

PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE CONSTRUCTION PLANS PARKER WATER AND SANITATION CONSTRUCTIONS PLANS

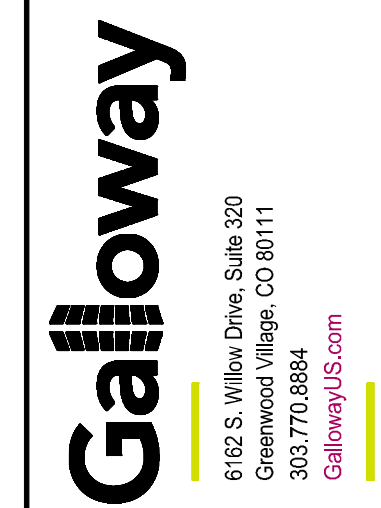


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SHEET NO. C-3.0



UTILITY COVER SHEET
 MURPHY EXPRESS
 12405 SOUTH PARKER ROAD
 PARKER, COLORADO



6102 S. Willow Drive, Suite 320
 Colorado Springs, CO 80920
 303.770.8844
 GallowayUS.com

MURPHY OIL USA, INC.
 200 PEACH STREET
 EL DORADO, AR 71730



PROJECT CONTACTS:

RECORD OWNER
 ETV PARKER COLORADO, LLC
 2710 E CAMELBACK ROAD, SUITE 210
 PHOENIX, AZ 85016
 TEL: (602) 468-6100
 CONTACT: RYAN AMATO

DEVELOPER/APPLICANT
 MURPHY OIL USA, INC.
 200 PEACH STREET
 EL DORADO, AR 71730
 CONTACT: GARY HEGENER

ENGINEER/CONSULTANT
 GALLOWAY & COMPANY, INC.
 6162 S. WILLOW DRIVE, SUITE 320
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 FAX: (303) 770-3636
 CONTACT: BRIAN DENNIS, PLS
 EMAIL: BRIANDENNIS@GALLOWAYUS.COM

MUNICIPAL & UTILITY CONTACTS:

ENGINEERING
 TOWN OF PARKER - ENGINEERING
 20120 E. MAIN STREET
 PARKER, CO 80138
 TEL: (303) 805-3169
 CONTACT: RANDY CAPRA

STORM SEWER
 TOWN OF PARKER - PUBLIC WORKS
 20120 E. MAIN STREET
 PARKER, CO 80138
 TEL: (303) 840-9546

FIRE
 SOUTH METRO FIRE RESCUE AUTHORITY
 9195 E. MINERAL AVE.
 CENTENNIAL, CO 80112
 TEL: (720) 989-2244
 CONTACT: CHP KERKHOVE

WATER & SANITARY SEWER
 PARKER WATER AND SANITATION DISTRICT
 1800 E. WOODMAN DRIVE
 PARKER, CO 80135
 TEL: (303) 841-4627
 CONTACT: DRAYTON SANDERSON

GAS
 XCEL ENERGY
 1800 PARKER STREET
 DENVER, CO 80202
 EMAIL: RON.H.JOHNSON@XCELENERGY.COM
 CONTACT: RON JOHNSON

ELECTRIC
 INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION
 5496 NORTH USHER HIGHWAY 85
 SEDALIA, CO 80135
 TEL: (303) 688-3100
 CONTACT: AMANDA STEINER

TELEVISION
 COMCAST
 1601 MILE HIGH STADIUM CIRCLE
 DENVER, CO 80204
 EMAIL: DEAN.FLENTHROP@COMCAST.COM
 CONTACT: DEAN FLENTHROP

TELEPHONE
 CENTURYLINK
 1801 CALIFORNIA STREET, SUITE 240
 DENVER, CO 80202
 CONTACT: IZZY MILLER
 EMAIL: IZZY.MILLER@CENTURYLINK.COM



VICINITY MAP
 (NOT TO SCALE)

PWSD GENERAL UTILITY NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
- 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.
- 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 PWSD IMMEDIATELY.
- PWSD ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
- ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
- 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 SIZE PRINTS SHALL BE TRANSMITTED TO THE PWSD OFFICE.
- 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.
- TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
- 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.
- SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF PARKER WATER AND SANITATION DISTRICT PAGE 17 DISTRICT PLAN APPROVAL PROCEDURES 2017 REVISION CONSTRUCTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SERVICE SEWERS "Y" FOR WATER SERVICES
- NO TREES ALLOWED IN EASEMENTS OR WITHIN 8' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
- THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.

FIRE NOTES

- IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LINES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
- EMERGENCY VEHICLE ACCESS ROAD IS REQUIRED TO ALLOW ACCESS WITHIN 150' OF ALL EXTERIOR OF THE BUILDING BY AN APPROVED ROUTE.
- FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRES APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. ACCESS ROAD SHALL BE EITHER CONCRETE, ASPHALT, OR OTHER APPROVED ALTERNATIVE MATERIAL ACCOMPANIED WITH AN ENGINEER'S STAMP STATING THE MATERIAL WILL MEET A 75,000 LBS IMPOSED LOAD.
- FIRE HYDRANT(S) ARE REQUIRED TO BE INSTALLED MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF VERTICAL CONSTRUCTION.
- NO PARKING FIRE LANE SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE, ROADWAYS OR DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE, ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR ACCESS ROADWAY FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS EXCEEDING 32 FEET WIDE.
- WHEN FIRE APPARATUS ACCESS ROADS OR WATER SUPPLY FOR FIRE PROTECTION IS REQUIRED TO BE INSTALLED, SUCH PROTECTION SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO BUILDING CONSTRUCTION GOING VERTICAL.

PWSD SANITARY SEWER NOTES

- ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE PARKER WATER AND SANITATION DISTRICT SPECIFICATION.
- 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.
- 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.
- SEWER RIM ELEVATIONS SHOWN ARE APPROXIMATE 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.
- 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.
- NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
- 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.
- ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
- PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
- 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.
- ALL PIPE LENGTHS ARE APPROXIMATE.
- 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.
- ALL MANHOLES SHALL HAVE SHAPED INVERTS.
- 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.
- 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.
- PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CLIENT SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

SUMMARY OF QUANTITIES (WATER)	
DESCRIPTION	QUANTITY
CONNECT TO EXISTING WATER LINE	
FIRE HYDRANT ASSEMBLY	1 EA
1-1/2" COPPER WATER SERVICE	50 LF
2" SCHEDULE 40 PVC PIPE	223 LF
6" PVC FIRE HYDRANT LATERAL	58 LF
WATER VALVE	5 EA
TEE	2 EA

SUMMARY OF QUANTITIES (SANITARY)	
DESCRIPTION	QUANTITY
CONNECT TO EXISTING SANITARY SEWER LINE	1 EA
4" PVC SANITARY SEWER LINE	163 LF
8" PVC SANITARY SEWER LINE	102 LF
TWO-WAY CLEANOUT	2 EA
SINGLE CLEANOUT	5 EA
WYE AND 4" TO 8" REDUCER	1 EA
GREASE INTERCEPTOR	1 EA
SAMPLING MANHOLE	1 EA

SHEET INDEX

SHEET NUMBER	DESCRIPTION
C-3.0	UTILITY COVER SHEET
C-3.1	OVERALL UTILITY PLAN
C-3.2	UTILITY DETAILS
C-3.3	UTILITY DETAILS
C-3.4	UTILITY DETAILS
C-3.5	UTILITY DETAILS
C-3.6	UTILITY DETAILS
C-3.7	STORM AND SANITARY PLAN
C-3.8	STORM PLAN & PROFILE
IR-1.1	IRRIGATION PLAN
IR-1.2	IRRIGATION DETAILS
IR-1.3	IRRIGATION NOTES & DETAILS

PWSD WATER MAIN NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
- ALL BENDS, FLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RIGID OR MEGA-LOGGED. ALL FITTINGS SHALL BE WRAPPED PER PWSD MATERIALS SPECIFICATIONS.
- THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
- FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES PER PWSD SPECIFICATIONS.
- ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST WITH CONCRETE THRUST BLOCKS.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE PWSD 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.
- PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PWSD STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- 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.
- COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND ACCEPTATION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
- 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.
- CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PWSD SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
- HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSD SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSD INSPECTOR/ENGINEER.

PWSD DISTRICT ACCEPTANCE NOTES

- 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-THROUGH AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO 1-YEAR 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.
- 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.

MATERIALS SPECIFICATIONS	
MATERIAL SPECIFICATION	DESCRIPTION
MS-W1, MS-S1, MS-S4	PIPE TYPE - PVC
MS-W2	PIPE TYPE - DUCTILE IRON
MS-W7	TAPPING SLEEVES
MS-W3, MS-S5	FITTINGS
MS-W4, MS-W5, MS-W6, MS-W8, MS-W9	VALVES, AIR RELEASE VALVES
MS-W17, MS-W18	WATER METER
MS-S2	PRECAST MANHOLES
MS-S3	CASTINGS

BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN. VERTICAL DATUM IS APPROXIMATELY 2.6' FEET BELOW NAVD 88.
 SITE BENCHMARKS:
 SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76
 SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHWEST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

CAUTION - NOTICE TO CONTRACTOR

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

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: *Drayton Sanderson*
 (DISTRICT REPRESENTATIVE)
 DATE: Dec 20 2021
 APPROVED FOR CONSTRUCTION
 PARKER WATER AND SANITATION DISTRICT
 BY: *Rebecca Pappalardo*
 (DISTRICT ENGINEER)
 DATE: Dec 20 2021

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.
 DATE: 09/02/2021
 FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

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 REVIEWS, GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

APPROVED
 Dec 20 2021
**PARKER WATER AND
 SANITATION DISTRICT**

PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

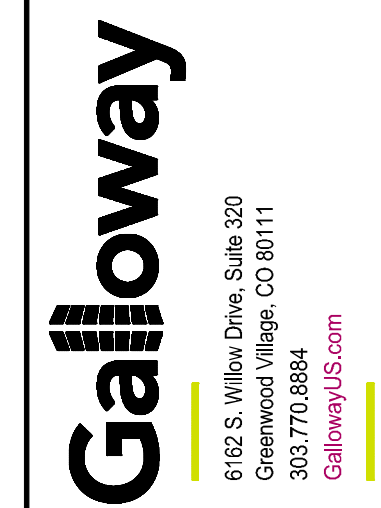
SITE PLAN DOCUMENTS



SHEET NO.
C-3.1



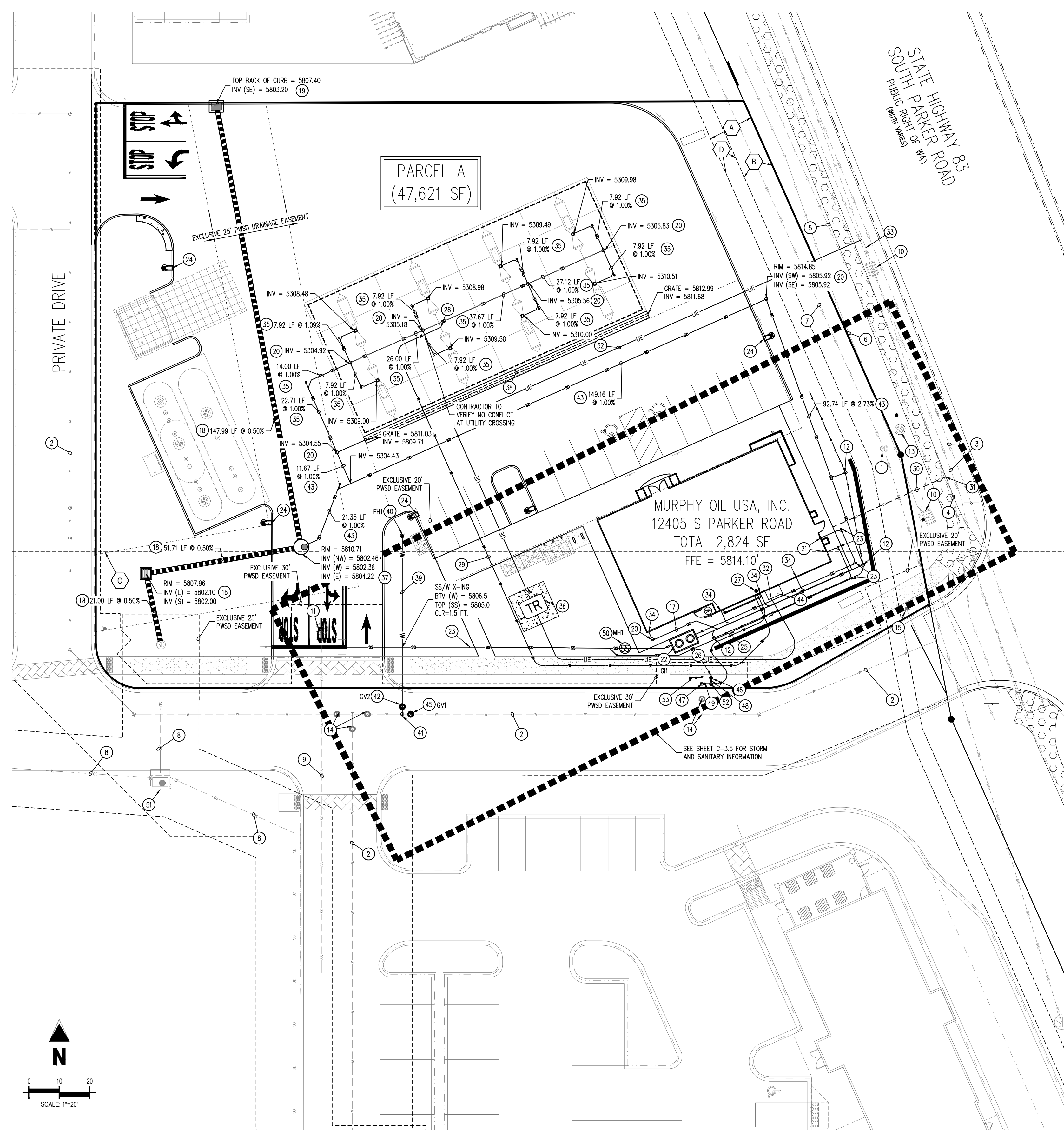
OVERALL UTILITY PLAN
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER
COLORADO



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 908 770 8840
 908 770 8840
 GallowayUS.com

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

MURPHY USA



- ### SCHEDULE
- EXISTING STORM SEWER MANHOLE TO REMAIN
 - EXISTING WATER LINE INSTALLED BY DEVELOPER
 - EXISTING CATV LINE TO REMAIN
 - EXISTING UNDERGROUND TELEPHONE LINE TO REMAIN
 - EXISTING GAS LINE TO REMAIN
 - EXISTING FIBER OPTIC LINE TO REMAIN
 - EXISTING STORM LINE TO REMAIN
 - EXISTING STORM LINE INSTALLED BY DEVELOPER
 - EXISTING SANITARY SEWER LINE INSTALLED BY DEVELOPER
 - EXISTING COMMUNICATION BOX/Vault TO REMAIN
 - EXISTING SANITARY SEWER MANHOLE PROVIDED BY DEVELOPER
 - PROPOSED YARD DRAIN WITH OPEN GRATE TOP
 - EXISTING SANITARY SEWER MANHOLE TO REMAIN
 - EXISTING 8" WATER STUB AND VALVE INSTALLED BY DEVELOPER
 - EXISTING FIRE HYDRANT TO REMAIN
 - PROPOSED CDOT TYPE C INLET
 - PROPOSED 4" STORM SEWER LINE
 - PROPOSED 18" STORM SEWER LINE
 - PROPOSED CDOT TYPE 13 INLET
 - PROPOSED STORM CLEANOUT
 - PROPOSED 4" SANITARY SEWER SERVICE LINE
 - PROPOSED 1,000 GALLON GREASE INTERCEPTOR
 - PROPOSED SANITARY SEWER CLEANOUT (TYP)
 - PROPOSED SITE LIGHT
 - PROPOSED 1 1/2" DOMESTIC WATER SERVICE LINE TO BUILDING
 - PROPOSED 3/4" IRRIGATION LINE
 - PROPOSED 1 1/2" INTERIOR SET WATER METER AND BACKFLOW
 - PROPOSED FREEZELESS HOSE BIBBS AT PUMP ISLAND (3/4" SCH. 40 PVC)
 - PROPOSED 3/4" WATER LINE TO CANOPY (TO BE CONNECTED AFTER METER)
 - PROPOSED UNDERGROUND TELEPHONE LINE. PLACE HAND HOLES AS NEEDED.
 - CONNECTION TO EXISTING TELEPHONE LINE TO BE COORDINATED WITH TELEPHONE COMPANY.
 - PROPOSED UNDERGROUND ELECTRICAL LINE.
 - CONNECTION TO EXISTING ELECTRICAL LINE TO BE COORDINATED WITH ELECTRICAL COMPANY.
 - PROPOSED ROOF DRAIN CONNECTION
 - PROPOSED 6" PVC ROOF DRAIN LINE
 - PROPOSED TRANSFORMER ON CONCRETE PAD
 - PROPOSED STORM MANHOLE
 - PROPOSED 8" TRENCH DRAIN
 - PROPOSED 6" PVC LATERAL FIRE HYDRANT
 - PROPOSED FIRE HYDRANT FHH#1
 - PROPOSED 8" x 6" TE
 - PROPOSED 6" GATE VALVE GV#1
 - PROPOSED 10" ROOF DRAIN
 - PROPOSED ELECTRICAL CABINET PER AREA REQUIREMENTS
 - PROPOSED 8" GATE VALVE GV#2
 - PROPOSED 3/4" IRRIGATION METER
 - TAP EXISTING 8" STUB
 - PROPOSED 3/4" CURB STOP
 - PROPOSED 1 1/2" CURB STOP
 - PROPOSED SANITARY SEWER SAMPLING MANHOLE (REFERENCE PWSO DETAIL 55.3)
 - EXISTING STORM SEWER INLET INSTALLED BY DEVELOPER

UTILITY INSTALLATION RESPONSIBILITIES

PERMITS AND INSPECTIONS	ELECTRIC RESPONSIBILITY		
	GENERAL CONTRACTOR	UTILITY PROVIDER	N/A
OVERHEAD SERVICE DROP	X	X	
SERVICE CONNECTION		X	
SERVICE ENTRANCE CONDUIT, CONDUCTOR, AND OH POINT OF ATTACHMENT	X		
METER SOCKET	X		
BILLING METER		X	
LOAD SIDE CONDUIT AND CONDUCTOR	X		
ICE AND SNOW SHIELD, IF REQUIRED	X		
GROUND ROD(S)	X		

TELEPHONE RESPONSIBILITY

CONDUIT/TRENCH	GENERAL CONTRACTOR			UTILITY PROVIDER			N/A		
PULL STRING	X								

WATER RESPONSIBILITY

TAP	GENERAL CONTRACTOR			UTILITY PROVIDER			N/A		
DOMESTIC METER	X								
DOMESTIC BFP									
IRRIGATION BFP									
IRRIGATION BFP									
HYDRANT									

FIRE CODE REVIEW BLOCK

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 REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.)

BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHWEST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24860 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 25224, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

CAUTION - NOTICE TO CONTRACTOR

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

UTILITY INSTALLATION RESPONSIBILITIES

WATER SERVICE:

- CONTRACTOR TO PROVIDE AND INSTALL TAP AND BACKFLOW DEVICES.
- CONTRACTOR TO PROVIDE AND INSTALL CONNECTION TO BACK SIDE OF METER, INCLUDING FITTINGS, VALVES, CURB STOP, CURB BOX, RPZ (ON IRRIGATION MAIN), WATER SERVICE MAINS, ETC. FOR IRRIGATION AND DOMESTIC SERVICE.

SEWER SERVICE:

- CONTRACTOR TO PROVIDE AND INSTALL GRAVITY SERVICE LINES, GREASE TRAP, CONNECTION TO EXISTING STUBOUT, ETC.

ELECTRIC SERVICE:

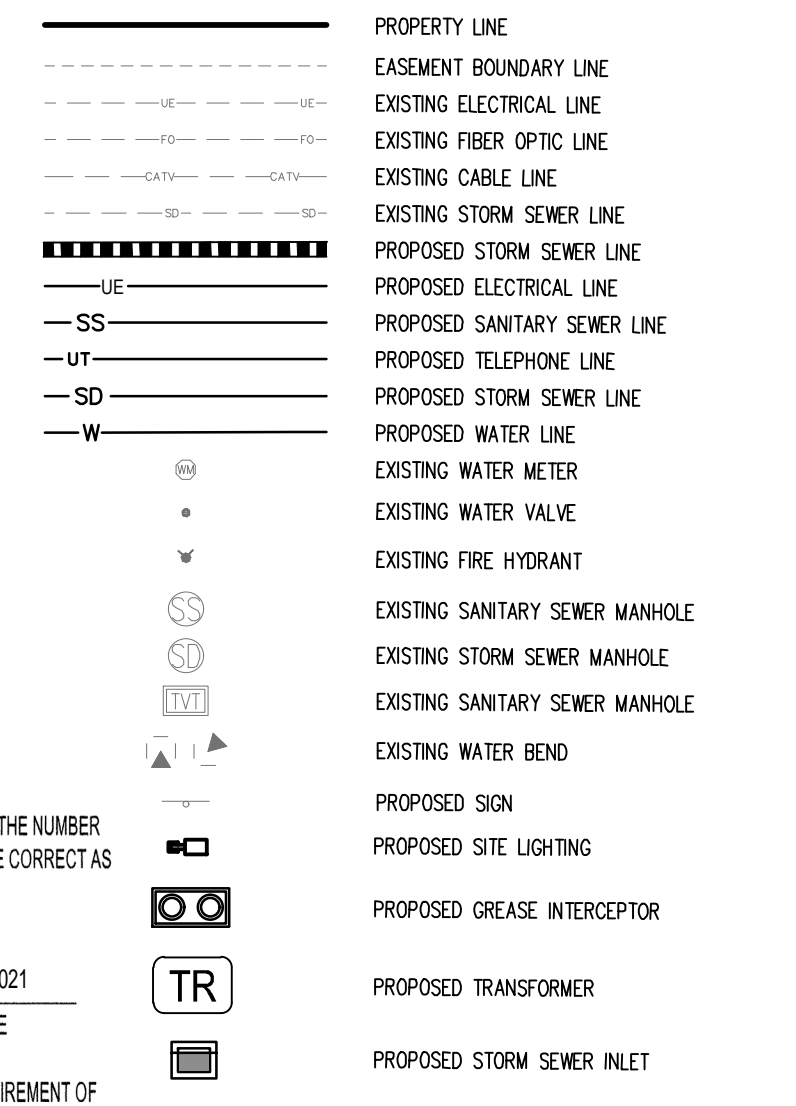
- ELECTRIC COMPANY PROVIDES AND INSTALLS POLE MOUNTED TRANSFORMER.
- CONTRACTOR TO PROVIDE & INSTALL 1-1/2" SCH. 40 CONDUIT WITH PULL STRINGS AND SWEEPS (36" R.) ALONG USE ROUTE FROM TRANSFORMER POLE TO BUILDING ENTRY POINT.
- CONTRACTOR TO PROVIDE AND INSTALL SECONDARY WIRE FROM TRANSFORMER TO BUILDING.

TELEPHONE SERVICE:

- TELEPHONE COMPANY WILL PROVIDE, INSTALL AND PULL WIRE TO BUILDING.
- CONTRACTOR TO INSTALL 4" CONDUIT WITH PULL-STRING FROM BUILDING TO POINT OF CONNECTION.
- CONTRACTOR TO PROVIDE #6 GROUND WIRE CONNECTED TO ELECTRICAL GROUND AND 4"X8" MOUNTED PLYWOOD BACKBOARD INSIDE BUILDING FOR TELEPHONE COMPANY TO MOUNT EQUIPMENT.
- CONTACT ATT TWO (2) WEEKS PRIOR TO NEEDING SERVICE.

EASEMENT SCHEDULE

- PERMANENT DRAINAGE EASEMENT (REC NO. 2004034896)
- 10' UTILITY EASEMENT (REC NO. 2004113377)
- EXCEPTION 12 & EXCEPTION 13 BOUNDARY (APPROXIMATE LOCATION) (BK 1227, PG 2338; BK 1284, PG 1957; BK 1290, PG 1455-1459)
- ADDITIONAL 5' UTILITY EASEMENT BY DEVELOPER PER REFERRAL SP18-047



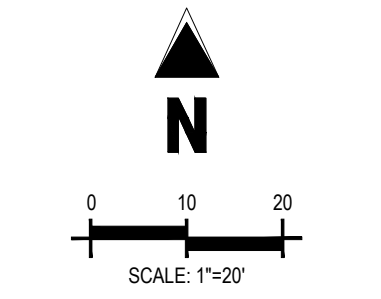
GENERAL UTILITY NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
- 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.
- 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.
- PWSO ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
- ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
- 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 SIZE PRINTS SHALL BE TRANSMITTED TO THE PWSO OFFICE.
- 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.
- TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
- 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 REMEDIATED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- 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.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
 - X FOR SANITARY SERVICE SEWERS
 - V FOR WATER SERVICES
- NO TREES ALLOWED IN EASEMENTS OR WITHIN 6' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
- 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.
- ANY TRAFFIC CONTROL WITHIN PARKER ROAD RIGHT-OF-WAY WILL REQUIRE A CDOT RIGHT-OF-WAY PERMIT.

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 reports, final development plans, special reviews, grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

[Signature]
 Town of Parker, Director of Engineering
 Date: 12/22/2021



APPROVED
Dec 20 2021
PARKER WATER AND
SANITATION DISTRICT

PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE PLAN DOCUMENTS



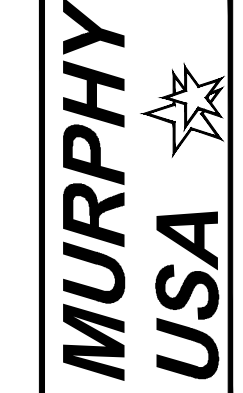
SHEET NO.
C-3-2



UTILITY DETAILS
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER COLORADO

Galloway
 6102 S. Willow Drive, Suite 320
 Denver, Colorado 80211
 303.770.8844
 GallowayUS.com

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730



INSPECTION POLICY:

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

INSTALLATION NOTES:

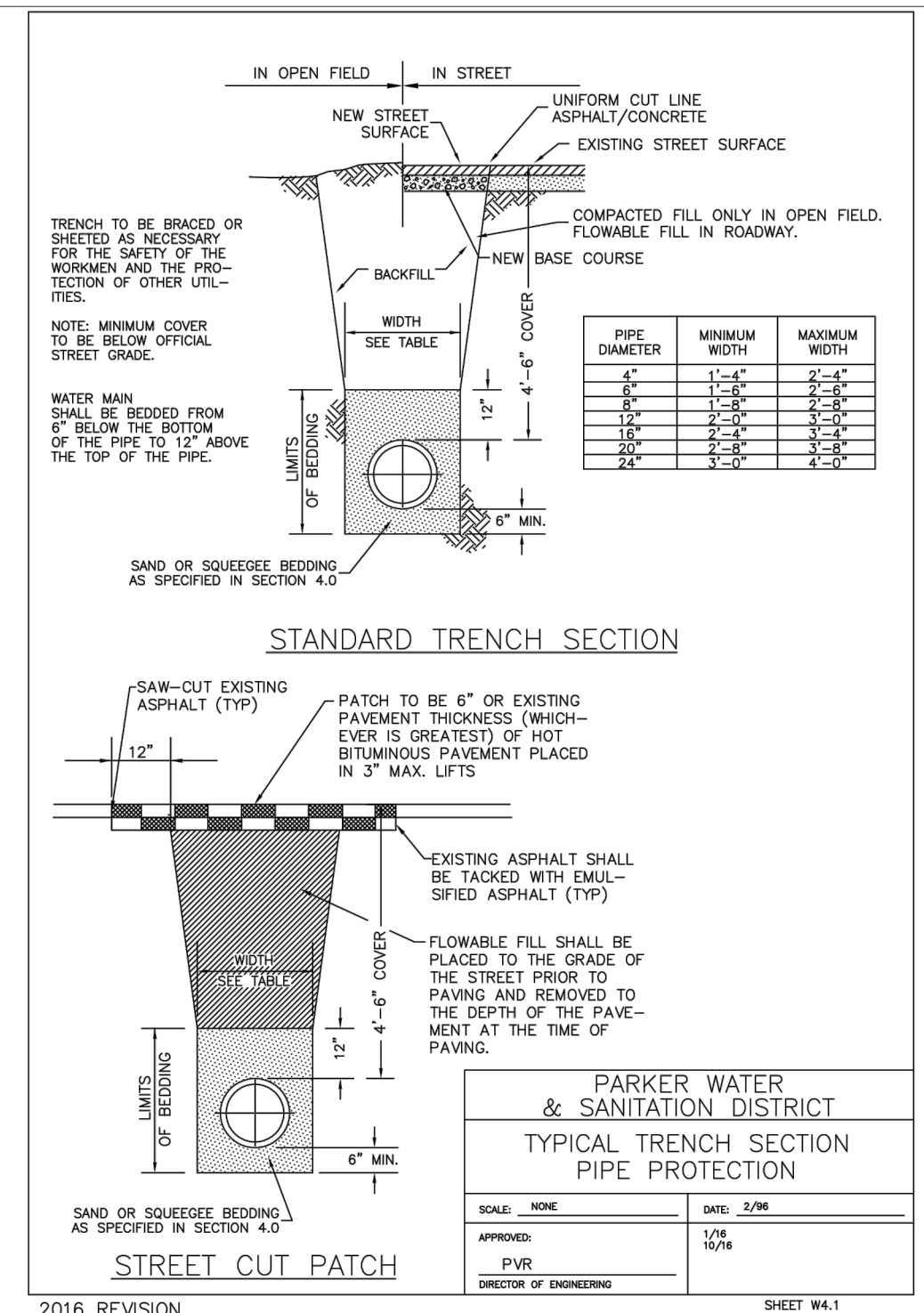
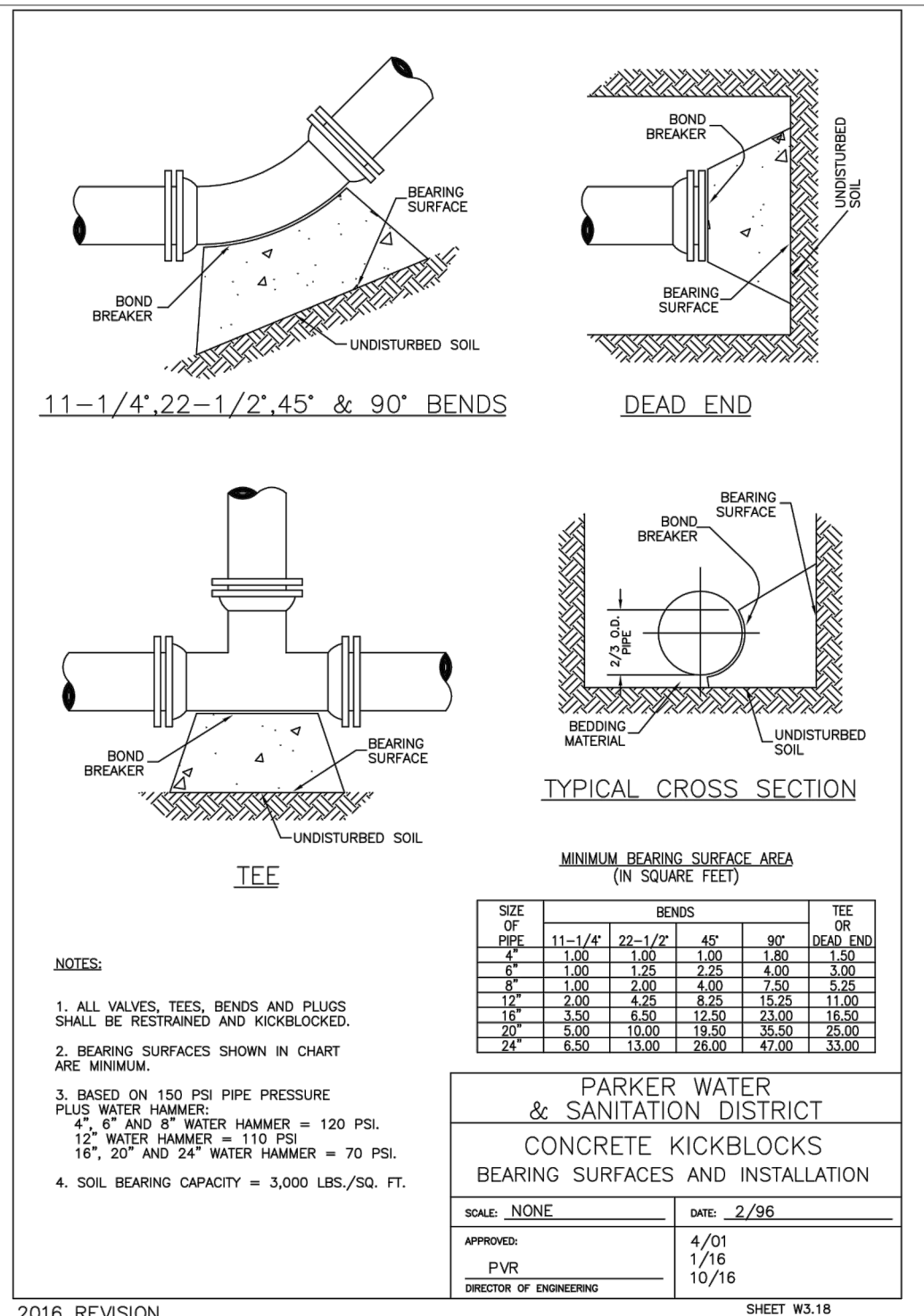
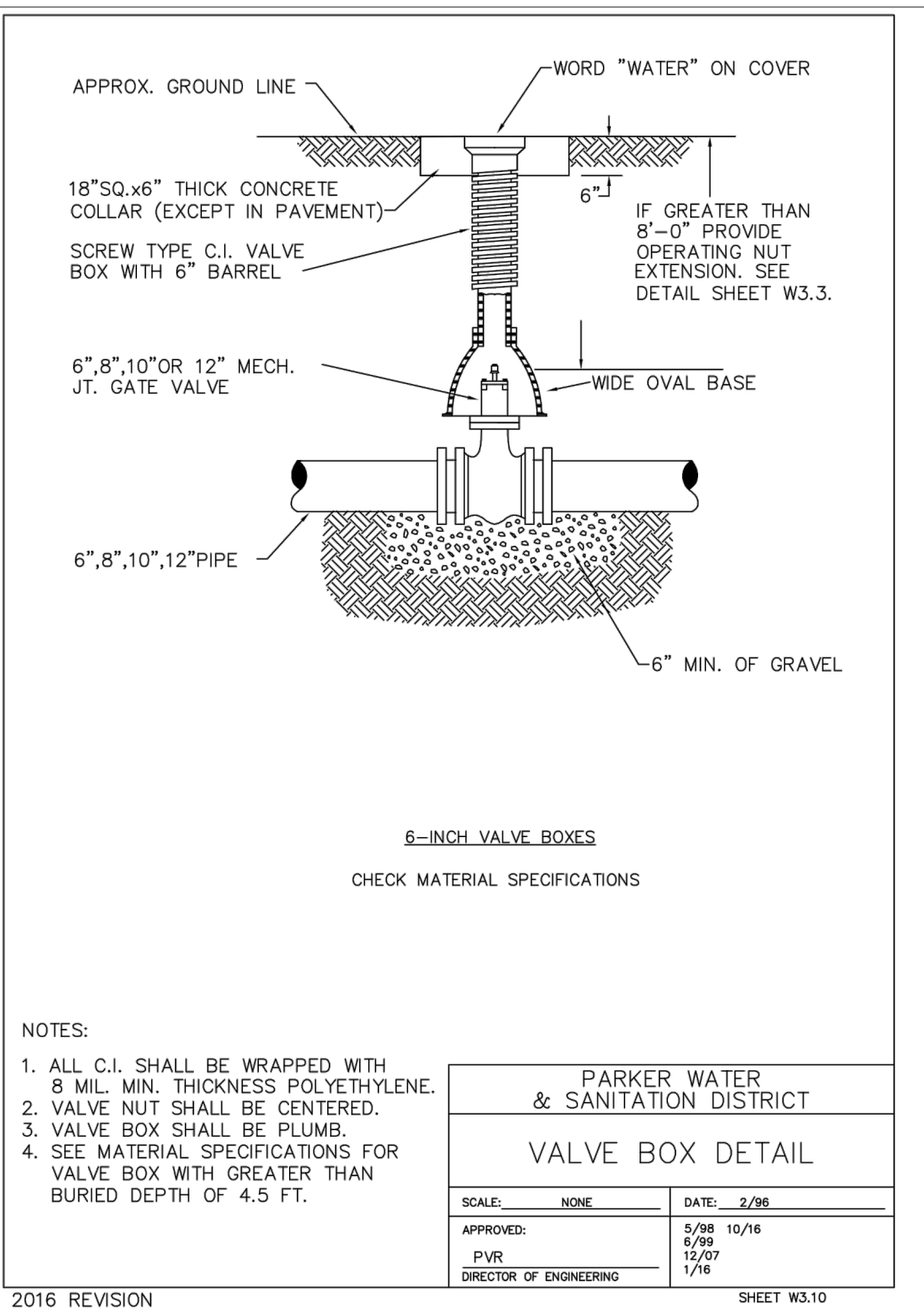
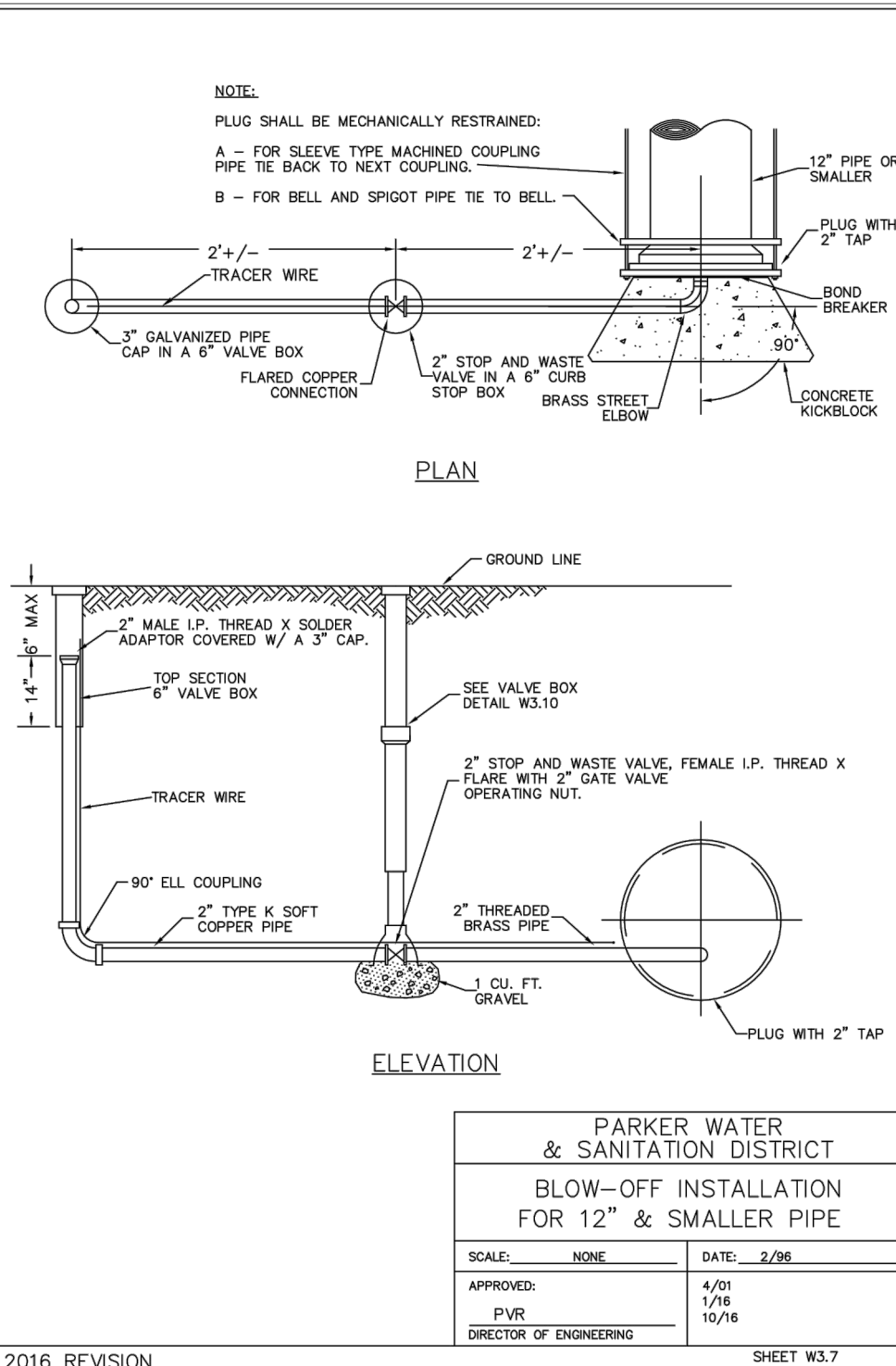
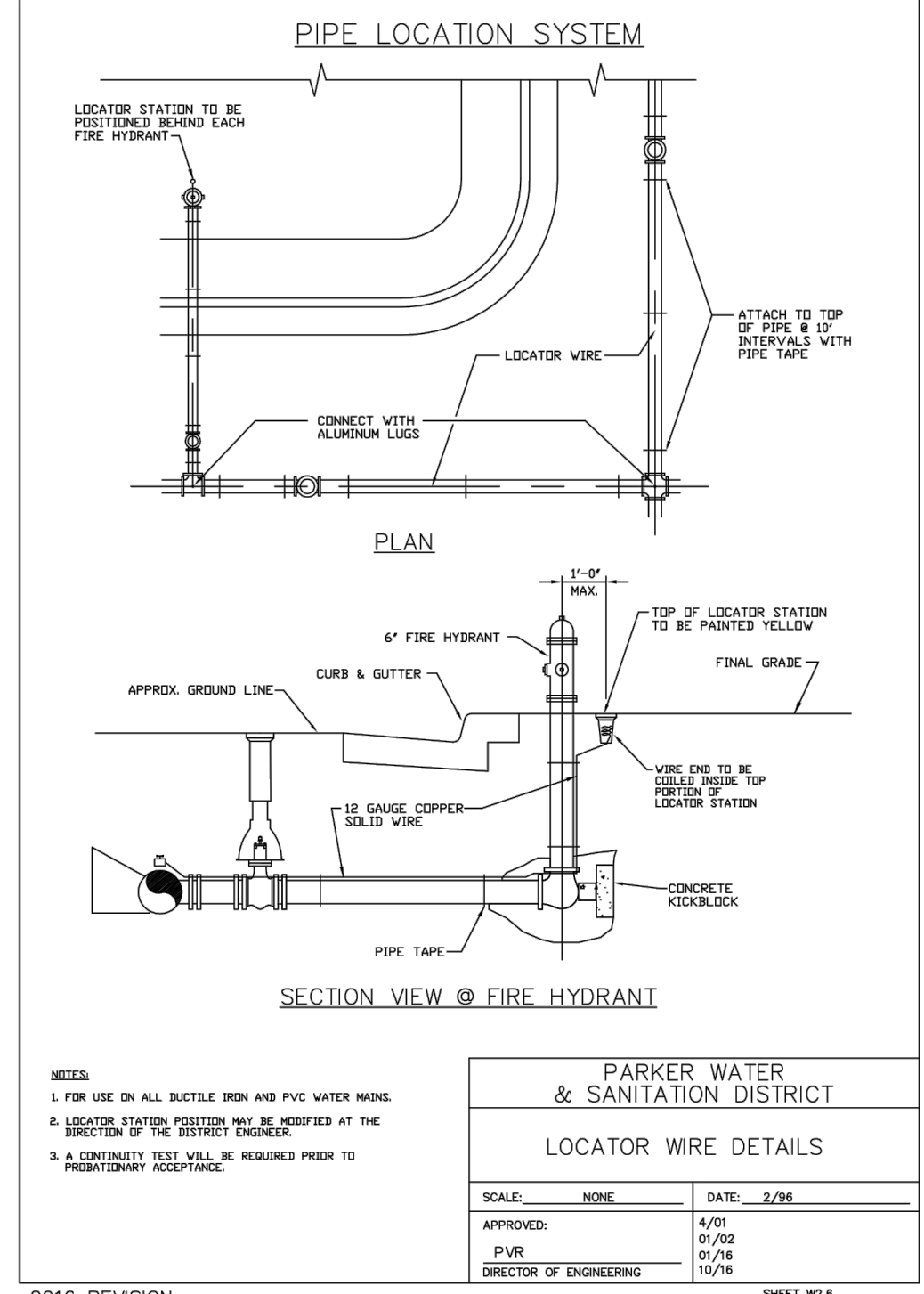
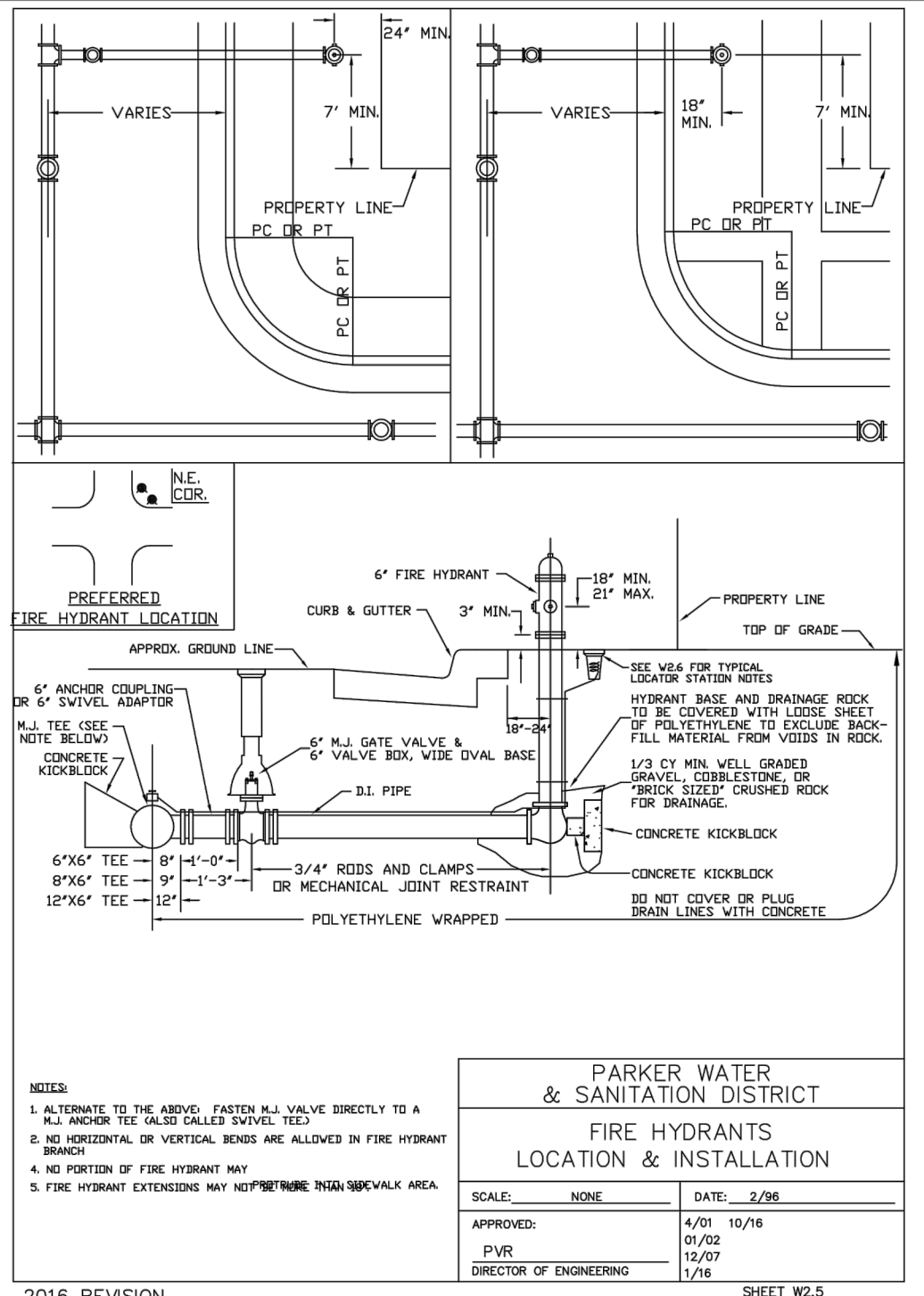
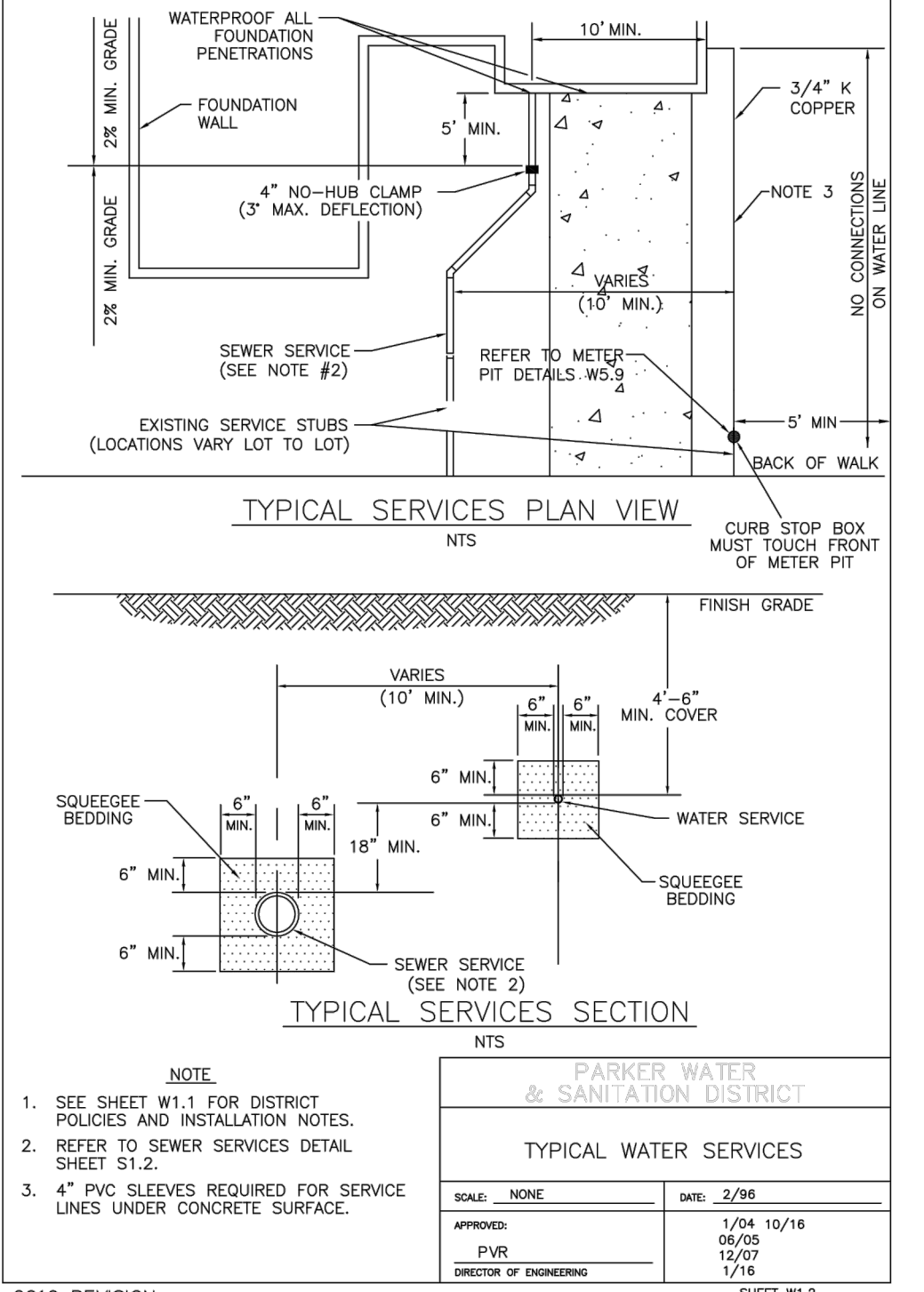
WATER

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING, (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE 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 WILL BE ALLOWED ON 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. CRACK SPACE 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 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:
 * W 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 NOTES FOR WATER SERVICES

SCALE:	NONE	DATE:	2/96
APPROVED:	1/04	1/16	10/16
	PVR		
	DIRECTOR OF ENGINEERING		

2016 REVISION SHEET W1.1



PIPE BEDDING:

(a) Installation of bedding and pipe after completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bedding material shall be placed on the bed and bedding material at pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is installed for line and grade and the joint is made, the bedding material shall be carefully placed and tamped under the bottom of the pipe and in the previously dug bed holes.

Bedding is herein defined as the act of placing approved bedding material under the bottom of the pipe, paying particular attention to voids, bell flanges, and silt holes. The purpose of bedding is to ensure uniform support for the pipe.

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

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

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

Sieve Size	Total Percent Passing by Weight
3/8" inch	100
No. 4	70-100
No. 8	35-93
No. 16	20-80
No. 30	8-60
No. 60	2-30
No. 100	1-10
No. 200	0-3

for use with 20-inch or smaller

Well-Graded Sand for (12-inch or smaller)

Sieve Size	Total Percent Passing by Weight
3/8" inch	100
No. 4	70-100
No. 8	35-93
No. 16	20-80
No. 30	8-60
No. 60	2-30
No. 100	1-10
No. 200	0-3

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

PARKER WATER & SANITATION DISTRICT
PIPE BEDDING

SCALE:	NONE	DATE:	2/96
APPROVED:	5/08	2/06	1/16
	PVR		
	DIRECTOR OF ENGINEERING		

2016 REVISION SHEET W1.2

APPROVED
Dec 20 2021
PARKER WATER AND
SANITATION DISTRICT

PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE PLAN DOCUMENTS



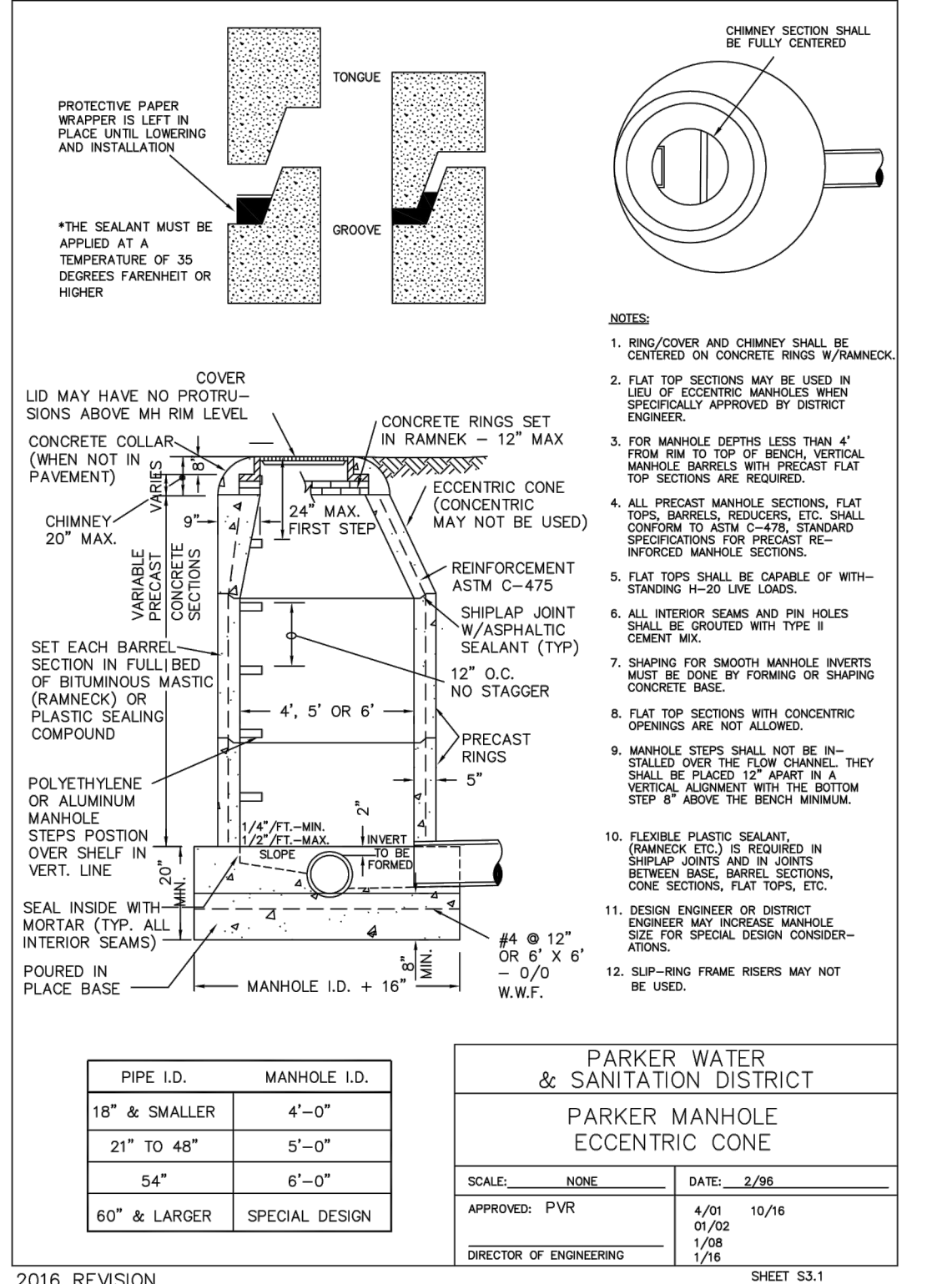
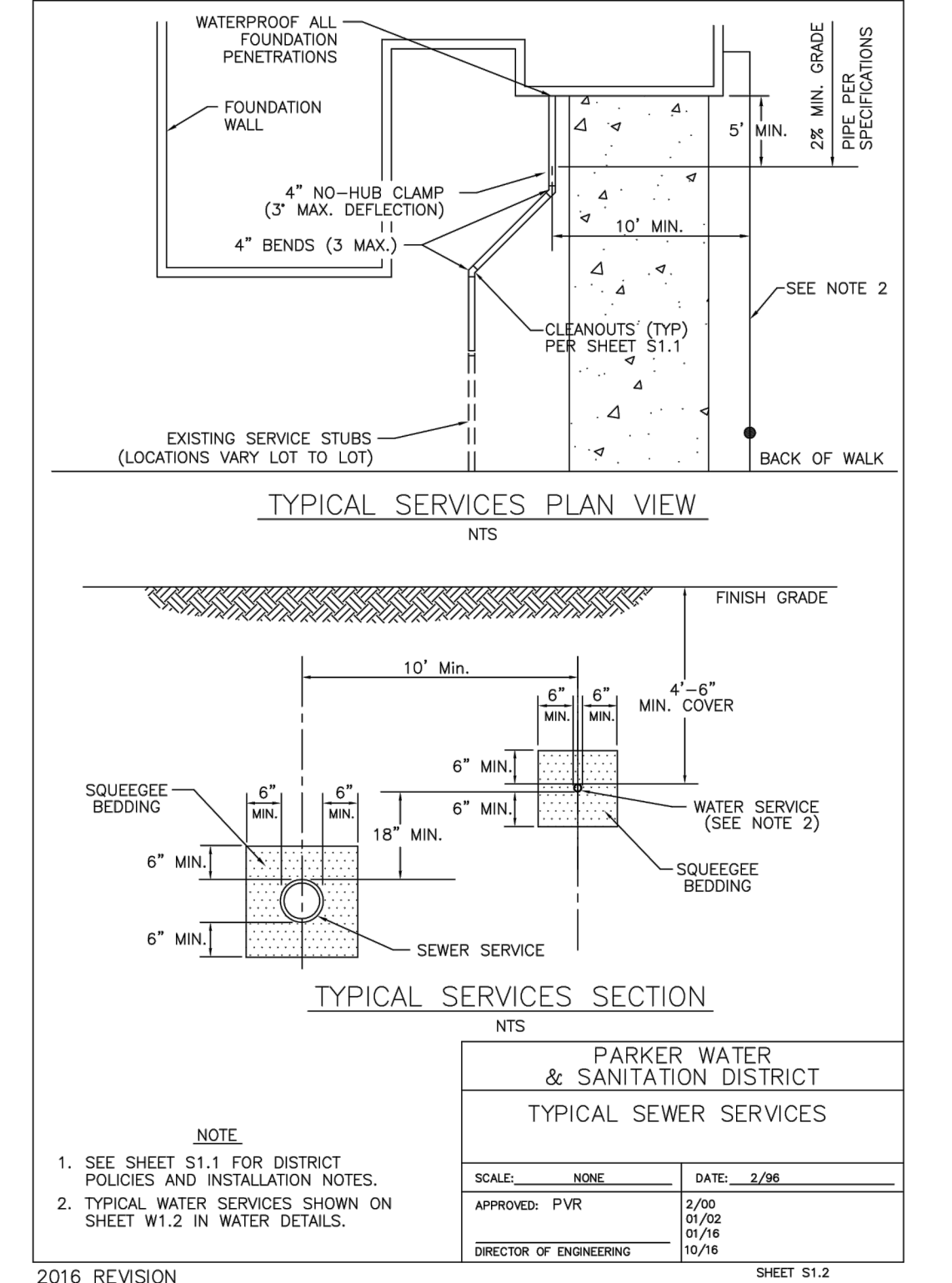
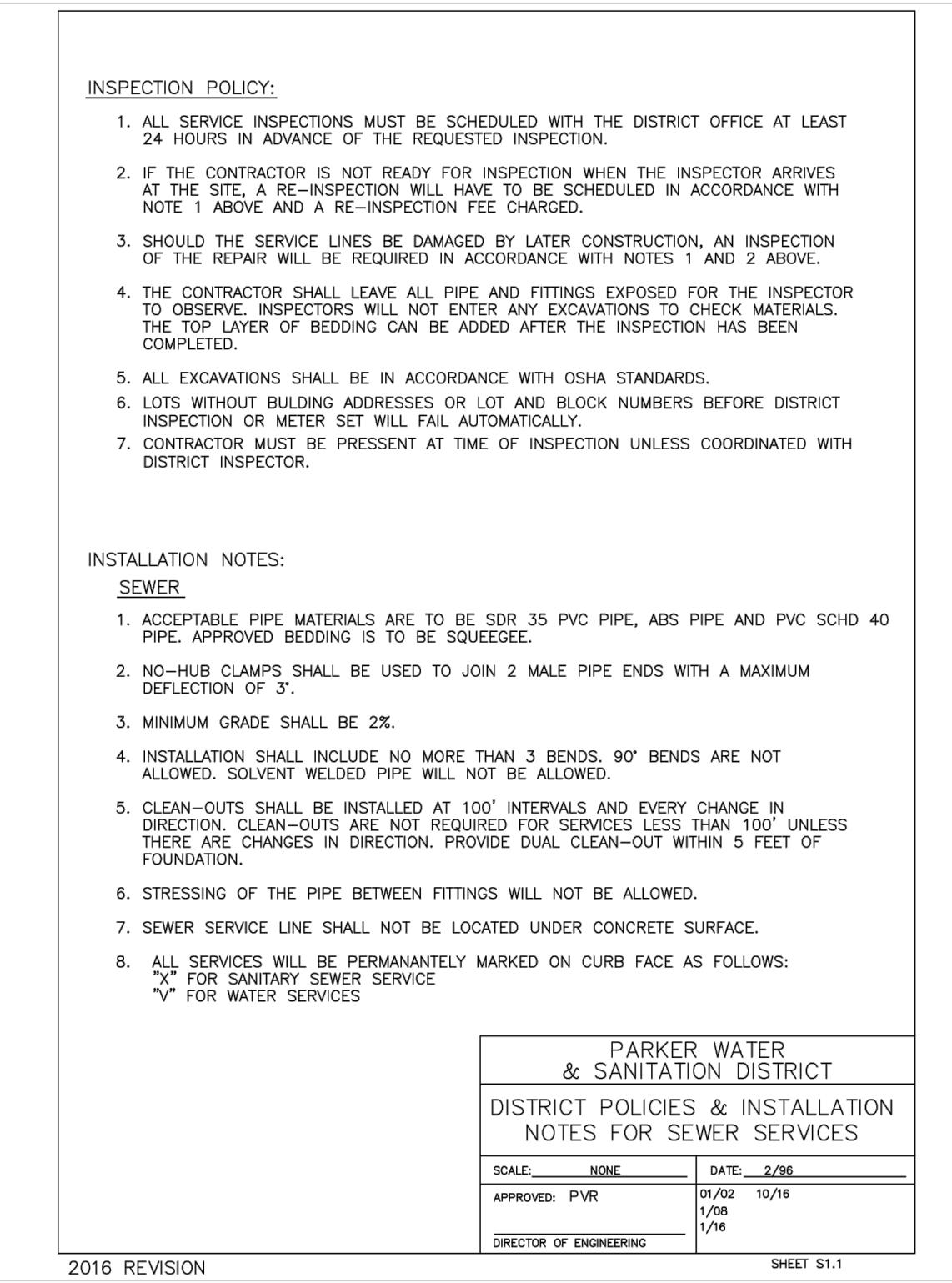
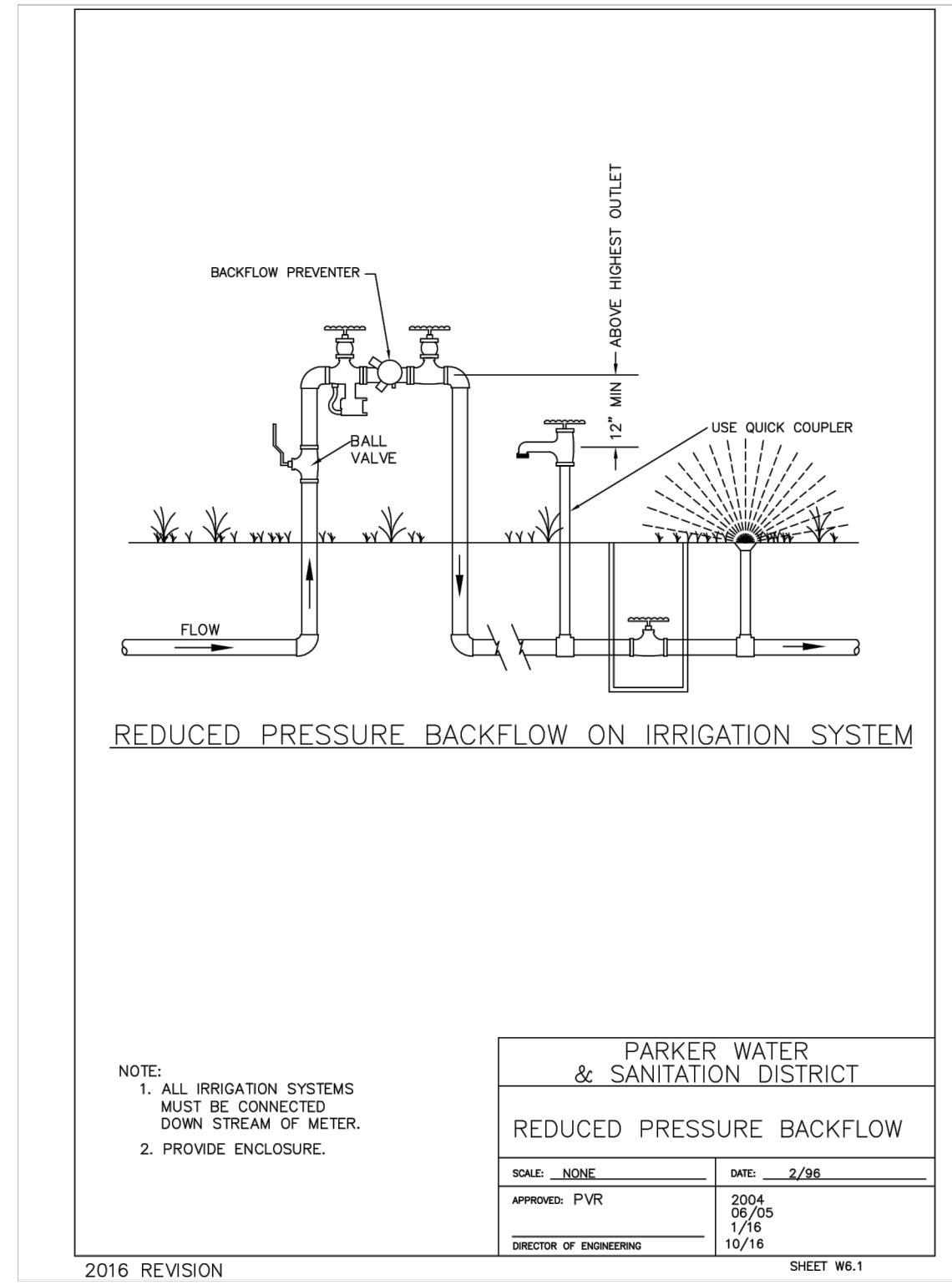
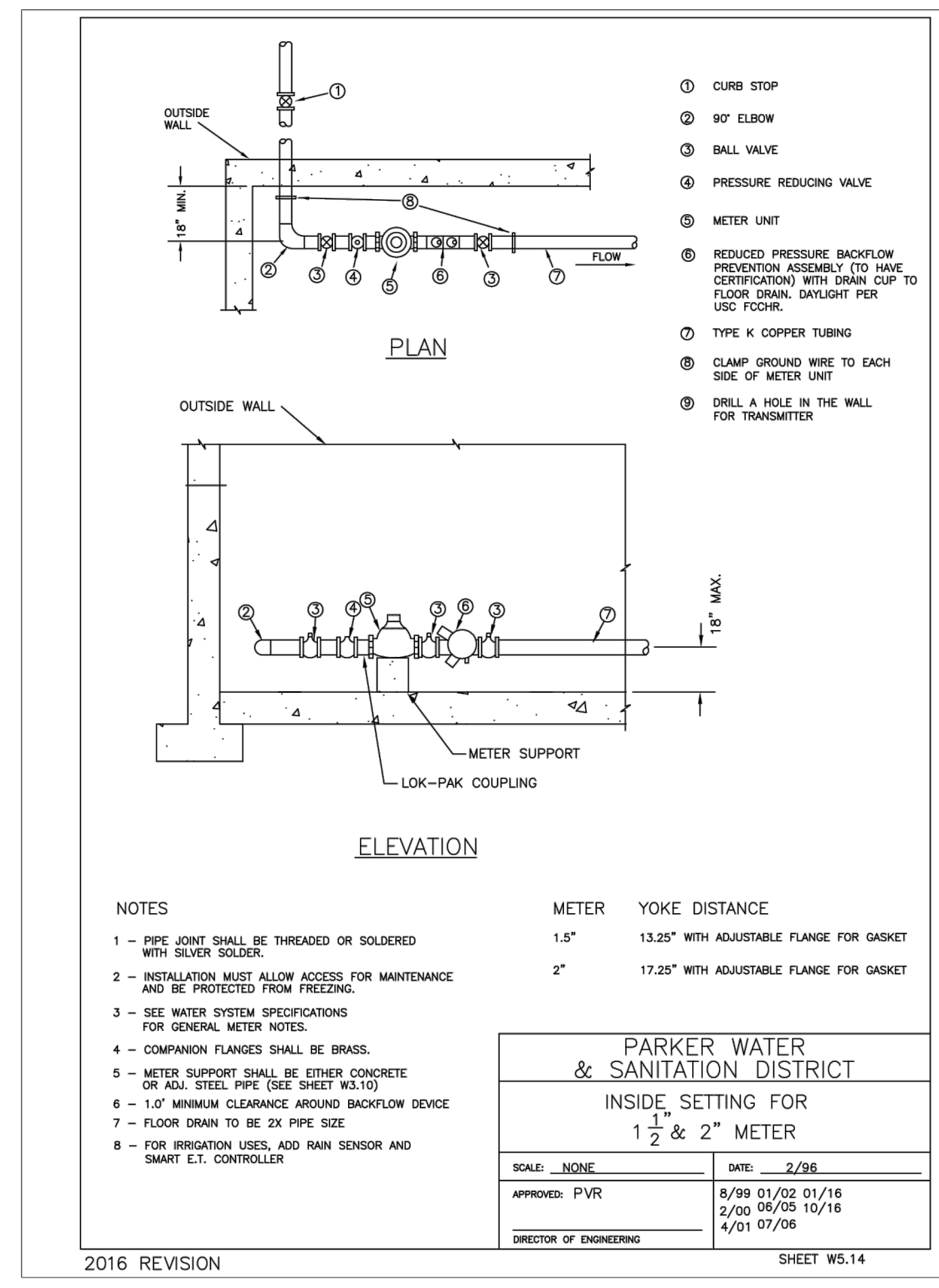
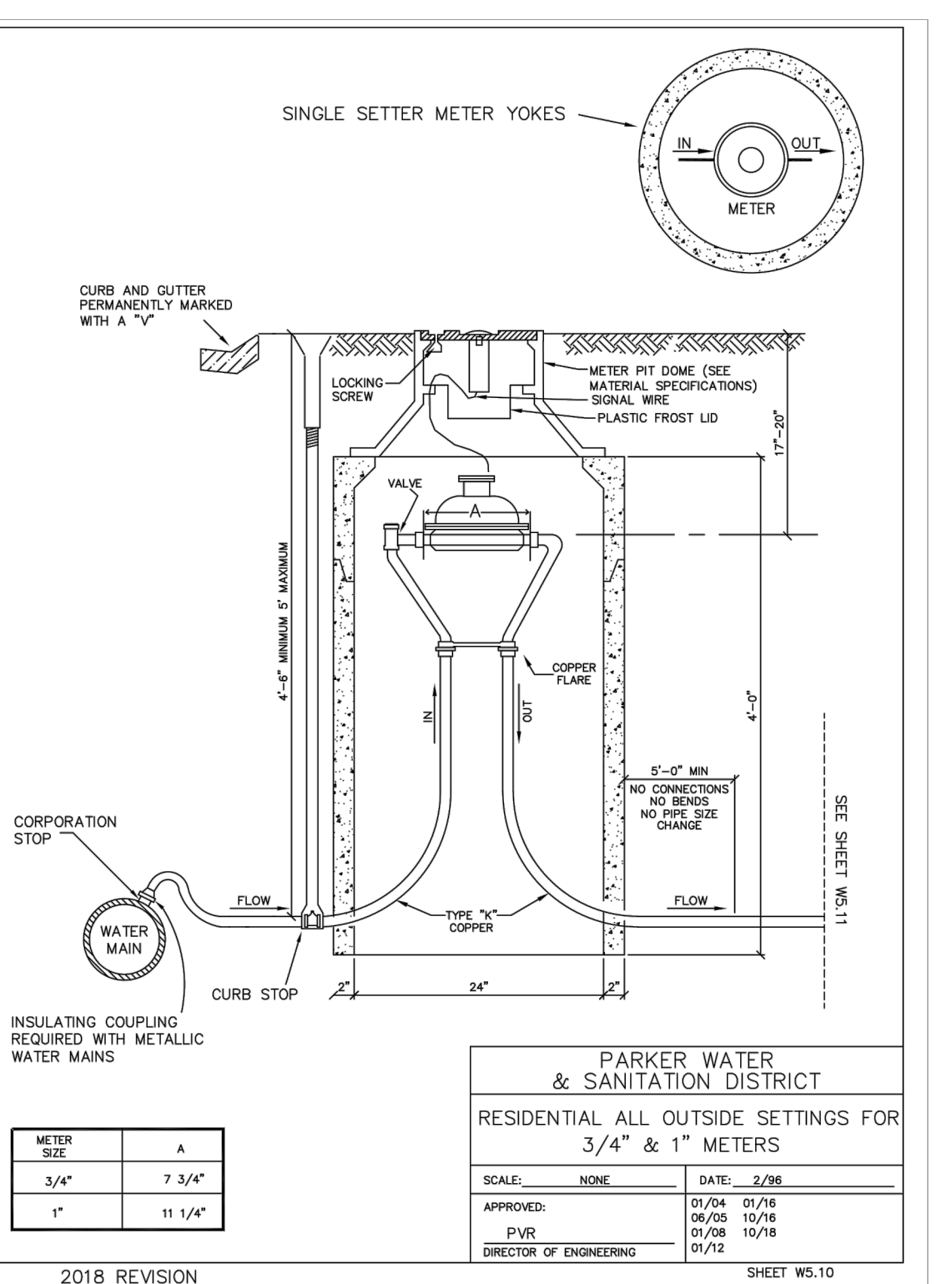
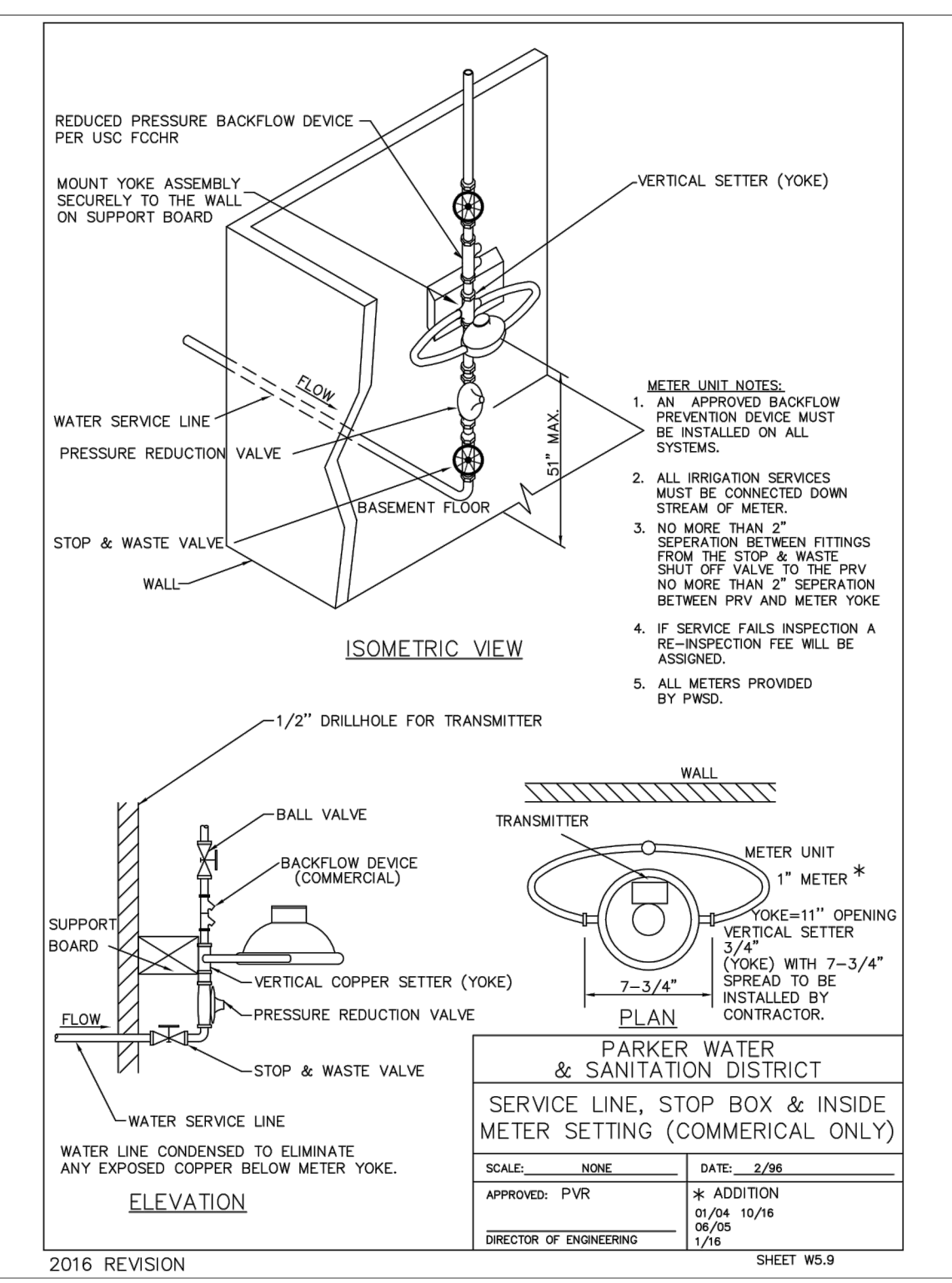
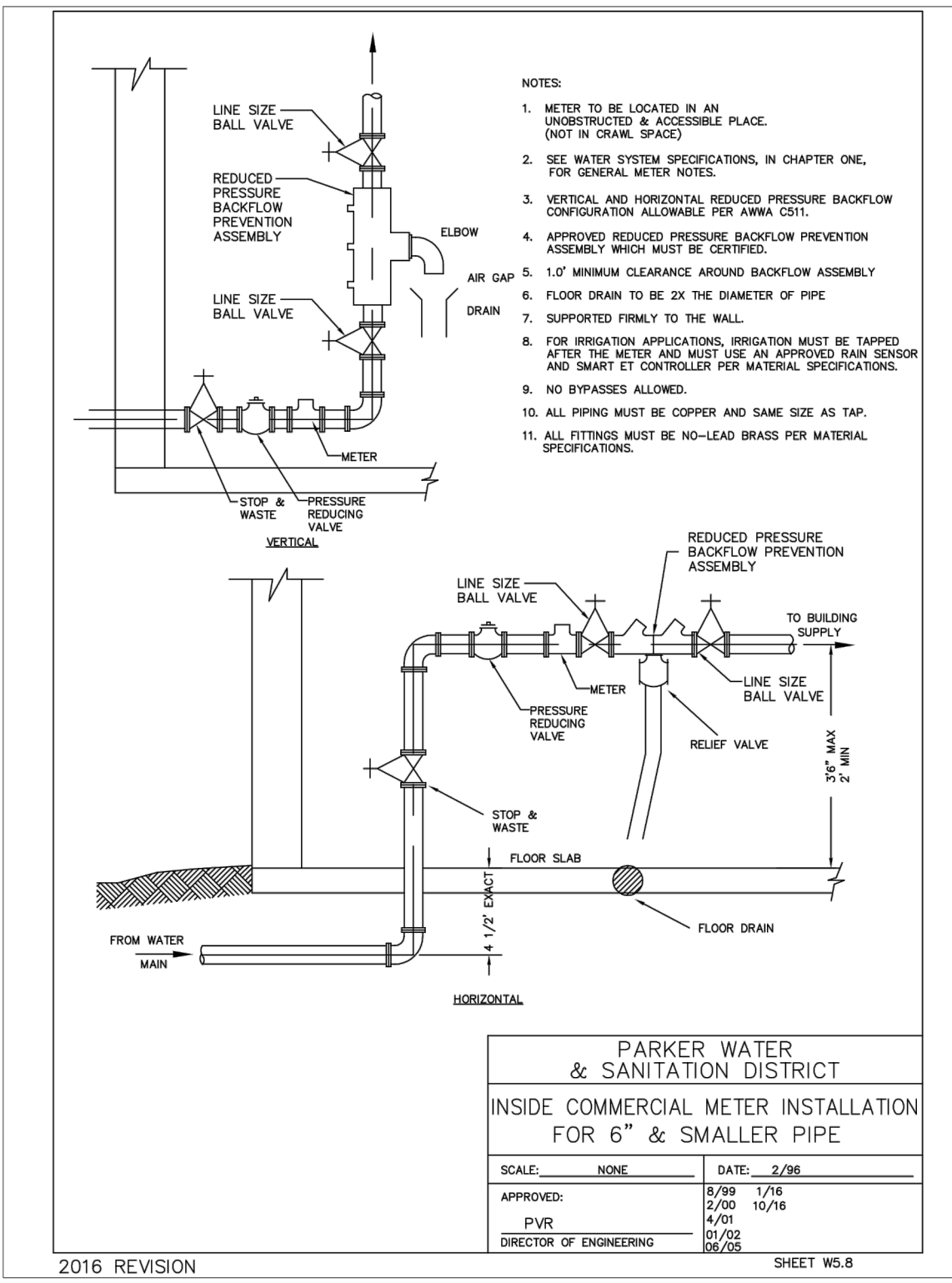
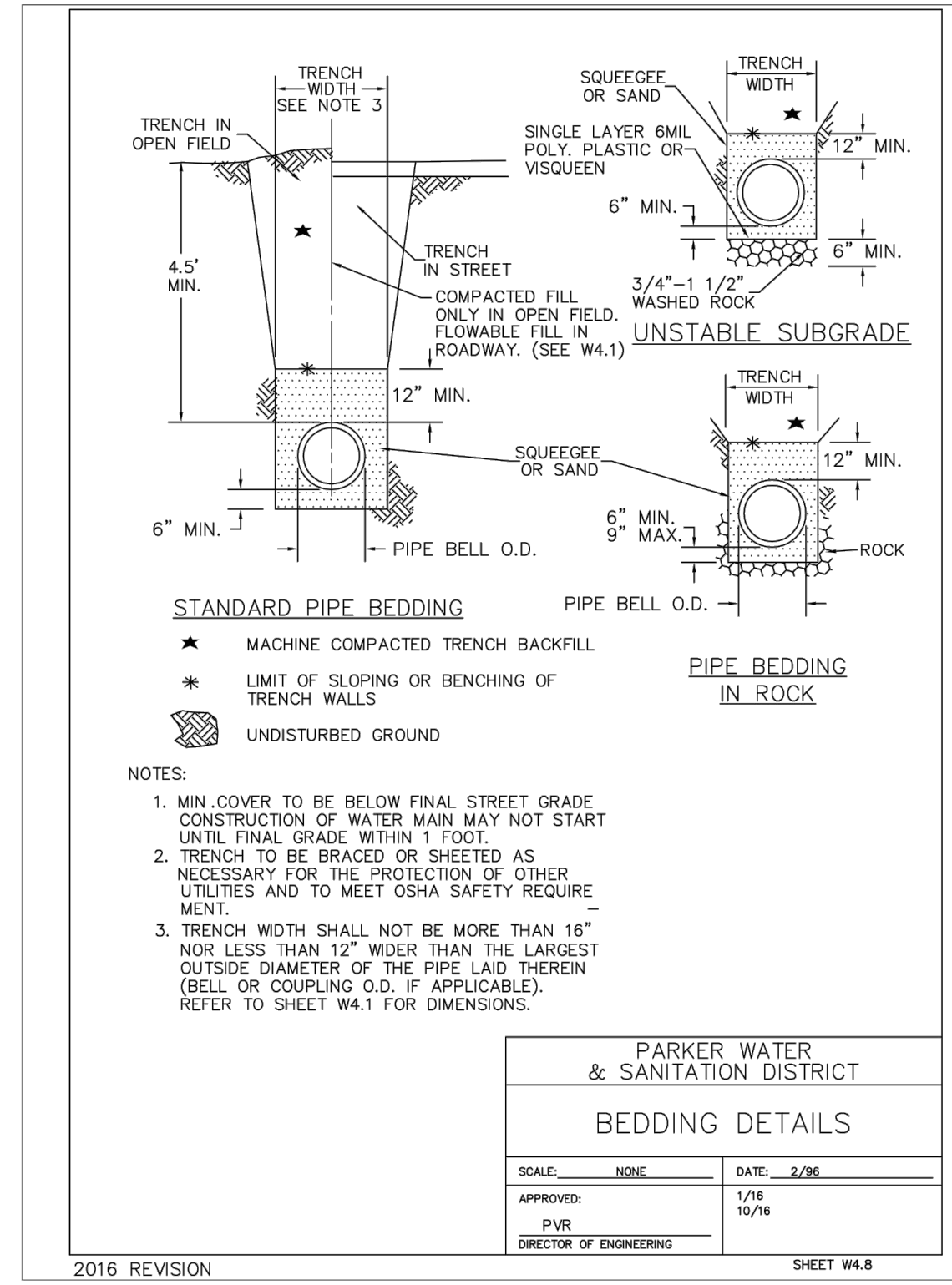
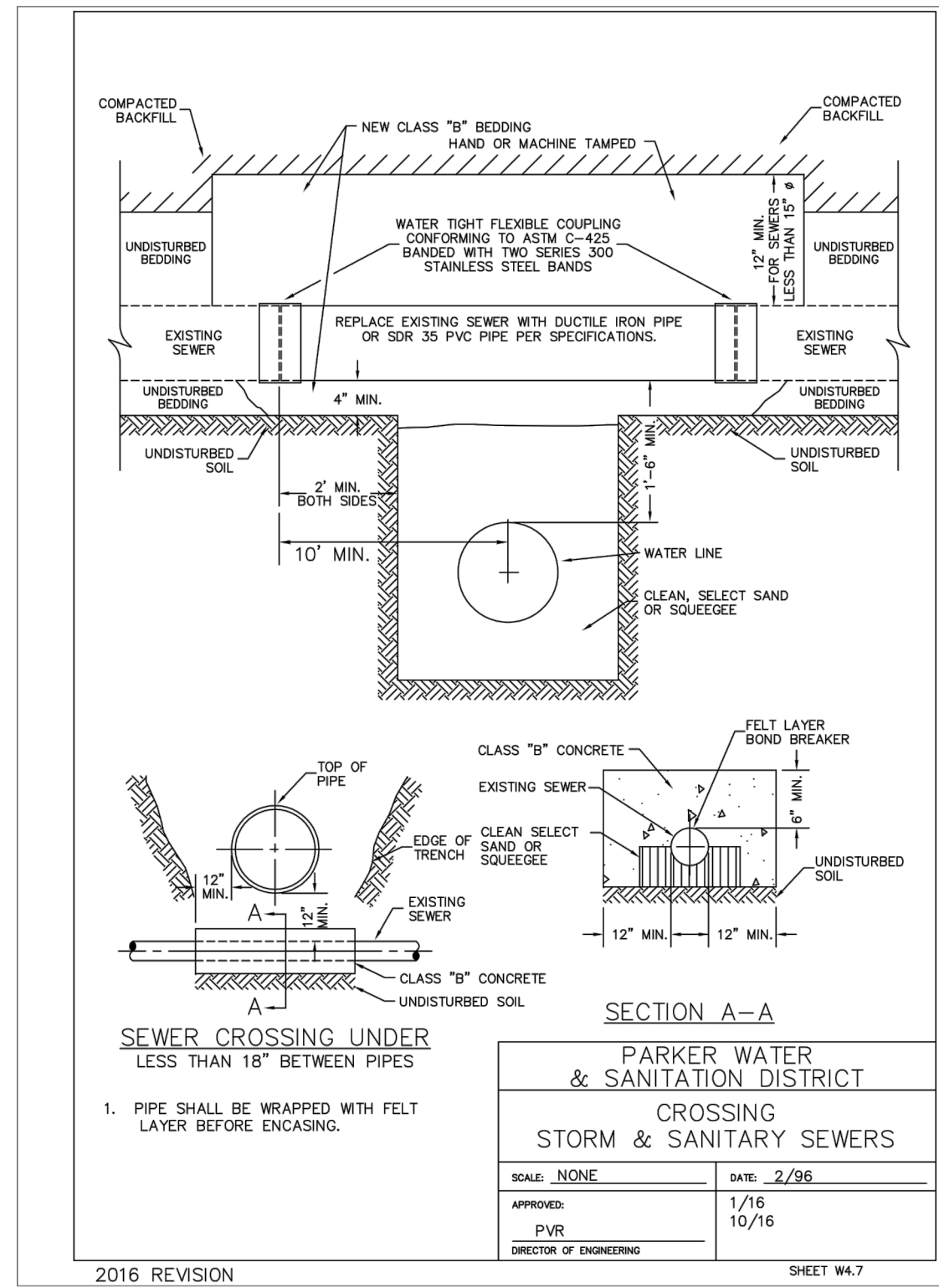
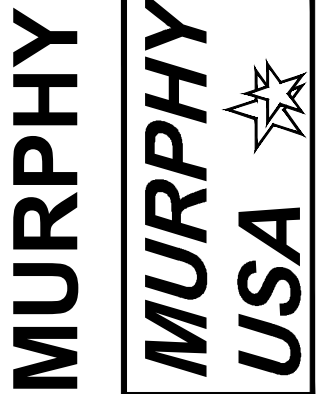
SHEET NO.
C-3.3



UTILITY DETAILS
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER
COLORADO

Galloway

MURPHY OIL USA, INC.
 200 PEACH STREET
 EL DORADO, AR 71730



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 DATE

PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE PLAN DOCUMENTS



Know what's below.
Call before you dig.

SHEET NO. C-3.5



PARKER COLORADO

MANHOLE COVER STANDARD DETAIL

DATE: NOVEMBER 2020
DETAIL: 33 OF 33

GENERAL NOTES:
1. LOAD RATING - HEAVY DUTY.
2. COATING - UNDRIPPED.
3. ESTIMATED WEIGHT - 112 LBS.
4. MATERIAL SPECIFICATION - GRAY IRON ASTM A88 CLASS B.
5. FOR USE ON ALL PRIVATE AND PUBLIC STORM SEWER.

ACO DRAIN
KlassikDrain - K200 Galvanized steel edge rail channel system

One meter channel: 39.37' (1 meter)

Half meter channel: 19.69' (0.5 meter)

Knock-outs included on every 5th channel

Total capacity = 19 gallons

Outlet	Product	Outlet size (in)	Invert depth (ft)	CFS
A	Bottom outlet - K200	4" round	7.87'	153
B	Bottom outlet - K2040	8" round	15.75'	316
C	End outlet - K200	4" round	7.87'	344
D	End outlet - K240	4" round	15.75'	200
E	Type K2 902G	4" round	25.53'	263
F	Type K2 902G	4" round	31.83'	297
G	Type K2 902G	4" round	23.76'	254
H	Type K2 902G	4" round	31.83'	658
I	Type K2 902G	4" round	24.69'	576
J	Type K2 902G	4" round	24.13'	254
K	Type K2 902G	4" round	31.87'	658
L	Type K2 902G	4" round	31.26'	598
M	Type K2 902G	4" round	31.26'	651
N	Type K2 902G	4" round	31.87'	1149
O	Type K2 902G	4" round	30.33'	640
P	Type K2 902G	4" round	23.19'	251
Q	Type K2 902G	4" round	23.90'	288
S	Type K2 902G	4" round	23.90'	288

April 2018 www.ACOdrain.us

ACO DRAIN
Type 678Q Longitudinal ductile iron grate (ADA)

Product Features

- Certified to EN 1433 Load Class C - 56,000 lbs - 967 psi
- Uses 'QuickLok' boltless locking system
- Suitable for use with K200, K2000, H200K13, and H200K13 channels
- Manufactured from ductile iron to ASTM A 536-84 - Grade 65-45-12
- E-coated for improved resistance against rust
- Complies with ADA - American Disabilities Act of 1990 Section 4.5.4
- Complies with ASME: A31.2.6.3 - 2001: Section 7.1.2 Heel Resistant Strainers and Grates
- Bicycle Tire Penetration Resistant to AS 3996 - 2006

Specifications

General: The surface drainage system that be ACO Drain K200, K2000, H200K13, and H200K13, channels* complete with ACO Type 678Q longitudinal ductile iron grate with 'QuickLok' locking as manufactured by ACO, Inc. or similar approved.

Materials: The covers shall be manufactured from ductile iron and have minimum properties as follows:

- Independently certified to meet Load Class C
- to EN 1433 - 56,000 lbs - 967 psi
- Ductile iron to ASTM A 536-84 - Grade 65-45-12
- Intake area of 51.62 sq. in. (330.97 cm²) per half meter of grate

The overall width of 9.41" (239mm) and overall length of 19.69" (500mm). Slots measure at a maximum of 1.41" (35.8mm) by 0.31" (8mm).

Installation: The trench drain system and grates shall be installed in accordance with the manufacturer's installation instructions and recommendations.

April 2018 www.ACOdrain.us

ACO DRAIN
Type 678Q Longitudinal ductile iron grate (ADA)

Plan view

Side elevation

Description	Part No.	Length inches (mm)	Width inches (mm)	Weight lbs.
QuickLok grate	90038	19.69 (500)	9.41 (239)	22.0
QuickLok locking bar	10457	-	-	0.5
QuickLok grate removal tool	03118	-	-	0.3

'QuickLok' locking mechanism

ACO 'QuickLok' is a patented boltless locking system. Grates are removed and replaced with the minimum time and effort for ease of maintenance. The unique design provides a positive 'snap down' fit into the locking bar. A slot is fixed to the grate which 'locks' into the spring clip on the locking bar.

The 'QuickLok' slot is made from stainless steel and high density polyethylene. The locking bar and clip are stainless steel, for use in both general purpose and corrosive environments.

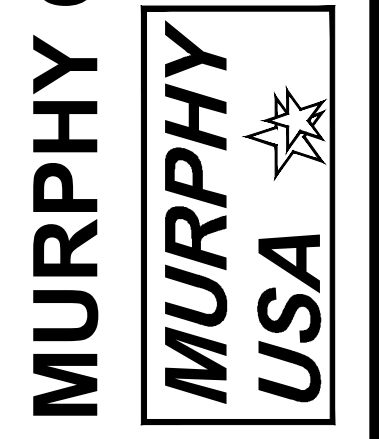
ACO Inc.
Northeast Sales Office: 9470 Proctor Drive, Mentor, OH 44060, Tel: (440) 639-7220, Fax: (440) 639-7255
West Sales Office: 825 W. Bechtel St., Casa Grande, AZ 85122, Tel: (520) 421-9988, Fax: (520) 421-9999
Southeast Sales Office: 4211 Pleasant Road, Fort Mill, SC 29508, Tel: (803) 543-7454, Fax: (803) 543-7453

April 2018 www.ACOdrain.us

UTILITY DETAILS
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER COLORADO

Galloway
6162 S. Willow Drive, Suite 320
Mogridge, CO 80111
GallowayUS.com

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730



PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE PLAN DOCUMENTS



Know what's below.
Call before you dig.

SHEET NO.

C-3.6



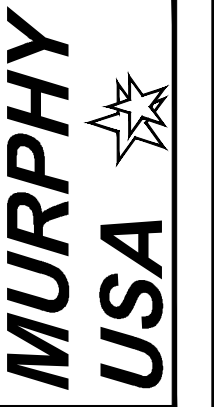
UTILITY DETAILS
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER, COLORADO

Galloway

6162 S. Willow Drive, Suite 320
Englewood, CO 80111
303.770.8844
GallowayUS.com

MURPHY OIL USA, INC.

200 PEACH STREET
EL DORADO, AR 71730



STEEL GRATE QUANTITIES

PIECES	DESCRIPTION	LENGTH PER FT. (LBS.)	WEIGHT PER FT. (LBS.)
4	5/8" x 7/8" BEAM	48"	7.50
2	3/2" x 1/2" FLAT	26 5/8"	2.90
2	3" x 1/2" FLAT	26 5/8"	2.50

TOTAL LBS. = 131

QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. OF STEPS
2'-0"	1.0	75	0
3'-0"	1.3	85	0
4'-0"	1.7	97	0
5'-0"	2.1	109	1
6'-0"	2.5	122	2
7'-0"	2.9	135	3
8'-0"	3.3	148	4
9'-0"	3.7	161	5
10'-0"	4.1	174	6
11'-0"	4.5	187	7
12'-0"	4.9	200	8

INLET WITH DITCH PAVING

INLET ON GRADE (FLOW FROM ONE DIRECTION)

INLET AT BOTTOM OF VERTICAL CURVE (FLOW FROM TWO DIRECTIONS)

INLET, TYPE C

Colorado Department of Transportation
2829 West Howard Place
COOT, 4th, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868

Project Development Branch JBK

Issued by the Project Development Branch July 31, 2019

STANDARD PLAN NO. M-604-10

Standard Sheet No. 1 of 1

STEEL GRATE QUANTITIES

PIECES	DESCRIPTION	LENGTH PER FT. (LBS.)	WEIGHT PER FT. (LBS.)
4	5/8" x 7/8" BEAM	48"	7.50
2	3/2" x 1/2" FLAT	26 5/8"	2.90
2	3" x 1/2" FLAT	26 5/8"	2.50

TOTAL LBS. = 131

QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. OF STEPS
3'-0"	1.3	72	4
3'-6"	1.5	78	4
4'-0"	1.8	89	5
4'-6"	2.1	104	6
5'-0"	2.4	119	6
5'-6"	2.7	134	7
6'-0"	3.0	149	7
6'-6"	3.3	164	8
7'-0"	3.6	179	8
7'-6"	3.9	194	9
8'-0"	4.2	209	9
8'-6"	4.5	224	10
9'-0"	4.8	239	10
9'-6"	5.1	254	11
10'-0"	5.4	269	11
10'-6"	5.7	284	12
11'-0"	6.0	299	12

TYPE 13 INLET FOR GUTTER TYPE 2

NO. 13 GRATING & FRAMES

CONCRETE INLET TYPE 13

Colorado Department of Transportation
2829 West Howard Place
COOT, 4th, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868

Project Development Branch JBK

Issued by the Project Development Branch July 31, 2019

STANDARD PLAN NO. M-604-13

Standard Sheet No. 1 of 1

PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE PLAN DOCUMENTS



Know what's below.
Call before you dig.

SHEET NO.

C-3.7



BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHEAST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN, VERTICAL DATUM IS APPROXIMATELY 2.6± FEET BELOW NAVD 88.

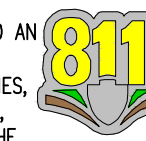
SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

CAUTION – NOTICE TO CONTRACTOR

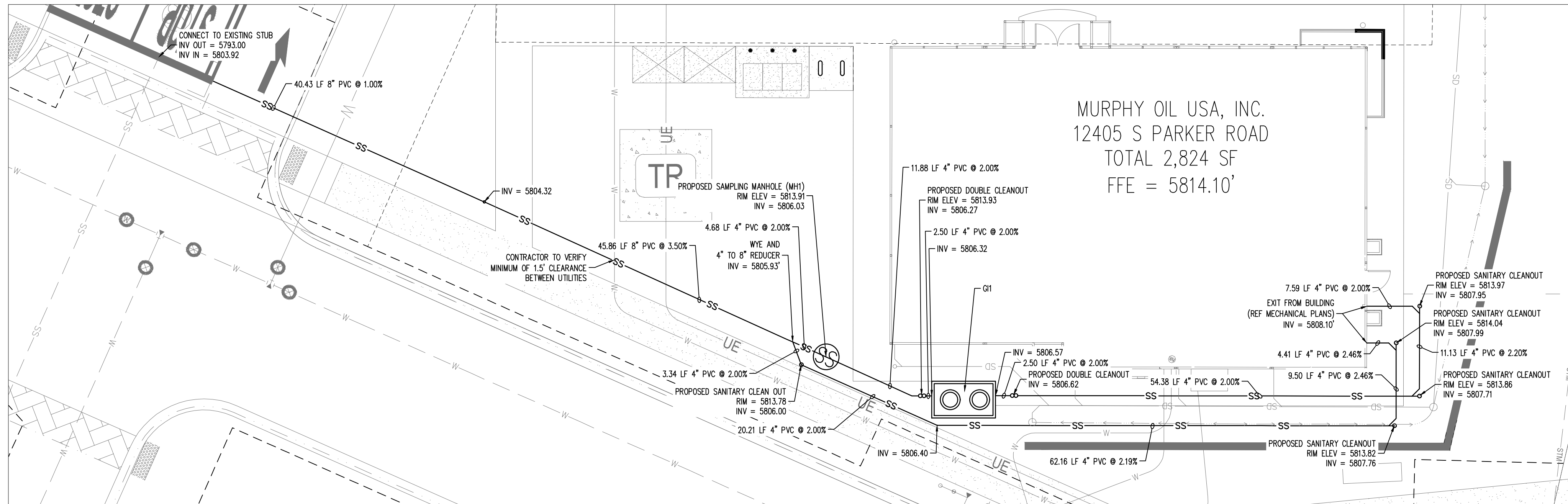
- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



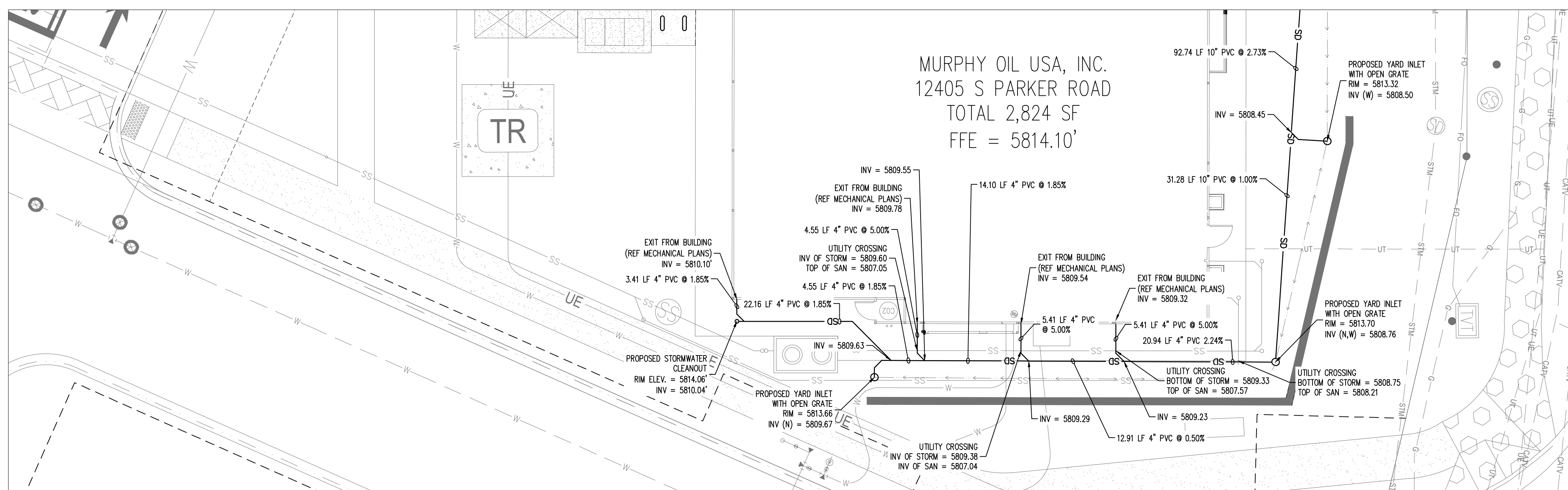
Know what's below.
Call before you dig.

NOTE: CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.



SANITARY PLAN



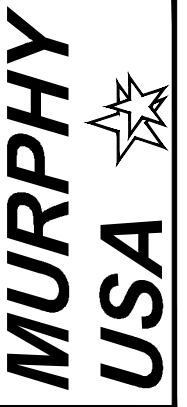
STORM PLAN

Galloway

6162 S. Willow Drive, Suite 320
Parker, Colorado 80111
303.770.9864
GallowayUS.com

MURPHY OIL USA, INC.

200 PEACH STREET
EL DORADO, AR 71730



PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

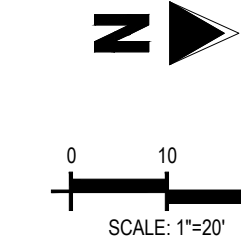
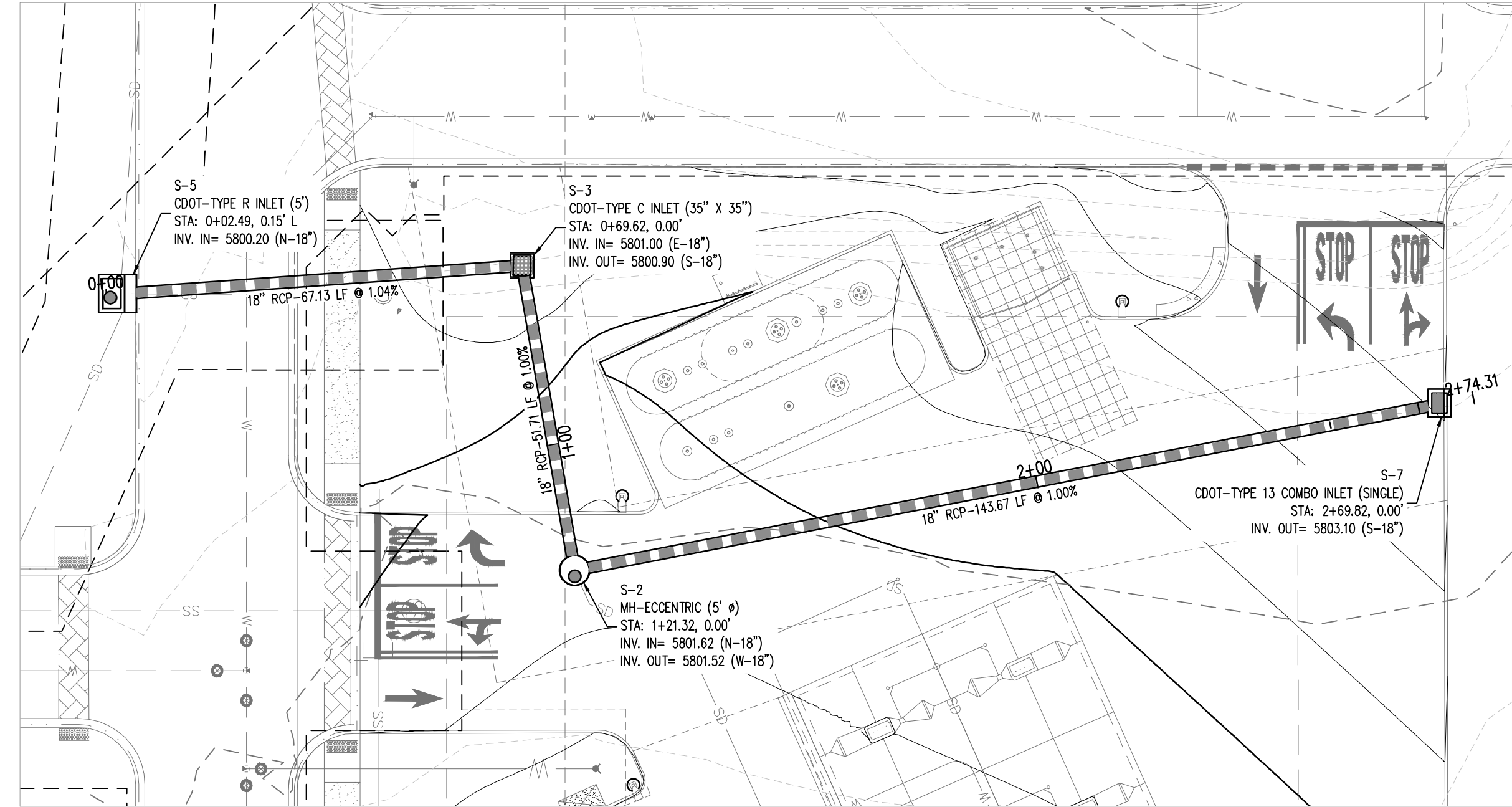
SITE PLAN DOCUMENTS



Know what's below.
Call before you dig.

SHEET NO.

C-3.8



BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHEAST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

BENCHMARK

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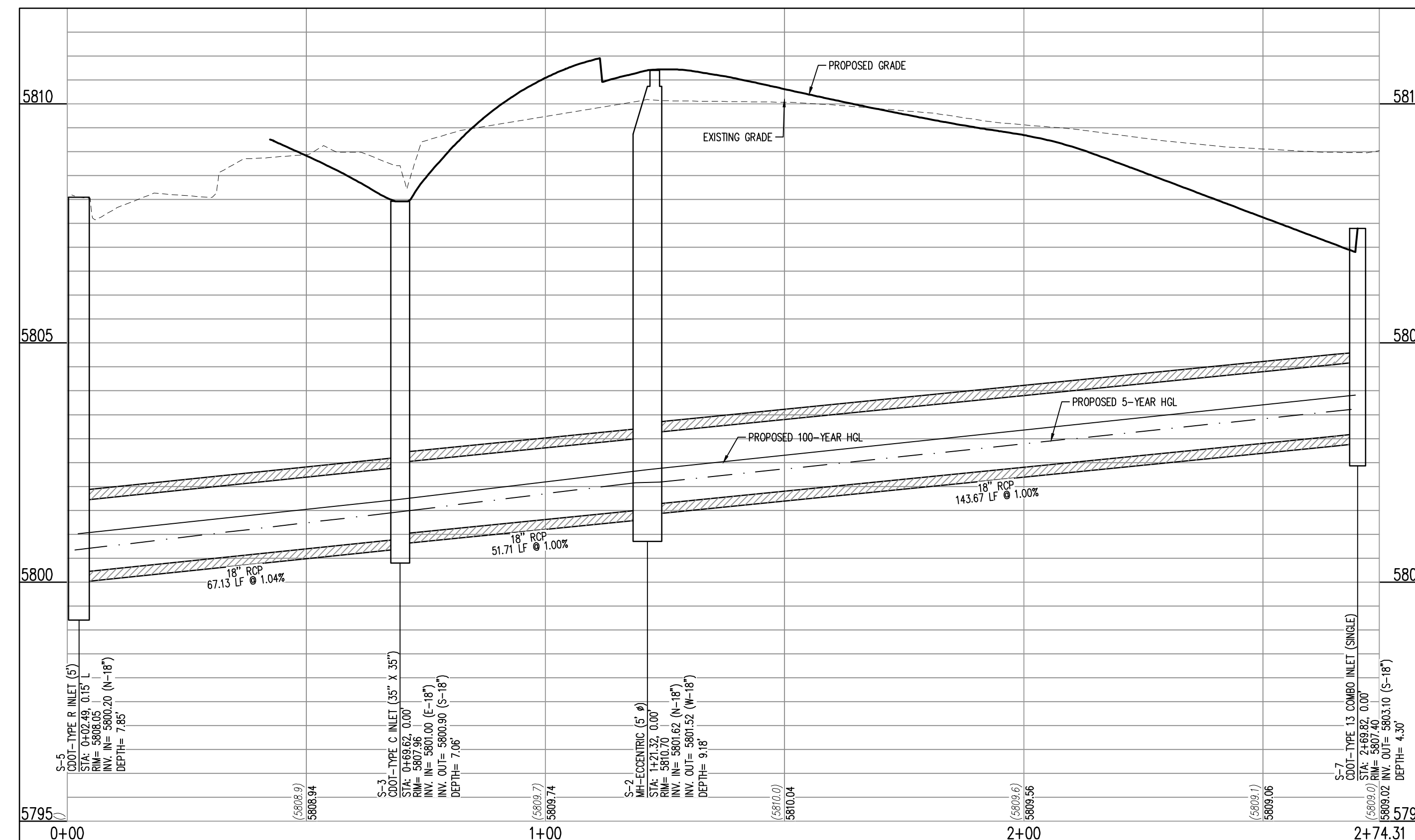
SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

NOTE: CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

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STM A
STA: 0+00 - 2+74.31
SCALE: H: 1"=20' V: 1"=10'

UTILITY LEGEND

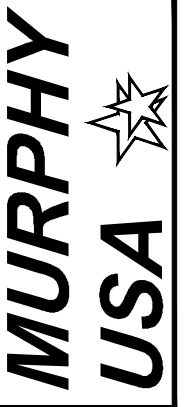
- w --- EXISTING WATER LINE
- ss --- EXISTING SANITARY SEWER
- ss --- PROPOSED SANITARY SEWER
- ss --- EXISTING STORM SEWER
- ss --- PROPOSED STORM SEWER
- rd --- PROPOSED ROOF DRAIN
- ⊙ PROPOSED MANHOLE
- ⊙ PROPOSED CLEANOUT
- ⊙ EXISTING GATE VALVE
- ⊙ PROPOSED GATE VALVE
- ⊙ EXISTING FIRE HYDRANT
- ⊙ PROPOSED HORIZONTAL BEND
- ⊙ PROPOSED FIRE HYDRANT
- ⊙ EXISTING INLET
- ⊙ PROPOSED INLET

Galloway

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Englewood, CO 80111
303.770.9884
GallowayUS.com

MURPHY OIL USA, INC.

200 PEACH STREET
EL DORADO, AR 71730



OTB DATE PRN PM DES DRW
08/04/2021
STORM PLAN AND PROFILE
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER COLORADO

IRRIGATION CONTROLLER 'A'

VALVE NUMBER	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
VALVE SIZE	1.0"	1.0"	1.0"	1.0"	1.0"	OPEN	OPEN	OPEN	OPEN	OPEN
G.P.M.	6.6	6.7	4.9	2.8	4.8	OPEN	OPEN	OPEN	OPEN	OPEN
OPERATION PSI	40	40	40	40	40	OPEN	OPEN	OPEN	OPEN	OPEN
ZONE TYPE	ROTATOR	ROTATOR	DRIP	DRIP	DRIP	OPEN	OPEN	OPEN	OPEN	OPEN

PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO
SITE CONSTRUCTION PLANS



Know what's below.
Call before you dig.

SHEET NO.
IR1.1



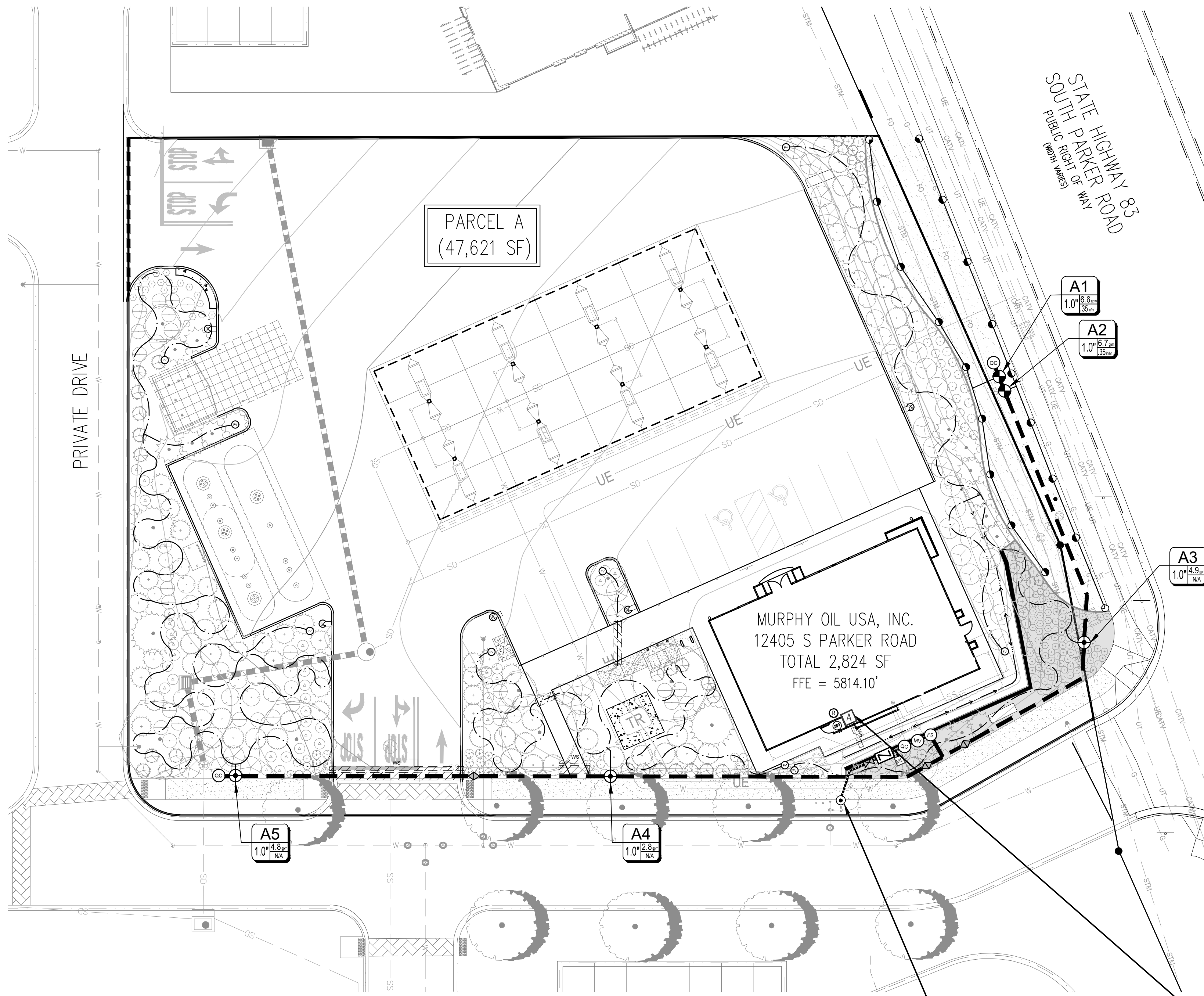
IRRIGATION PLAN
 MURPHY EXPRESS
 12405 SOUTH PARKER ROAD
 PARKER, COLORADO



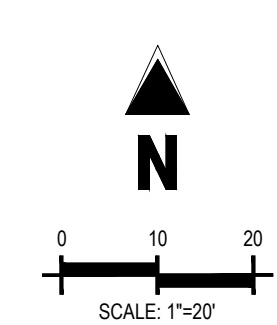
6102 S. Willow Drive, Suite 320
 Littleton, CO 80111
 303.770.8844
 GallowayUS.com

MURPHY OIL USA, INC.
 200 PEACH STREET
 EL DORADO, AR 71730

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE



CAUTION
 UTILITIES EXIST WITHIN CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THEIR LOCATION PRIOR TO CONSTRUCTION.



IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	REMARKS/DETAIL
--------	--------	-----------	-------------	----------------

CONTROLLERS AND SENSORS

A	HUNTER	I-CORE 10 STATION	IRRIGATION CONTROLLER TO BE A HUNTER IC-1000-M, WITHIN METAL VANDAL RESISTANT LOCKABLE PEDESTAL CABINET. IRRIGATION CONTROLLER TO BE LOCATED AS DIRECTED BY OWNER OR OWNERS REPRESENTATIVE.	DETAIL 1 / IR1.2
B	HUNTER	SOLAR-SYNC	ET/RAIN/FREEZE SENSOR - MOUNT PER DETAIL AND PLAN LOCATION	DETAIL 4 / IR1.2

POINT OF CONNECTION

C	PER CITY OR WATER DISTRICT CODES AND STANDARDS	3/4" POINT OF CONNECTION, REFERENCE CIVIL PLANS FOR TAP LOCATION.	SEE P.O.C. DIAGRAM THIS SHEET	
M	PER CITY OR WATER DISTRICT CODES AND STANDARDS	IRRIGATION METER, REFERENCE CIVIL PLANS FOR METER LOCATION.	SEE P.O.C. DIAGRAM THIS SHEET	
N	FEBCO	MODEL 825YA	3/4" BACKFLOW PREVENTER-MOUNT IN GUARDSHACK MODEL #GS-1 W/ FROST GUARD BAG MODEL #FG-1 FOR WINTERIZATION, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 2 / IR1.2

VALVES

MV	HUNTER	IBV-101G-FS	1" MASTER VALVE	DETAIL 16 / IR1.3
FS	FLOMEC	QS200-10	1" ULTRASONIC FLOWMETER WITH 1" PVC TEE RECEPTACLE	DETAIL 12 / IR1.2
CV	HUNTER	ICV-FS-ADJ	REMOTE CONTROL VALVE, SIZE PER PLAN. ADJUST PRESSURE REGULATOR BETWEEN 60-85PSI. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMs.	DETAIL 3 / IR1.2
RC	RAINBIRD	XCZ-100-PRB-COM (0.3-20 GPM)	DRIP CONTROL ZONE KITS (24 VAC-60HZ)-IRRIGATION CONTRACTOR TO VERIFY DRIP ZONES PRESSURE REQUIREMENTS AND USE VALVE REGULATOR FOR HIGH PRESSURES. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMs.	DETAIL 5 / IR1.2
QC	HUNTER	HQ-44-LRC	1" QUICK COUPLER WITH LOCK	DETAIL 9 / IR1.2
GV	WATTS	WGV-X	GATE VALVE, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 7 / IR1.2
AP	ANY APPROVED	ANY APPROVED	PVC BALL VALVE - SIZE PER MAINLINE SIZE	DETAIL 11 / IR1.2

MAIN LINE / LATERALS & SLEEVES

---	ANY APPROVED	PRESSURIZED PVC MAINLINE - 1-1/2" CLASS 200 PVC PIPE UNLESS OTHERWISE NOTED ON THE PLANS	DETAIL 10 / IR1.2
---	ANY APPROVED	LATERAL LINE - USE CLASS 200 PVC, SIZE 1"-INCH SIZE UNLESS OTHERWISE NOTED ON THE PLANS. INSTALL ANTI-FREEZE DRAINS AT LOW POINTS	DETAIL 10 / IR1.2
---	ANY APPROVED	IRRIGATION SLEEVE - SCHEDULE 40 PVC TWICE THE SIZE OF THE PIPE TO BE INSERTED, ONE SLEEVE PER PIPE	DETAIL 10 / IR1.2
---	ANY APPROVED	CONTROL WIRING SLEEVE - 2" SCHEDULE 40 PVC PIPE (SEE WIRING/SPLICING/SLEEVING NOTE, THIS SHEET)	DETAIL 10 / IR1.2

ROTORS & SPRAY HEADS

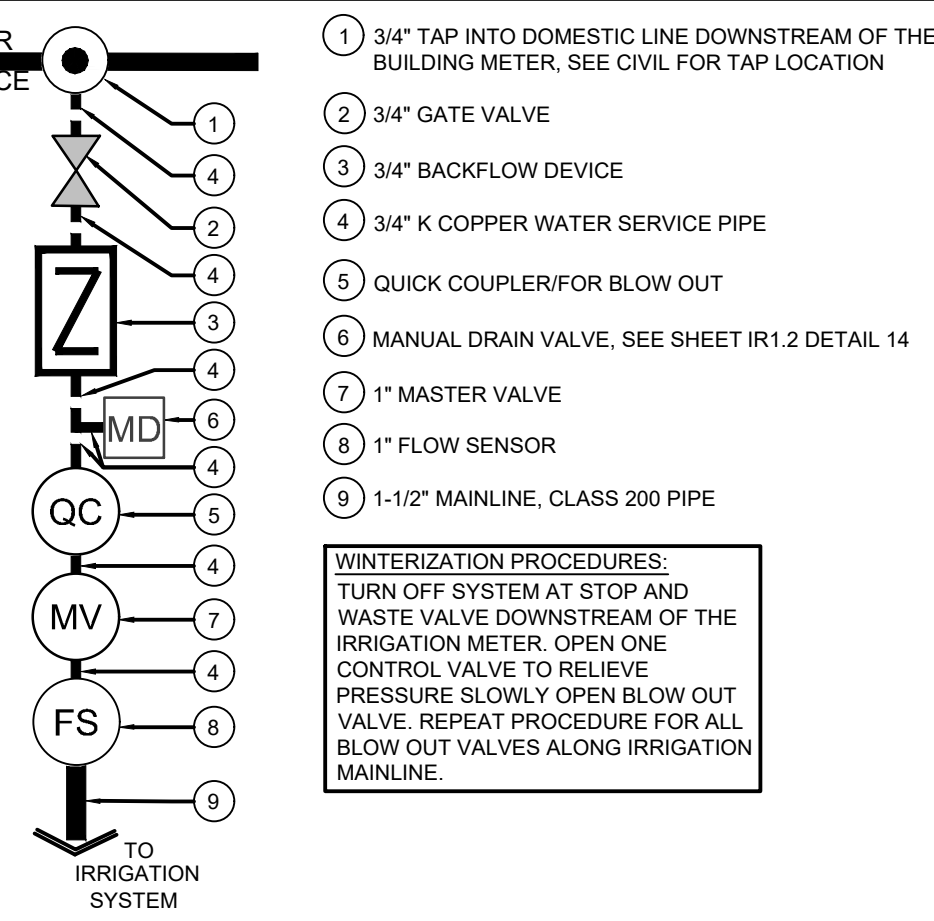
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-QUARTER	MAROON	8-13"	0.16	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-135°	MAROON	8-13"	0.24	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-HALF	MAROON	8-13"	0.32	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-360 (TURF) PROS-12-CV/MP1000-360 (SEED)	MP ROTATOR-FULL	OLIVE	8-13"	0.65	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-QUARTER	BLUE	20-28"	0.74	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-135°	BLUE	20-28"	1.29	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-HALF	BLUE	20-28"	1.58	40	DETAIL 15 / IR1.3

SPRAY NOTES:
 1. CONTRACTOR SHALL USE RADIUS REDUCTION SCREWS ON MP ROTATORS AS NECESSARY TO ACHIEVE APPROPRIATE RADII COVERAGE.

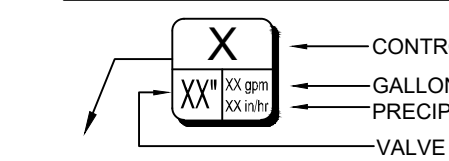
DRIP SYSTEM

POINT SOURCE EMITTERS	RAINBIRD	FOR LANDSCAPE BED AREAS - XBS-XXX	XERI BLACK STRIPE POLY TUBING (OR APPROVED EQUAL), CONNECTION TO PVC LATERAL PER CONTRACTOR. ATTACH TREE & SHRUB DRIP EMITTERS PER THE EMITTER SCHEDULE BELOW. USE 3/4-INCH POLY TUBING UNLESS OTHERWISE NOTED. FLOWS IN GPM FOR LINE CHANGES SHALL BE: (3/4"-1 TO 7 GPM), (1"-8 TO 14 GPM), (1-1/2"-15 TO 35 GPM), INSTALL SEVERAL IN-LINE CHECK VALVES IN ZONES W/ LARGE ELEVATION DIFFERENCES. GROUP DRIP CONTROLLER VALVES TOGETHER TO MAXIMIZE WATER WINDOWS.	DETAIL 8 / IR1.2
DRIP EMITTER SCHEDULE	HUNTER	AFV-B	AUTOMATIC FLUSH VALVE WITH BARB CONNECTION.	DETAIL 13 / IR1.2

TYPICAL POINT OF CONNECTION SCHEMATIC DIAGRAM



VALVE KEY DIAGRAM



WIRING / SPLICING / SLEEVING NOTES

- 14 AWG WIRE TO BE USED FOR UP TO 10,000 LF. 12 AWG WIRE SHALL BE USED BETWEEN 10,000 LF & 15,000 LF.
- ALL CONNECTIONS AND SPLICES MUST BE MADE WITH DRY-8 WATERPROOF CONNECTORS. LEAVE 5 LF OF WIRE SLACK FOR EASE OF MAINTENANCE AND PREVENT DAMAGE FROM CONTRACTION.
- PROVIDE AND INSTALL SCHEDULE 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA.

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 REVIEWS(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

IRRIGATION DISCLAIMER

- IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPALITIES ENTITIES AND THIS DIAGRAMMATIC IN NATURE.
- CONTRACTOR SHALL INSTALL MAINLINES 12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
- THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PITS, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.
- ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 5' AWAY FROM ANY BUILDING FOUNDATION. ADDITIONAL REQUIREMENTS MAY BE LISTED IN THE GEOTECHNICAL REPORT REGARDING IRRIGATION NEAR BUILDING FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO ABIDE BY THE 5' MINIMUM DISTANCE AND/OR THE GEOTECHNICAL REPORT REQUIREMENTS. IF THIS EQUIPMENT IS SHOWN WITHIN THE 5' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
- REFER TO SHEET IR1.2 FOR IRRIGATION DETAILS AND IR1.3 FOR IRRIGATION NOTES.

UTILITY NOTES

- THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
- THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
- THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

POINT OF CONNECTION 'A'

- STATIC PRESSURE: +/- TBD
 SIZE OF TAP: 3/4"
- USE 3/4" TAP AND INTO THE DOMESTIC WATER LINE DOWNSTREAM OF THE BUILDING METER.
 - 3/4" TYPE K COPPER SERVICE FROM THE TAP THROUGH THE IRRIGATION BACKFLOW, TO THE MASTER VALVE.
 - CONTRACTOR SHALL VERIFY LOCATION OF THE EQUIPMENT, IN FIELD WITH OWNER OR OWNERS AUTHORIZED REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
 - SEE POINT OF CONNECTION DIAGRAM, THIS SHEET, FOR THE IRRIGATION SYSTEM EQUIPMENT CONFIGURATION.
 - THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION. SEE GENERAL IRRIGATION NOTES.
 - WHEN WATER PRESSURE TO THE IRRIGATION SYSTEM EXCEEDS 100 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A PRESSURE REDUCING / REGULATING VALVE (PRV) TO LIMIT THE WATER TO 80 PSI MAXIMUM. WHEN PRESSURE DROPS BELOW 65 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A BOOSTER PUMP TO A MINIMUM PRESSURE OF 80 PSI.

CONTROLLER 'A' NOTE

- ONE (1) TO STATION CONTROLLER, SEE LEGEND.
- FIVE (5) OPEN STATIONS FOR FUTURE EXPANSION.
- STATION RUN ORDER SHALL MATCH PLANS.
- LOCATE CONTROLLER IN THE UTILITY CLOSET AS SPECIFIED ON THE BUILDING PLANS. VERIFY LOCATION WITH OWNER OR REPRESENTATIVE.
- 120 VAC POWER TO CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLERS TO 120 VAC SHALL BE PERFORMED BY THE LANDSCAPE CONTRACTOR.
- CONDUIT FROM INSIDE THE BUILDING TO EXTERIOR IRRIGATION SYSTEM SHALL BE PROVIDED BY OTHERS.

PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE CONSTRUCTION PLANS



Know what's below.
 Call before you dig.

SHEET NO.
IR1.2

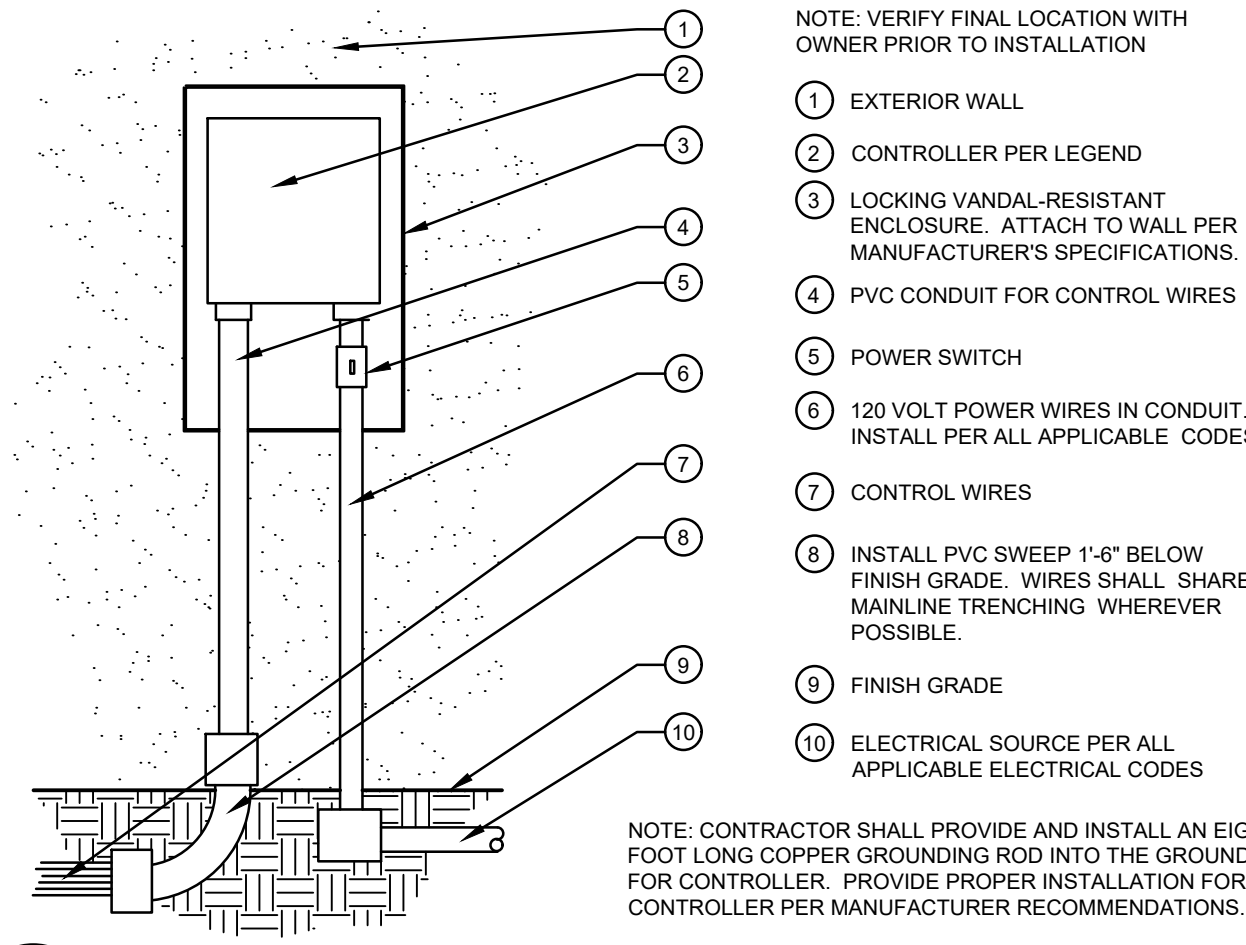


REV-0
 DATE 07/12/2021
 JES
 KML
 KML
 DES
 PM
 DRW
IRRIGATION DETAILS
MURPHY EXPRESS
12405 SOUTH PARKER ROAD
PARKER COLORADO

Galloway

6122 S. Willow Drive, Suite 320
 Aurora, CO 80011
 303.770.8844
 GallowayUS.com

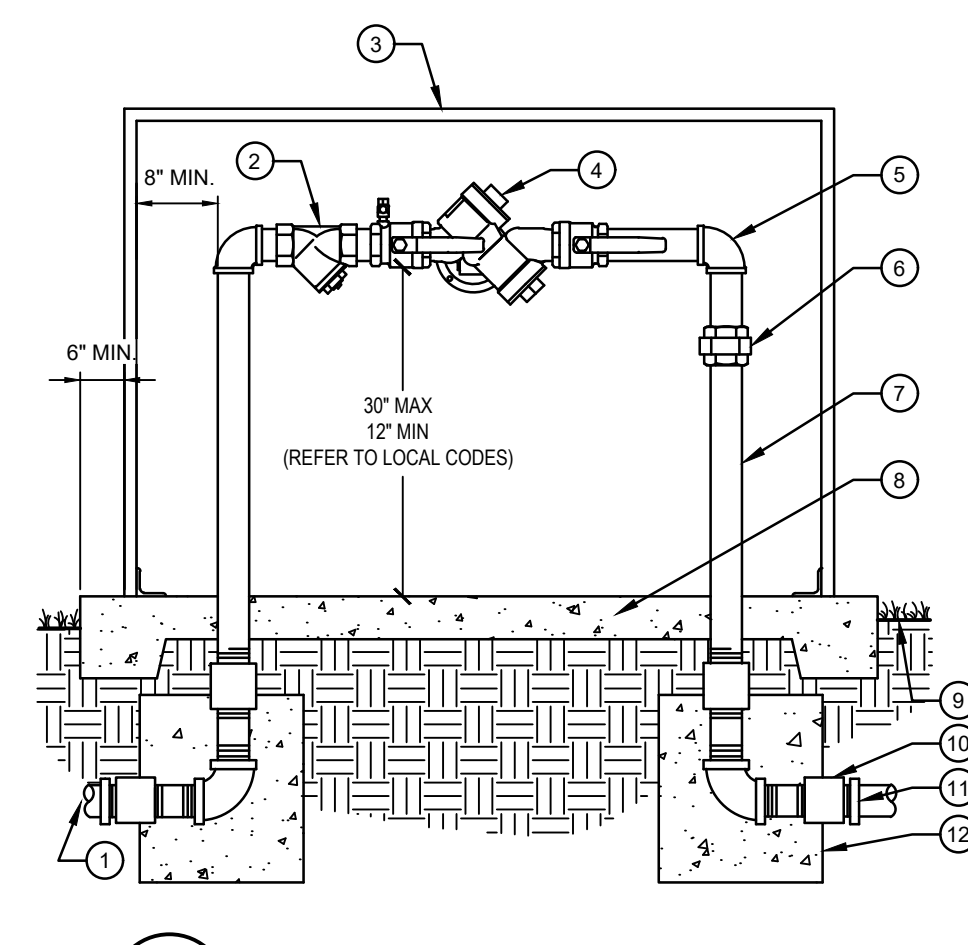
MURPHY OIL USA, INC.
 200 PEACH STREET
 EL DORADO, AR 71730
MURPHY USA



1 WALL MOUNT CONTROLLER
 SCALE: NOT TO SCALE

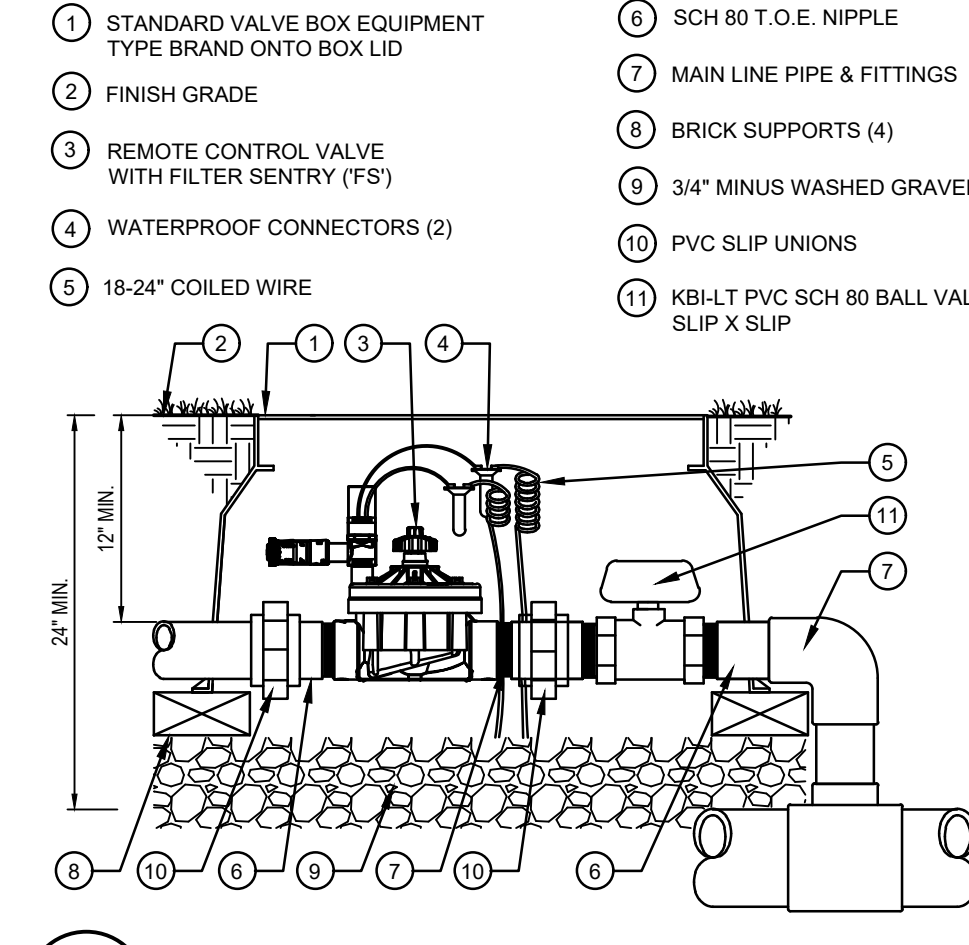
- NOTE: VERIFY FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION
- EXTERIOR WALL
 - CONTROLLER PER LEGEND
 - LOCKING VANDAL-RESISTANT ENCLOSURE. ATTACH TO WALL PER MANUFACTURER'S SPECIFICATIONS.
 - PVC CONDUIT FOR CONTROL WIRES
 - POWER SWITCH
 - 120 VOLT POWER WIRES IN CONDUIT. INSTALL PER ALL APPLICABLE CODES.
 - CONTROL WIRES
 - INSTALL PVC SWEEP 1'-6" BELOW FINISH GRADE. WIRES SHALL SHARE MAINLINE TRENCHING WHEREVER POSSIBLE.
 - FINISH GRADE
 - ELECTRICAL SOURCE PER ALL APPLICABLE ELECTRICAL CODES

NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL AN EIGHT FOOT LONG COPPER GROUNDING ROD INTO THE GROUND FOR CONTROLLER. PROVIDE PROPER INSTALLATION FOR CONTROLLER PER MANUFACTURER RECOMMENDATIONS.



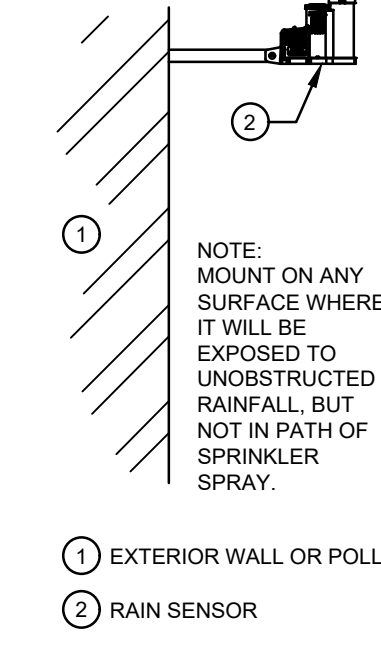
2 BACKFLOW PREVENTER, REDUCED PRESSURE
 SCALE: NOT TO SCALE

- TO POINT OF CONNECTION, ADAPT AS NECESSARY ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES
- BRASS WYE STRAINER W/60 MESH SCREEN
- ENCLOSURE PER IRRIGATION LEGEND
- BACKFLOW PREVENTER UNIT
- BRASS 90 DEGREE ELLS (TYP.)
- BRASS UNION (TYPICAL)
- BRASS NIPPLES (TYPICAL)
- 4" CONCRETE PAD - SLOPE TO DRAIN AWAY FROM BACKFLOW PREVENTER
- FINISH GRADE 2" BELOW PAD
- BRASS COUPLING
- PIPE ADAPTER AND MAINLINE PIPE
- 12"X12"X12" THRUST BLOCKS

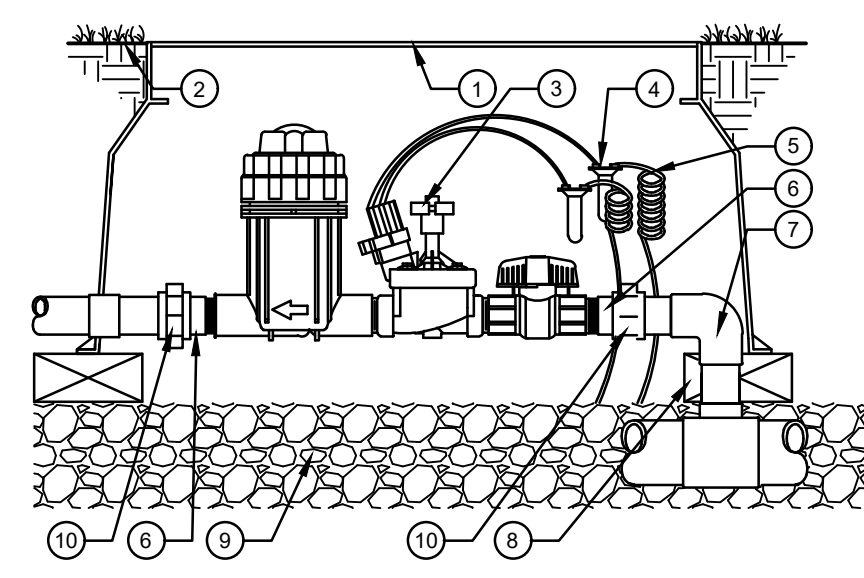


3 REMOTE CONTROL VALVE
 SCALE: NOT TO SCALE

- STANDARD VALVE BOX EQUIPMENT TYPE BRAND ONTO BOX LID
- FINISH GRADE
- REMOTE CONTROL VALVE WITH FILTER ENTRY (FS)
- WATERPROOF CONNECTORS (2)
- 18-24" COILED WIRE
- SCH 80 T.O.E. NIPPLE
- MAIN LINE PIPE & FITTINGS
- BRICK SUPPORTS (4)
- 3/4" MINUS WASHED GRAVEL
- PVC SLIP UNIONS
- KBI-LT PVC SCH 80 BALL VALVE SLIP X SLIP

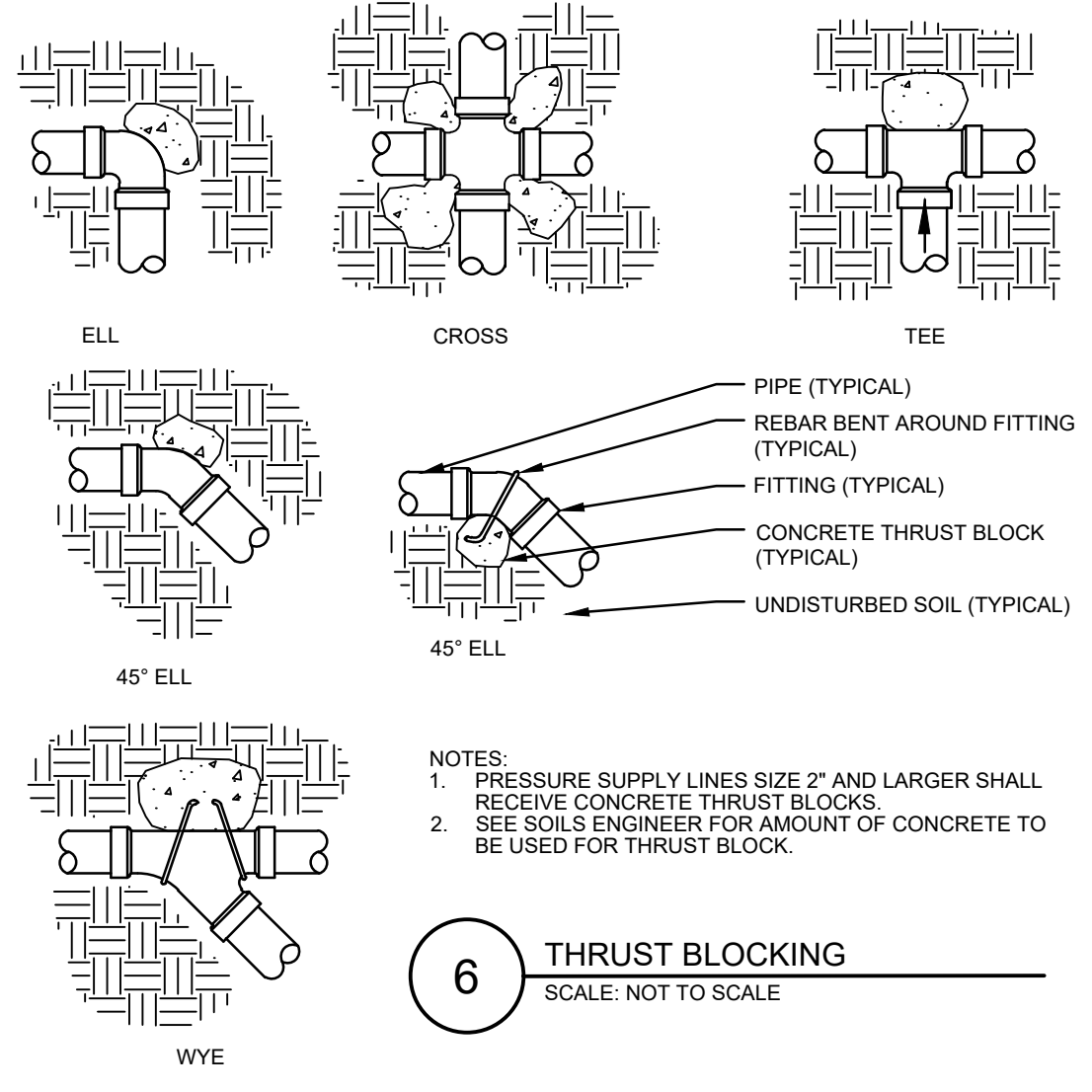


4 WEATHER SENSOR
 SCALE: NOT TO SCALE



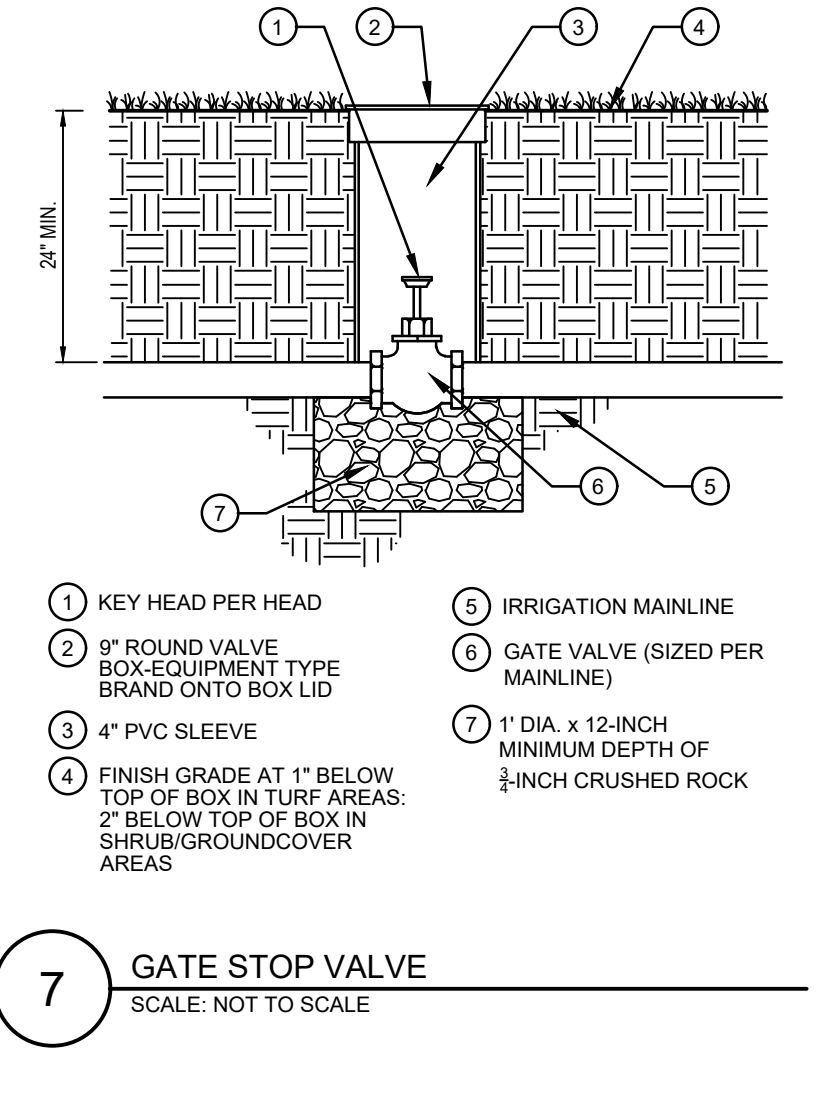
5 REMOTE DRIP CONTROL VALVE
 SCALE: NOT TO SCALE

- STANDARD VALVE BOX, BRAND EQUIPMENT TYPE AND ZONE NUMBER ONTO LID
- FINISH GRADE
- DRIP ZONE KIT PER PLAN
- WATERPROOF CONNECTORS (2)
- 18-24" COILED WIRE
- SCH 80 T.O.E. NIPPLE
- MAIN LINE PIPE & FITTINGS
- BRICK SUPPORTS (4)
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
- PVC SLIP UNIONS



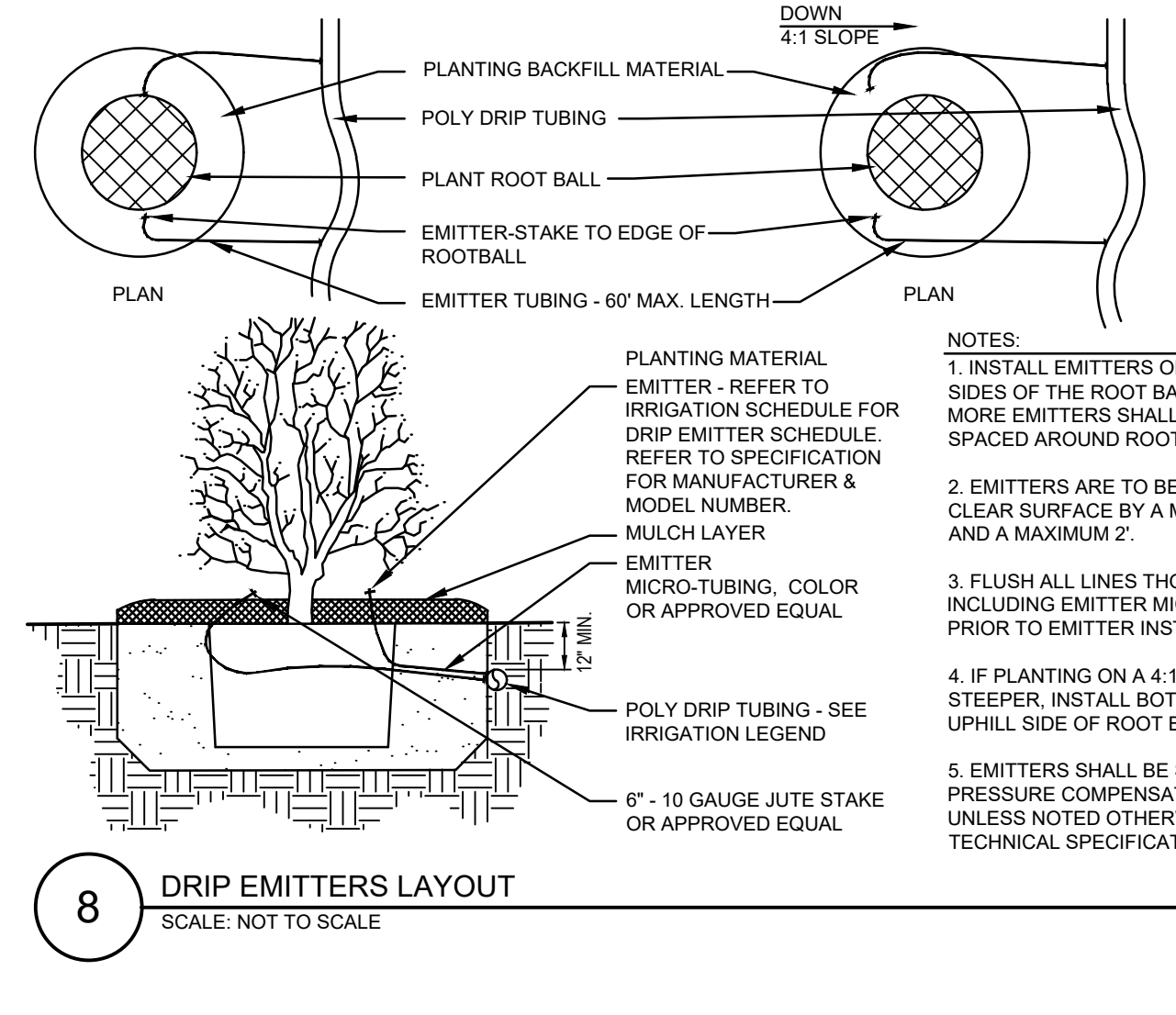
6 THRUST BLOCKING
 SCALE: NOT TO SCALE

- PIPE (TYPICAL)
 REBAR BENT AROUND FITTING (TYPICAL)
 FITTING (TYPICAL)
 CONCRETE THRUST BLOCK (TYPICAL)
 UNDISTURBED SOIL (TYPICAL)



7 GATE STOP VALVE
 SCALE: NOT TO SCALE

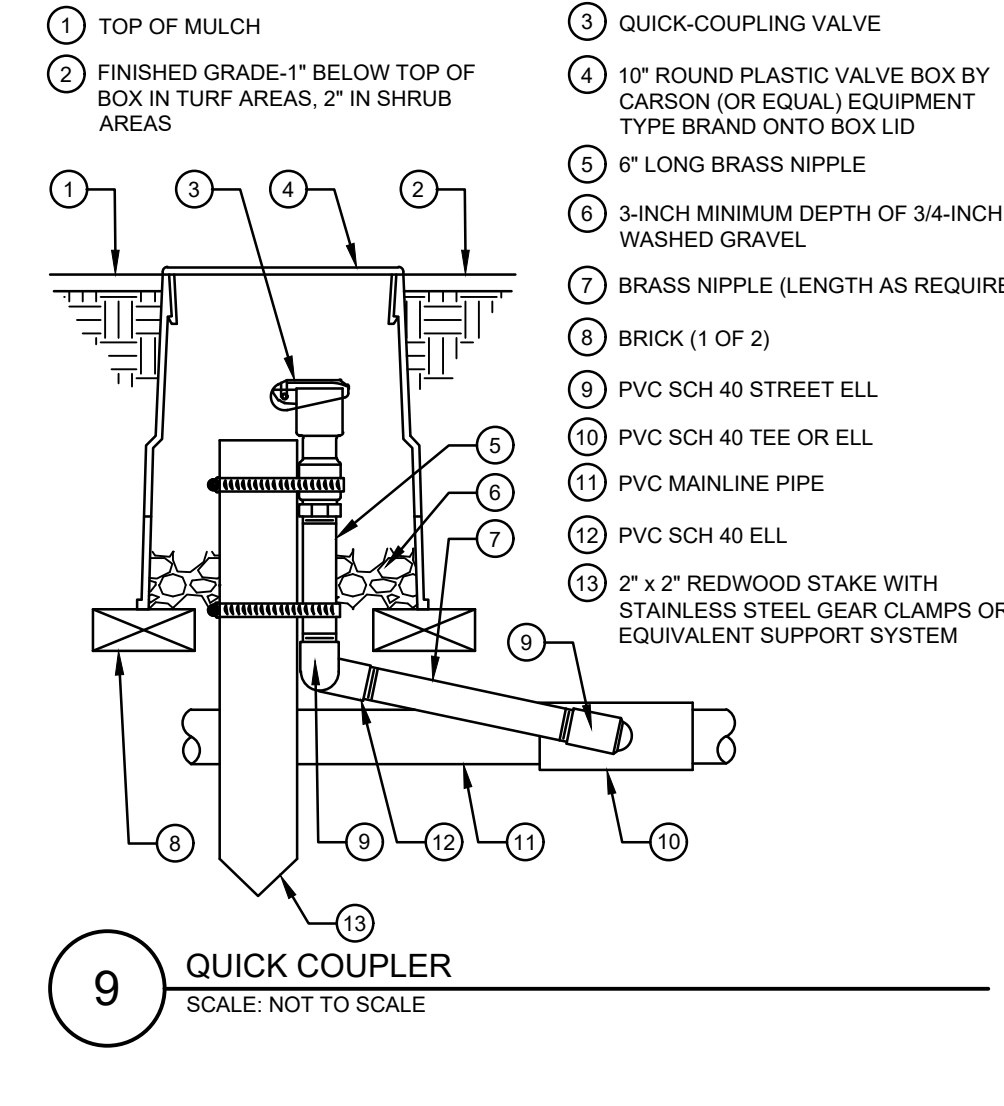
- KEY HEAD PER HEAD
- 9" ROUND VALVE BOX-EQUIPMENT TYPE BRAND ONTO BOX LID
- 4" PVC SLEEVE
- FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS; 2" BELOW TOP OF BOX IN SHRUB/GROUND COVER AREAS
- IRRIGATION MAINLINE
- GATE VALVE (SIZED PER MAINLINE)
- 1" DIA. x 12-INCH MINIMUM DEPTH OF 1/2-INCH CRUSHED ROCK



8 DRIP EMITTERS LAYOUT
 SCALE: NOT TO SCALE

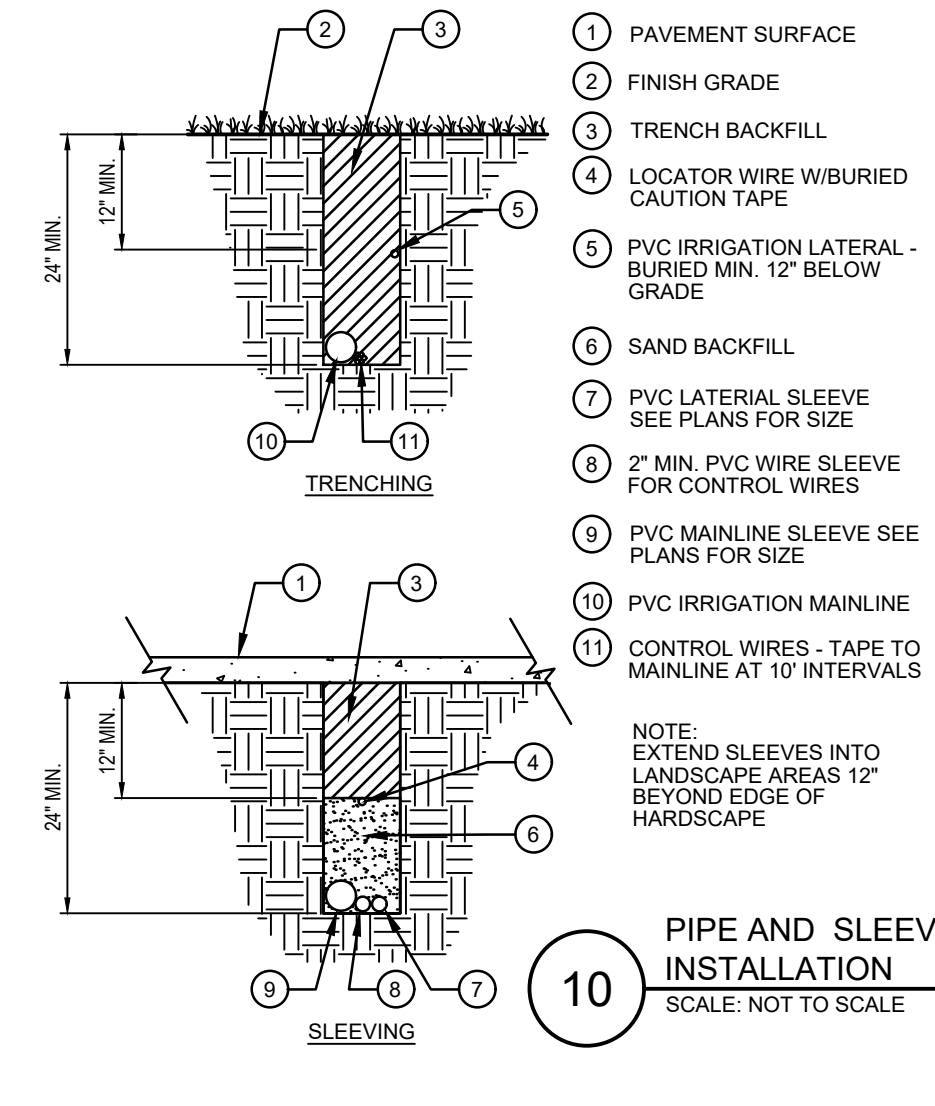
- PLANTING BACKFILL MATERIAL
 POLY DRIP TUBING
 PLANT ROOT BALL
 EMITTER-STAKE TO EDGE OF ROOTBALL
 EMITTER TUBING - 60" MAX. LENGTH
- PLANTING MATERIAL EMITTER - REFER TO IRRIGATION SCHEDULE FOR DRIP EMITTER SCHEDULE. REFER TO SPECIFICATION FOR MANUFACTURER & MODEL NUMBER
 MULCH LAYER
 EMITTER MICRO-TUBING, COLOR OR APPROVED EQUAL
 POLY DRIP TUBING - SEE IRRIGATION LEGEND
 6" - 10 GAUGE JUTE STAKE OR APPROVED EQUAL

- NOTES:
 1. INSTALL EMITTERS ON OPPOSING SIDES OF THE ROOT BALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
 2. EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM 2".
 3. FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
 4. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
 5. EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.



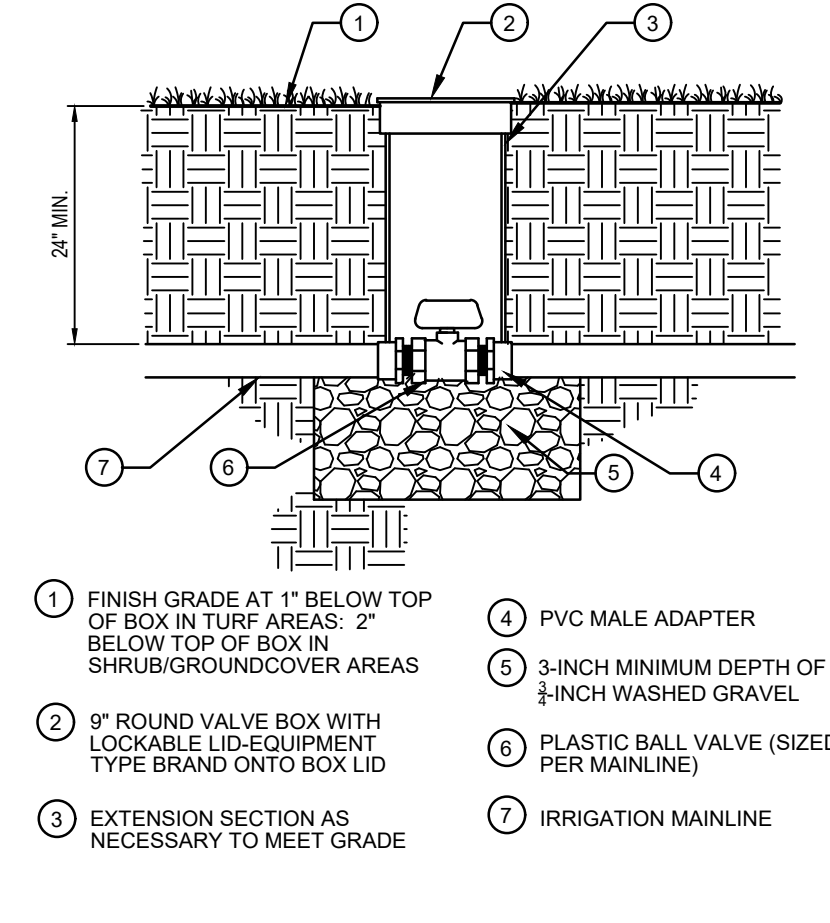
9 QUICK COUPLER
 SCALE: NOT TO SCALE

- TOP OF MULCH
- FINISHED GRADE-1" BELOW TOP OF BOX IN TURF AREAS; 2" IN SHRUB AREAS
- QUICK-COUPLING VALVE
- 10" ROUND PLASTIC VALVE BOX BY CARSON (OR EQUAL) EQUIPMENT TYPE BRAND ONTO BOX LID
- 6" LONG BRASS NIPPLE
- 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- BRICK (1 OF 2)
- PVC SCH 40 STREET ELL
- PVC SCH 40 TEE OR ELL
- PVC MAINLINE PIPE
- PVC SCH 40 ELL
- 2" x 2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM



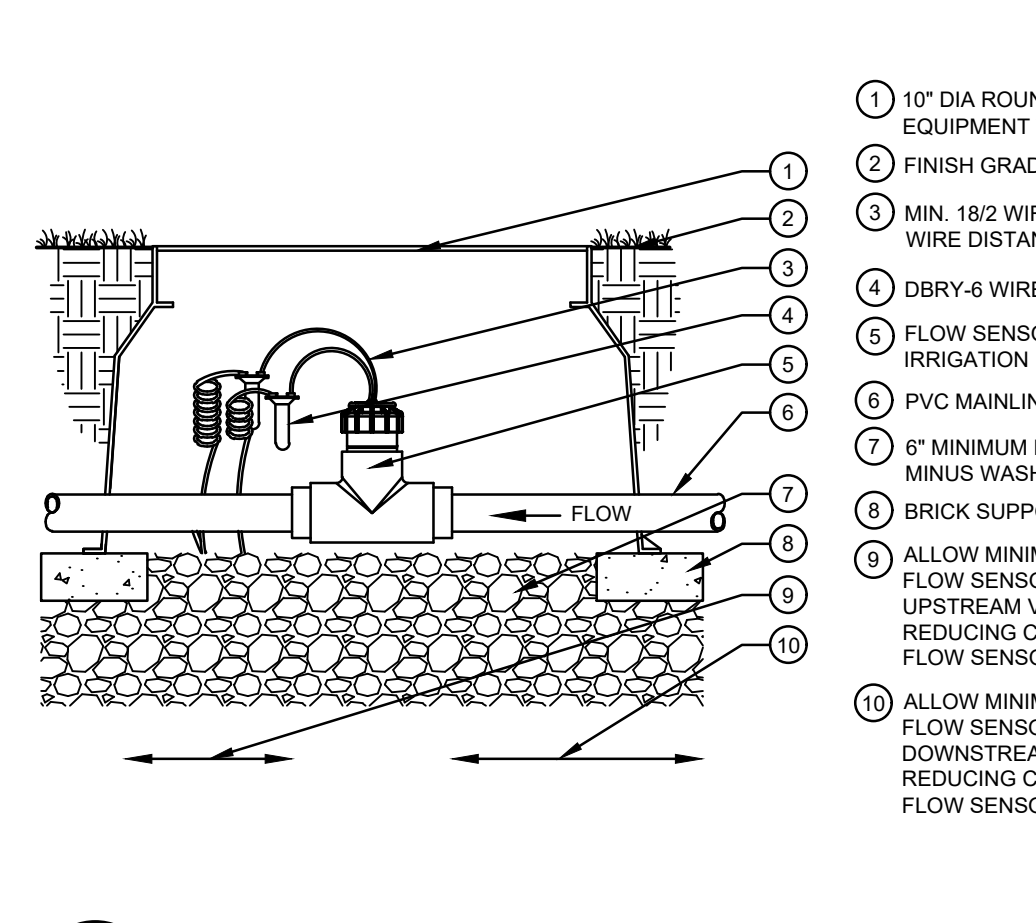
10 PIPE AND SLEEVE INSTALLATION
 SCALE: NOT TO SCALE

- PAVEMENT SURFACE
 - FINISH GRADE
 - TRENCH BACKFILL
 - LOCATOR WIRE W/BURIED CAUTION TAPE
 - PVC IRRIGATION LATERAL - BURIED MIN. 12" BELOW GRADE
 - SAND BACKFILL
 - PVC LATERAL SLEEVE - SEE PLANS FOR SIZE
 - 2" MIN. PVC WIRE SLEEVE FOR CONTROL WIRES
 - PVC MAINLINE SLEEVE - SEE PLANS FOR SIZE
 - PVC IRRIGATION MAINLINE
 - CONTROL WIRES - TAPE TO MAINLINE AT 10' INTERVALS
- NOTE: EXTEND SLEEVES INTO LANDSCAPE AREAS 12" BEYOND EDGE OF HARDSCAPE



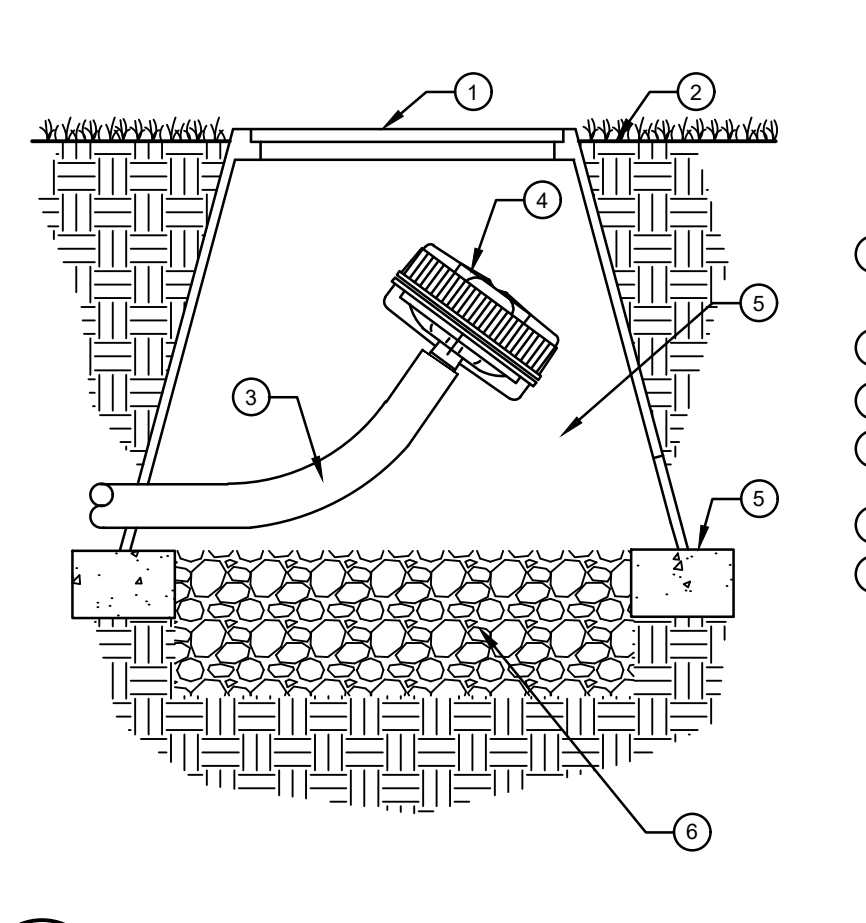
11 PLASTIC BALL VALVE
 SCALE: NOT TO SCALE

- FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS; 2" BELOW TOP OF BOX IN SHRUB/GROUND COVER AREAS
- 9" ROUND VALVE BOX WITH LOCKABLE LID-EQUIPMENT TYPE BRAND ONTO BOX LID
- EXTENSION SECTION AS NECESSARY TO MEET GRADE
- PVC MALE ADAPTER
- 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- PLASTIC BALL VALVE (SIZED PER MAINLINE)
- IRRIGATION MAINLINE



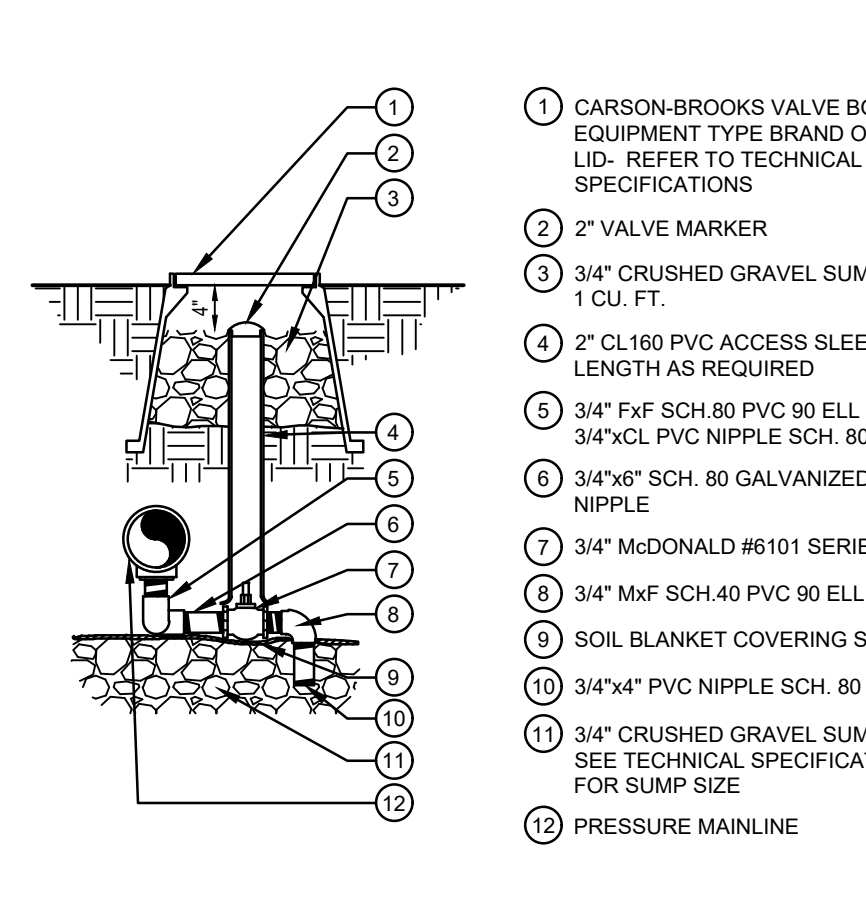
12 FLOW SENSOR
 SCALE: NOT TO SCALE

- 10" DIA ROUND VALVE BOX, BRAND EQUIPMENT TYPE ONTO LID
- FINISH GRADE
- MIN. 18/2 WIRE TO CONTROLLER, MAX WIRE DISTANCE RUN OF 1,000'
- DBRY-6 WIRE CONNECTORS (2)
- FLOW SENSOR AS REFERENCED IN IRRIGATION LEGEND
- PVC MAINLINE PIPE
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
- BRICK SUPPORTS (3)
- ALLOW MINIMUM DISTANCE OF 10X FLOW SENSOR SIZE FROM NEAREST UPSTREAM VALVE, FITTING, OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR
- ALLOW MINIMUM DISTANCE OF 5X FLOW SENSOR SIZE FROM NEAREST DOWNSTREAM VALVE, FITTING OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR



13 FLUSH DRAIN VALVE
 SCALE: NOT TO SCALE

- 6" DIA ROUND VALVE BOX, EQUIPMENT TYPE BRAND ONTO LID
- FINISH GRADE
- POLYPIPE DRIP LINE
- AUTOMATIC FLUSH VALVE
- BRICK SUPPORTS (3)
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL



14 MANUAL DRAIN VALVE
 SCALE: NOT TO SCALE

- CARSON-BROOKS VALVE BOX, EQUIPMENT TYPE BRAND ONTO BOX LID - REFER TO TECHNICAL SPECIFICATIONS
- 2" VALVE MARKER
- 3/4" CRUSHED GRAVEL SUMP 1 CU. FT.
- 2" CL160 PVC ACCESS SLEEVE - LENGTH AS REQUIRED
- 3/4" Fx F SCH 80 PVC 90 ELL (2)
- 3/4"XCL PVC NIPPLE SCH. 80 (2)
- 3/4"x6" SCH. 80 GALVANIZED STEEL NIPPLE
- 3/4" McDonald #6101 SERIES VALVE
- 3/4" Mx F SCH.40 PVC 90 ELL
- SOIL BLANKET COVERING SUMP
- 3/4"x4" PVC NIPPLE SCH. 80
- 3/4" CRUSHED GRAVEL SUMP - SEE TECHNICAL SPECIFICATIONS FOR SUMP SIZE
- PRESSURE MAINLINE

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 OR CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

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

TOWN OF PARKER, DIRECTOR OF ENGINEERING _____ DATE _____



PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

SITE CONSTRUCTION PLANS

SHEET NO. IR1.3



IRRIGATION NOTES & DETAILS
 MURPHY EXPRESS
 12405 SOUTH PARKER ROAD
 PARKER, COLORADO

GENERAL IRRIGATION NOTES

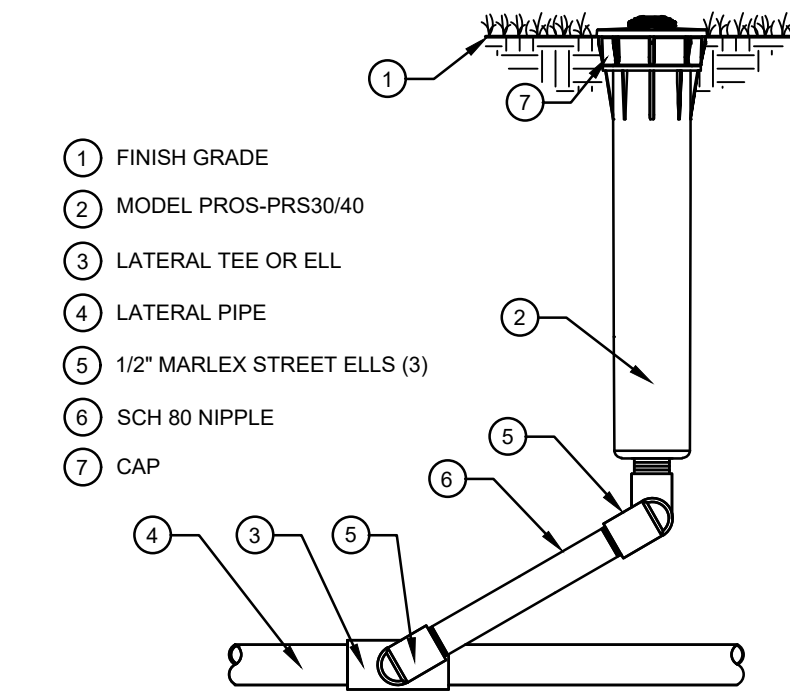
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- REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE CONSULTED BY THE IRRIGATION CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
- THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY PAVING, ETC.
- THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO

- THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.
- ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION NOTE TAG(S) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION AND PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.
- NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS, FURTHERMORE, THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW.
- SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION WATER METER.
- INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED EQUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER.
- WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDSCAPE (SUCH

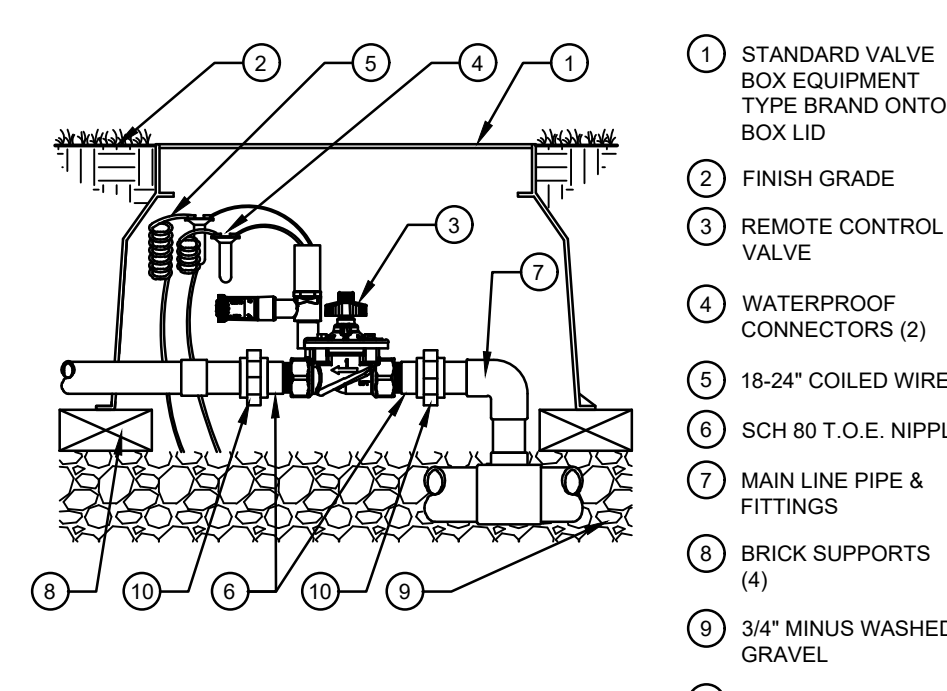
- AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDSCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE TRENCHING DETAILS FOR ADDITIONAL INFORMATION.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.
- THE RAIN SENSOR SHALL BE LOCATED NEAR THE IRRIGATION CONTROLLER, AND SHALL BE MOUNTED AS SHOWN ON THE DETAIL AND/OR LEGEND. LOCATE SENSOR AWAY FROM TALL TREES, SHRUBS, AND OTHER POTENTIAL OBSTRUCTIONS.
- ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3MS "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
- CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3MS "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED).
- PROVIDE ADDITIONAL IRRIGATION CONTROL WIRES TO THE AMOUNT OF OPEN ZONES ON THE CONTROLLER ALONG EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE. SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING/WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN ON THESE DRAWINGS.
- TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS LARGER THAN 1" IN DIAMETER. BACKFILL SHALL BE

- COMPACTED TO 90% MAXIMUM DRY DENSITY.
- WHERE VALVES ARE LOCATED IN CLOSE PROXIMITY TO EACH OTHER, CLUSTER VALVES INTO MANIFOLDS. INSTALL NO MORE THAN ONE VALVE PER VALVE BOX.
- MANUAL DRAIN VALVE FOR FREEZE PROTECTION ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES. WHERE THE LOW POINT IS AT THE END OF THE LINE, LOCATE DRAIN VALVE A MINIMUM OF 12" DOWNSTREAM FROM THE LAST SPRINKLER HEAD. SEE DETAIL FOR VALVE ORIENTATION.
- USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON ALL SWING JOINT AND VALVE ASSEMBLIES.
- ALL IRRIGATION HEADS, INCLUDING FIXED-SPRAY AND DRIP DEVICES, SHALL BE SET PERPENDICULAR TO THE FINISH GRADE OF THE AREA TO BE IRRIGATED.
- ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 3' AWAY FROM ANY BUILDING FOUNDATION. IF THIS EQUIPMENT IS SHOWN WITHIN THE 3' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
- EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, IT IS THE INTENT OF THE IRRIGATION DESIGN TO INDICATE ALL SPRAY HEADS AS "POP-UPS". IN THE EVENT THAT POP-UP HEADS HAVE NOT BEEN SPECIFIED IN TURF AREAS, IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING AND CONSTRUCTION.
- ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE LANDSCAPE ARCHITECT BEFORE INSTALLATION. STAKED LOCATIONS SHALL BE SPACED TO PROVIDE HEAD-TO-HEAD COVERAGE. RECOMMENDED SETBACK DISTANCE OF ALL PROPOSED IRRIGATION HEADS IS 12" FROM BACK OF CURB AND EDGE OF PAVEMENT.
- FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS.
- ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH THE ADJACENT SIDEWALK, OR PAVING. ALL POP-UP HEADS AWAY FROM HARDSCAPE EDGES IN

- TURF SHALL BE 1" ABOVE THE FINISH GRADE TO PREVENT CONTACT WITH MOWERS.
- EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
- UPON COMPLETION OF INSTALLATION OF IRRIGATION SYSTEM, IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING:
 - ACCURATE AND COMPLETE "AS BUILT" PLANS OF IRRIGATION SYSTEM INCLUDING 8-1/2" X 11" ZONE MAP TO BE PLACED INSIDE EACH CONTROLLER BOX.
 - LOG ON ALL WATER WINDOWS, RUN SCHEDULE TIMES, AND OTHER CHANGES AND/OR MODIFICATIONS TO THE IRRIGATION SYSTEM SINCE INSTALLATION.
 - ONE HOUR OF TRAINING TO OWNER ON IRRIGATION SYSTEM AND CONTROLLER OPERATION.
 - THREE OF EACH TYPE OF HEAD AND EMITTER INSTALLED.
 - ONE OF EACH TYPE OF VALVE INSTALLED.
 - REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
- PRIOR TO ACCEPTANCE OF IRRIGATION SYSTEM AT THE END OF THE MAINTENANCE PERIOD, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: CURRENT SCHEDULE RUN TIME AND WATER WINDOW LOG, ALONG WITH NOTING ANY OTHER PERTINENT INFORMATION.
- UNLESS OTHERWISE SPECIFIED, THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ANYTHING DAMAGED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL INSTALL MAINLINES 12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
- IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND SPECIFICATIONS, THE PLAN SHALL TAKE PRECEDENCE.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.



15 MP ROTATOR SPRINKLER
SCALE: NOT TO SCALE



16 MASTER VALVE
SCALE: NOT TO SCALE



Landscape/Irrigation Worksheet

Project Name: Murphy Oil USA - 12405 S Parker Rd

Landscape/Irrigation Tap address (physical location of tap) 3/4" Tap off the domestic line downstream of the building meter (12405 S Parker Rd, Parker, CO 80134)

Landscape Area	High Water TURF (6,000sf = 1 SFE)	Native Grass and Perennials (10,000sf = 1 SFE)	Drip Irrigated area (20,000sf = 1 SFE)	Sub-Total of Non-Irrigated area (calculated) Areas	PWSDF one SFE per 6000	SFE Requirement (Sub-Total Calculation divided by 6000 = requirement)
Area #1	2,500 sf x 1 = 2,500	0 sf x .6 = 0	10,497 sf x .3 = 3,149	0 sf x 0 = 0	5,649 sf	6,000
						0.94 SFE's

Worksheet Completed by: Troy Noser
 Company: Galloway
 Address: 6162 S Willow Drive Suite 320 Greenwood Village, CO 80111
 Phone #: 303-770-8884

Owner/Developer: _____
 Attn: _____
 Billing Address: _____
 Phone #: _____

Manufacturer: ET Controller (with Rain Sensor)
 Model number: Hunter I-Core w/ Solar Sync
 Hunter IC-1000-M

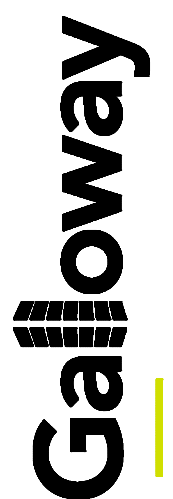
Tap Size Requirements:
 0 - 1 SFE's requires a 3/4-inch tap
 1.1 - 2.0 SFE's requires a 1-inch tap
 2.1 - 4.0 SFE's requires a 1 1/2-inch tap
 4.1 - 7.0 SFE's requires a 2-inch tap
 7.1 - 16.0 SFE's requires a 3-inch tap

APPROVED
 Dec 20 2021
PARKER WATER AND SANITATION DISTRICT

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 DATE



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 303.770.8884
 GallowayUS.com

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