

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

VICINITY MAP
SCALE: 1" = 2000'

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 SCHEDULELINE 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: _____

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

PLANNER/
LANDSCAPE
DESIGNER:

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

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

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

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

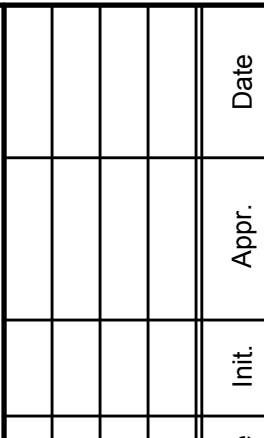
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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.



UNCC
UNIVERSITY OF NORTHERN COLORADO

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

SHEET NUMBER		SCALE:	TRAILS AT CROWFOOT FILING 14 CONSTRUCTION DRAWINGS COVER SHEET						 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				No.	Revisions	Date	Init.	Appr.	Date
DRAWN BY:	RRR	AS SHOWN																							
CHECKED BY:	BPW	FILE NO:																							
DATE:	JUNE 2018	8130283701																							

N:\PROJECTS\BUSHES RANCH\CAD\ENGINEERING\DWG\SET\B\MULTIFAMILY\CDSEF\H PARKER WATER AND SANITATION\COVER.DWG, BRIAN.W, 7/6/2016 12:50 PM



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

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 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. 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 DETERMINED 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.

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

SHEET NUMBER	DRAWN BY: KJD	CHECKED BY: BPW	DATE: JUNE 2016	SCALE: AS SHOWN FILE NO: 8130283701	TRAILS AT CROWFOOT FILING 14 CONSTRUCTION DRAWINGS PARKER WATER AND SANITATION NOTES	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	 CVL CONSULTANTS	10339 E. Dry Creek Rd. Suite 110 Englewood, CO 80110 Tel: (720) 482-9526 Fax: (720) 482-9546	No.	Revisions			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)

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L1	BLUE COSMOS CT	10+91.00
F14,B1,L2	BLUE COSMOS CT	10+81.00
F14,B1,L3	BLUE COSMOS CT	10+93.50
F14,B1,L4	BLUE COSMOS CT	10+78.50
F14,B1,L5	RED COSMOS CT	11+18.52
F14,B1,L6	RED COSMOS CT	11+08.52
F14,B1,L7	RED COSMOS CT	11+21.02
F14,B1,L8	RED COSMOS CT	11+06.02
F14,B1,L9	RED COSMOS ST	14+29.94
F14,B1,L10	RED COSMOS ST	14+19.94
F14,B1,L11	RED COSMOS ST	13+50.65
F14,B1,L12	RED COSMOS ST	13+40.65
F14,B1,L13	RED COSMOS ST	12+71.65
F14,B1,L14	RED COSMOS ST	12+61.65
F14,B1,L15	RED COSMOS ST	11+92.65
F14,B1,L16	RED COSMOS ST	11+82.65
F14,B1,L17	RED COSMOS ST	11+13.65
F14,B1,L18	RED COSMOS ST	11+03.65
F14,B1,L19	ZINNIA CT	10+68.10
F14,B1,L20	ZINNIA CT	10+83.10
F14,B1,L21	ZINNIA CT	10+70.80
F14,B1,L22	ZINNIA CT	10+80.60
F14,B2,L1	ROSE HEATH ST	10+67.50
F14,B2,L2	ROSE HEATH ST	10+77.50
F14,B2,L3	ROSE HEATH ST	11+31.50
F14,B2,L4	ROSE HEATH ST	11+41.50
F14,B2,L5	ROSE HEATH ST	11+95.50
F14,B2,L6	ROSE HEATH ST	12+05.50
F14,B2,L7	ROSE HEATH ST	12+73.00
F14,B2,L8	ROSE HEATH ST	12+83.00
F14,B2,L9	ROSE HEATH ST	13+37.00
F14,B2,L10	ROSE HEATH ST	13+47.00
F14,B2,L11	ROSE HEATH ST	14+01.00
F14,B2,L12	ROSE HEATH ST	14+11.00
F14,B3,L1	ROSE HEATH LN	10+54.06
F14,B3,L2	ROSE HEATH LN	10+69.06
F14,B3,L3	ROSE HEATH LN	11+18.06
F14,B3,L4	ROSE HEATH LN	11+33.06
F14,B3,L5	ROSE HEATH LN	10+56.56
F14,B3,L6	ROSE HEATH LN	10+66.56
F14,B3,L7	ROSE HEATH LN	11+20.55
F14,B3,L8	ROSE HEATH LN	11+30.56
F14,B3,L9	ROSE HEATH RD	10+54.06
F14,B3,L10	ROSE HEATH RD	10+69.06
F14,B3,L11	ROSE HEATH RD	11+18.06
F14,B3,L12	ROSE HEATH RD	11+33.06
F14,B3,L13	ROSE HEATH RD	10+56.56
F14,B3,L14	ROSE HEATH RD	10+66.56
F14,B3,L15	ROSE HEATH RD	11+20.56
F14,B3,L16	ROSE HEATH RD	11+30.56

SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L3	FILING 14 SS NORTH	10+99.00
F14,B1,L4	FILING 14 SS NORTH	10+79.00
F14,B1,L5	FILING 14 SS NORTH	10+99.00
F14,B1,L6	FILING 14 SS NORTH	10+76.00
F14,B1,L7	FILING 14 SS NORTHEAST	12+51.97
F14,B1,L8	FILING 14 SS NORTHEAST	12+31.97
F14,B1,L9	RED COSMOS ST	14+39.68
F14,B1,L10	RED COSMOS ST	14+09.04
F14,B1,L11	RED COSMOS ST	13+60.42
F14,B1,L12	RED COSMOS ST	13+30.06
F14,B1,L13	RED COSMOS ST	12+81.44
F14,B1,L14	RED COSMOS ST	12+51.65
F14,B1,L15	RED COSMOS ST	12+02.65
F14,B1,L16	RED COSMOS ST	11+72.65
F14,B1,L17	RED COSMOS ST	11+23.65
F14,B1,L18	RED COSMOS ST	10+93.65
F14,B1,L19	FILING 14 SS SOUTHWEST	10+68.60
F14,B1,L20	FILING 14 SS SOUTHWEST	10+88.60
F14,B1,L21	FILING 14 SS SOUTH	10+82.67
F14,B1,L22	FILING 14 SS SOUTH	11+02.67
F14,B3,L1	RED COSMOS ST	16+24.86
F14,B3,L2	RED COSMOS ST	16+04.86
F14,B3,L3	RED COSMOS ST	15+64.42
F14,B3,L4	RED COSMOS ST	15+40.86
F14,B3,L5	FILING 14 SS EAST-WEST	10+00.00
F14,B3,L6	FILING 14 SS EAST-WEST	10+23.00
F14,B3,L7	FILING 14 SS EAST-WEST	10+61.00
F14,B3,L8	FILING 14 SS EAST-WEST	10+87.00
F14,B3,L9	FILING 14 SS EAST-WEST	10+00.00
F14,B3,L10	FILING 14 SS EAST-WEST	10+20.00
F14,B3,L11	FILING 14 SS EAST-WEST	10+64.00
F14,B3,L12	FILING 14 SS EAST-WEST	10+84.00
F14,B3,L13	RED COSMOS PT	24+13.51
F14,B3,L14	RED COSMOS PT	24+33.49
F14,B3,L15	RED COSMOS ST	9+74.09
F14,B3,L16	RED COSMOS ST	9+94.06

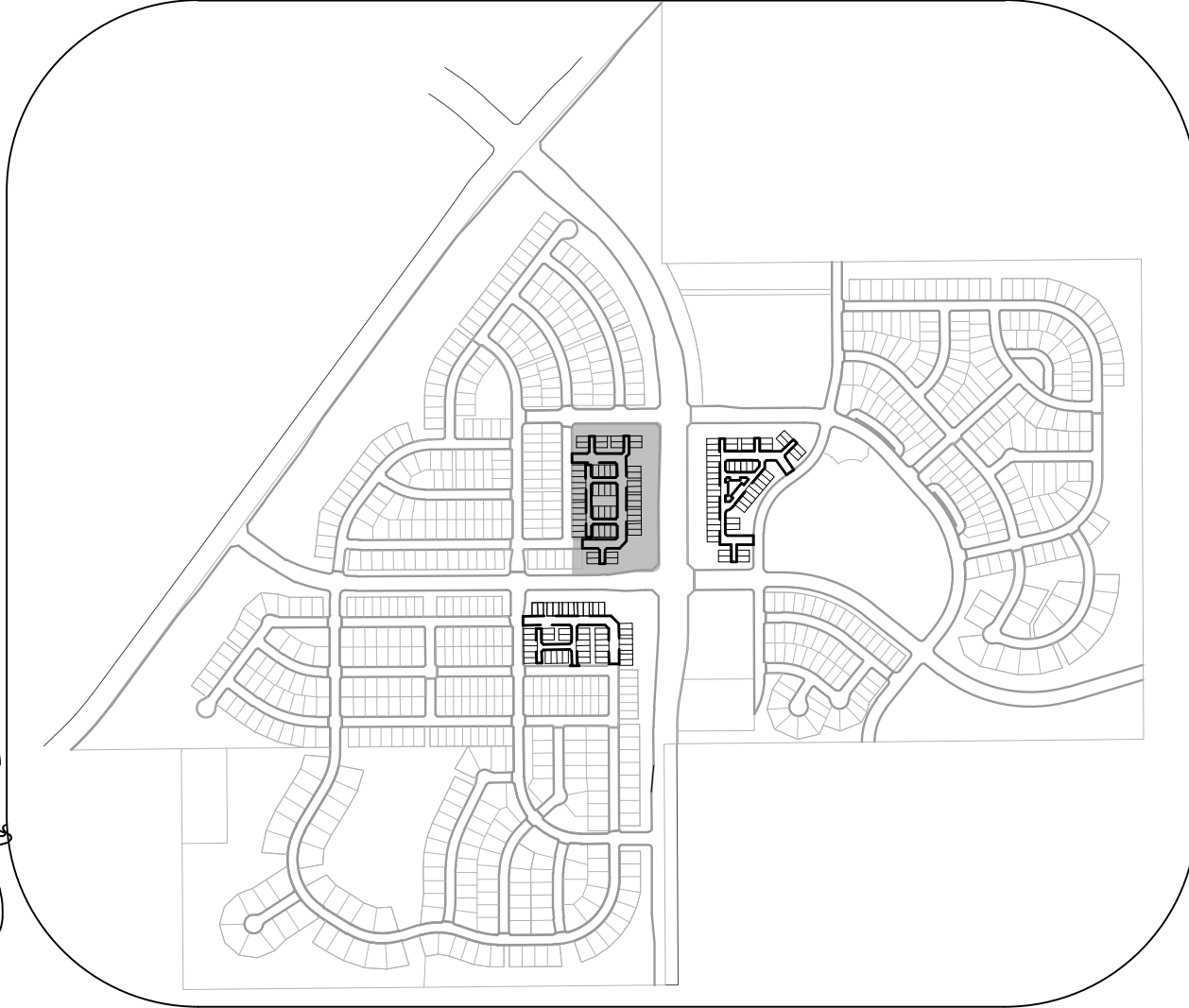
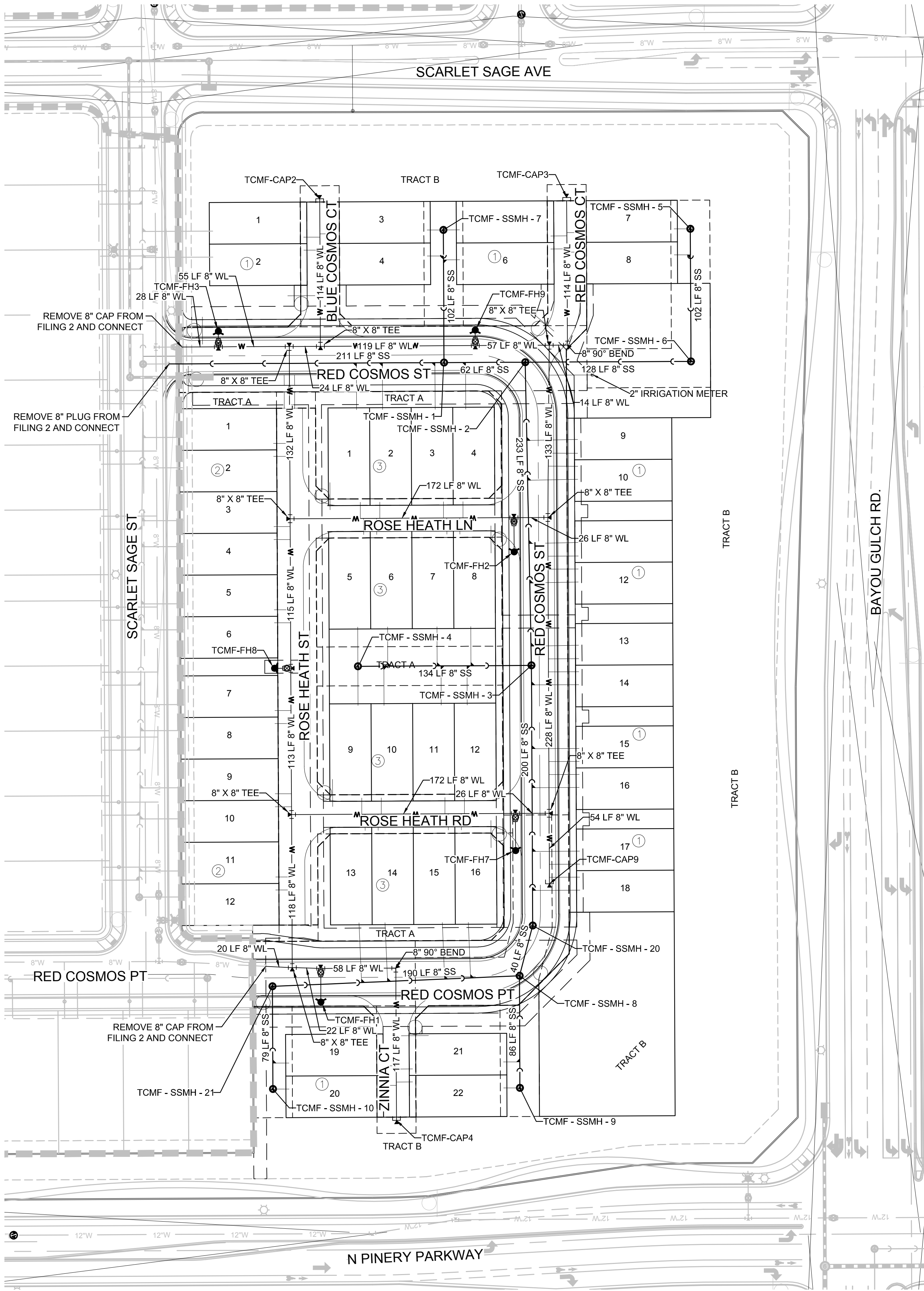
NOTES:
1. SANITARY SERVICES FOR BLOCK 1, LOTS 1-2 & BLOCK 2, LOTS 1-12 WILL BE INSTALLED WITH TRAILS AT CROWFOOT FILING 2.

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.)



KEYMAP
N.T.S.
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 | 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 |

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.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

TOWN OF PARKER, DIRECTOR OF ENGINEERING

DATE



CALL 811
TWO WORKING DAYS
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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.

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



HR 935 LLC
7363 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

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

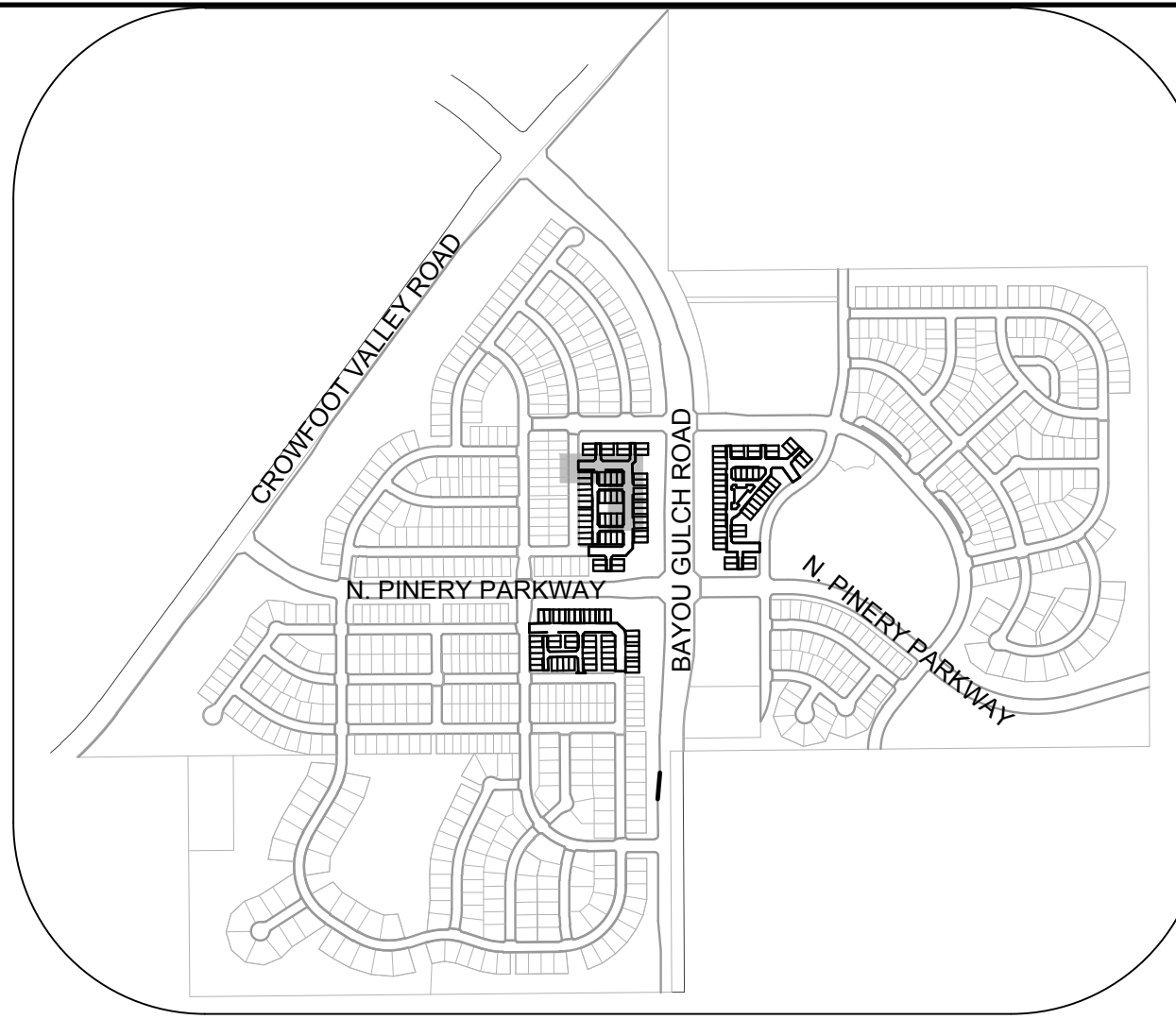
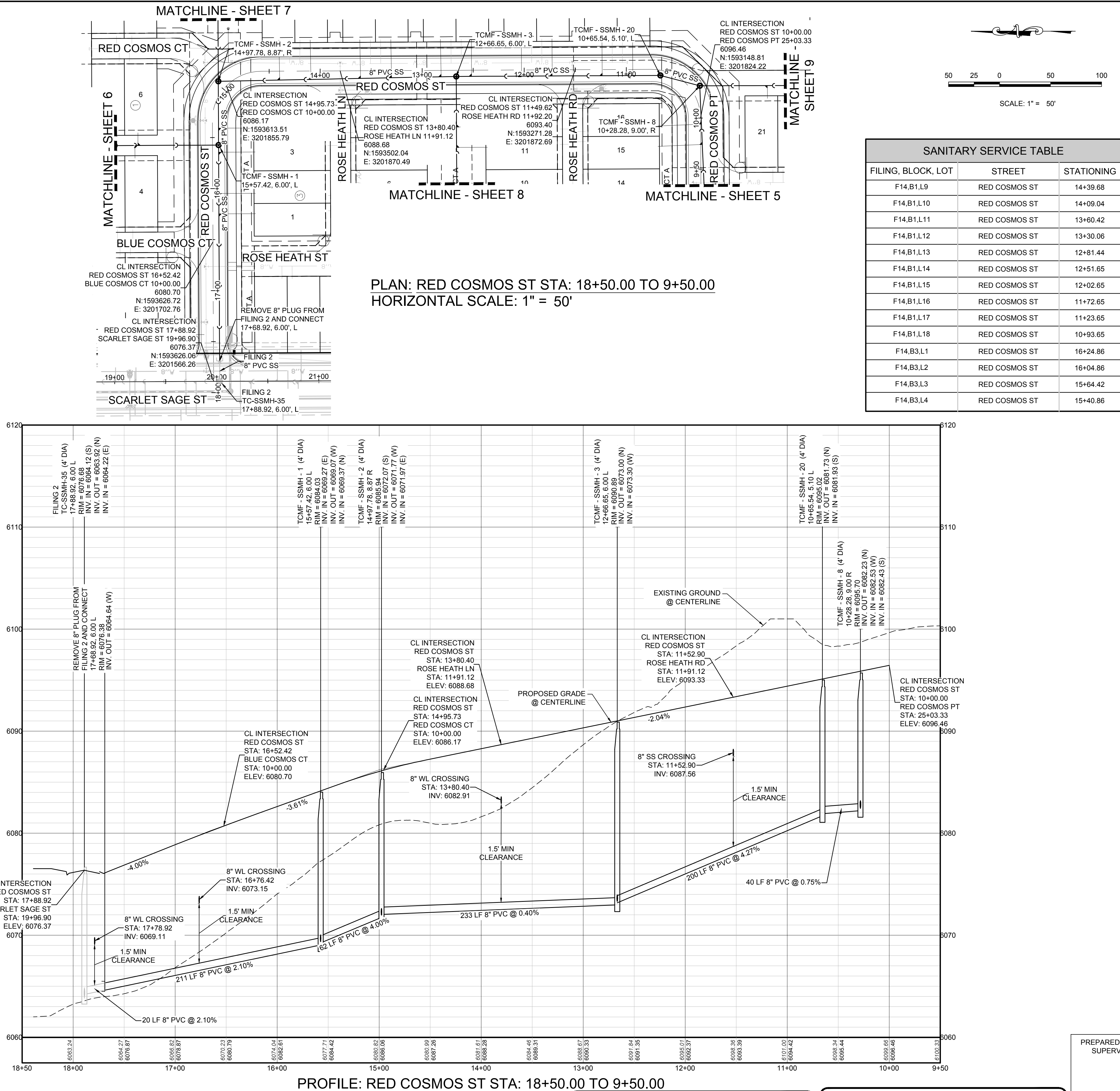
SHEET NUMBER
3

N:\PROJECTS\SSS RANCH\CD\ENGINEERING\SSSHEET SETS\MULTIFAMILY\CDSE\HARPER WATER AND SANITATION\SANITARY SEWER SHEETS\RED COSMOS ST DWG. RYAN REDD, 7/5/2018 6:16 PM



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UTILITY NOTIFICATION
CENTER OF COLORADO

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KEYMAP
N.T.S.

LEGEND

- 2

BLOCK NUMBER

A

LOT TYPE

6

LOT NUMBER

PROPOSED BUTTERFLY VALVE

PROPOSED CAP WITH END OF LINE BLOWOFF

PROPOSED REDUCER

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED W/FITTING WITH THRUST BLOCK

PROPOSED FLARED END SECTION

PROPOSED LOW POINT BLOW-OFF

PROPOSED AIR VALVE

FUTURE PHASE VALVE

FUTURE FIRE HYDRANT

PROPOSED LIGHT POLE

PROPOSED SIDEWALK

PROPOSED SIDEWALK RAMP

EXISTING ELEVATION

PROPOSED DESIGN ELEVATION

PROPOSED STORM DRAIN INLET

PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE & DIRECTION
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE WITH MANHOLE
- PROPOSED SEWER LATERAL
- PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- SECTION LINE
- FILING BOUNDARY
- EXISTING FIBER OPTIC LINE
- EXISTING OVERHEAD POWER
- EXISTING TELEPHONE LINE

ABBREVIATIONS

- AD

ANGLE DIFFERENCE
- AV

AIR VAC RELEASE VALVE
- BVC

BEGIN VERTICAL CURVE
- BVP

BEGIN VERTICAL PROFILE
- CBO

CAP WITH BLOW OFF
- CRR

CURB RETURN RADIUS
- EL

ELEVATION
- EP

EDGE OF PAVEMENT
- EVC

END VERTICAL CURVE
- EVP

END VERTICAL PROFILE
- FG

FINISHED GROUND
- FH

FIRE HYDRANT
- FL

FLOW LINE
- GV

GATE VALVE
- HCR

HANDICAP CURB RAMP
- HP

HIGH POINT
- INV

INVERT
- K

CURVATURE COEFFICIENT
- LF

LINEAR FEET
- MH

MANHOLE
- N.T.S.

NOT TO SCALE
- PVC

POLYVINYL CHLORIDE
- PVI

PT. OF VERTICAL INTERSECTION
- PVT

POINT OF VERTICAL TANGENT
- RCBC

REINFORCED CONCRETE BOX CULVERT
- RCP

REINFORCED CONCRETE PIPE
- ROW

RIGHT OF WAY
- SC

SANITARY CAP
- SD

STORM DRAIN
- SL

SECTION LINE
- SS

SANITARY SEWER
- STA

STATION
- T.O.P.

TOP OF PIPE
- UE

UTILITY EASEMENT
- VC

VERTICAL CURVE
- WL

WATER LINE
- WLC

WATER LINE CONNECTION
- WSE

WATER SURFACE ELEVATION

10333 E. Dry Creek Rd.
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
RED COSMOS STREET

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RRR
CHECKED BY: BPW
DATE: JUNE 2018

SHEET NUMBER

4

Revisions

No.	Date	Init.	Appr.	Date

N:\PROJECTS\SSHS BANCHADO\ENGINEERING\SSHS SETS\MULTIFAMILY\CDSIF HAPARKER WATER AND SANITATION\SANITARY SEWER SHEETS\RED COSMOS PT DWG. RYAN REDD, 7/5/2018 6:18 PM



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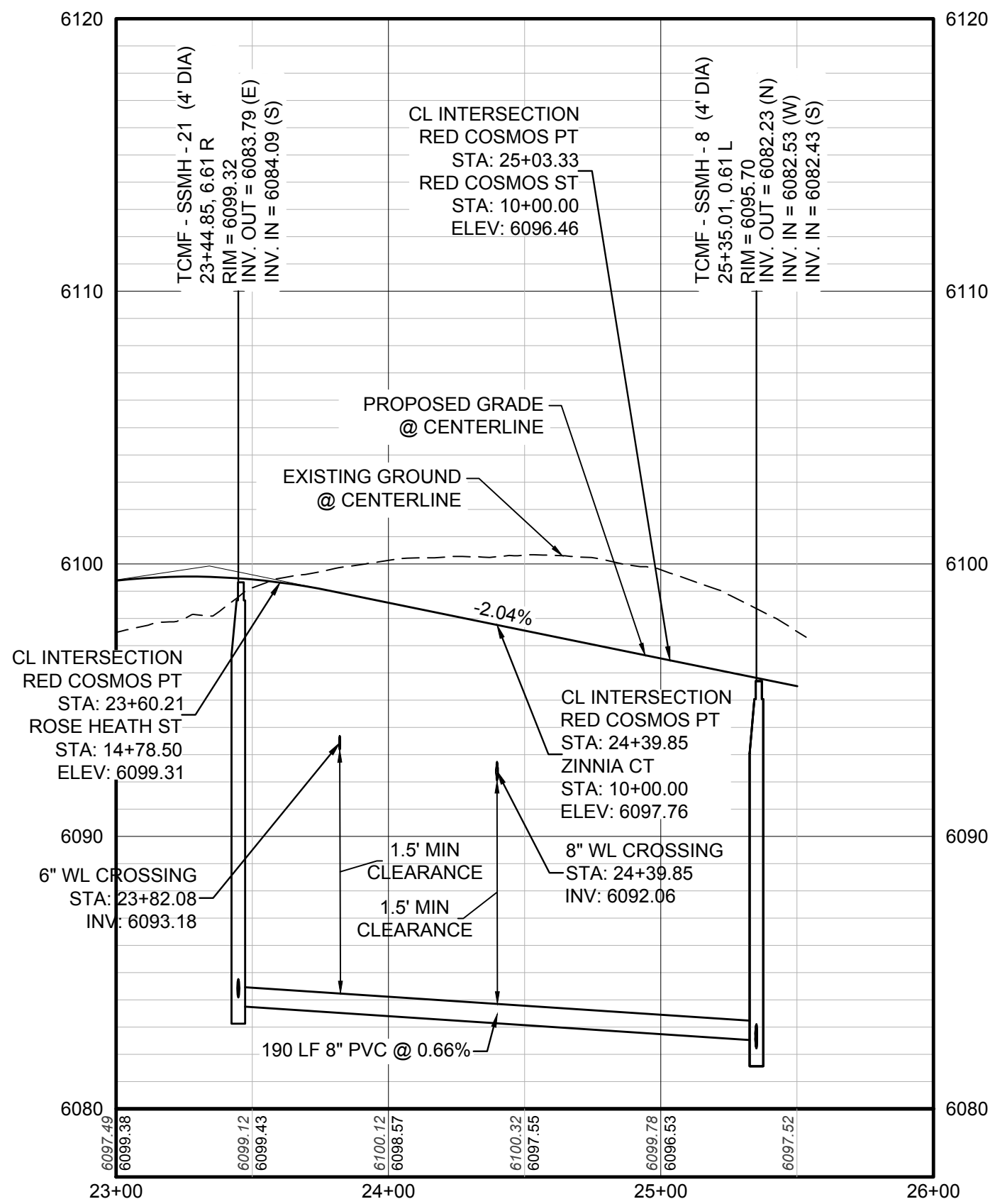
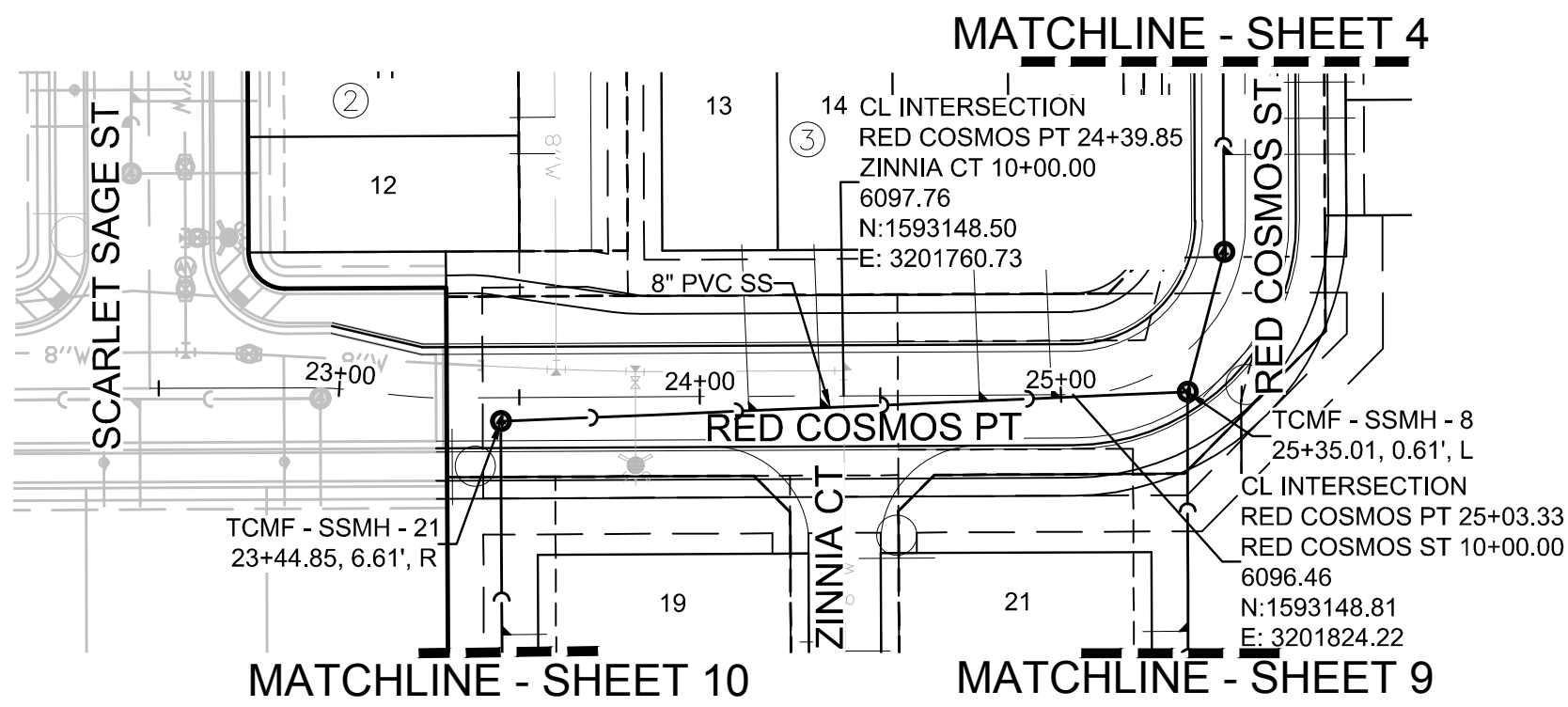
LITELTY NOTIFICATION
CENTER OF COLORADO

CALL 811

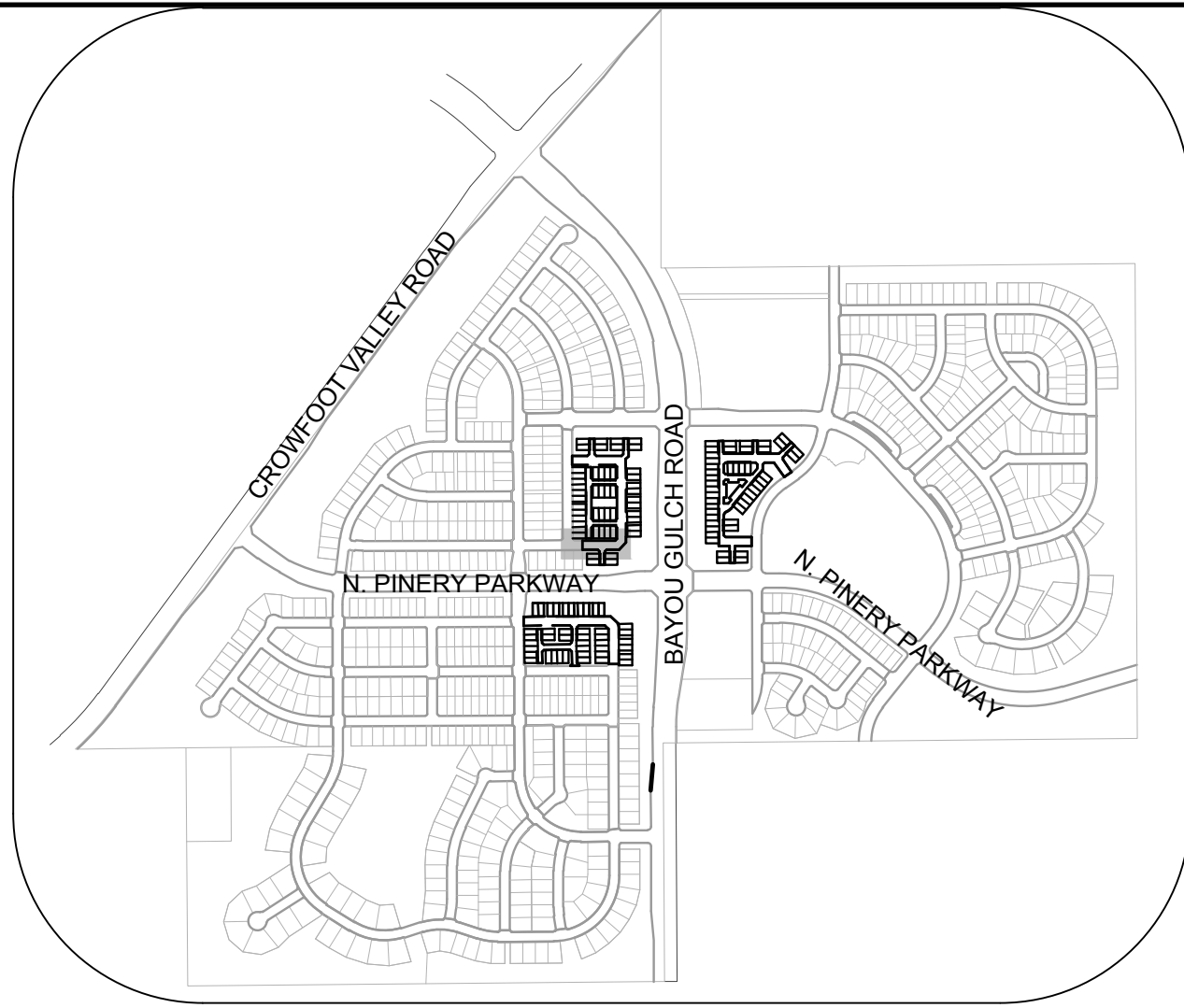
TWO WORKING DAYS

BEFORE YOU DIG

1-800-922-1987



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B3,L13	RED COSMOS PT	24+13.51
F14,B3,L14	RED COSMOS PT	24+33.49
F14,B3,L15	RED COSMOS ST	9+74.09
F14,B3,L16	RED COSMOS ST	9+94.06



KEYMAP
N.T.S.

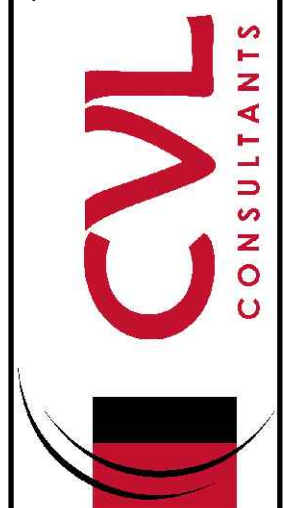
LEGEND

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 WITH MANHOLE
⊗	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

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7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
RED COSMOS PT

SCALE:
AS SHOWN

FILE NO:
8130283701

DRAWN BY:
RRR

CHECKED BY:
BPW

DATE:
JUNE 2018

SHEET NUMBER
5

Revisions
No. Date Init. Appr. Date

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

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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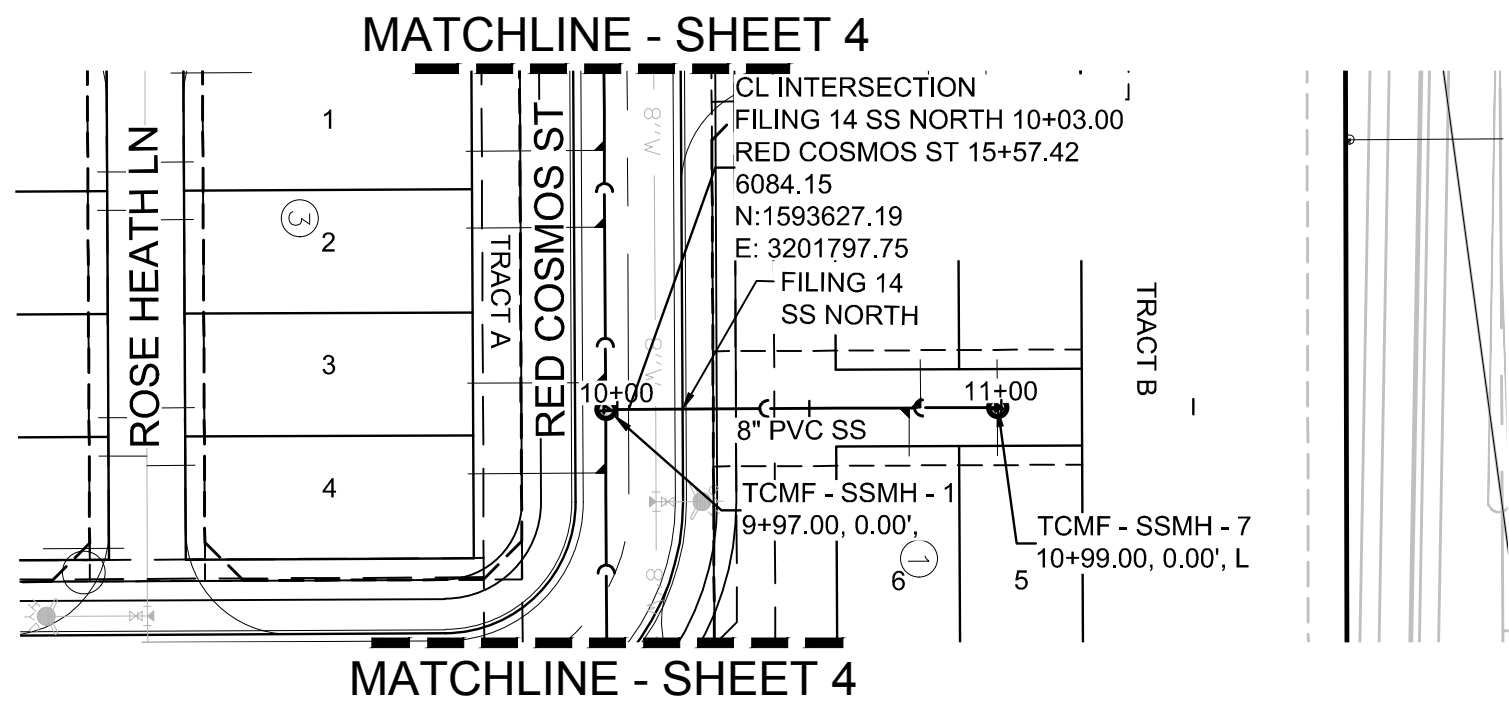
TWO WORKING DAYS

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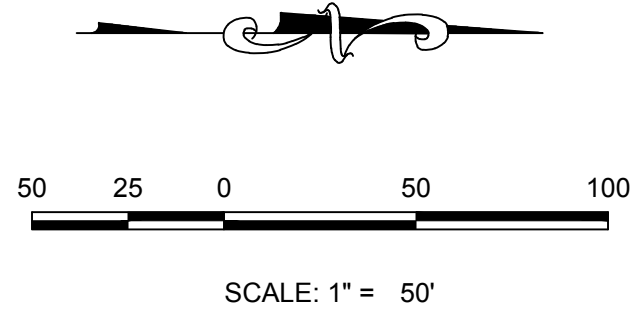
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UTILITY NOTIFICATION

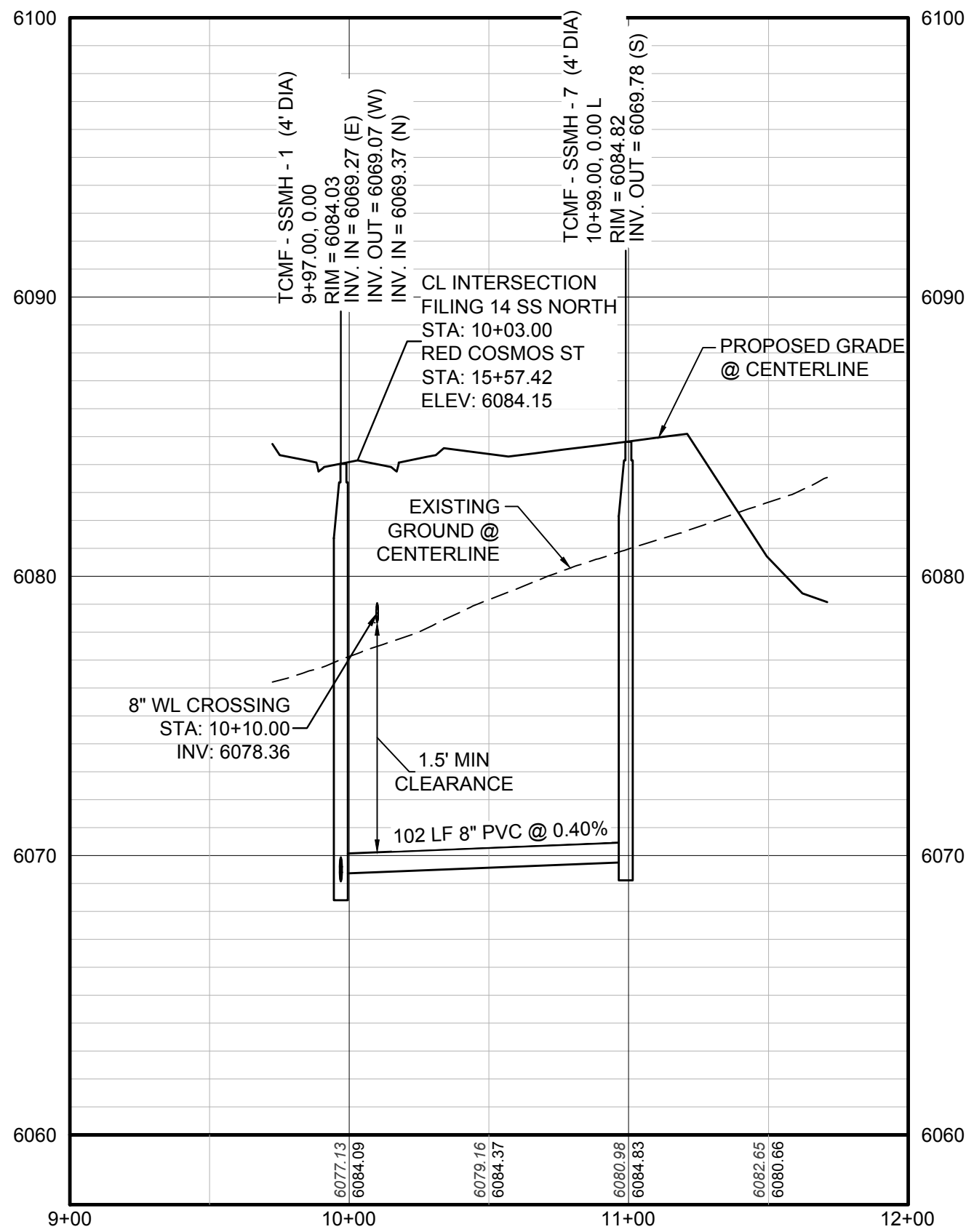
CENTURY OF COLORADO



PLAN: FILING 14 SS NORTH STA: 9+00.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L3	FILING 14 SS NORTH	10+99.00
F14,B1,L4	FILING 14 SS NORTH	10+79.00
F14,B1,L5	FILING 14 SS NORTH	10+99.00
F14,B1,L6	FILING 14 SS NORTH	10+76.00



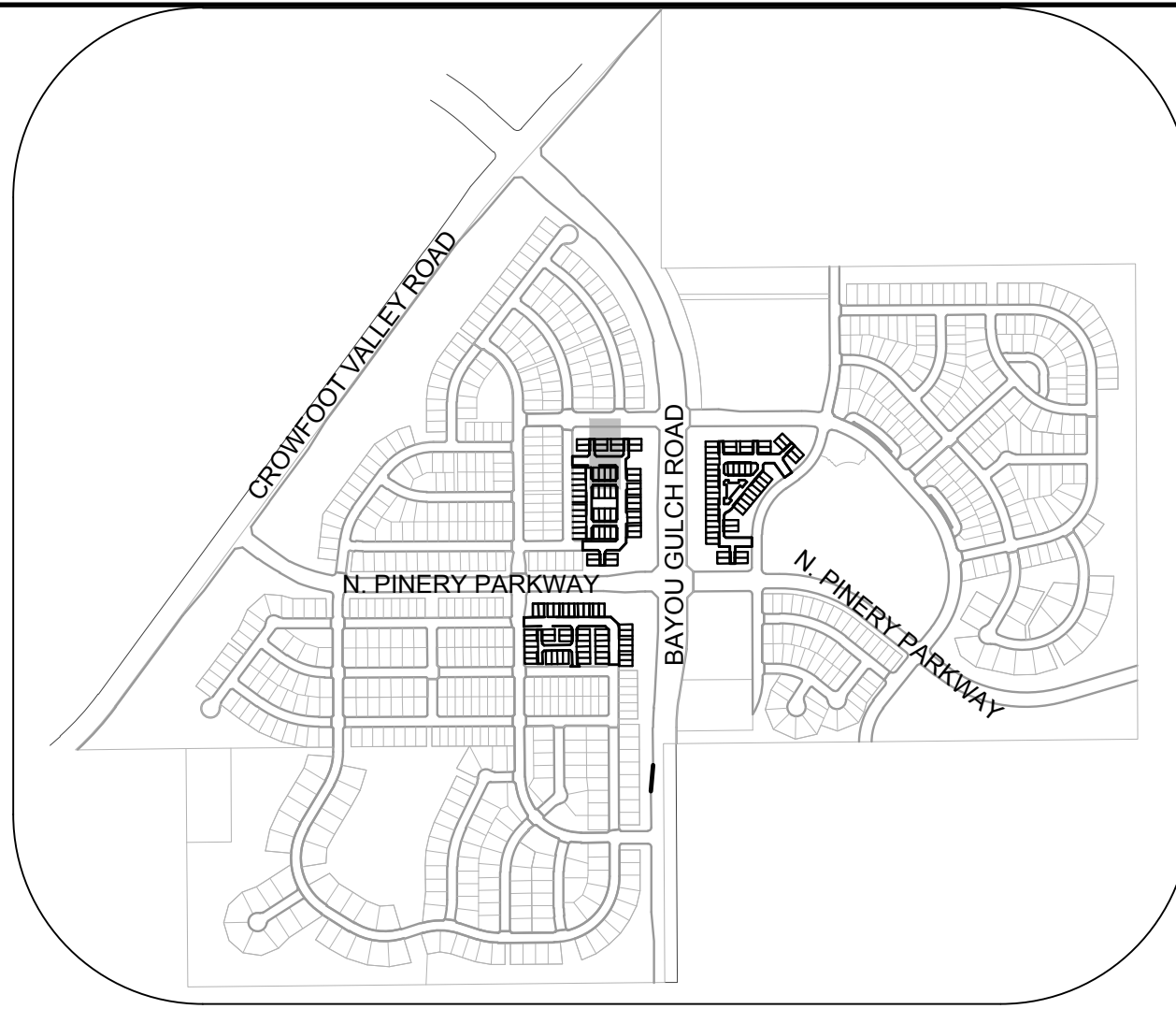
PROFILE: FILING 14 SS NORTH STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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
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⊗	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊗	PROPOSED LIGHT POLE	8"W	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
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FG	FINISHED GROUND	SL	SECTION LINE
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SHEET NUMBER	DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	TRAILS AT CROWFOOT FILING 14 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN & PROFILE FILING 14 SS NORTH	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112		10333 E. Dry Creek Rd. Suite 110 Englewood, CO 80150 Tel: (720) 482-9526 Fax: (720) 482-9548	Revisions	Appr.	Date
										No.	Init.	Date

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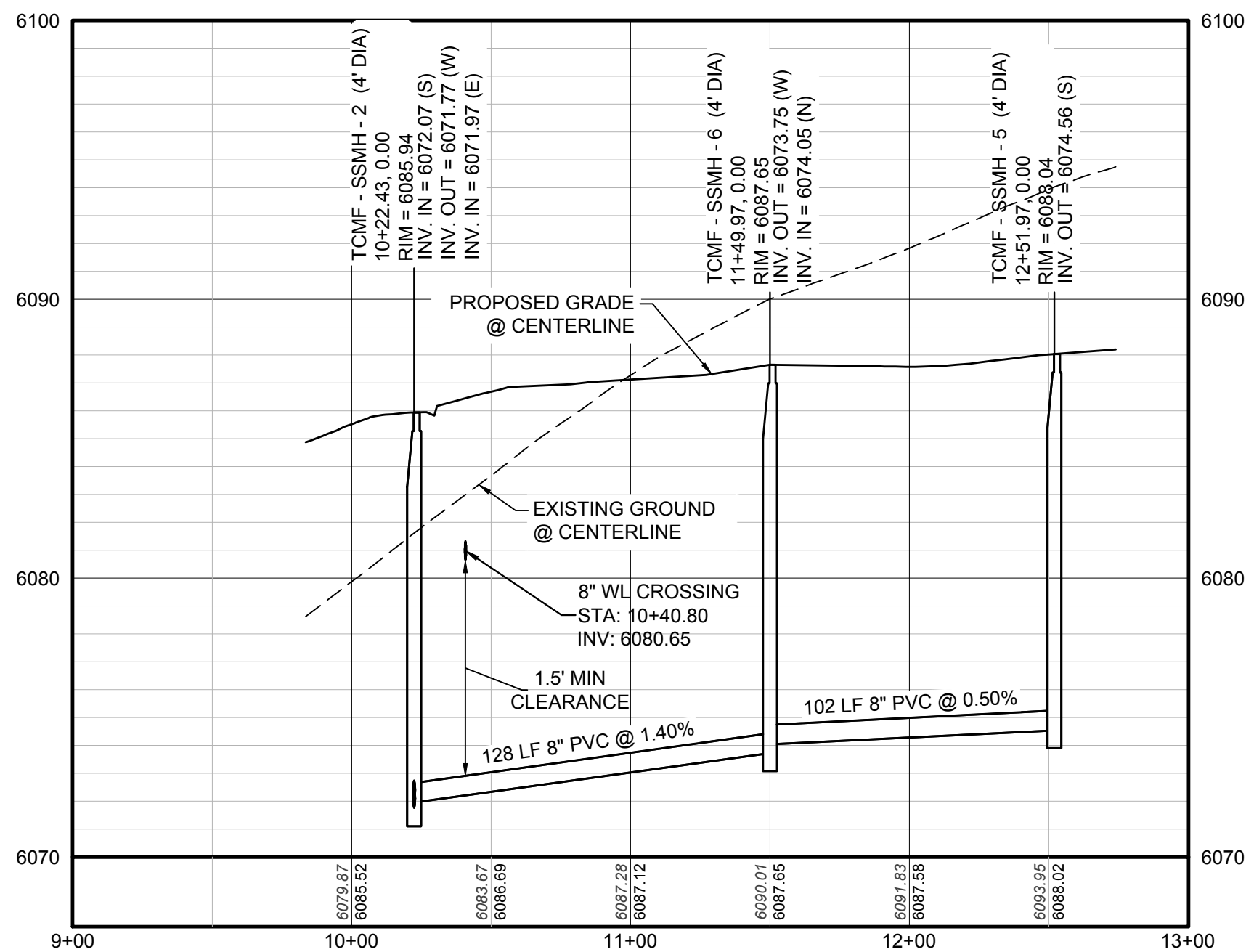
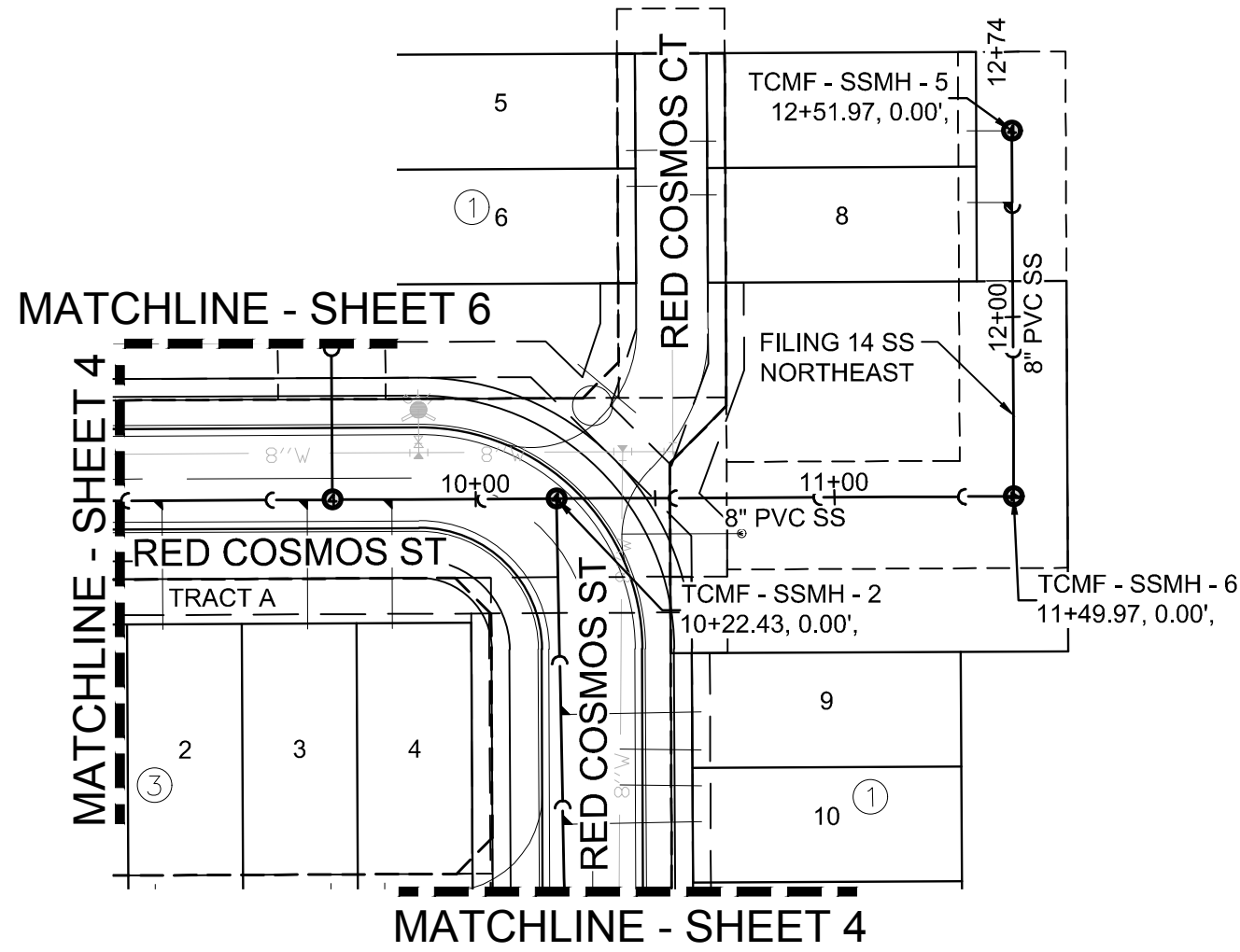
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1-800-922-1987

UTILITY NOTIFICATION

CENTERS OF COLORADO

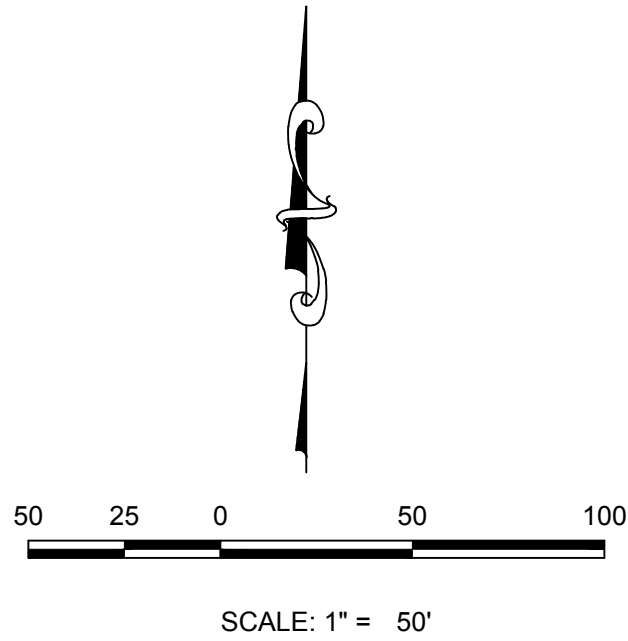


BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14.B1.L7	FILING 14 SS NORTHEAST	12+51.97
F14.B1.L8	FILING 14 SS NORTHEAST	12+31.97

LEGEND

②

BLOCK NUMBER

Ⓐ

LOT TYPE

6

LOT NUMBER

⊕

PROPOSED BUTTERFLY VALVE

⌋

PROPOSED CAP WITH END OF LINE BLOWOFF

⌋

PROPOSED REDUCER

⊕

PROPOSED VALVE

⊕

PROPOSED FIRE HYDRANT

⊕

PROPOSED WL FITTING WITH THRUST BLOCK

⌋

PROPOSED FLARED END SECTION

⊕

PROPOSED LOW POINT BLOW-OFF

⊕

PROPOSED AIR VALVE

⊕

FUTURE PHASE VALVE

⊕

FUTURE FIRE HYDRANT

⊕

PROPOSED LIGHT POLE

⊕

PROPOSED SIDEWALK

⊕

PROPOSED SIDEWALK RAMP

10.00

EXISTING ELEVATION

10.00

PROPOSED DESIGN ELEVATION

⊕

PROPOSED STORM DRAIN INLET

⊕

PROPOSED STORM DRAIN MANHOLE

△

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

→

PROPOSED DIRECTION OF FLOW

1.0%

PROPOSED SLOPE & DIRECTION

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

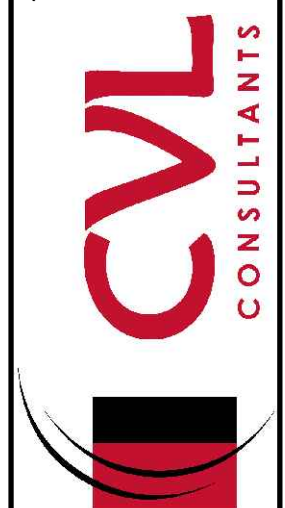
EXISTING FIBER OPTIC LINE

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	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

10333 E. Dry Creek Rd.
Suite 110
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9548



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT

FILING 14 CONSTRUCTION DRAWINGS

SANITARY SEWER PLAN & PROFILE

FILING 14 SS NORTHEAST

DRAWN BY: RRR

CHECKED BY: BPW

DATE: JUNE 2018

SCALE: AS SHOWN

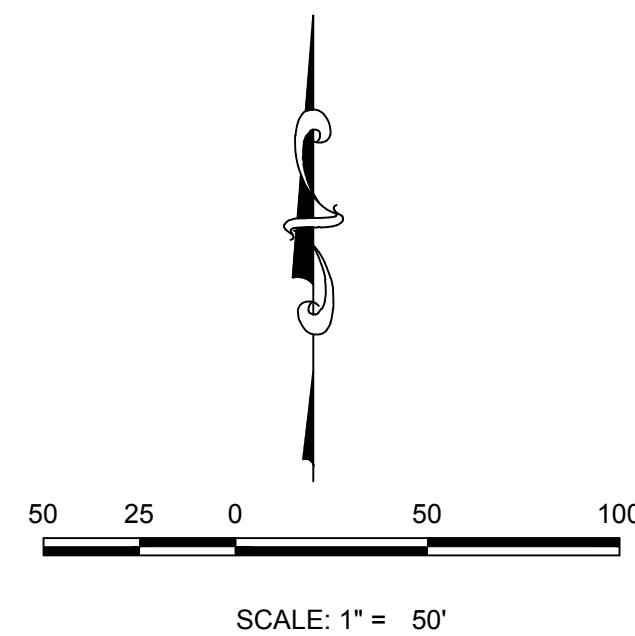
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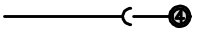
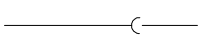
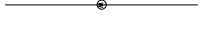
7

Revisions

No.	Date	Init.	Appr.	Date



LEGEND

	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 FIRE HYDRANT		PROPOSED SLOPE & DIRECTION
	PROPOSED WL FITTING WITH THRUST BLOCK	— 5615 —	EXISTING 5' CONTOUR
	PROPOSED FLARED END SECTION	— 5616 —	EXISTING 1' CONTOUR
	PROPOSED LOW POINT BLOW-OFF	— 5620 —	PROPOSED 5' CONTOUR
	PROPOSED AIR VALVE	— 5607 —	PROPOSED 1' CONTOUR
	FUTURE PHASE VALVE		PROPOSED STORM DRAIN
	FUTURE FIRE HYDRANT		PROPOSED SEWER LINE WITH MANHOLE
	PROPOSED LIGHT POLE		PROPOSED SEWER LATERAL
=====	PROPOSED SIDEWALK		PROPOSED WATER LINE
	PROPOSED SIDEWALK RAMP		PROPOSED LATERAL W/ METER
10.00	EXISTING ELEVATION	---	SECTION LINE
10.00	PROPOSED DESIGN ELEVATION		FILING BOUNDARY
	PROPOSED STORM DRAIN INLET	— FO —	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN MANHOLE	— OH —	EXISTING OVERHEAD POWER
		— TEL —	EXISTING TELEPHONE LINE

ABBREVIATIONS

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AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
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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
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HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
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LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION



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1-800-922-1987

UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO

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

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



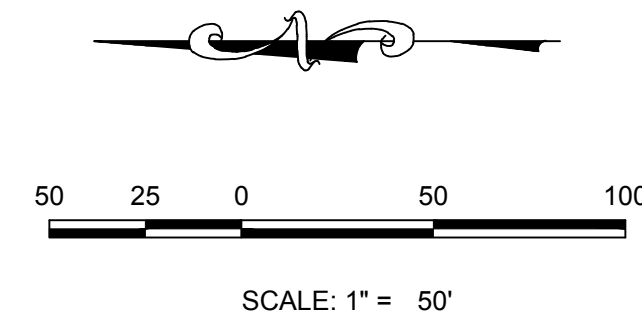
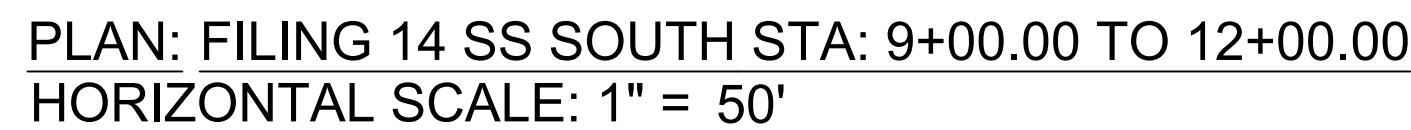
CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

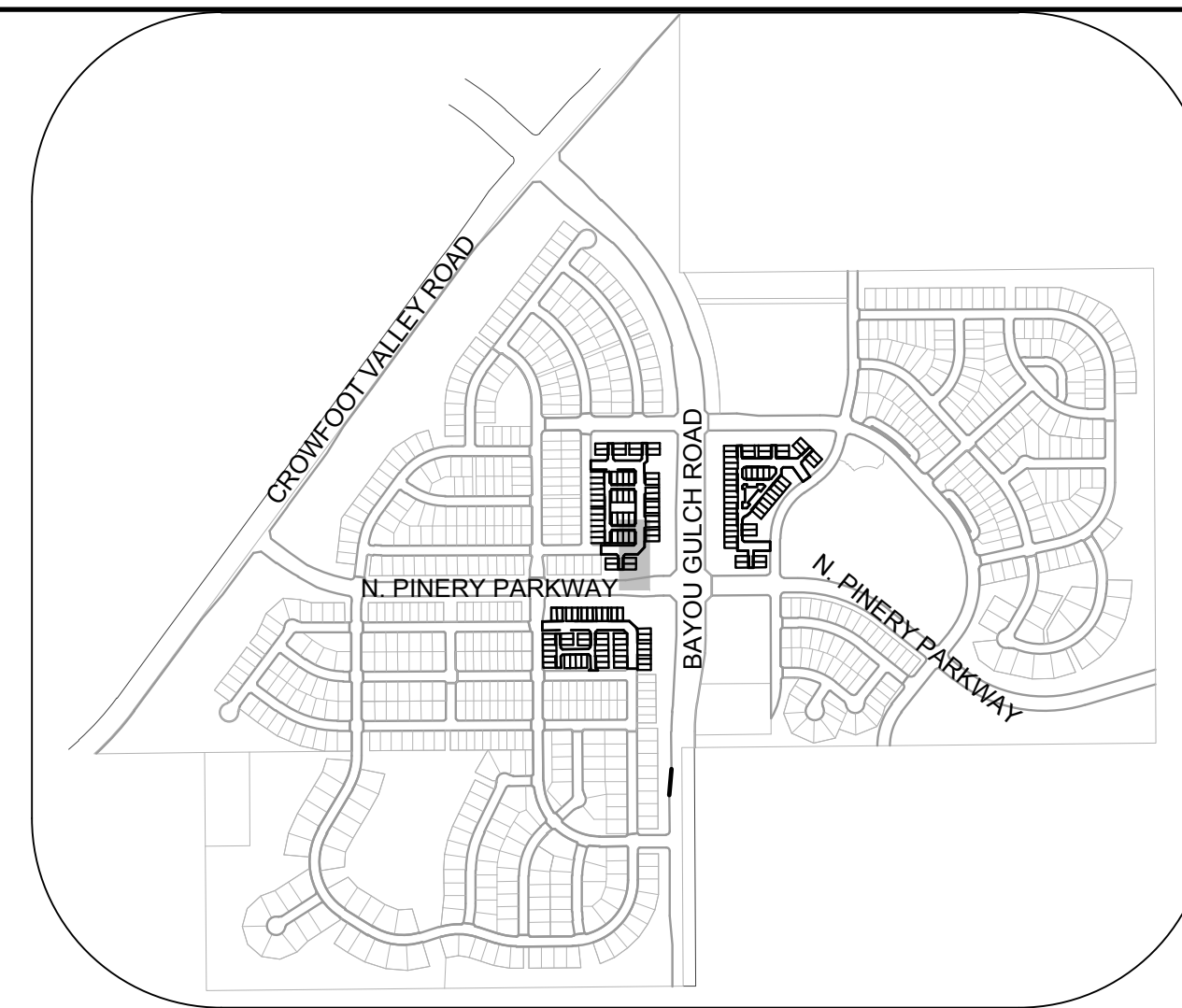
TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
FILING 14 SS EAST-WEST

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

8



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L21	FILING 14 SS SOUTH	10+82.67
F14,B1,L22	FILING 14 SS SOUTH	11+02.67

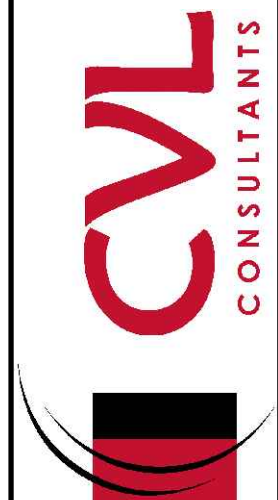


KEYMAP

N.T.S.

[illegible]

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

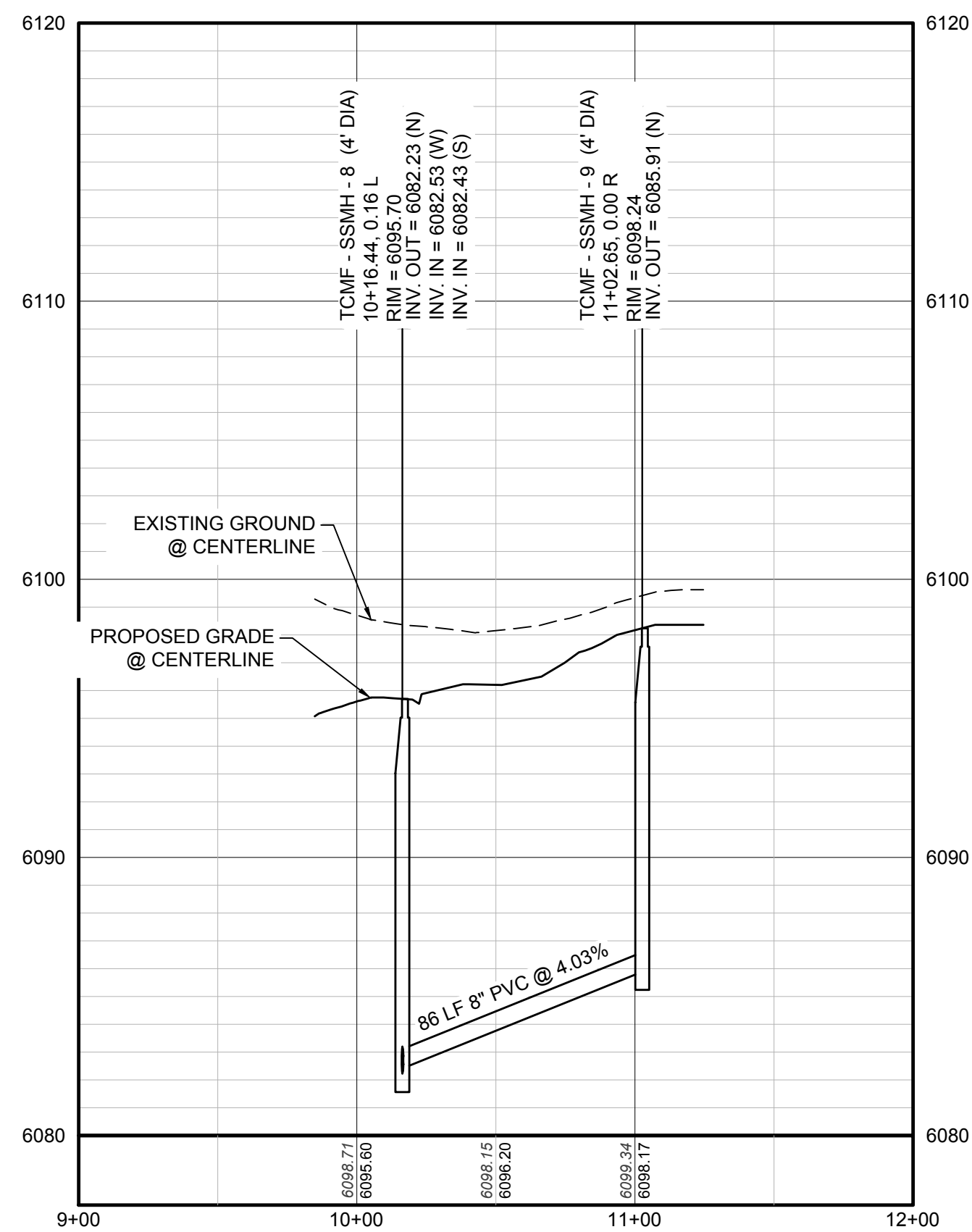


HR 935 LLC
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CENTENNIAL, CO 80112

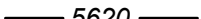
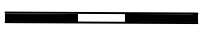
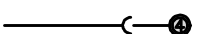
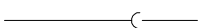
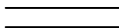
TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
FILING 14 SS SOUTH

DRAWN BY:	B/JG	SCALE:	
	CHECKED BY:	AS SHOWN	
DATE:	BPW	FILE NO:	
	JUNE 2018	8130283701	

9



PROFILE: FILING 14 SS SOUTH STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

	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		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

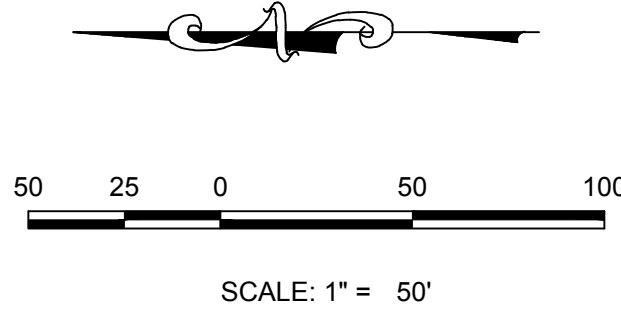
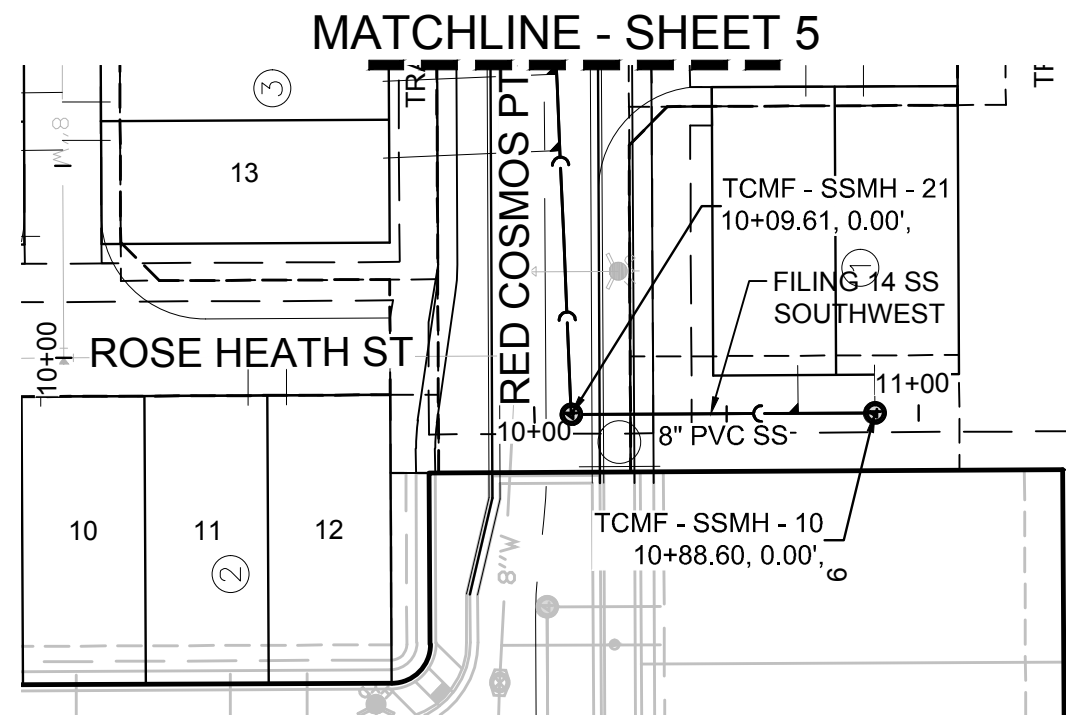
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PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

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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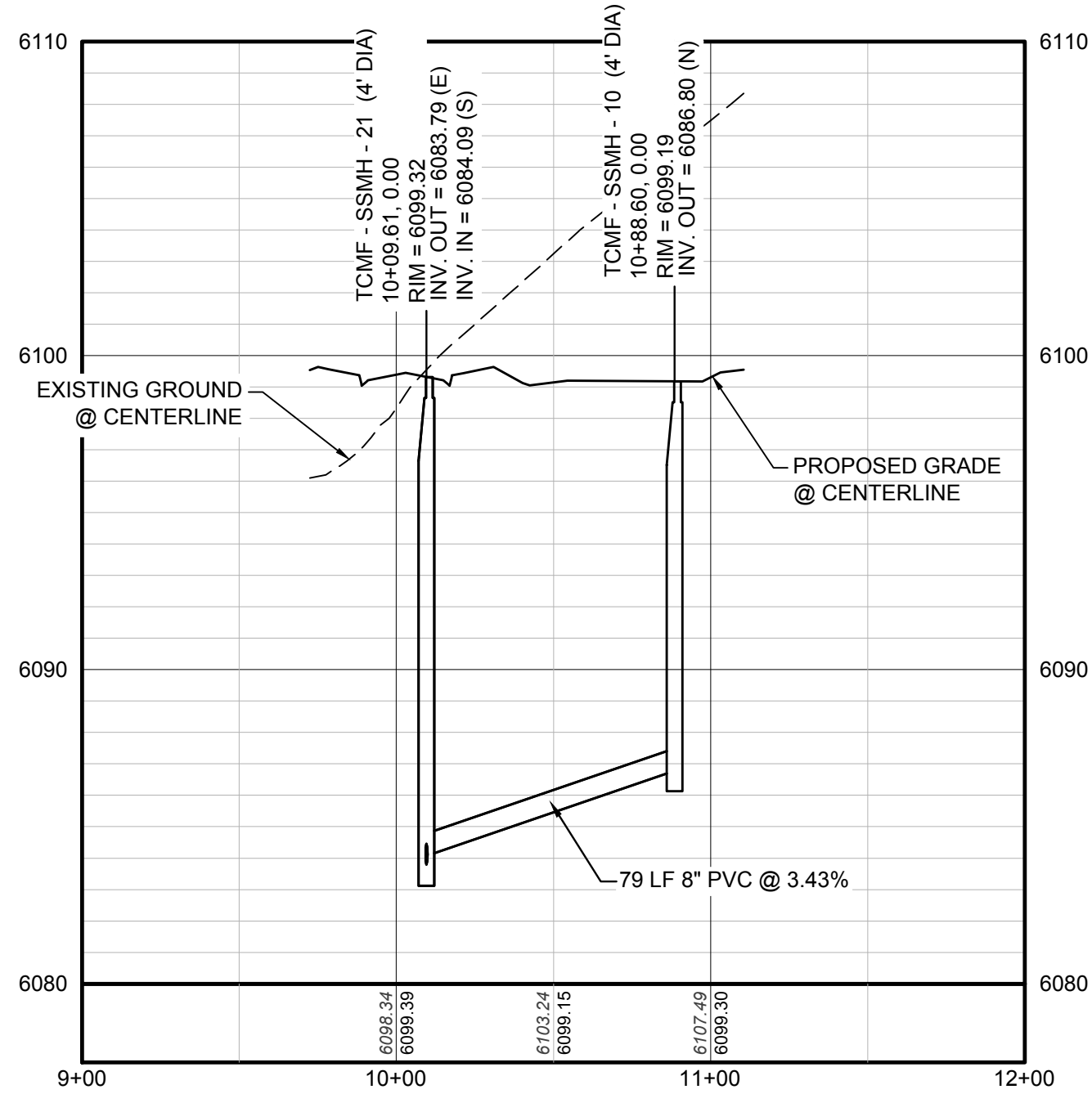


KEYMAP
N.T.S.

PLAN: FILING 14 SS SOUTHWEST STA: 9+00.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'

SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L19	FILING 14 SS SOUTHWEST	10+68.60
F14,B1,L20	FILING 14 SS SOUTHWEST	10+88.60

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	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	8"W 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



PROFILE: FILING 14 SS SOUTHWEST STA: 9+00.00 TO 12+00.00
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N:\PROJECTS\SSHS BANCHADO\ENGINEERING\SSHS SETS\MULTIFAMILY\CDS\F-HARPER WATER AND SANITATION\SANITARY SEWER SHEETS\FILING 14 SS SOUTHWEST.DWG, RYANREDD, 7/9/2018 6:28 PM



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UTILITY NOTIFICATION
CENTER OF COLORADO

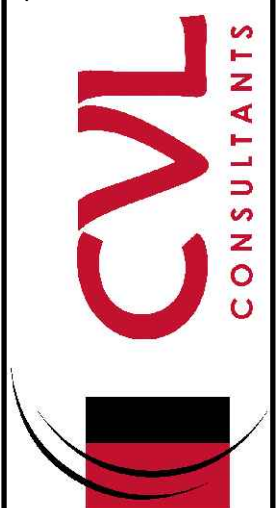
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TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
FILING 14 SS SOUTHWEST

SCALE:
AS SHOWN

DRAWN BY:
RRR

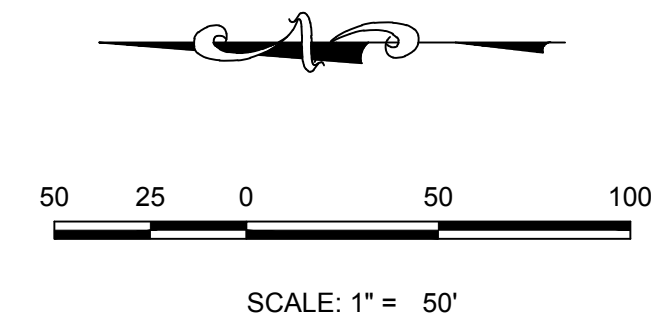
CHECKED BY:
BPW

DATE:
JUNE 2018

FILE NO:
8130283701

SHEET NUMBER
10

Revisions
No. Init. Date Appr. Date



WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B2,L1	ROSE HEATH ST	10+67.50
F14,B2,L2	ROSE HEATH ST	10+77.50
F14,B2,L3	ROSE HEATH ST	11+31.50
F14,B2,L4	ROSE HEATH ST	11+41.50
F14,B2,L5	ROSE HEATH ST	11+95.50
F14,B2,L6	ROSE HEATH ST	12+05.50
F14,B2,L7	ROSE HEATH ST	12+73.00
F14,B2,L8	ROSE HEATH ST	12+83.00
F14,B2,L9	ROSE HEATH ST	13+37.00
F14,B2,L10	ROSE HEATH ST	13+47.00
F14,B2,L11	ROSE HEATH ST	14+01.00
F14,B2,L12	ROSE HEATH ST	14+11.00

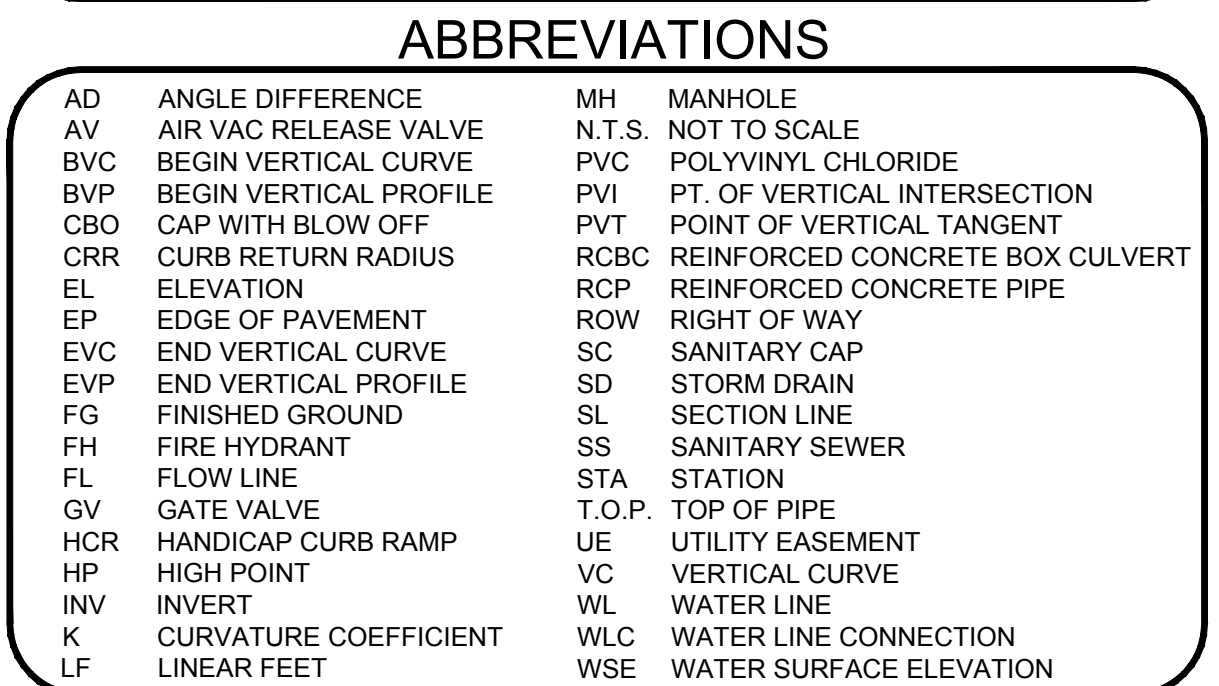
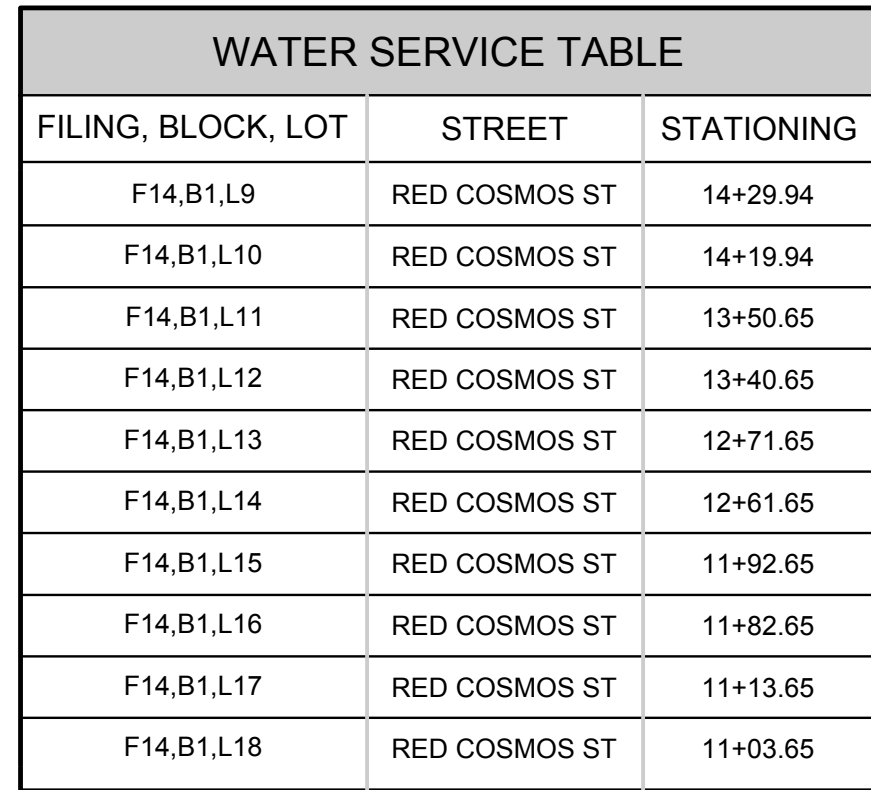
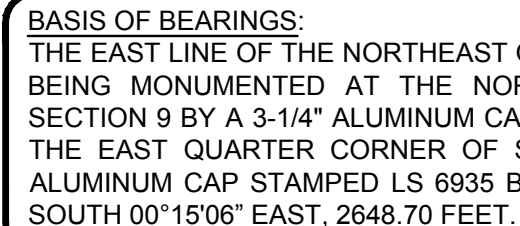
	BLOCK NUMBER		PROPOSED RANGE POINT
	LOT TYPE		CENTERLINE
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	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
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	PROPOSED FIRE HYDRANT		EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK		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
	EXISTING ELEVATION		FILING BOUNDARY
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CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RPC	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



BRIAN P. WILSON
COLORADO P.E. 0050067

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.

[illegible]

BRIAN P. WILSON
COLORADO P.E. 0050067

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

DATE: 813028

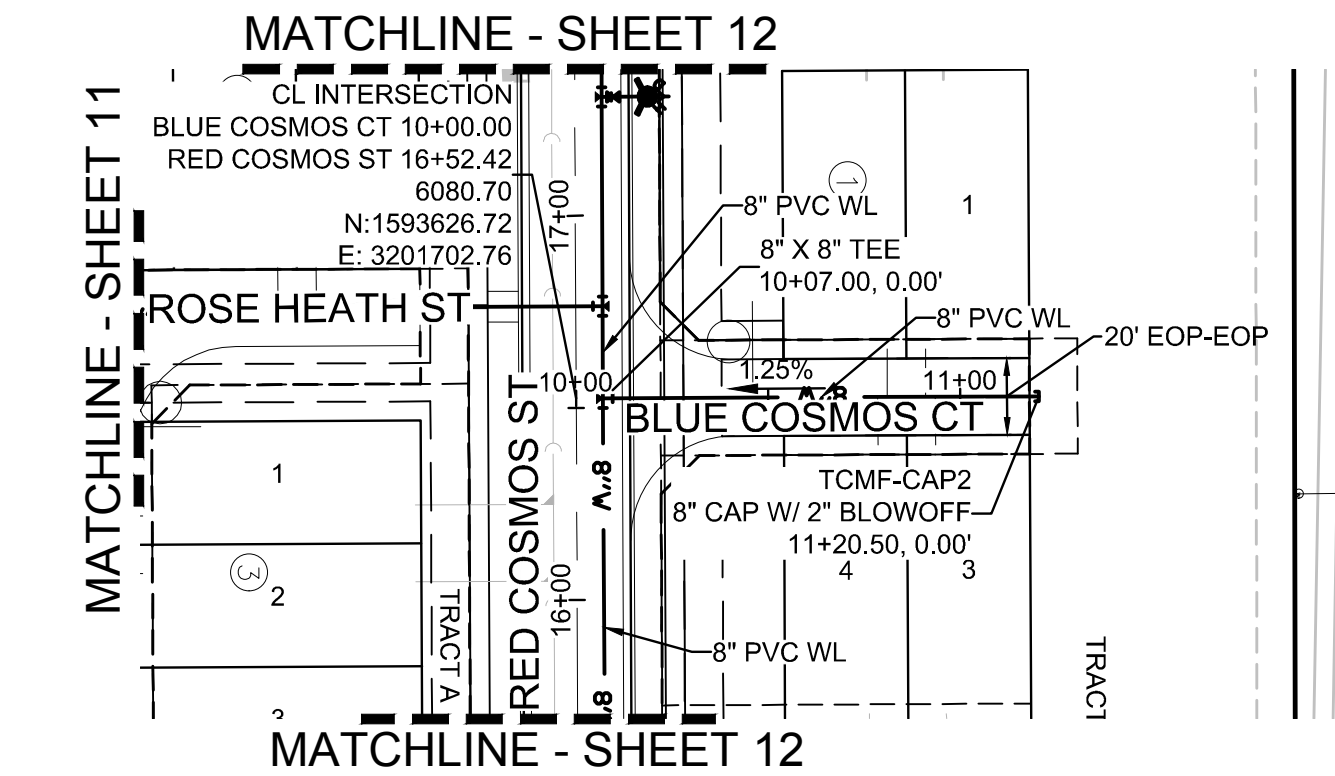
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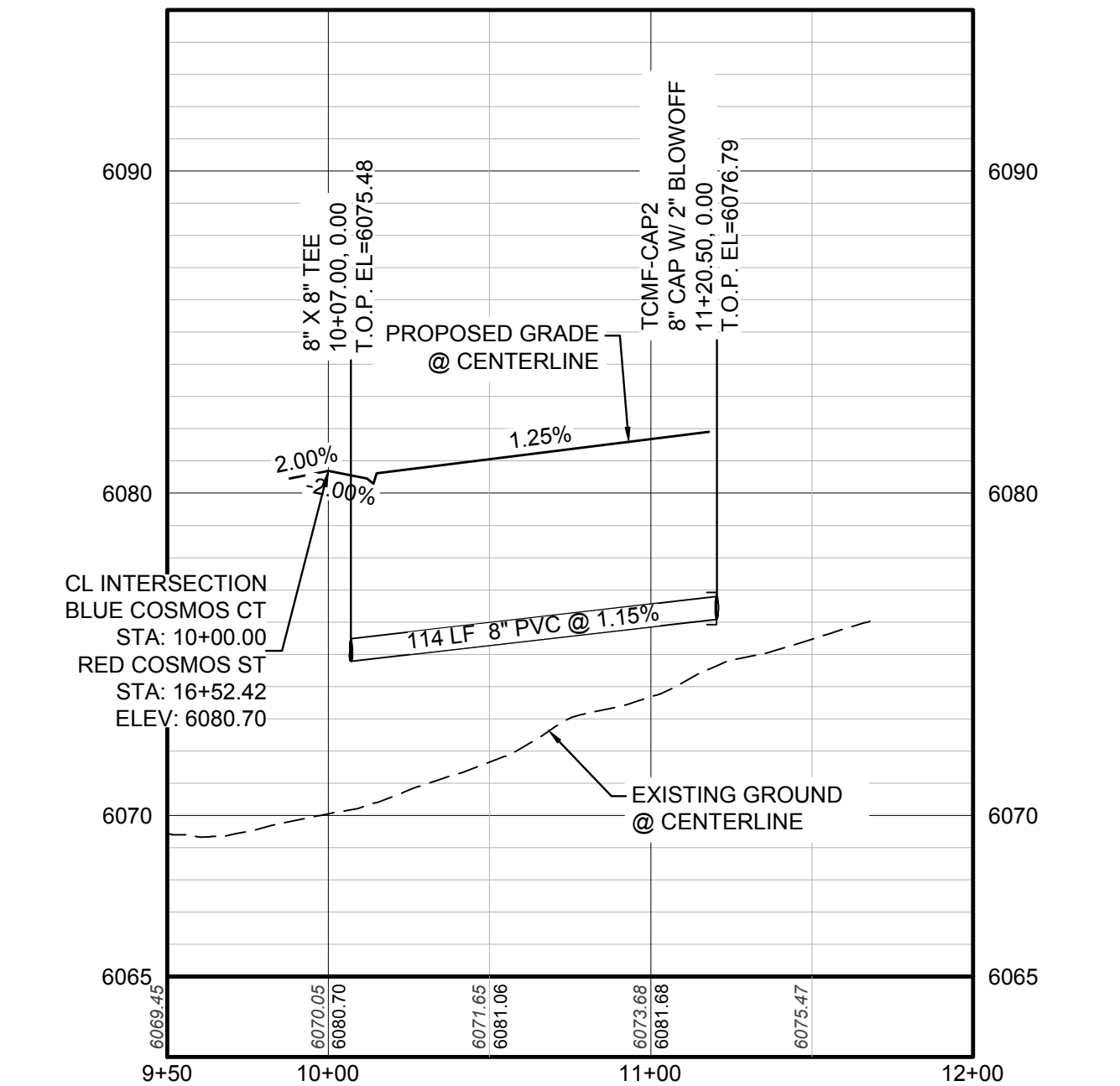


CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC 1-800-922-1987

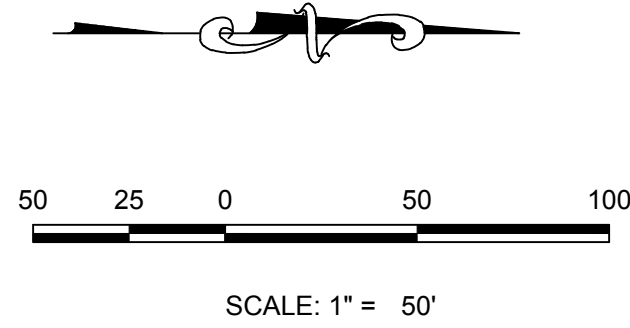
UTILITY NOTIFICATION
CENTER OF COLORADO



PLAN: BLUE COSMOS CT STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: BLUE COSMOS CT STA: 9+50.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L1	BLUE COSMOS CT	10+91.00
F14,B1,L2	BLUE COSMOS CT	10+81.00
F14,B1,L3	BLUE COSMOS CT	10+93.50
F14,B1,L4	BLUE COSMOS CT	10+78.50



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	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	---	EXISTING FIBER OPTIC LINE
---	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
⊗	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

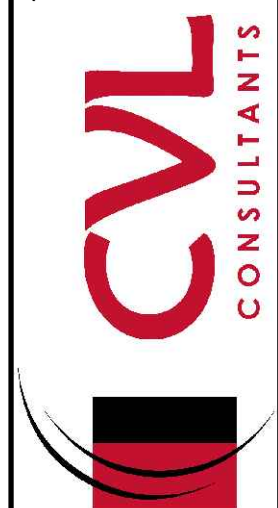
ABBREVIATIONS

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
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INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

10333 E. Dry Creek Rd.
Suite 110
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9548



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
BLUE COSMOS CT

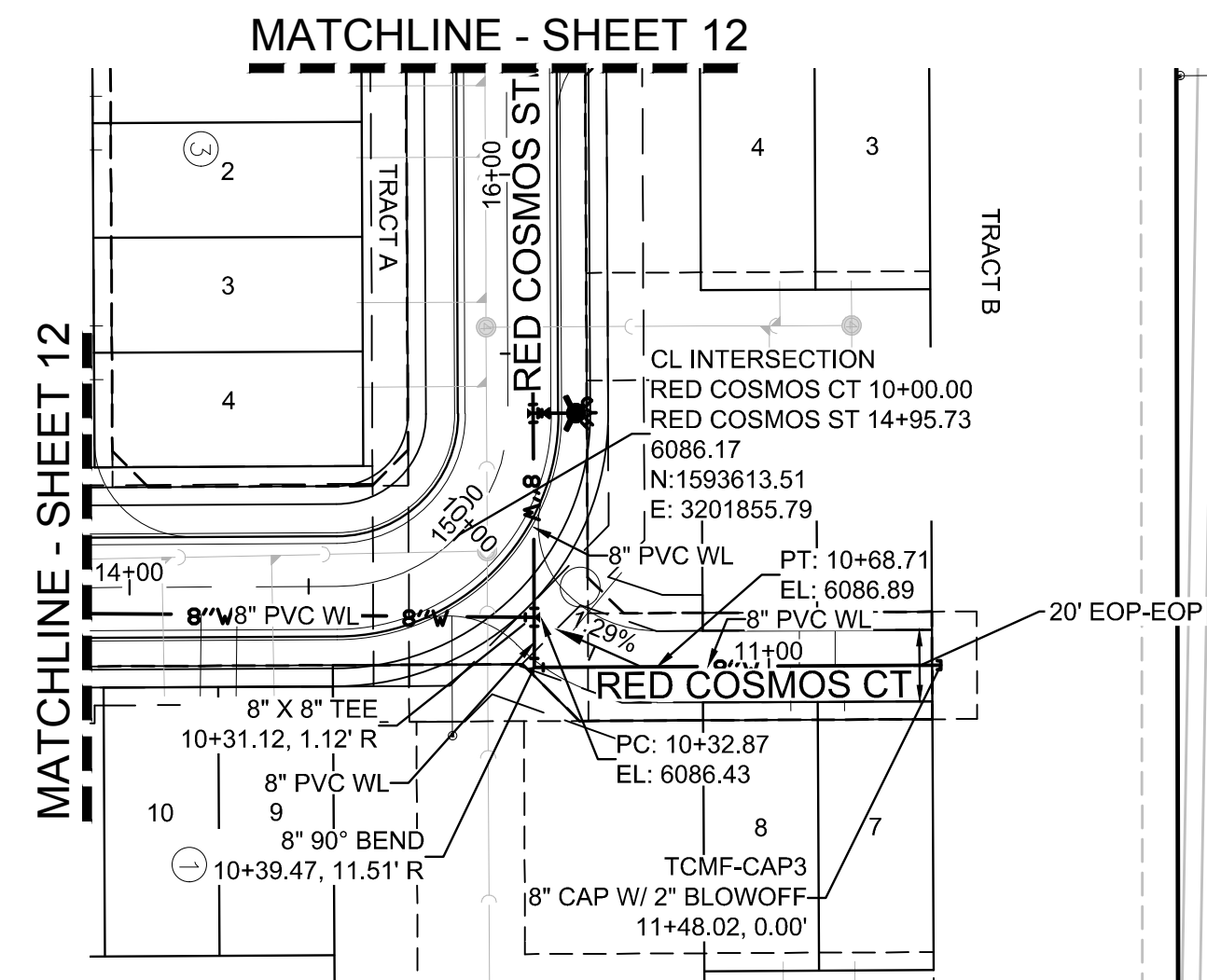
SCALE:
AS SHOWN

DRAWN BY: KJD
CHECKED BY: BPW
DATE: JUNE 2018

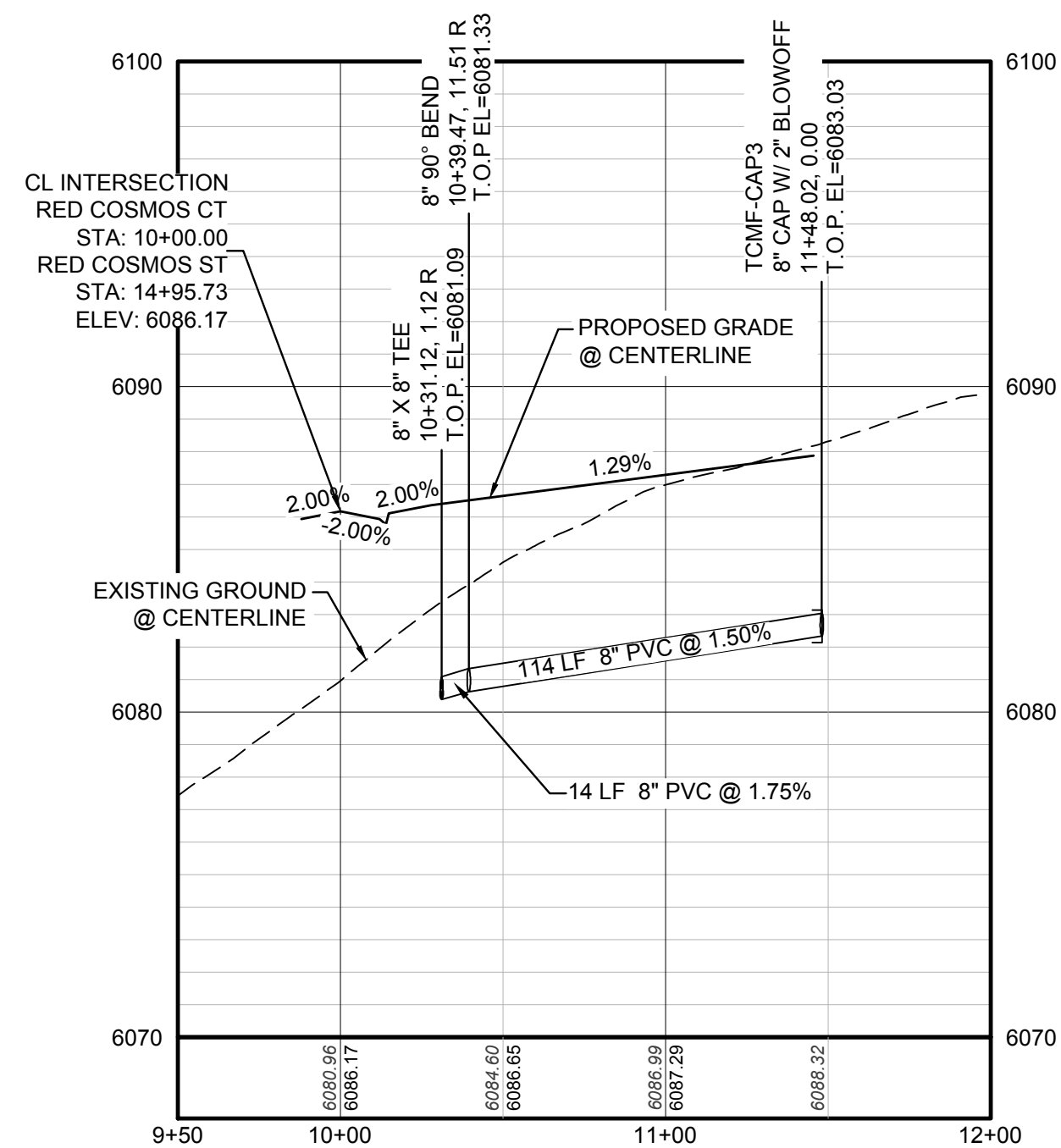
FILE NO:
8130283701

SHEET NUMBER
13

Revisions
No. Date Init. Appr. Date

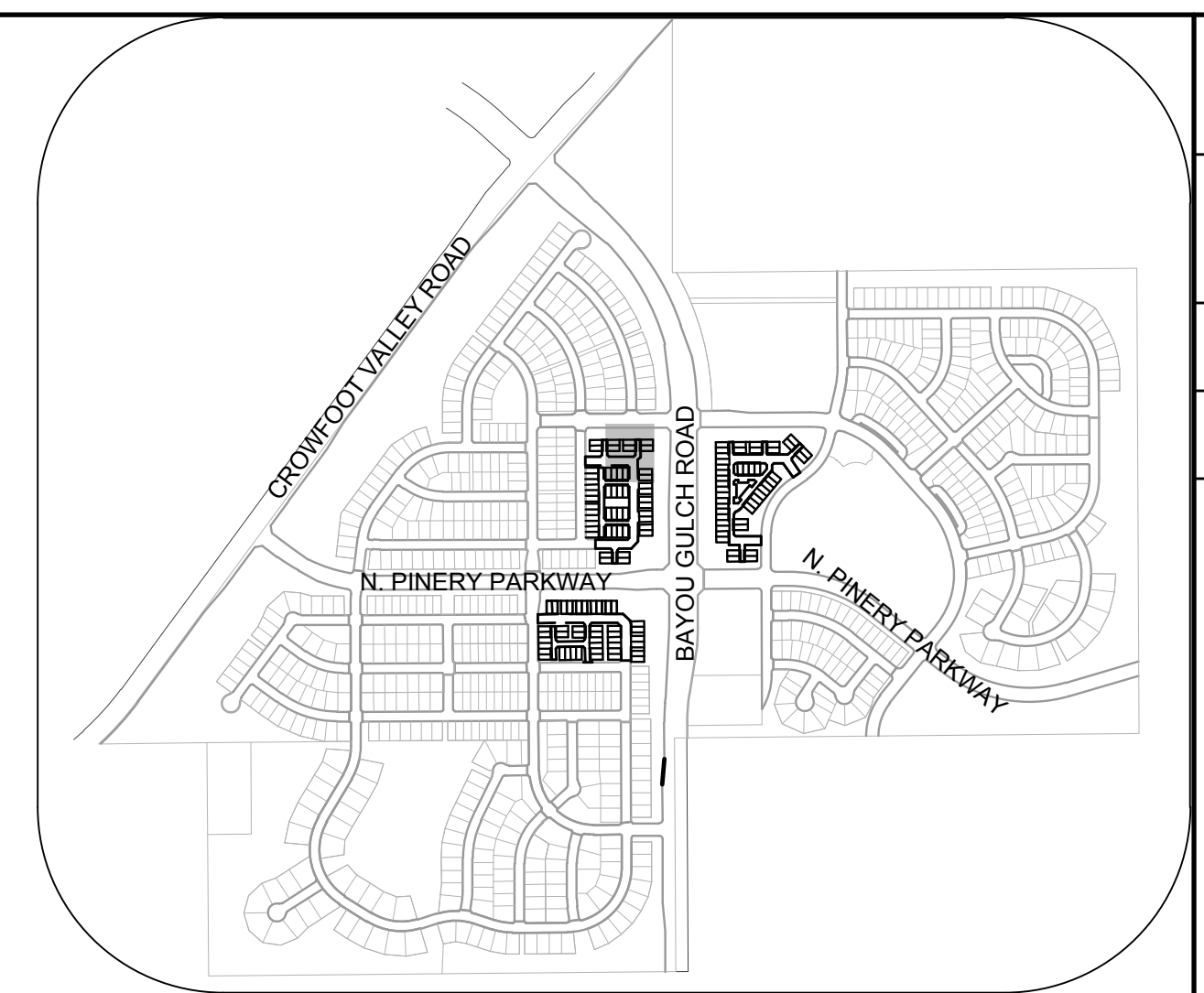


PLAN: RED COSMOS CT STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



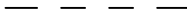
PROFILE: RED COSMOS CT STA: 9+50.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L5	RED COSMOS CT	11+18.52
F14,B1,L6	RED COSMOS CT	11+08.52
F14,B1,L7	RED COSMOS CT	11+21.02
F14,B1,L8	RED COSMOS CT	11+06.02



KEYMAP
N.T.S.

LEGEND

	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		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

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CALL 811
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BEFORE YOU DIG
1-800-922-1987

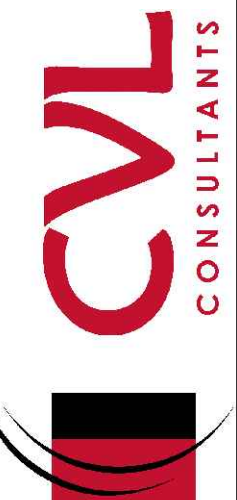
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9
BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID
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PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

Suite 240
inglewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

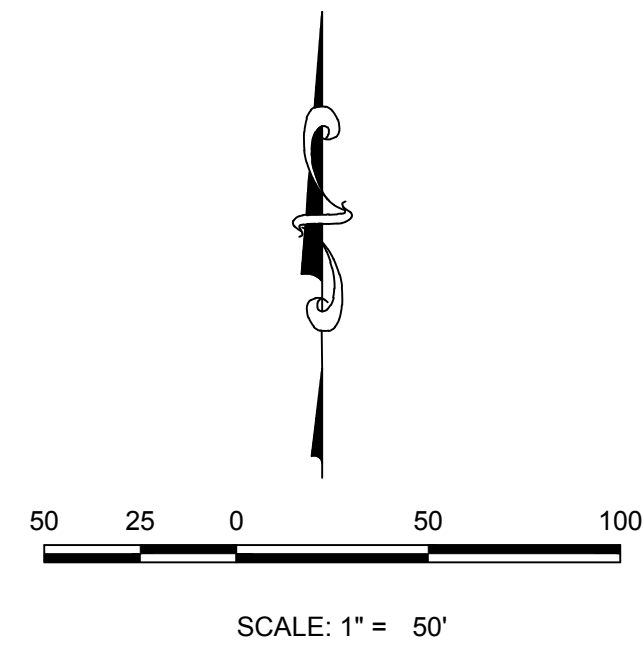


HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

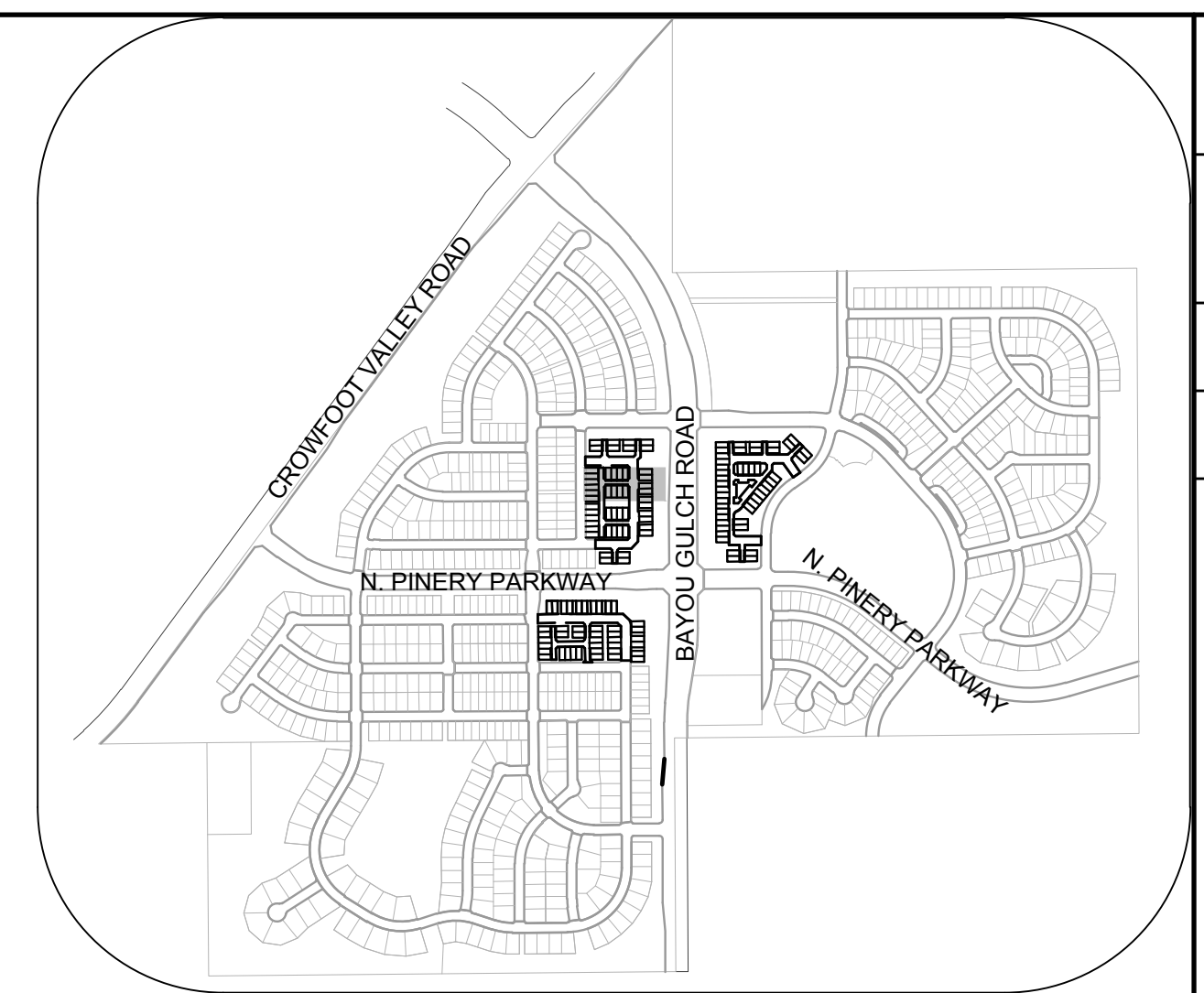
FILING 14 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
RED COSMOS COURT

CHECKED BY:	KJD	AS SHOWN
DATE:	BPW	FILE NO:
	JUNE 2018	8130283701

14



WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B3,L1	ROSE HEATH LN	10+54.06
F14,B3,L2	ROSE HEATH LN	10+69.06
F14,B3,L3	ROSE HEATH LN	11+18.06
F14,B3,L4	ROSE HEATH LN	11+33.06
F14,B3,L5	ROSE HEATH LN	10+56.56
F14,B3,L6	ROSE HEATH LN	10+66.56
F14,B3,L7	ROSE HEATH LN	11+20.55
F14,B3,L8	ROSE HEATH LN	11+30.56



KEYMAP
N.T.S.

	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 FIRE HYDRANT		PROPOSED SLOPE & DIRECTION
	PROPOSED WL FITTING WITH THRUST BLOCK	— 5615 —	EXISTING 5' CONTOUR
		— 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

AD	ANGLE DIFFERENCE	MH	MANHOLE
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K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

No.	Revisions	Date	Init.	Appr.	Date

333 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 14 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
ROSE HEATH LANE

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

15

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

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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N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\MULTIFAMILY\CDSE\FH\HARKER WATER AND SANITATION\WATER\PROPOSE HEALTH RD.DWG, RYAN REED, 7/5/2016 6:37 PM



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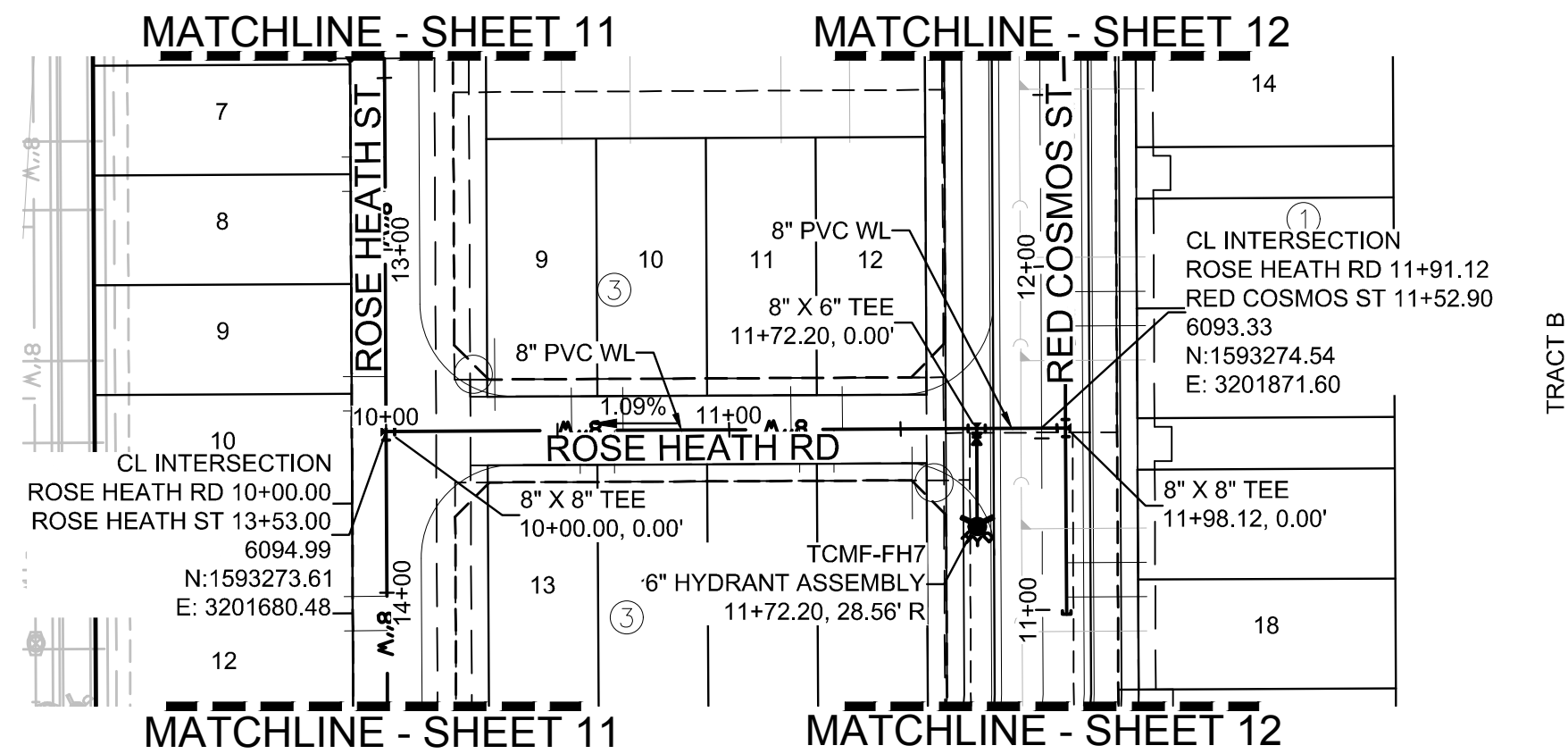
TWO WORKING DAYS

BEFORE YOU DIG

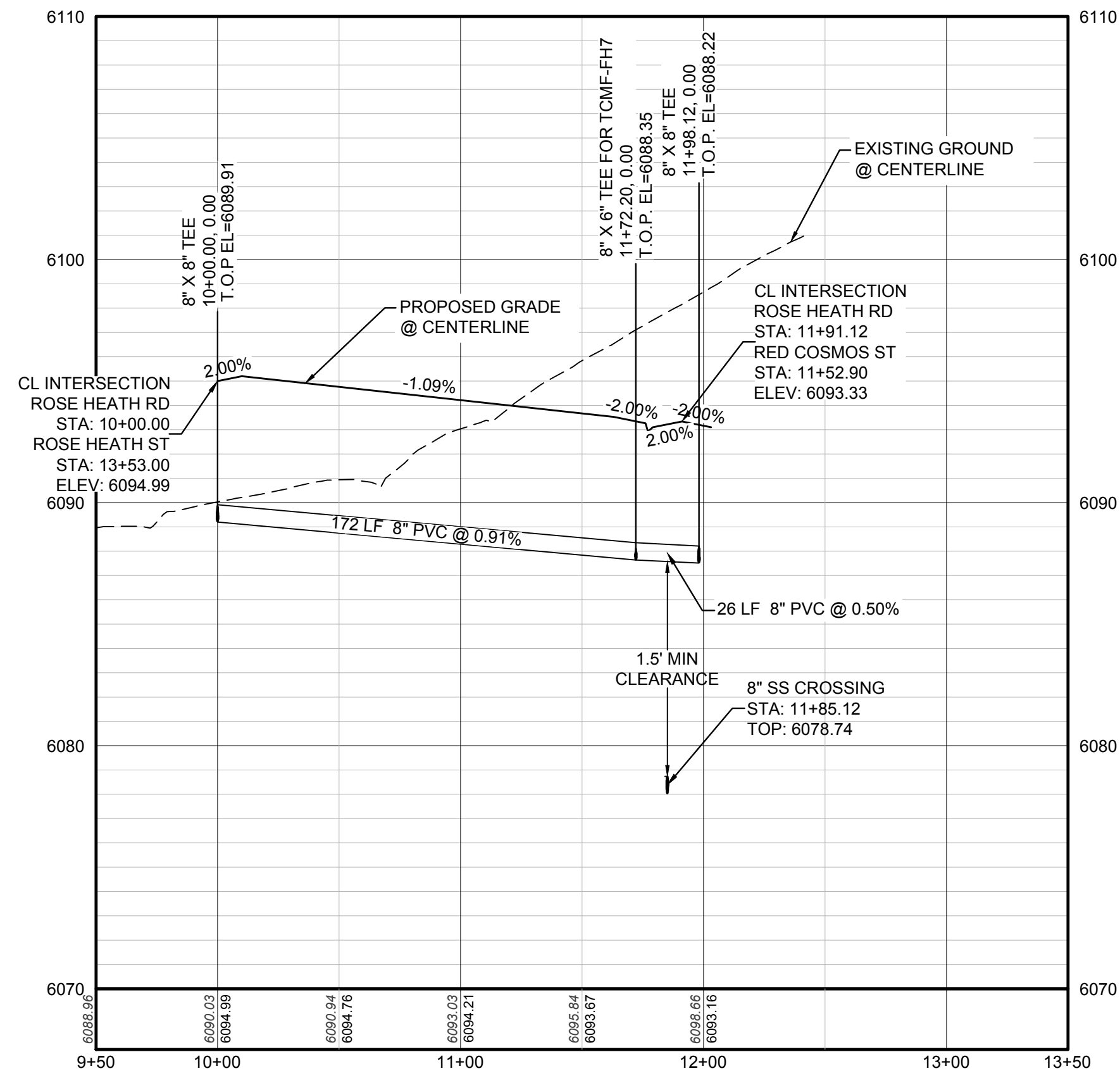
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UTILITY NOTIFICATION

CENTERS OF COLORADO

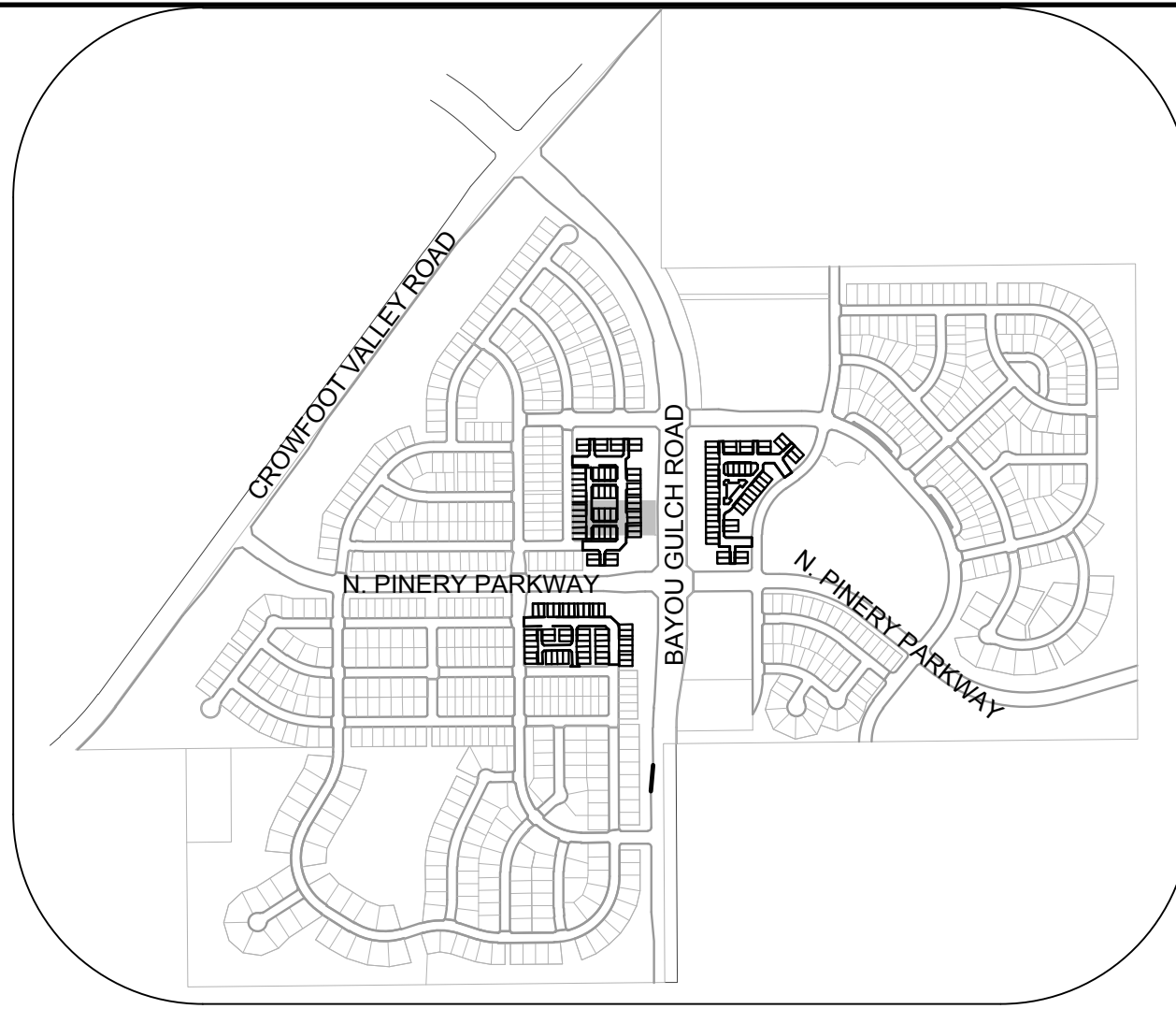


PLAN: ROSE HEATH RD STA: 9+50.00 TO 13+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: ROSE HEATH RD STA: 9+50.00 TO 13+50.00
HORIZONTAL: 1" = 50'
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WATER SERVICE TABLE		
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F14,B3,L9	ROSE HEATH RD	10+54.06
F14,B3,L10	ROSE HEATH RD	10+69.06
F14,B3,L11	ROSE HEATH RD	11+18.06
F14,B3,L12	ROSE HEATH RD	11+33.06
F14,B3,L13	ROSE HEATH RD	10+56.56
F14,B3,L14	ROSE HEATH RD	10+66.56
F14,B3,L15	ROSE HEATH RD	11+20.56
F14,B3,L16	ROSE HEATH RD	11+30.56



KEYMAP
N.T.S.

LEGEND

2

BLOCK NUMBER

A

LOT TYPE

6

LOT NUMBER

⊗

PROPOSED BUTTERFLY VALVE

⌋

PROPOSED CAP WITH END OF LINE BLOWOFF

⌋

PROPOSED REDUCER

⊗

PROPOSED VALVE

⊗

PROPOSED FIRE HYDRANT

⊗

PROPOSED WL FITTING WITH THRUST BLOCK

⌋

PROPOSED FLARED END SECTION

⊗

PROPOSED LOW POINT BLOW-OFF

⊗

PROPOSED AIR VALVE

⊗

FUTURE PHASE VALVE

⊗

FUTURE FIRE HYDRANT

⊗

PROPOSED LIGHT POLE

⊗

PROPOSED SIDEWALK

⊗

PROPOSED SIDEWALK RAMP

10.00

EXISTING ELEVATION

10.00

PROPOSED DESIGN ELEVATION

⊗

PROPOSED STORM DRAIN INLET

⊗

PROPOSED STORM DRAIN MANHOLE

△

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

→

PROPOSED DIRECTION OF FLOW

1.0%

PROPOSED SLOPE & DIRECTION

5615

EXISTING 5' CONTOUR

5616

EXISTING 1' CONTOUR

5620

PROPOSED 5' CONTOUR

5607

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

EXISTING FIBER OPTIC LINE

EXISTING OVERHEAD POWER

EXISTING TELEPHONE LINE

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

TRAILS AT CROWFOOT

FILING 14 CONSTRUCTION DRAWINGS

WATER PLAN & PROFILE

ROSE HEATH ROAD

DRAWN BY: KJD

CHECKED BY: BPW

DATE: JUNE 2018

SCALE: AS SHOWN

FILE NO: 8130283701

SHEET NUMBER

16

Revisions

No.	Date	Init.	Appr.	Date

N:\PROJECTS\SSR\BANCHADO\ENGINEERING\SSR\BANCHADO\WATER AND SANITATION\WATER PIPED COSMOS PT.DWG, RYAN REDD, 7/5/2018 6:40 PM



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CALL 811

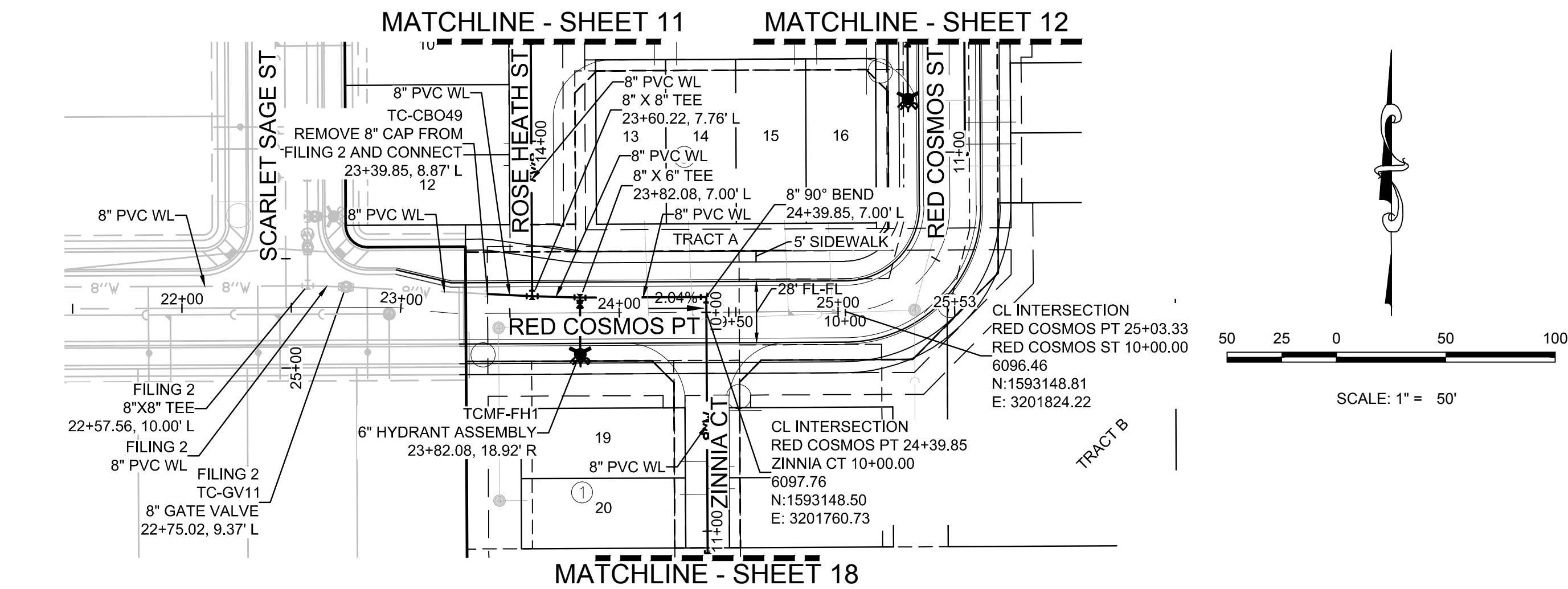
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BEFORE YOU DIG

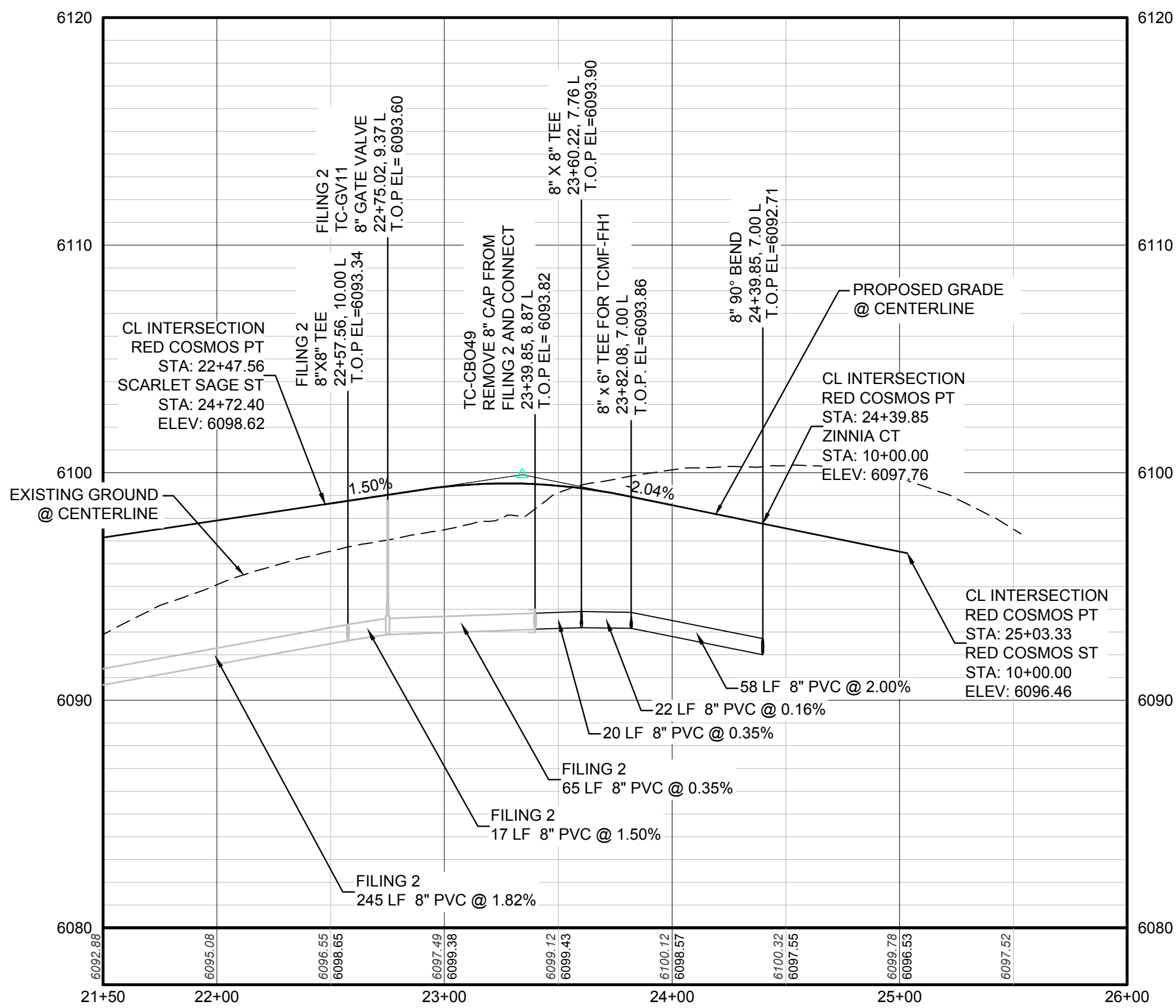
1-800-922-1987

UTILITY NOTIFICATION

CENTERS OF COLORADO



PLAN: RED COSMOS POINT STA: 21+50.00 TO 26+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: RED COSMOS PT STA: 21+50.00 TO 26+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

2

BLOCK NUMBER

A

LOT TYPE

6

LOT NUMBER

PROPOSED BUTTERFLY VALVE

PROPOSED CAP WITH END OF LINE BLOWOFF

PROPOSED REDUCER

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED WL FITTING WITH THRUST BLOCK

PROPOSED FLARED END SECTION

PROPOSED LOW POINT BLOW-OFF

PROPOSED AIR VALVE

FUTURE PHASE VALVE

FUTURE FIRE HYDRANT

PROPOSED LIGHT POLE

PROPOSED SIDEWALK

PROPOSED SIDEWALK RAMP

EXISTING ELEVATION

PROPOSED DESIGN ELEVATION

PROPOSED STORM DRAIN INLET

PROPOSED STORM DRAIN MANHOLE

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

PROPOSED DIRECTION OF FLOW

PROPOSED SLOPE & DIRECTION

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

EXISTING FIBER OPTIC LINE

EXISTING OVERHEAD POWER

EXISTING TELEPHONE LINE

ABBREVIATIONS

AD

ANGLE DIFFERENCE

AV

AIR VAC RELEASE VALVE

BVC

BEGIN VERTICAL CURVE

BVP

BEGIN VERTICAL PROFILE

CBO

CAP WITH BLOW OFF

CRR

CURB RETURN RADIUS

EL

ELEVATION

EP

EDGE OF PAVEMENT

EVC

END VERTICAL CURVE

EVP

END VERTICAL PROFILE

FG

FINISHED GROUND

FH

FIRE HYDRANT

FL

FLOW LINE

GV

GATE VALVE

HCR

HANDICAP CURB RAMP

HP

HIGH POINT

INV

INVERT

K

CURVATURE COEFFICIENT

LF

LINEAR FEET

MH

MANHOLE

N.T.S.

NOT TO SCALE

PVC

POLYVINYL CHLORIDE

PVI

PT. OF VERTICAL INTERSECTION

PVT

POINT OF VERTICAL TANGENT

RCBC

REINFORCED CONCRETE BOX CULVERT

RCP

REINFORCED CONCRETE PIPE

ROW

RIGHT OF WAY

SC

SANITARY CAP

SD

STORM DRAIN

SL

SECTION LINE

SS

SANITARY SEWER

STA

STATION

T.O.P.

TOP OF PIPE

UE

UTILITY EASEMENT

VC

VERTICAL CURVE

WL

WATER LINE

WLC

WATER LINE CONNECTION

WSE

WATER SURFACE ELEVATION

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

10333 E. Dry Creek Rd.
Suite 110
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
RED COSMOS POINT

SCALE: AS SHOWN

FILE NO: 8130283701

DRAWN BY: KJD

CHECKED BY: BPW

DATE: JUNE 2018

SHEET NUMBER

17

Revisions

No.

Date

Appr.

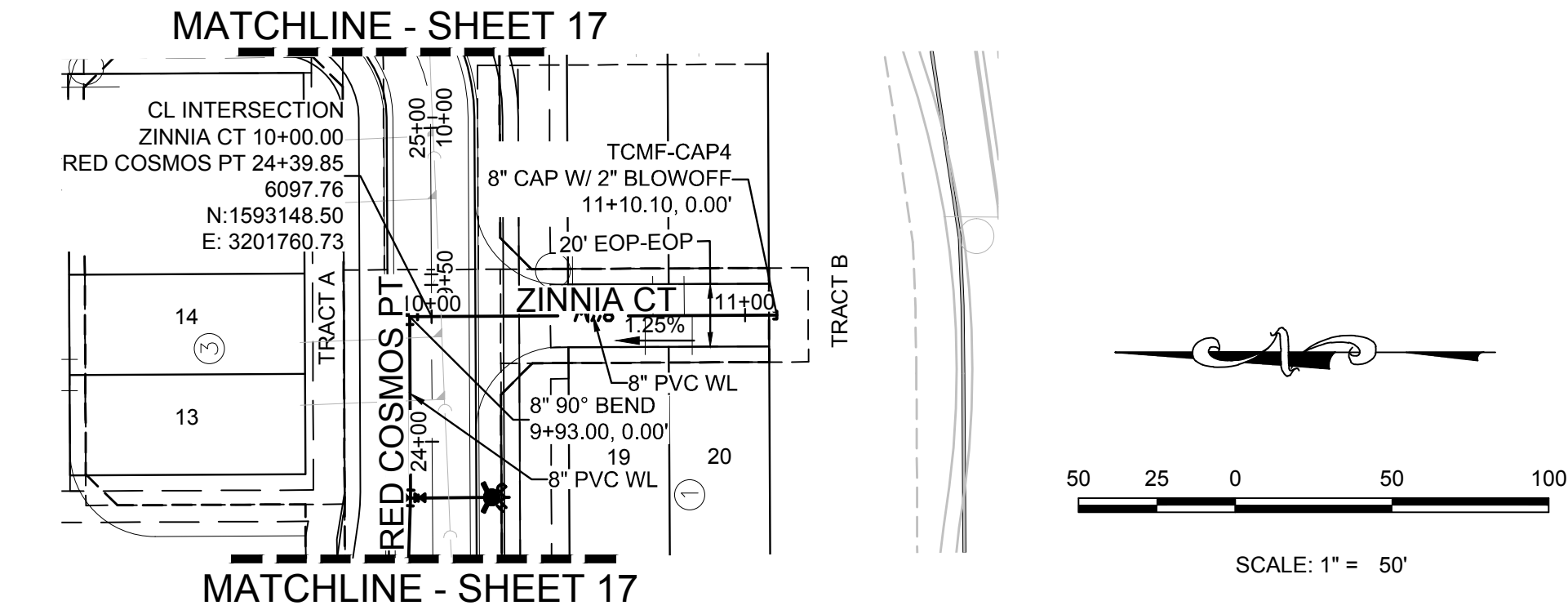
Date

N:\PROJECTS\SSS BANCHADO\ENGINEERING\SSSHEET SETS\MULTIFAMILY\CDSE\FH PARKER WATER AND SANITATION\WATER P&P\ZINNIA CT DWG. RYAN REDO. 7/5/2018 9:42 PM

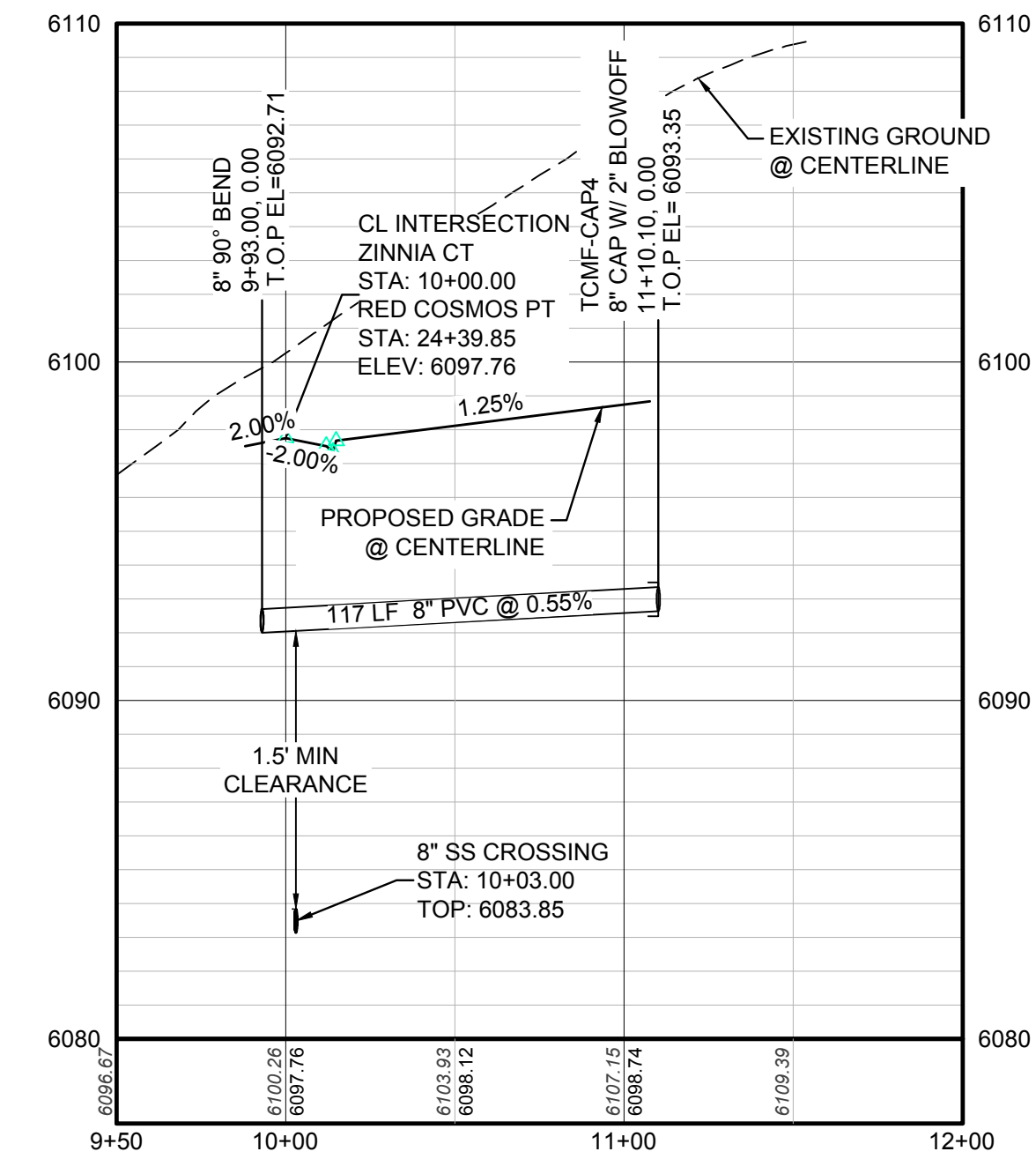


CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO

1-800-922-1987



PLAN: ZINNIA CT STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: ZINNIA CT STA: 9+50.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F14,B1,L19	ZINNIA CT	10+68.10
F14,B1,L20	ZINNIA CT	10+83.10
F14,B1,L21	ZINNIA CT	10+70.60
F14,B1,L22	ZINNIA CT	10+80.60



KEYMAP
N.T.S.

LEGEND

2

A

6

PROPOSED BUTTERFLY VALVE

PROPOSED CAP WITH END OF LINE BLOWOFF

PROPOSED REDUCER

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED WL FITTING WITH THRUST BLOCK

PROPOSED FLARED END SECTION

PROPOSED LOW POINT BLOW-OFF

PROPOSED AIR VALVE

FUTURE PHASE VALVE

FUTURE FIRE HYDRANT

PROPOSED LIGHT POLE

PROPOSED SIDEWALK

PROPOSED SIDEWALK RAMP

10.00

EXISTING ELEVATION

10.00

PROPOSED DESIGN ELEVATION

PROPOSED STORM DRAIN INLET

PROPOSED STORM DRAIN MANHOLE

4

5

6

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

PROPOSED DIRECTION OF FLOW

PROPOSED SLOPE & DIRECTION

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

EXISTING FIBER OPTIC LINE

EXISTING OVERHEAD POWER

EXISTING TELEPHONE LINE

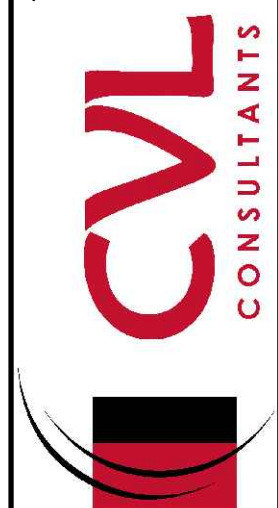
ABBREVIATIONS

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	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

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

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



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 14 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
ZINNIA COURT

SCALE:
AS SHOWN

DRAWN BY:
KJD

CHECKED BY:
BPW

DATE:
JUNE 2018

FILE NO:
8130283701

SHEET NUMBER
18

Revisions
No. Date Init. Appr. Date

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
3. 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.
4. 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.
5. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
6. LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
7. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

INSTALLATION NOTES:

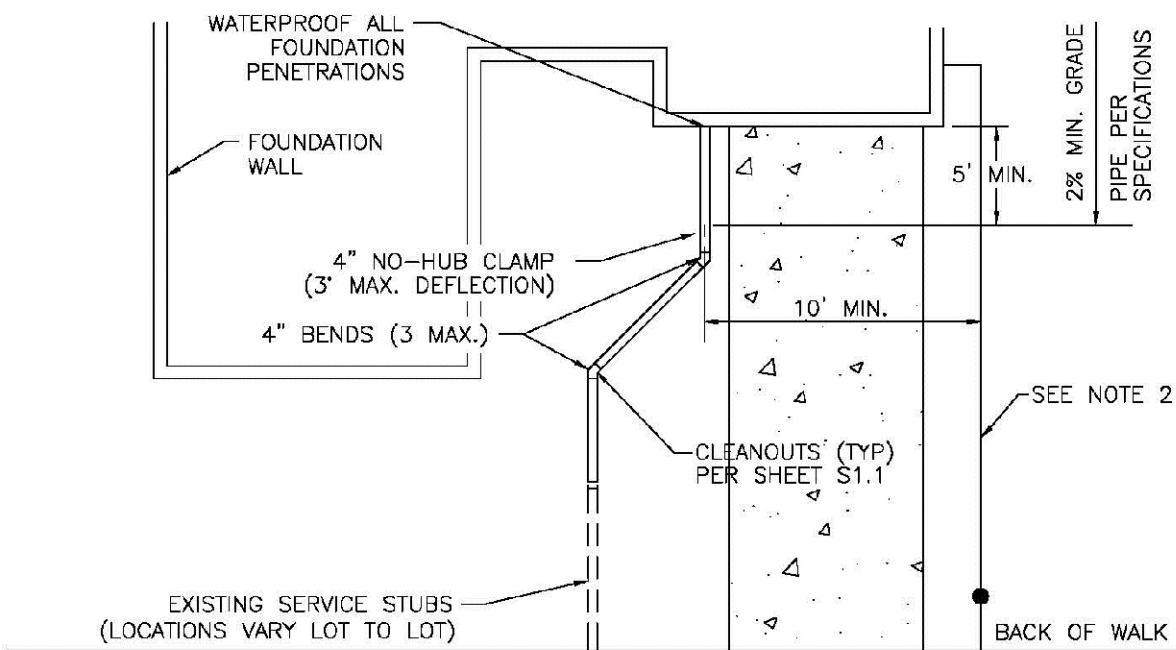
SEWER

1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3°.
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS AND EVERY CHANGE IN DIRECTION. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100' UNLESS THERE ARE CHANGES IN DIRECTION. PROVIDE DUAL CLEAN-OUT WITHIN 5 FEET OF FOUNDATION.
6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
8. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"V" FOR WATER SERVICES

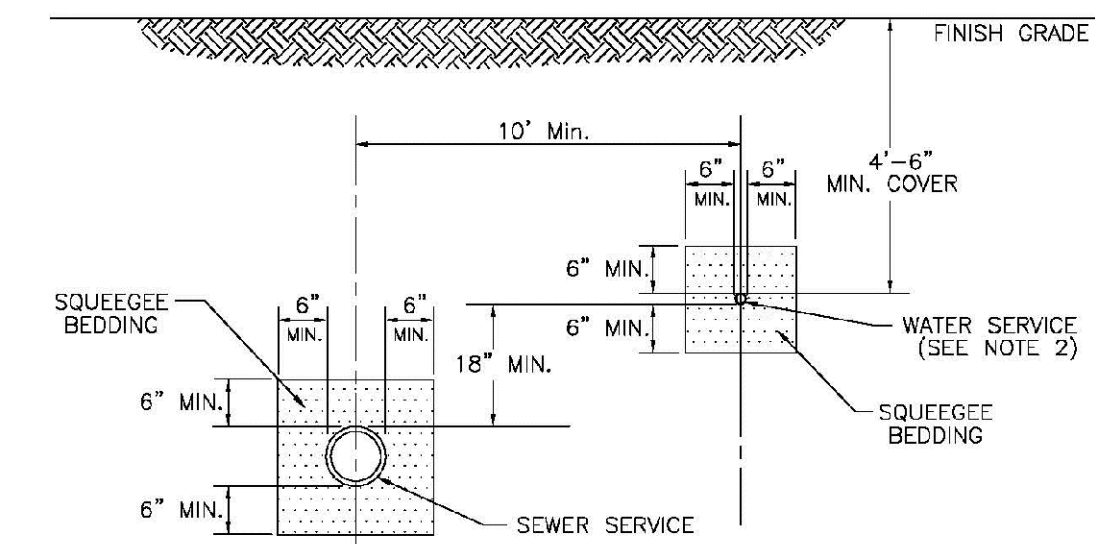
PARKER WATER & SANITATION DISTRICT	
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 10/16
DIRECTOR OF ENGINEERING	01/08 1/16

2016 REVISION

SHEET 51.1



TYPICAL SERVICES PLAN VIEW



TYPICAL SERVICES SECTION

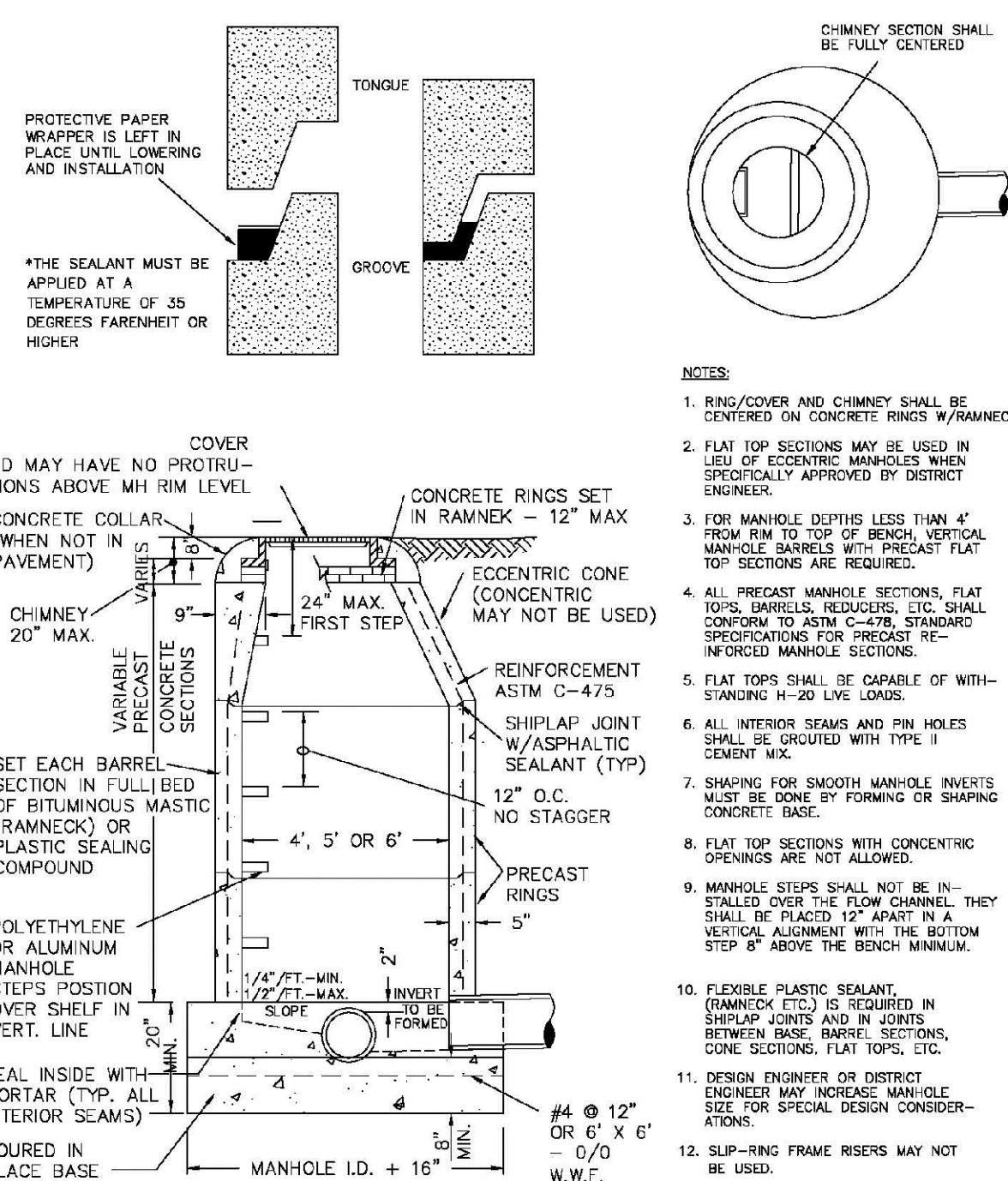
- NOTE:
1. SEE SHEET 51.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
 2. TYPICAL WATER SERVICES SHOWN ON SHEET W1.2 IN WATER DETAILS.

2016 REVISION

SHEET 51.2

PARKER WATER & SANITATION DISTRICT	
TYPICAL SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 01/02 01/16 10/16
DIRECTOR OF ENGINEERING	

SHEET 51.2



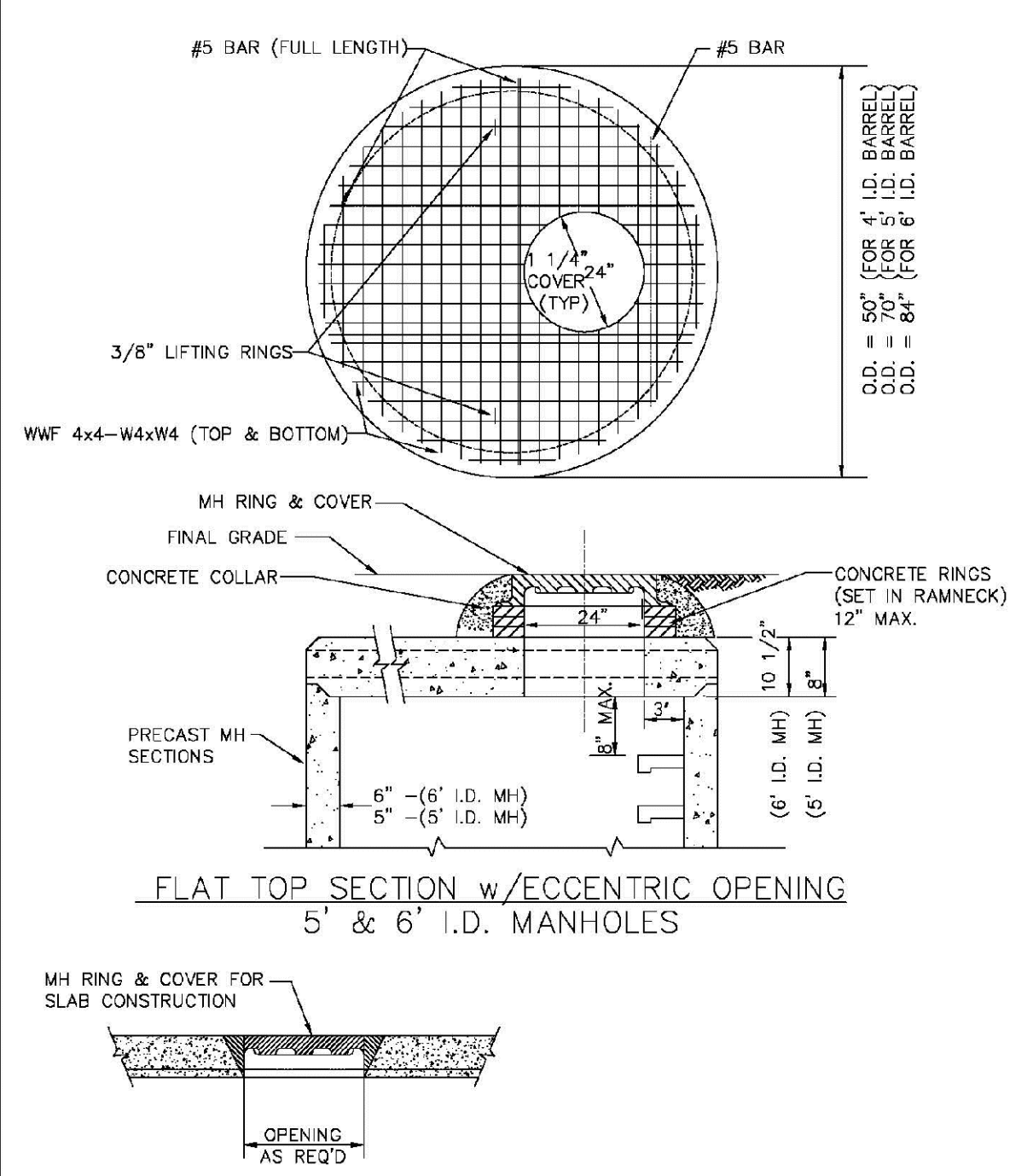
PARKER WATER & SANITATION DISTRICT
PARKER MANHOLE
ECCENTRIC CONE

SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 10/16 01/02 1/08 1/16
DIRECTOR OF ENGINEERING	

SHEET 53.1

PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

2016 REVISION

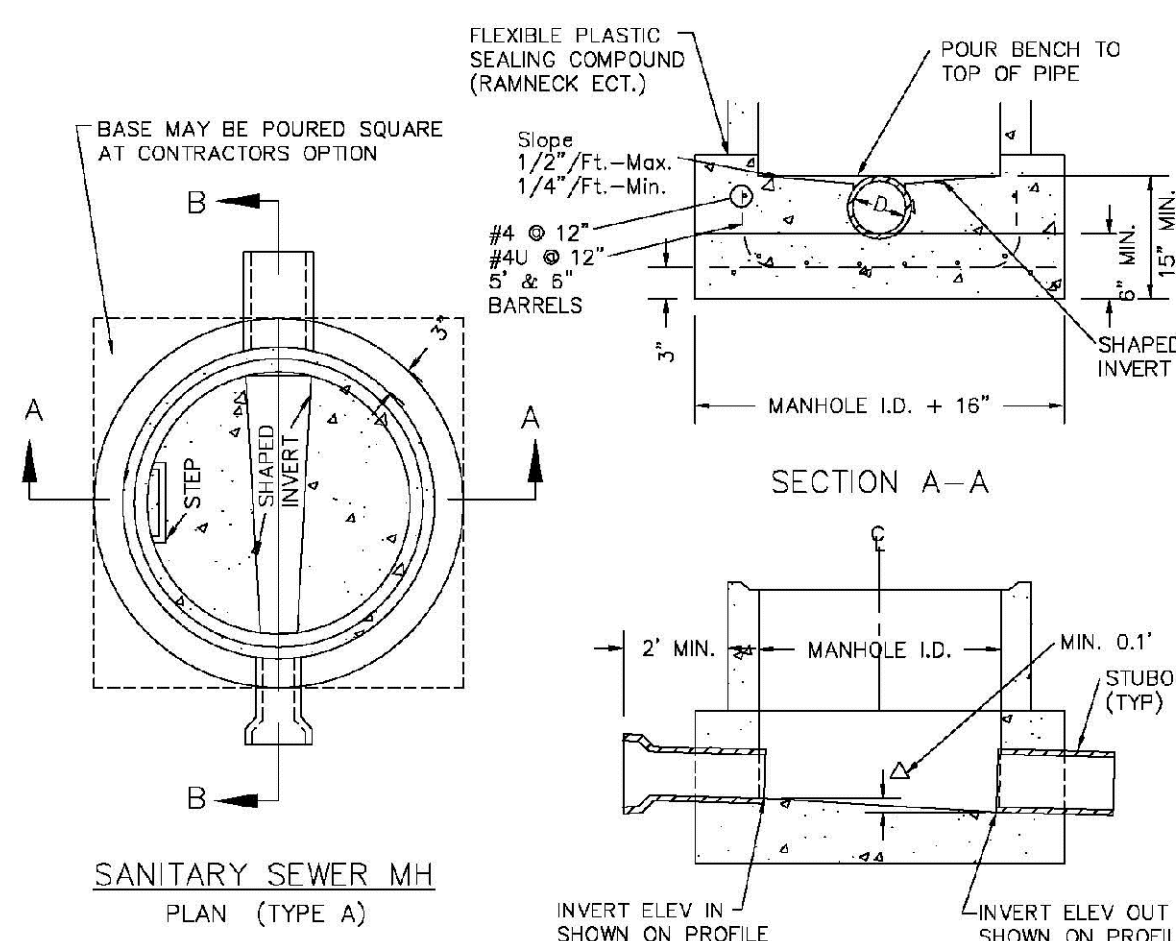


PARKER WATER & SANITATION DISTRICT
PRECAST MANHOLE - 5' & 6' I.D.
WITH ECCENTRIC CONE

SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 10/16
DIRECTOR OF ENGINEERING	

SHEET 53.3

2016 REVISION

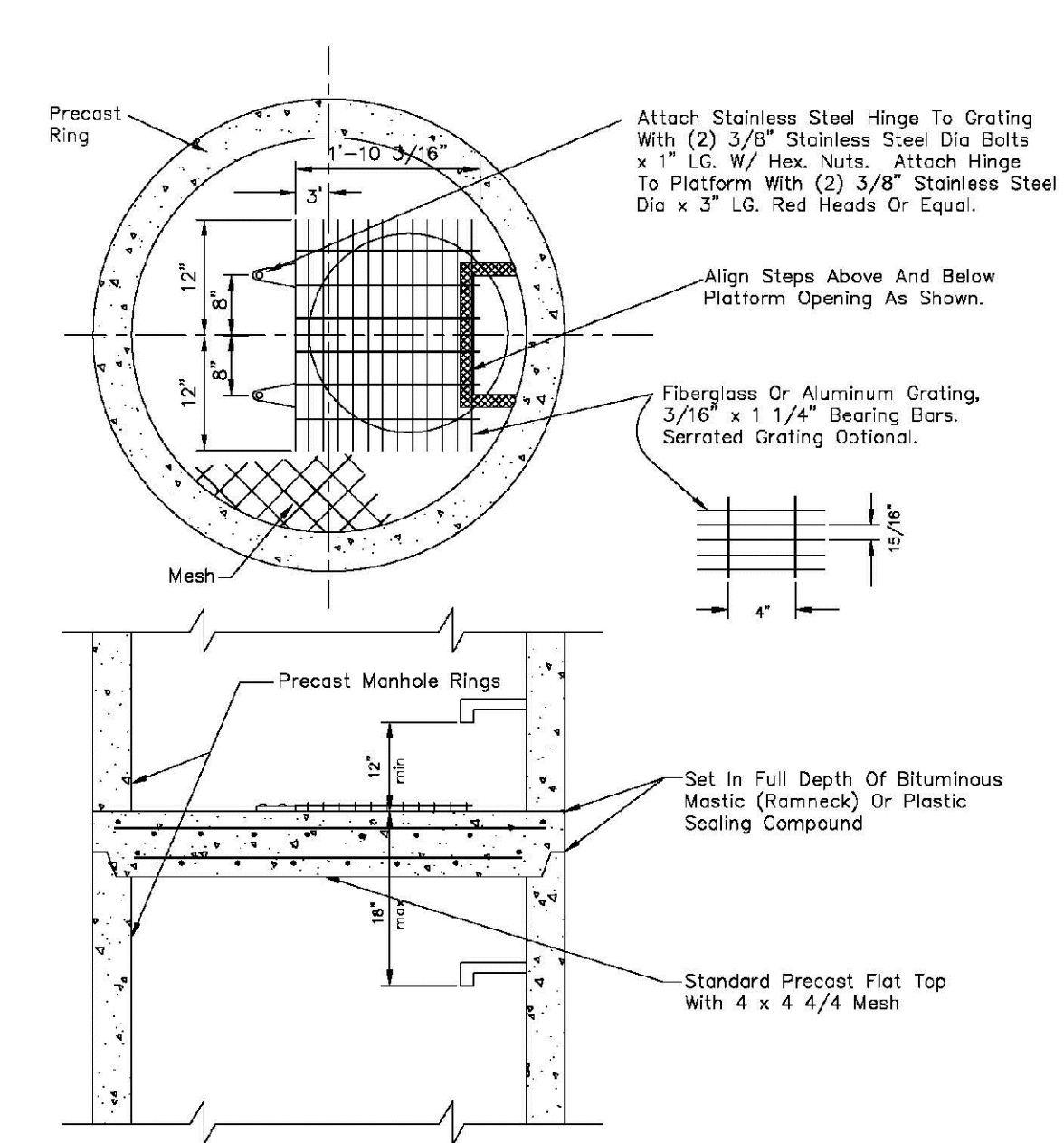


- NOTES:
1. Manhole barrel min. thickness to be 5".
 2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
 3. The manhole steps shall conform to District Standards and Specifications.
 4. Precast sections to conform to A.S.T.M. C-478.
 5. All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
 6. Stub outs shall extend 2'-0" minimum past manhole O.D. and be satisfactorily plugged.
 7. Reinforcing in base required for manhole.
 8. Slope of bench = 1/2"/FT.-Max. 1/4"/FT.-Min.
 9. Δ = invert drop thru MH (if Δ > 18", outside drop MH required). Min. 0.1" for all straight through MH and 0.2" for all angled MH.

PARKER WATER & SANITATION DISTRICT	
CAST-IN-PLACE MANHOLE BASE DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET 53.5

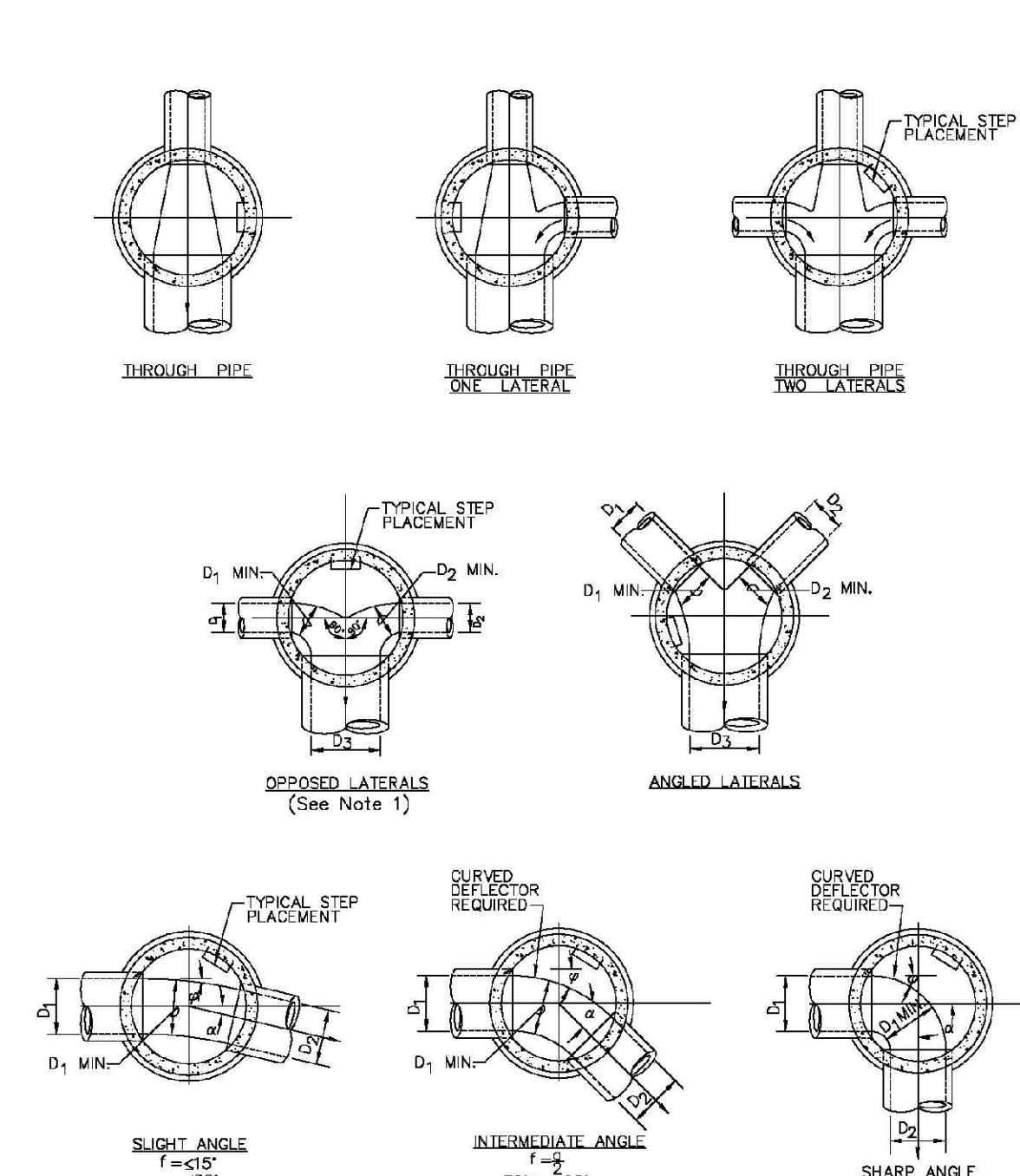


- NOTES:
- 1.1 Maximum distance between platforms shall be 15' vertically.
 - 1.2 All hardware used inside a manhole shall be stainless steel.
 - 1.3 Manholes over 20' deep shall submit structural calculations on base and wall sizing.

PARKER WATER & SANITATION DISTRICT	
INTERMEDIATE PLATFORM FOR MANHOLES OVER 20' DEPTH	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET 53.6

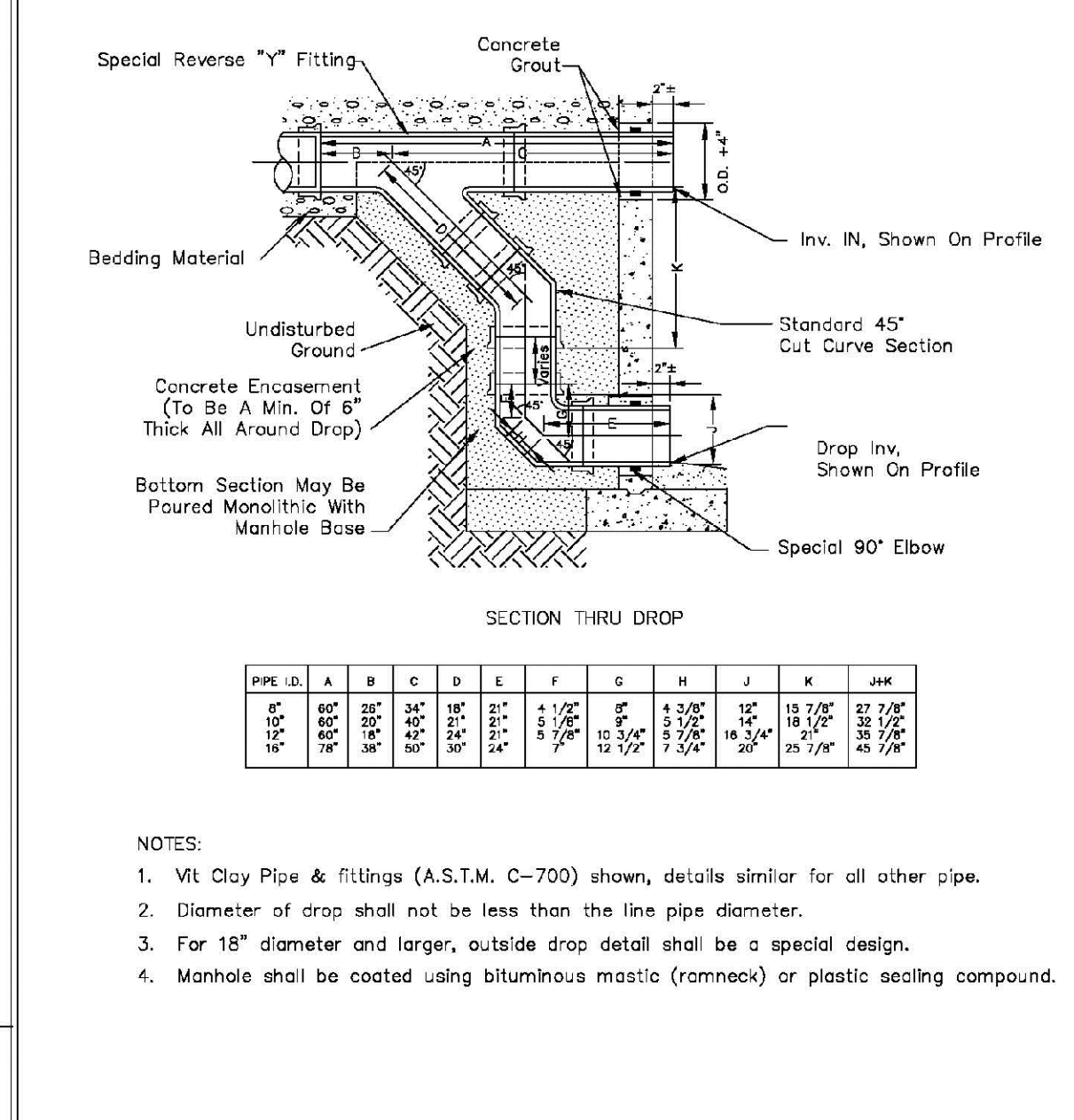


PARKER WATER & SANITATION DISTRICT
TYPICAL BASE
CHANNELIZATION DETAILS

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

SHEET 53.7

2016 REVISION

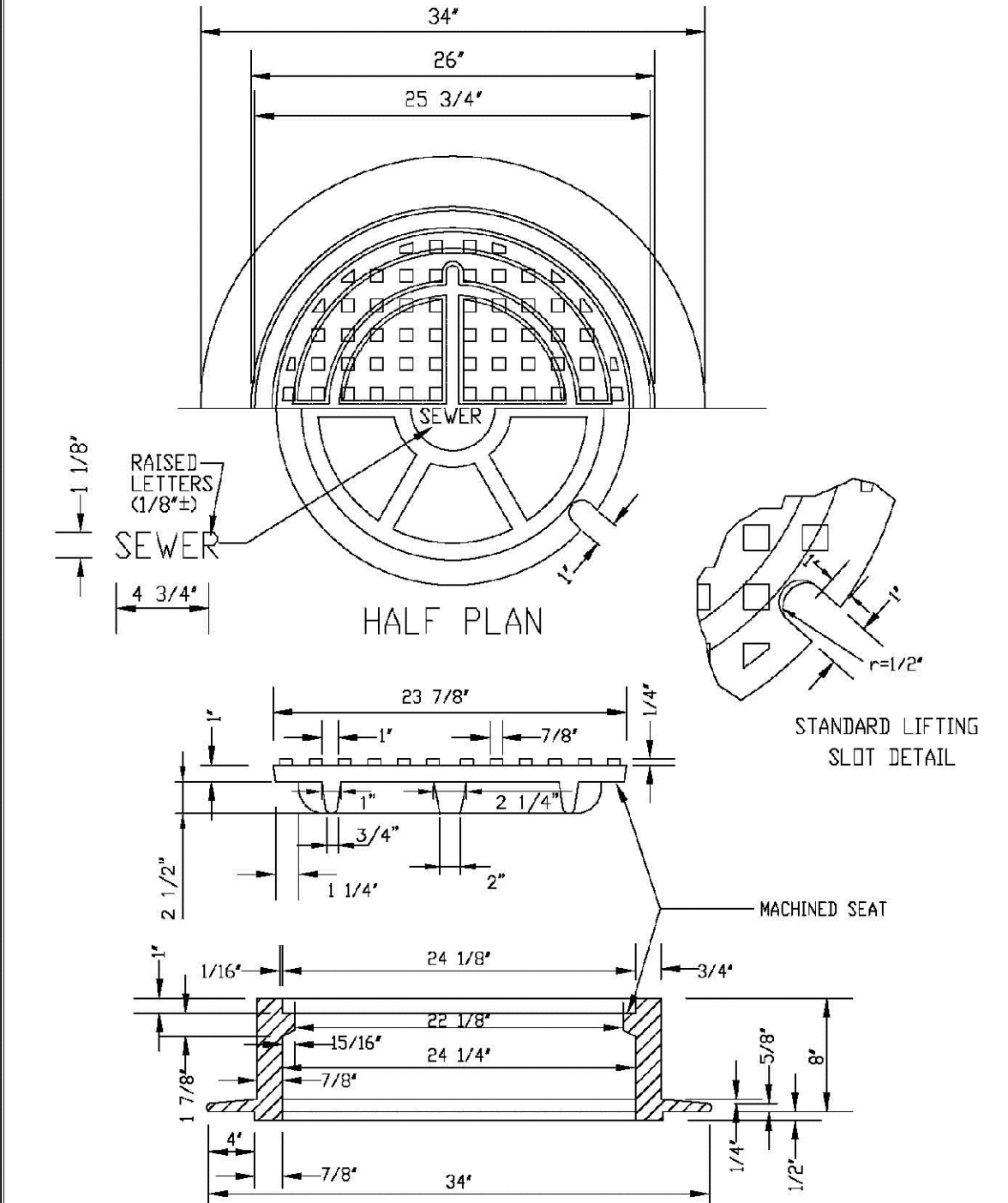


PARKER WATER & SANITATION DISTRICT
OUTSIDE DROP MANHOLE
CONSTRUCTION

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

SHEET 53.8

2016 REVISION

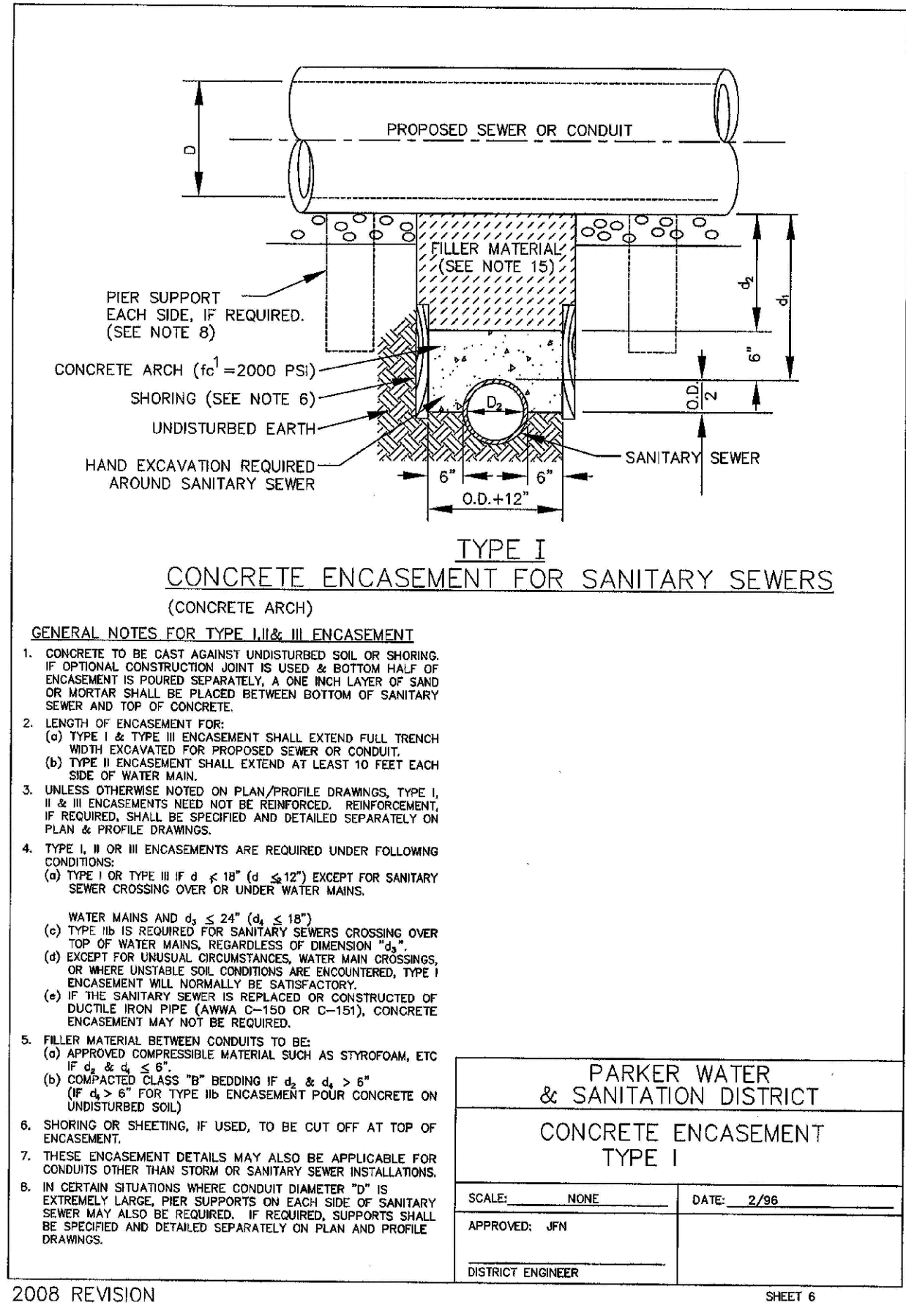
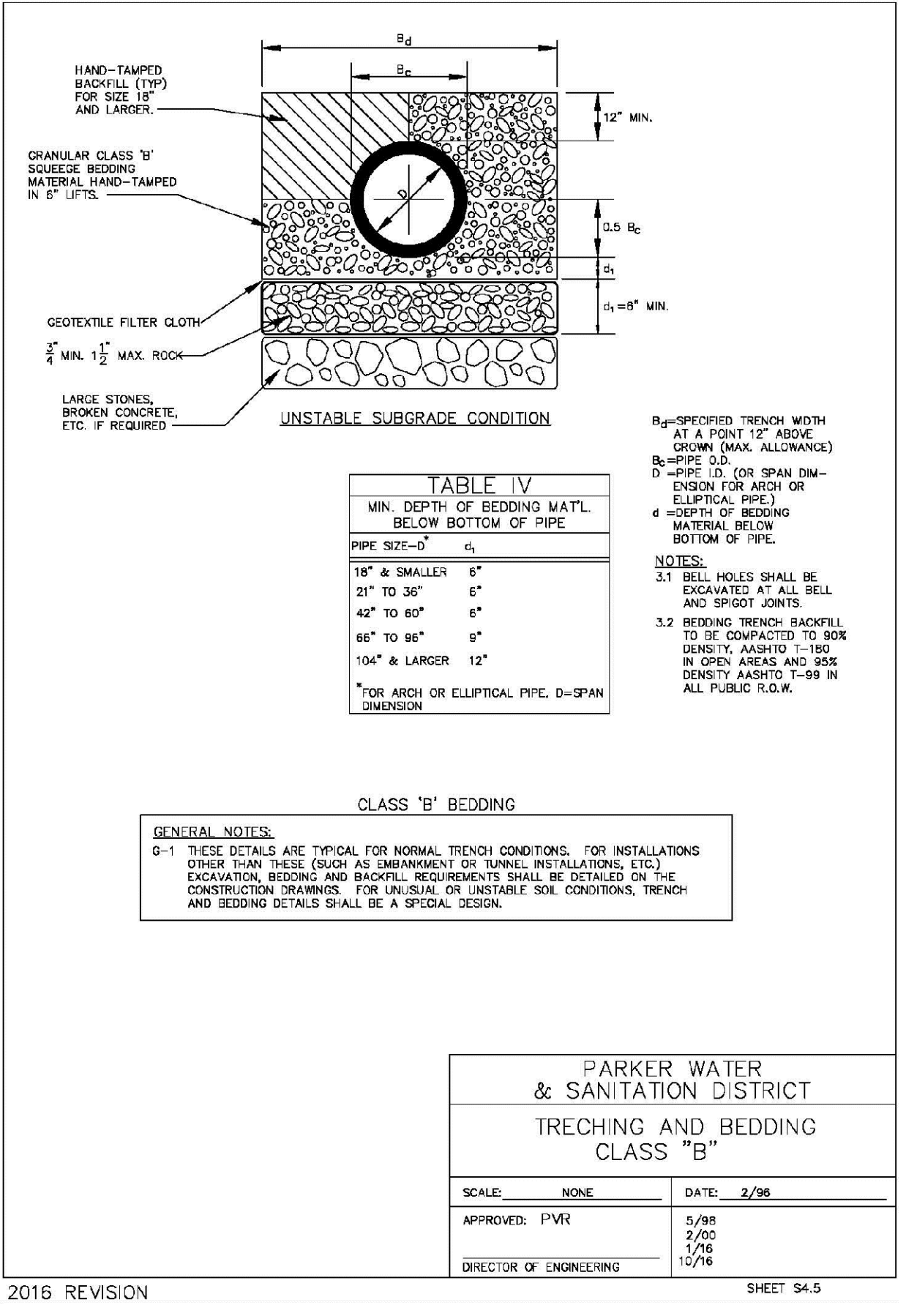
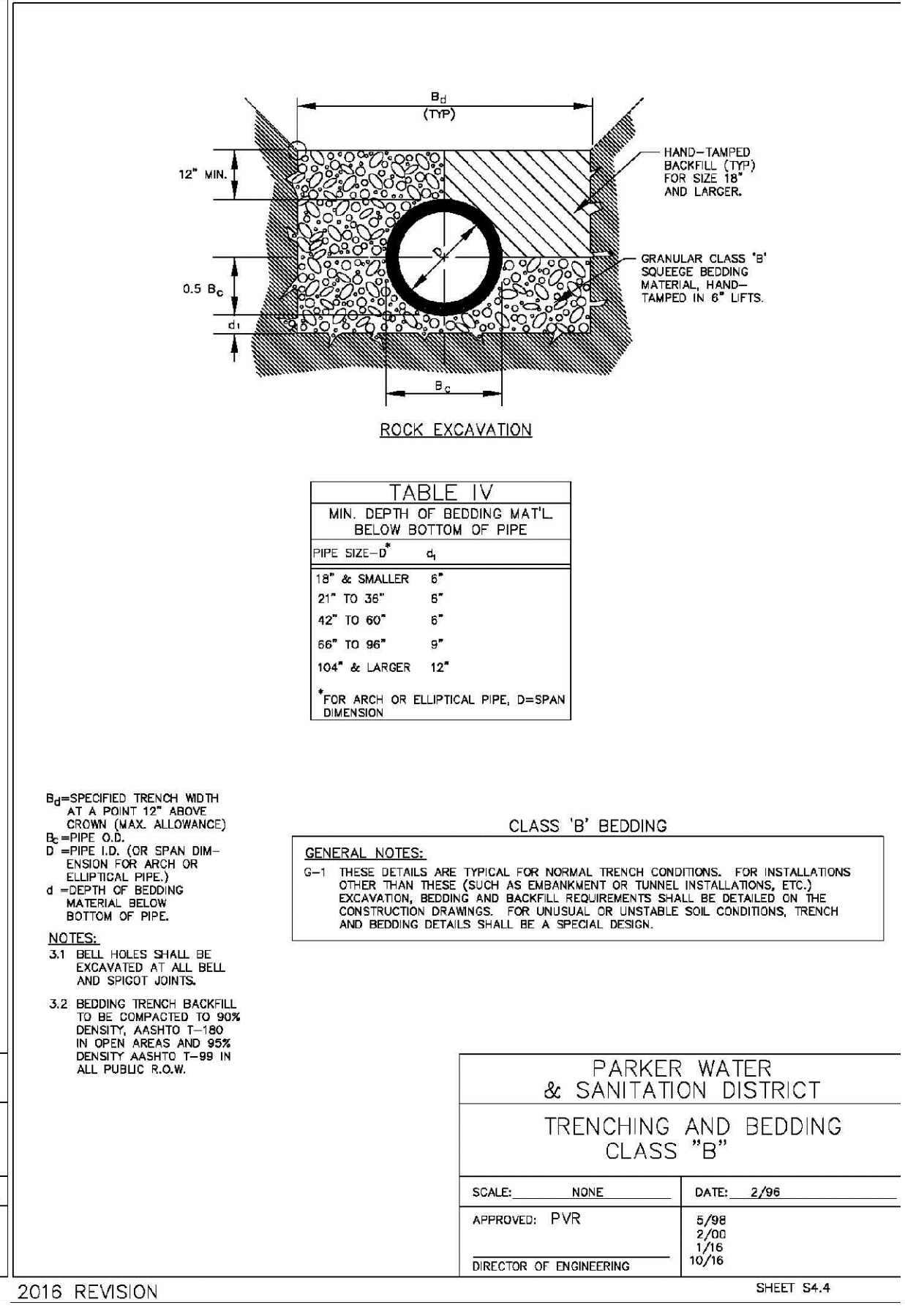
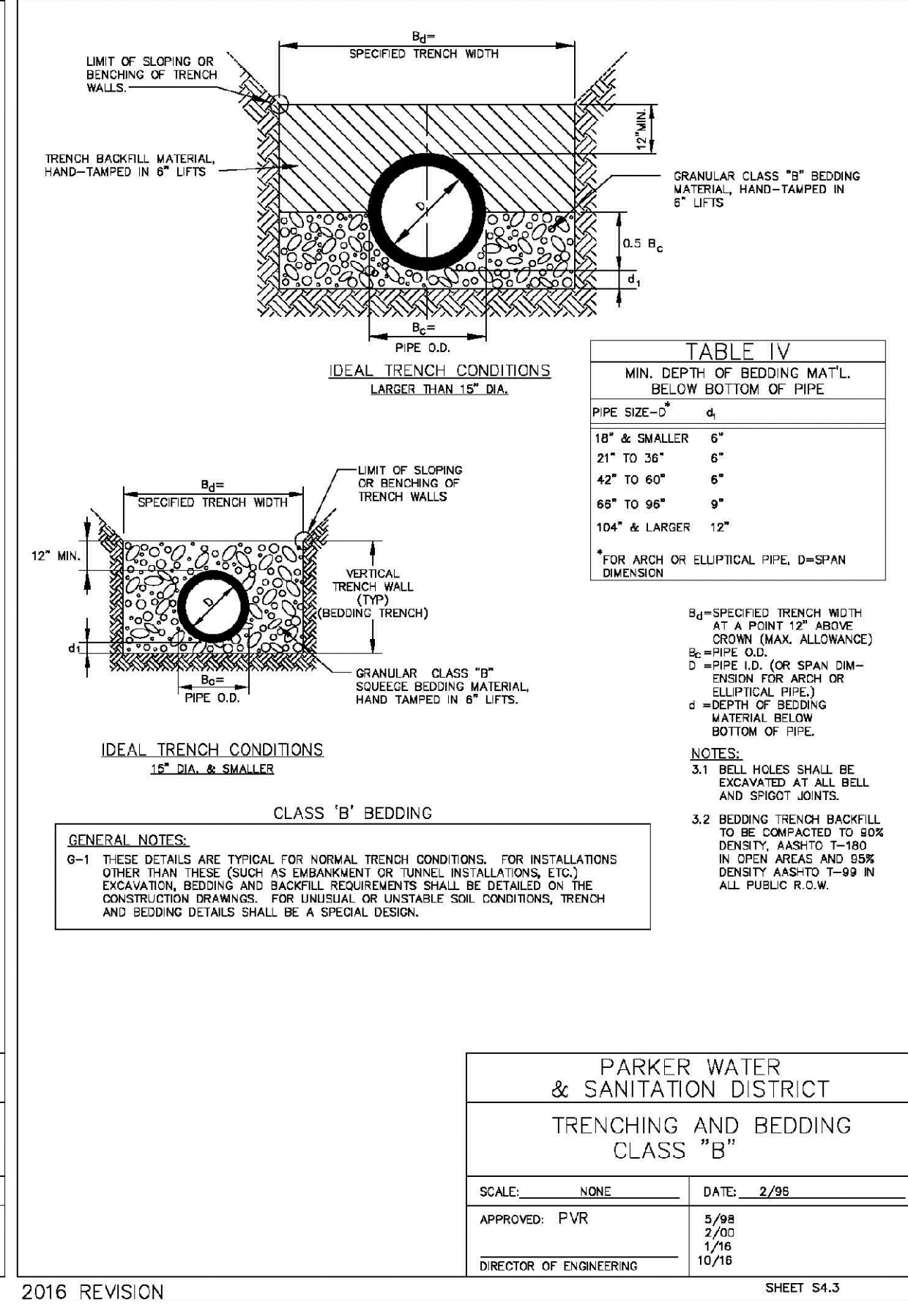
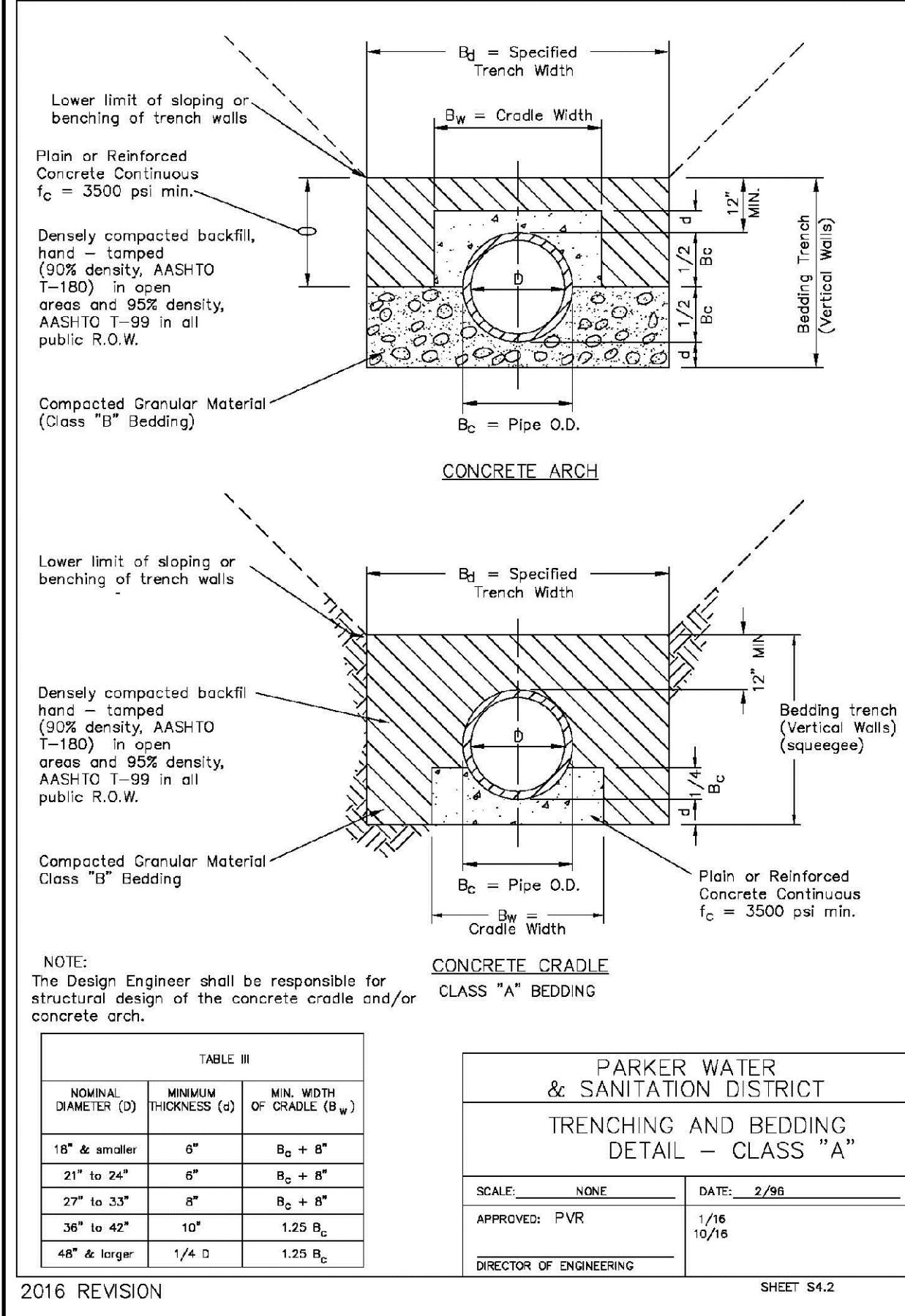
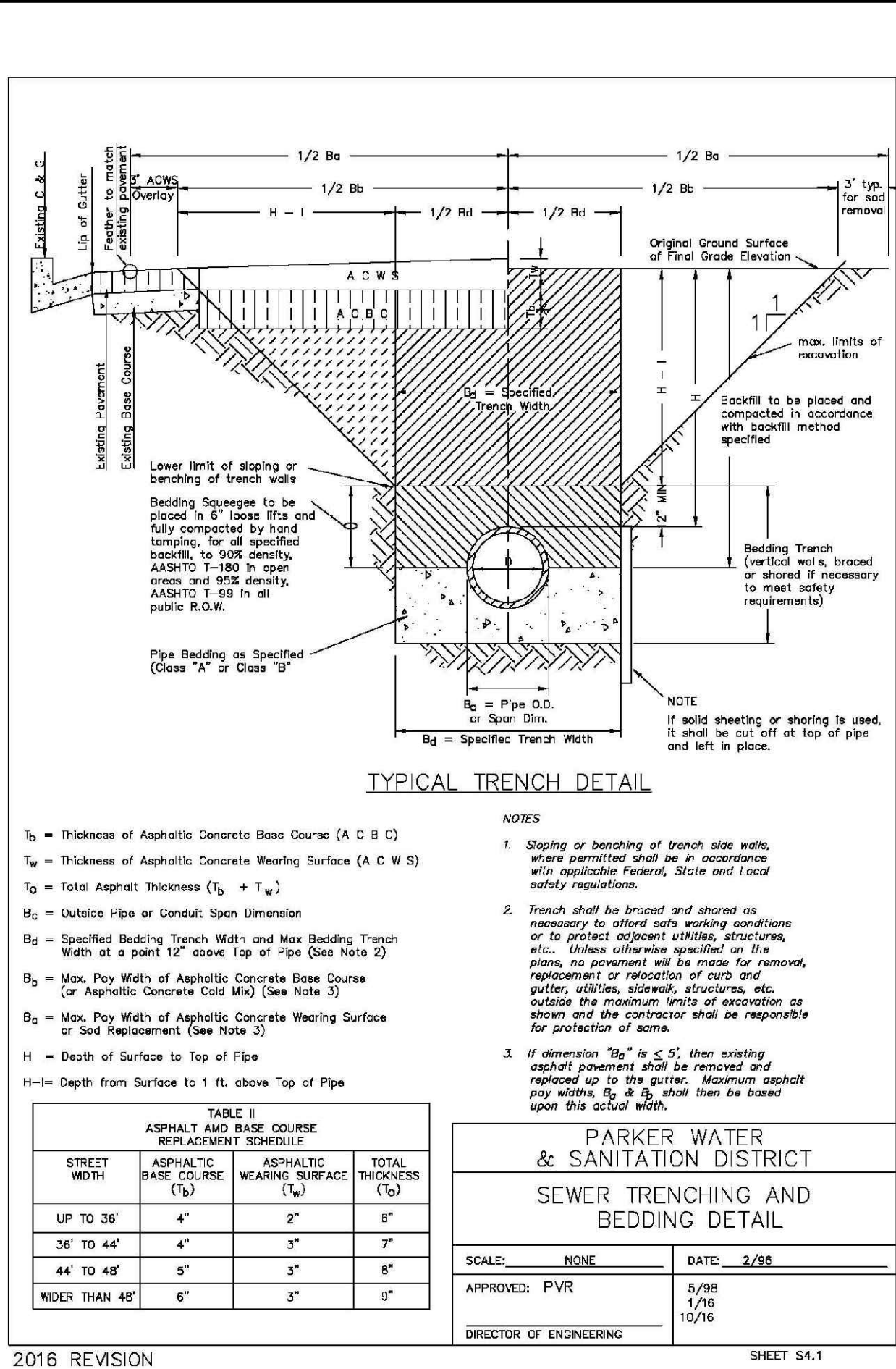
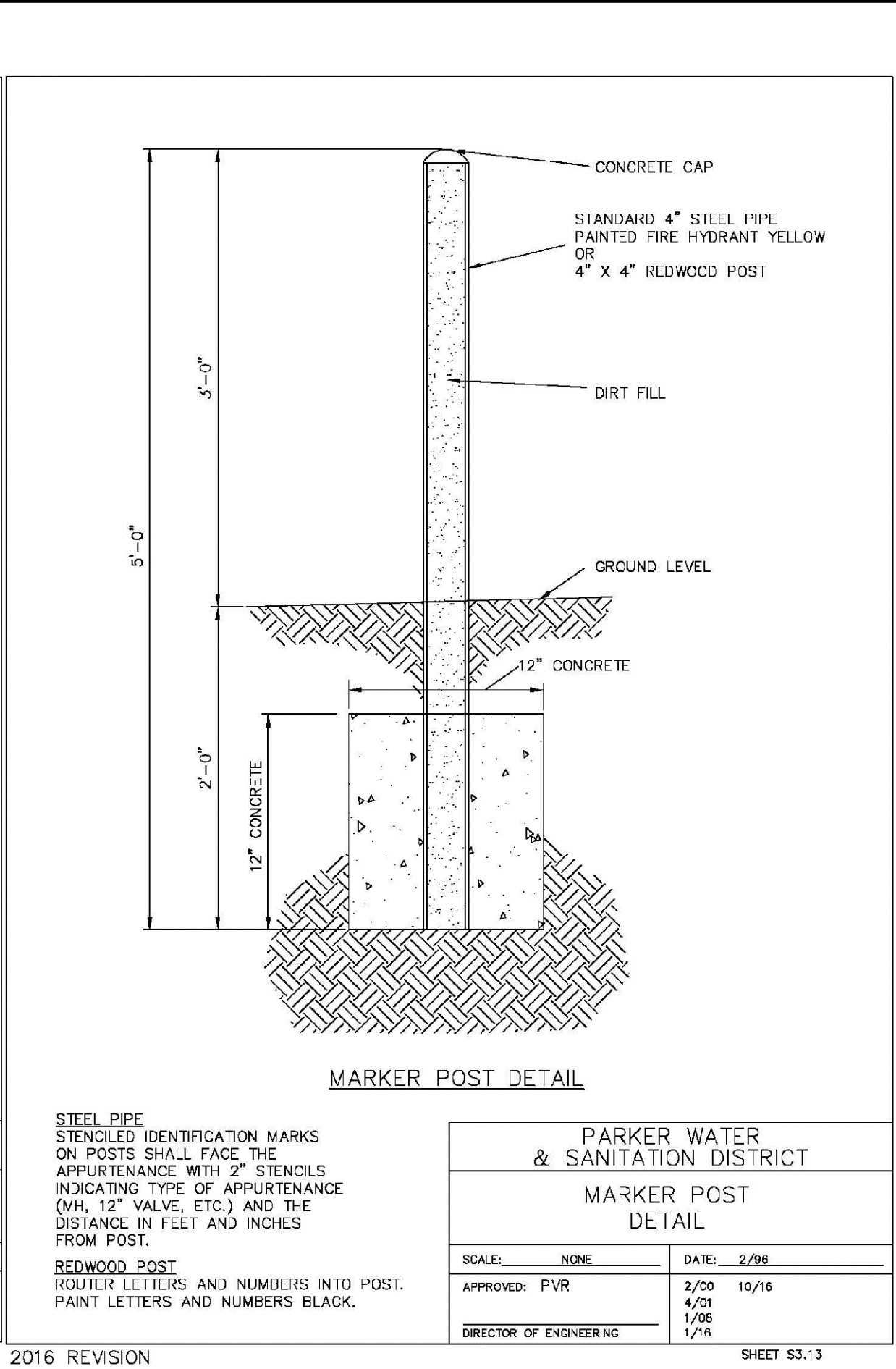
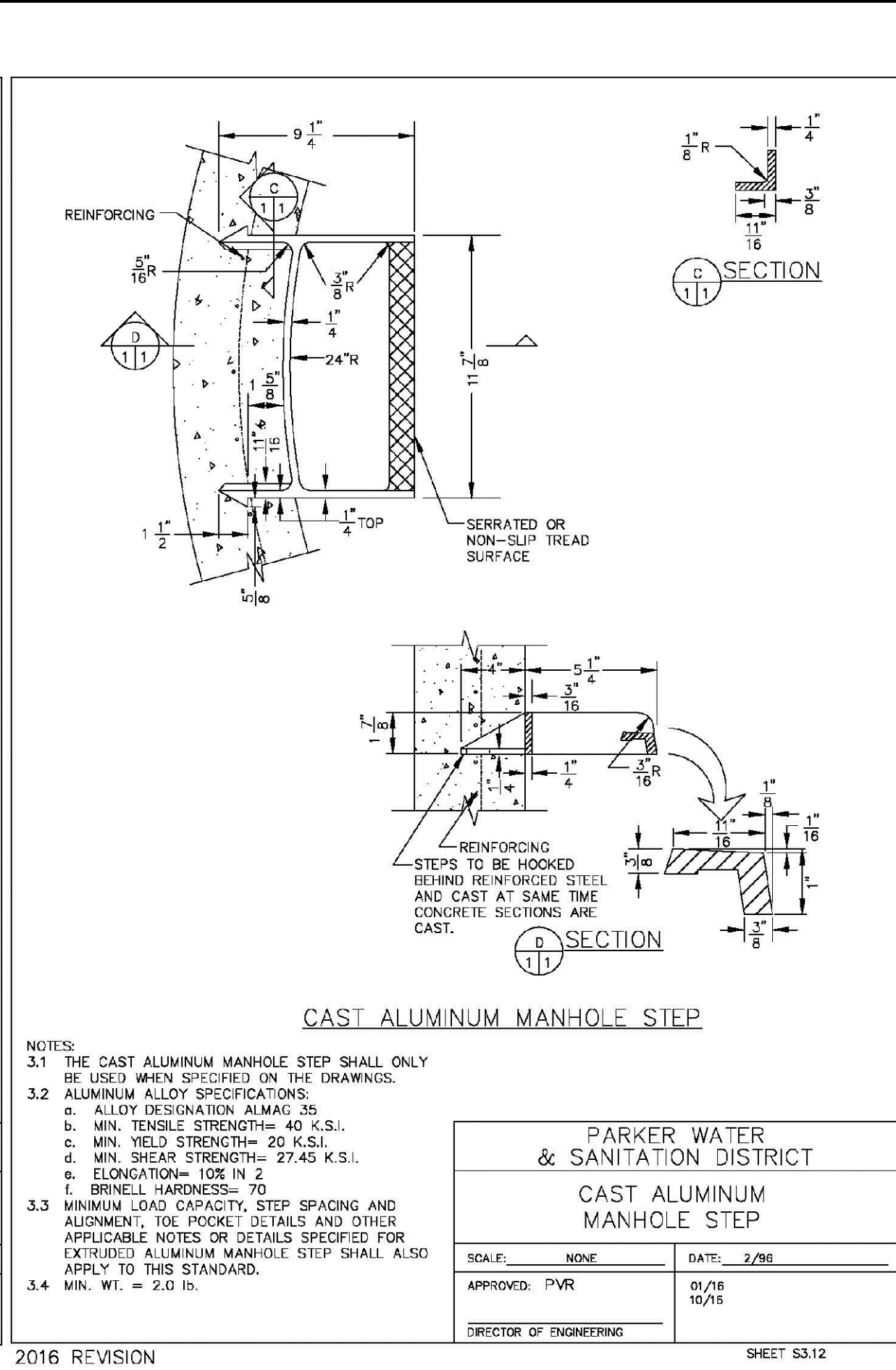
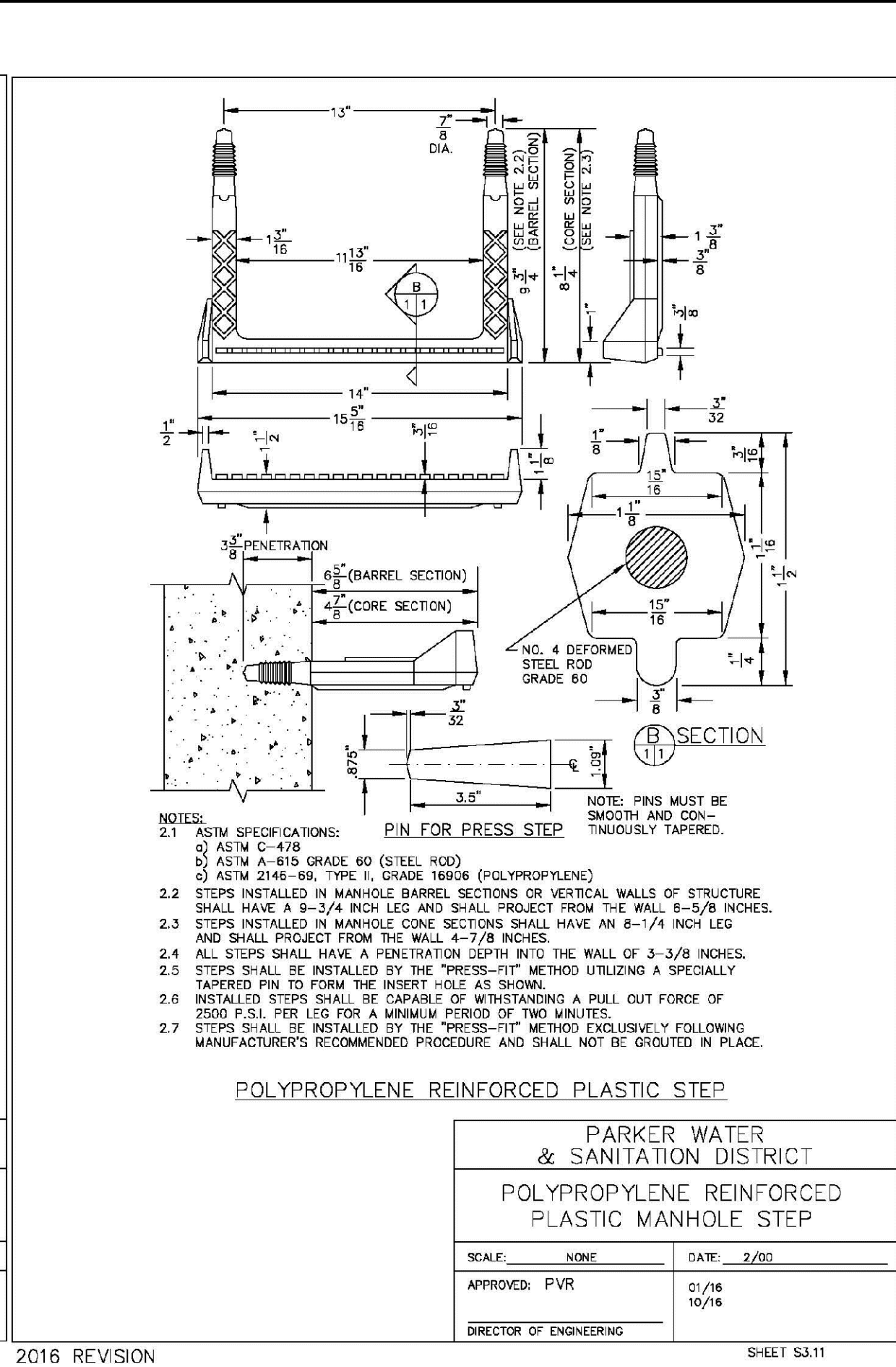
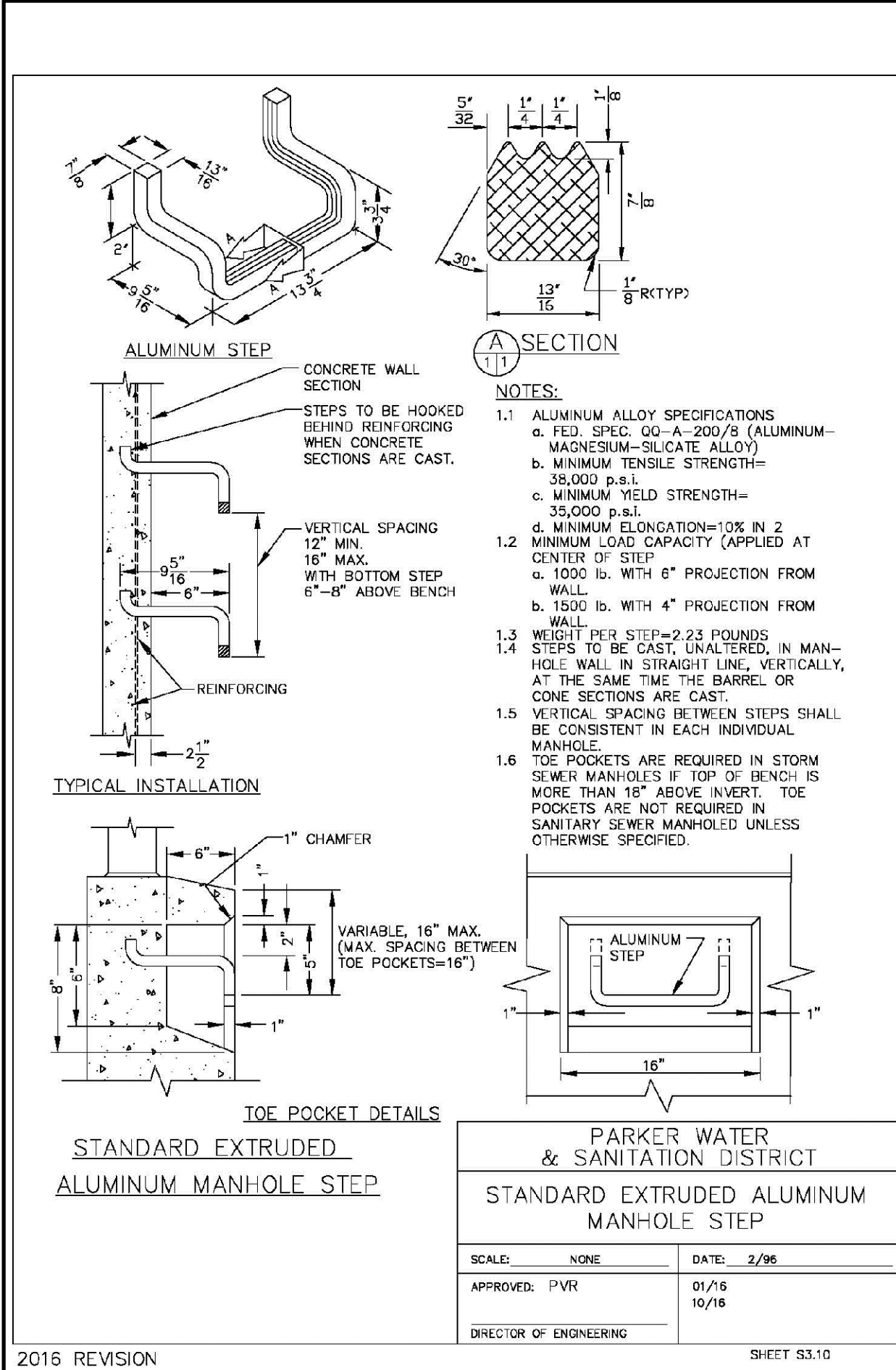


PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING
AND COVER

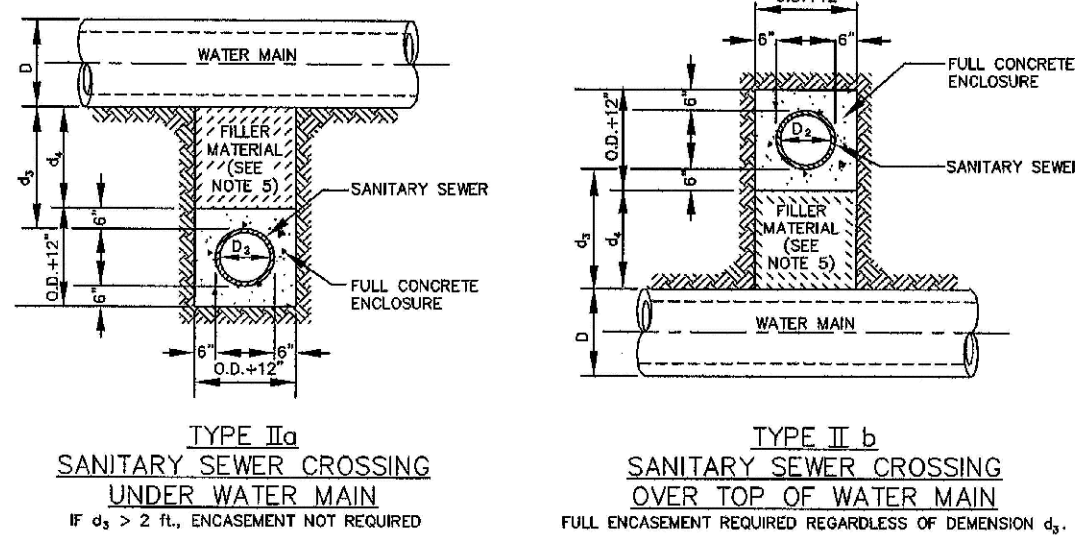
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	

SHEET 53.9

2016 REVISION



N:\PROJECTS\BISHOP\BISHOP\ENGINEERING\DRAWINGS\SET\MULTIFAMILY\CD\SF\HAPARKER WATER AND SANITATION\SANITARY SEWER DETAILS.DWG, CDDVA, 7/6/2016 6:42 PM



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

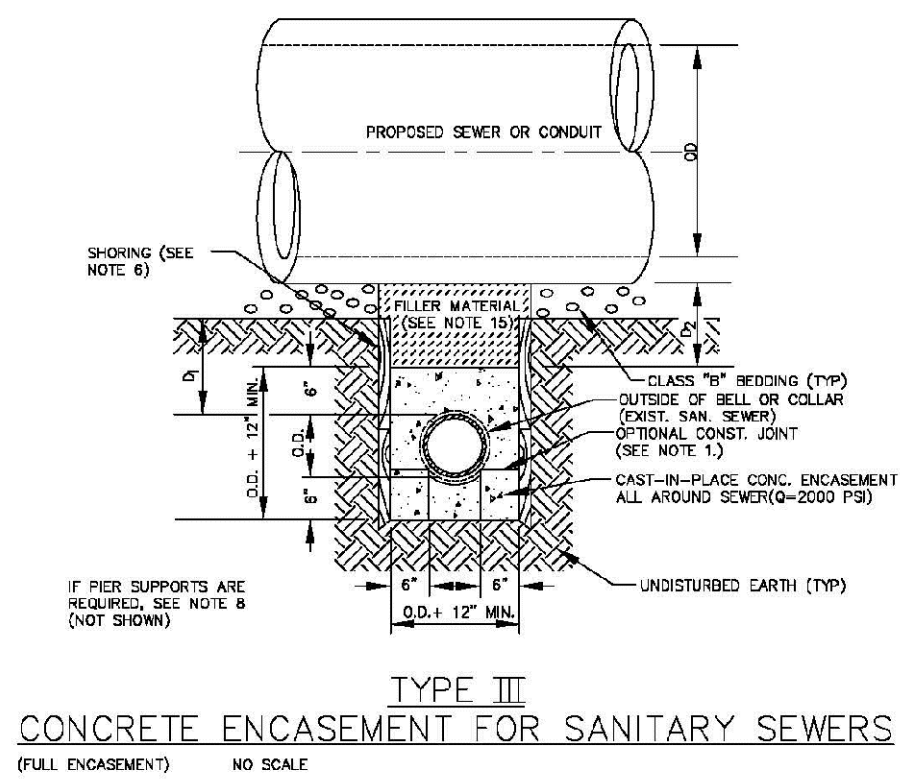
GENERAL NOTES FOR TYPE IIa & IIb ENCASEMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED & BOTTOM HALF OF ENCASEMENT 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 ENCASEMENT FOR:
(a) TYPE I & II ENCASEMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
(b) TYPE II ENCASEMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASEMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
(a) TYPE I OR TYPE II IF $d_1 \leq 18"$ ($d_1 \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
(b) TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIAMETER d_1 .
(c) EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASEMENT WILL NORMALLY BE SATISFACTORY.
(d) IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASEMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
(a) APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_1 \leq 4"$ & $d_2 \leq 4"$.
(b) COMPACTED CLASS "B" BEDDING IF $d_1 \leq 4"$ & $d_2 \leq 4"$.
(c) IF $d_1 > 4"$ FOR TYPE II ENCASEMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.
- THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT	
TYPE II	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	5/98 4/01 1/08
DISTRICT ENGINEER	

2008 REVISION

SHEET 7



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

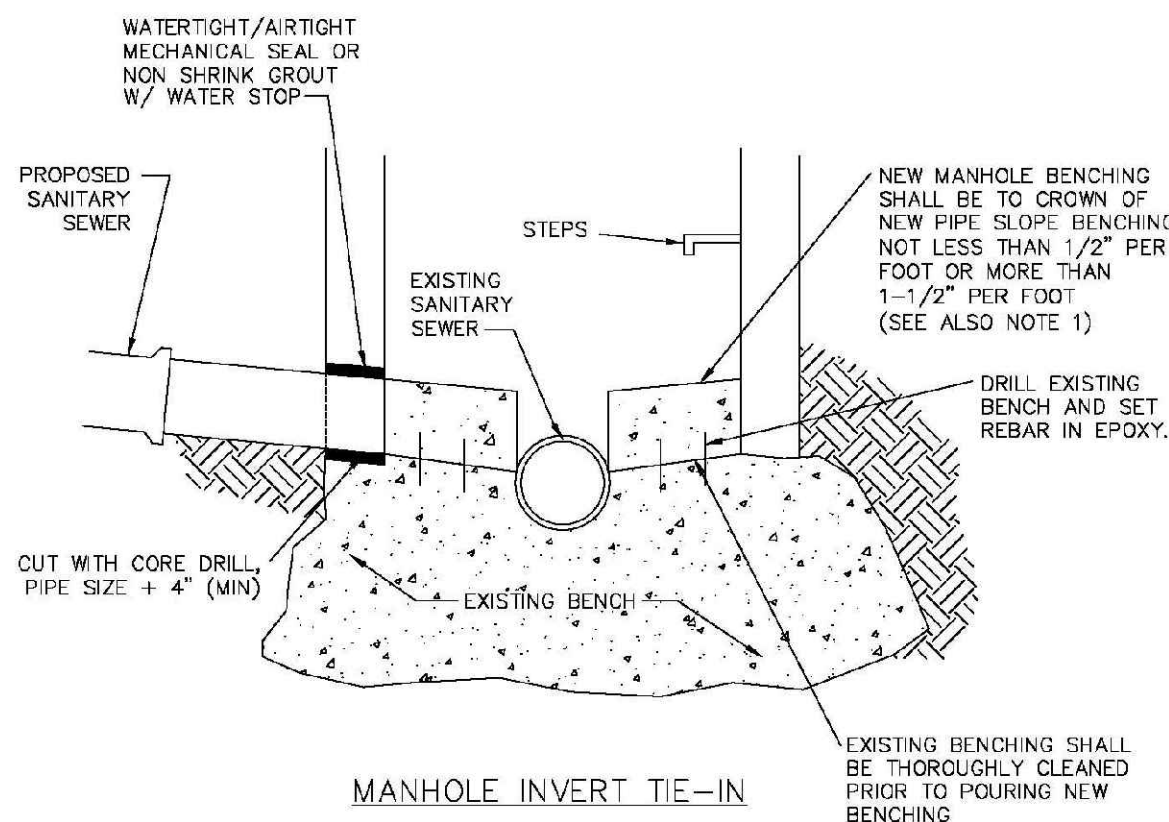
GENERAL NOTES FOR TYPE III ENCASEMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED & BOTTOM HALF OF ENCASEMENT 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 ENCASEMENT FOR:
(a) TYPE I & TYPE II ENCASEMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
(b) TYPE II ENCASEMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASEMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, TO BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
(a) TYPE I OR TYPE II IF $d_1 \leq 18"$ ($d_1 \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
(b) TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIAMETER d_1 .
(c) EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASEMENT WILL NORMALLY BE SATISFACTORY.
(d) IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASEMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
(a) APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_1 \leq 4"$ & $d_2 \leq 4"$.
(b) COMPACTED CLASS "B" BEDDING IF $d_1 \leq 4"$ & $d_2 \leq 4"$.
(c) IF $d_1 > 4"$ FOR TYPE II ENCASEMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.
- THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.
- CONCRETE ENCASED PIPING SHALL BE LINED WITH FELT LAYER.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT	
TYPE III	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	5/98 1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S4.8

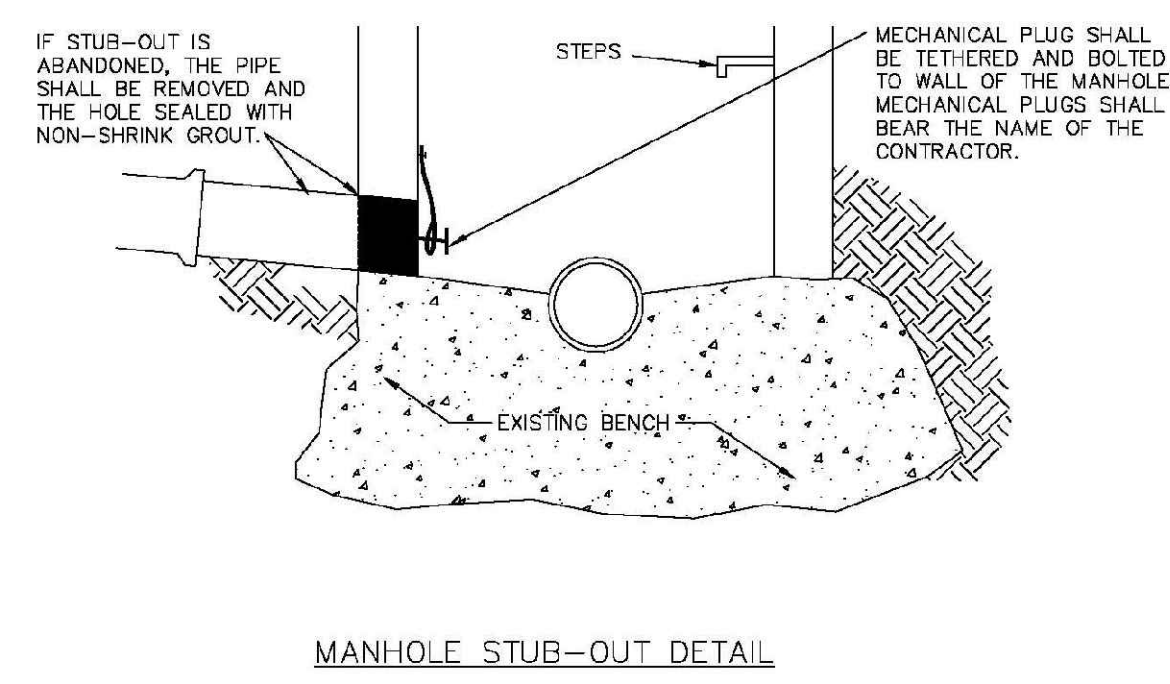


- NOTES
- NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

PARKER WATER & SANITATION DISTRICT	
MANHOLE INVERT	
TIE-IN DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

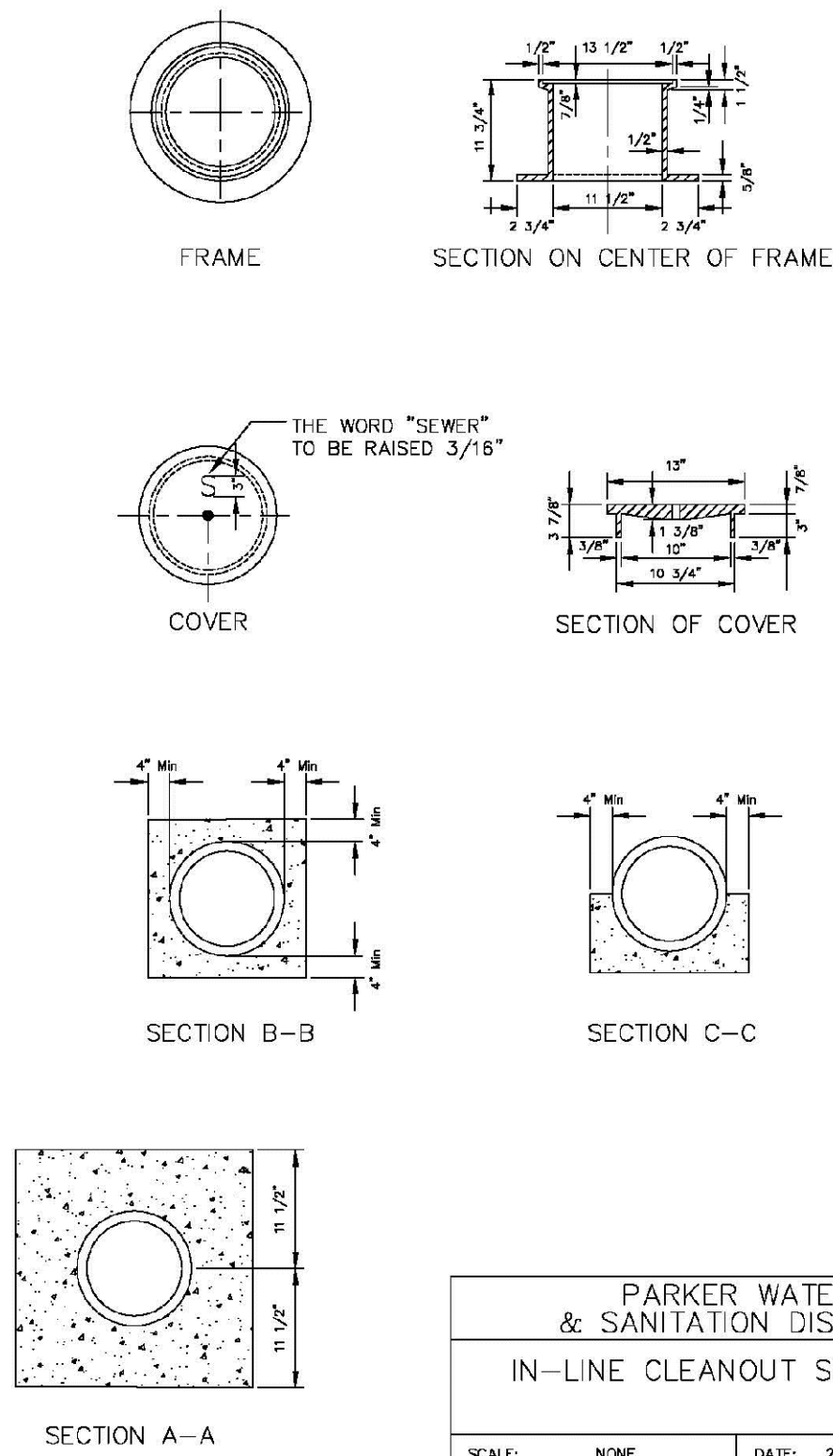
SHEET S4.9



PARKER WATER & SANITATION DISTRICT	
MANHOLE STUB-OUT	
DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

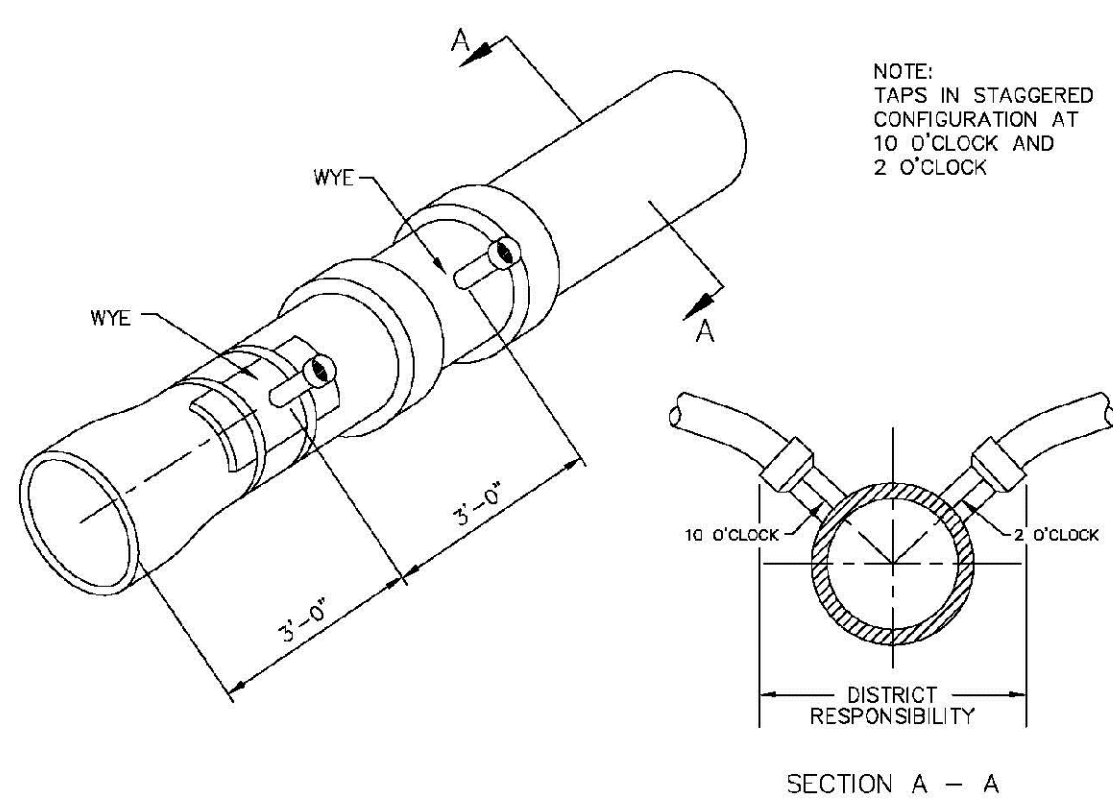
SHEET S4.10



PARKER WATER & SANITATION DISTRICT	
IN-LINE CLEANOUT SECTIONS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 1/98 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S4.12



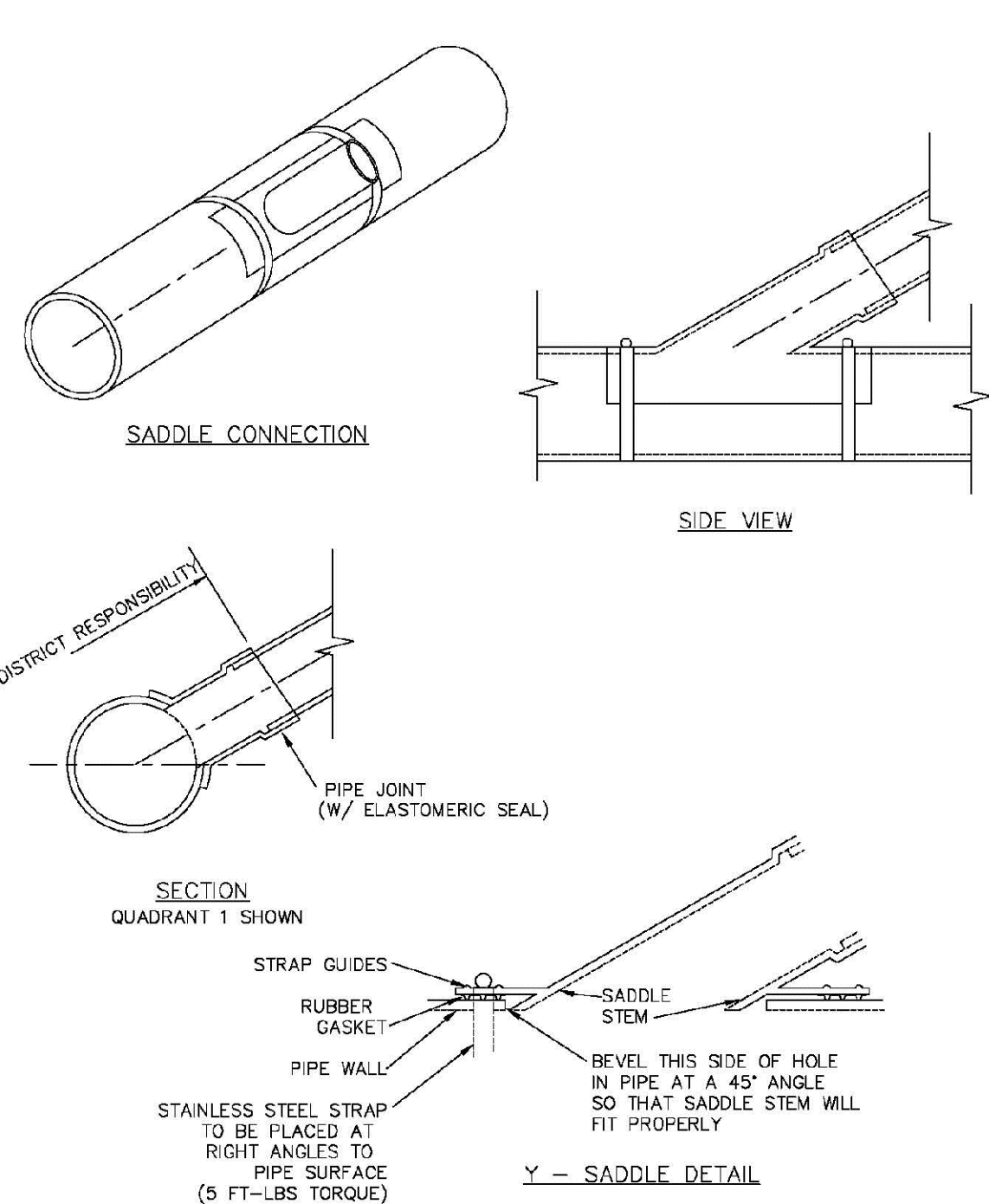
Sewer service connections shall be positioned at either the 2 o'clock or the 10 o'clock position on the circumference of the sewer main. On new installations, tee or wye fittings shall be used. When tapping into existing sewer main, a saddle connection and approved coring method shall be used. The minimum 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.

DOMESTIC SEWER TAPPING DETAIL

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER	
TAPPING DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 1/08 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S4.13



- NOTES:
- SADDLE FITTINGS TO BE PER ASTM D3034.
 - CONNECTION SHALL BE Y - SADDLE WITH TWO BONDS

PARKER WATER & SANITATION DISTRICT	
P.V.C. SADDLE	
CONNECTION DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S4.14

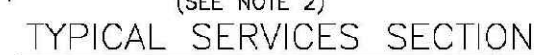
1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR AN INSPECTION WHEN THE INSPECTOR ARRIVES AT THE JOB, THE SERVICE FEE, A FINE IN ADDITION WITH NOTES 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 LATER WORK WILL BE REQUIRED AND THE SERVICE FEE WILL BE CHARGED.
5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS.
6. THE COVER OF ANY EXCAVATION MUST BE REINSTALLED WHEN THE INSPECTION HAS BEEN COMPLETED.
7. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
8. LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
9. CONTRACTORS MUST BE PRESENT AT TIME OF INSPECTION, UNLESS COORDINATED WITH DISTRICT INSPECTOR.

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BENDING TO BE SQUEEGE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUD-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 SHALL BE REQUIRED 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. THE CROSSING SHALL BE LOCATED A MINIMUM OF 18" ABOVE THE SEWER SERVICE.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD, CRAWL SPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURY.
6. CUP 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 FINISHED GRADE.
7. MOVED CURB BOXES MUST BE INSPECTED BY PWSD 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 (CROSSINGS) ARE ALLOWED. (JUMPER PIPES WILL BE REMOVED PRIOR TO METER SECT DATE).
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"G" 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 WOODEN STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

DISTRICT POLICIES & INSTALLATION

SCALE: <u>NONE</u>	DATE: <u>2/95</u>
APPROVED:	1/04
<u>PVR</u>	1/16
DIRECTOR OF ENGINEERING	10/15

SHEET W1.1



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

SHEET W1.2



1. SEE "TYPICAL STREET CROSS SECTION - TYPICAL STREET Q₁ PROFILE" DRAWING.
2. ALL FIRE HYDRANTS TO BE LOCATED AT POINTS OTHER THAN CORNER INTERSECTIONS SHALL BE INSTALLED AT A LOT LINE EXTENDED.

SHEET W2.9



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

SHEET W2.3



PARKER WATER & SANITATION DISTRICT
WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CURVED STREETS

SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED: <u>PVR</u>	1/16 10/16
DEPARTMENT OF ENGINEERING	

SHEET W2.3



SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED: <u>PVR</u>	1/16 10/16

SHEET 02.4



	PARKER WATER & SANITATION DISTRICT
NT	FIRE HYDRANTS LOCATION & INSTALLATION

SCALE: <u>NONE</u>	DATE: <u>2/98</u>
APPROVED: PVR DIRECTOR OF ENGINEERING	4/01 10/18 01/02 12/07 1/18

SHEET W2.5



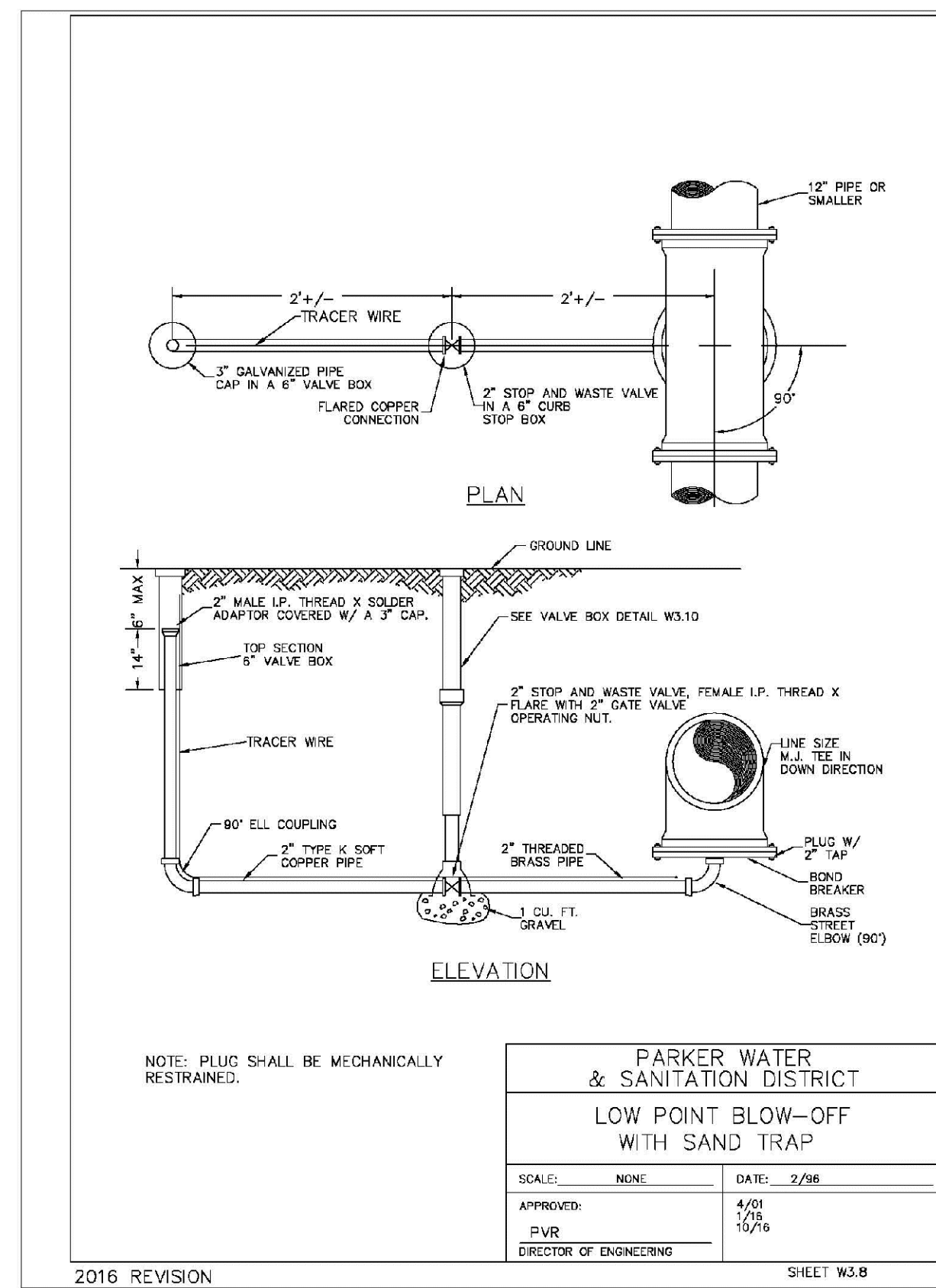
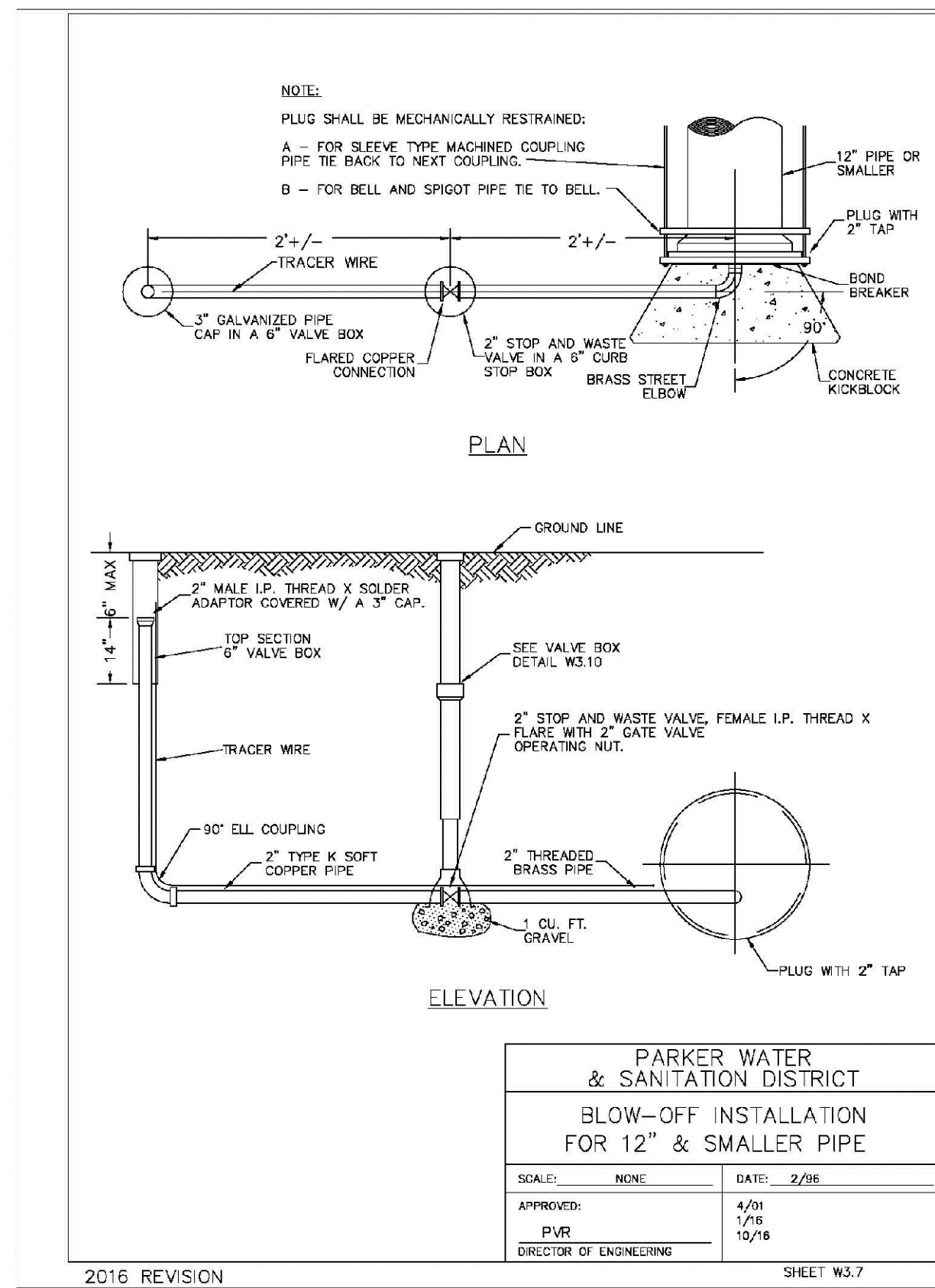
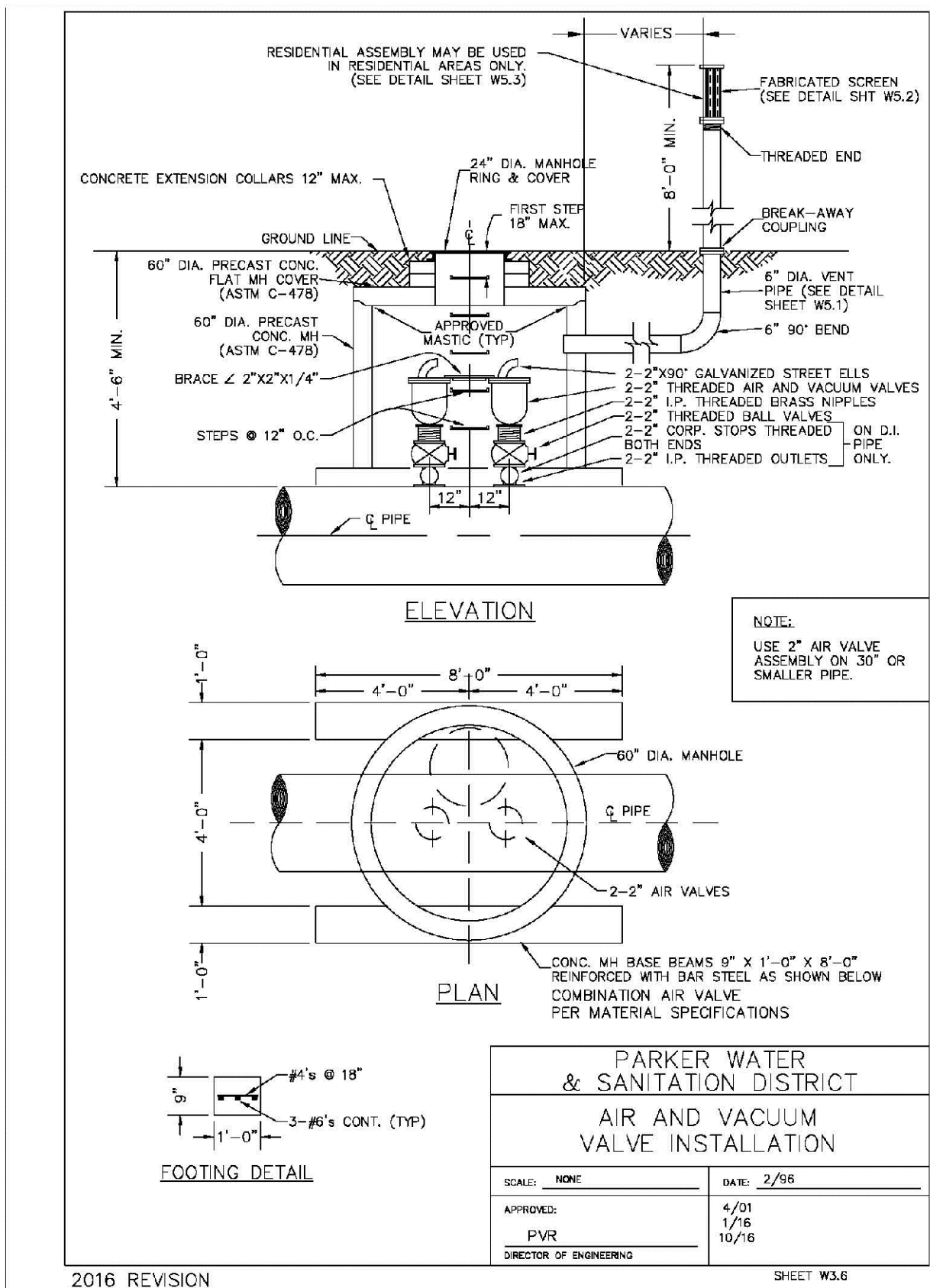
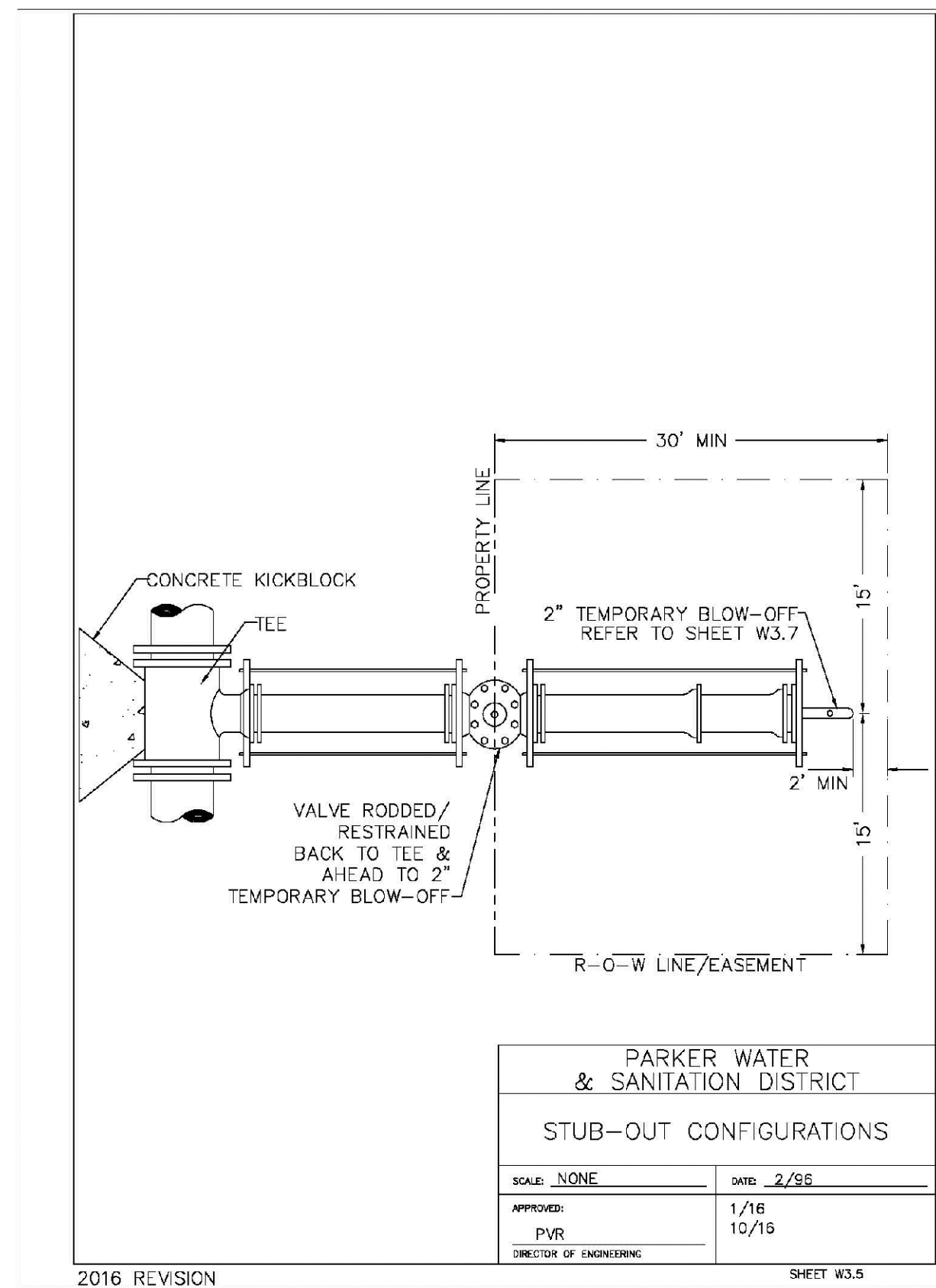
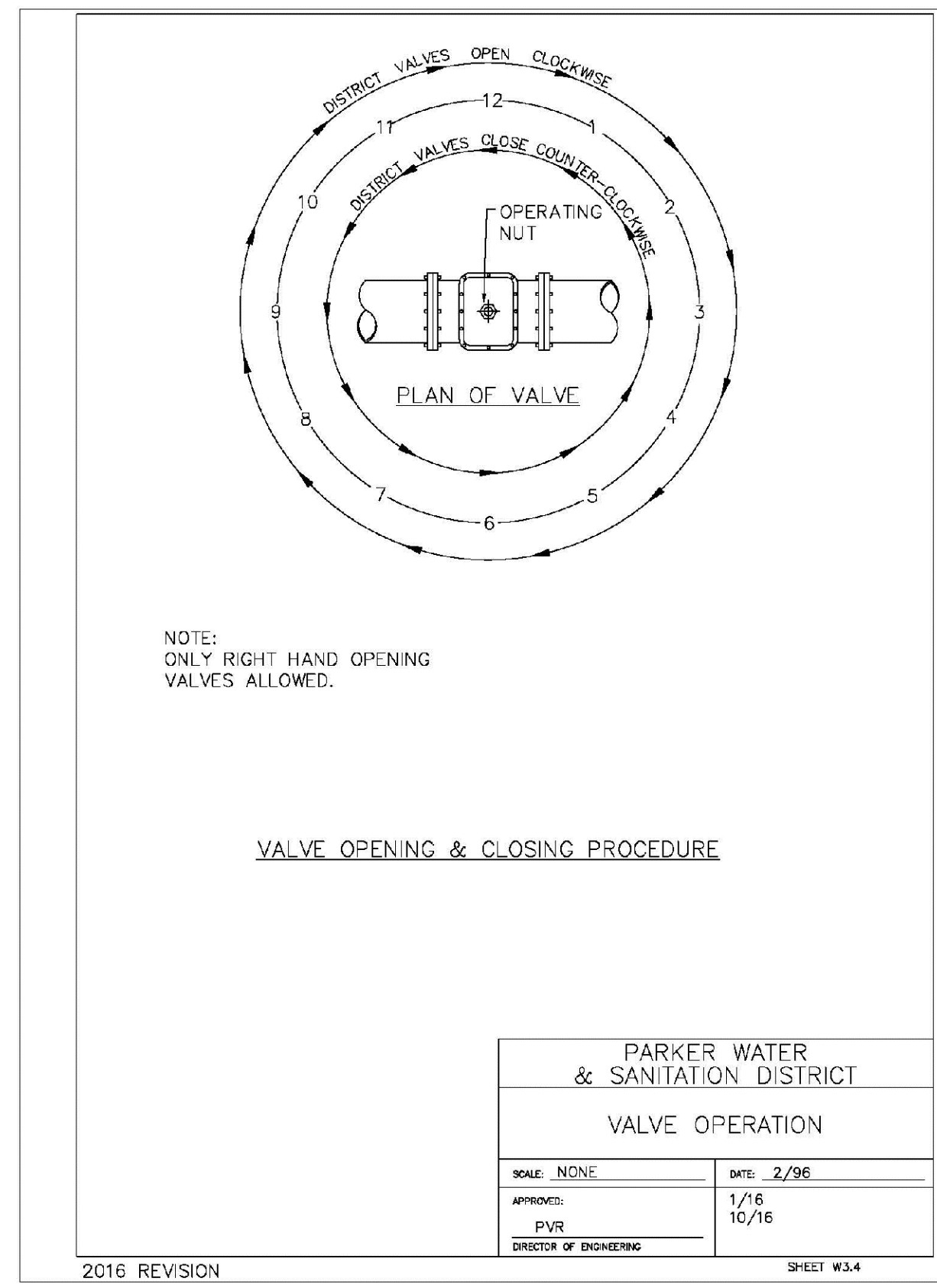
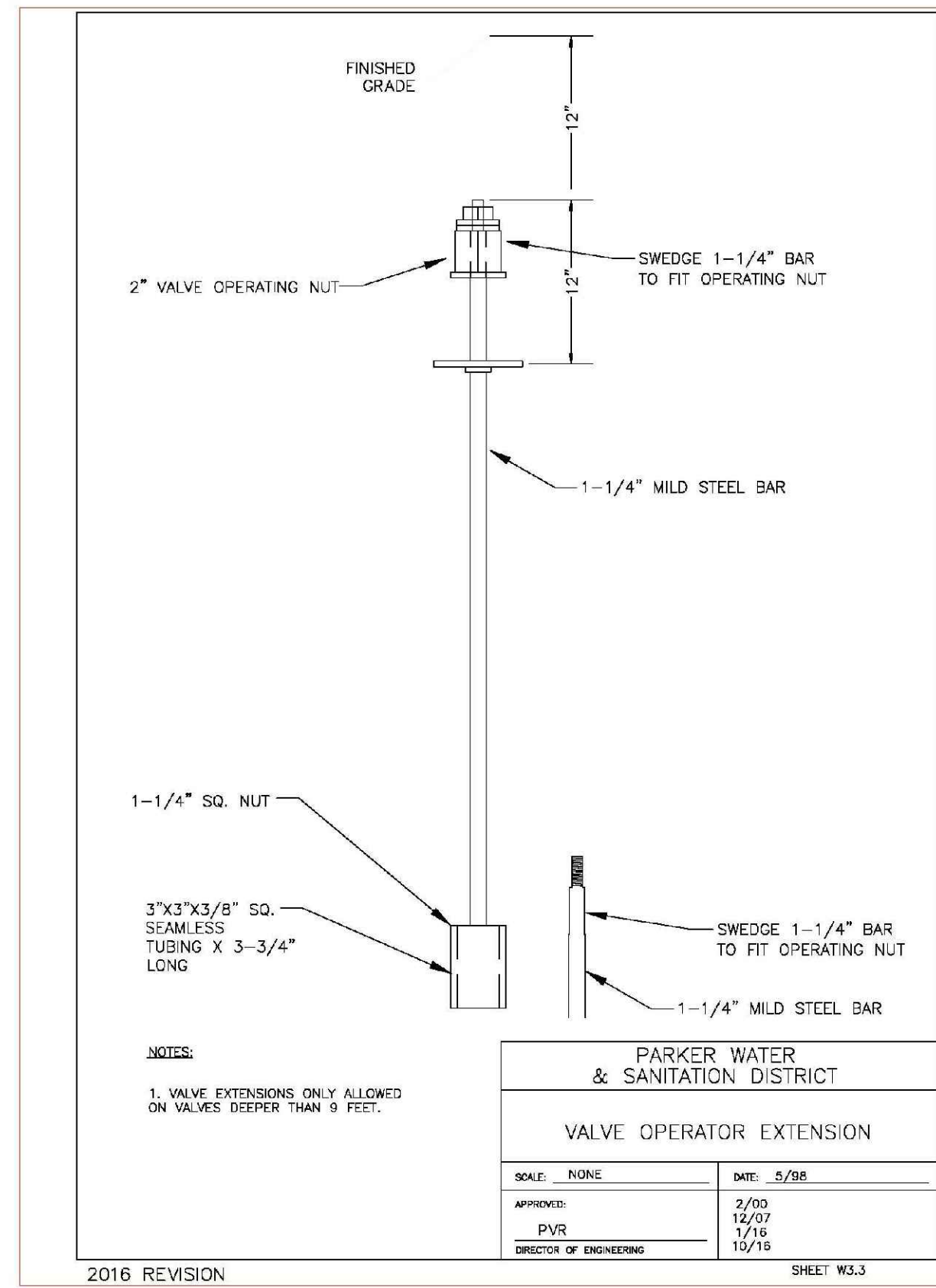
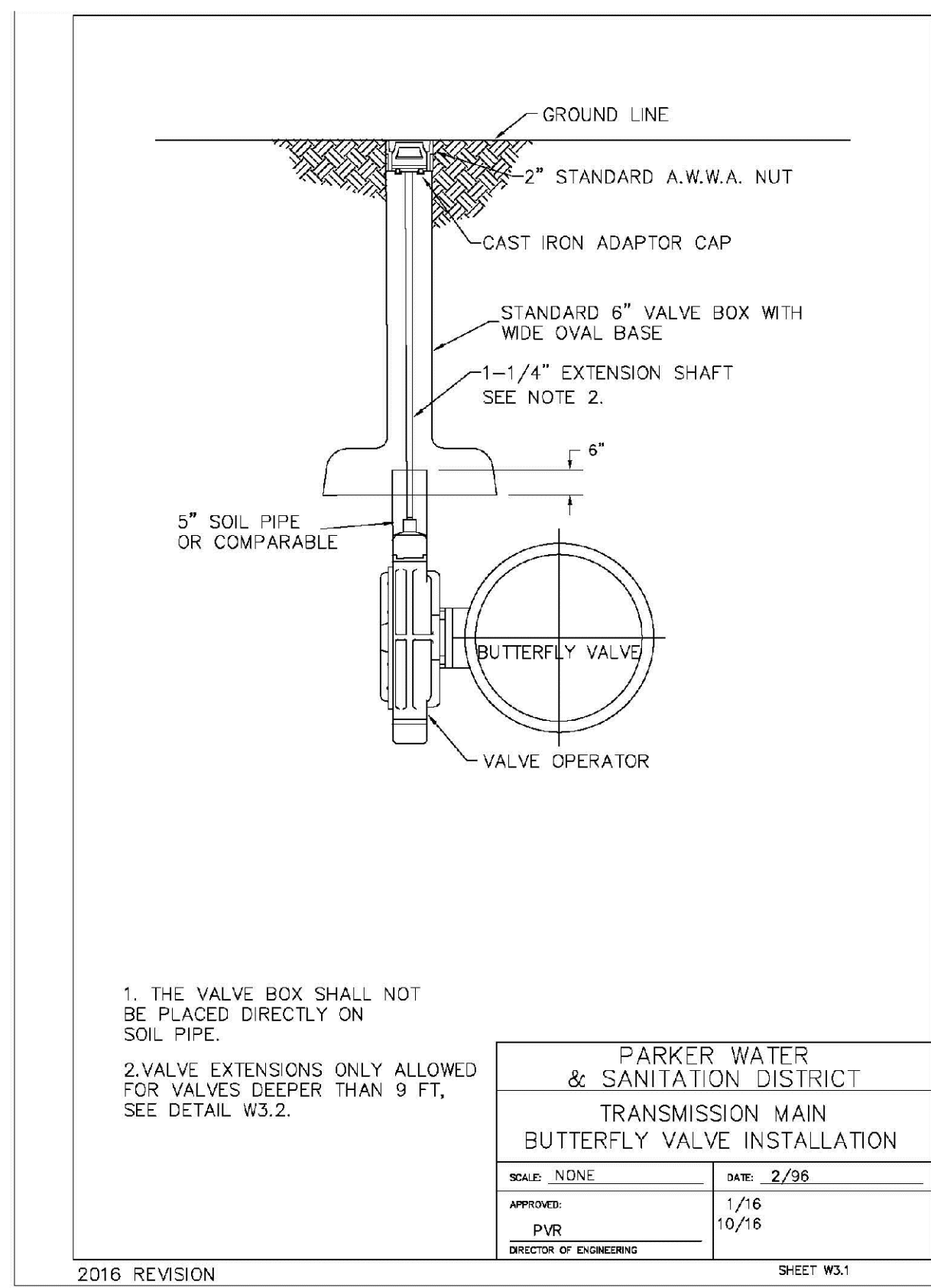
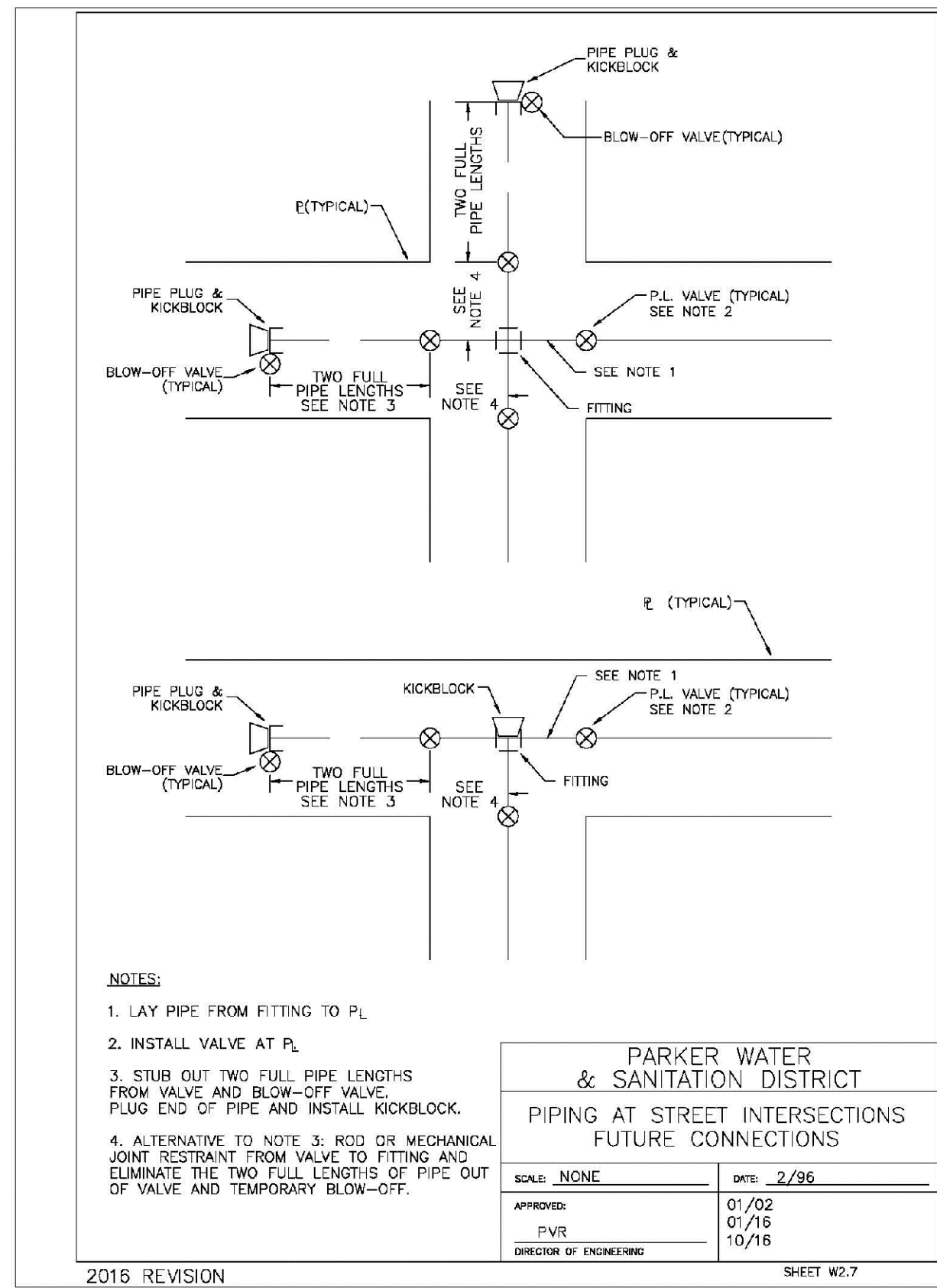
PARKER WATER & SANITATION DISTRICT
LOCATOR WIRE DETAILS

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

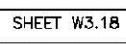
SHEET W2.

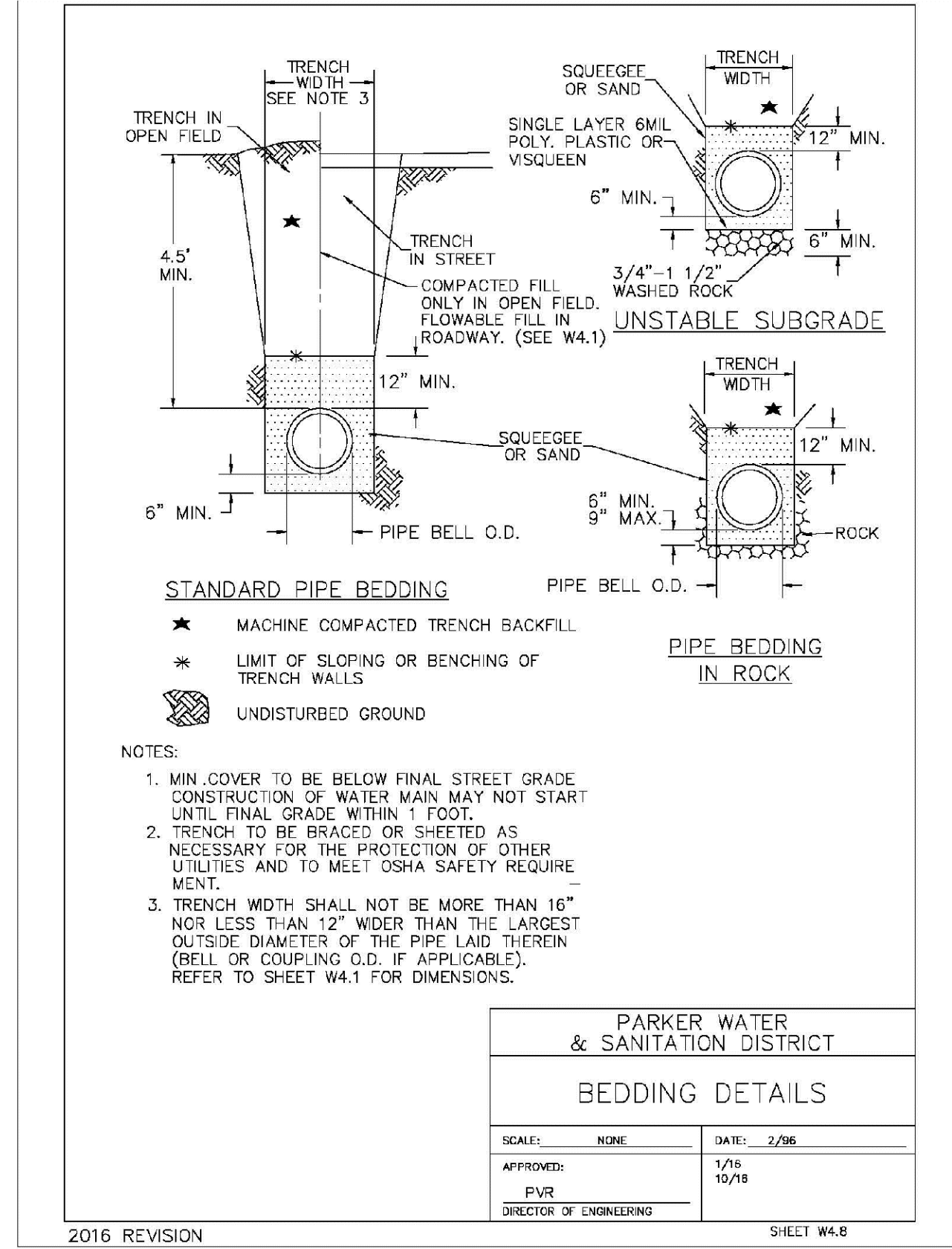
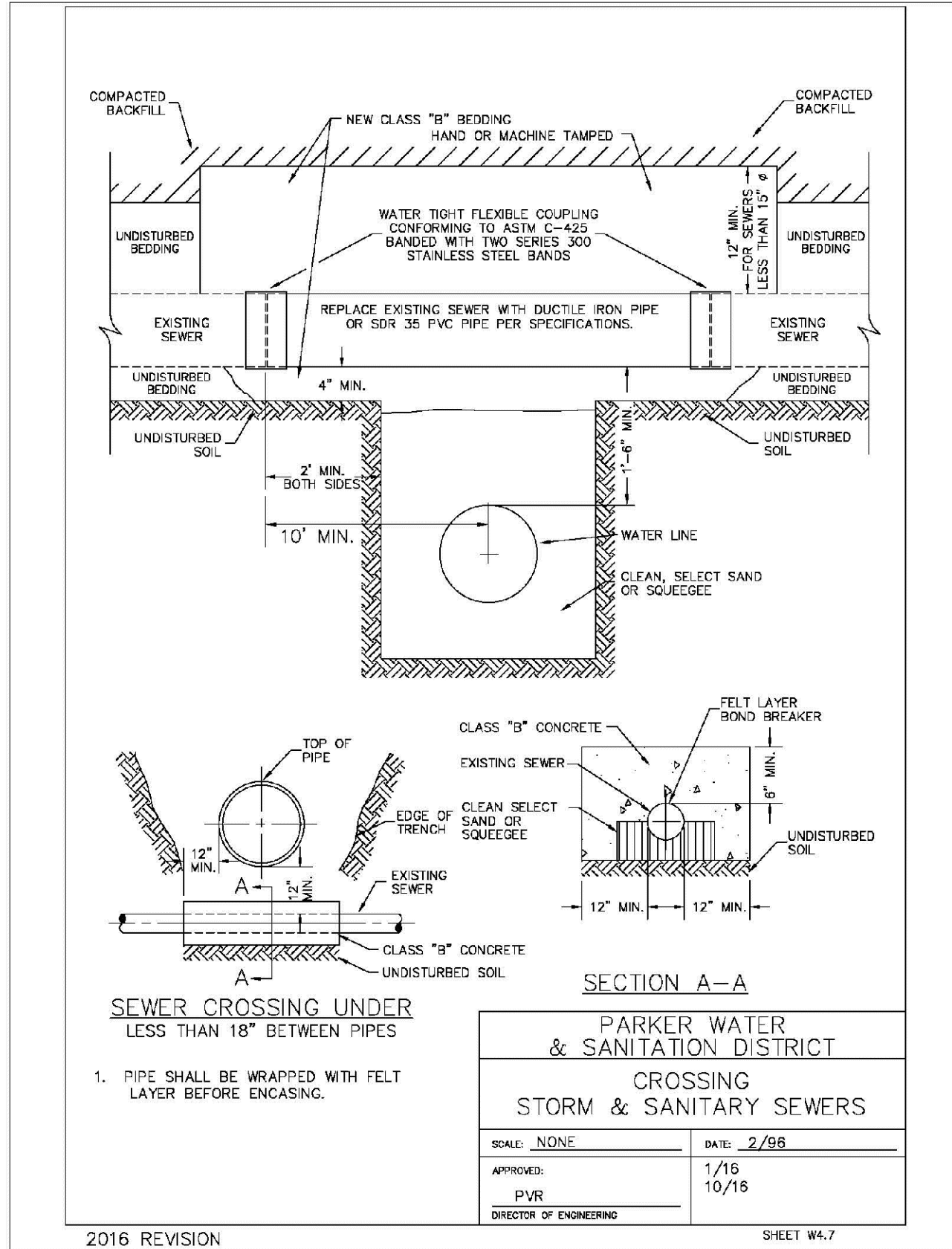
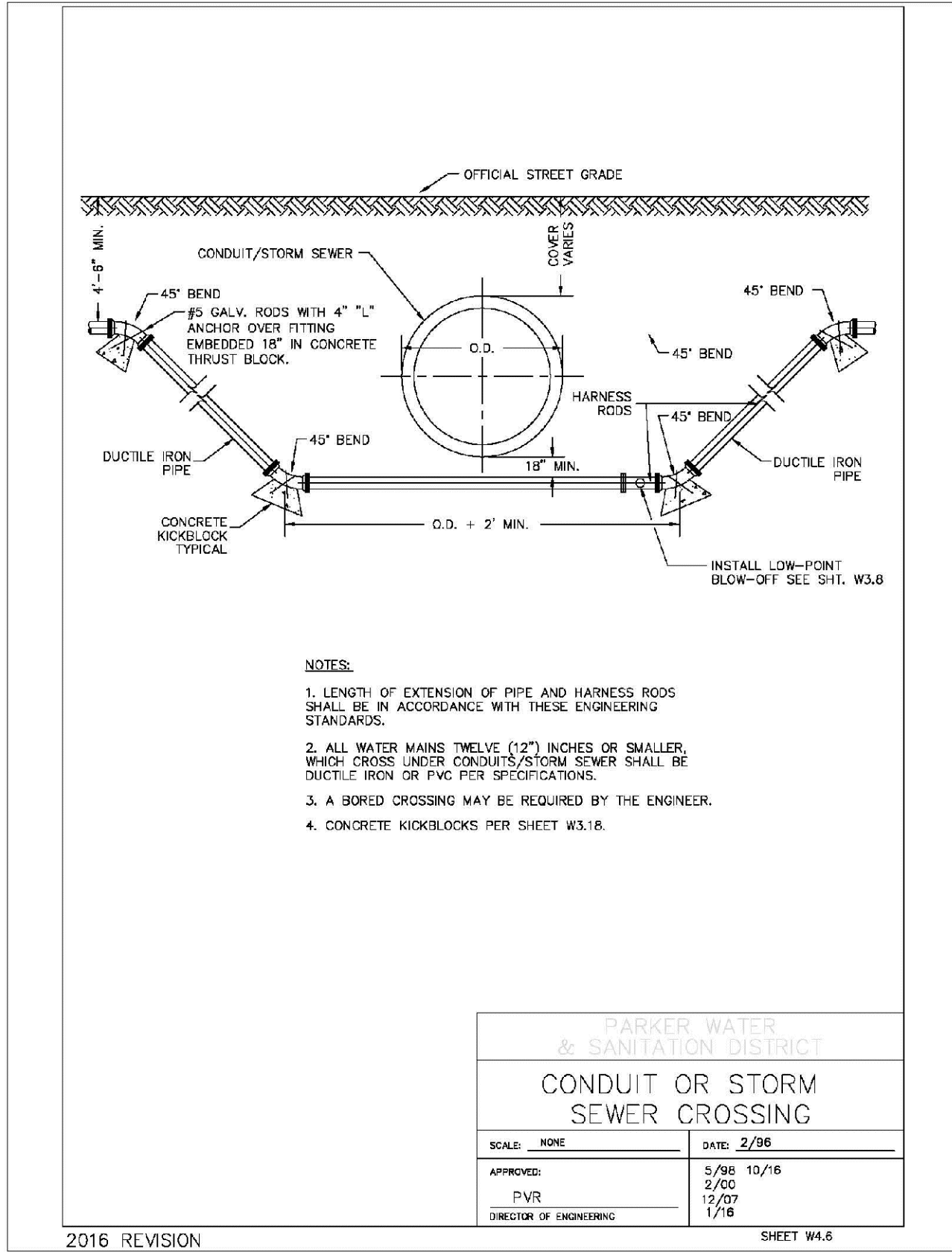
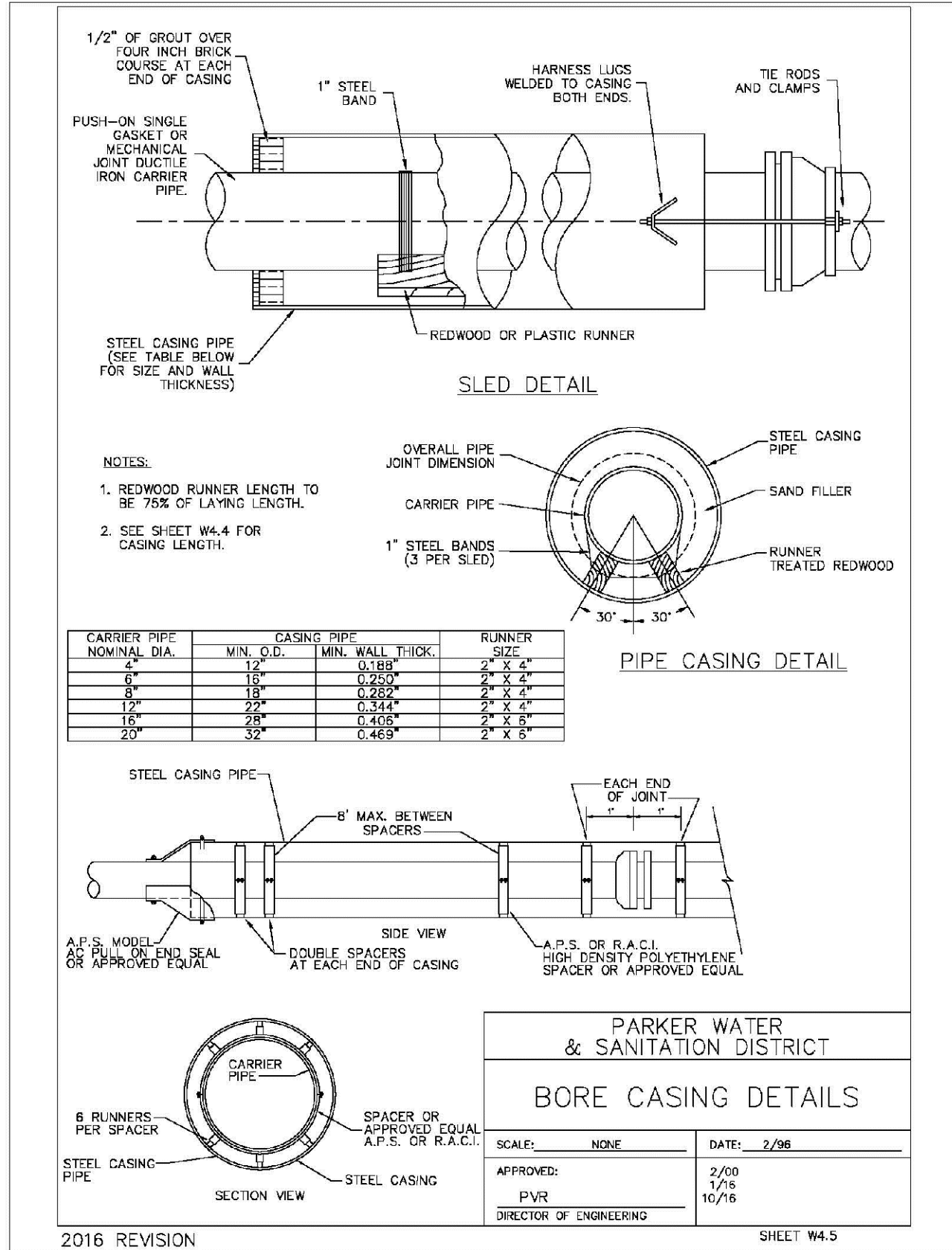
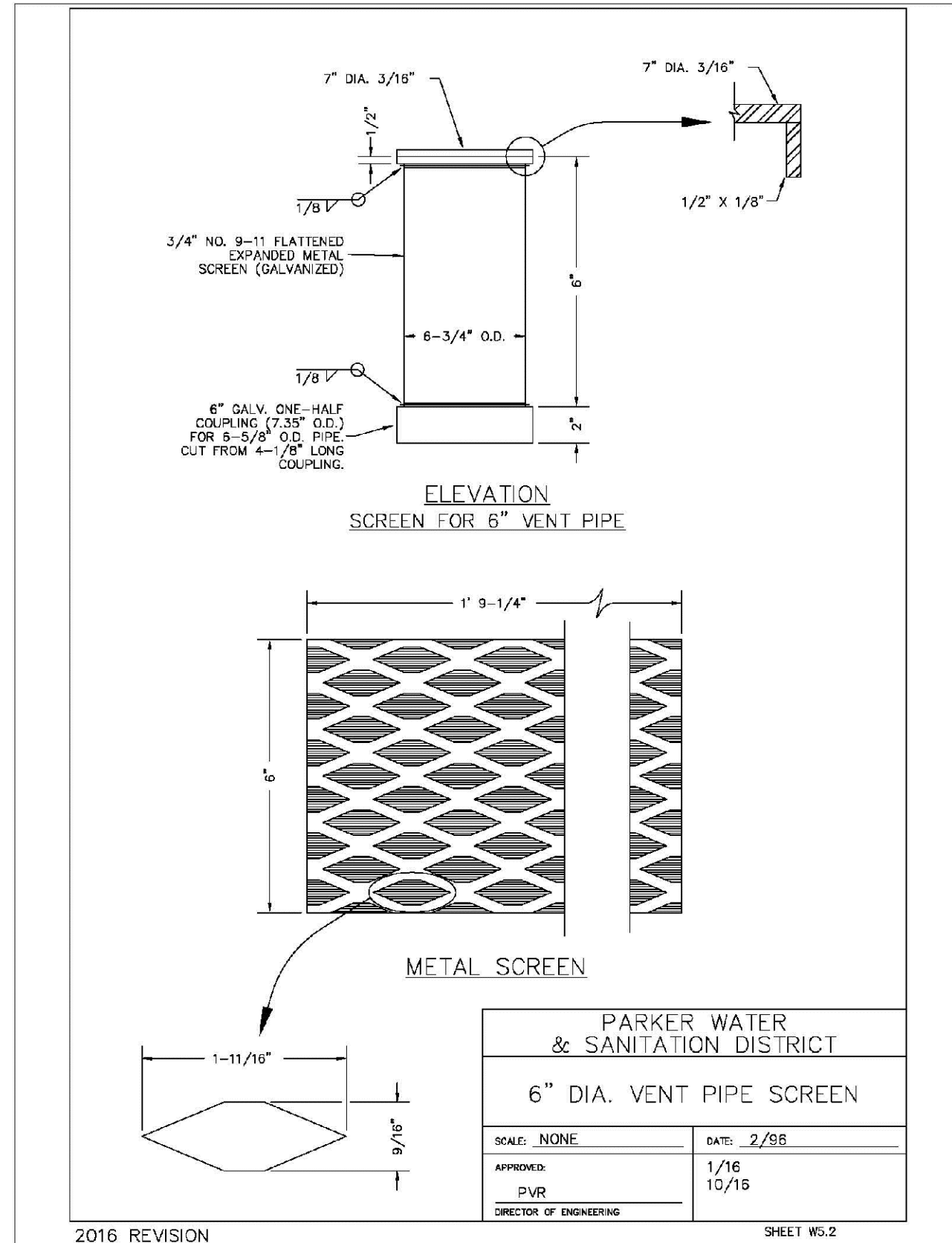
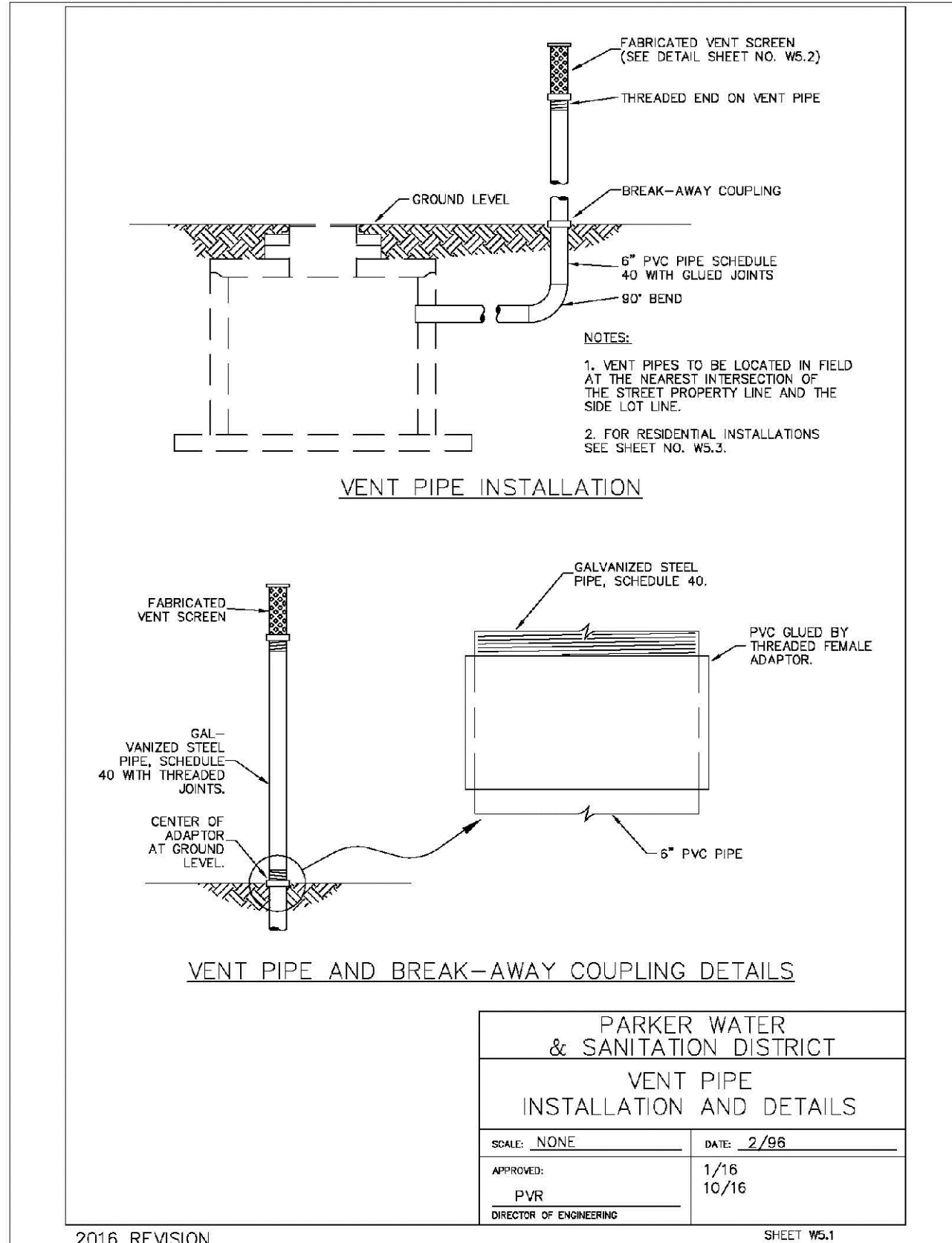
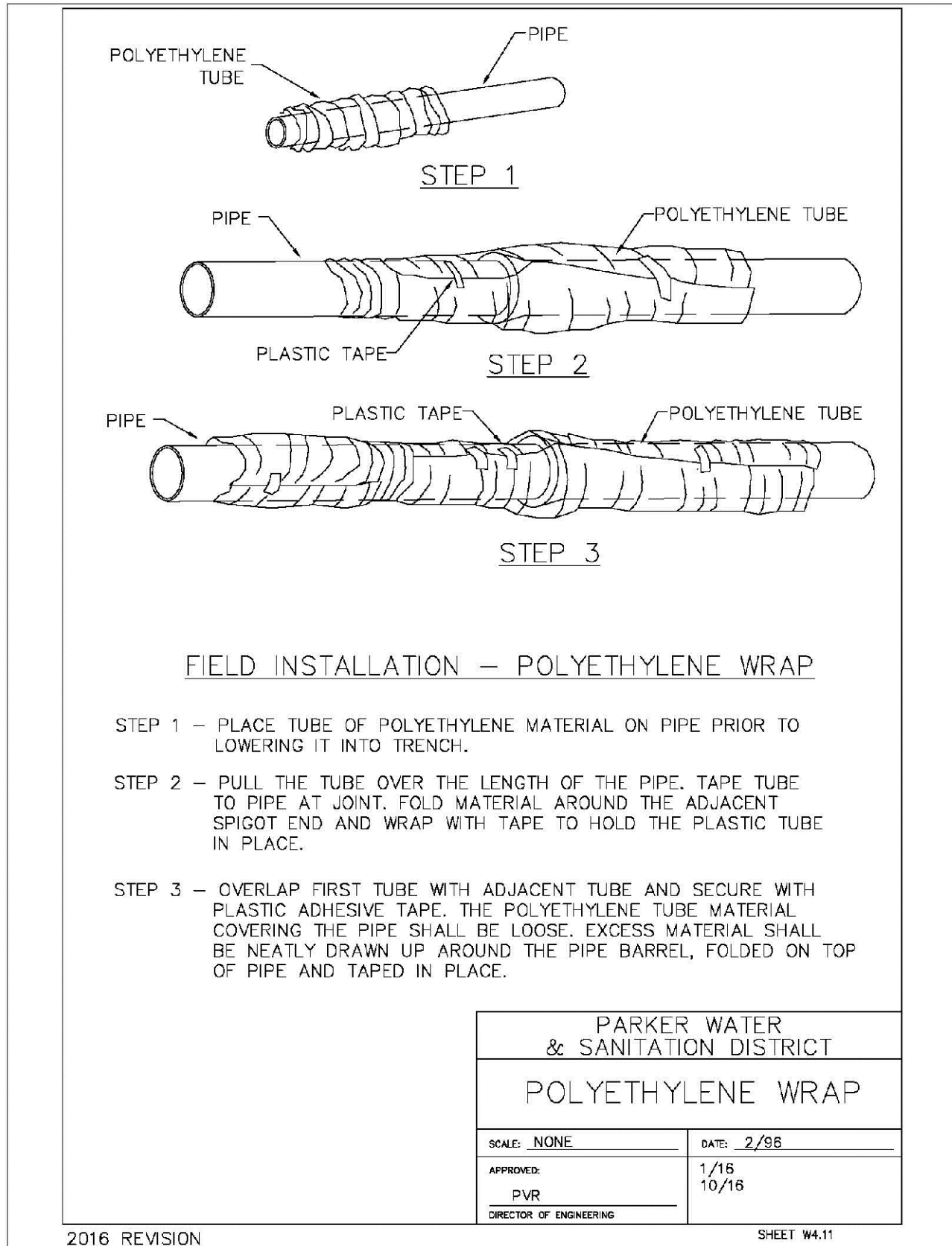
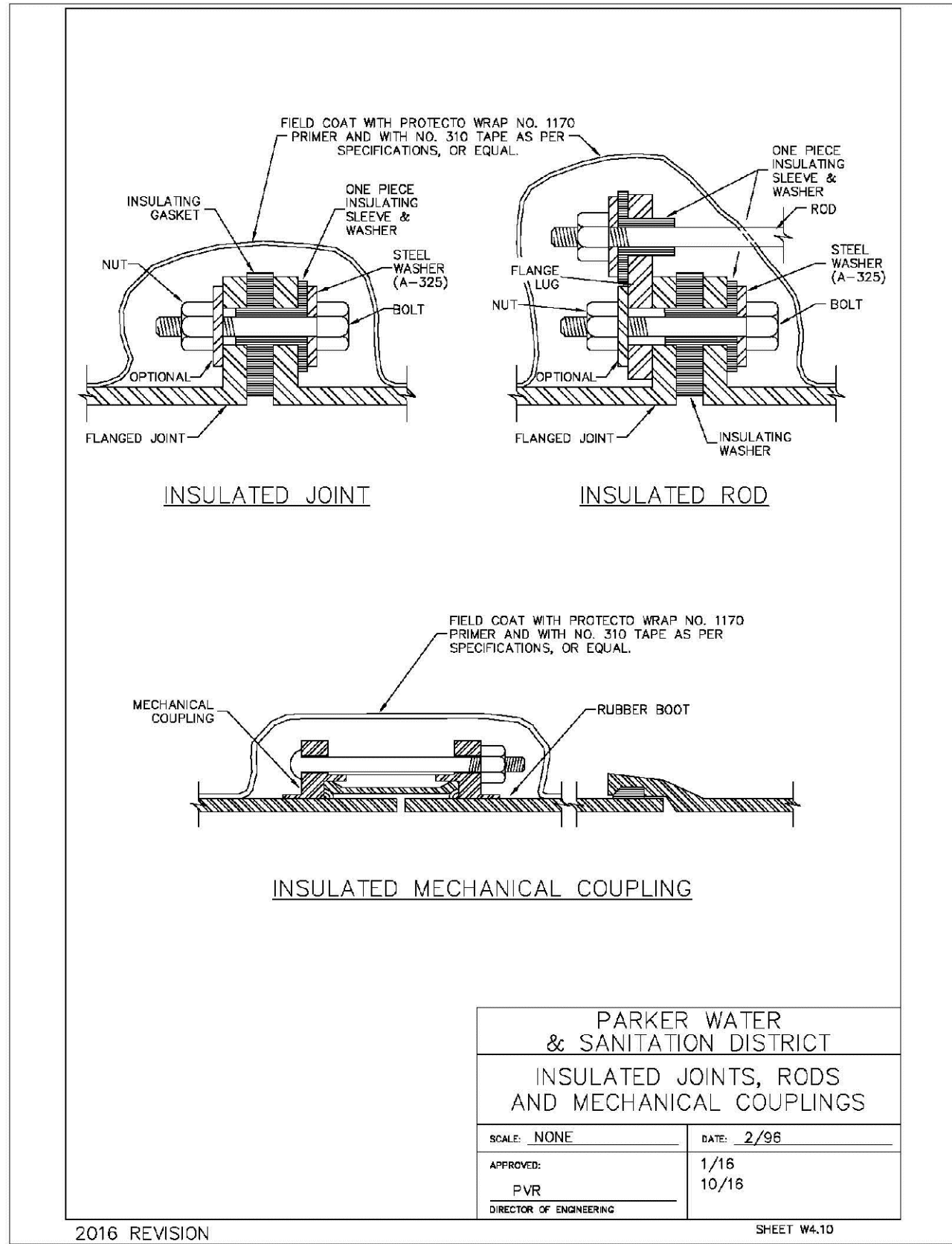
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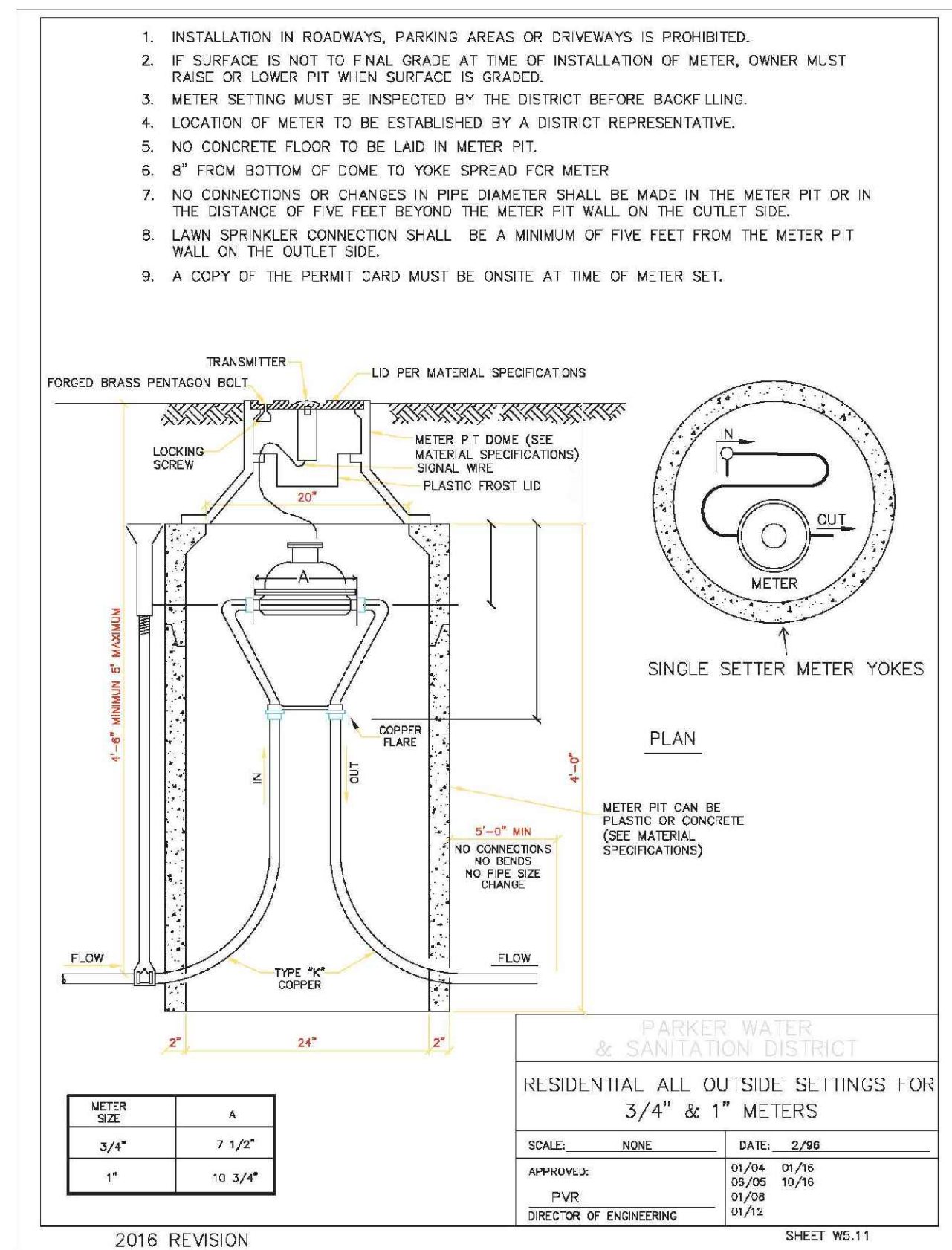
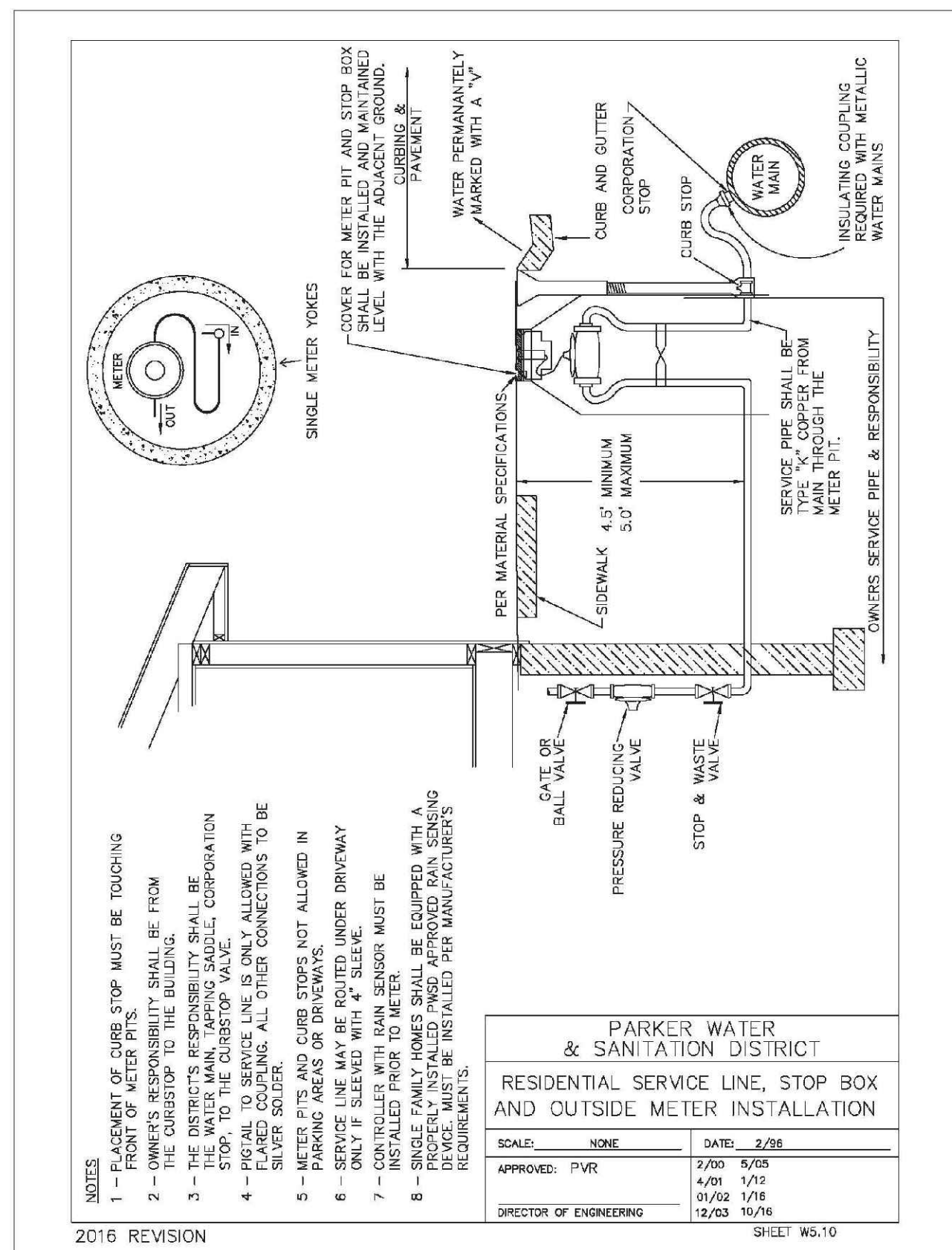
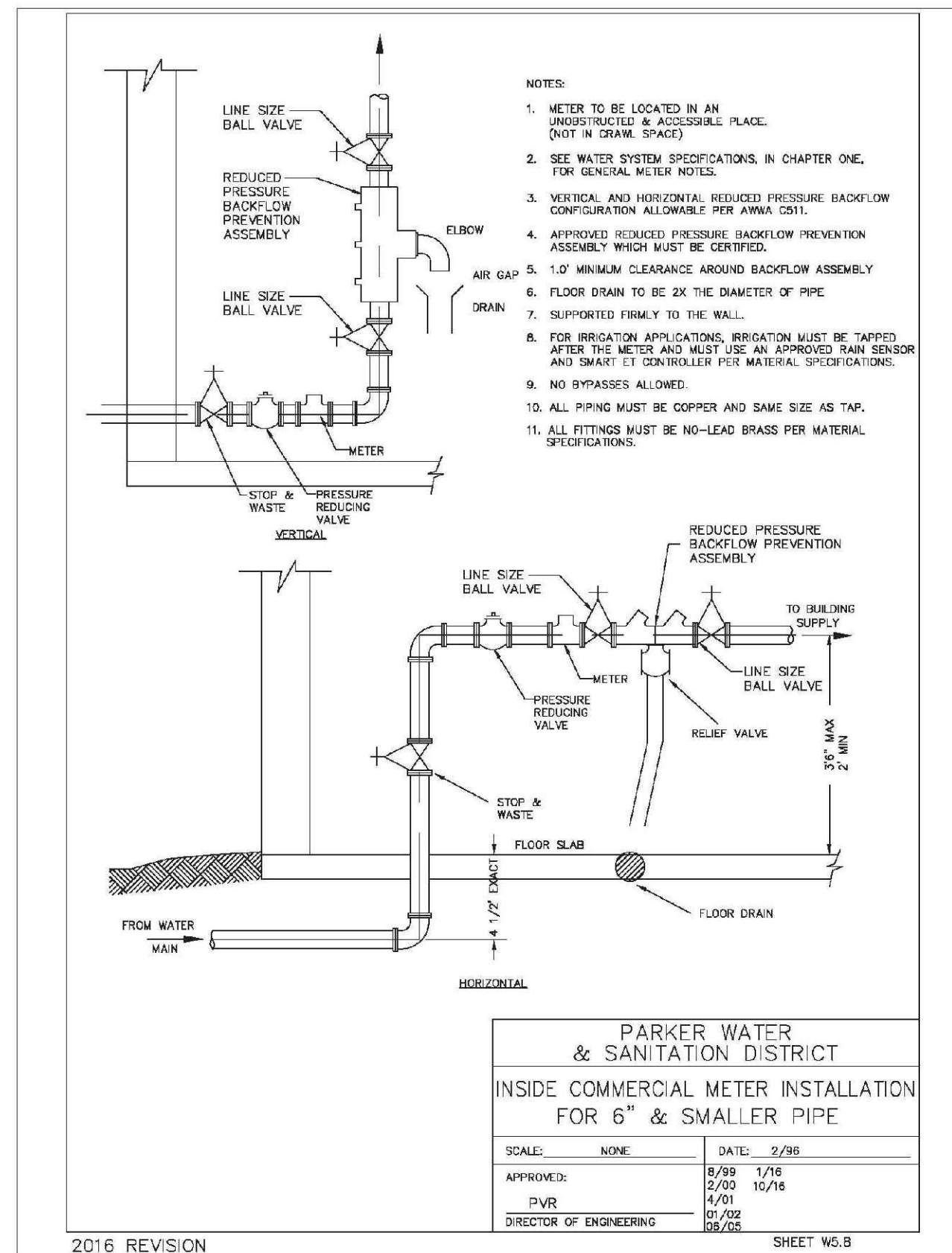
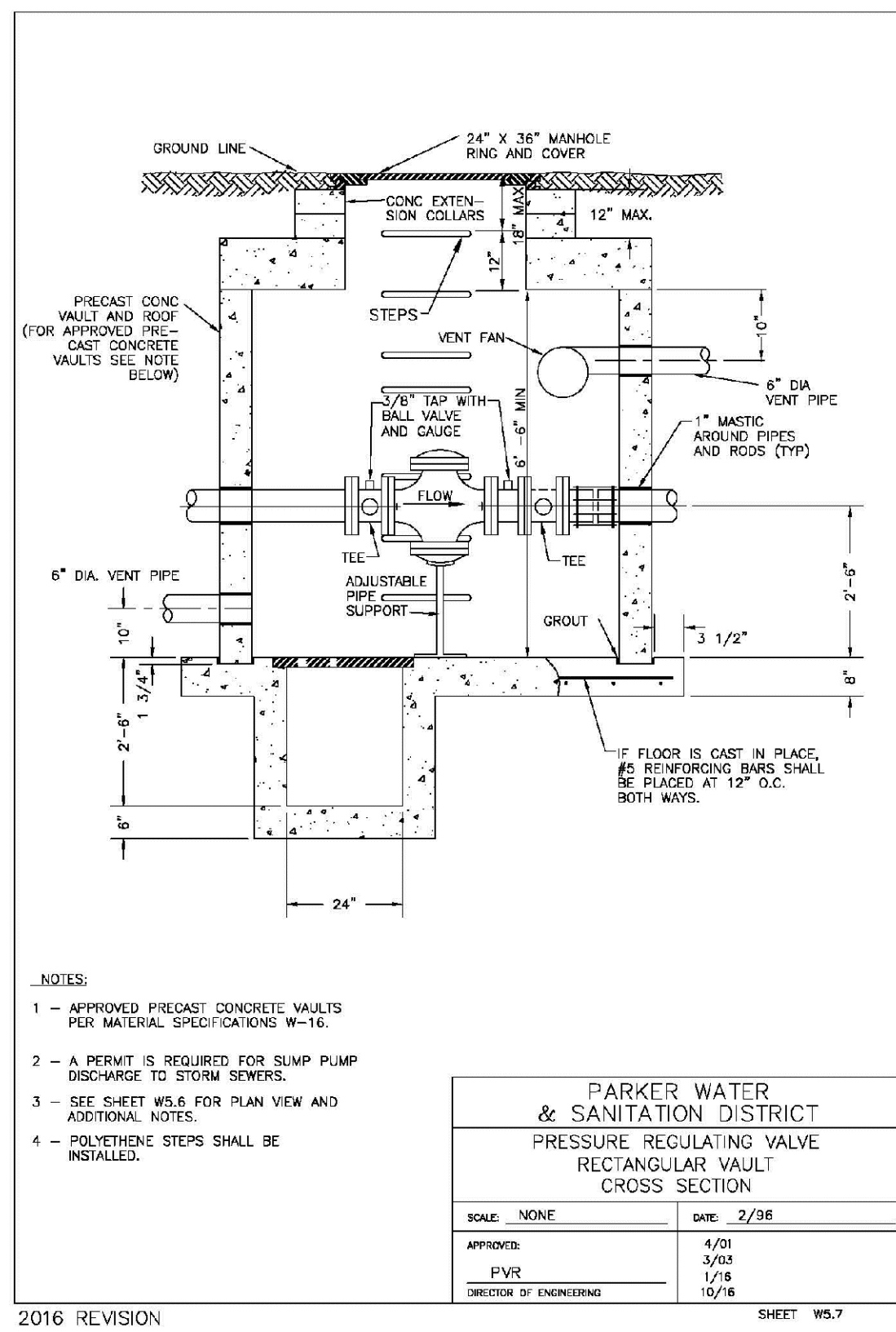
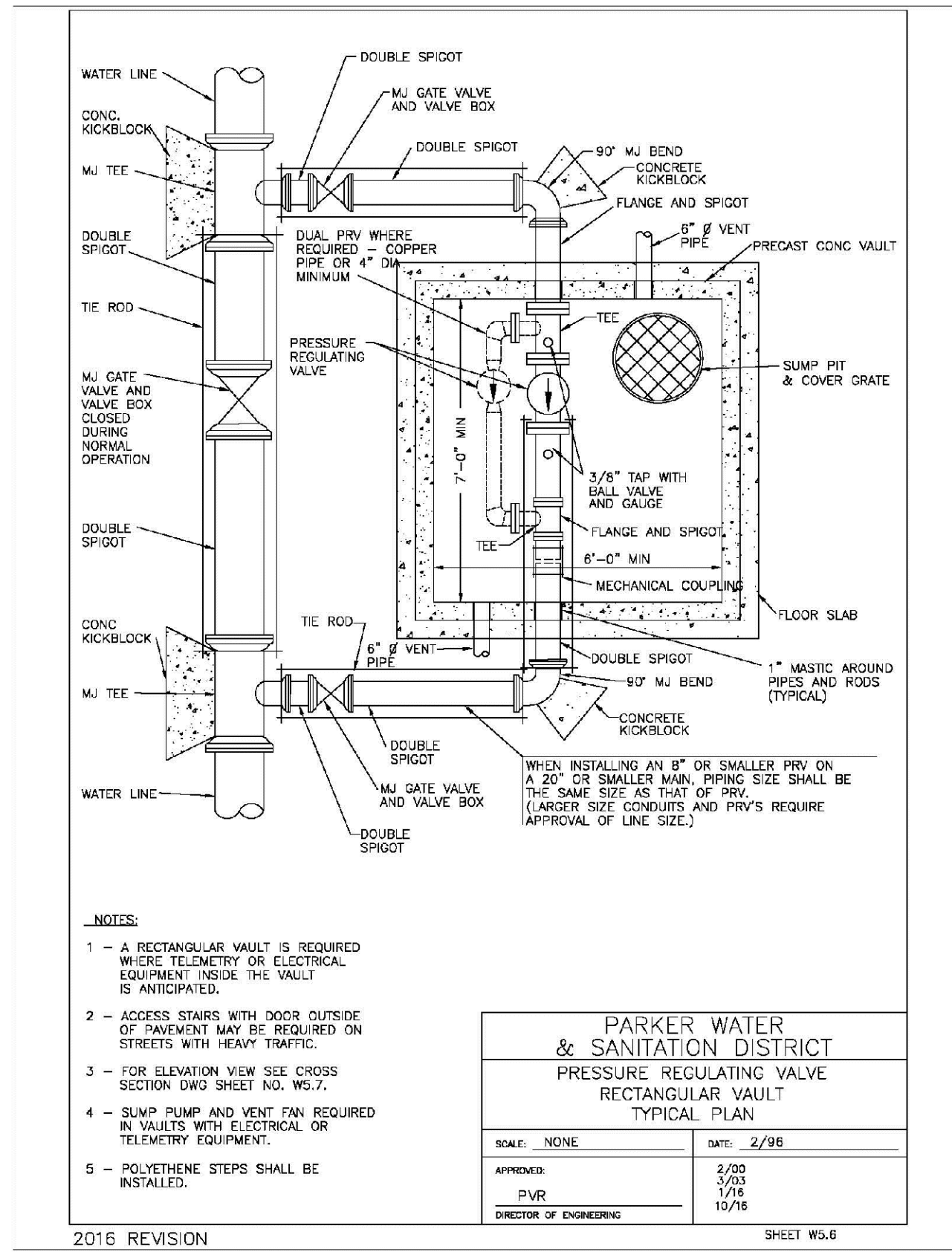
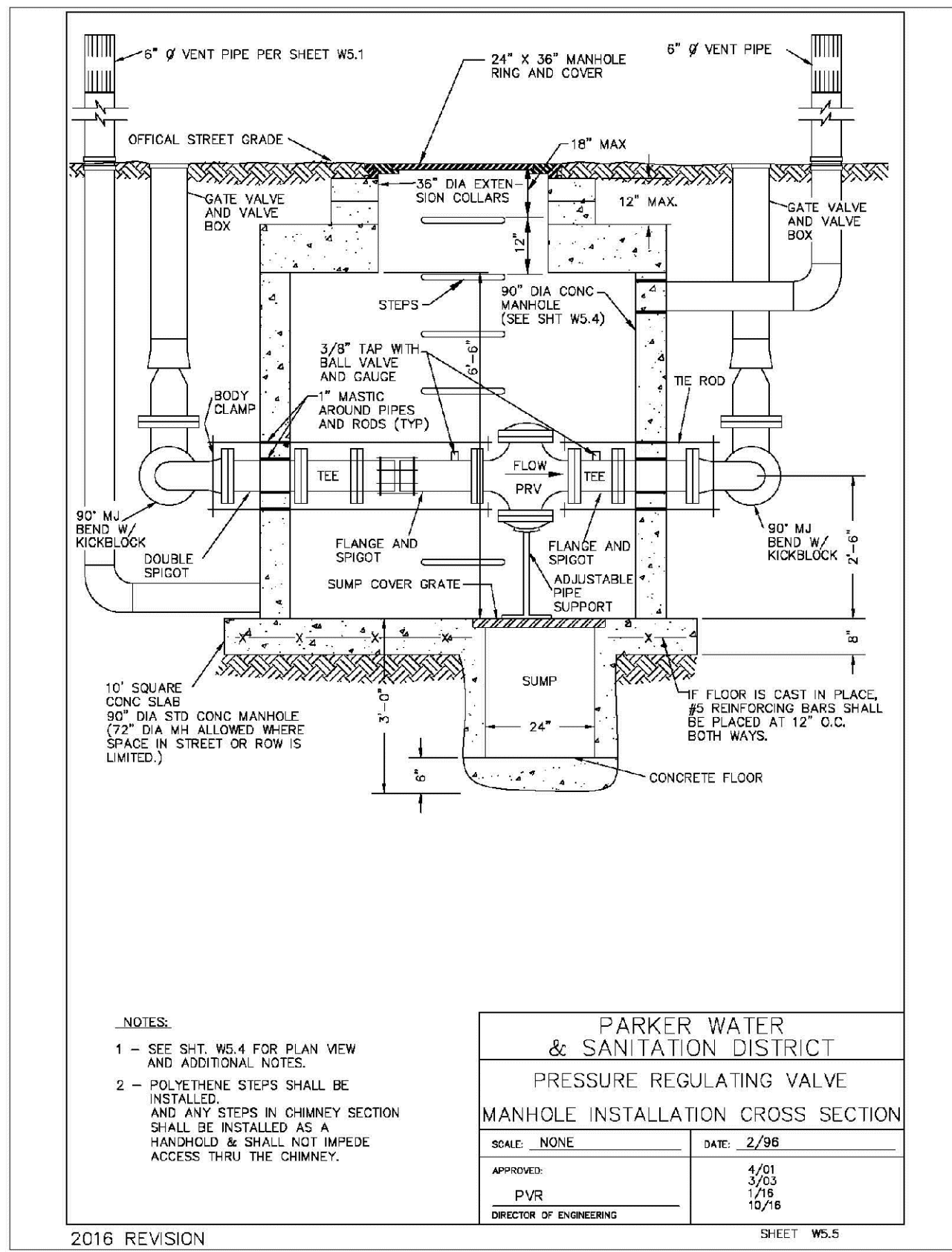
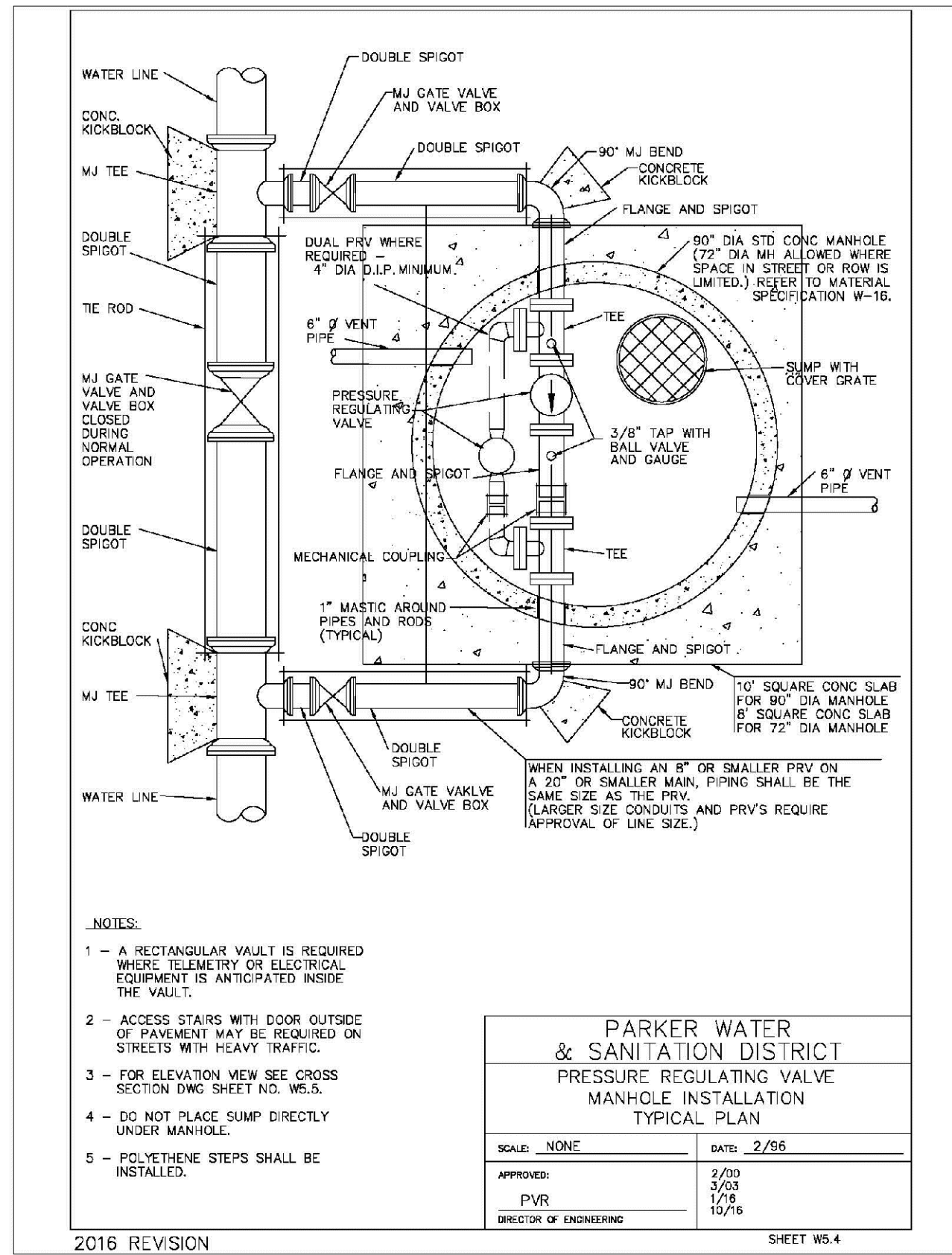
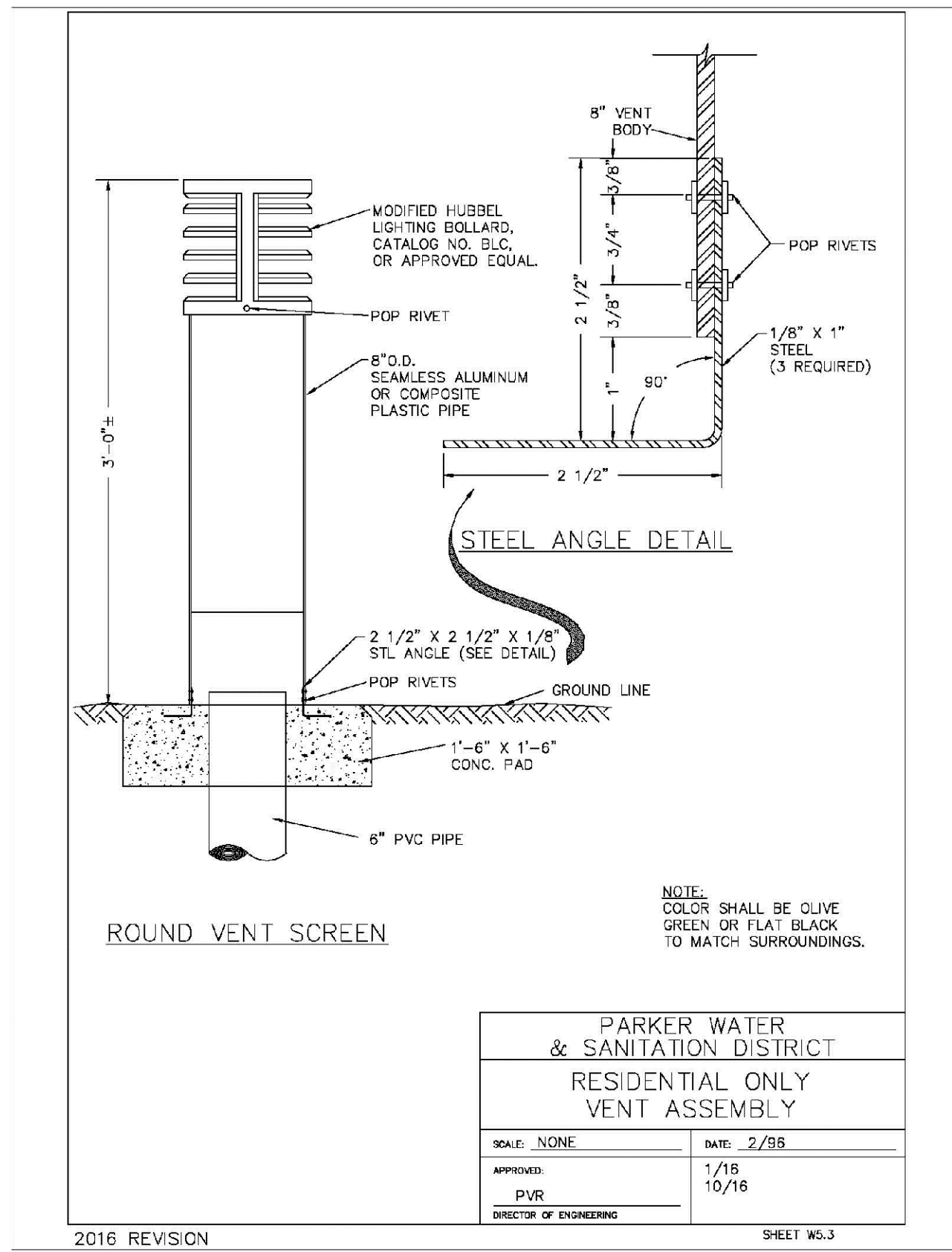








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