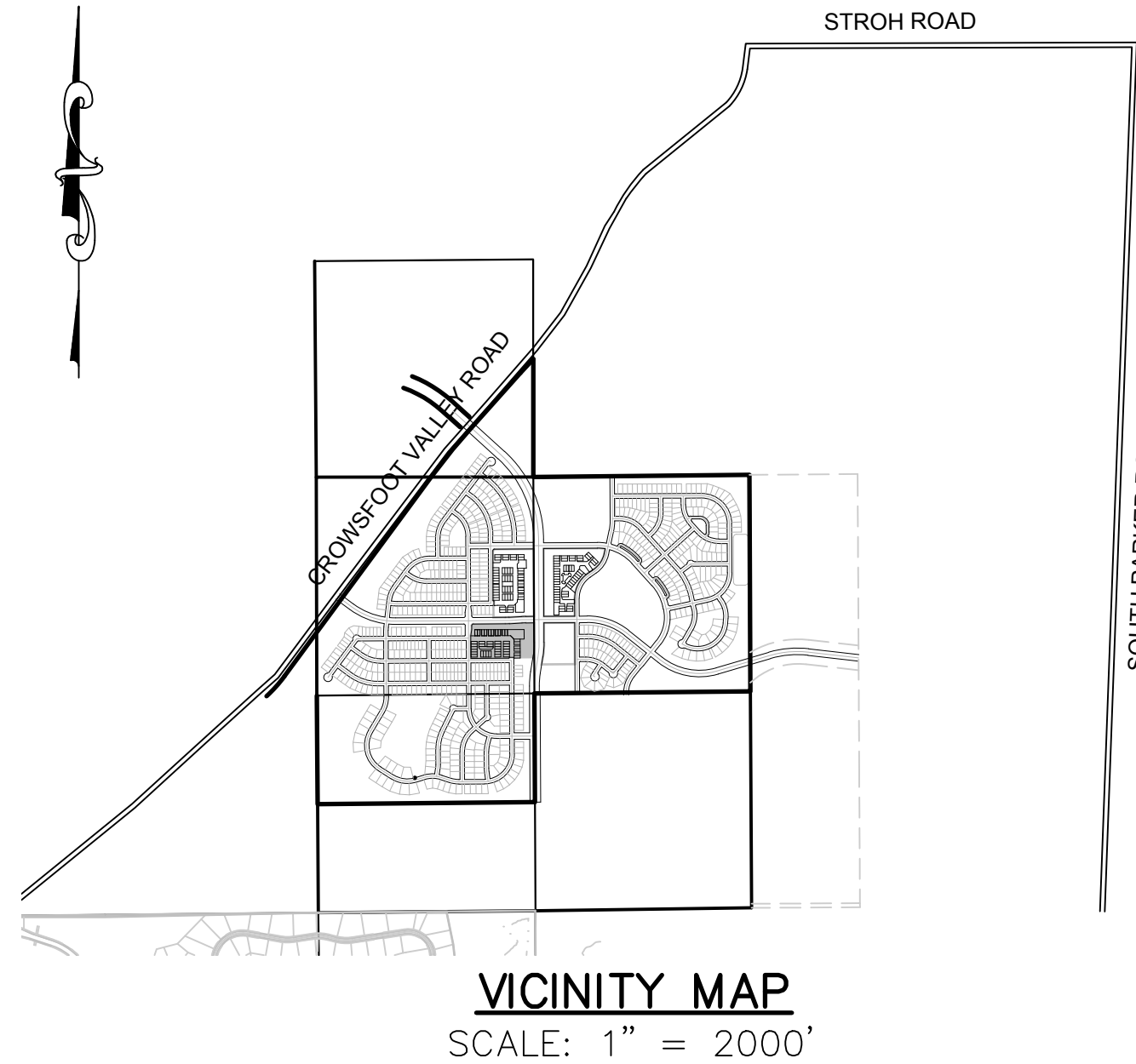


TRAILS AT CROWFOOT FILING 16

PARKER WATER AND SANITATION CONSTRUCTION PLANS

SECTIONS 4, 8, AND 9 TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN COUNTY OF DOUGLAS, STATE OF COLORADO

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	PARKER WATER AND SANITATION NOTES
3	AREA UTILITY PLAN
4	BIRDS FOOT TRAIL
5	FILING 16 SS NORTHWEST
6	FILING 16 SS NORTHEAST
7	FILING 16 SS EAST
8	BIRDS FOOT TRAIL
9	HOP CLOVER TRAIL
10	ALPINE LILY LANE
11	ALPINE LILY TRAIL
12	ALPINE LILY STREET
13	SANITARY SEWER DETAILS
14	SANITARY SEWER DETAILS
15	SANITARY SEWER DETAILS
16	WATER DETAILS
17	WATER DETAILS
18	WATER DETAILS
19	WATER DETAILS
20	WATER DETAILS
21	WATER DETAILS
22	WATER DETAILS



MATERIALS LIST		
DESCRIPTION	QUANTITY	UNIT
8" SEWER (SDR-35 PVC)	1,184	L.F.
4' DIA. MANHOLE	7	EA.
SEWER SERVICE LATERAL W/ WYE TAP	32	EA.
CONNECTION TO EXISTING MAIN	1	EA.
6" WATERPIPE (DIP)	55	L.F.
8" WATERPIPE (PVC)	1,422	L.F.
6" GATE VALVE W/ BOX	4	EA.
8" GATE VALVE	4	EA.
8" MISC FITTINGS	12	EA.
FIRE HYDRANT WITH 6" LEAD	4	EA.
IRRIGATION SERVICE WITH METER (2")	1	EA.
DOMESTIC WATER SERVICE WITH METER	42	EA.
CONNECTION TO EXISTING MAIN	4	EA.

FIRE DEPARTMENT APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) _____ DATE _____
(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULE INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____
(DISTRICT REPRESENTATIVE)

DATE SIGNED: _____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____
(DISTRICT ENGINEER)

DATE SIGNED: _____

DEVELOPER

HR 935 LLC
7353 SOUTH ALTON WAY
CENTENNIAL, CO 80112
TEL: (303) 770-9111
CONTACT: MATT JANKE

PLANNER/ LANDSCAPE DESIGNER:

PCS GROUP, INC.
200 KALAMATH STREET
DENVER, CO 80233
TEL: (303) 531-4905
CONTACT: JOHN PRESTWICH

SURVEYOR/ ENGINEER:

CVL CONSULTANTS
OF COLORADO, INC.
10333 E. DRY CREEK RD. STE 240
ENGLEWOOD, CO 80112
TEL: (720) 482-9526
CONTACT: JIM JANNICKE

UTILITY DISTRICT

PARKER WATER AND
SANITATION DISTRICT
18100 E. WOODMAN DRIVE
PARKER, CO 80134
TEL: (303) 841-4627

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.


BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

N:\PROJECTS\SS RANCH\ENGINEERING\SS SETS\MULTIFAMILY\CDS\F16\PARKER WATER AND SANITATION\COVER.DWG, BRIANW, 12/20/18 3:30 PM

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC 1-800-922-1987
UTILITY NOTIFICATION
CENTER OF COLORADO

DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701
			TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS COVER SHEET	
SHEET NUMBER 1			HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112 	
10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546			Revisions No. _____ Date _____ Init. _____ Appr. _____ Date _____	

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH PARKER WATER AND SANITATION DISTRICT SPECIFICATIONS.
2. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, HE SHALL CONTACT THE ENGINEER IMMEDIATELY.
4. THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS THAT ARE NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
7. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF ROLLED "AS-BUILT" BLUELINE PRINTS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL PRIOR TO PRINTING MYLAR SEPIAS FOR THE DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE MYLAR SEPIA PRINTS SHALL BE TRANSMITTED TO THE PARKER WATER AND SANITATION DISTRICT OFFICE.
8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
11. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
12. NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER.
13. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SERVICE SEWERS "V" FOR WATER SERVICES
14. NO TREES SHALL BE ALLOWED IN EASEMENTS OR WITHIN 8' OF ANY WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
15. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.

WATER MAIN NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PARKER WATER AND SANITATION DISTRICT ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISIONS. ALL WORK SHALL BE INSPECTED AND APPROVED BY PERSONNEL OF THE PARKER WATER SANITATION DISTRICT AND THE DISTRICT ENGINEER.
2. ALL WATER MAINS SHALL BE PER PWS MATERIALS SPECIFICATIONS.
3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED WITH 8-MIL MINIMUM THICKNESS POLYETHYLENE MATERIAL PER PWS MATERIALS SPECIFICATIONS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPE, FITTINGS, VALVES, MATERIALS, AND LABOR WHICH ARE NECESSARY TO INSTALL THE HYDRANT COMPLETE IN PLACE. SEE MATERIALS SPECIFICATIONS FOR APPROVED MODELS.
6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS AND PLUGS AT DEAD END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS.
7. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS. THE MORE CLOSELY THE RATE OF DELIVERY IS CORRELATED TO THE RATE OF PIPE LAYING, THE LOWER THE RISK OF CONTAMINATION.
8. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PARKER WATER AND SANITATION STANDARDS AND SPECIFICATIONS. THE LINES SHALL BE CHLORINATED IN ACCORDANCE WITH ANSI/AWWA C-651-92., "DISINFECTING WATER MAINS." PARKER WATER AND SANITATION DISTRICT REQUIRES THE INITIAL DOSAGE RATE OF DISINFECTION BE AT LEAST 50 MG PER LITER. CHLORINE TABLETS SHOULD BE ADHERED TO THE TOP OF THE PIPE SECTION WITH PERMATEX NO.1 (RED). THE CHLORINATION OF ANY FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING.
9. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS. ALL PIPE SHALL BE FIELD PRESSURE TESTED TO A MINIMUM OF 150 PSI. ALL TESTING SHALL BE DONE IN THE PRESENCE OF A PARKER WATER AND SANITATION DISTRICT INSPECTOR. LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINES VALVES SHALL NOT EXCEED THE LIMITS SET FORTH IN THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS.
10. VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES WHERE AN ADDITIONAL VALVES SHALL BE PLACED ON THE TAPPING TEE. OTHER VALVE LOCATIONS, SUCH AS WHERE CROSS PANS EXIST, ARE SHOWN ON THE PLANS.
11. WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.50 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
12. THE CONTRACTOR SHALL NOTIFY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48 HOURS PRIOR TO RE-START.
13. PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
14. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
15. COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
16. VALVE BOXES: TYLER SCREW-TYPE 6 INCHES CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE. CLAY AND BAILEY SCREW-TYPE 6 INCH CAST IRON VALVE BOX ASSEMBLY NO. P-108 WITH NO. 106 LARGE OVAL BASE.
17. ALL PIPE LENGTHS ARE APPROXIMATE.
18. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVE OF OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE PARKER WATER AND SANITATION DISTRICT SPECIFICATION.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PARKER WATER AND SANITATION DISTRICT STANDARD AND SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.
5. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.
6. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
7. SEWER SERVICE TEES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.
8. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
10. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.
11. ALL PIPE LENGTHS ARE APPROXIMATE.
12. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.
13. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
14. ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
15. PRIOR TO START WORK WHERE SEWER MAIN TO BE INSTALLED INTO EXISTING DISTRICT SEWER SYSTEMS. THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL ACCEPTANCE BY THE DISTRICT. ITS PURPOSE SHALL BE TO PREVENT ANY MUD, WATER OR OTHER MATERIALS FROM ENTERING THE LINE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN SO INSTRUCTED BY THE DISTRICT.
16. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CLIENT SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

DISTRICT ACCEPTANCE NOTES:

1. UPON COMPLETION OF SANITARY SEWER AND WATER CONSTRUCTION AND TESTING, THE DEVELOPER OR CONTRACTOR SHALL CONTACT THE DISTRICT FOR PROBATIONARY ACCEPTANCE INSPECTION. A PUNCHLIST WILL BE PROVIDED THE DEVELOPER AND CONTRACTOR UPON COMPLETION OF THE INITIAL WALK-THRU AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
2. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
3. THE DATE OF FINAL ACCEPTANCE WILL BE INDICATED IN THE CONDITIONS OF THE PROBATIONARY ACCEPTANCE LETTER. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT FOR FINAL INSPECTION AND FINAL ACCEPTANCE.

N:\PROJECTS\SSHS RANCH\ENGINEERING\SSHS SETS\MULTIFAMILY\CDS\FR\PARKER WATER AND SANITATION\COVER.DWG, BRIAN.W. 12/25/2018 3:30 PM



CALL 811
 TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PREPARED UNDER THE
 SUPERVISION OF

 BRIAN P. WILSON
 COLORADO P.E. 0050067

2	DRAWN BY: KID	CHECKED BY: BFW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS PARKER WATER AND SANITATION NOTES	HR 95 LLC <small>7353 South Alton Way CENTENNIAL, CO 80112</small>
							
				<small>10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546</small>			
No.	Date	Init	Appr.	Date			

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULED INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ DATE _____
(DISTRICT REPRESENTATIVE)

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ DATE _____
(DISTRICT ENGINEER)

LEGEND

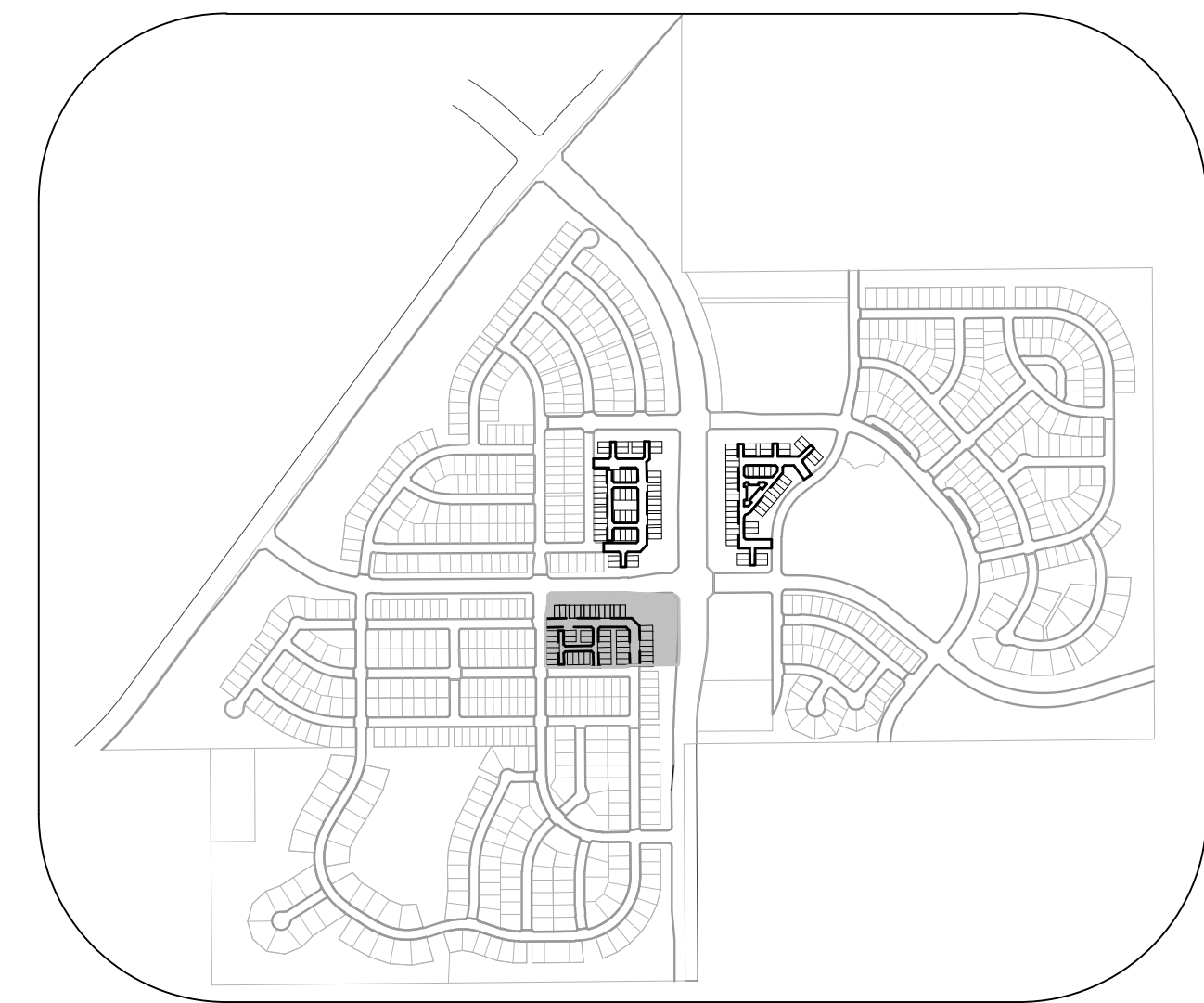
②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
⊕	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
⊕	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
⊕	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR
⊕	PROPOSED FLARED END SECTION	---	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	---	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	---	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
---	PROPOSED SIDEWALK	---	PROPOSED WATER LATERAL W/ METER
---	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
ELL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

SERVICE TABLE				
FILING, BLOCK, LOT	SANITARY STREET	SANITARY STATIONING	WATER STREET	WATER STATIONING
F16,B1,L1	BIRDS FOOT TRL	30+47.85	BIRDS FOOT TRL	30+57.85
F16,B1,L2	BIRDS FOOT TRL	30+82.08	BIRDS FOOT TRL	30+72.08
F16,B1,L3	BIRDS FOOT TRL	31+31.85	BIRDS FOOT TRL	31+41.85
F16,B1,L4	BIRDS FOOT TRL	31+73.58	BIRDS FOOT TRL	31+51.85
F16,B1,L5	BIRDS FOOT TRL	32+15.11	BIRDS FOOT TRL	32+25.85
F16,B1,L6	BIRDS FOOT TRL	32+45.61	BIRDS FOOT TRL	32+35.85
F16,B1,L7	BIRDS FOOT TRL	32+99.09	BIRDS FOOT TRL	33+09.86
F16,B1,L8	BIRDS FOOT TRL	33+29.58	BIRDS FOOT TRL	33+19.85
F16,B1,L9	BIRDS FOOT TRL	33+84.20	BIRDS FOOT TRL	33+93.85
F16,B1,L10	BIRDS FOOT TRL	34+14.84	BIRDS FOOT TRL	34+03.85
F16,B1,L11	FILING 16 SS EAST	10+36.57	HOP CLOVER TRL	10+68.31
F16,B1,L12	FILING 16 SS EAST	10+56.57	HOP CLOVER TRL	10+78.31
F16,B1,L13	FILING 16 SS EAST	11+20.57	HOP CLOVER TRL	11+52.31
F16,B1,L14	FILING 16 SS EAST	11+40.57	HOP CLOVER TRL	11+62.31
F16,B1,L15	FILING 16 SS EAST	12+04.57	HOP CLOVER TRL	12+36.31
F16,B1,L16	FILING 16 SS EAST	12+24.57	HOP CLOVER TRL	12+46.31
F16,B2,L1	SHASTA DAISY ST	27+03.94	ALPINE LILY LN	10+27.00
F16,B2,L2	SHASTA DAISY ST	27+23.94	ALPINE LILY LN	10+37.00
F16,B2,L3	SHASTA DAISY ST	27+67.94	ALPINE LILY LN	10+91.00
F16,B2,L4	SHASTA DAISY ST	27+87.94	ALPINE LILY LN	11+01.00
F16,B2,L5	SHASTA DAISY ST	28+31.94	ALPINE LILY LN	11+55.36
F16,B2,L6	SHASTA DAISY ST	28+51.94	ALPINE LILY LN	11+65.35

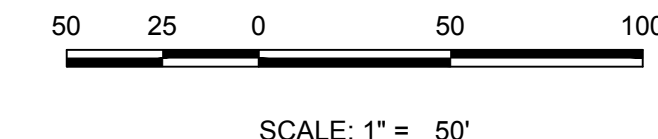
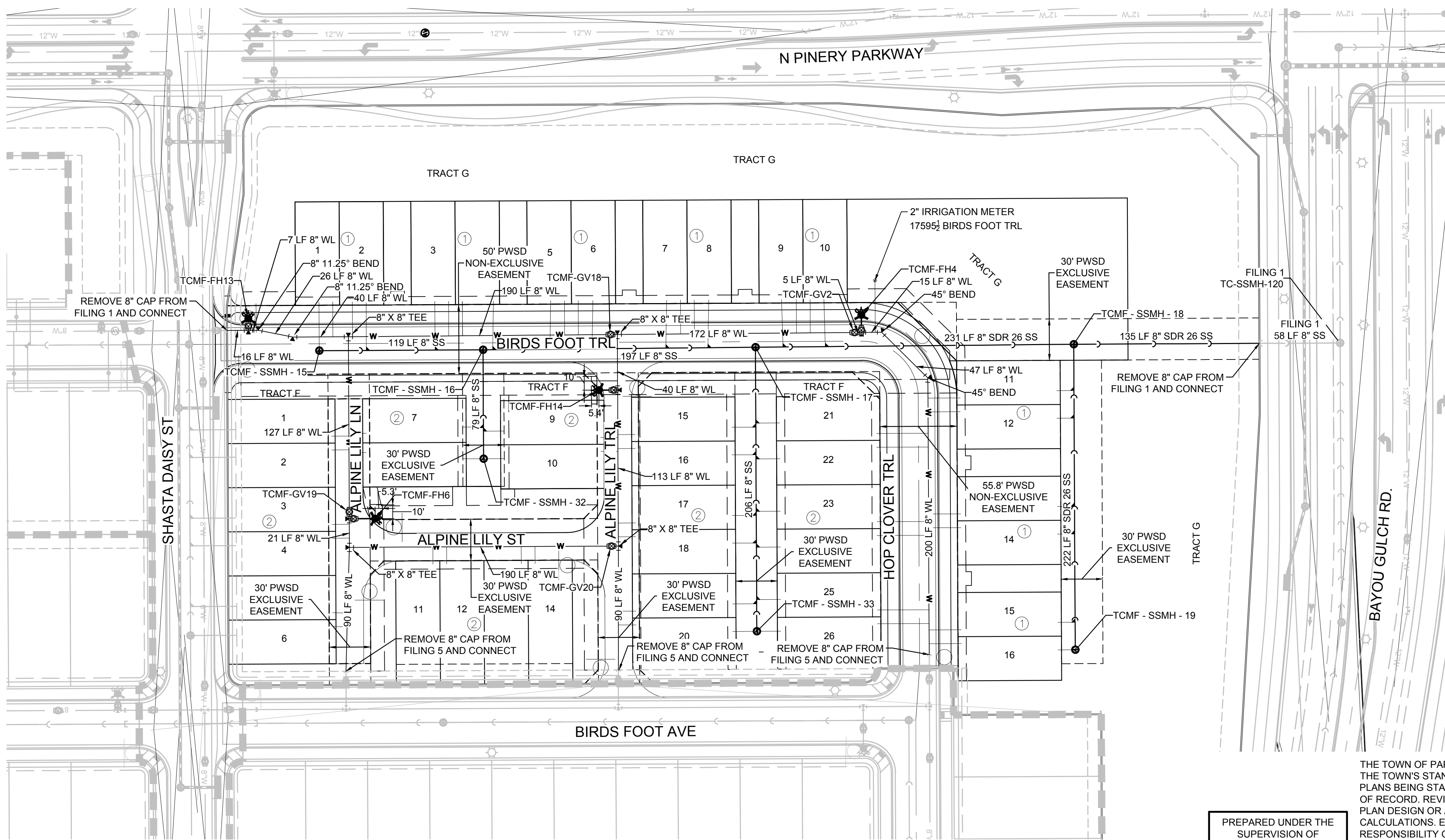
SERVICE TABLE				
FILING, BLOCK, LOT	SANITARY STREET	SANITARY STATIONING	WATER STREET	WATER STATIONING
F16,B2,L7	FILING 16 SS WEST	10+60.92	ALPINE LILY LN	10+25.00
F16,B2,L8	FILING 16 SS WEST	10+83.92	ALPINE LILY LN	10+39.00
F16,B2,L9	FILING 16 SS WEST	10+63.92	ALPINE LILY TRL	10+68.92
F16,B2,L10	FILING 16 SS WEST	10+83.92	ALPINE LILY TRL	10+79.00
F16,B2,L11	BIRDS FOOT AVE	26+63.71	ALPINE LILY ST	10+60.48
F16,B2,L12	BIRDS FOOT AVE	26+83.71	ALPINE LILY ST	10+70.48
F16,B2,L13	BIRDS FOOT AVE	27+27.71	ALPINE LILY ST	11+24.48
F16,B2,L14	BIRDS FOOT AVE	27+47.71	ALPINE LILY ST	11+34.48
F16,B2,L15	FILING 16 SS MIDDLE	10+62.00	ALPINE LILY TRL	10+66.92
F16,B2,L16	FILING 16 SS MIDDLE	10+82.00	ALPINE LILY TRL	10+77.00
F16,B2,L17	FILING 16 SS MIDDLE	11+26.00	ALPINE LILY TRL	11+31.00
F16,B2,L18	FILING 16 SS MIDDLE	11+46.00	ALPINE LILY TRL	11+41.00
F16,B2,L19	FILING 16 SS MIDDLE	11+90.00	ALPINE LILY TRL	11+94.94
F16,B2,L20	FILING 16 SS MIDDLE	12+10.00	ALPINE LILY TRL	12+04.94
F16,B2,L21	FILING 16 SS MIDDLE	10+59.00	HOP CLOVER TRL	10+93.74
F16,B2,L22	FILING 16 SS MIDDLE	10+85.00	HOP CLOVER TRL	11+03.74
F16,B2,L23	FILING 16 SS MIDDLE	11+23.00	HOP CLOVER TRL	11+57.74
F16,B2,L24	FILING 16 SS MIDDLE	11+49.00	HOP CLOVER TRL	11+67.74
F16,B2,L25	FILING 16 SS MIDDLE	11+87.00	HOP CLOVER TRL	12+21.74
F16,B2,L26	FILING 16 SS MIDDLE	12+10.00	HOP CLOVER TRL	12+31.74



KEYMAP
N.T.S.

NOTES:

- SANITARY SERVICES FOR BLOCK 7, LOTS 1-6 & 21-28 WILL BE INSTALLED WITH TRAILS AT CROWFOOT FILING 1.
- THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.
- SANITARY SEWER PIPE INSTALLED DEEPER THAN 20' SHALL BE SDR 26 PVC.



PREPARED UNDER THE SUPERVISION OF
BRIAN P. WILSON
COLORADO P.E. 005067

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES. SUBJECT TO THESE PLANS BEING STAMPED, SIGN, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

FIRE DEPARTMENT APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) _____ DATE _____
(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

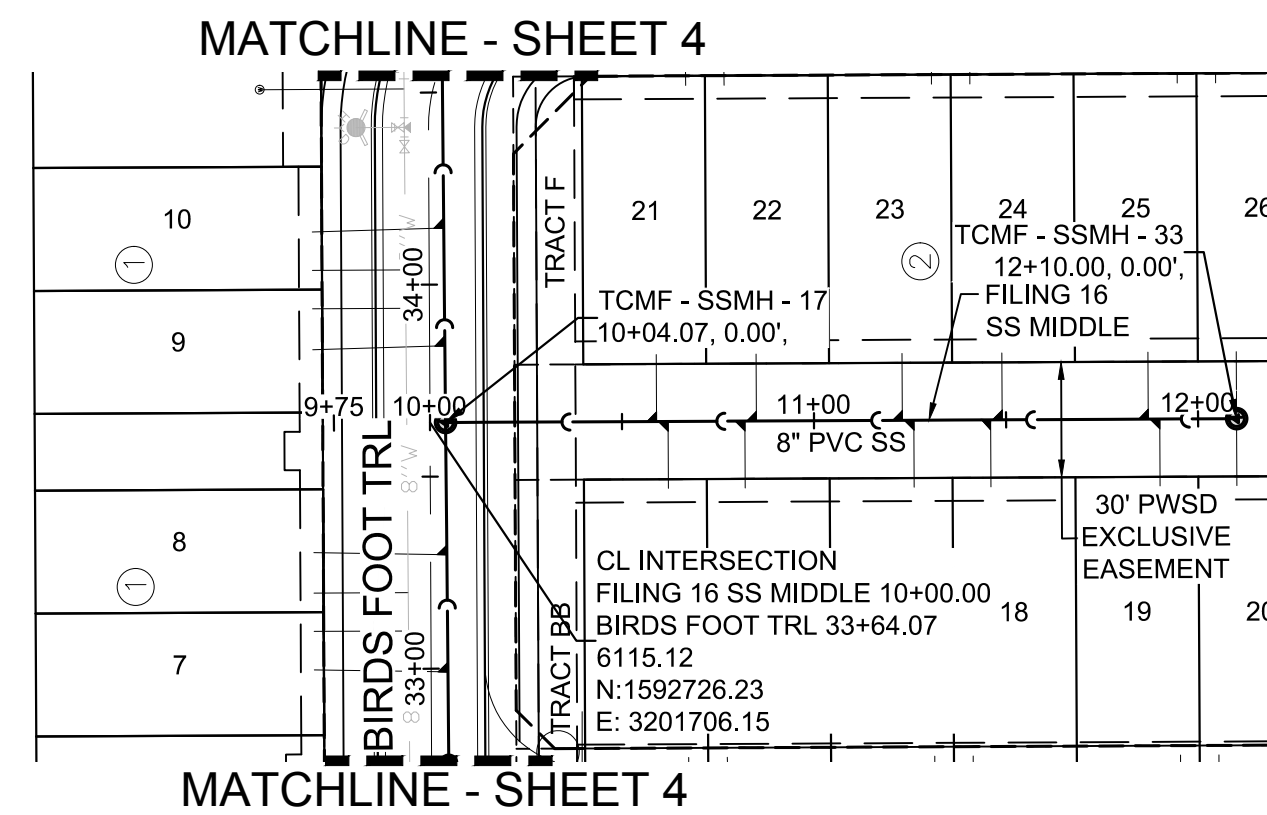
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PROJECT SHEET: BRANCH/ENGINEERING SHEET SETS/MULTIFAMILY/CS/IF/HP/PARKER WATER AND SANITATION/AREA/UTILITY PLAN/DWG. BR/ANW. 12/11/2018 9:56 AM

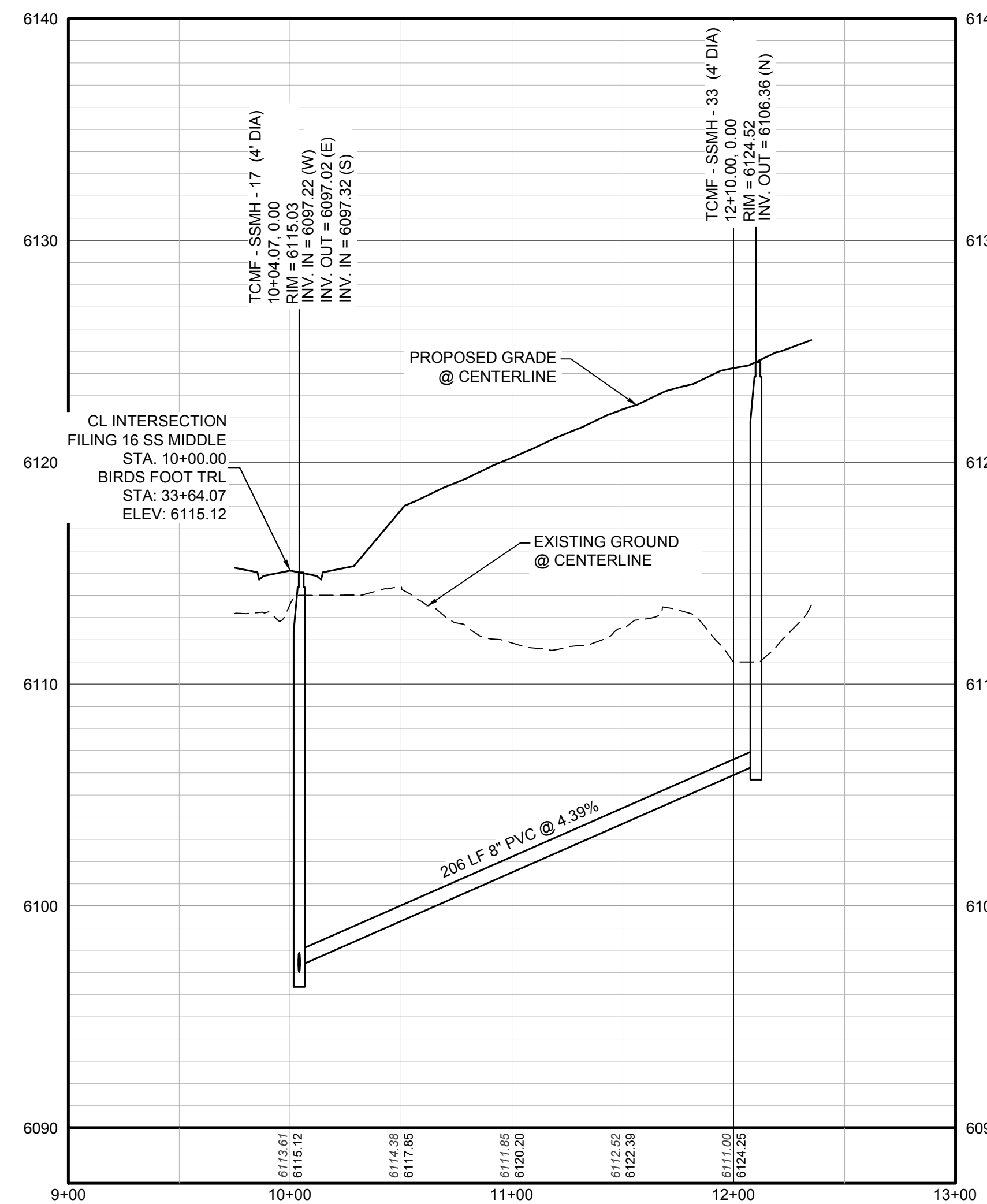
CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

No.	Revisions	Date	Appr.	Date
TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS AREA UTILITY PLAN				
SCALE:	AS SHOWN	FILE NO:	8130283701	
DRAWN BY:	BPW	CHECKED BY:	BPW	DATE: JUNE 2018
SHEET NUMBER	3			
TOWN OF PARKER, DIRECTOR OF ENGINEERING _____ DATE _____				

N:\PROJECTS\SS RANCH\ENGINEERING\SS RANCH SANITARY SEWER SHEET SET\16 SS NORTH EAST DWS, DANIEL D., 12/05/2018, 3:34 PM



PLAN: FILING 16 SS MIDDLE STA: 9+00.00 TO 13+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: FILING 16 SS MIDDLE STA: 9+00.00 TO 13+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

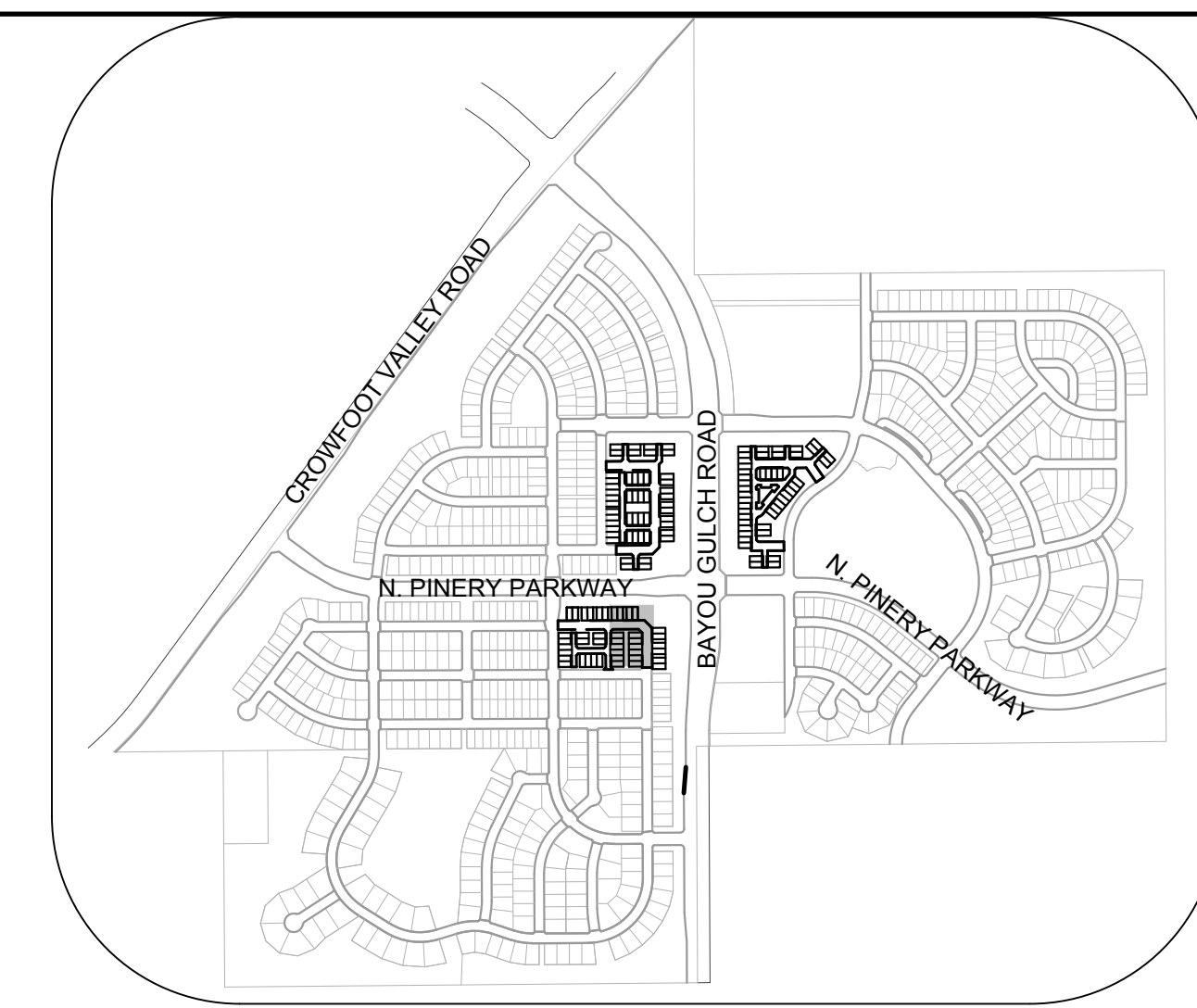
CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067



KEYMAP
N.T.S.

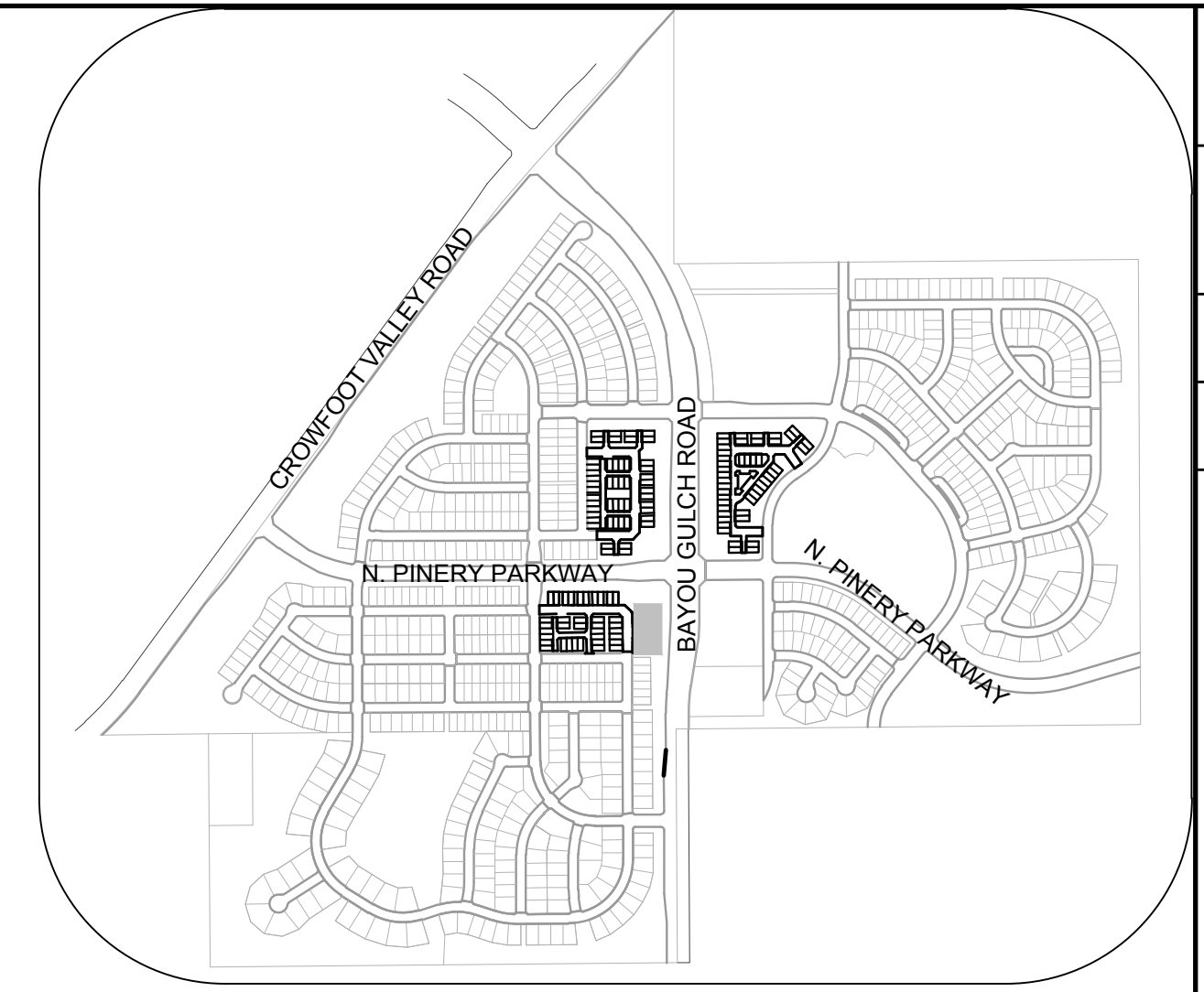
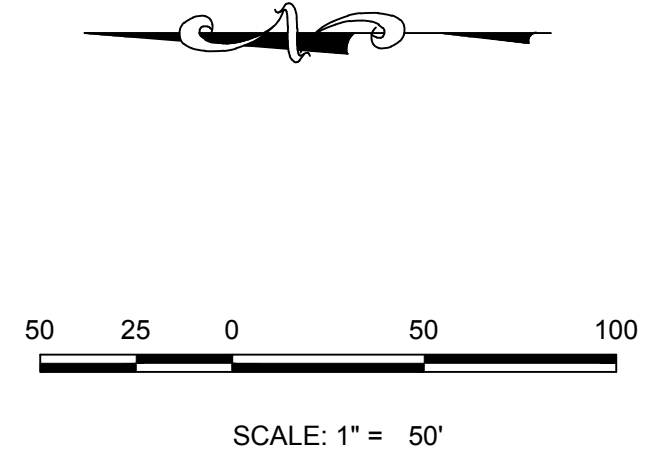
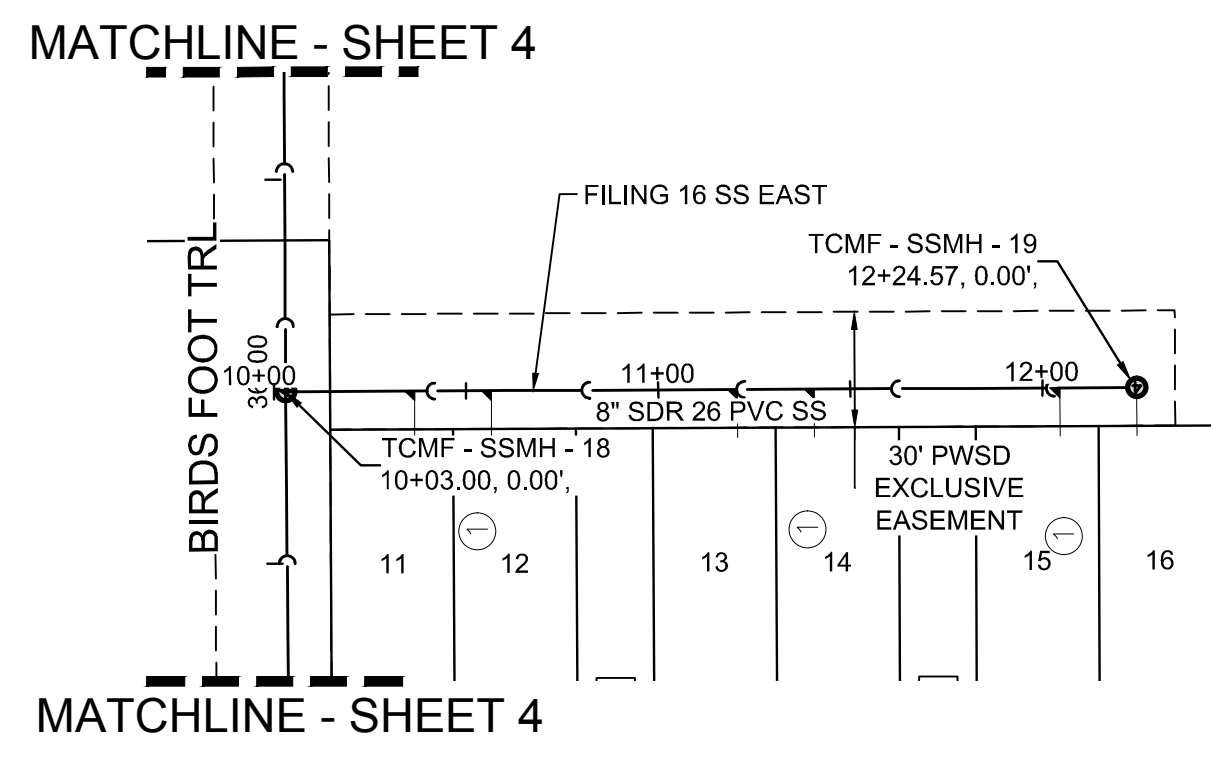
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
Ⓜ	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
Ⓜ	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
Ⓜ	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
Ⓜ	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
Ⓜ	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
Ⓜ	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR
Ⓜ	PROPOSED FLARED END SECTION	---	PROPOSED 5' CONTOUR
Ⓜ	PROPOSED LOW POINT BLOW-OFF	---	PROPOSED 1' CONTOUR
Ⓜ	PROPOSED AIR VALVE	---	PROPOSED STORM DRAIN
Ⓜ	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
Ⓜ	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
Ⓜ	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
Ⓜ	PROPOSED SIDEWALK	---	PROPOSED WATER LATERAL W/ METER
Ⓜ	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
Ⓜ	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
Ⓜ	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

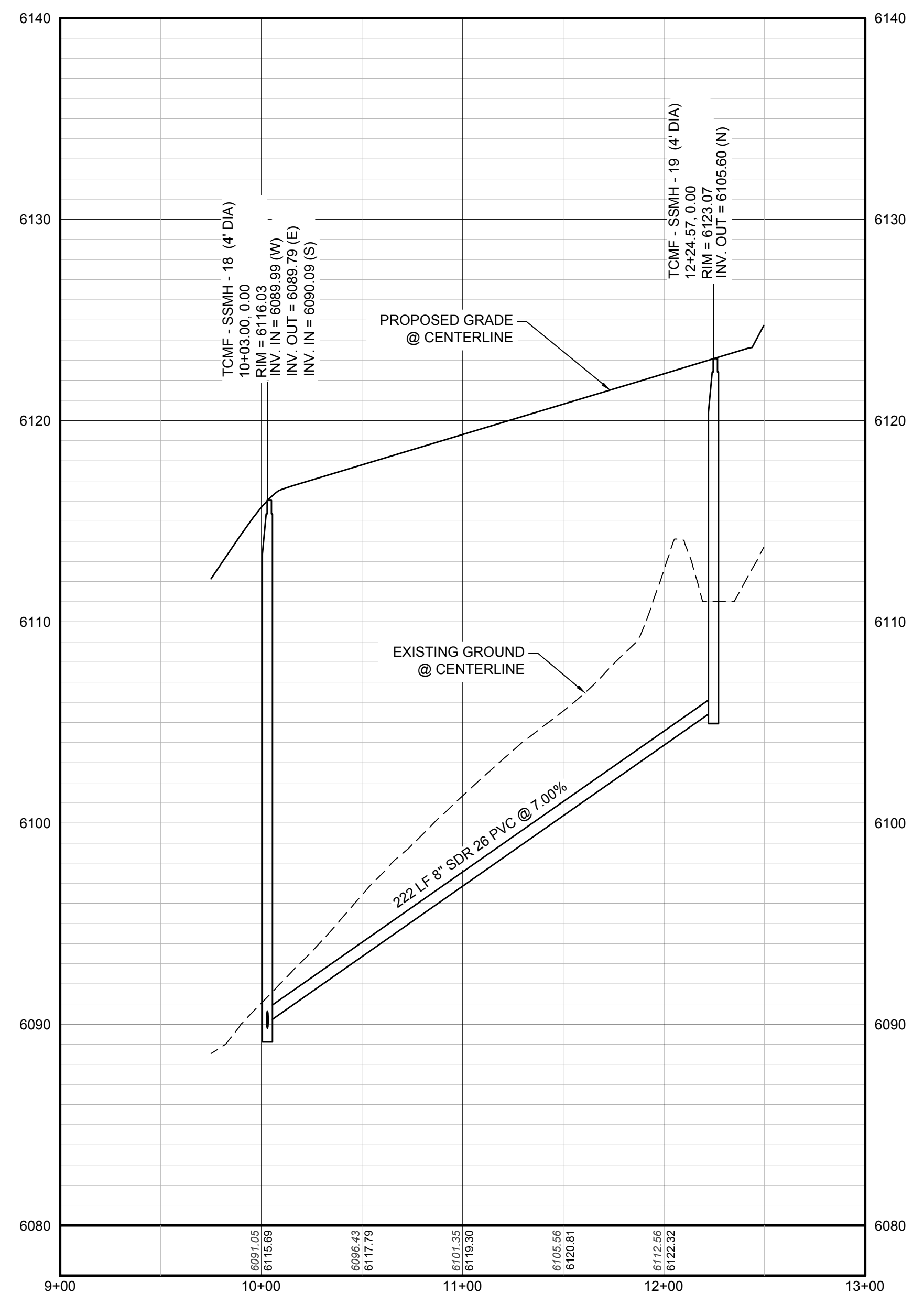
AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	ROBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	ROP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701
			TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE FILING 16 SS NORTHEAST	
SHEET NUMBER 6	Revisions		10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	
	No.		CVL CONSULTANTS 7353 South Alton Way CENTENNIAL, CO 80112	
Date		Date		Date
Init		Init		Appr.



KEYMAP
N.T.S.

PLAN: FILING 16 SS EAST STA: 9+00.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: FILING 16 SS EAST STA: 9+00.00 TO 13+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT	
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⊕	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW	
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION	
⊕	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR	
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR	
⊕	PROPOSED FLARED END SECTION	---	5620	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	---	5607	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	---	---	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	---	---	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	---	---	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	---	---	PROPOSED WATER LINE
---	PROPOSED SIDEWALK	---	---	PROPOSED WATER LATERAL W/ METER
---	PROPOSED SIDEWALK RAMP	---	---	SECTION LINE
10.00	EXISTING ELEVATION	---	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	---	EXISTING FIBER
⊕	PROPOSED STORM DRAIN INLET	---	---	OPTIC LINE
⊕	PROPOSED STORM DRAIN MANHOLE	---	---	EXISTING OVERHEAD POWER
		---	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	ROP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546
CVL CONSULTANTS	CVL CONSULTANTS
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112
TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE 7 - FILING 16 SS EAST	TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE 7 - FILING 16 SS EAST
DRAWN BY: RRR	DRAWN BY: RRR
CHECKED BY: BPW	CHECKED BY: BPW
DATE: JUNE 2018	DATE: JUNE 2018
SCALE: AS SHOWN	SCALE: AS SHOWN
FILE NO: 8130283701	FILE NO: 8130283701
SHEET NUMBER: 7	SHEET NUMBER: 7
Revisions	Revisions
No.	No.
Date	Date
Init	Init
Appr.	Appr.
Date	Date

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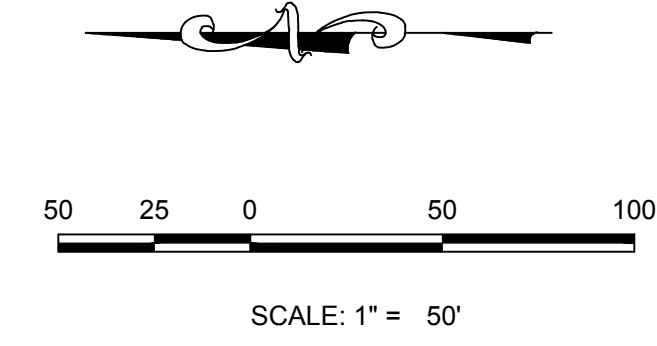
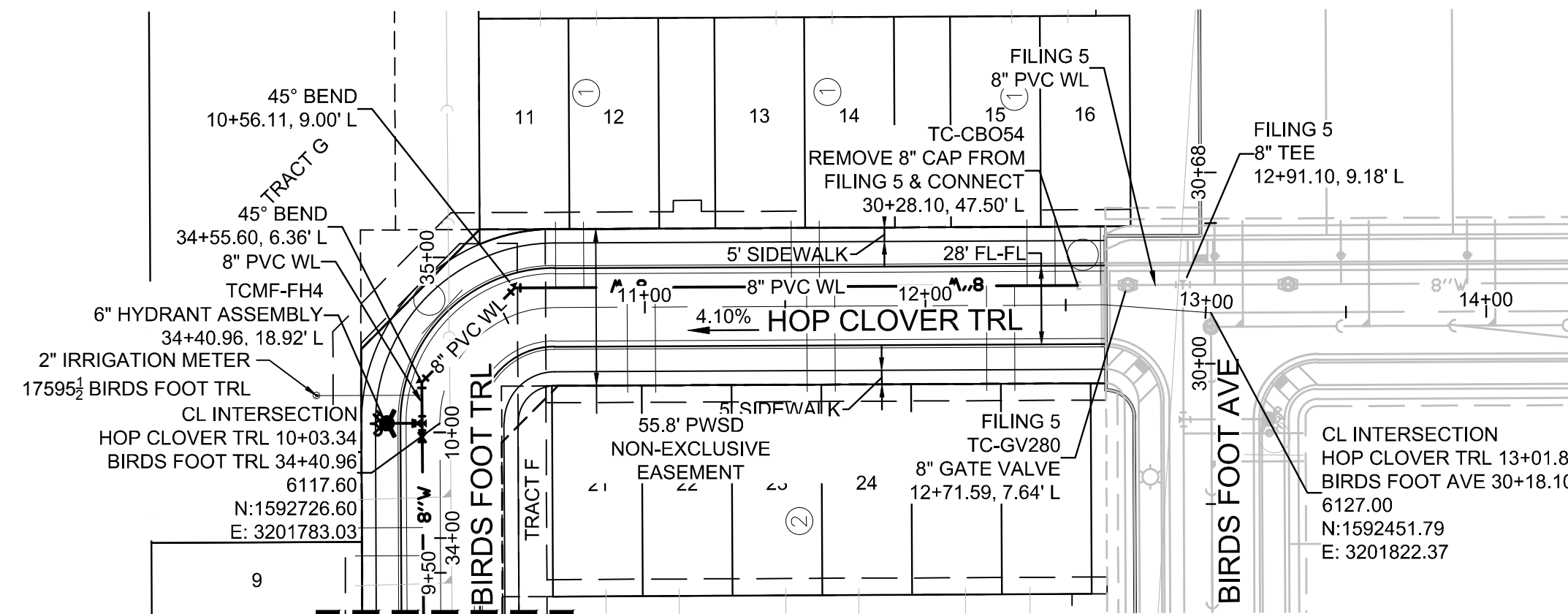
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

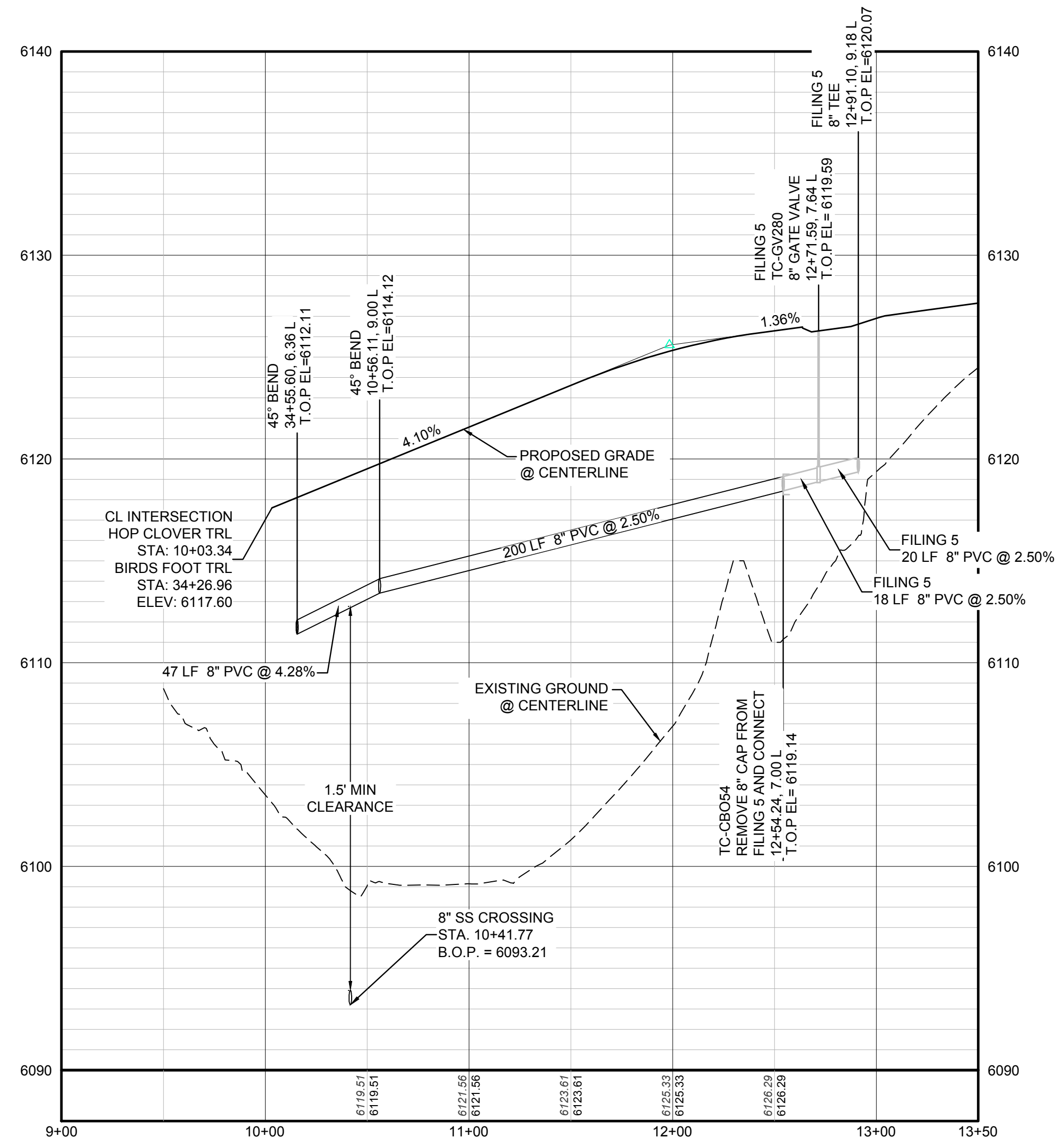
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KEYMAP
N.T.S.

MATCHLINE - SHEET 8

PLAN: HOP CLOVER TRL STA: 9+50.00 TO 14+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: HOP CLOVER TRL STA: 9+00.00 TO 13+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

(2) BLOCK NUMBER	△ PROPOSED RANGE POINT
(A) LOT TYPE	--- CENTERLINE
6 LOT NUMBER	--- RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	--- PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	--- EDGE OF PAVEMENT
PROPOSED REDUCER	→ PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	--- PROPOSED STORM DRAIN
FUTURE PHASE VALVE	--- PROPOSED SEWER LINE WITH MANHOLE
FUTURE FIRE HYDRANT	--- PROPOSED SEWER LATERAL
PROPOSED LIGHT POLE	--- PROPOSED WATER LINE
PROPOSED SIDEWALK	--- PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK RAMP	--- SECTION LINE
10.00 EXISTING ELEVATION	--- FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER
PROPOSED STORM DRAIN INLET	OH EXISTING OVERHEAD POWER
PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD ANGLE DIFFERENCE	MH MANHOLE
AV AIR VAC RELEASE VALVE	N.T.S. NOT TO SCALE
BVC BEGIN VERTICAL CURVE	PVC POLYVINYL CHLORIDE
BVP BEGIN VERTICAL PROFILE	PVI PT. OF VERTICAL INTERSECTION
CBO CAP WITH BLOW OFF	PVT POINT OF VERTICAL TANGENT
CRR CURB RETURN RADIUS	RCBC REINFORCED CONCRETE BOX CULVERT
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10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	Revisions	Date	Appr.	Date	
CVL CONSULTANTS 	No.	Date	Appr.	Date	
	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				
TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE HOP CLOVER TRAIL	SCALE: AS SHOWN	FILE NO: 8130283701	DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018
SHEET NUMBER	9				

N:\PROJECTS\SS RANCH\ENGINEERING\SS RANCH\WATER AND SANITATION\WATER P&ID\HOP CLOVER TRL.DWG. BRIANW. 12/6/2018 12:32 PM

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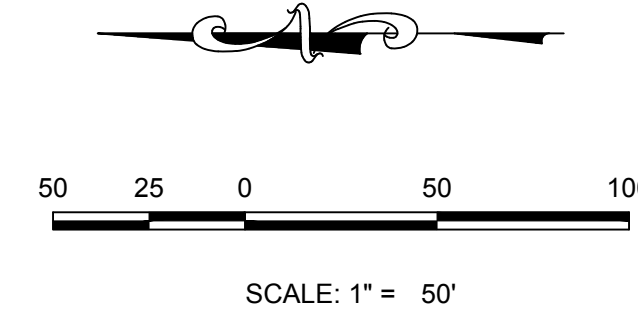
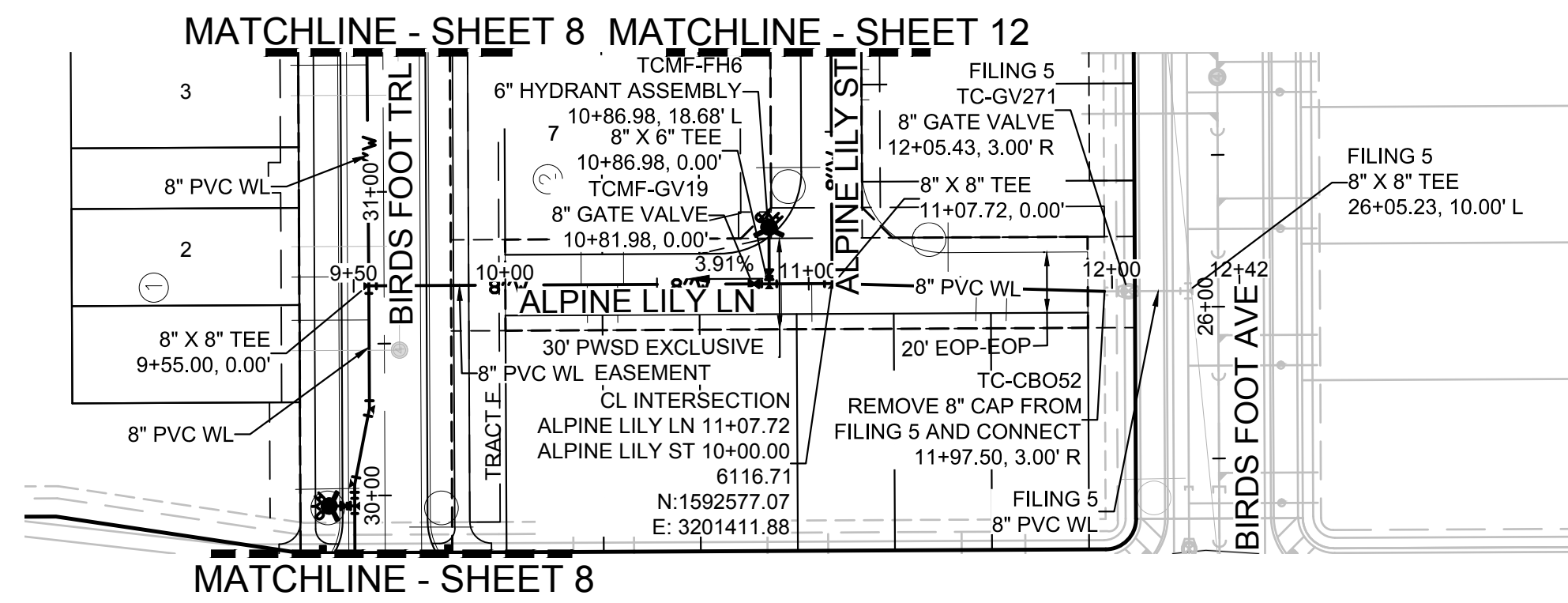
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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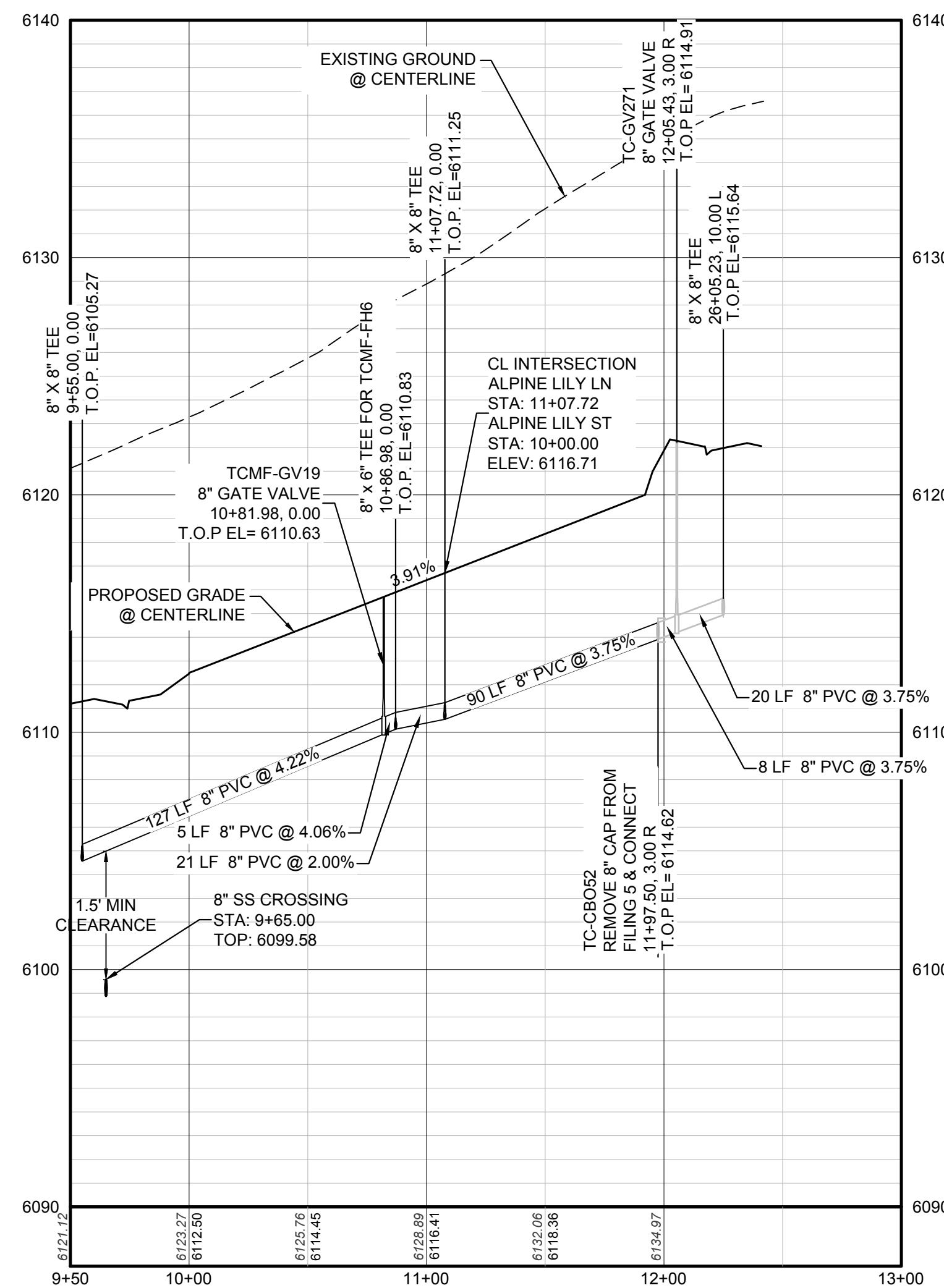
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BRIAN P. WILSON
COLORADO P.E. 0050067

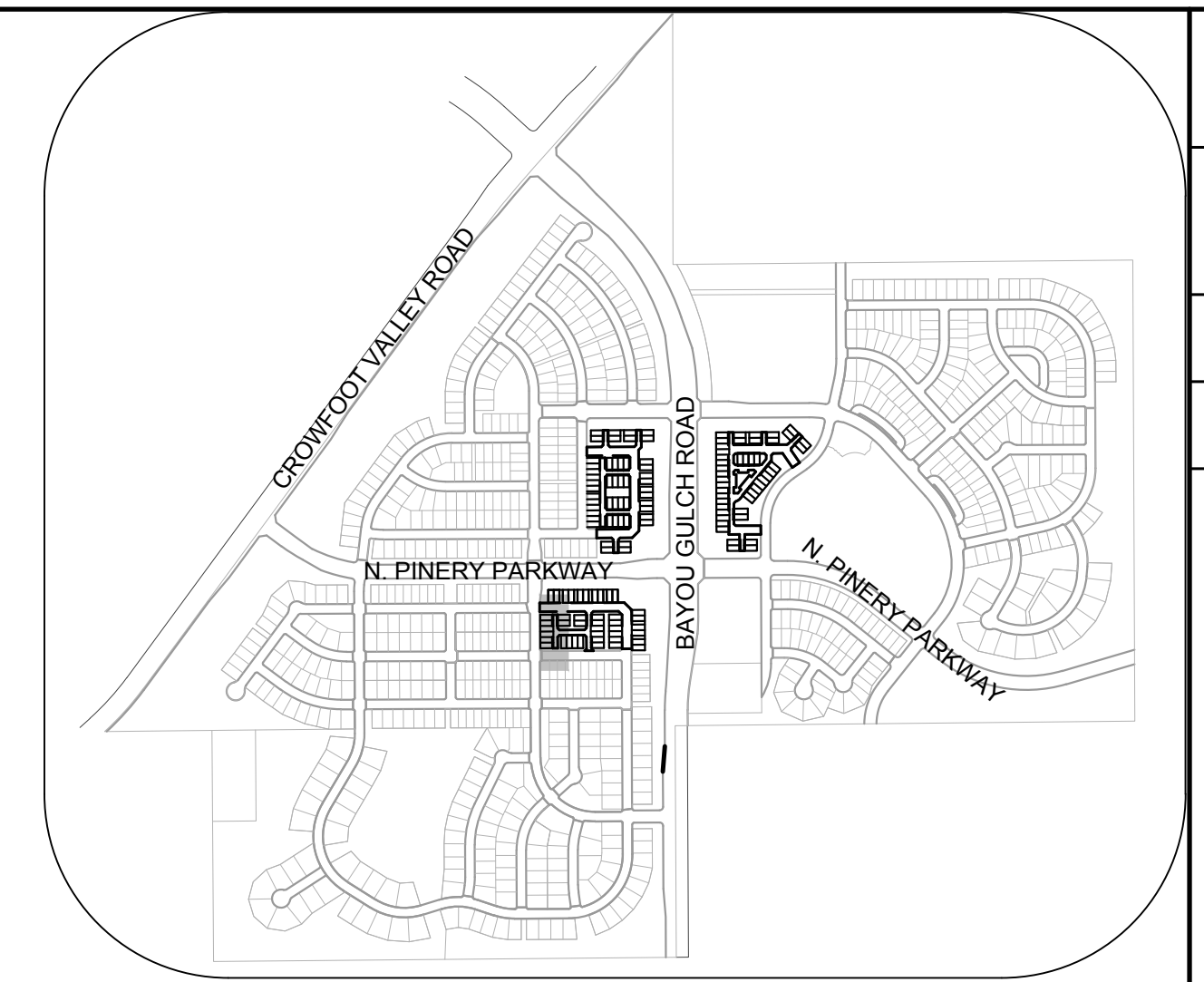
N:\PROJECTS\SSR\SSR\ENGINEERING\SSR\SET\MULTIFAMILY\CDS\F\00PARKER WATER AND SANITATION\WATER\BAP\ALPINE LILY LN.DWG, BRIAN.W, 12/25/2018 3:41 PM



PLAN: ALPINE LILY LN STA: 9+50.00 TO 13+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: ALPINE LILY LN STA: 9+50.00 TO 13+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
⊕	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
⊕	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
⊕	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR
⊕	PROPOSED FLARED END SECTION	---	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	---	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	---	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK RAMP	---	PROPOSED WATER LATERAL W/ METER
10.00	EXISTING ELEVATION	---	SECTION LINE
10.00	PROPOSED DESIGN ELEVATION	---	FILING BOUNDARY
⊕	PROPOSED STORM DRAIN INLET	---	FO
⊕	PROPOSED STORM DRAIN MANHOLE	---	OH
		---	TEL

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
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BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
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HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

No.	Revisions	Date	Init	Appr.	Date

10333 E. Dry Creek Rd.
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Tel: (720) 482-9526
Fax: (720) 482-9546

CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 16 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
ALPINE LILY LANE

DRAWN BY:	RRR	CHECKED BY:	BPW	DATE:	JUNE 2018
SCALE:	AS SHOWN	FILE NO.:	8130283701		
SHEET NUMBER	10				

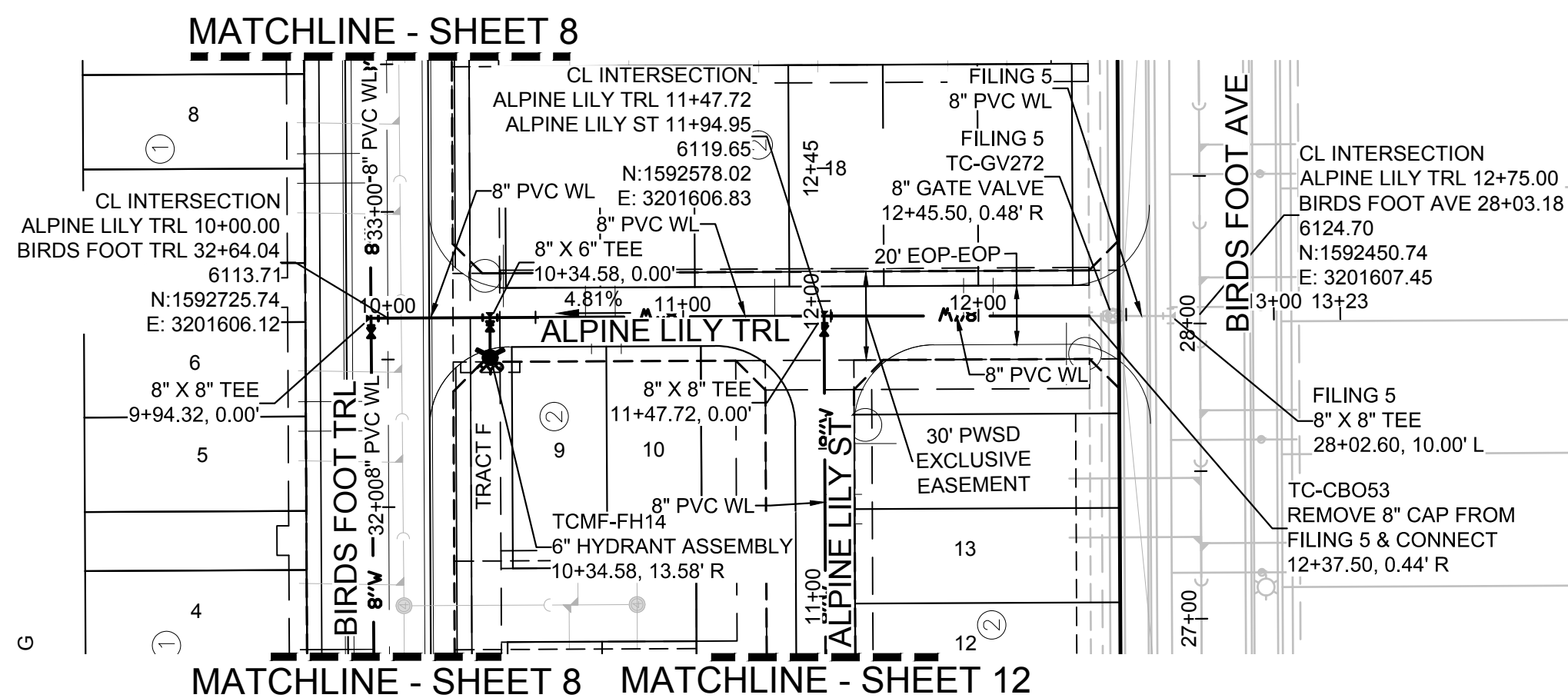
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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

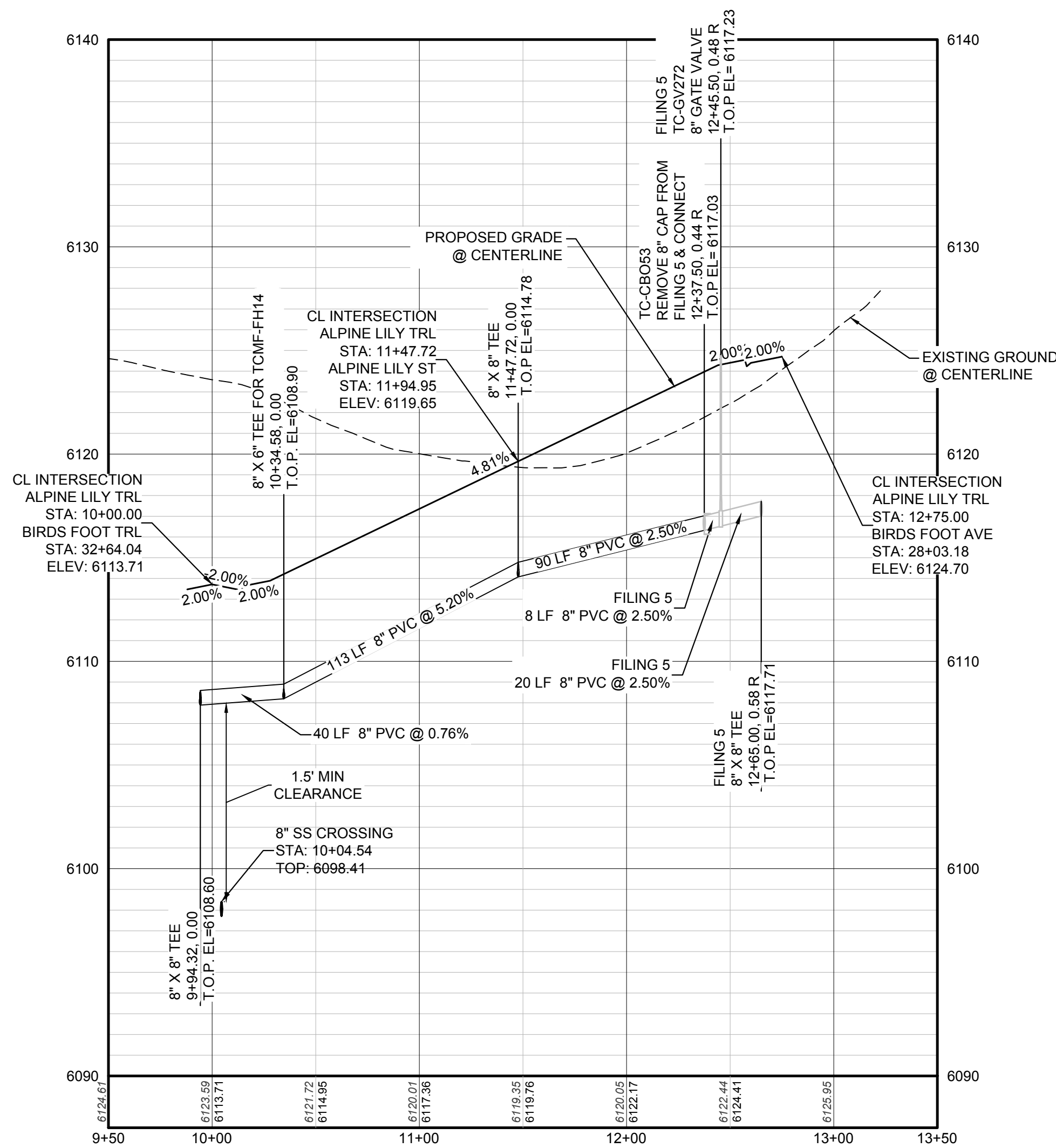
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PREPARED UNDER THE SUPERVISION OF

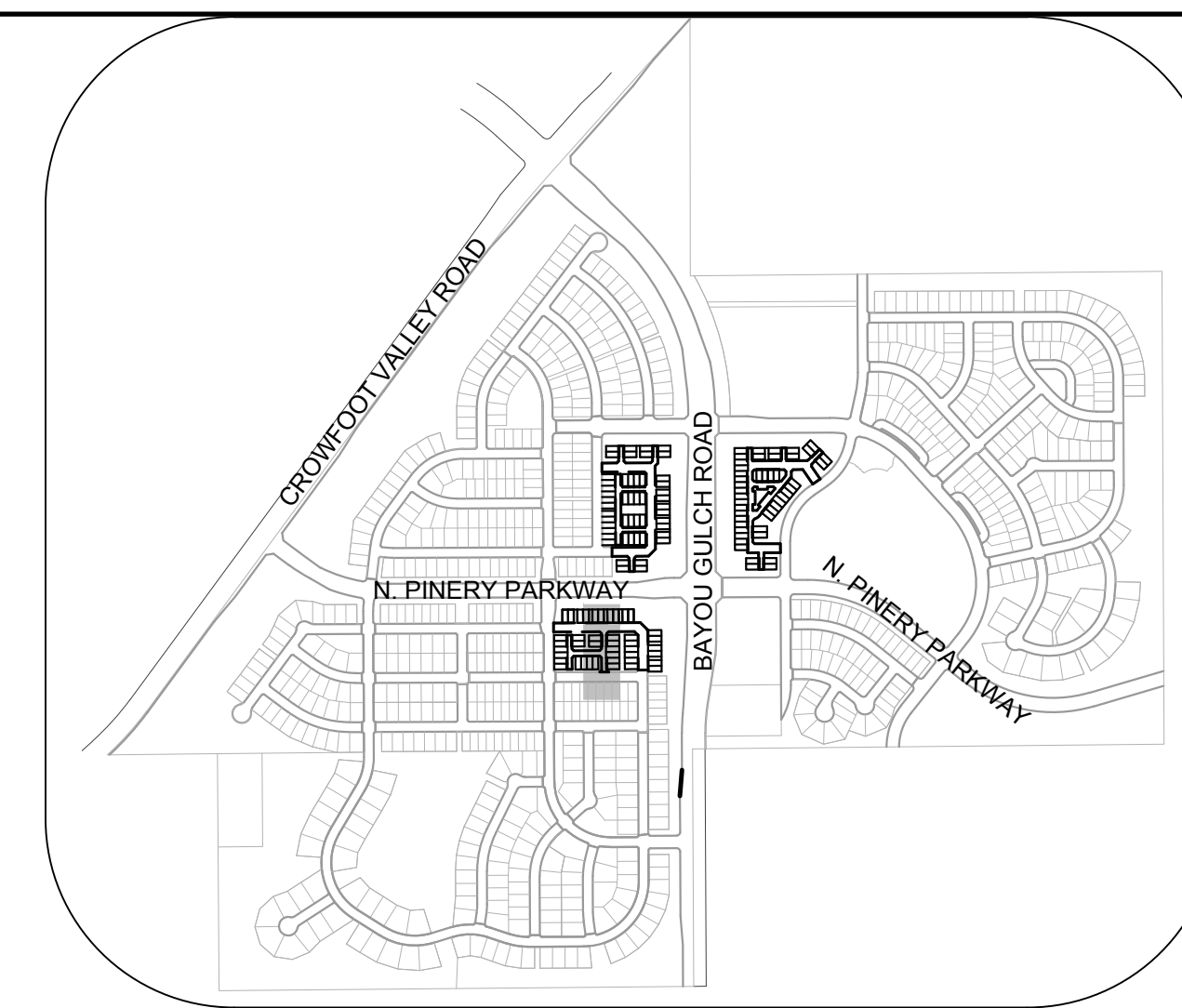
BRIAN P. WILSON
COLORADO P.E. 0050067



PLAN: ALPINE LILY TRL STA: 9+50.00 TO 13+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: ALPINE LILY TRL STA: 9+50.00 TO 13+50.00
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10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	Revisions	Date	Appr.	Date		
	No.					
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE ALPINE LILY TRAIL	SCALE: AS SHOWN	FILE NO: 8130283701	DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018
11	SHEET NUMBER	PREPARED UNDER THE SUPERVISION OF BRIAN P. WILSON COLORADO P.E. 0050067				

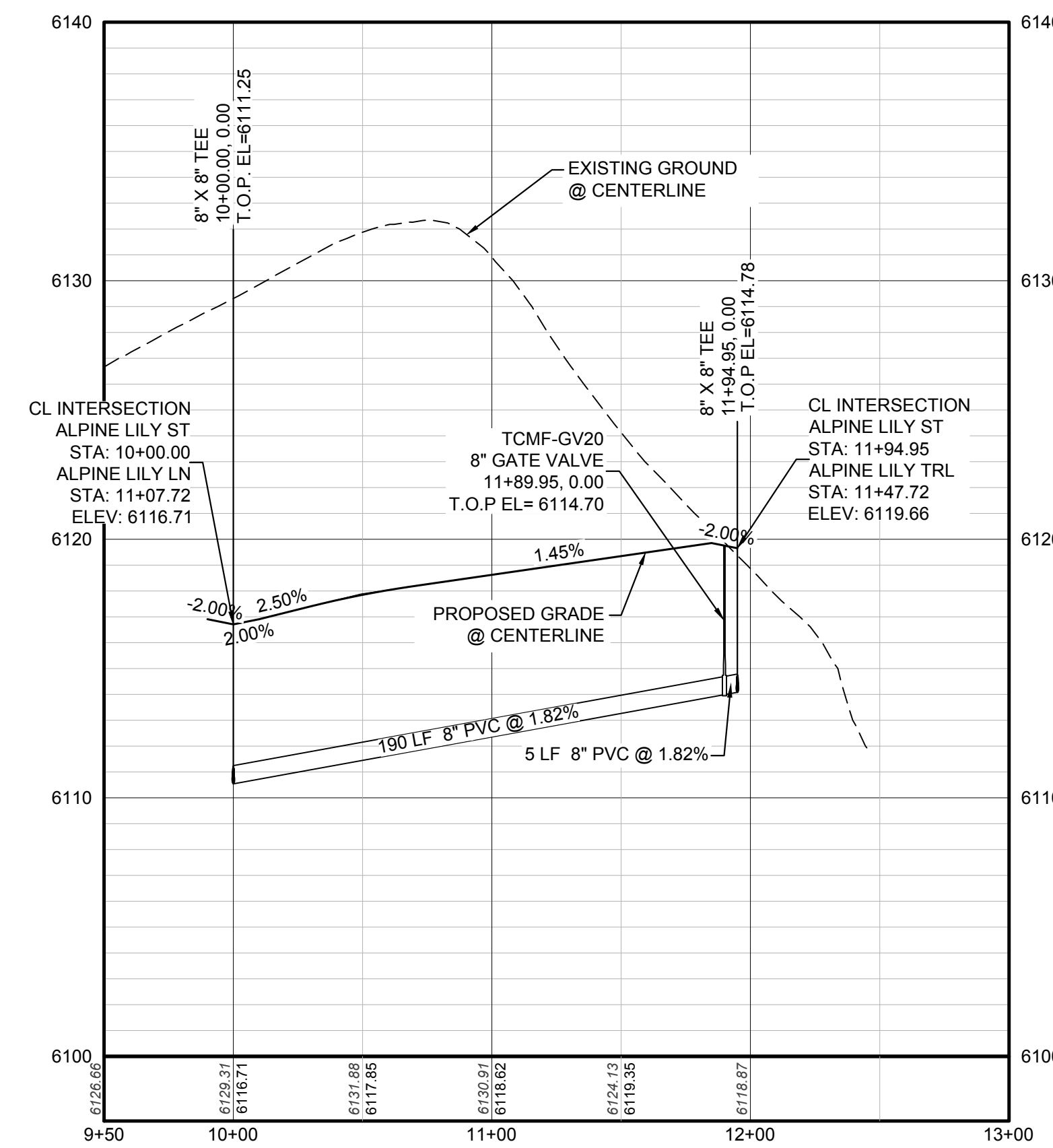
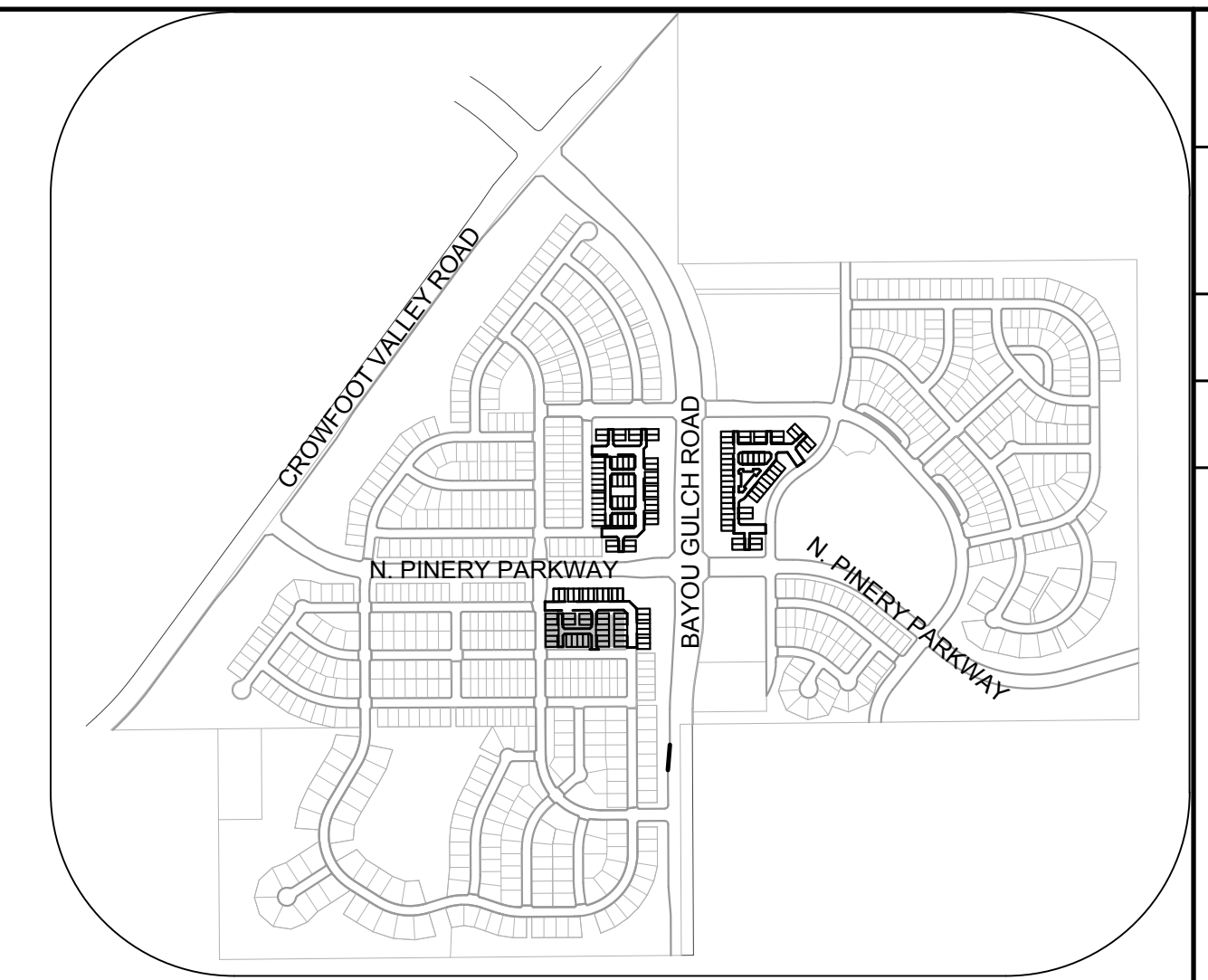
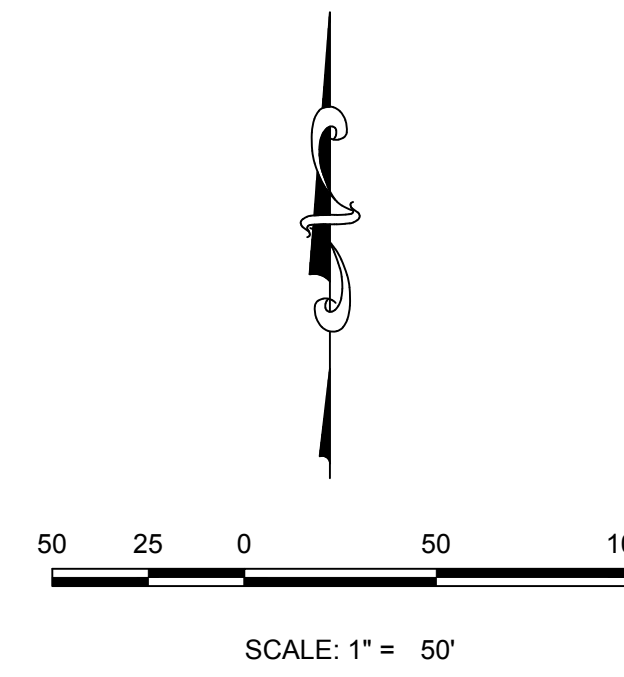
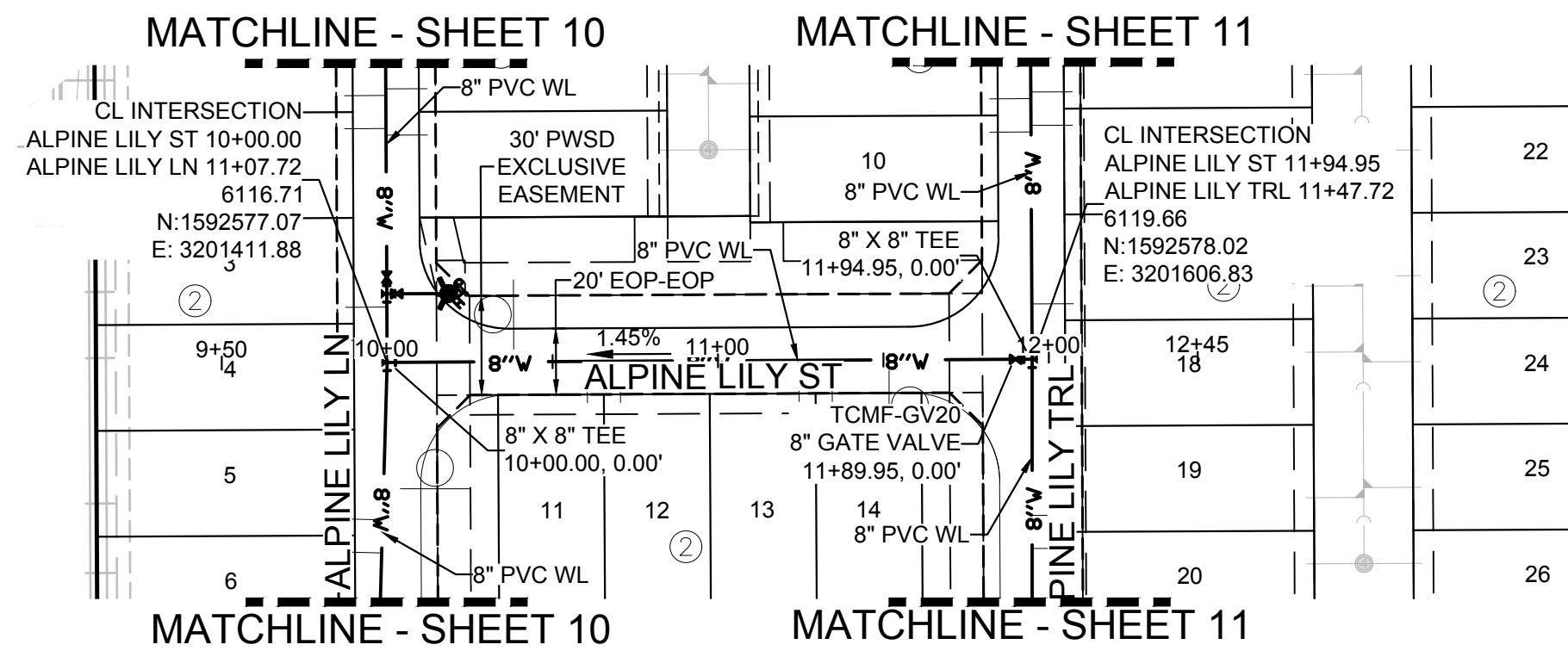
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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546		HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112
TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE ALPINE LILY STREET		
DRAWN BY: RRR CHECKED BY: BPW DATE: JUNE 2018	SCALE: AS SHOWN FILE NO: 8130283701	SHEET NUMBER: 12
No. Revisions:	Date:	Date:
Appr.	Date:	Date:

ALUMINUM STEP

NOTES:

- ALUMINUM ALLOY SPECIFICATIONS
 - FED. SPEC. QQ-A-200/8 (ALUMINUM-MAGNESIUM-SILICATE ALLOY)
 - MINIMUM TENSILE STRENGTH= 36,000 p.s.i.
 - MINIMUM YIELD STRENGTH= 35,000 p.s.i.
 - MINIMUM ELONGATION=10% IN 2 MINIMUM LOAD CAPACITY (APPLIED AT CENTER OF STEP)
- MINIMUM LOAD CAPACITY (APPLIED AT CENTER OF STEP)
 - 1000 lb. WITH 6" PROJECTION FROM WALL.
 - 1500 lb. WITH 4" PROJECTION FROM WALL.
- WEIGHT PER STEP=2.23 POUNDS
- STEPS TO BE CAST, UNALTERED, IN MANHOLES AT THE SAME TIME THE BARREL OR CONE SECTIONS ARE CAST.
- VERTICAL SPACING BETWEEN STEPS SHALL BE CONSISTENT IN EACH INDIVIDUAL MANHOLE.
- TOE POCKETS ARE REQUIRED IN STORM SEWER MANHOLES IF TOP OF BENCH IS MORE THAN 18" ABOVE INVERT. TOE POCKETS ARE NOT REQUIRED IN SANITARY SEWER MANHOLES UNLESS OTHERWISE SPECIFIED.

TYPICAL INSTALLATION

TOE POCKET DETAILS

STANDARD EXTRUDED ALUMINUM MANHOLE STEP

**PARKER WATER & SANITATION DISTRICT
STANDARD EXTRUDED ALUMINUM MANHOLE STEP**

SCALE: NONE DATE: 2/96
APPROVED: PVR 01/16 10/16
DIRECTOR OF ENGINEERING

PIN FOR PRESS STEP

POLYPROPYLENE REINFORCED PLASTIC STEP

NOTES:

- ASTM SPECIFICATIONS:
 - ASTM C-478
 - ASTM A-615 GRADE 60 (STEEL ROD)
 - ASTM 2146-95, TYPE II, GRADE 1986 (POLYPROPYLENE)
- STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 3-3/4 INCH LEG AND SHALL PROJECT FROM THE WALL 8-5/8 INCHES.
- STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8-1/4 INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8 INCHES.
- ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8 INCHES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY WAFERED PIN TO FORM THE INSERT HOLE AS SHOWN.
- INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 P.S.I. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUDED IN PLACE.

PIN FOR PRESS STEP

POLYPROPYLENE REINFORCED PLASTIC STEP

**PARKER WATER & SANITATION DISTRICT
POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP**

SCALE: NONE DATE: 2/96
APPROVED: PVR 01/16 10/16
DIRECTOR OF ENGINEERING

REINFORCING

SECTION

SECTION

SECTION

CAST ALUMINUM MANHOLE STEP

NOTES:

- THE CAST ALUMINUM MANHOLE STEP SHALL ONLY BE USED WHEN SPECIFIED ON THE DRAWINGS.
- ALUMINUM ALLOY SPECIFICATIONS:
 - ASTM C-478
 - MIN. TENSILE STRENGTH= 40 K.S.I.
 - MIN. YIELD STRENGTH= 20 K.S.I.
 - MIN. SHEAR STRENGTH= 27.45 K.S.I.
 - ELONGATION= 10% IN 2
 - BRIEFLY HARDNESS= 70
- MINIMUM LOAD CAPACITY, STEP SPACING AND ALIGNMENT, TOE POCKET DETAILS AND OTHER APPLICABLE NOTES OR DETAILS SPECIFIED FOR EXTRUDED ALUMINUM MANHOLE STEP SHALL ALSO APPLY TO THIS STANDARD.
- MIN. WT. = 2.0 LB.

CAST ALUMINUM MANHOLE STEP

**PARKER WATER & SANITATION DISTRICT
CAST ALUMINUM MANHOLE STEP**

SCALE: NONE DATE: 2/96
APPROVED: PVR 01/16 10/16
DIRECTOR OF ENGINEERING

CONCRETE CAP

STANDARD 4" STEEL PIPE PAINTED FIRE HYDRANT YELLOW OR 4" X 4" REDWOOD POST

DIRT FILL

GROUND LEVEL

MARKER POST DETAIL

STEEL PIPE IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPURTENANCE WITH 2" STENCILS INDICATING TYPE OF APPURTENANCE (MH, 12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST.

REDWOOD POST ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.

**PARKER WATER & SANITATION DISTRICT
MARKER POST DETAIL**

SCALE: NONE DATE: 2/96
APPROVED: PVR 2/00 10/16 4/01 1/08 1/16
DIRECTOR OF ENGINEERING

TYPICAL TRENCH DETAIL

NOTES:

- Sloping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.
- Trench shall be braced and shored as necessary to offset safe working conditions or to protect adjacent utilities, structures, etc. Unless otherwise specified on the plans, no pavement will be made for removal, replacement or relocation of curb and gutter, utilities, sidewalks, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.
- If dimension "B₂" is $\leq 5'$, then existing asphalt pavement shall be removed and replaced up to the gutter. Maximum asphalt pay width, B₂ & B₃ shall not be based upon this actual width.

**PARKER WATER & SANITATION DISTRICT
SEWER TRENCHING AND BEDDING DETAIL**

SCALE: NONE DATE: 2/96
APPROVED: PVR 5/98 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION

2016 REVISION

2016 REVISION

2016 REVISION

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2016 REVISION

2016 REVISION

2016 REVISION

CONCRETE ARCH

CONCRETE CRADLE

**PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "A"**

SCALE: NONE DATE: 2/96
APPROVED: PVR 1/16 10/16
DIRECTOR OF ENGINEERING

CLASS "B" BEDDING

**PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"**

SCALE: NONE DATE: 2/96
APPROVED: PVR 5/98 2/00 1/16 10/16
DIRECTOR OF ENGINEERING

ROCK EXCAVATION

CLASS "B" BEDDING

**PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"**

SCALE: NONE DATE: 2/96
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DIRECTOR OF ENGINEERING

CLASS "B" BEDDING

**PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"**

SCALE: NONE DATE: 2/96
APPROVED: PVR 5/98 2/00 1/16 10/16
DIRECTOR OF ENGINEERING

TYPE I CONCRETE ENCASEMENT FOR SANITARY SEWERS

**PARKER WATER & SANITATION DISTRICT
CONCRETE ENCASEMENT TYPE I**

SCALE: NONE DATE: 2/96
APPROVED: JFN
DISTRICT ENGINEER

2016 REVISION

2016 REVISION

2016 REVISION

2016 REVISION

2016 REVISION

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2016 REVISION

2008 REVISION

2008 REVISION

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CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

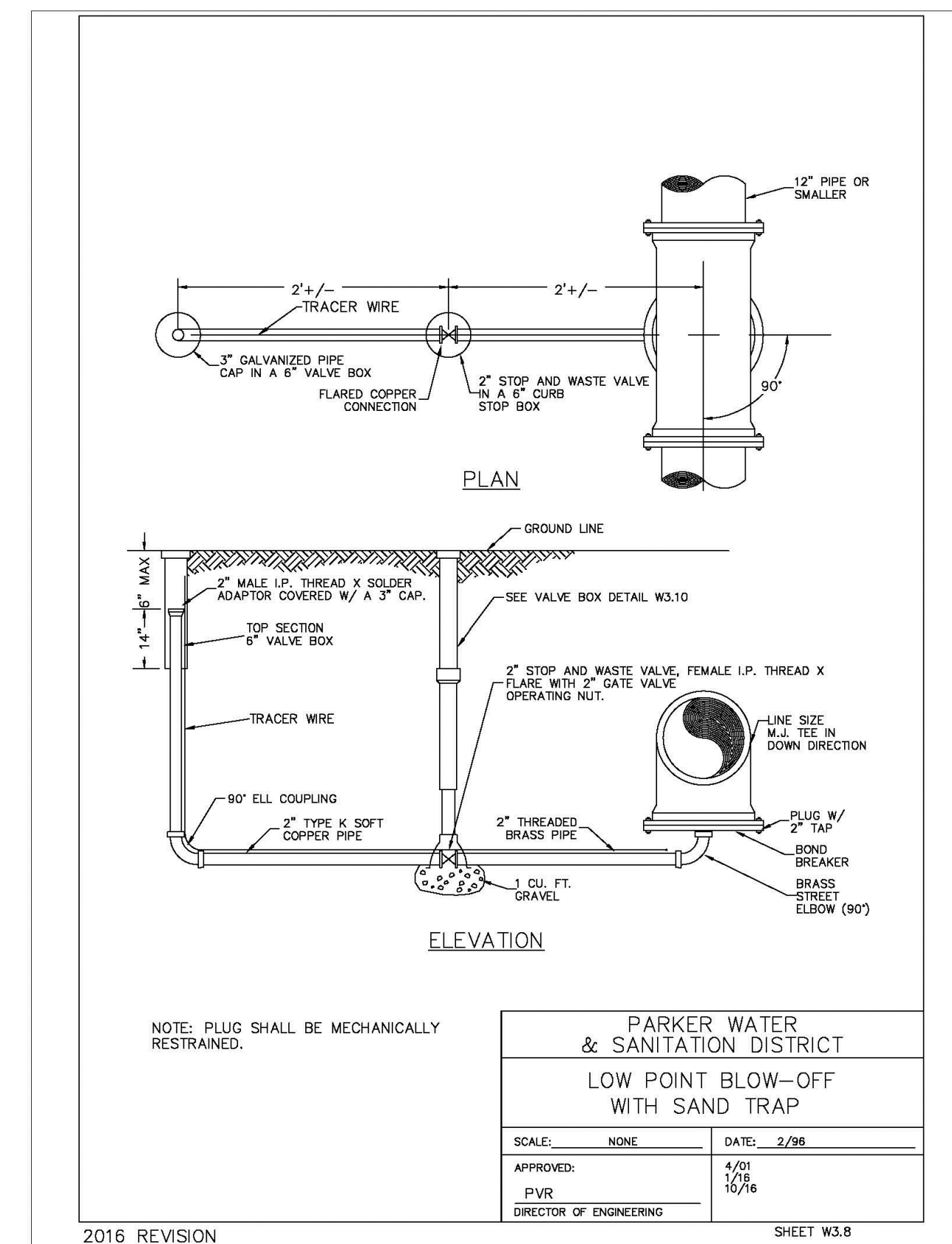
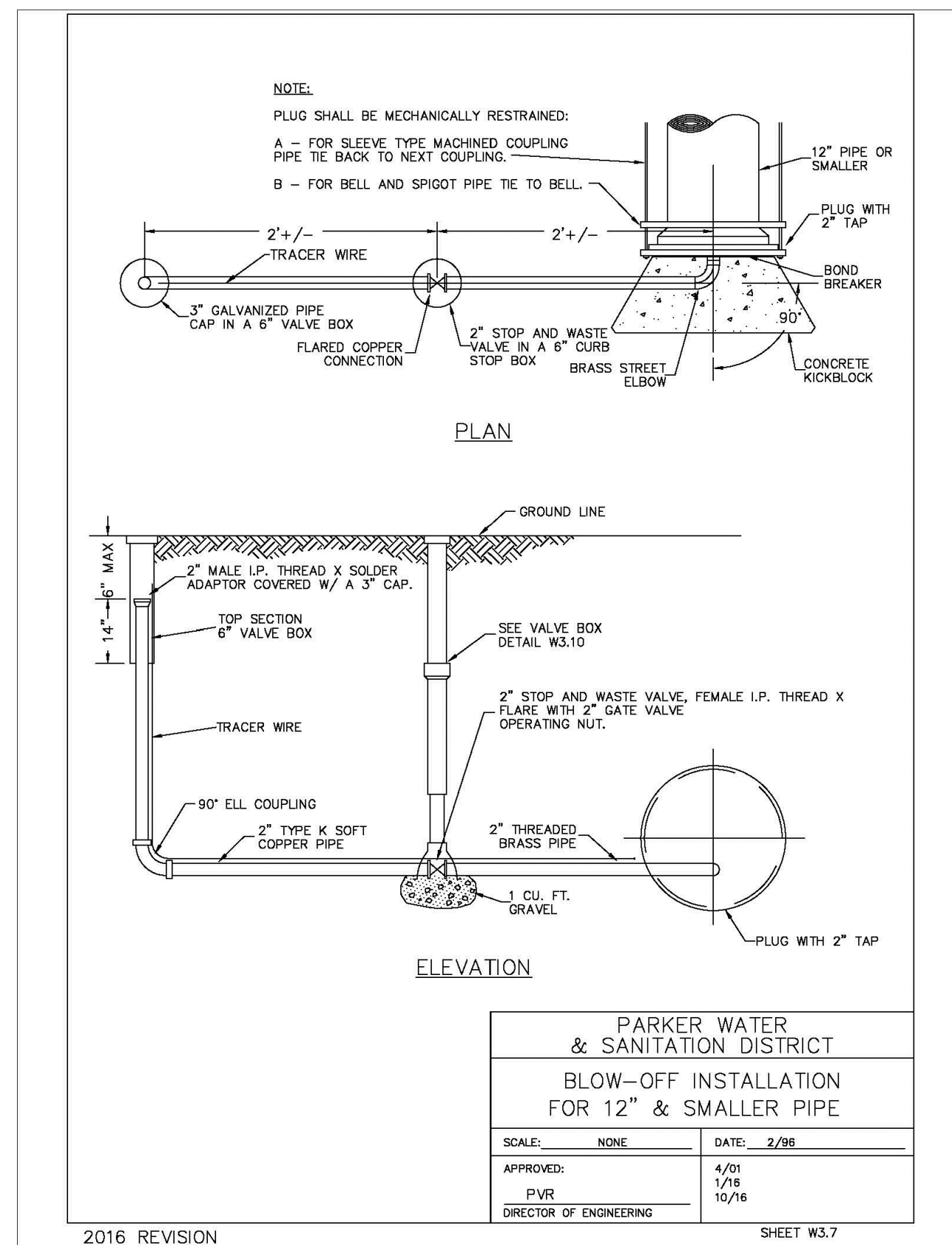
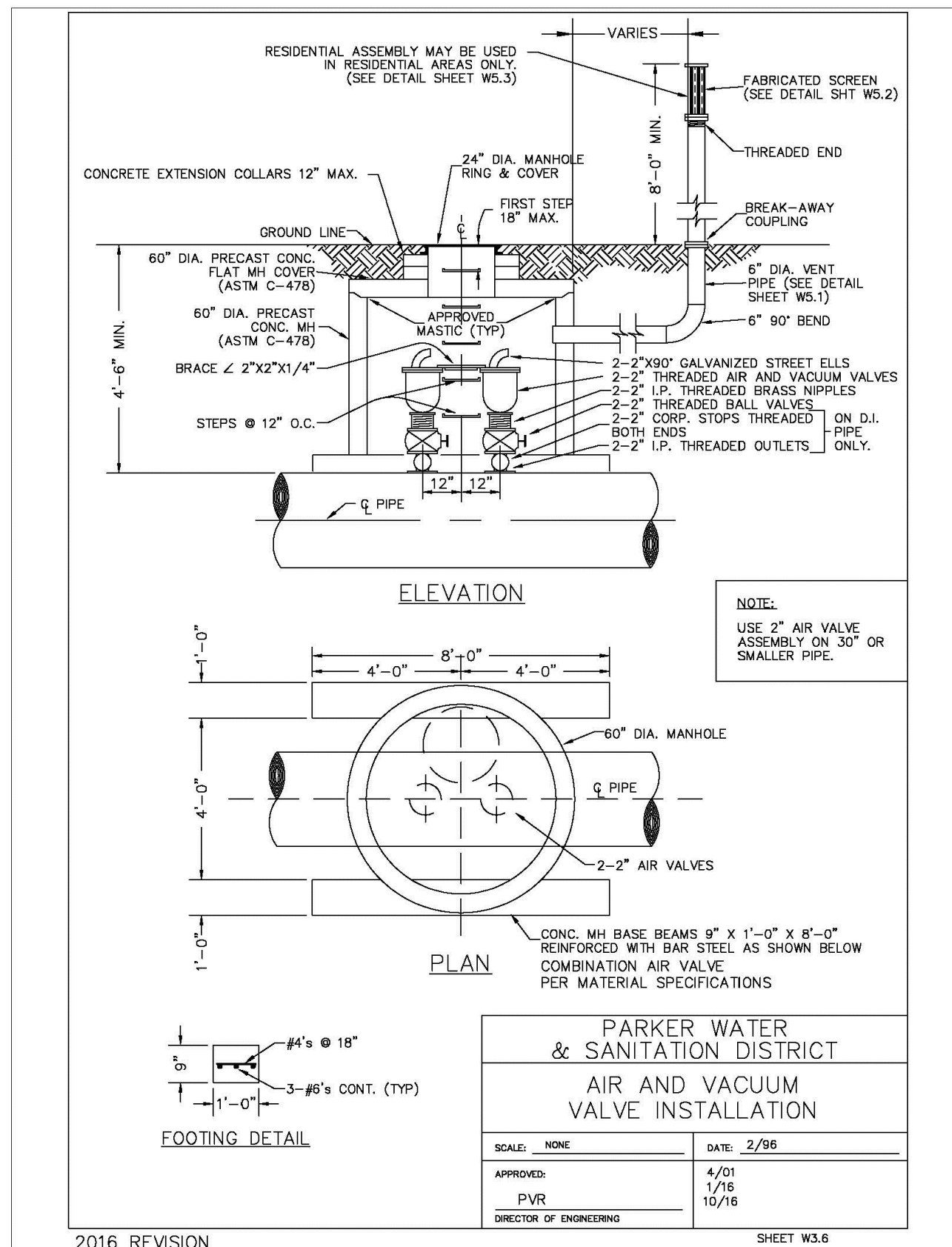
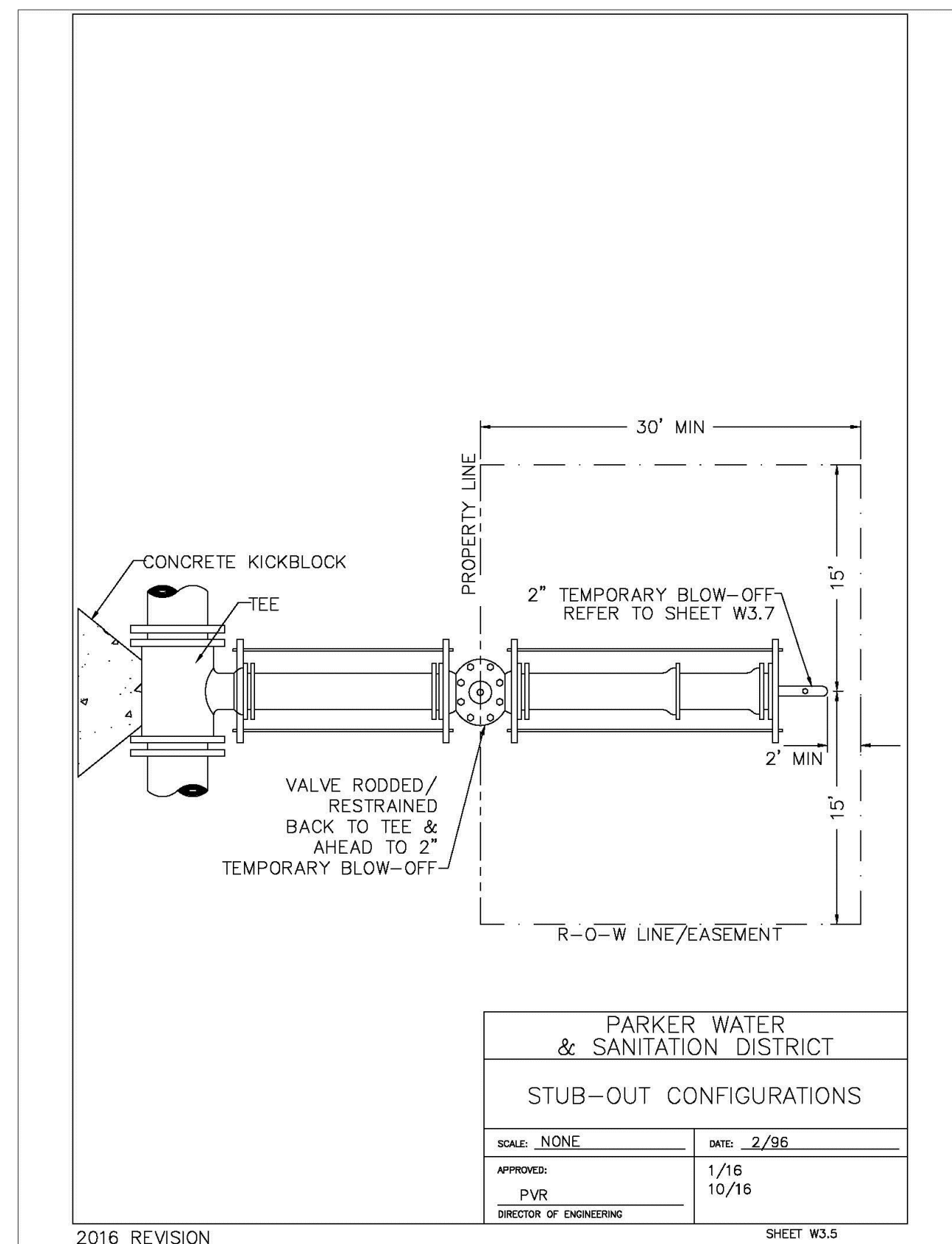
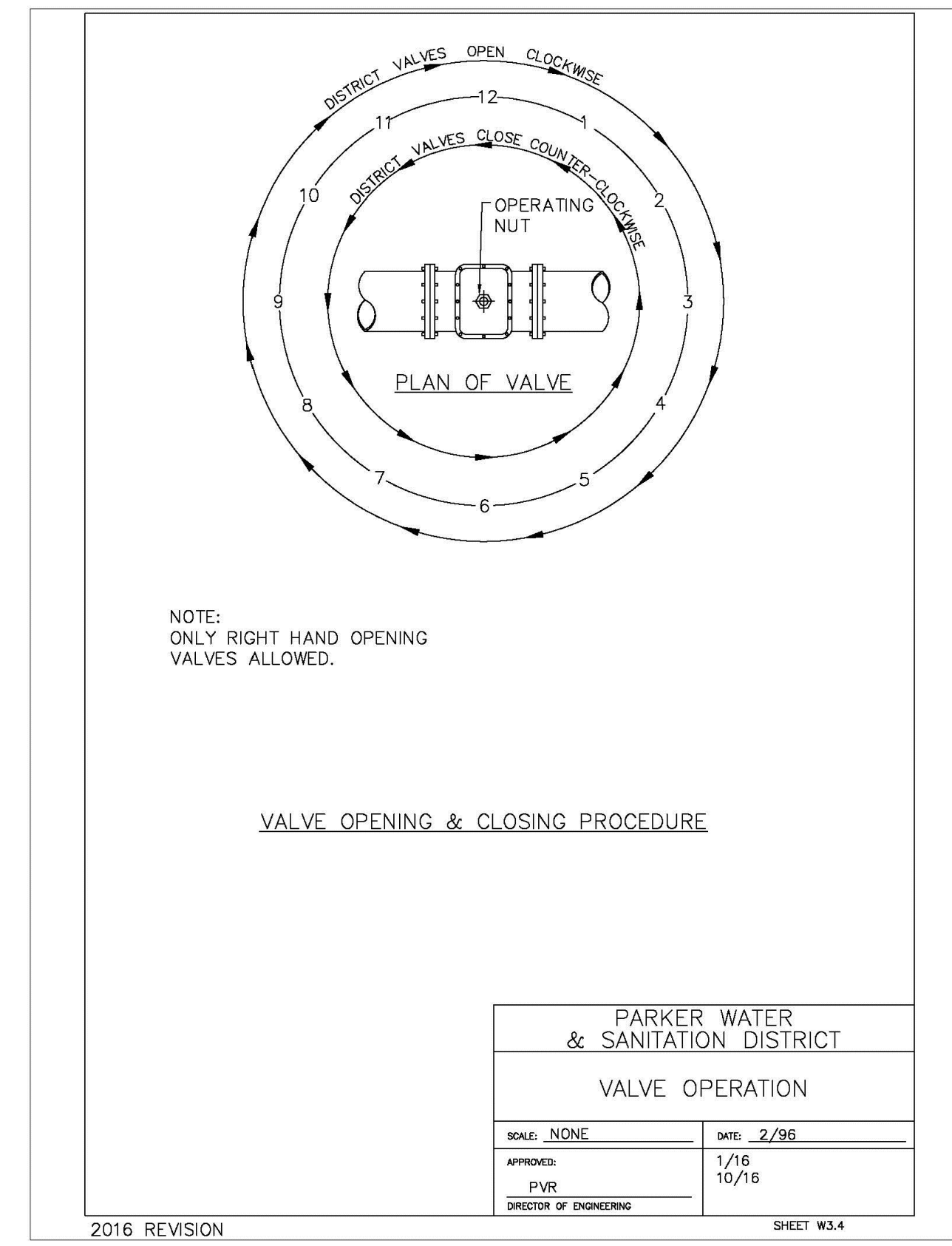
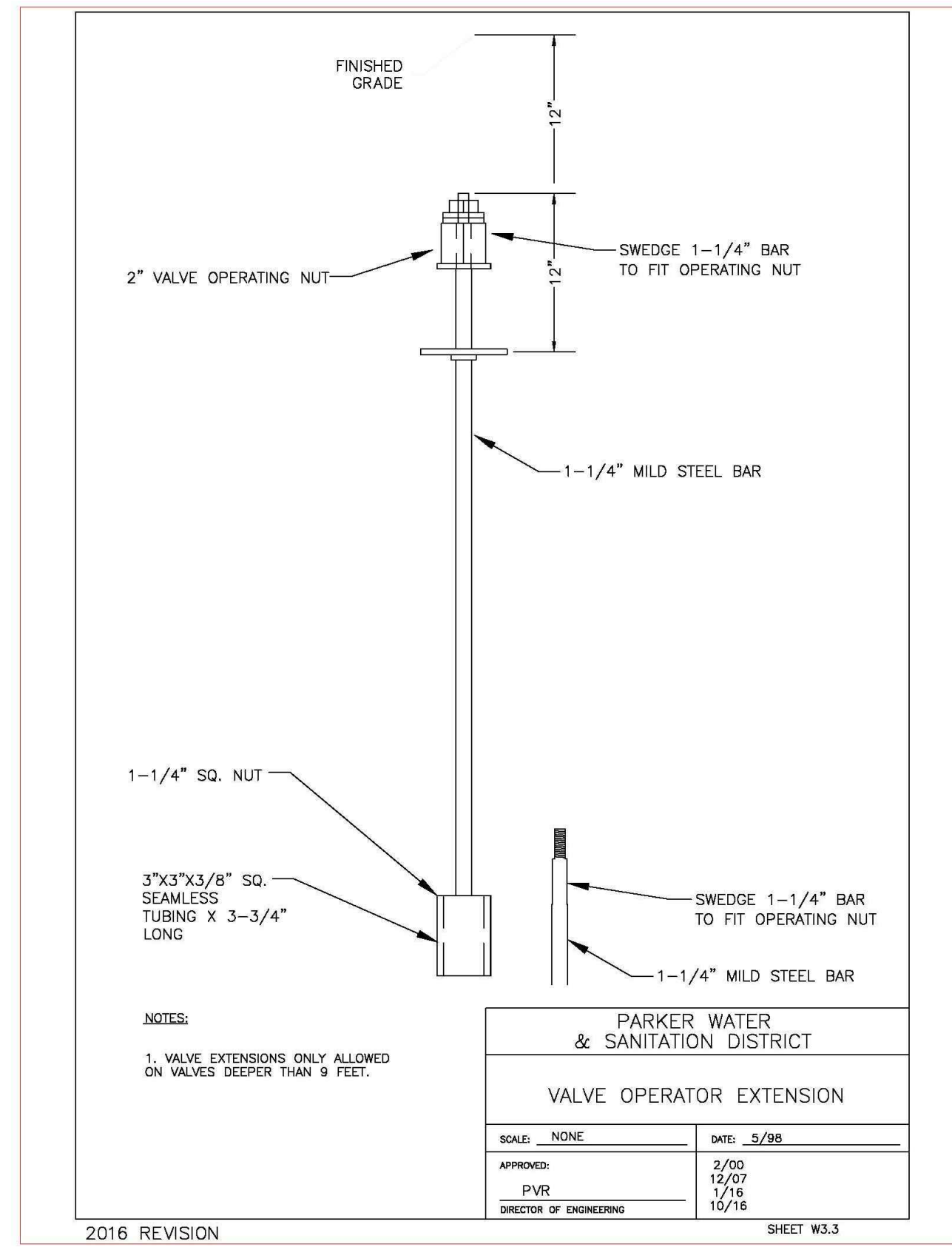
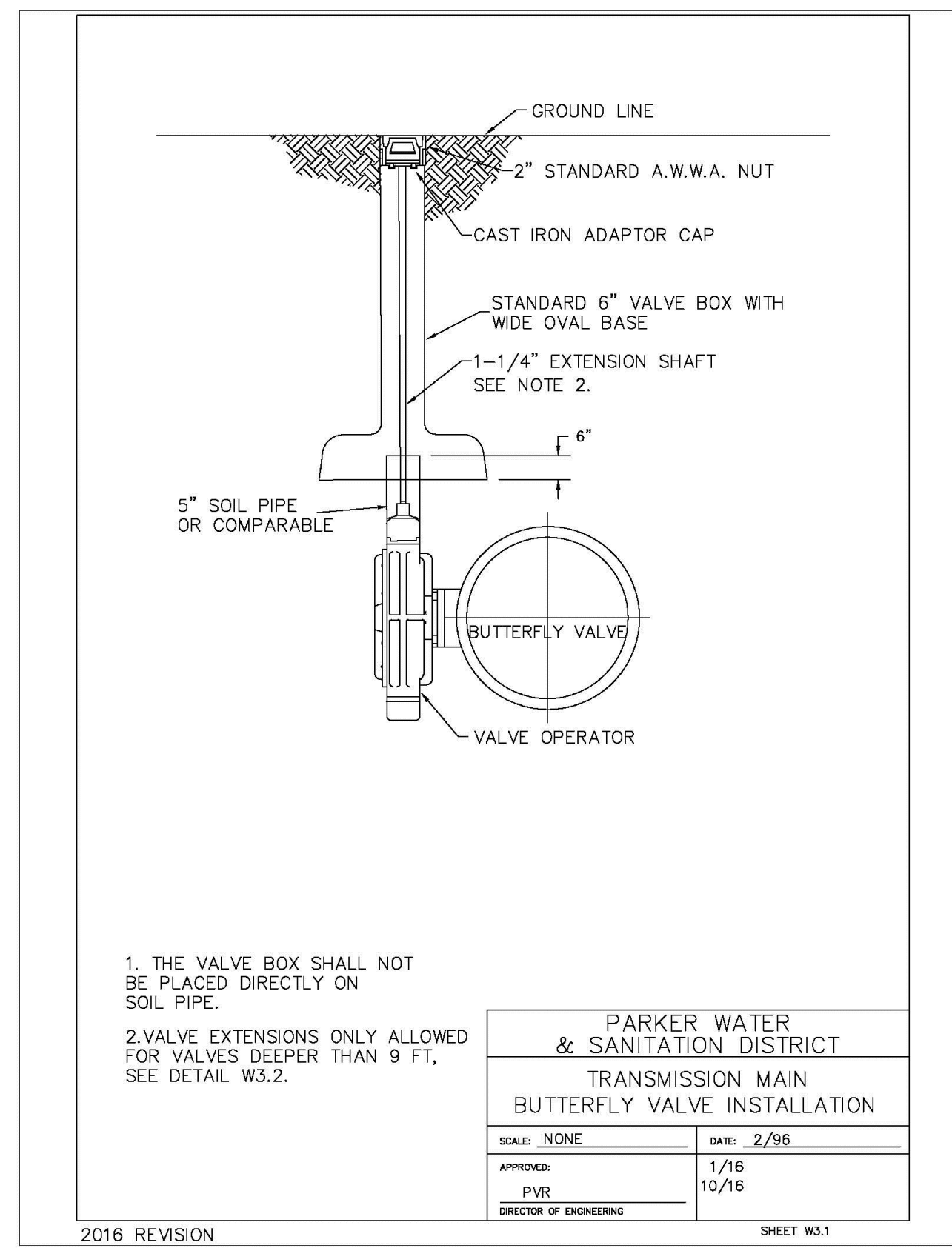
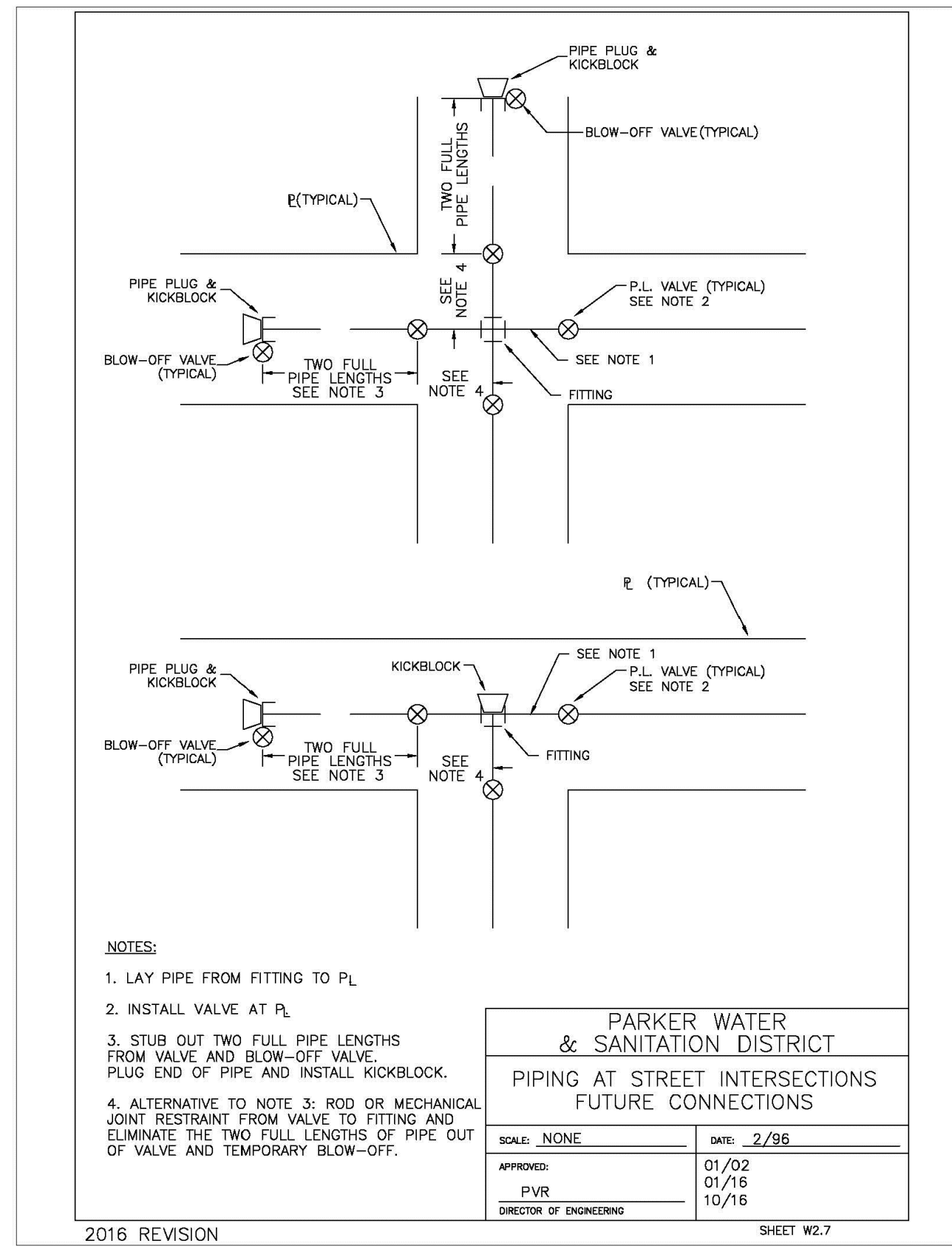
TRAILS AT CROWFOOT
FILING 16 CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

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DATE: JUNE 2018

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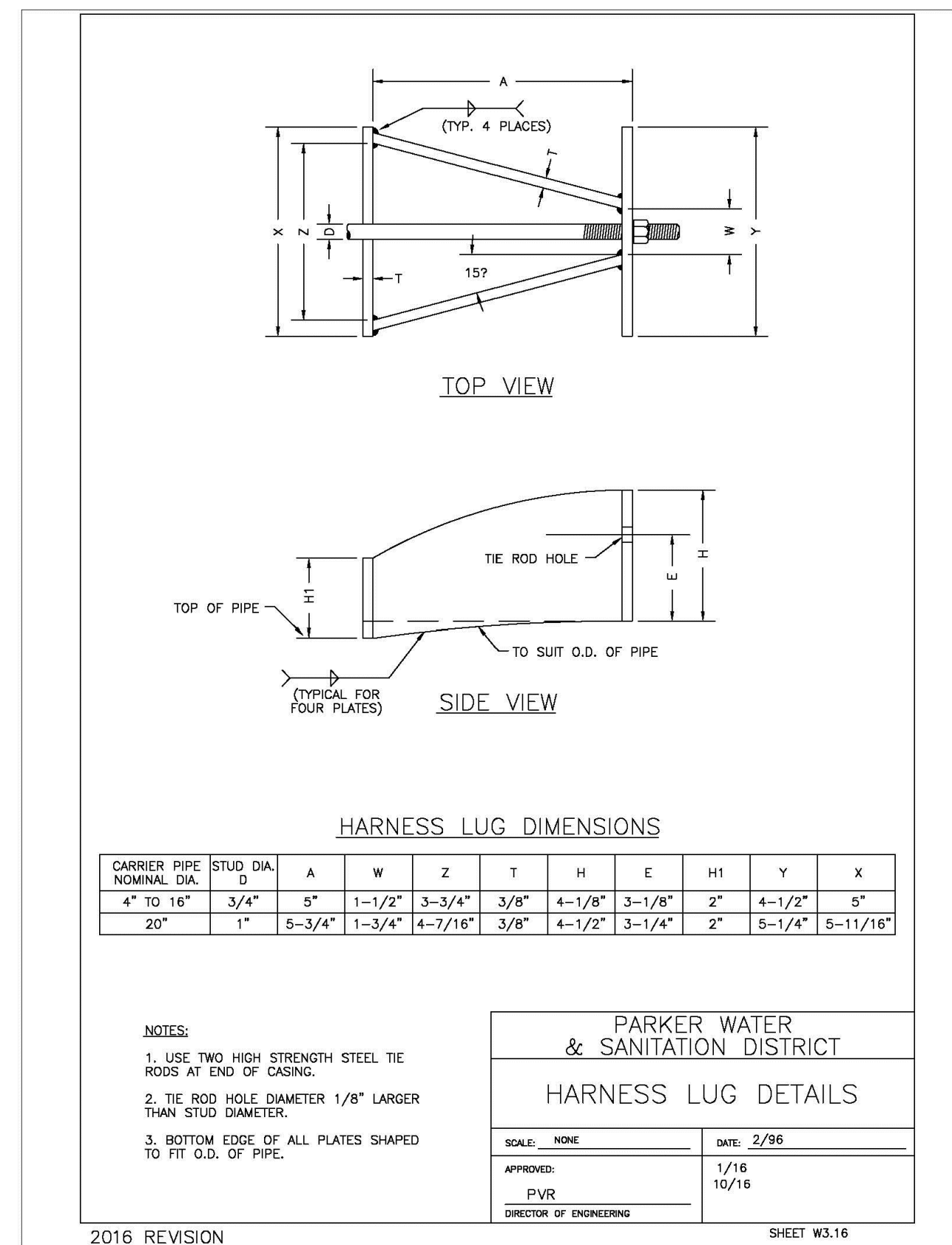
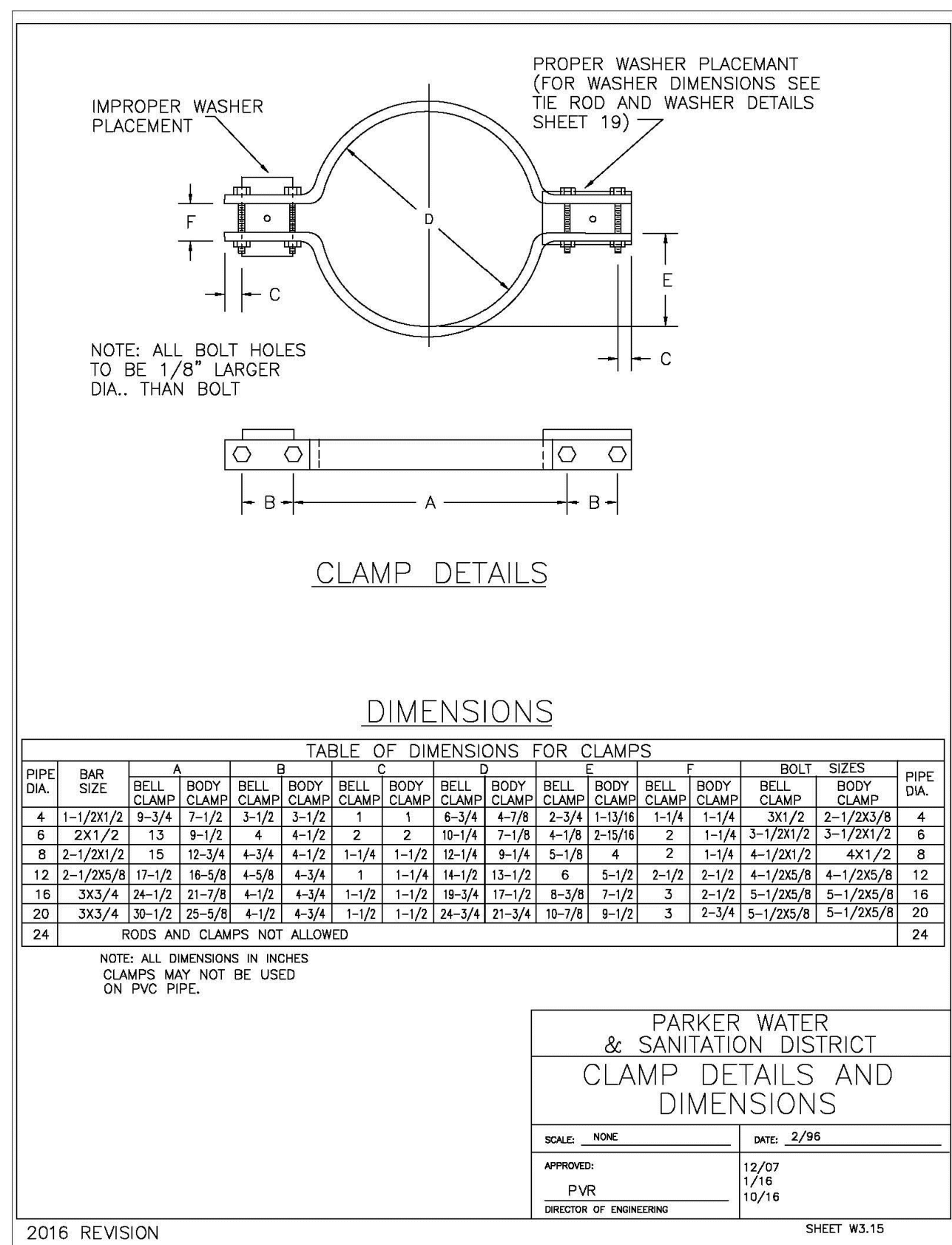
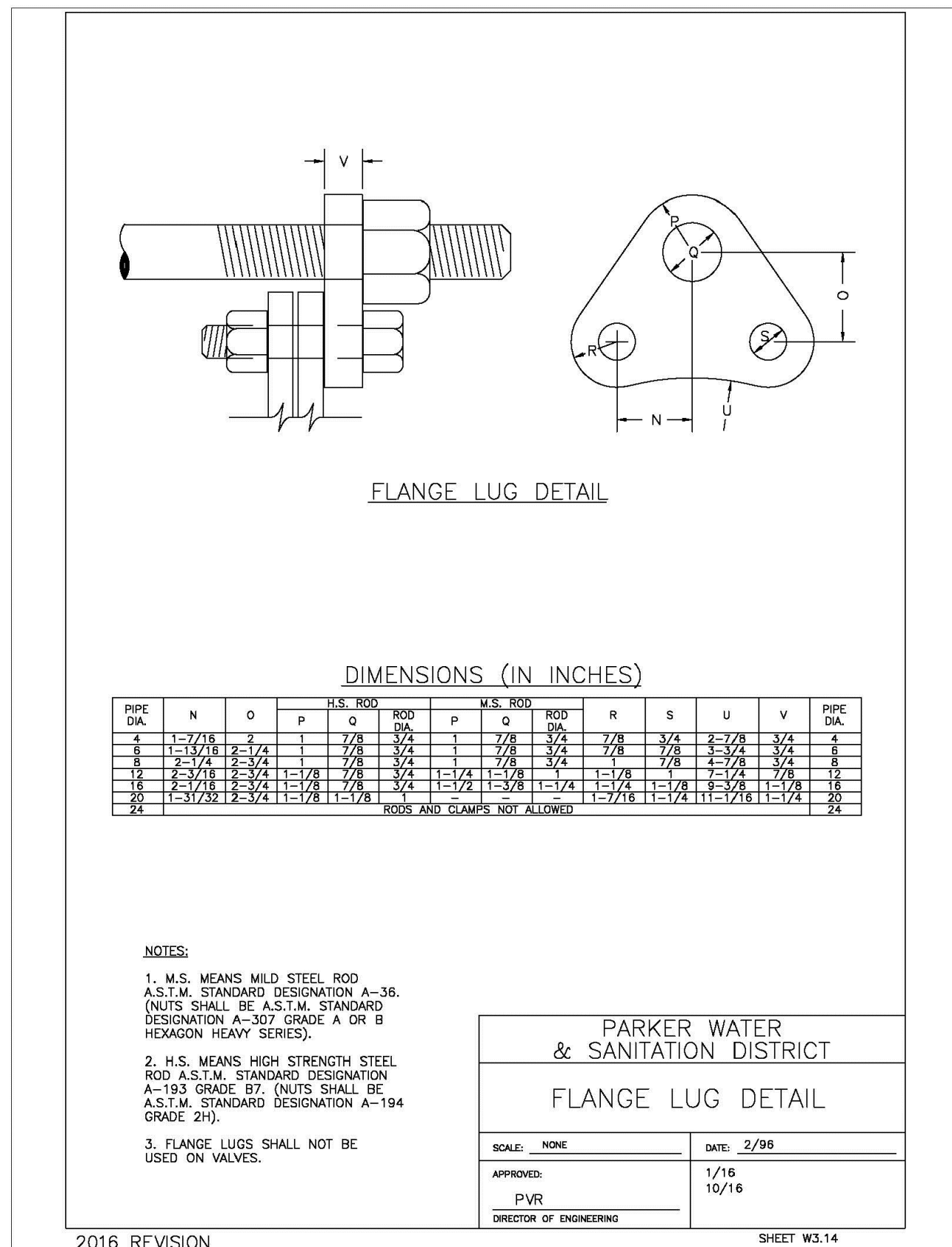
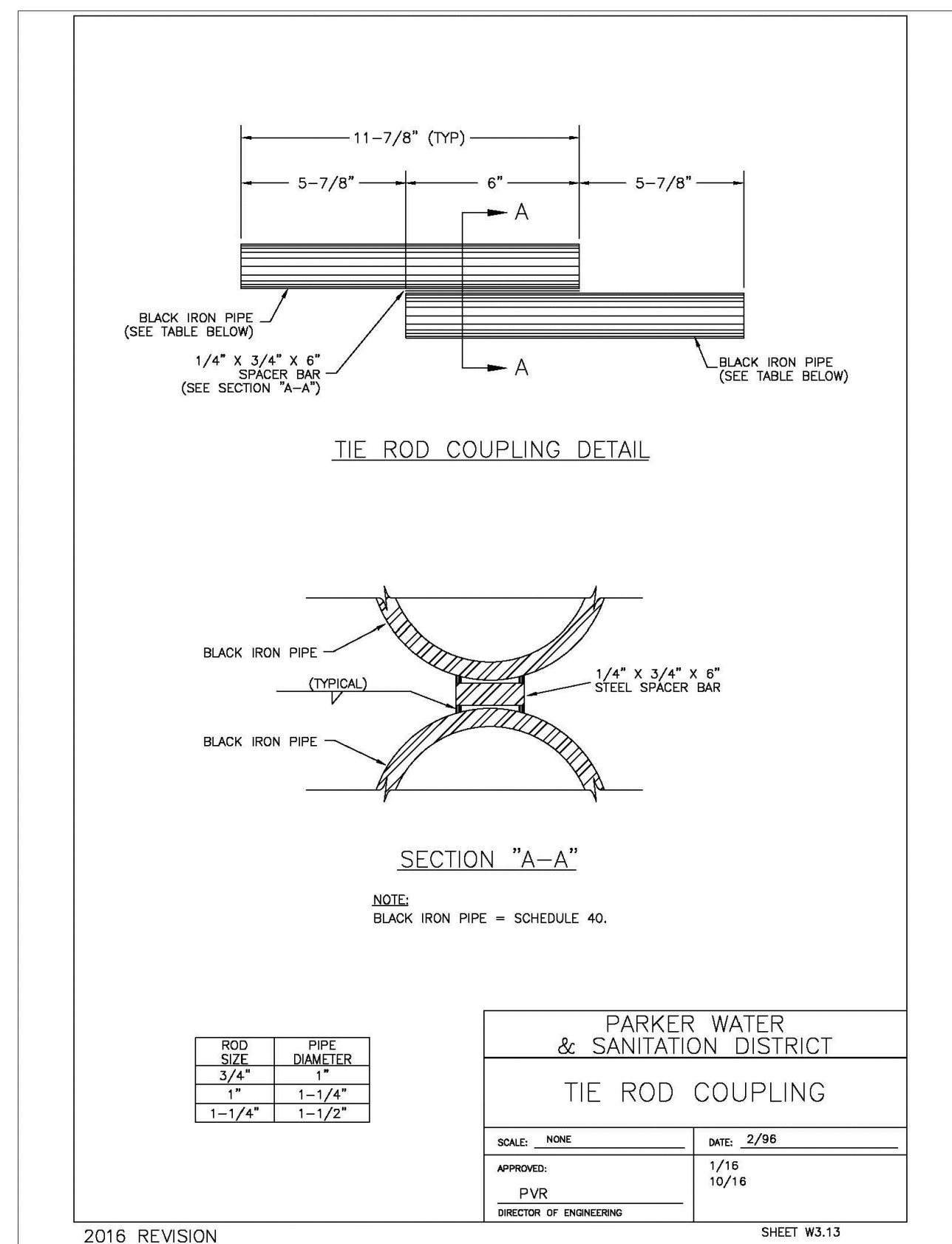
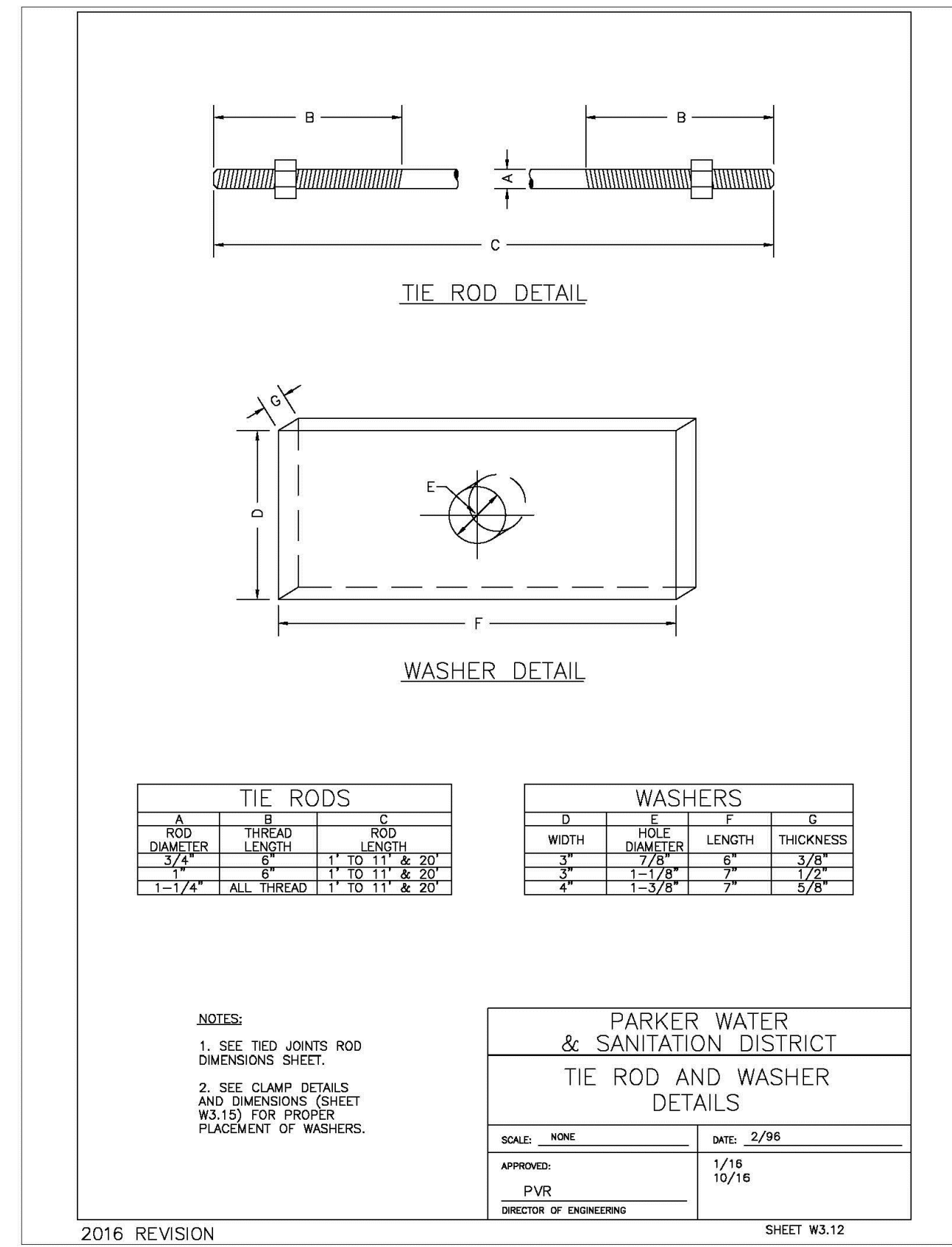
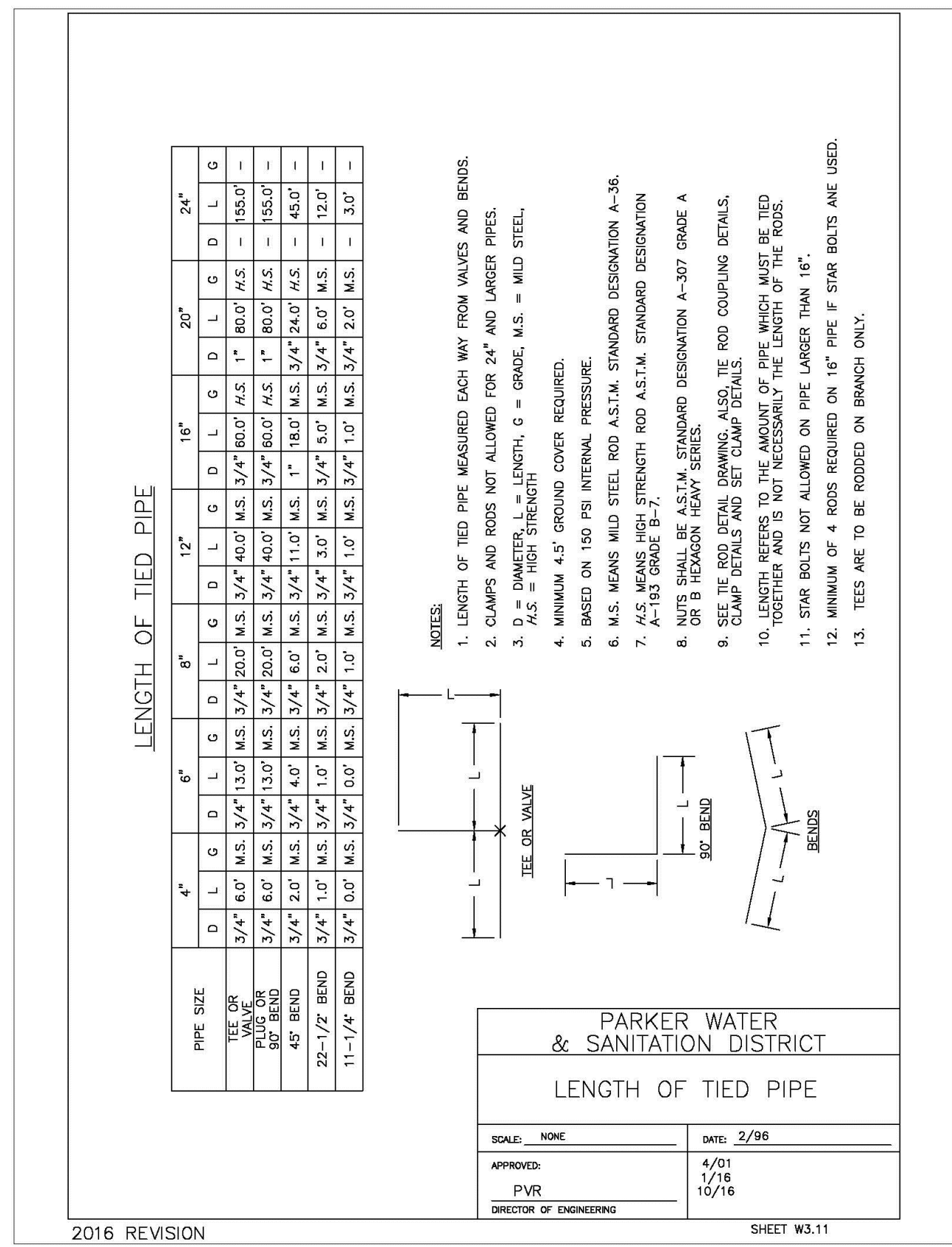
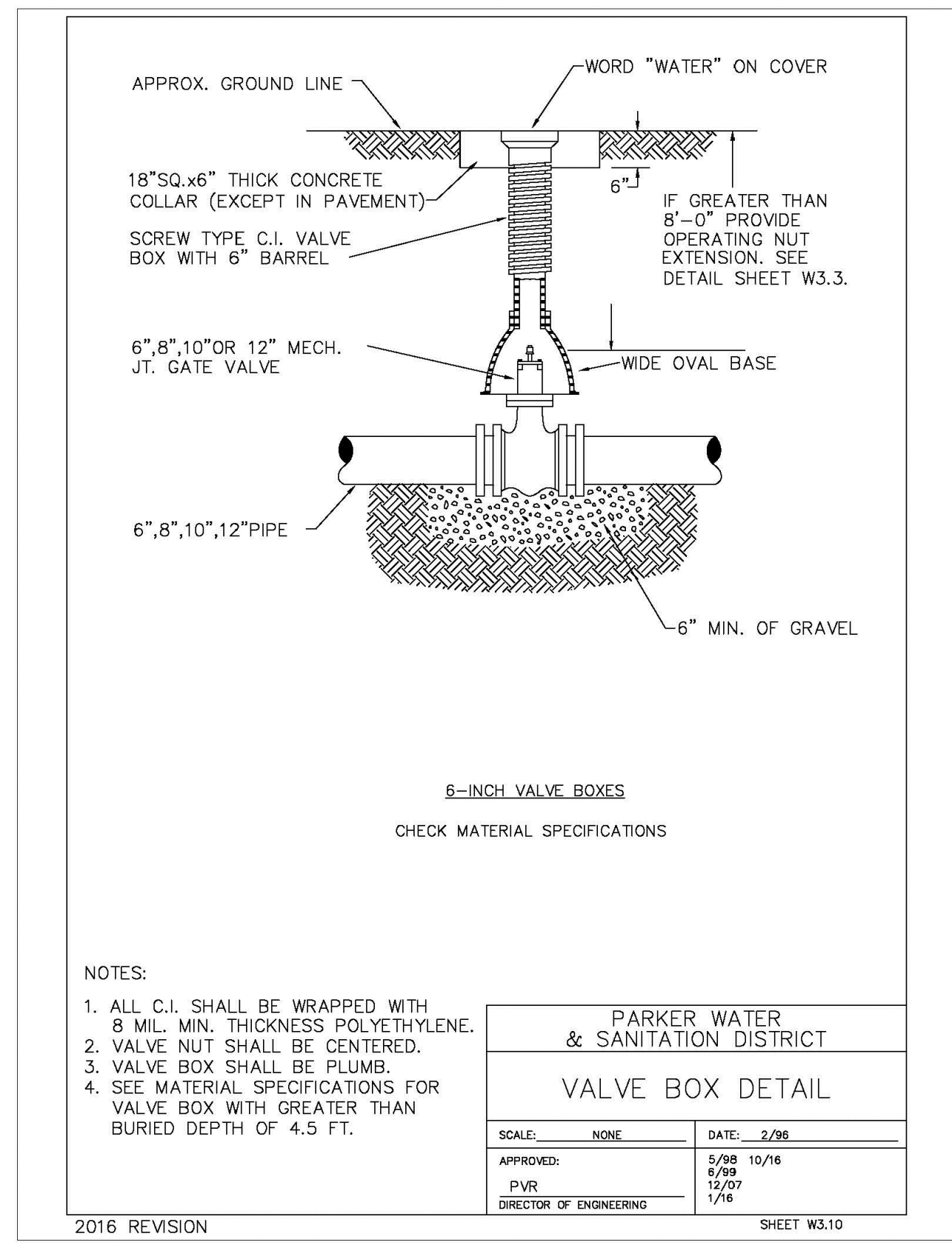
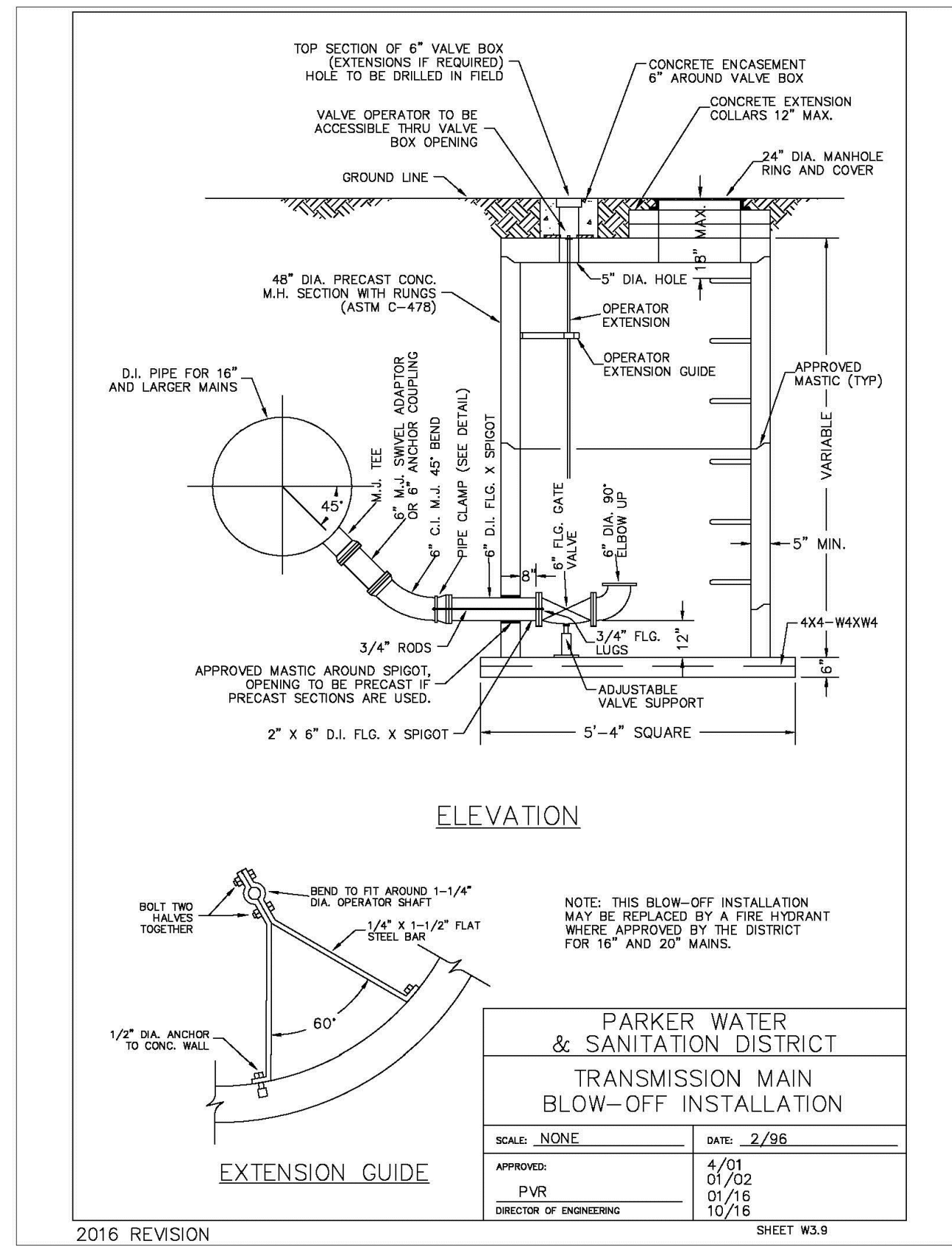
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10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	Revisions	No.	Date	Appr.	Date
	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				
	TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS WATER DETAILS				
DRAWN BY: RRR CHECKED BY: BPW DATE: JUNE 2018	SCALE: AS SHOWN FILE NO: 8130283701				
SHEET NUMBER	17				



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CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

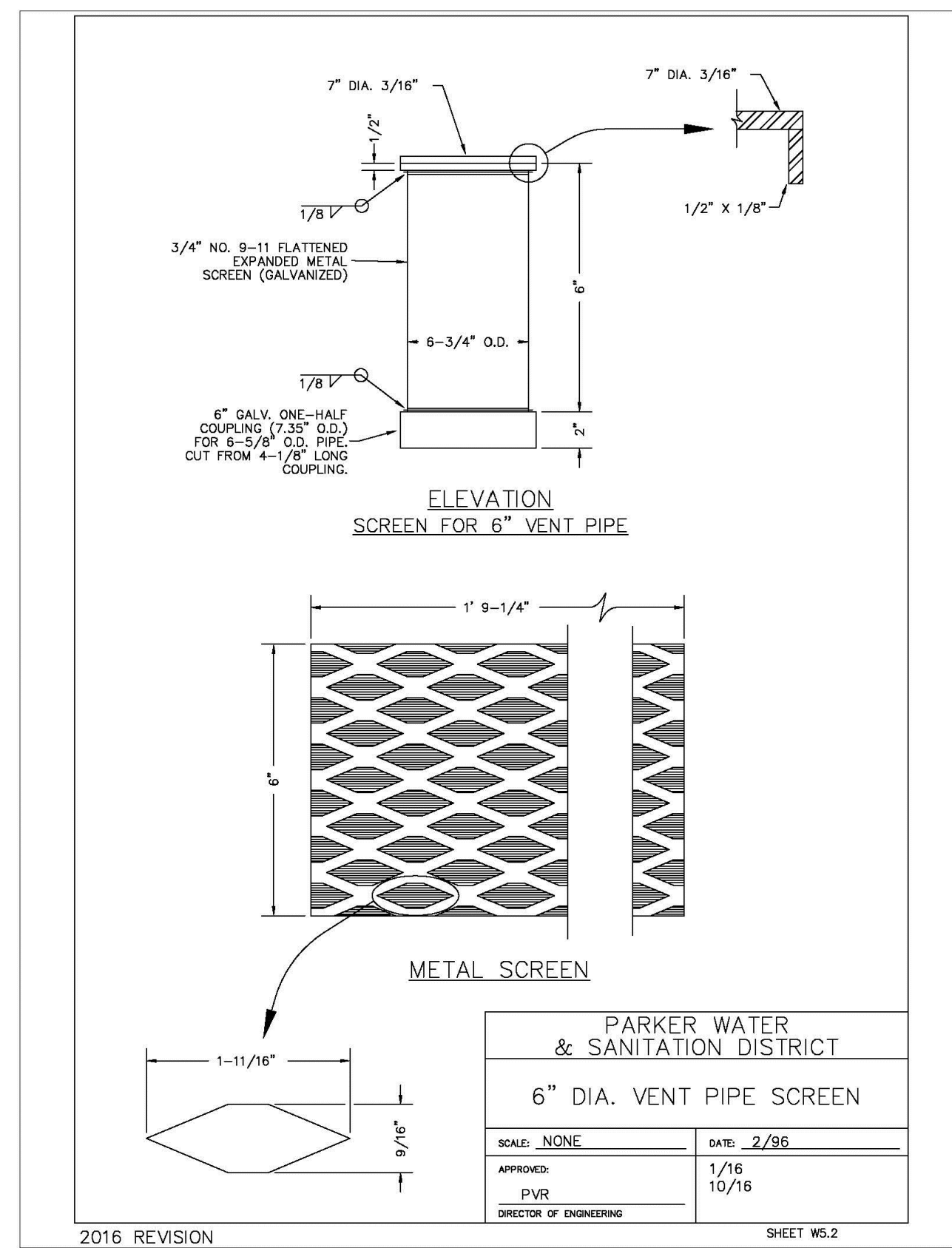
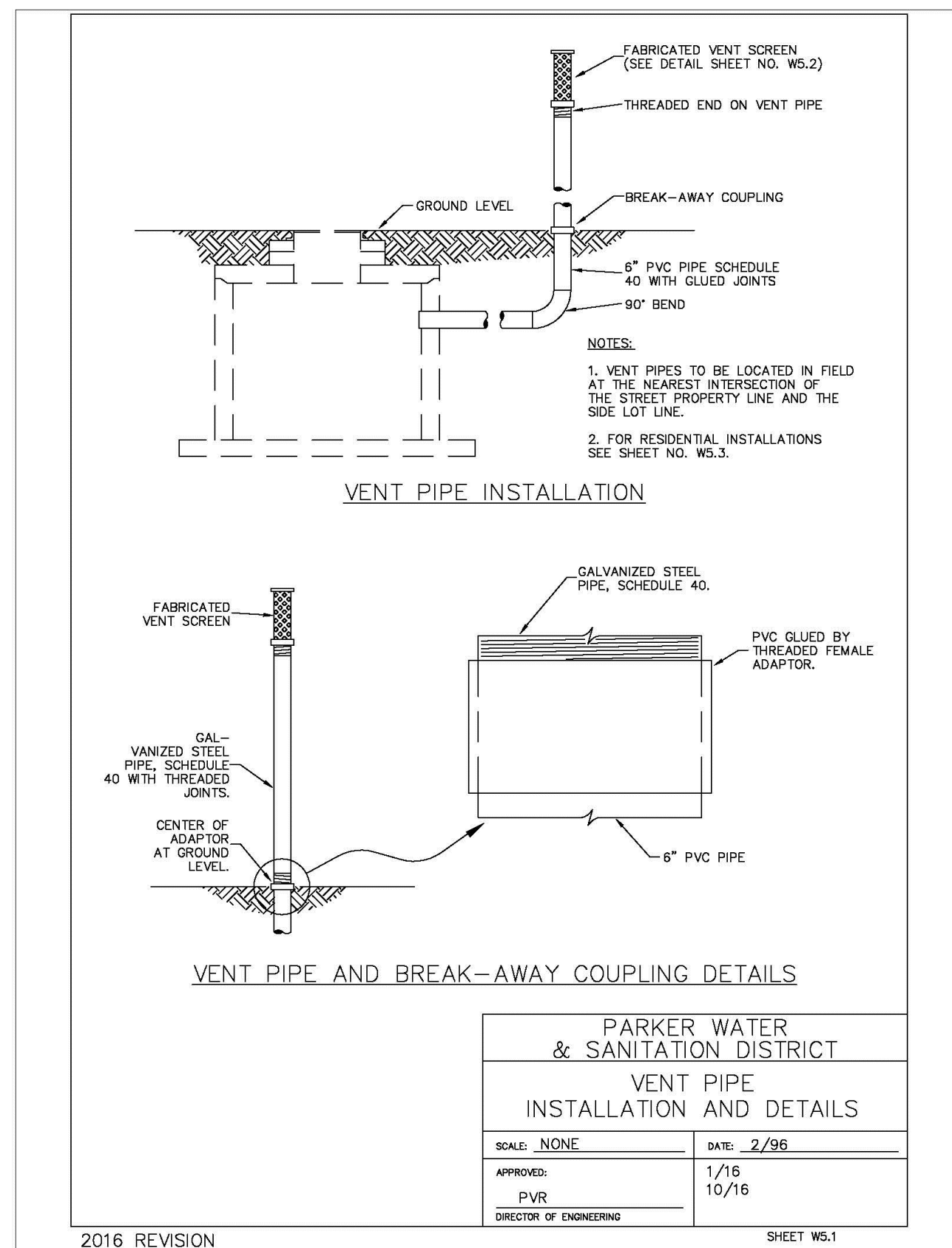
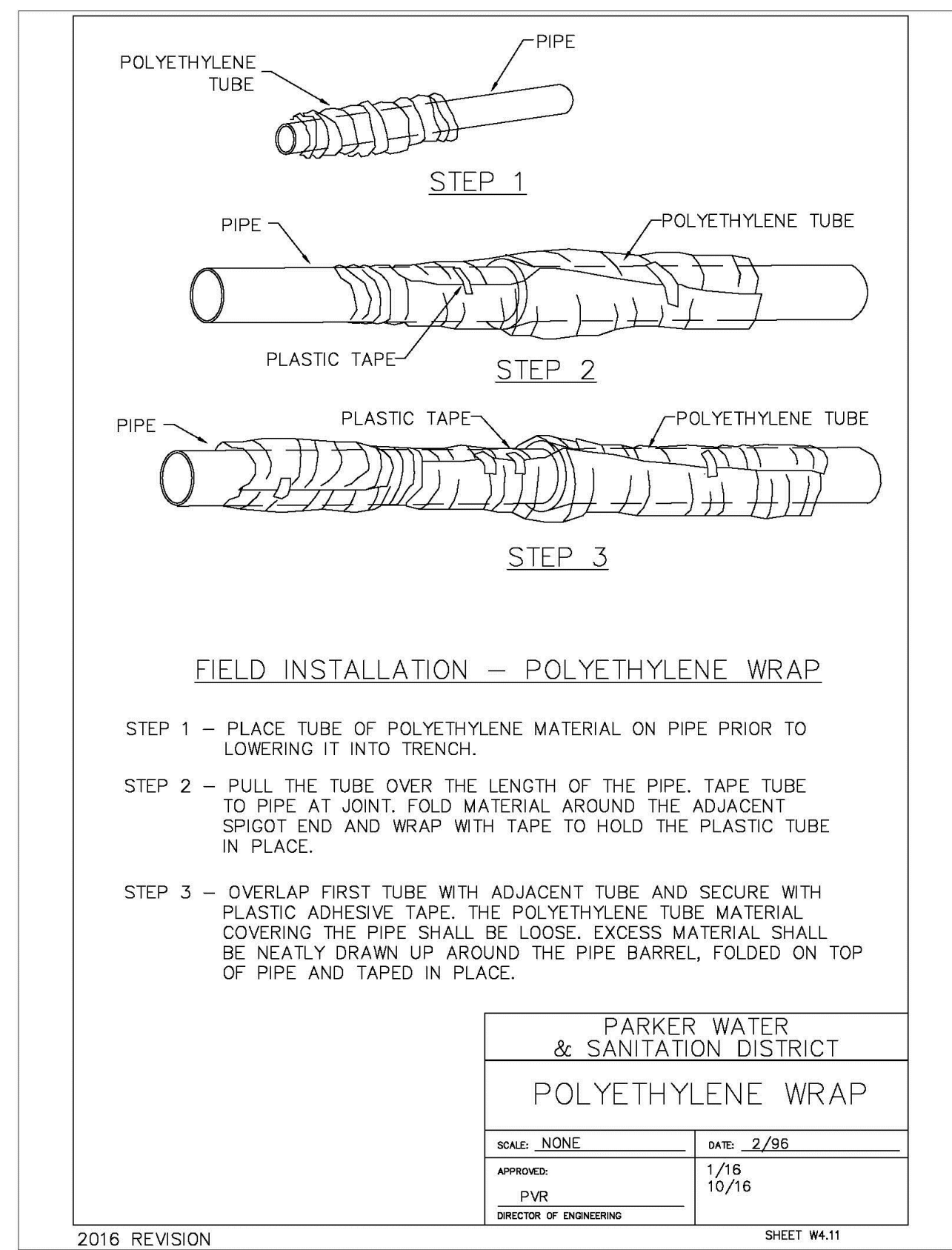
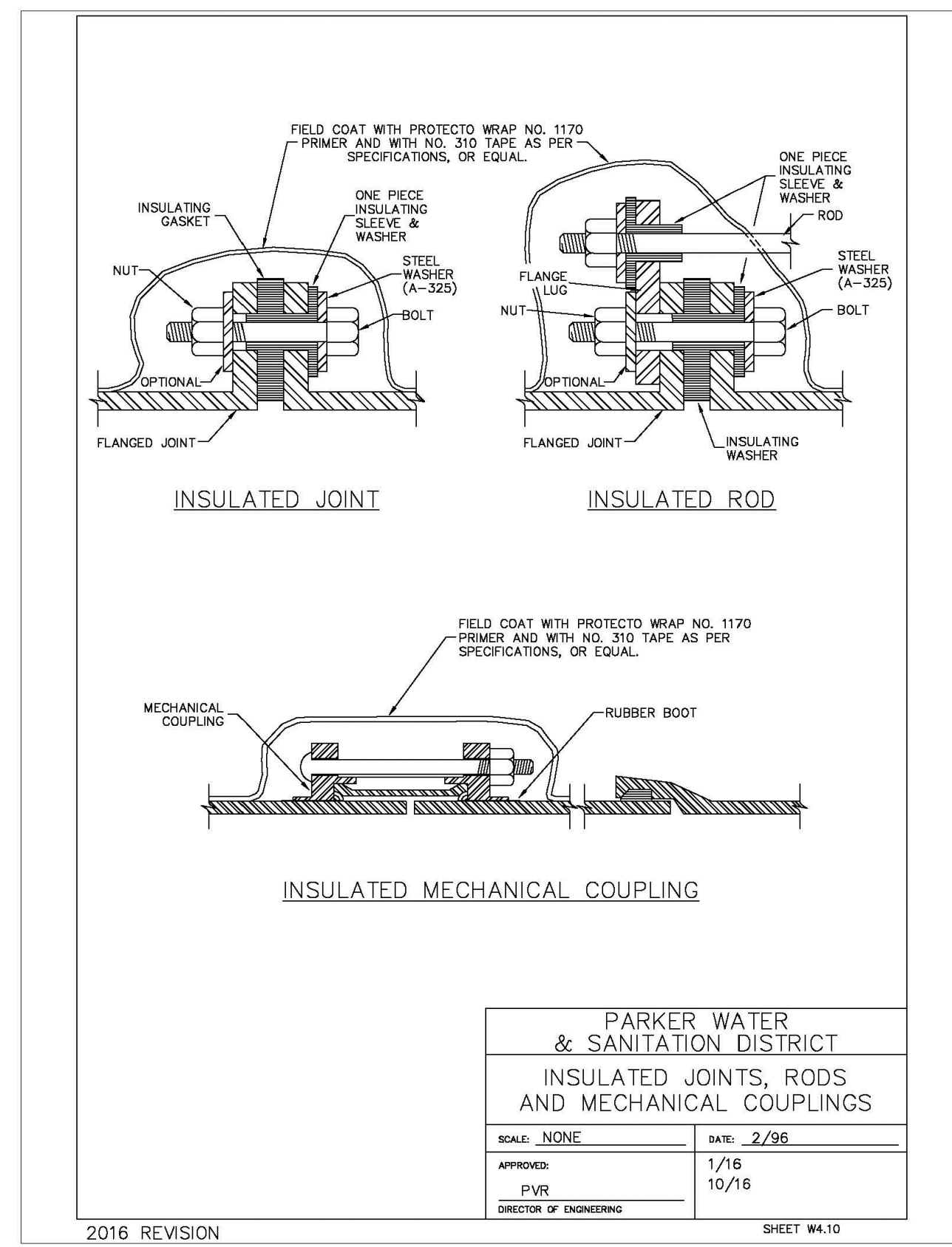
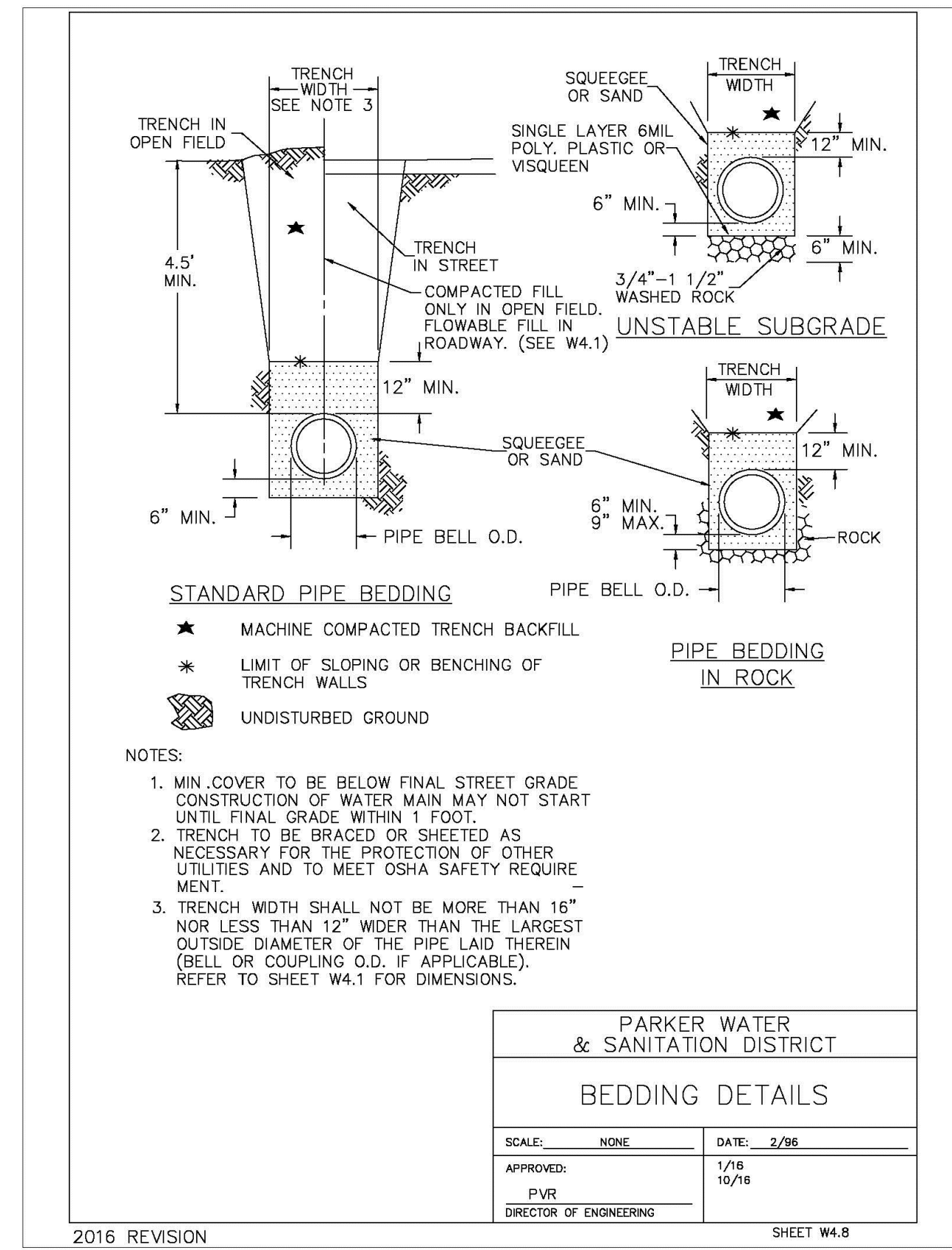
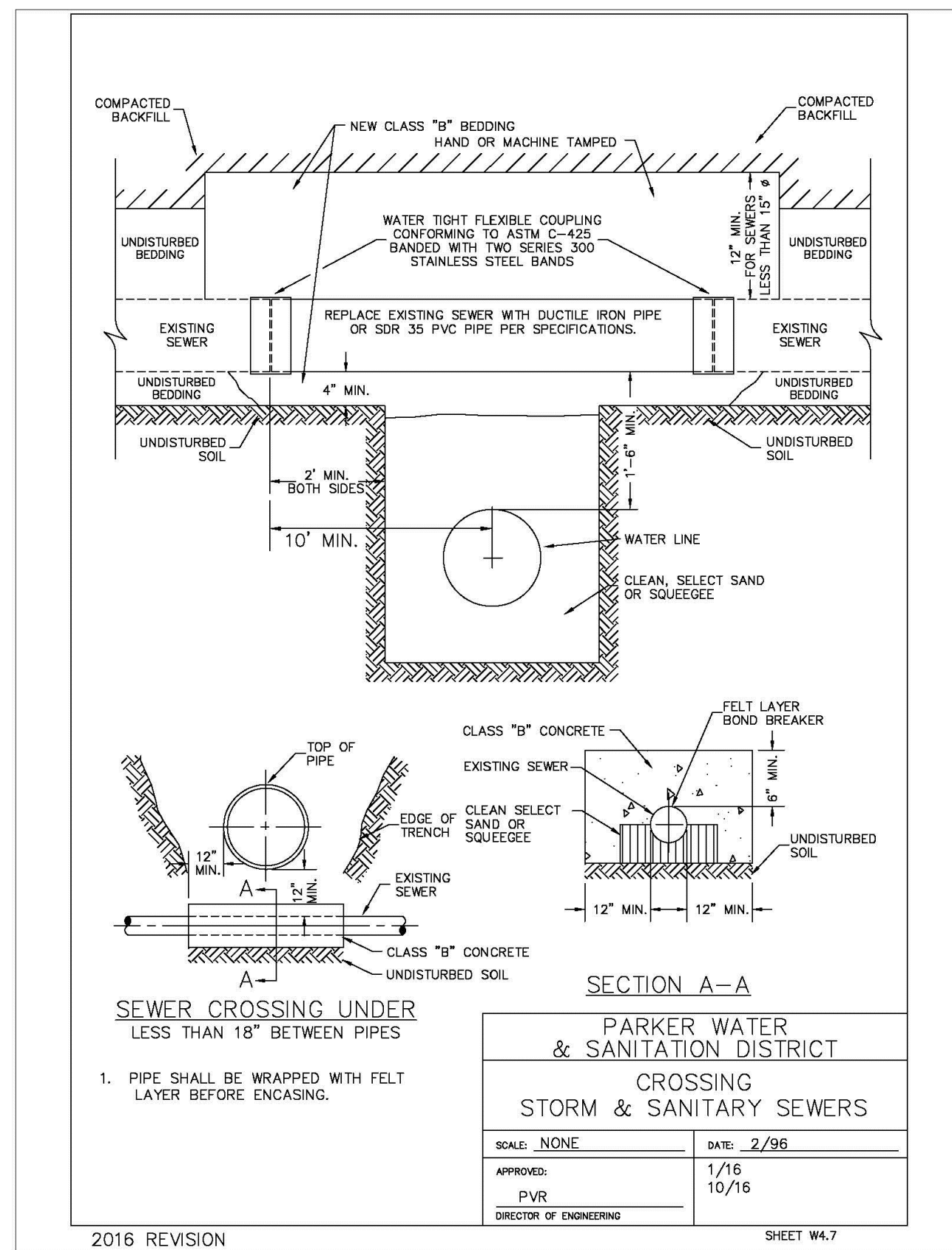
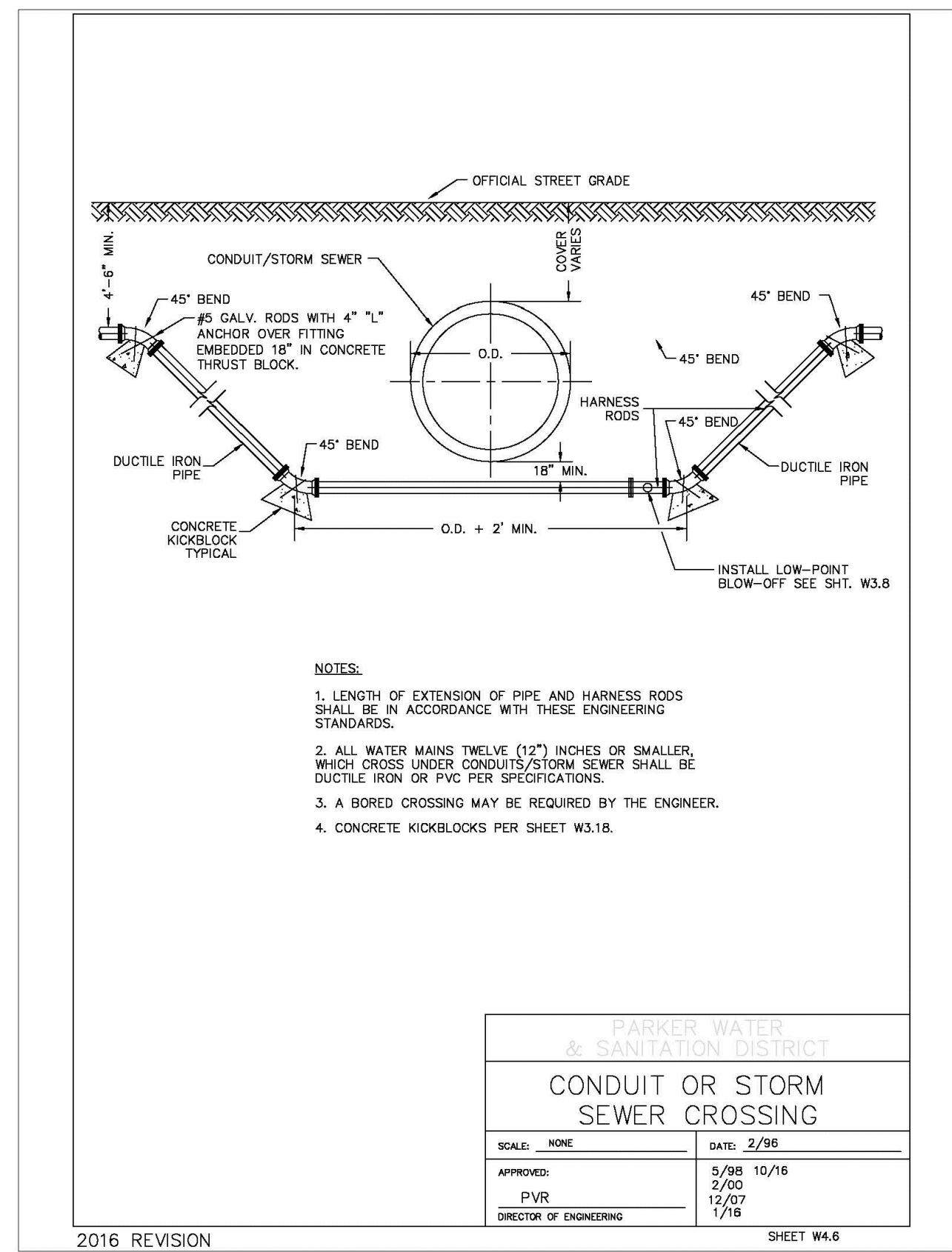
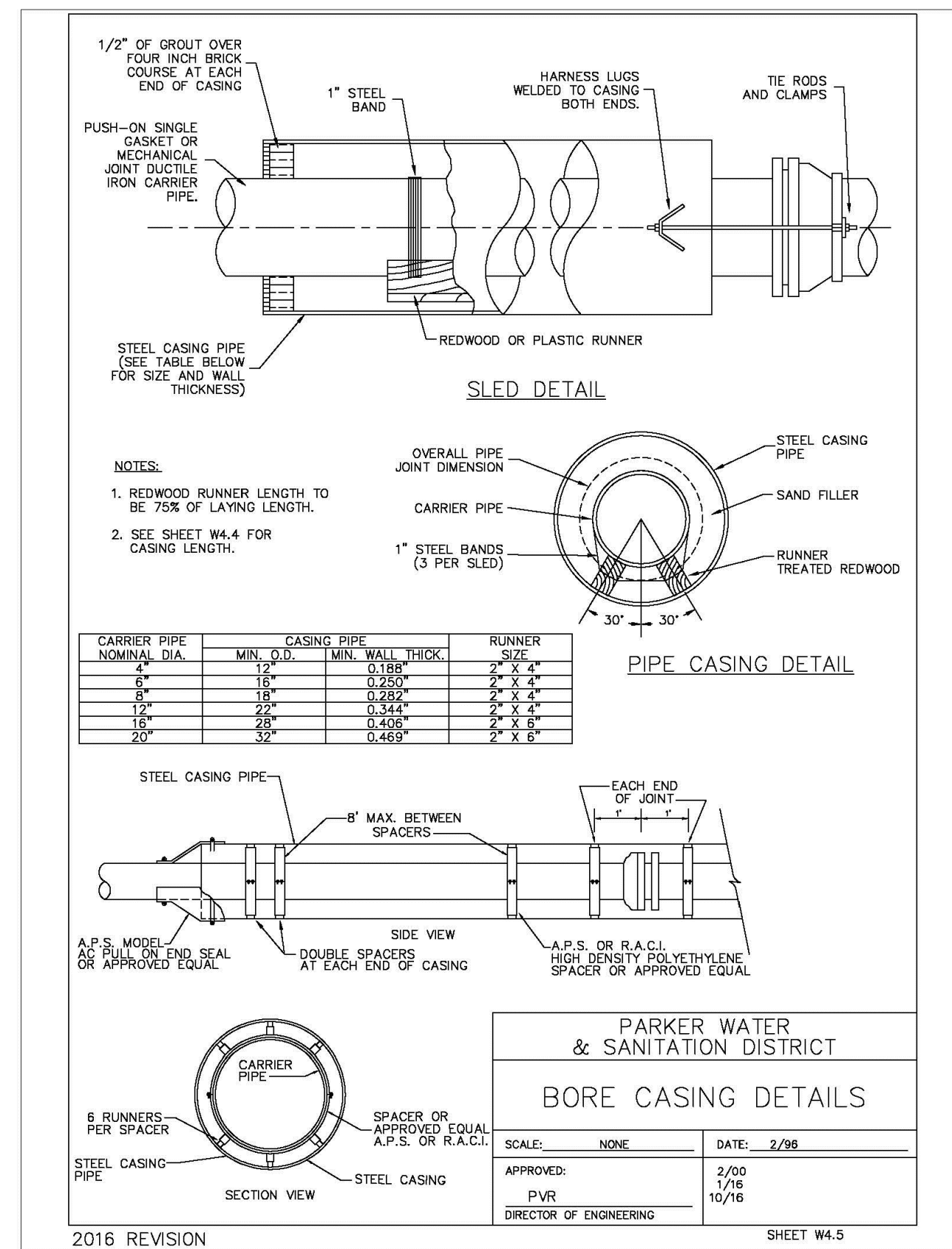
TRAILS AT CROWFOOT
FILING 16 CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

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DATE: JUNE 2018

SHEET NUMBER: 18

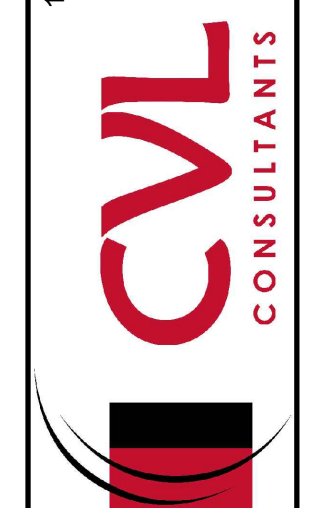
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				PROJECT: TRAILS AT CROWFOOT FILING 16 CONSTRUCTION DRAWINGS WATER DETAILS	CLIENT: HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112						

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