

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.
3. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY.
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.
8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
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.
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.
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.
2. ALL WATER MAINS SHALL BE PER PWSO 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 PWSO 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.
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.
8. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PARKER WATER AND SANITATION STANDARDS AND SPECIFICATIONS.
9. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF 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.
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.
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.
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.
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.

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.
4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL 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.
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.
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.
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.
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.
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\SHERRILL\ENGINEERING\DRG\SET\MULTIFAMILY\CDSET\19PARKER WATER AND SANITATION\COVER.DWG, BRIANW, 11/22/2018 10:43 AM

UNCC UTILITY UTILIZATION 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 6835 BEING CONSIDERED TO BEAR SOUTH 00°15'08" EAST, 2648.70 FEET.

PREPARED UNDER THE SUPERVISION OF BRIAN P. WILSON COLORADO P.E. 0050067

APPROVED JUL 29 2019 PARKER WATER AND SANITATION DISTRICT

Table with columns: SHEET NUMBER (2), DRAWN BY (KJD), CHECKED BY (BRW), DATE (JUNE 2018), SCALE (AS SHOWN), FILE NO. (8130283701), PROJECT TITLE (TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS PARKER WATER AND SANITATION NOTES), CONSULTANT (HR 935 LLC), ADDRESS (7353 South Alton Way CENTENNIAL, CO 80112), CONTACT (10335 E. Dry Creek Rd Suite 240 Englewood, CO 80112), and Revisions table.

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: (DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: (DISTRICT ENGINEER) DATE

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.

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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 OPTIC LINE
⊕	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
EL	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

NOTES:
 1. SANITARY SERVICES FOR BLOCK 1, LOTS 19-20 & 29-30 & BLOCK 2, LOTS 5-14 WILL BE INSTALLED WITH TRAILS AT CROWFOOT FILING 9.
 2. 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.
 3. FIRE HYDRANT EASEMENTS ARE 5' BEHIND AND 10' TO EACH SIDE OF THE HYDRANTS.

FIRE DEPARTMENT APPROVAL

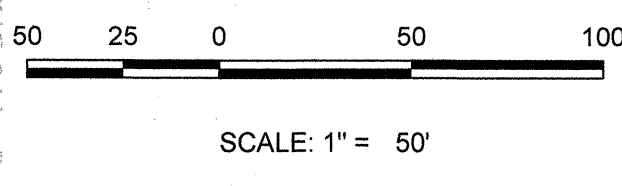
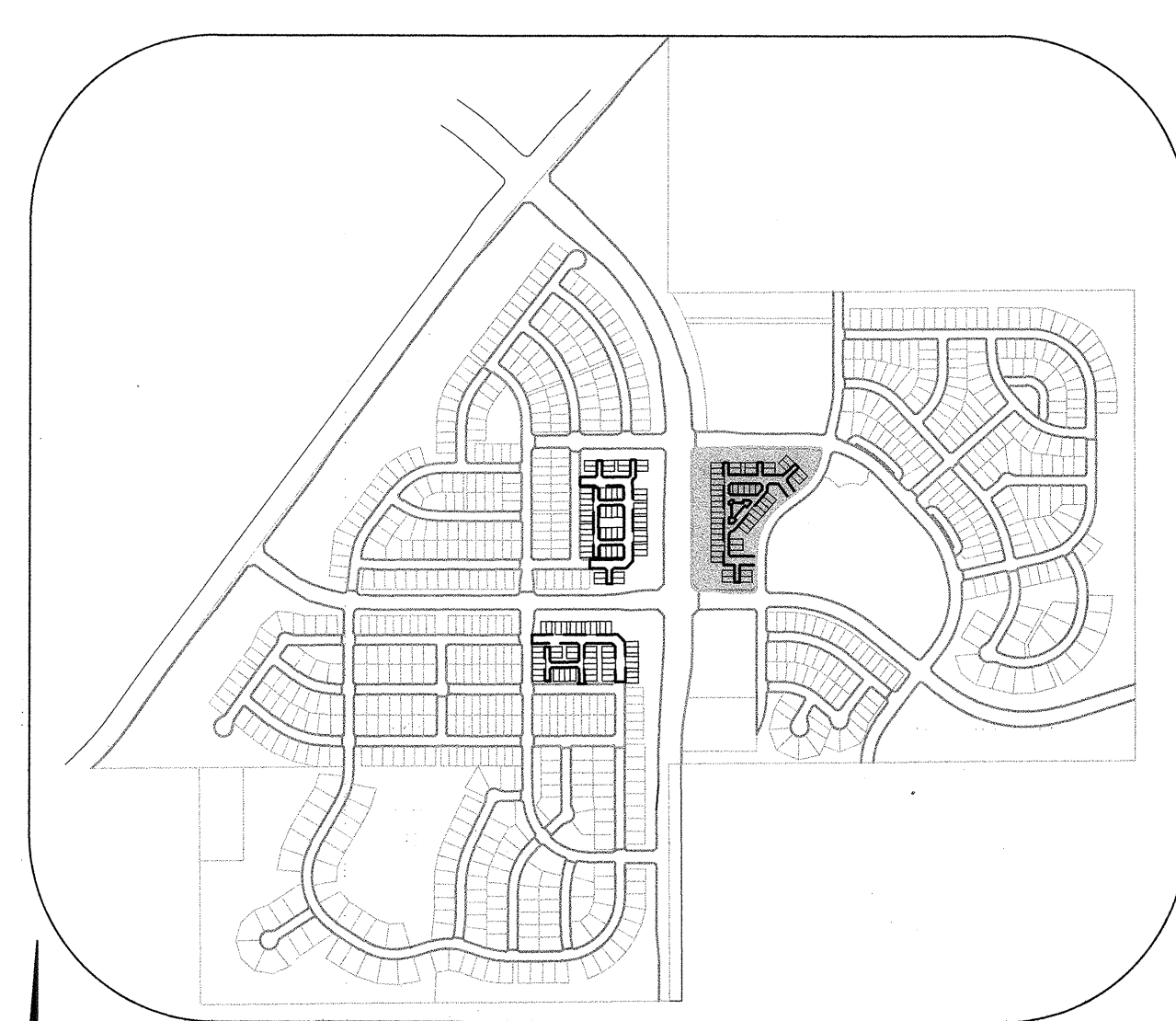
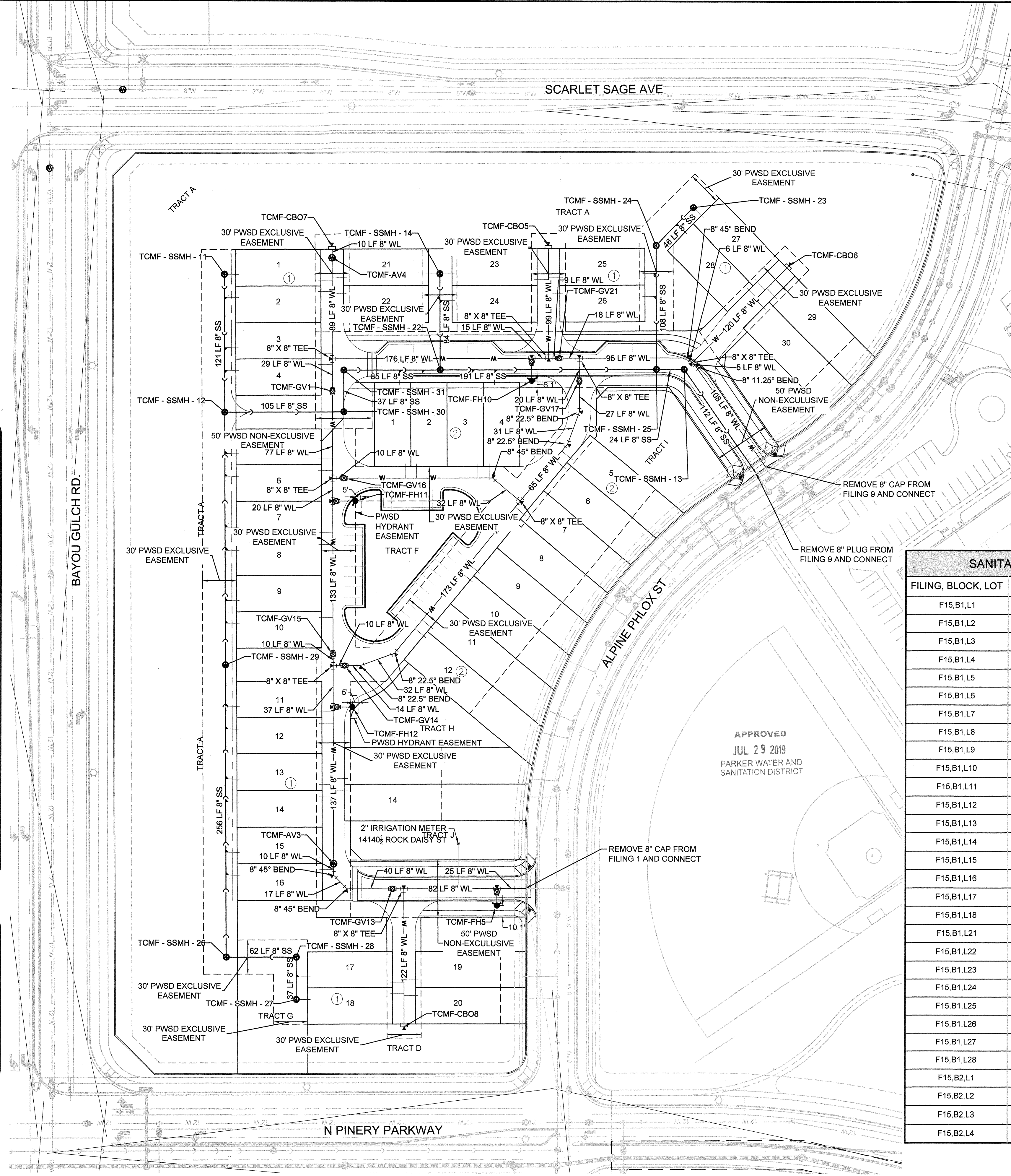
ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) DATE: 11-16-18

(NOTE: UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

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

UNCC
UNIVERSITY OF NORTH CAROLINA CENTER FOR UTILITY CARE



SANITARY SERVICE TABLE

FILING, BLOCK, LOT	STREET	STATIONING
F15,B1,L1	FILING 15 SS WEST	16+98.25
F15,B1,L2	FILING 15 SS WEST	16+78.25
F15,B1,L3	FILING 15 SS WEST	16+34.25
F15,B1,L4	FILING 15 SS WEST	16+14.25
F15,B1,L5	FILING 15 SS WEST	15+40.25
F15,B1,L6	FILING 15 SS WEST	15+20.25
F15,B1,L7	FILING 15 SS WEST	14+76.25
F15,B1,L8	FILING 15 SS WEST	14+56.25
F15,B1,L9	FILING 15 SS WEST	14+12.25
F15,B1,L10	FILING 15 SS WEST	13+92.25
F15,B1,L11	FILING 15 SS WEST	13+18.83
F15,B1,L12	FILING 15 SS WEST	12+98.83
F15,B1,L13	FILING 15 SS WEST	12+54.83
F15,B1,L14	FILING 15 SS WEST	12+34.83
F15,B1,L15	FILING 15 SS WEST	11+90.83
F15,B1,L16	FILING 15 SS WEST	11+70.83
F15,B1,L17	FILING 15 SS WEST	10+20.00
F15,B1,L18	FILING 15 SS WEST	10+00.00
F15,B1,L21	FILING 15 SS NORTH	10+84.00
F15,B1,L22	FILING 15 SS NORTH	10+64.00
F15,B1,L23	FILING 15 SS NORTH	10+84.00
F15,B1,L24	FILING 15 SS NORTH	10+61.00
F15,B1,L25	FILING 15 SS NORTHEAST	10+84.00
F15,B1,L26	FILING 15 SS NORTHEAST	10+64.00
F15,B1,L27	FILING 15 SS NORTHEAST	11+64.29
F15,B1,L28	FILING 15 SS NORTHEAST	11+34.29
F15,B2,L1	MOCK ORANGE AVE	10+59.00
F15,B2,L2	MOCK ORANGE AVE	10+79.00
F15,B2,L3	MOCK ORANGE AVE	11+23.00
F15,B2,L4	MOCK ORANGE AVE	11+43.00

WATER SERVICE TABLE

FILING, BLOCK, LOT	STREET	STATIONING
F15,B1,L1	ROCK DAISY PT	10+27.00
F15,B1,L2	ROCK DAISY PT	10+37.00
F15,B1,L3	ROCK DAISY PT	10+91.00
F15,B1,L4	ROCK DAISY PT	11+01.00
F15,B1,L5	ROCK DAISY PT	11+85.00
F15,B1,L6	ROCK DAISY PT	11+95.00
F15,B1,L7	ROCK DAISY PT	12+49.00
F15,B1,L8	ROCK DAISY PT	12+59.00
F15,B1,L9	ROCK DAISY PT	13+13.00
F15,B1,L10	ROCK DAISY PT	13+23.00
F15,B1,L11	ROCK DAISY PT	14+06.42
F15,B1,L12	ROCK DAISY PT	14+16.42
F15,B1,L13	ROCK DAISY PT	14+70.42
F15,B1,L14	ROCK DAISY PT	14+80.42
F15,B1,L15	ROCK DAISY PT	15+34.19
F15,B1,L16	ROCK DAISY PT	15+42.76
F15,B1,L17	BLUE HEART CT	10+82.08
F15,B1,L18	BLUE HEART CT	10+92.08
F15,B1,L19	BLUE HEART CT	10+80.08
F15,B1,L20	BLUE HEART CT	10+94.08
F15,B1,L21	ROCK DAISY PT	10+25.00
F15,B1,L22	ROCK DAISY PT	10+39.00
F15,B1,L23	MOCK ORANGE WAY	10+27.00
F15,B1,L24	MOCK ORANGE WAY	10+37.00
F15,B1,L25	MOCK ORANGE WAY	10+25.00
F15,B1,L26	MOCK ORANGE WAY	10+39.00
F15,B1,L27	MOCK ORANGE CT	10+98.21
F15,B1,L28	MOCK ORANGE CT	10+88.21
F15,B1,L29	MOCK ORANGE CT	11+00.21
F15,B1,L30	MOCK ORANGE CT	10+86.21
F15,B2,L1	ROCK DAISY LN	10+64.00
F15,B2,L2	ROCK DAISY LN	10+74.00
F15,B2,L3	ROCK DAISY LN	11+27.91
F15,B2,L4	ROCK DAISY LN	11+37.07
F15,B2,L5	ROCK DAISY TRL	12+86.64
F15,B2,L6	ROCK DAISY TRL	12+76.64
F15,B2,L7	ROCK DAISY TRL	12+22.64
F15,B2,L8	ROCK DAISY TRL	12+12.64
F15,B2,L9	ROCK DAISY TRL	11+58.64
F15,B2,L10	ROCK DAISY TRL	11+48.64
F15,B2,L11	ROCK DAISY TRL	10+94.64
F15,B2,L12	ROCK DAISY TRL	10+84.64
F15,B2,L13	ROCK DAISY PT	14+65.32
F15,B2,L14	ROCK DAISY PT	14+75.32

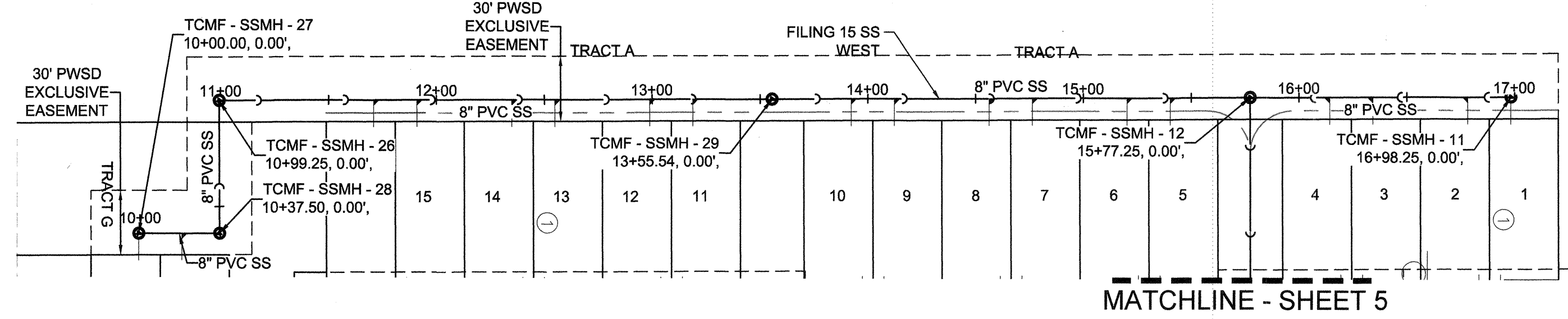
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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 23063 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.

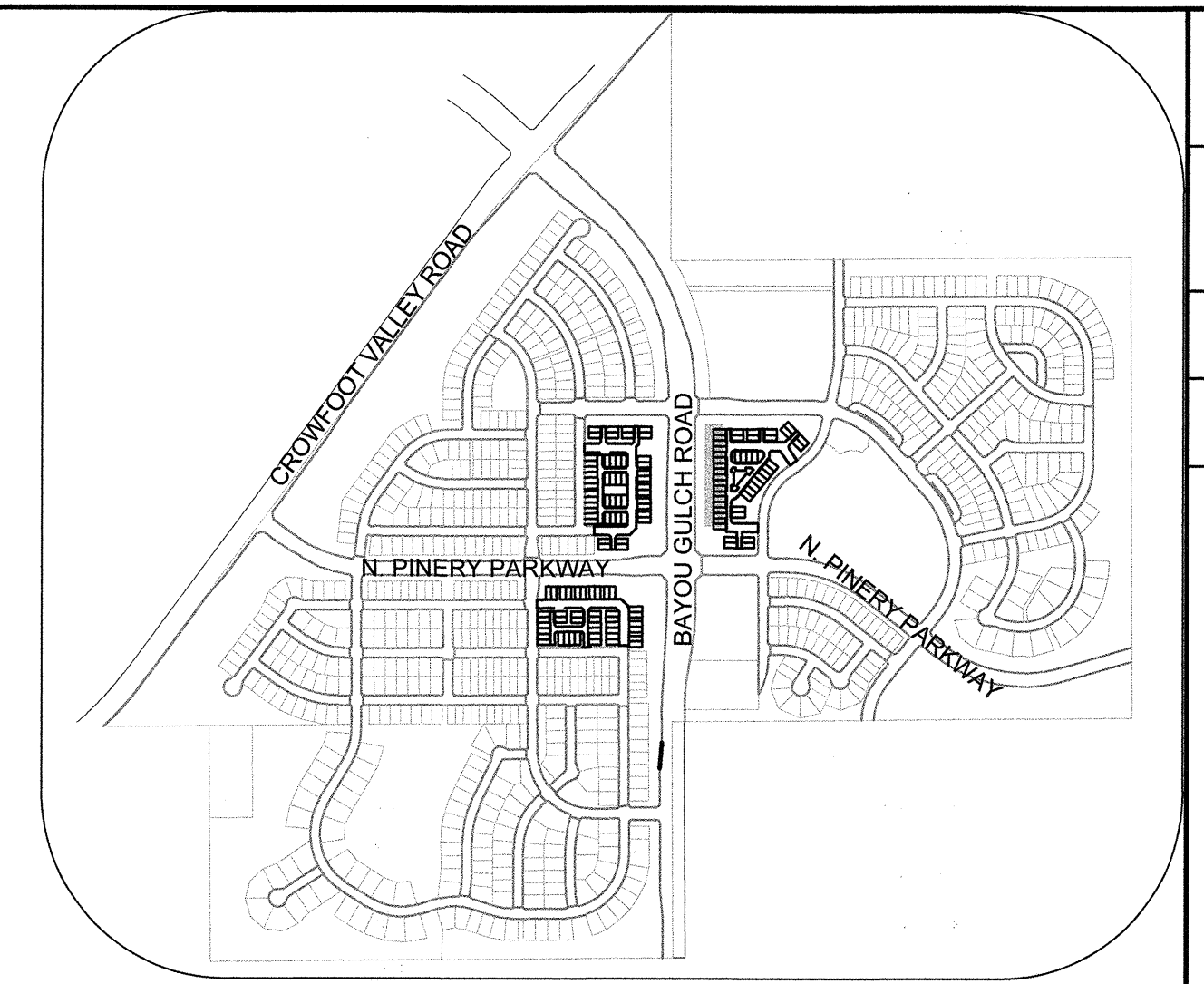
PREPARED UNDER THE SUPERVISION OF

 BRIAN P. WILSON
 COLORADO P.E. 0050067

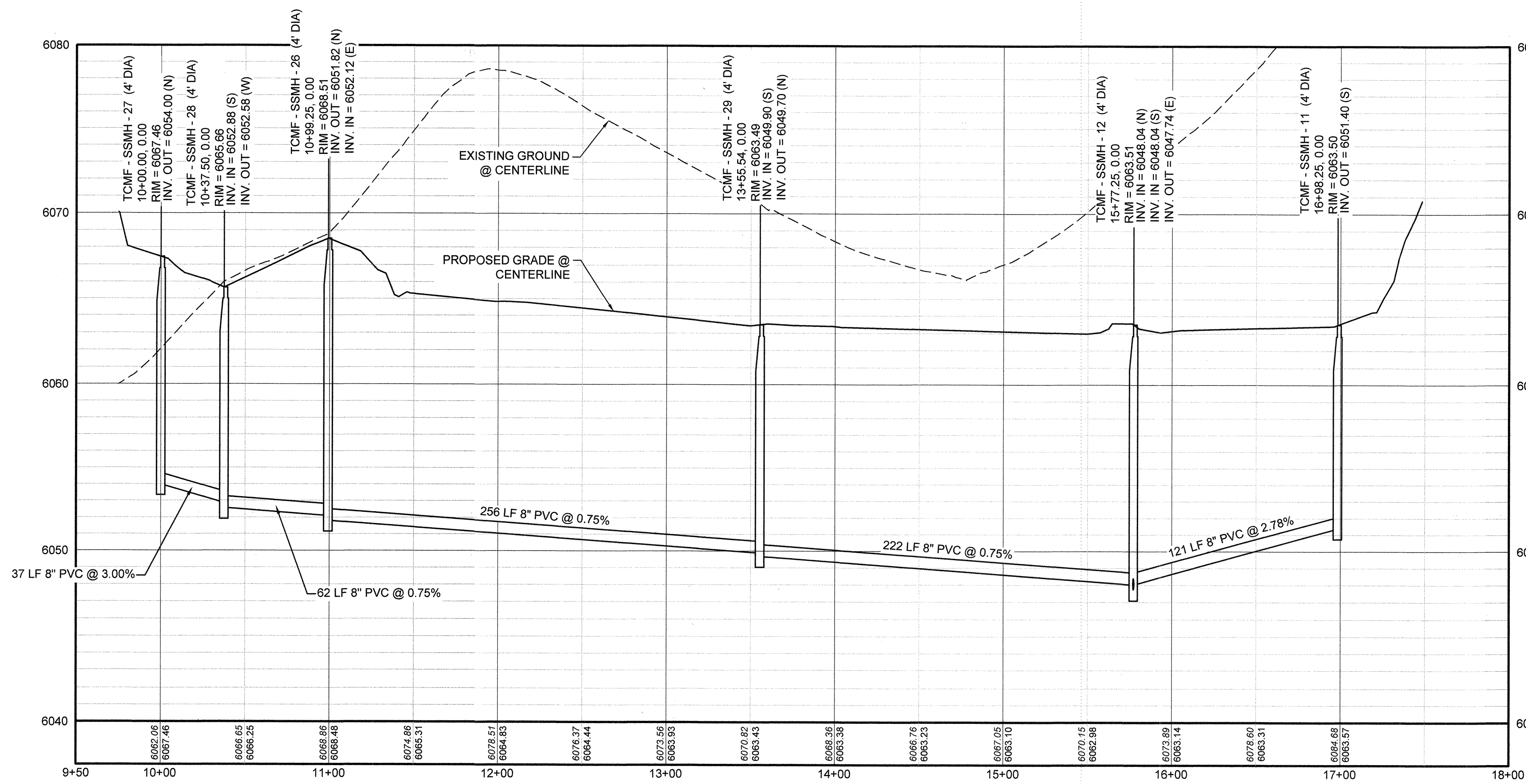
10333 E Dry Creek Rd Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	Revisions	Appr.	Date
CVL CONSULTANTS	No.	Init.	Date
	HR 935 LLC 7351 ALCOBY CENTENNIAL, CO 80112		
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS AREA UTILITY PLAN			
SCALE: AS SHOWN	CHECKED BY: BRW	DRAWN BY: BRW	SHEET NUMBER: 3
FILE NO: 8130283701	DATE: JUNE 2018		



PLAN: FILING 15 SS WEST STA: 9+50.00 TO 15+50.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: FILING 15 SS WEST STA: 9+50.00 TO 18+00.00
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	---	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	PVT	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	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

NOTES:
1. SEE SHEET 3 FOR SANITARY SERVICE TABLES.

A:\PROJECTS\SS SANITARY SEWER SHEET\SS WEST DWG.BRANW.1122018.10:47 AM

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BENCHMARK
THE 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 88 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

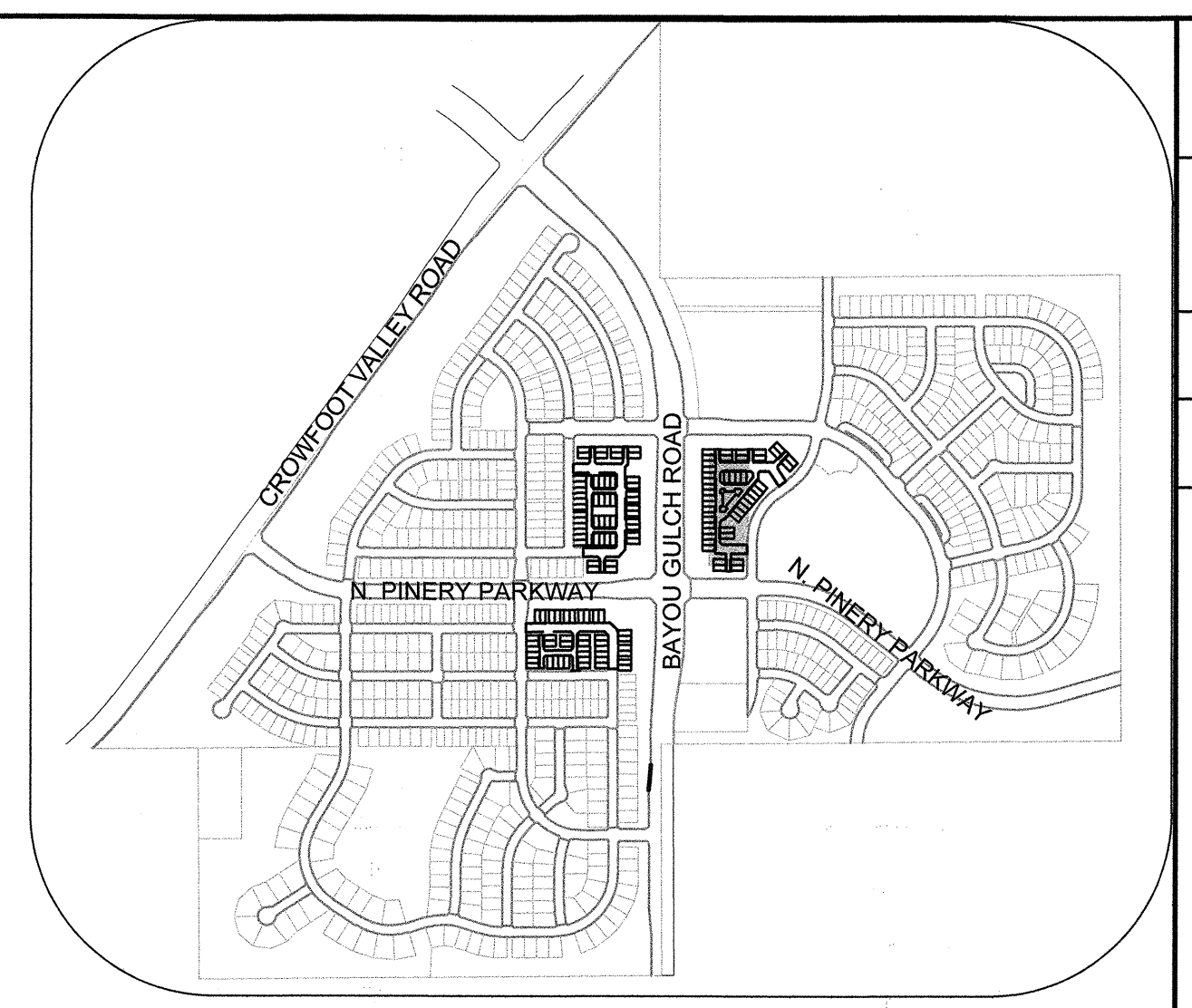
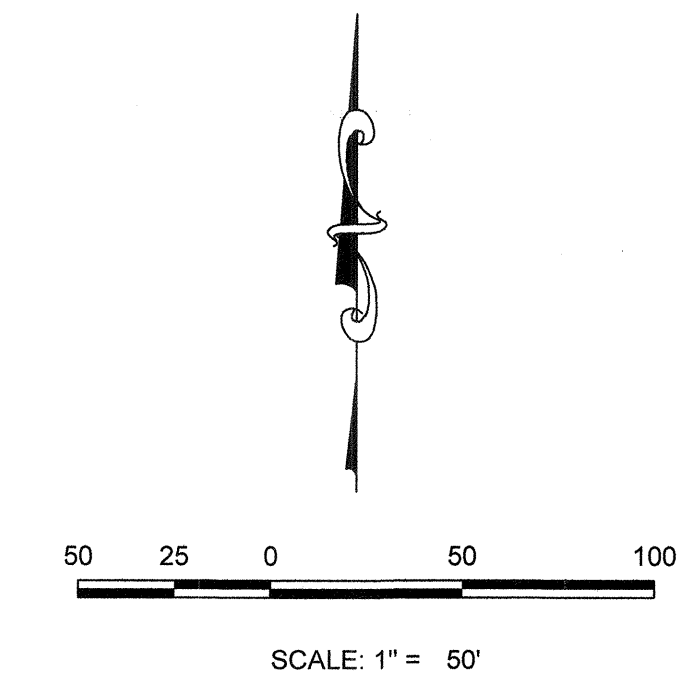
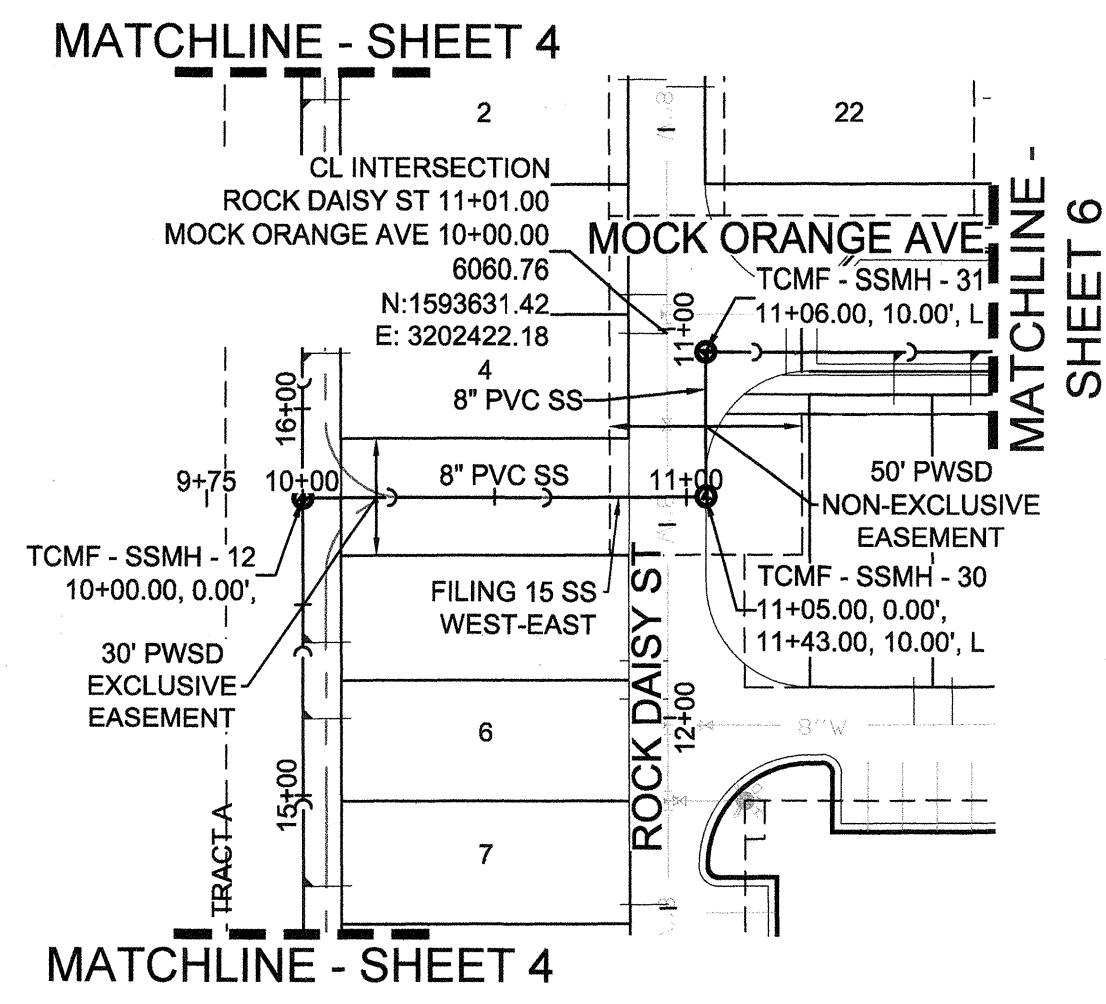
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'08" EAST, 2648.70 FEET.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

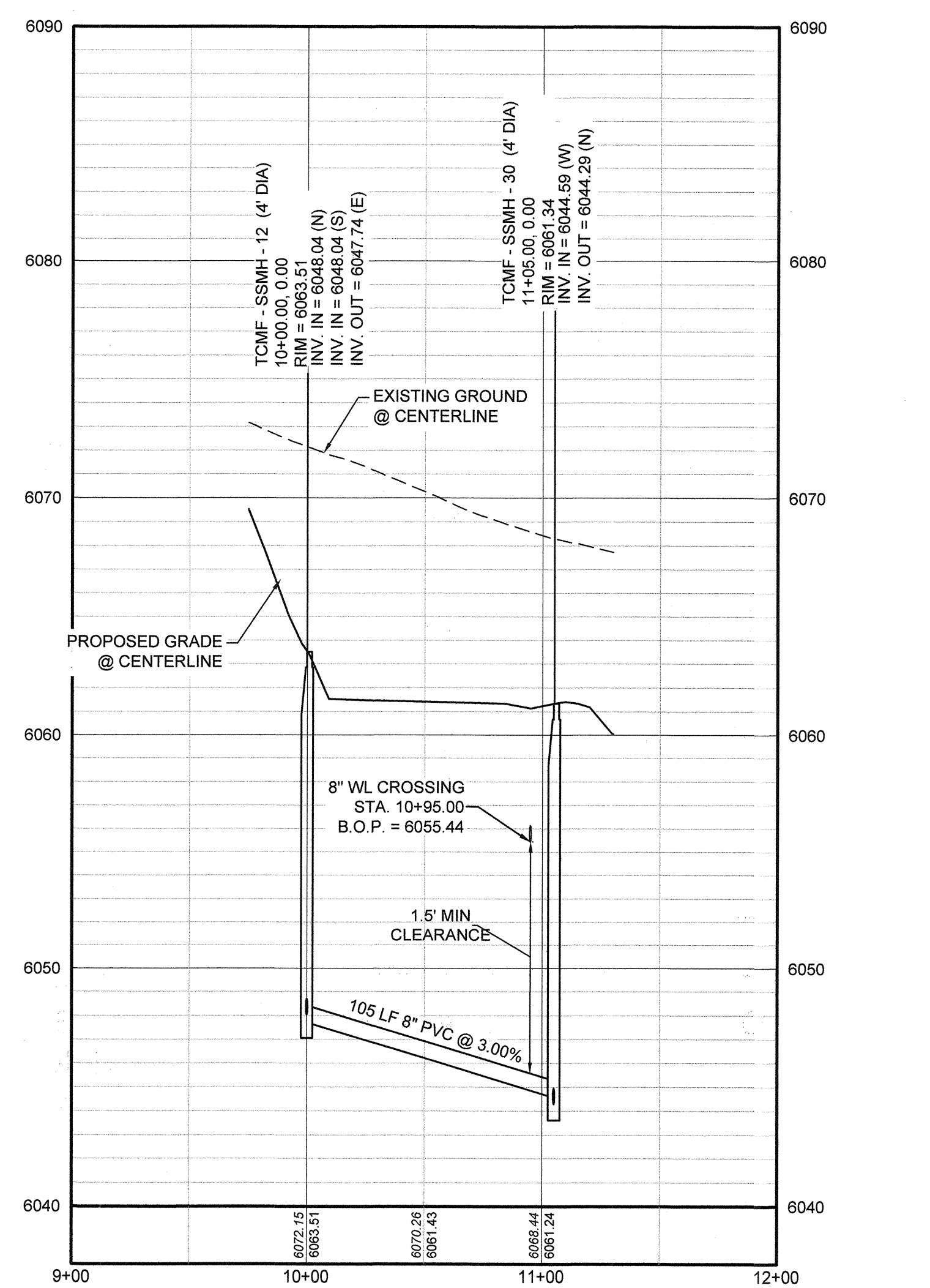
APPROVED
JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	Revisions	Date	Appr.	Date
 HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	No.			
	TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE FILING 15 SS WEST			
SCALE: AS SHOWN	FILE NO: 8130283701	DATE: JUNE 2018		
DRAWN BY: RRR	CHECKED BY: BRW	DATE: JUNE 2018		
SHEET NUMBER	4			

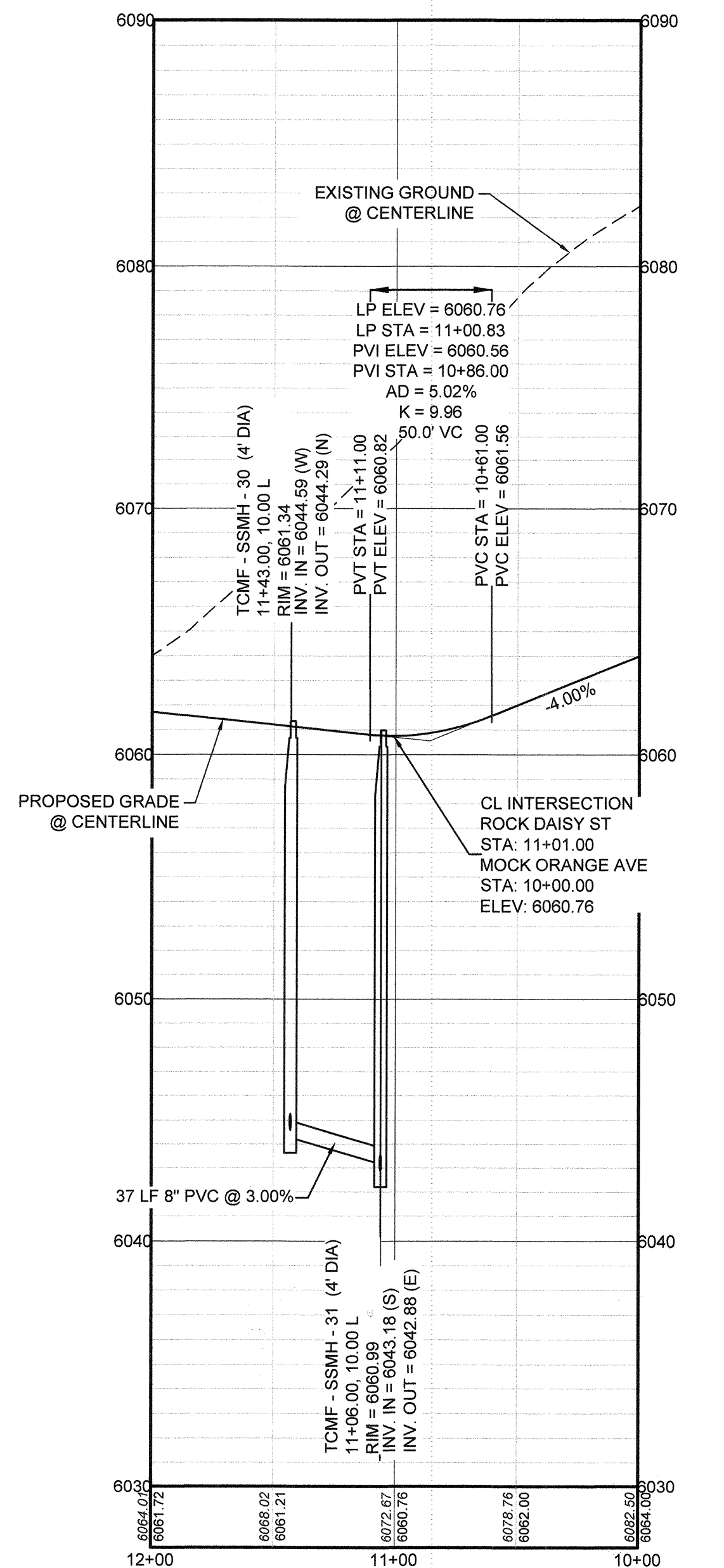


PLAN: FILING 15 SS WEST-EAST STA: 9+75.00 TO 11+50.00 & ROCK DAISY ST STA: 11+00.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'

KEYMAP
N.T.S.



PROFILE: FILING 15 SS WEST-EAST STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: ROCK DAISY ST STA: 12+00.00 TO 10+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

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

ABBREVIATIONS

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EVC	END VERTICAL CURVE	SC	SANITARY CAP
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FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
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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

NOTES:
 1. SEE SHEET 3 FOR SANITARY SERVICE TABLES.

N:\PROJECTS\SHSS RANCH\ENGINEERING\SHSS\MULTIFAMILY\DCS\FIPARKER WATER AND SANITATION\SANITARY SEWER SHEET\ROCK DAISY POINT DWG. BRIAN.W. 11/27/2018 10:49 AM

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BENCHMARK
 THE 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 8 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 6835 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
 COLORADO P.E. 0050067

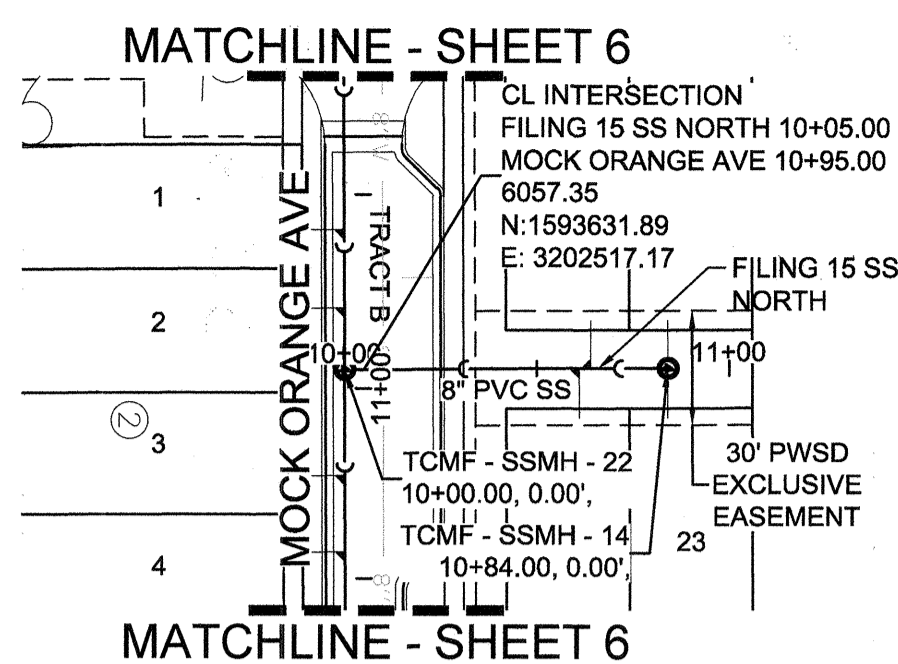
APPROVED
 JUL 29 2019
 PARKER WATER AND SANITATION DISTRICT

SHEET NUMBER	DRAWN BY: RRR	CHECKED BY: BRW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	Revisions	No.	Date	Init.	Appr.	Date
				TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE FILING 15 SS WEST-EAST & ROCK DAISY ST							
5											

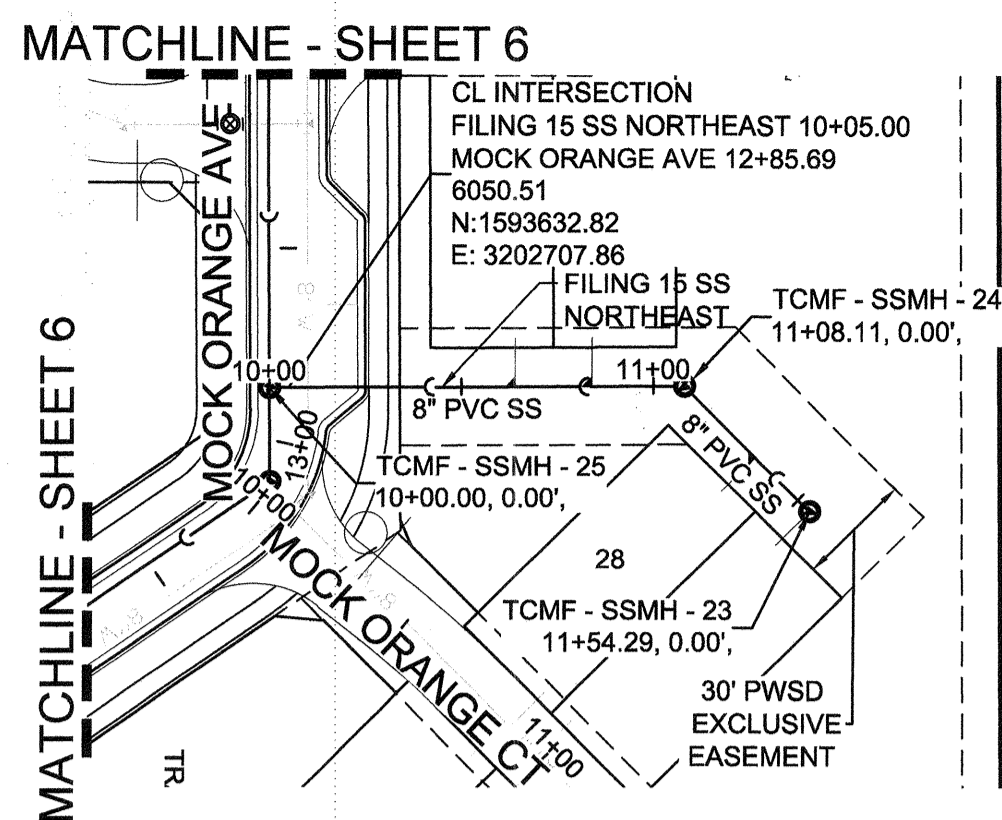
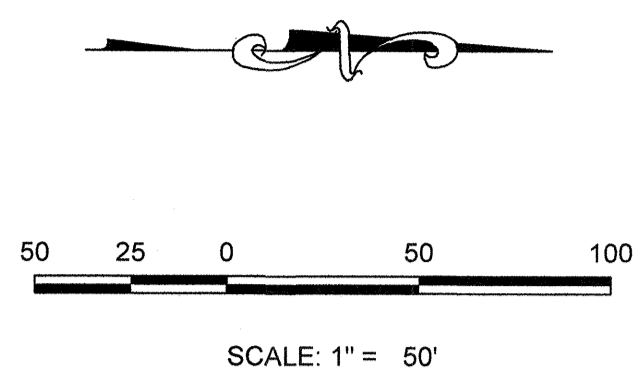
10333 E. Dry Creek Rd.
 Suite 240
 Englewood, CO 80112
 Tel: (720) 482-9526
 Fax: (720) 482-9546

CVL
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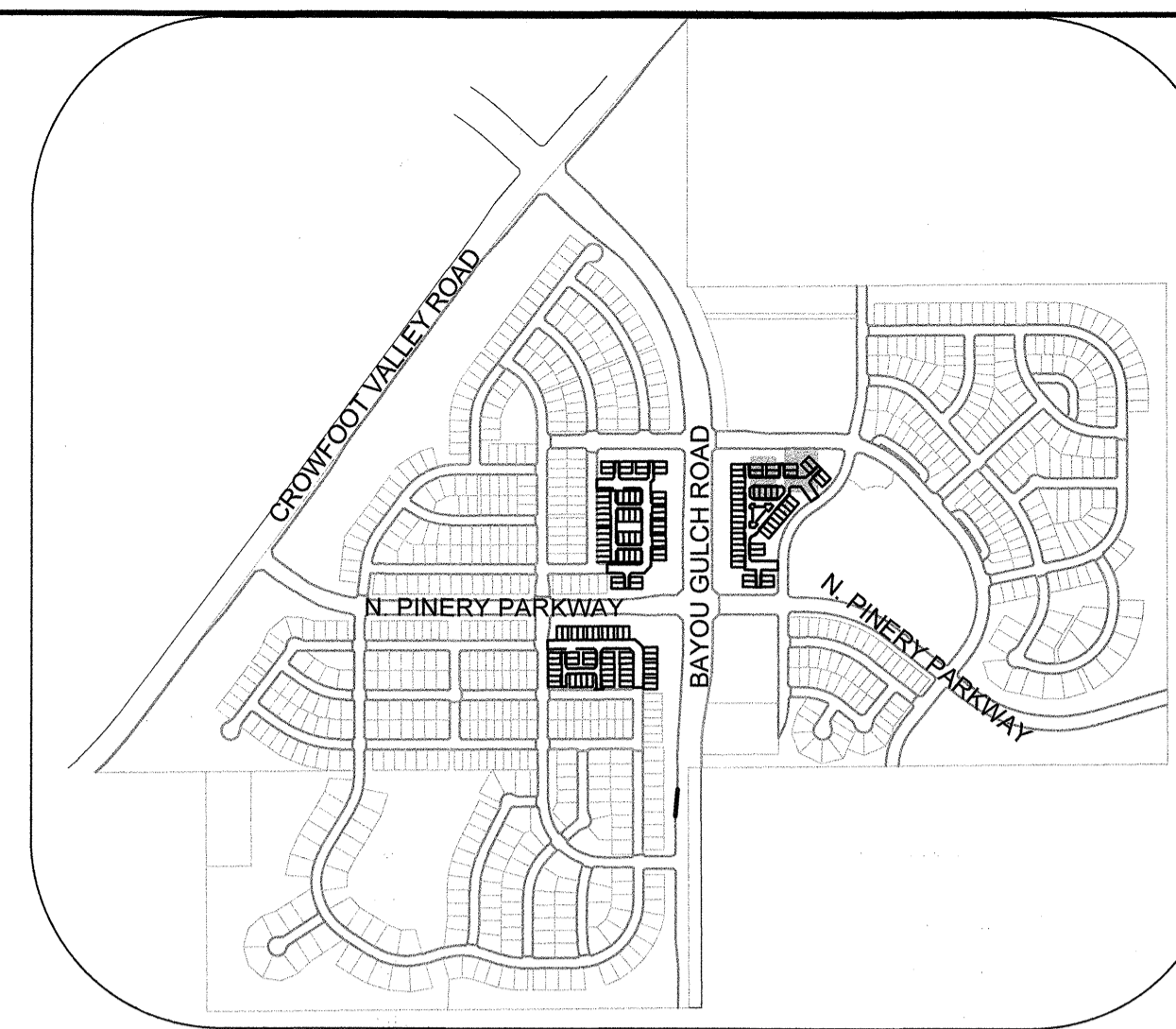
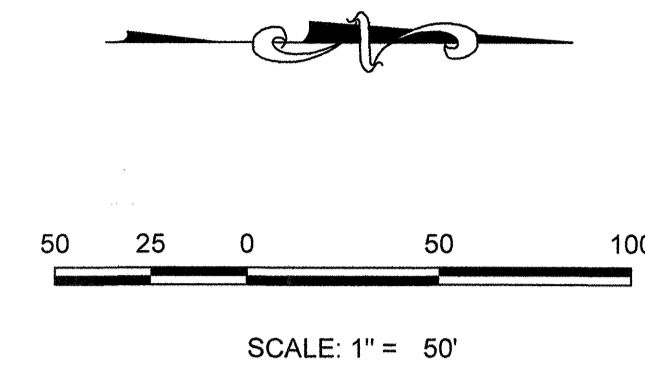
HR 935 LLC
 7353 South Alton Way
 CENTENNIAL, CO 80112



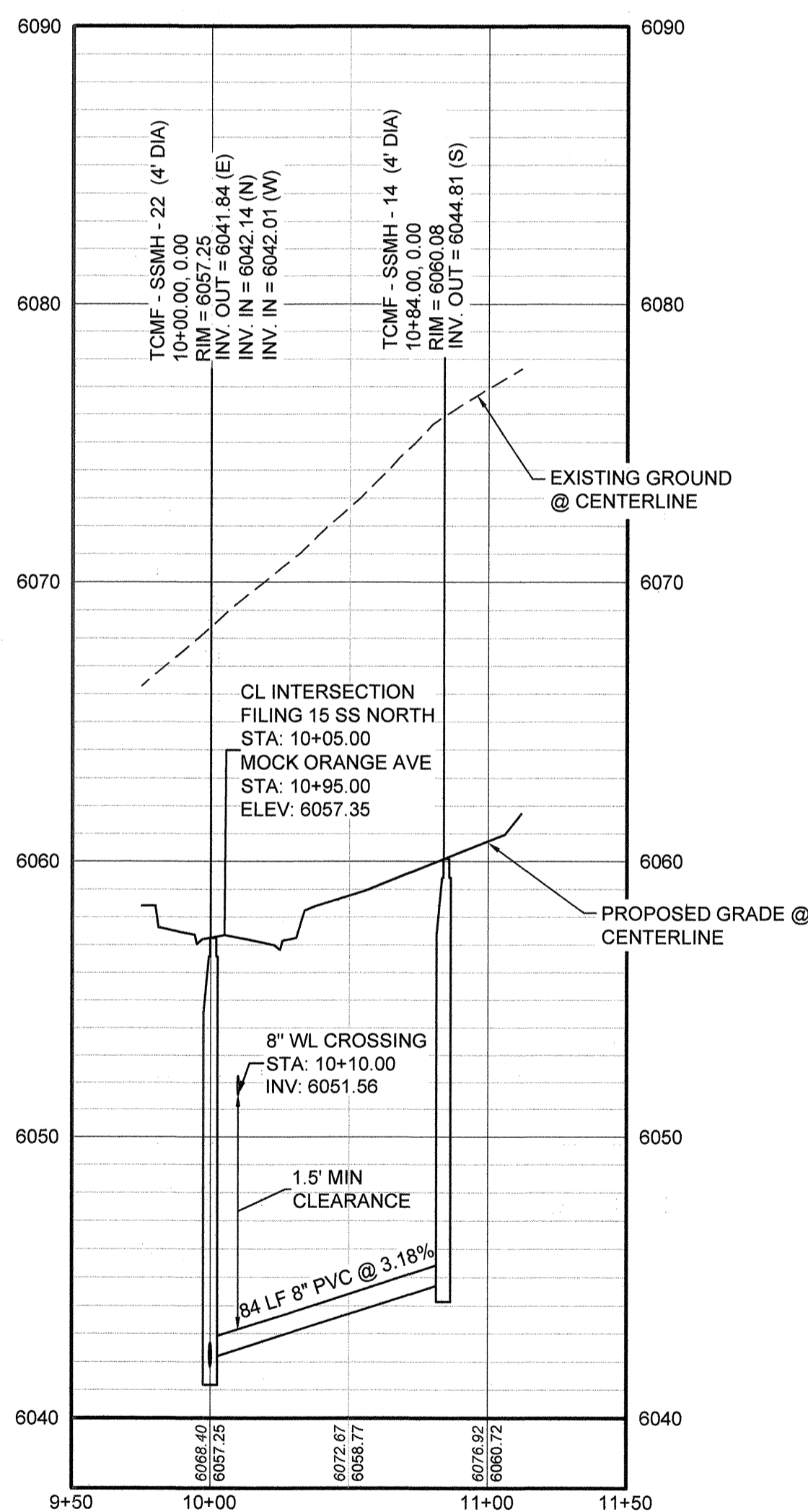
PLAN: FILING 15 SS NORTH STA: 9+50.00 TO 11+50.00
HORIZONTAL SCALE: 1" = 50'



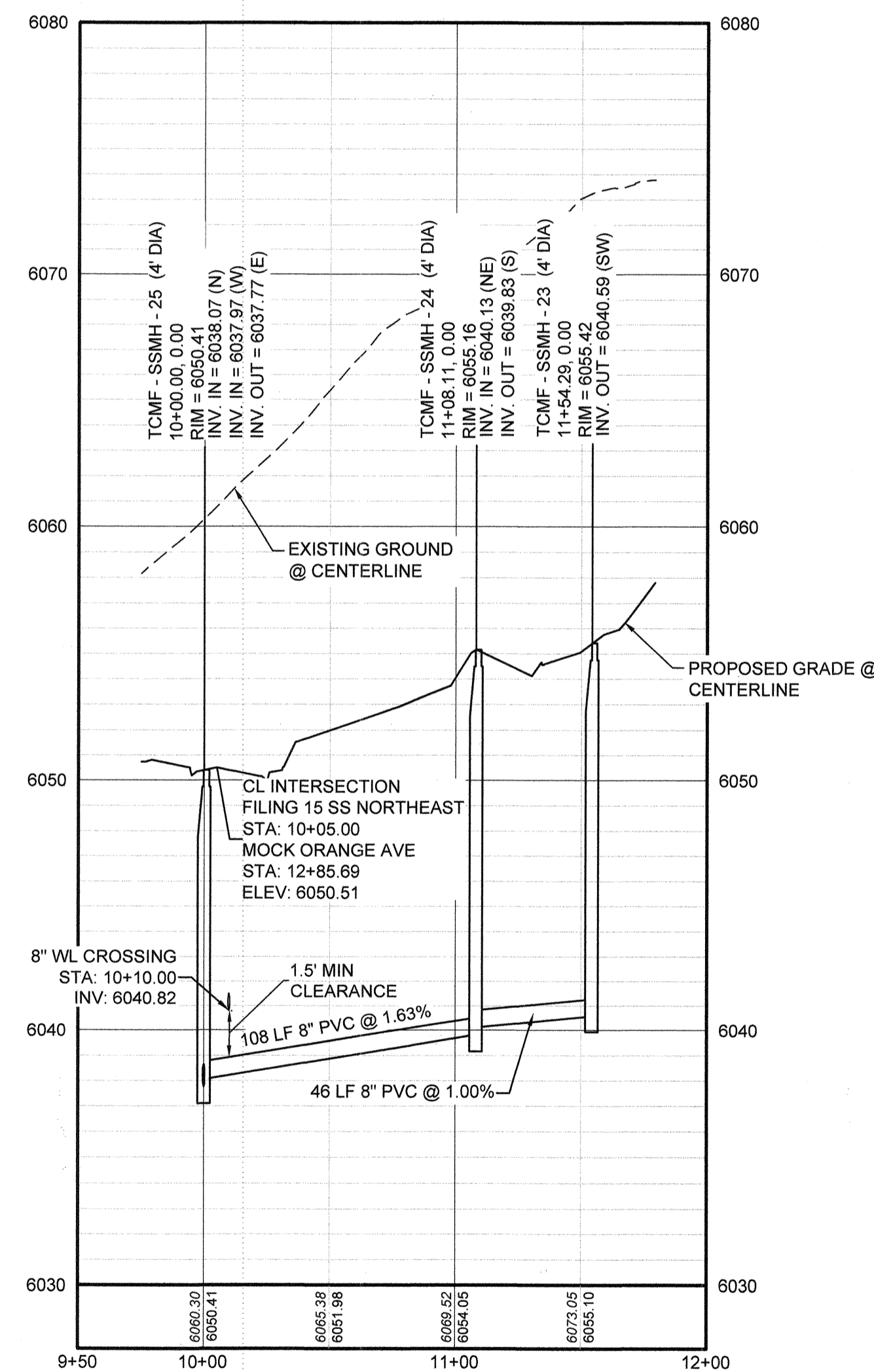
PLAN: FILING 15 SS NORTHEAST STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: FILING 15 SS NORTH STA: 9+50.00 TO 11+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: FILING 15 SS NORTHEAST STA: 9+50.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND			
(2)	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	---	CENTERLINE
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(D)	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
(E)	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
(F)	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
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(O)	PROPOSED SIDEWALK RAMP	---	SECTION LINE
(P)	EXISTING ELEVATION	---	FILING BOUNDARY
(Q)	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
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NOTES:
1. SEE SHEET 3 FOR SANITARY SERVICE TABLES.

N:\PROJECTS\SS RANCH\CAD\ENGINEERING\SS\SET\MULTIFAMILY\CDS\F\SPARKER WATER AND SANITATION\SANITARY SEWER SHEETS\FILING 15 SS NORTH.DWG.BRIAN.W. 11/20/18 10:53 AM

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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.

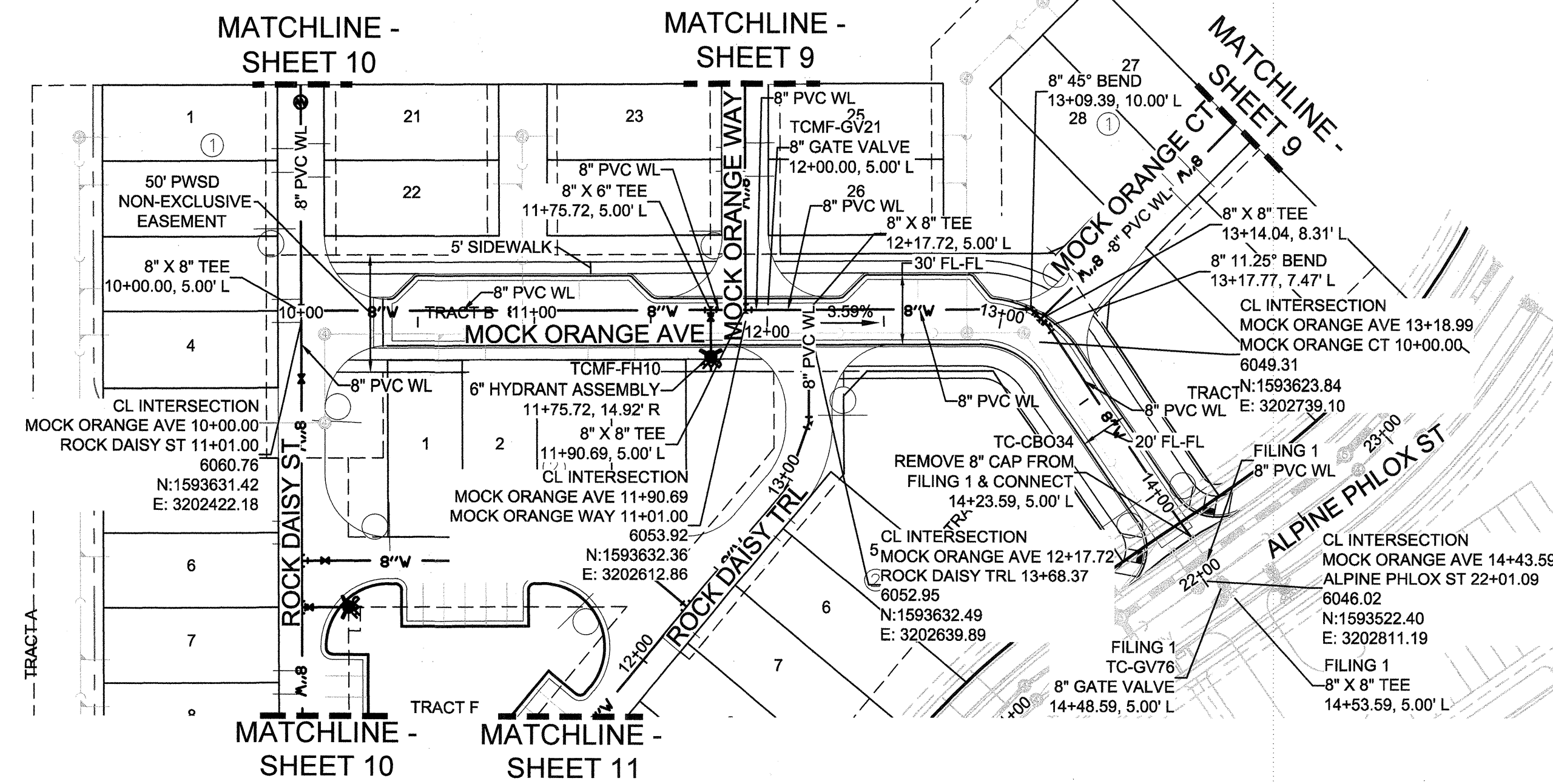
BASIS OF BEARINGS:
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PREPARED UNDER THE SUPERVISION OF

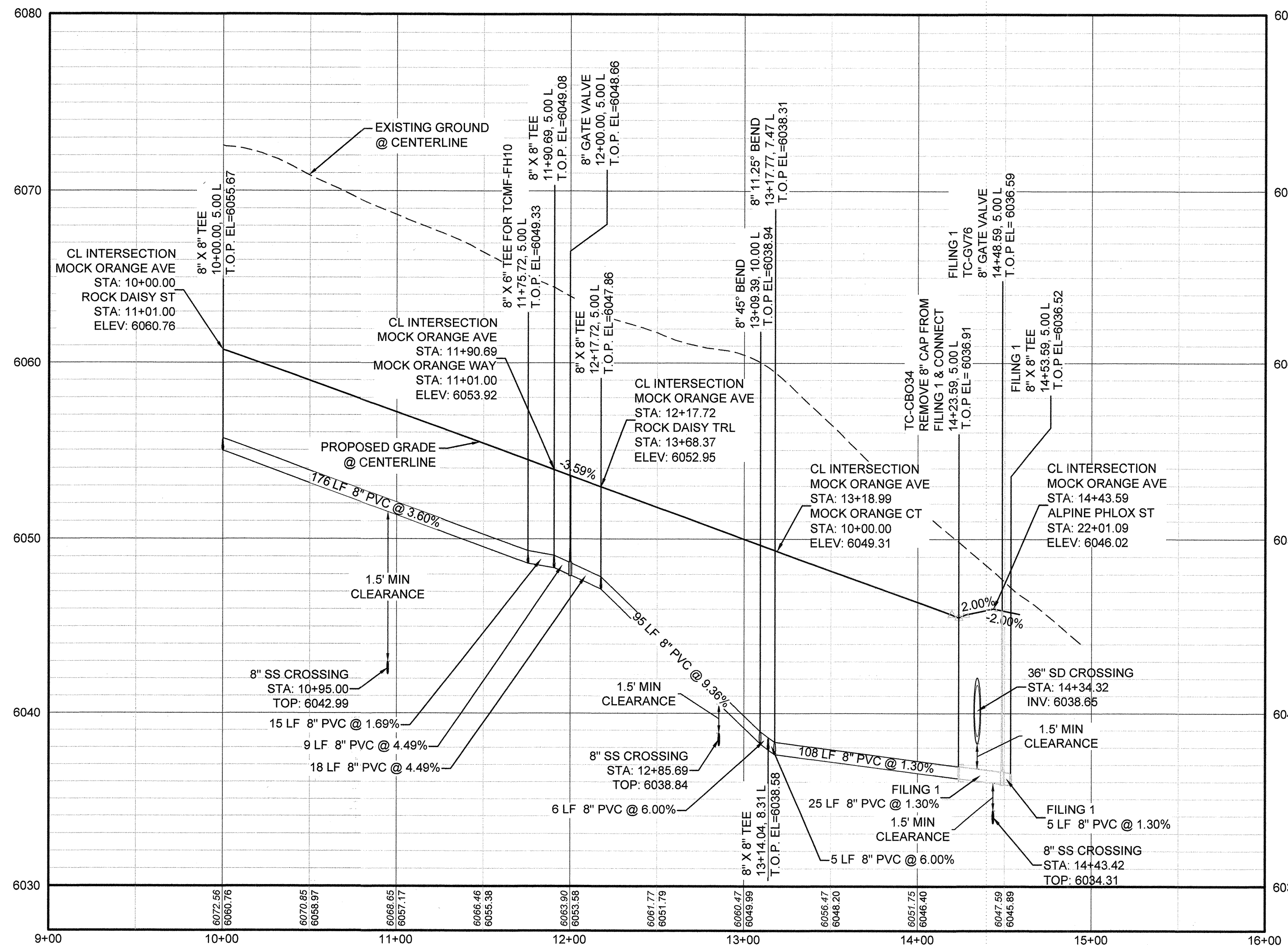
BRIAN P. WILSON
COLORADO P.E. 0050067

APPROVED
JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

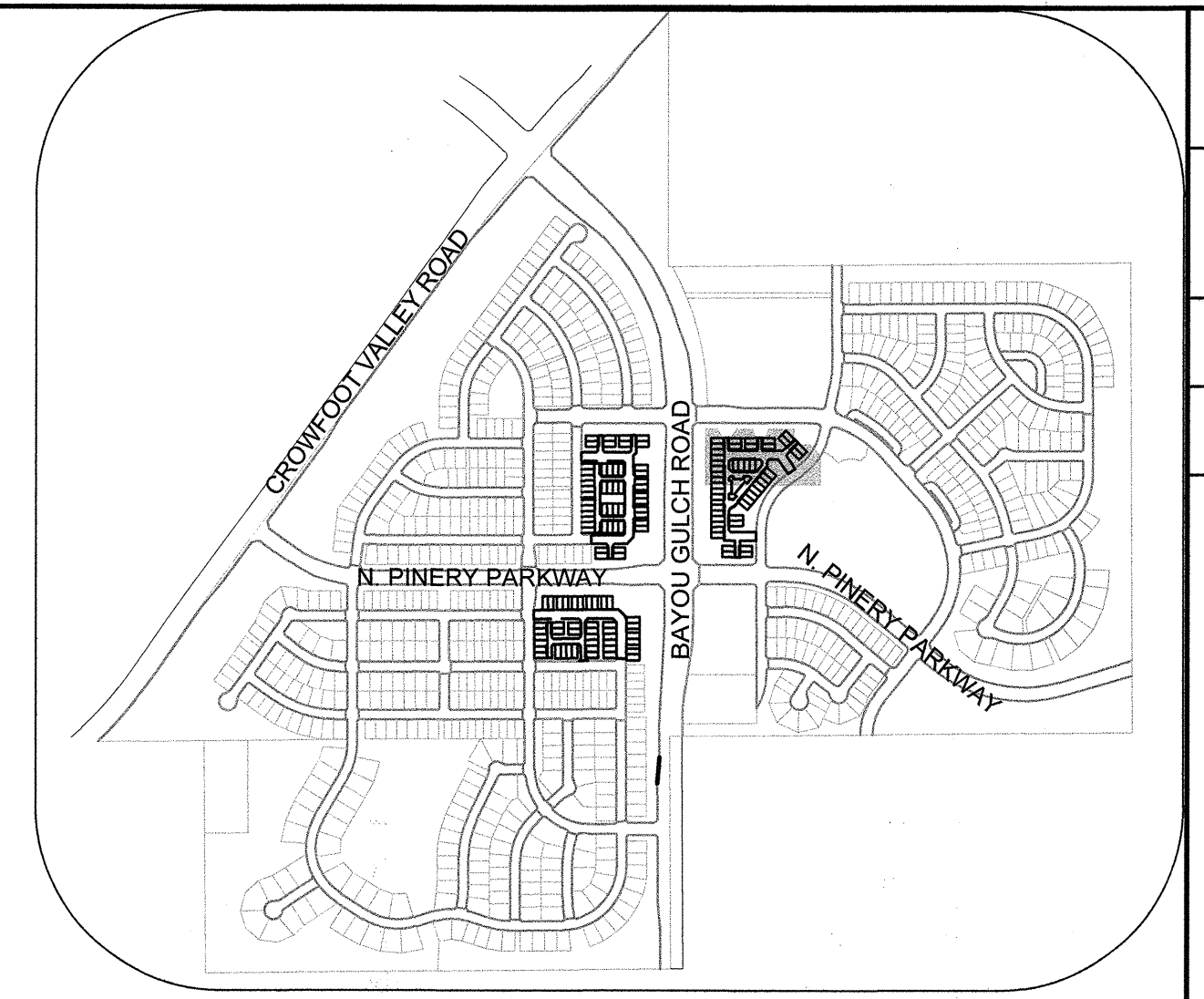
SHEET NUMBER	DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701
				NO. REVISIONS	DATE
 CVL CONSULTANTS 10333 E. Dry Creek Rd., Suite 240, Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546 HR 935 LLC 7353 South Alton Way, CENTENNIAL, CO 80112					
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE FILING 15 SS NORTH & NORTHEAST					



PLAN: MOCK ORANGE AVE STA: 9+00.00 TO 15+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: MOCK ORANGE AVE STA: 9+00.00 TO 16+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
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⊕	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
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INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

NOTES:
1. SEE SHEET 3 FOR WATER SERVICE TABLES.

N:\PROJECTS\SSR\ANCHORAGE\ENGINEERING\SSR\SETS\MULTIFAMILY\CDS\B\F\SPARKER WATER AND SANITATION\WATER P&M\MOCK ORANGE AVE.DWG. BRIANW. 11/22/2018 10:56 AM

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.090032, 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

APPROVED
JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

DATE		APPR.	
REVISIONS		DATE	
NO.			

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 462-9526
Fax: (720) 462-9546

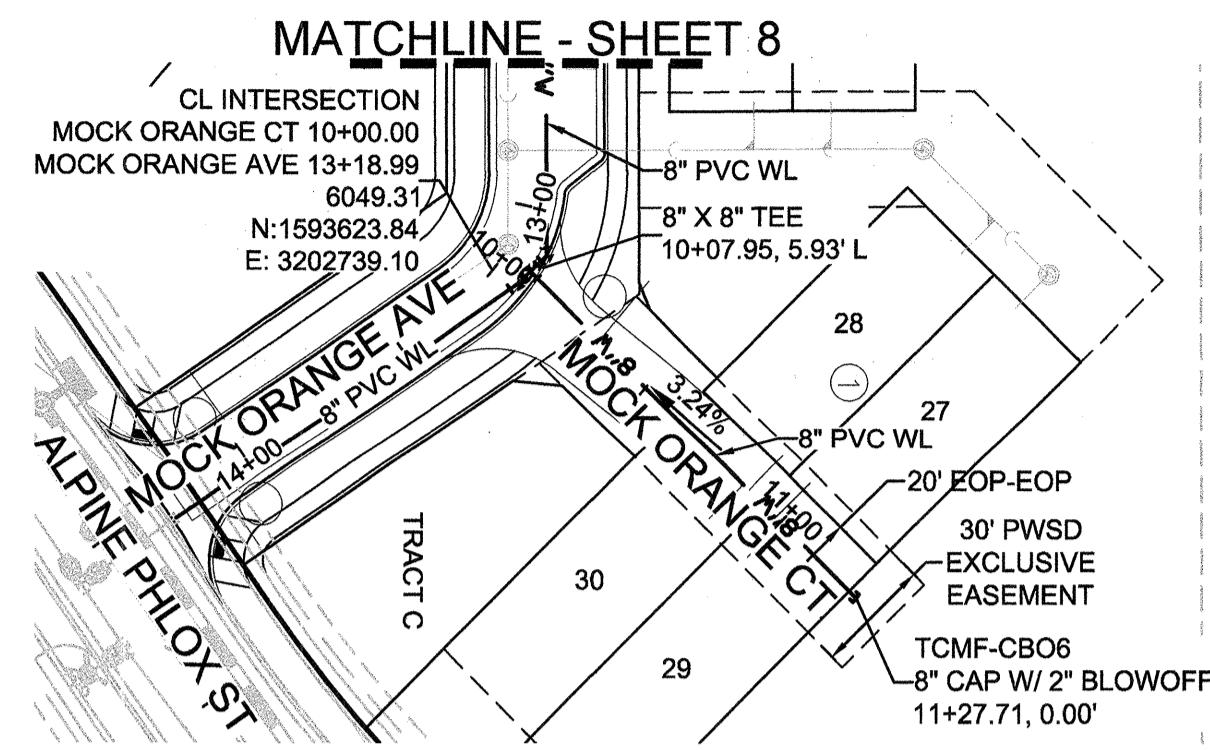
CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

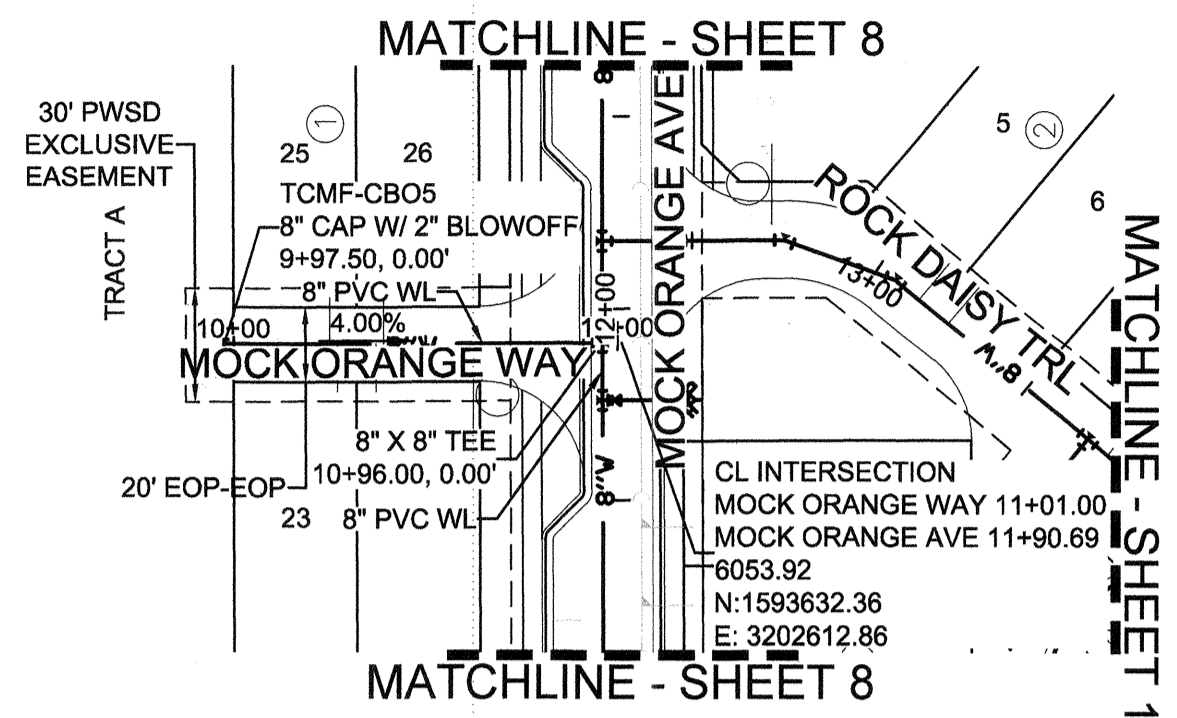
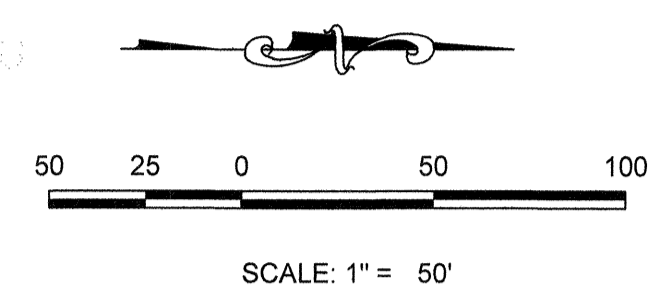
TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
MOCK ORANGE AVENUE

SCALE: AS SHOWN
DRAWN BY: RRR
CHECKED BY: BPW
DATE: JUNE 2018
FILE NO: 8130283701

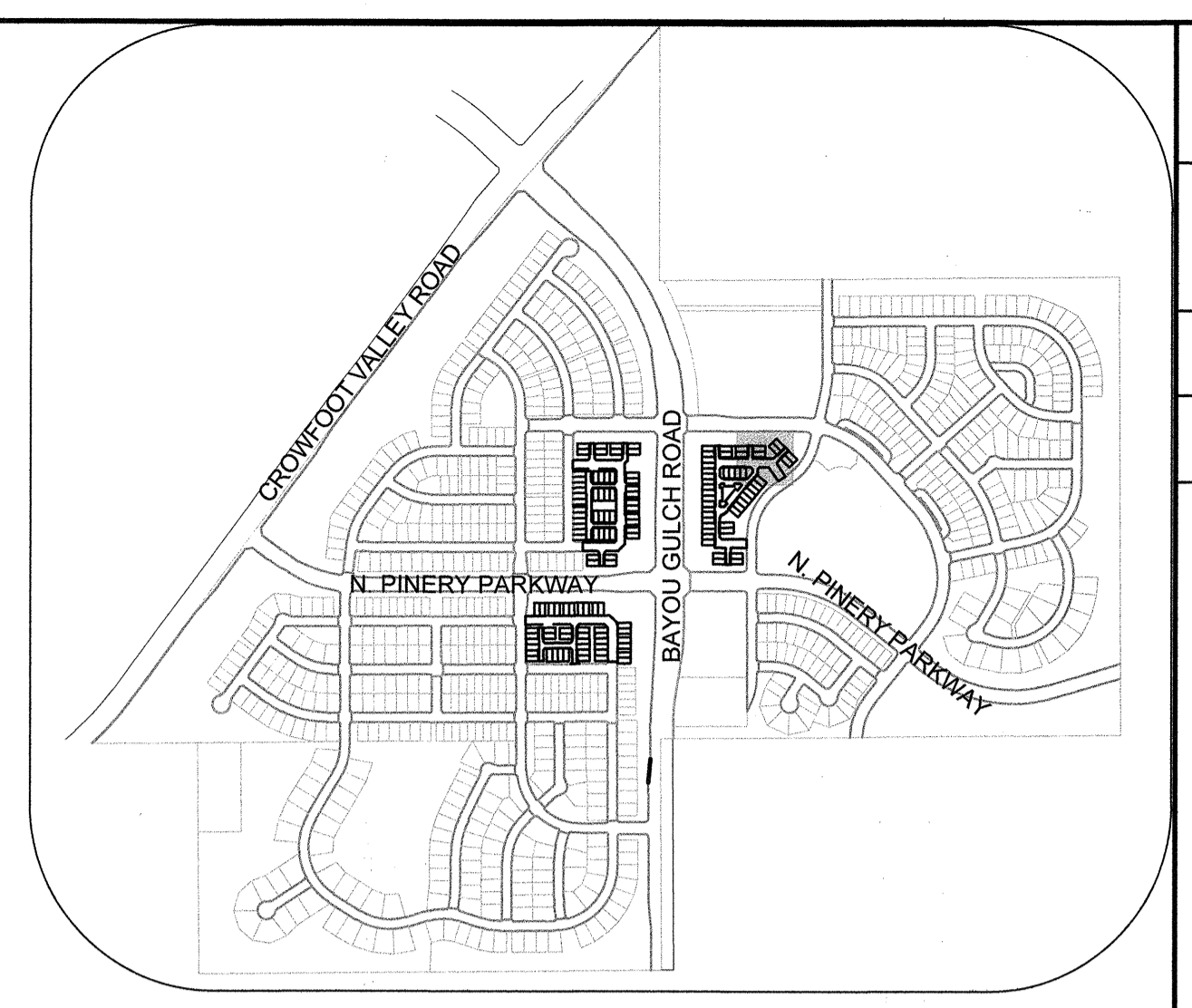
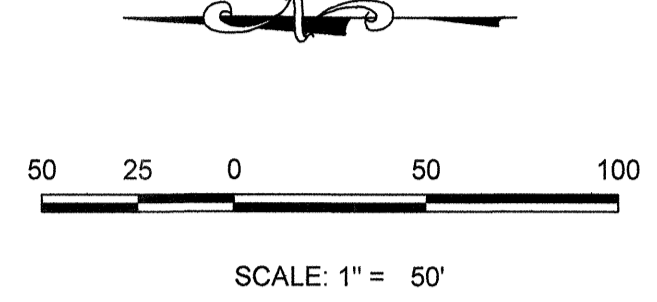
SHEET NUMBER **8**



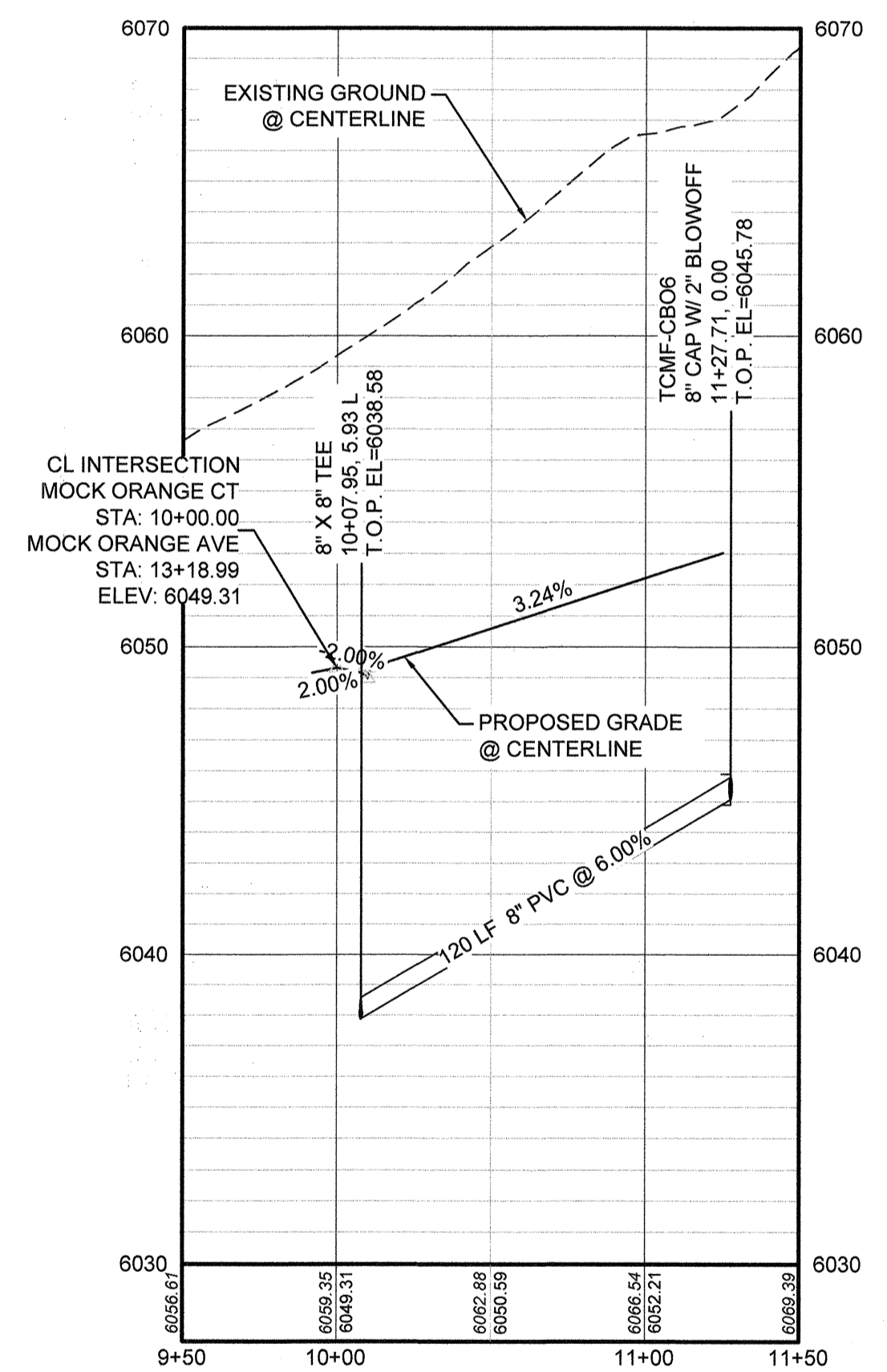
PLAN: MOCK ORANGE CT STA: 10+00.00 TO 11+50.00
HORIZONTAL SCALE: 1" = 50'



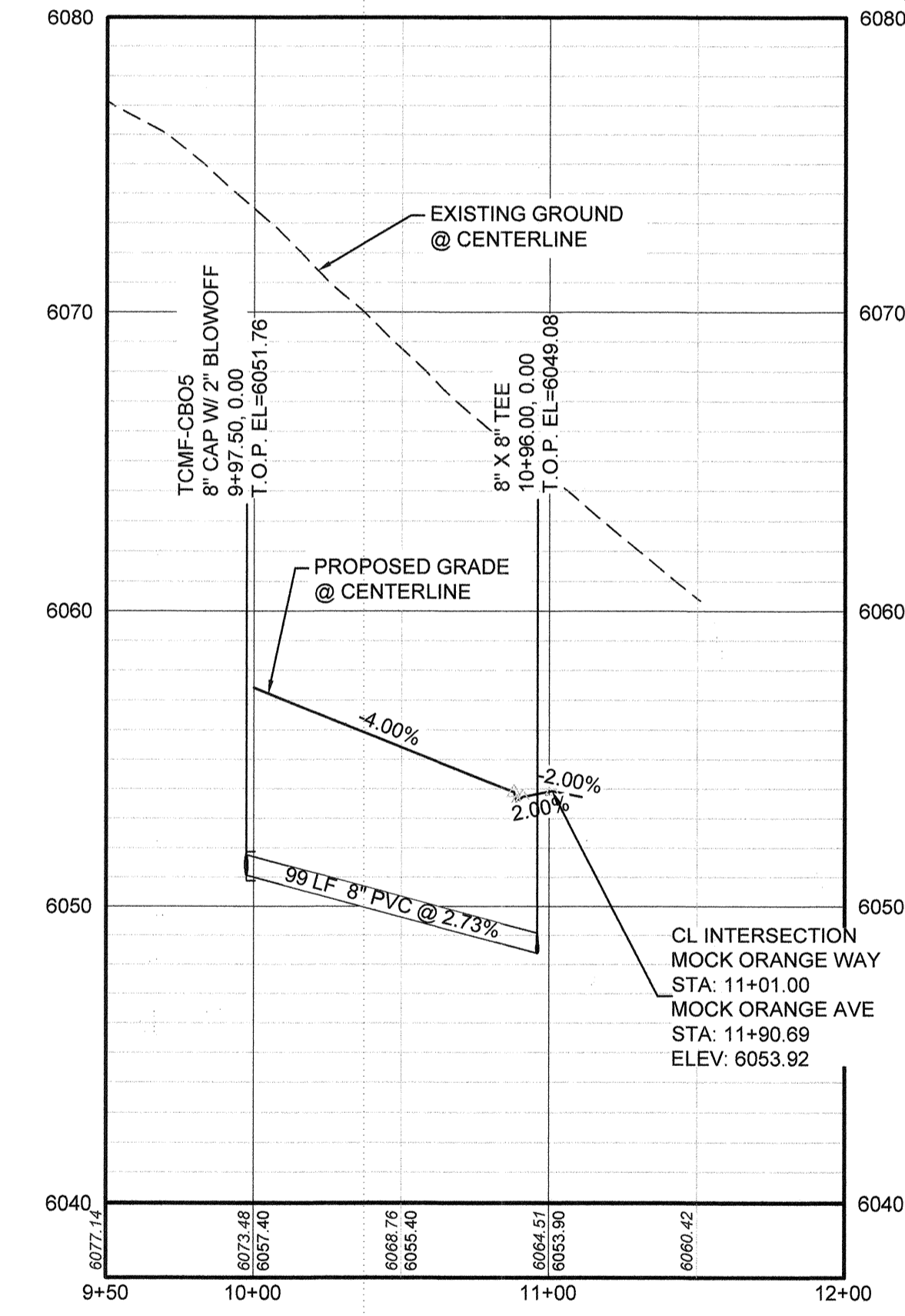
PLAN: MOCK ORANGE WAY STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: MOCK ORANGE CT STA: 9+50.00 TO 11+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: MOCK ORANGE WAY STA: 9+50.00 TO 12+00.00
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	---	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	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCR	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

NOTES:
1. SEE SHEET 3 FOR WATER SERVICE TABLES.

PROJECT SHESS MANCHAC ENGINEERING SHEET SETS MULTIFAMILY/ODS/IF PARKER WATER AND SANITATION WATER P&P/MOCK ORANGE WAY DWG. BRIANW. 11/22/2018 10:58 AM

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.080032, 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.

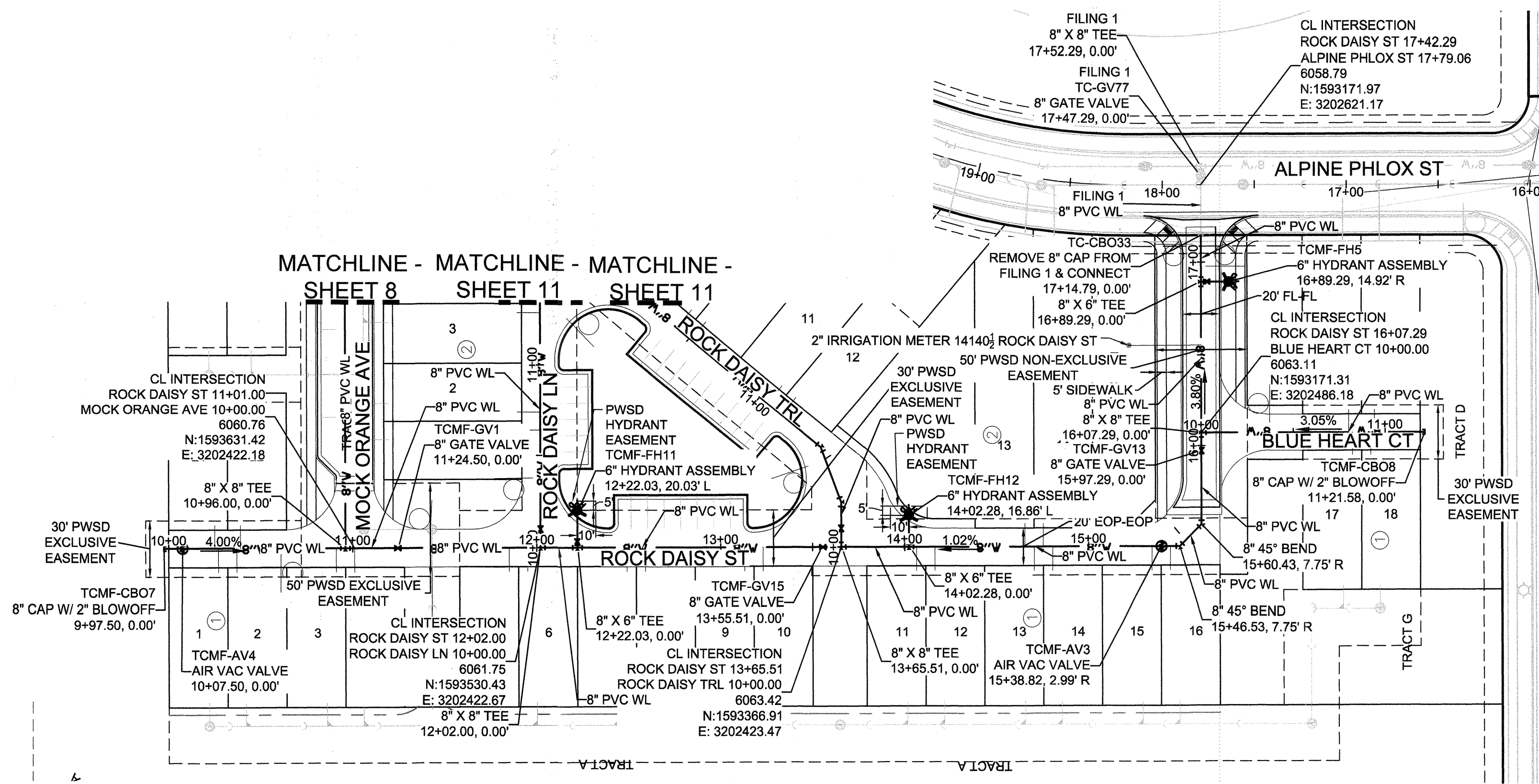
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06"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

PREPARED UNDER THE SUPERVISION OF

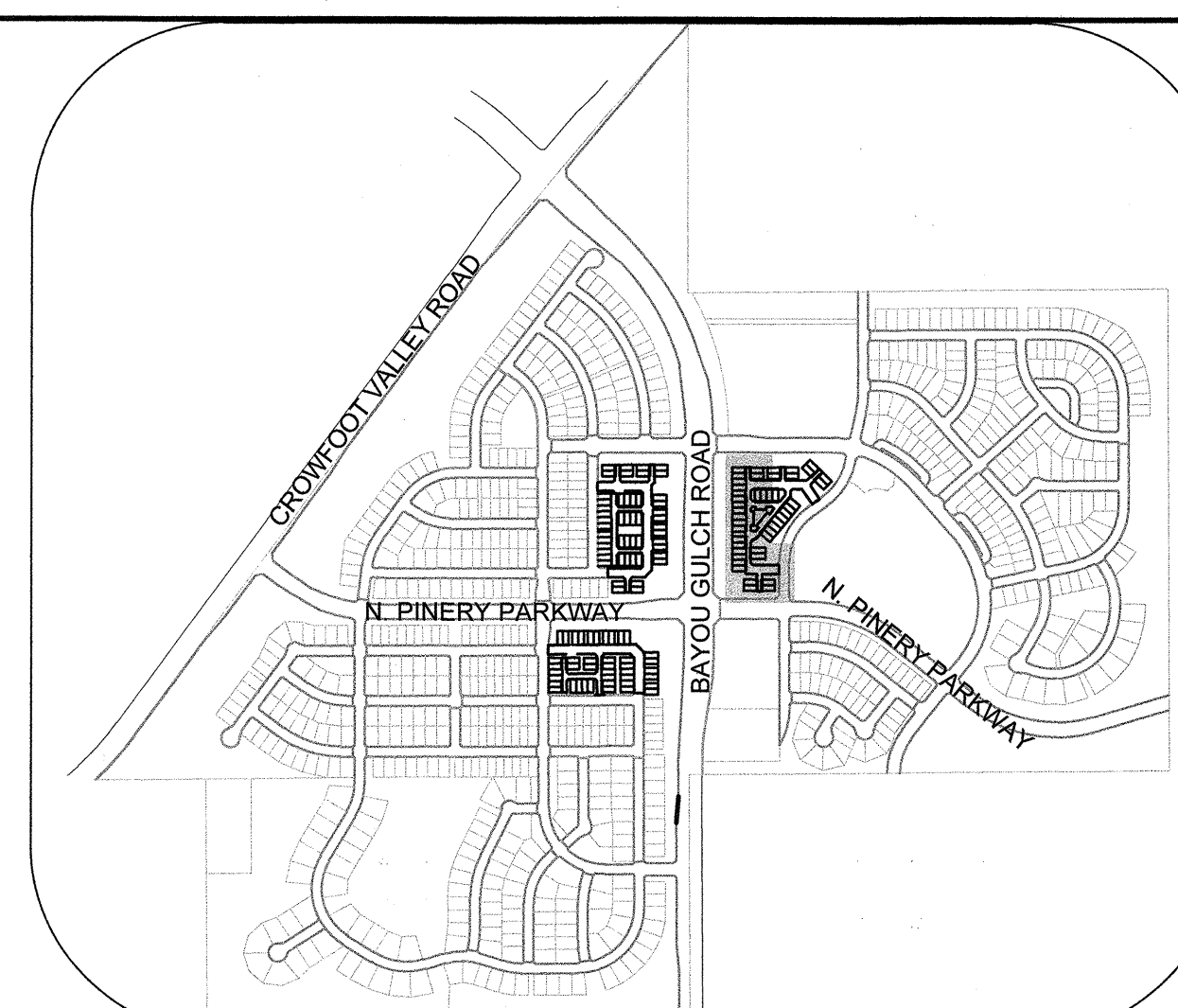
BRIAN P. WILSON
COLORADO P.E. 0050067

APPROVED
JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

DATE	
APPR.	
DATE	
REVISIONS	
NO.	
 CVL CONSULTANTS 10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 485-9526 Fax: (720) 485-9546	
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE MOCK ORANGE WAY & MOCK ORANGE COURT	
SCALE:	AS SHOWN
DRAWN BY:	RRR
CHECKED BY:	BPW
FILE NO.:	8130283701
DATE:	JUNE 2018
SHEET NUMBER	9



PLAN: ROCK DAISY ST STA: 9+50.00 TO 18+00.00 & BLUE HEART CT 10+00.00 TO 11+00.00
HORIZONTAL SCALE: 1" = 50'



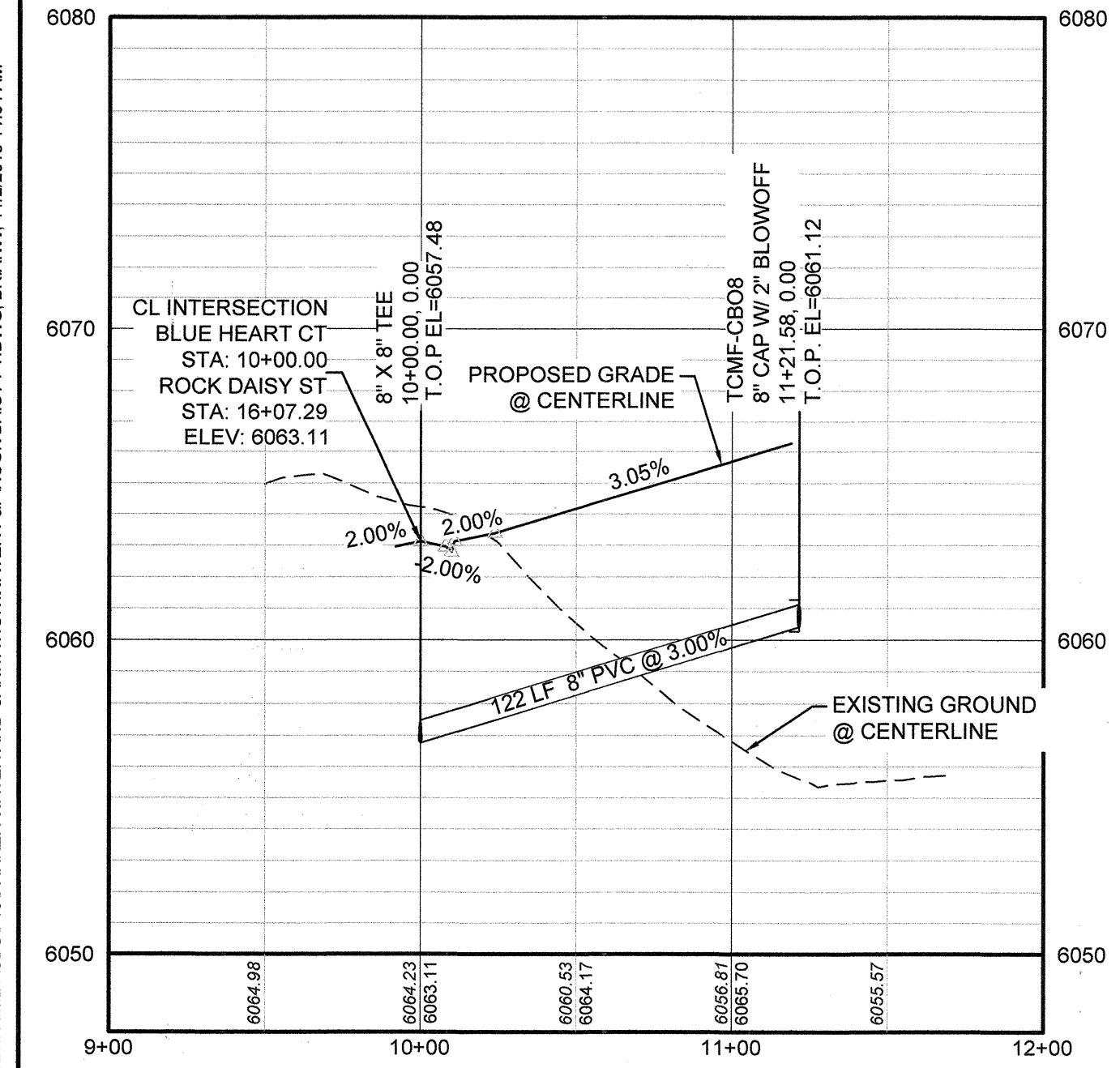
KEYMAP
N.T.S.

LEGEND

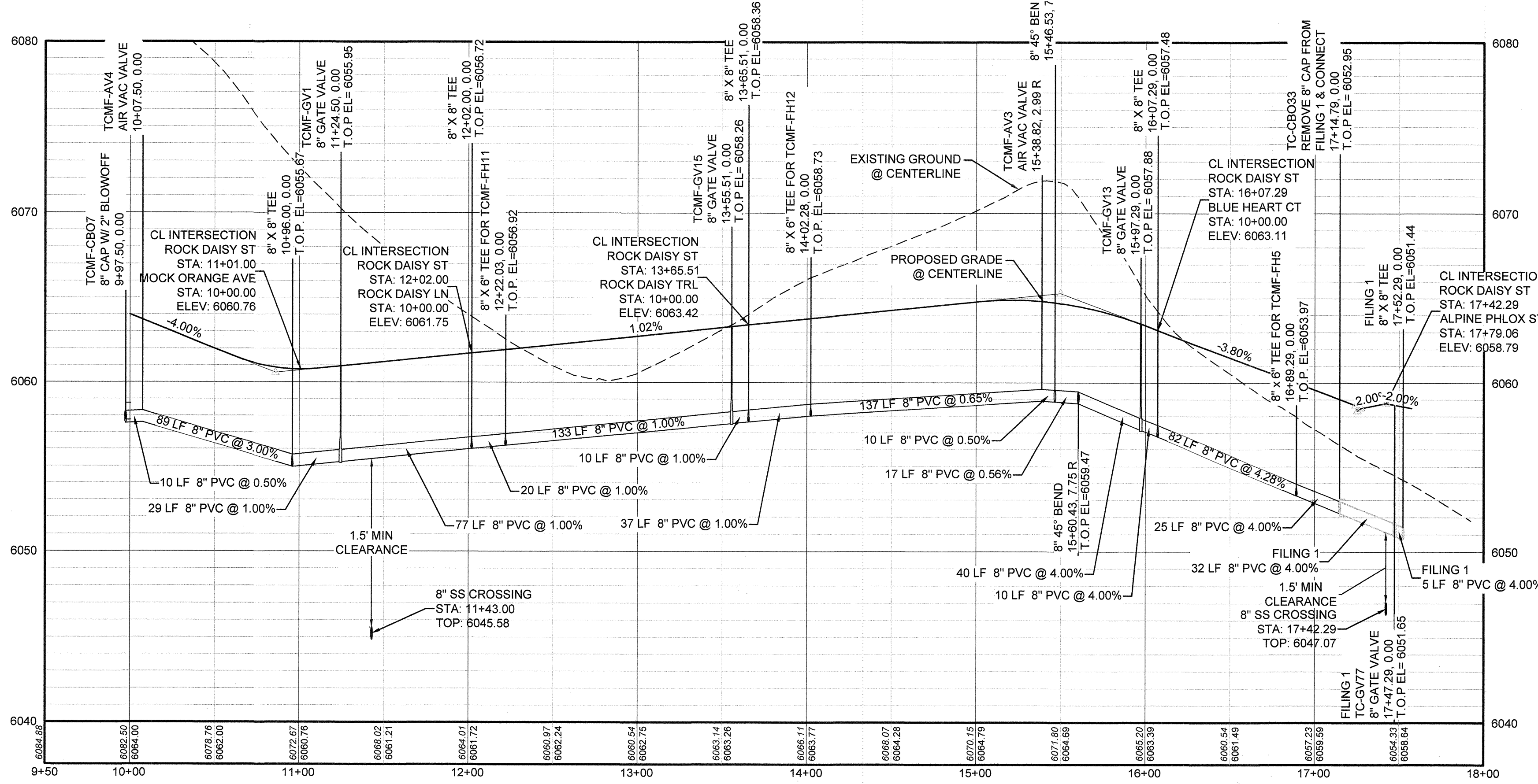
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(A)	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
⊕	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
⌋	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
⊖	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	---	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
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ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
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PROFILE: BLUE HEART CT STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: ROCK DAISY ST STA: 9+50.00 TO 18+00.00
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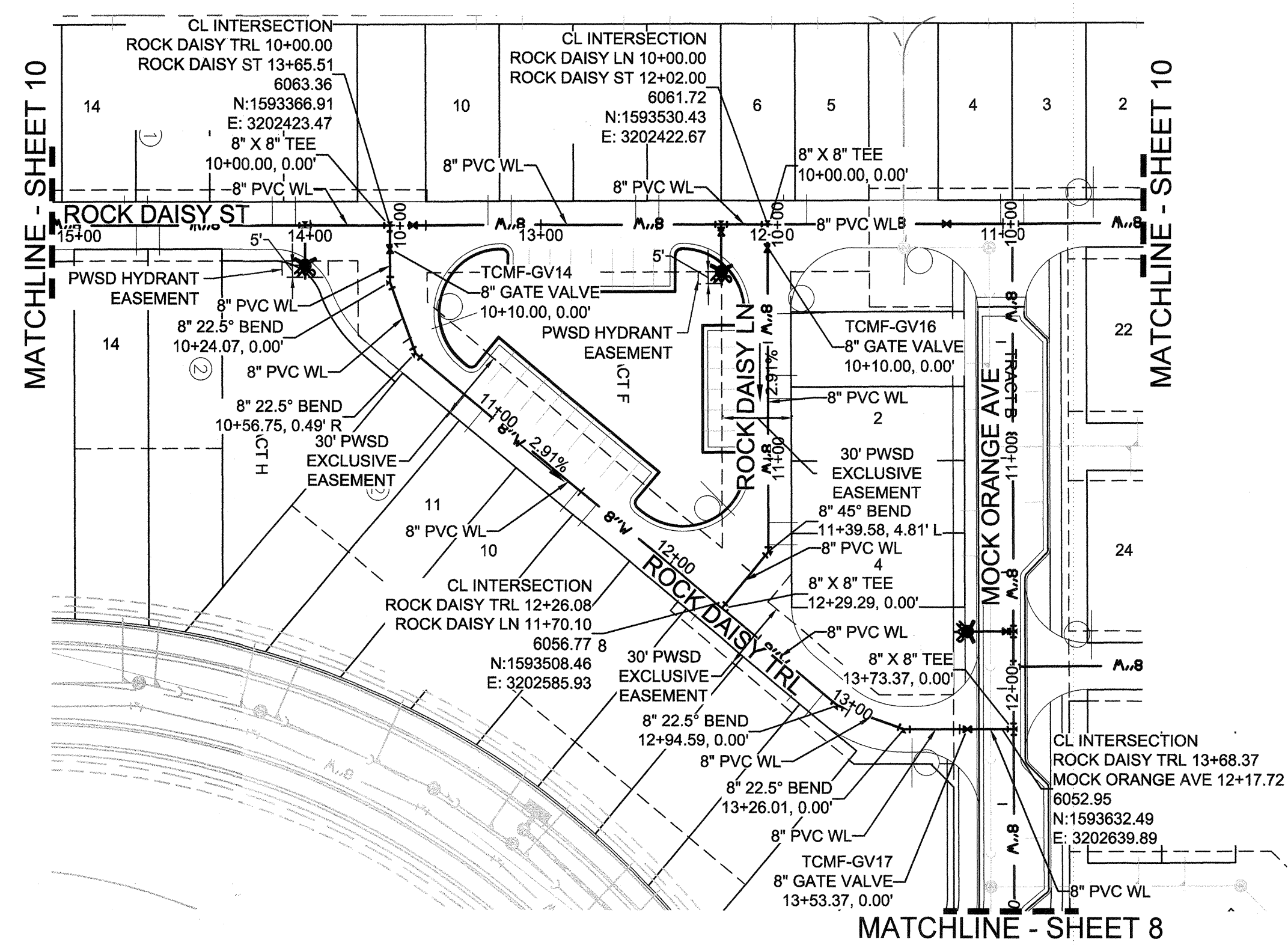
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.08032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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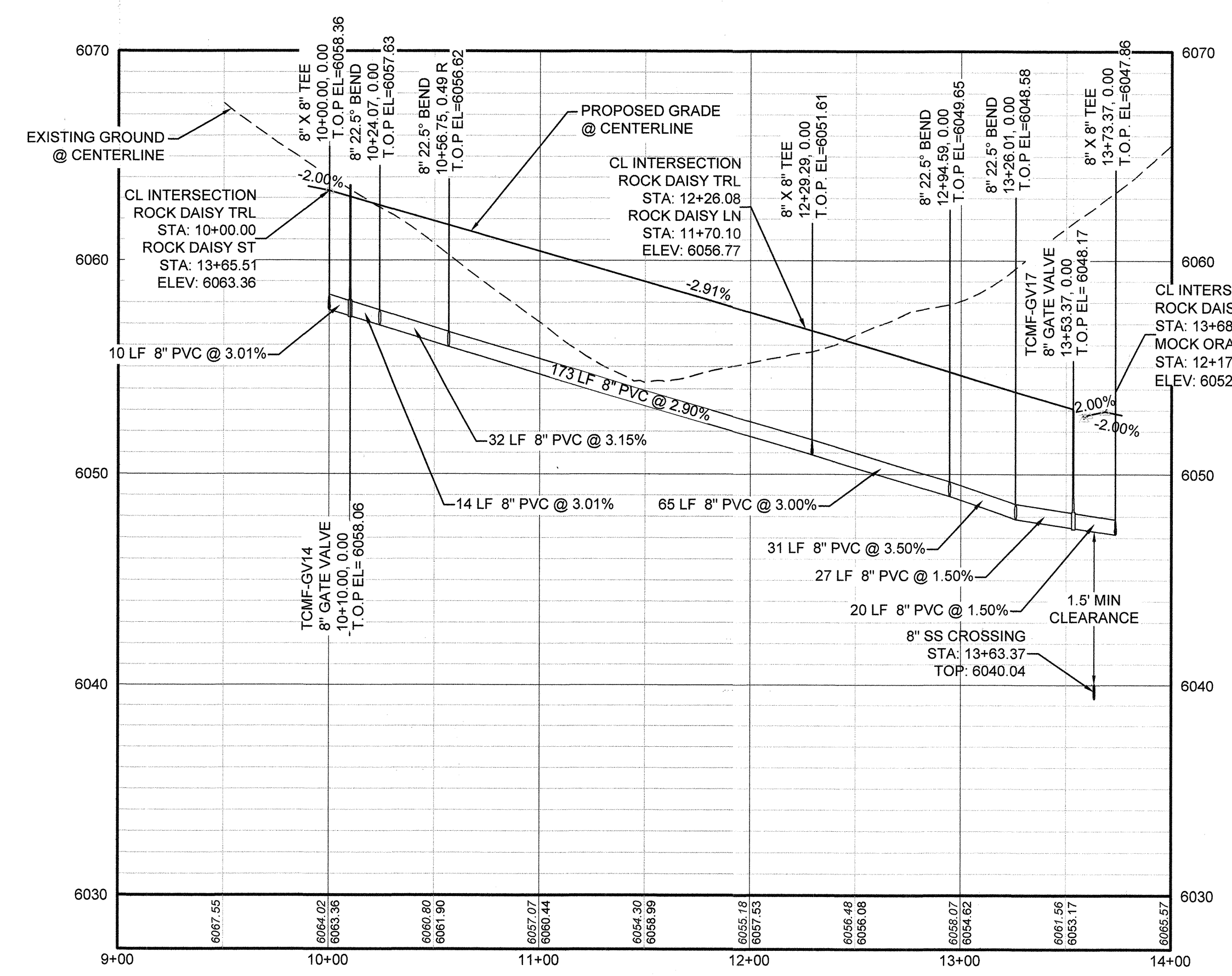
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COLORADO P.E. 0050067

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JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

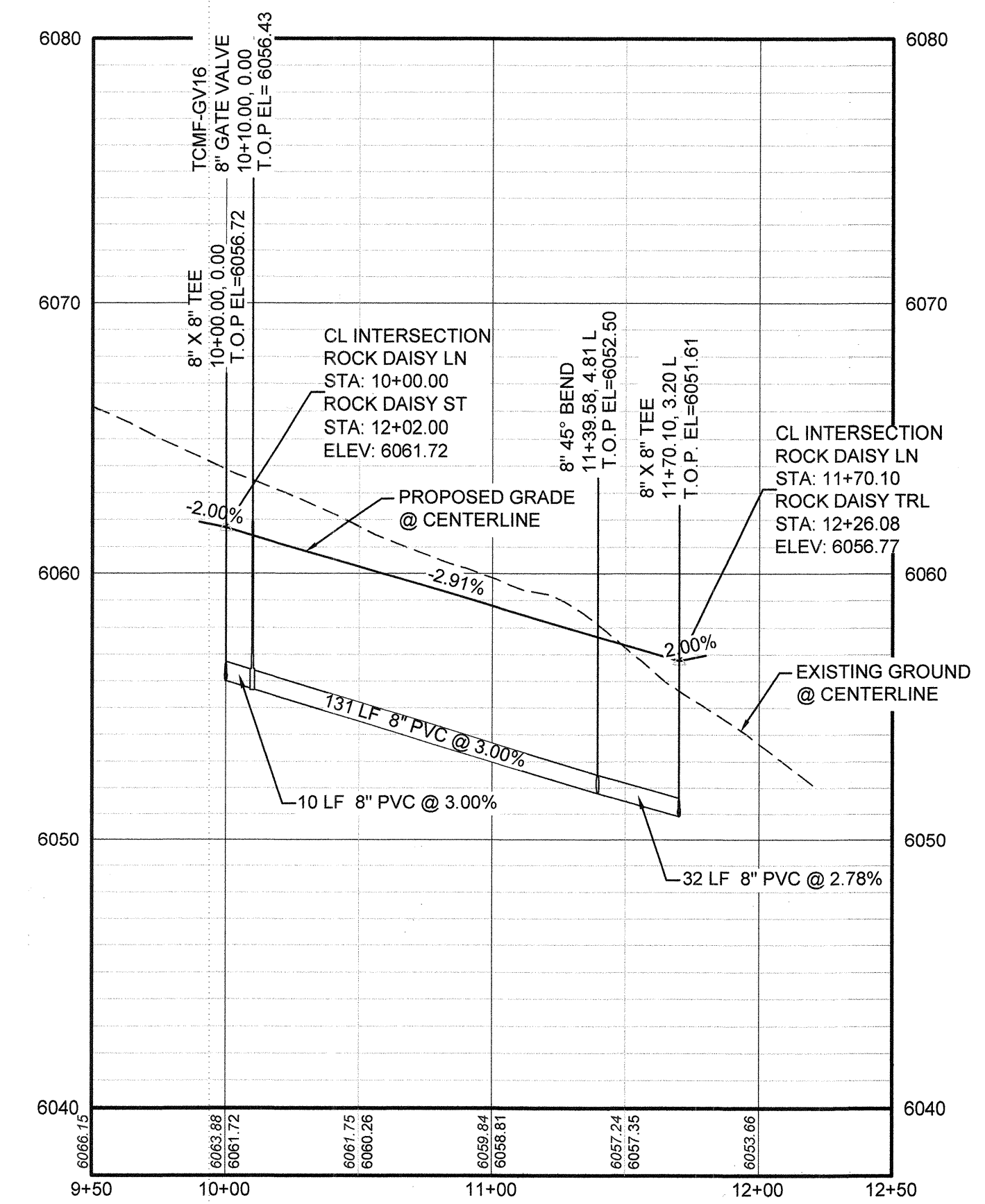
DATE		APPR.	
REVISIONS		DATE	
NO.			
10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546			
CVL CONSULTANTS			
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112			
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE ROCK DAISY STREET & BLUE HEART COURT			
SCALE:	AS SHOWN	FILE NO.:	8130283701
DRAWN BY:	RRR	CHECKED BY:	BPW
		DATE:	JUNE 2018
SHEET NUMBER	10		



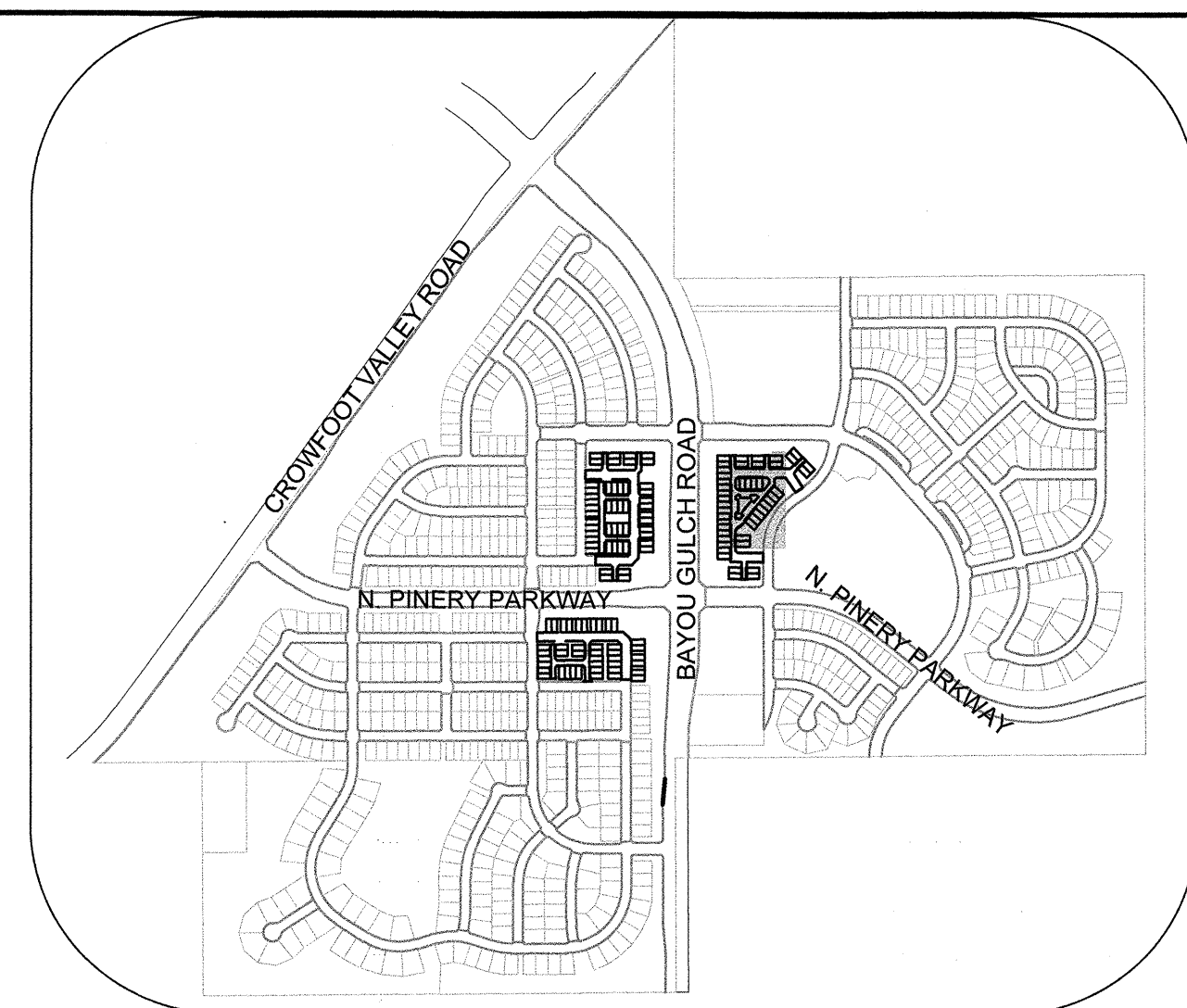
PLAN: ROCK DAISY TRL STA: 9+00.00 TO 14+00.00 & ROCK DAISY LN STA: 9+50.00 TO 12+50.00
 HORIZONTAL SCALE: 1" = 50'



PROFILE: ROCK DAISY TRL STA: 9+00.00 TO 14+00.00
 HORIZONTAL: 1" = 50'
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PROFILE: ROCK DAISY LN STA: 9+50.00 TO 12+50.00
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KEYMAP
 N.T.S.

LEGEND

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NOTES:
 1. SEE SHEET 3 FOR WATER SERVICE TABLES.

N:\PROJECTS\SS RANCH\ENGINEERING\SSHEETS\MULTIFAMILY\CD\SF\IPARKER WATER AND SANITATION\WATER AND SANITATION\WATER & ROCK DAISY TRL.DWG. BRIAN.W. 11/22/2018 11:09 AM

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BENCHMARK
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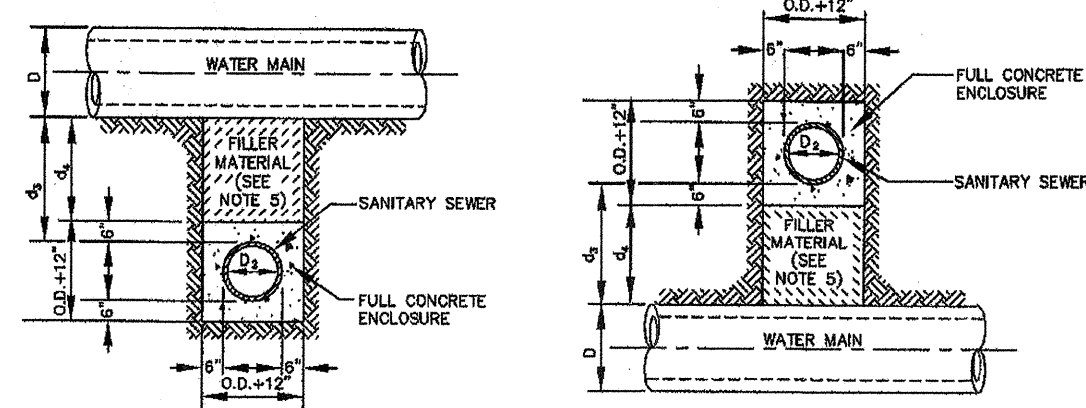
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PREPARED UNDER THE SUPERVISION OF

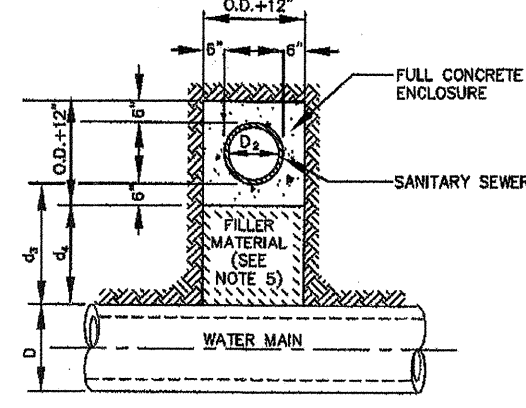
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10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	 CVL CONSULTANTS	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE ROCK DAISY TRAIL & ROCK DAISY LANE
SCALE: AS SHOWN FILE NO: 8130283701		DRAWN BY: RRR CHECKED BY: BRW DATE: JUNE 2018	SHEET NUMBER: 11



TYPE IIa
SANITARY SEWER CROSSING UNDER WATER MAIN
IF $d_s > 24$, ENCASMENT NOT REQUIRED



TYPE IIb
SANITARY SEWER CROSSING OVER TOP OF WATER MAIN
FULL ENCASMENT REQUIRED REGARDLESS OF DIMENSION d_s

TYPE II
CONCRETE ENCASMENT FOR SANITARY SEWERS CROSSING OVER OR UNDER WATER MAIN

GENERAL NOTES FOR TYPE IIa & IIb ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED, BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH WITH EXHAUSTION FOR PROPOSED SEWER OR CONDUIT.
 - TYPE II ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I & II ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAIL SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I & II ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_s \leq 18"$ ($d_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_s \leq 24"$ ($d_s \leq 18"$).
 - TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIER SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAIL SEPARATELY ON PLAN AND PROFILE DRAWINGS.

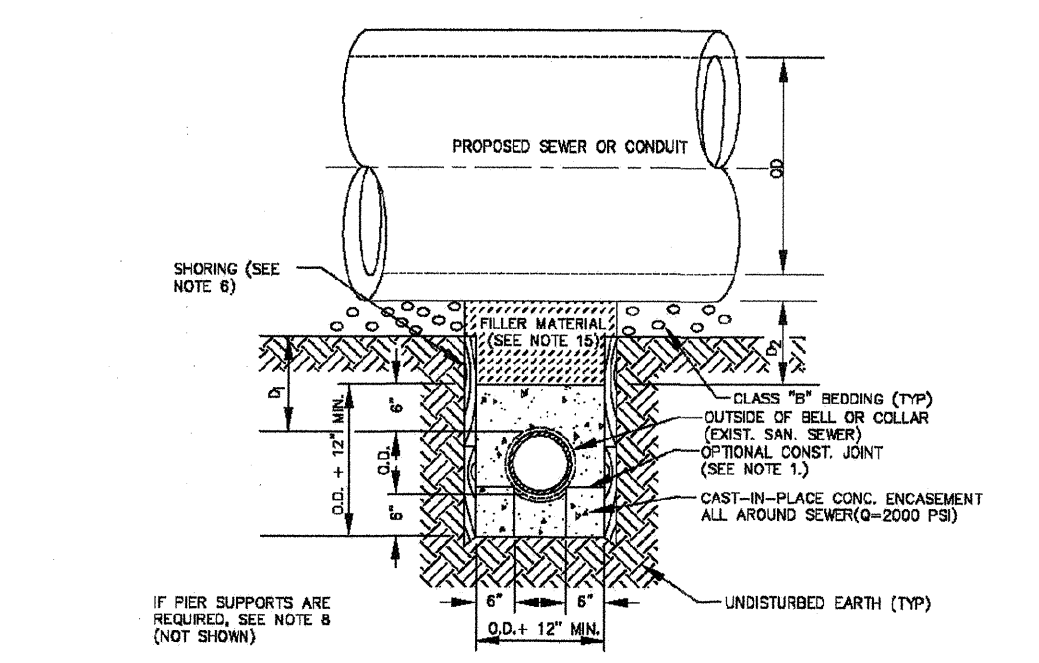
PARKER WATER & SANITATION DISTRICT
CONCRETE ENCASMENT TYPE II

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/88 4/01 1/98

DIRECTOR OF ENGINEERING

2008 REVISION SHEET 7



TYPE III
CONCRETE ENCASMENT FOR SANITARY SEWERS
(FULL ENCASMENT) NO SCALE

GENERAL NOTES FOR TYPE IIIa & IIIb ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED, BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH WITH EXHAUSTION FOR PROPOSED SEWER OR CONDUIT.
 - TYPE II ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE II & III ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, TO BE SPECIFIED AND DETAIL SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I & II ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_s \leq 18"$ ($d_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING UNDER WATER MAINS AND $d_s \leq 24"$ ($d_s \leq 18"$).
 - TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_s \leq 24"$ ($d_s \leq 18"$).
 - TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
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- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIER SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAIL SEPARATELY ON PLAN AND PROFILE DRAWINGS.
- CONCRETE ENCASED PIPING SHALL BE LINED WITH FELT LATER.

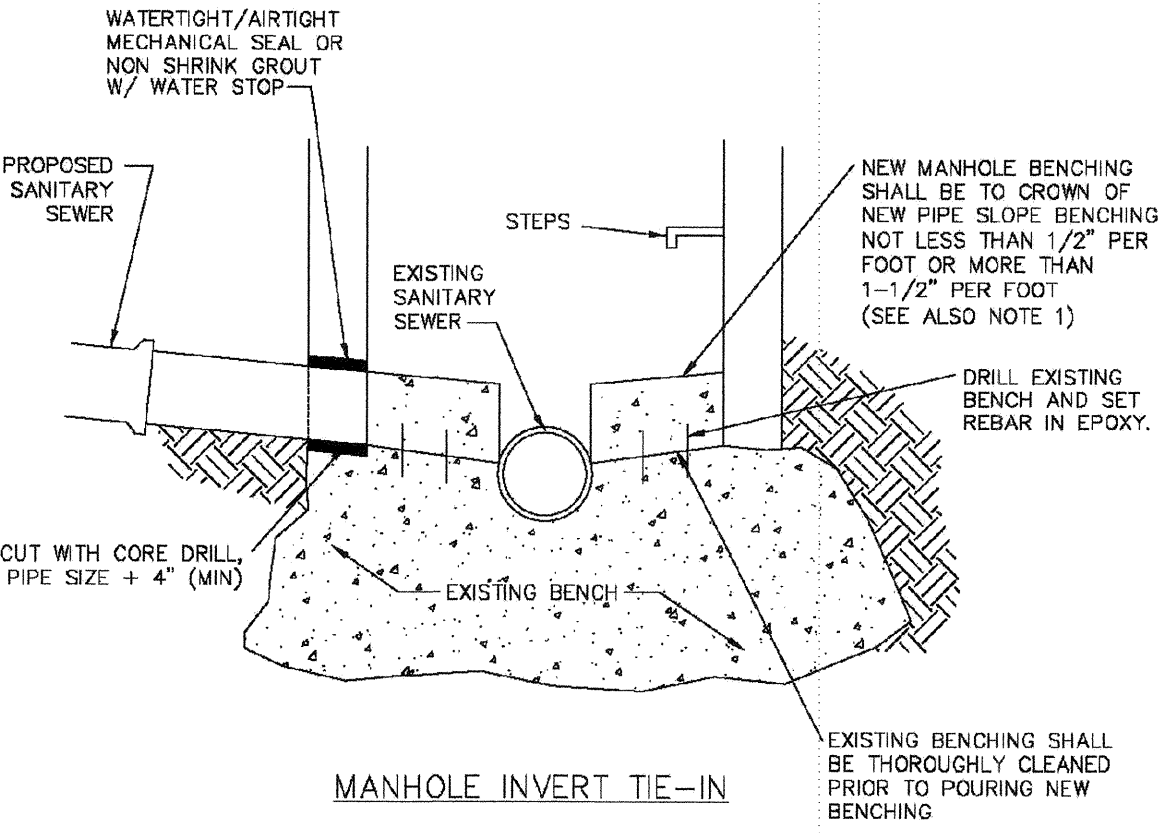
PARKER WATER & SANITATION DISTRICT
CONCRETE ENCASMENT TYPE III

SCALE: NONE DATE: 2/98

APPROVED: PVR 5/88 1/78 10/78

DIRECTOR OF ENGINEERING

2016 REVISION SHEET 54.8



MANHOLE INVERT TIE-IN

NOTES
1 - NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

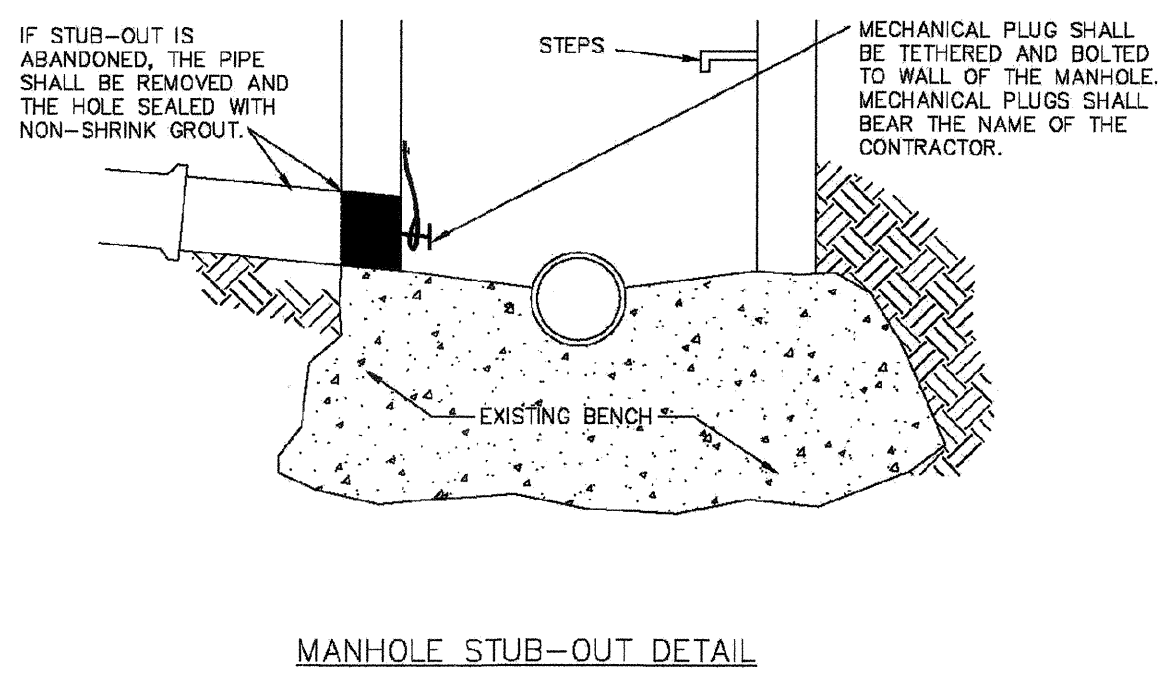
PARKER WATER & SANITATION DISTRICT
MANHOLE INVERT TIE-IN DETAIL

SCALE: NONE DATE: 2/98

APPROVED: PVR 1/78 10/78

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2016 REVISION SHEET 54.9



MANHOLE STUB-OUT DETAIL

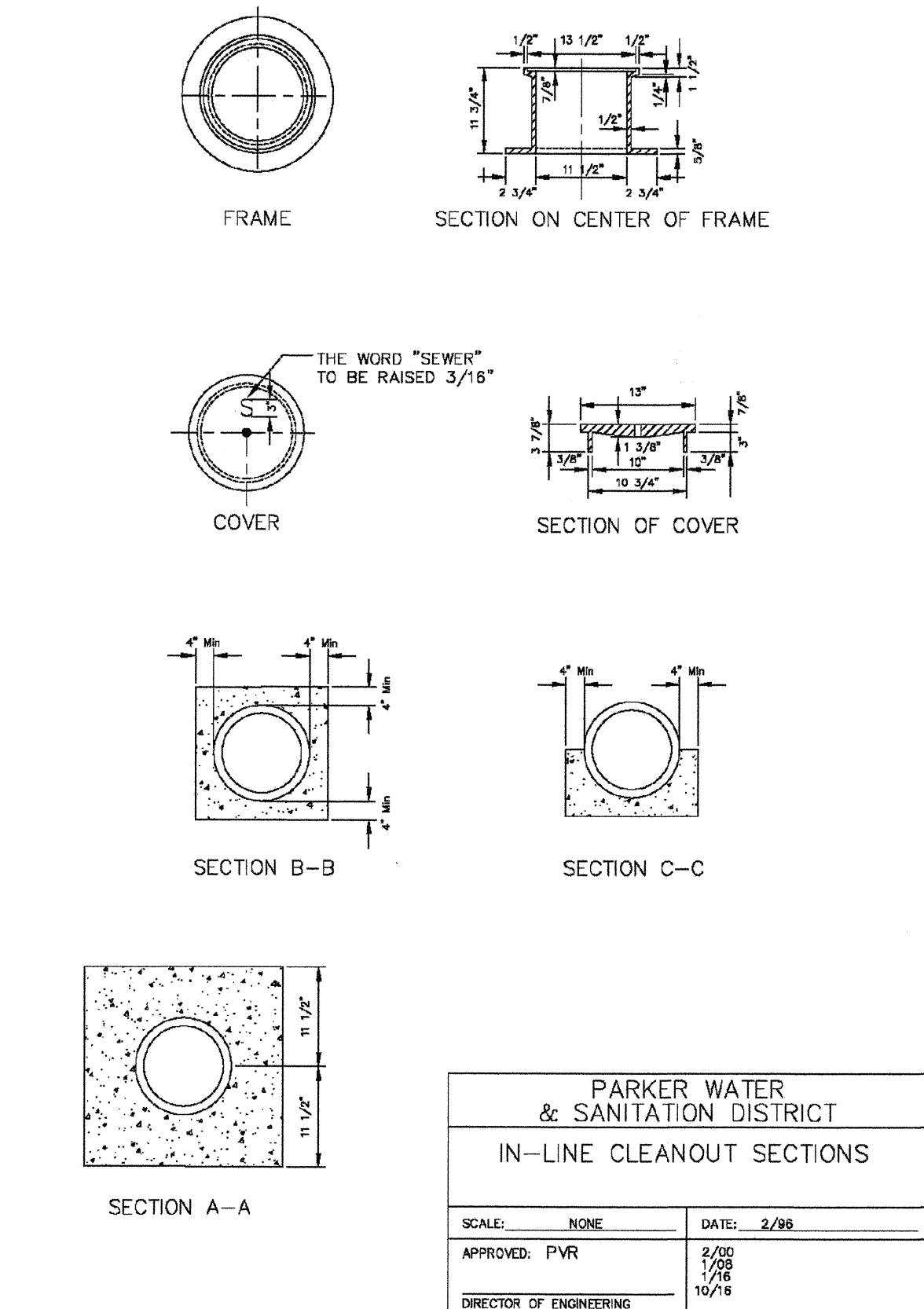
PARKER WATER & SANITATION DISTRICT
MANHOLE STUB-OUT DETAIL

SCALE: NONE DATE: 2/98

APPROVED: PVR 1/78 10/78

DIRECTOR OF ENGINEERING

2016 REVISION SHEET 54.10



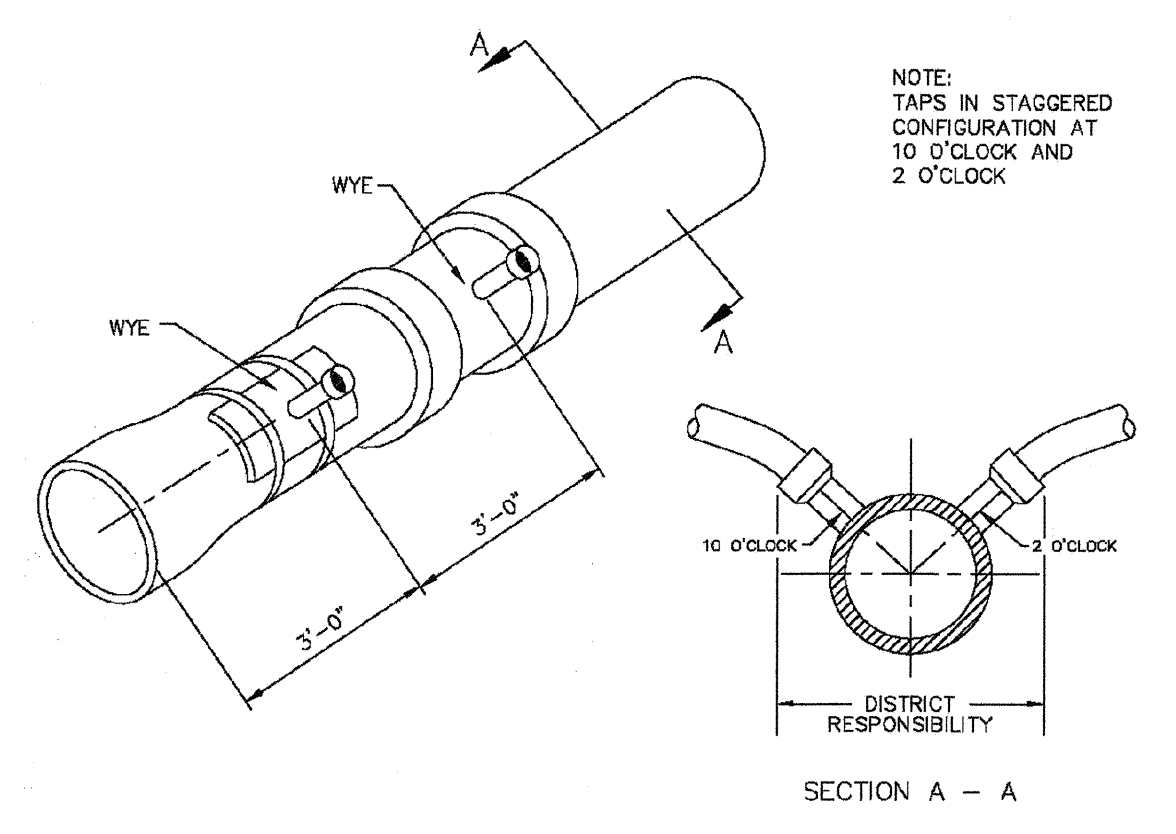
PARKER WATER & SANITATION DISTRICT
IN-LINE CLEANOUT SECTIONS

SCALE: NONE DATE: 2/98

APPROVED: PVR 2/98 1/78 10/78

DIRECTOR OF ENGINEERING

2016 REVISION SHEET 54.12



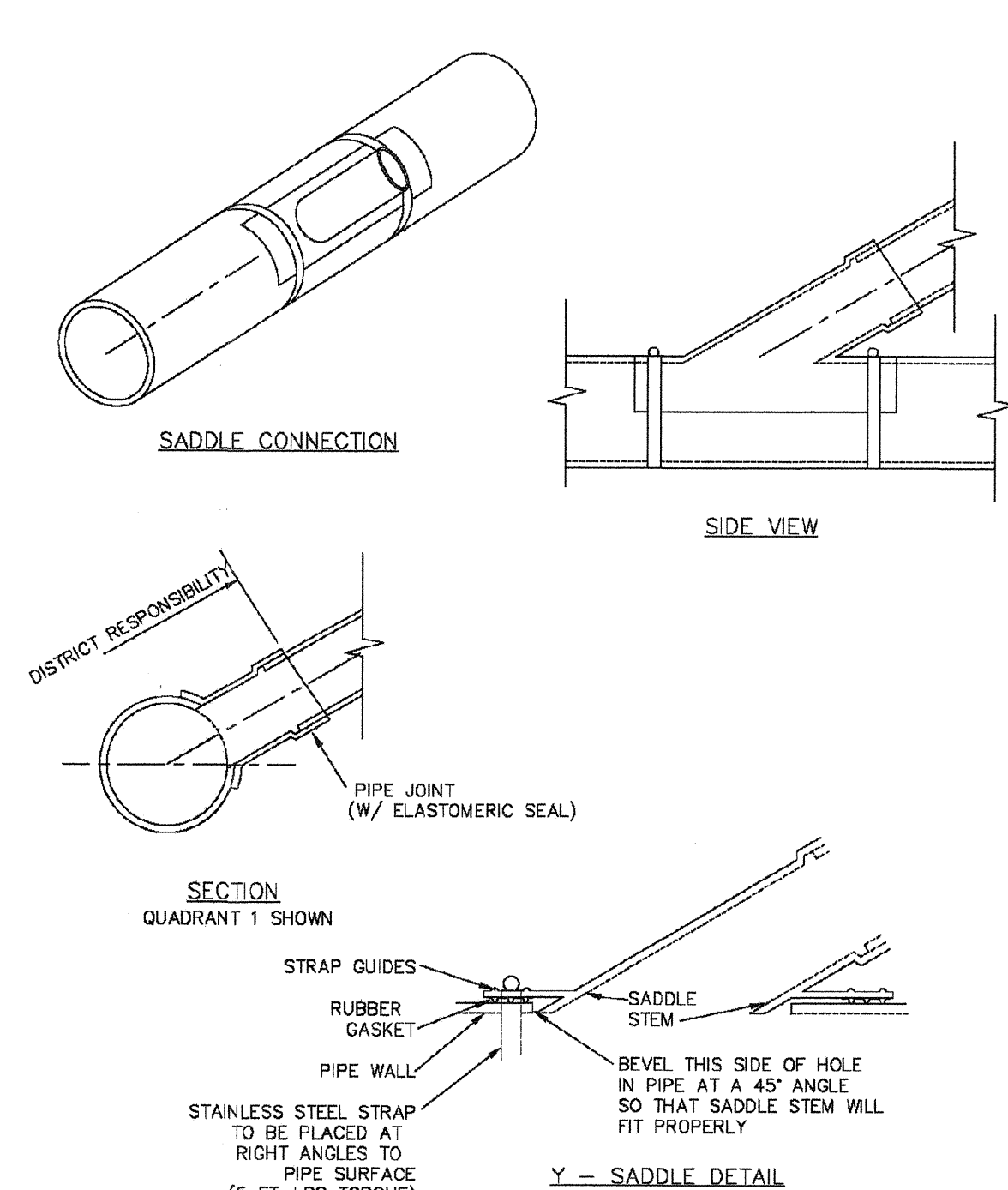
PARKER WATER & SANITATION DISTRICT
DOMESTIC SEWER TAPPING DETAIL

SCALE: NONE DATE: 2/98

APPROVED: PVR 4/01 1/08 1/78 10/78

DIRECTOR OF ENGINEERING

2016 REVISION SHEET 54.13



PARKER WATER & SANITATION DISTRICT
P.V.C. SADDLE CONNECTION DETAIL

SCALE: NONE DATE: 2/98

APPROVED: PVR 1/78 10/78

DIRECTOR OF ENGINEERING

2016 REVISION SHEET 54.14

Sewer service connections shall be positioned at either the 2 o'clock or the 10 o'clock position on the circumference of the sewer main. On new installations, tee or wye fittings shall be used. When tapping into existing sewer main, a saddle connection and approved coring method shall be used. The minimum distance between service connections made along the pipe shall be 3 feet. The minimum distance from either the bell or spigot end of a pipe shall be 3 feet. The minimum distance from the center of a manhole to a service connection shall be either 7 feet or the transition point from the manhole trench to the normal pipe trench, whichever is greater. A maximum of 4 sewer service connections shall be allowed per 20 foot length of pipe. In all cases, a specific soils investigation should be conducted to assure that the external loading will be within allowable limits regardless of the number of taps involved.

APPROVED
JUL 29 2018
PARKER WATER AND SANITATION DISTRICT

N:\PROJECTS\SHSS RANCH\CD\ENGINEERING\SHSS\MULTIFAMILY\CD\SF\19\PARKER WATER AND SANITATION\SANITARY SEWER DETAILS.DWG, BRIANW, 11/22/2018 11:07 AM

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SHEET NUMBER	DRAWN BY: RHR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	NO. REVISIONS	DATE	INIT.	APPR.	DATE
				PROJECT: SHSS RANCH	PROJECT: SHSS RANCH					
TRAILS AT CROWFOOT FILE 15 CONSTRUCTION DRAWINGS SANITARY SEWER DETAILS										
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546										
CVL CONSULTANTS										
14										

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
7. LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
8. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION, UNLESS COORDINATED WITH DISTRICT INSPECTOR.

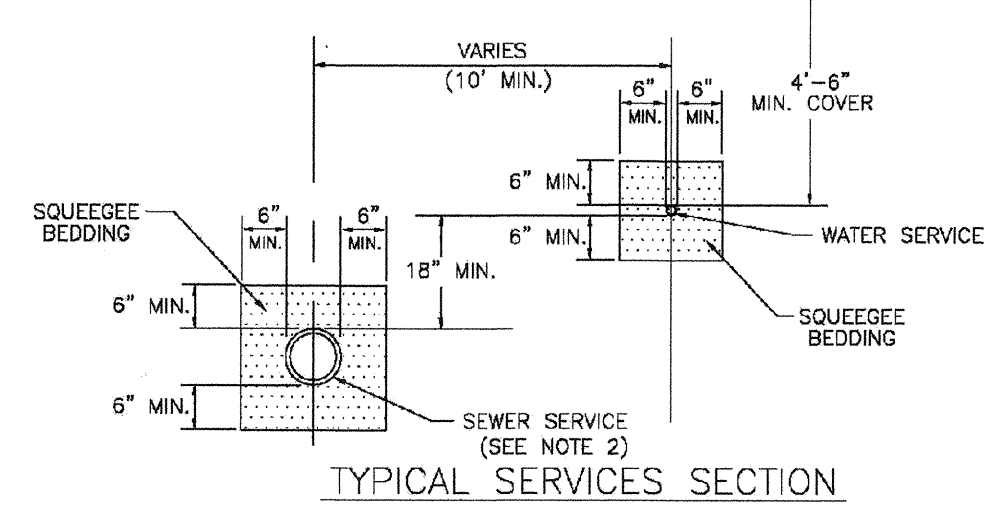
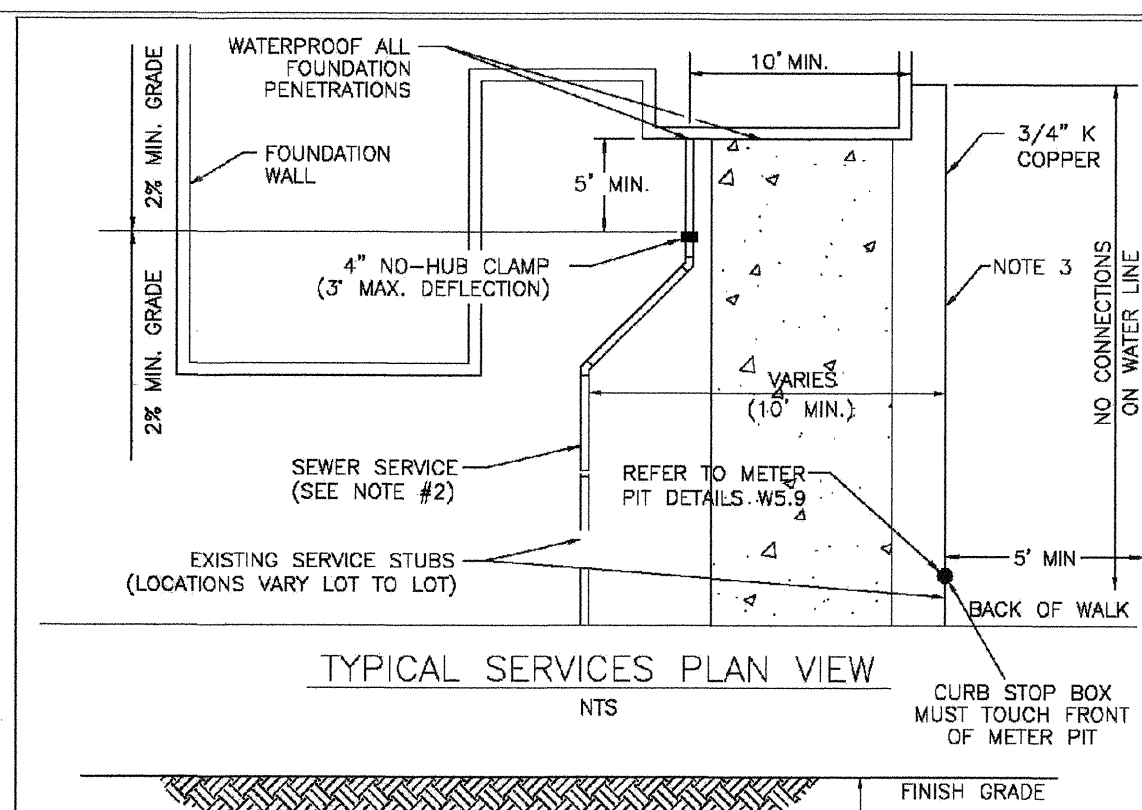
INSTALLATION NOTES:

- WATER**
1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING, (3/4" MIN.).
 2. APPROVED BEDDING TO BE SQUEEGEE.
 3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STOP-IN AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWS PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
 4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
 5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD, CRAWL SPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURR.
 6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT, IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISH GRADE.
 7. MOVED CURB BOXES MUST BE INSPECTED BY PWS PRIOR TO BURIAL.
 8. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
 9. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
 10. CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
 11. ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
 12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
 "X" FOR SANITARY SEWER SERVICE
 "W" FOR WATER SERVICES
 13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWS PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W1.1



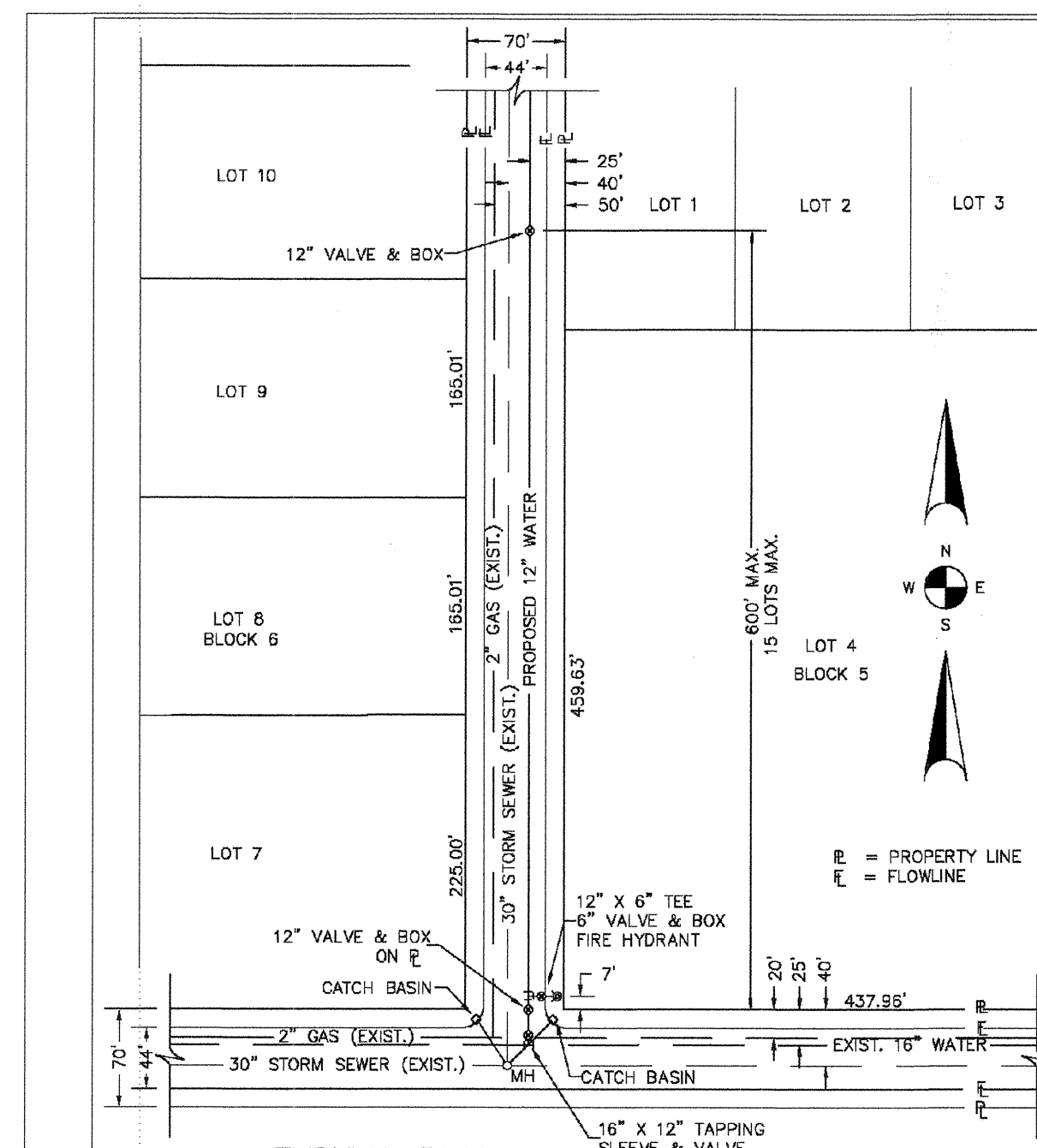
NOTE:

1. SEE SHEET W1.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
2. REFER TO SEWER SERVICES DETAIL SHEET S1.2.
3. 4" PVC SLEEVES REQUIRED FOR SERVICE LINES UNDER CONCRETE SURFACE.

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

2016 REVISION

SHEET W1.2



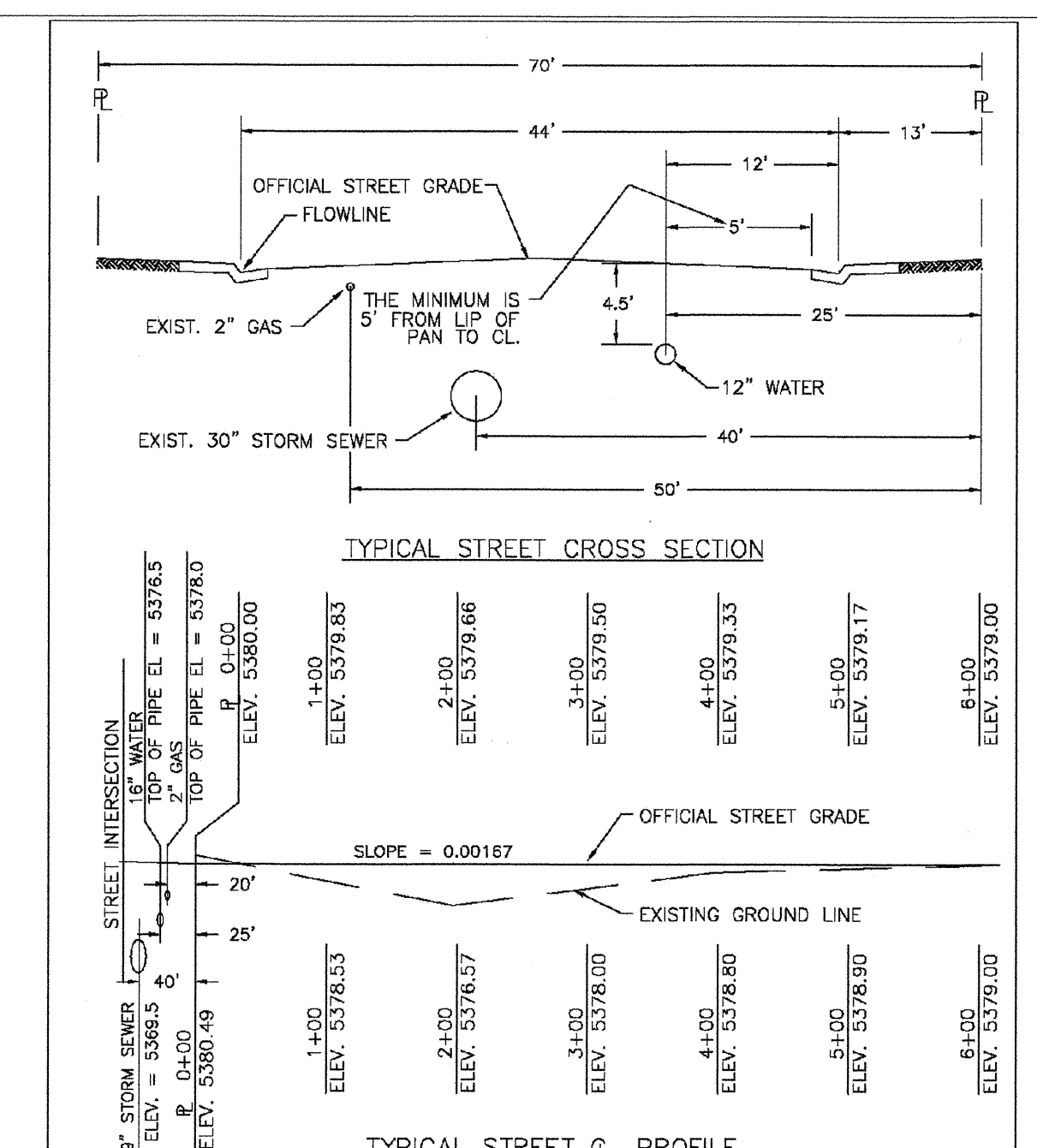
NOTE:

1. SEE "TYPICAL STREET CROSS SECTION - TYPICAL STREET Q PROFILE" DRAWING.
2. ALL FIRE HYDRANTS TO BE LOCATED AT POINTS OTHER THAN CORNER INTERSECTIONS SHALL BE INSTALLED AT A LOT LINE EXTENDED.

PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

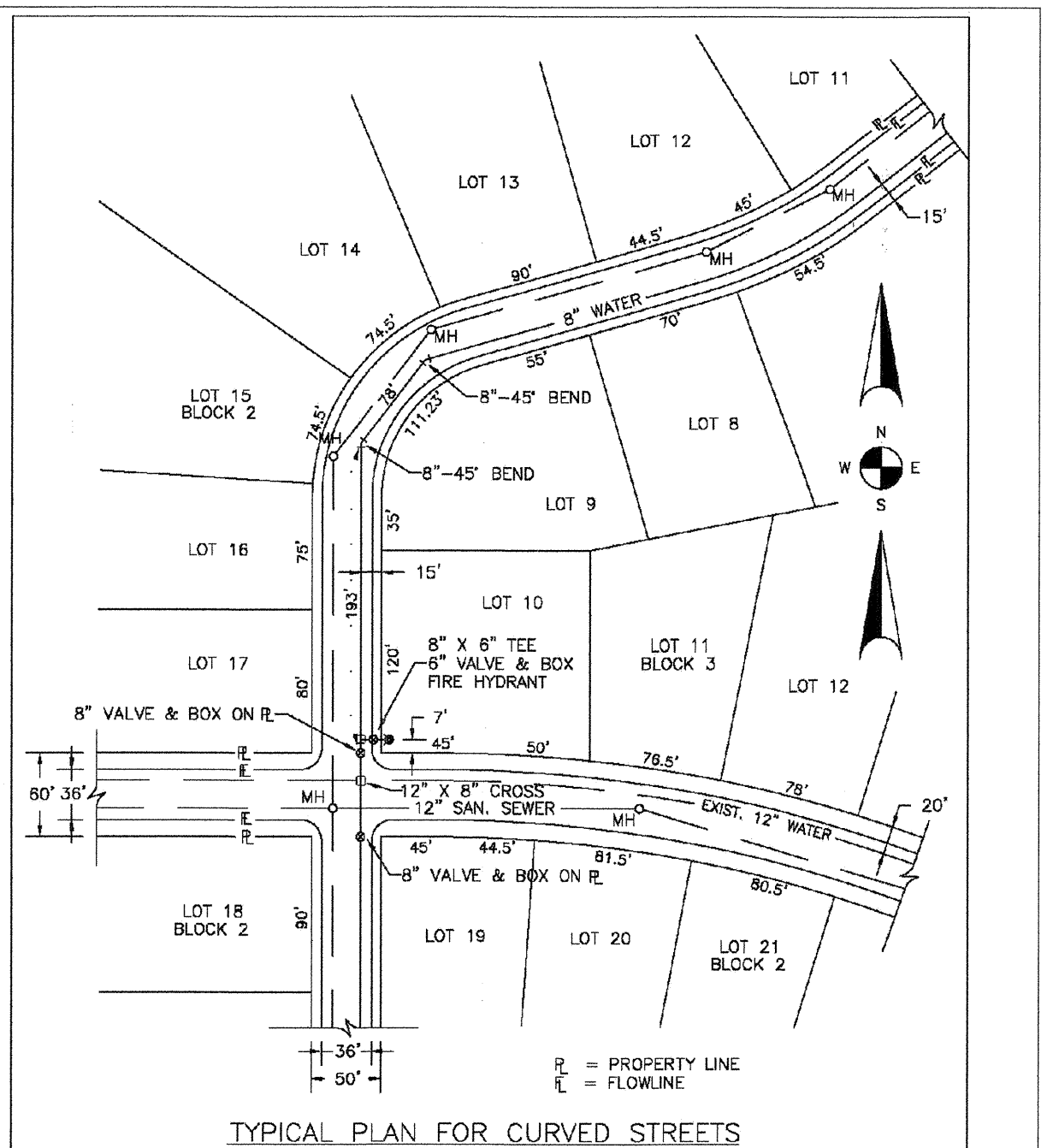
SHEET W2.1



PARKER WATER & SANITATION DISTRICT TYPICAL STREET CROSS SECTION TYPICAL STREET Q PROFILE	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W2.2

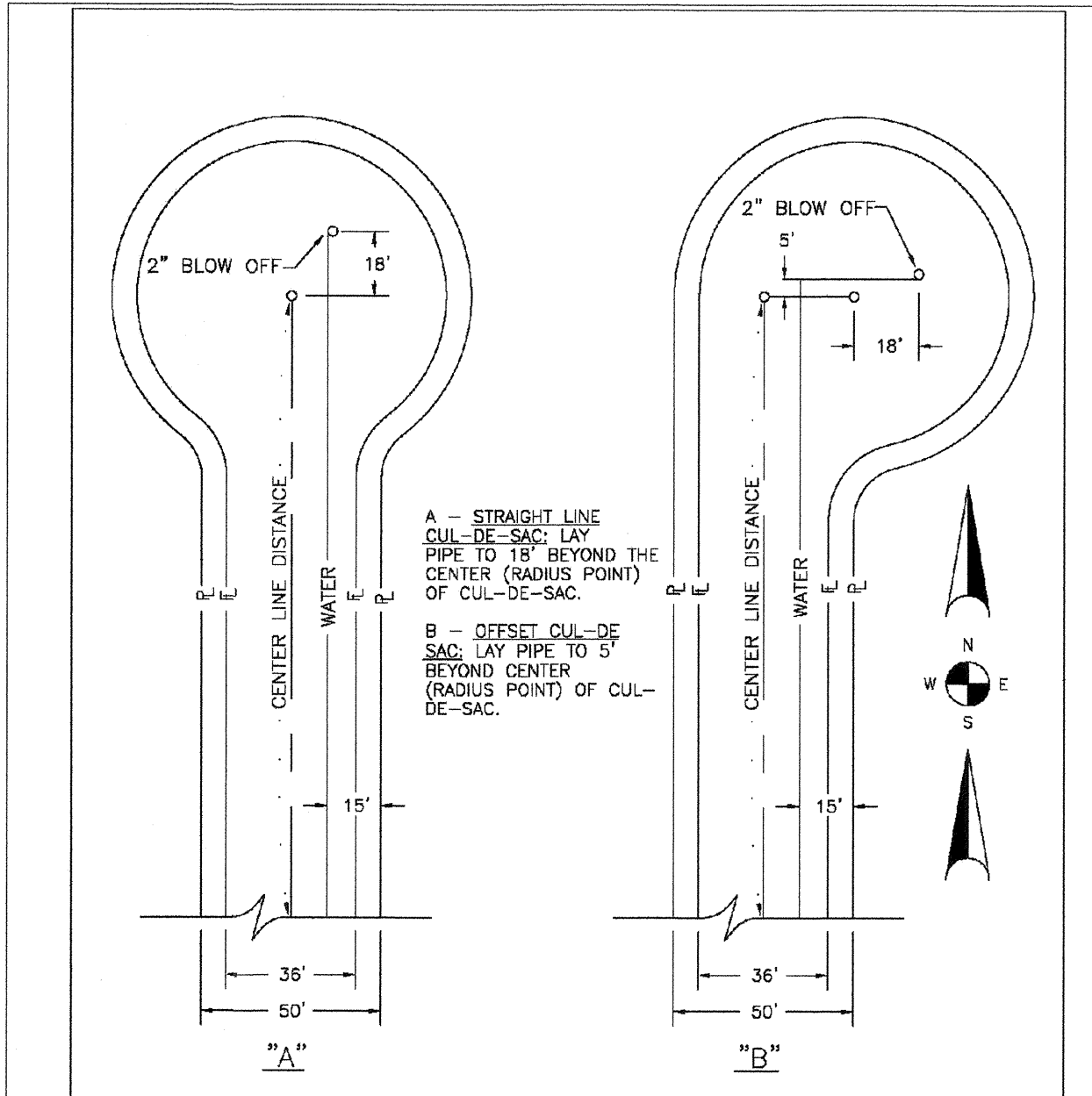


NOTE: WATER AND SEWER MAY NEVER BE CLOSER THAN 10" HORIZONTALLY AND MUST MAINTAIN A MINIMUM OF 8" FROM THE LIP OF PAN ON THE OUTSIDE.

PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CURVED STREETS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

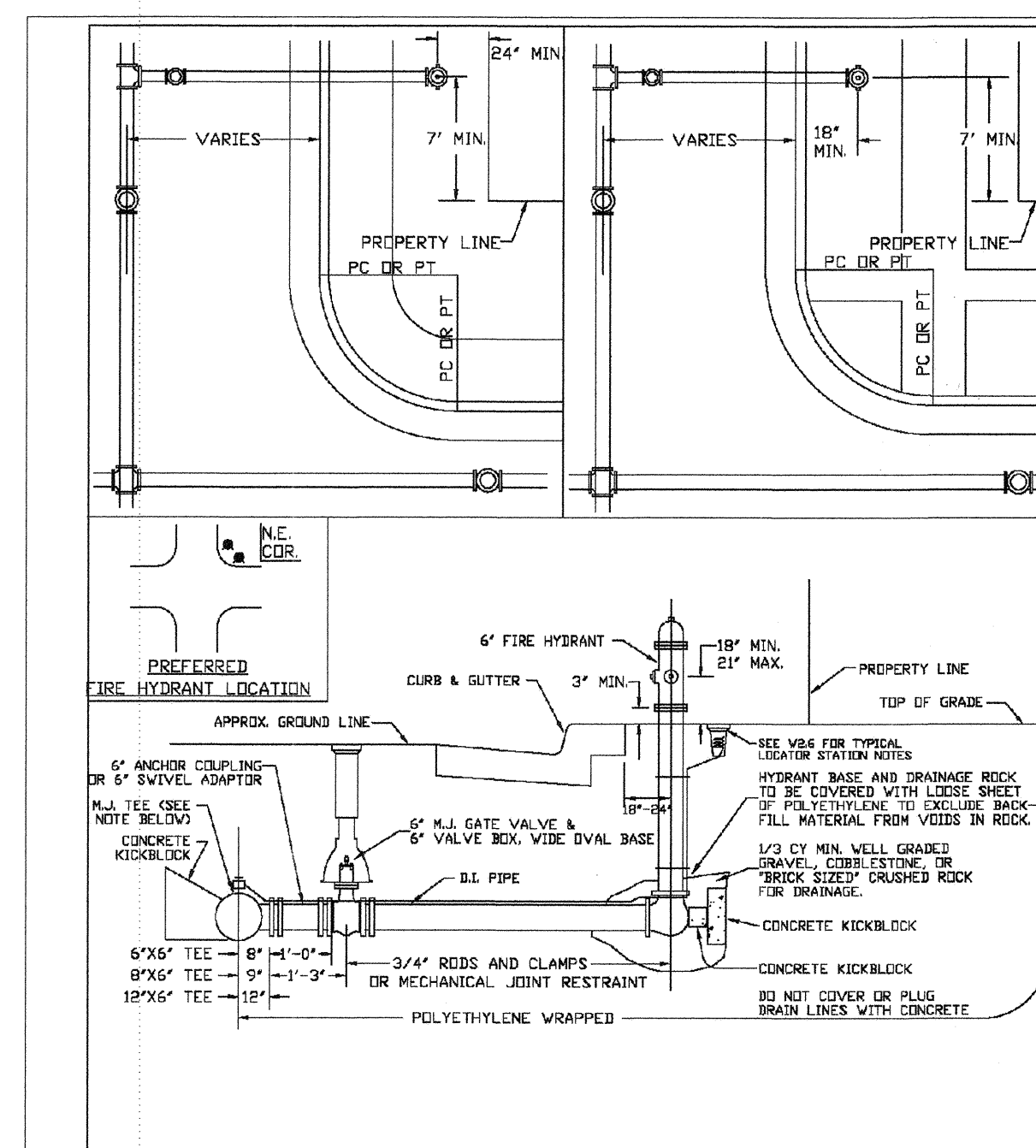
SHEET W2.3



PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CUL-DE-SACS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W2.4



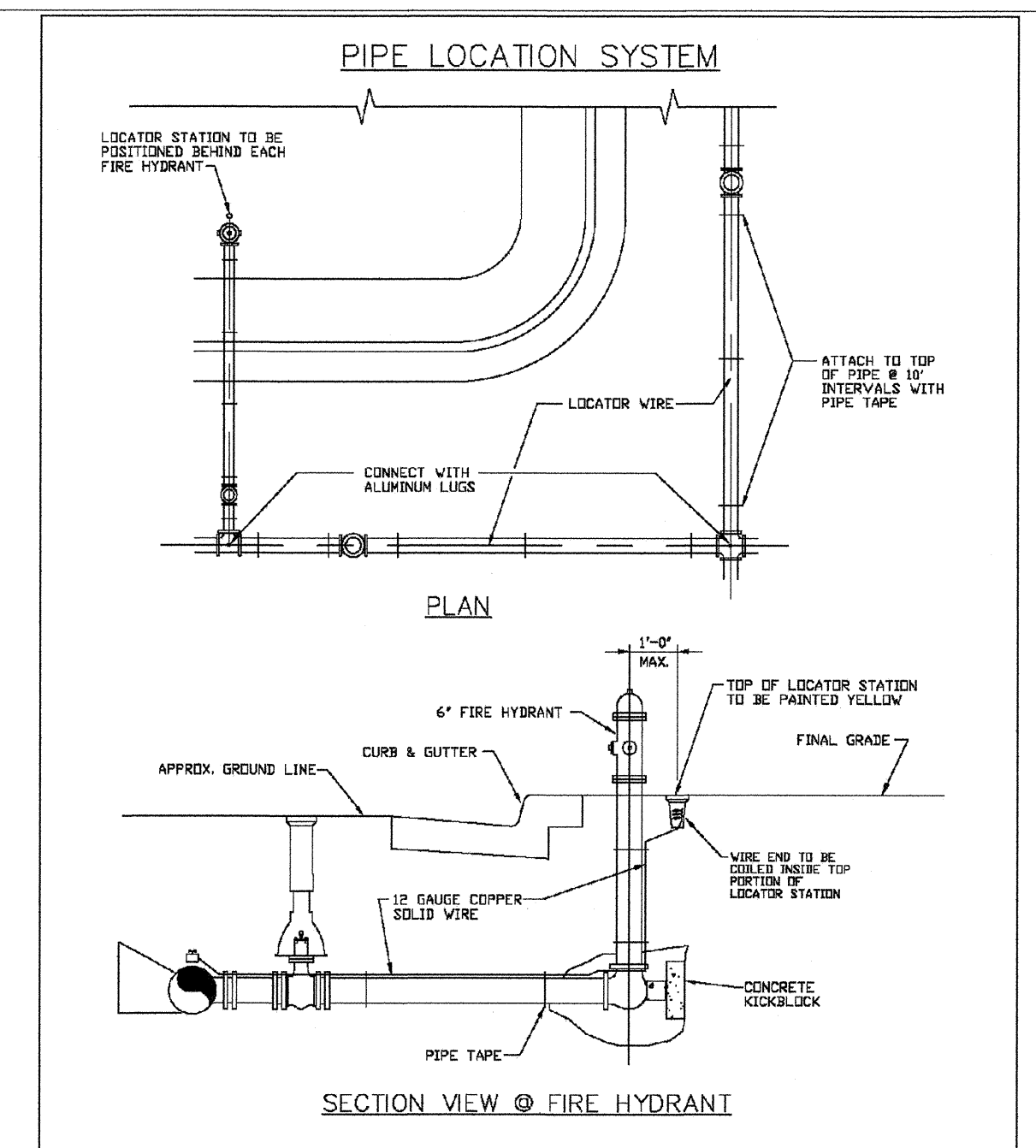
NOTE:

1. ALTERNATE TO THE ABOVE, FASTEN PL-1 VALVE DIRECTLY TO A 6" ANCHOR TIE (AS SHOWN CALLER BYVAL TIE).
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH.
3. NO PORTION OF FIRE HYDRANT MAY BE NEAR/IN/ON ANY UTILITY AREA.
4. FIRE HYDRANT EXTENSIONS MAY NEAR/IN/ON ANY UTILITY AREA.

PARKER WATER & SANITATION DISTRICT FIRE HYDRANTS LOCATION & INSTALLATION	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W2.5



NOTE:

1. FOR USE ON ALL DUCTILE IRON AND PVC WATER MAINS.
2. LOCATOR STATION POSITION MAY BE IDENTIFIED AT THE DIRECTION OF THE SERVICE ENGINEER.
3. A CONTINUED TIE WILL BE REQUIRED PRIOR TO PAVEMENT ACCEPTANCE.

PARKER WATER & SANITATION DISTRICT LOCATOR WIRE DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W2.6

APPROVED
JUL 29 2019
PARKER WATER AND SANITATION DISTRICT

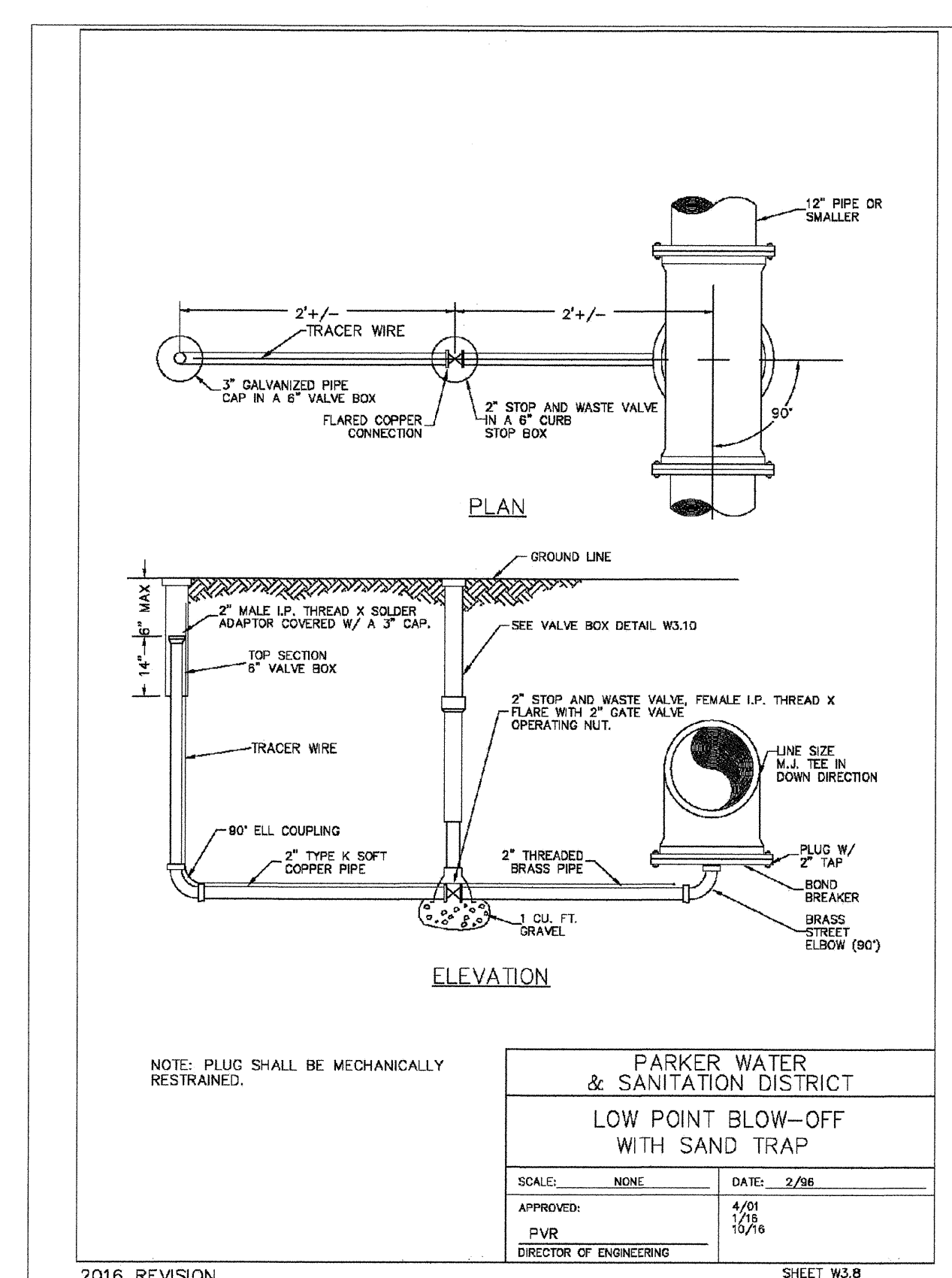
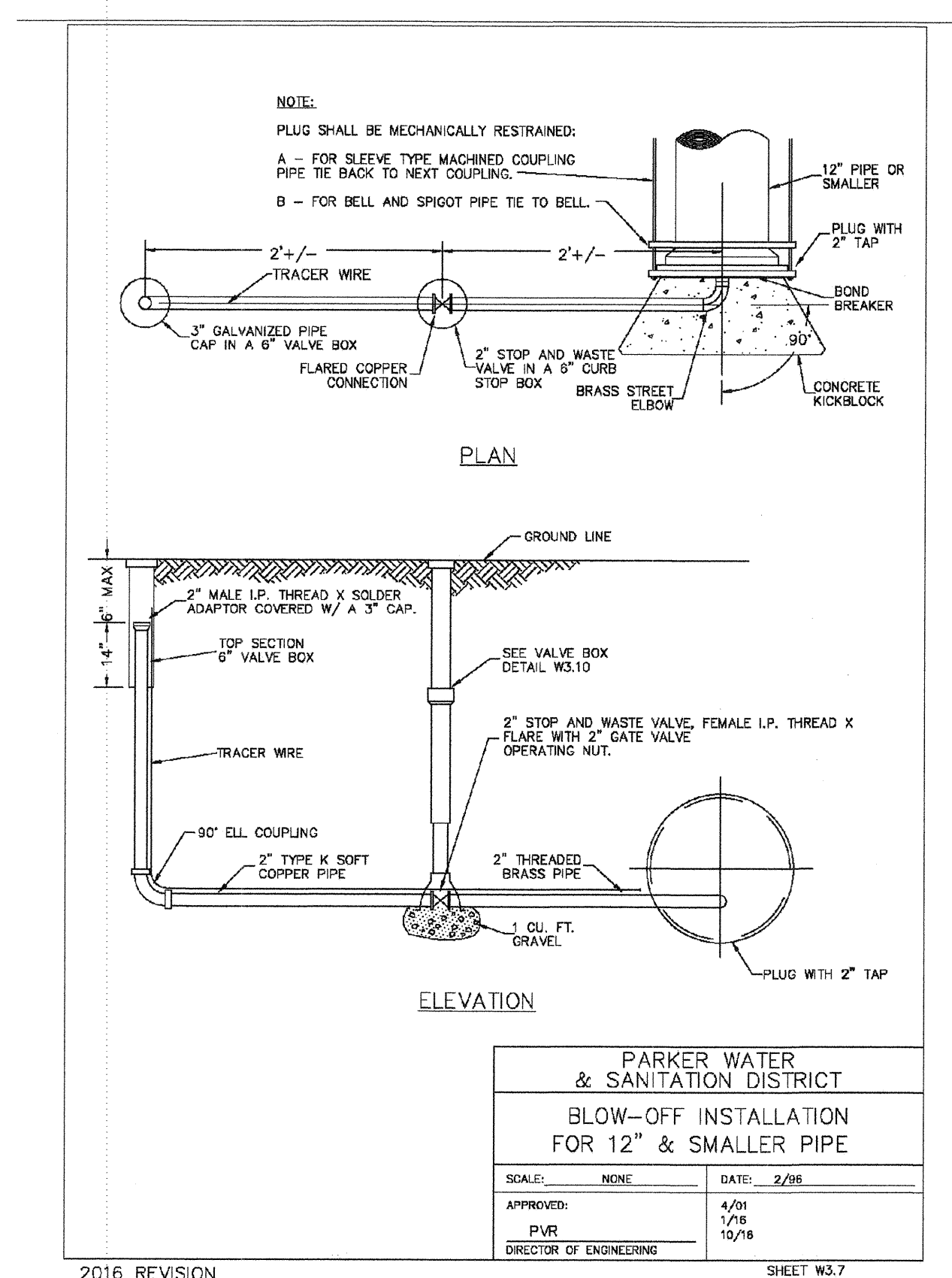
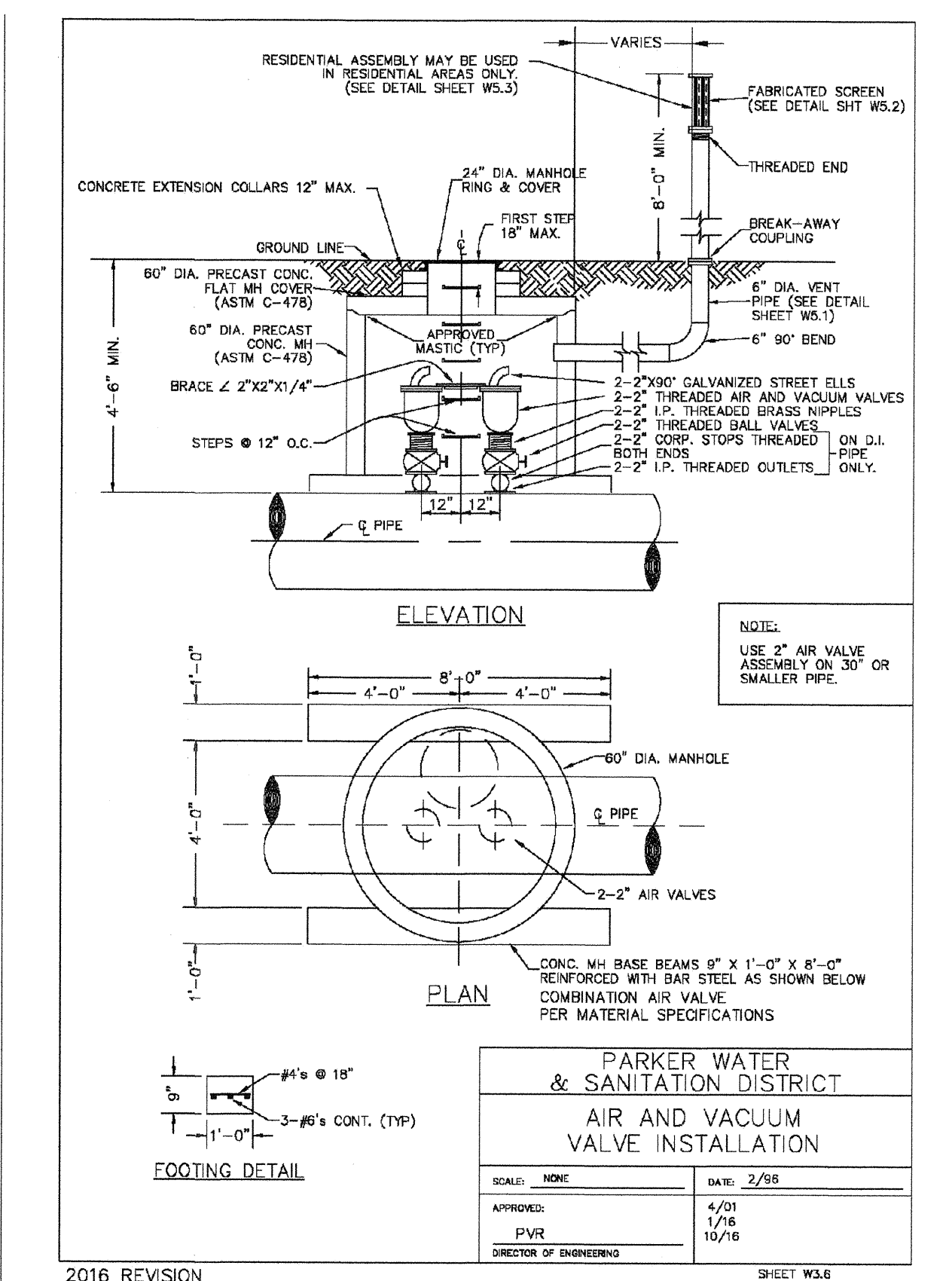
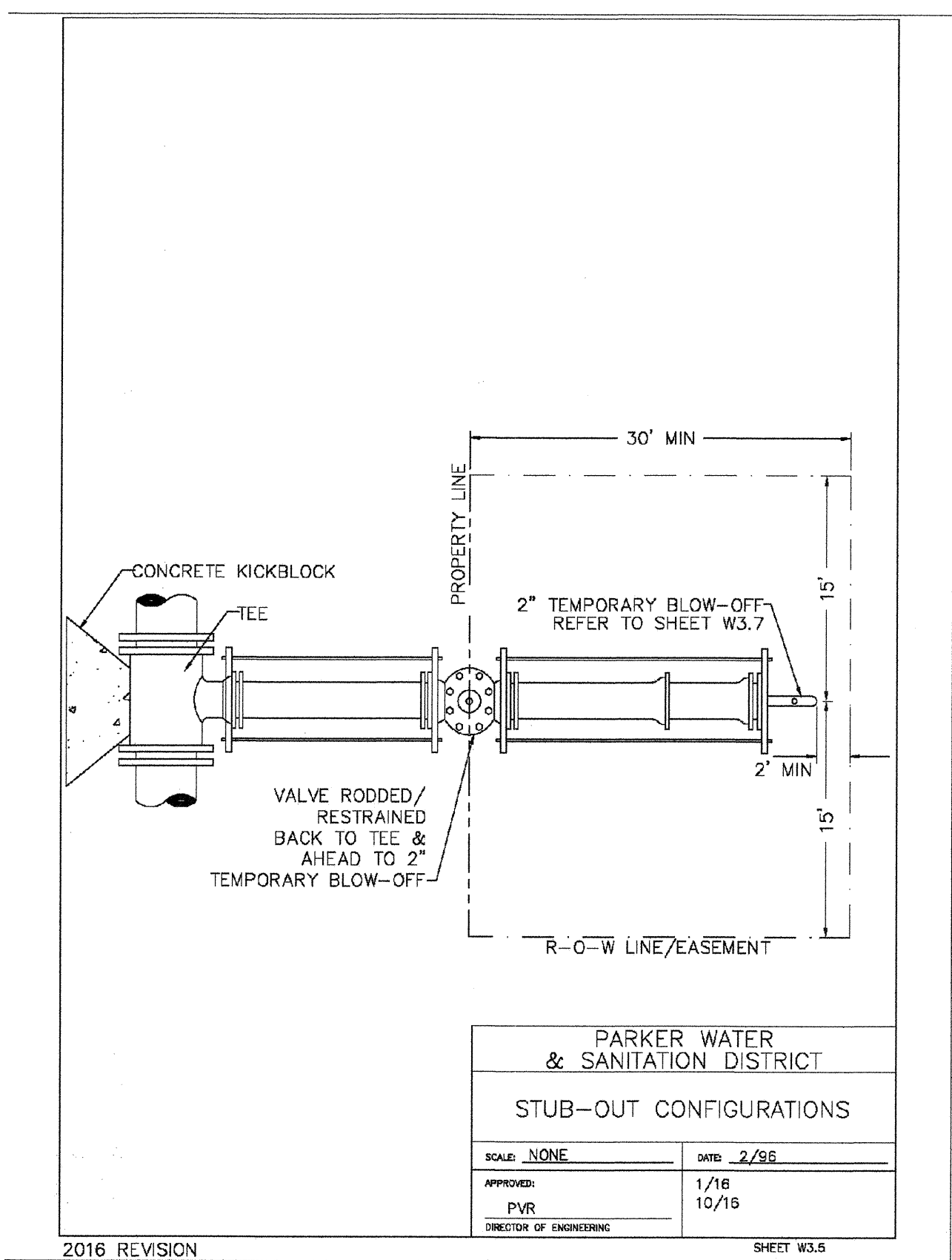
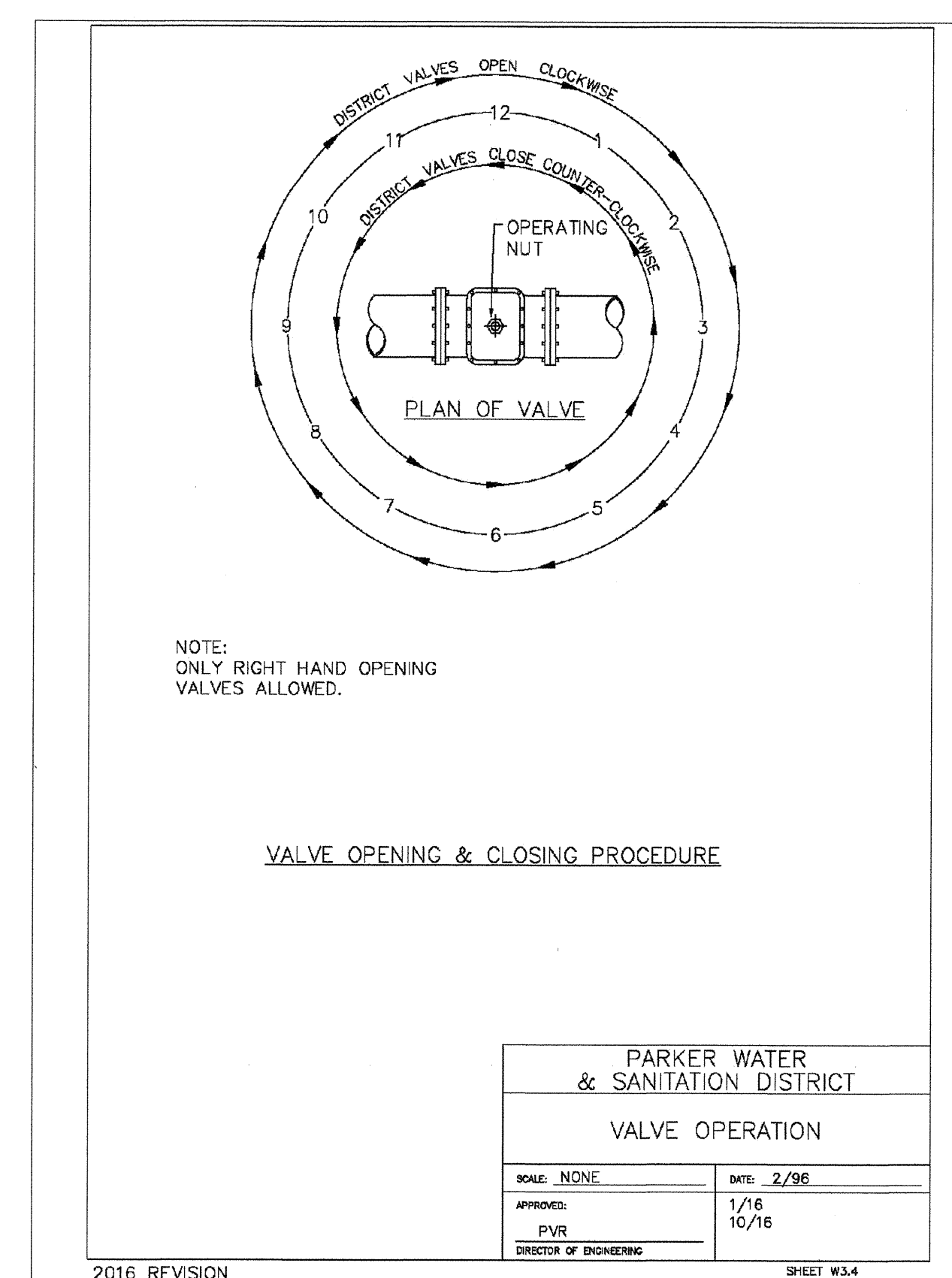
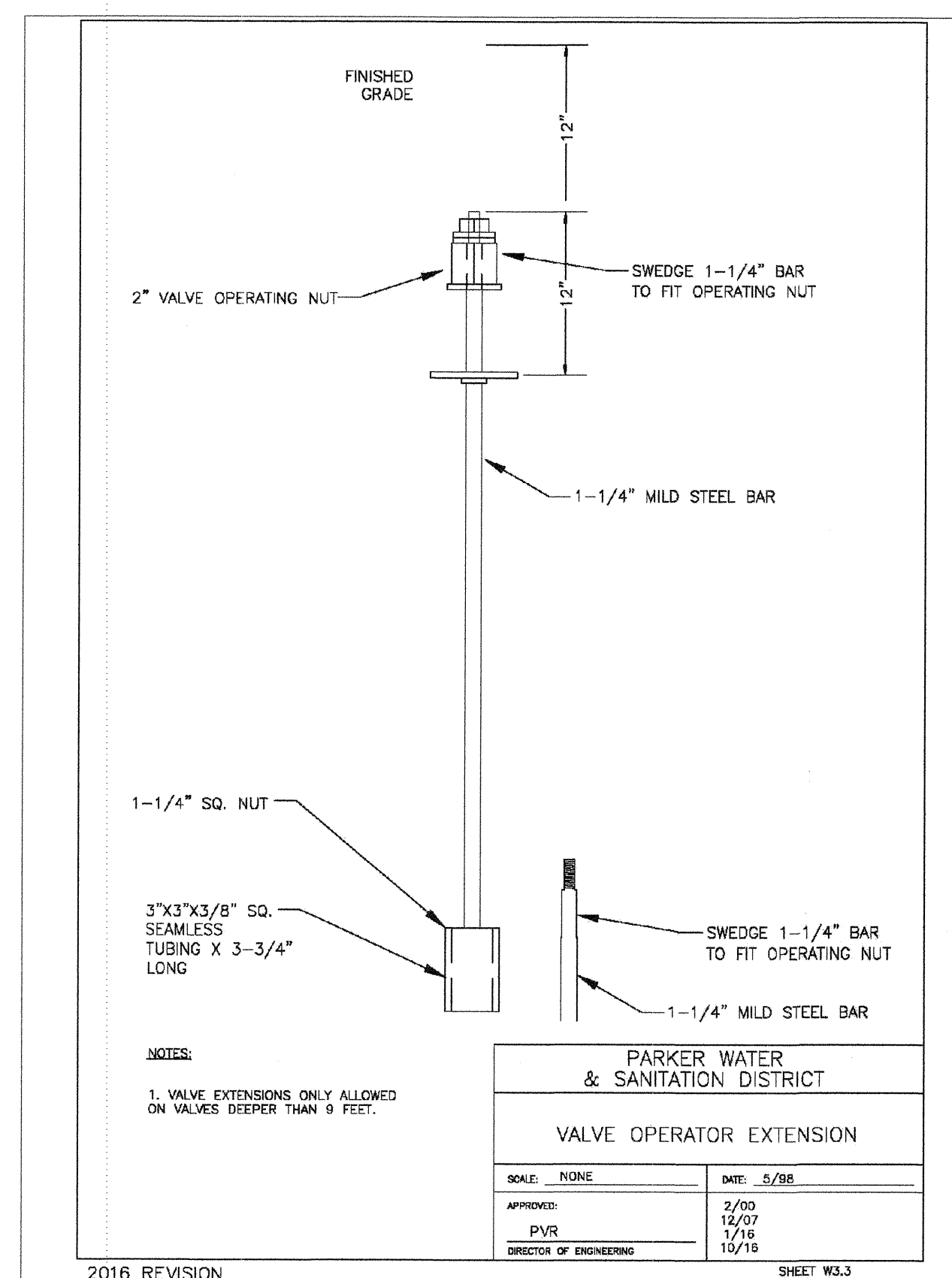
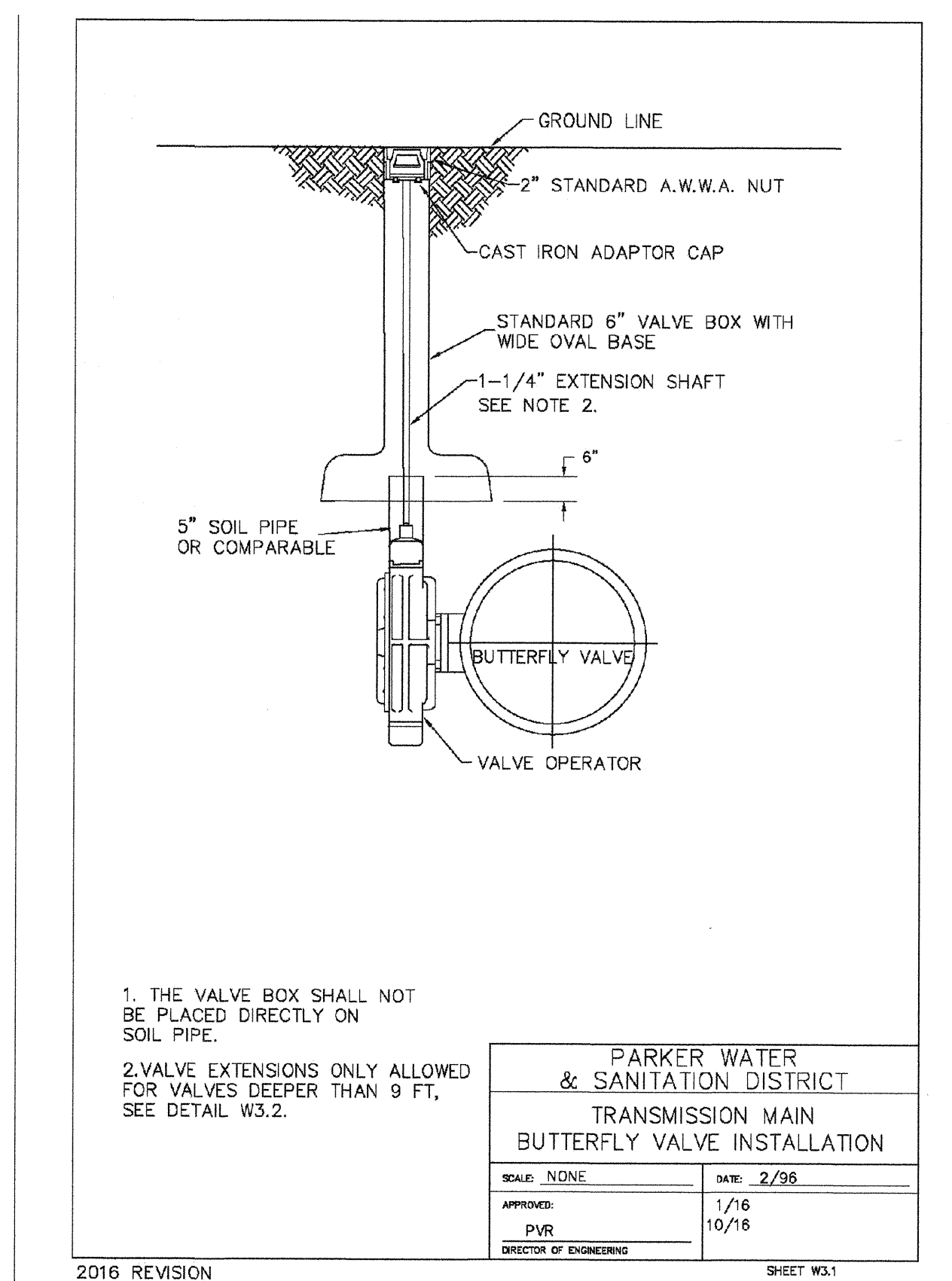
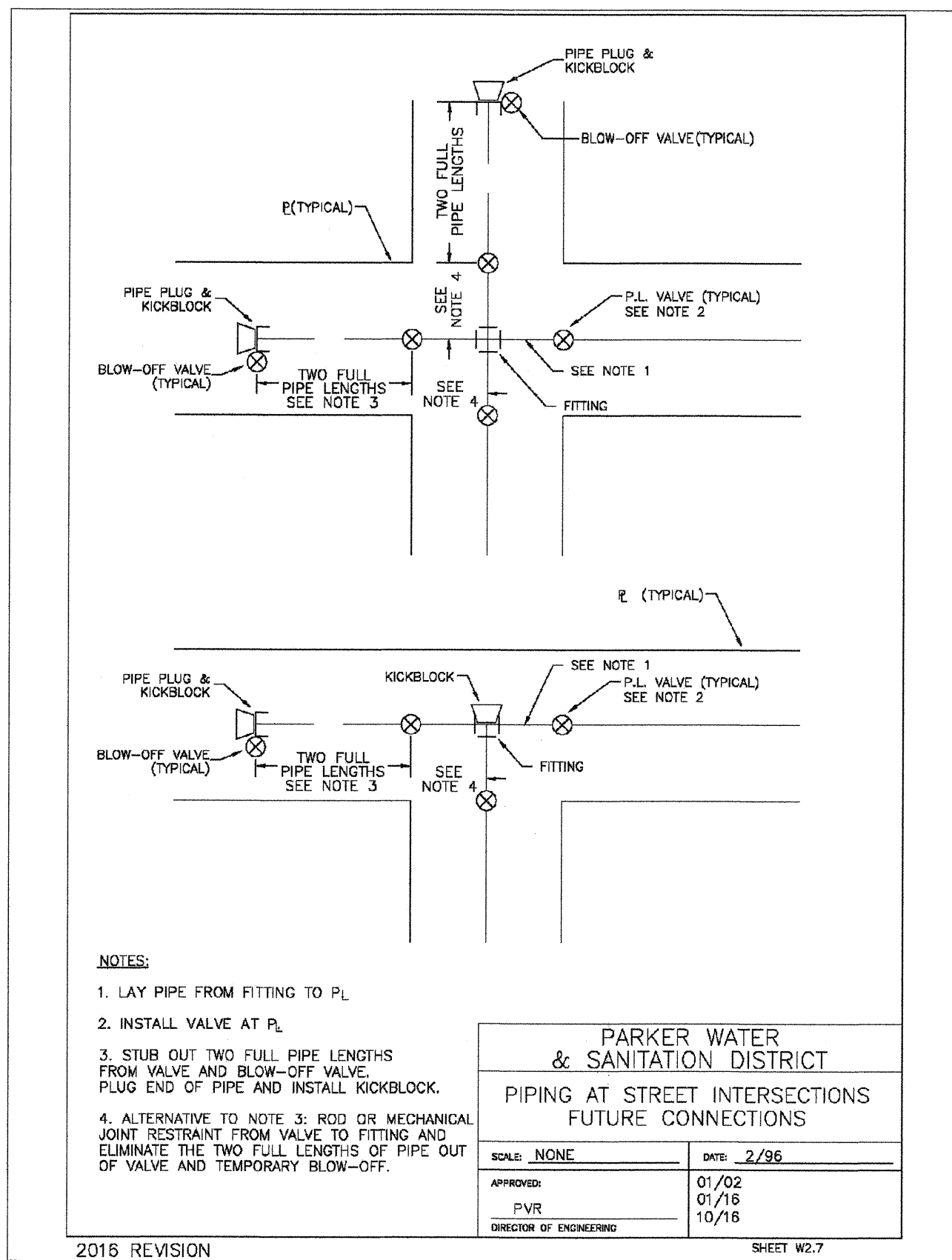
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SHEET NUMBER	DRAWN BY: RHR	CHECKED BY: BRW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	Revisions	Date	Appr.	Date
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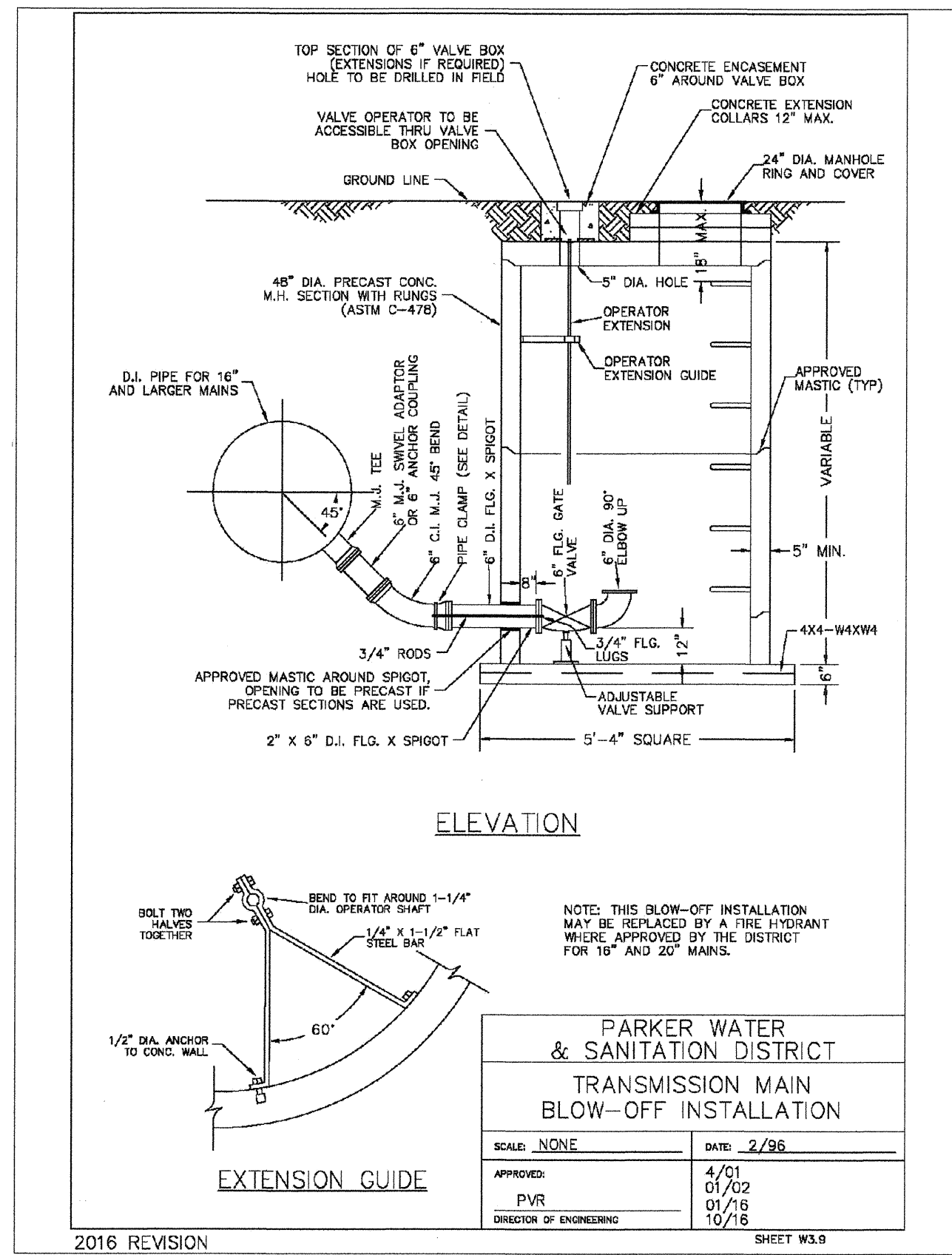


APPROVED
JUL 29 2018
PARKER WATER AND SANITATION DISTRICT

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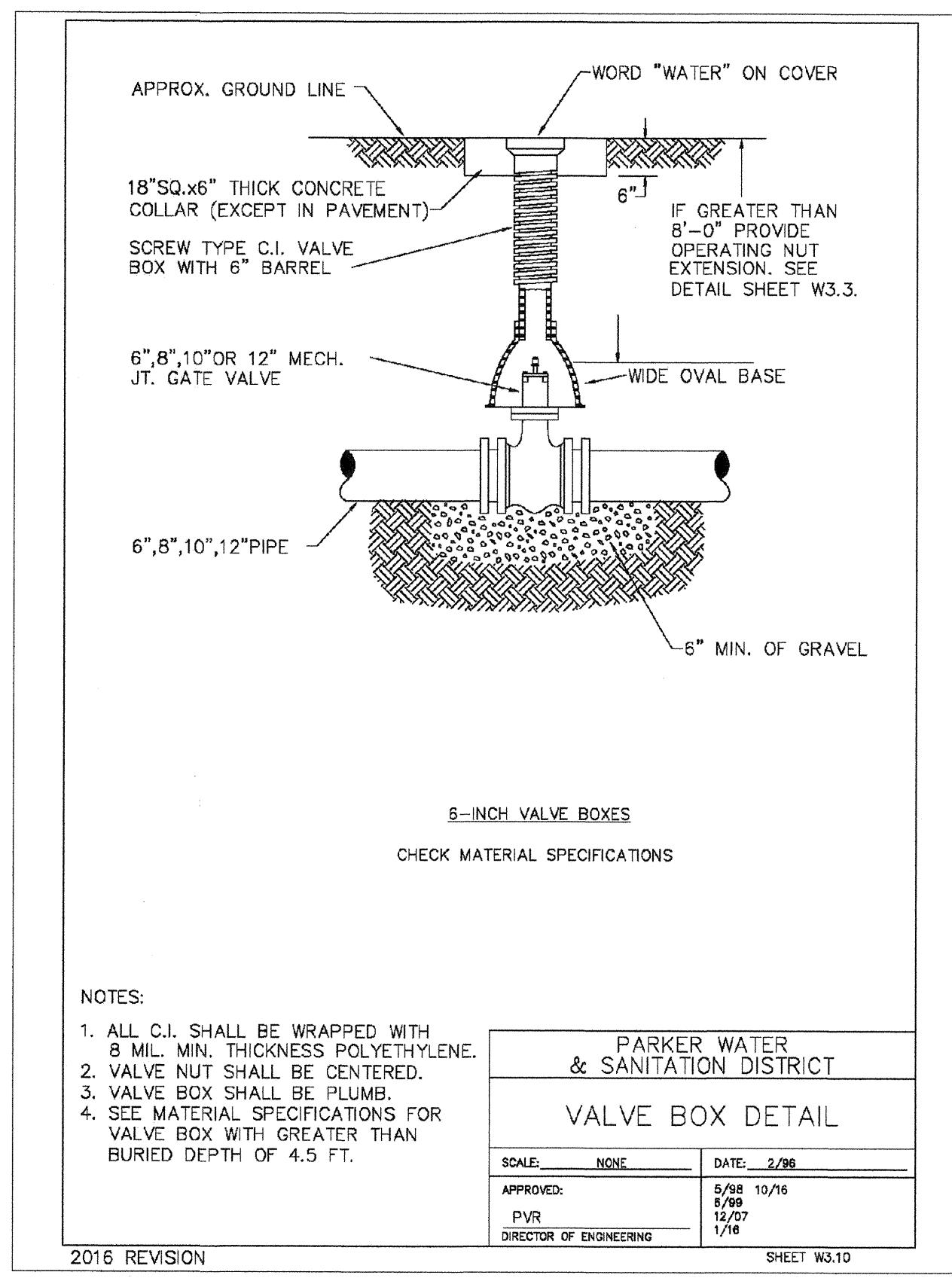
10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9529 Fax: (720) 482-9546	Revisions	Date	Appr.	Date
HR 985 LLC 7855 CENTENNIAL BLVD CENTENNIAL, CO 80112	No.	Date	Init.	Date
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	SCALE: AS SHOWN	FILE NO: 8130283701	DRAWN BY: RHR	CHECKED BY: BPW
16	DATE: JUNE 2018			



PARKER WATER & SANITATION DISTRICT
TRANSMISSION MAIN BLOW-OFF INSTALLATION

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
 PVR 01/02
 DIRECTOR OF ENGINEERING 01/16 10/16

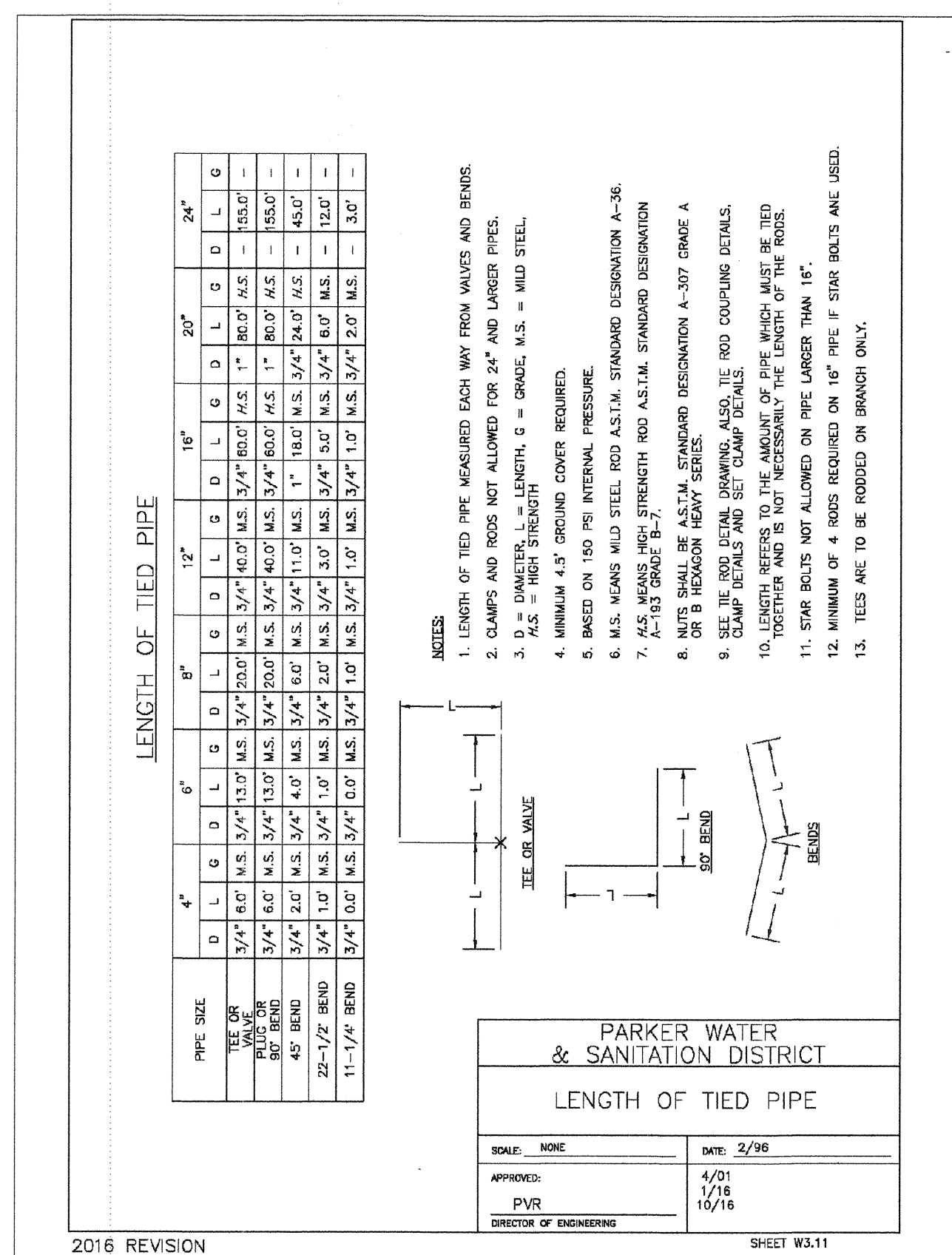
SHEET W3.9



PARKER WATER & SANITATION DISTRICT
VALVE BOX DETAIL

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
 PVR 01/02
 DIRECTOR OF ENGINEERING 01/16 10/16

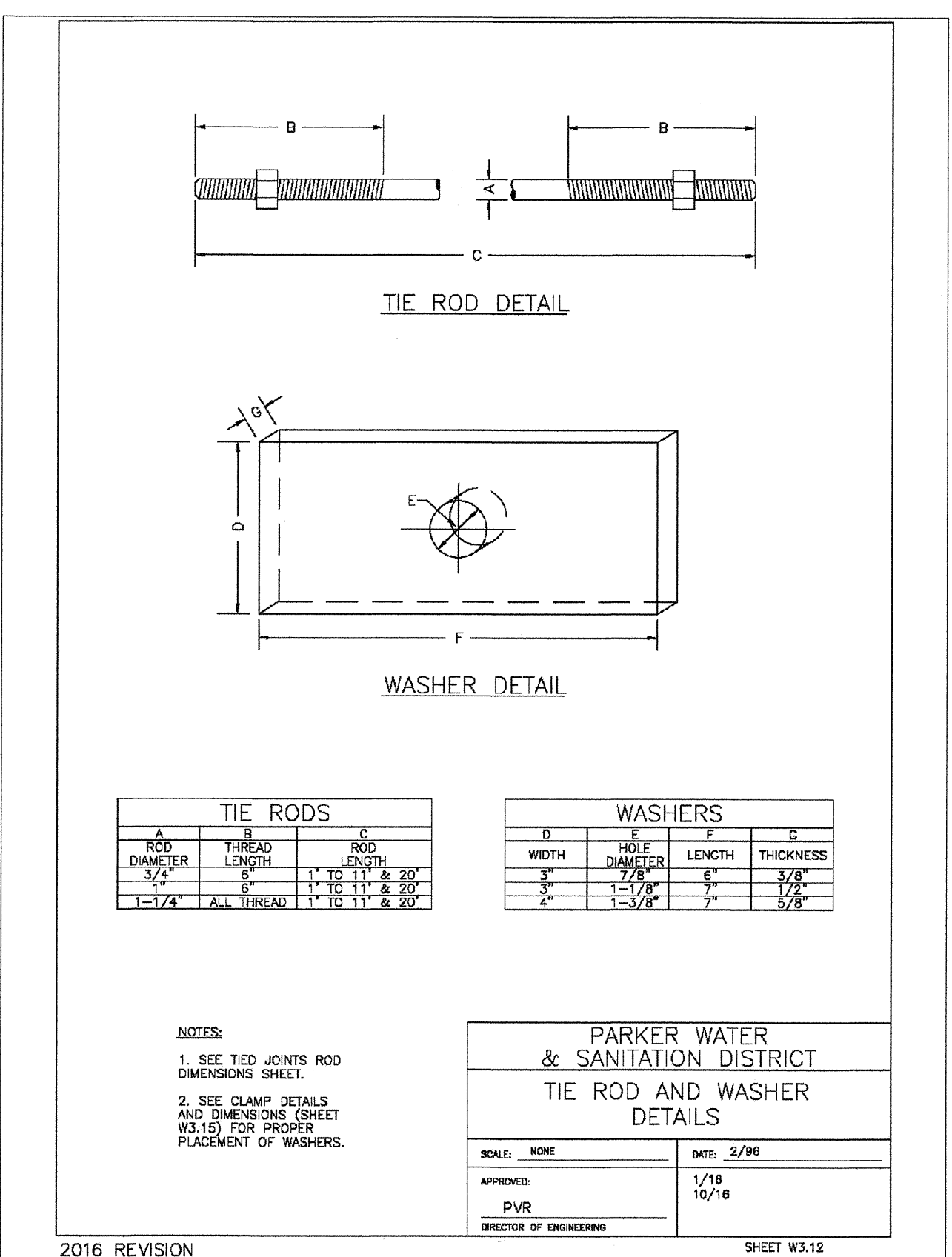
SHEET W3.10



PARKER WATER & SANITATION DISTRICT
LENGTH OF TIED PIPE

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
 PVR 01/02
 DIRECTOR OF ENGINEERING 01/16 10/16

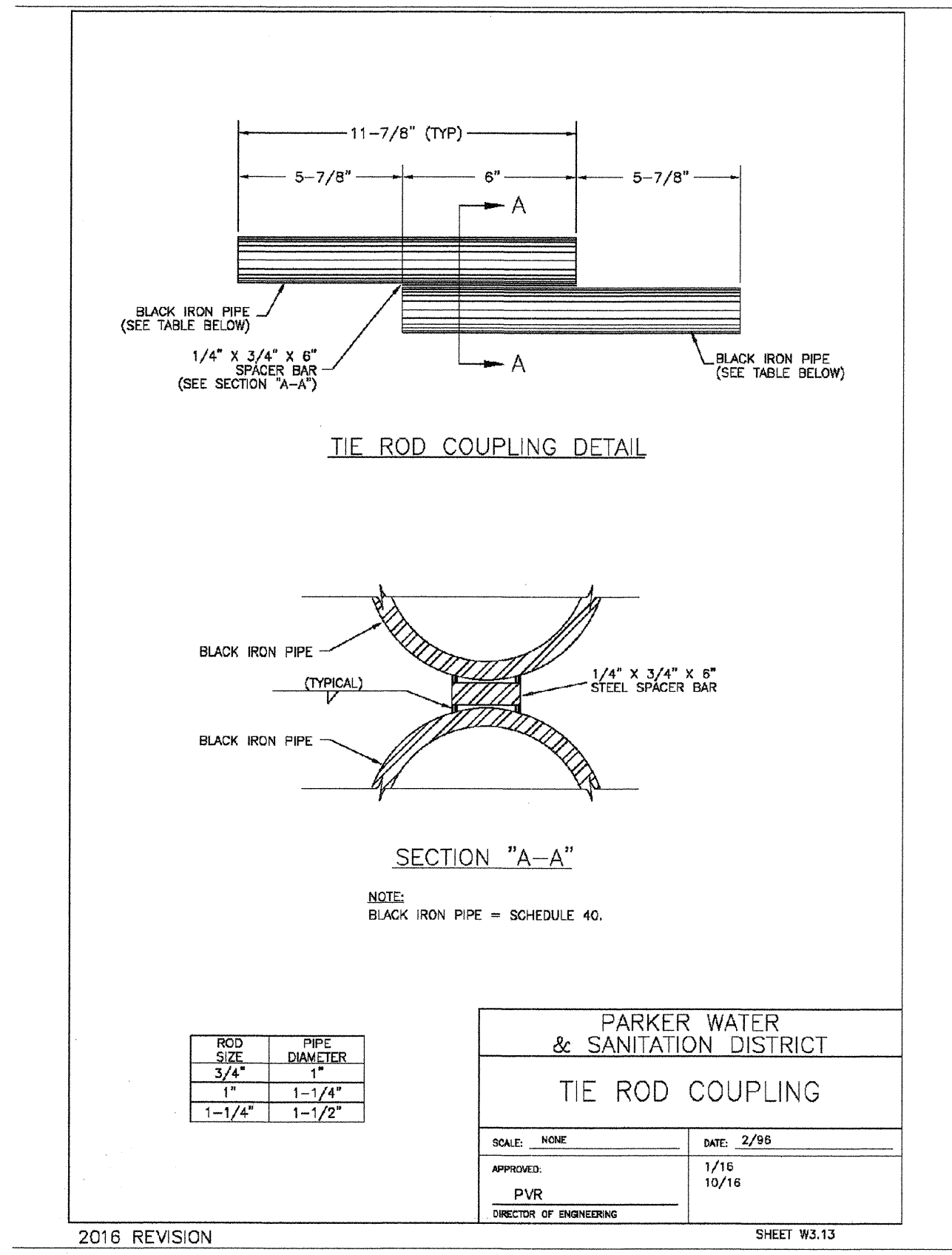
SHEET W3.11



PARKER WATER & SANITATION DISTRICT
TIE ROD AND WASHER DETAILS

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
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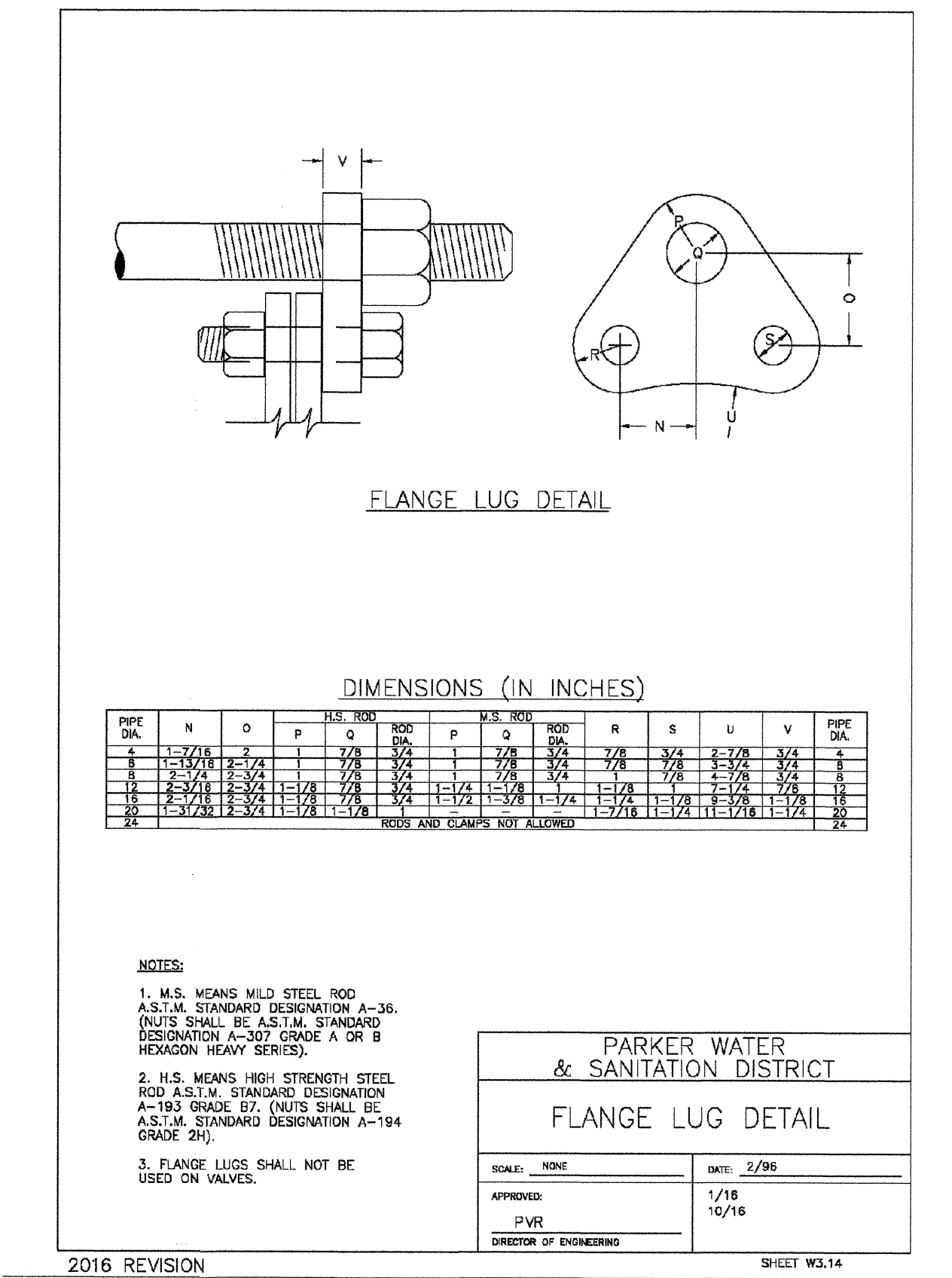
SHEET W3.12



PARKER WATER & SANITATION DISTRICT
TIE ROD COUPLING

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
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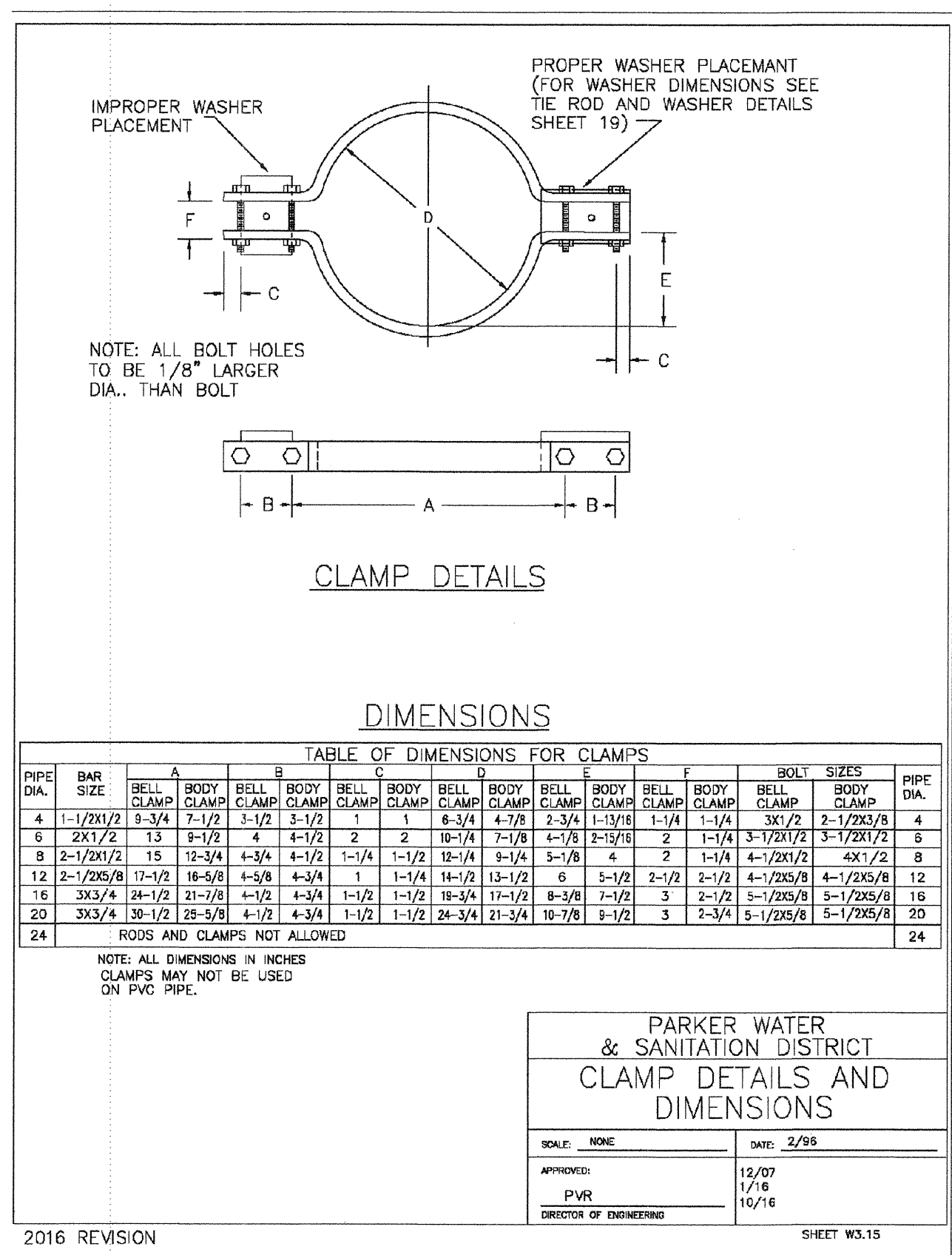
SHEET W3.13



PARKER WATER & SANITATION DISTRICT
FLANGE LUG DETAIL

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
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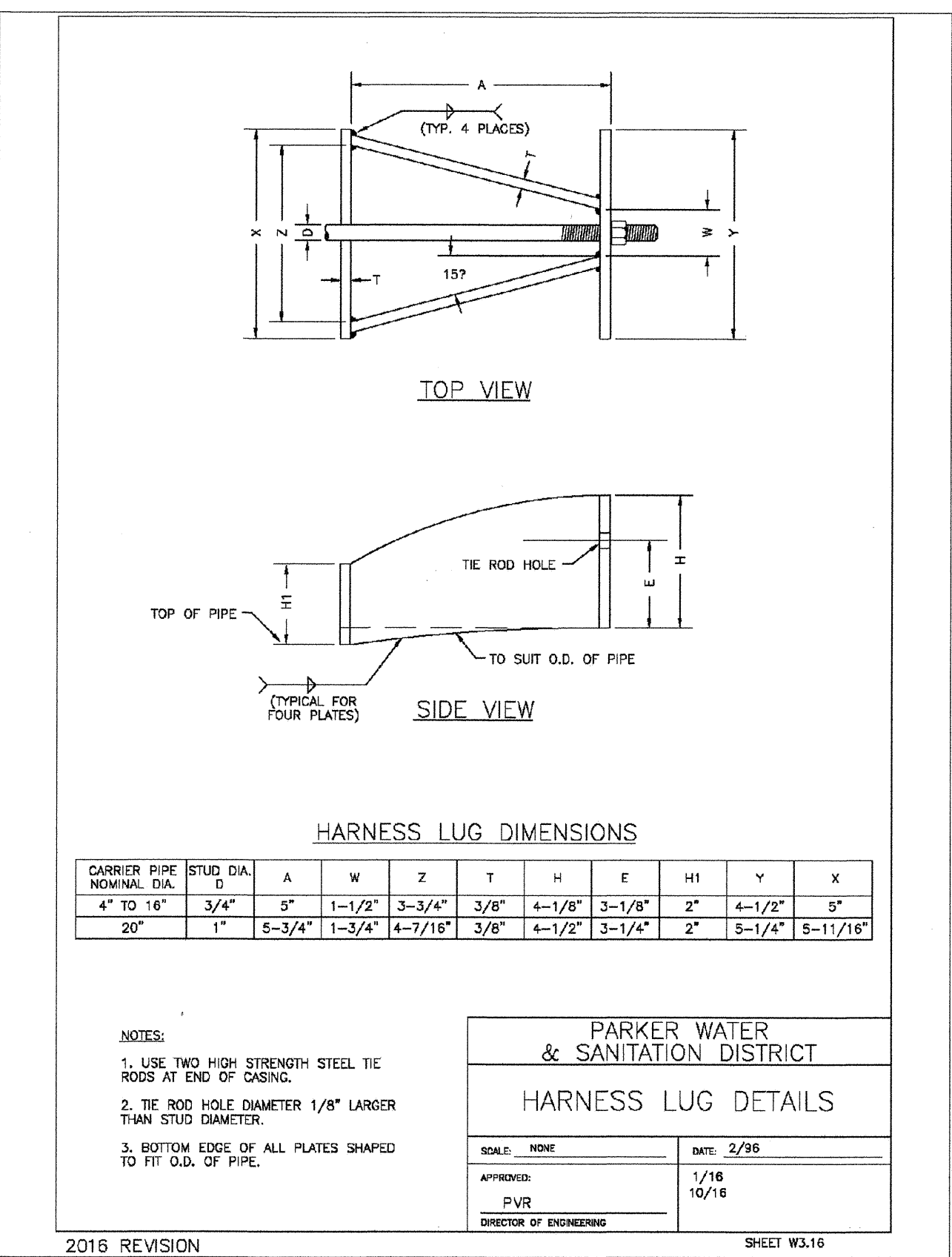
SHEET W3.14



PARKER WATER & SANITATION DISTRICT
CLAMP DETAILS AND DIMENSIONS

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
 PVR 01/02
 DIRECTOR OF ENGINEERING 01/16 10/16

SHEET W3.15



PARKER WATER & SANITATION DISTRICT
HARNESS LUG DETAILS

SCALE: NONE DATE: 2/98
 APPROVED: 4/01
 PVR 01/02
 DIRECTOR OF ENGINEERING 01/16 10/16

SHEET W3.16

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CVL CONSULTANTS

HR 935 LLC
 7353 South Alton Way
 CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
 FILING 15 CONSTRUCTION DRAWINGS
 WATER DETAILS

SCALE: AS SHOWN
 DRAWN BY: RHR
 CHECKED BY: BRW
 DATE: JUNE 2018

FILE NO: 8130283701

DATE: JUL 29 2019
 APPROVED: PARKER WATER AND SANITATION DISTRICT

NO. REVISIONS DATE INIT. APPR.

SHEET NUMBER **17**

MECHANICAL JOINT RESTRAINT

NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES
4"	2	2	11.12	9.5	7.00	0.88
6"	3	3	13.37	11.76	9.15	1.00
8"	4	4	15.62	14.00	11.20	1.00
10"	5	5	17.88	16.25	13.30	1.25
12"	6	6	20.13	18.50	15.40	1.50

NOTES:
1. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.

**PARKER WATER & SANITATION DISTRICT
MECHANICAL JOINT RESTRAINT DETAILS**

SCALE: NONE DATE: 2/96
APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.17

11-1/4", 22-1/2", 45" & 90" BENDS

DEAD END

TYPICAL CROSS SECTION

TEE

SIZE OF PIPE	BENDS	TEE OR DEAD END
11-1/4"	22-1/2"	45"
12"	15/16"	2 1/4"
16"	2 1/8"	2 3/8"
20"	2 3/4"	2 7/8"
24"	3 1/4"	3 1/4"

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

NOTES:
1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RESTRAINED AND KICKBLOCKED.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. BASED ON 150 PSI PIPE PRESSURE PLUS WATER HAMMER.
4. 4" AND 6" WATER HAMMER = 120 PSI.
12" WATER HAMMER = 110 PSI.
16", 20" AND 24" WATER HAMMER = 70 PSI.
4. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.

**PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS BEARING SURFACES AND INSTALLATION**

SCALE: NONE DATE: 2/96
APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.18

HALF PLAN

STANDARD LIFTING SLOT DETAIL

24" DIAMETER RING AND COVER

NOTES:
1. Coating Specifications: ASTM A-88 With A Minimum Tenacity Strength of 25 LBS (Class 25)
2. All Coating To Be Applied in Ambient Base Point (Or Approved Equal)

**PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER**

SCALE: NONE DATE: 6/05
APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.19

ACCESS MANHOLE AND AIR VALVE ASSEMBLY

NOTES:
1. SEE SHEET W3.1 FOR CONCRETE MANHOLE BASE BEAMS AND AIR/VACUUM VALVE DETAILS.

**PARKER WATER & SANITATION DISTRICT
ACCESS MANHOLE ASSEMBLY**

SCALE: NONE DATE: 2/96
APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.20

STANDARD TRENCH SECTION

STREET CUT PATCH

PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
10"	2'-0"	3'-0"
12"	2'-2"	3'-2"
16"	2'-6"	3'-6"
20"	3'-0"	4'-0"
24"	3'-4"	4'-4"

**PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION**

SCALE: NONE DATE: 2/96
APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.1

PIPE BEDDING

(a) Installation of Bedding and Pipes After completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bed holes shall be dug deep enough to provide a minimum of two inches (2") of clearance between the bed and bedding material. All pipe shall be installed in such a manner as to insure full support of the pipe bottom over the entire length. After the pipe is adjusted for line and grade, and the joint is made, the bedding material shall be carefully placed and tamped under the bottom of the pipe and in the previously dug bed holes.

Tamping is herein defined as the act of placing approved bedding material under the portions of the pipe paying particular attention to voids, bell holes, and sling holes. The purpose of tamping is to ensure uniform support for the pipe.

The limits of bedding shall be from six inches (6") below the bottom of the pipe to twelve inches (12") above the top of the pipe. Approved bedding may then be installed to the groundline. See Chapter 2 of these Standards for backfill and compaction of backfill.

Compaction of bedding is not required. The only requirement is sufficient tamping to achieve uniform support under the pipe. See Sheet W4.1 of the Standard Details for a typical trench cross section.

(b) Bedding Materials: The bedding material shall be a clean well-graded sand or silt-sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand for (24-inch or larger diameter)

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	70-100
No. 8	35-83
No. 16	20-80
No. 30	8-59
No. 60	2-30
No. 100	1-10
No. 200	0-3

Sandstone Sand for use with 20-inch or smaller

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 200	0-3

If approved by the District, fines form the trench walls and spoils pile may be used to provide uniform support for the pipe. No rock or stone larger than that allowed by the slope credits, or any other detrimental substance, shall be placed closer to the pipe than six inches (6"). Approved bedding materials shall be stockpiled on the site to be used in the event natural materials become unsatisfactory. The District reserves the right to require the use of the specified bedding material at any time.

**PARKER WATER & SANITATION DISTRICT
PIPE BEDDING**

SCALE: NONE DATE: 2/98
APPROVED: PVR 3/08 2/02 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.2

TYPICAL SECTION

WATERLINE ENCASEMENT

NOTES:
1. ALL CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI USING TYPE I PORTLAND CEMENT AND 3/4" AGGREGATE. ALL CONCRETE SHALL HAVE 5-7% ENTRAINED AIR CONTENT AND A MAXIMUM SLUMP OF 4".
2. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
3. ALL REINFORCEMENT SHALL HAVE 2" MIN. CONCRETE COVER.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY PRIOR TO FORMING THE STRUCTURE.
5. PIPE SHALL BE WRAPPED WITH FELT LAYER BEFORE ENCASEMENT.

**PARKER WATER & SANITATION DISTRICT
WATERLINE ENCASEMENT**

SCALE: NONE DATE: 5/98
APPROVED: PVR 3/08 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.3

PLAN FOR PERPENDICULAR CROSSING

PLAN FOR ANGLE CROSSING

PROFILE

FORMULA FOR FINDING C:
$$C = B + (2)(1.5) \left[\frac{B}{2} + A + F \right]$$

FORMULA FOR FINDING L:
$$L = \frac{C}{\sin \theta}$$

NOTES:
1. FINAL APPROVAL OF BORING AND CASING METHOD AND MATERIALS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION.

**PARKER WATER & SANITATION DISTRICT
BORED CROSSINGS BENEATH CONDUITS**

SCALE: NONE DATE: 2/96
APPROVED: PVR 2/02 1/16 10/16
DIRECTOR OF ENGINEERING

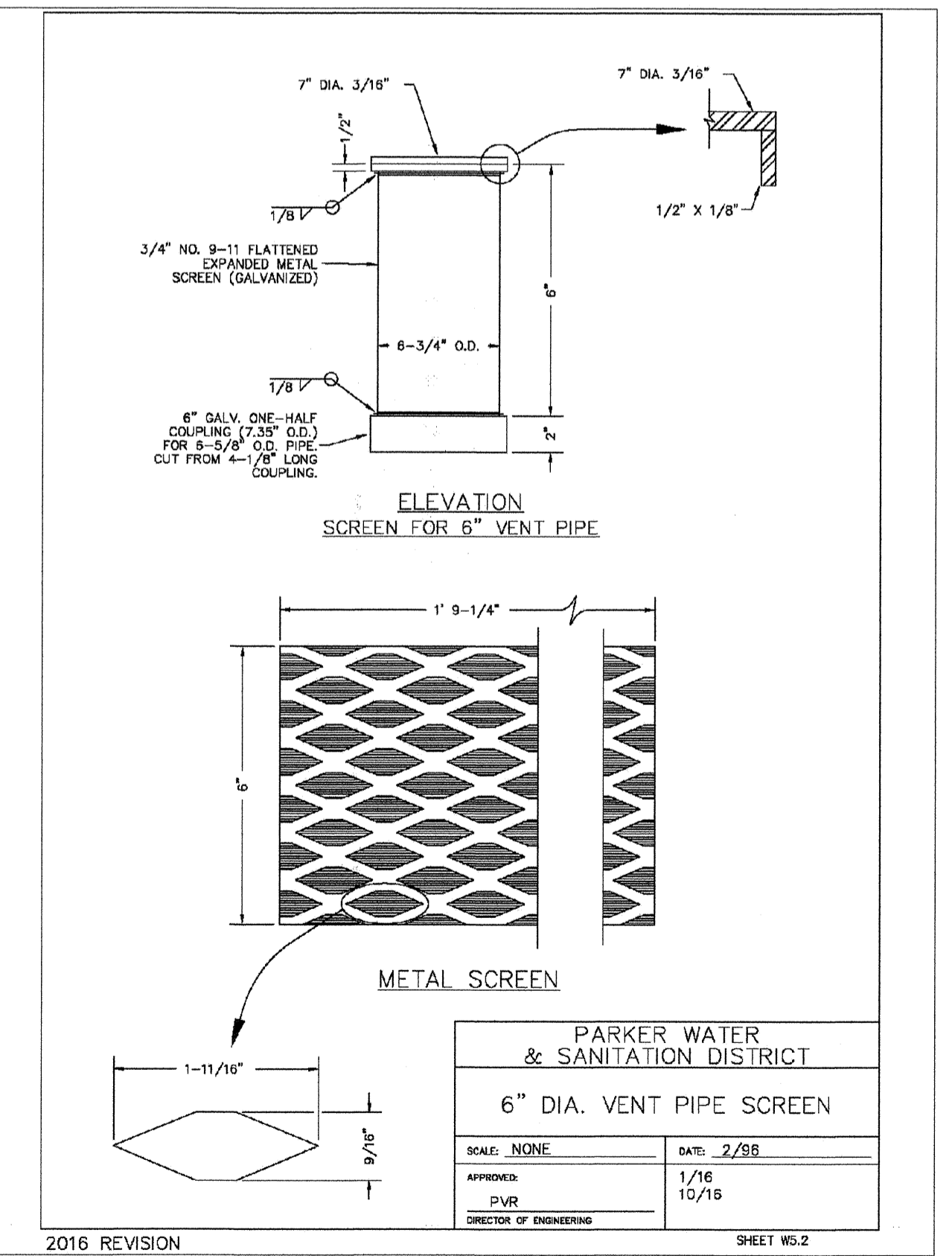
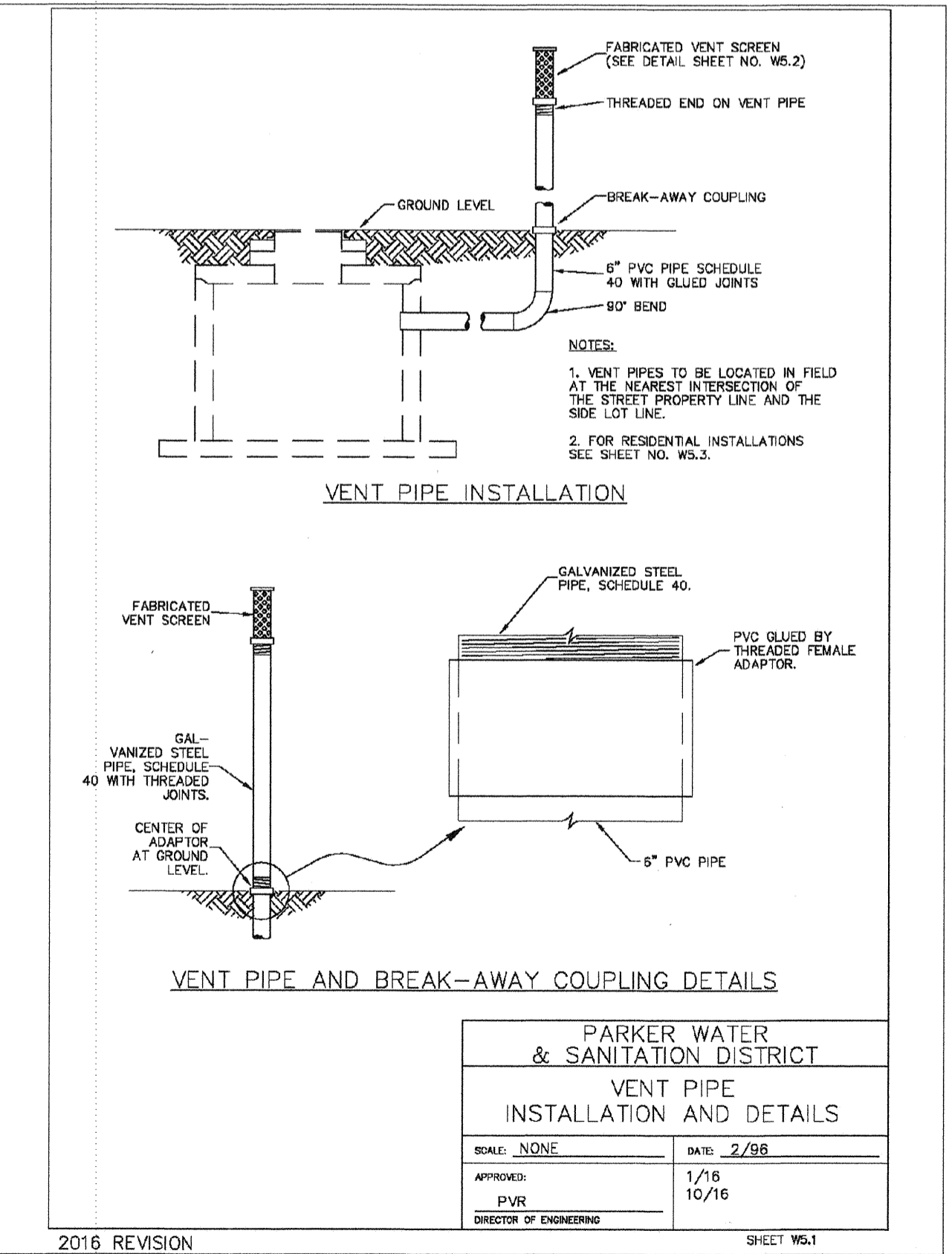
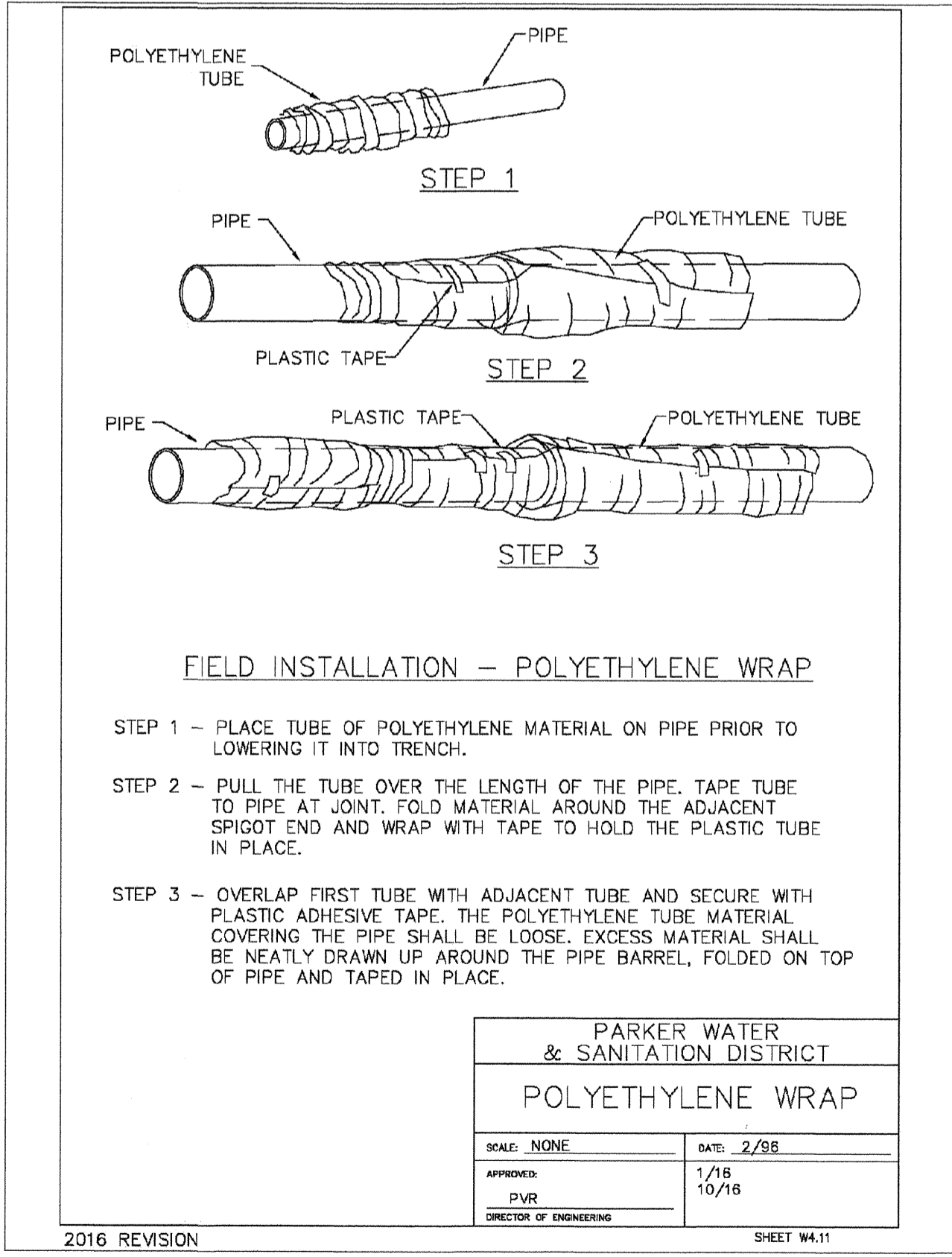
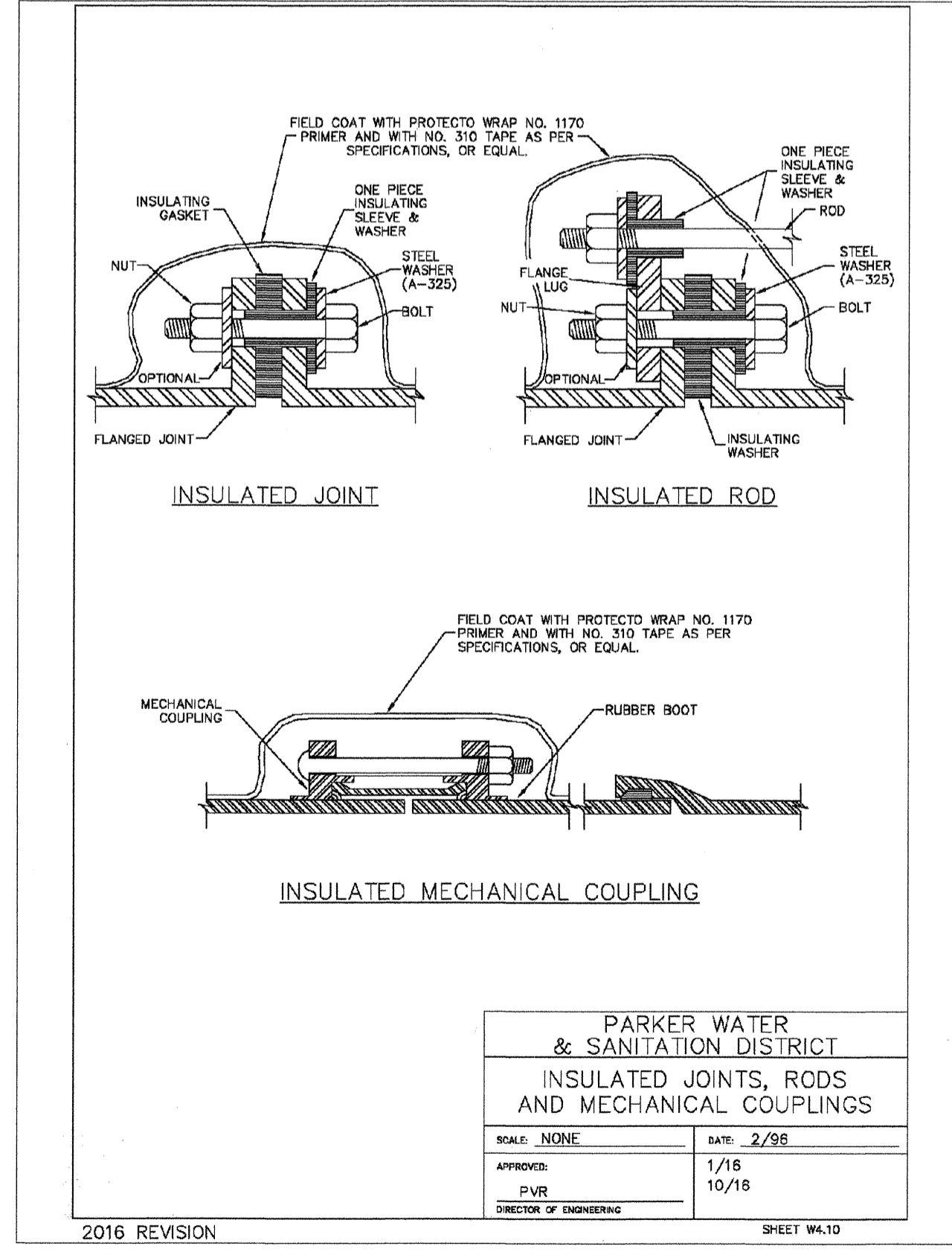
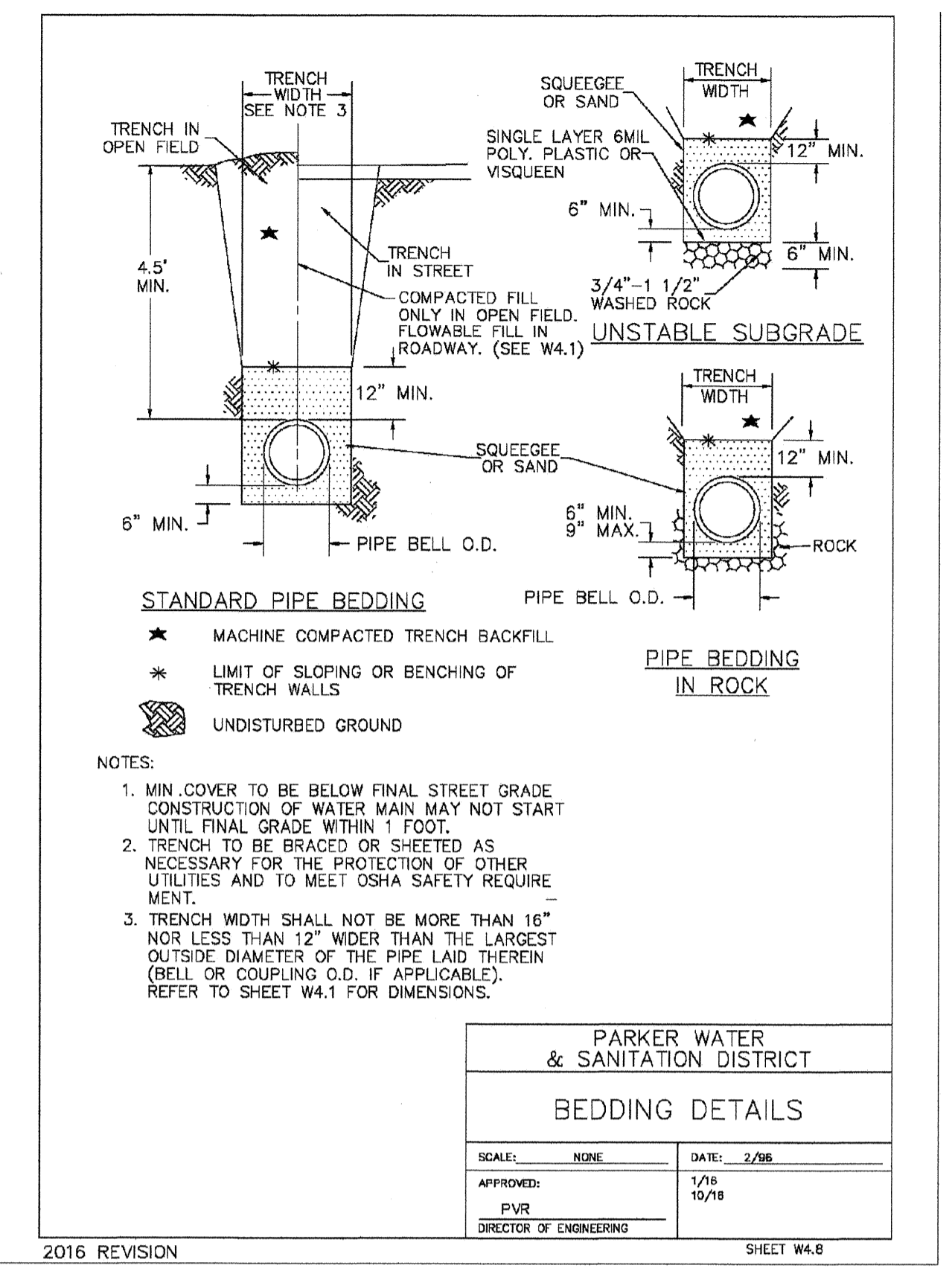
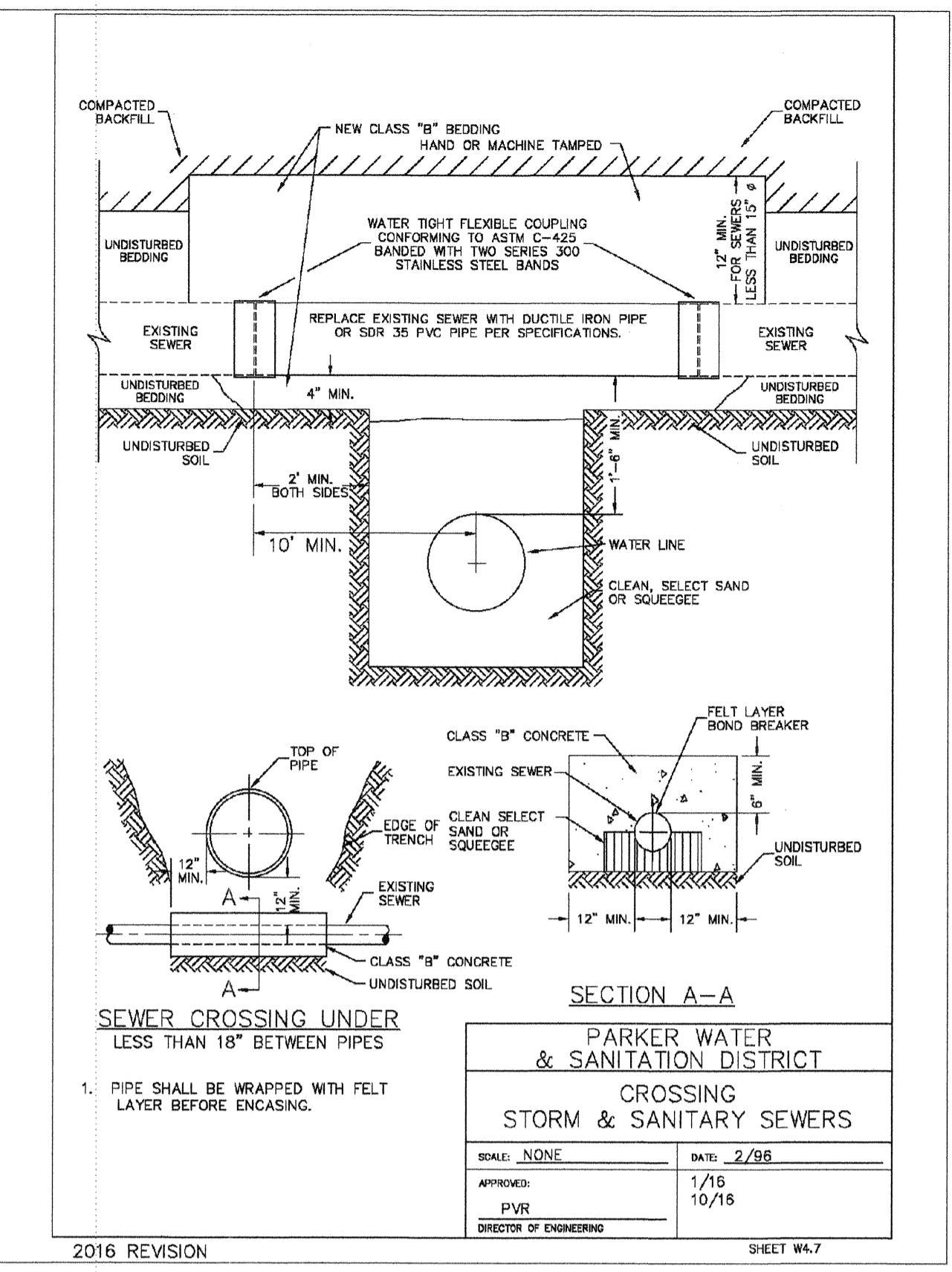
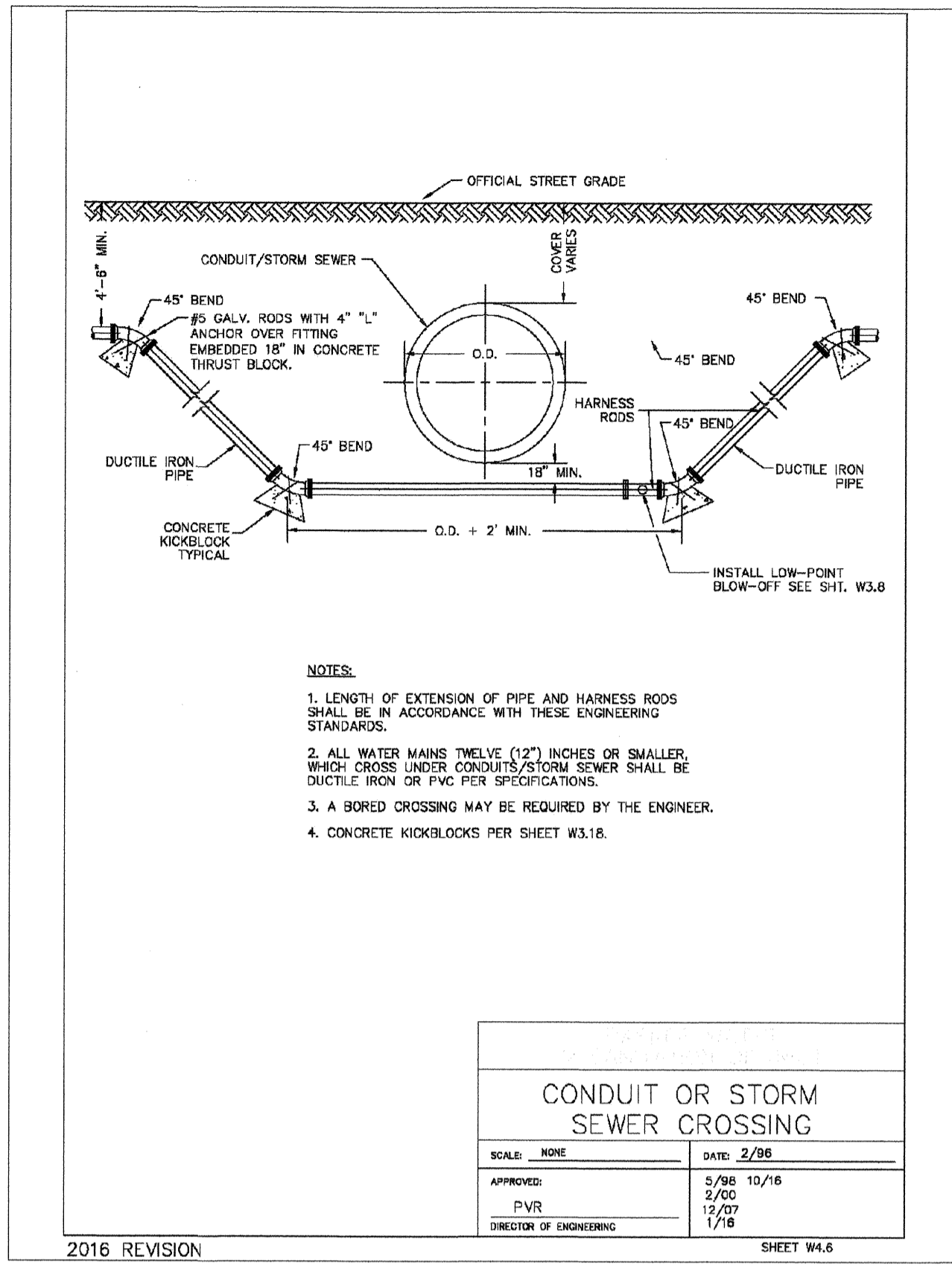
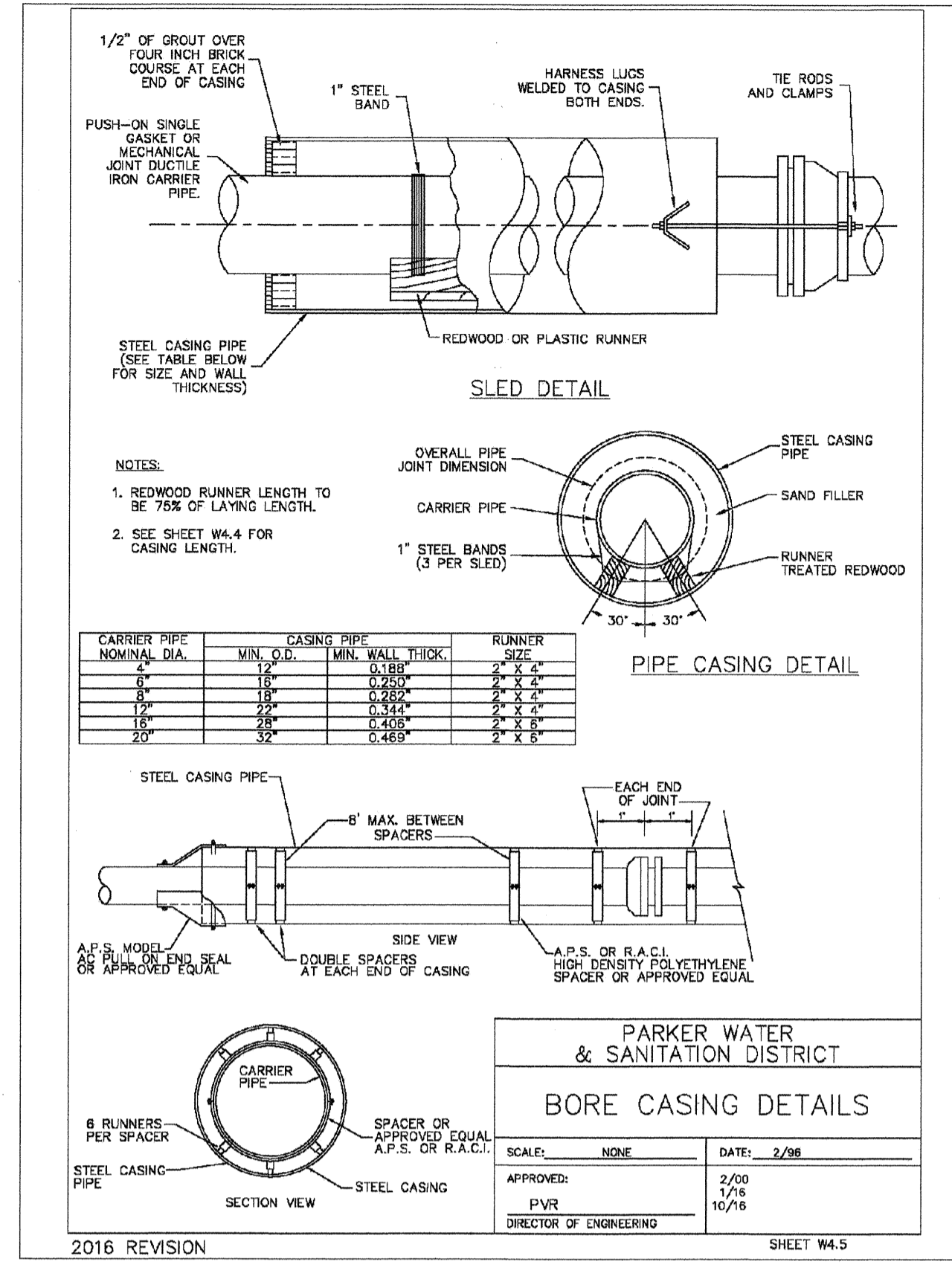
2016 REVISION SHEET W4.4

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TWO WORKING DAYS
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UNCC 1-800-922-1987

APPROVED
JUL 29 2019
PARKER WATER & SANITATION DISTRICT

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DATE	
REVISIONS	
NO.	
10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9626 Fax: (720) 482-9546	
CVL CONSULTANTS	
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	
TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	
SCALE:	AS SHOWN
DRAWN BY:	RHR
CHECKED BY:	BPW
DATE:	JUNE 2018
SHEET NUMBER	18
FILE NO:	8130283701

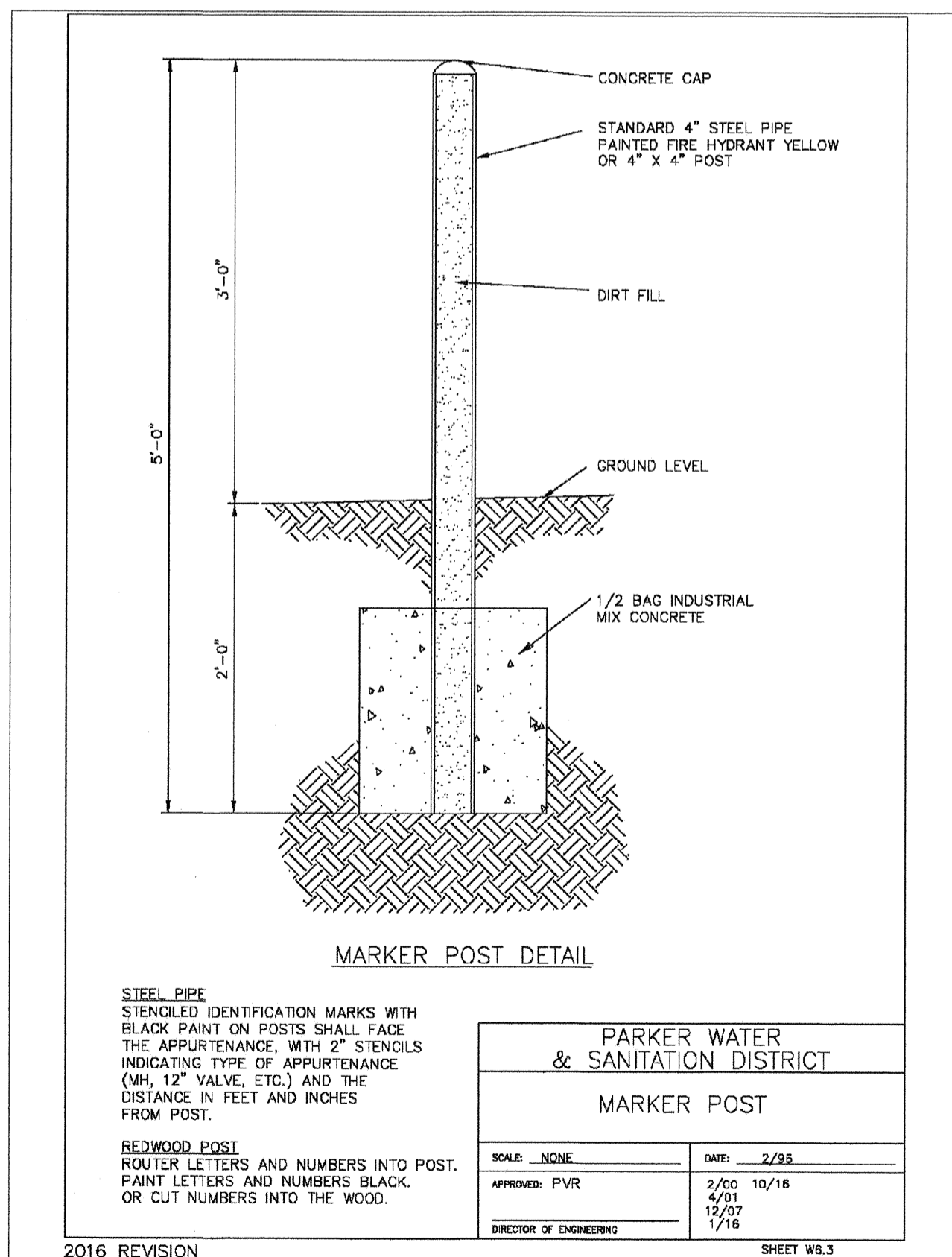
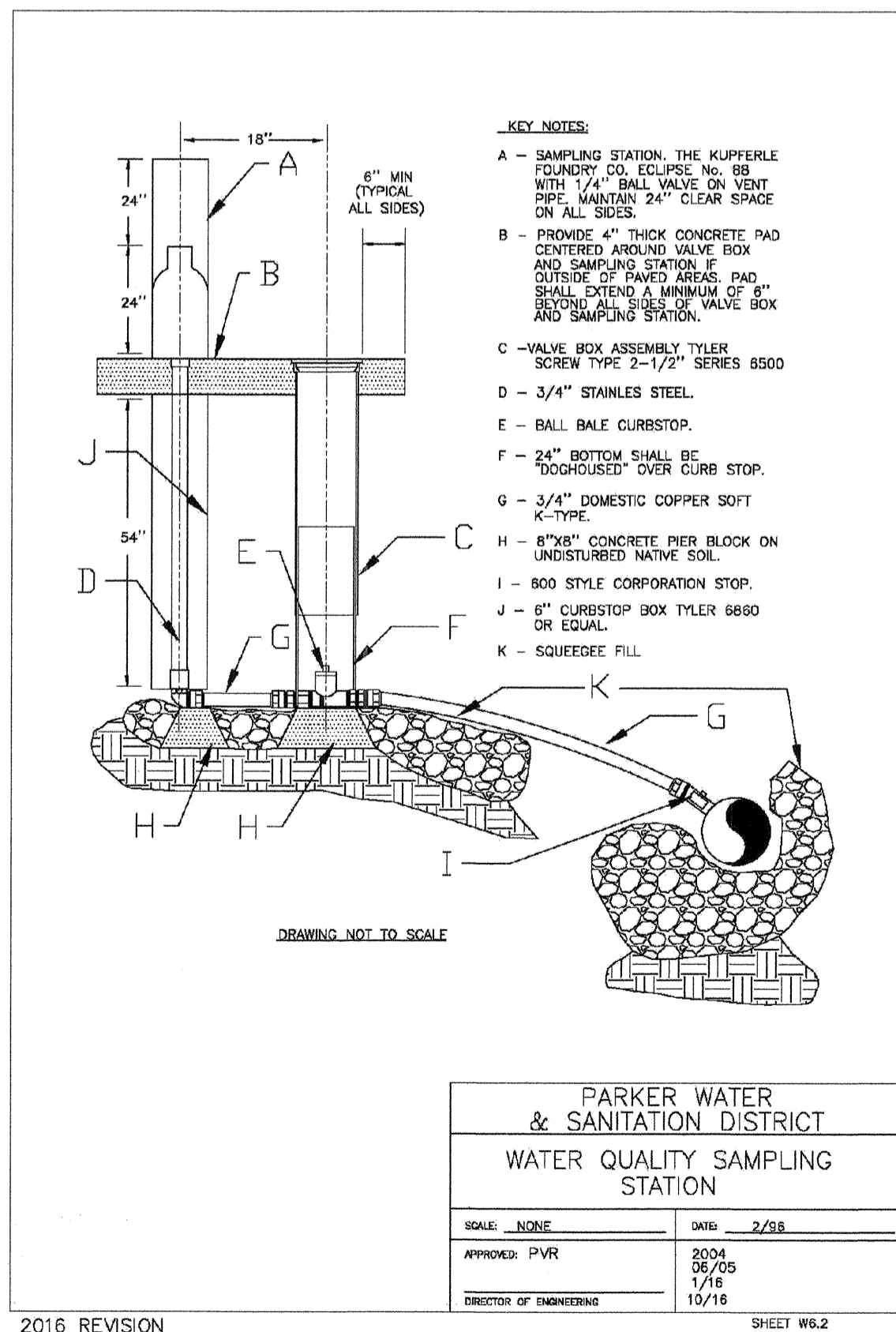
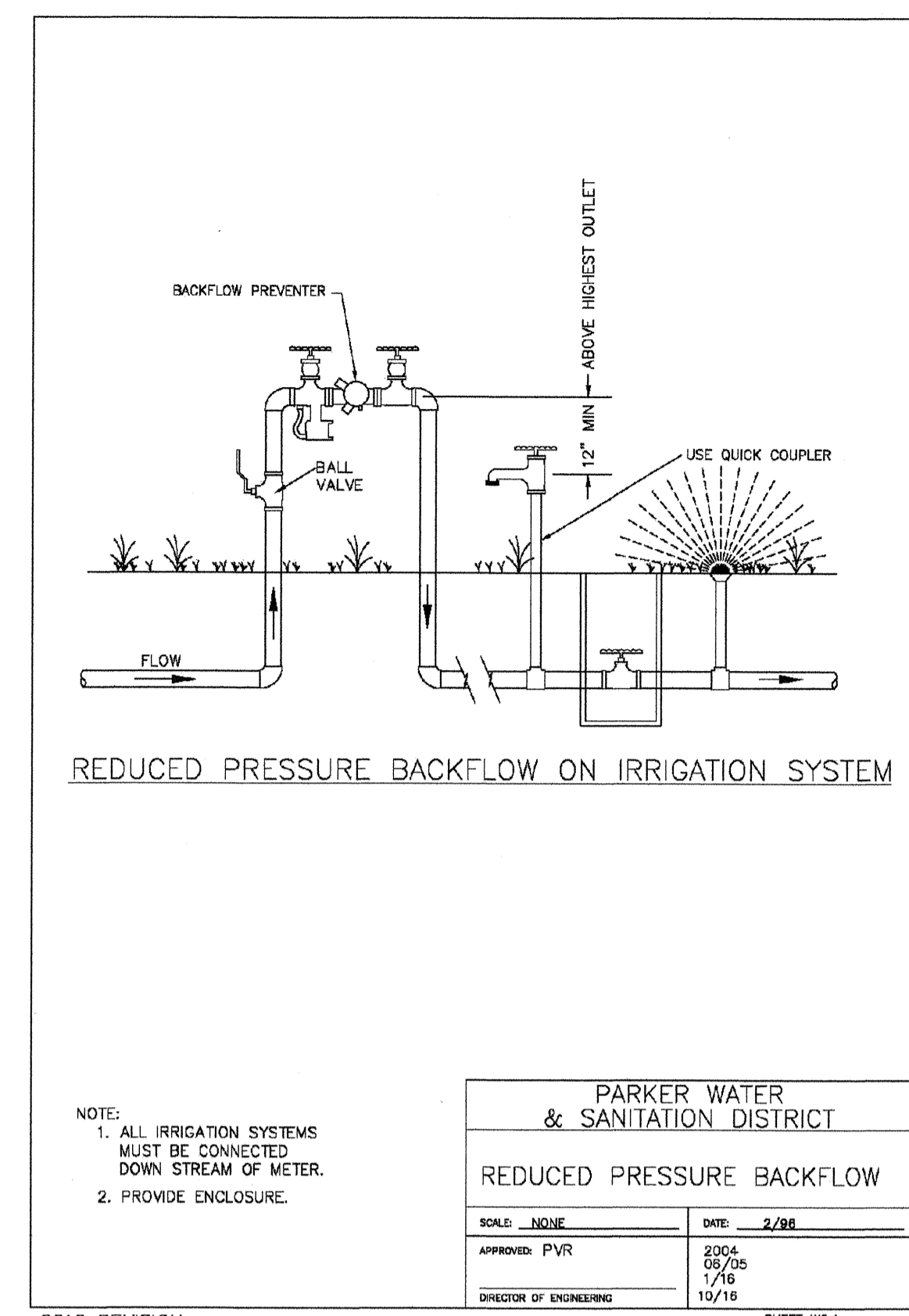
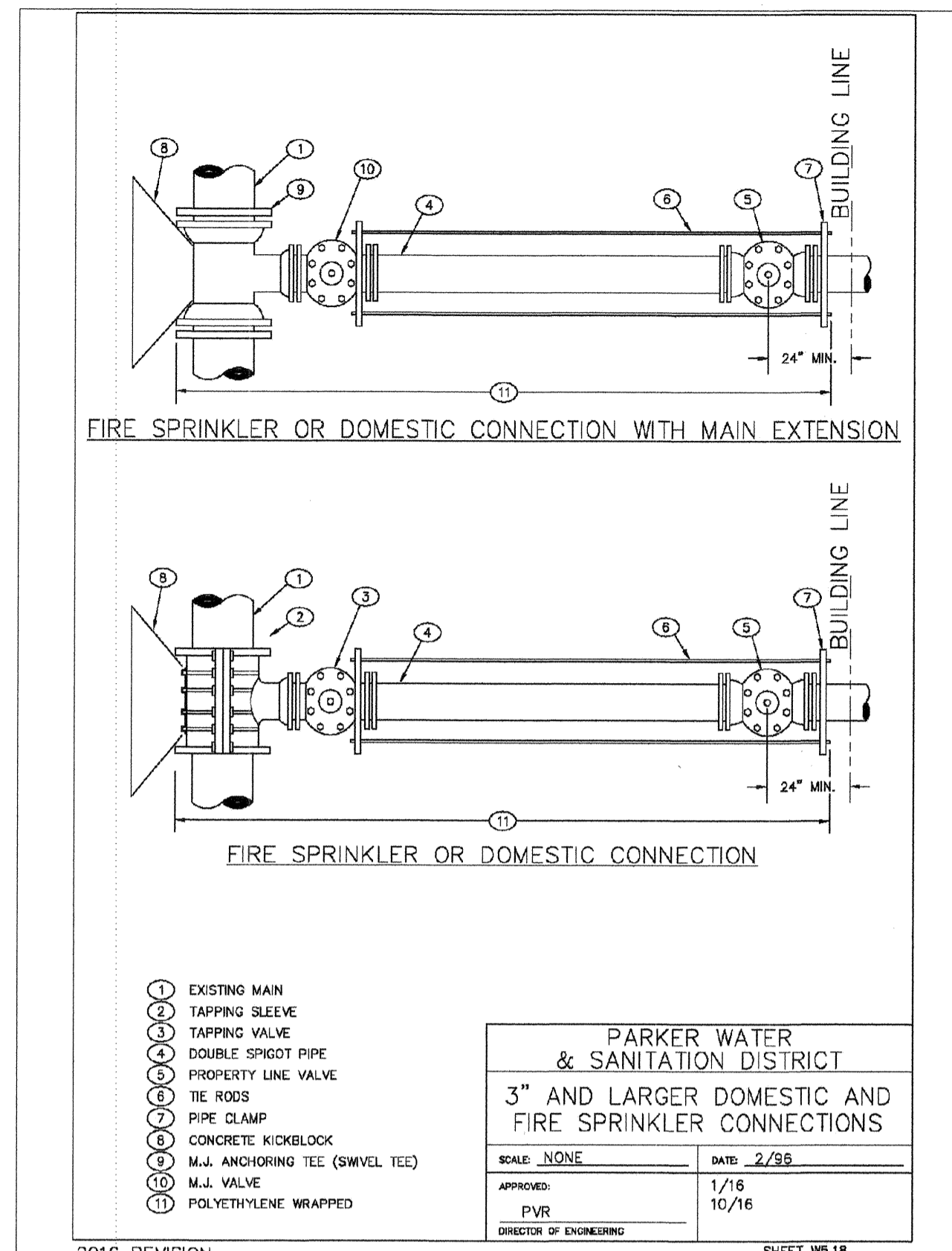
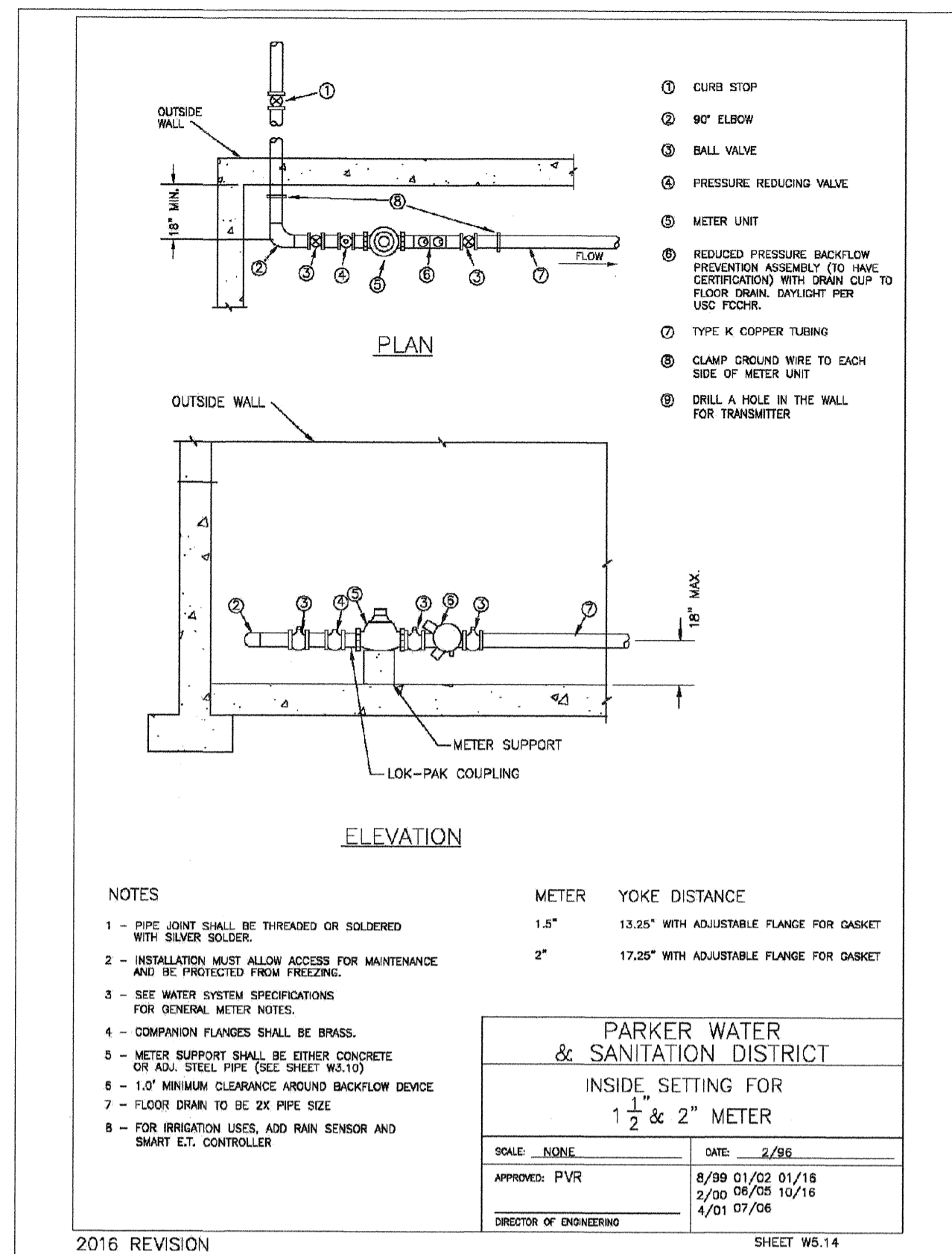
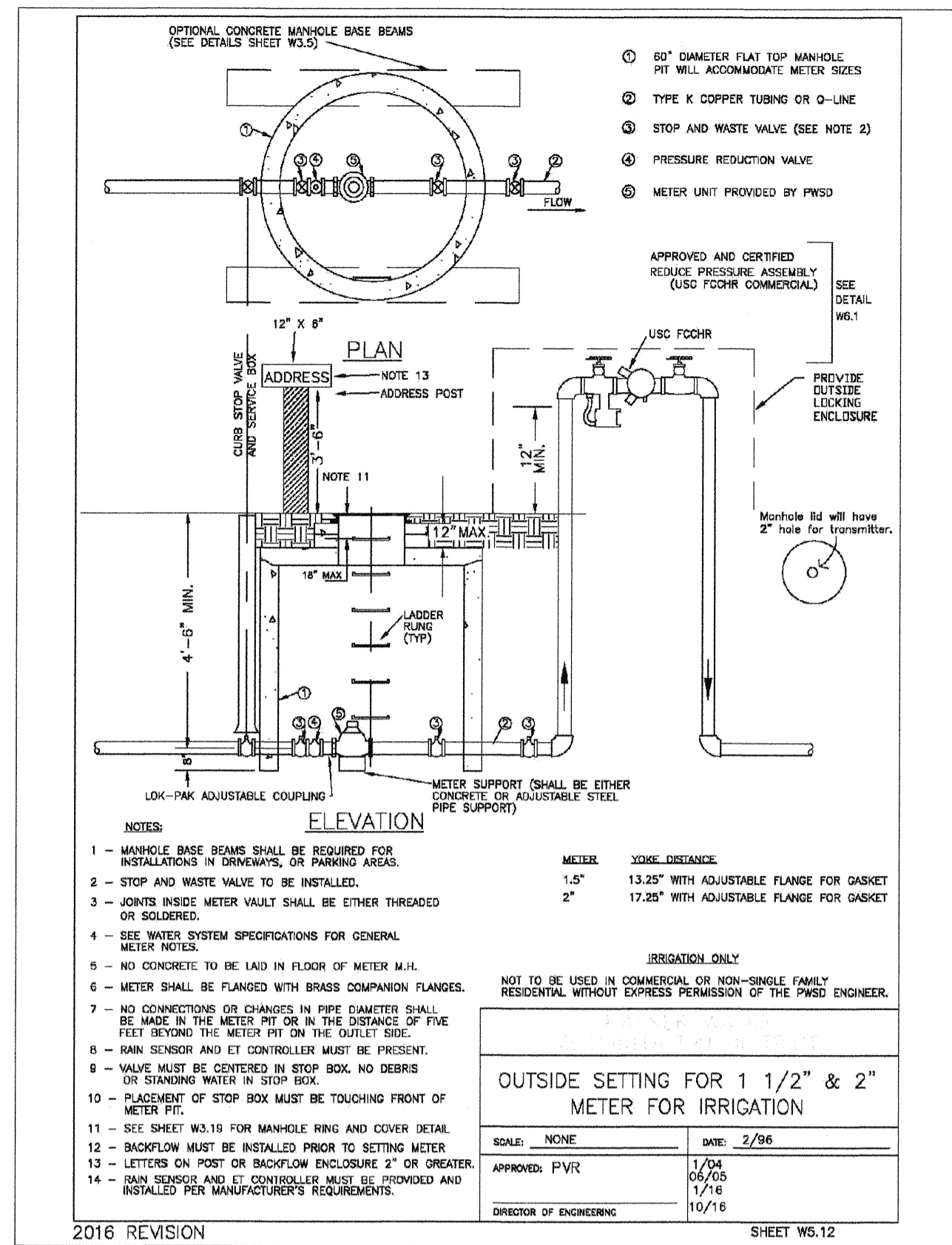


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PARKER WATER AND SANITATION DISTRICT

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				TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	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				



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				10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546			
					Revisions	Date	Int.
				No.	Date		

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