT SHALL BE REPLACED WITHIN SEVEN CALENDAR DAYS FROM THE TIME THE PAVEMENT AND/OR CONCRETE IS REMOVED. CONCRETE AND PAVEMENT SHALL BE REPLACED PER ISPCW STANDARDS.
19. NO PAVING SHALL OCCUR UNTIL THE CONTRACTOR OBTAINS WRITTEN APPROVAL OF ALL INSTALLED WATER AND SEWER FACILITIES FROM THE CITY OF BOISE.

ROADWAY

- 1. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPCW AND THE ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS, AND THE ISPCW WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.
2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.
3. INSPECTION OF WORK WITHIN THE RIGHT-OF-WAYS SHALL BE BY THE ADA COUNTY HIGHWAY DISTRICT AND THE OWNER'S ENGINEER.
4. ALL TOPS OF VALVE BOXES AND SEWER MANHOLES SHALL BE SET FLUSH WITH THE SLOPE OF THE FINISHED STREET GRADES. THE ROADWAY CONTRACTOR SHALL INSTALL AND ADJUST ALL SPACERS, MANHOLE RINGS AND LIDS.
5. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.
6. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER.
7. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.
8. ALL STORM DRAINAGE APPURTENANCES SHALL BE INSPECTED AND CERTIFIED BY ADA COUNTY HIGHWAY DISTRICT.
9. ALL WATER VALVES WILL BE PLACED SO AS NOT TO CONFLICT WITH ANY CONCRETE CURB, GUTTER, VALLEY GUTTER, AND SIDEWALK IMPROVEMENTS.
10. ALL WATER METERS ARE TO BE LOCATED OUTSIDE THE ROAD RIGHT-OF-WAY. ALL FIRE HYDRANTS ARE TO BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY. THERE MUST BE AT LEAST A ONE (1) FOOT SEPARATION BETWEEN BACK OF SIDEWALK (OR CURB IF NO SIDEWALK) AND THE LEADING EDGE OF ANY FIRE HYDRANT.
11. OVER EXCAVATION AND ADDITIONAL GRANULAR BACKFILL MAY BE REQUIRED IN HIGH GROUNDWATER AREAS WHICH ARE TO BE DETERMINED BY THE FIELD INSPECTOR.
12. ALL WORK SHALL BE INSPECTED BY THE ADA COUNTY HIGHWAY DISTRICT OR BY THE OWNERS ENGINEERS IN ACCORDANCE WITH THE LATEST EDITION OF THE "CONSTRUCTION QUALITY ASSURANCE MANUAL."
13. ALL MATERIAL PLACED AS FILL OR BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 306 OF THE CURRENT EDITION OF ADA COUNTY HIGHWAY DISTRICT STANDARD SPECIFICATIONS.
14. ROADWAY CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION STANDARD DRAWINGS: (CURRENT EDITION)
1. STREET SECTION, DRAWING NO. SD-801, AND SECTIONS AS SHOWN ON ROADWAY DETAIL SHEET.
2. 4.0' CONCRETE VALLEY GUTTER, DRAWING NO. SD-708.
3. ROLLED CURB AND GUTTER, DRAWING NO. SD-702.
4. PEDESTRIAN RAMP FOR HANDICAPPED, DRAWING NO. SD-712C.
5. SIDEWALKS, DRAWING NO. SD-709.
6. STANDARD DROP INLET TYPE I W/ 12" SUMP, DRAWING NO. SD-601.
7. STANDARD DROP INLET TYPE VI W/ 12" SUMP, DRAWING NO. SD-605A.

IRRIGATION

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2010 EDITION OF IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (I.S.P.W.C.) AND NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL STANDARD SPECIFICATIONS FOR IRRIGATION WATER DISTRIBUTION SYSTEMS.
2. TEN (10) FEET OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND NON-POTABLE WATER LINES WHERE IT IS NECESSARY FOR THE NON POTABLE WATER LINE AND WATER LINE TO CROSS EACH OTHER AND THE NON POTABLE LINE IS LESS THAN 18" BELOW OR ABOVE THE WATER MAIN, THE NON POTABLE WATER LINE CROSSING SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C-900 (CLASS 160) OR ASTM D2241 (CLASS 250) STANDARDS WITH WATERTIGHT JOINTS, OR EQUAL CONSTRUCTION, FOR A DISTANCE OF 10' ON BOTH SIDES OF THE WATER LINE IN ACCORDANCE WITH IDAPA 58.01.08, RULES FOR PUBLIC DRINKING WATER SYSTEMS. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER OR NON POTABLE WATER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. IN LIEU OF CONSTRUCTING OR RECONSTRUCTING THE SEWER OR NON POTABLE WATER LINE TO CONFORM TO WATER MAIN STANDARDS, THE NON POTABLE WATER LINE MAY BE SLEEVED PER IDAPA 58.01.08, SECTION 550.06.h.v. CONSTRUCTION SHALL BE IN CONFORMANCE WITH ISPCW SD-407, NON-POTABLE WATER LINE SEPARATION.
3. MINIMUM BURIAL DEPTH FOR ALL IRRIGATION MAINS SHALL BE 2.5 FEET FROM FINISHED GRADE TO TOP OF PIPE. ALL CROSSING OF PUBLIC RIGHT-OF-WAY WITH PRESSURE IRRIGATION SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3.5 FEET. PIPE SHALL BE CONSTRUCTED TO SLOPE TO DRAINS AND/OR PUMP-OUT STATIONS AS SHOWN ON THE PLANS.
4. ALL VAULTS AND VALVE BOX COVERS FOR THE PRESSURIZED IRRIGATION SYSTEM SHOULD BE IDENTIFIED AS "IRRIGATION" OR "NONPOTABLE WATER."
5. PRESSURE IRRIGATION MAINS WITHIN THE RIGHT OF WAY SHALL BE BEDDED WITH REJECT SAND MEETING GRADATION SPECIFICATIONS OF TABLE 801 OF I.S.P.W.C.
6. FINAL APPROVAL AND ACCEPTANCE OF ALL PRESSURE IRRIGATION CONSTRUCTION WILL BE BY THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL.
7. FINAL APPROVAL OF GRAVITY IRRIGATION CONSTRUCTION WILL BE BY THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL.
8. PRESSURE IRRIGATION INSPECTIONS WILL BE BY THE OWNERS ENGINEER AND THEIR DECISIONS SHOULD BE CONSIDERED AS FINAL. SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER. CONTRACTOR TO NOTIFY ENGINEER OF TESTING 24 HOURS PRIOR.
9. ALL TEES, PLUGS, CAPS, AND BENDS OF 11-1/4" AND GREATER AT LOCATIONS WHERE UNBALANCED FORCES EXIST SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN IN THE ISPCW STANDARDS.
10. ALL PLASTIC PIPE SHALL BE INSTALLED WITH LOCATING WIRE AND IDENTIFICATION TAPE AS SPECIFIED IN ISPCW SECTION 901.
11. PRESSURE MAIN LINE PIPING SHALL BE PVC, 200 PSI, SDR 32.5 CONFORMING TO ASTM D-2241.
12. GRAVITY FLOW IRRIGATION PIPE SHALL BE 18"RCP.
13. THE CONTRACTOR SHALL CONTACT THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL AND BAILEY ENGINEERING, TO WITNESS THE PRESSURE TEST.

SEWER

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST SEWER SPECIFICATIONS AND STANDARD DRAWINGS OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPCW), BOISE CITY PUBLIC WORKS DEPARTMENT AND/OR THE ADA COUNTY HIGHWAY DISTRICT (ACHD) MODIFICATIONS TO THE ISPCW.
2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT.
3. SEWER PIPE WITH COVER OF GREATER THAN 3 FEET, SHALL BE BEM AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034 FOR 4-INCH THROUGH 15-INCH AND ASTM F679 FOR 18-INCH THROUGH 27-INCH AS SET FORTH BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. SEWER PIPE WITH LESS THAN 3 FEET OF COVER SHALL BE DUCTILE IRON CONFORMING TO ANSI A-21.51 OR AWWA C-151 MINIMUM CLASS 50. A RUBBER RING IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH THE MANHOLE BASE TO ENSURE A WATER-TIGHT SEAL.
4. SEWER INSPECTIONS WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT AND THEIR DECISIONS SHOULD BE CONSIDERED AS FINAL. THE CONTRACTOR WILL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO CONSTRUCTION. BOISE CITY WILL PROVIDE PERIODIC INSPECTIONS FOR AN EIGHT-HOUR DAY, FROM 8:00 A.M. TO 5:00 P.M., FOR A FORTY HOUR WEEK. THE CONTRACTOR SHALL REMBURSE THE CITY AT RATES ESTABLISHED BY THE CITY FOR INSPECTION IN EXCESS OF THE NORMAL WORK WEEK, INCLUDING LEGAL HOLIDAYS, OVERTIME INSPECTION RATES AND A LIST OF LEGAL HOLIDAYS CAN BE OBTAINED FROM THE BOISE CITY PUBLIC WORKS DEPARTMENT.
5. SERVICE LINES SHALL BE MARKED IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWING SD 512. SERVICE LINE MARKERS SHALL REMAIN IN PLACE DURING CONSTRUCTION AND BE PRESENT FOR FINAL INSPECTION.
6. PRIOR TO FINAL ACCEPTANCE, AFTER ALL UTILITIES ARE IN AND PRIOR TO PAVING, AN AIR TEST SHALL BE CONDUCTED. THE CONTRACTOR SHALL CONTACT THE CITY OF BOISE A MINIMUM OF 24 HOURS PRIOR TO TESTING. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH THE ISPCW AND BOISE CITY'S MODIFICATIONS.
7. THE SEWER CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE SEWER CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE MANHOLE CONE TO ASSURE THAT RING ELEVATIONS MATCH FINAL STREET GRADES. THE MAXIMUM HEIGHT OF THE GRADE RINGS SHALL BE SUCH THAT THE FINISH GRADE ELEVATION OF THE MANHOLE FRAME AND COVER SHALL NOT BE MORE THAN TWENTY-ONE (21") INCHES ABOVE THE TOP OF THE MANHOLE CONE.
8. THE PAVING CONTRACTOR SHALL SET THE GRADE RINGS AND POUR THE CONCRETE COLLARS PER STANDARD DRAWING NO. SD 508. THE PAVING CONTRACTOR SHALL CONTACT ACHD 24 HOURS PRIOR TO POURING CONCRETE COLLARS.
9. THE HORIZONTAL SEPARATION OF THE WATER AND SEWER MAINS SHALL BE A MINIMUM OF TEN (10) FEET, WHERE IT IS NECESSARY FOR SEWER AND WATER TO CROSS EACH OTHER AND THE SEWER LINE IS LESS THAN 18 INCHES BELOW OR ABOVE THE WATER MAIN, THE SEWER LINE CROSSING SHALL BE P.V.C. PRESSURE PIPE CONFORMING TO AWWA C-900 OR ASTM D2241, FOR A DISTANCE OF 10' ON BOTH SIDES OF WATER LINE. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE.
10. GROUNDWATER LEVELS SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING OPERATIONS. ALL MANHOLES LOCATED WITHIN MLIMITS OF SEASONAL GROUNDWATER SHALL HAVE THE EXTERIOR OF ALL CONCRETE SURFACES COATED WITH TWO COATS OF COAL-TAR EPOXY.
11. THE TRENCH BACKFILL ABOVE THE PIPE ZONE WILL BE INSPECTED BY THE ACHD OR BY THE DEVELOPER'S ENGINEER IN ACCORDANCE WITH THE LATEST EDITION OF THE "CONSTRUCTION QUALITY ASSURANCE MANUAL". COMPACTION TESTS ARE REQUIRED IN THE BACKFILL ABOVE THE PIPE ZONE, WITHIN PUBLIC RIGHT-OF-WAY, ACCORDING TO ACHD REQUIREMENTS AND THE RESULTS SHALL BE SUBMITTED TO BOISE CITY PUBLIC WORKS DEPARTMENT AND ACHD PRIOR TO FINAL ACCEPTANCE.
12. ALL STATIONING RELATES TO THE GRAVITY SEWER CENTERLINE.
13. THE SEWER MAIN SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH THE ISPCW AND BOISE CITY'S MODIFICATIONS. ALL SEWER LINES SHALL BE TELEVIEWED WITH A CLOSED CIRCUIT TELEVISION CAMERA IN ACCORDANCE WITH THE ISPCW AND BOISE CITY'S MODIFICATIONS. NO STANDING WATER SHALL BE PRESENT.
14. THE BOISE PUBLIC WORKS DEPARTMENT MAY TEST THE COMPACTION OF THE SEWER PIPELINE BEDDING. TESTING WILL BE DONE BY AN INDEPENDENT TESTING LABORATORY. THE COST OF THE FIRST TEST WILL BE PAID BY THE BOISE PUBLIC WORKS DEPARTMENT. IF THE FIRST TEST FAILS TO MEET REQUIRED COMPACTION, ALL RE-TESTING SHALL BE PAID BY THE SEWER CONTRACTOR. THE CONTRACTOR SHALL CONTACT THE BOISE PUBLIC WORKS DEPARTMENT AND/OR TESTING LABORATORY TO SCHEDULE THE TESTS PRIOR TO ANY PIPE LAYING AND BACKFILLING.
15. SEWER CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION:
1. STANDARD MANHOLE - TYPE A, DRAWING NO. SD-501.
2. STANDARD SHALLOW MANHOLE, DRAWING NO. SD-505.
3. MANHOLE COLLAR DETAIL, DRAWING NO. SD-508.
4. MANHOLE COVER & FRAME, DRAWING NO. SD-507.
5. STANDARD SEWER SERVICE LINE, DRAWING NO. SD-511-A.
6. SEWER SERVICE MARKER, DRAWING NO. SD-512.
16. THE CONTRACTOR SHALL LEAVE THE EXCAVATION FOR THE UPSTREAM END OF ALL SERVICE LINES OPEN FOR FIELD VERIFICATION OF THE INVERT ELEVATION BY THE CITY'S INSPECTOR. THE CONTRACTOR SHALL NOT BACKFILL THE ENDS OF SERVICE LINES UNTIL HE HAS OBTAINED APPROVAL FROM BOISE CITY'S INSPECTOR OR MADE OTHER ARRANGEMENTS FOR THE VERIFICATION OF SERVICE LINE INVERT ELEVATIONS.
17. THE CONTRACTOR SHALL PROVIDE BOISE CITY'S INSPECTOR WITH "CUT SHEETS" FOR THE STAKING PROVIDED FOR CONSTRUCTION OF THE SANITARY SEWER. "CUT SHEETS" SHALL BE PROVIDED TO THE CITY PRIOR TO CONSTRUCTION. ADDITIONALLY, TEMPORARY BENCH MARKS MUST BE PROVIDED TO THE BOISE CITY DEPARTMENT OF PUBLIC WORKS INSPECTION SECTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
18. THE CONTRACTOR SHALL INSTALL A REMOVABLE PLUG UPSTREAM OF SSMH 71501 BETWEEN SSMH 71501 AND SSMH 71502. THIS PLUG SHALL REMAIN IN PLACE DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THIS SEWER PROJECT.
19. THE CONTRACTOR SHALL CONSTRUCT THE SANITARY SEWER IN ACCORDANCE WITH THE STAMPED PLANS APPROVED BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. THESE PLANS WILL BE PROVIDED TO THE CONTRACTOR BY THE PROJECT INSPECTOR PRIOR TO CONSTRUCTION. WORK SHALL NOT BE DONE WITHOUT THE CURRENT SET OF APPROVED PLANS.
20. PRIOR TO CONSTRUCTION, TEMPORARY BENCHMARKS (TBM'S) SHALL BE SET IN THE FIELD BY A LICENSED SURVEYOR OR ENGINEER AND SHALL BE FLAGGED AND CLEARLY VISIBLE FROM ALL DIRECTIONS. A TBM SHALL BE LOCATED WITHIN 100-FEET OF TIE-IN TO EXISTING SEWER AND SPACED NO GREATER THAN 500-FEET ALONG THE SEWER ALIGNMENT THERE AFTER. TBM'S SHALL HAVE ELEVATIONS TIED TO THE NAVD 1988 DATUM.

WATER

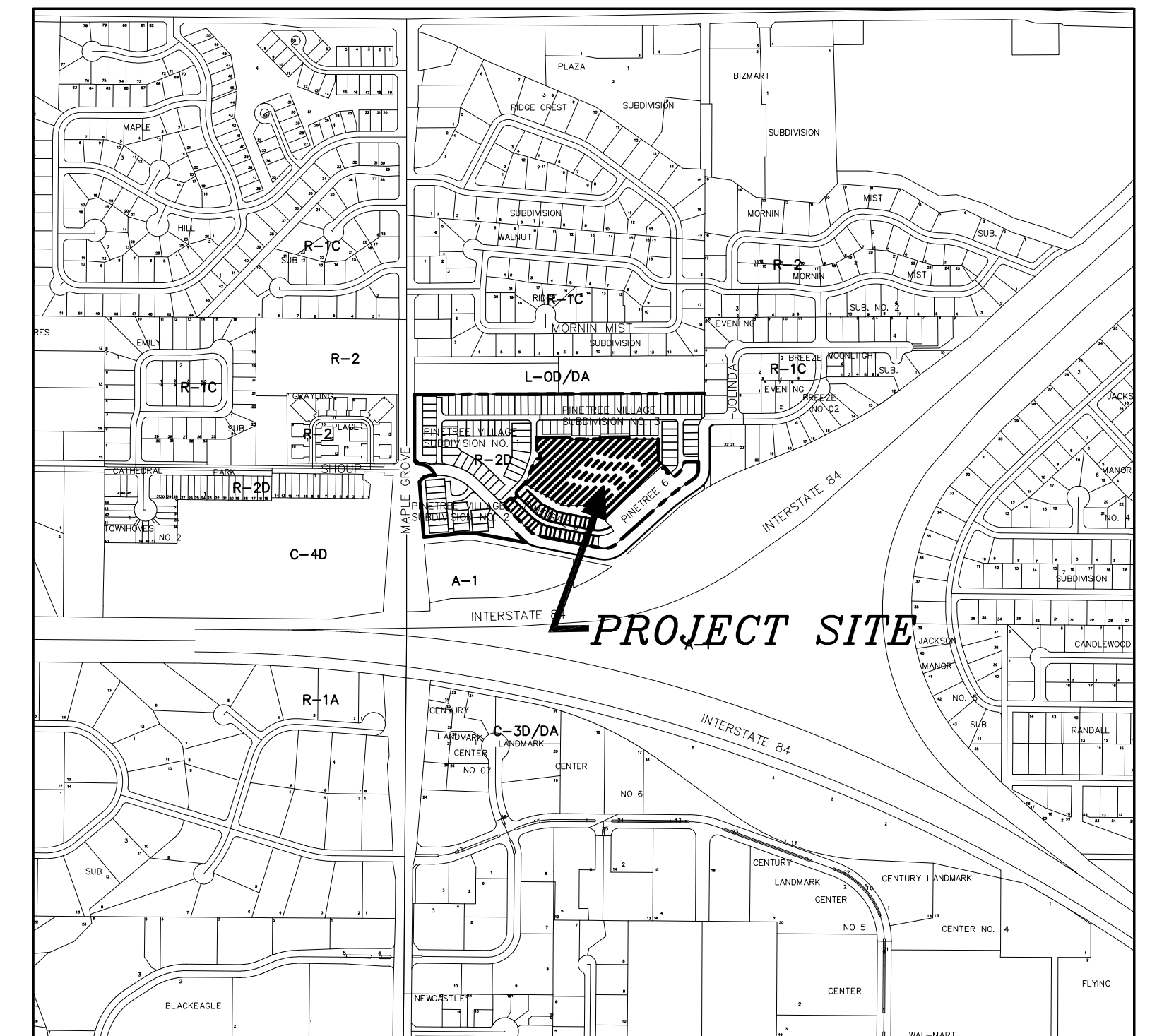
1. SEE UNITED WATER PLAN FOR ALL WATER SYSTEM CONSTRUCTION.

GENERAL LEGEND

Table listing symbols for various utility lines and features: SS (Existing Sewer Line), W (Existing Water Line), SD (New Storm Drain), W (New Water Line), S (New Sewer Line), PI (New Pressure Irrigation Line), EP (Existing Fence), EP (Existing Edge of Pavement), EP (New Edge of Pavement), EP (Saw Cut Line), EP (Boundary Line), EP (Roadway Center Line), EP (Roadway Right-of-Way), EP (Easement Boundary), EP (Lot Line), EP (Existing Contour), EP (Final Grade Contour), EP (Elevation @ Station), EP (Curve (Top Back of Rolled Curb Unless Otherwise Noted)), EP (TVC = Top Back Vertical Curb), EP (AC = Asphalt), EP (TRLC = Top Reverse Lip Curb), EP (PC = Point of Curvature), EP (PT = Point of Tangency), EP (FL = Gutter Flow Line), EP (GB = Grade Break), EP (GC = Grade Change), EP (EI = End Invert Sewer Service), EP (Sanitary Sewer Manhole), EP (Existing Sanitary Sewer Manhole), EP (4" Sewer Service Line), EP (Typical Water Service), EP (Proposed Fire Hydrant), EP (Existing Fire Hydrant), EP (Lot Number), EP (Catch Basin - ISPCW SD-601 W/12" Sump), EP (Direction of Drainage Flow), EP (Street Light), EP (Existing Deciduous Tree (Caliper)), EP (Existing Power Line & Pole).

DEVELOPMENT PLANS FOR PINE TREE VILLAGE SUBDIVISION NO. 5

A PORTION OF THE NW1/4, SECTION 13, TOWNSHIP 3 NORTH, RANGE 1 EAST, BOISE MERIDIAN, BOISE, ADA COUNTY, IDAHO 2013

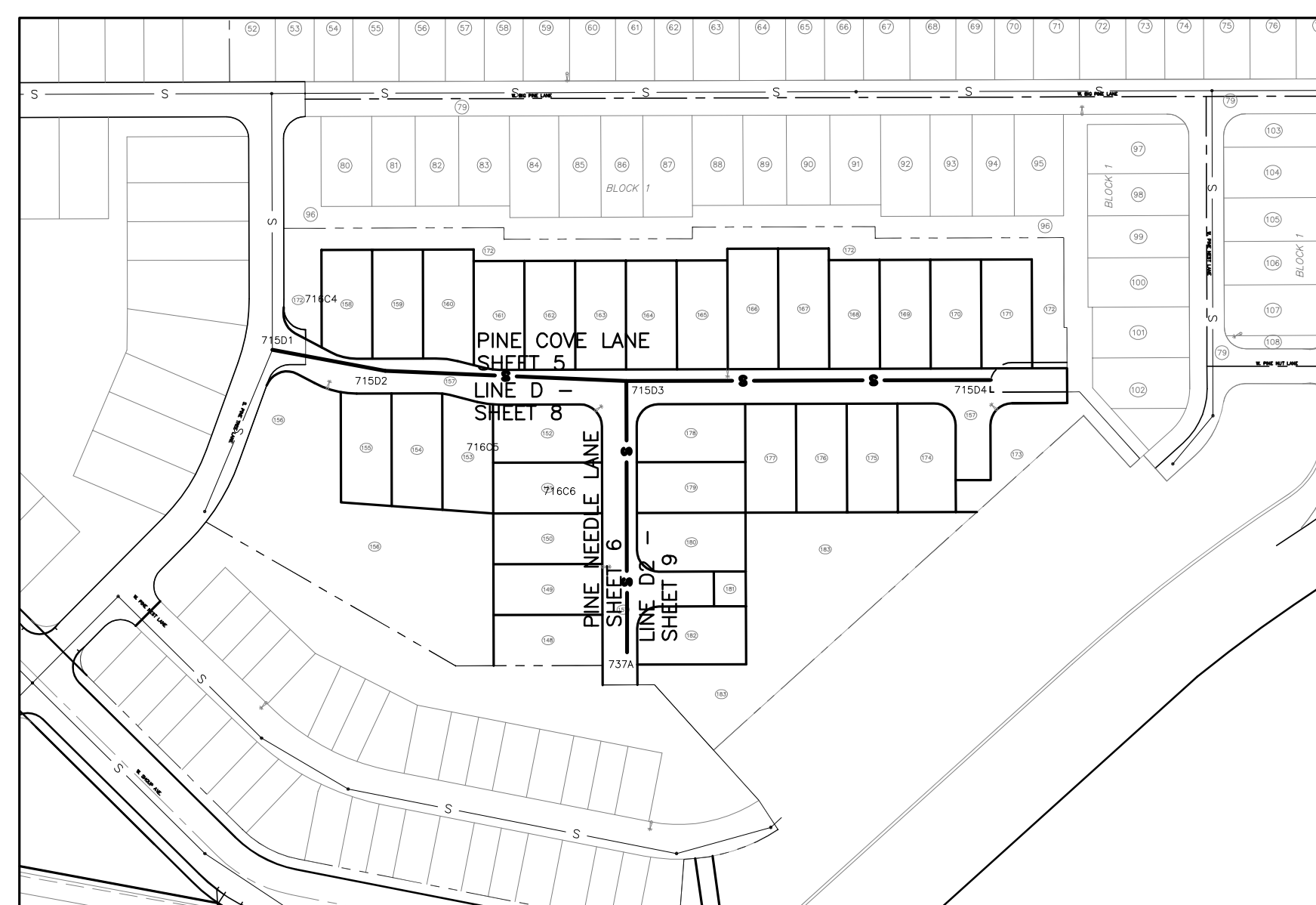


VICINITY MAP 1" = 600' NAVD 1988 DATUM

PLAN SHEET INDEX

SHEET DESCRIPTION

- 1. COVER SHEET, INDEX, VICINITY MAP, & NOTES
2. FINAL PLAT
3. 1GRADING PLAN
4. STREET PLAN & PROFILE W. PINE COVE LANE
5. STREET PLAN & PROFILE S. PINE NEEDLE LANE
6. STREET AND DRAINAGE DETAILS
7. SEWER PLAN & PROFILE LINE D
8. SEWER PLAN & PROFILE LINE D2
9. UNITED WATER PLAN
10. PRESSURE IRRIGATION PLAN



STREET & SEWER INDEX MAP -NTS-

DEVELOPER PARADIGM DEVELOPMENT, LLC 1403 MACE ROAD EAGLE, ID 83616



Revised table with columns for NO., DATE, and DESCRIPTION. Includes developer information (Paradigm Development, LLC) and engineering firm details (Bailey Engineering, Inc., Civil Engineering | Planning | CADD, 4242 N. BROOKSIDE LANE, BOISE, ID 83714, TEL: 208-938-0313, FAX: 208-938-9516). Project info: DRAWN BY: DAB, CHECKED BY: DAVID A. BAILEY P.E., PROJECT NO. C27032, DATE: 02-20-2013. Sheet title: COVER SHEET, PINE TREE VILLAGE SUBDIVISION NO. 5, PARADIGM DEVELOPMENT, SHEET 1.

# PLAT SHOWING PINETREE VILLAGE SUBDIVISION NO. 5

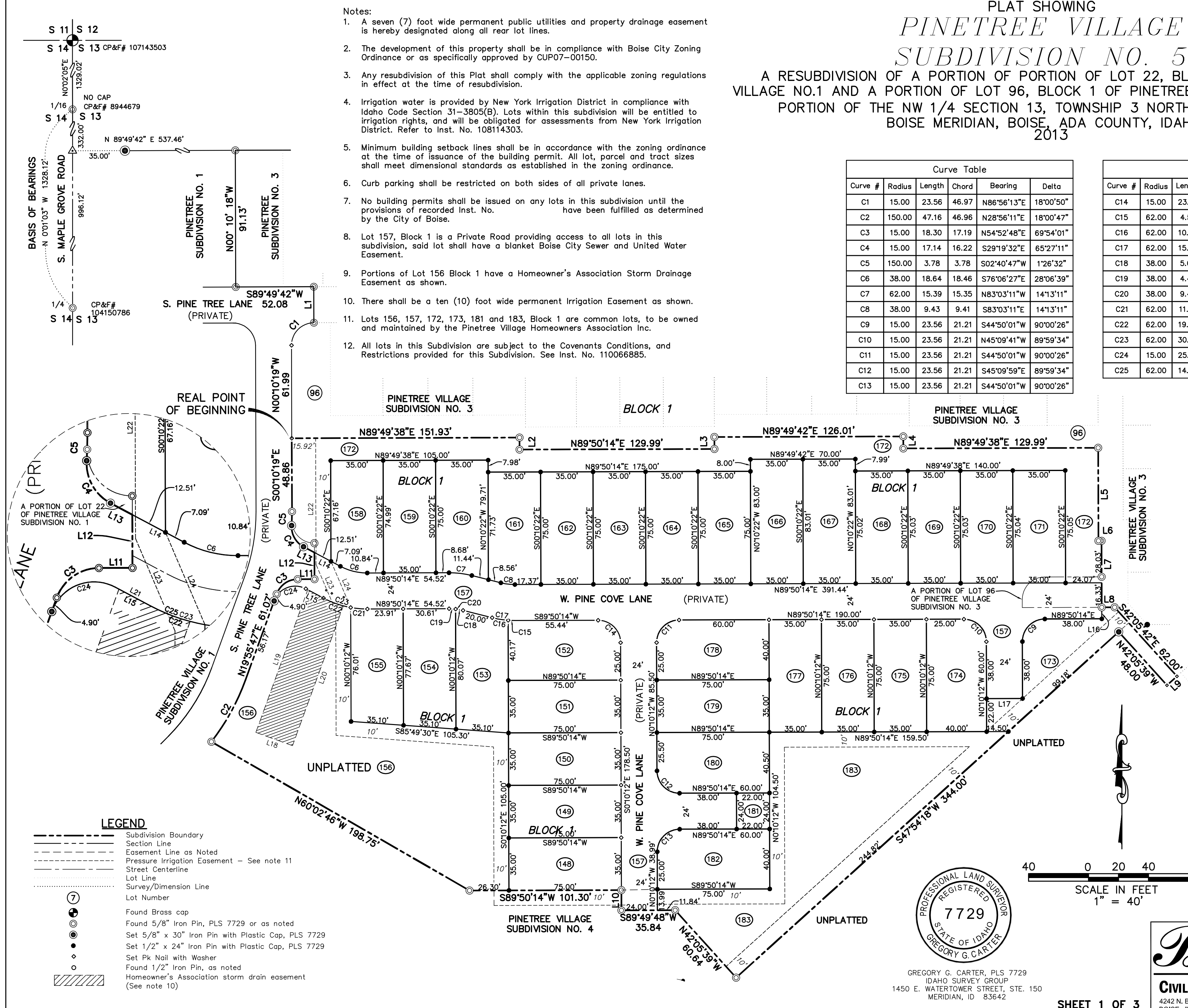
A RESUBDIVISION OF A PORTION OF PORTION OF LOT 22, BLOCK 1 OF PINETREE VILLAGE NO.1 AND A PORTION OF LOT 96, BLOCK 1 OF PINETREE VILLAGE NO. 3 AND A PORTION OF THE NW 1/4 SECTION 13, TOWNSHIP 3 NORTH, RANGE 1 EAST, BOISE MERIDIAN, BOISE, ADA COUNTY, IDAHO 2013

- Notes:
- A seven (7) foot wide permanent public utilities and property drainage easement is hereby designated along all rear lot lines.
  - The development of this property shall be in compliance with Boise City Zoning Ordinance or as specifically approved by CU07-00150.
  - Any resubdivision of this Plat shall comply with the applicable zoning regulations in effect at the time of resubdivision.
  - Irrigation water is provided by New York Irrigation District in compliance with Idaho Code Section 31-3805(B). Lots within this subdivision will be entitled to irrigation rights, and will be obligated for assessments from New York Irrigation District. Refer to Inst. No. 108114303.
  - Minimum building setback lines shall be in accordance with the zoning ordinance at the time of issuance of the building permit. All lot, parcel and tract sizes shall meet dimensional standards as established in the zoning ordinance.
  - Curb parking shall be restricted on both sides of all private lanes.
  - No building permits shall be issued on any lots in this subdivision until the provisions of recorded Inst. No. have been fulfilled as determined by the City of Boise.
  - Lot 157, Block 1 is a Private Road providing access to all lots in this subdivision, said lot shall have a blanket Boise City Sewer and United Water Easement.
  - Portions of Lot 156 Block 1 have a Homeowner's Association Storm Drainage Easement as shown.
  - There shall be a ten (10) foot wide permanent Irrigation Easement as shown.
  - Lots 156, 157, 172, 173, 181 and 183, Block 1 are common lots, to be owned and maintained by the Pinetree Village Homeowners Association Inc.
  - All lots in this Subdivision are subject to the Covenants Conditions, and Restrictions provided for this Subdivision. See Inst. No. 110066885.

Curve #	Radius	Length	Chord	Bearing	Delta
C1	15.00	23.56	46.97	N86°56'13"E	18°00'50"
C2	150.00	47.16	46.96	N28°56'11"E	18°00'47"
C3	15.00	18.30	17.19	N54°52'48"E	69°54'01"
C4	15.00	17.14	16.22	S29°19'32"E	65°27'11"
C5	150.00	3.78	3.78	S02°40'47"W	1°26'32"
C6	38.00	18.64	18.46	S76°06'27"E	28°06'39"
C7	62.00	15.39	15.35	N83°03'11"W	14°13'11"
C8	38.00	9.43	9.41	S83°03'11"E	14°13'11"
C9	15.00	23.56	21.21	S44°50'01"W	90°00'26"
C10	15.00	23.56	21.21	N45°09'41"W	89°59'34"
C11	15.00	23.56	21.21	S44°50'01"W	90°00'26"
C12	15.00	23.56	21.21	S45°09'59"E	89°59'34"
C13	15.00	23.56	21.21	S44°50'01"W	90°00'26"

Curve #	Radius	Length	Chord	Bearing	Delta
C14	15.00	23.56	21.21	N45°09'59"W	89°59'34"
C15	62.00	4.56	4.56	S88°03'18"E	47°2'56"
C16	62.00	10.83	10.81	S80°56'43"E	10°00'15"
C17	62.00	15.39	15.35	S83°03'11"E	14°13'11"
C18	38.00	5.03	5.03	N79°44'09"W	7°35'07"
C19	38.00	4.40	4.40	N86°50'44"W	6°38'04"
C20	38.00	9.43	9.41	N83°03'11"W	14°13'11"
C21	62.00	11.15	11.14	S85°00'38"E	10°18'17"
C22	62.00	19.27	19.19	S70°57'18"E	17°48'21"
C23	62.00	30.42	30.11	S76°06'27"E	28°06'39"
C24	15.00	25.66	22.64	S68°56'20"W	98°01'05"
C25	62.00	14.22	14.19	S68°37'27"E	13°08'38"

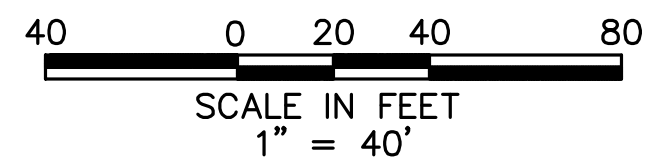
Line #	Direction	Length
L1	N00°10'18"W	24.00
L2	N00°10'18"W	7.98
L3	N00°10'12"W	8.00
L4	N00°10'18"W	7.99
L5	S00°10'18"E	62.02
L6	N89°49'48"E	2.06
L7	S00°10'12"E	44.36
L8	N89°49'48"E	8.59
L9	S47°54'18"W	8.94
L10	N00°10'12"W	13.49
L11	N89°49'48"E	11.19
L12	S00°10'12"E	17.73
L13	S62°03'07"E	8.25
L14	S62°03'07"E	19.61
L15	N62°03'07"W	13.37
L16	S00°10'12"E	7.67
L17	S89°50'14"W	24.00
L18	N70°04'09"W	26.00
L19	N19°59'28"W	101.23
L20	S19°59'28"W	99.21
L21	S62°03'07"E	11.93
L22	S00°10'22"E	84.19
L23	S23°08'32"E	33.48
L24	S23°08'32"E	33.48



- LEGEND**
- Subdivision Boundary
  - Section Line
  - Easement Line as Noted
  - Pressure Irrigation Easement - See note 11
  - Street Centerline
  - Lot Line
  - Survey/Dimension Line
  - Lot Number
  - Found Brass cap
  - Found 5/8" Iron Pin, PLS 7729 or as noted
  - Set 5/8" x 30" Iron Pin with Plastic Cap, PLS 7729
  - Set 1/2" x 24" Iron Pin with Plastic Cap, PLS 7729
  - Set Pk Nail with Washer
  - Found 1/2" Iron Pin, as noted
  - Homeowner's Association storm drain easement (See note 10)



GREGORY G. CARTER, PLS 7729  
IDAHO SURVEY GROUP  
1450 E. WATERTOWER STREET, STE. 150  
MERIDIAN, ID 83642



SHEET 1 OF 3

**Bailey Engineering, Inc.**  
CIVIL ENGINEERING | PLANNING | CADD  
4242 N. BROOKSIDE LN  
BOISE, ID 83714  
TEL: 208-938-0013  
FAX: 208-938-0516

Plans Are Accepted For Public Street Construction

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

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

TOTAL LOTS: 36

REVISED NO.	DATE	DESCRIPTION

**Bailey Engineering, Inc.**  
CIVIL ENGINEERING | PLANNING | CADD  
4242 N. BROOKSIDE LANE  
BOISE, ID 83714  
TEL: 208-938-0013  
FAX: 208-938-0516

DRAWN BY: DAB | CHECKED BY: DAVID A. BAILEY P.E. | PROJECT NO. C27032 | DATE: 02-20-2013

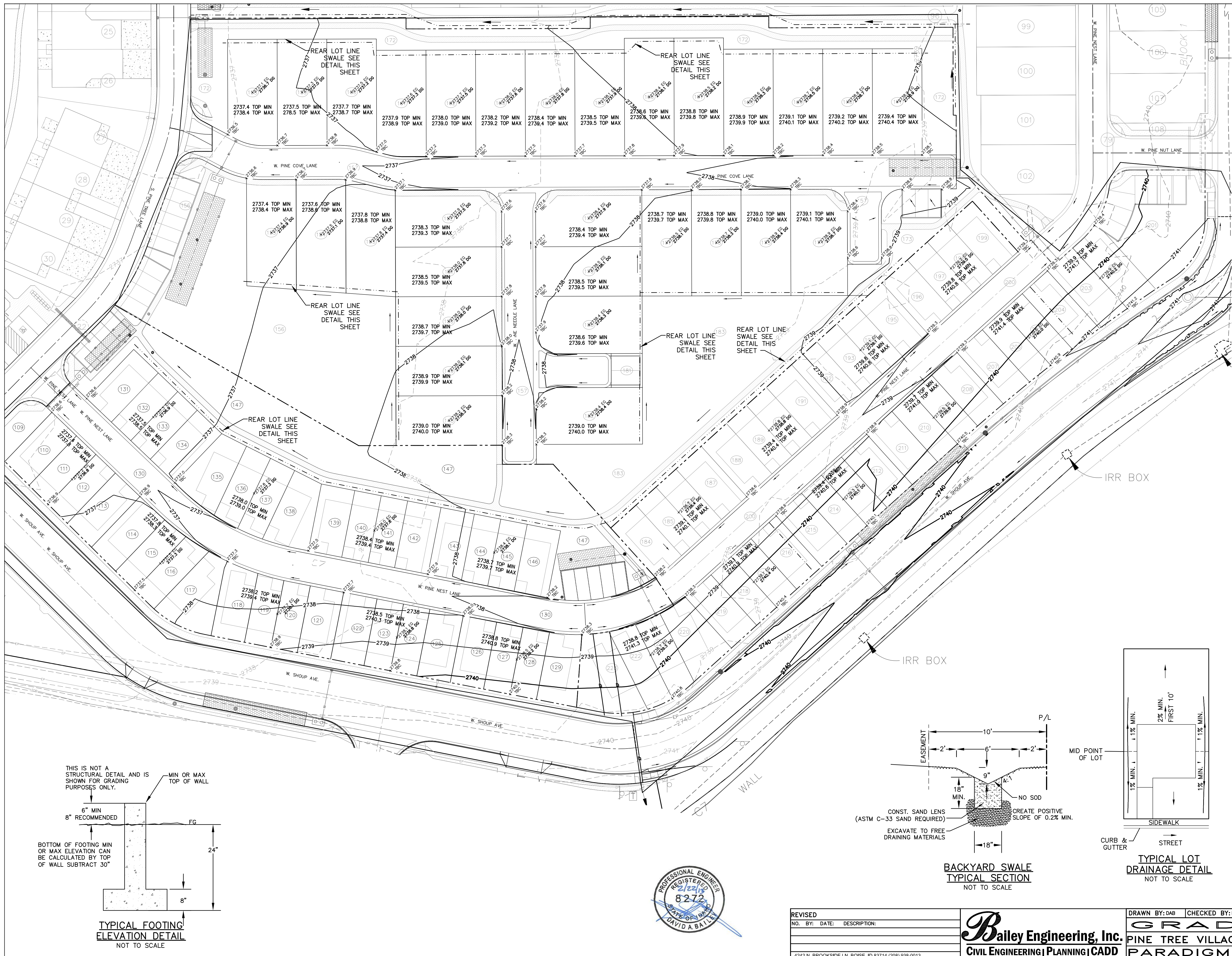
**FINAL PLAT**

**PINETREE VILLAGE NO. 5**

**PARADIGM DEVELOPMENT**

SHEET **2**

THE PLAT HAS BEEN ADDED TO THE CONSTRUCTION SET FOR REFERENCE PURPOSES ONLY. FOR EXACT INFORMATION REFER TO THE RECORDED PLAT OF PINETREE VILLAGE SUBDIVISION NO. 5.



**GRADING NOTES AND VOLUMES:**

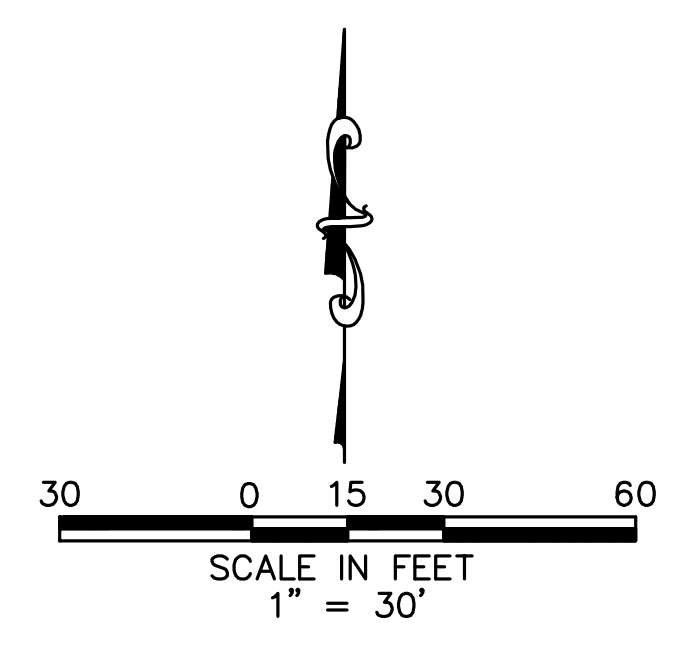
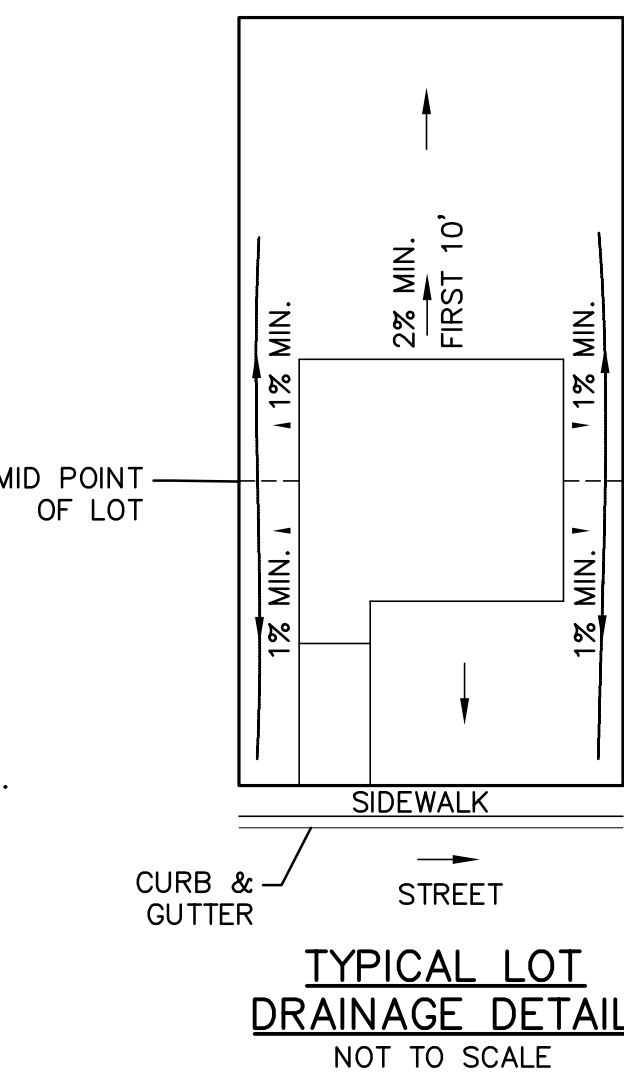
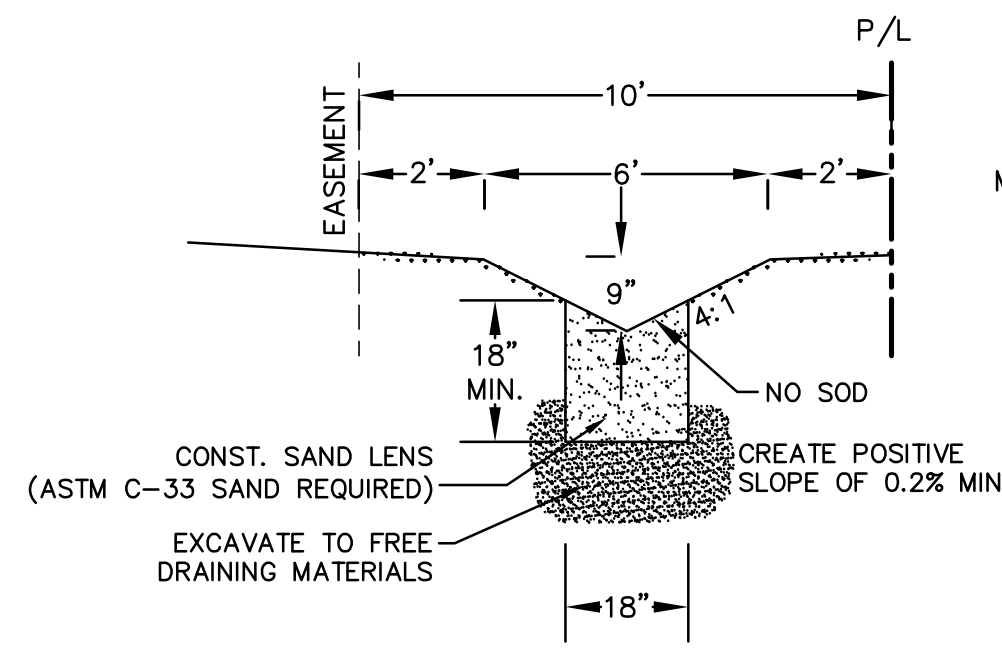
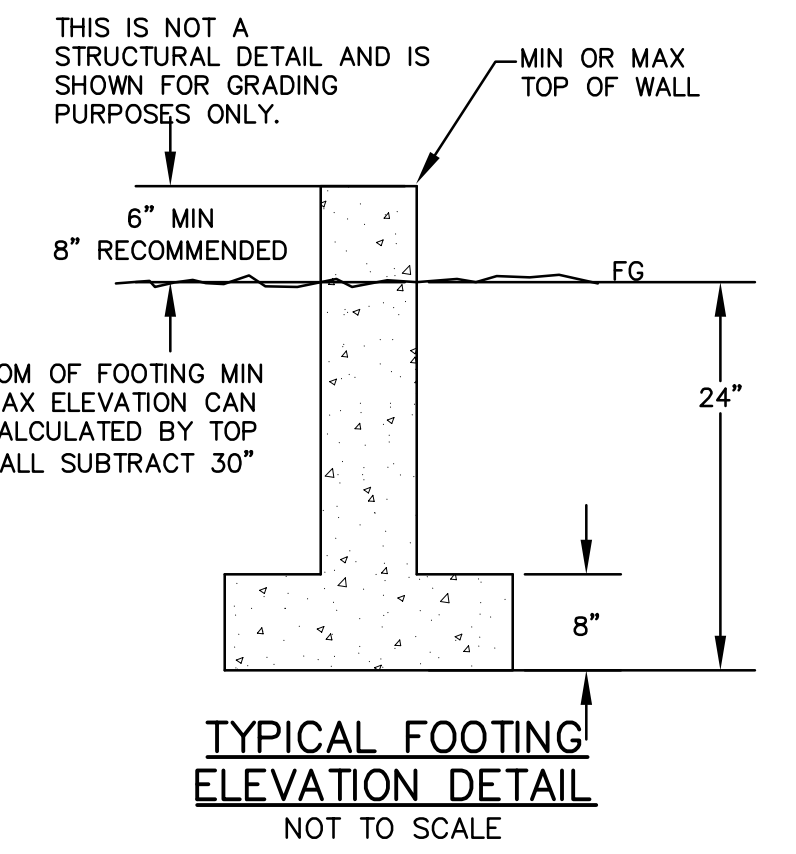
STRIP VOLUME 4" AS SPECIFIED = ±3,500 cy  
 ROAD EXCAVATION TO SUBGRADE = ±5,080 cy  
 SEEPAGE BEDS EXCAVATION = ±1386 cy  
 FILL TO FINAL GRADE ON LOTS FROM STRIPPED SURFACE = ±2,330 cy

NET OFF-HAUL FROM SITE - 7,600 cy

ALL CALCULATIONS ARE RAW VOLUMES BASED ON ROAD AND FINAL SURFACE MODELS DEPICTED ON THIS GRADING PLAN. THESE NUMBERS MAY VARY DUE TO ACTUAL SOIL COMPACTION AND SOIL SHRINKAGE.

- NOTES:**
1. THE BUILDING ENVELOPES ARE BASED ON THE BOISE CITY SETBACKS APPROVED WITH THE PINE TREE VILLAGE PLANNED DEVELOPMENT.
  2. THE MINIMUM TOP OF STEM WALL ELEVATIONS ARE BASED ON THE LOWEST TOP BACK CURB ELEVATION ALONG THE FRONTAGE OF THE LOTS, PLUS 20 FT @ 3% AND THEN AN ADDITIONAL 12" PER THE 2003 INTERNATIONAL RESIDENTIAL CODE SECTION R403.1.7.3.
  3. FOUNDATIONS MAY BE STEPPED A MAXIMUM OF 2 FEET.
  4. REAR YARD SWALES SHOULD BE NO CLOSER THAN 10 FEET FROM THE STRUCTURE.
  5. THE BUILDING CONTRACTOR SHALL REVIEW & FOLLOW FOUNDATION & CRAWL SPACE RECOMMENDATIONS IN THE GEOTECHNICAL ENGINEERING REPORT BY MTI, DATED JULY 9<sup>th</sup>, 2007.
  6. EXCEPTIONS TO THIS GRADING PLAN MAY BE APPROVED BY THE BOISE CITY BUILDING OFFICIAL AT ISSUANCE OF BUILDING PERMIT BASED UPON REVIEW OF AN ENGINEERED INDIVIDUAL LOT GRADING PLAN.

- LEGEND**
- PROPERTY LINE
  - - - LOT SWALE (1% MIN)
  - CURB AND GUTTER
  - - - 2700 EXISTING CONTOURS
  - 2700 FINISHED GRADE CONTOURS
  - EP EDGE OF PAVEMENT
  - EG 55.71 EXISTING GRADE SPOT ELEV.
  - FG 56.50 FINISHED GRADE SPOT ELEV.
  - X TBC 57.80 TOP BACK OF CURB ELEVATION
  - 36.5 TOP MIN / 37.4 TOP MAX / 38.1 EG / 38.2 PAD EL TOP OF STEM WALL MIN/MAX GRADING PLAN EXISTING GRADE & PAD ELEVATION
  - DIRECTION OF SHEET FLOW
  - (TH) APPROXIMATE TEST PIT LOCATION



Plans Are Accepted For Public Street Construction

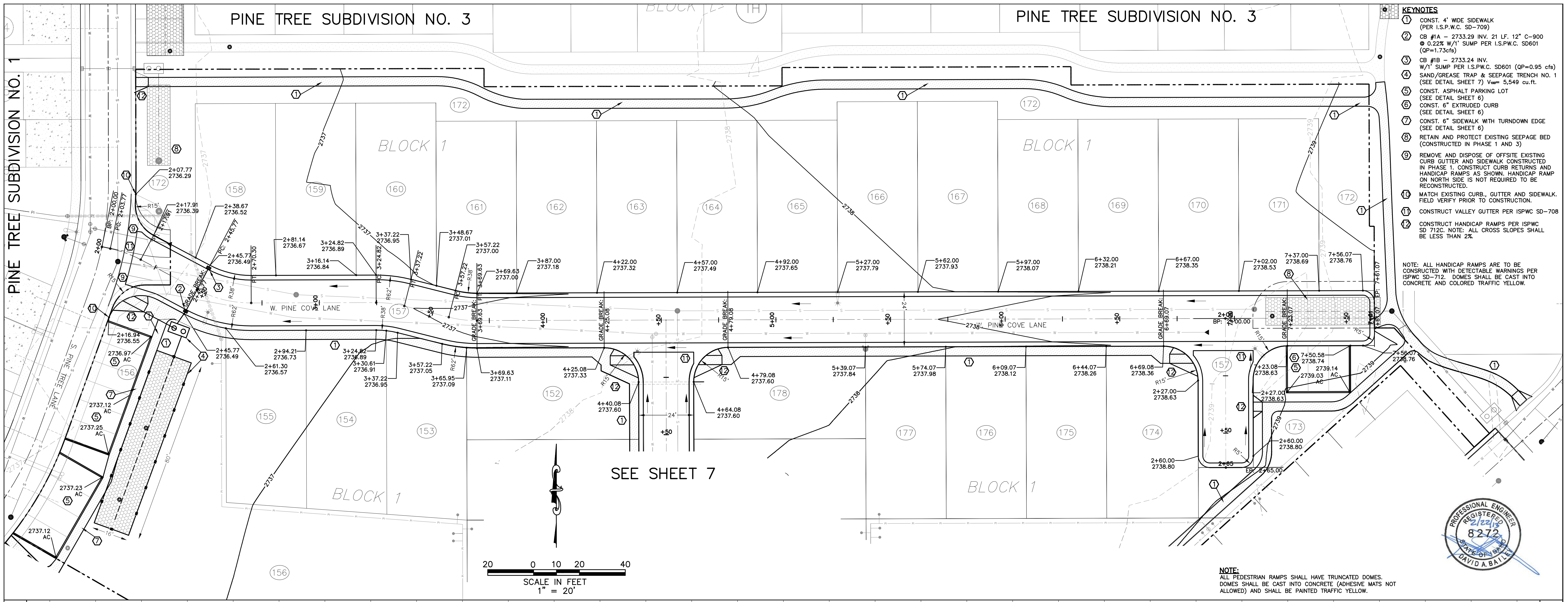
By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District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

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 ADA COUNTY HIGHWAY DISTRICT



REVISED	NO. BY: DATE: DESCRIPTION:	 <b>Bailey Engineering, Inc.</b> CIVIL ENGINEERING   PLANNING   CADD	DRAWN BY: DAB	CHECKED BY: DAVID A. BAILEY P.E.	PROJECT NO. C27032	DATE: 02-20-2013
			<b>GRADING PLAN</b>		<b>PINE TREE VILLAGE SUBDIVISION NO. 4,5,6</b>	
				<b>PARADIGM DEVELOPMENT</b>		

4242 N. BROOKSIDE LN. BOISE, ID 83714 (208) 938-0013

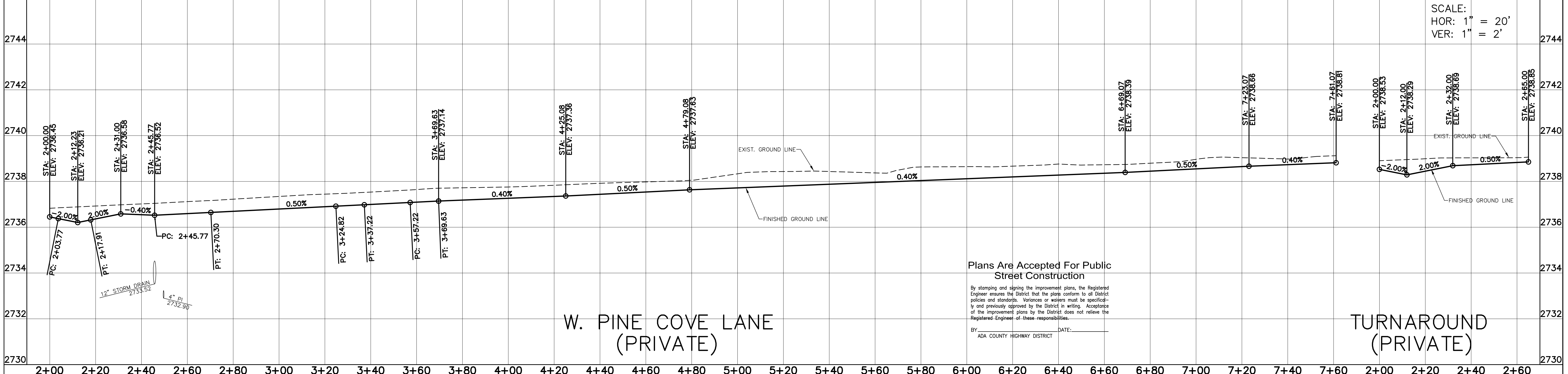


- KEYNOTES**
- ① CONST. 4' WIDE SIDEWALK (PER I.S.P.W.C. SD-709)
  - ② CB #1A - 2733.29 INV. 21 LF. 12" C-900 @ 0.22% W/1' SUMP PER I.S.P.W.C. SD601 (QP=1.73cfs)
  - ③ CB #1B - 2733.24 INV. W/1' SUMP PER I.S.P.W.C. SD601 (QP=0.95 cfs)
  - ④ SAND/GREASE TRAP & SEEPAGE TRENCH NO. 1 (SEE DETAIL SHEET 7)  $V_{max} = 5,549$  cu.ft.
  - ⑤ CONST. ASPHALT PARKING LOT (SEE DETAIL SHEET 6)
  - ⑥ CONST. 6" EXTRUDED CURB (SEE DETAIL SHEET 6)
  - ⑦ CONST. 6" SIDEWALK WITH TURNDOWN EDGE (SEE DETAIL SHEET 6)
  - ⑧ RETAIN AND PROTECT EXISTING SEEPAGE BED (CONSTRUCTED IN PHASE 1 AND 3)
  - ⑨ REMOVE AND DISPOSE OF OFFSITE EXISTING CURB GUTTER AND SIDEWALK CONSTRUCTED IN PHASE 1. CONSTRUCT CURB RETURNS AND HANDICAP RAMPS AS SHOWN. HANDICAP RAMP ON NORTH SIDE IS NOT REQUIRED TO BE RECONSTRUCTED.
  - ⑩ MATCH EXISTING CURB, GUTTER AND SIDEWALK. FIELD VERIFY PRIOR TO CONSTRUCTION.
  - ⑪ CONSTRUCT VALLEY GUTTER PER ISPPWC SD-708
  - ⑫ CONSTRUCT HANDICAP RAMPS PER ISPPWC SD 712C. NOTE: ALL CROSS SLOPES SHALL BE LESS THAN 2%.

NOTE: ALL HANDICAP RAMPS ARE TO BE CONSTRUCTED WITH DETECTABLE WARNINGS PER ISPPWC SD-712. DOMES SHALL BE CAST INTO CONCRETE AND COLORED TRAFFIC YELLOW.



NOTE: ALL PEDESTRIAN RAMPS SHALL HAVE TRUNCATED DOMES. DOMES SHALL BE CAST INTO CONCRETE (ADHESIVE MATS NOT ALLOWED) AND SHALL BE PAINTED TRAFFIC YELLOW.

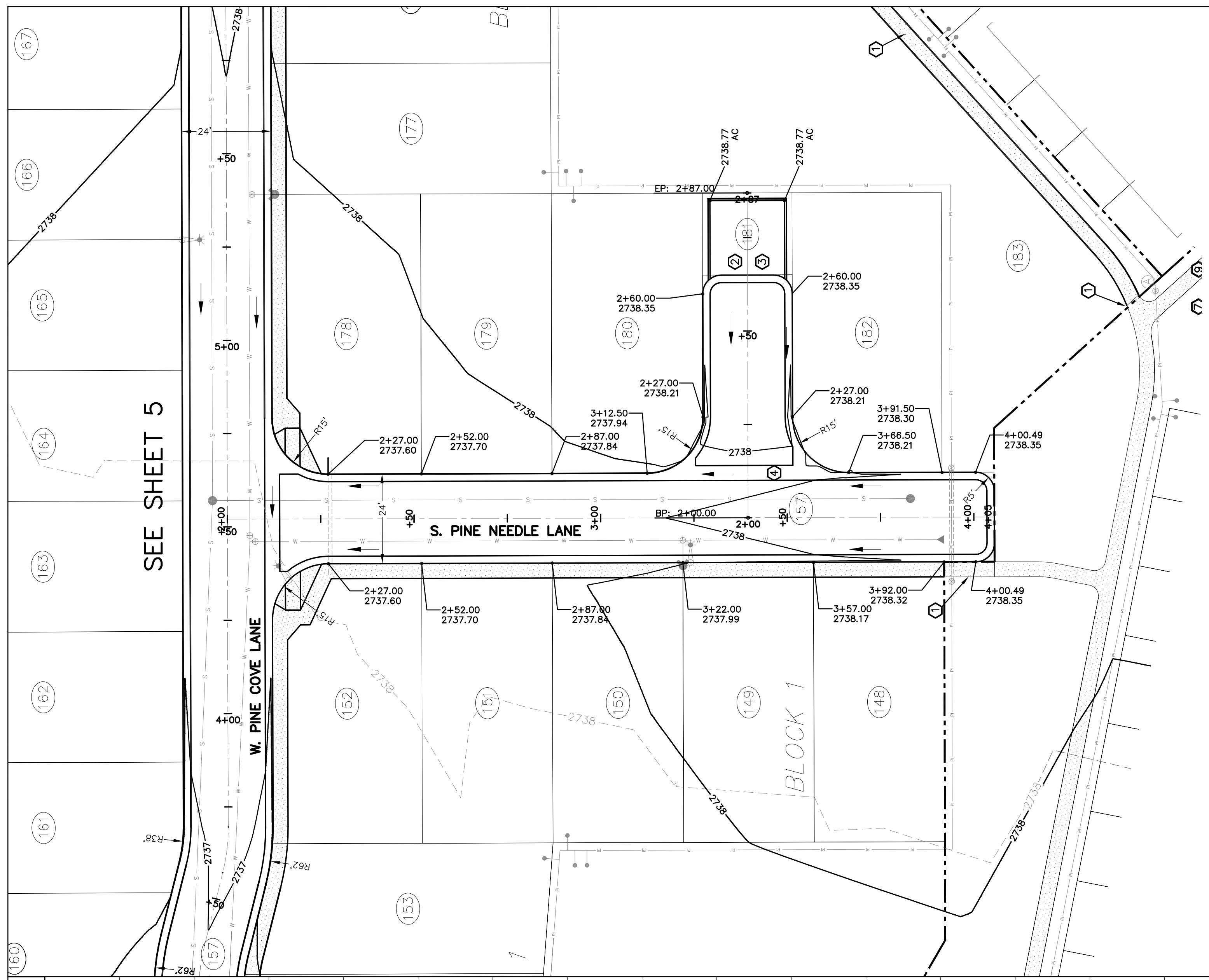


Plans Are Accepted For Public Street Construction

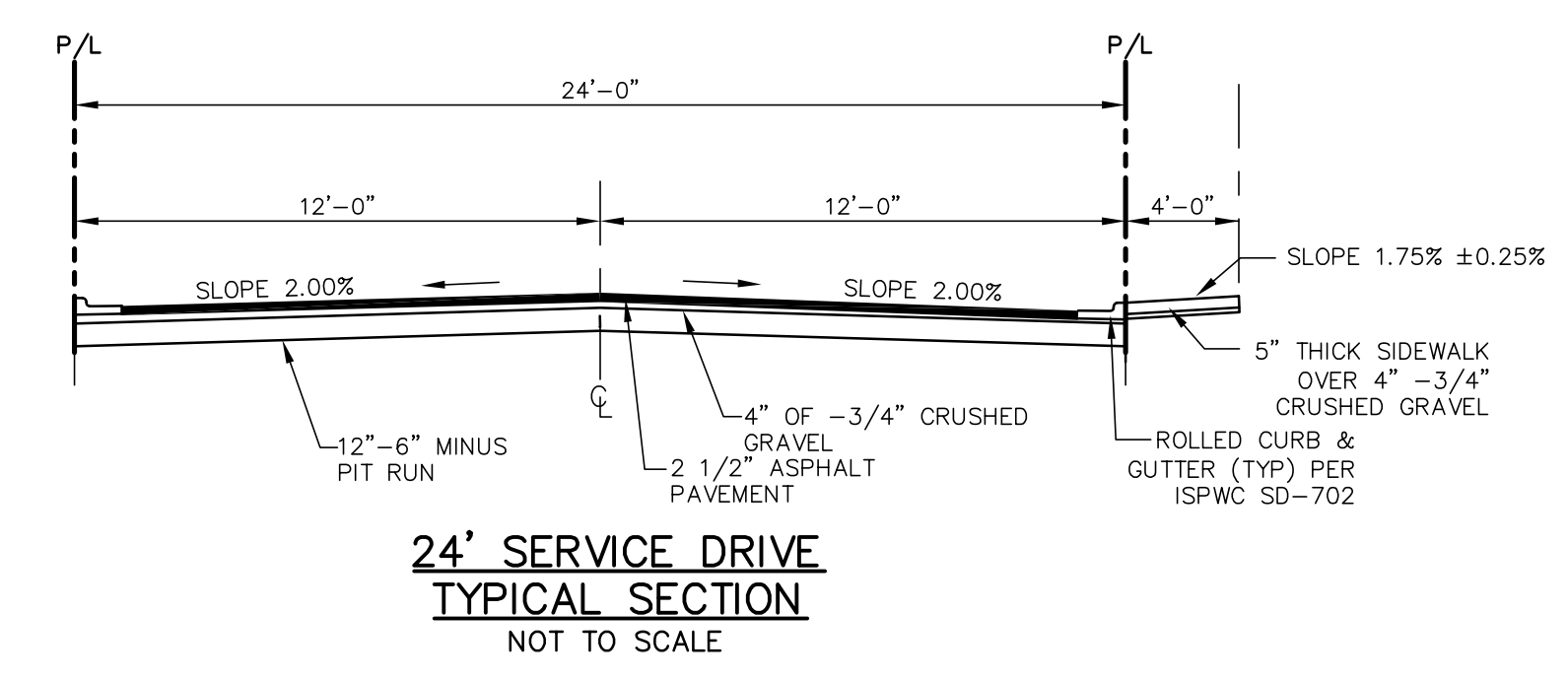
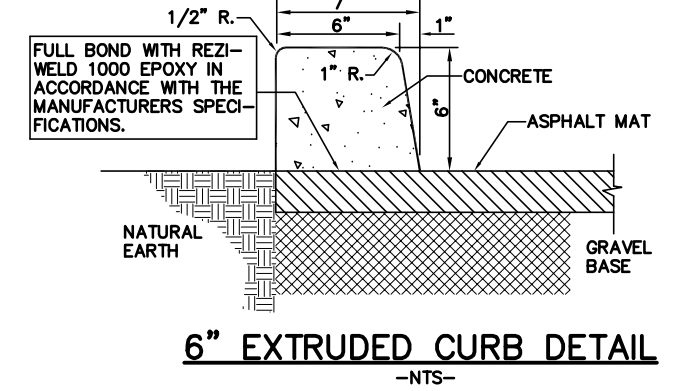
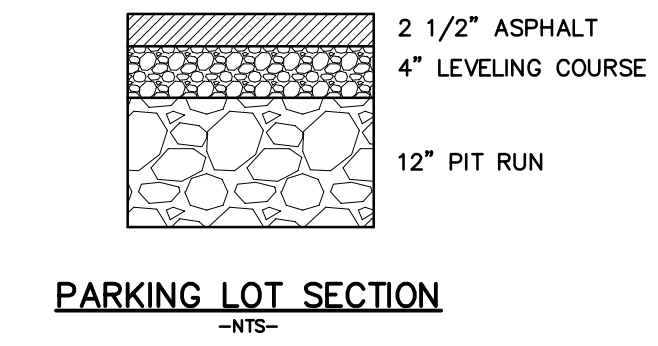
By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District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

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

REVISED	NO. BY: DATE: DESCRIPTION:	<b>Bailey Engineering, Inc.</b> CIVIL ENGINEERING   PLANNING   CADD	DRAWN BY: DAB	CHECKED BY: DAVID A. BAILEY P.E.	PROJECT: C27032	DATE: 02-20-2018
			<b>STREET PLAN AND PROFILE</b>			
4242 N. BROOKSIDE LN. BOISE, ID 83714 (208) 938-0013		<b>PARADIGM DEVELOPMENT</b>	<b>PINE TREE VILLAGE SUBDIVISION NO. 5</b>			
			SHEET <b>4</b>			



SEE SHEET 5

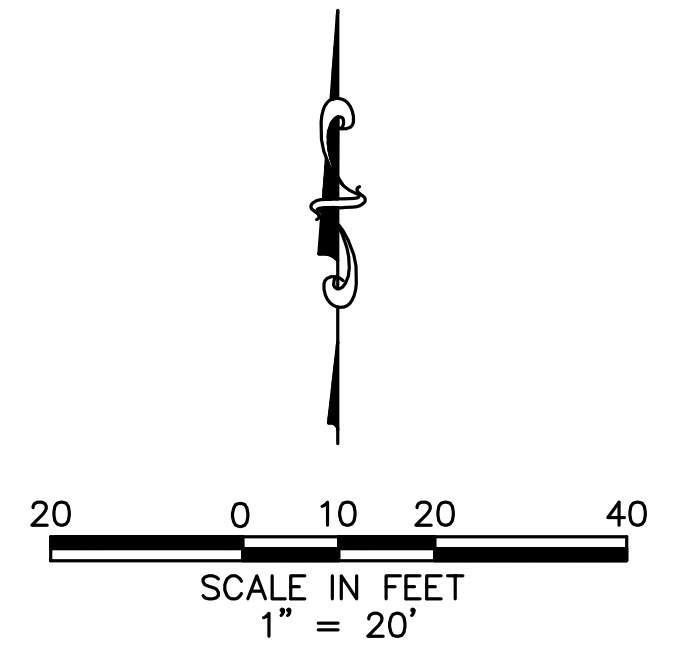


- KEYNOTES**
- ① CONST. 4' WIDE SIDEWALK (PER I.S.P.W.C. SD-709) MATCH EXISTING SIDEWALK AT CONNECTIONS
  - ② CONST. ASPHALT PARKING LOT (SEE DETAIL SHEET 5)
  - ③ CONST. 6" EXTRUDED CURB (SEE DETAIL SHEET 5)
  - ④ CONST. VALLEY GUTTER PER ISWPC SD-708

Plans Are Accepted For Public Street Construction

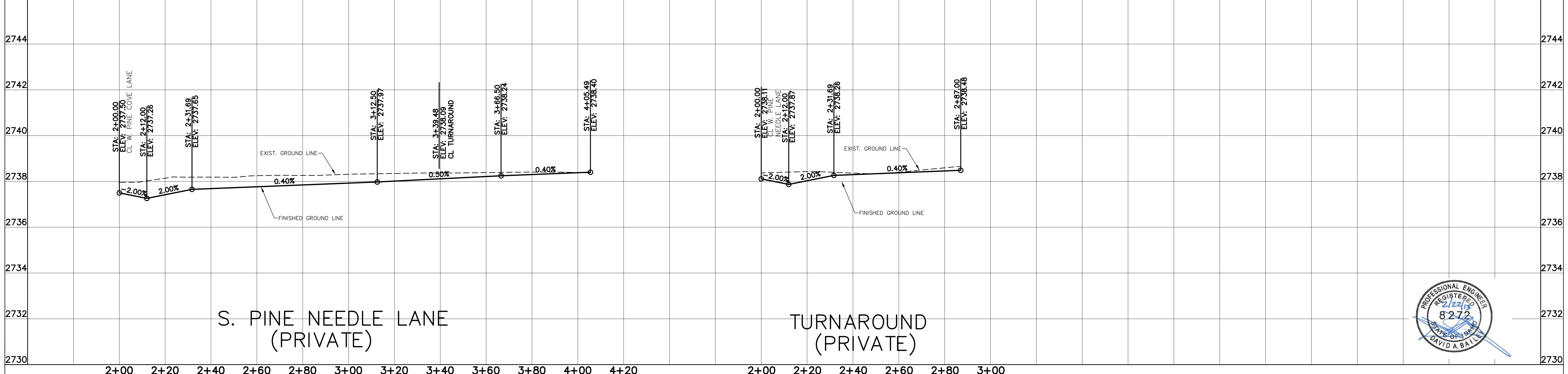
By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District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

BY \_\_\_\_\_ DATE: \_\_\_\_\_  
 ADA COUNTY HIGHWAY DISTRICT



**NOTE:**  
 ALL PEDESTRIAN RAMPS SHALL HAVE TRUNCATED DOMES. DOMES SHALL BE CAST INTO CONCRETE. (ADHESIVE MATS NOT ALLOWED) AND SHALL BE PAINTED TRAFFIC YELLOW.

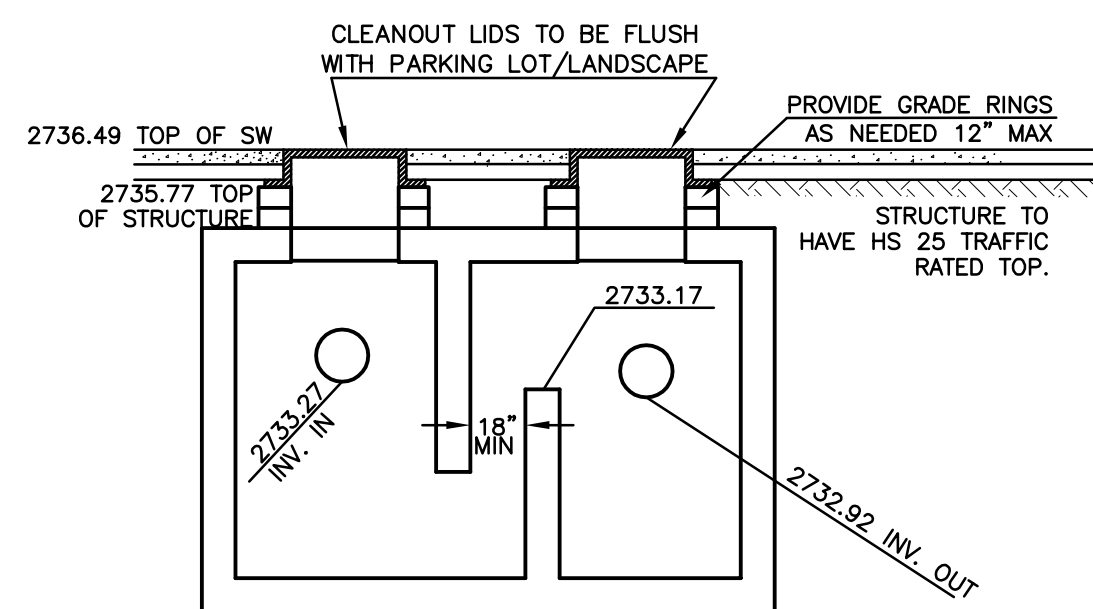
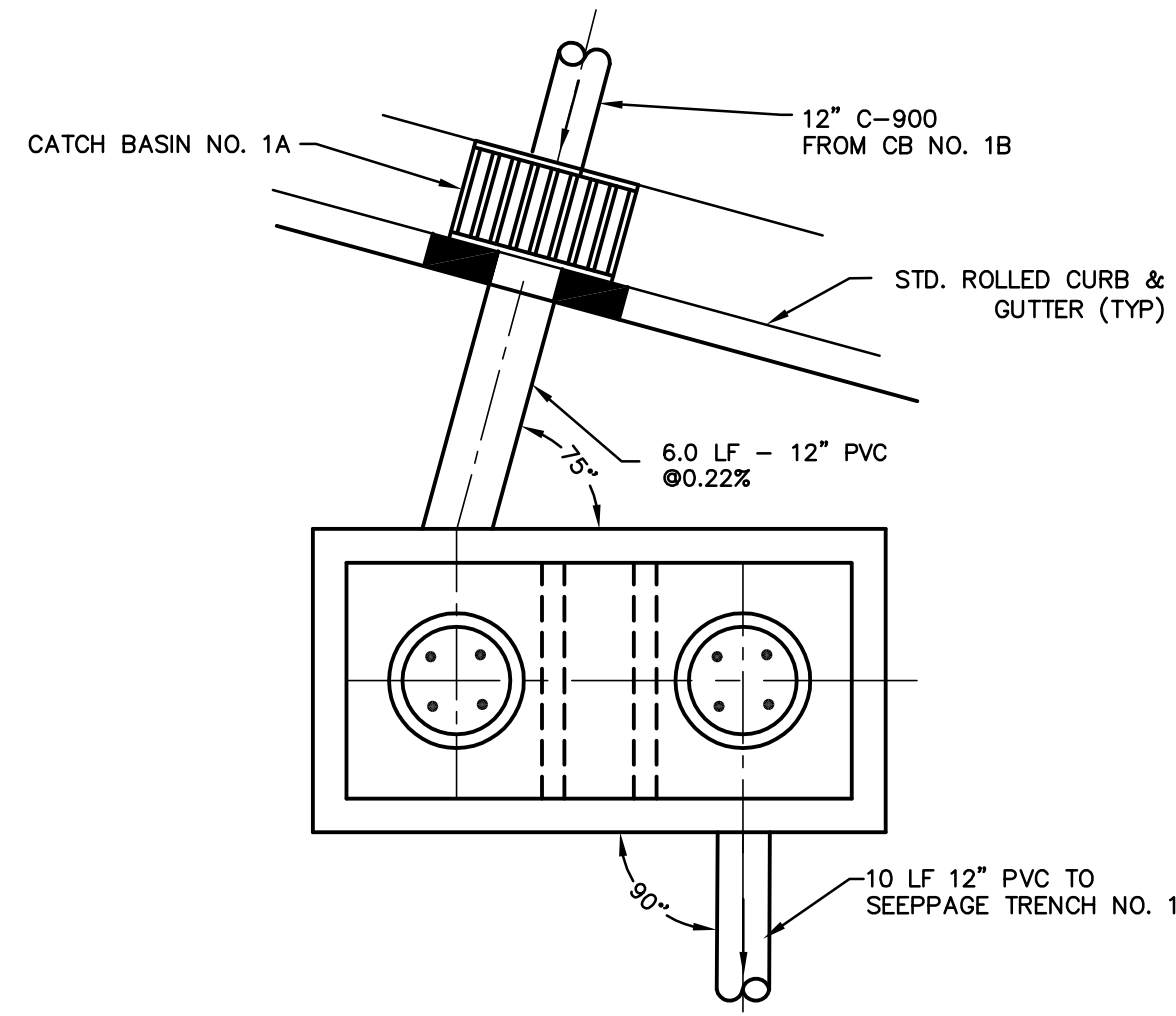
SCALE:  
 HOR: 1" = 20'  
 VER: 1" = 2'



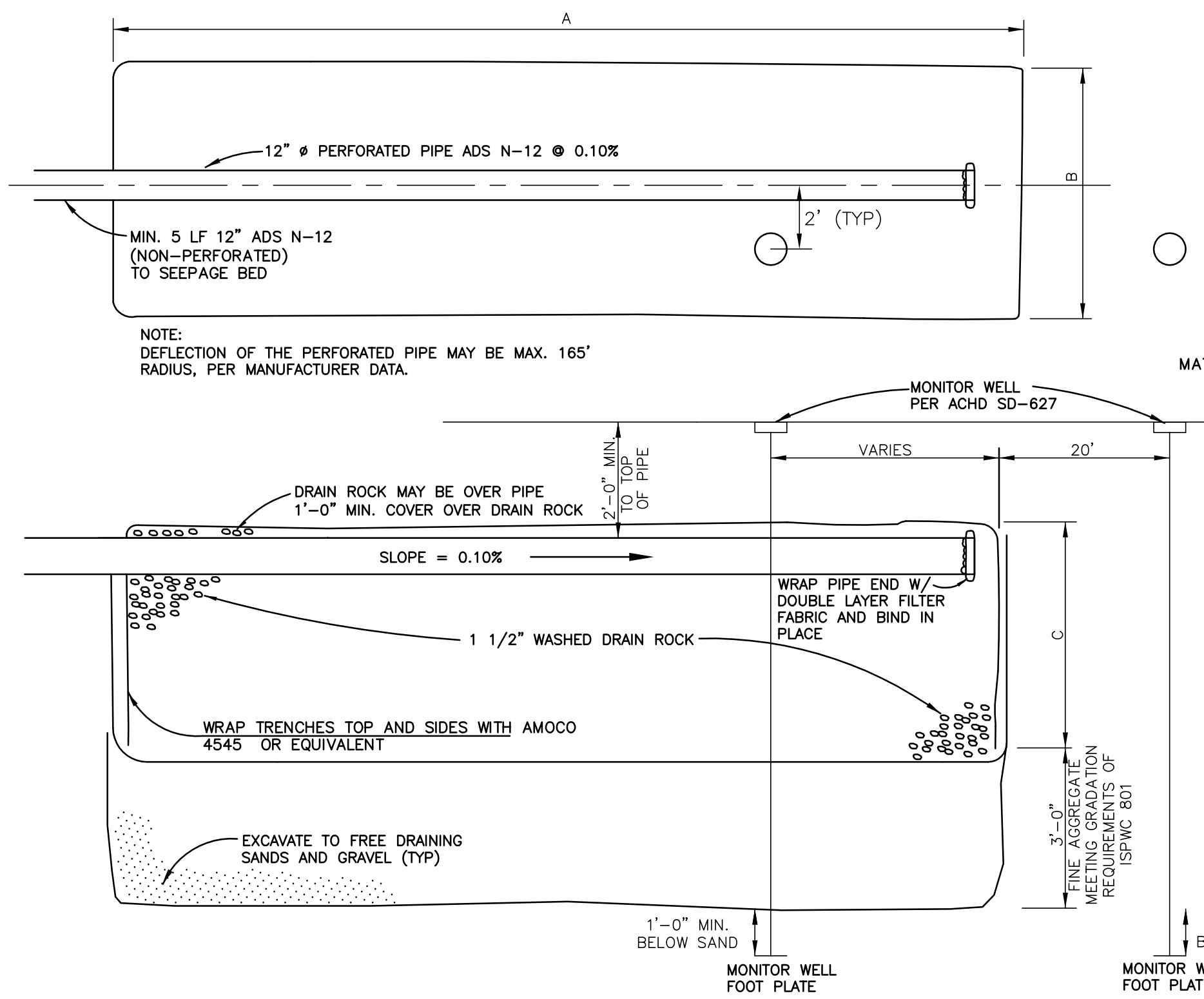
S. PINE NEEDLE LANE  
 (PRIVATE)

TURNAROUND  
 (PRIVATE)





**PRIVATE  
1000 GALLON  
SAND/GREASE TRAP NO. 2  
(PER ISPMC SD-624)**  
-NTS-



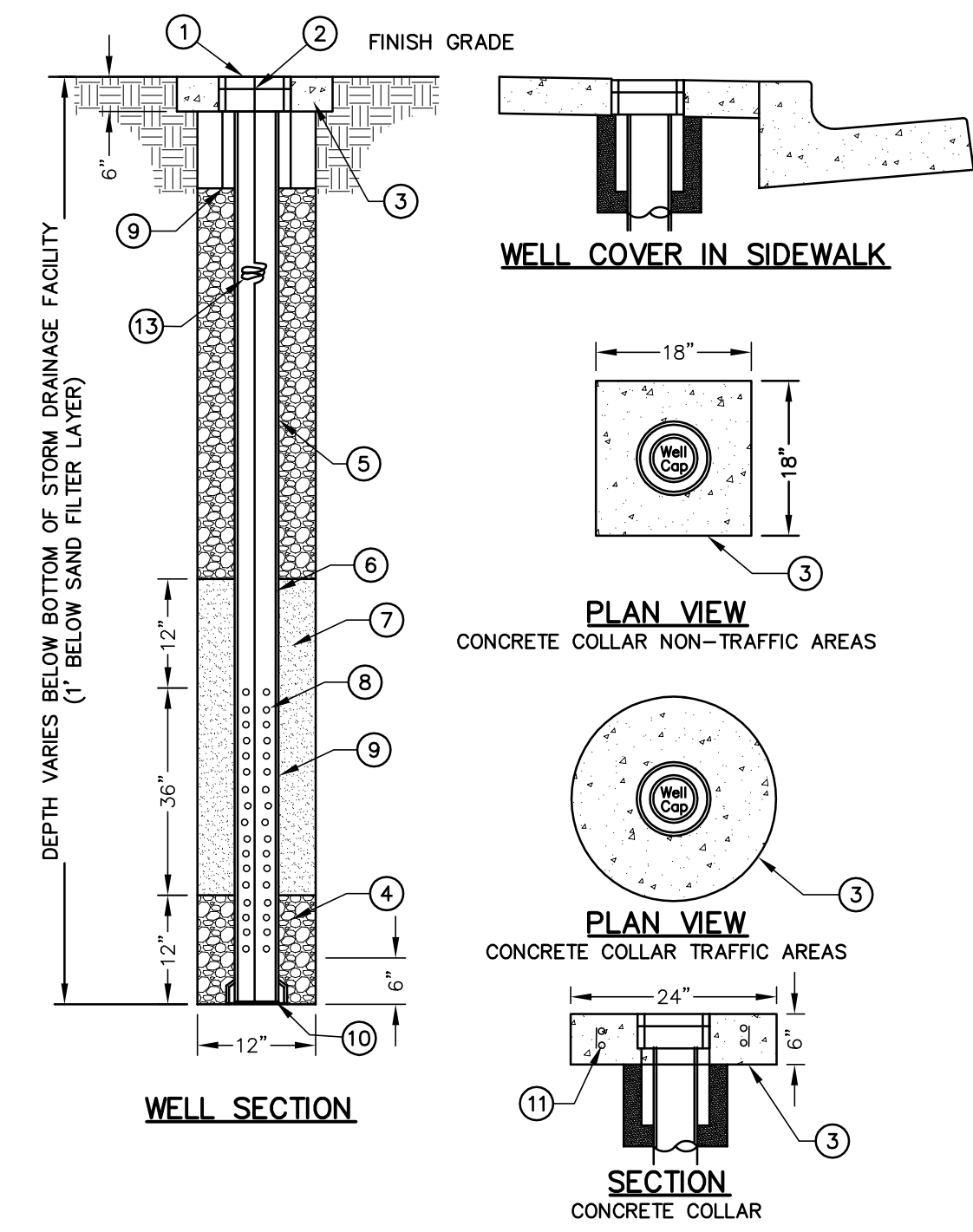
**TABLE OF DIMENSIONS**

DESCRIPTION	"A" LENGTH	"B" WIDTH	"C" DEPTH	TOP	BOTTOM	GROUND WATER
PRIVATE SEEPAGE TRENCH #1	80'	16'	10'	2734.4	2724.4	2718.0

**SEEPAGE TRENCH  
NOT TO SCALE**

NOTE:  
CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF GROUNDWATER IS ENCOUNTERED WITHIN 3 FEET OF THE BOTTOM OF DESIGN ELEVATION FOR ANY INFILTRATION FACILITY.

- NOTE:
- DRAINAGE CONTRACTOR SHALL INSTALL 2" SCH 80 WATER CLASS PIPE CONDUITS THROUGH THE SEEPAGE TRENCHES FOR WATER LINES, UNDERGROUND POWER LINES, GAS LINES AND TELEPHONE LINES. SEWER SERVICES SHALL BE PLACED IN 6" DIA. SCH 80 WATER GLASS PIPE THROUGH SEEPAGE TRENCHES. THE PRECISE LOCATION, DEPTH AND SIZE SHALL BE DETERMINED BY THE ENGINEER.
  - NO GROUNDWATER WAS ENCOUNTERED IN TEST EXCAVATIONS ON THIS SITE. IF GROUNDWATER IS ENCOUNTERED HIGHER THAN INDICATED ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR REDESIGN OF SEEPAGE TRENCHES TO PROVIDE 3' MINIMUM CLEARANCE BETWEEN GROUNDWATER AND THE BOTTOM OF THE TRENCH. URGENT NOTIFICATION OF THE ENGINEER MAY RESULT IN ADDITIONAL COSTS TO THE CONTRACTOR. REFER TO GEOTECHNICAL REPORT PREPARED BY M.T.I. DATED JULY 9, 2007. ESTIMATED HIGH GROUNDWATER ELEVATION 2718.00
  - ALL MONITOR WELLS SHALL HAVE A CONCRETE APRON POURED AROUND THE CAP.
  - PERCOLATION RATE FOR SEEPAGE TRENCHES 8" PER HOUR
  - WHEN ROCK IS ENCOUNTERED CONTRACTOR TO HAVE PERCOLATION TEST PERFORMED BY SOILS ENGINEER AFTER SEEPAGE TRENCH IS FULLY EXCAVATED. IF THE PERCOLATION IS LESS THAN SPECIFIED BY THE SOILS REPORT AND ENGINEER, CONTRACTOR WILL NEED TO BLAST TO CREATE CRACKS IN ROCK FOR DRAINAGE TO OCCUR OR REDESIGN THE SYSTEM TO ACHIEVE THE REQUIRED CRITERIA.

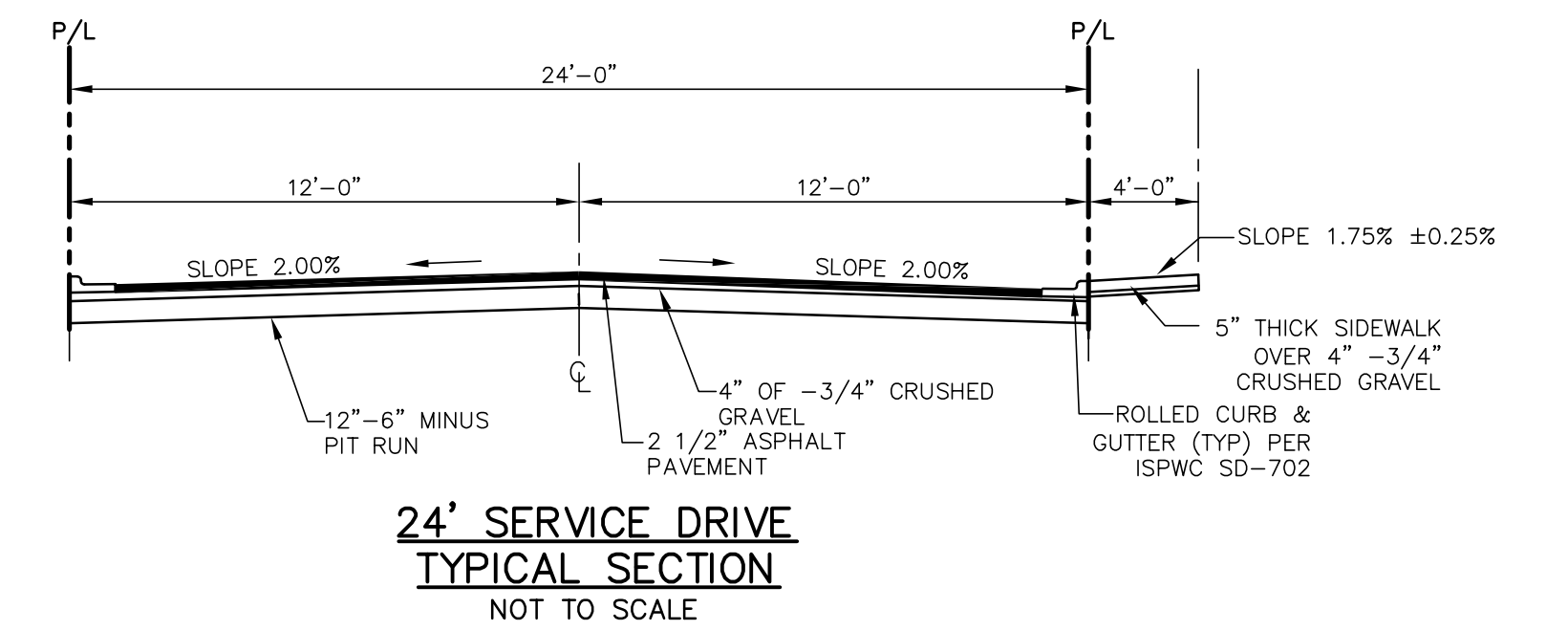


- LEGEND:
- WELL COVER, 8" DIAM. WATERTIGHT GALVANIZED STEEL COVER AND CANISTER.
  - PVC CAP, GASKETED (WATERTIGHT).
  - CONCRETE (COLLAR), CLASS 3000 (ISPMC SECTION 703).
  - 3/4" MINUS CRUSHED AGGREGATE FOR BASE (ISPMC SECTION 802) OR MATERIAL REQUIRED FOR STORM DRAINAGE FACILITY (I.E. 1.5" TO 2" DRAIN ROCK, FILTER SAND).
  - PVC PIPE, 4" DIAMETER ASTM D-3034 SDR 35 FOR DRILLED WELLS. PVC PIPE, 6" DIAMETER ASTM D-3034 SDR 35 FOR WELLS DUG & BACKFILLED (INSIDE SEEPAGE BEDS FOR EXAMPLE).
  - 2 - STAINLESS STEEL HOSE CLAMPS AT 3" SPACING. SECURE GEOTEXTILE IN PLACE.
  - FILTER SAND (ISPMC SECTION 801).
  - PERFORATED PVC PIPE, ASTM D-3035 SDR 35 WITH 6 - 3/8" DIA. HOLES AT 3" ON CENTER.
  - DRAINAGE GEOTEXTILE, TYPE I (ISPMC SECTION 2060).
  - PVC CAP, SOLVENT WELDED OR GASKETED (WATERTIGHT).
  - (2) #4 REBAR HOOPS WITH #4 VERTICALS.
  - NO. 12 AWG. GALVANIZED FINDER WIRE.
  - THREE 6" DIAMETER COILS.

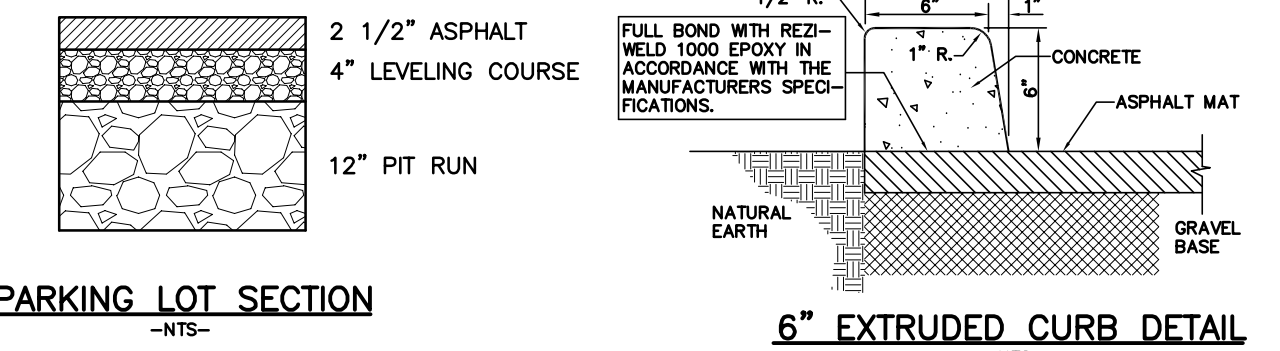
- A. WELLS ARE FOR OBSERVATION OF GROUNDWATER LEVEL NEAR STORM DRAINAGE FACILITIES.  
B. LOCATION OF GROUNDWATER OBSERVATION WELLS SHALL BE APPROVED BY ENGINEER.

**MONITOR WELL LOCATIONS**

TRENCH #1	WELL #	NORTH	EAST	DIST. ALONG TRENCH
#1	#1	N 4895.16	E 6538.56	50' INTO TRENCH
	#2	N 4858.23	E 6510.58	16' PAST TRENCH IN SIDEWALK

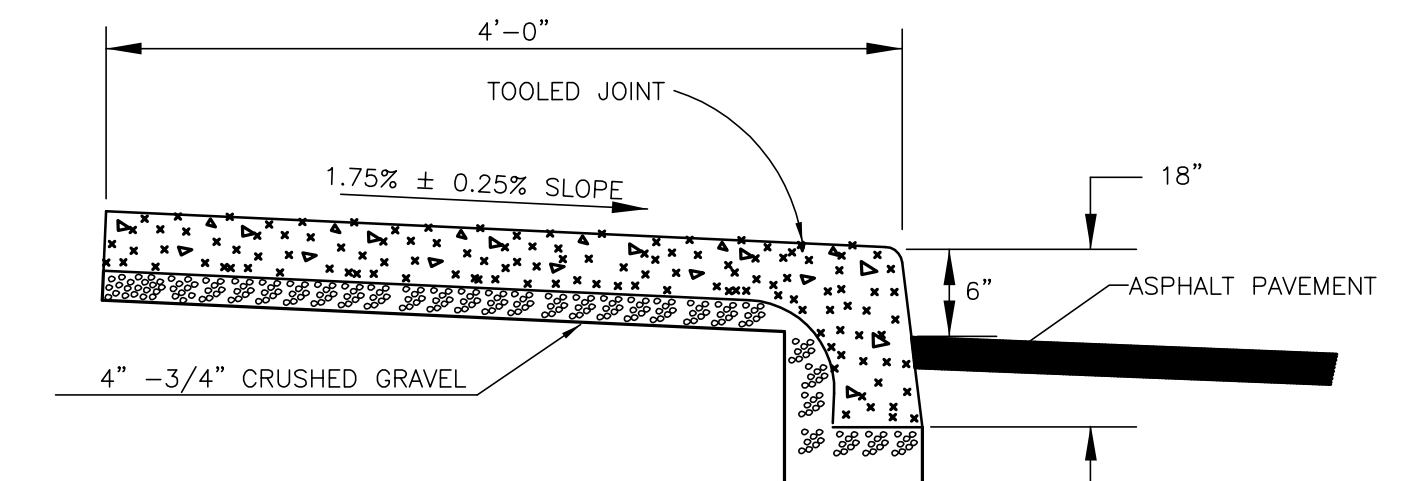


**24" SERVICE DRIVE  
TYPICAL SECTION  
NOT TO SCALE**



**PARKING LOT SECTION  
-NTS-**

**6" EXTRUDED CURB DETAIL  
-NTS-**



**THICKENED EDGE SIDEWALK DETAIL  
-NTS-**

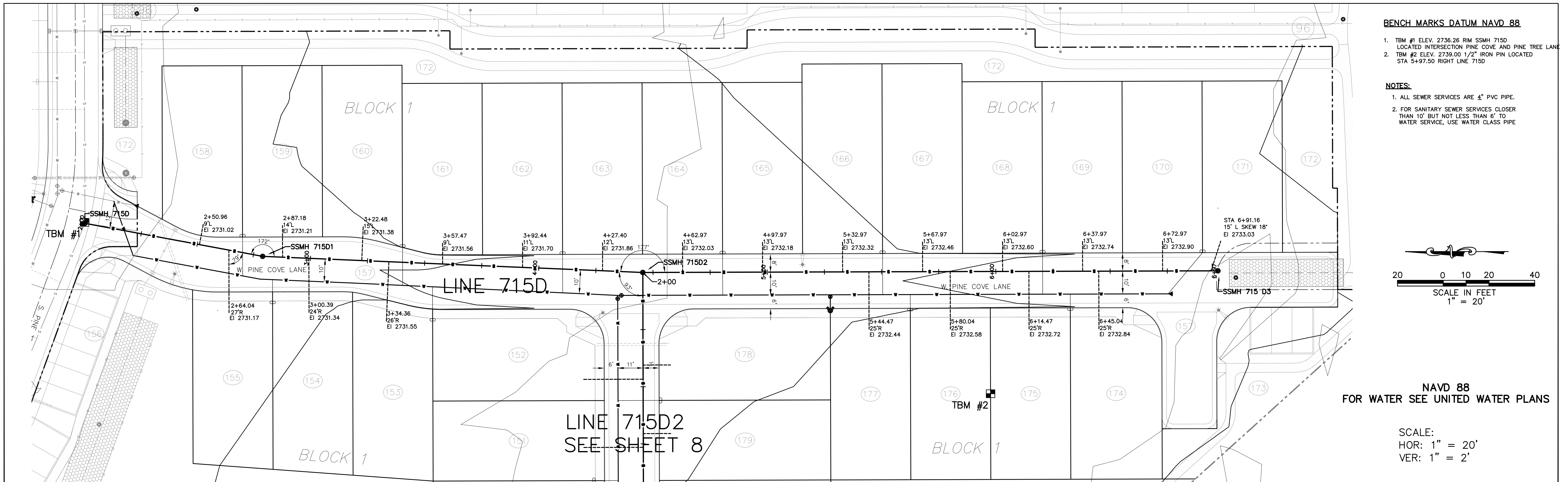


Plans Are Accepted For Public Street Construction

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

BY \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

REVISED NO. BY: DATE: DESCRIPTION:	 <b>CIVIL ENGINEERING   PLANNING   CADD</b> 1472 E. IRON EAGLE DRIVE EAGLE, ID 83616 TEL 208-938-0013 FAX 208-938-0516			
DRAWN BY: DAB		CHECKED BY: DAVID A. BAILEY P.E.	PROJECT NO. C27032	DATE: 02-20-2013
<b>DRAINAGE DETAILS</b>				
<b>PINE TREE VILLAGE SUBDIVISION NO. 5 PARADIGM DEVELOPMENT</b>				

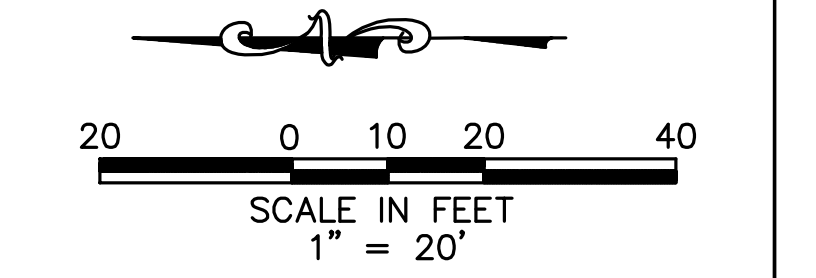


**BENCH MARKS DATUM NAVD 88**

- TBM #1 ELEV. 2736.26 RIM SSMH 715D LOCATED INTERSECTION PINE COVE AND PINE TREE LANE
- TBM #2 ELEV. 2739.00 1/2" IRON PIN LOCATED STA 5+97.50 RIGHT LINE 715D

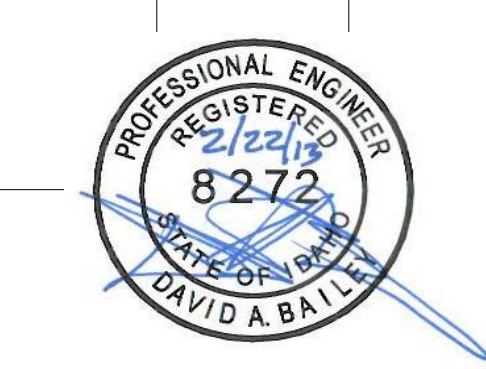
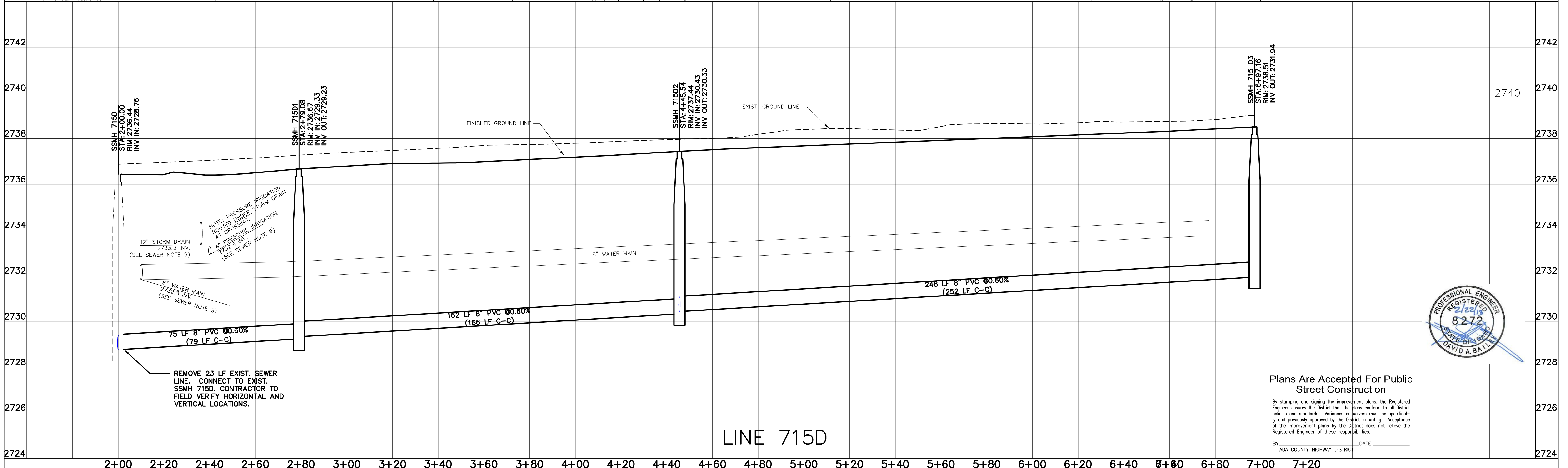
**NOTES:**

- ALL SEWER SERVICES ARE 4" PVC PIPE.
- FOR SANITARY SEWER SERVICES CLOSER THAN 10' BUT NOT LESS THAN 6' TO WATER SERVICE, USE WATER CLASS PIPE



NAVD 88  
FOR WATER SEE UNITED WATER PLANS

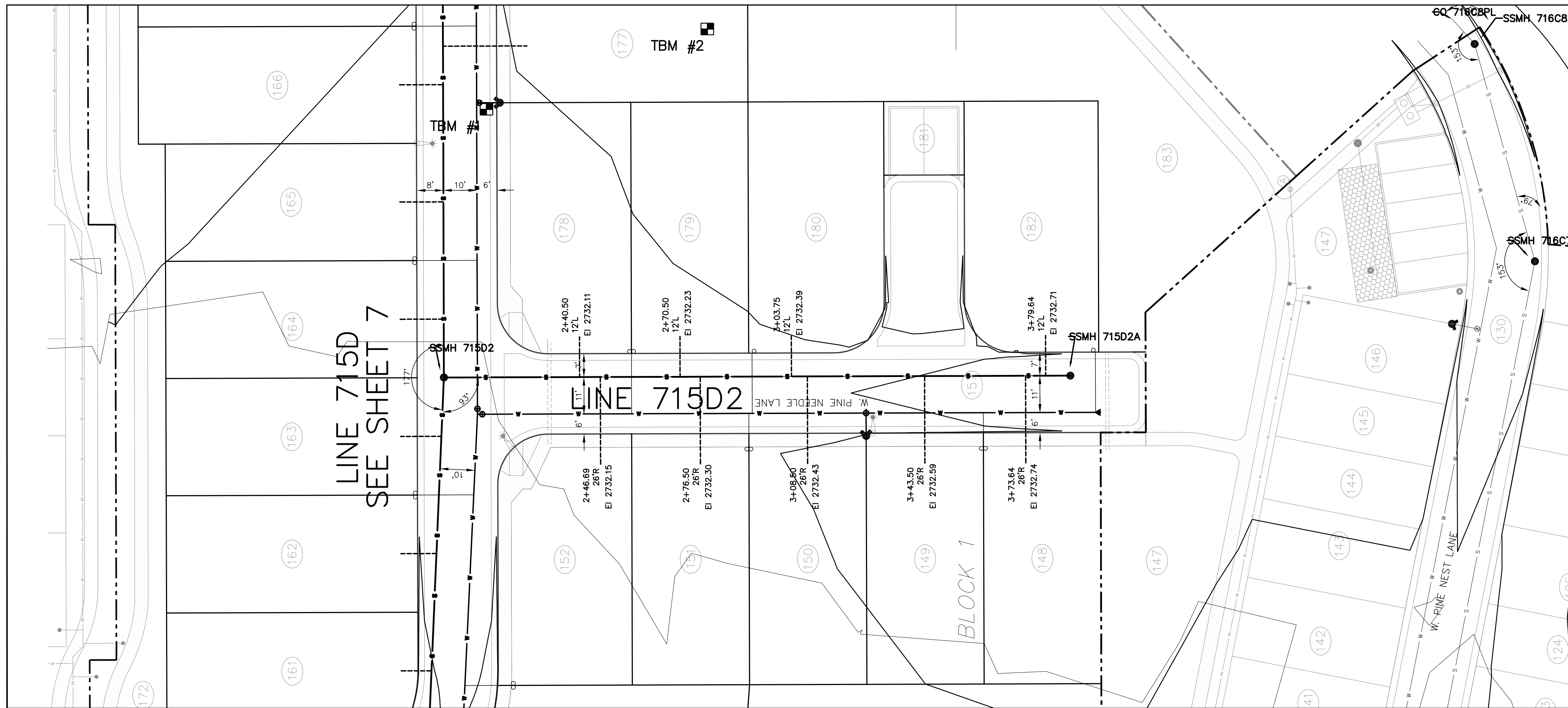
SCALE:  
HOR: 1" = 20'  
VER: 1" = 2'



Plans Are Accepted For Public Street Construction

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

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

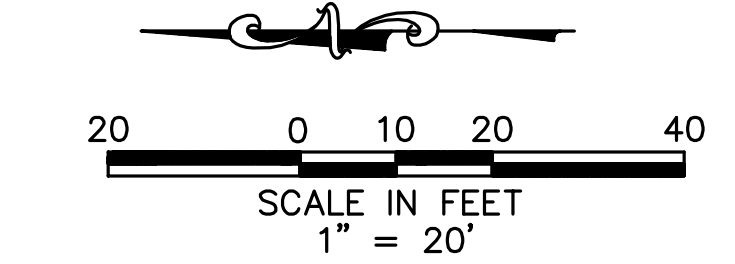


**BENCH MARKS DATUM NAVD 88**

- TBM #1 ELEV. 2736.26 RIM SSMH 715D LOCATED INTERSECTION PINE COVE AND PINE TREE LANE
- TBM #2 ELEV. 2739.00 1/2" IRON PIN LOCATED STA 5+97.50 RIGHT LINE 715D

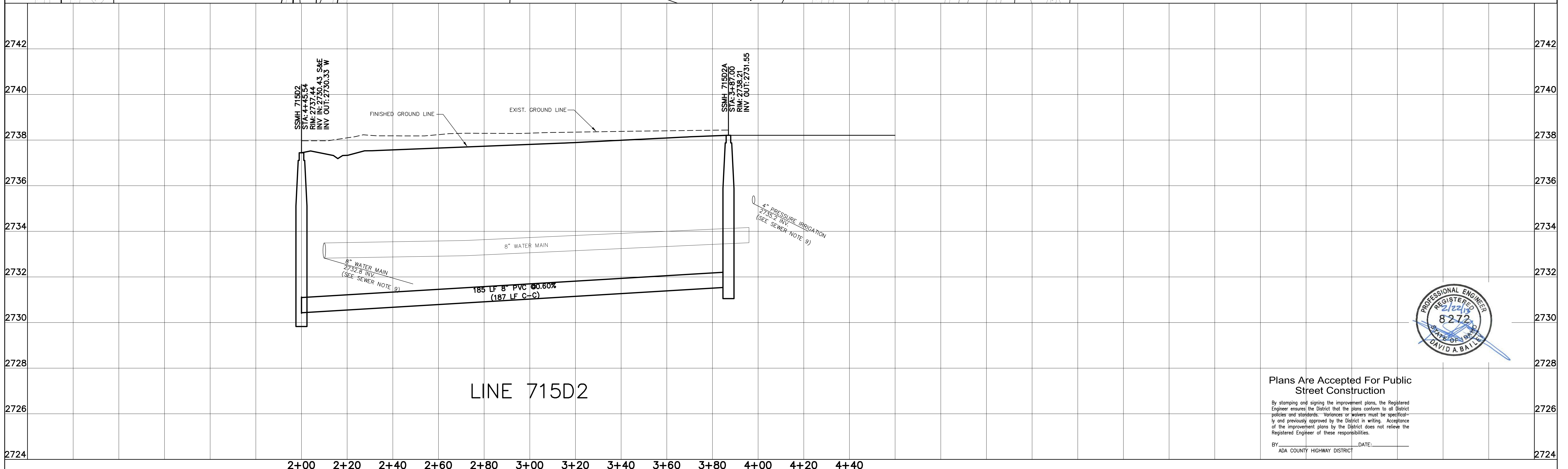
**NOTES:**

- ALL SEWER SERVICES ARE 4" PVC PIPE.
- FOR SANITARY SEWER SERVICES CLOSER THAN 10' BUT NOT LESS THAN 6' TO WATER SERVICE, USE WATER CLASS PIPE



NAVD 88  
FOR WATER SEE UNITED WATER PLANS

SCALE:  
HOR: 1" = 20'  
VER: 1" = 2'



Plans Are Accepted For Public Street Construction

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

BY \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

REVISED	
NO. BY:	DATE: DESCRIPTION:

**Bailey Engineering, Inc.**  
CIVIL ENGINEERING | PLANNING | CADD

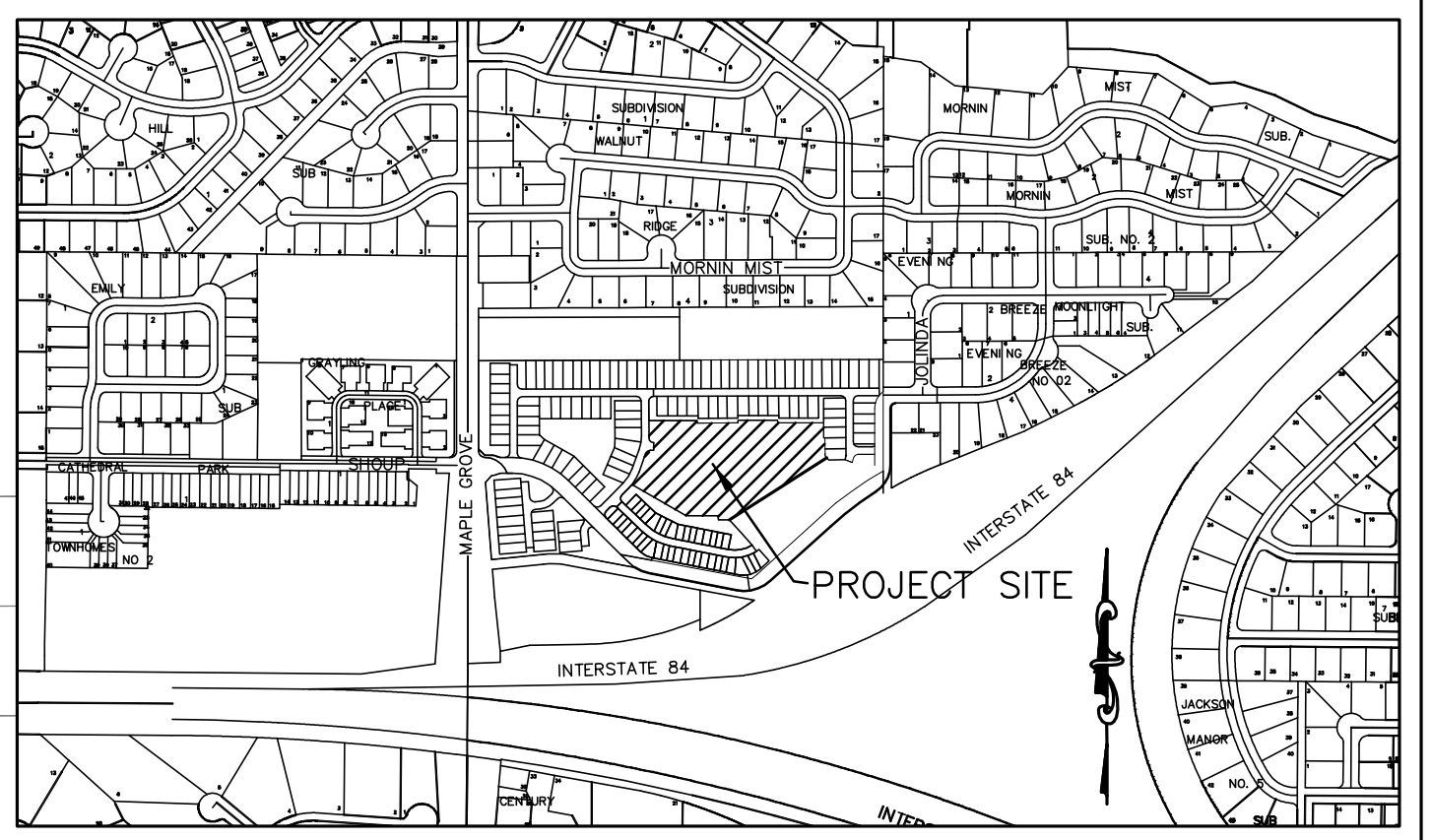
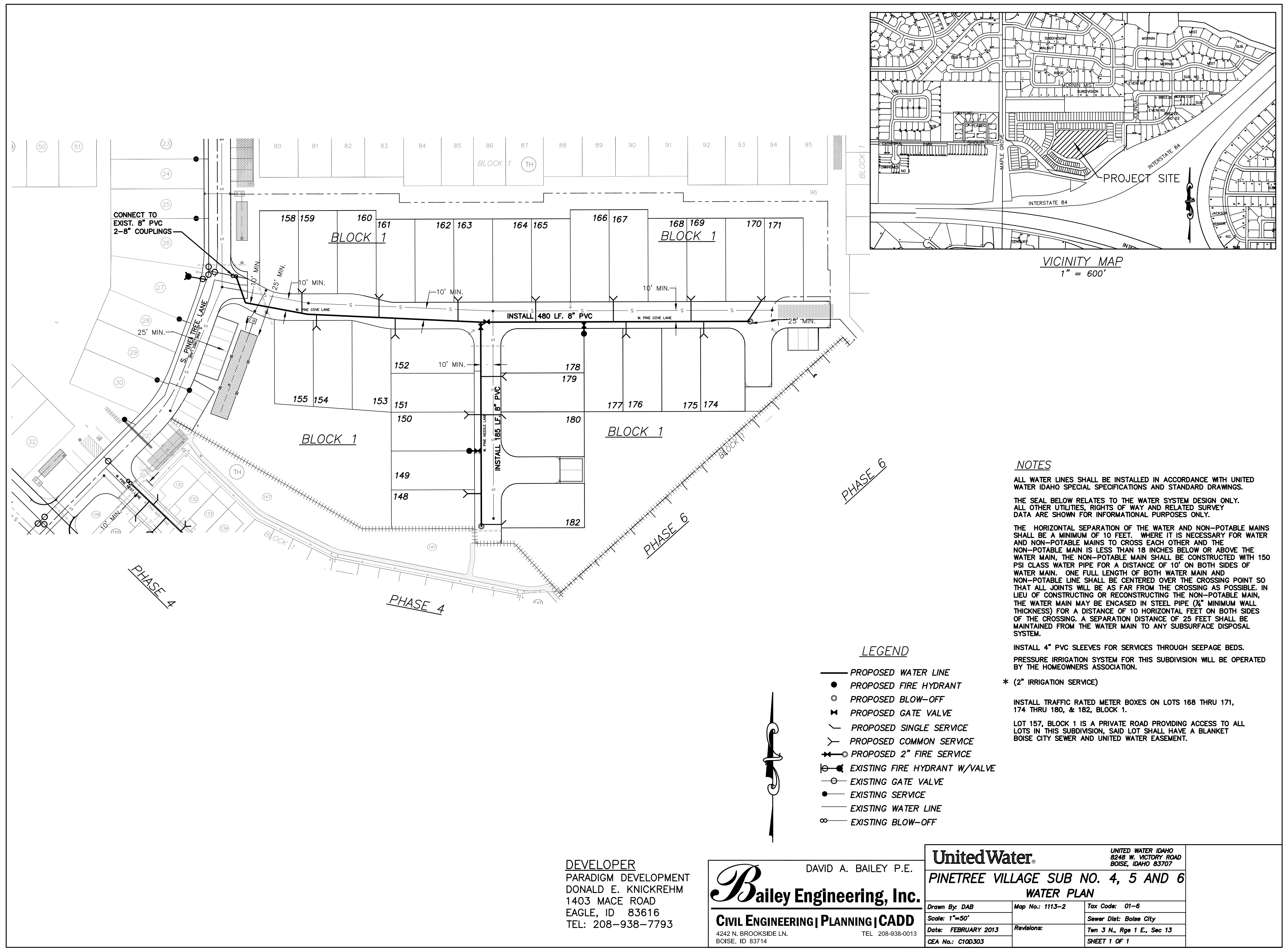
4242 N. BROOKSIDE LN, BOISE, ID 83714 (208) 938-0013

DRAWN BY: DAB | CHECKED BY: DAVID A. BAILEY P.E. | PROJECT NO. C27032 | DATE: 02-20-2013

**SEWER PLAN AND PROFILE**  
PINETREE VILLAGE SUBDIVISION NO. 5  
PARADIGM DEVELOPMENT

SHEET **8**





**NOTES**

ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH UNITED WATER IDAHO SPECIAL SPECIFICATIONS AND STANDARD DRAWINGS.

THE SEAL BELOW RELATES TO THE WATER SYSTEM DESIGN ONLY. ALL OTHER UTILITIES, RIGHTS OF WAY AND RELATED SURVEY DATA ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

THE HORIZONTAL SEPARATION OF THE WATER AND NON-POTABLE MAINS SHALL BE A MINIMUM OF 10 FEET. WHERE IT IS NECESSARY FOR WATER AND NON-POTABLE MAINS TO CROSS EACH OTHER AND THE NON-POTABLE MAIN IS LESS THAN 18 INCHES BELOW OR ABOVE THE WATER MAIN, THE NON-POTABLE MAIN SHALL BE CONSTRUCTED WITH 150 PSI CLASS WATER PIPE FOR A DISTANCE OF 10' ON BOTH SIDES OF WATER MAIN. ONE FULL LENGTH OF BOTH WATER MAIN AND NON-POTABLE LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. IN LIEU OF CONSTRUCTING OR RECONSTRUCTING THE NON-POTABLE MAIN, THE WATER MAIN MAY BE ENCASED IN STEEL PIPE (1/2" MINIMUM WALL THICKNESS) FOR A DISTANCE OF 10 HORIZONTAL FEET ON BOTH SIDES OF THE CROSSING. A SEPARATION DISTANCE OF 25 FEET SHALL BE MAINTAINED FROM THE WATER MAIN TO ANY SUBSURFACE DISPOSAL SYSTEM.

INSTALL 4" PVC SLEEVES FOR SERVICES THROUGH SEEPAGE BEDS. PRESSURE IRRIGATION SYSTEM FOR THIS SUBDIVISION WILL BE OPERATED BY THE HOMEOWNERS ASSOCIATION.

\* (2" IRRIGATION SERVICE)

INSTALL TRAFFIC RATED METER BOXES ON LOTS 168 THRU 171, 174 THRU 180, & 182, BLOCK 1.

LOT 157, BLOCK 1 IS A PRIVATE ROAD PROVIDING ACCESS TO ALL LOTS IN THIS SUBDIVISION. SAID LOT SHALL HAVE A BLANKET BOISE CITY SEWER AND UNITED WATER EASEMENT.

- LEGEND**
- PROPOSED WATER LINE
  - PROPOSED FIRE HYDRANT
  - PROPOSED BLOW-OFF
  - ⋈ PROPOSED GATE VALVE
  - PROPOSED SINGLE SERVICE
  - PROPOSED COMMON SERVICE
  - ⋈ PROPOSED 2" FIRE SERVICE
  - ⊗ EXISTING FIRE HYDRANT W/VALVE
  - EXISTING GATE VALVE
  - EXISTING SERVICE
  - EXISTING WATER LINE
  - EXISTING BLOW-OFF

DEVELOPER  
 PARADIGM DEVELOPMENT  
 DONALD E. KNICKREHM  
 1403 MACE ROAD  
 EAGLE, ID 83616  
 TEL: 208-938-7793

DAVID A. BAILEY P.E.  
**Bailey Engineering, Inc.**  
 CIVIL ENGINEERING | PLANNING | CADD  
 4242 N. BROOKSIDE LN. TEL: 208-938-0013  
 BOISE, ID 83714

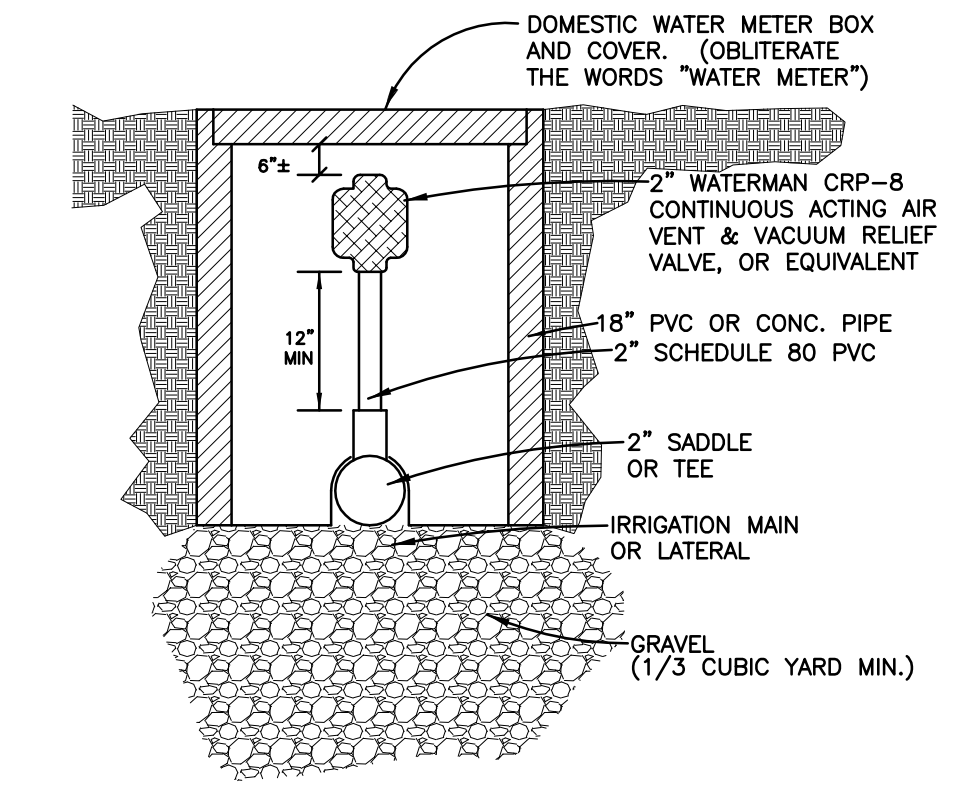
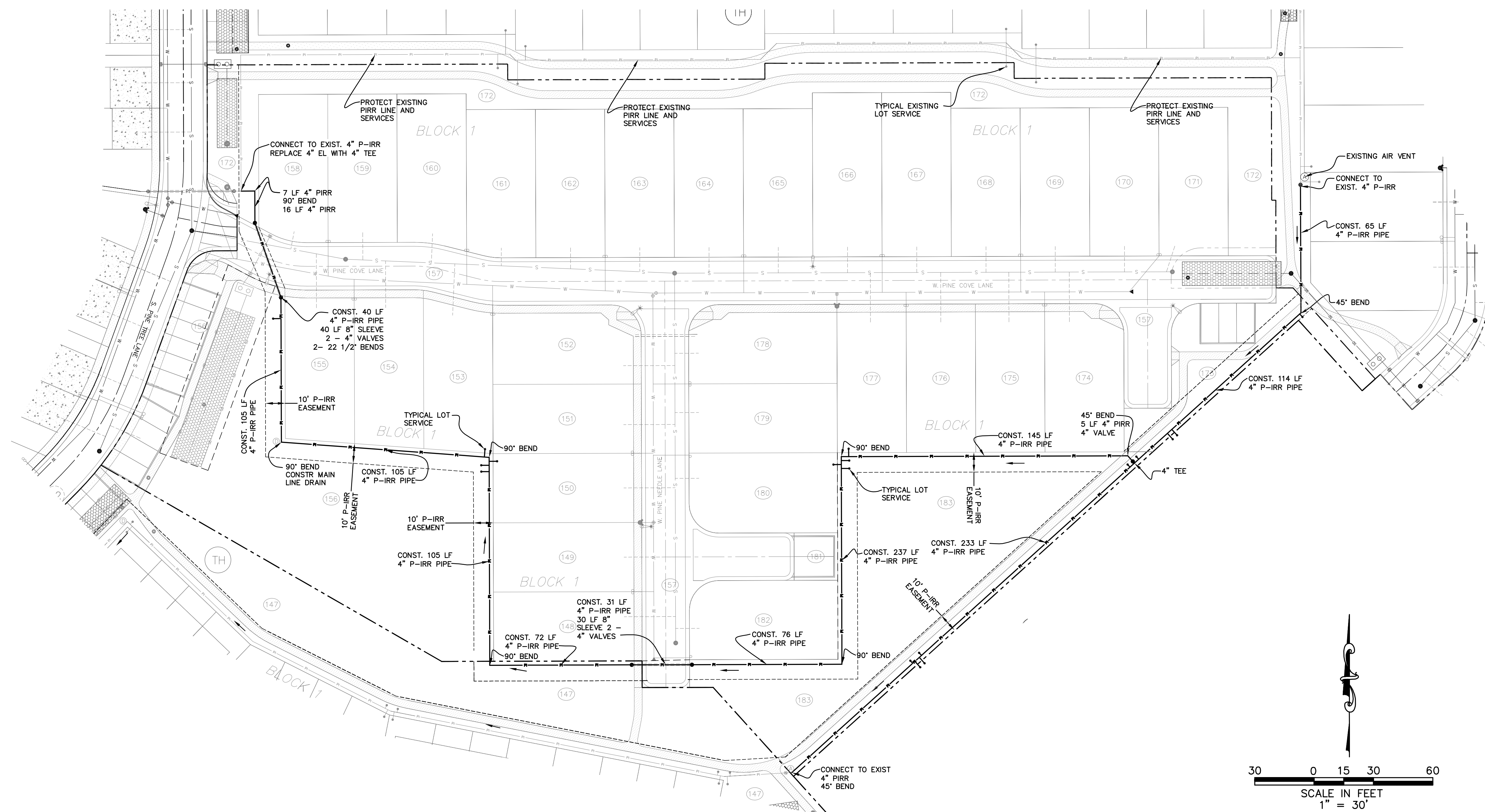
<b>United Water</b>		UNITED WATER IDAHO 8245 W. VICTORY ROAD BOISE, IDAHO 83727
<b>PINETREE VILLAGE SUB NO. 4, 5 AND 6</b>		
<b>WATER PLAN</b>		
Drawn By: DAB	Map No.: 1113-2	Tax Code: 01-6
Scale: 1"=50'		Sewer Dist: Boise City
Date: FEBRUARY 2013	Revisions:	Twn 3 N., Rge 1 E., Sec 13
CEA No.: C100303		SHEET 1 OF 1

Plans Are Accepted For Public Street Construction

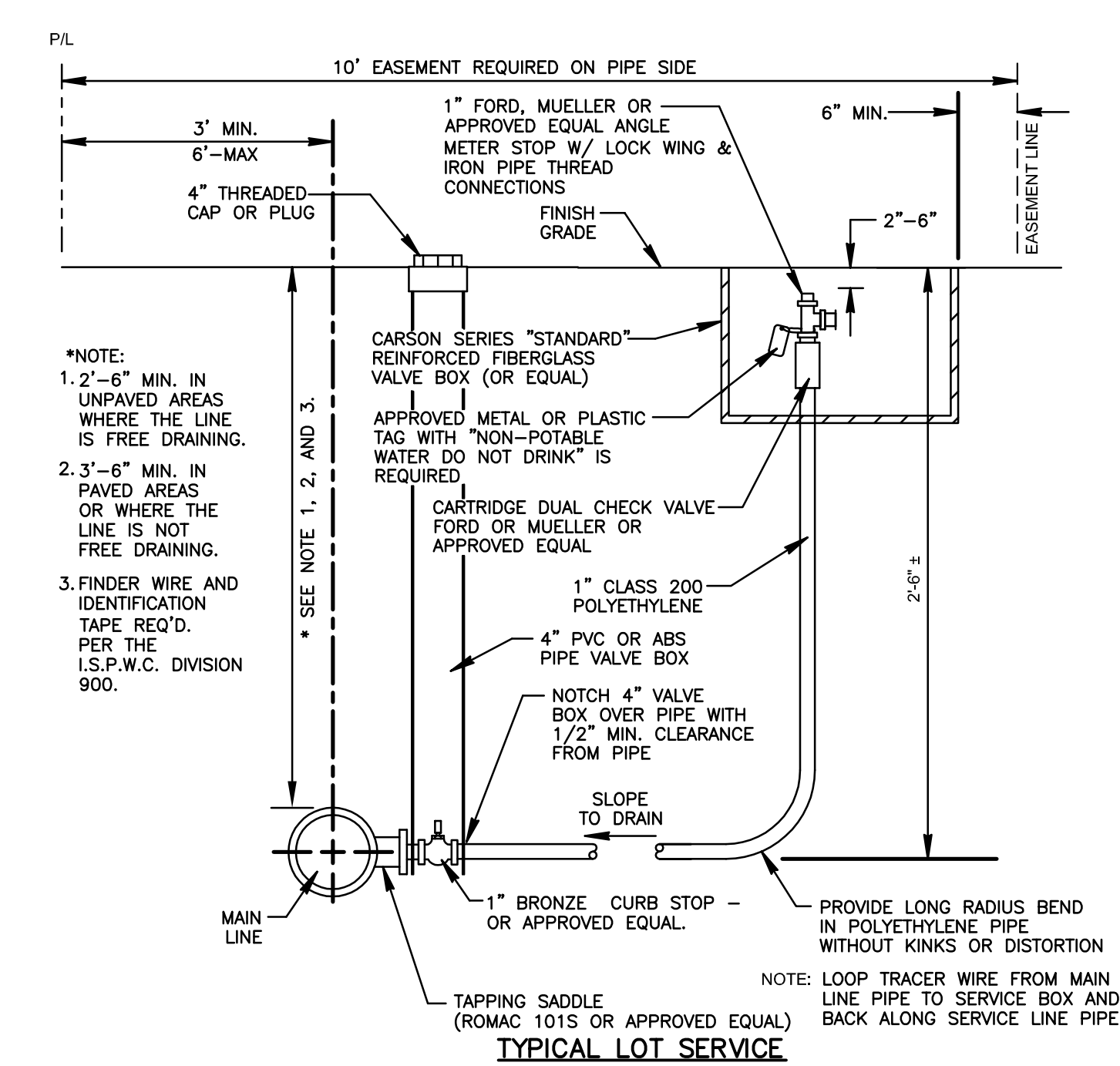
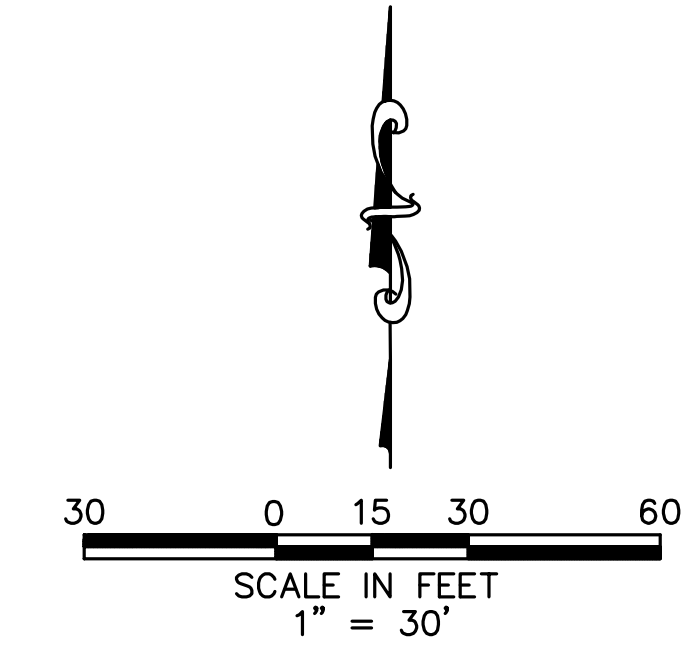
By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District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

BY \_\_\_\_\_ DATE: \_\_\_\_\_  
 ADA COUNTY HIGHWAY DISTRICT

REVISED NO. DATE DESCRIPTION	 <b>Civil Engineering   Planning   CADD</b> 4242 N. BROOKSIDE LANE TEL: 208-938-0013 BOISE, ID 83714 FAX: 208-938-0516
DRAWN BY: DAB	
CHECKED BY: DAVID A. BAILEY P.E.	
PROJECT NO. C27032	
<b>UNITED WATER IDAHO PLAN</b>	
<b>PINETREE VILLAGE SUBDIVISION NO. 4, 5 AND 6</b>	
<b>PARADIGM DEVELOPMENT</b>	
DATE: 02-20-2013	
SHEET <b>9</b>	

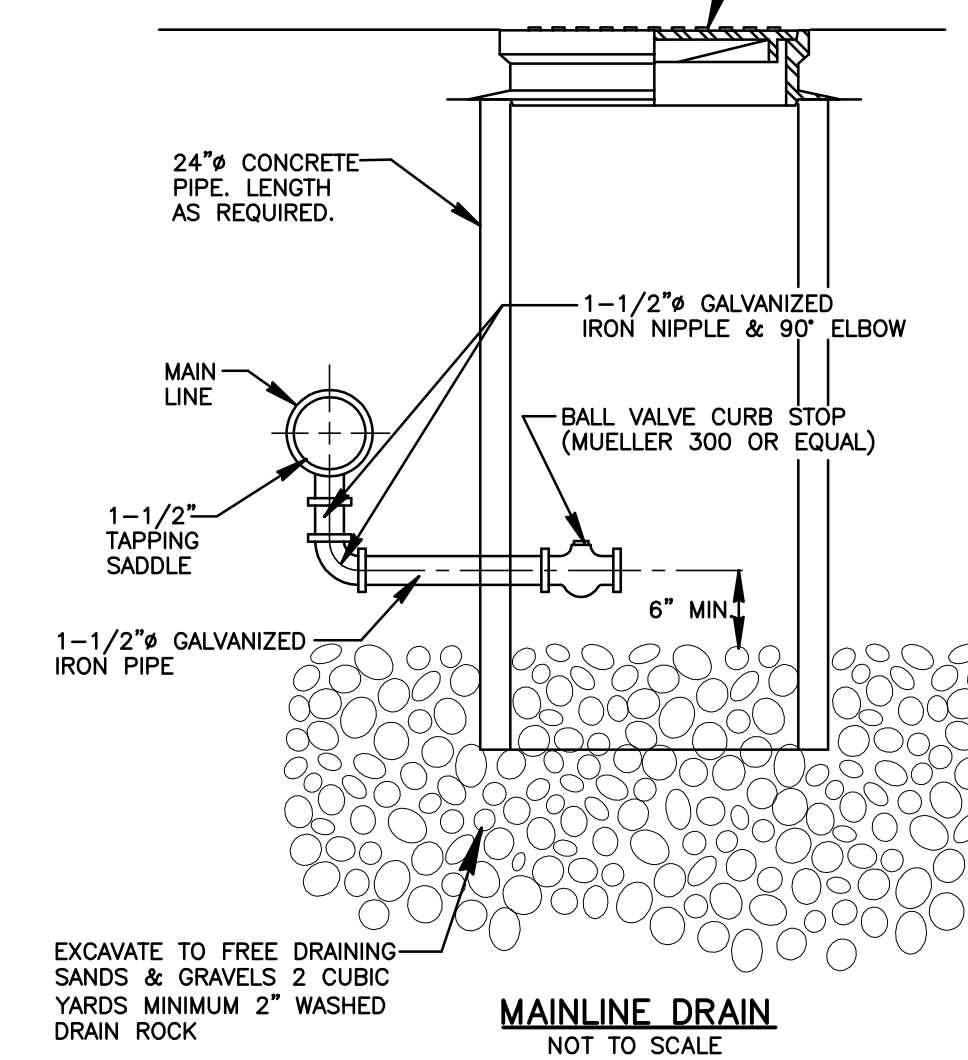


**AIR VENT STATION DETAIL**  
NOT TO SCALE



**TYPICAL LOT SERVICE**  
NOT TO SCALE

NOTE: INSTALL MAIN LINE DRAINS AS REQUIRED TO PROVIDE COMPLETE DRAINAGE DURING WINTER SHUT DOWN OF IRRIGATION SYSTEM.



**MAINLINE DRAIN**  
NOT TO SCALE



Plans Are Accepted For Public Street Construction

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

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
ADA COUNTY HIGHWAY DISTRICT

REVISED NO. DATE DESCRIPTION	<p><b>Bailey Engineering, Inc.</b> CIVIL ENGINEERING   PLANNING   CADD 4242 N. BROOKSIDE LANE BOISE, ID 83714 TEL 208-938-0013</p>
DRAWN BY: DAB	
CHECKED BY: DAVID A. BAILEY P.E.	
PROJECT NO. C27032 DATE: 02-20-2013	
<b>PRESSURE IRRIGATION PLAN</b>	
<b>PINETREE VILLAGE SUBDIVISION NO. 5</b>	
<b>PARADIGM DEVELOPMENT</b>	
SHEET <b>11</b>	