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PARKER WATER AND SANITATION DISTRICT

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LOCAL CALLS: (811)

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COLORADO DEPARTMENT OF HEALTH

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DENVER, CO
PHONE: 303.320.8333

INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION

5496 NORTH US HWY 85
P.O. BOX DRAWER A
SEDALIA, CO 80135
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CONTACT: JASON JENKS

URBAN DRAINAGE FLOOD CONTROL DISTRICT (UDFCD)

2480 W. 26TH AVE.
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CONTACT: MIKE SARMENTO

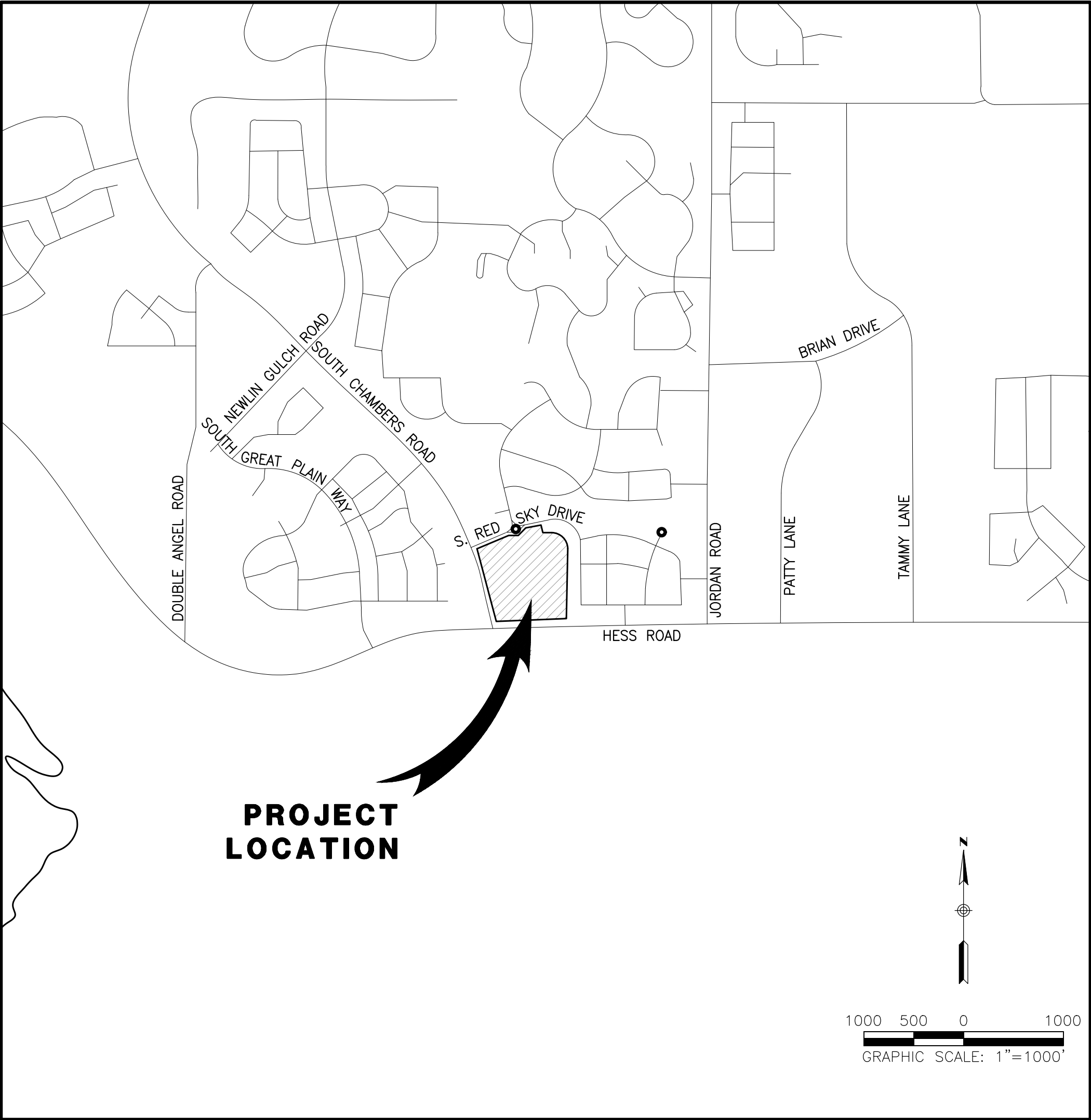
SITE BENCHMARK & BASIS OF BEARINGS:

THE PRIMARY BENCHMARK USED TO DETERMINE THE BASIS OF ELEVATIONS FOR THIS MAP IS BY GPS OBSERVATION NAVD88. A SITE BENCHMARK HAS BEEN SET AT THE NORTHWEST CORNER OF A DRAIN INLET ON CHAMBERS ROAD, APPROXIMATELY 200'± NORTH OF HESS ROAD. ELEVATION = 6075.31

THE BASIS OF BEARINGS IS THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 29 TOWNSHIP 6 SOUTH, RANGE 66 WEST, 6TH PRINCIPAL MERIDIAN, BEARING SOUTH 89°15'13" WEST AS SHOWN ON FINAL PLAT DOUGLAS 234 FILING NO. 1.

WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234, FILING NO. 6

A PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 29,
TOWNSHIP 6 SOUTH, RANGE 66 WEST, 6TH PRINCIPAL MERIDIAN,
TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO
13.80 ACRES, 11 COMMERCIAL LOTS



VICINITY MAP

SCALE 1"= 1000'

SHEET INDEX	
NO.	TITLE
1	COVER SHEET
2	NOTES
3	OVERALL UTILITY PLAN
4	WATER PLAN
5	WATER PLAN AND PROFILE
6	SLICEROO DR SEWER PLAN AND PROFILE
7	SEWER PLAN AND PROFILE
8-10	WATER DETAILS
11-12	SEWER DETAILS

NOTE:

THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY RICK ENGINEERING COMPANY. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY RICK ENGINEERING COMPANY AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS.

STATEMENT:

IT IS UNDERSTOOD AND AGREED THAT A REVIEW OF THESE PLANS AND SPECIFICATIONS BY OR ON BEHALF OF THE PARKER WATER AND SANITATION DISTRICT IS ONLY FOR PURPOSES OF THE DISTRICT AND IN NO WAY RELATES TO AN APPROVAL OF MATERIALS USED OR THE END PRODUCT OF THE DEVELOPER'S WORK. THE DEVELOPER CERTIFIES THAT IT HAS THOROUGHLY REVIEWED ALL PLANS, NOTES AND SPECIFICATIONS, EXAMINED THE PROJECT SITE AND ASCERTAINED ALL SOIL, GEOLOGICAL, GROUNDWATER AND OTHER CONDITIONS TO BE ENCOUNTERED THAT MIGHT AFFECT THE CONSTRUCTION AND FUTURE MAINTENANCE OF THE PROJECT. THE DEVELOPER FURTHER CERTIFIES THAT WORK CONTEMPLATED UNDER SUCH PLANS AND SPECIFICATIONS HAS BEEN PREPARED BY OR ON BEHALF OF THE DEVELOPER, THAT THE PROJECT IS THE RESPONSIBILITY OF THE DEVELOPER, AND THAT WORK IS UNDERTAKEN THEREON ONLY IN RELIANCE ON ITS OWN INVESTIGATION AND INFORMATION AND NOT ON ANY STATEMENTS, REPRESENTATIONS OR REPORTS IF ANY, THAT MAY HAVE BEEN MADE OR FURNISHED BY THE DISTRICT, ITS OFFICERS, AGENTS OR EMPLOYEES.

MATERIALS LIST

ITEM	QTY.
48"ø SSMH	6
8" SS PVC PIPE	1095 LF
SEWER CONNECTION	1
FIRE HYDRANT	4
8" GATE VALVE	5
LOW PT BLOW OFF	2
8"x6" TEE	4
16"x8" TEE	1
24"x8" TEE	1
8" 45° BEND	2
8" 22.5° BEND	3
8" 11.25° BEND	3
8" W PVC PIPE	1232 LF
WATER CONNECTION	2

LEGEND

	EXISTING	PROPOSED
PROPERTY BOUNDARY	---	---
PROPERTY LINE	---	---
RIGHT-OF-WAY	---	---
CENTERLINE	---	---
CURB	---	---
CURB & GUTTER	---	---
DAYLIGHT LINE	---	---
EASEMENT	---	---
FLOWLINE	---	---
SLOPE	---	---
CONTOURS	---	---
WATER LINE	W	W
SANITARY SEWER LINE	S	S
STORM DRAIN LINE	SD	SD
GAS LINE	G	G
ELECTRIC LINE	E	E
FENCE-GENERAL USE	×	×
OVERHEAD WIRES	OHE	OHE
TYPICAL LATERALS	---	---
SANITARY SEWER MANHOLE	---	---
STORM DRAIN MANHOLE	---	---
STORM DRAIN INLET	---	---
FIRE HYDRANT	---	---
WATER VALVE	---	---
STREET LAMP	---	---
AC PAVING	---	---
CONCRETE	---	---
DG TRAIL/CRUSHER FINES	---	---

ABBREVIATION

AIR RELEASE VALVE	ARV
ASPHALT CONCRETE	AC
BEGIN CURB RETURN	BCR
BEGIN CURVE	BC
BEGIN VERTICAL CURVE	BVC
CENTERLINE	CL
END CURVE	EC
END VERTICAL CURVE	EVC
EXISTING GRADE	EG
FINISHED GRADE	FG
FINISHED SURFACE	FS
FLOW LINE	FL
GRADE BREAK	GB
HIGH POINT	HP
INVERT	INV
POINT OF CONNECTION	POC
PROPERTY LINE	PL
PUBLIC UTILITY EASEMENT	PUE
RIGHT-OF-WAY	ROW
TOP OF CURB	TC

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 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 NFPA 24 WHEN SUBMITTING FOR REVIEW

WATER/SANITARY SEWER APPROVAL

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 SCHEDULING 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 _____

WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

RICK
ENGINEERING COMPANY
9801 EAST EASTER AVE
CENTENNIAL, CO 80112
303.537.8020
Tucson - San Diego - Riverside - Orange
Sacramento - San Luis Obispo - Phoenix
rickengineering.com



REVISIONS:		
NO.	DESCRIPTION	DATE:
1	-	-

SCALE:	NTS
DATE:	10/7/2020
DRAWN BY:	WD
CHECKED BY:	JS
JOB NO:	D01173-A

COVER
SHEET

PROJECT NO.	D01173-A
DRAWING NO.	1
SHEET NO.	1 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION

GENERAL NOTES:

1.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2.

THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER, DOUGLAS COUNTY AND OTHER NEIGHBORING CITIES AND TOWNS 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 THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS CONTACT THE PWSO IMMEDIATELY.
4.

PWSO ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
5.

THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS 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 "AS-BUILT" DRAWINGS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL BY DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZED PRINTS SHALL BE TRANSMITTED TO THE PWSO OFFICE.
8.

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. 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 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 COST 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 MAY BE SUBMITTED TO THE DISTRICT ENGINEER.
12.

ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SERVICE SEWERS
"V" FOR WATER SERVICES
13.

NO TREES ALLOWED IN EASEMENTS OR WITHIN 8' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
14.

THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSO AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSO SPECIFICATION MANUAL.

WATER SYSTEM NOTES:

1.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
2.

ALL WATER MAINS SHALL BE PER PWSO MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
3.

ALL BENDS, PLUGS, REDUCERS AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED 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 PER PWSO SPECIFICATIONS.
6.

ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD END MAINS SHALL BE PROTECTED FROM THRUST WITH 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.
8.

VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES; WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER LOCATIONS SHOWN ON THE PLANS.
9.

WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
10.

THE CONTRACTOR SHALL NOTIFY THE PWSO 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.
11.

PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PWSO STANDARDS AND SPECIFICATIONS, LATEST REVISION.
12.

THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
13.

COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOIL REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
14.

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, DESIGN ENGINEER, AND REPRESENTATIVE OF OTHER APPROVING AGENCIES.
15.

CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSO SPECIFICATIONS CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
16.

HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSO SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSO INSPECTOR/ENGINEER.

SANITARY SEWER SYSTEM NOTES:

1.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
2.

ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" DIAMETER UNLESS OTHERWISE NOTED.
3.

SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE. SEWER LINES SHALL BE 10 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES, SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PWSO 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 FURNISHED OR INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH THE 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. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
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.

THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSO AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSO SPECIFICATION MANUAL.
12.

ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PWSO STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
13.

PRIOR TO STARTING WORK WHERE SEWER MAIN IS TO BE CONNECTED TO EXISTING PWSO 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 PROBATIONARY ACCEPTANCE BY PWSO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN INSTRUCTED BY THE DISTRICT.
14.

PRIOR TO PROBATIONARY ACCEPTANCE WALKTHROUGH, THE CONTRACTOR SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

WATER & SEWER IMPROVEMENT PLANS FOR

DOUGLAS 234

FILING NO. 6

DOUGLAS COUNTY, COLORADO

RICK

ENGINEERING COMPANY

9801 EAST EASTER AVE
CENTENNIAL, CO 80112
303.537.8020

Tucson - San Diego - Riverside - Orange
Sacramento - San Luis Obispo - Phoenix
rickengineering.com



Know what's below.
Call before you dig.

REVISIONS:		
NO.	DESCRIPTION	DATE:
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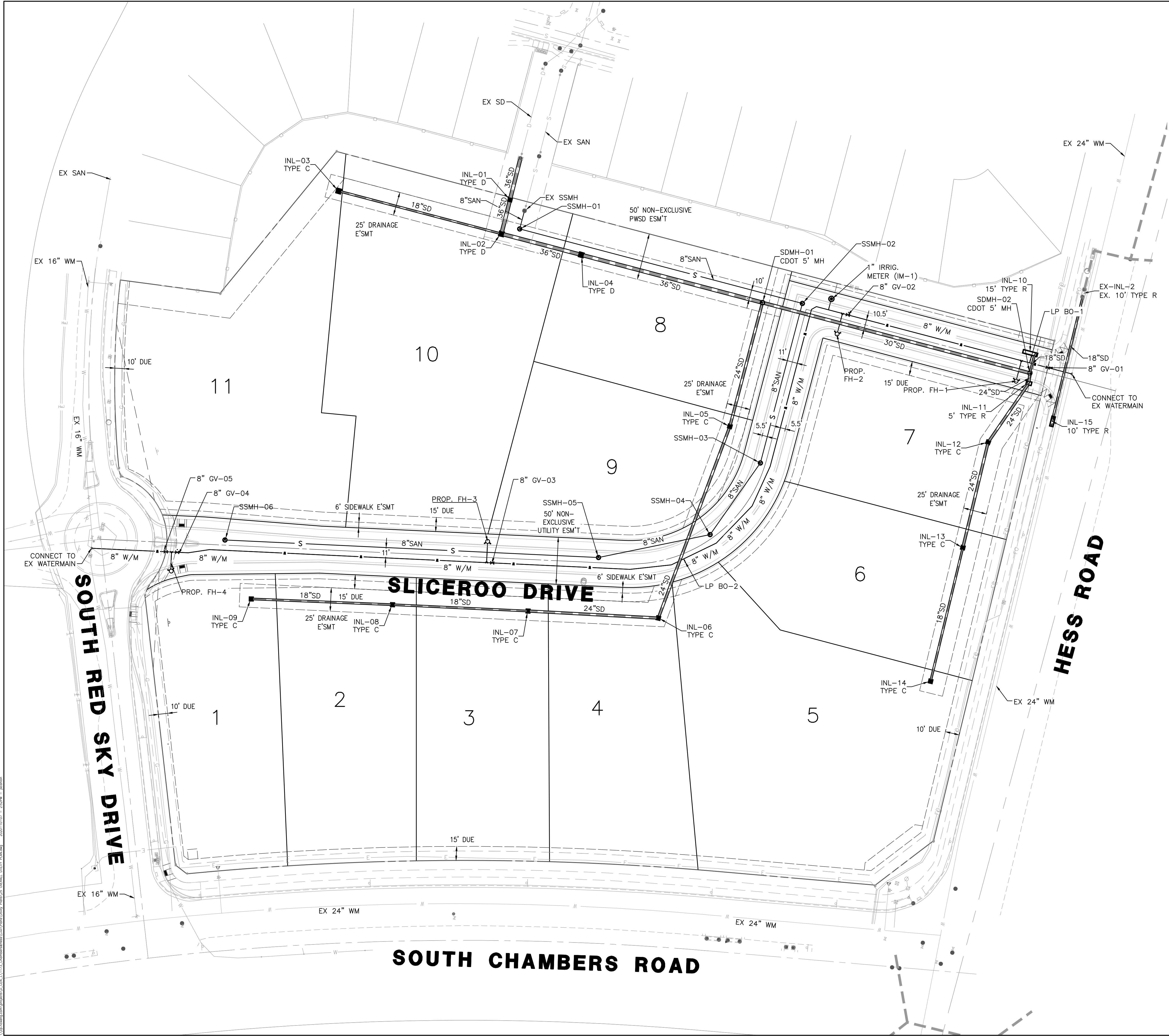
SCALE:	NTS
DATE:	10/7/2020
DRAWN BY:	WD
CHECKED BY:	JS
JOB NO:	D01173-A

NOTES

PROJECT NO.	D01173-A
DRAWING NO.	2

SHEET NO. 2 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION



NOTES

1. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.

TOWN OF PARKER APPROVAL

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

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

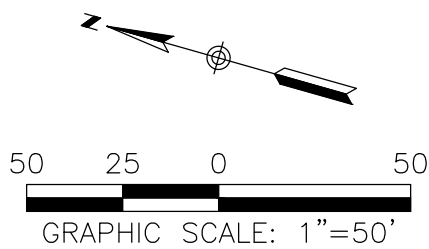
TOWN OF PARKER, DIRECTOR OF ENGINEERING/PUBLIC WORKS DATE

FIRE DEPARTMENT APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO DISTRICT STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE SOUTH METRO FIRE PROTECTION DISTRICT.

SIGNATURE OF FIRE CHIEF OR DESIGNATED REPRESENTATIVE

DATE



WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

RICK
ENGINEERING COMPANY
9801 EAST EASTER AVE
CENTENNIAL, CO 80112
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Tucson - San Diego - Riverside - Orange
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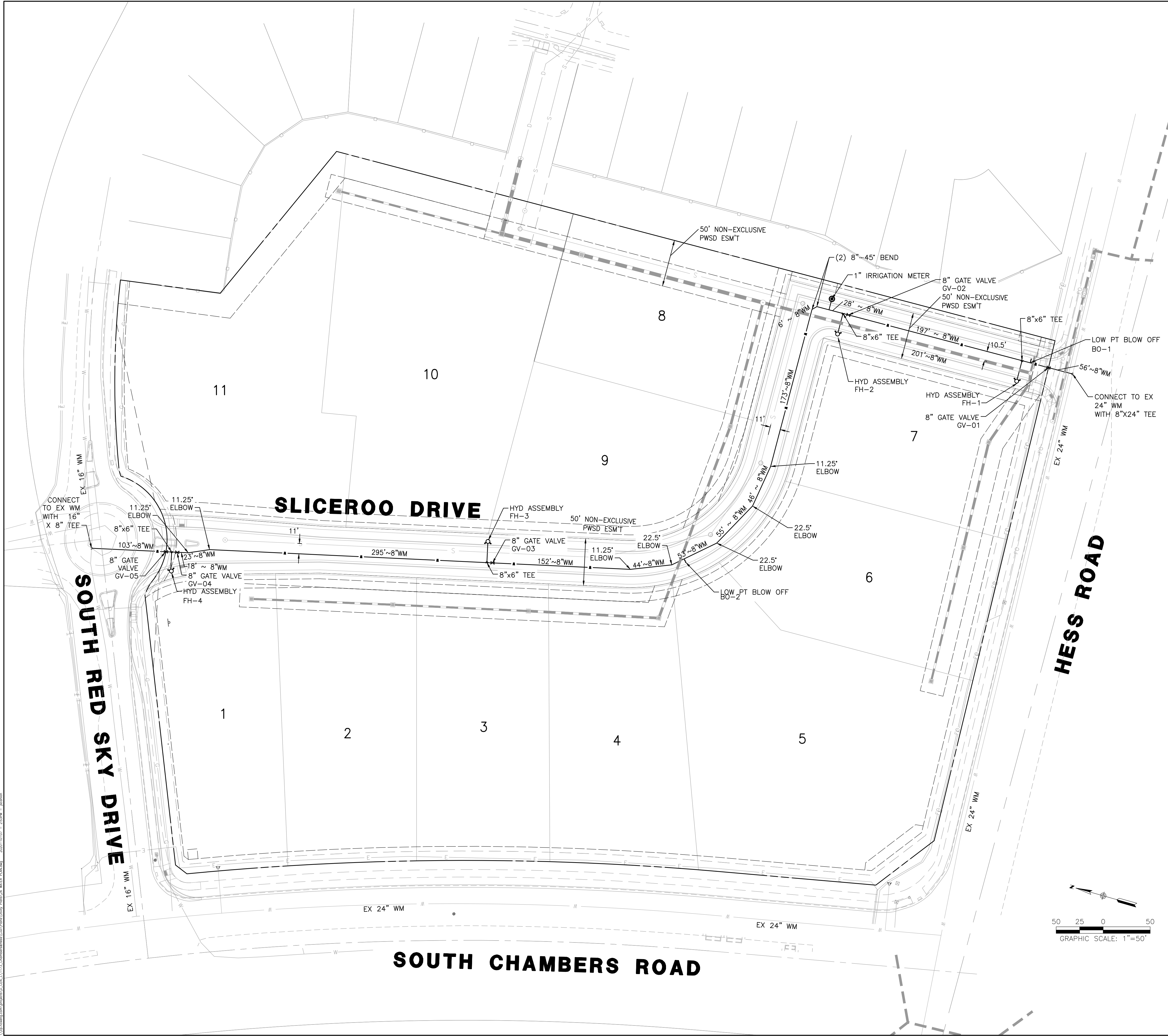
REVISIONS:		
NO.	DESCRIPTION	DATE:
1	-	-

SCALE:	1" = 50'
DATE:	10/7/2020
DRAWN BY:	WD
CHECKED BY:	JS
JOB NO:	D01173-A

OVERALL
UTILITY
PLAN

PROJECT NO.	D01173-A
DRAWING NO.	3
SHEET NO.	3 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION



DISTRICT POLICIES & INSTALLATION NOTES
FOR WATER SERVICES:

INSTALLATION NOTES: WATER

- 1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN)
- 2. APPROVED BEDDING TO BE SQUEEGEE.
- 3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-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 PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
- 4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED AT A MINIMUM OF 18" ABOVE SEWER SERVICE.
- 5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD, CRAWLSPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURY.
- 6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE 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 (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
- 12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"V" FOR WATER SERVICES
- 13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

INSPECTION POLICY:

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

NOTES

- 1. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.

WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

RICK
ENGINEERING COMPANY
9801 EAST EASTER AVE
CENTENNIAL, CO 80112
303.537.8020
Tucson - San Diego - Riverside - Orange
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PROFESSIONAL ENGINEER
48704

811
Know what's below.
Call before you dig.

REVISIONS:		
NO.	DESCRIPTION	DATE:
1	-	-

SCALE: 1" = 50'
DATE: 10/7/2020
DRAWN BY: WD
CHECKED BY: JS
JOB NO: D01173-A

**WATER
PLAN**

PROJECT NO.
D01173-A
DRAWING NO.
4
SHEET NO. 4 OF 12 SHEETS

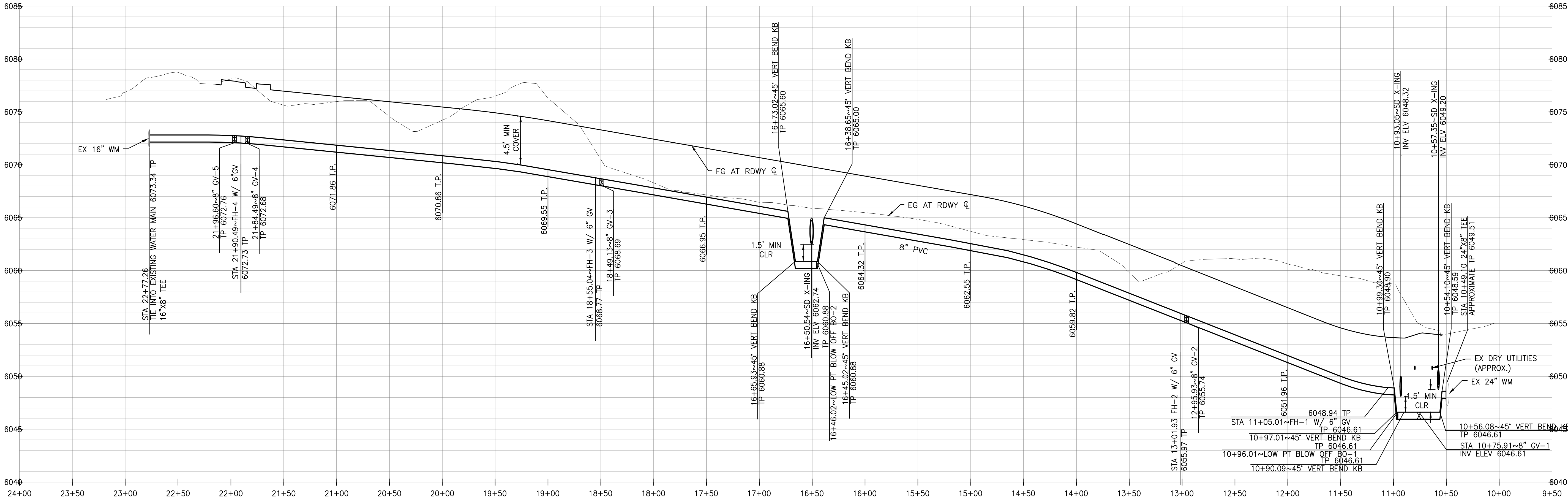
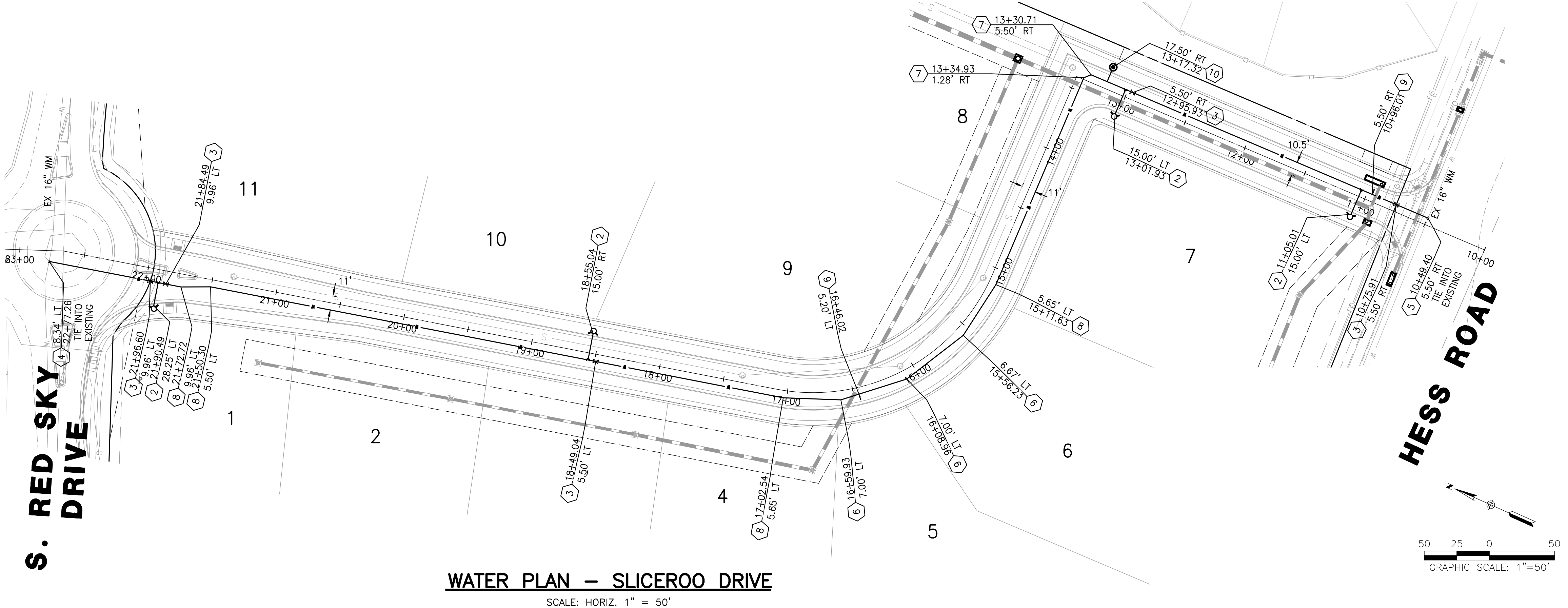
PRELIMINARY
NOT FOR CONSTRUCTION

CONSTRUCTION NOTES

- 1 WATER SERVICE CONNECTION PER PWSO STD DTL W1.2
- 2 FIRE HYDRANT ASSEMBLY PER PWSO STD DTL W2.5
- 3 8" GATE GALVE
- 4 16"x8" TEE
- 5 24"x8" TEE
- 6 22.5' BEND AND THRUST BLOCK
- 7 45' BEND AND THRUST BLOCK
- 8 11.25' BEND AND THRUST BLOCK
- 9 LOW POINT BLOW OFF PER PWSO STD DTL W3.8
- 10 1" IRRIGATION METER PWSO STD DTL W5.10

GENERAL NOTES

- EXISTING WATER MAIN DEPTH UNKNOWN, EXISTING ELEVATIONS ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM THE EXISTING WATER MAIN DEPTH BENEATH ALL PROPOSED STREET IMPROVEMENTS PRIOR TO CONSTRUCTION. ANY AREAS WHERE THE EXISTING WATER MAIN DEPTH WILL BE LESS THAN 4.5' AS A RESULT OF THE PROPOSED IMPROVEMENTS WILL REQUIRE A WATER MAIN LOWERING. THE CONTRACTOR SHALL HAVE A PARKER WATER & SANITATION DISTRICT INSPECTOR ON SITE FOR ANY POTHOLES FOR THE EXISTING WATER MAIN DEPTH.



WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
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WATER
PLAN &
PROFILE

PROJECT NO.
D01173-A
DRAWING NO.
5
SHEET NO. 5 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION

DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES:

INSTALLATION NOTES:

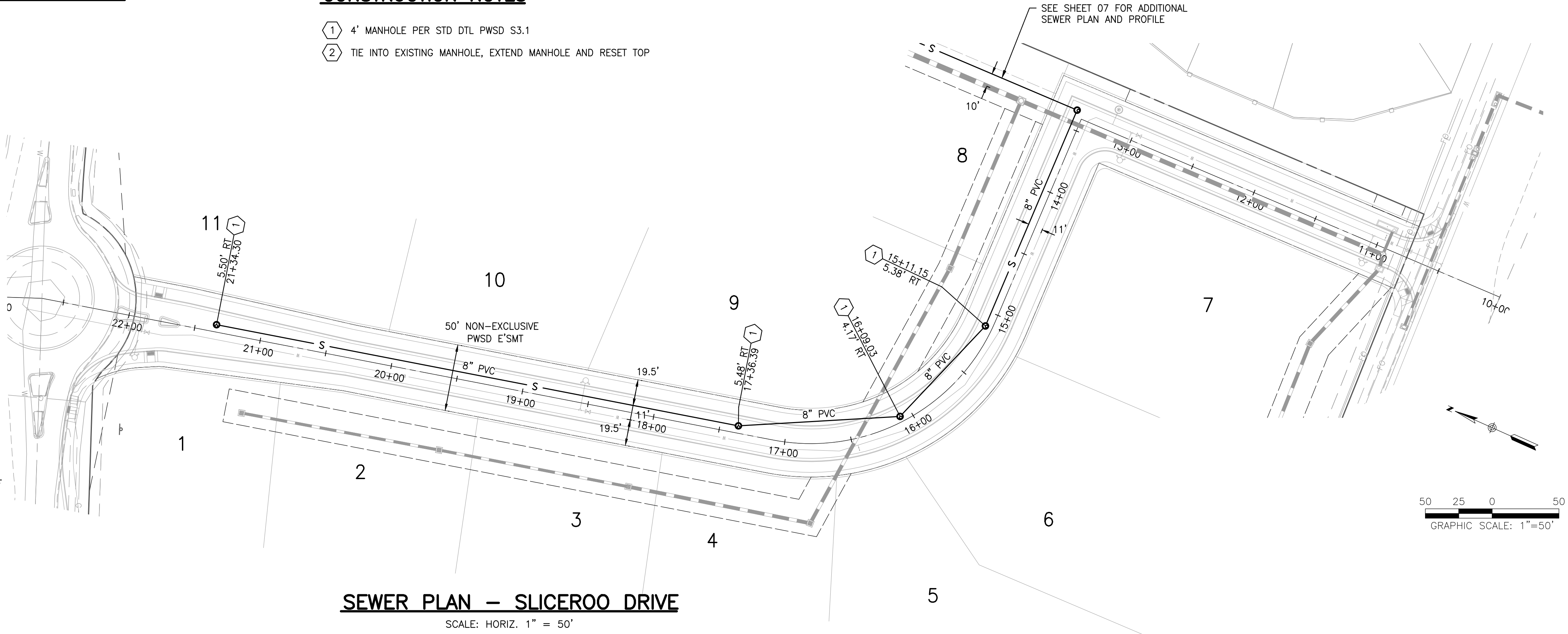
1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHEDULE 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3'.
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL NOT INCLUDE MORE THAN 3 BENDS. 90° 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 THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
8. ALL SERVICES SHALL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"Y" FOR WATER SERVICES

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED 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.

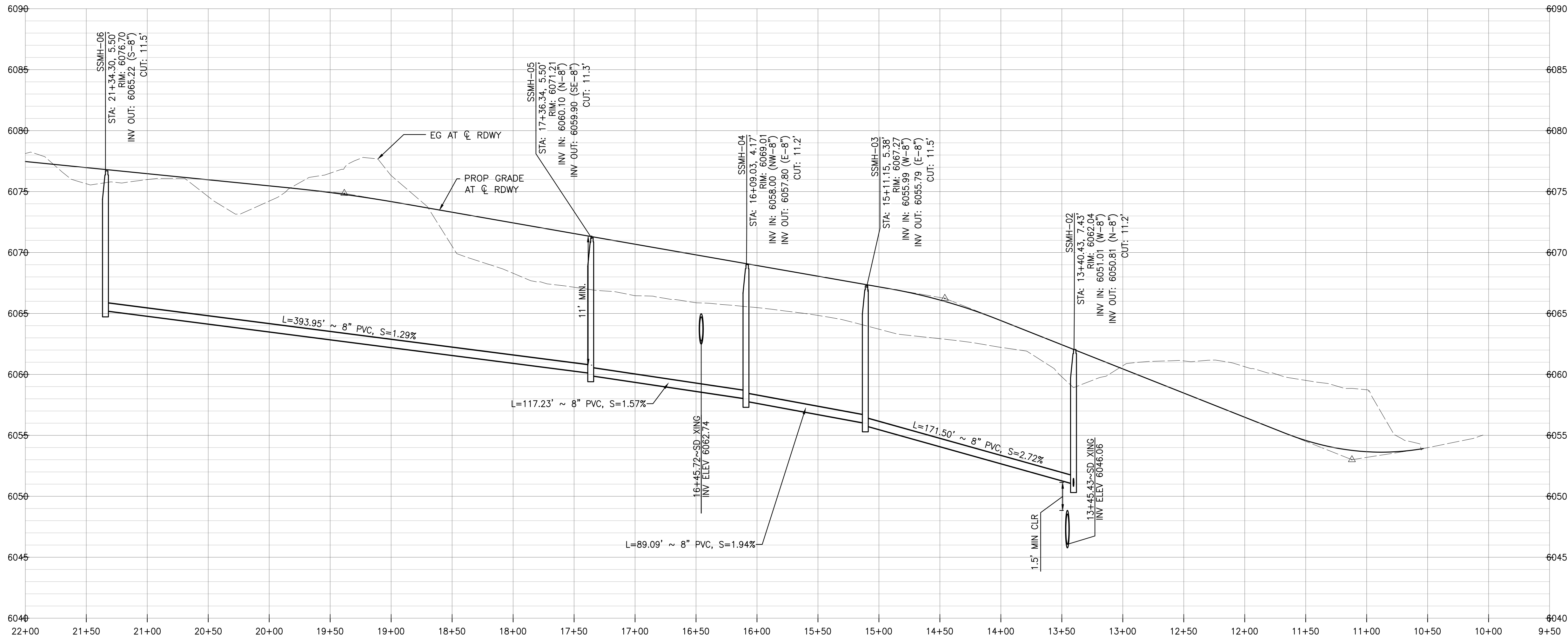
CONSTRUCTION NOTES

- 1 4' MANHOLE PER STD DTL PWS S3.1
- 2 TIE INTO EXISTING MANHOLE, EXTEND MANHOLE AND RESET TOP



SEWER PLAN - SLICEROO DRIVE

SCALE: HORIZ. 1" = 50'



SEWER PROFILE - SLICEROO DRIVE

SCALE: HORIZ. 1"=50', VERT. 1"=5'

WATER & SEWER IMPROVEMENT PLANS FOR
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FILING NO. 6
DOUGLAS COUNTY, COLORADO

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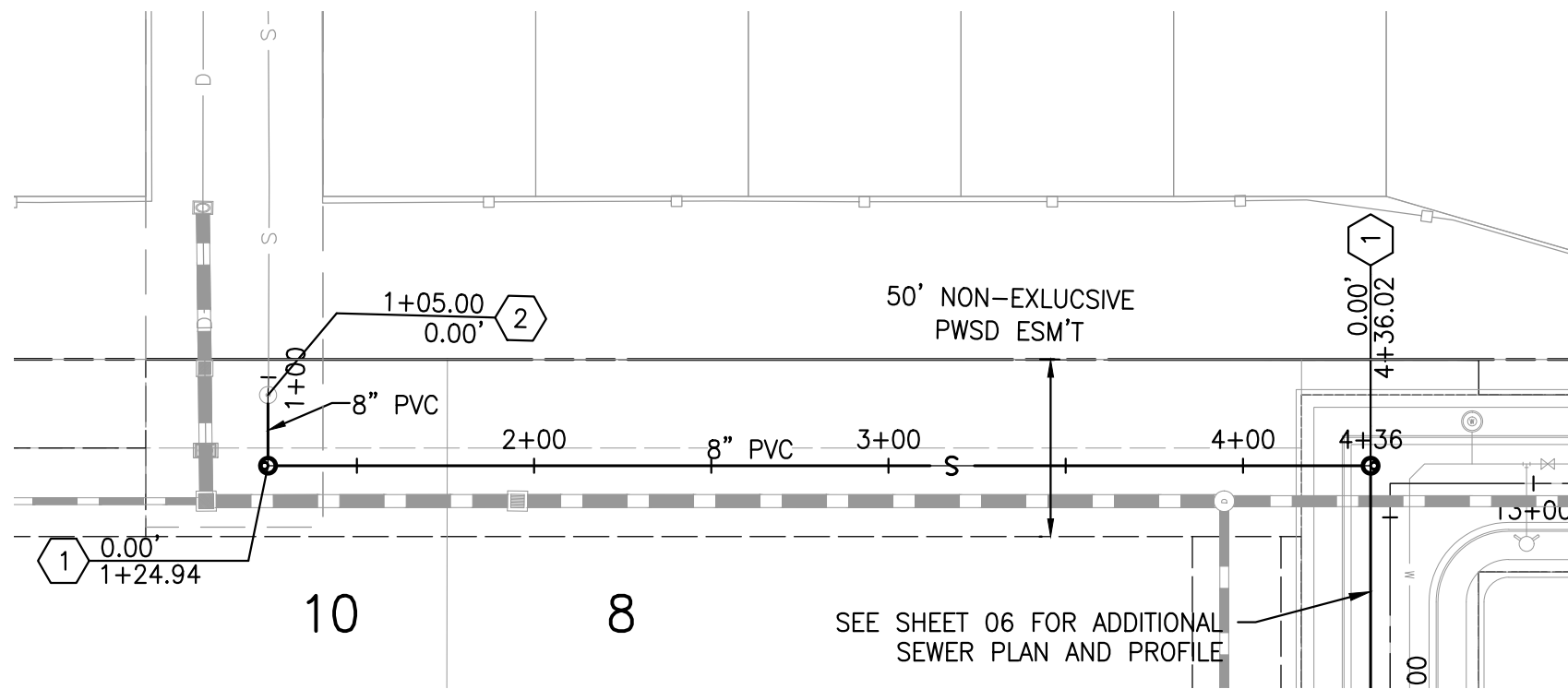
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NO.	DESCRIPTION	DATE:
1	-	-

SCALE: 1" = 50'
DATE: 10/7/2020
DRAWN BY: WD
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SLICEROO DR
SEWER PLAN
& PROFILE

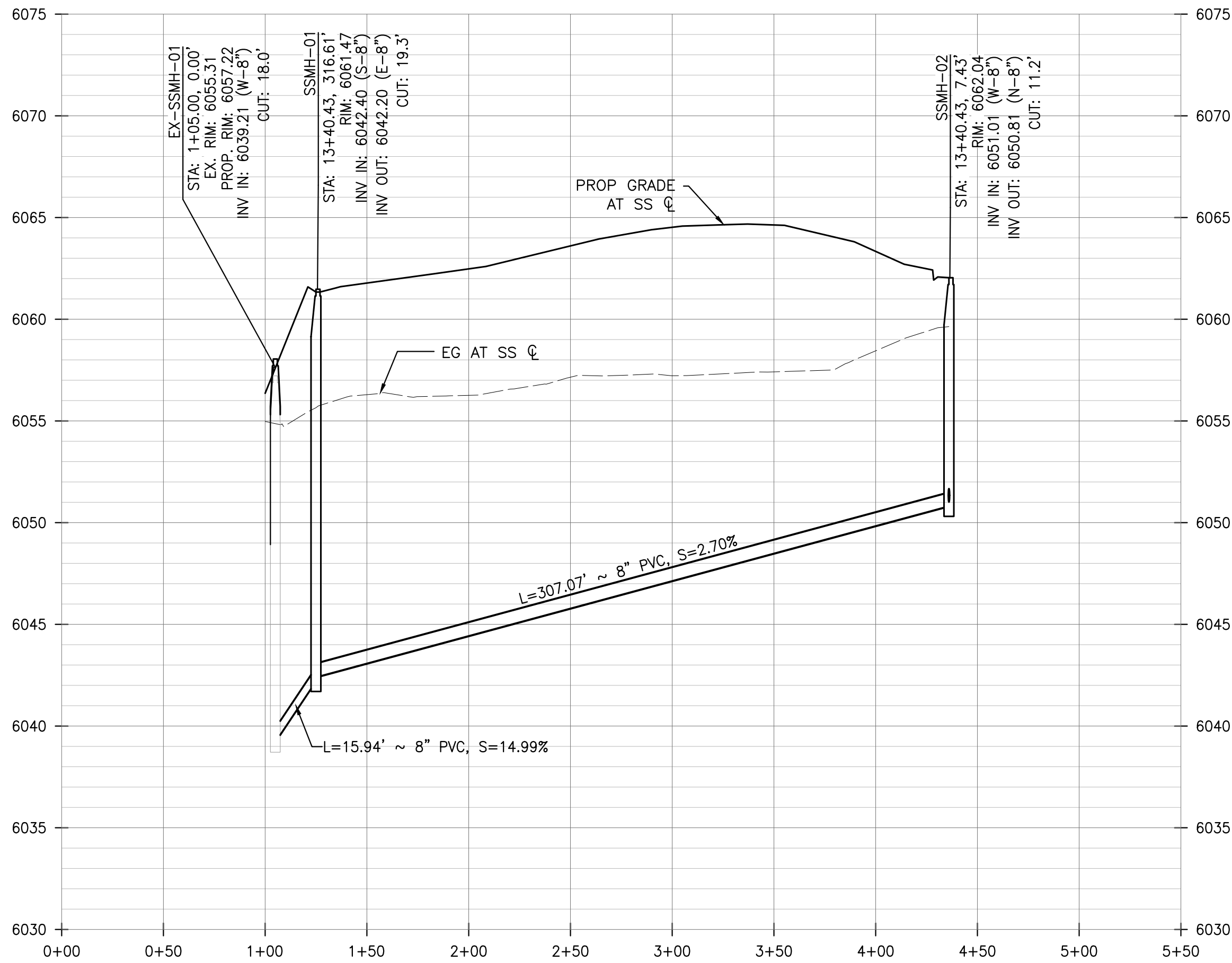
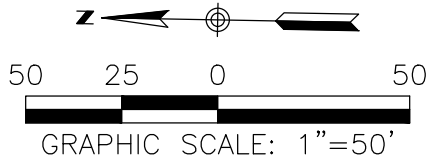
PROJECT NO.
D01173-A
DRAWING NO.
6
SHEET NO. 6 OF 12 SHEETS

PRELIMINARY
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SEWER PLAN

SCALE: HORIZ. 1" = 50'



SEWER PROFILE

SCALE: HORIZ. 1"=50', VERT. 1"=5'

DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES:

INSTALLATION NOTES:

1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHEDULE 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 NOT INCLUDE 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 THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
8. ALL SERVICES SHALL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"Y" FOR WATER SERVICES

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED 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.

CONSTRUCTION NOTES

- 1 4' MANHOLE PER STD DTL PWS S3.1
- 2 TIE INTO EXISTING MANHOLE, EXTEND MANHOLE & RESET MANHOLE TOP

WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

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DATE: 10/7/2020
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CHECKED BY: JS
JOB NO: D01173-A

SEWER PLAN & PROFILE

PROJECT NO.
D01173-A

DRAWING NO.

7

SHEET NO. 7 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION

2020 Rick Engineering Company

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

WATER

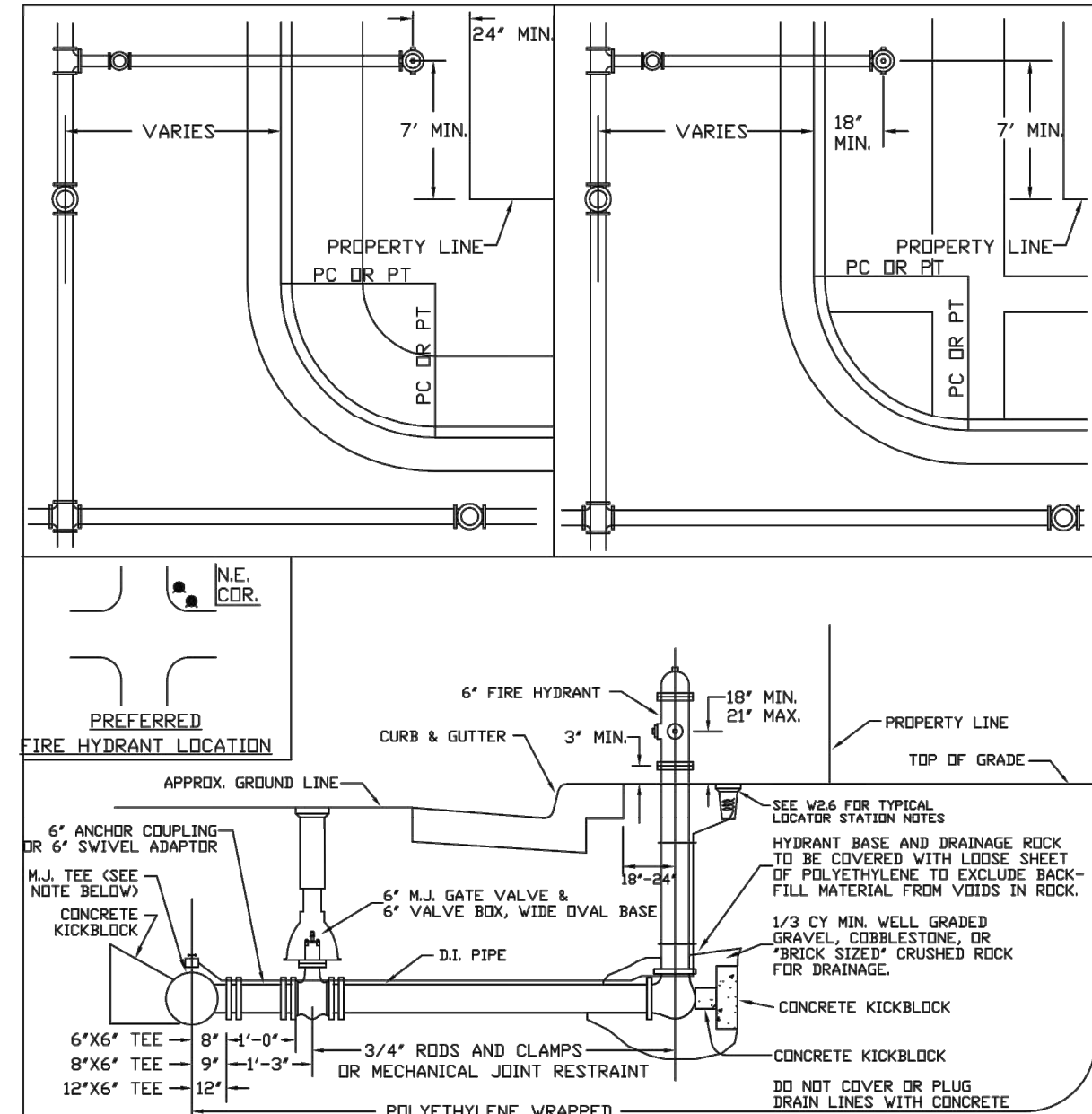
1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEZE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4".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

PARKER WATER
& SANITATION DISTRICT

DISTRICT POLICIES & INSTALLATION

PARKER WATER & SANITATION DISTRICT DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES	
SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED:	1/04
PVR	1/16
DIRECTOR OF ENGINEERING	10/16

SHEET W1.1

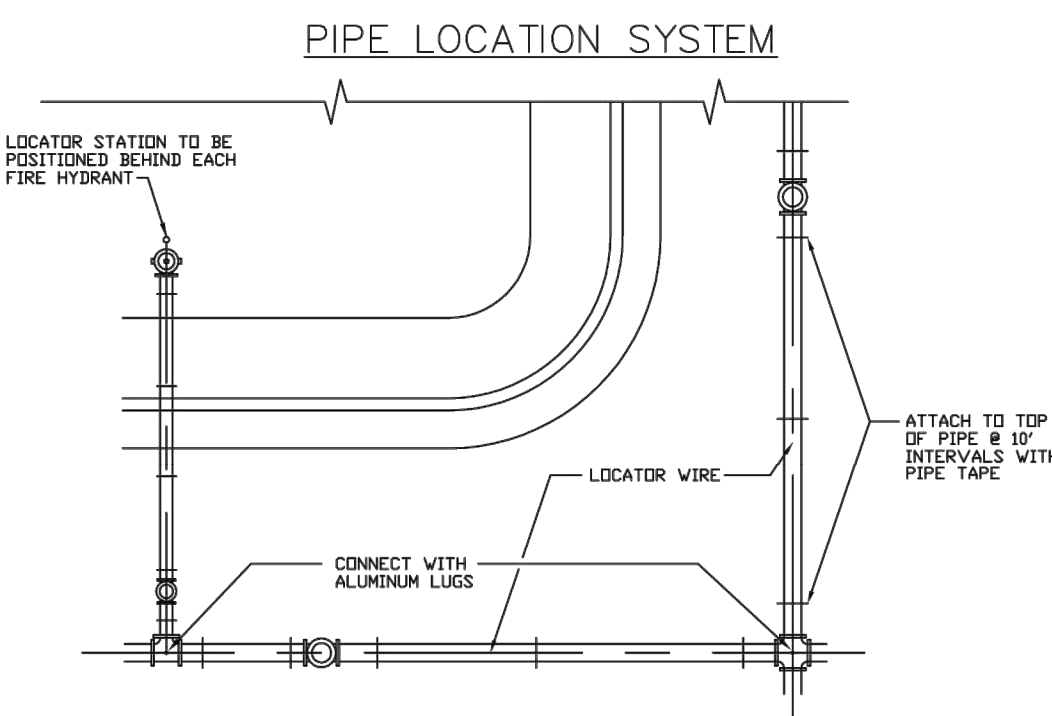


NOTES:

1. ALTERNATE TO THE ABOVE: FASTEN M.I. VALVE DIRECTLY TO A M.I. ANCHOR TEE (ALSO CALLED SWIVEL TEE.)
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH
4. NO PORTION OF FIRE HYDRANT MAY
5. FIRE HYDRANT EXTENSIONS MAY NOT BE MORE THAN SIX WALK AREA.

PARKER WATER & SANITATION DISTRICT	
FIRE HYDRANTS LOCATION & INSTALLATION	
SCALE: NONE	DATE: 2/96
APPROVED:	4/01 10/16
PVR	01/02
DIRECTOR OF ENGINEERING	12/07
	1/16

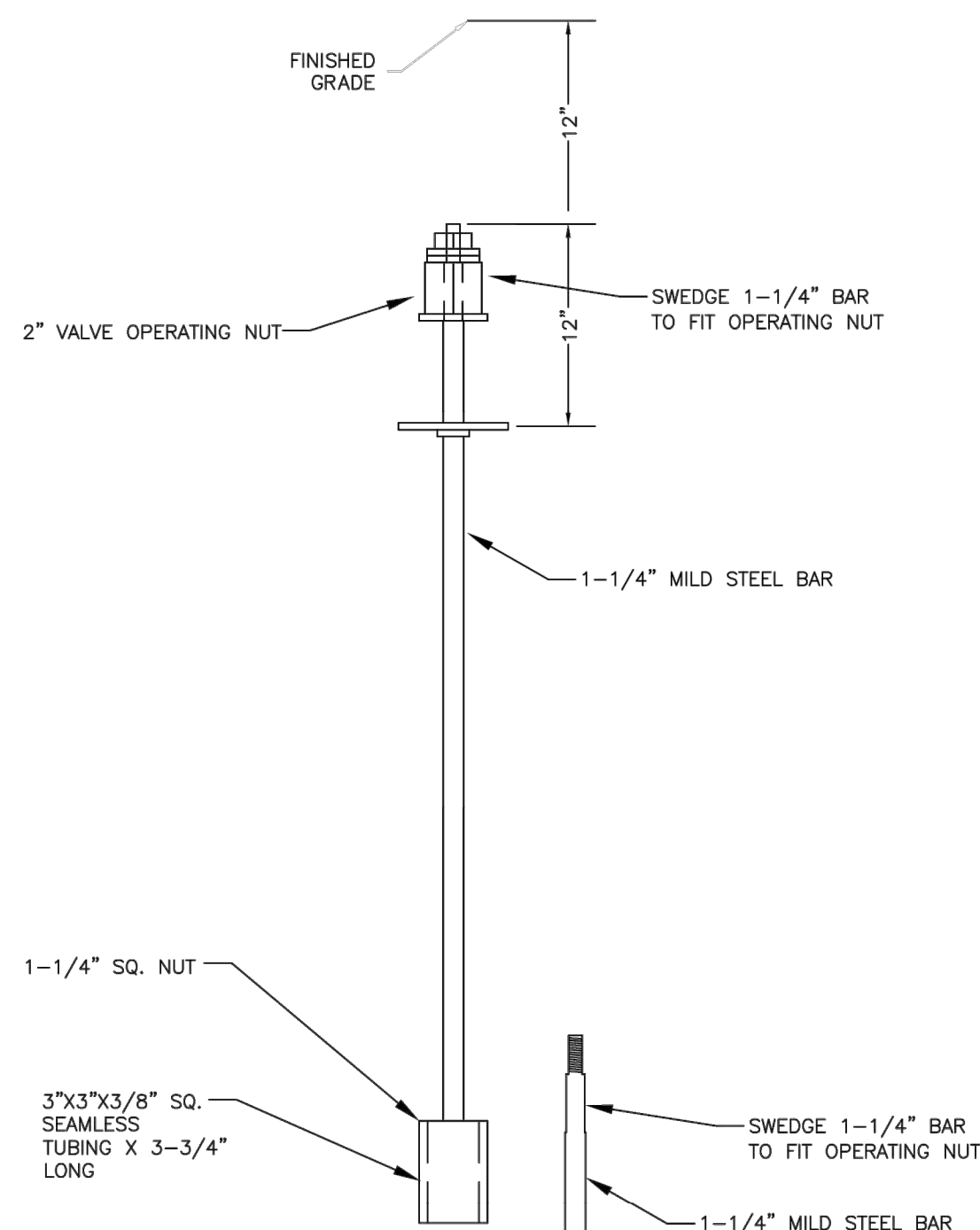
2016 REVISION



OR USE ON ALL DUCTILE IRON AND PVC WATER MAINS.
LOCATOR STATION POSITION MAY BE MODIFIED AT THE
DISCRETION OF THE DISTRICT ENGINEER.
A CONTINUITY TEST WILL BE REQUIRED PRIOR TO
PROBATIONARY ACCEPTANCE.

PARKER WATER & SANITATION DISTRICT	
LOCATOR WIRE DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR DIRECTOR OF ENGINEERING	4/01 01/02 01/16 10/16

2016 REVISION

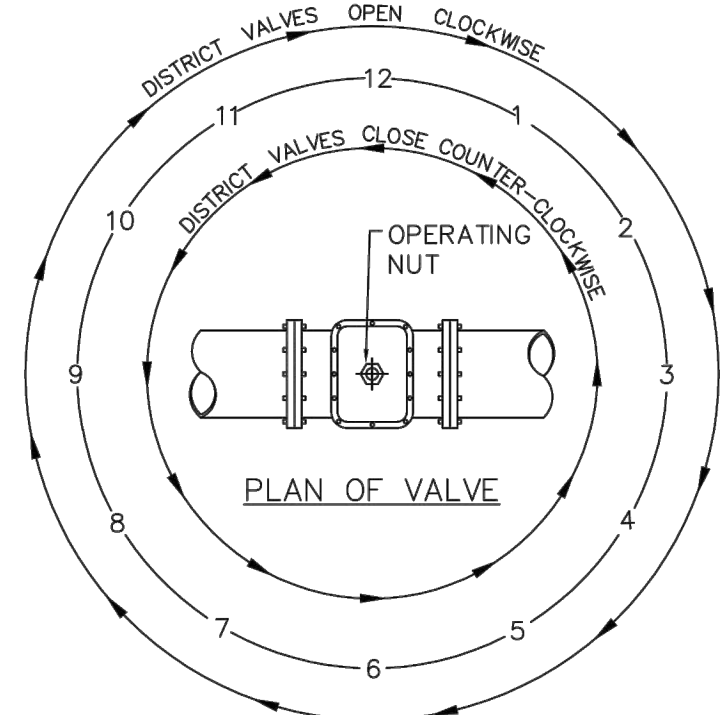


NOTES:

1. VALVE EXTENSIONS ONLY ALLOWED ON VALVES DEEPER THAN 9 FEET.

PARKER WATER & SANITATION DISTRICT	
VALVE OPERATOR EXTENSION	
SCALE: NONE	DATE: 5/98
APPROVED: PVR	2/00 12/07 1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

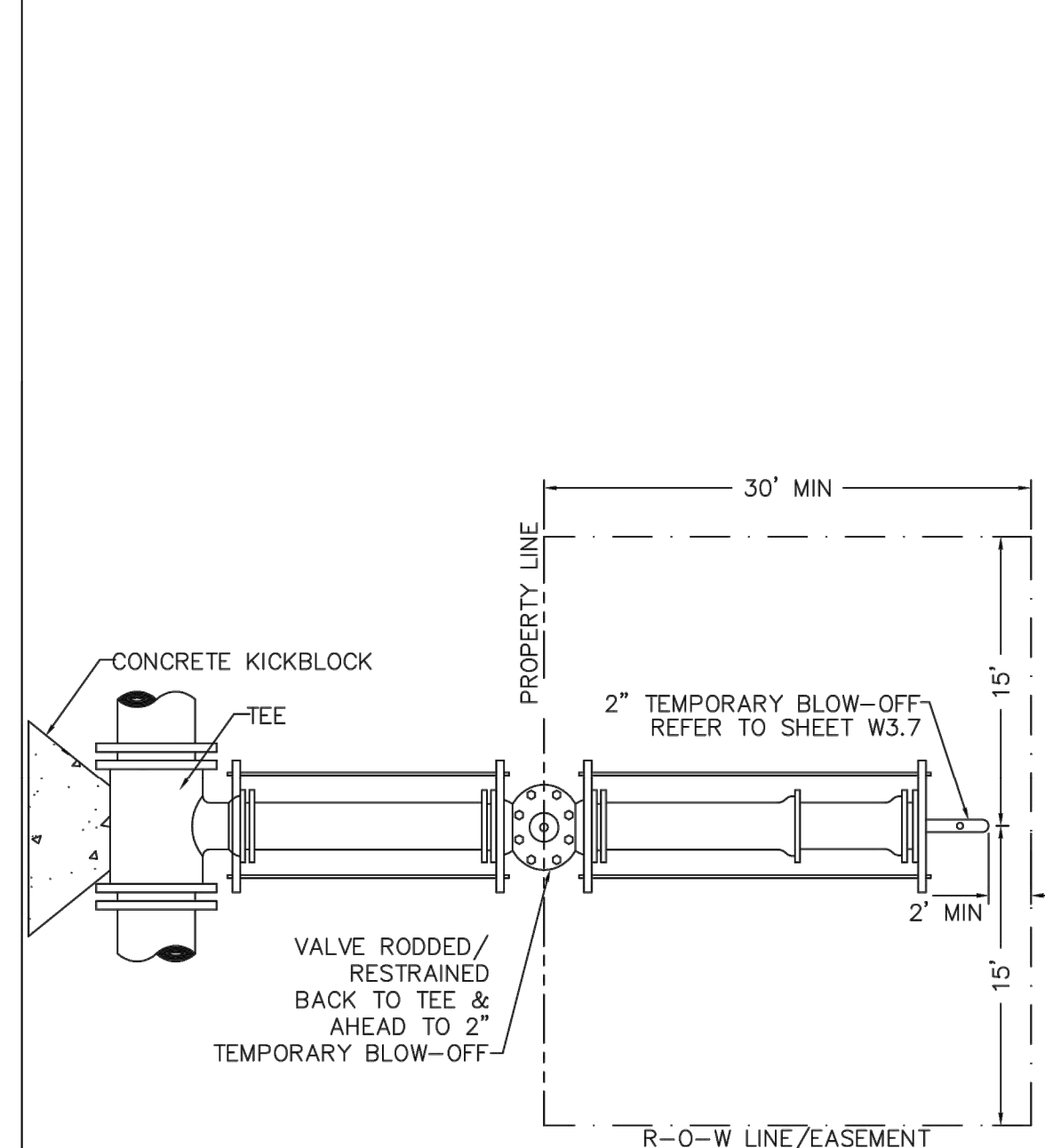


NOTE:
ONLY RIGHT HAND OPENING
VALVES ALLOWED.

VALVE OPENING & CLOSING PROCEDURE

PARKER WATER & SANITATION DISTRICT	
VALVE OPERATION	
SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION



PARKER WATER & SANITATION DISTRICT	
STUB-OUT CONFIGURATIONS	
SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED:	1/16 10/16
<u>PVR</u>	

2016 REVISION

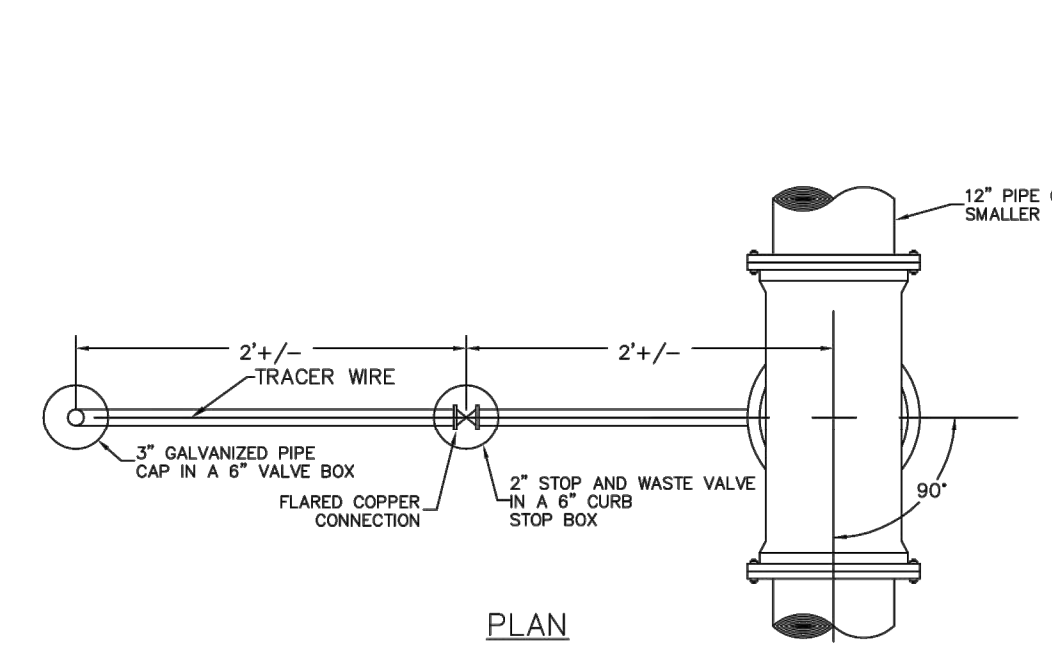


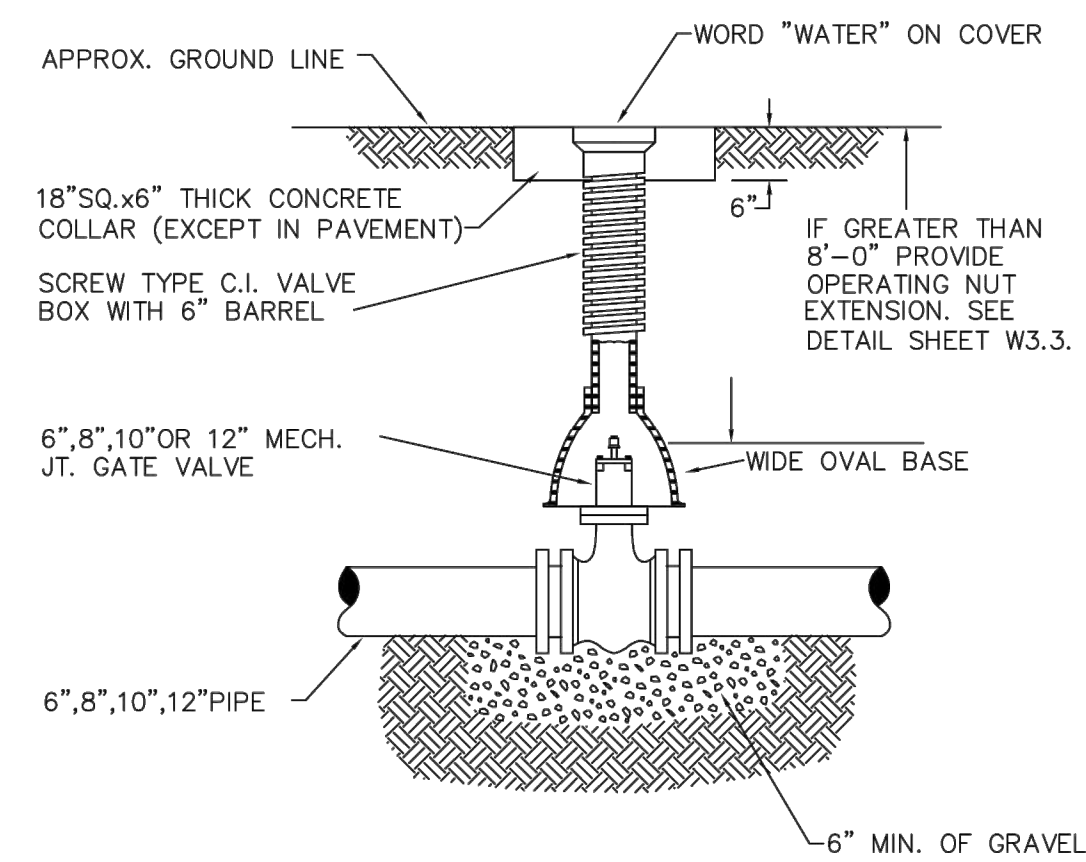
Diagram illustrating the components and assembly of a 2-inch water line installation. The diagram shows a cross-section of the ground line and the installation details below it.

- GROUND LINE**: The top boundary of the installation.
- 2" MALE I.P. THREAD X SOLDER ADAPTOR COVERED W/ A 3" CAP.**: The top connection point.
- SEE VALVE BOX DETAIL W3.10**: Reference to a detailed view of the valve box.
- TOP SECTION OF VALVE BOX**: The upper part of the valve assembly.
- 2" STOP AND WASTE VALVE, FEMALE I.P. THREAD X FLARE WITH 2" GATE VALVE OPERATING NUT.**: The main valve assembly.
- LINE SIZE M-J TEE IN DOWN DIRECTION**: The tee fitting for the main line.
- PLUG W/ 2" TAP**: The plug and tap fitting.
- BOND BREAKER**: The fitting between the main line and the branch.
- BRASS STREET ELBOW (9"**: The elbow fitting for the street connection.
- 2" TYPED W/ SOFT COPPER PIPE**: The main water line.
- 90° ELL COUPLING**: The elbow coupling for the main line.
- 2" THREADED BRASS PIPE**: The branch line.
- 1 CU. FT. GRAVEL**: The gravel bedding for the branch line.
- TRACER WIRE**: The wire used for tracing the line.
- 14" MAX**: The maximum depth of the installation.

NOTE: PLUG SHALL BE MECHANICALLY RESTRAINED.

PARKER WATER & SANITATION DISTRICT LOW POINT BLOW-OFF WITH SAND TRAP	
SCALE: <u> NONE </u>	DATE: <u> 2/96 </u>
APPROVED: <u> PVR </u> DIRECTOR OF ENGINEERING	4/01 10/6 10/16

2016 REVISION



6-INCH VALVE BOXES

NOTES:

1. ALL C.I. SHALL BE WRAPPED WITH 8 MIL. MIN. THICKNESS POLYETHYLENE.
2. VALVE NUT SHALL BE CENTERED.
3. VALVE BOX SHALL BE PLUMB.
4. SEE MATERIAL SPECIFICATIONS FOR VALVE BOX WITH GREATER THAN BURIED DEPTH OF 4.5 FT.

PARKER WATER & SANITATION DISTRICT	
VALVE BOX DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED:	5/98 10/16
PVR	8/99
	12/07
DIRECTOR OF ENGINEERING	1/16

2016 REVISION

**WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO**

TRICK

ENGINEERING COMPANY

9801 EAST EASTER AVE
CENTENNIAL, CO 80112
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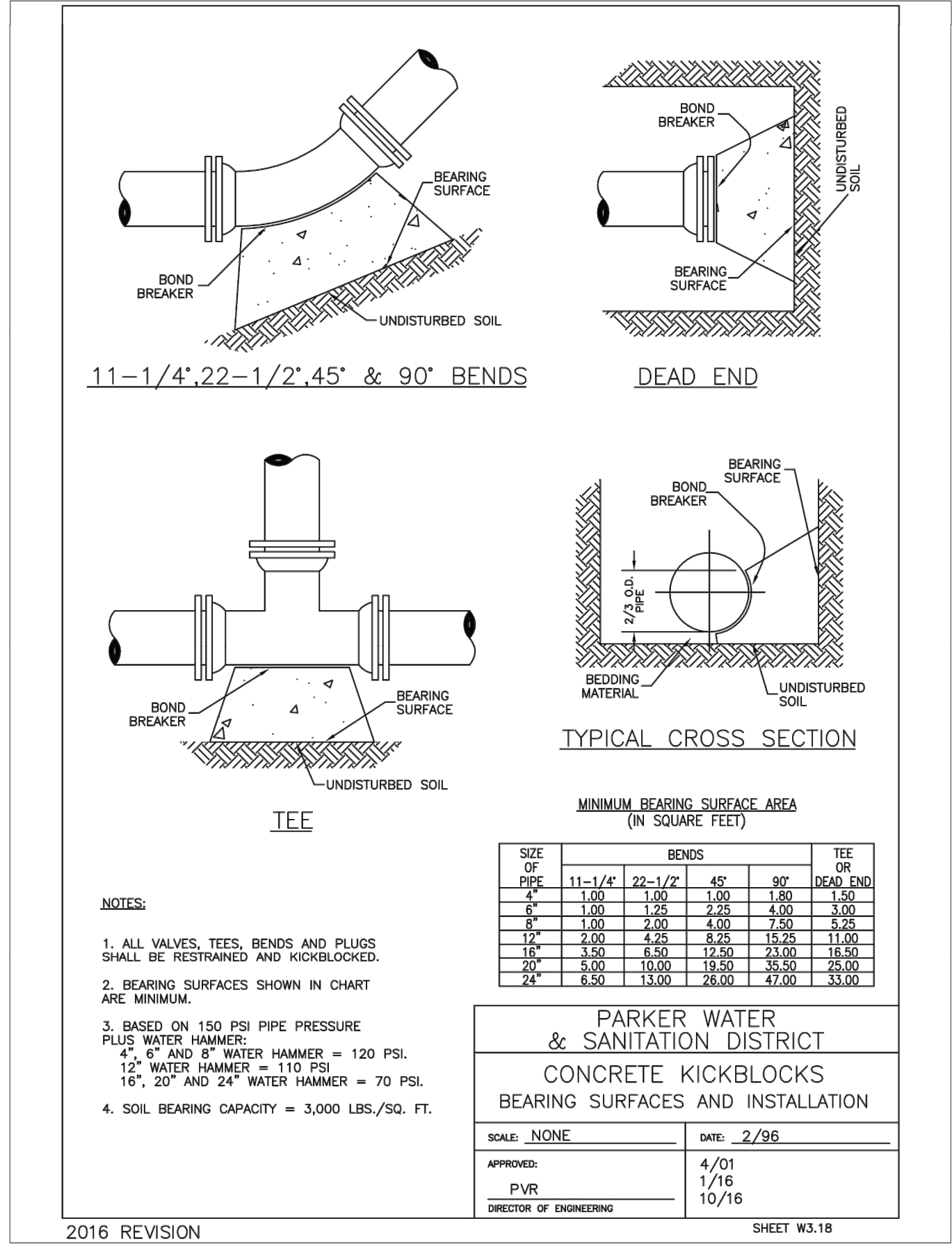
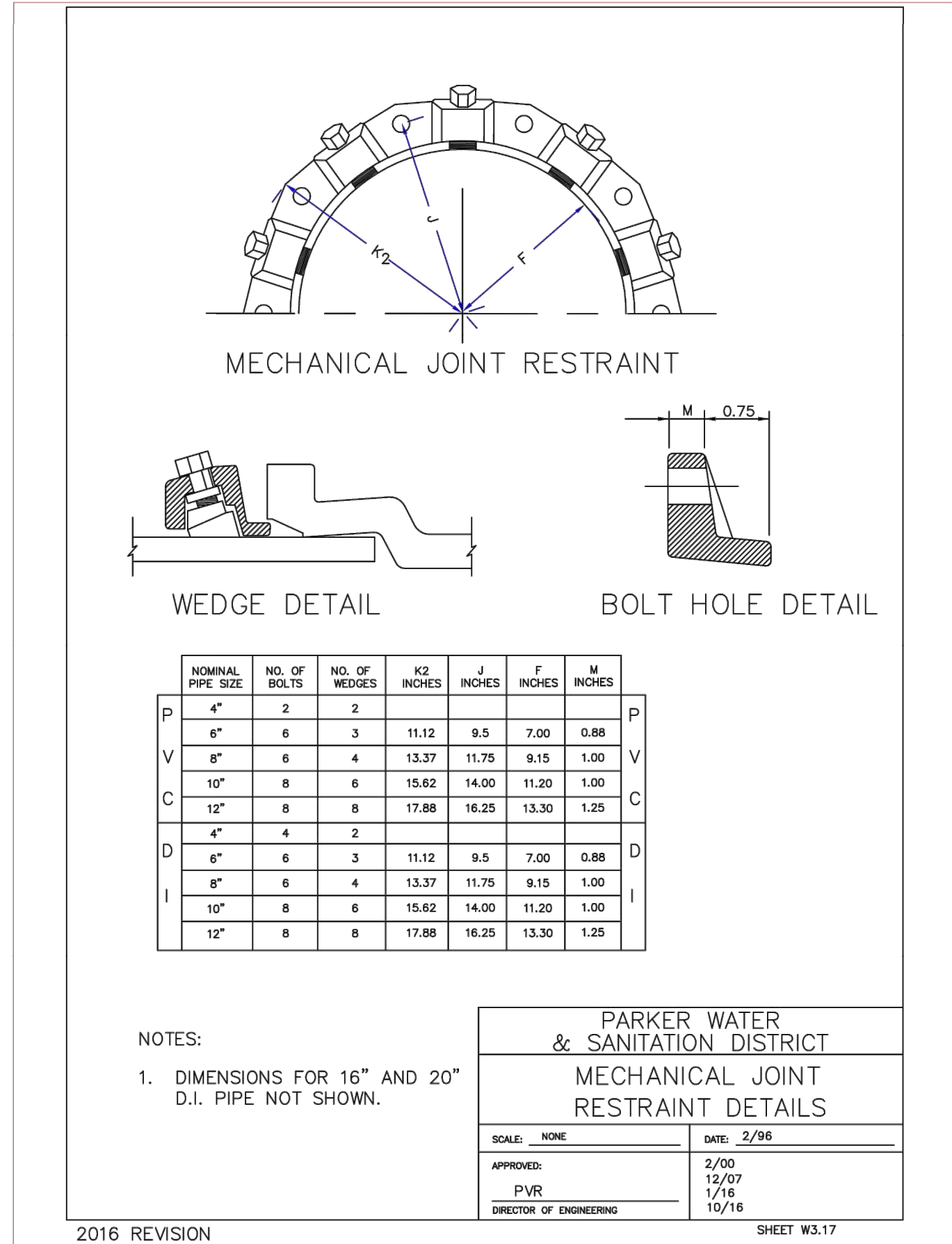
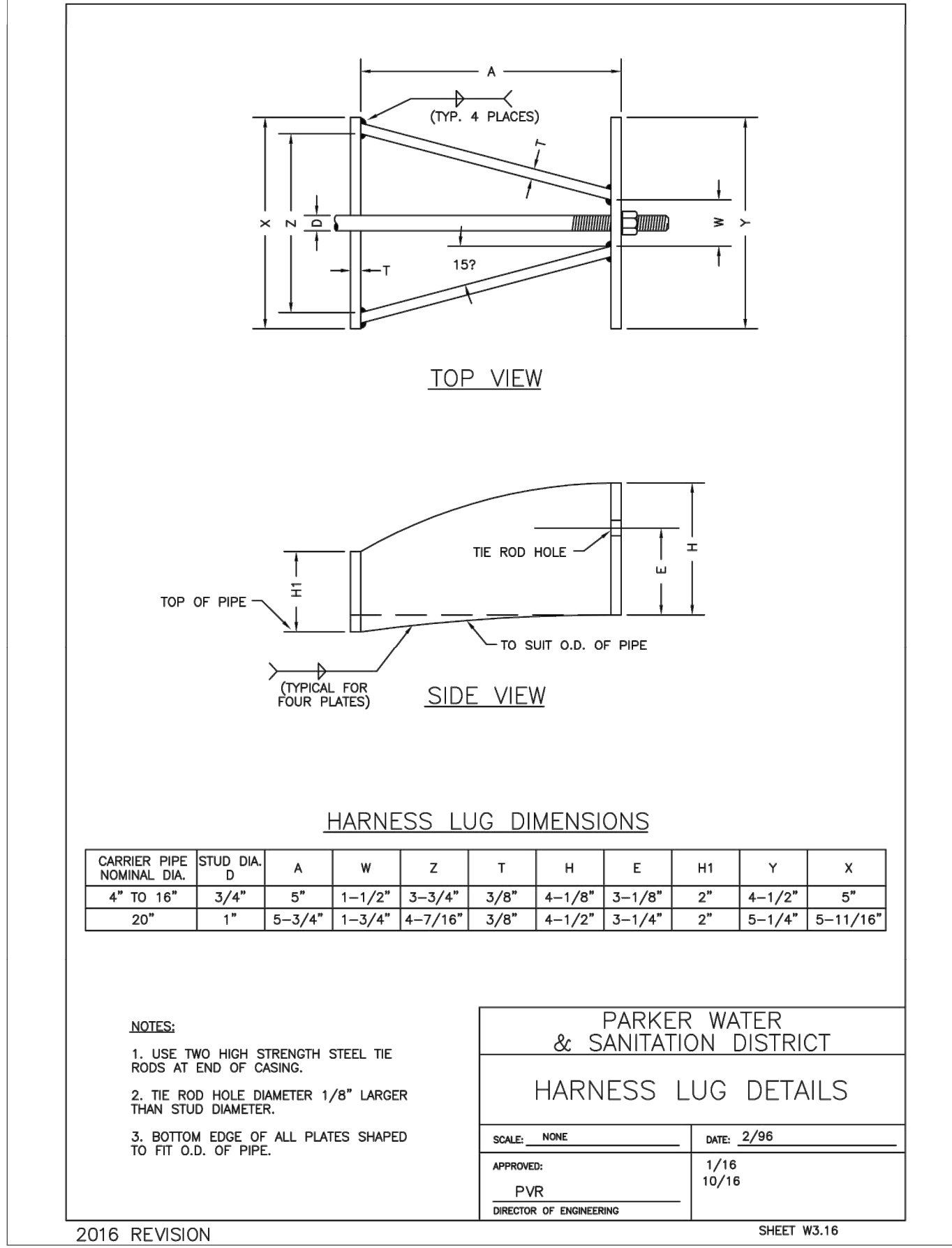
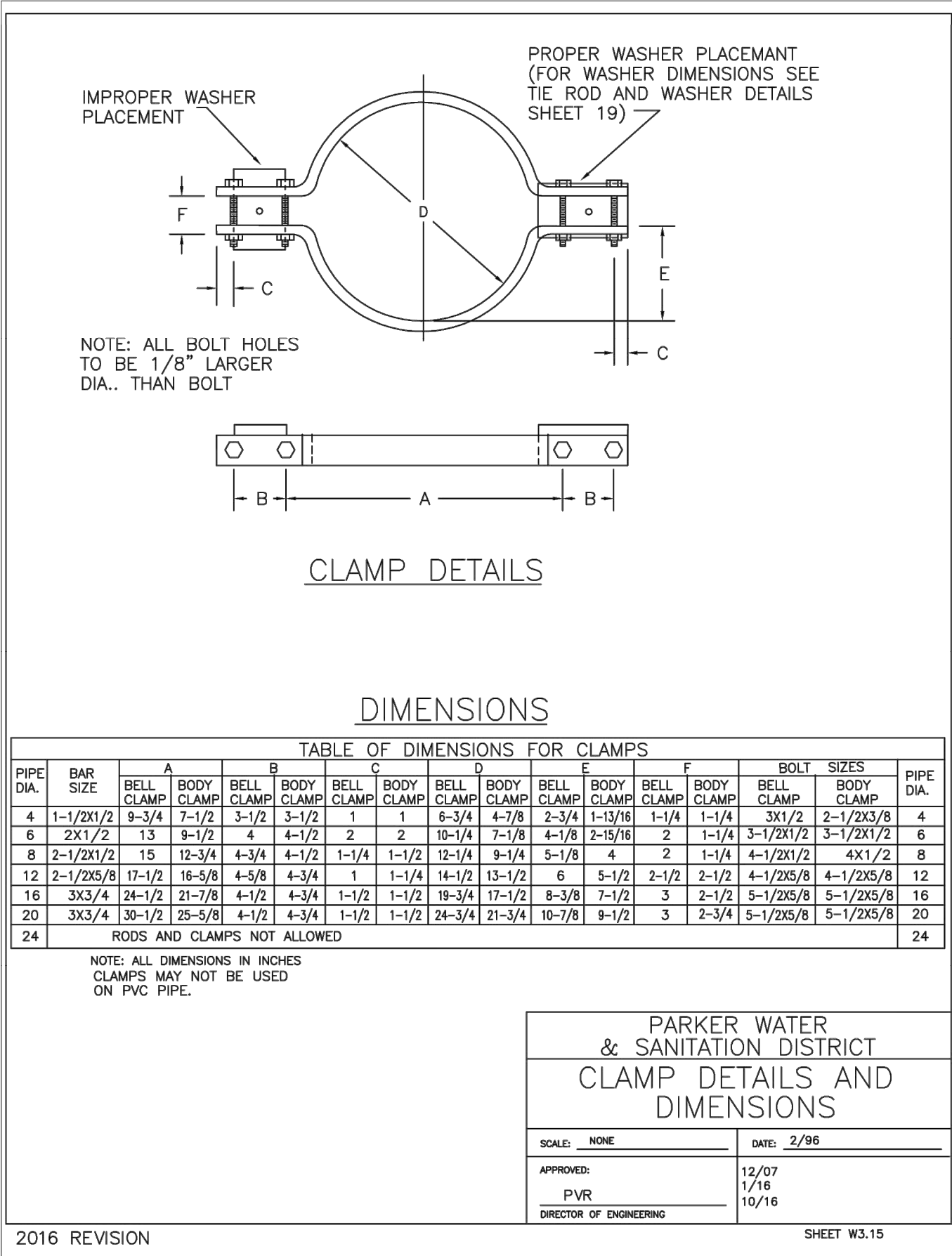
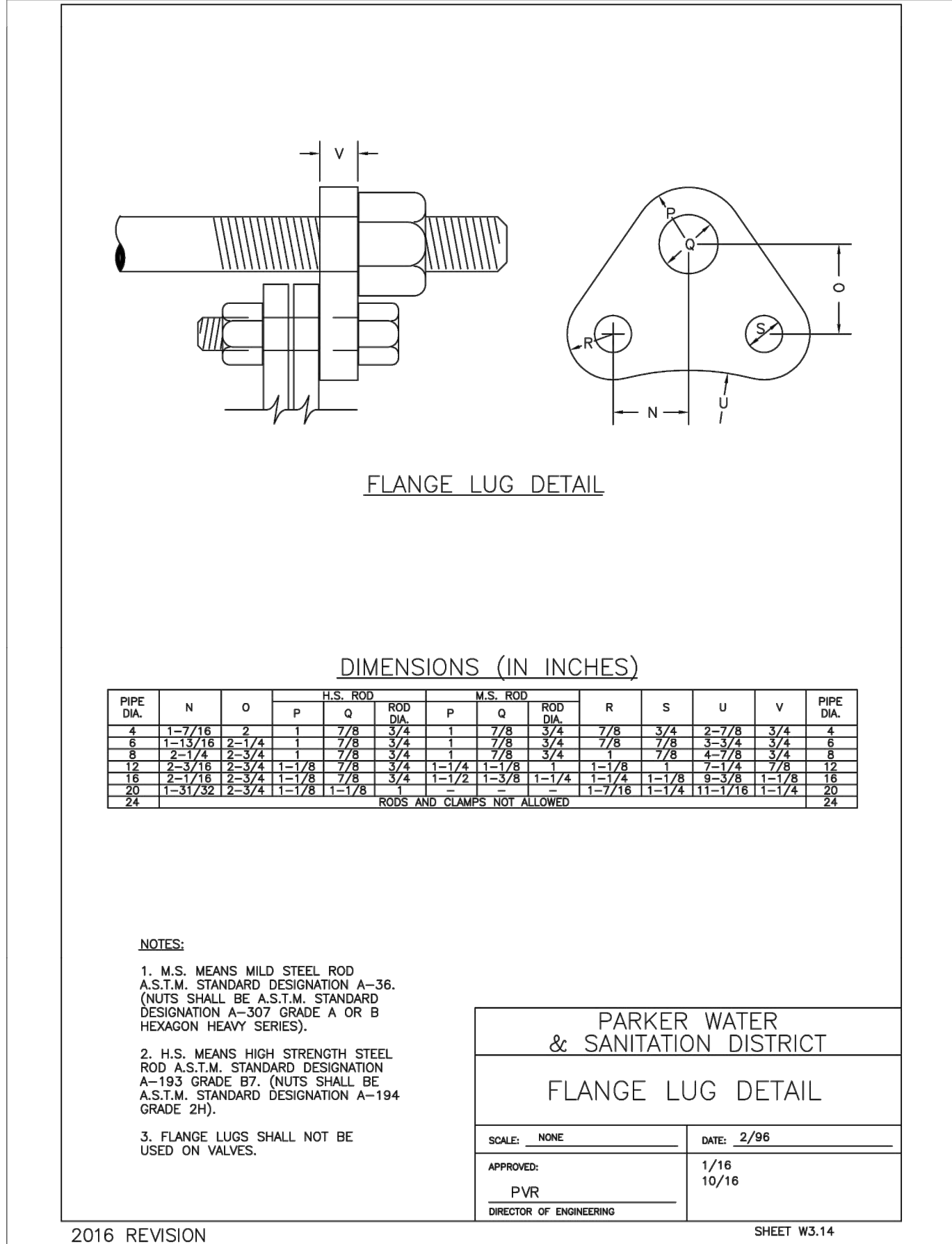
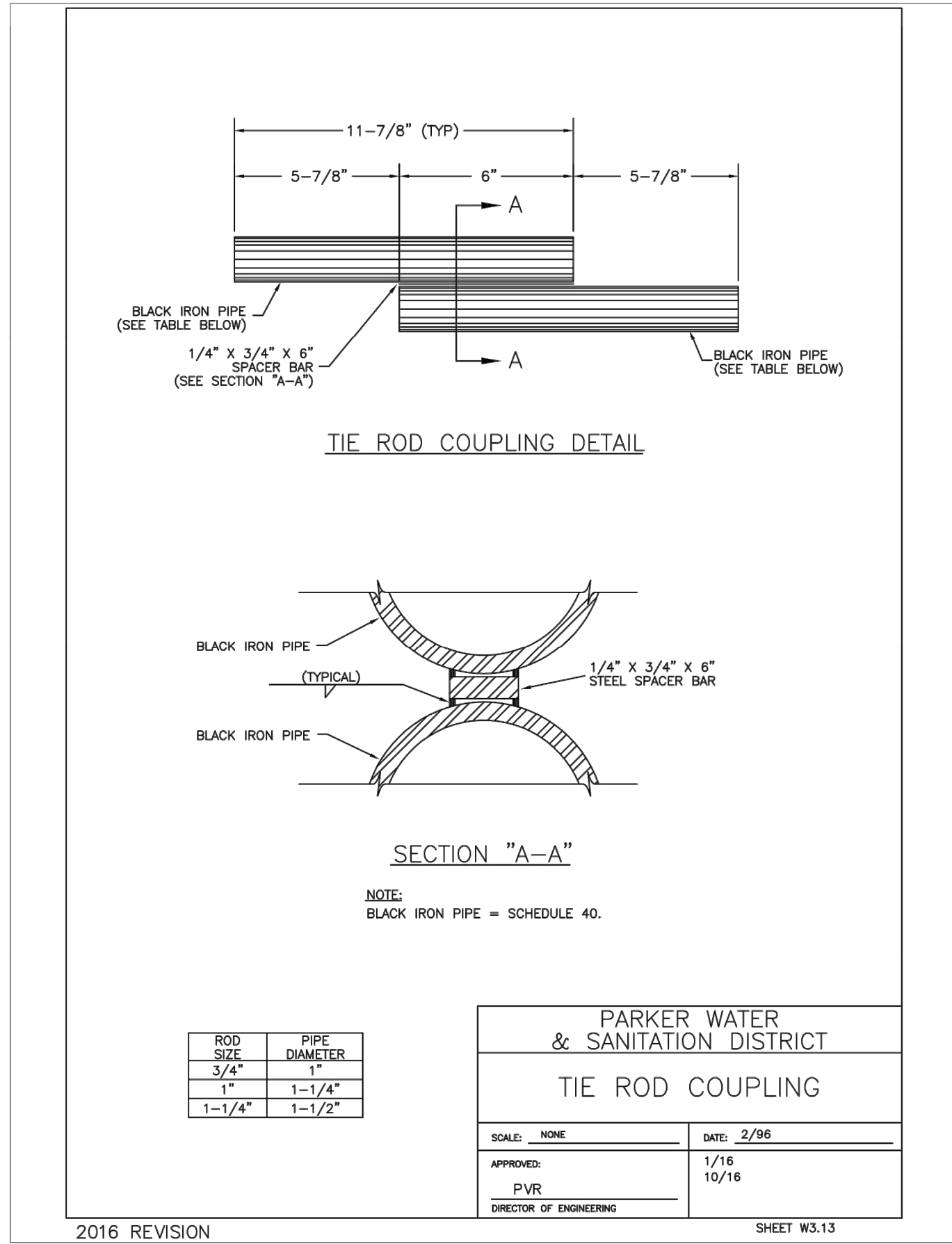
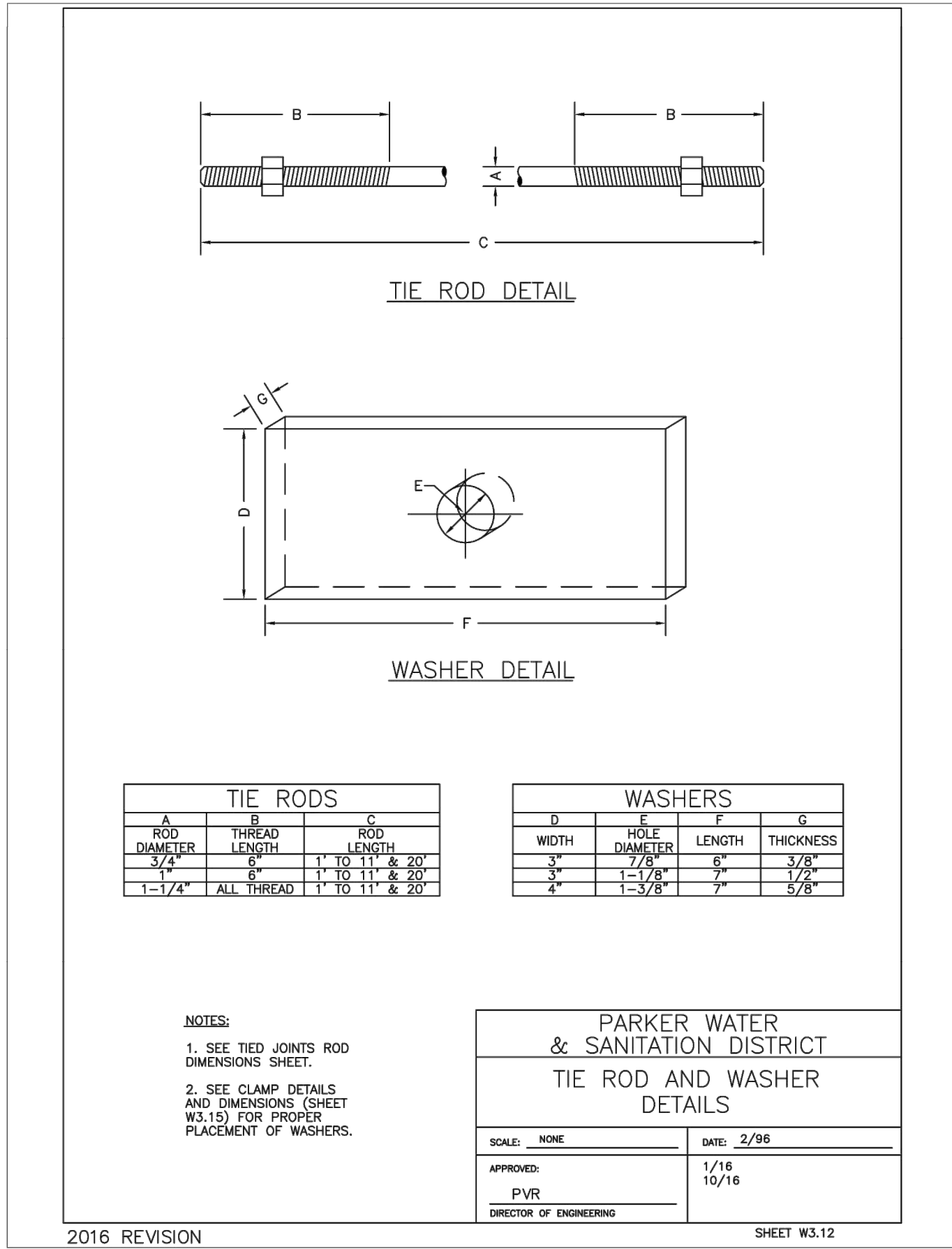
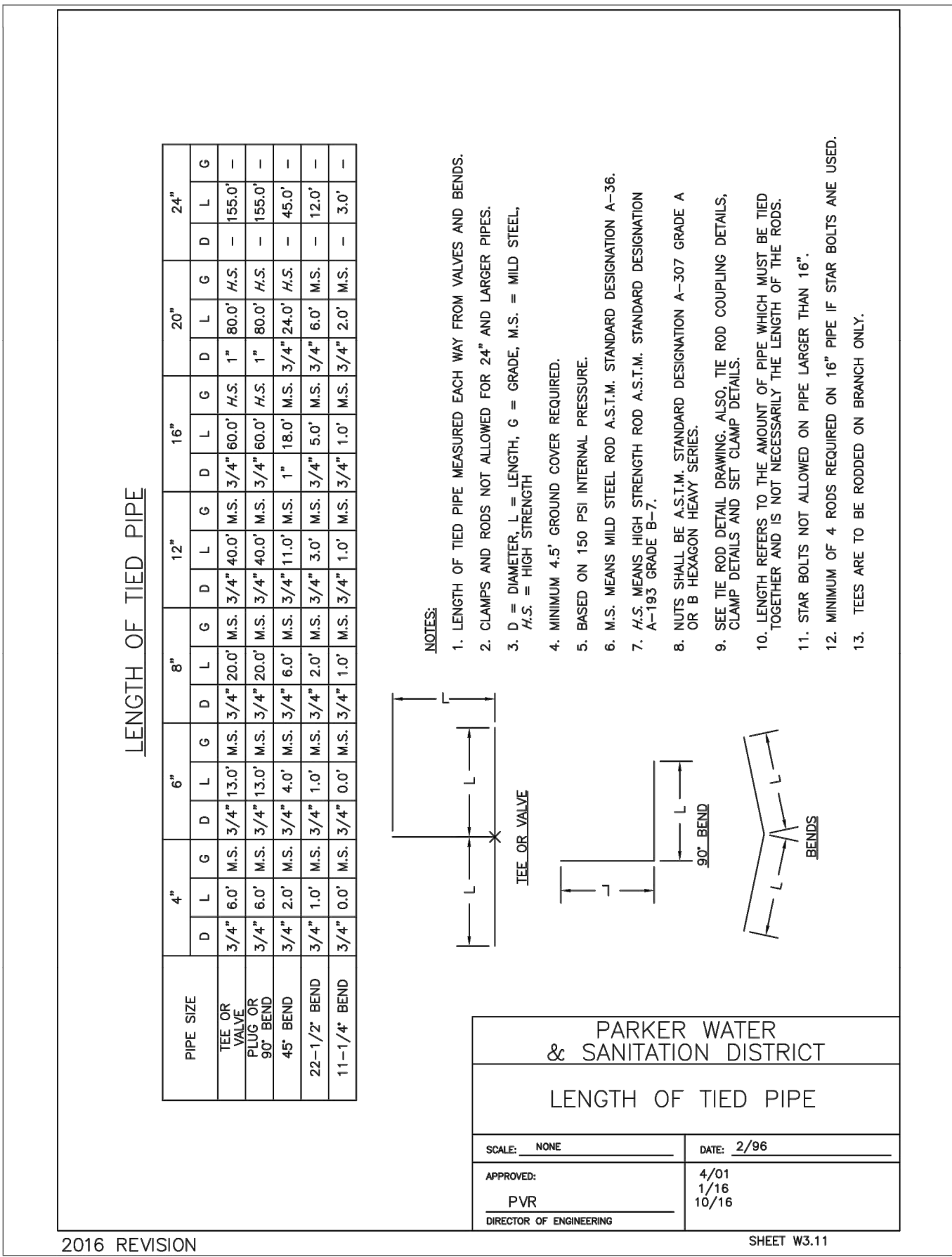
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SCALE: NTS
DATE: 10/7/2020
DRAWN BY: WD
CHECKED BY: JS
JOB NO: D01173-A

WATER DETAILS

PROJECT NO.	D01173-A
DRAWING NO.	8
SHEET NO.	8 OF 12 SHEET

PRELIMINARY
NOT FOR CONSTRUCTION



WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

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DATE: 10/7/2020
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CHECKED BY: JS
JOB NO: D01173-A

WATER DETAILS

PROJECT NO. D01173-A
DRAWING NO. 9
SHEET NO. 9 OF 12 SHEETS

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SHEET W4.2



INSPECTION POLICY:

- ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
- 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.
- 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.
- 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.
- ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
- LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
- CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

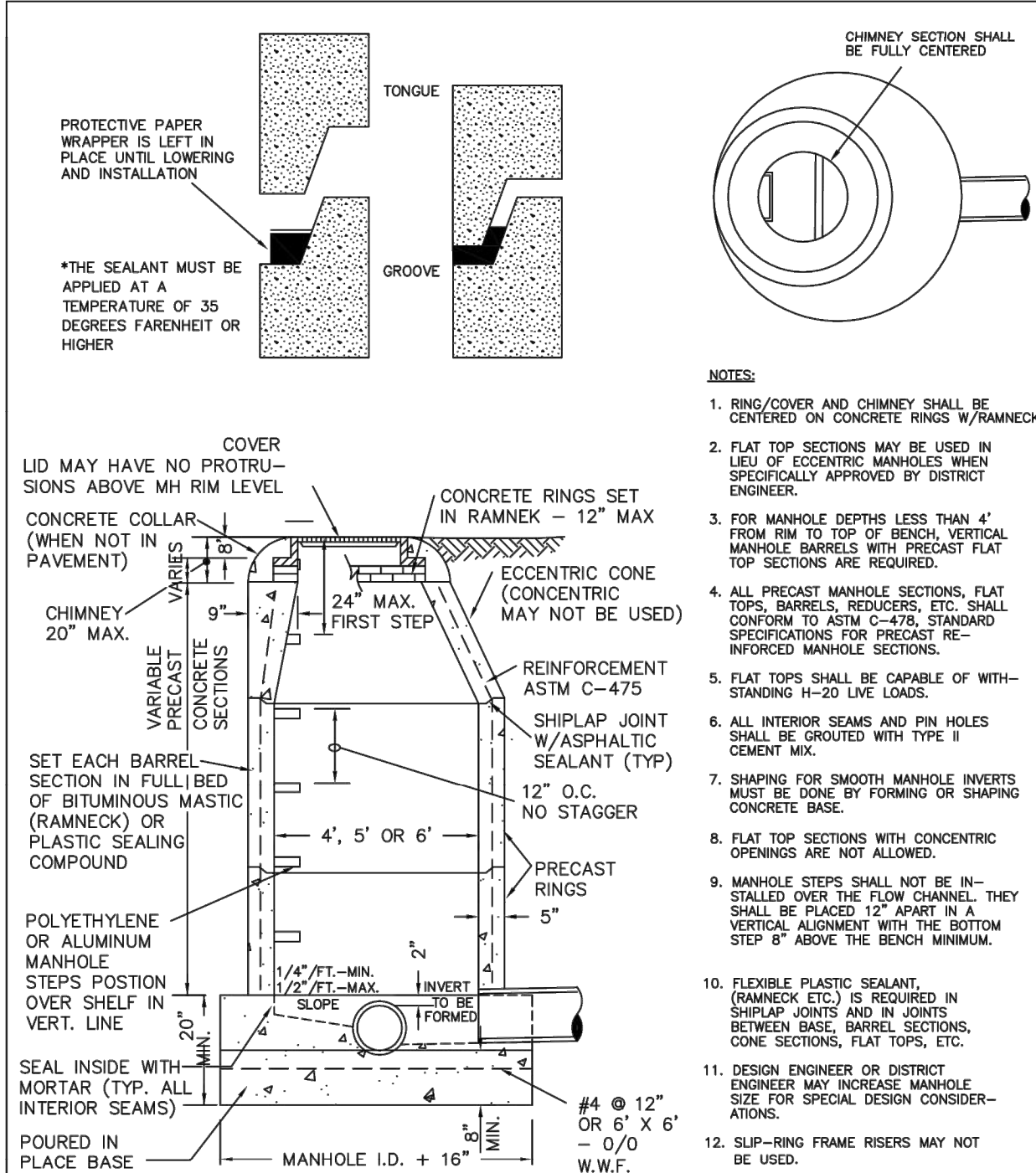
INSTALLATION NOTES: SEWER

- ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGE.
- NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3".
- MINIMUM GRADE SHALL BE 2%.
- INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
- 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.
- STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
- SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
- 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: 2/98		
APPROVED: PVR	01/02 1/08 1/16	4/01 10/16 1/08	
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET S1.1

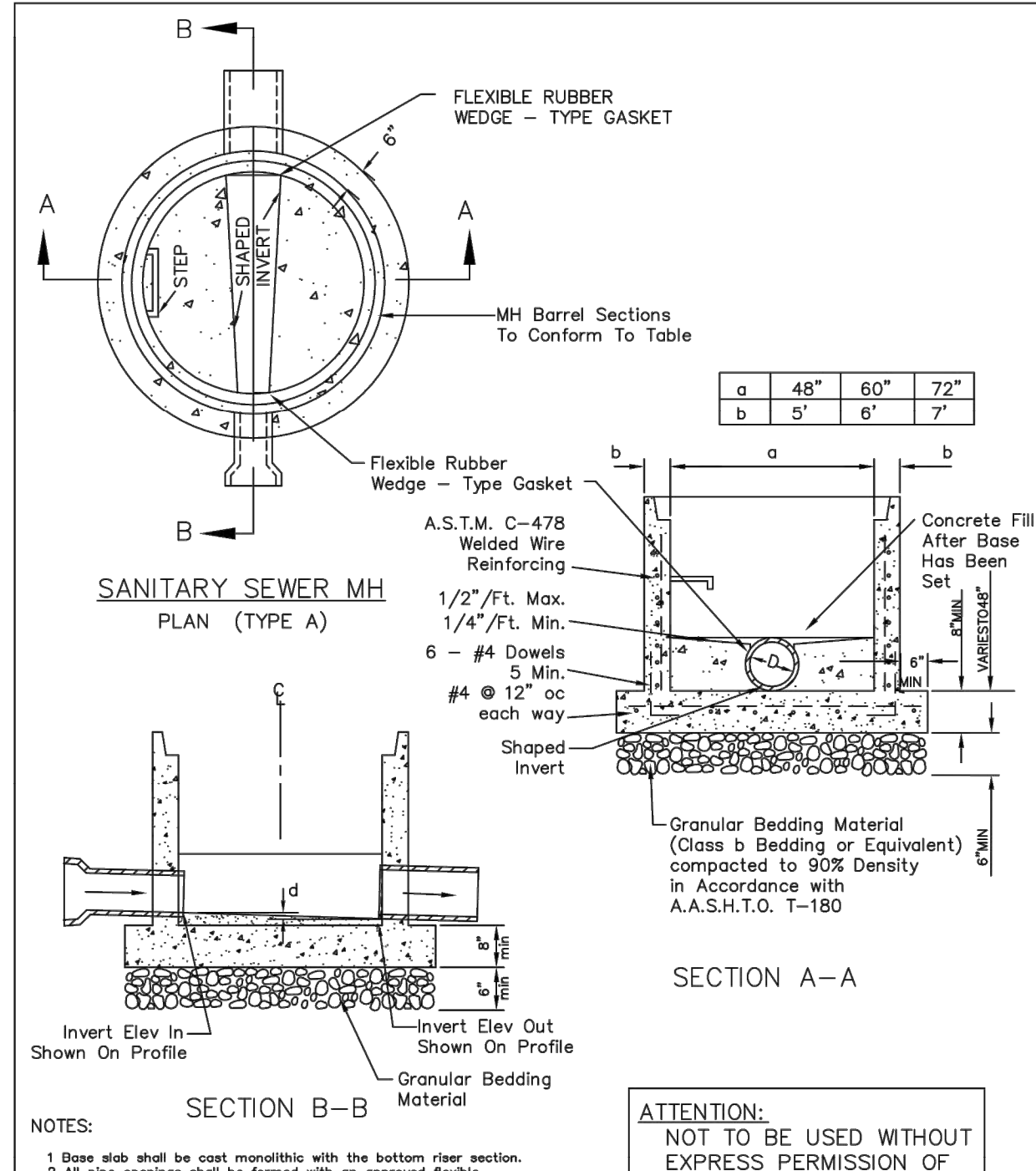


PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

PARKER WATER & SANITATION DISTRICT PARKER MANHOLE ECCENTRIC CONE			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/02 10/16 1/08	4/01 10/16 1/08	
DIRECTOR OF ENGINEERING			

2016 REVISION

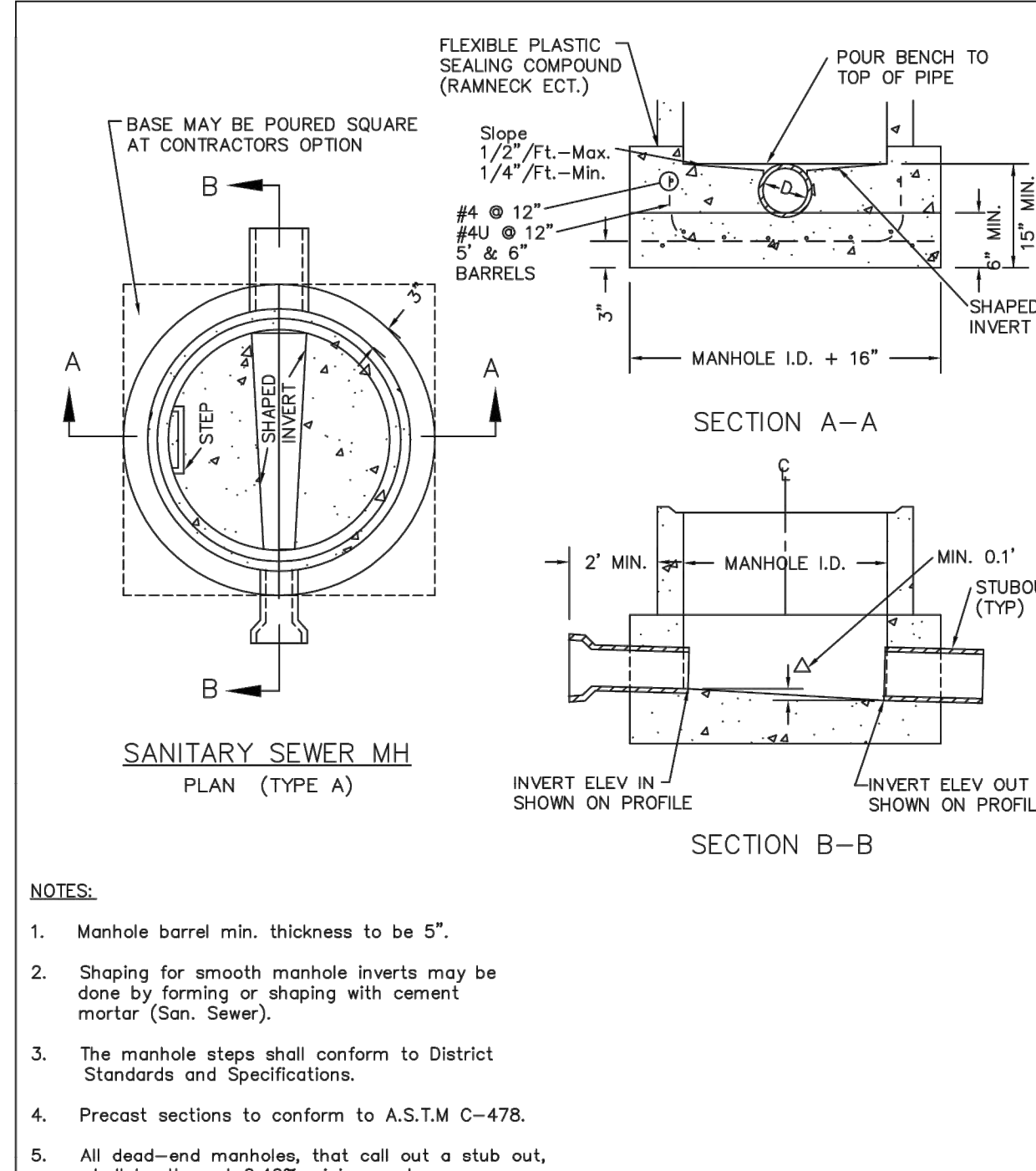
SHEET S3.1



PARKER WATER & SANITATION DISTRICT PRECAST MANHOLE BASE DETAIL			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/02 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

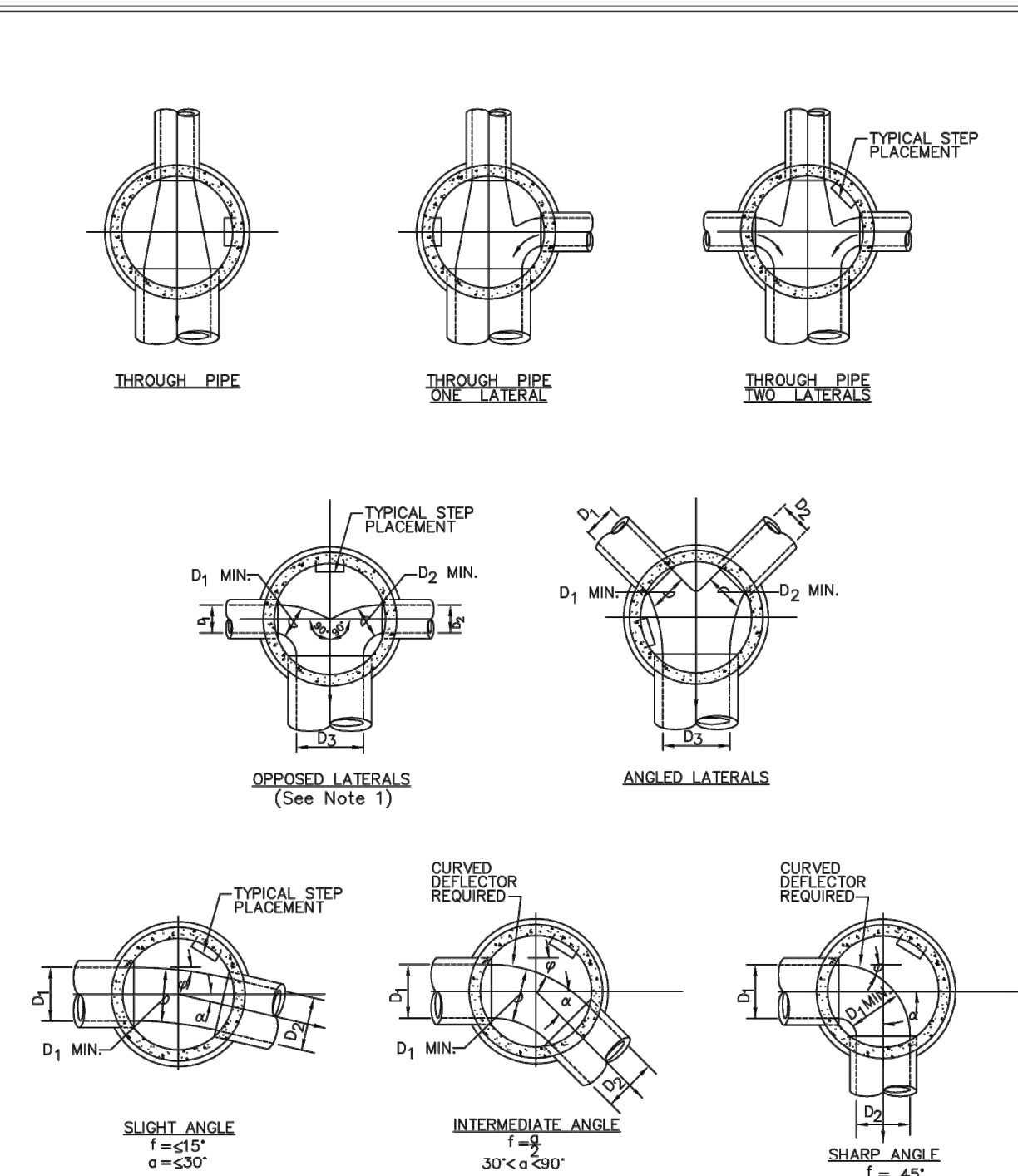
SHEET S3.4



PARKER WATER & SANITATION DISTRICT CAST-IN-PLACE MANHOLE BASE DETAIL			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/02 01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET S3.5

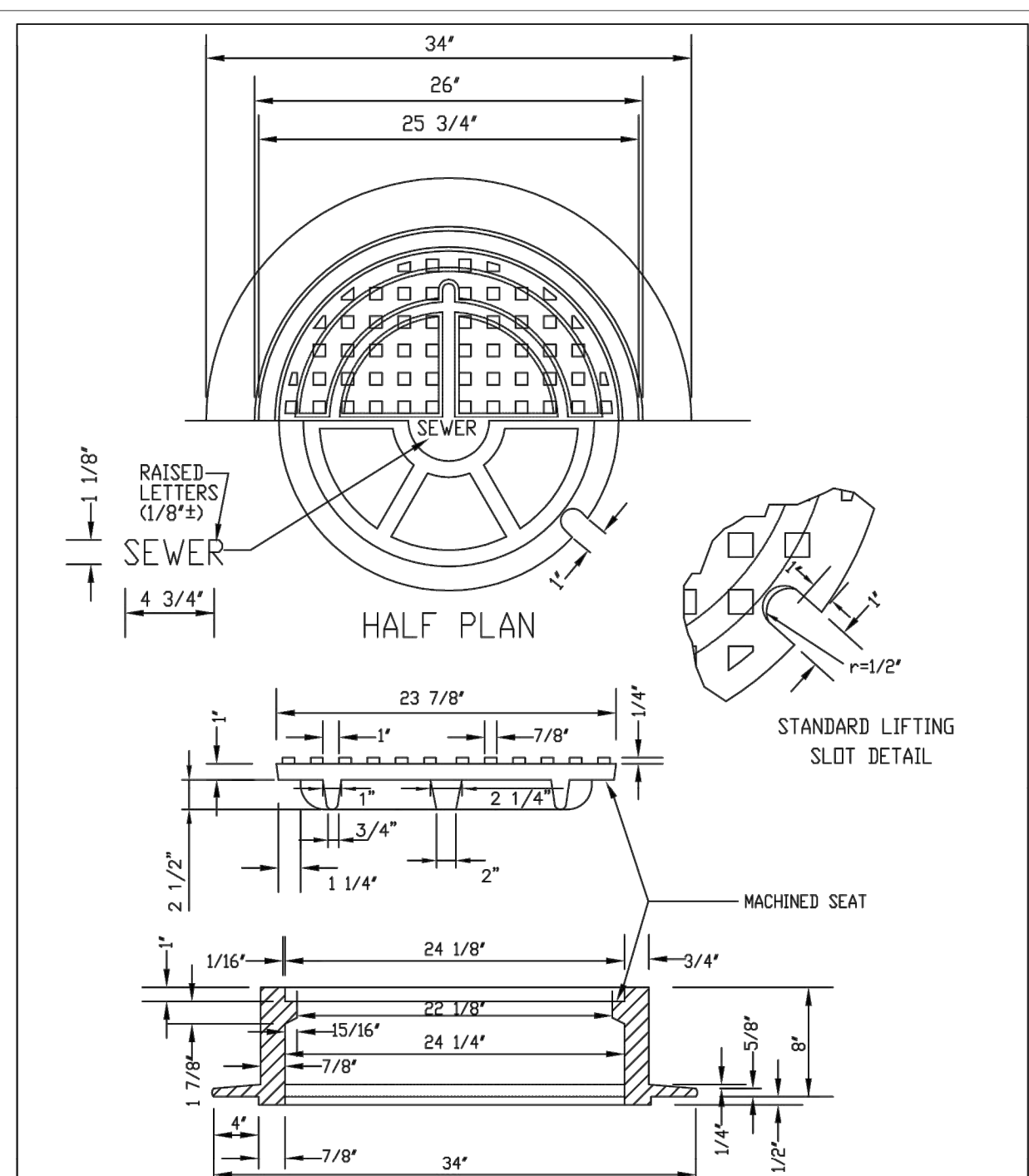


- NOTES:
- Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT TYPICAL BASE CHANNELIZATION DETAILS			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET S3.7

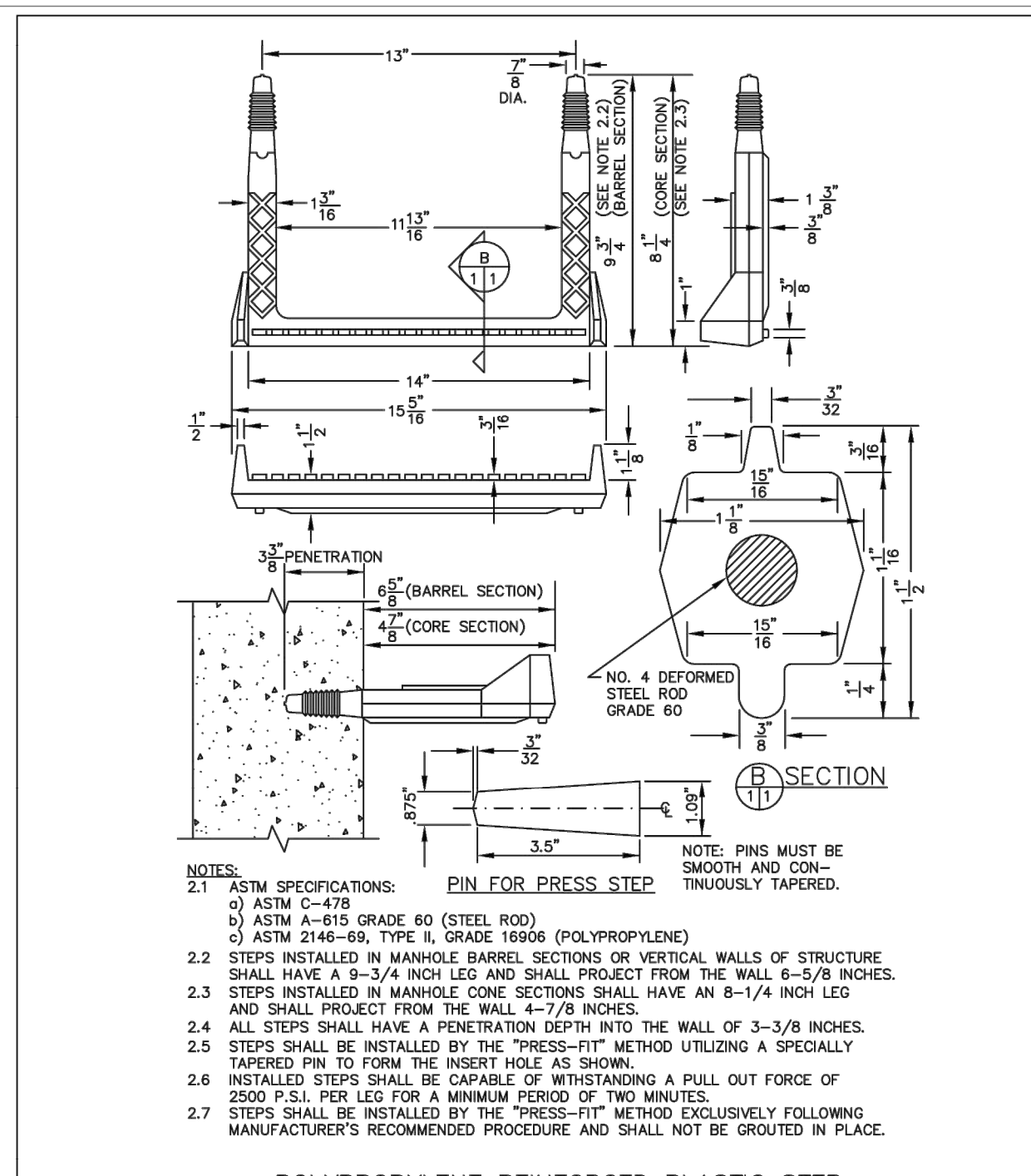


- NOTE:
- Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
 - All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equal)
 - No other manhole lids will be accepted without prior approval from the District Engineer.

PARKER WATER & SANITATION DISTRICT 24" DIAMETER RING AND COVER			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

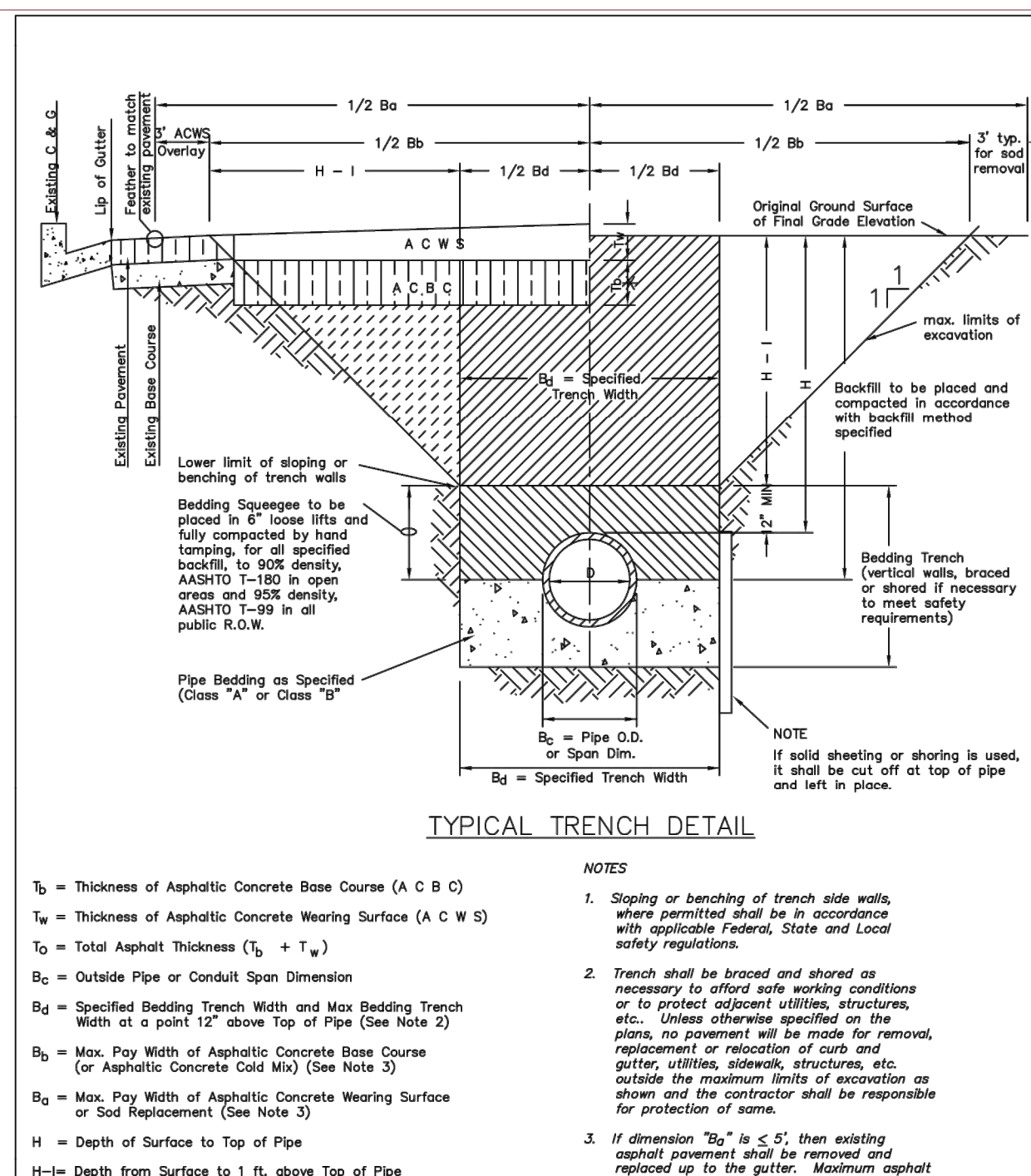
SHEET S3.9



PARKER WATER & SANITATION DISTRICT POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET S3.11



PARKER WATER & SANITATION DISTRICT SEWER TRENCHING AND BEDDING DETAIL			
SCALE: NONE	DATE: 2/98		
APPROVED: PVR	5/98 1/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET S4.1

WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

RICK
ENGINEERING COMPANY
9801 EAST EASTER AVE
CENTENNIAL, CO 80112
303.537.8020
Tucson - San Diego - Riverside - Orange
Sacramento - San Luis Obispo - Phoenix
rickengineering.com



REVISIONS:		
NO.	DESCRIPTION	DATE:
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2		
3		
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SCALE: NTS
DATE: 10/7/2020
DRAWN BY: WD
CHECKED BY: JS
JOB NO: D01173-A

**SEWER
DETAILS**

PROJECT NO.
D01173-A

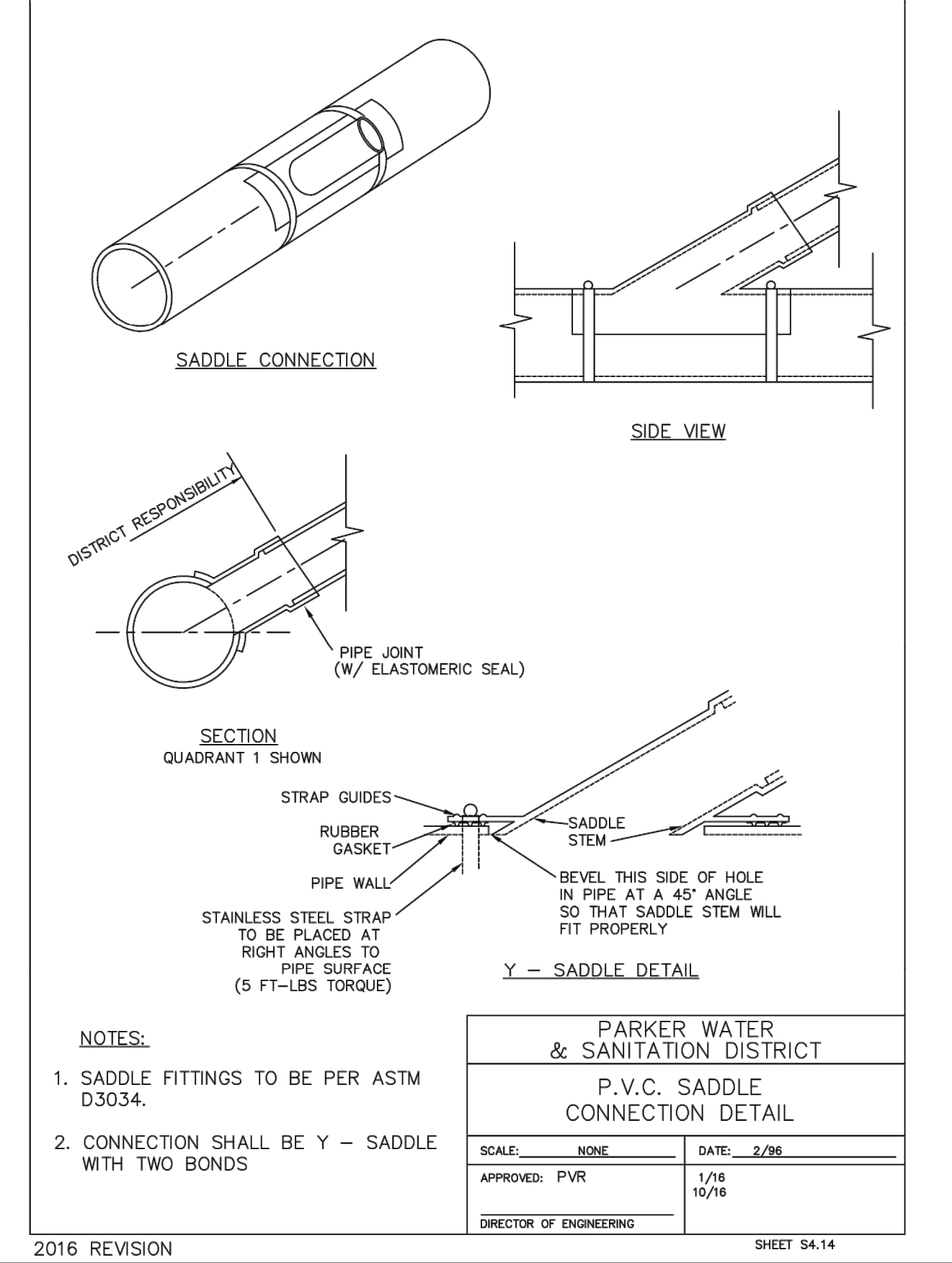
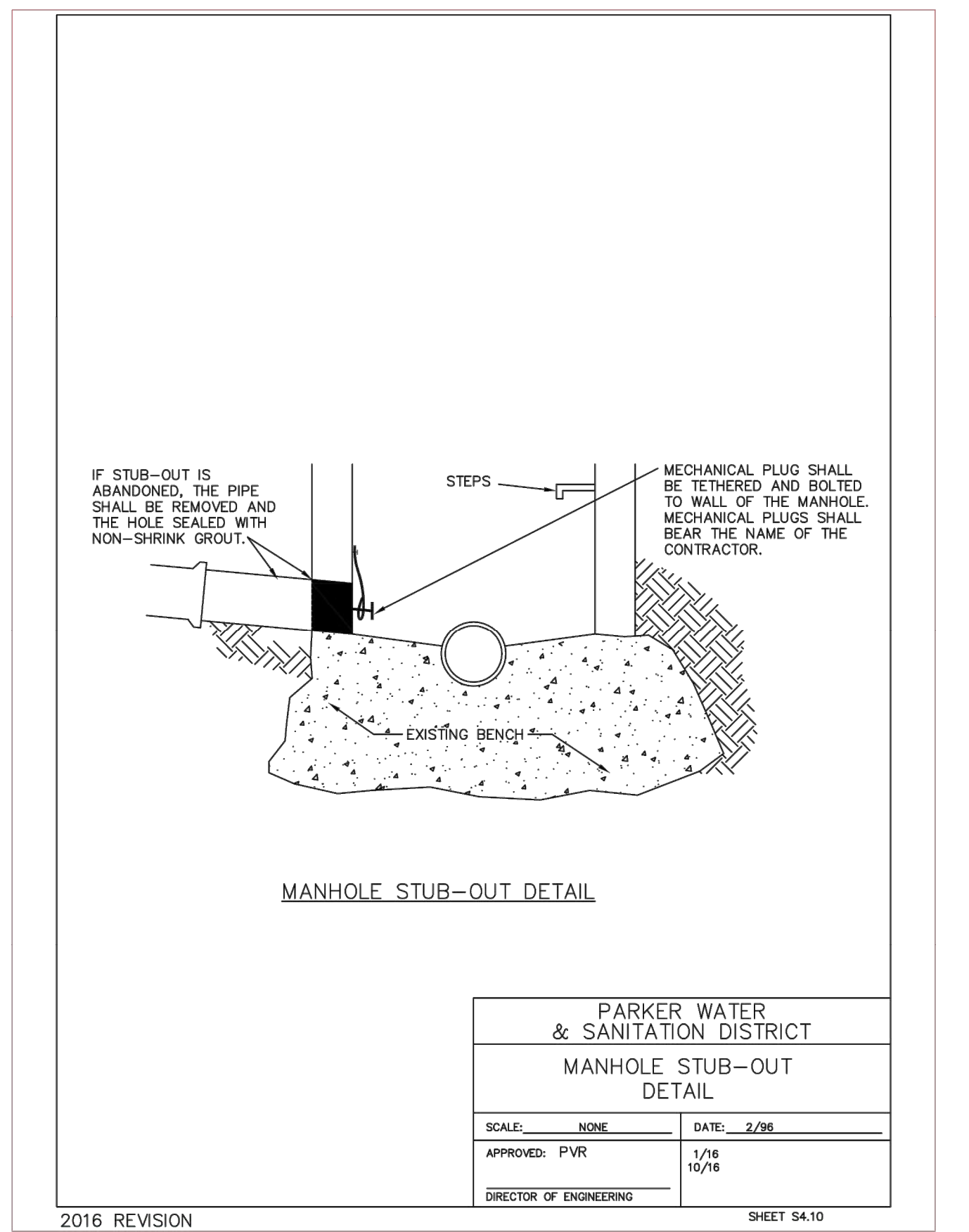
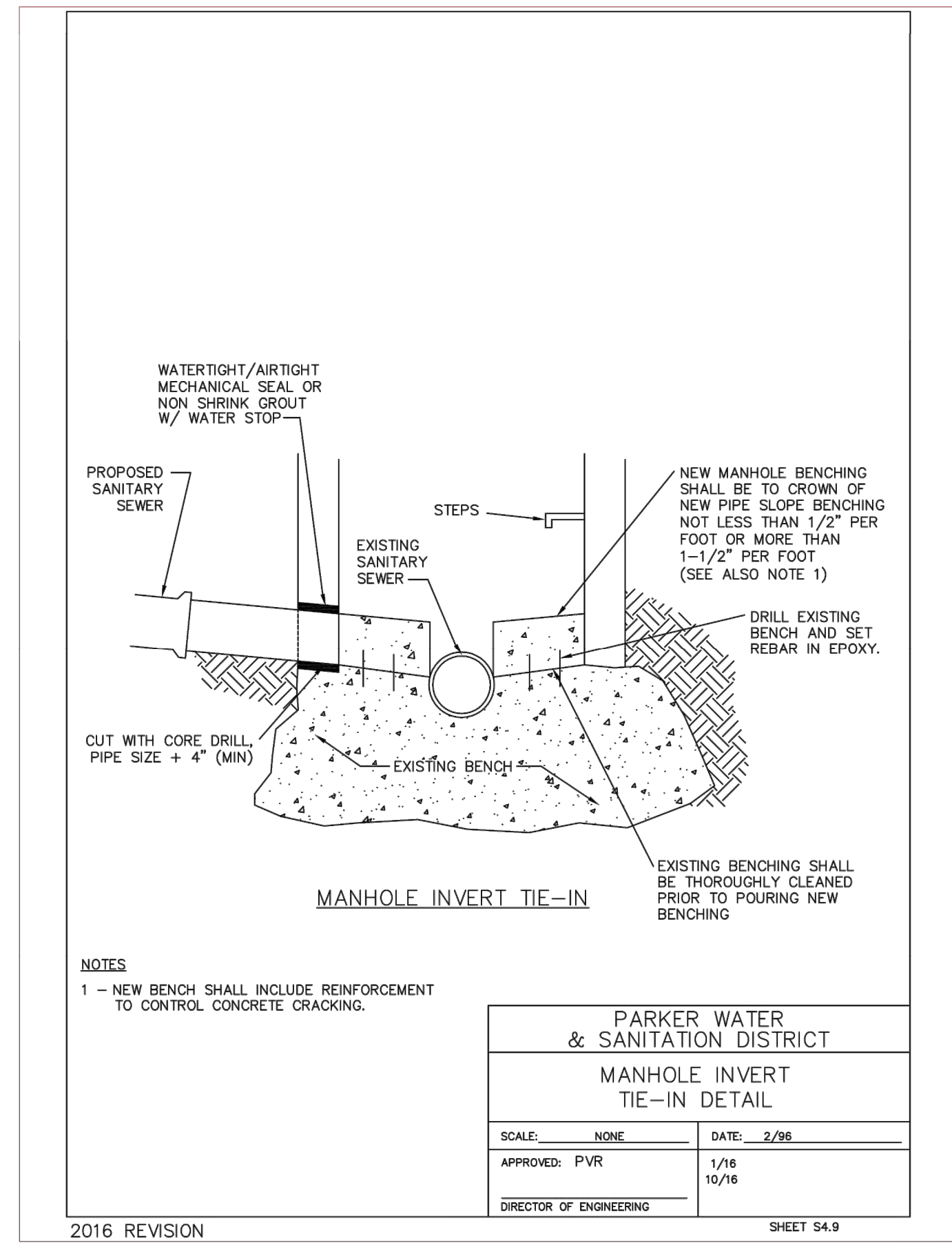
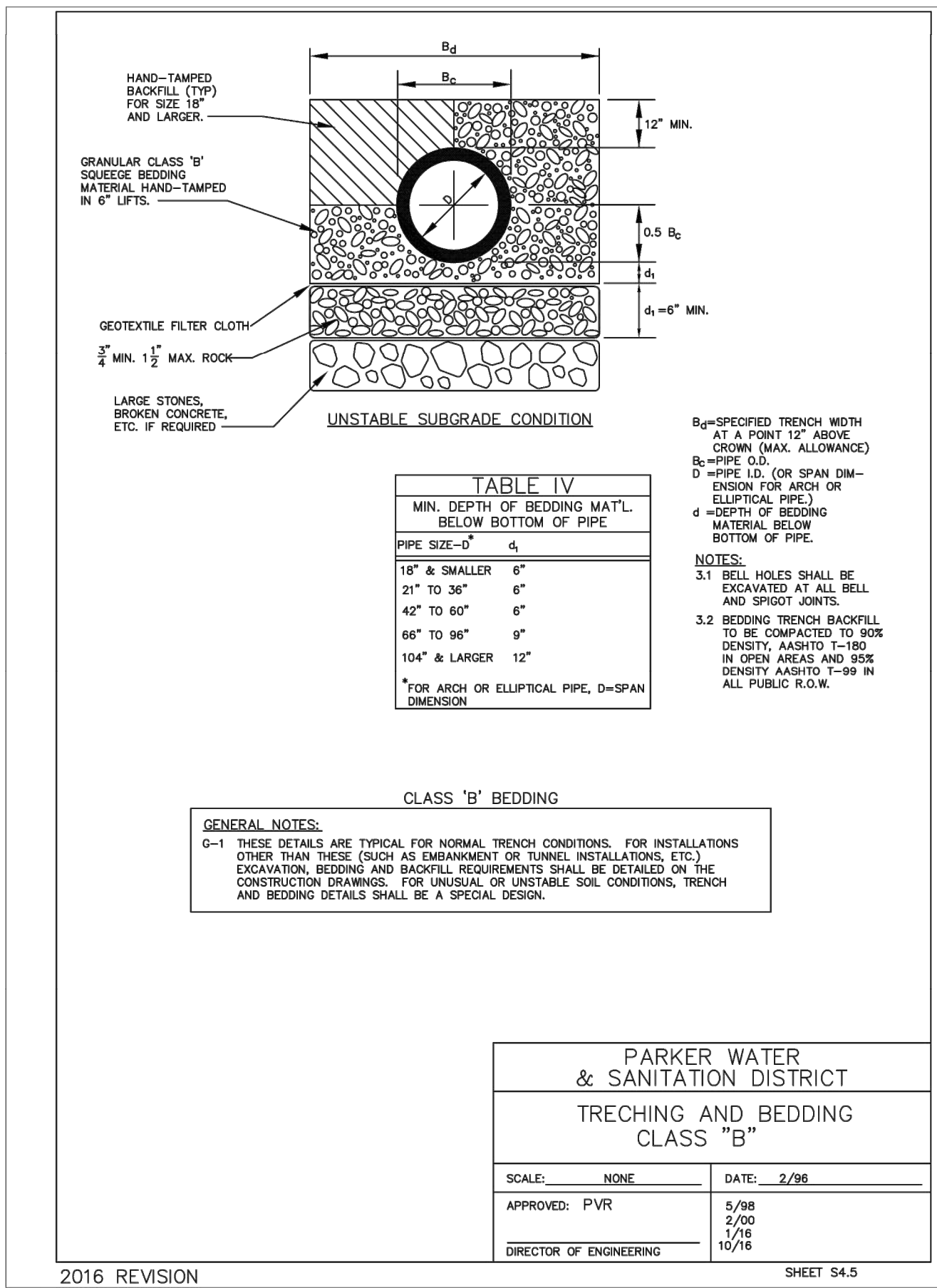
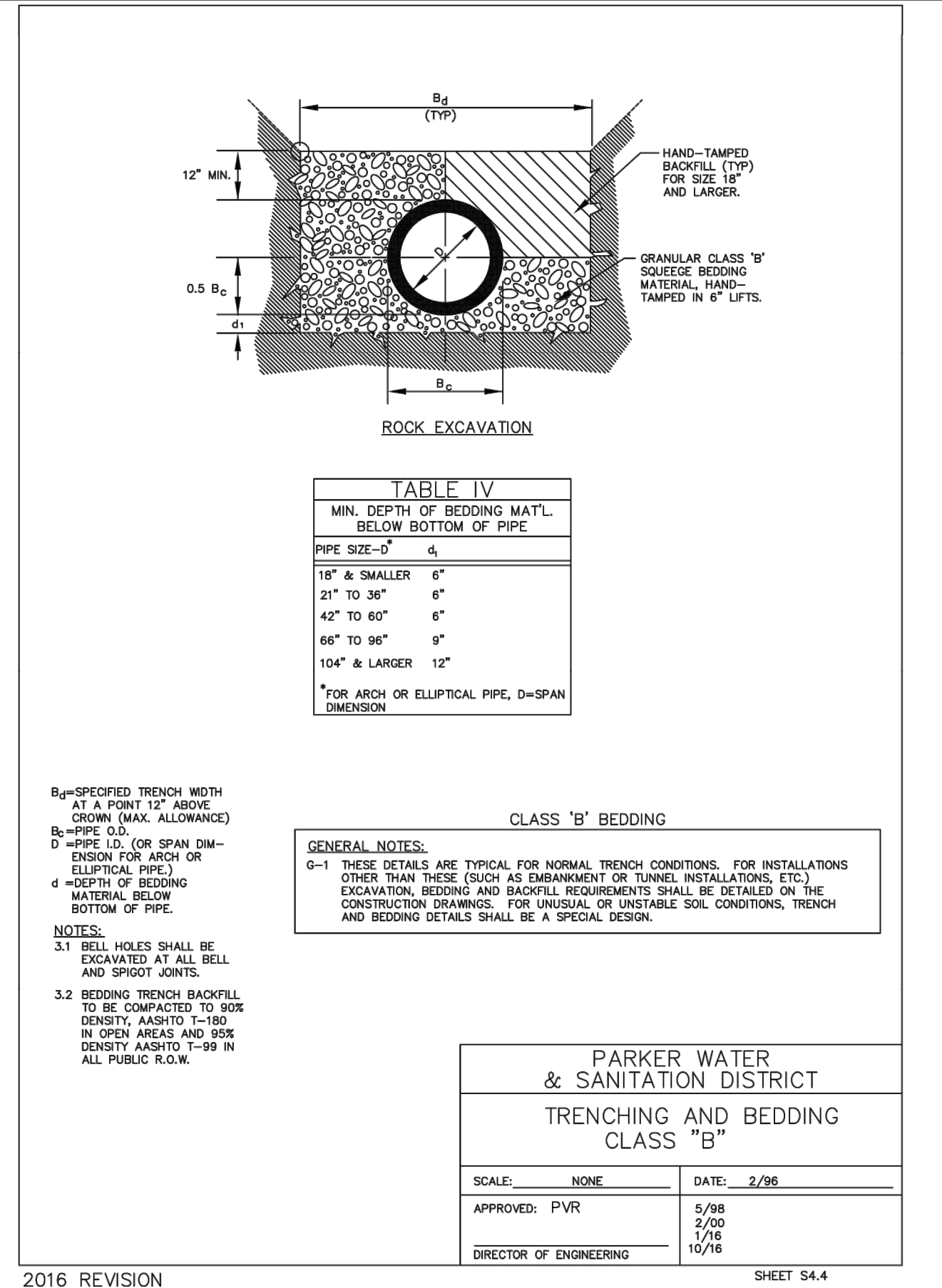
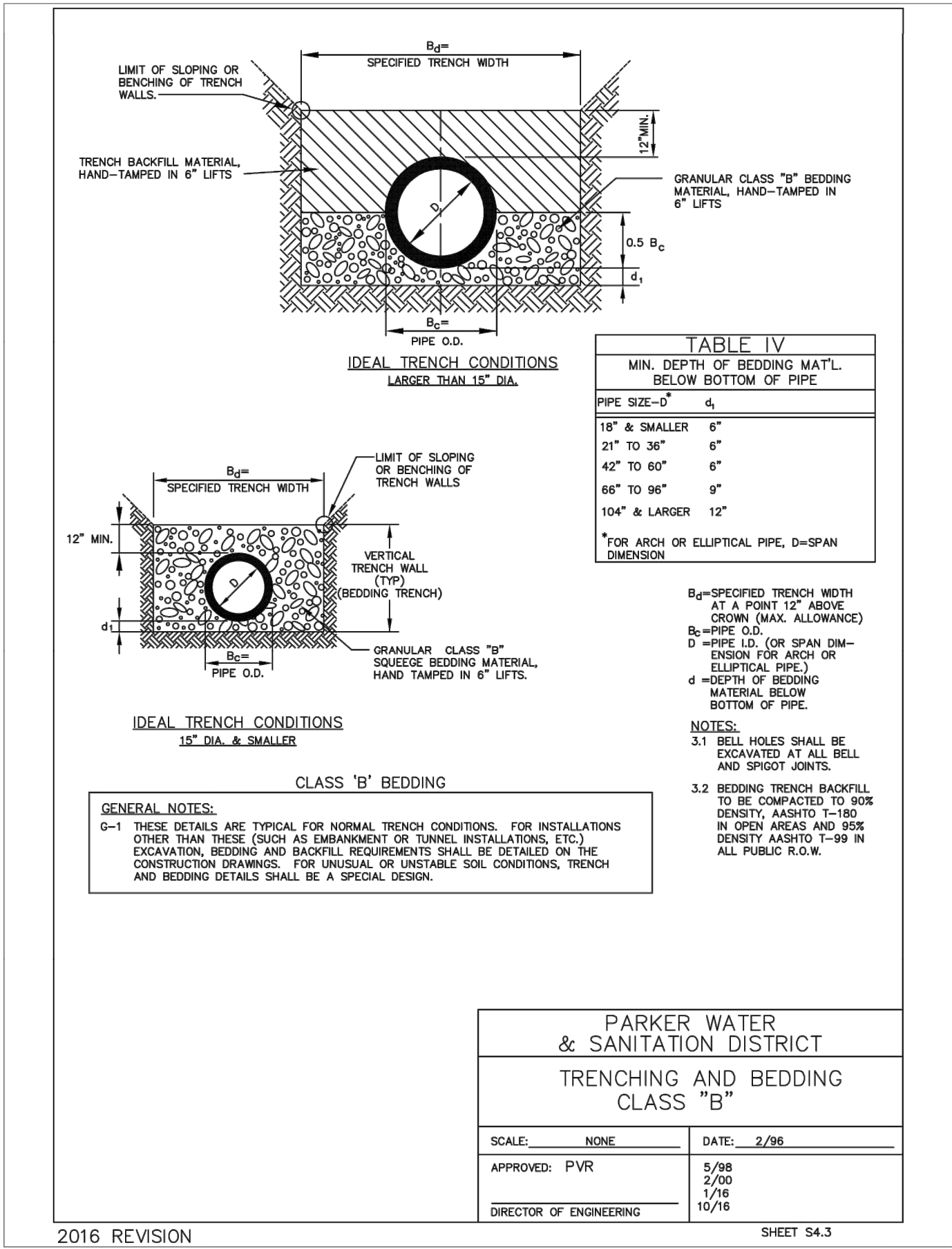
DRAWING NO.

11

SHEET NO. 11 of 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION

2020 Rick Engineering Company



WATER & SEWER IMPROVEMENT PLANS FOR
DOUGLAS 234
FILING NO. 6
DOUGLAS COUNTY, COLORADO

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9801 EAST EASTER AVE
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Sacramento - San Luis Obispo - Phoenix
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REVISIONS:		
NO.	DESCRIPTION	DATE:
1	-	-

SCALE: NTS
DATE: 10/7/2020
DRAWN BY: WD
CHECKED BY: JS
JOB NO: D01173-A

SEWER DETAILS

PROJECT NO.
D01173-A
DRAWING NO.
12
SHEET NO. 12 OF 12 SHEETS

PRELIMINARY
NOT FOR CONSTRUCTION