

SUBMITTED BY:  
MOY TARIN RAMIREZ ENGINEERS, LLC.  
12770 CIMARRON PATH, SUITE 100  
SAN ANTONIO, TEXAS 78249  
TEL: (210) 698-5051  
FAX: (210) 698-5085

OWNER/DEVELOPER  
KINGFISH DEVELOPMENT, LLC  
2722 W. BITTERS RD. SUITE 106  
SAN ANTONIO, TX. 78233  
(210) 882-6800

SAWS CONSTRUCTION NOTES  
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT  
JANUARY 2022

General Section

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
- A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
  - B. Current TxDOT "Standard Specifications for Construction of Highways, Streets and Drainage".
  - C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
  - D. Current City of San Antonio "Standard Specifications for Public Works Construction".
  - E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.

3. The Contractor shall obtain the SAWS Standard Details from the SAWS website, [http://www.saws.org/business\\_center/specs](http://www.saws.org/business_center/specs). Unless otherwise noted within the design plans.

4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners hours prior to beginning any work.

5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.

6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:
- SAWS Utility Locates: <http://www.saws.org/Service/Locates>
  - COSA Drainage (210) 207-0724 or (210) 207-6026
  - COSA Traffic Signal Operations (210) 206-8480
  - COSA Traffic Signal Damages (210) 207-3951
  - Texas State Wide One Call Locator 1-800-545-6005 or 811

7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.

8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.

9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.

10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to [constworkreq@saws.org](mailto:constworkreq@saws.org).

- Weekend Work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to request weekend work. Request should be sent to [constworkreq@saws.org](mailto:constworkreq@saws.org).

- Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.

12. Compaction note [Item 804]: The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.

13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

Water Section

1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the SAWS Construction Inspection Division at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.

- For water mains 12" or higher: SAWS Emergency Operations Center (210) 233-2014

2. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos-containing material (ACM), may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe".

3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a cap/plug. (NSPI)

4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves, and bends, in accordance with the Standard Drawings DD-839 Series and Item No. 839, in the SAWS Standard Specifications for Construction.

5. All valves shall read "open right".

6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of 565 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below 565 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if

- \*PRV is/are required for such lot(s), only single service connections shall be allowed.

- \*Note: A pressure regulator is also known as a pressure reducing valve (PRV).

7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.

8. Backflow Prevention Devices:

- All irrigation services within residential areas are required to have backflow prevention devices.
- All commercial backflow prevention devices must be approved by SAWS prior to installation.

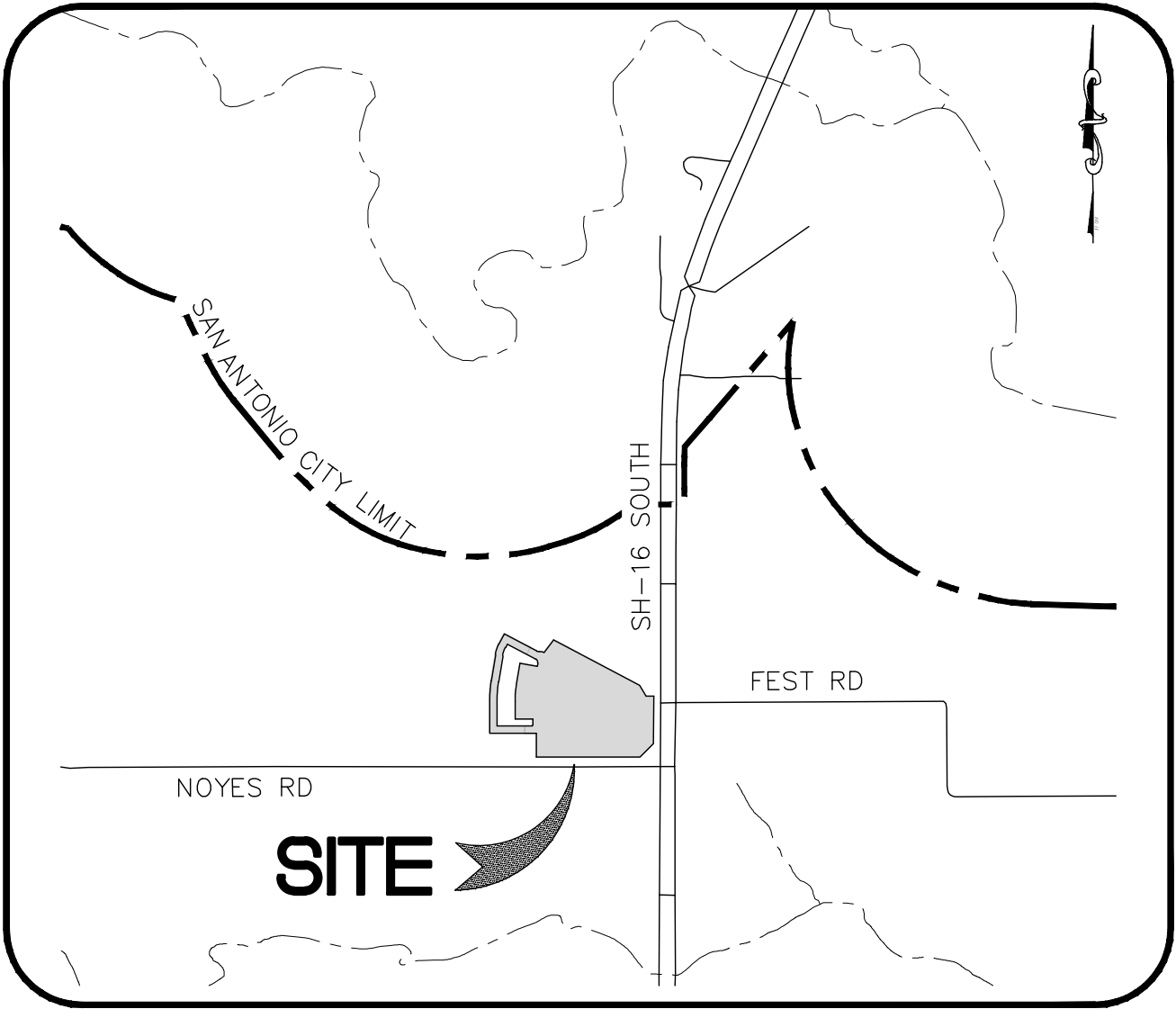
9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use.

10. Division Valves: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by SAWS Distribution and Collection staff and only with prior written approval of the SAWS Director of Production and Operations and proper coordination with all SAWS departments. Contractor shall provide written notification to the inspector a minimum of two weeks in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the SAWS Distribution and Collection staff. The Division Valve can only be operated by SAWS Distribution and Collection staff member not the inspector or the contractor.

- Operation of a Division Valve without the express prior written approval of the SAWS Distribution and Collection staff will constitute a material breach of any written SAWS contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by the contractor but will be installed by SAWS Distribution and Collection staff.

# CONSTRUCTION PLANS FOR

# VERDIN SUBDIVISION, UNIT 2 WATER IMPROVEMENTS



## VICINITY MAP

N.T.S.

## SUBMITTAL DATE:

DECEMBER 2022

## NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH INDIVIDUAL UTILITY, FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

## TRAFFIC CONTROL NOTE:

NECESSARY TRAFFIC CONTROL, FLAGMEN, DETOUR ROUTING AROUND WORK ACTIVITIES AND MAINTENANCE OF DETOUR SIGNS ARE THE CONTRACTOR'S RESPONSIBILITY. UNLESS DIRECTED OTHERWISE BY THE PLANS, IN ALL AREAS WHERE WORK IS ADJACENT TO OR CROSSING ROADWAYS, THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE OPEN TRAFFIC LANE (12 FT.), CONTROLLED WITH FLAGMEN, DURING WORKING HOURS. DURING ALL NON-WORKING HOURS A MINIMUM OF TWO TRAFFIC LANES (24 FT.) SHALL BE OPEN TO TRAFFIC. CONTRACTOR WILL FURNISH AND MAINTAIN ALL REQUIRED TRAFFIC CONTROL DEVICES PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), TO PROPERLY WARN, GUIDE AND CONTROL TRAFFIC AT ALL TIMES DURING CONSTRUCTION.

## MISCELLANEOUS GENERAL NOTES

- MACHINE CHLORINATION BY THE SAN ANTONIO WATER SYSTEM FOR NEW WATER MAINS GREATER THAN 800 FEET. CONTRACTOR SHALL CHLORINATE NEW MAINS WITH HTH FOR NEW WATER MAINS 750 FEET AND LESS.
- JUMPER CONNECTIONS TO EXISTING WATER SERVICE TO BE PROVIDED AS REQUIRED OR DIRECTED BY THE SAWS INSPECTOR.
- ALL MAINS ARE ON-SITE.
- FITTINGS WEIGHT IS BASED ON M.J. DUCTILE IRON FITTINGS (COMPACT).
- CONTRACTOR TO OBTAIN STREET CUT PERMITS AS NECESSARY FOR WATER MAIN INSTALLATION, REPLACEMENT OF CURB, SIDEWALKS, BASE AND PAVEMENT WILL BE SUBSIDIARY TO THE ITEMS THAT THE STREET CUT WAS NEEDED FOR.
- \* MINIMUM COVER OVER WATER MAIN BASED ON FINISHED GROUND.  
WATER LINE DIA. MIN. DEPTH  
8"-12" 4'  
24" 5'



**Moy Tarin Ramirez Engineers, LLC**

FIRM TBPELS ENG F-5297 SVY F-10131500

12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051  
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

- Engineers
- Surveyors
- Planners

THIS DEVELOPMENT IS ENTIRELY IN PRESSURE ZONE 2

FIRE HYDRANT LEAD FREE NOTE:  
"SAWS REQUIRES GCPS AND COUNTER PERMITS TO USE LEAD FREE (<25% LEAD) FIRE HYDRANTS."

## ESTIMATED WATER QUANTITIES

ITEM	DESCRIPTION	UNIT	EST/QTY
1	12" WATER MAIN TIE-IN	L.S.	1
2	TRENCH EXCAVATION PROTECTION	L.F.	2,686
3	12" PIPE, C900 DR 18 PVC CLASS 235 (INCL. RESTRAINTS)	L.F.	928
4	8" PIPE, C900 DR 18 PVC CLASS 235 (INCL. RESTRAINTS)	L.F.	1,758
5	12" GATE VALVE, M.J.	EA.	4
6	8" GATE VALVE, M.J.	EA.	6
7	STANDARD FIRE HYDRANT (COMPLETE)	EA.	3
8	2" PERMANENT BLOW-OFF	EA.	2
9	2" TEMPORARY BLOW-OFF	EA.	1
10	3/4" IRRIGATION SERVICE: LONG	EA.	1
11	3/4" SINGLE SERVICE: SHORT	EA.	41
12	3/4" SINGLE SERVICE: LONG	EA.	19
13	D.I. FITTINGS (RESTRAINED)	TON	1.7
14	HYDROSTATIC TESTING	EA.	1
15	12"x16" CUT-IN TEE	EA.	1
16	METER BOXES	EA.	61

## CAUTION!

THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRICAL, PRIMARY ELECTRICAL, DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

## TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

TXDOT PERMIT NO. SAT20221017153623

## PRESSURE ZONE 2

Developer's Name	KINGFISH DEVELOPMENT, LLC		
Developer's Address	2722 W. BITTERS RD. SUITE 106		
City	SAN ANTONIO	State	TX
Phone #	(210) 882-6800	Fax #	
SAWS Block Map #	132-514	Total EDU's	61
Total Linear Footage of Pipe	8" ~ 1,758 L.F. - 12" ~ 928 L.F.	Plot No.	22-11800352
Number of Lots	60	SAWS Job No.	22-1155

SUBMITTAL SET

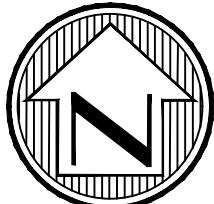
TEXAS C3.0

BEXAR COUNTY



LEGEND

EXISTING WATER MAIN	8" PVC
PROPOSED WATER MAIN	8" PVC
EXISTING FIRE HYDRANT	EXISTING FIRE HYDRANT
PROPOSED FIRE HYDRANT	PROPOSED FIRE HYDRANT
EXISTING GATE VALVE	EXISTING GATE VALVE
PROPOSED GATE VALVE	PROPOSED GATE VALVE
3/4" SINGLE SERVICE	3/4" SINGLE SERVICE
ELEC. GAS, TELE, CABLE TV ESMT.	E.G.T.V.E.
EXISTING IRRIGATION CONTROL VALVE	EXISTING IRRIGATION CONTROL VALVE
EXISTING WATER METER	EXISTING WATER METER
DEED & PLAT RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.



SCALE: 1"=50'

NO.	DATE	DESCRIPTION	BY

Engineers  
Surveyors  
Planners

**MTR**

**May Tarin Ramirez Engineers, LLC**

TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500  
12770 CHARRON PATH, SUITE 100 TEL: (210) 698-5051  
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5065

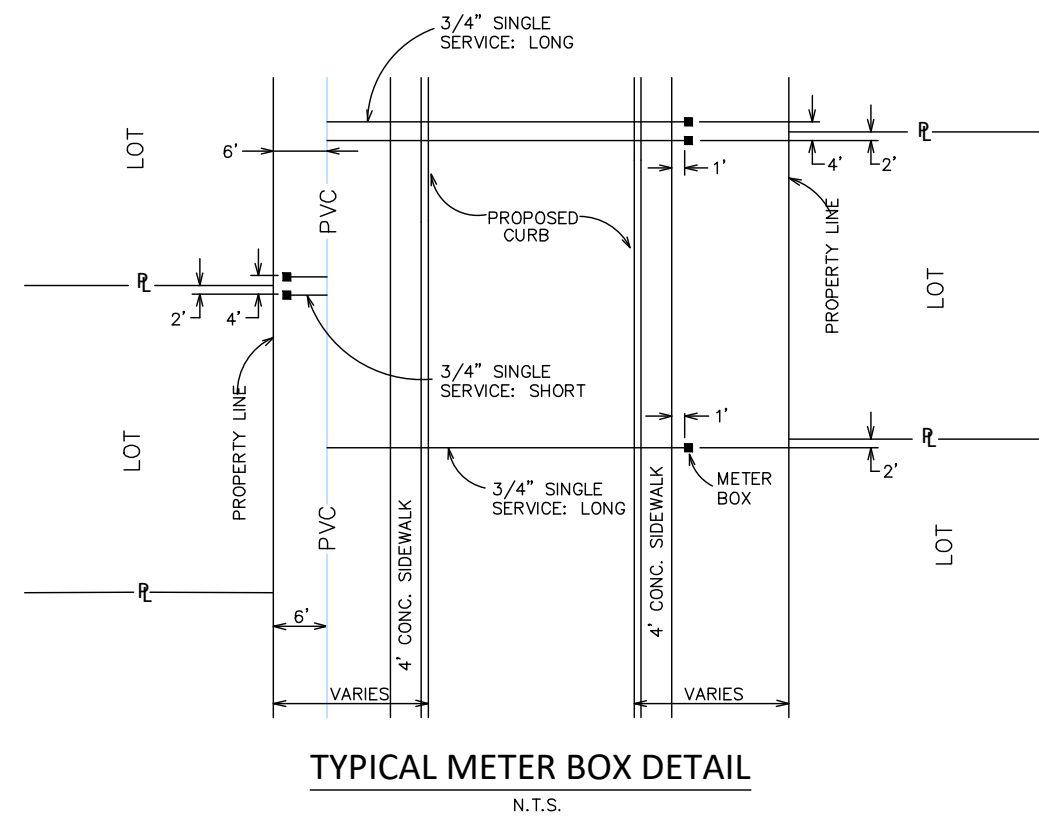


VERDIN SUBDIVISION, UNIT 2

**WATER OVERALL DISTRIBUTION PLAN**

SHEET

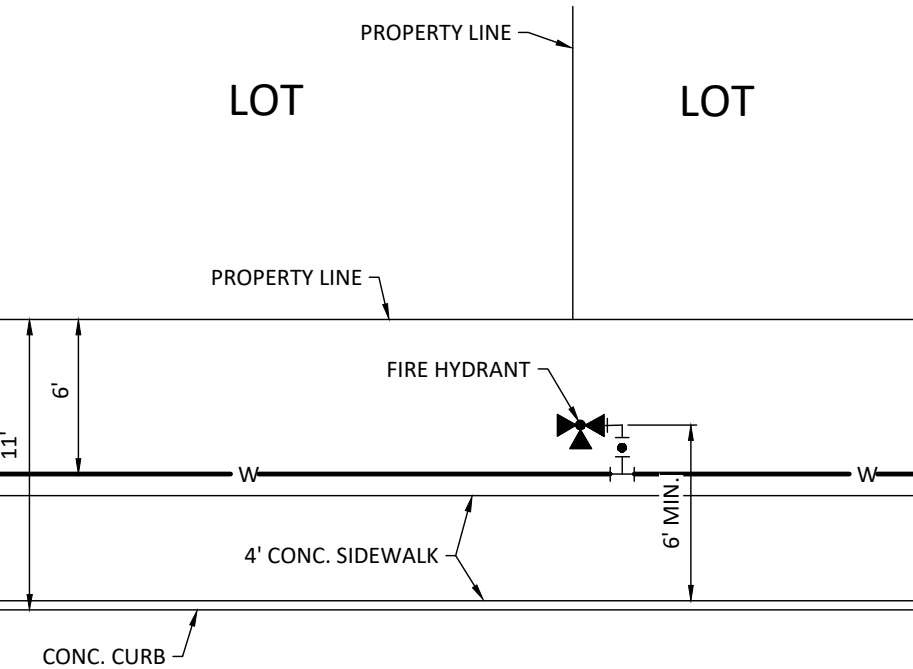
C3.1



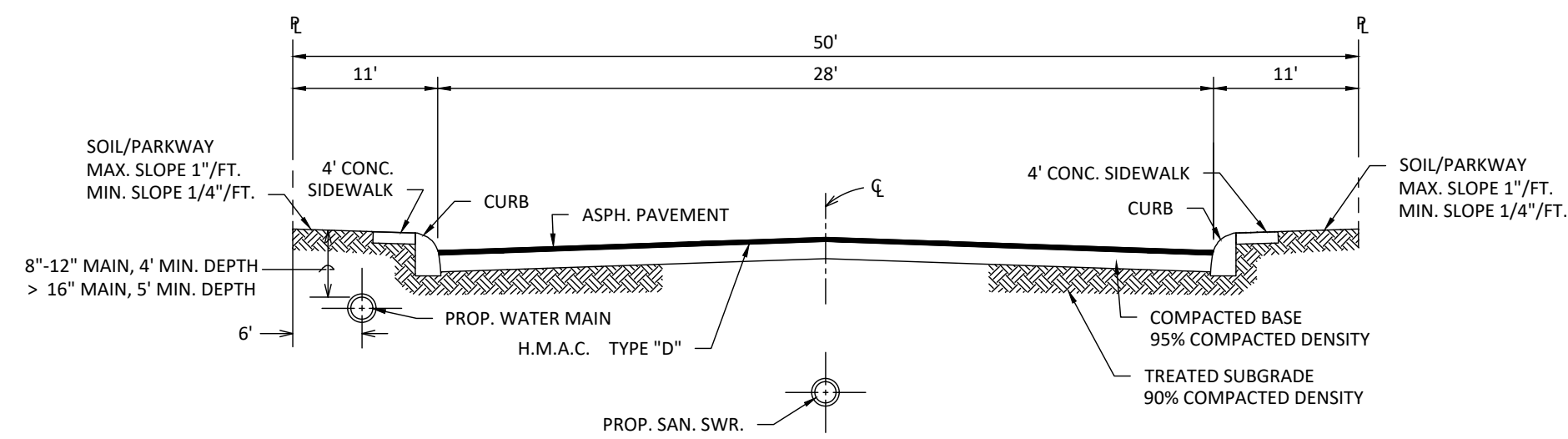
RESTRAINT JOINTS	
①	ALL TEES RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-04
②	ALL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-08
③	ALL VALVES/DEAD ENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-05
④	ALL VERTICAL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-06

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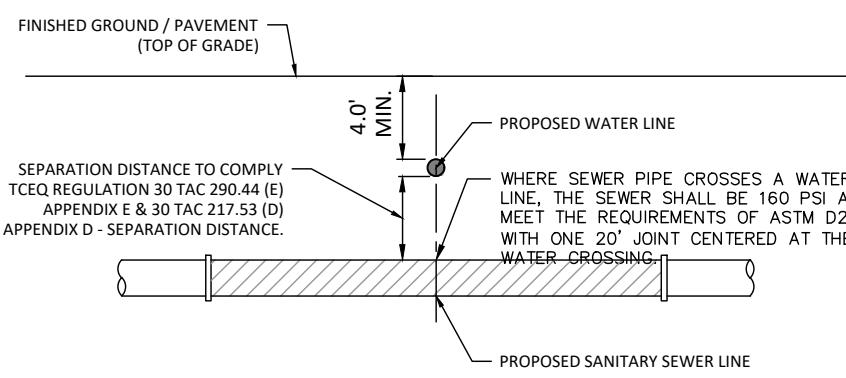
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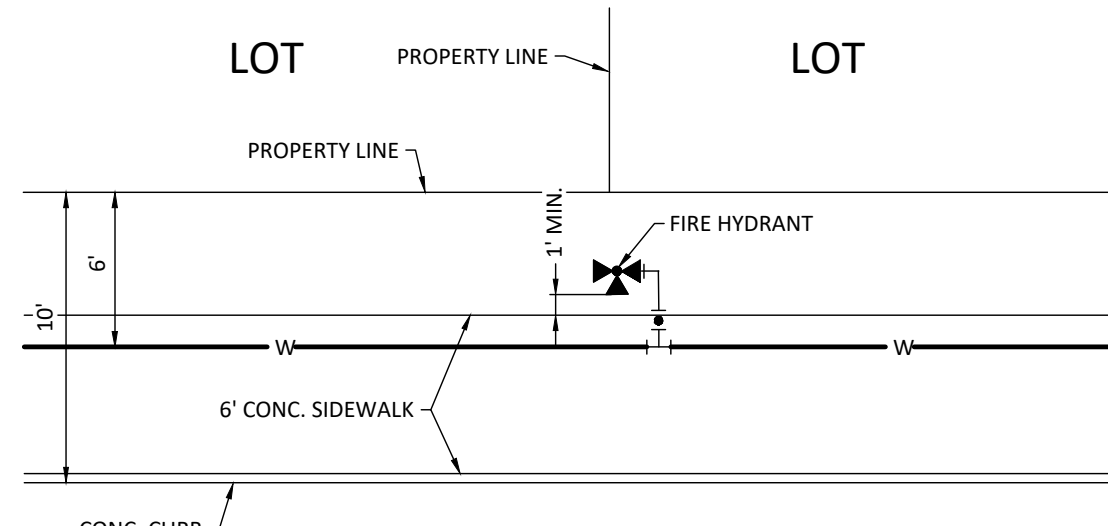
TYPICAL FIRE HYDRANT DETAIL FOR LOCAL A  
N.T.S.



TYPICAL STREET CROSS-SECTION (28' PAVEMENT)  
N.T.S.



TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL  
N.T.S.



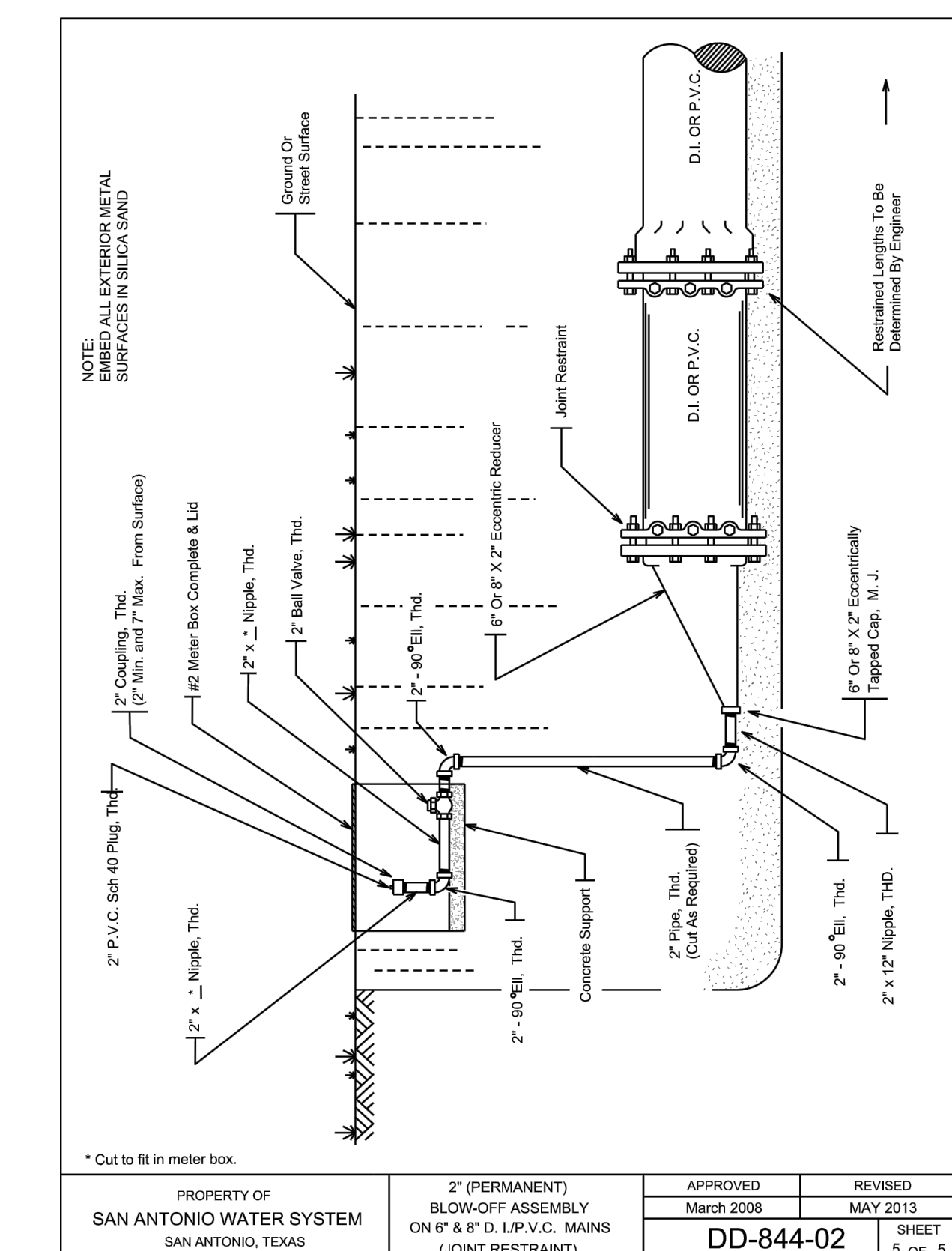
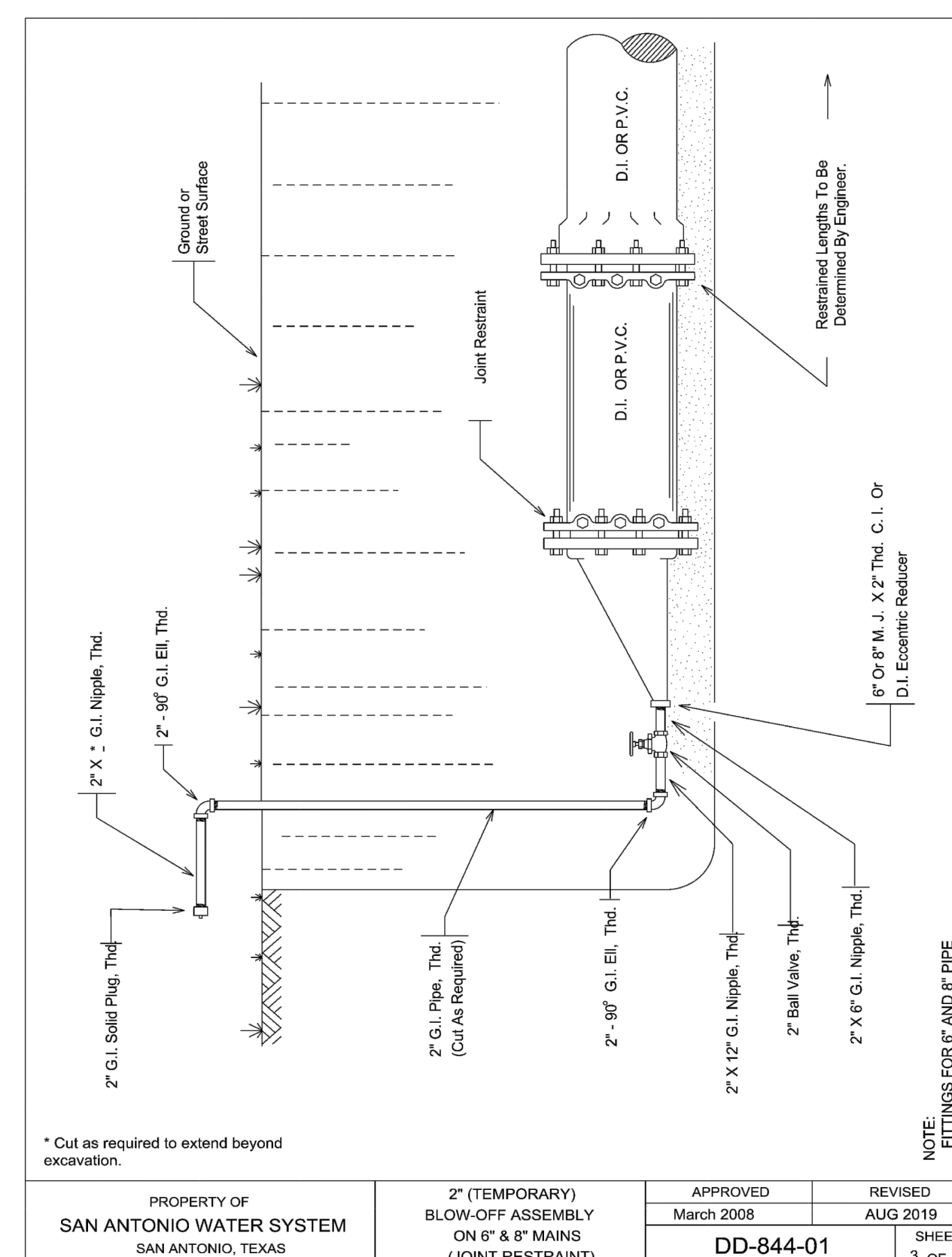
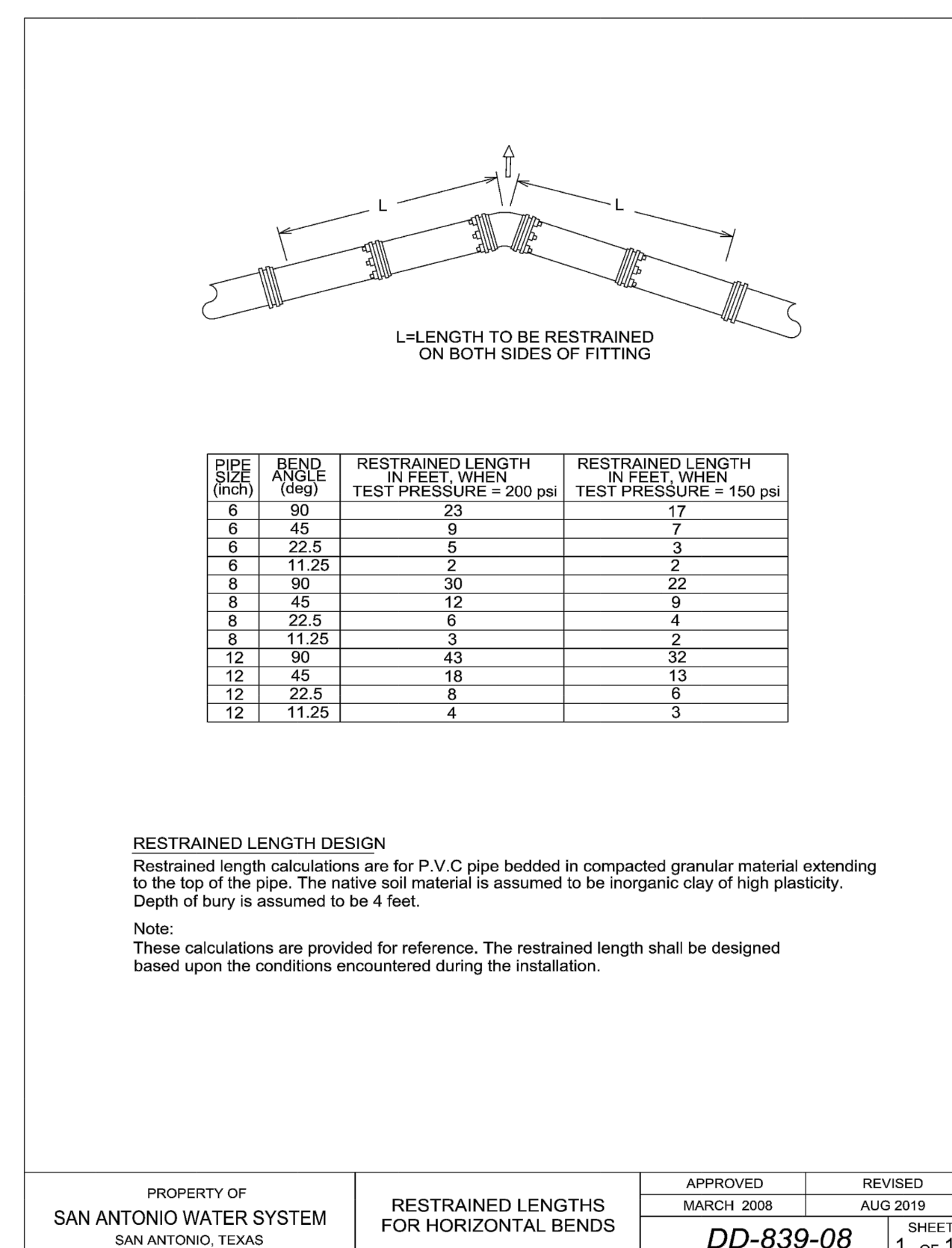
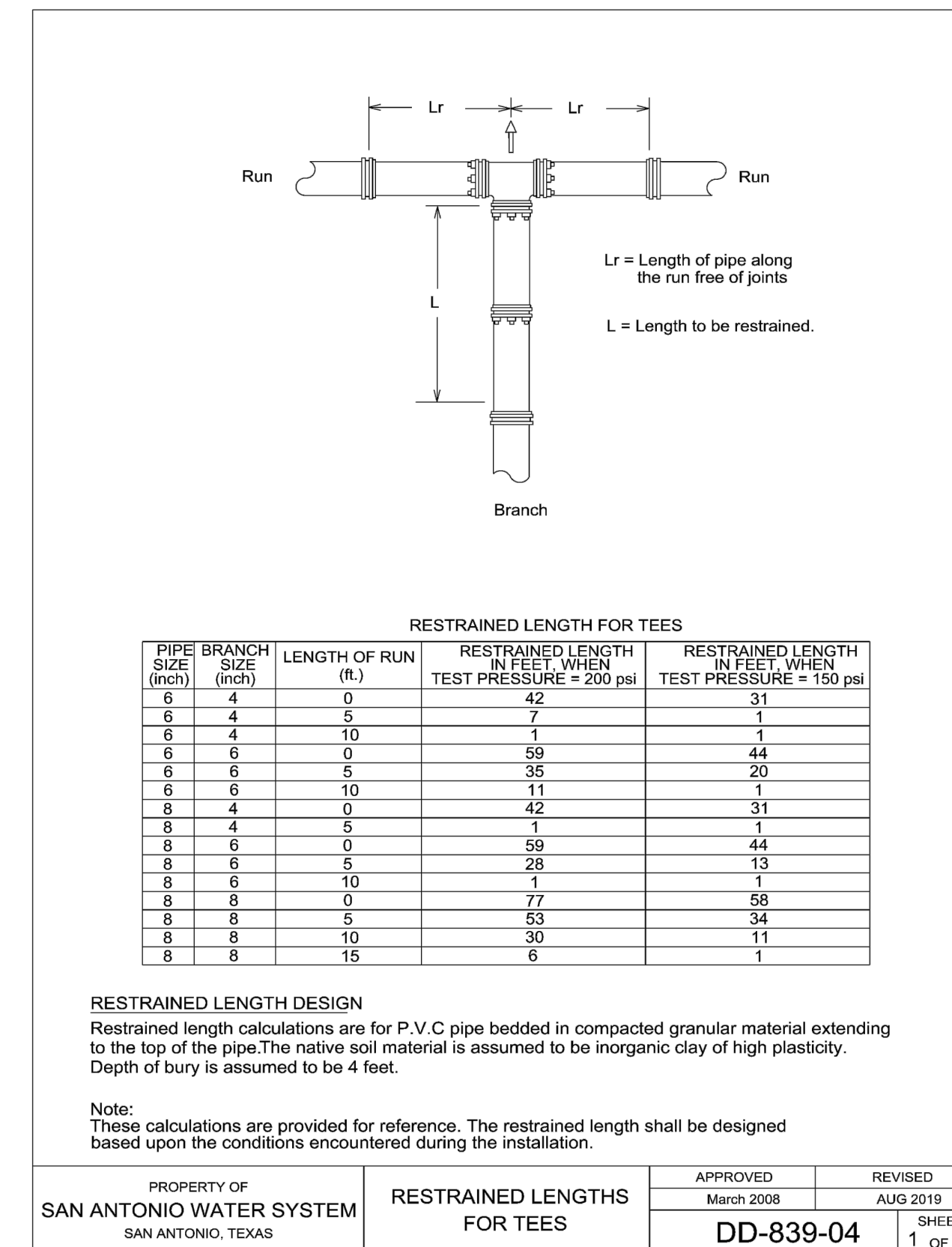
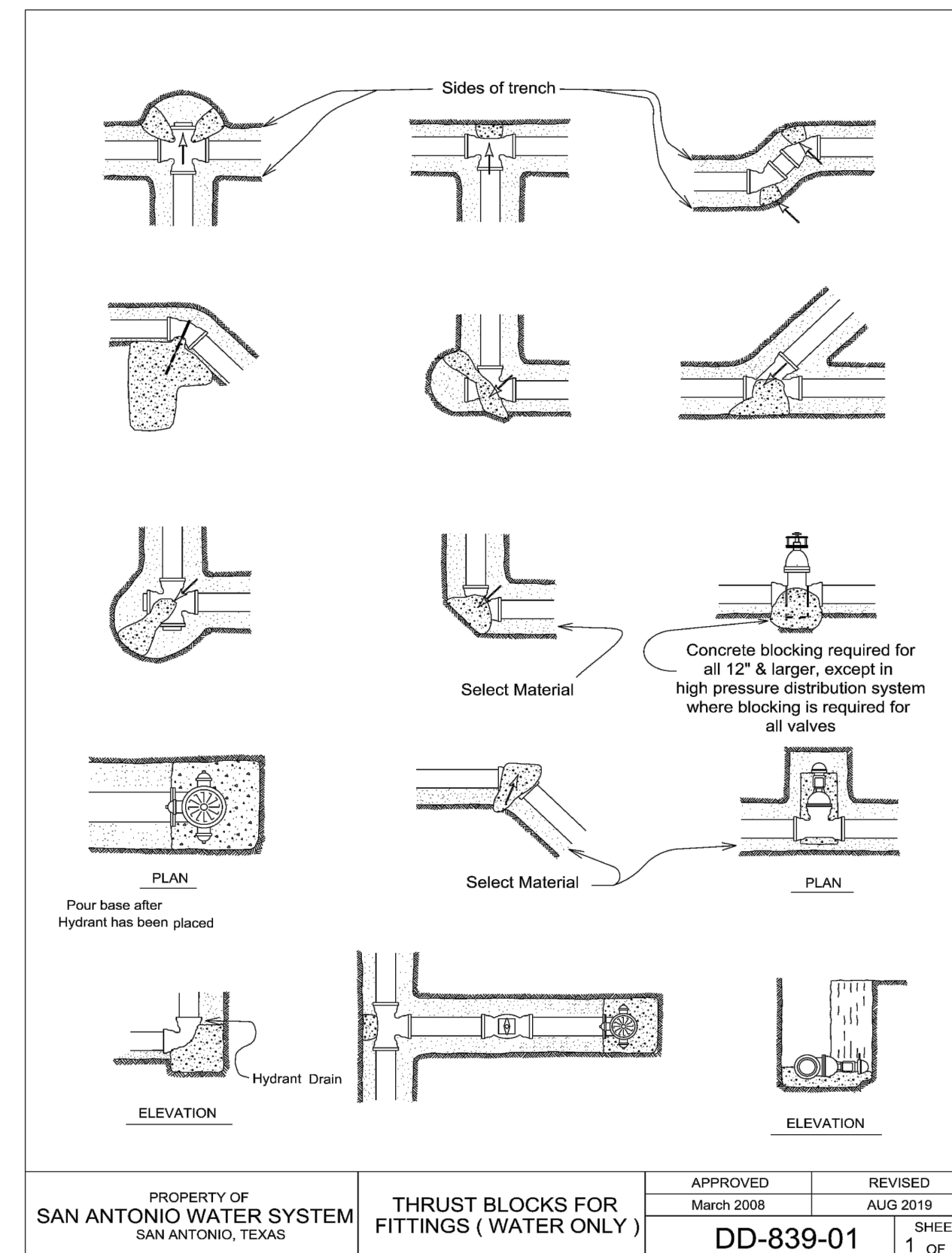
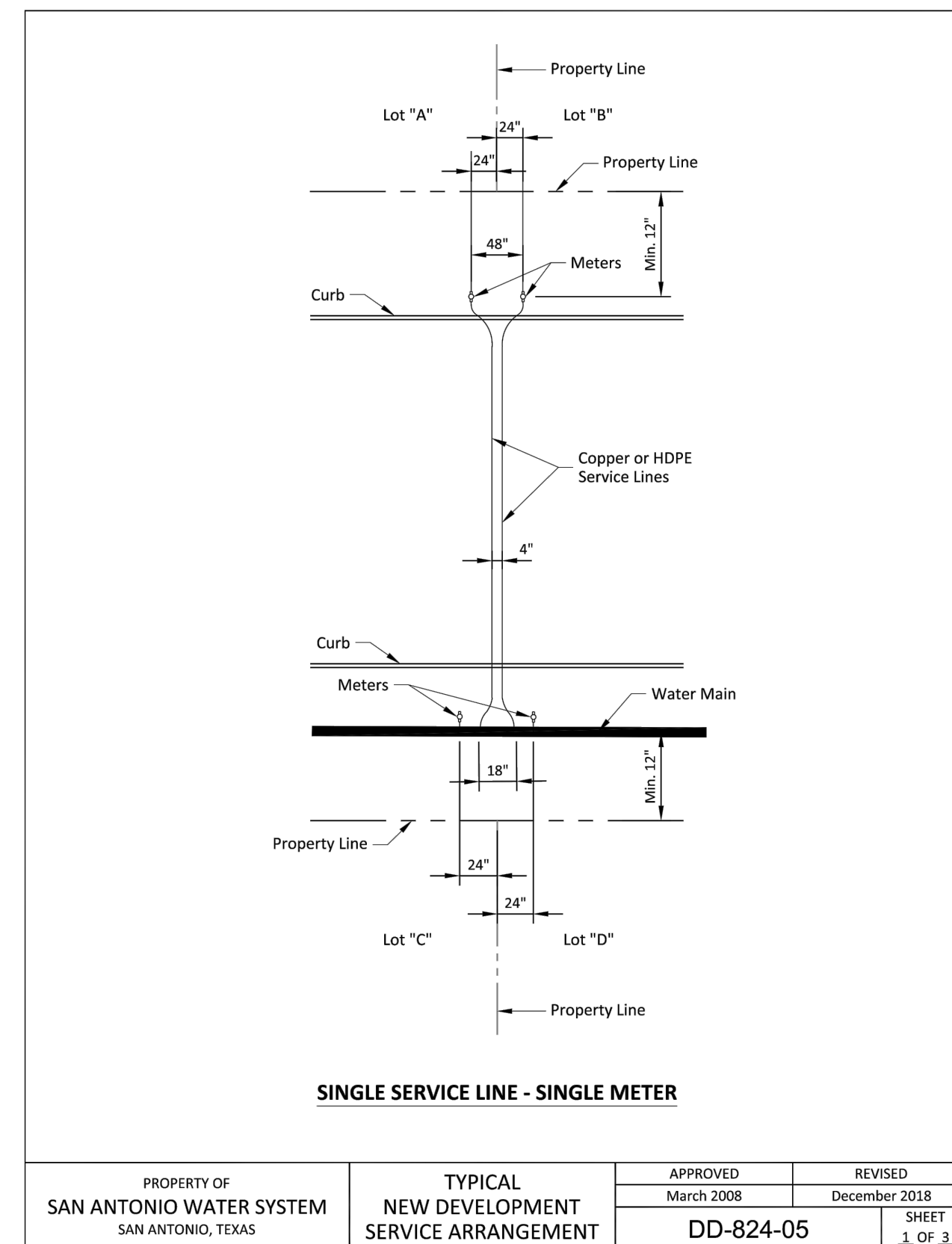
TYPICAL FIRE HYDRANT DETAIL FOR LOCAL B  
N.T.S.

**TXDOT PERMIT NO. SAT20221017153623**

PRESSURE_ZONE_2			
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SAN ANTONIO State TX Zip 78248			
Phone #	(210) 882-6800	Fax #	
SAWS Block Map #	132-514	Total EDU's	61
SAWS Block Map #		Total Acreage	13.578
Total Linear Footage of Pipe		8" ~ 1,758 L.F. - 12" ~ 928 L.F.	Plat No. 22-11800352
Number of Lots		60	SAWS Job No. 22-1155

SUBMITTAL SET

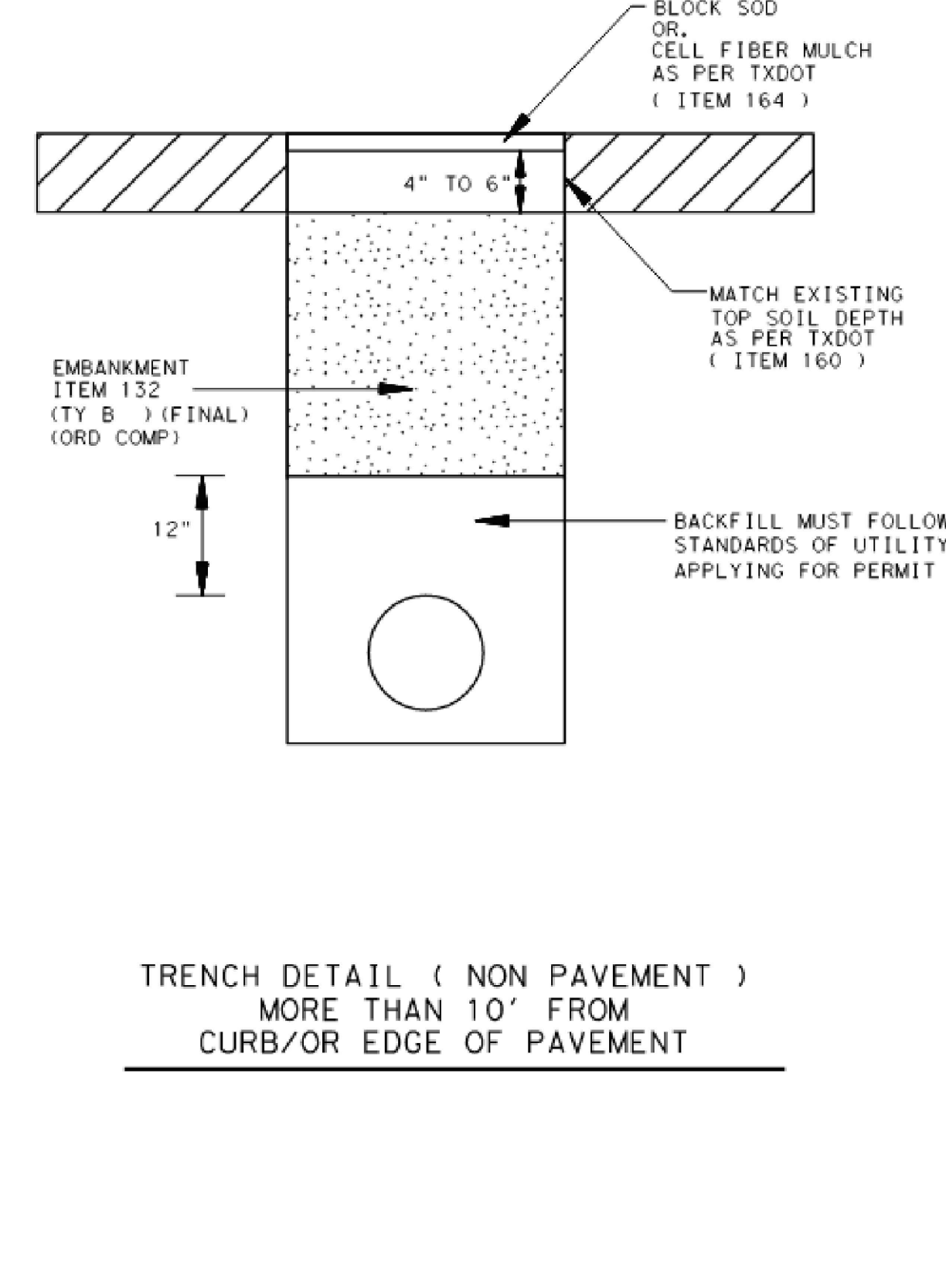
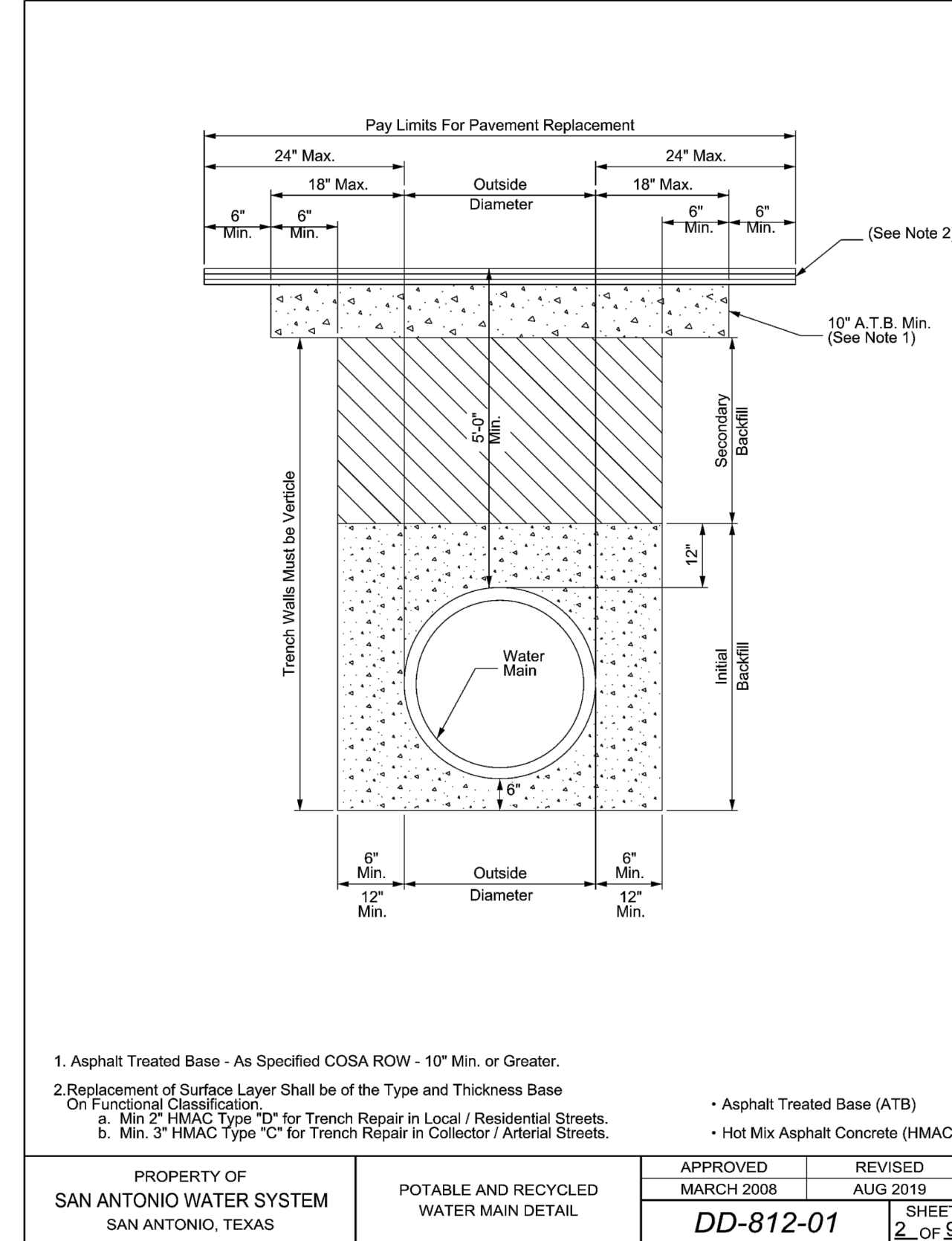




PRESSURE ZONE 2

Developer's Name <u>KINGFISH DEVELOPMENT, LLC</u>			
Developer's Address <u>2722 W. BITTERS RD. SUITE 106</u>			
City <u>SAN ANTONIO</u>		State <u>TX</u>	Zip <u>78248</u>
Phone #	<u>(210) 882-6800</u>	Fax #	
SAWS Block Map	<u>132-514</u>	Total EDU's	<u>61</u>
Total Linear Footage of Pipe <u>8" - 1,758 L.F.</u>		<u>12" - 928 L.F.</u>	Plot No. <u>22-11800352</u>
Number of Lots	<u>60</u>	SAWS Job No.	<u>22-1155</u>





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Phone # <u>(210) 882-6800</u>		Fax # _____	
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SUBMITTAL SET