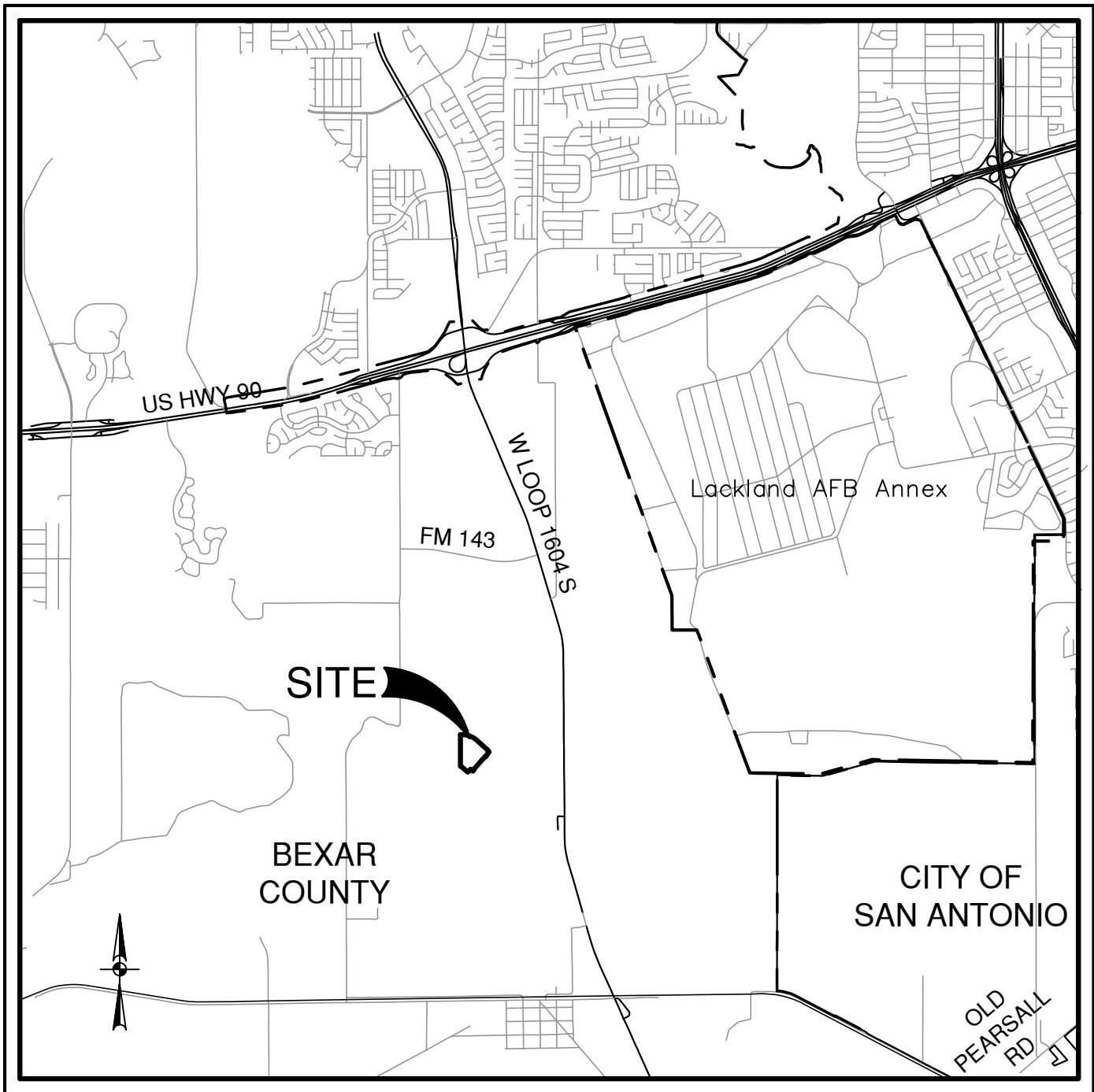


# WESTLAKES UNIT 11

## SAN ANTONIO, TEXAS

### CIVIL CONSTRUCTION PLANS



LOCATION MAP  
NOT-TO-SCALE

PULTE HOMES OF TEXAS, L.P.  
1718 DRY CREEK WAY, SUITE 120  
SAN ANTONIO, TEXAS 78259

JUNE 2022



SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028800

Sheet List Table

Sheet Title	Sheet No.
COVER SHEET	C0.00
MASTER DRAINAGE PLAN	C1.00
DRAIN A	C1.01
DRAIN B	C1.02
DRAIN C	C1.03
DRAINAGE DETAILS	C1.10
DRAINAGE DETAILS	C1.11
STILLHOUSE HOLLOW	C2.00
HAMRICK CIRCLE	C2.01
SMITHERS AVENUE	C2.02
BRANDY BRANCH	C2.03
TYPICAL STREET DETAILS	C2.10
TYPICAL STREET DETAILS	C2.11
TYPICAL STREET DETAILS	C2.12
OVERALL SIGNAGE PLAN	C3.00
SIGNAGE DETAILS	C3.10
SIGNAGE DETAILS	C3.11
SIGNAGE DETAILS	C3.12
OVERALL SANITARY SEWER PLAN	C4.00
SANITARY SEWER LINE C	C4.01
SANITARY SEWER LINE C	C4.02
SANITARY SEWER LINE D	C4.03
SANITARY SEWER LINE D	C4.04
SANITARY SEWER LINE K	C4.05
SANITARY SEWER LINE L	C4.06
SANITARY SEWER LINE M	C4.07
SANITARY SEWER LINE O	C4.08
SANITARY SEWER DETAILS	C4.10
SANITARY SEWER NOTES	C4.20
OVERALL WATER DISTRIBUTION PLAN	C5.00
WATER DISTRIBUTION PLAN DETAILS	C5.10
WATER DISTRIBUTION PLAN NOTES	C5.20
OVERALL UTILITY PLAN	C6.00
OVERALL UTILITY PLAN	C6.01
OVERALL GRADING PLAN	C7.00
STORM WATER POLLUTION PREVENTION PLAN	C8.00
STORM WATER POLLUTION PREVENTION PLAN DETAILS	C8.10



LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.			
ADDRESS: 1718 DRY CREEK WAY, SUITE 120			
CITY: SAN ANTONIO	STATE: TEXAS	ZIP: 78259	
PHONE# (210) 496-1985	FAX#		
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76			
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,369 LF PLAT NO. 21-11800397			
NUMBER OF LOTS 79	SAWS JOB NO. 22-1624		

WATER (SAWS PRESSURE ZONE 4)

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.			
ADDRESS: 1718 DRY CREEK WAY, SUITE 120			
CITY: SAN ANTONIO	STATE: TEXAS	ZIP: 78259	
PHONE# (210) 496-1985	FAX#		
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 81 TOTAL ACREAGE 15.76			
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,128 LF PLAT NO. 21-11800397			
NUMBER OF LOTS 79	SAWS JOB NO. 22-1130		



Date: Aug 15, 2022, 10:07 am User: JD - FOUR  
File: P:\13148\13148.dwg Design: GHA\GHA.dwg  
This document has been produced from material that was stored and/or transmitted electronically and may have been inadvertently altered. Rely only on final hardcopy materials bearing the consultant's original signature and seal. Imagery © 2016, CAPCO, Digital Globe, Terra, Orthoimage Program, USDA Farm Service Agency.



Ref. Point	Return Year	#	Contributing Flow			Reference Sub-point			
			Upstream Watershed	Upstream Surface Bypass	Upstream Pipe/System Flow	T	C	B	P
			Q <sub>WATERSHED</sub> (cfs)	Surf Byp. Upstream Ref. Point	Q <sub>SURF-UP</sub> (cfs)	Q <sub>PIPE-UP</sub> (cfs)	Q <sub>INLET-TOTAL</sub> (cfs)	Q <sub>CAPTURED</sub> (cfs)	Q <sub>BYPASS</sub> (cfs)
11.50	5	14.7	-	-	0.0	0.0	14.7	8.9	5.8
	25	20.3	-	-	0.0	0.0	20.3	10.9	9.4
	100	25.3	-	-	0.0	0.0	25.3	12.5	12.8
11.51	5	7.6	11.50	-	5.8	8.9	13.4	13.4	-
	25	10.5	11.50	-	9.4	10.9	19.9	19.9	-
	100	13.1	11.50	-	12.8	12.5	25.9	25.9	-
11.60	5	11.4	-	-	0.0	0.0	11.4	11.2	0.2
	25	15.8	-	-	0.0	0.0	15.8	14.6	1.2
	100	19.7	-	-	0.0	0.0	19.7	17.3	2.4
11.61	5	6.9	11.60	-	0.2	0.0	7.1	-	-
	25	9.6	11.60	-	1.2	0.0	10.8	-	-
	100	11.9	11.60	-	2.4	0.0	14.3	-	-
11.63	5	5.5	11.61	-	7.1	11.2	12.6	-	23.8
	25	7.7	11.61	-	10.8	14.6	18.5	-	33.1
	100	9.6	11.61	-	14.3	17.3	23.9	-	41.2

1% ANNUAL CHANCE (100-YR) FLOODPLAIN PER FEMA PANEL 48029C0530F, EFFECTIVE 9/29/2010  
1% ANNUAL CHANCE (100-YR) PROPOSED UD FLOODPLAIN (ATLAS 14) PER FLOOD STUDY BY PAPE-DAWSON ENGINEERS, INC.

Drainage Plan Calculations  
(Ultimate Development)

Ref. Point	Structure / Description	Drainage Areas				Total Floodpath (ft)	Overland/Sheet Flow (Seelye)			Shallow Concentrated Flow**				Shallow Concentrated Flow - 2"				Channelized Flow**			Tc-TOT	Rational Method Q=CIA IDF Curve: CoSA J14, PM			
		#	Area (Ac)	C	Lc (FT)		S0 (ft/ft)	T0* (MIN)	Lsc (FT)	Condition**	Slope (ft/ft)	V0c (FPS)	T0c** (MIN)	Lsc2 (FT)	Condition**	Slope (ft/ft)	V0c1 (FPS)	T0c1** (MIN)	Lcch1 (FT)	V0ch1 (FPS)		T0ch1** (MIN)	Return Year	Intensity (in/hr)	Q (cfs)
11.00	Watershed // Drain C Unit 11	A	7.10	0.72	900	100	0.013	14			-	-	800	P	0.008	1.8	7.3		-	-	21	5	4.40	22.5	
																					21	25	6.05	30.9	
																					21	100	7.52	38.4	
11.10	Watershed // Drain B Unit 11	B	2.72	0.72	511	100	0.013	14	40	U	0.013	1.8	0.4	371	P	0.013	2.3	2.7		-	-	17	5	4.91	9.6
																					17	25	6.76	13.2	
																					17	100	8.42	16.5	
11.20	Watershed // Drain A Unit 12	C	3.42	0.72	588	100	0.014	13	141	U	0.014	1.9	1.2	347	P	0.012	2.2	2.6		-	-	16	5	5.06	12.5
																					16	25	6.99	17.2	
																					16	100	8.71	21.4	
11.30	Watershed // Drain B Unit 12	D	4.37	0.72	819	100	0.013	14			-	-	719	P	0.009	1.9	6.2		-	-	20	5	4.51	14.2	
																					20	25	6.21	19.5	
																					20	100	7.71	24.3	
11.50	Watershed // Street Capacity	F-1	4.04	0.72	668	100	0.034	12	61	U	0.020	2.3	0.4	507	P	0.010	2.0	4.2		-	-	16	5	5.06	14.7
																					16	25	6.99	20.3	
																					16	100	8.71	25.3	
11.51	Curb Inlet in Sag	F-2	1.81	0.80	487	84	0.017	13			-	-	403	P	0.012	2.3	3.0		-	-	15	5	5.24	7.6	
																					15	25	7.24	10.5	
																					15	100	9.03	13.1	
11.52	Drain B Outfall // Arterial Phase 2	F-1+F-2+F-3	6.25	0.75	878	100	0.034	12	61	U	0.020	2.3	0.4	507	P	0.010	2.0	4.2	210	6.0	0.6	17	5	4.91	23.0
																					17	25	6.76	31.7	
																					17	100	8.42	39.5	
11.60	Watershed // Street Capacity	I-1	2.92	0.72	561	100	0.035	11	61	U	0.019	2.2	0.5	400	P	0.013	2.3	2.9		-	-	14	5	5.42	11.4
																					14	25	7.53	15.8	
																					14	100	9.39	19.7	
11.61	Watershed	I-2	1.65	0.80	484	100	0.028	12	46	U	0.025	2.6	0.3	338	P	0.006	1.6	3.6		-	-	15	5	5.24	6.9
																					15	25	7.24	9.6	
																					15	100	9.03	11.9	
11.62	Watershed // Street Capacity	I-3	1.23	0.80	398	84	0.019	12			-	-	314	P	0.018	2.7	1.9		-	-	13	5	5.61	5.5	
																					13	25	7.82	7.7	
																					13	100	9.76	9.6	
11.64	Drain A Outfall // Arterial Phase 2	I-1+I-2+I-3+I-4+I-5	6.20	0.76	597	100	0.028	12	46	U	0.025	2.6	0.3	338	P	0.006	1.6	3.6	113	6.0	0.3	16	5	5.06	23.8
																					16	25	6.99	32.9	
																					16	100	8.71	41.0	

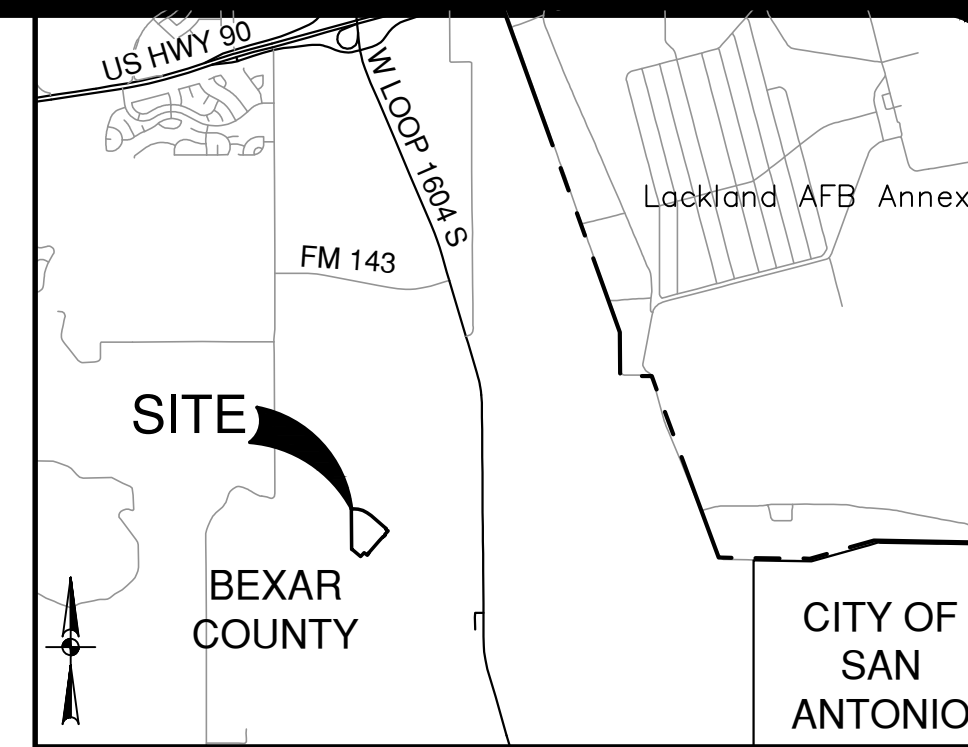
Rational Method Time of Concentration

\*Seelye Chart or TR-55 Eqn. 3-3

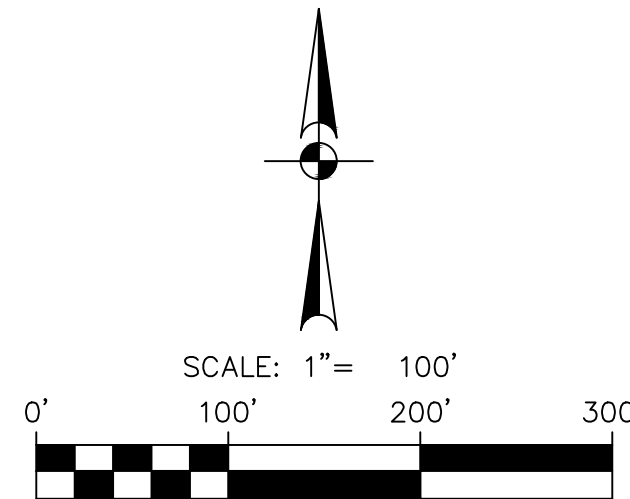
\*\*As Calculated using Mannings or TR-55 Figure 3-1 or 6 ft/s

From TR-55 Figure 3-1\*\*  
$$T_0 = \frac{(0.007(n+1)^{0.8})}{(P^2)^{0.54}} + 60 \frac{v}{n} R^{2/3} S_0^{1/2}$$
$$k = 1.486 \text{ ft}^{1/3}/\text{s}$$

S: For Streets: n = 0.018, R = 0.2 (Adapted from Mannings)  
P: For Paved: n = 0.025, R = 0.2  
U: For Unpaved: n = 0.05, R = 0.4  
D: For Default: v = 6 fps



LOCATION MAP  
NOT-TO-SCALE



LEGEND

- PROPERTY LINES
- CURRENT PHASE
- COSA UD 100 YR FLOODPLAIN (ATLAS 14)
- FEMA 100 YR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- OVERLAND FLOW PATH
- SHALLOW CONCENTRATED FLOW PATH
- CHANNEL FLOW PATH
- 1' CONTOUR
- 5' CONTOUR
- RATIONAL CALCULATION DRAINAGE REFERENCE POINT
- ACCUMULATED FLOW RATE DRAINAGE REFERENCE POINT
- DRAINAGE AREA

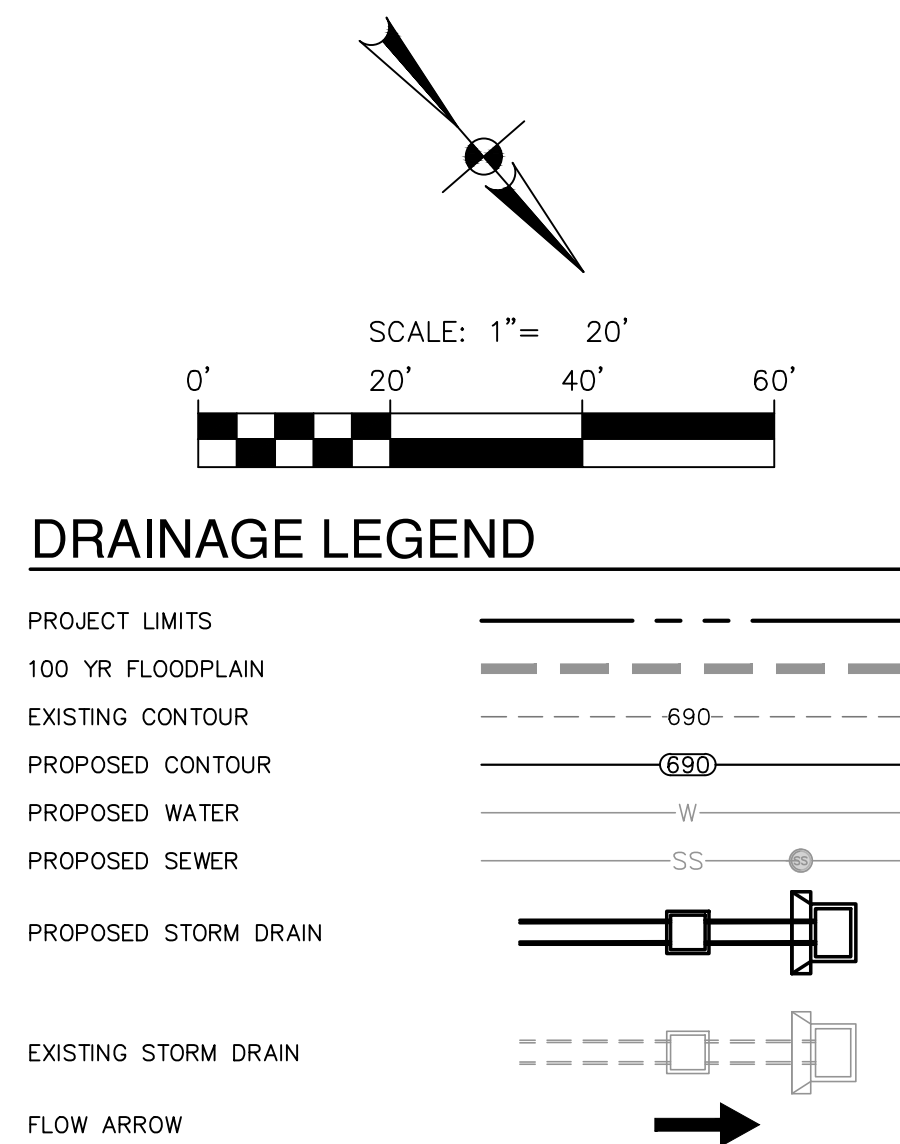
WESTLAKES UNIT 11  
SAN ANTONIO, TEXAS  
MASTER DRAINAGE PLAN

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C1.00

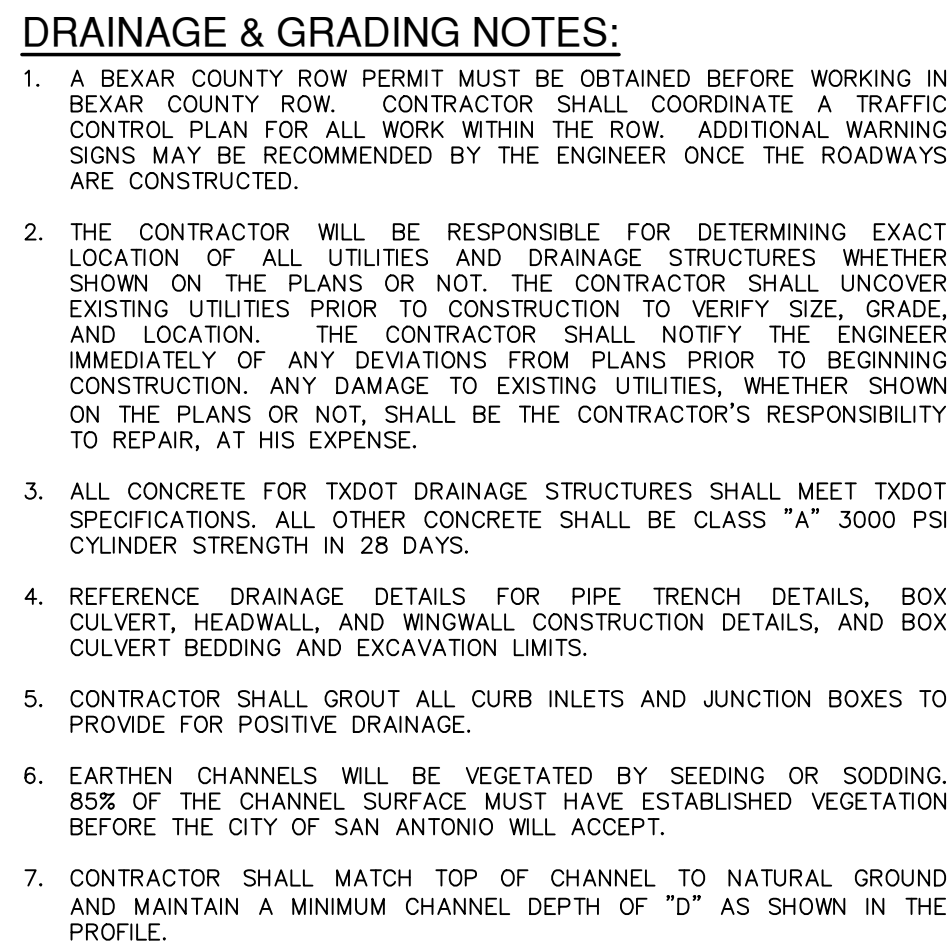
DATE  
NO. REVISION  
STATE OF TEXAS  
MATTHEW GEISTWEIDT  
118861  
PROFESSIONAL ENGINEER  
8/17/2022

PAPE-DAWSON  
ENGINEERS  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800



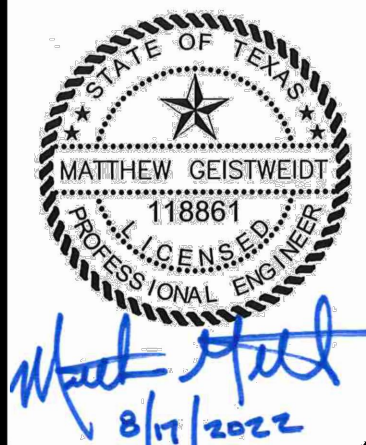


$Q_{25} = 15.8$  CFS (POINT 11.60)  
 $Q_{25/2} = 7.9$  CFS  
 $S = 1.80\%$   
 $L = 20'$   
 $Q_{\text{captured}} = 7.3$  CFS



CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND ADVISE THE CONTRACTOR OF ANY RECOMMENDATIONS FOR 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 PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION TO ALL WORKERS AT ALL TIMES. THE CONTRACTOR SHALL COMPLY WITH THE MINIMUM SAFETY REQUIREMENTS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH THE OSHA REGULATIONS REGARDING TRENCHING AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRICAL, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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 ANY 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.

[illegible]

**PAPE-DAWSON  
ENGINEERS**

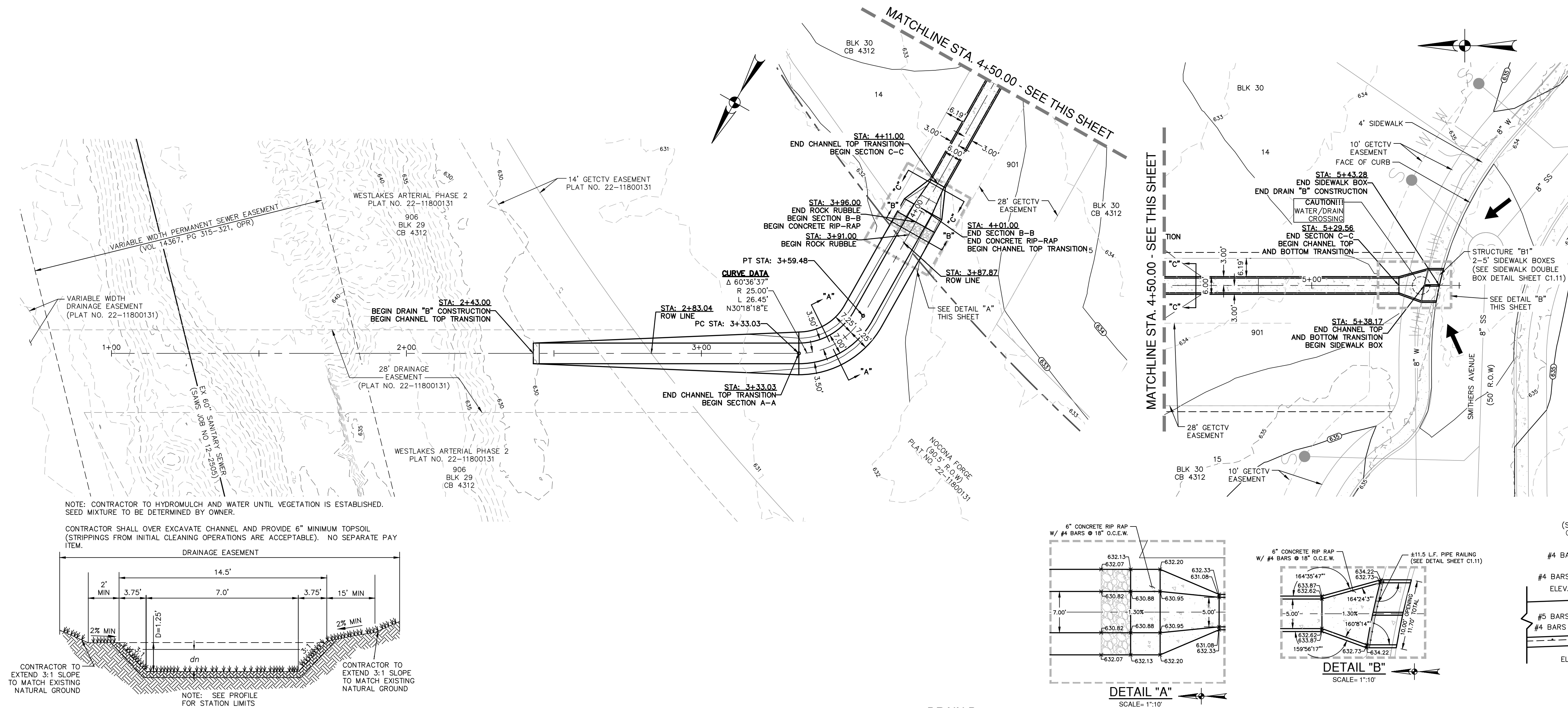
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028600

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS

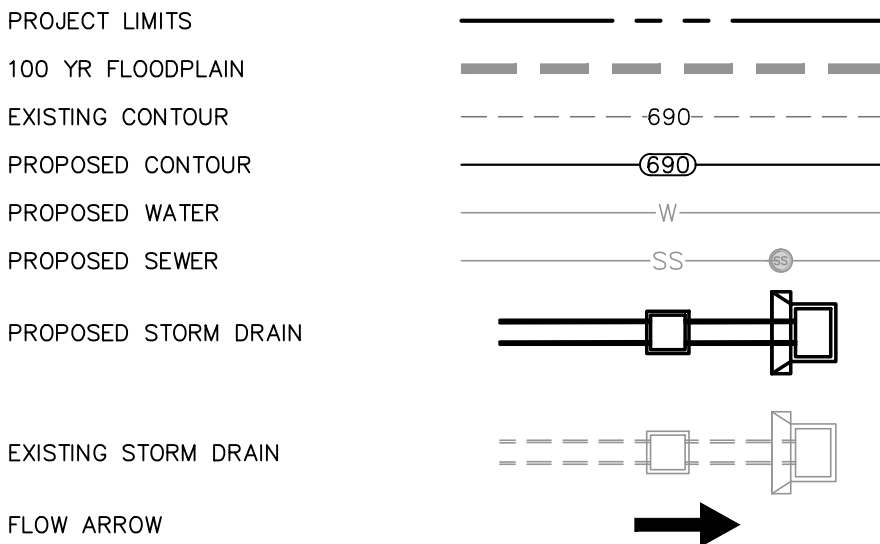
DRAIN A  
PLAN AND PROFILE (STA. 4+70.27 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MGG  
SHEET **C1.01**



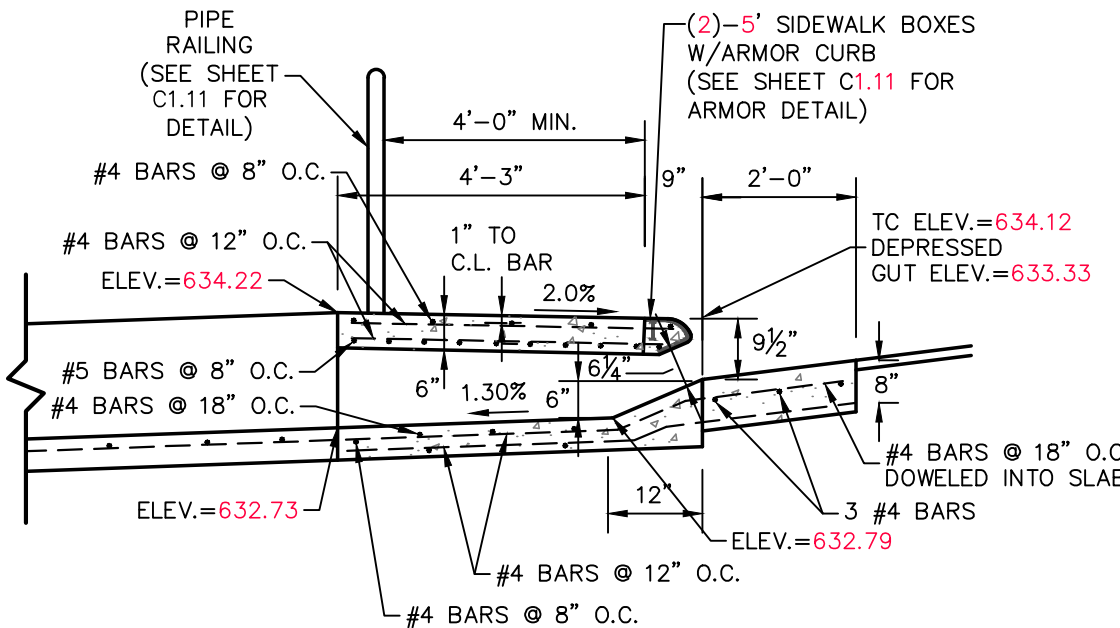


### DRAINAGE LEGEND



### SIDEWALK BOX IN SAG HYDRAULIC CALCULATION STRUCTURE "B1" (POINT 11.10)

$$Q_{sw} = C_w \times L \times H^{3/2} = 13.2 \text{ CFS}$$
$$C_w = 3.087$$
$$H = 0.79'$$
$$L_{cal} = 6.08'$$
$$USE L = 2 \sim 5' \text{ SW BOXES} = 10' \text{ TOTAL}$$
$$H = 0.57'$$

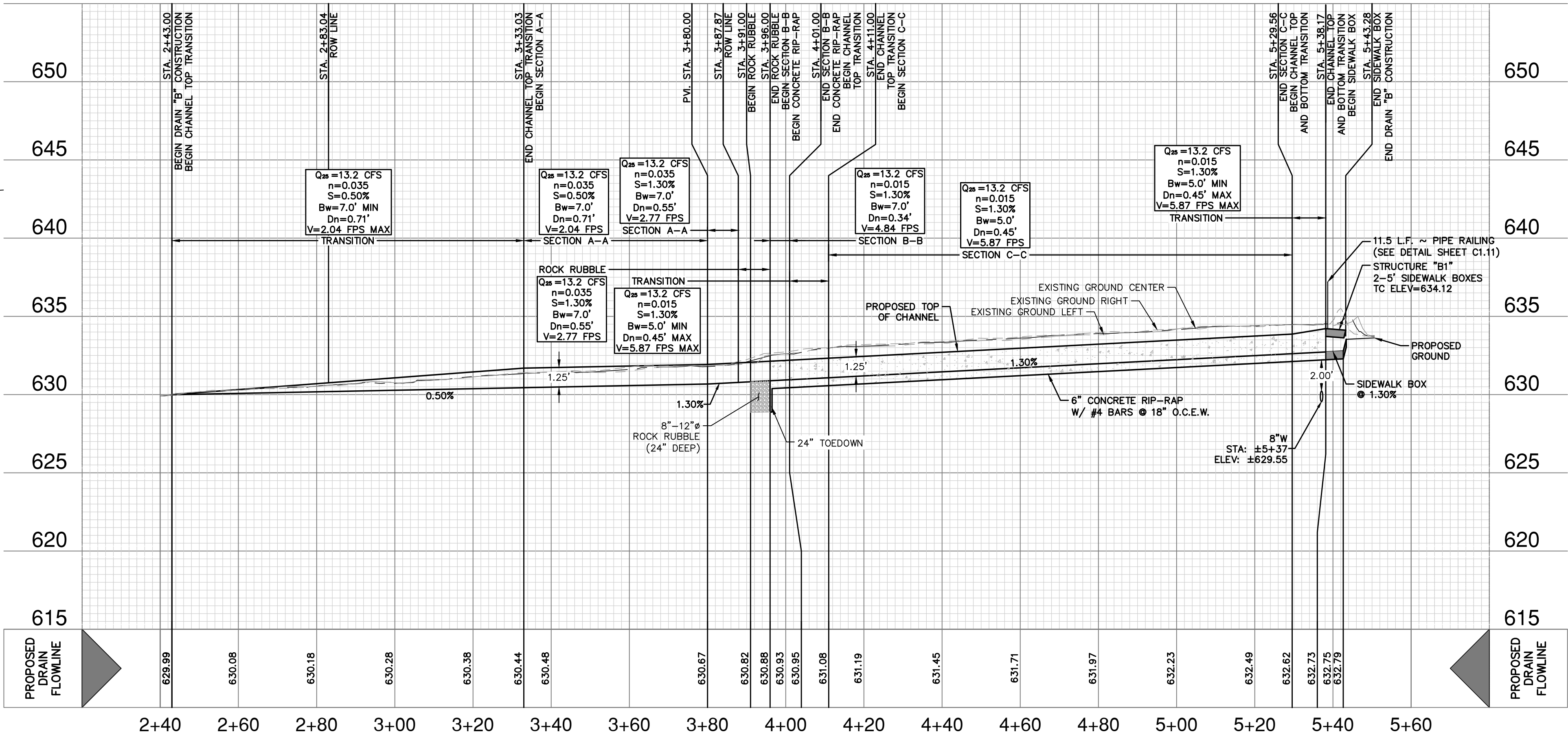


### SIDEWALK BOX DETAIL

NOT-TO-SCALE

### DRAIN B PLAN AND PROFILE (STA. 2+43.00 TO END)

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 20'



### DRAINAGE & GRADING NOTES:

- A BEAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN BEAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
- ALL CONCRETE FOR TxDOT DRAINAGE STRUCTURES SHALL MEET TxDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
- REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND MINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
- CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
- EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.
- CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

### 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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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.

### CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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.

DATE

NO. REVISION

**PAPE-DAWSON  
ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS

**DRAIN B**  
PLAN AND PROFILE (STA. 2+43.00 TO END)

PLAT NO. 21-11800397

JOB NO. 11348-43

DATE JUNE 2022

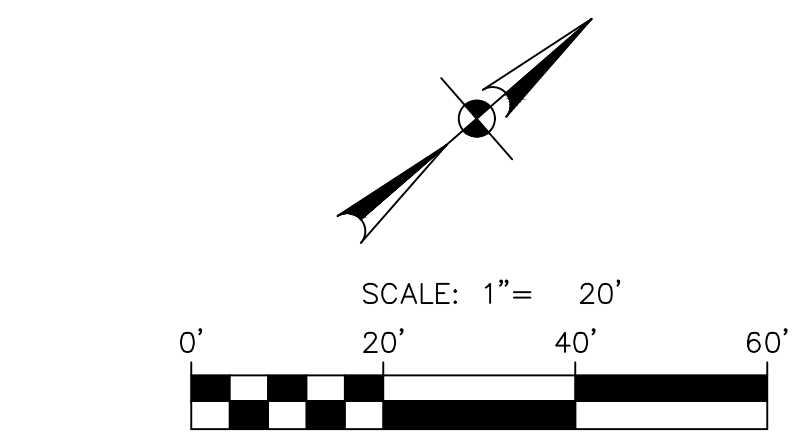
DRAWN EDK

CHECKED MG

DRAWN MG

SHEET C1.02





PROJECT LIMITS

100 YR FLOODPLAIN

EXISTING CONTOUR

690

PROPOSED CONTOUR

690

PROPOSED WATER

W

PROPOSED SEWER

SS

PROPOSED STORM DRAIN

EXISTING STORM DRAIN

FLOW ARROW

$Q_{25} = C_w \times L \times H^{3/2} = 30.9 \text{ CFS}$   
 $C_w = 3.087$   
 $H = 0.79'$   
 $L_{cal} = 14.25'$   
 $USE \ L = 20'$   
 $H = 0.63'$



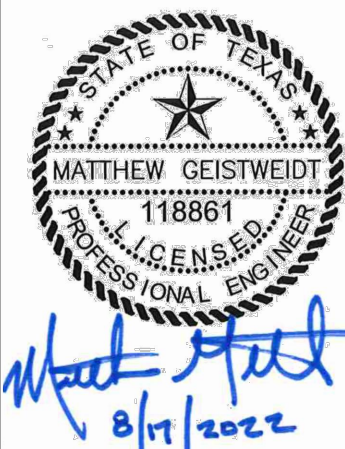
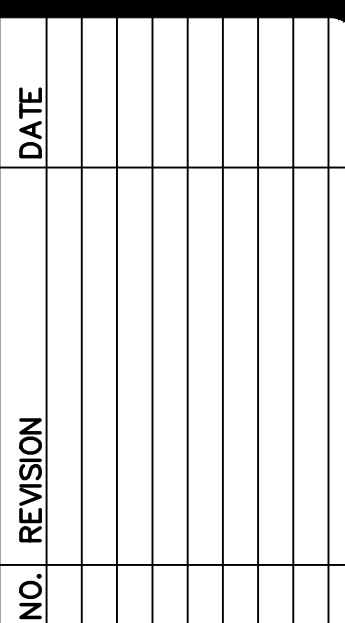
1. A BEAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN BEAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN WITH THE CITY OF SAN ANTONIO. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AND DRAINAGE WITHIN CONSTRUCTION TO VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
3. ALL CONCRETE FOR TxDOT DRAINAGE STRUCTURES SHALL MEET TxDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
4. REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
5. CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
6. EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO CAN ACCEPT IT.
7. CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

### 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 ANY AVAILABLE GEOTECHNICAL DATA  
AND/OR INFORMATION AND ADVISE THE CONTRACTOR WITHIN \_\_\_\_\_  
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 ALL THE CURRENTLY APPLICABLE 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 THE FOLLOWING: (1) ADEQUATE TRENCH EXCAVATION  
SAFETY OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRICAL, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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 ANY CONSTRUCTION OF NEW OR EXISTING UTILITIES TO THE PROJECT. THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE ON THESE CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.



**PAPE-DAWSON  
ENGINEERS**

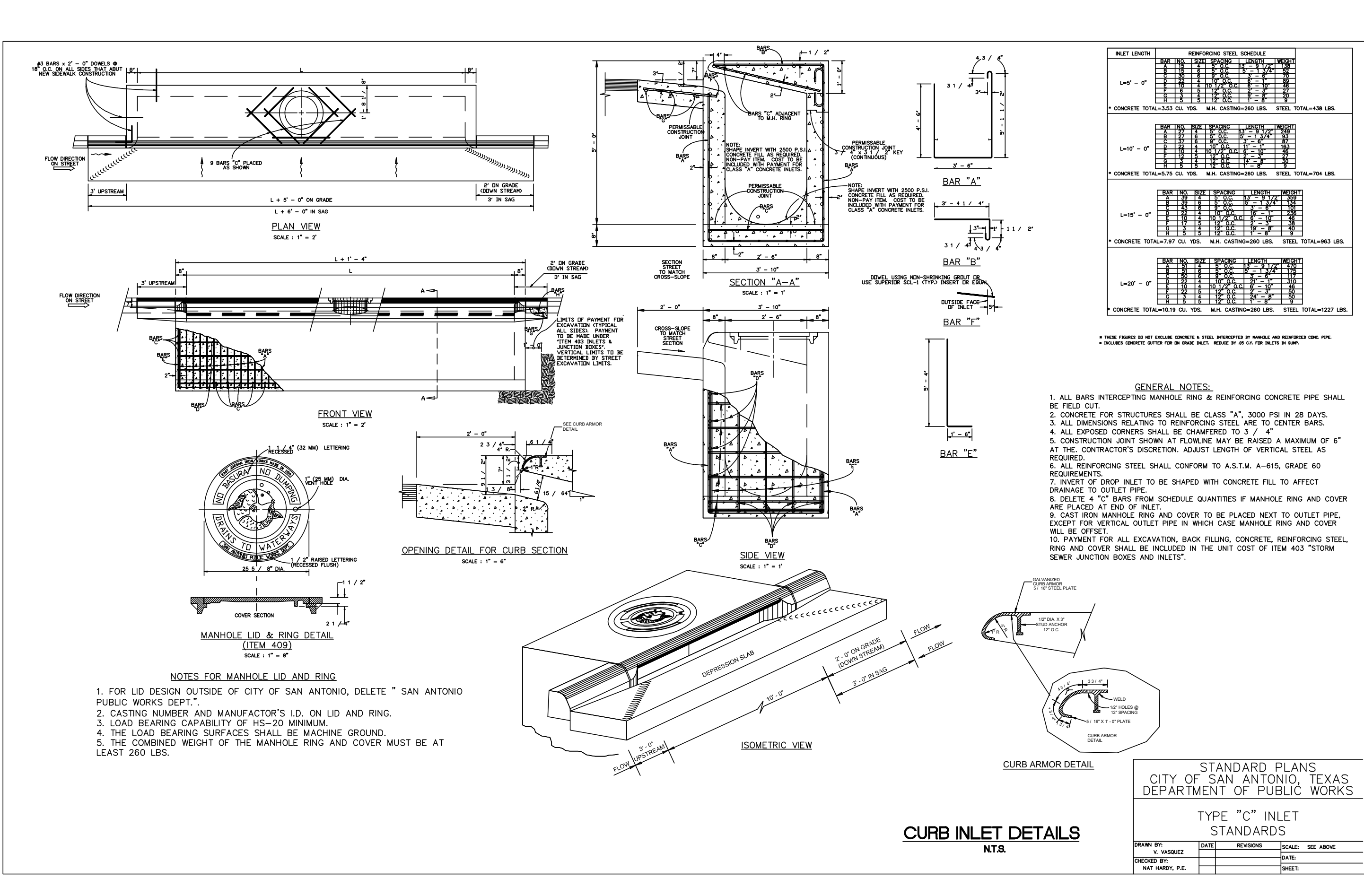
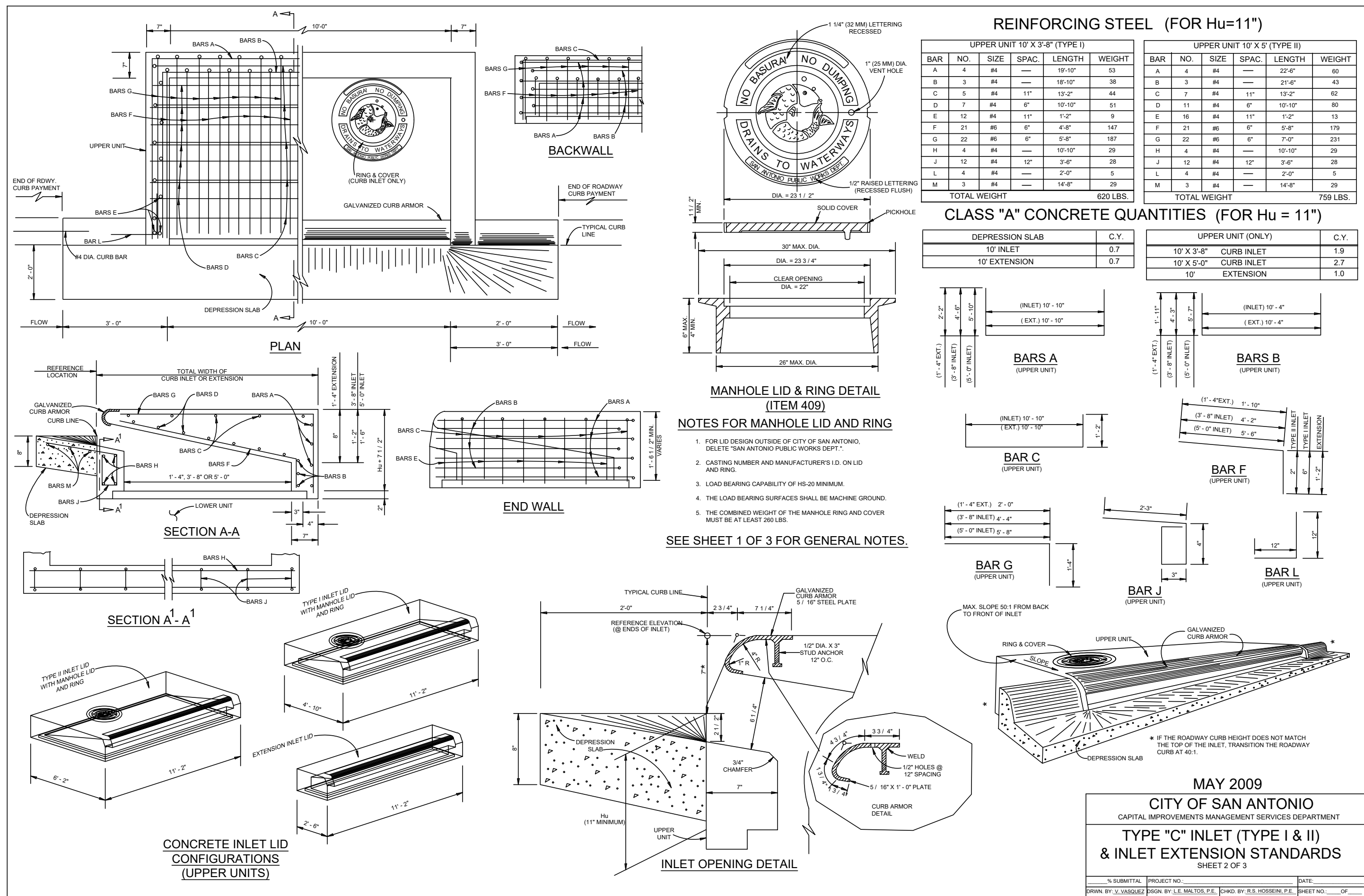
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
20200 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028600

**WESTLAKES UNIT 11**  
**SAN ANTONIO, TEXAS**

DRAIN C  
PLAN AND PROFILE (STA. 2+72.82 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET **C1.03**





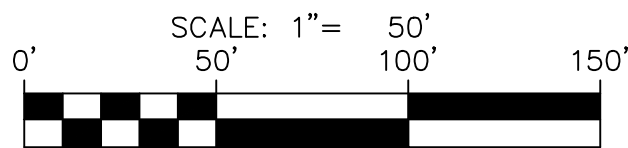
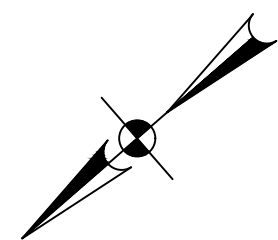
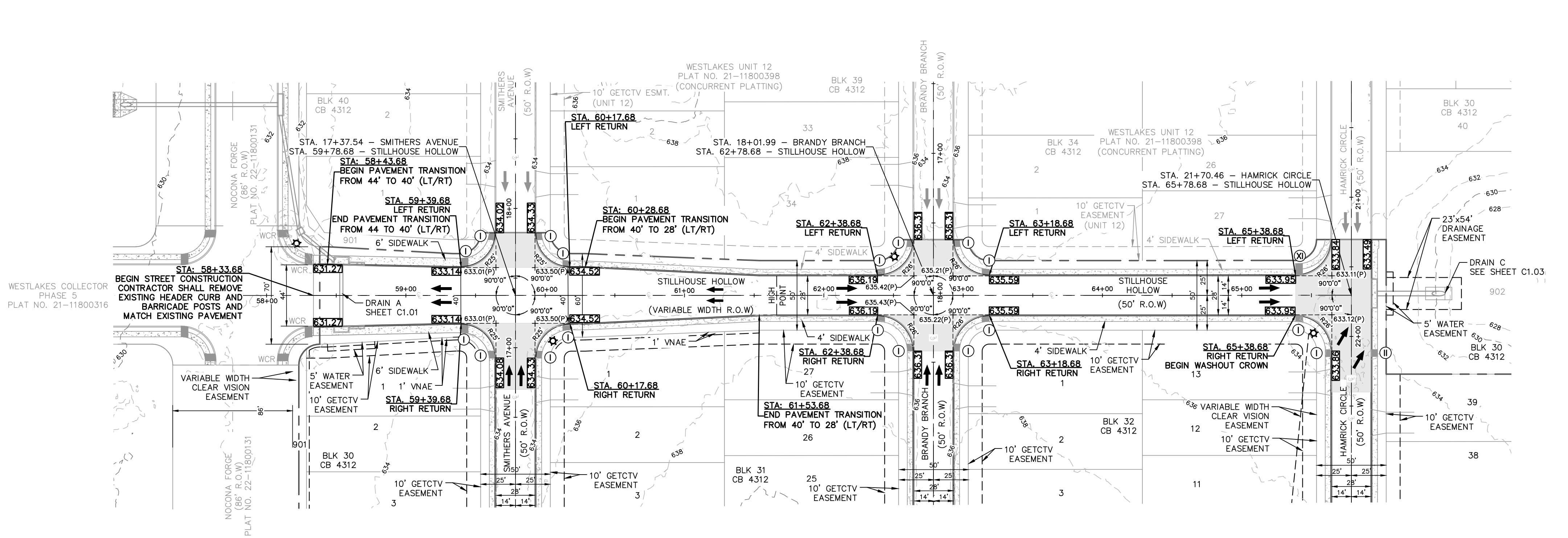






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File: E:\1348\43\Design\CH\ST1124843 STILLHOUSE HOLLOW.dwg

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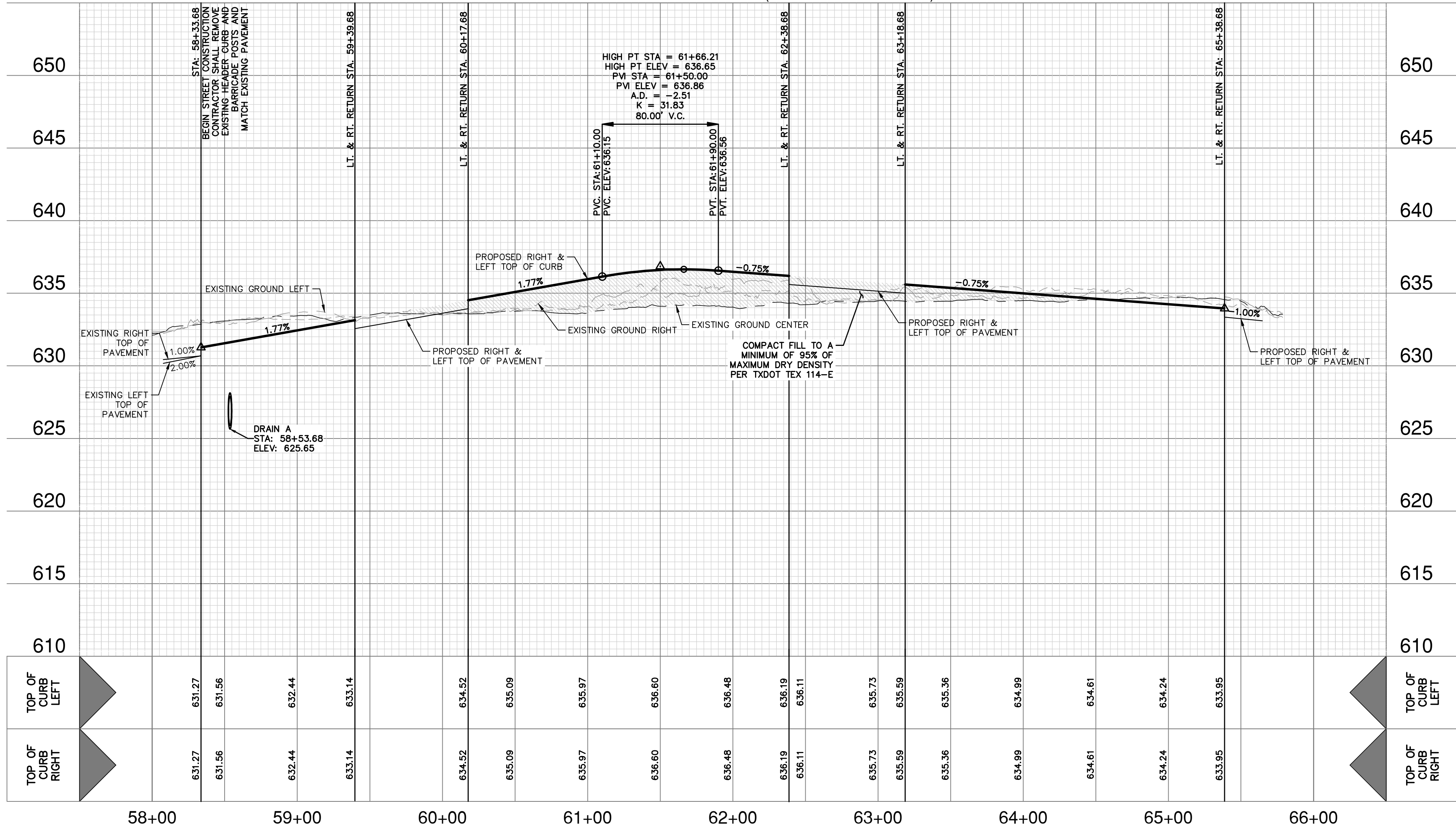


### STREET LEGEND

PROJECT LIMITS	---
MAINTAIN GUTTER	→
EXISTING CONTOUR	- - - 970 - - -
WHEELCHAIR RAMP	◊WCR
CENTERLINE	CL
RADIUS POINT	RP
POINT OF CURVATURE	PC
POINT OF TANGENCY	PT
RETURN	RET
DRAINAGE FLOW ARROW	→
TOP OF CURB SPOT ELEVATION	[857.30]
PAVEMENT ELEVATION	857.00(P) ×
WASHOUT CROWN SECTION	[Pattern]
SIDEWALK (SEE SHEET C3.00 FOR DEVELOPER/HOMEBUILDER RESPONSIBILITY)	[Pattern]
DRIVEWAY	---
GETCTV	GAS, ELECTRIC, TELEPHONE, CABLE TV
VNA	VEHICULAR NON-ACCESS
EASEMENT	ESMT
CLEAR VISION	CVSN

STILLHOUSE HOLLOW  
PLAN AND PROFILE (STA. 58+33.68 TO END)

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



### STREET NOTES:

1. A BEXAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
2. CONTRACTOR SHALL MATCH EXISTING PAVEMENT AT TIE-IN. IF EXISTING PAVEMENT ELEVATION DIFFERS SIGNIFICANTLY, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.
3. SIDEWALKS SHALL BE CONSTRUCTED 3'-FT FROM THE BACK OF CURB FOR ALL LOCATIONS WHERE THE SIDEWALK IS SHOWN OFFSET. REFER TO STREET DETAIL SHEET FOR SIDEWALK AND RAMP DETAILS.
4. NO PERMANENT STRUCTURES HIGHER THAN 3 FEET, AND LOWER THAN 8 FEET ABOVE THE PAVEMENT, INCLUDING STRUCTURES, WALLS, FENCES, AND VEGETATION, SHALL BE CONSTRUCTED OR ALLOWED WITHIN THE CLEAR VISION EASEMENT. CONTRACTOR SHALL GRADE AREAS WITHIN CLEAR VISION EASEMENTS SUCH THAT THE ELEVATION WITHIN THE CLEAR VISION EASEMENT IS NOT HIGHER THAN 3 FEET ABOVE THE ADJACENT TOP OF PAVEMENT.
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6. CHANGES IN THE SIDEWALK LOCATION FOR A MAXIMUM LINEAR DISTANCE OF TWO HUNDRED (200) FEET ARE PERMITTED TO BE APPROVED BY THE FIELD INSPECTOR WITHOUT AMENDING THE STREET PLAN OR UTILITY LAYOUT PER UDC SECTION 35-506 (Q)(6).
7. THE CONSTRUCTION OF SIDEWALKS ADJACENT TO ALL 900 SERIES LOTS WILL BE THE RESPONSIBILITY OF THE DEVELOPER AS SHOWN ON THE OVERALL SIGNAGE PLAN.
8. FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.0 AND A PI MAXIMUM OF 40. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

WESTLAKES UNIT 11  
SAN ANTONIO, TEXAS

STILLHOUSE HOLLOW  
PLAN AND PROFILE (STA. 58+33.68 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C2.00

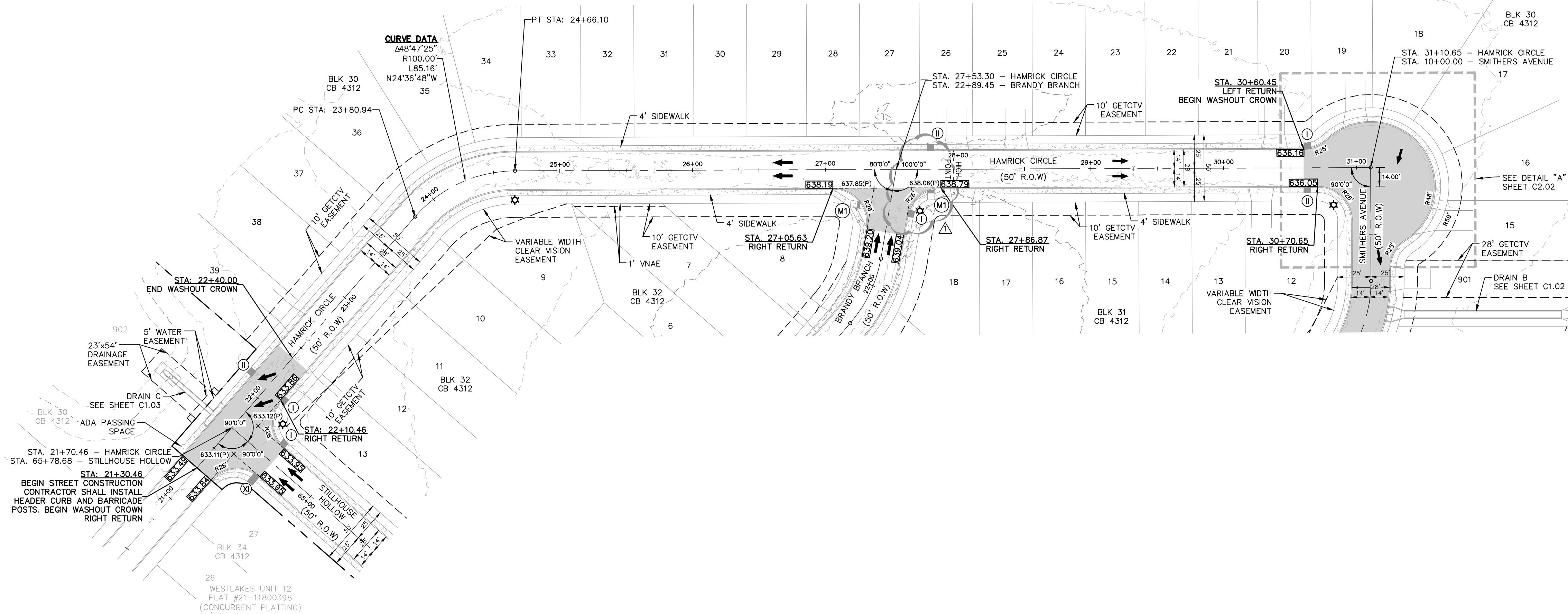


**PAPE-DAWSON**  
**ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #479 | TEXAS SURVEYING FIRM #10028800



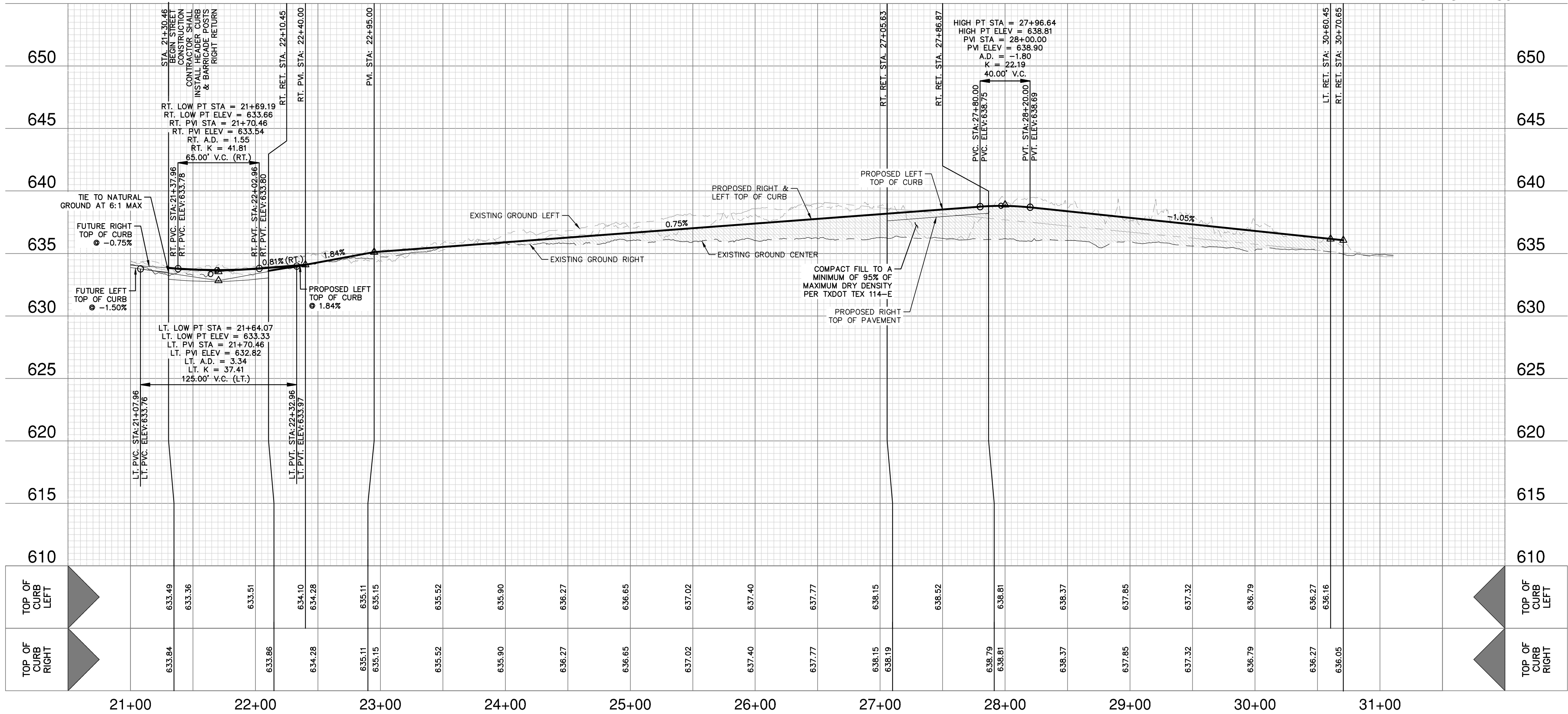
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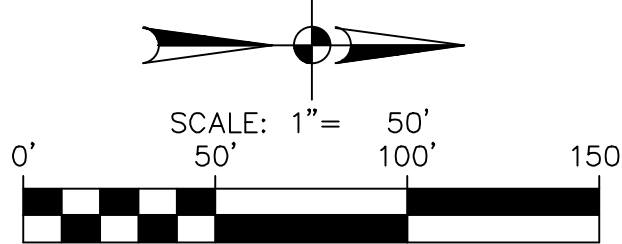
HAMRICK CIRCLE  
PLAN AND PROFILE (STA. 21+30.46 TO END)

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



STREET NOTES:

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STREET LEGEND

PROJECT LIMITS	---
MAINTAIN GUTTER	→
EXISTING CONTOUR	970
WHEELCHAIR RAMP	⊙WCR
CENTERLINE	CL
RADIUS POINT	RP
POINT OF CURVATURE	PC
POINT OF TANGENCY	PT
RETURN	RET
DRAINAGE FLOW ARROW	→
TOP OF CURB SPOT ELEVATION	[857.30]
PAVEMENT ELEVATION	857.00(P) ×
WASHOUT CROWN SECTION	
SIDEWALK (SEE SHEET C3.00 FOR DEVELOPER/HOMEBUILDER RESPONSIBILITY)	
DRIVEWAY	
GETCTV	GAS, ELECTRIC, TELEPHONE, CABLE TV
VNA	VEHICULAR NON-ACCESS
EASEMENT	ESMT
CLEAR VISION	CVSN

NO.	REVISION	DATE
1	REVISED WHEELCHAIR RAMPS	05/25/23



**PAPE-DAWSON**  
**ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

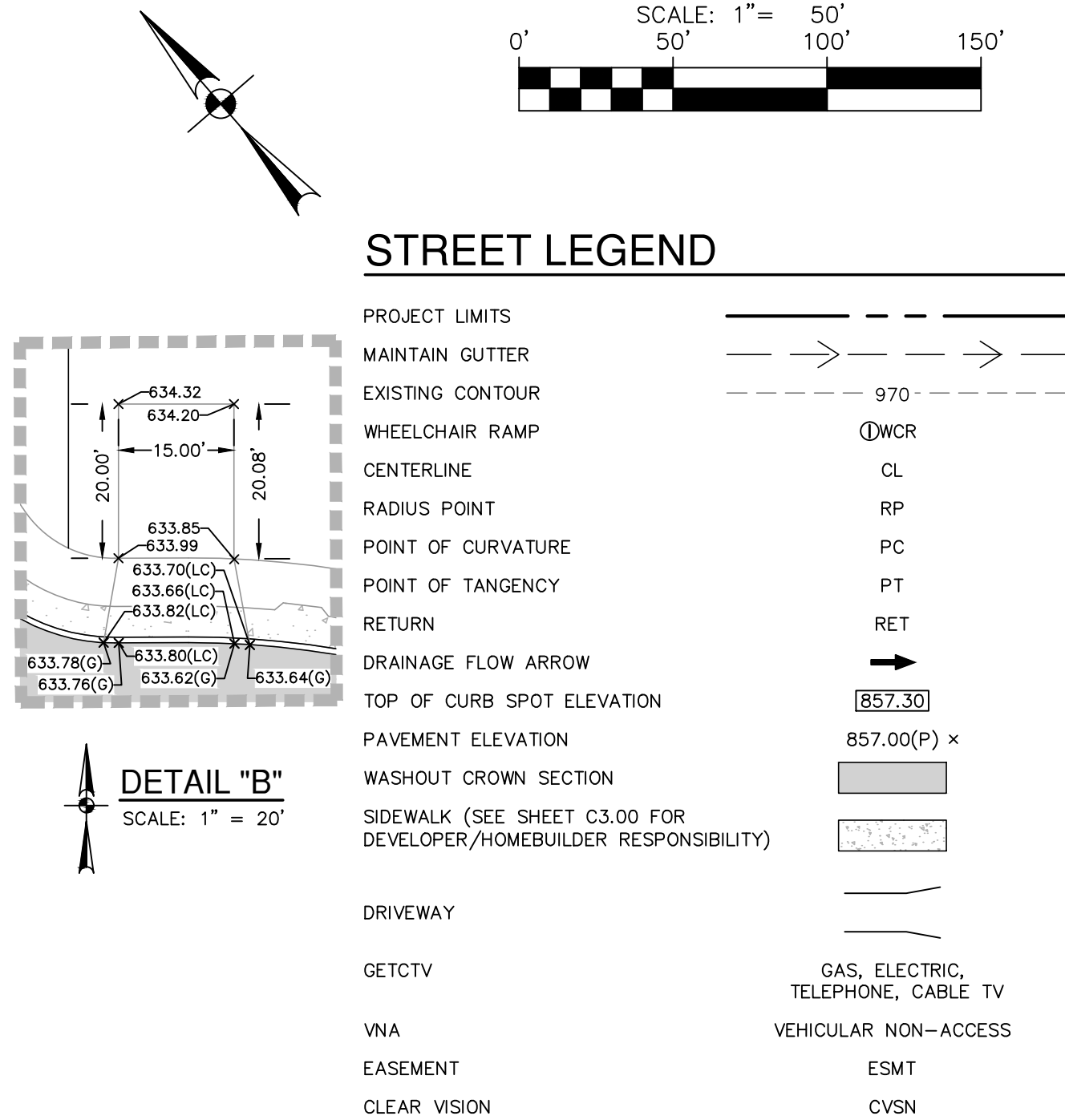
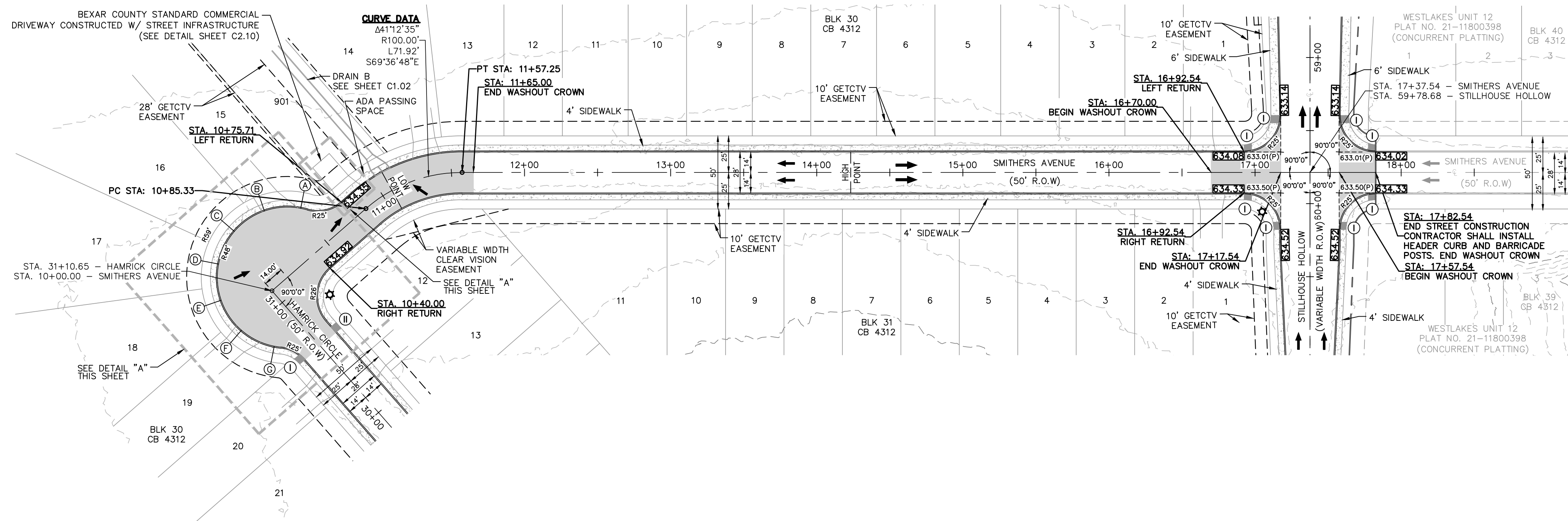
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
**HAMRICK CIRCLE**  
PLAN AND PROFILE (STA. 21+30.46 TO END)

PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MG
SHEET	C2.01



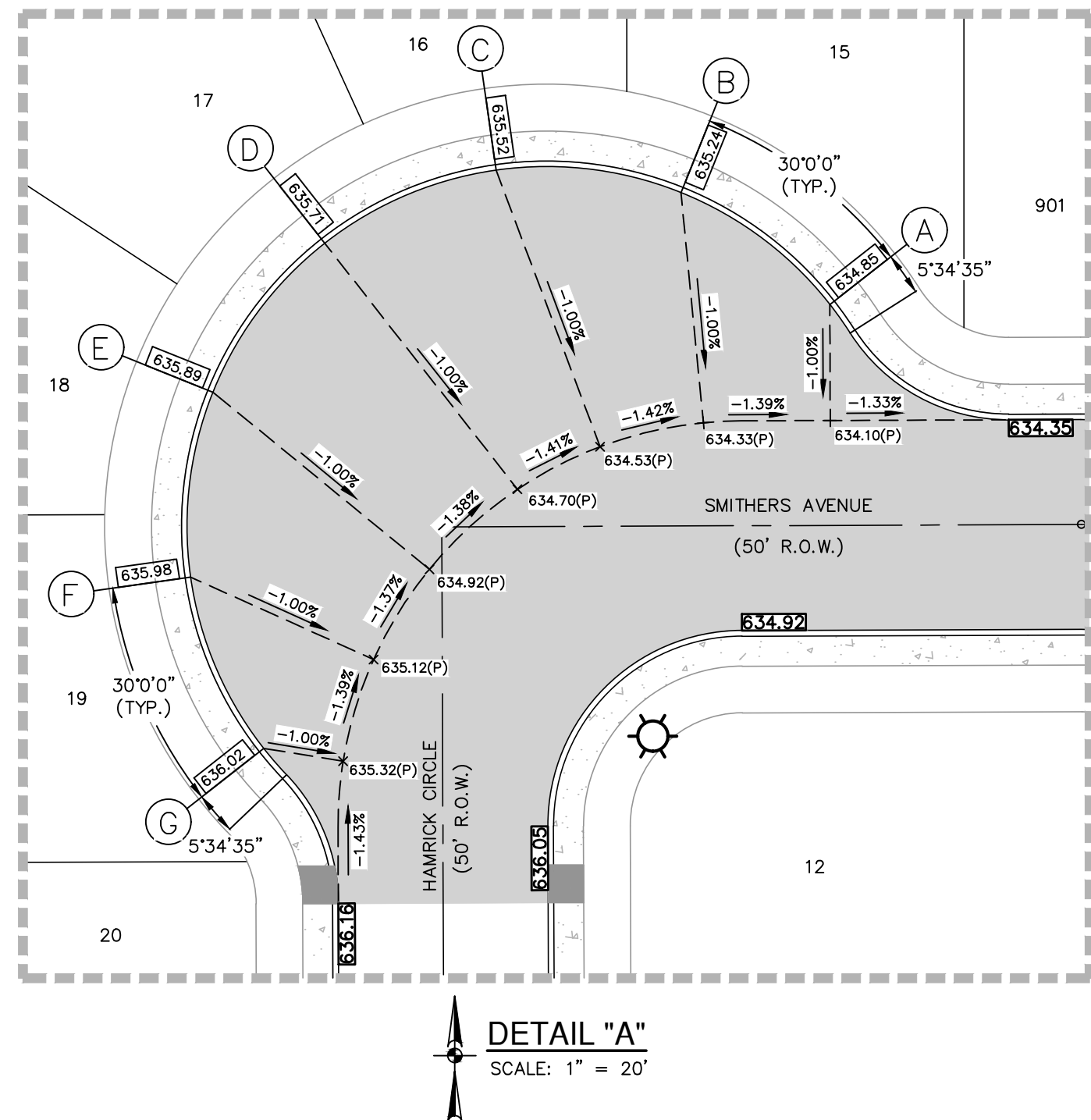
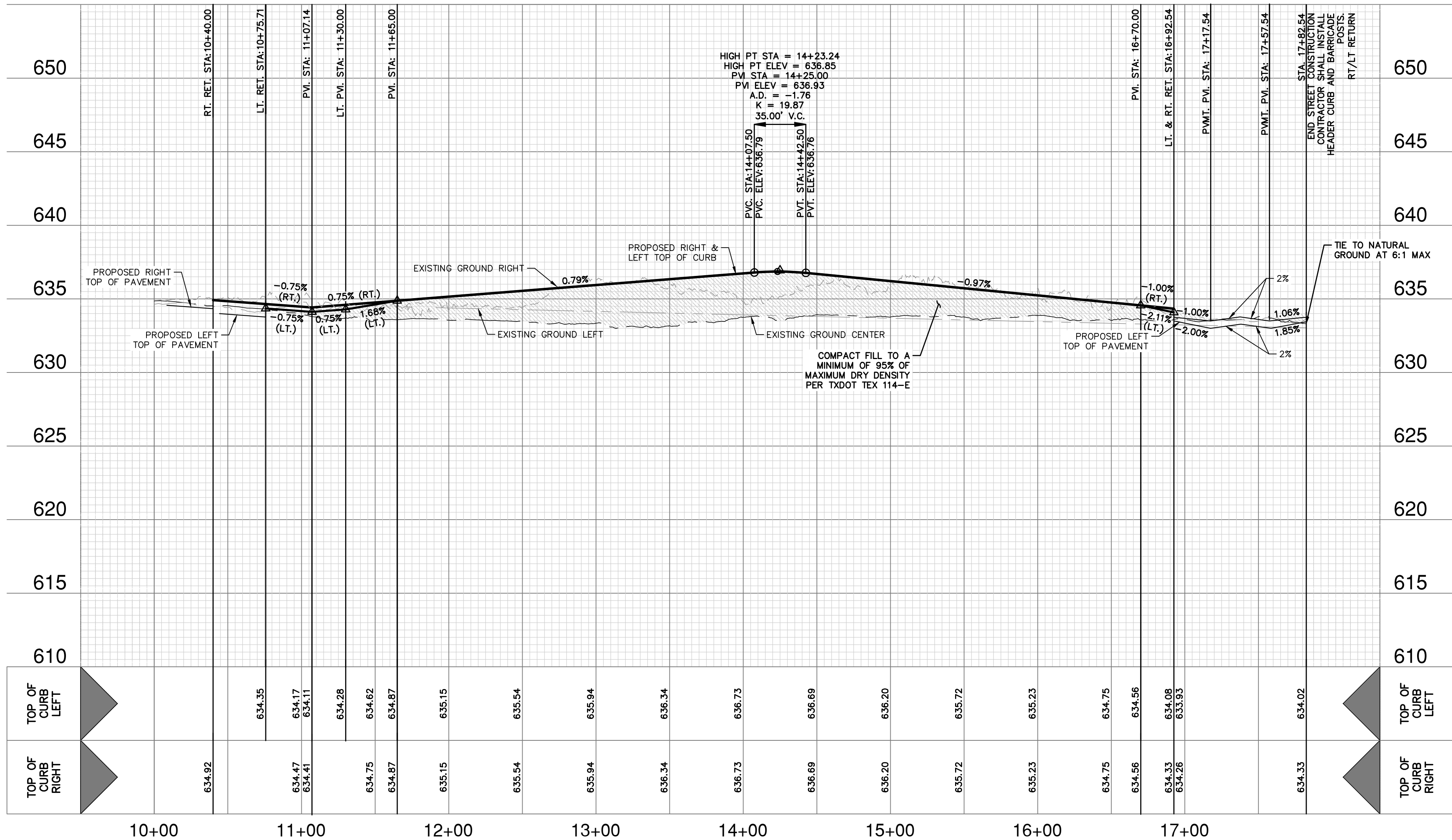
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SMITHERS AVENUE  
PLAN AND PROFILE (STA. 10+00.00 TO STA 17+82.54)

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



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**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS

SMITHERS AVENUE  
PLAN AND PROFILE (STA. 10+00.00 TO STA 17+82.54)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MGG  
SHEET C2.02



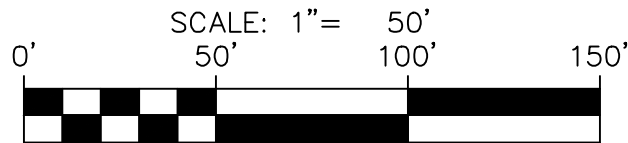
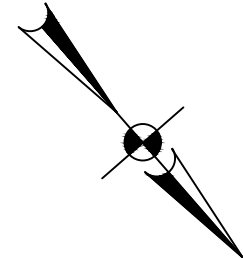
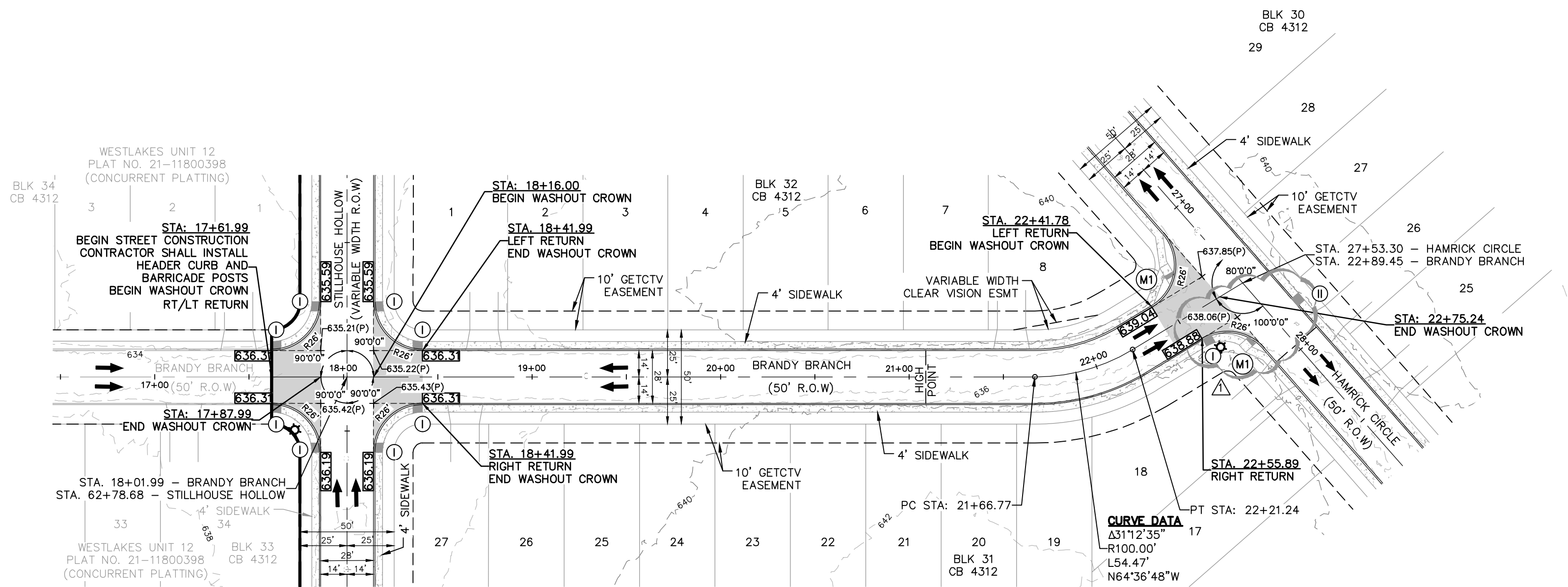
**PAPE-DAWSON**  
**ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

DATE	NO.	REVISION



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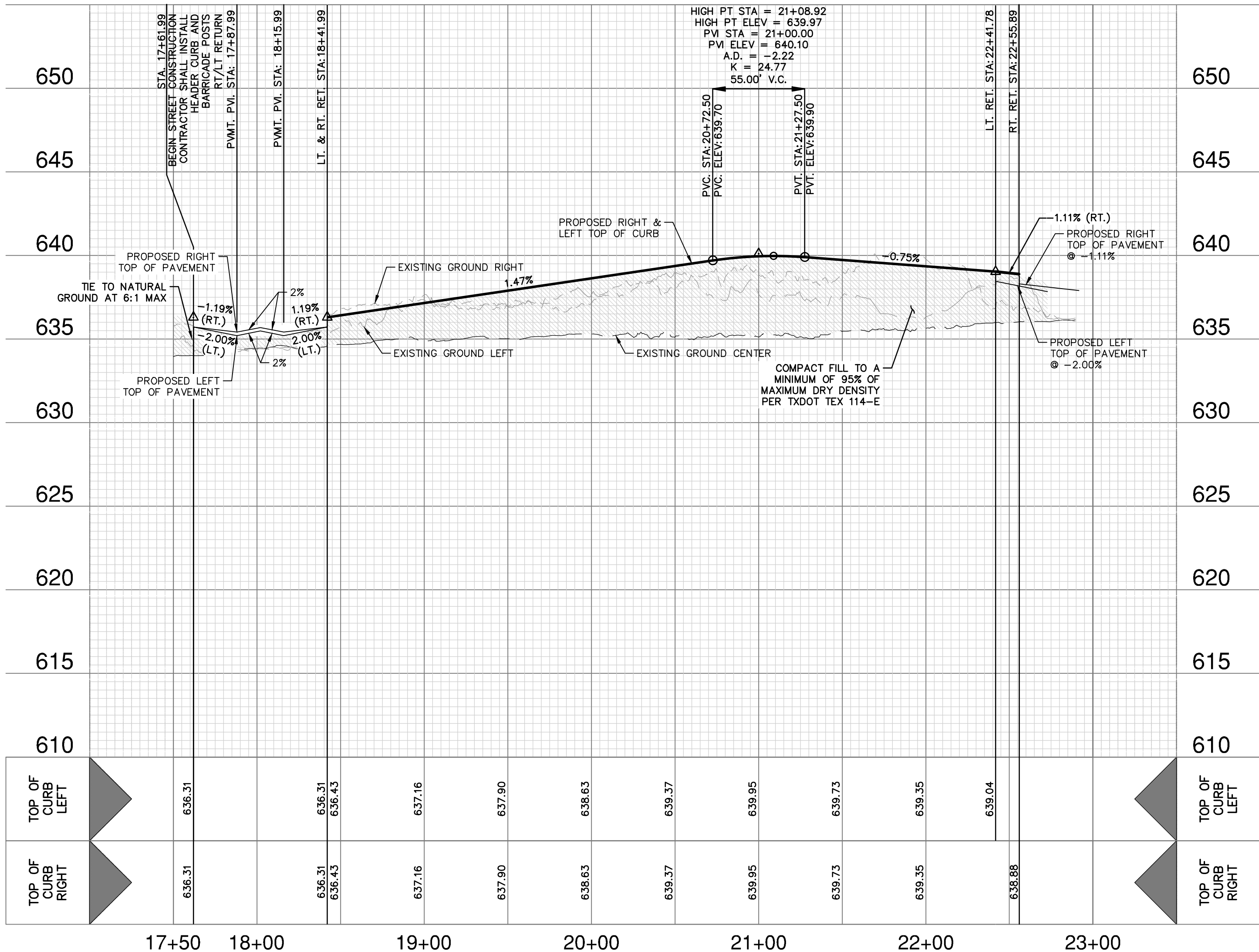
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### STREET LEGEND

PROJECT LIMITS	---
MAINTAIN GUTTER	→
EXISTING CONTOUR	- - - 970 - - -
WHEELCHAIR RAMP	⊙WCR
CENTERLINE	CL
RADIUS POINT	RP
POINT OF CURVATURE	PC
POINT OF TANGENCY	PT
RETURN	RET
DRAINAGE FLOW ARROW	→
TOP OF CURB SPOT ELEVATION	[857.30]
PAVEMENT ELEVATION	857.00(P) ×
WASHOUT CROWN SECTION	[Pattern]
SIDEWALK (SEE SHEET C3.00 FOR DEVELOPER/HOMEBUILDER RESPONSIBILITY)	[Pattern]
DRIVEWAY	---
GETCTV	GAS, ELECTRIC, TELEPHONE, CABLE TV
VNA	VEHICULAR NON-ACCESS
EASEMENT	ESMT
CLEAR VISION	CVSN

BRANDY BRANCH  
PLAN AND PROFILE (STA. 17+61.99 TO END)  
VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



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NO.	REVISION	DATE
1	REVISED WHEELCHAIR RAMPS	05/25/23

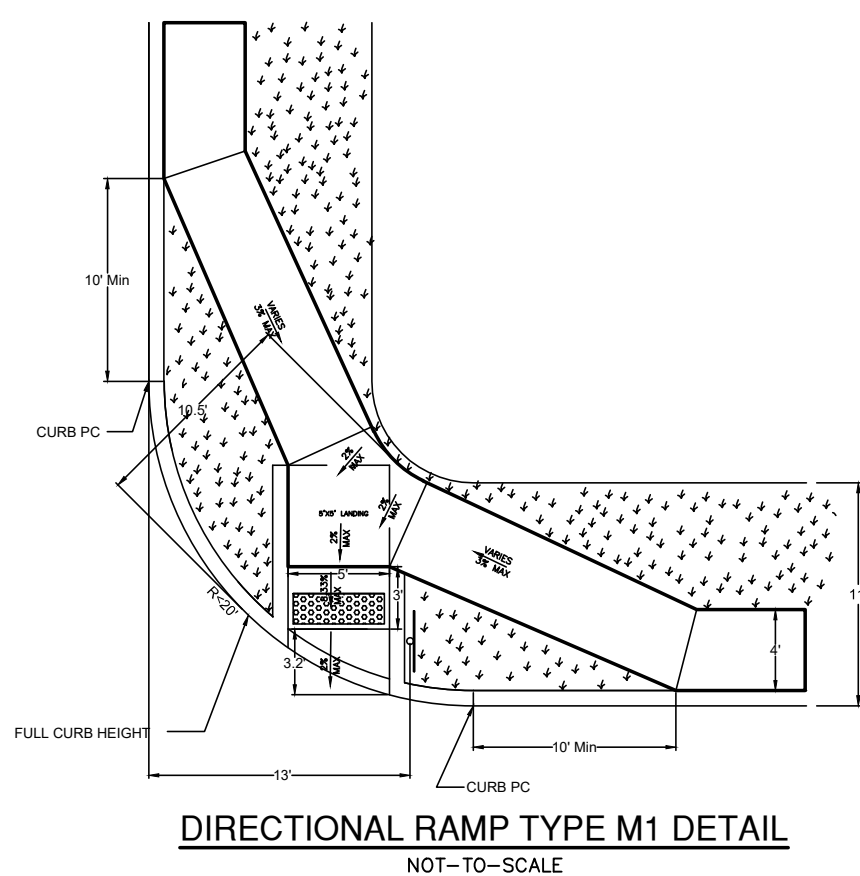
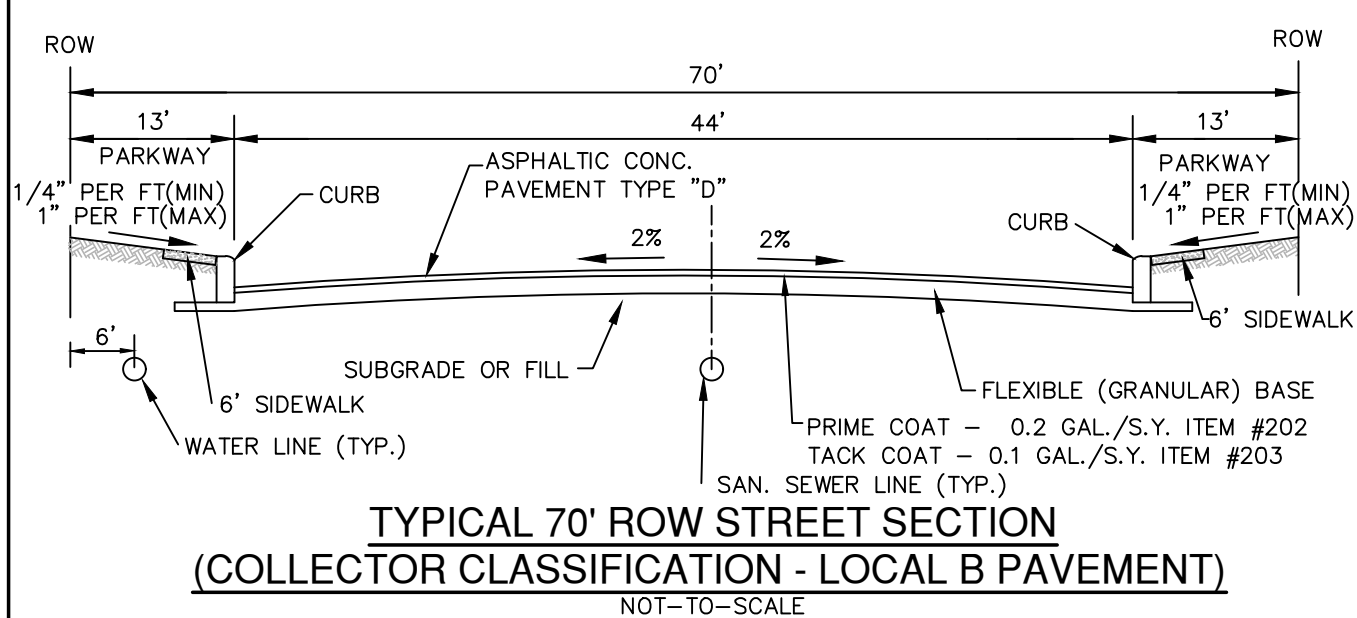
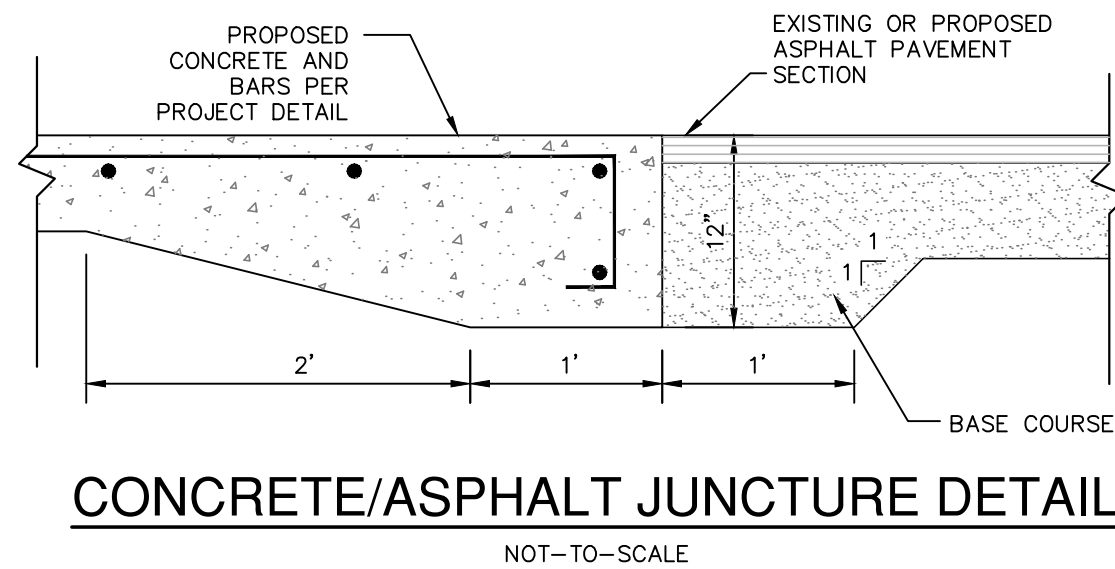
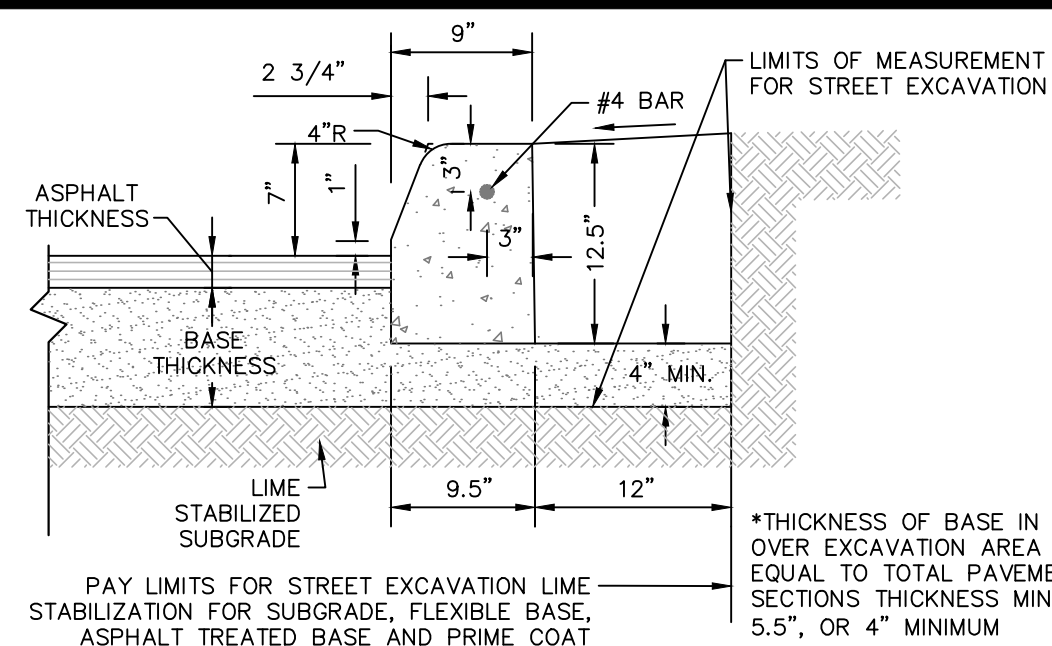
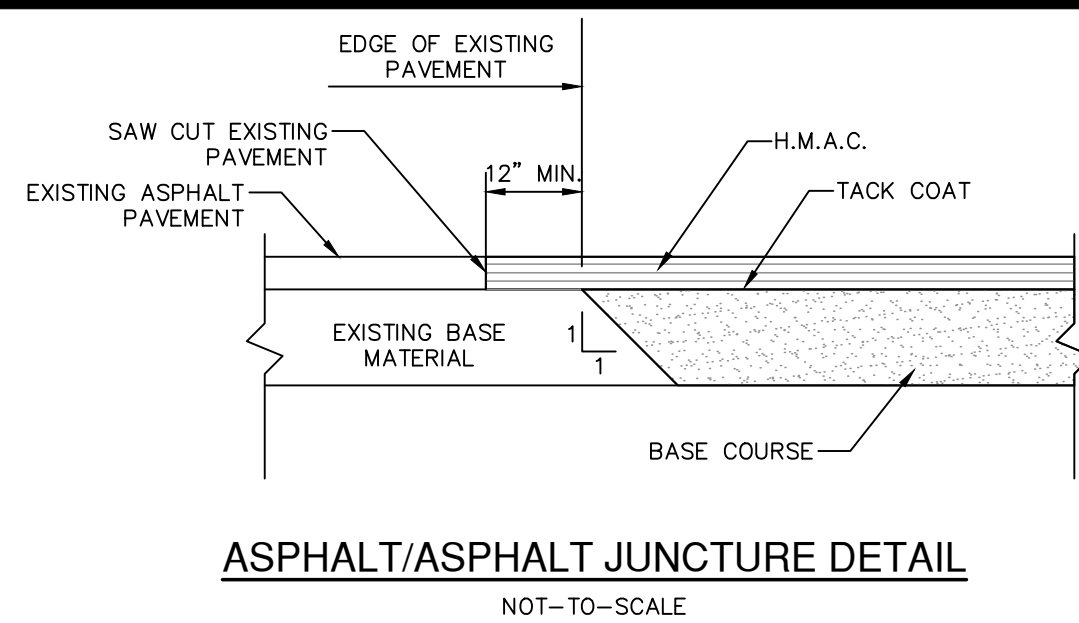
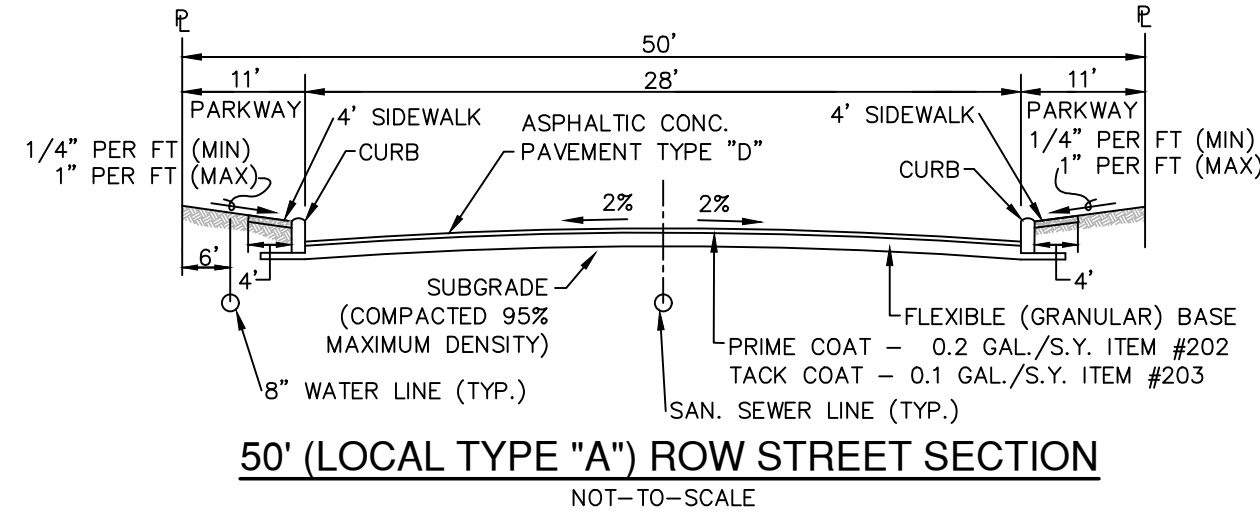
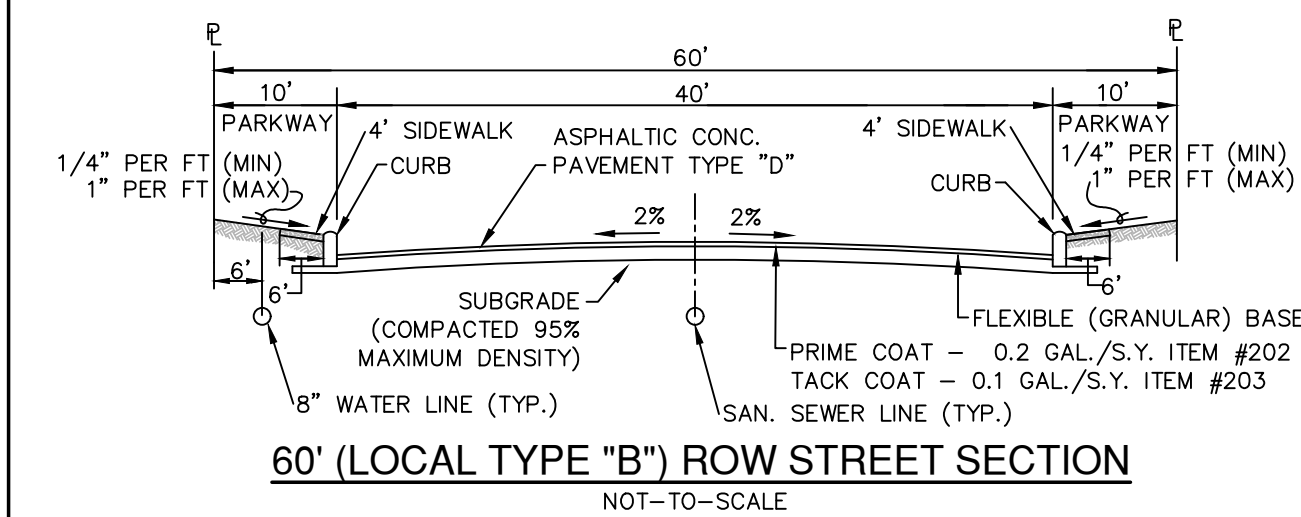


**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
**BRANDY BRANCH**  
PLAN AND PROFILE (STA. 17+61.99 TO END)

PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MG
SHEET	C2.03





PAVEMENT SECTION DETAIL								
STREET NAME	STATION	TYPE "D" HMAC	TYPE "C" HMAC	CRUSHED LIMESTONE BASE	STABILIZED SUBGRADE	GEOGRID (TENSAR TRIAX TX5)	CBR	STRUCTURAL NUMBER
STILLHOUSE HOLLOW (LOCAL B DEPTH)	58+33.68 TO 61+53.68	1.5"	2.5"	18.5"	8"	NO	2.0	4.99
STILLHOUSE HOLLOW (LOCAL A DEPTH)	61+53.68 TO 65+64.68	2"		11"	6"	NO	2.0	2.90
SMITHERS AVENUE	10+00.00 TO 17+17.54 17+57.54 TO 17+82.54	2"		11"	6"	NO	2.0	2.90
SMITHERS AVENUE (LOCAL B DEPTH)	17+17.54 TO 17+57.54	1.5"	2.5"	18.5"	8"	NO	2.0	4.99
BRANDY BRANCH	17+61.99 TO 17+87.99 18+15.99 TO 22+75.23	2"		11"	6"	NO	2.0	2.90
HAMRICK CIRCLE	21+30.46 TO 31+10.65	2"		11"	6"	NO	2.0	2.90

GENERAL NOTES:

1. CONTRACTOR SHALL REFERENCE THE PROJECT PAVEMENT DESIGN REPORT **S221068** PREPARED BY **INTEC** DATED **FEBRUARY 26, 2022**.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEER TO VERIFY THE SUB GRADE CONDITION PRIOR TO PLACING ANY BASE MATERIAL. GEOTECHNICAL ENGINEER SHALL DETERMINE THE SUB GRADE CONDITION AND IF LIME STABILIZATION IS REQUIRED.
3. GEOTECHNICAL ENGINEER SHOULD VERIFY THE STREET SUBGRADE AT THE TIME OF CONSTRUCTION PRIOR TO PLACEMENT OF AGGREGATE BASE.
4. THE FLEXIBLE BASE COURSE SHOULD BE CRUSHED LIMESTONE CONFORMING TO TxDOT STANDARD SPECIFICATIONS, ITEM 247, TYPE A, GRADES 1 OR 2.
5. THE MOISTURE CONTENT OF THE FILL SHOULD BE MAINTAINED WITHIN THE RANGE OF OPTIMUM WATER CONTENT TO 3 PERCENTAGE POINTS ABOVE THE OPTIMUM WATER CONTENT UNTIL PERMANENTLY COVERED.
6. IN THE EVENT THAT THE CLAY FILL USED IS DIFFERENT THAN THE EXISTING SUBGRADE, THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT COULD BE INVALIDATED AND THE DESIGN ENGINEER MUST BE CONSULTED TO DETERMINE IF ADDITIONAL CRP TESTING AND THICKER PAVEMENT SECTIONS ARE REQUIRED.
7. WHERE PAVEMENT SUBGRADE IS LOCATED WITHIN 2- FEET OF THE EXISTING ROAD SURFACE (STRATUM 1 CLAYS), MOISTURE CONDITIONED SUBGRADE WILL BE REQUIRED. GEOTECHNICAL ENGINEER SHOULD VERIFY THE STREET SUBGRADE AT THE TIME OF CONSTRUCTION PRIOR TO PLACEMENT OF AGGREGATE BASE TO DETERMINE WHEN THE MOISTURE CONDITIONED SUBGRADE IS NEEDED. REFERENCE GEOTECHNICAL ENGINEERING REPORT FOR MORE INFORMATION.
8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL MATERIAL TESTING WITH THE PROJECT GEOTECHNICAL ENGINEER. TESTING SHALL BE PAID FOR BY THE OWNER.
9. FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CRP VALUE OF 2 AND A MAXIMUM PI OF 35. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME OR CEMENT APPLICATION RATES SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES. CONTRACTOR TO VERIFY EXACT SPECIFICATIONS WITH PROJECT GEOTECHNICAL ENGINEERING REPORT.
10. A BEVAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN THE BEVAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

STREET SUBGRADE NOTES:

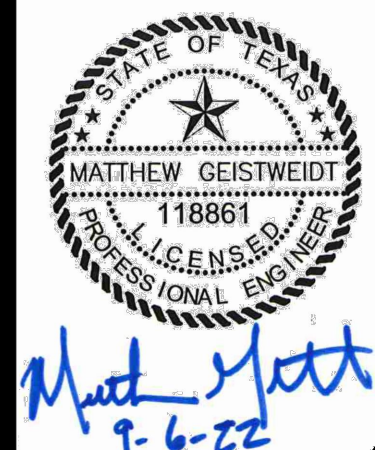
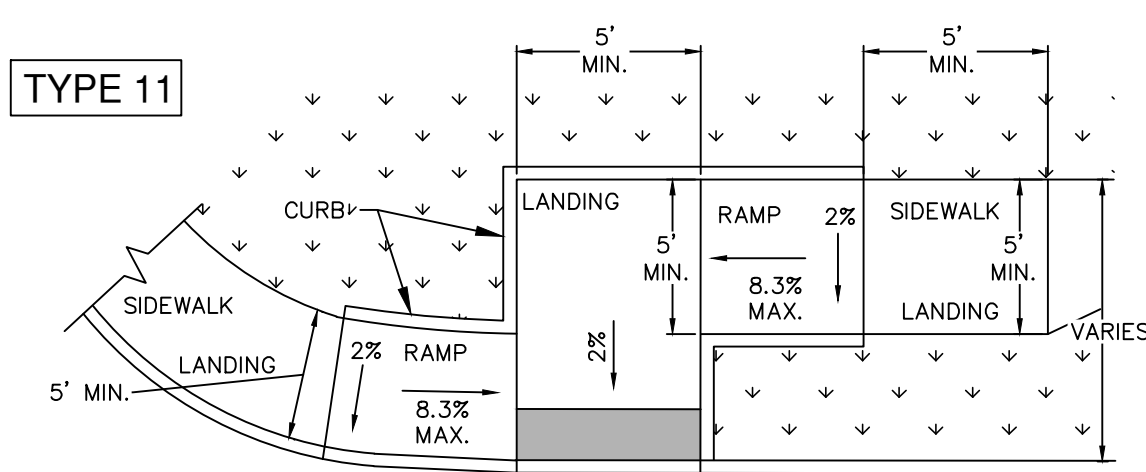
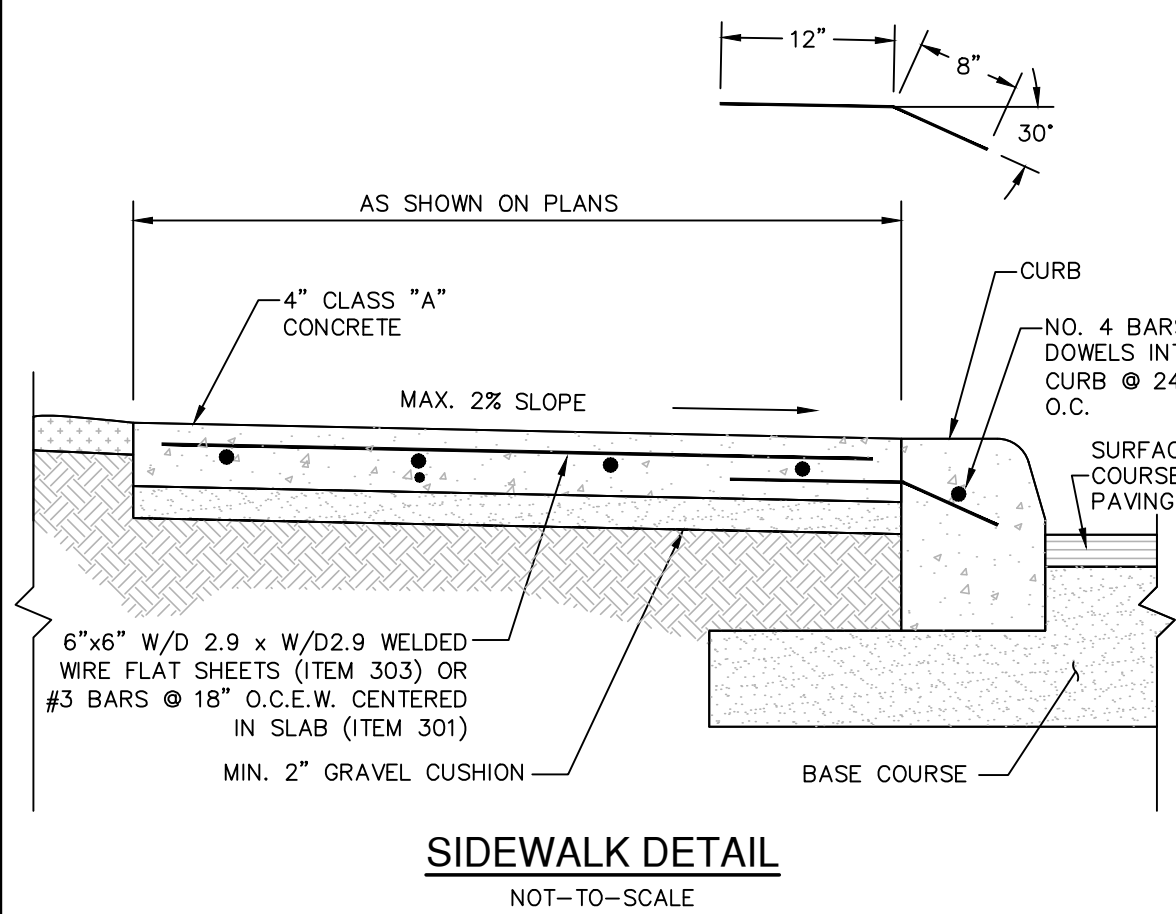
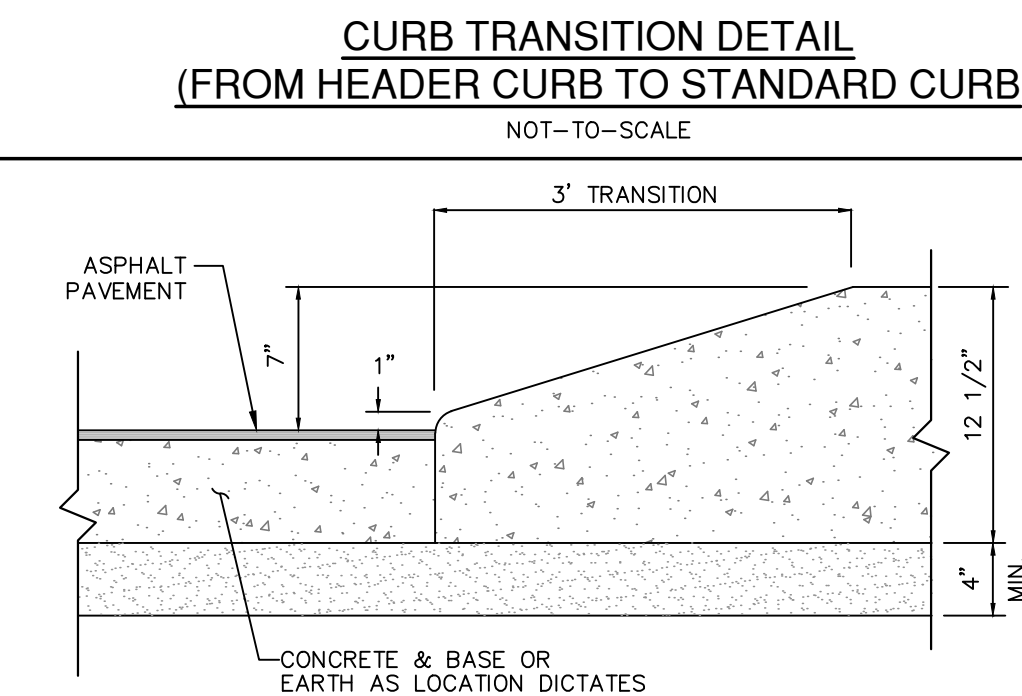
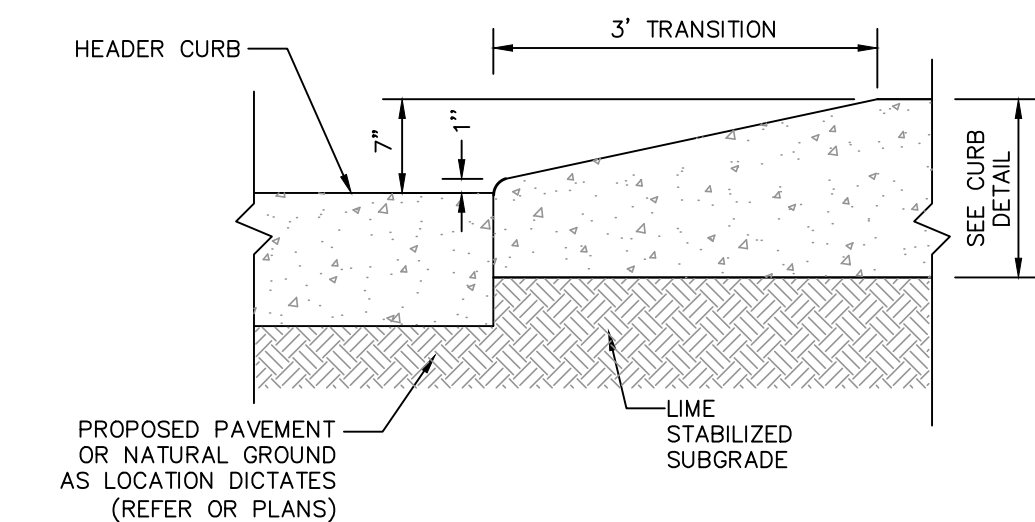
1. IF THE STREET SUBGRADE PLASTICITY INDEX VALUE IS GREATER THAN 20, SUBGRADE STABILIZATION IS NEEDED AS PER CITY OF SAN ANTONIO REQUIREMENTS.
2. IF THE SUBGRADE PLASTICITY INDEX VALUE IS 20 OR LESS, SUBGRADE STABILIZATION IS NOT NEEDED. THE SUBGRADE SHOULD BE MOISTURE CONDITIONED (COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT A MINIMUM MOISTURE CONTENT OF OPTIMUM PLUS 2 PERCENT (TEXT14E)).
3. THE SUBGRADE SHOULD BE STABILIZED USING 6.0 PERCENT LIME TO A DEPTH OF 6 AND 8 INCHES AS NOTED ABOVE.
4. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS GREATER THAN 3000 PPM, AN ALTERNATE PROCEDURE / RECOMMENDATION WILL BE NEEDED.
5. LIME APPLICATION RATE OF 30.0 LBS PER SQ YARD FOR 6 INCH STABILIZATION DEPTH AND 40.0 LBS PER SQ YARD FOR 8 INCH STABILIZATION DEPTH IS RECOMMENDED.
6. APPROVED FILL MATERIAL SHOULD BE USED TO RAISE THE GRADE. THE FILL SHOULD BE FREE OF DESTRUCTIVE MATERIAL WITH A MINIMUM PL VALUE OF 2/0 AND A MAXIMUM PI OF 35. LIME APPLICATION RATE SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USING THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.
7. THE SUBGRADE, PRIOR TO PLACEMENT OF FILL, SHOULD BE PROOF ROLLED TO IDENTIFY WEAK AREAS. ANY IDENTIFIED WEAK AREAS SHOULD BE RECOMPACTED.

LIME NOTES:

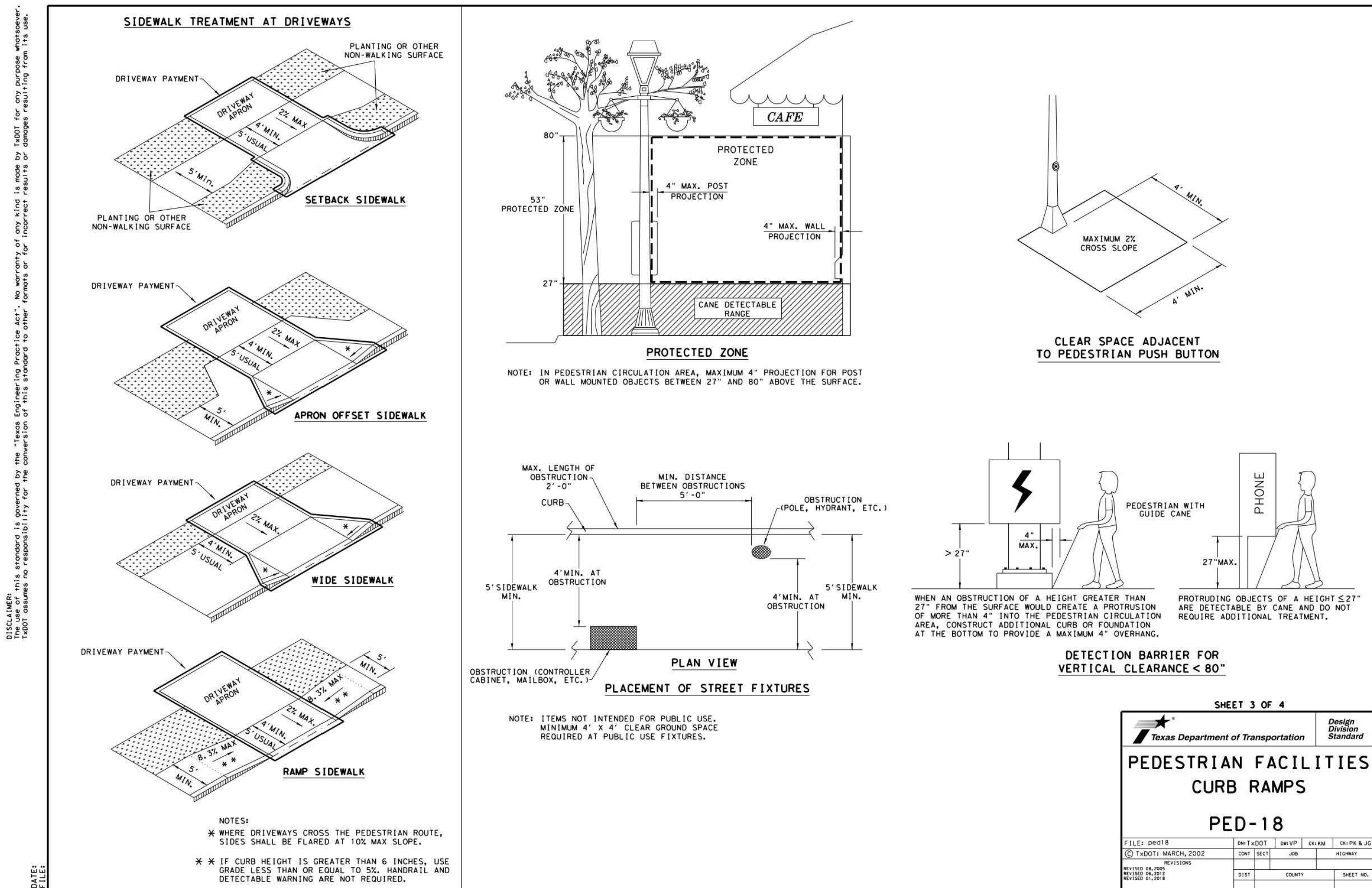
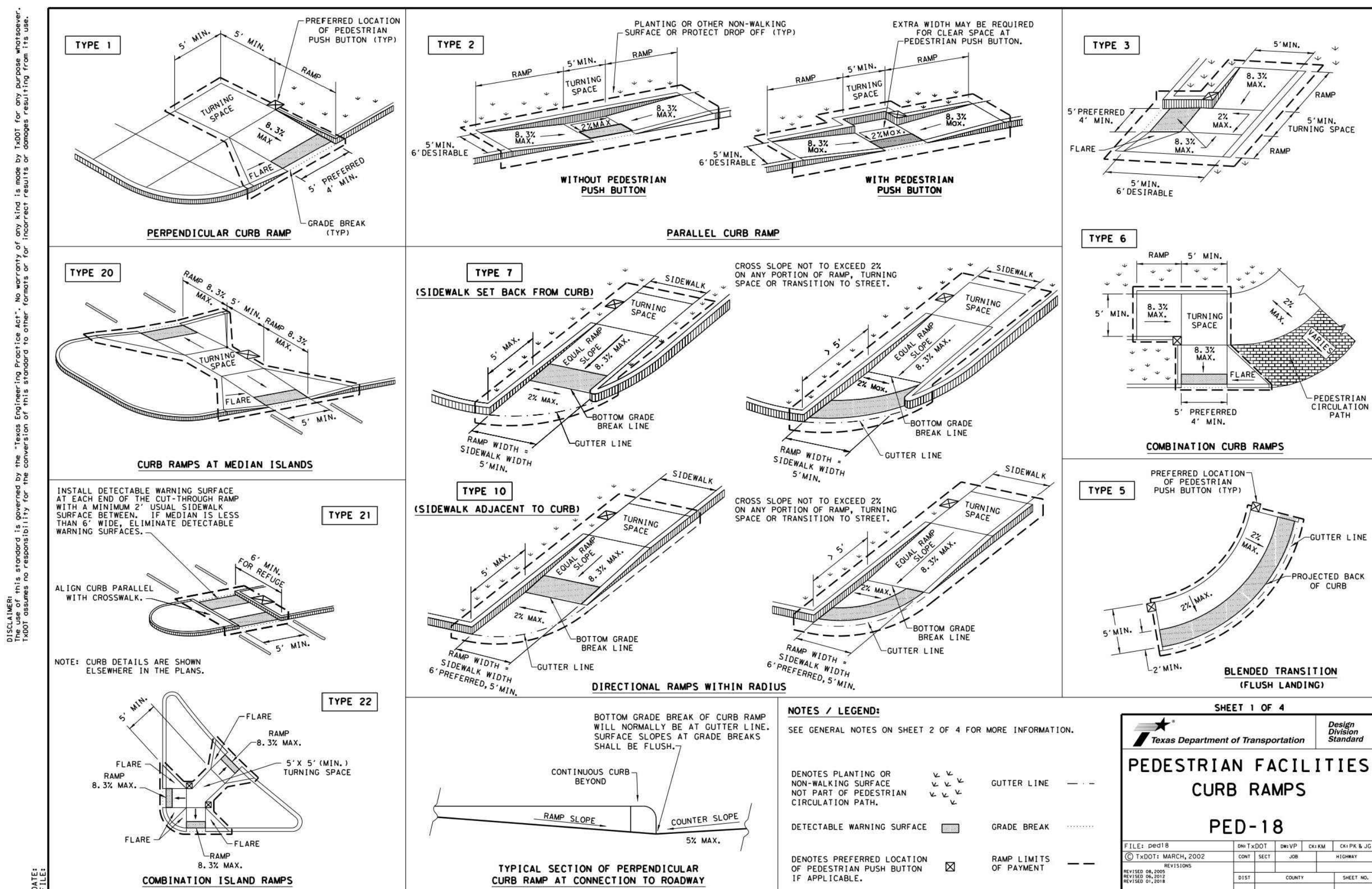
FOR LIME STABILIZATION CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED ON THE FIELD:

1. AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2-3) DAYS. MAINTAIN MOISTURE DURING MELLOWING.

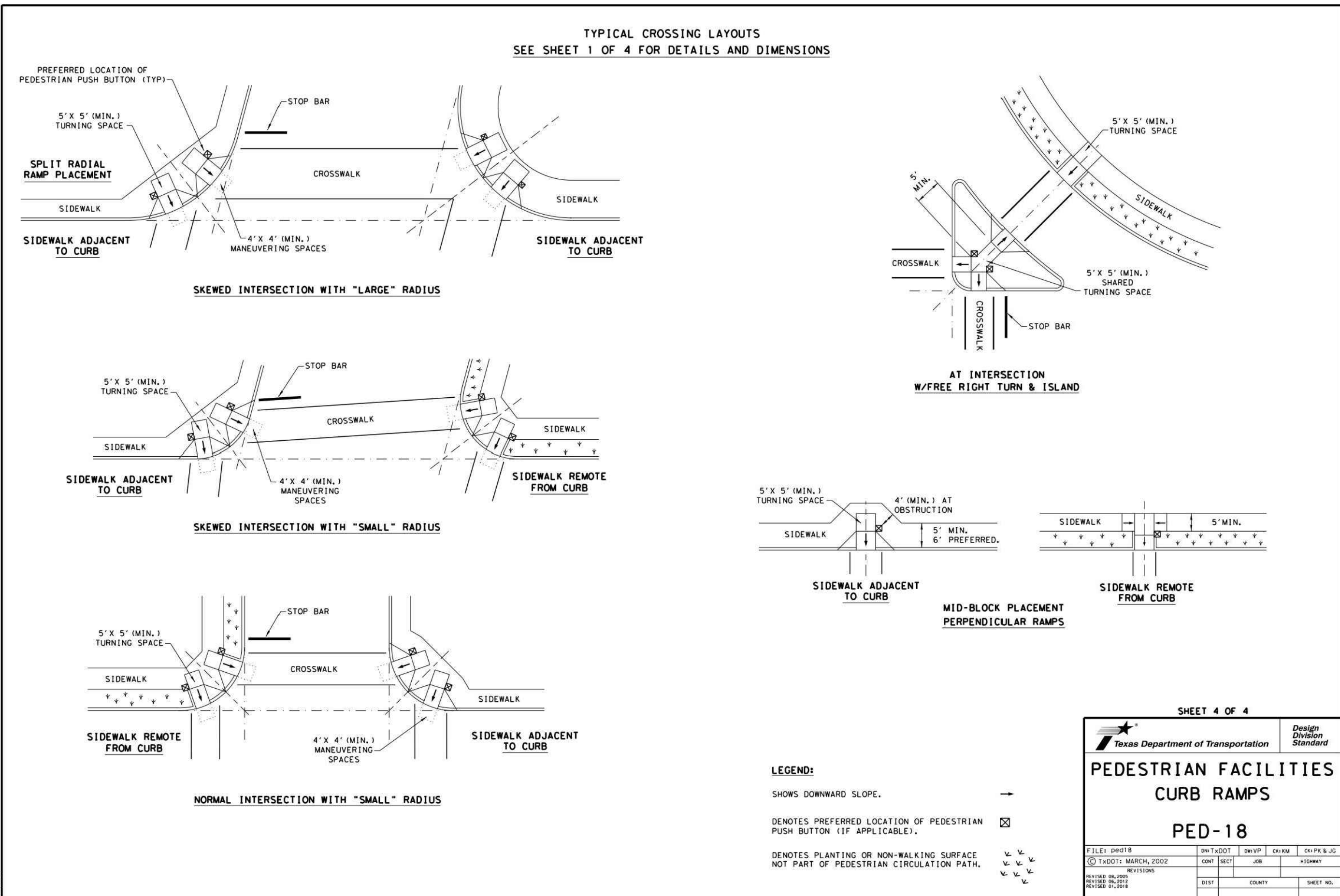
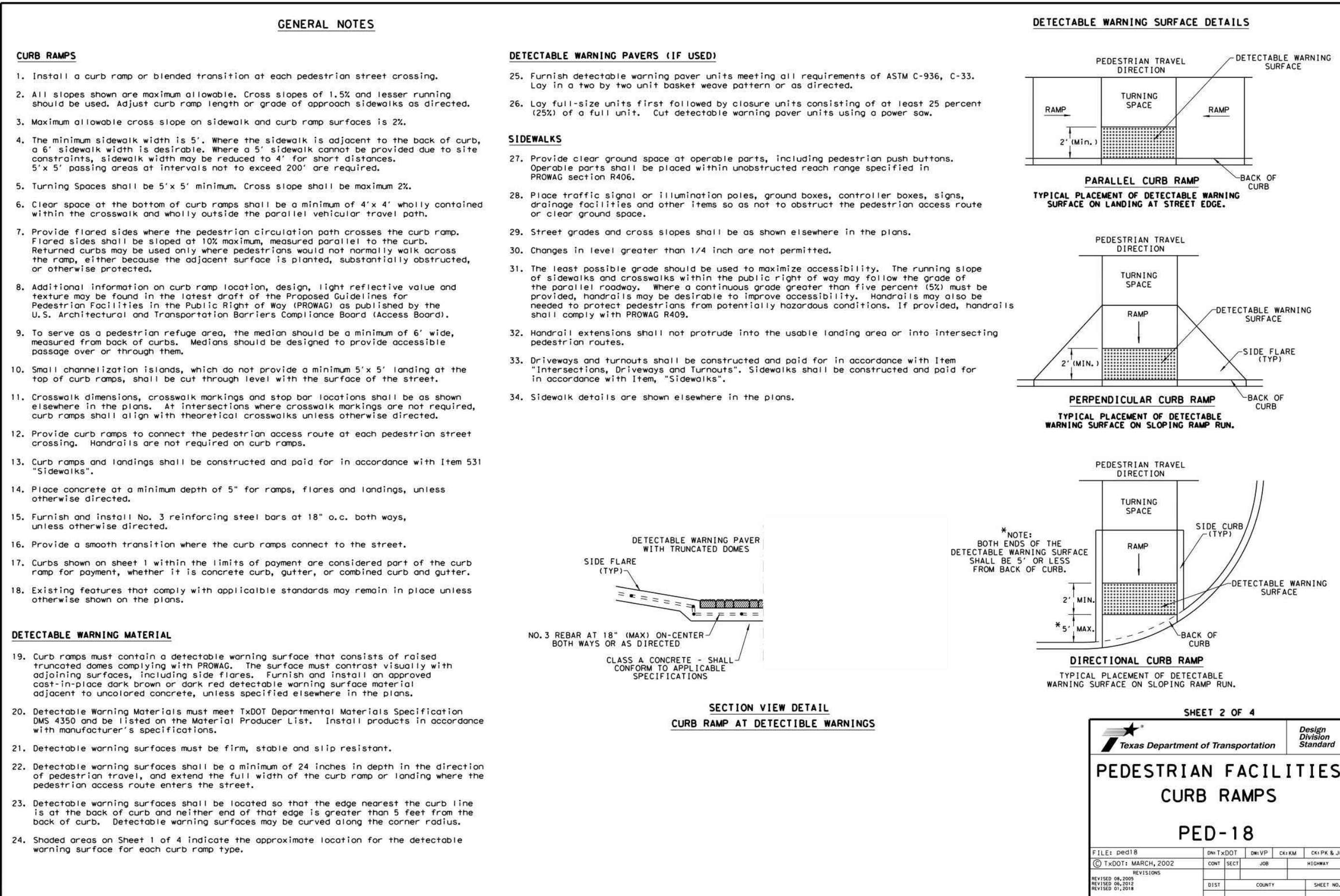
2. AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SKALING AGGREGATES RETAINED ON THE 1/2 INCH SIEVE FROM THE SAMPLE):
  - MINIMUM PASSING 1 1/2" SIEVE 100
  - MINIMUM PASSING 3/4" SIEVE 85
  - MINIMUM PASSING NO. 4 SIEVE 60
3. SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD), IN THE LABORATORY, MOULD SPECIMENS TO 95% OF MDD AT OPTIMUM MOISTURE CONTENT AND VERIFY UCS TO BE AT LEAST 160 PSI IN ACCORDANCE WITH PROCEDURE OUTLINED IN THE BEAR COUNTY FLEXIBLE PAVEMENT DESIGN CRITERIA GUIDE FOR MIXTURE DESIGN.
4. COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED).
5. CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
6. VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN +/- 1.0 INCH.



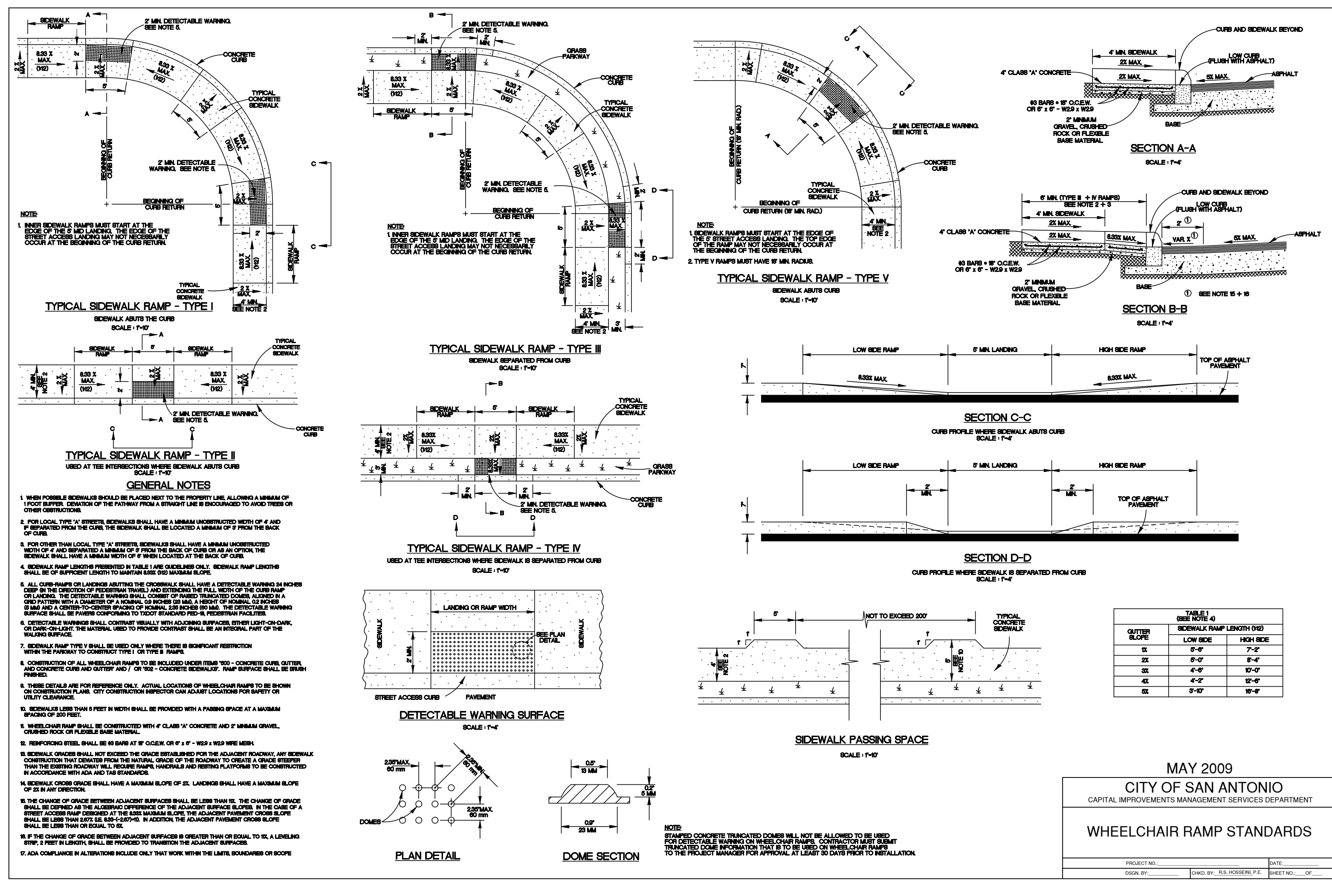
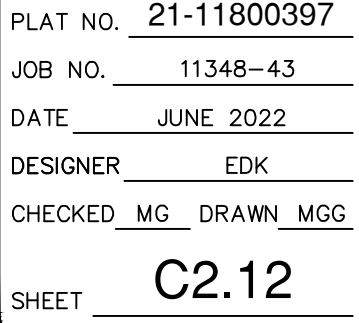




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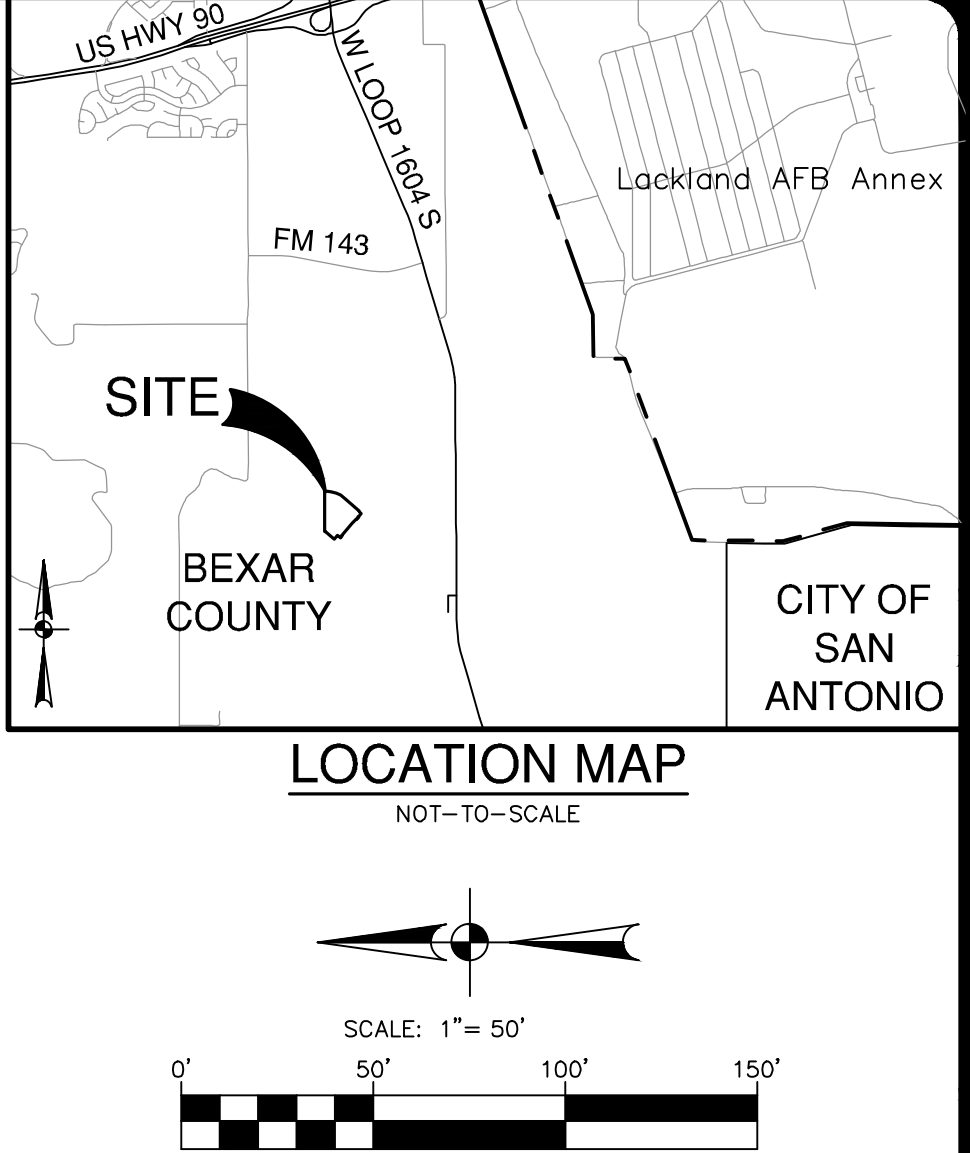
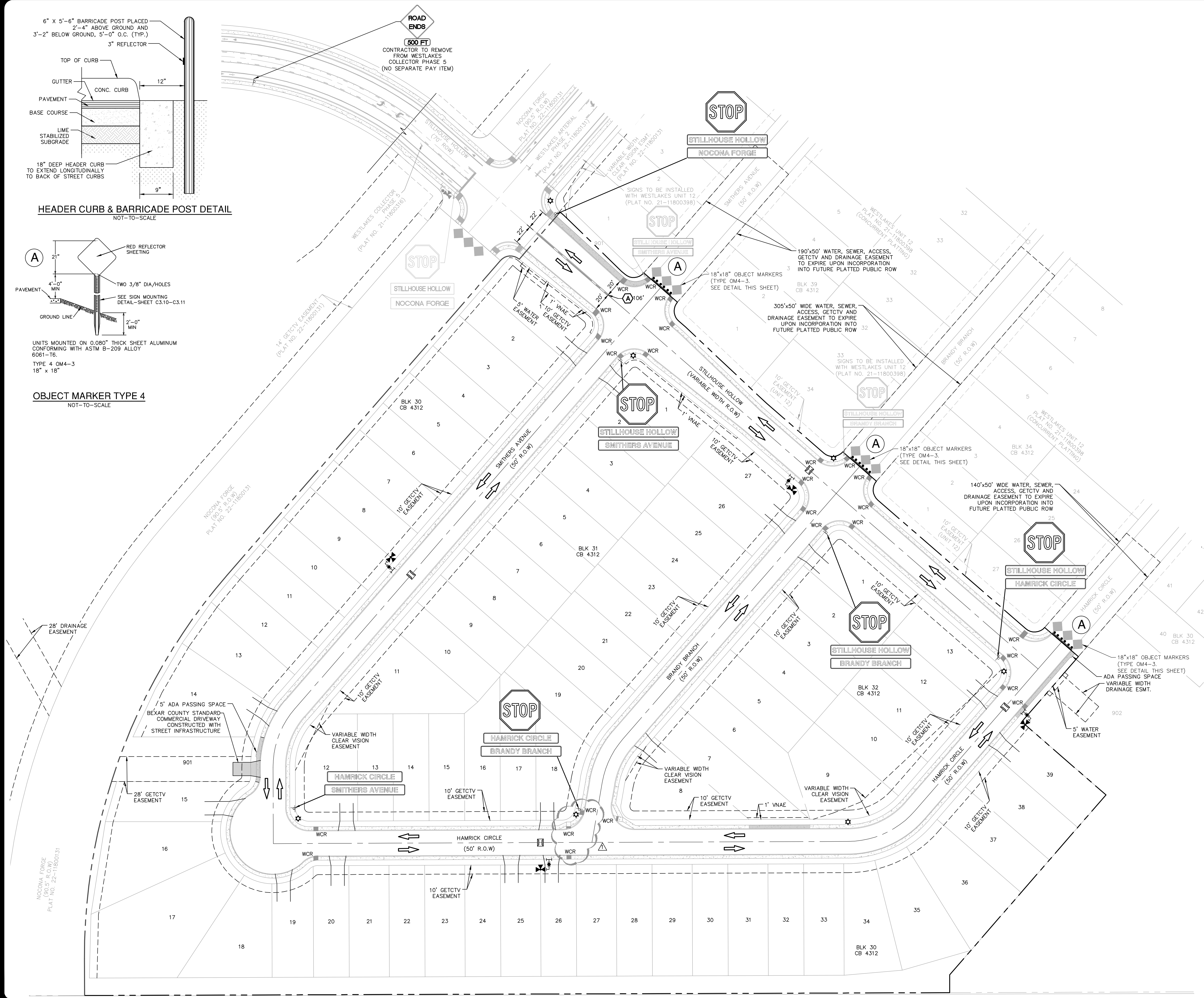








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File: P:\12\1248\1248.dwg User: B. McGarrett  
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SYMBOL	ITEM NUMBER
	UNIT BOUNDARY
	PROPOSED DRIVEWAY
	TRAFFIC FLOW ARROW
	SIDEWALK (HOMEBUILDER RESPONSIBILITY)
	SIDEWALK (DEVELOPER RESPONSIBILITY)
	TYPE II BLUE RAISED PAVEMENT MARKERS - NO SEPARATE PAY ITEM (N.T.S.)
	STREET SIGN
	R1-1 30"x30"
	531.57
	531.3

DATE	05/25/23
REVISION	
NO.	
REVISED	
WHEELCHAIR RAMPS	

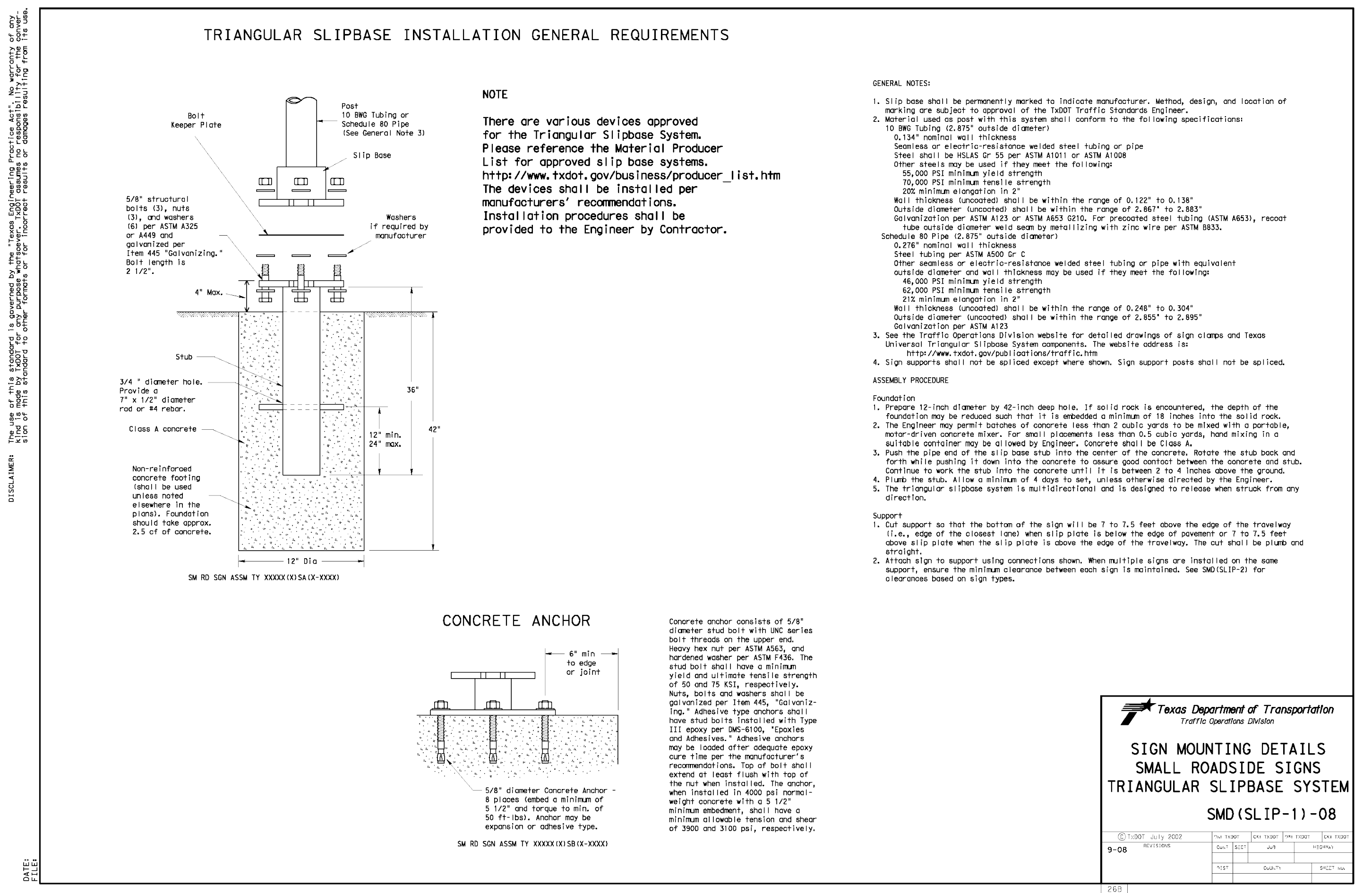
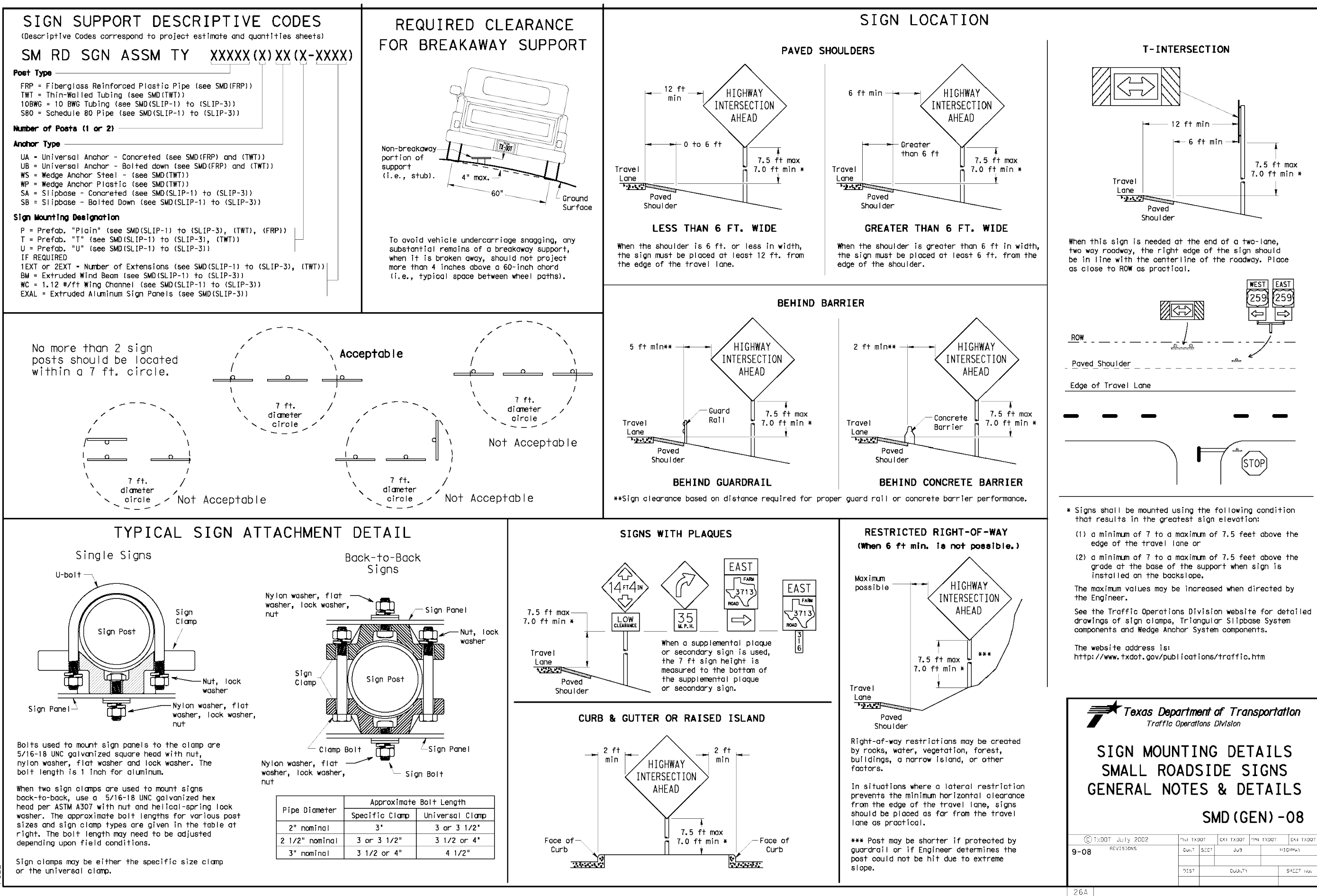
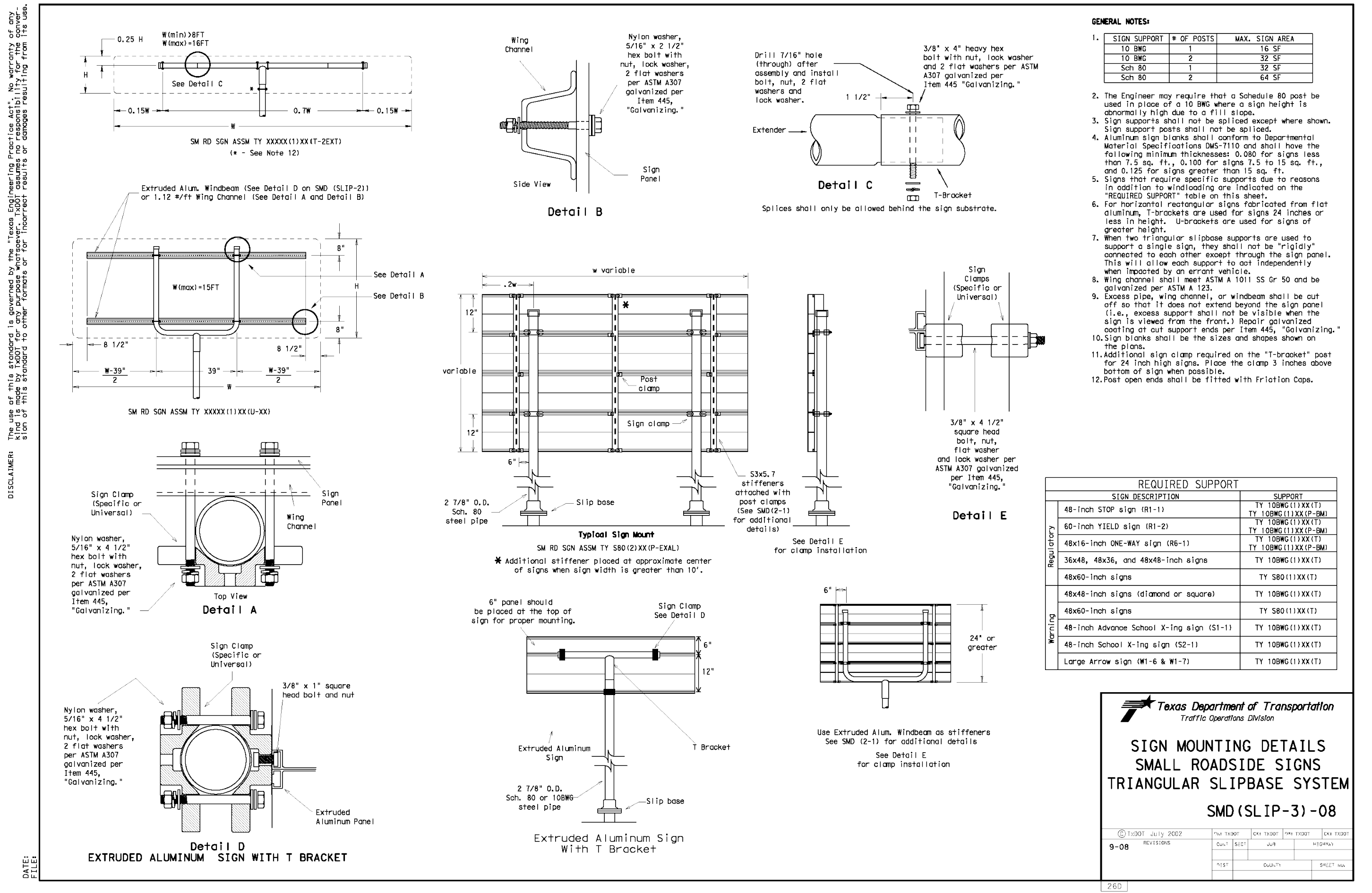
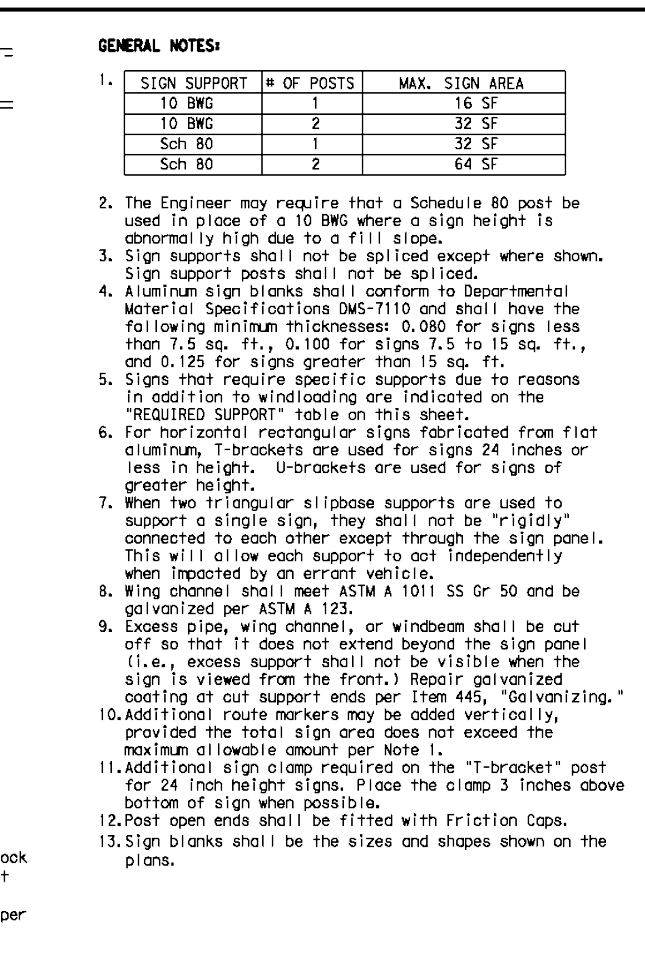
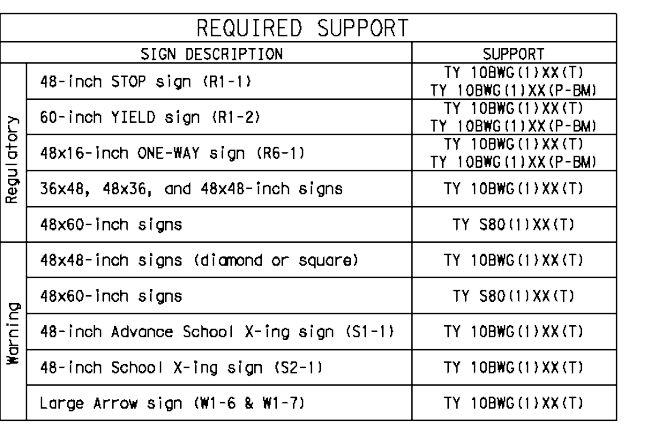
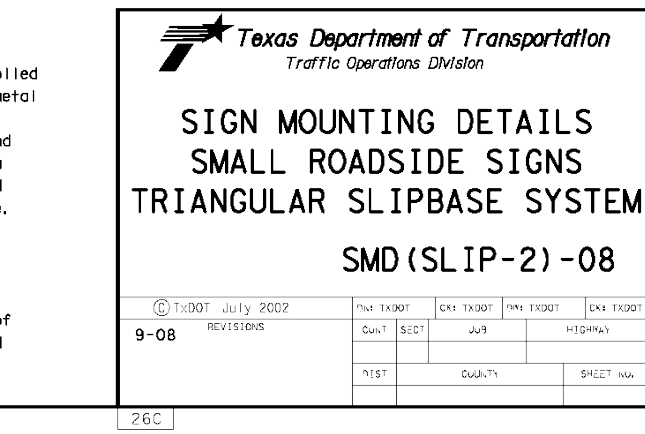
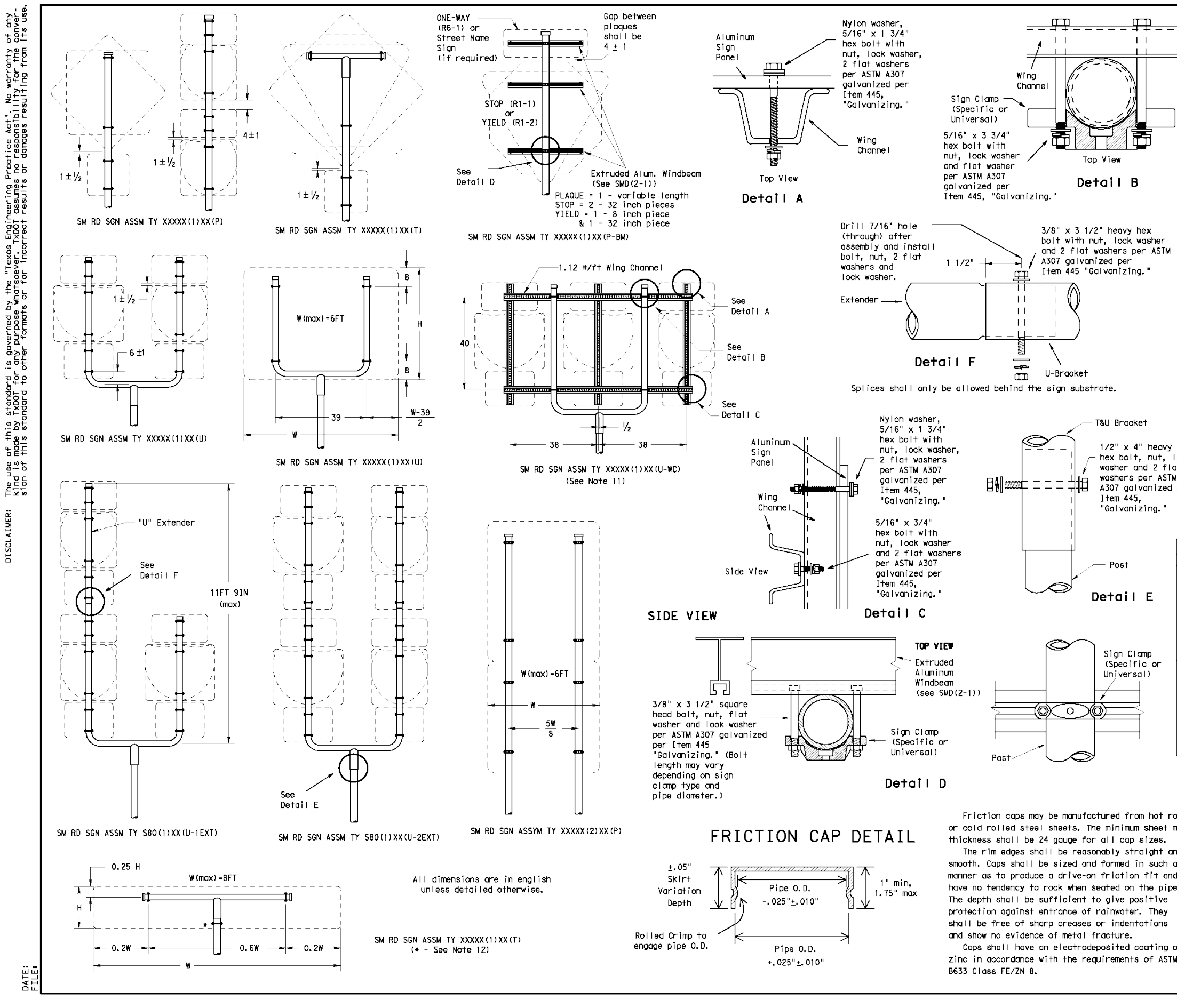
STATE OF TEXAS  
MATTHEW GEISTWEIT  
118861  
LICENSED PROFESSIONAL ENGINEER  
5/25/2023

**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

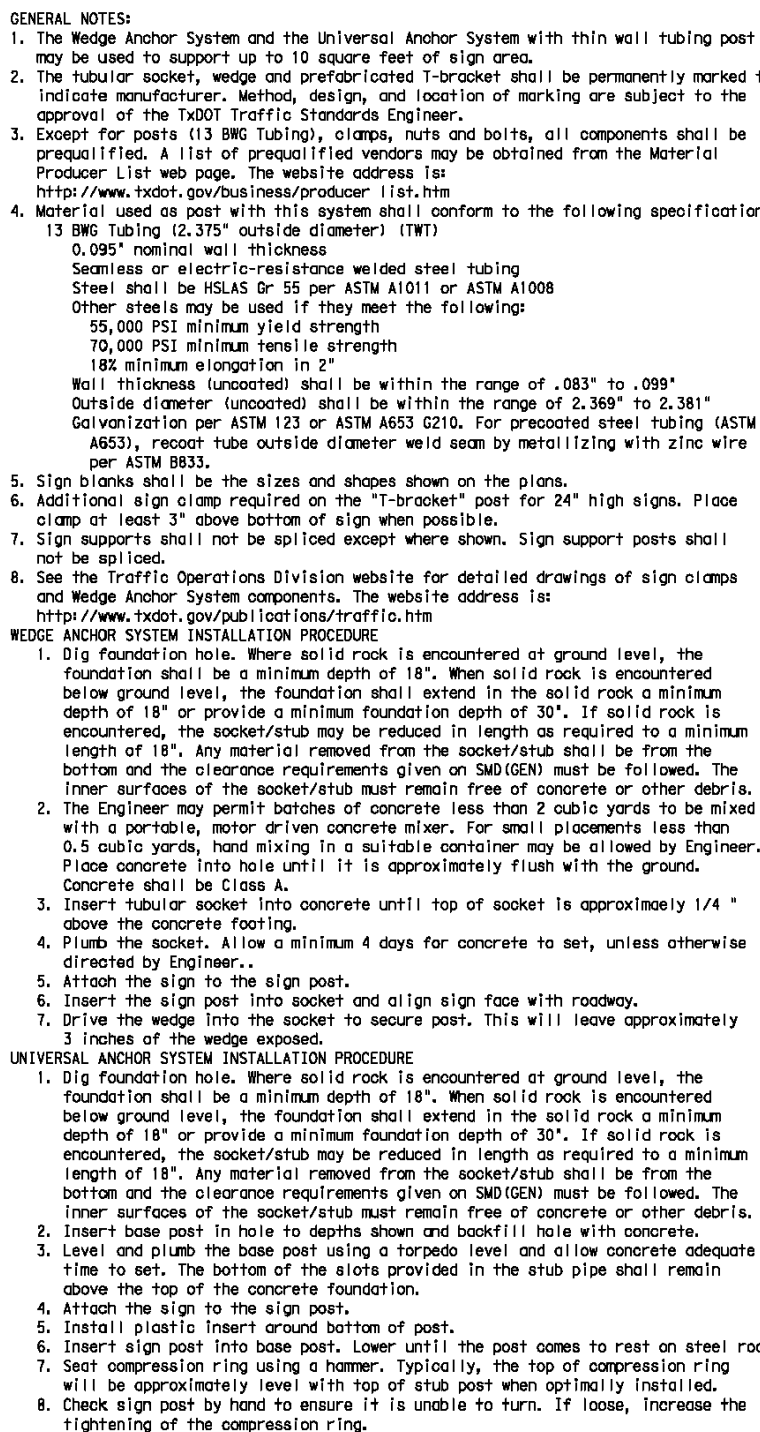
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
OVERALL SIGNAGE PLAN


PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DRAWN	EDK
CHECKED	MG
DRAWN	MG
SHEET	C3.00







[illegible]

 **Texas Department of Transportation**  
Traffic Operations Division

**SIGN MOUNTING DETAILS**  
**SMALL ROADSIDE SIGNS**  
**WEDGE & UNIVERSAL ANCHOR**  
**WITH THIN WALL TUBING POST**  
**SMD(TWT)-08**

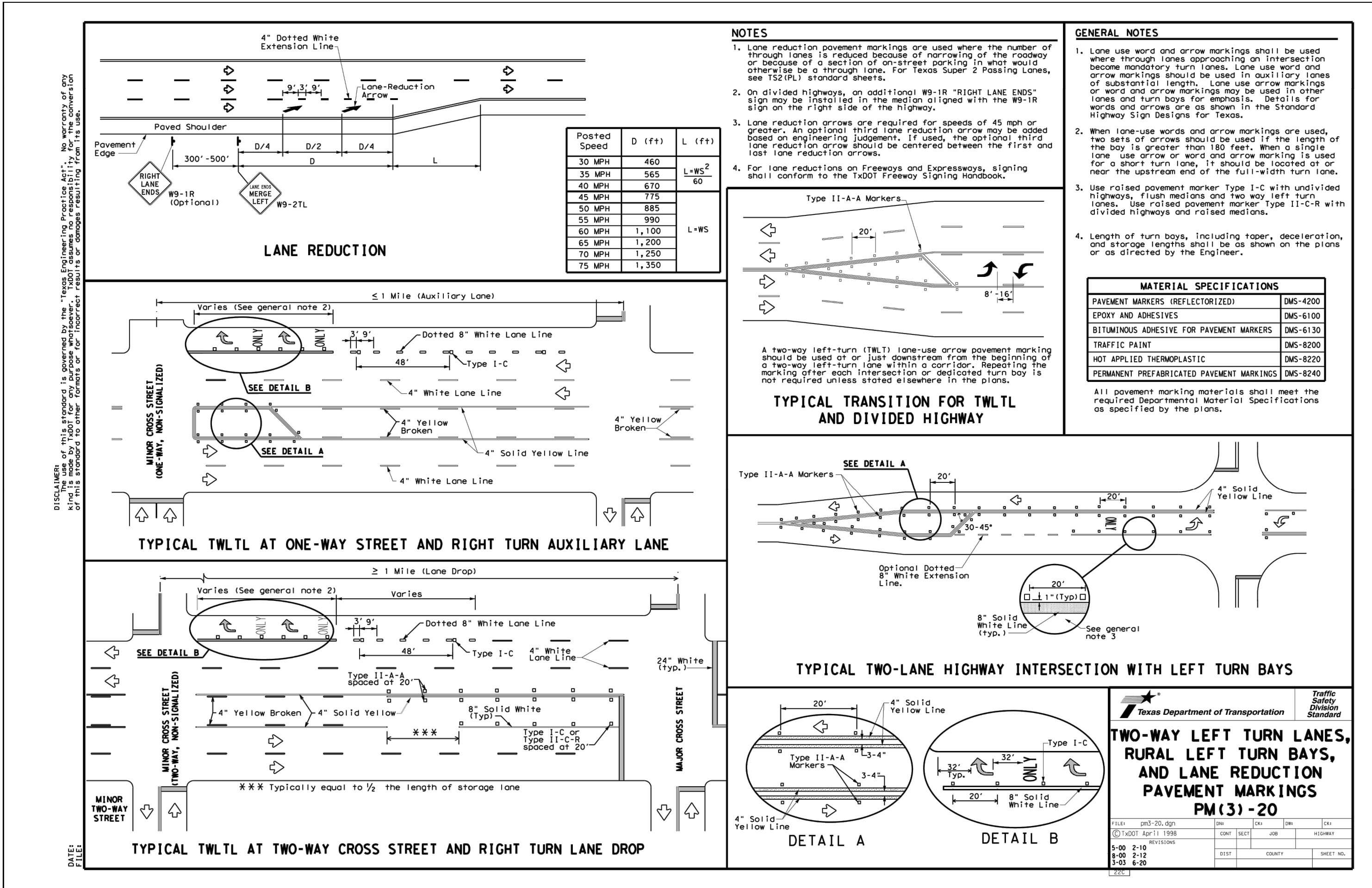
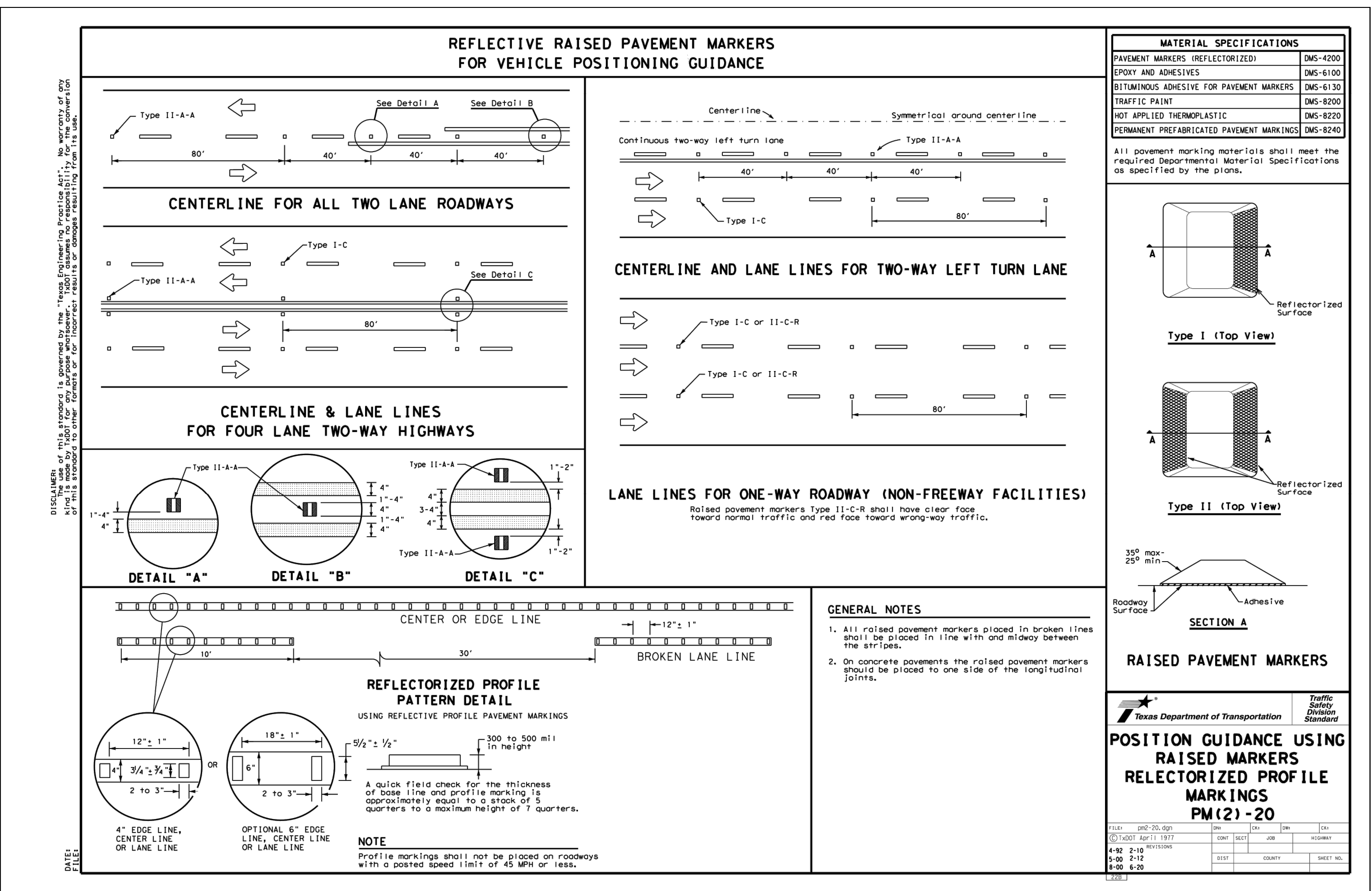
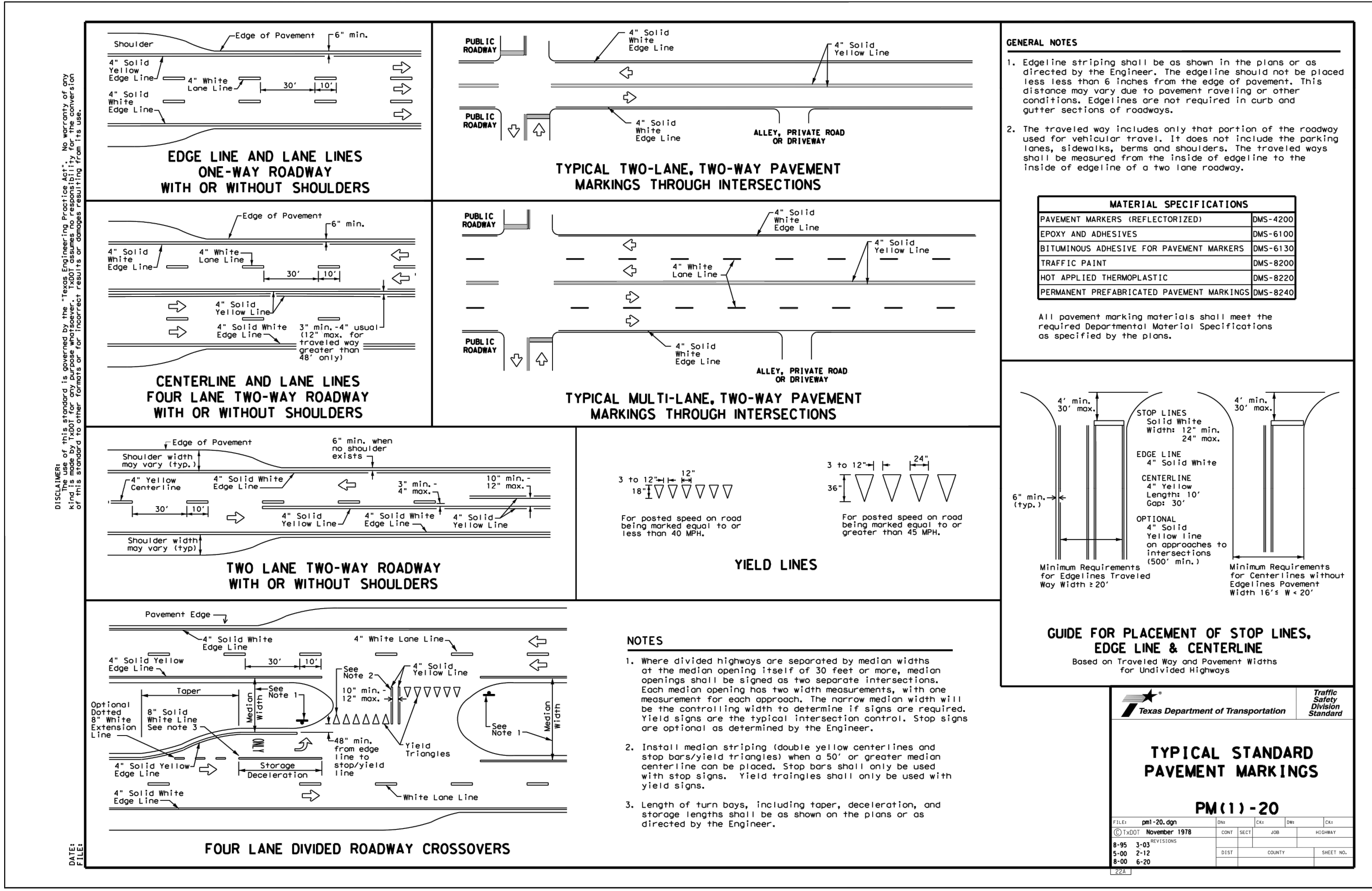
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9-08					
		POST	QUALITY		SHEET NO.

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288000

SIGNAGE DETAILS  
(SHEET 2 OF 3)

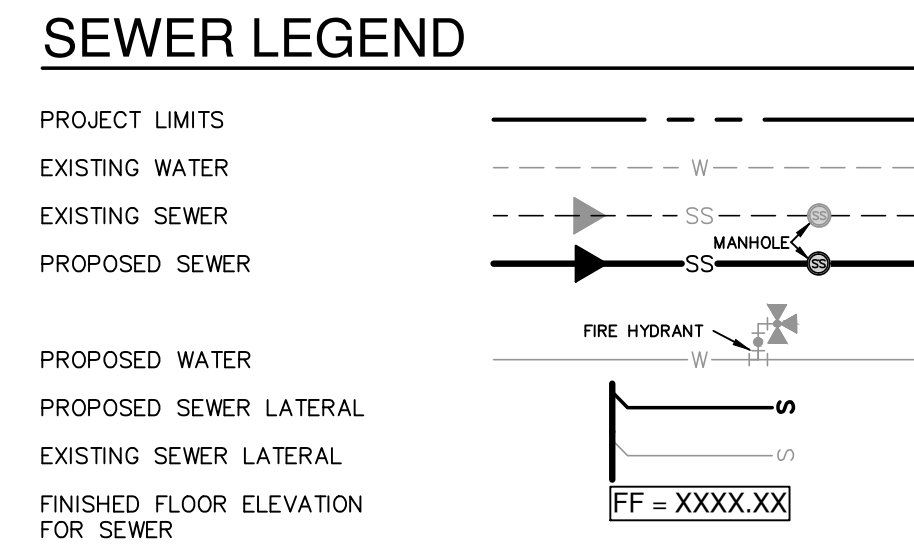
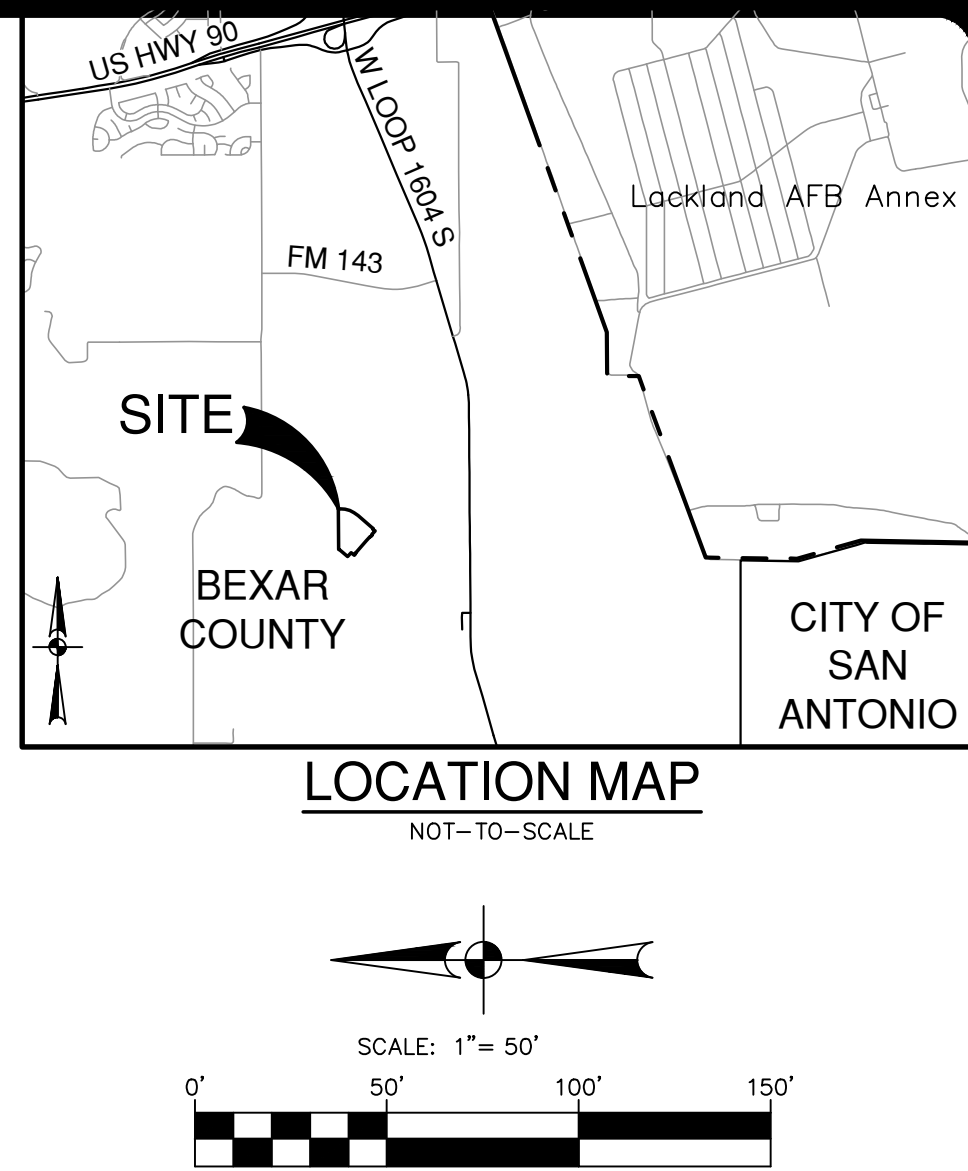
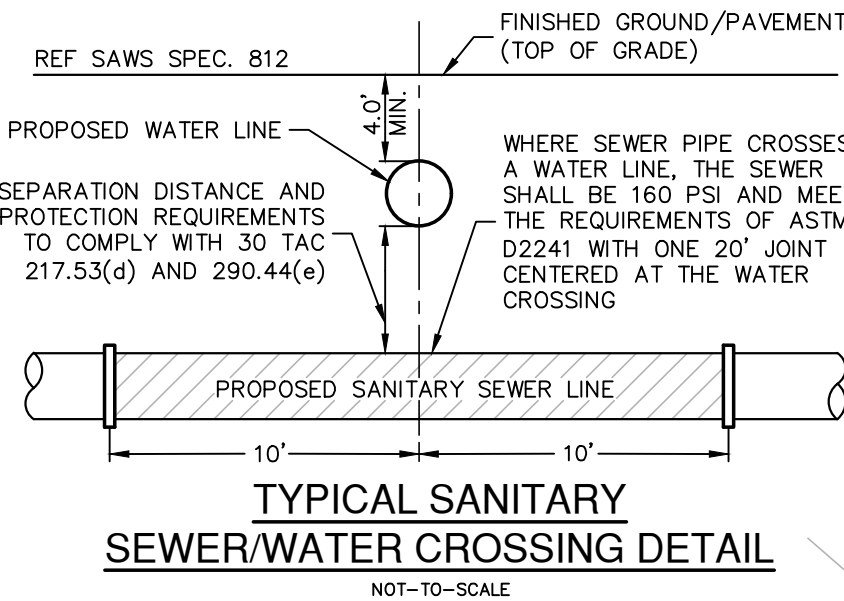
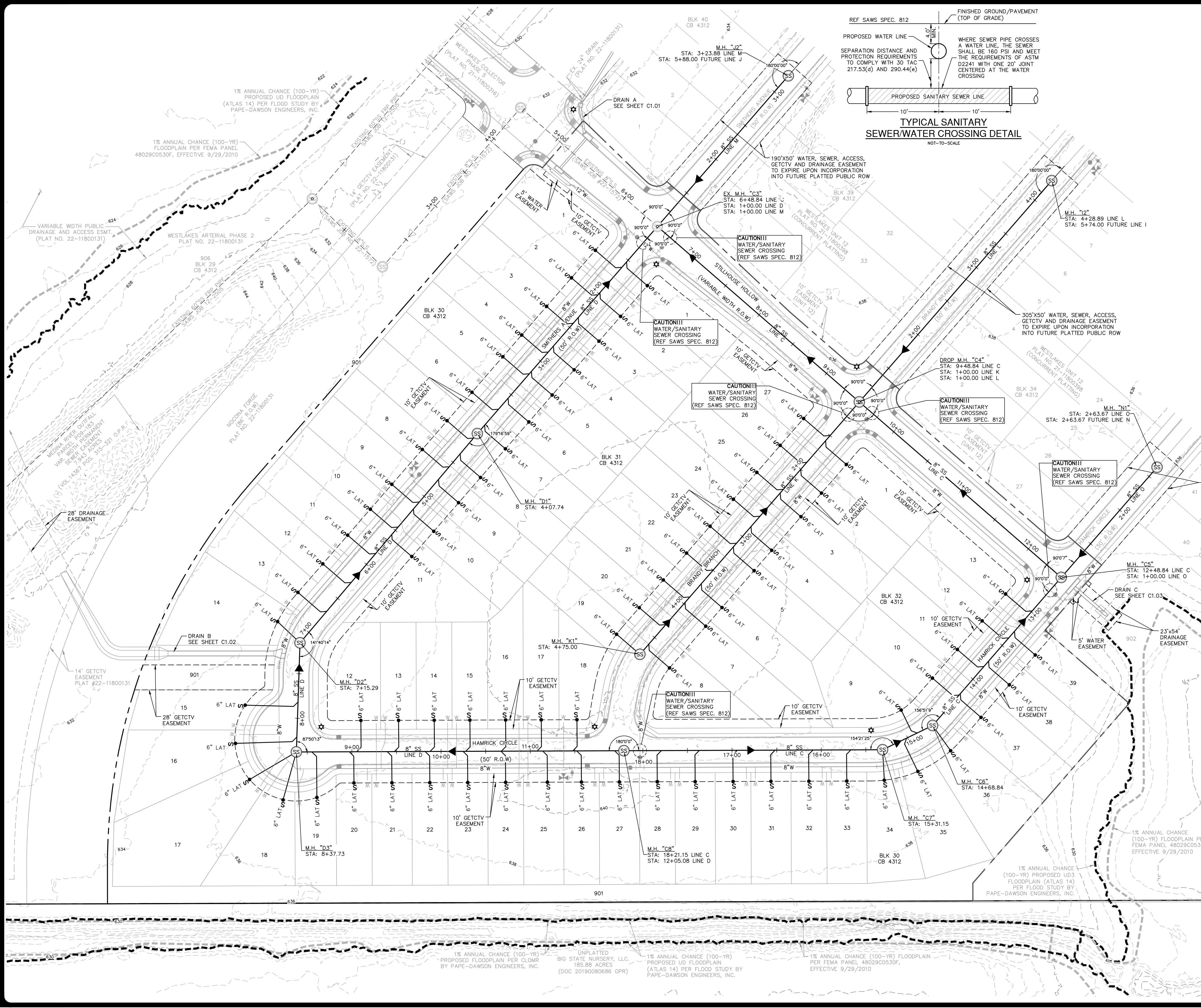
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 DATE JUNE 2022  
 DESIGNER EDK  
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**CAUTION!!**  
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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.

**FINISHED FLOOR NOTES:**  
1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER AND SHALL TAKE INTO CONSIDERATION AS-BUILT CONDITIONS FOR FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.  
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

**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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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.

**LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.**

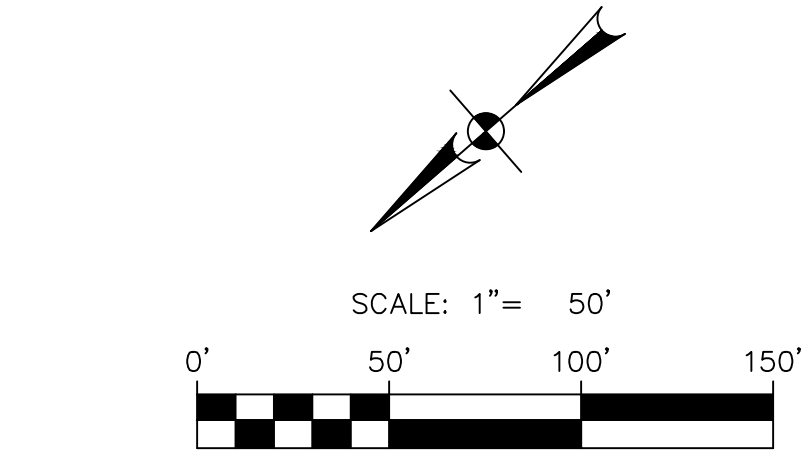
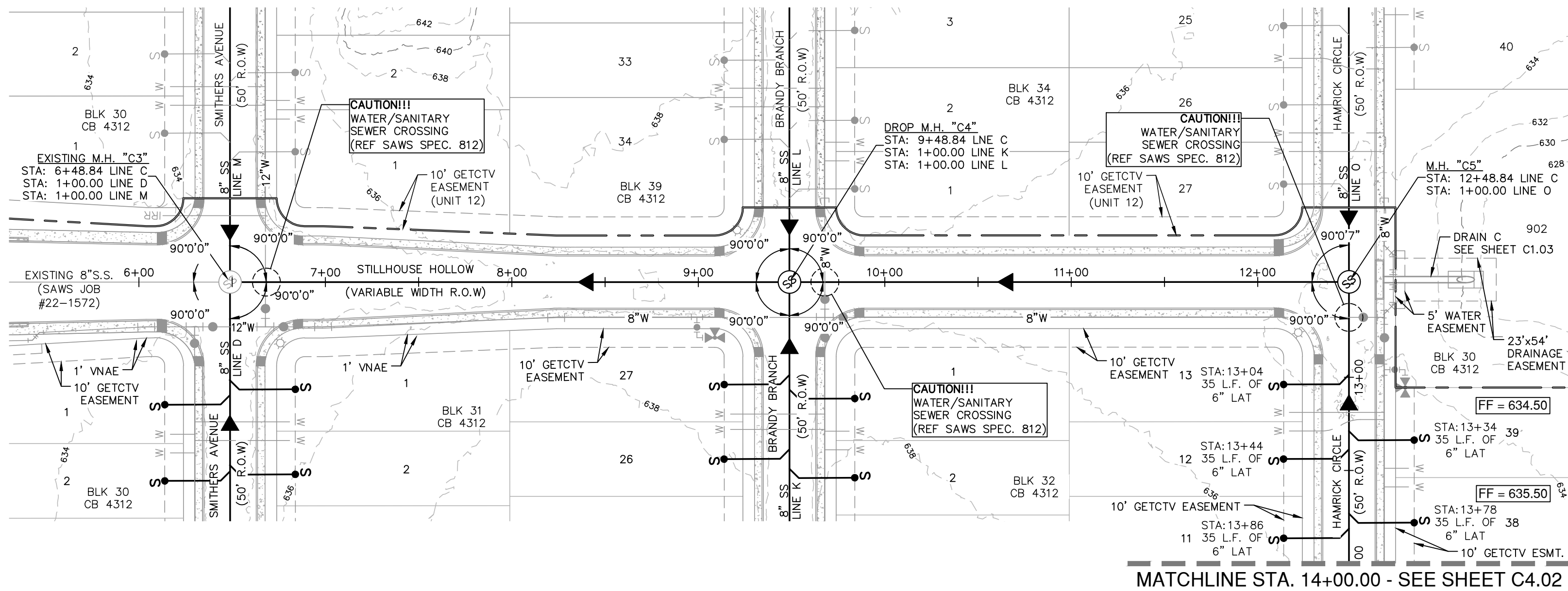
DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.			
ADDRESS: 1718 DRY CREEK WAY, SUITE 120			
CITY: SAN ANTONIO	STATE: TEXAS	ZIP: 78259	
PHONE# (210) 496-1985	FAX#		
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76			
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,369 LF PLAT NO. 21-11800397			
NUMBER OF LOTS 79 SAWS JOB NO. 22-1624			

DATE	
NO.	REVISION
<b>PAPE-DAWSON ENGINEERS</b>	
SAN ANTONIO   AUSTIN   HOUSTON   FORT WORTH   DALLAS 2000 HW LOOP 410   SAN ANTONIO, TX 78213   210.375.9000 TEXAS ENGINEERING FIRM #470   TEXAS SURVEYING FIRM #10028800	
<b>WESTLAKES UNIT 11</b> SAN ANTONIO, TEXAS	
<b>OVERALL SANITARY SEWER PLAN</b>	
PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MG
SHEET	C4.00

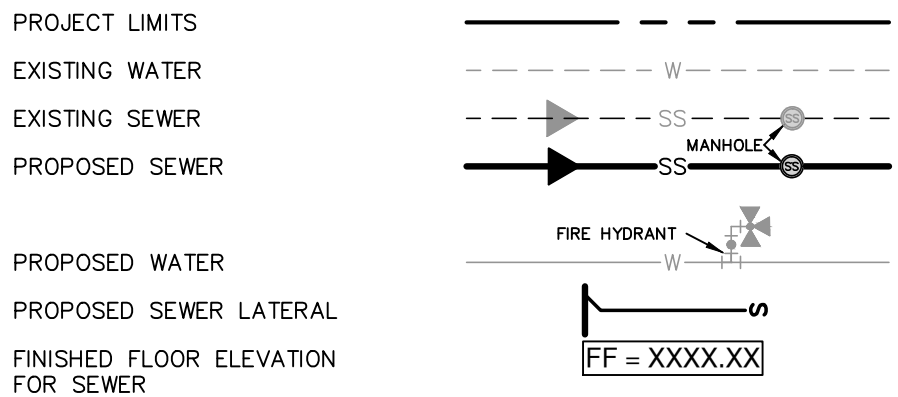


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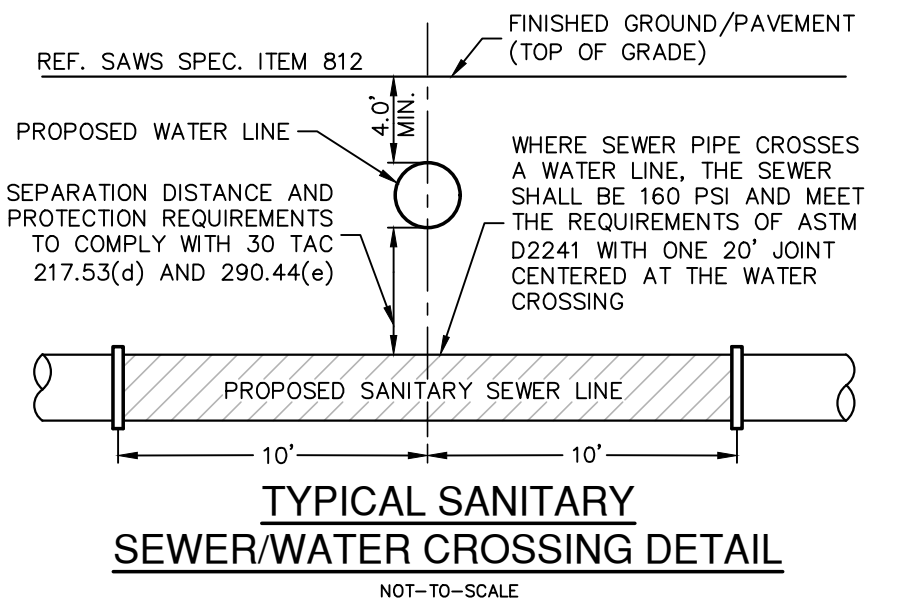
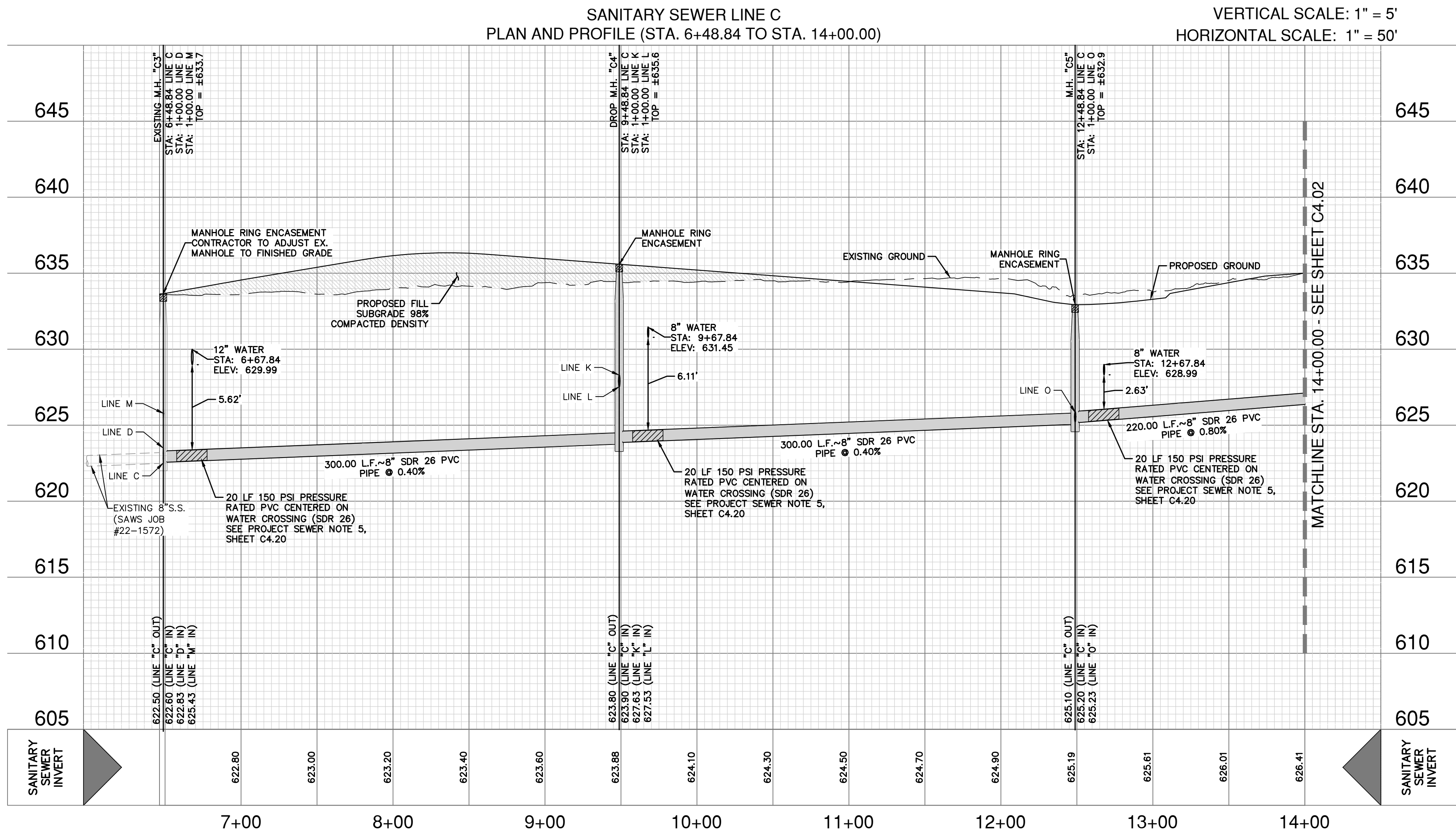
### SEWER LEGEND



NO.	REVISION	DATE



**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800



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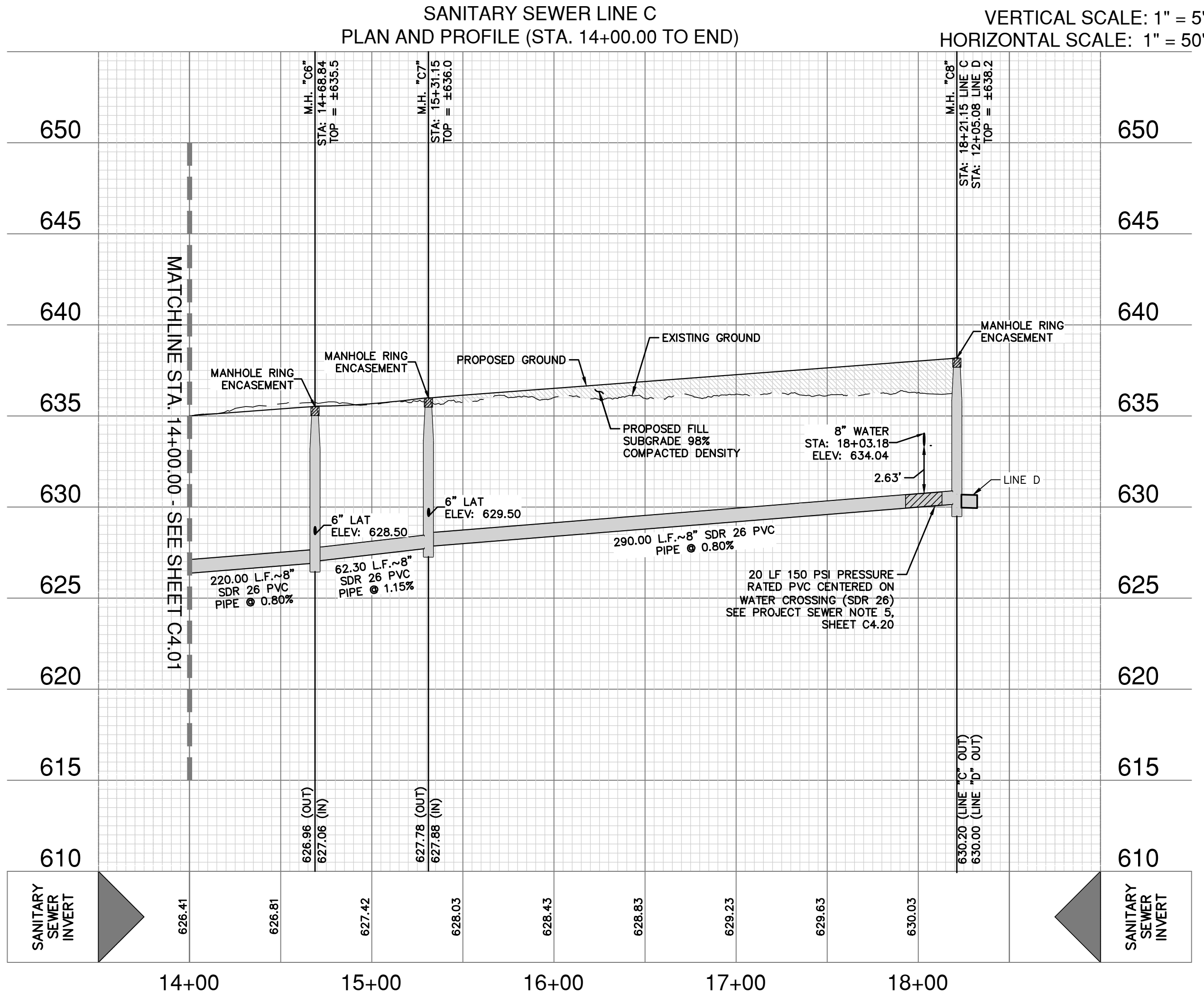
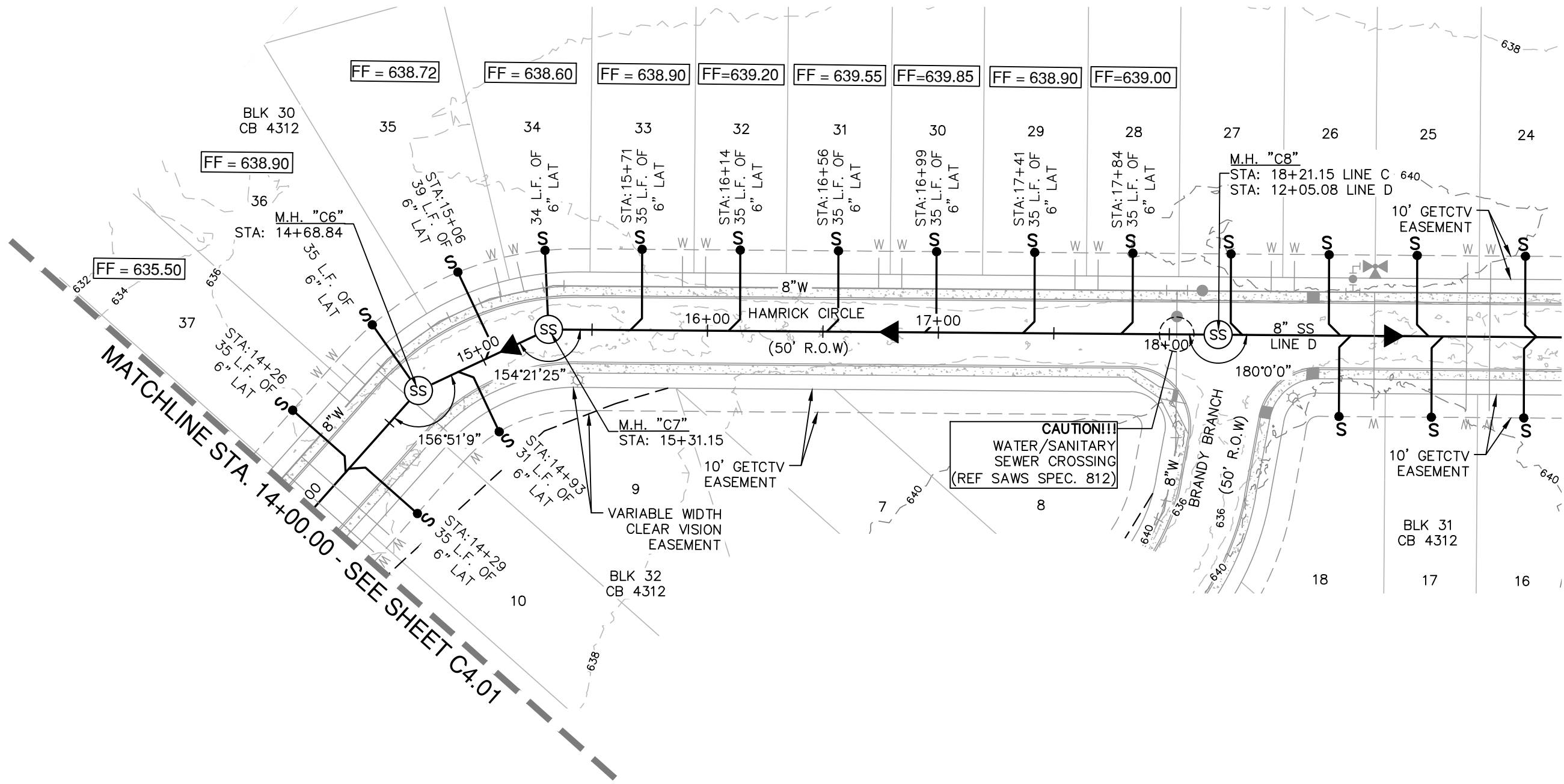
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SEWER: UPPER MEDINA RIVER SOUTH  
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NUMBER OF LOTS .79		SAWS JOB NO. 22-1624	

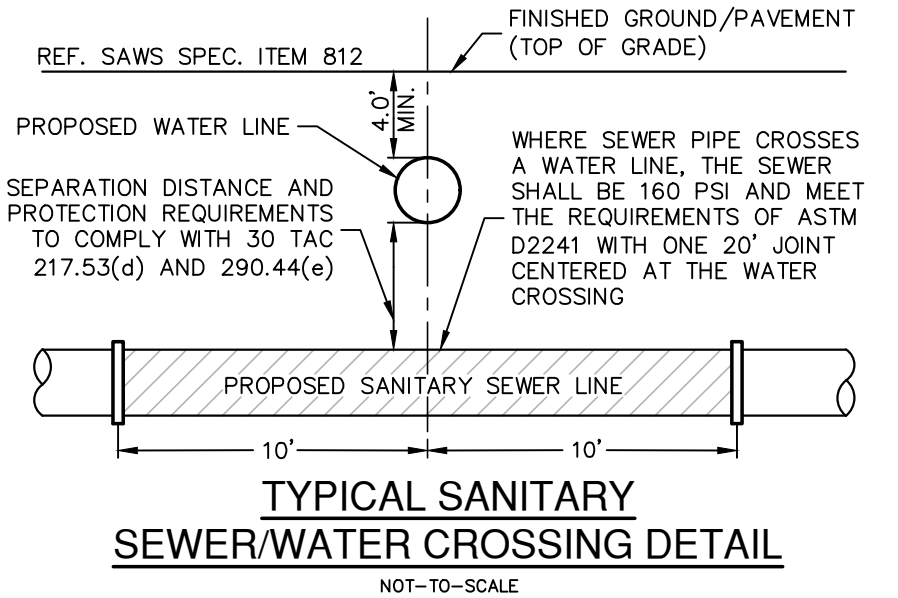
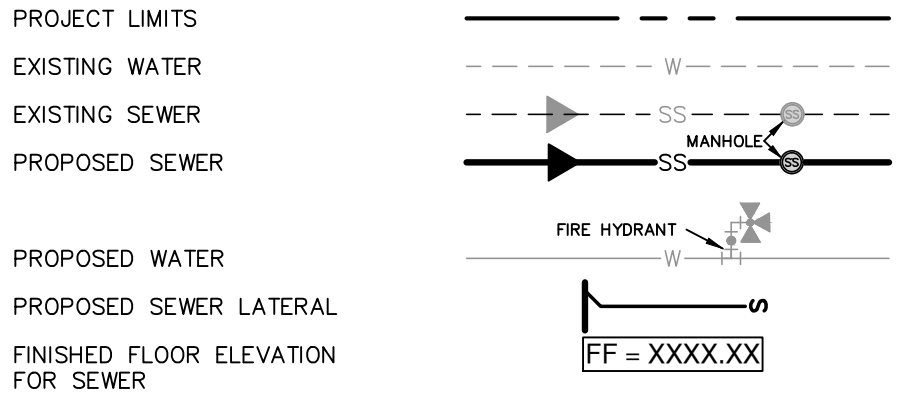
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
**SANITARY SEWER LINE C**  
PLAN AND PROFILE (STA. 6+48.84 TO STA. 14+00.00)

PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MG
SHEET	C4.01





### SEWER LEGEND



**CAUTION!!**  
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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.

LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.  
ADDRESS: 1718 DRY CREEK WAY, SUITE 120  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78259  
PHONE# (210) 496-1985 FAX#  
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76  
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,369 LF PLAT NO. 21-11800397  
NUMBER OF LOTS 79 SAWS JOB NO. 22-1624

**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

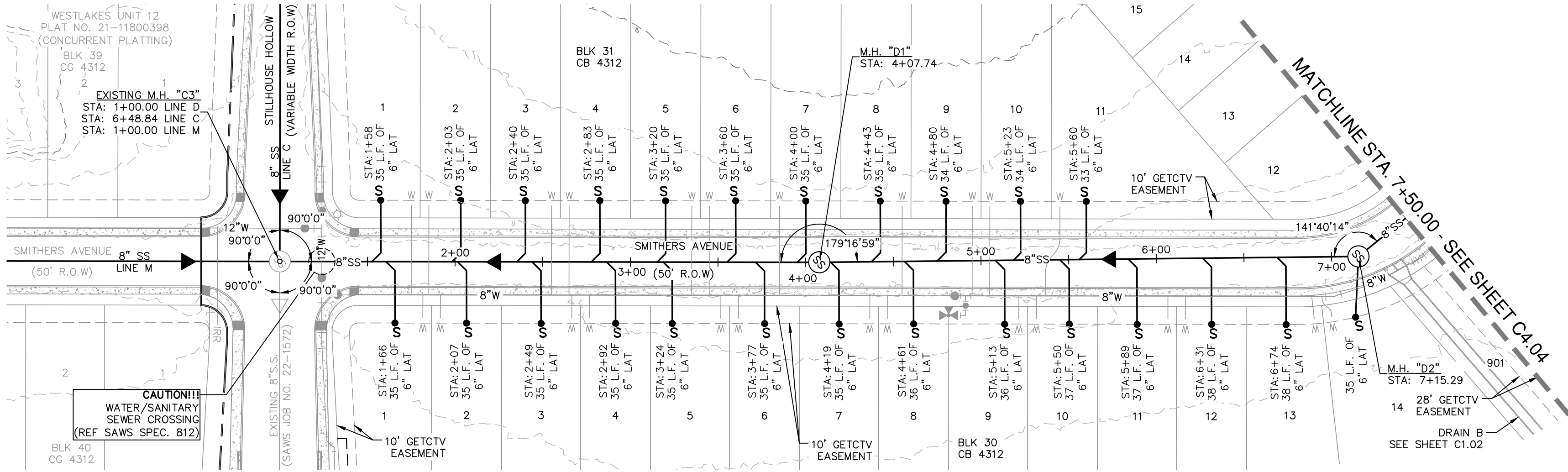
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
SANITARY SEWER LINE C  
PLAN AND PROFILE (STA. 14+00.00 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C4.02



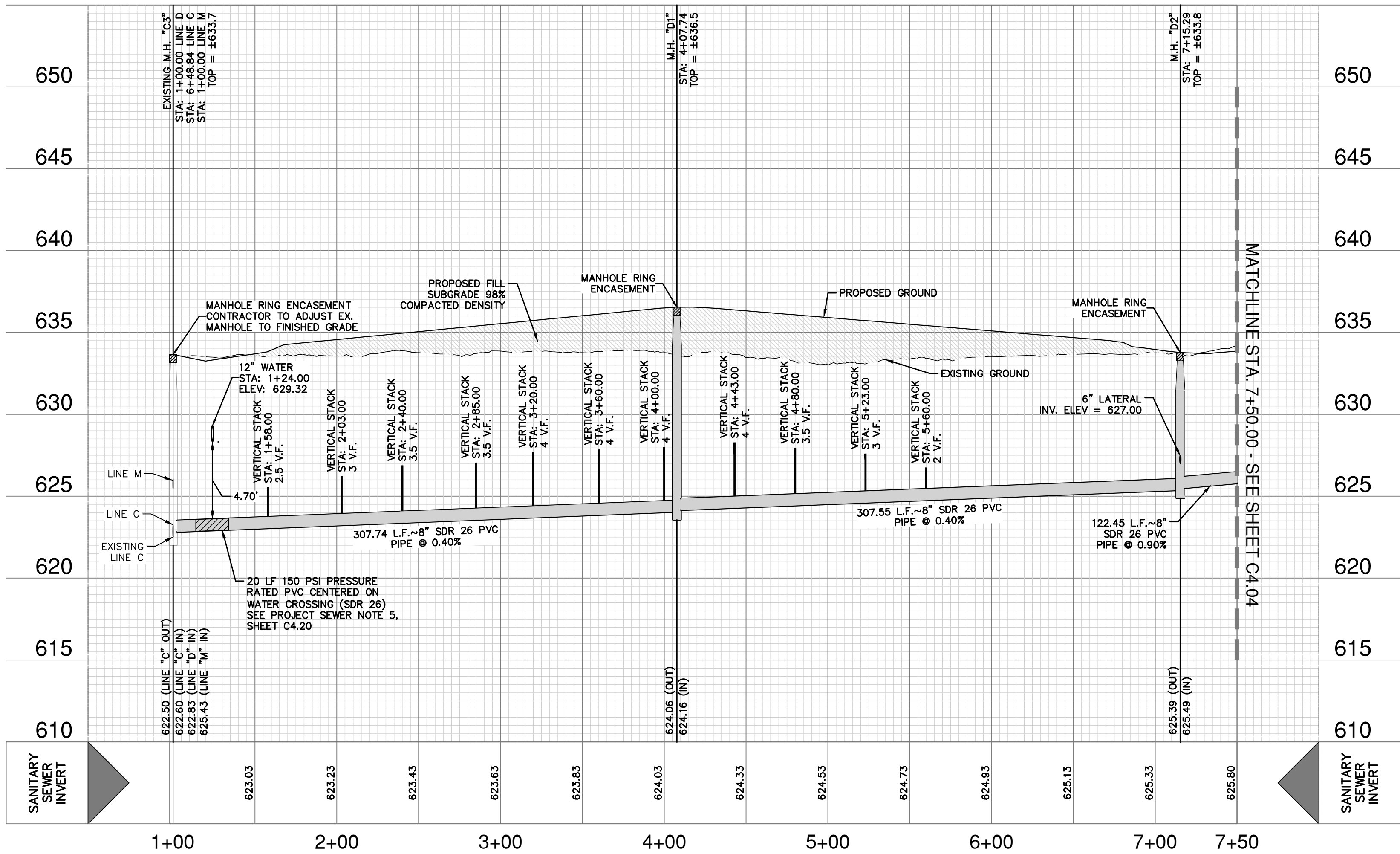
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THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE/© UNLESS OTHERWISE NOTED. Imagery © 2016, CARCO, Digital Globe, Texas Orthometry Program, USDA Farm Service Agency.



SANITARY SEWER LINE D  
PLAN AND PROFILE (STA. 1+00.00 TO STA. 7+50.00)

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'

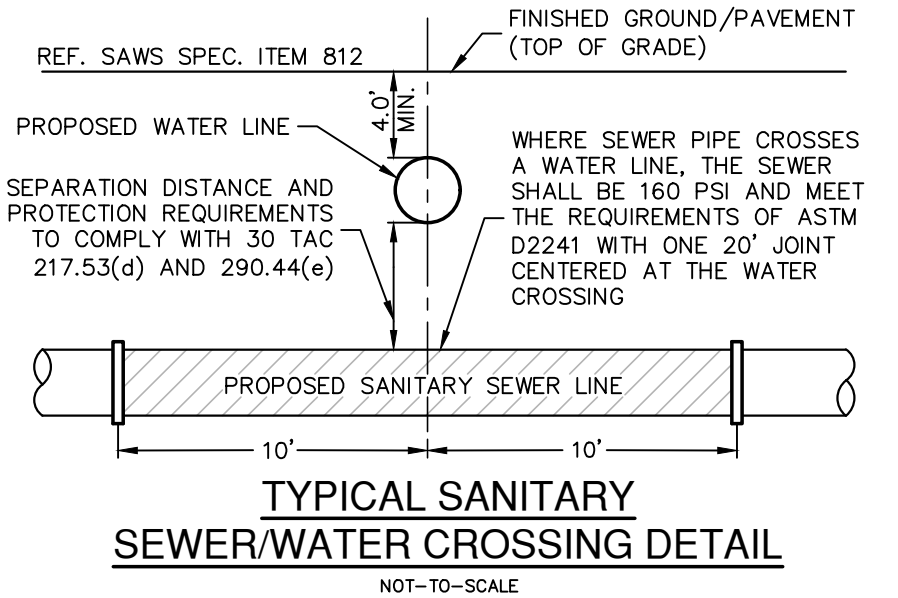


## SEWER LEGEND

- PROJECT LIMITS  
EXISTING WATER  
EXISTING SEWER  
PROPOSED SEWER  
PROPOSED WATER  
PROPOSED SEWER LATERAL  
FINISHED FLOOR ELEVATION FOR SEWER



**PAPE-DAWSON**  
**ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008860



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LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME:	PULTE HOMES OF TEXAS, L.P.
ADDRESS:	1718 DRY CREEK WAY, SUITE 120
CITY:	SAN ANTONIO
STATE:	TEXAS
ZIP:	78259
PHONE#	(210) 496-1985
FAX#	
SAWS BLOCK MAP#	096-550
TOTAL EDU'S	79
TOTAL ACREAGE	15.76
TOTAL LINEAR FOOTAGE OF PIPE: 8"	3,369 LF
PLAT NO.	21-11800397
NUMBER OF LOTS	79
SAWS JOB NO.	22-1624

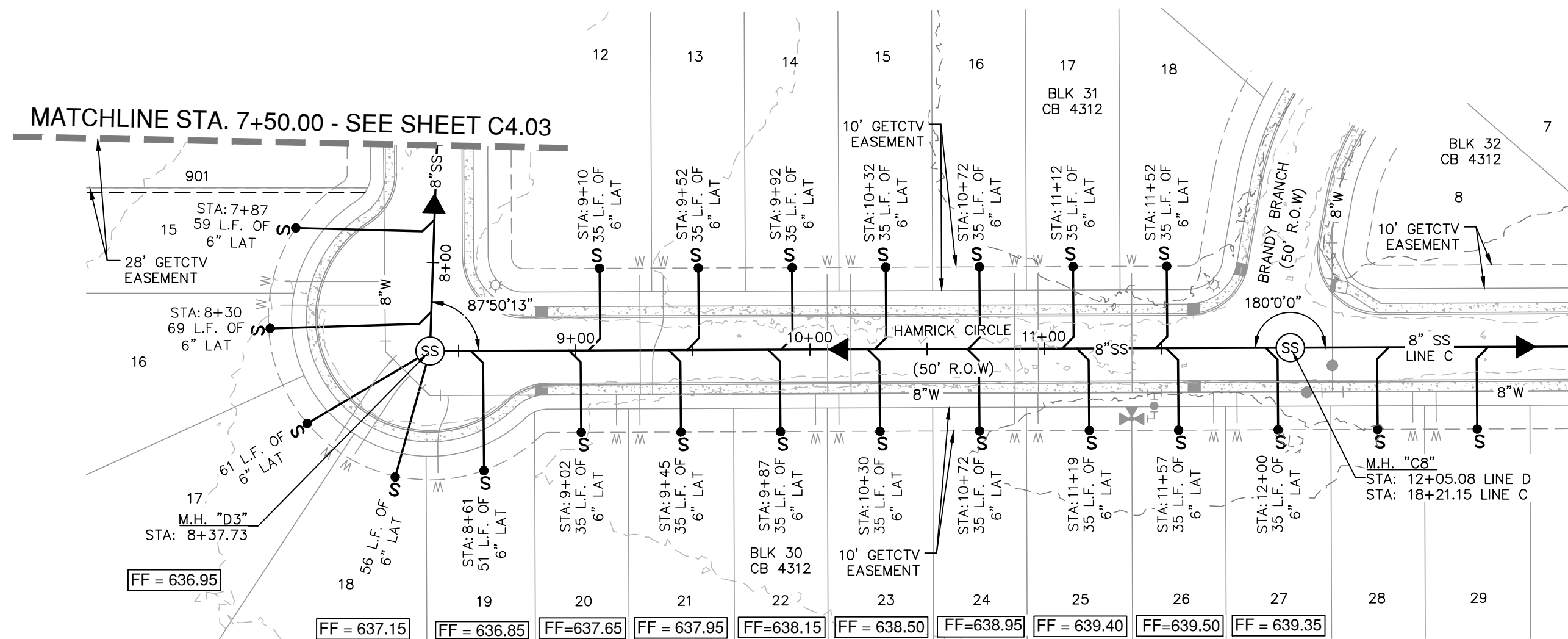
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
SANITARY SEWER LINE D  
PLAN AND PROFILE (STA. 1+00.00 TO STA. 7+50.00)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MGG  
SHEET C4.03

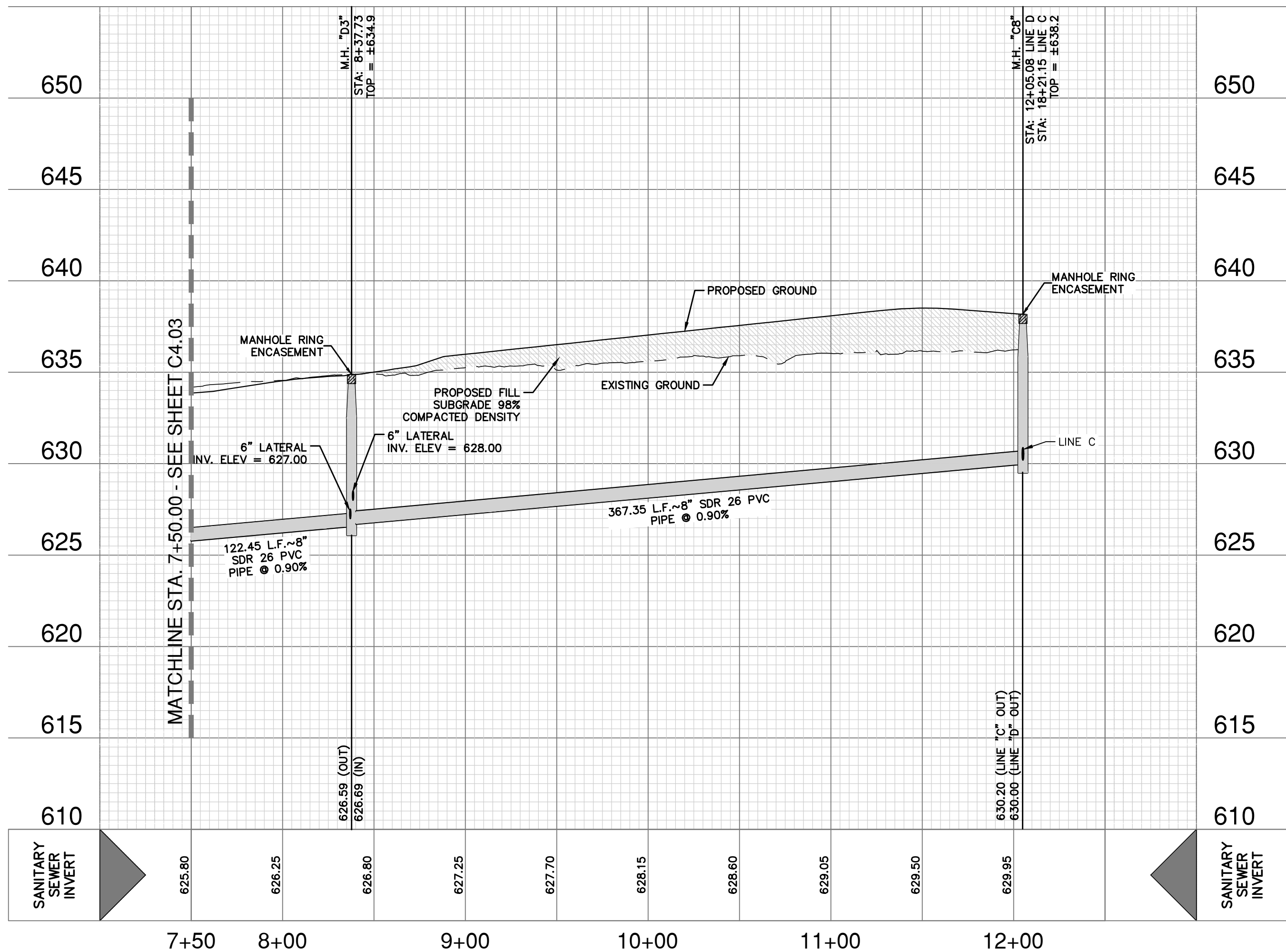


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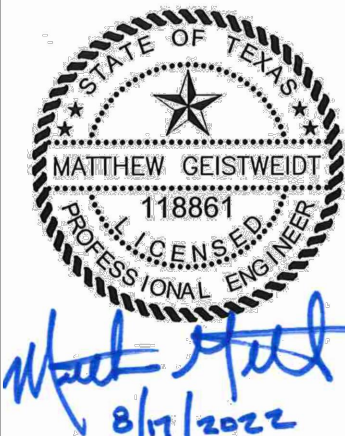
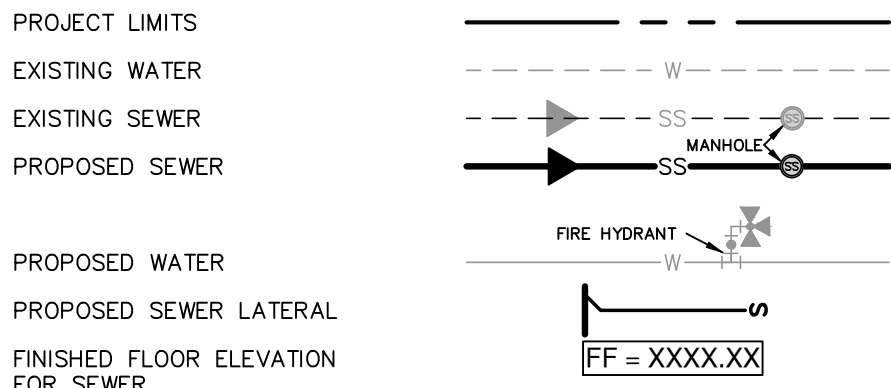
THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE/© UNLESS OTHERWISE NOTED. Imagery © 2016, CARPOOL, Digital Globe, Texas Orthomography Program, USDA Farm Service Agency.



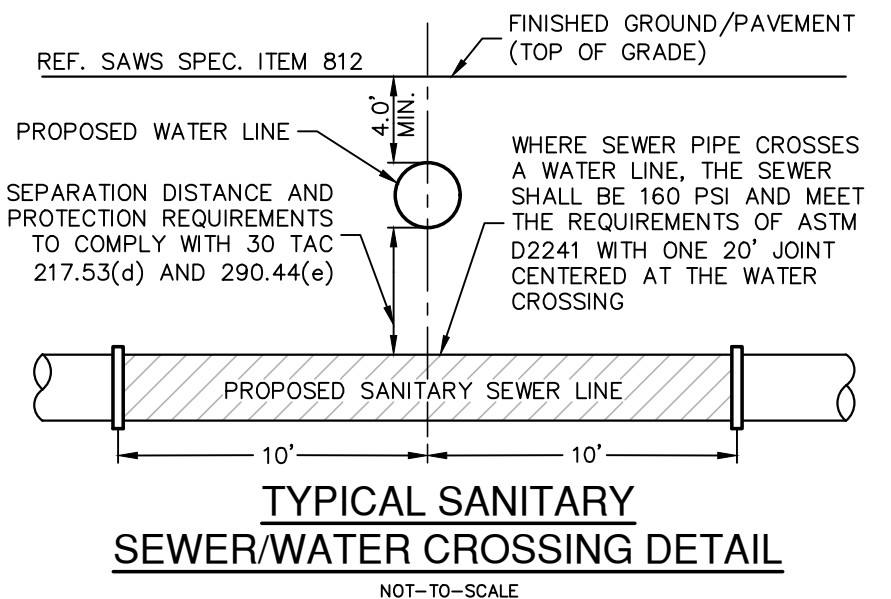
SANITARY SEWER LINE D  
PLAN AND PROFILE (STA. 7+50.00 TO END)  
VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



## SEWER LEGEND



**PAPE-DAWSON**  
**ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800



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**TRENCH EXCAVATION SAFETY PROTECTION:**  
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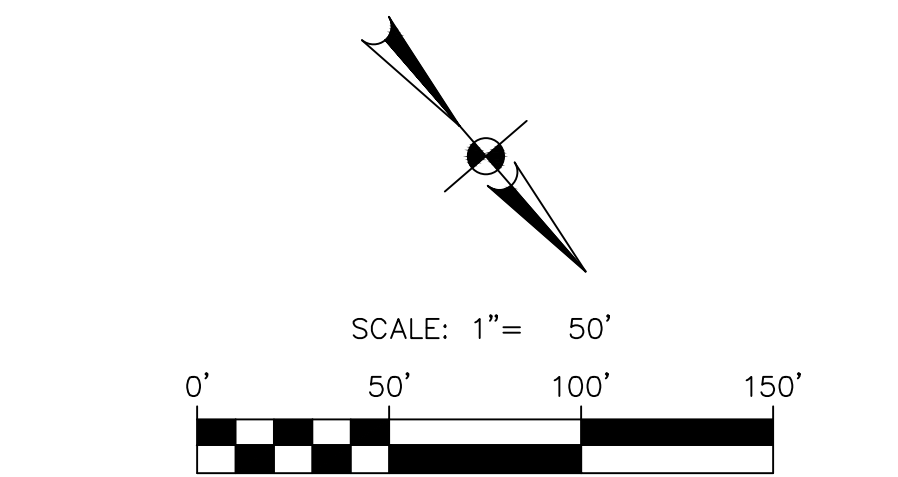
LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME:	PULTE HOMES OF TEXAS, L.P.
ADDRESS:	1718 DRY CREEK WAY, SUITE 120
CITY:	SAN ANTONIO
STATE:	TEXAS
ZIP:	78259
PHONE#	(210) 496-1985
FAX#	
SAWS BLOCK MAP#	096-550
TOTAL EDU'S	79
TOTAL ACREAGE	15.76
TOTAL LINEAR FOOTAGE OF PIPE: 8"	3,369 LF
PLAT NO.	21-11800397
NUMBER OF LOTS	79
SAWS JOB NO.	22-1624

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
SANITARY SEWER LINE D  
PLAN AND PROFILE (STA. 7+50.00 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C4.04





PROJECT LIMITS

EXISTING WATER

EXISTING SEWER

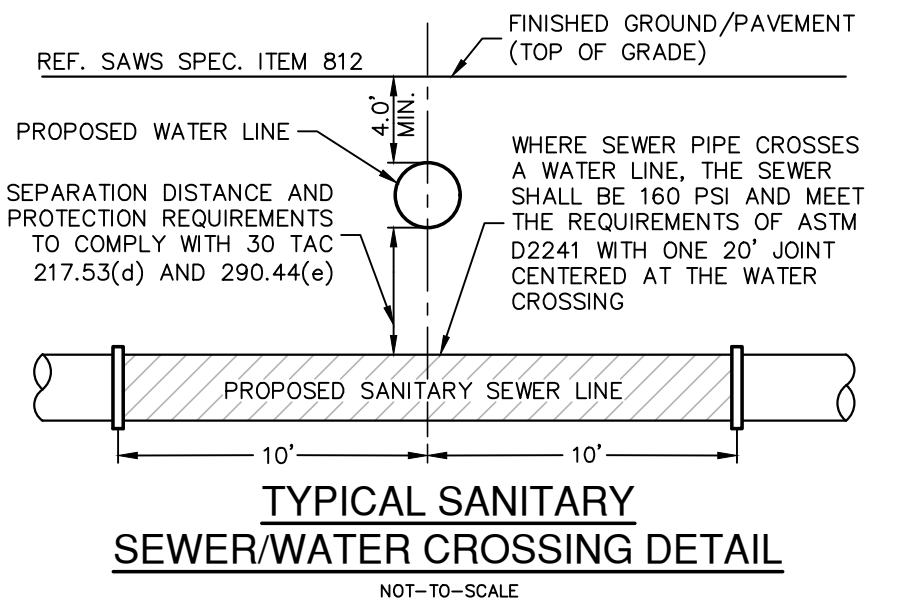
PROPOSED SEWER

PROPOSED WATER

PROPOSED SEWER LATERAL

FINISHED FLOOR ELEVATION FOR SEWER

FF = XXXX.XX



**CAUTION!!**

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**TRENCH EXCAVATION SAFETY PROTECTION:**

THE CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEES OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT(S), SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL/ GEOPHYSICAL INFORMATION AND DETERMINE ANY ADDITIONAL SAFETY/ SHIELDING/ PROTECTIVE WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH/ EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES. THE CONTRACTOR'S PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE 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 STANDARD 1926.650-686. SPECIFICALLY, CONTRACTOR'S TRENCHING AND /OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH THE FOLLOWING: THE CONTRACTOR SHALL PROVIDE FOR THE ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

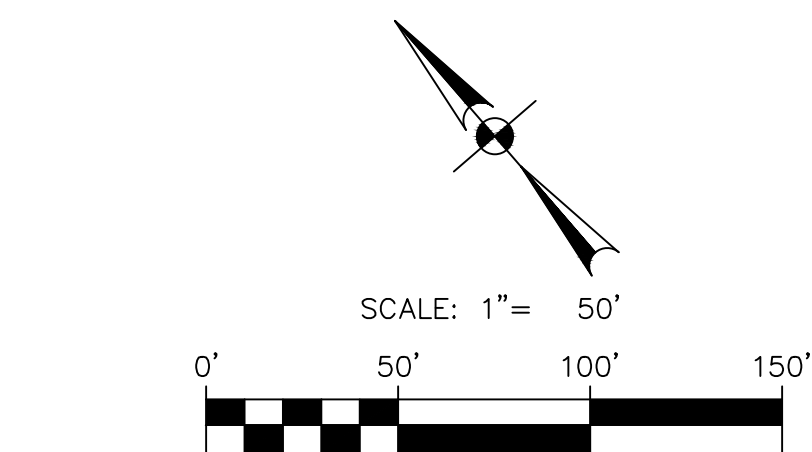
VE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.  
ADDRESS: 1718 DRY CREEK WAY, SUITE 120  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78259  
PHONE# (210) 496-1985 FAX#  
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76  
TOTAL LINEAR FOOTAGE OF PIPE: 8'-3,369 LF PLAT NO. 21-11800397  
NUMBER OF LOTS 79 SAWS JOB NO. 22-1624

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
 SANITARY SEWER LINE K  
 PLAN AND PROFILE (STA. 1+00.00 TO END)

PLAT NO. 21-11800397  
 DB NO. 11348-43  
 DATE JUNE 2022  
 DESIGNER EDK  
 CHECKED MG DRAWN MG  
 C4.05





PROJECT LIMITS

EXISTING WATER

EXISTING SEWER

PROPOSED SEWER

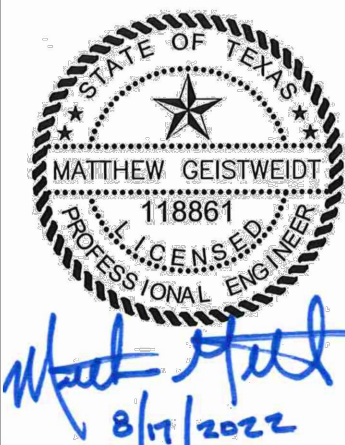
PROPOSED WATER

PROPOSED SEWER LATERAL

FIRE HYDRANT

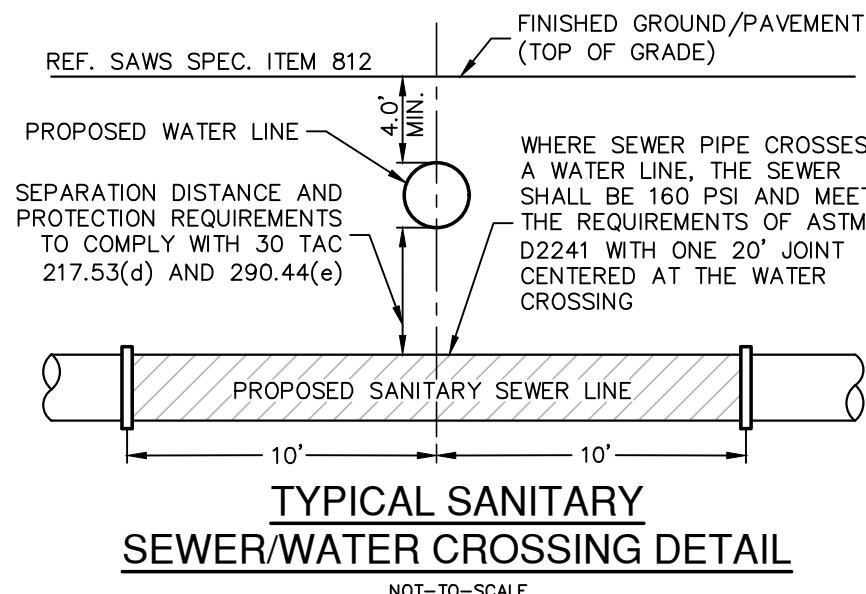
FINISHED FLOOR ELEVATION FOR SEWER

FF = XXXX.XX



**PAPE-DAWSON  
ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
20200 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028600



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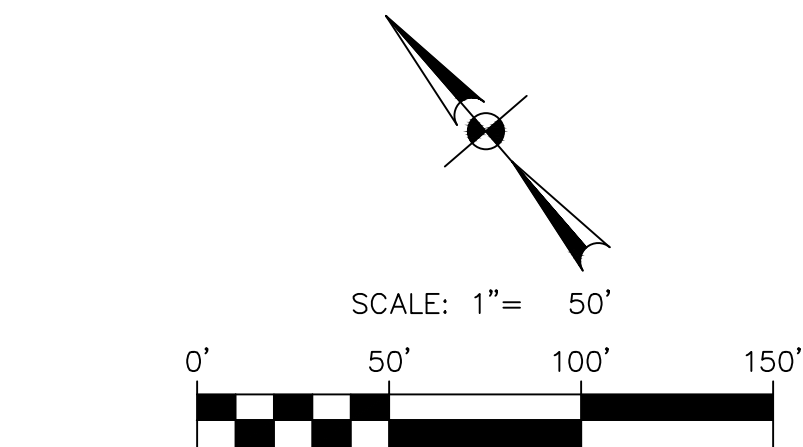
DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.  
ADDRESS: 1718 DRY CREEK WAY, SUITE 120  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78259  
PHONE# (210) 496-1985 FAX# \_\_\_\_\_  
SAWS BLOCK MAP# 096-550 TOTAL EDU# 79 TOTAL ACRES 15.76  
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,369 LF PLAT NO. 21-11800397  
NUMBER OF LOTS 79 SAWS JOB NO. 22-1824

**WESTLAKES UNIT 11**  
**SAN ANTONIO, TEXAS**

SANITARY SEWER LINE L  
PLAN AND PROFILE (STA. 1+00.00 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MGG  
SHEET C4.06





PROJECT LIMITS

EXISTING WATER

EXISTING SEWER

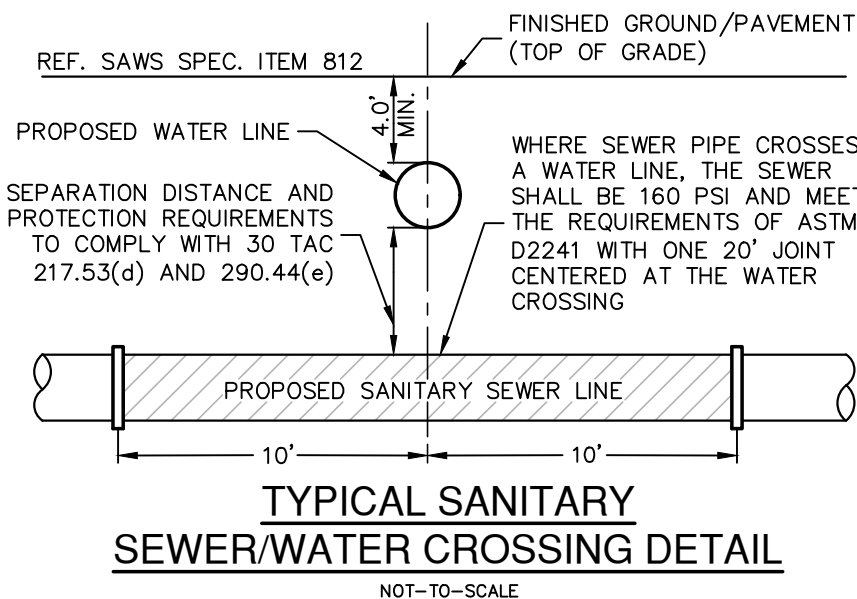
PROPOSED SEWER

PROPOSED WATER

PROPOSED SEWER LATERAL

FINISHED FLOOR ELEVATION FOR SEWER

FIRE HYDRANT



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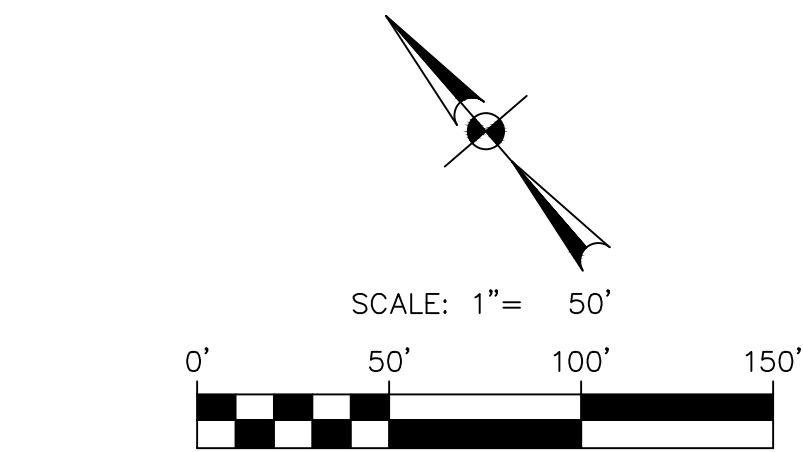
DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.  
ADDRESS: 1718 DRY CREEK WAY, SUITE 120  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78259  
PHONE# (210) 496-1985 FAX# \_\_\_\_\_  
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76  
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3.369 LF PLAT NO. 21-1180039  
NUMBER OF LOTS 79 SAVING JOB NO. 22-1624

SANITARY SEWER LINE M

PLAN AND PROFILE (STA. 1+00.00 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET **C4.07**





PROJECT LIMITS

EXISTING WATER

EXISTING SEWER

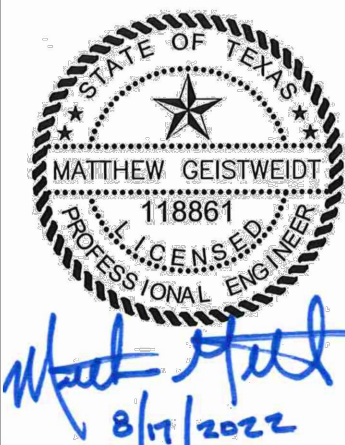
PROPOSED SEWER

PROPOSED WATER

PROPOSED SEWER LATERAL

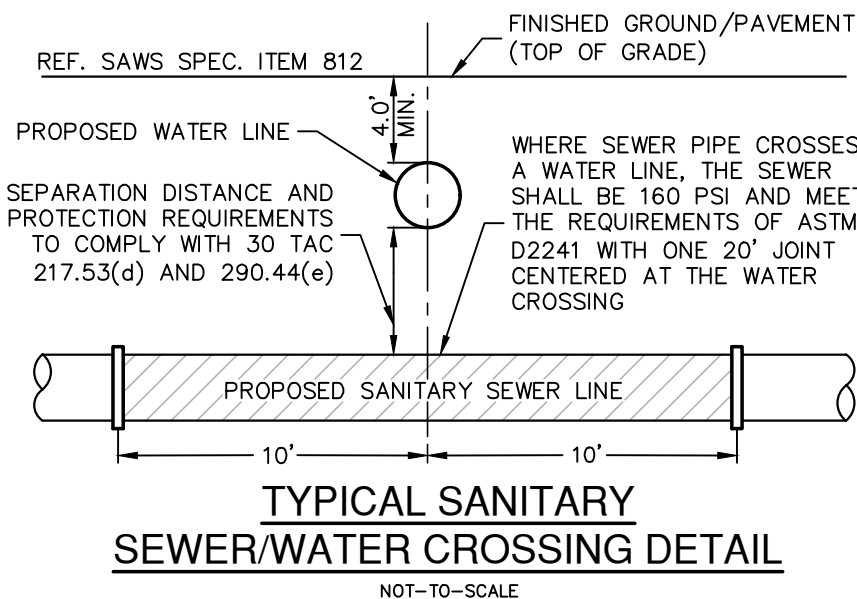
FINISHED FLOOR ELEVATION FOR SEWER

FF = XXXX.XX



**PAPE-DAWSON  
ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
20200 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028600



CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRICAL, SECONDARY ELECTRIC, PRIMARY ELECTRICAL, DUCTBANKS, 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 AT MINIMUM 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE TO EXISTING UTILITIES. 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.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE  
OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT,  
IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL  
INFORMATION AND THE ANTICIPATED INSTALLATION SITE WITHIN THE  
PROJECT AREA, UNDER THE SUPERVISION OF THE CONTRACTOR, FOR  
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 BE SUBJECT TO THE ADEQUATE TRENCH  
SAFETY PROTECTION THE COMPLY WITH AS A MINIMUM A MANDATORY  
FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR  
CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY  
CONSULTANT SHALL IMPLEMENT THE TRENCH SAFETY PROGRAM IN  
CONJUNCTION WITH THE TRENCH SAFETY TRAINING PROGRAM AND THE  
ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.  
ADDRESS: 1718 DRY CREEK WAY, SUITE 120  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78259  
PHONE # (210) 496-1985 FAX# \_\_\_\_\_  
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76  
TOTAL LINEAR FOOTAGE OF PIPE: 8" - 3,369 LF PLAT NO. 21-1180039  
NUMBER OF LOTS 79 SAWS JOB NO. 22-1624

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS

SANITARY SEWER LINE O

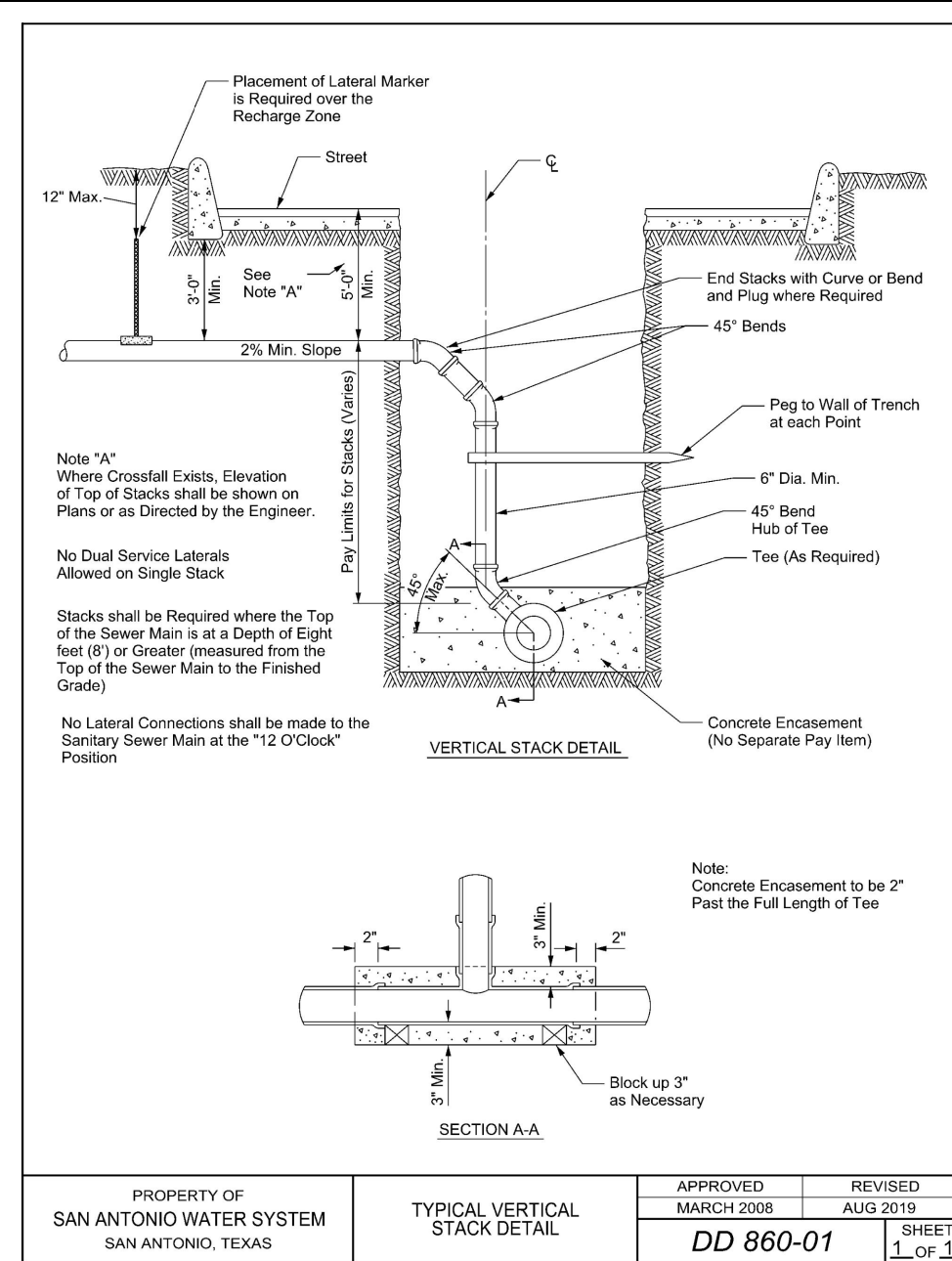
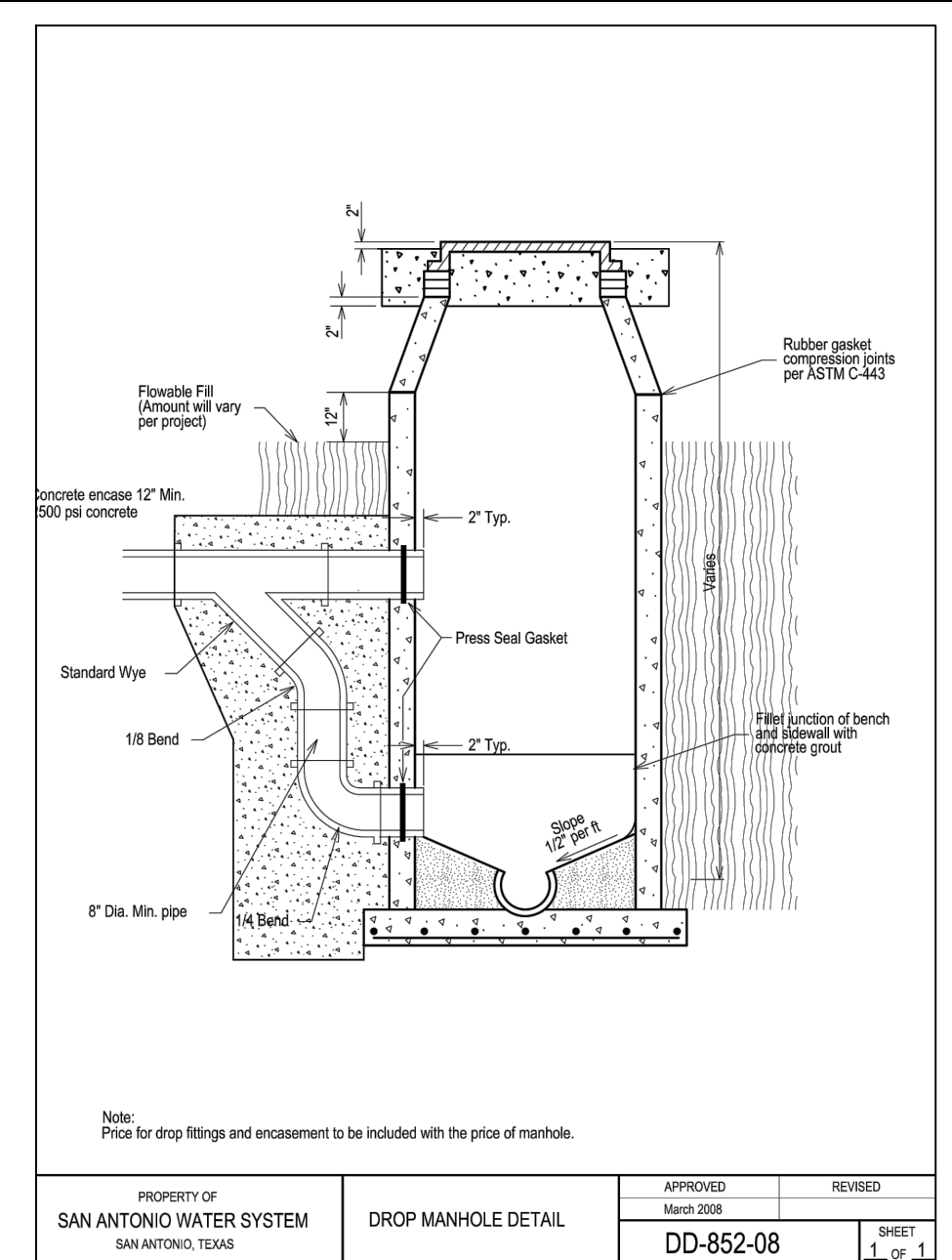
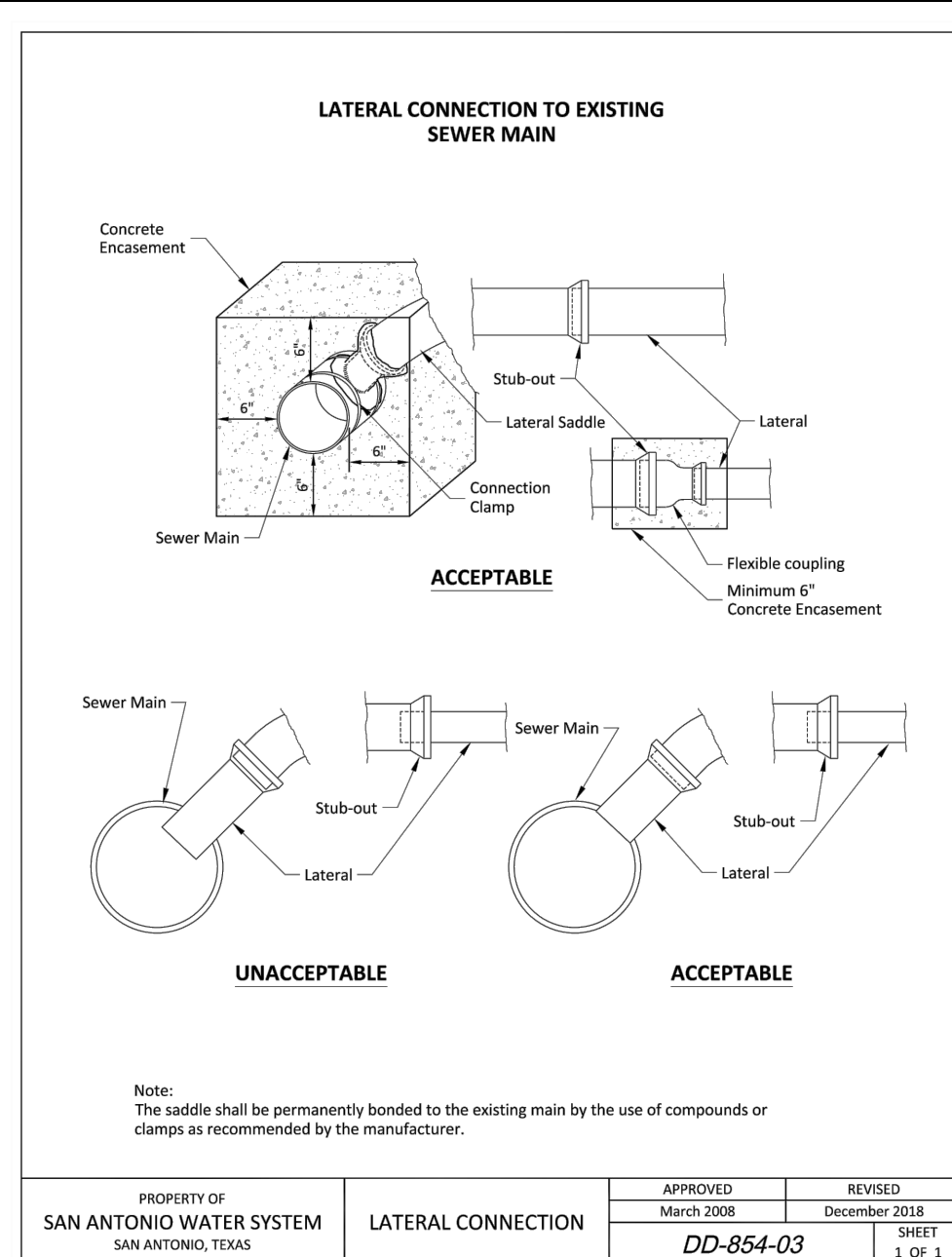
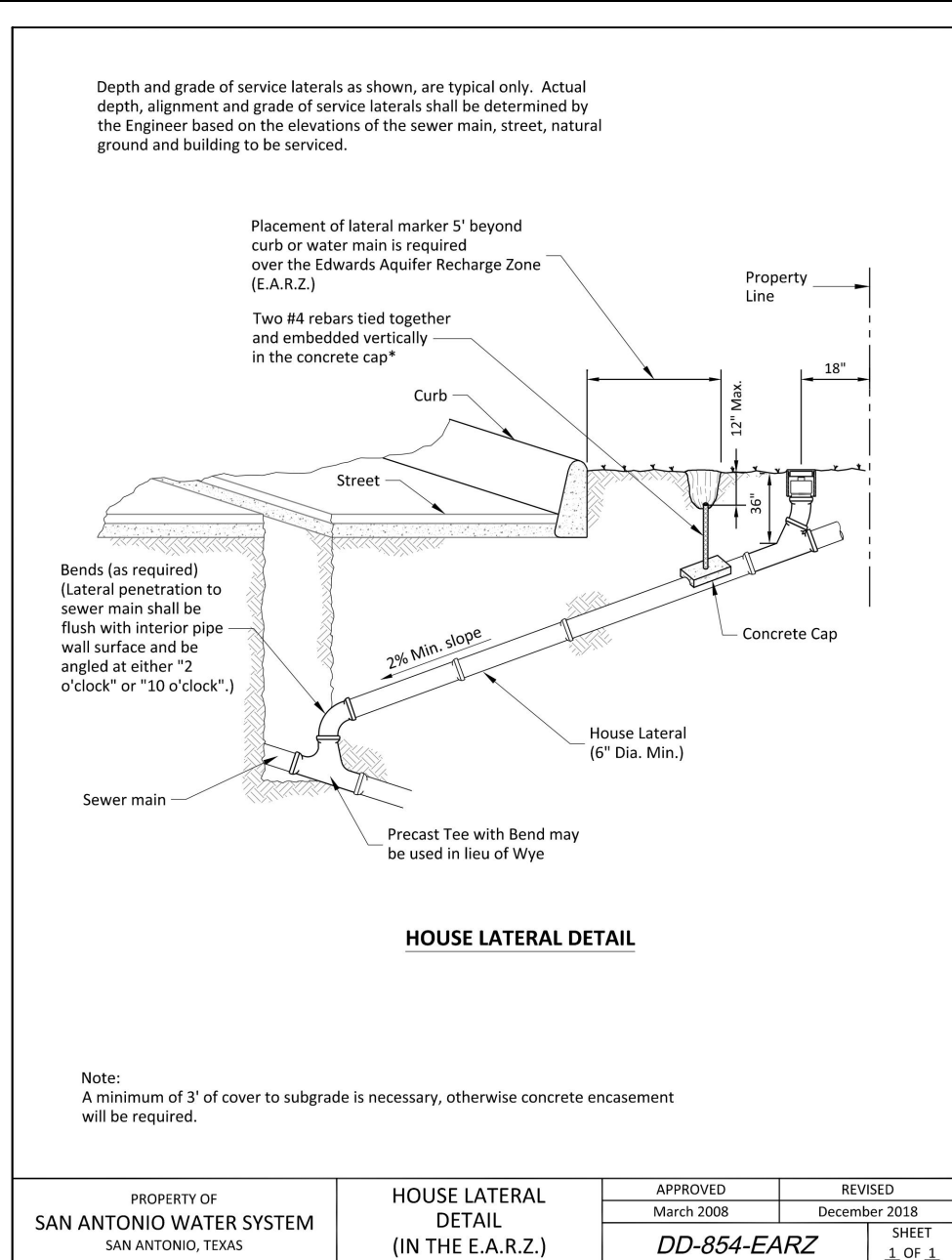
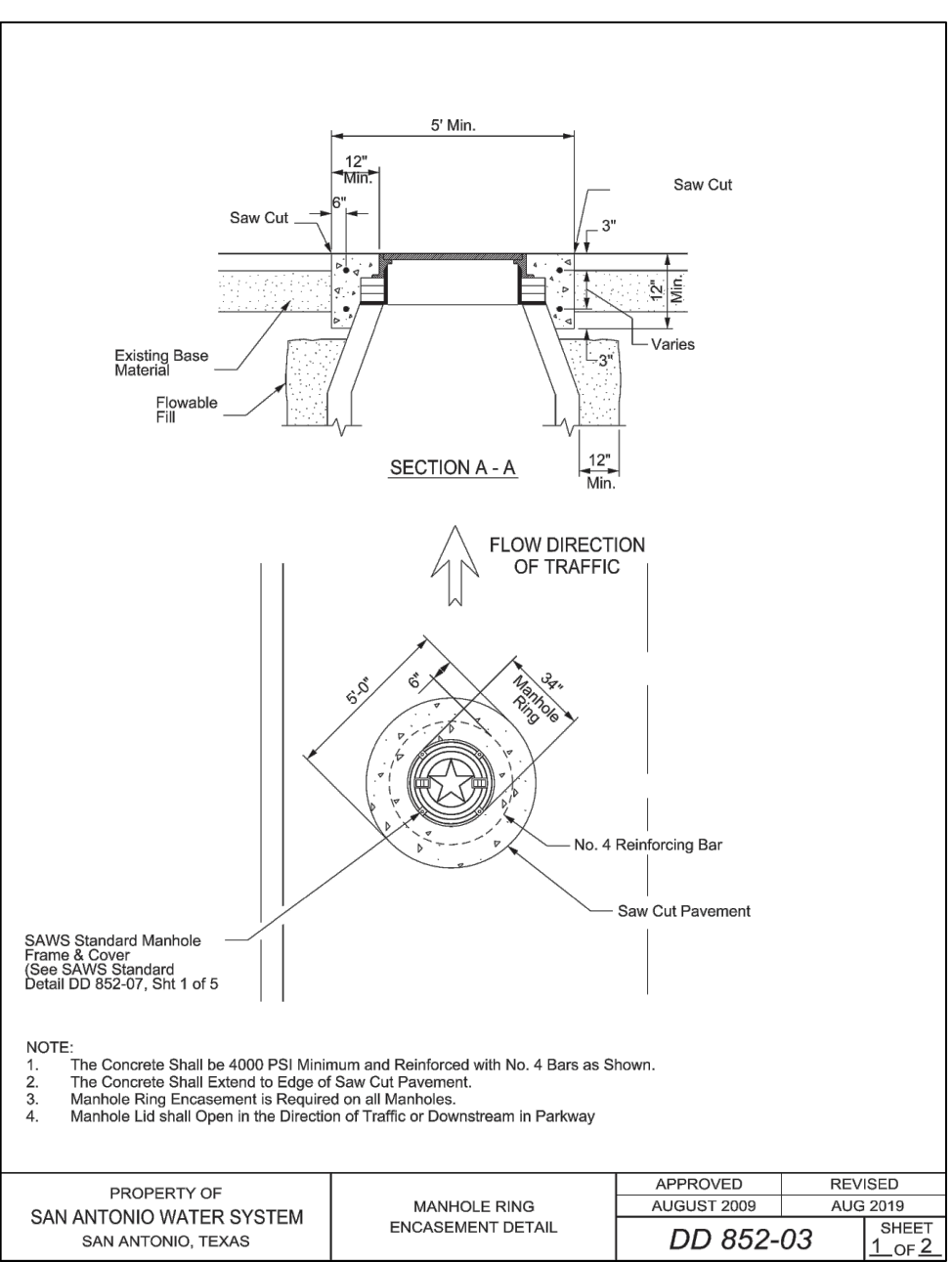
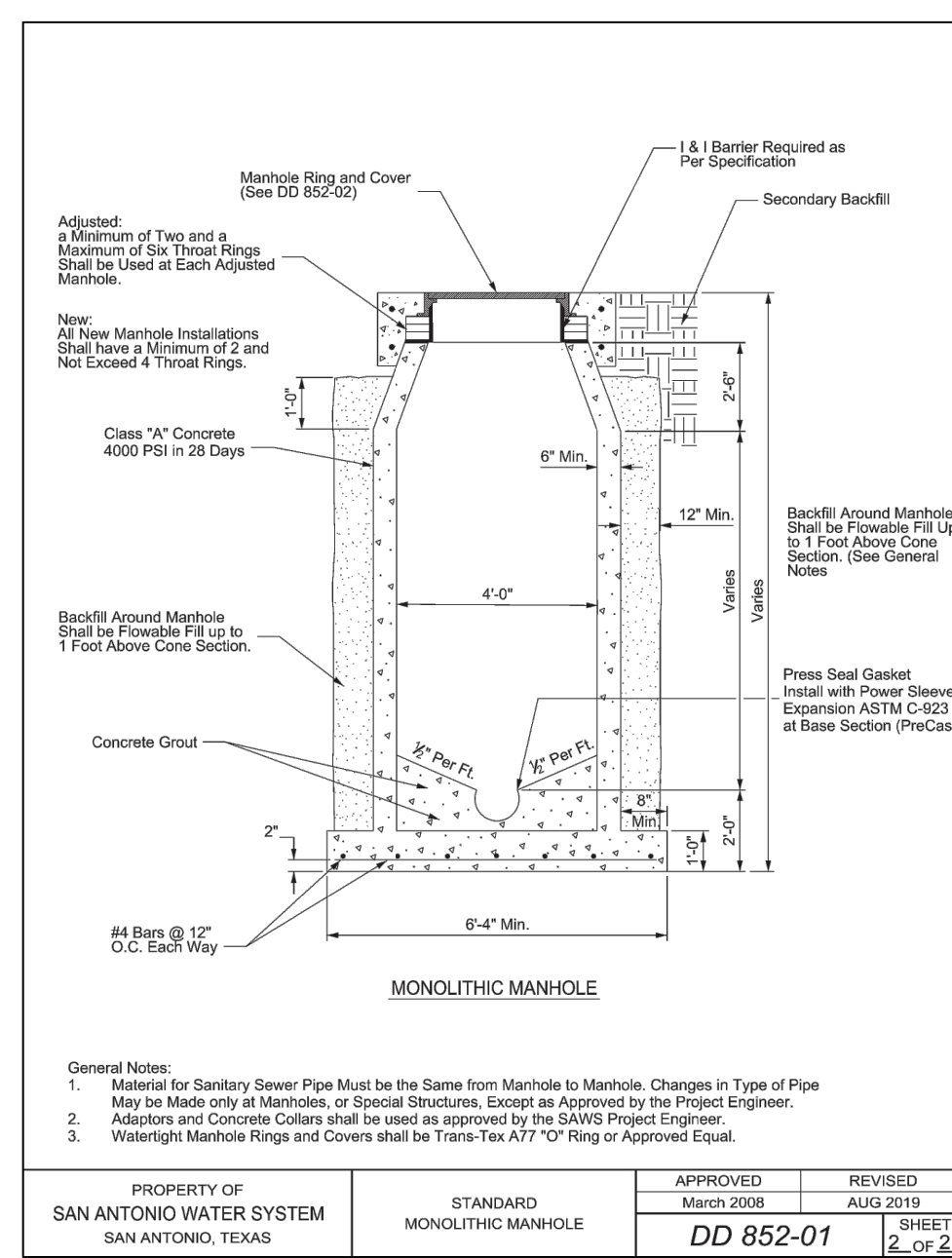
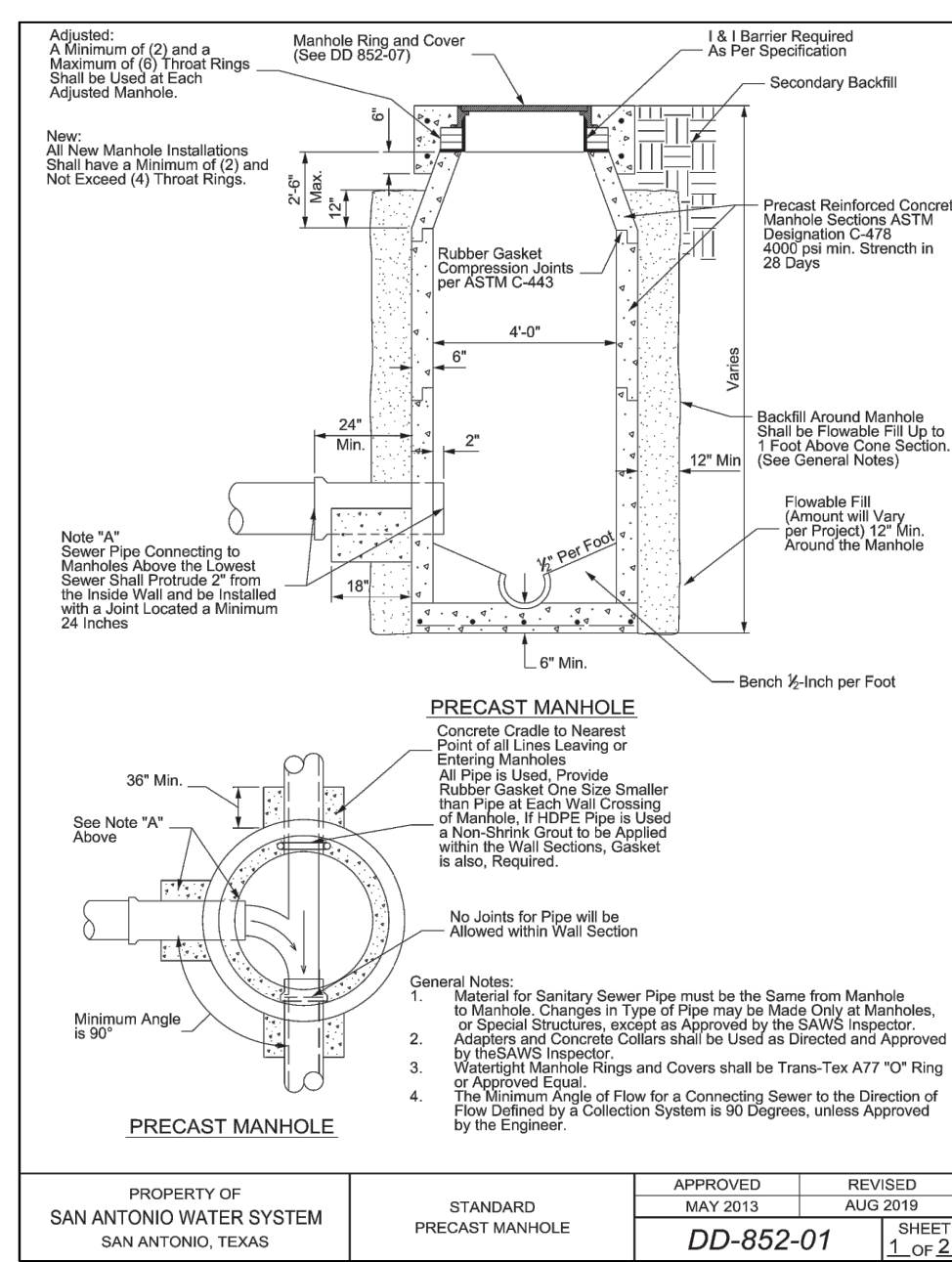
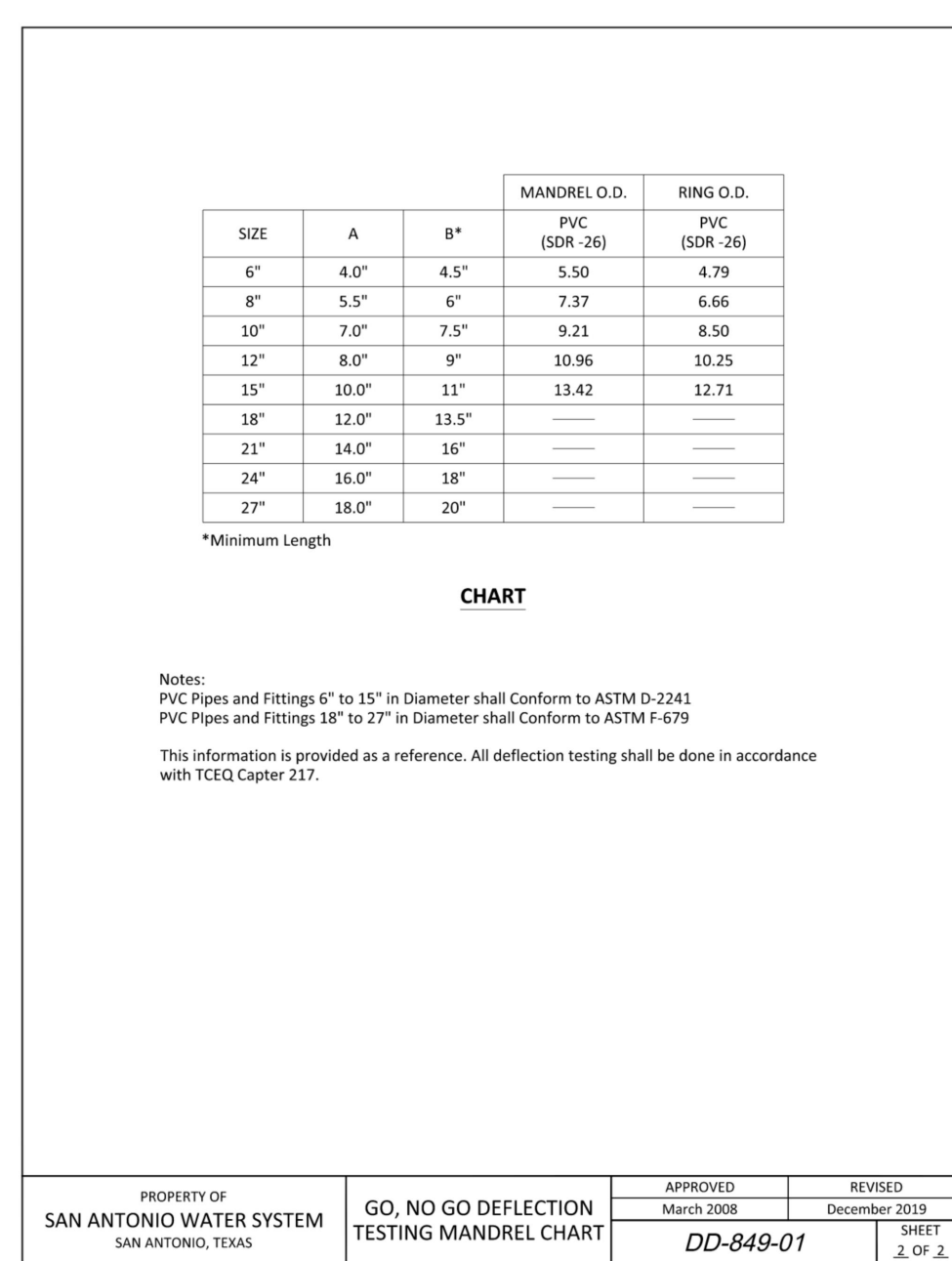
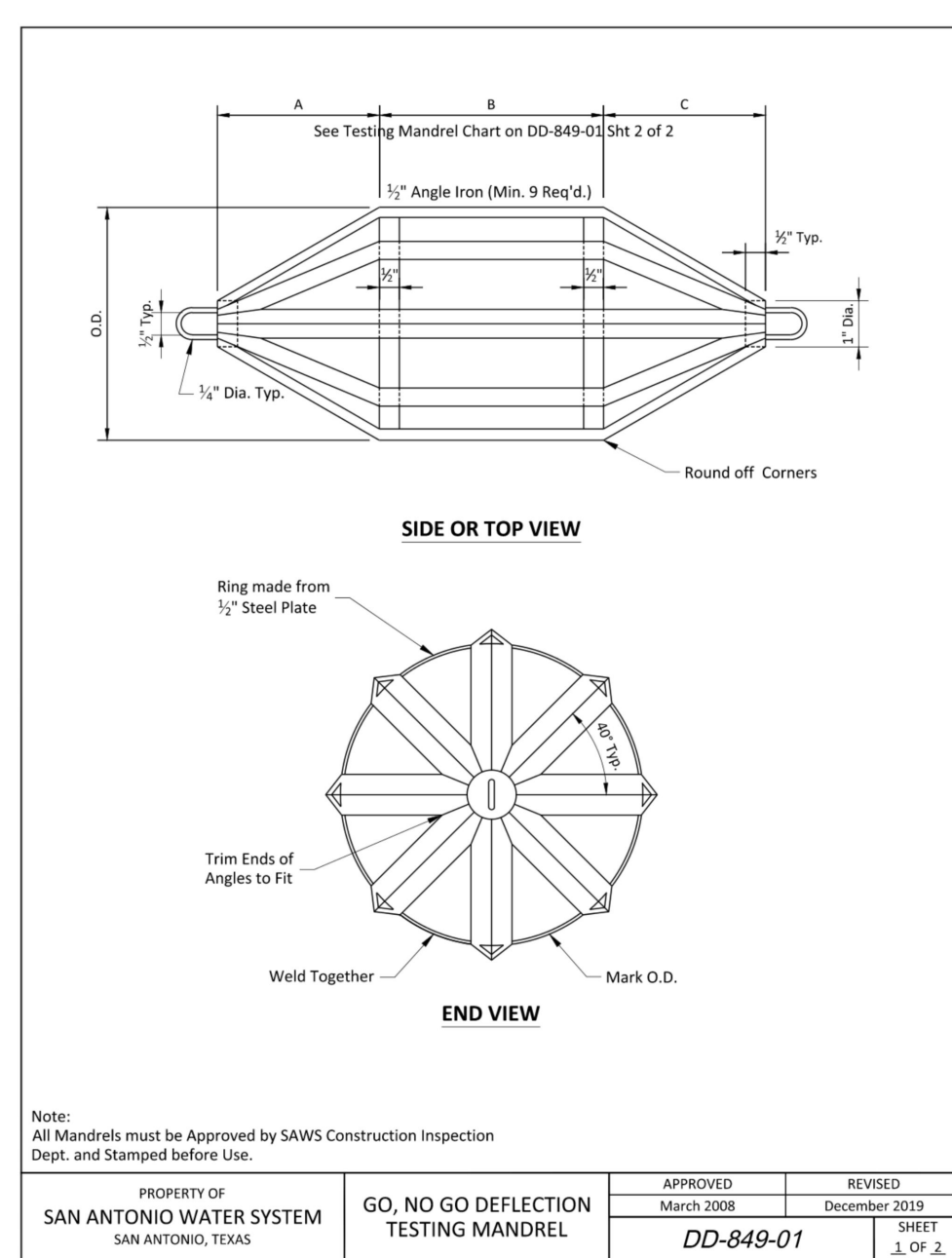
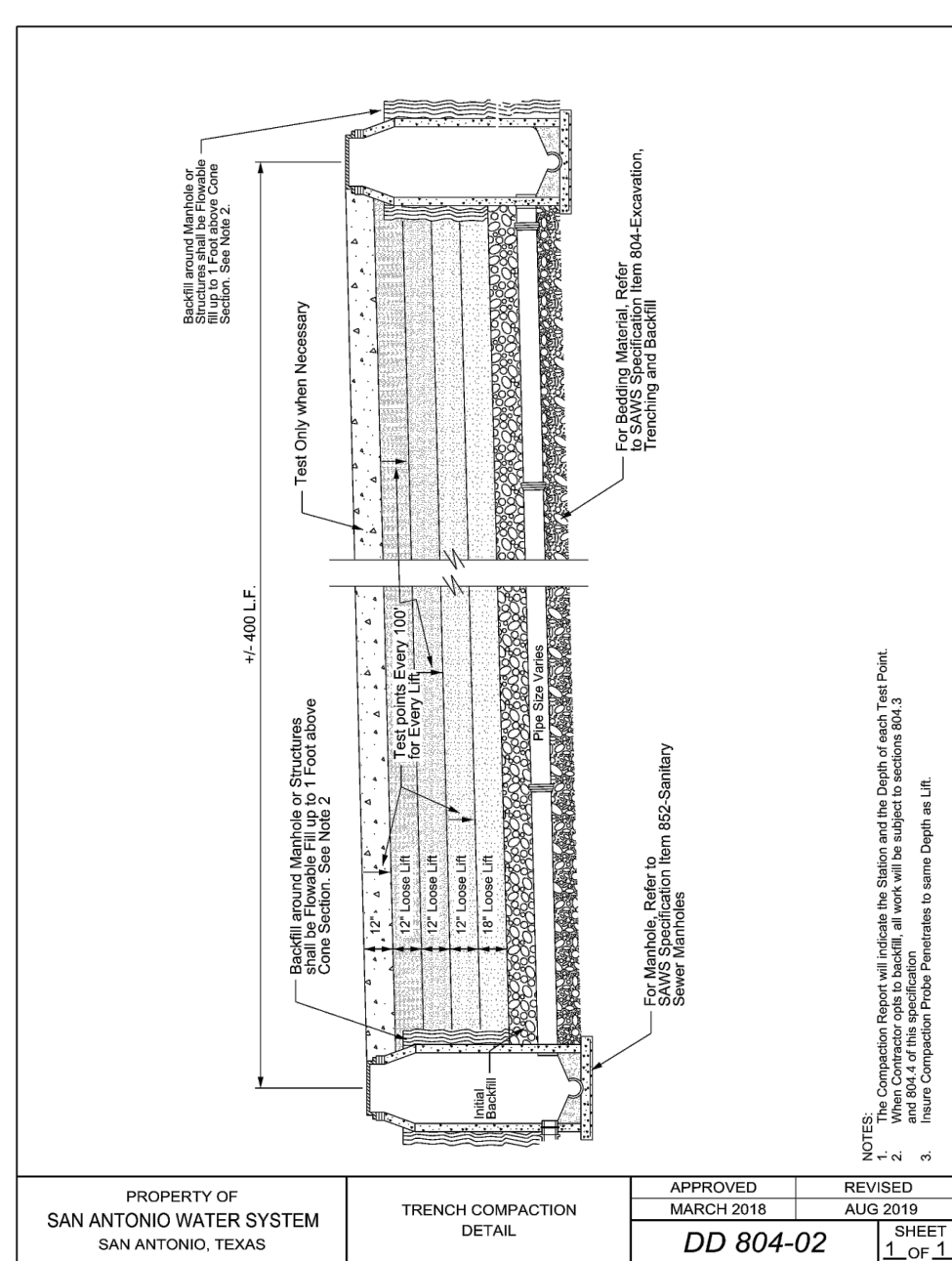
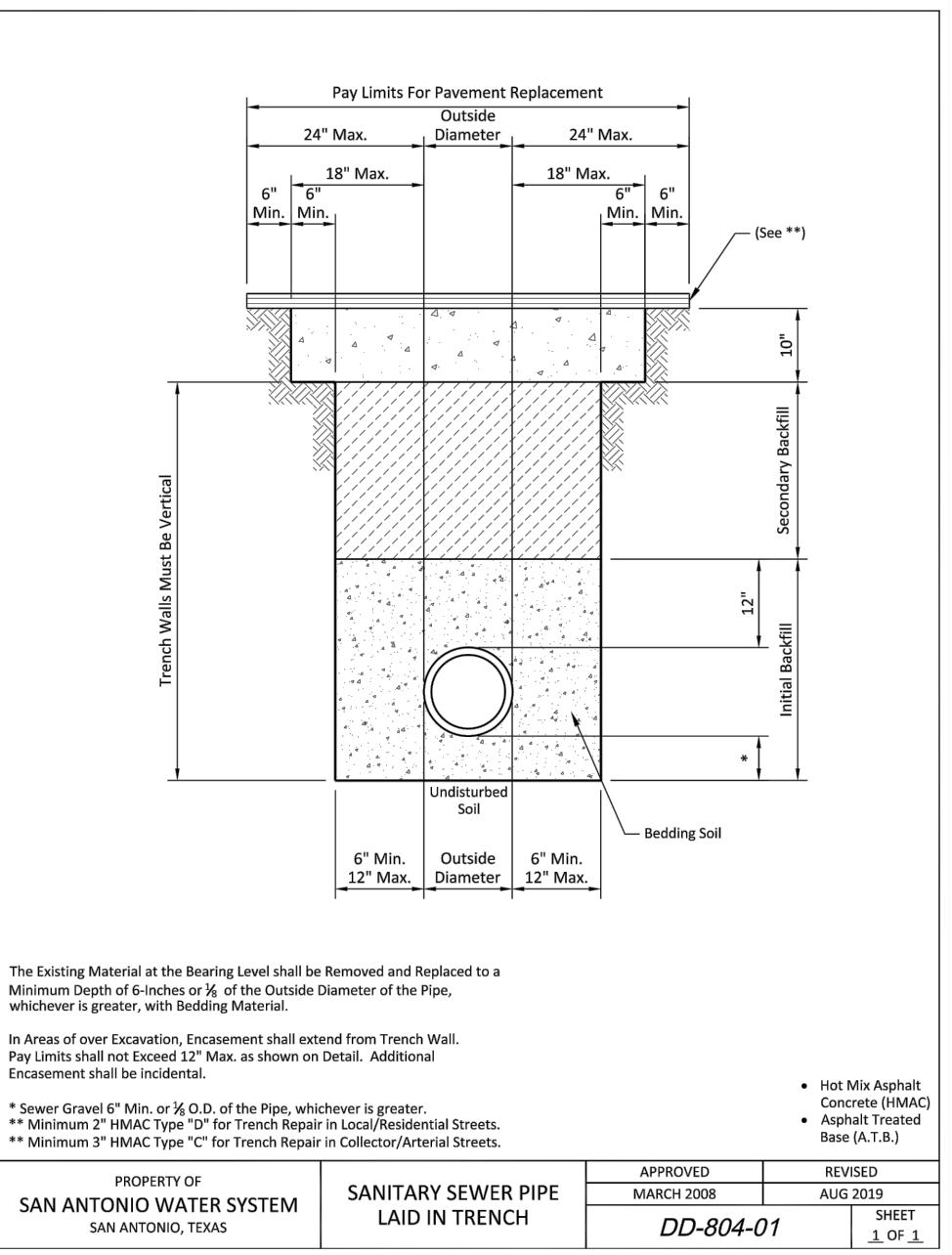
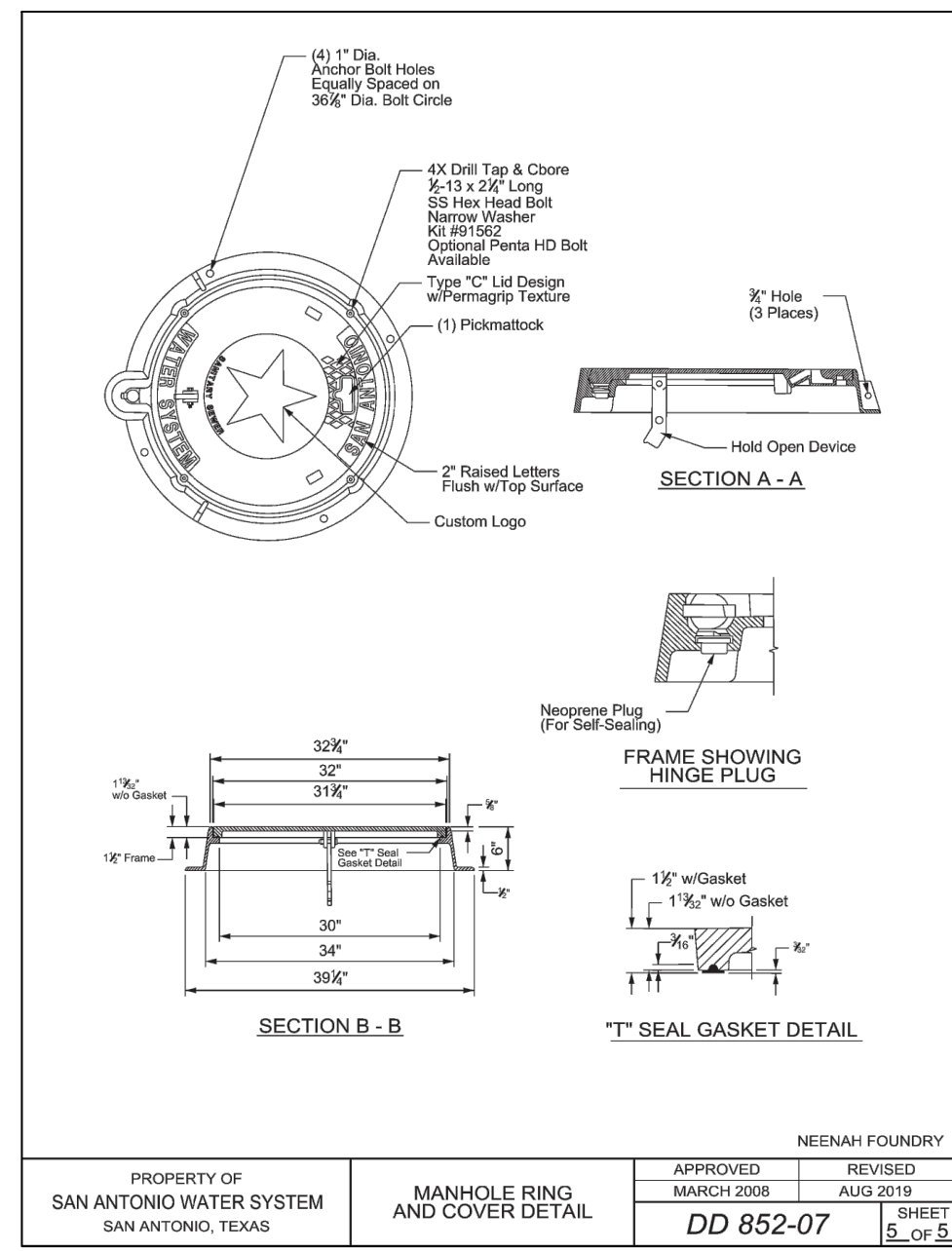
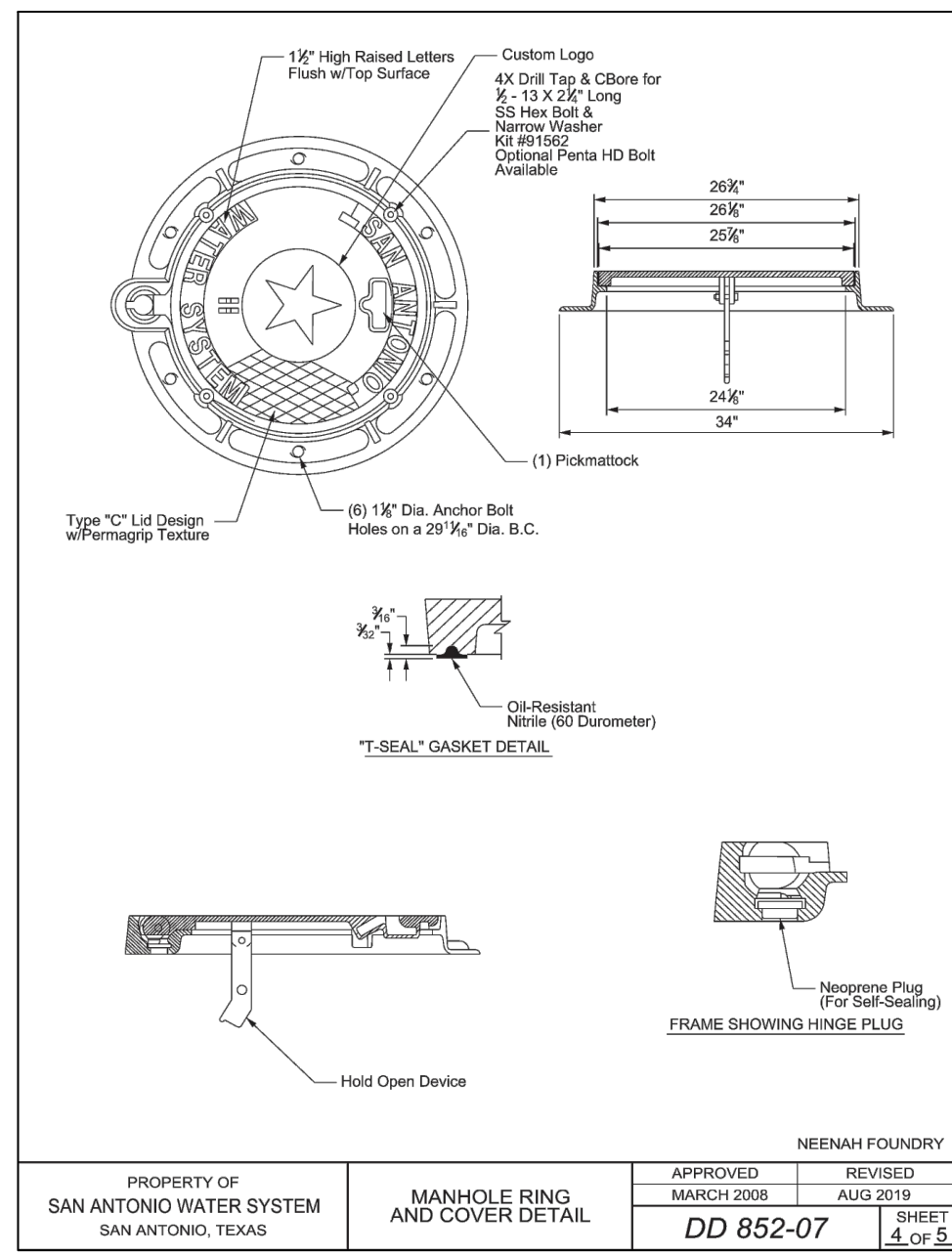
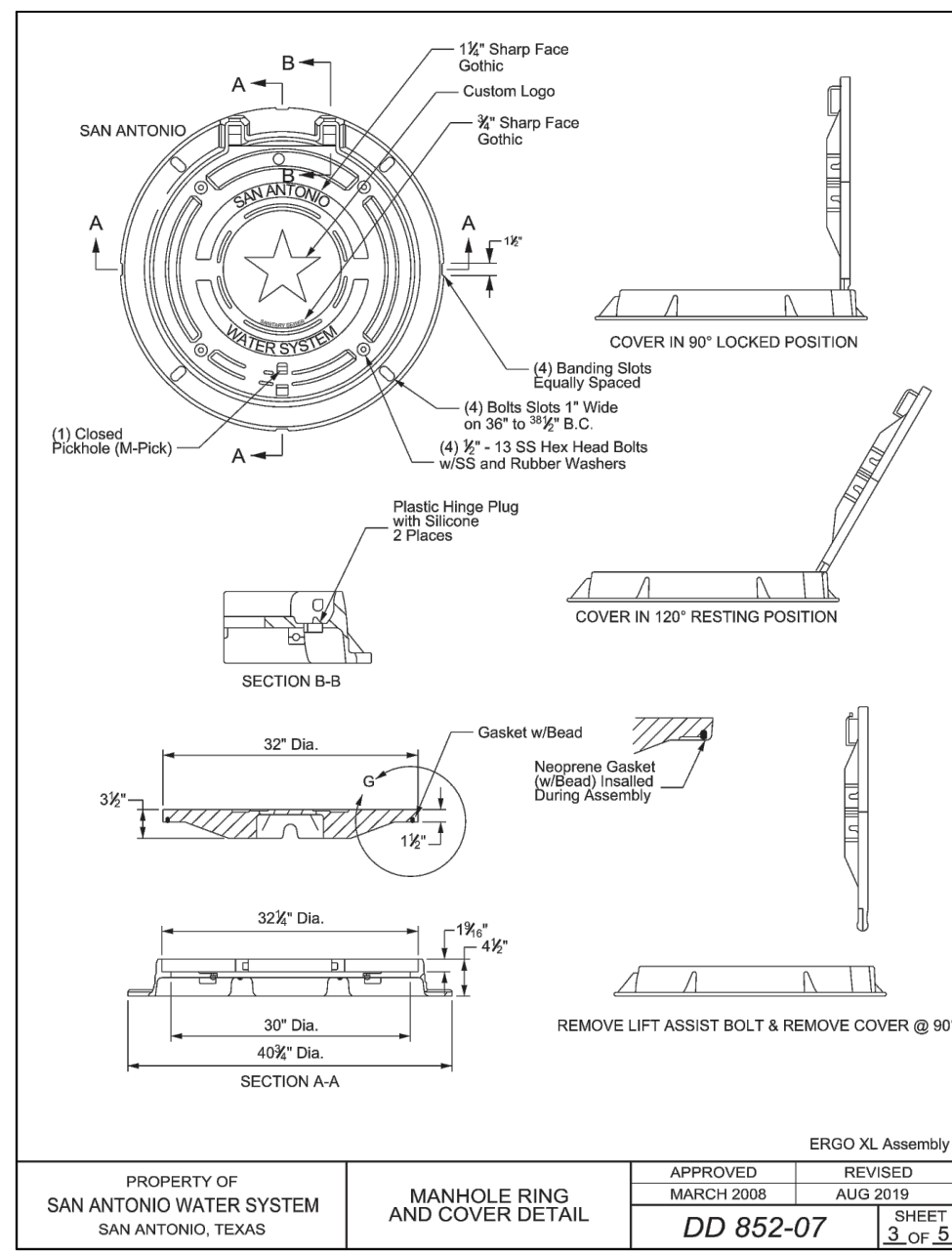
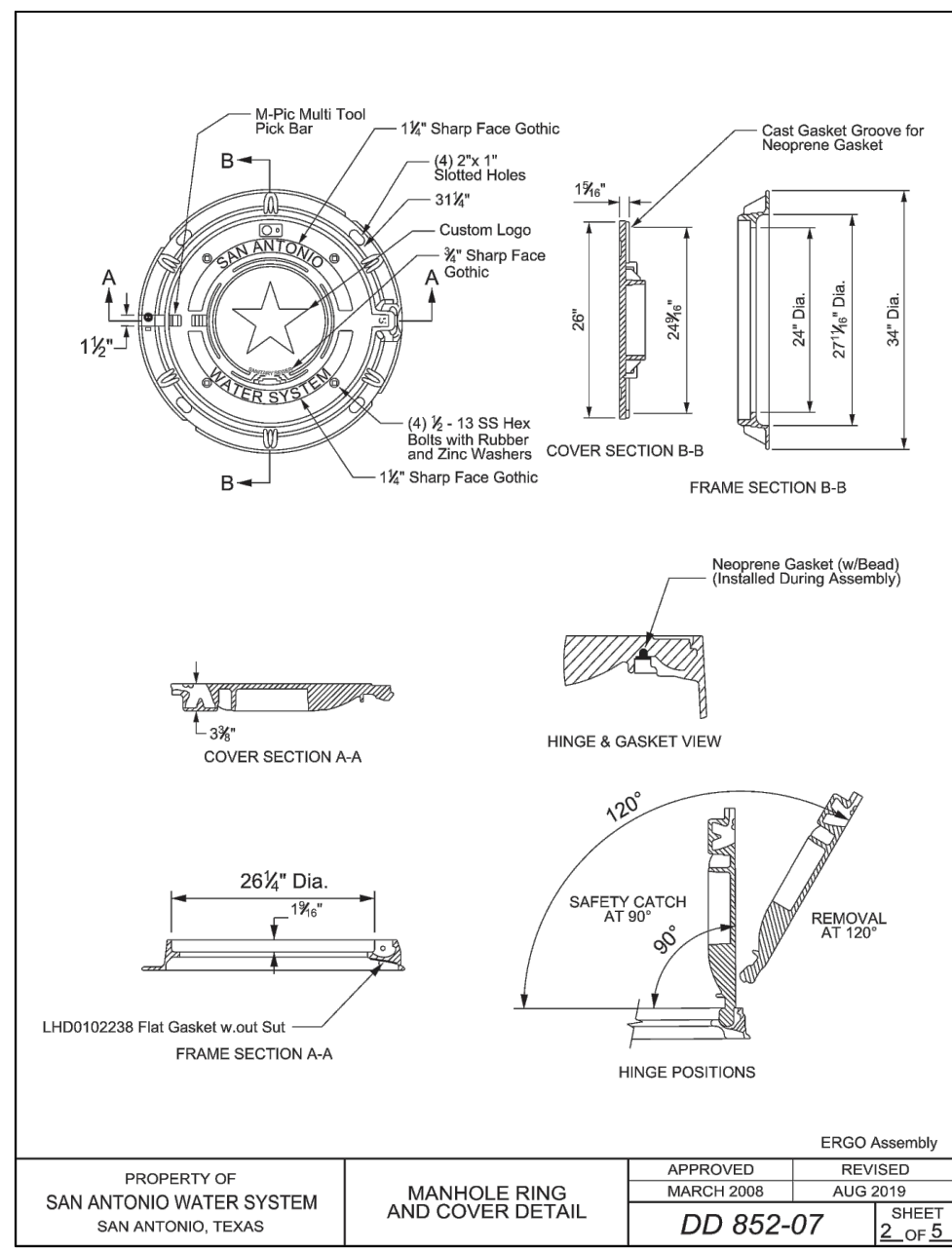
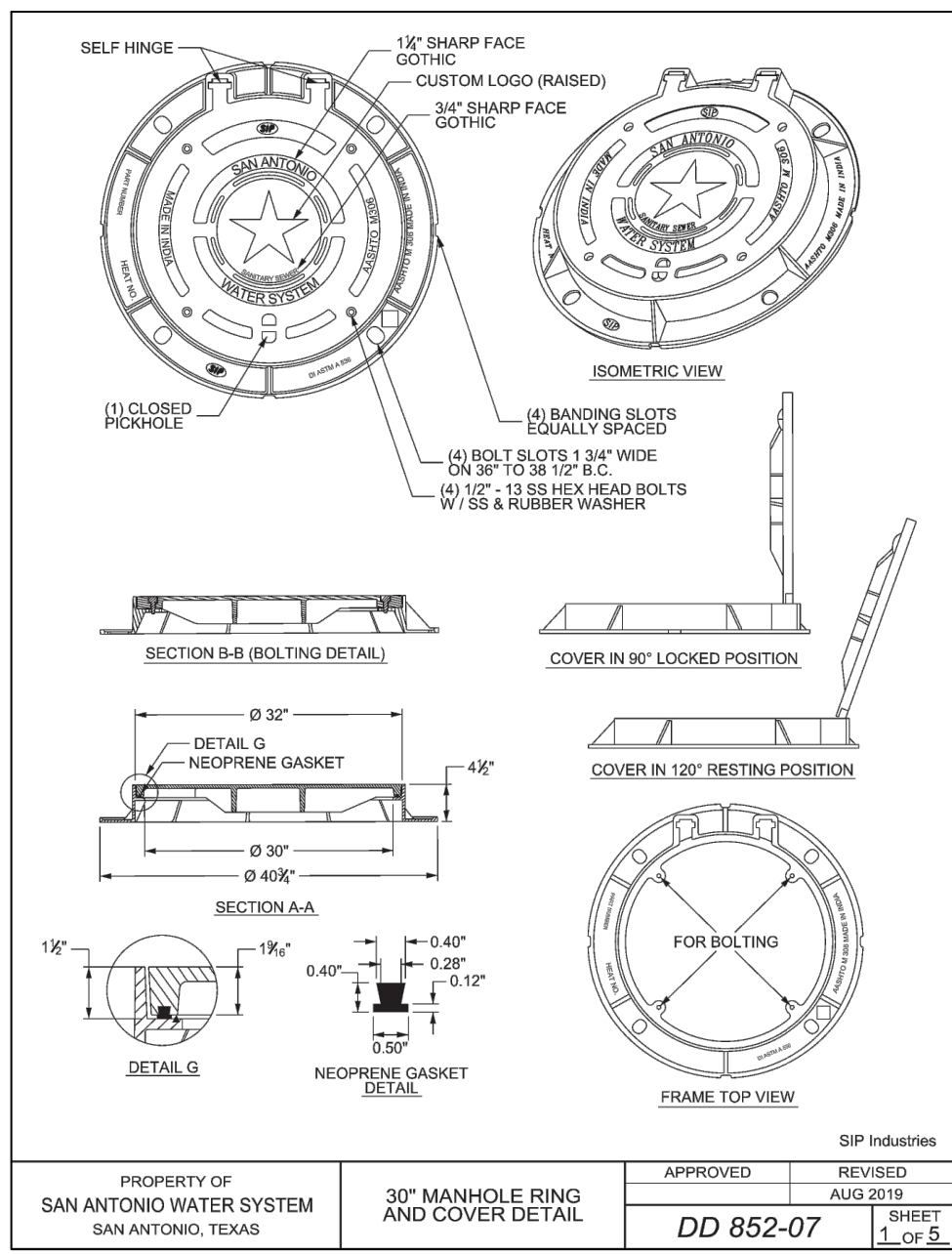
PLAN AND PROFILE (STA. 1+00.00 TO END)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C4.08



Date: Aug 17, 2023, 1:47pm User: ID: edk@pawsonciv  
File: P:\13\48\43\Design\CH\SSD11\3485-03.dwg

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LIVE OAK SLOUGH-MEDINA RIVER WATERSHED  
SEWER: UPPER MEDINA RIVER SOUTH  
SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: PULTE HOMES OF TEXAS, L.P.			
ADDRESS: 1718 DRY CREEK WAY, SUITE 120			
CITY: SAN ANTONIO	STATE: TEXAS	ZIP: 78259	
PHONE# (210) 496-1985	FAX#		
SAWS BLOCK MAP# 096-550 TOTAL EDU'S 79 TOTAL ACREAGE 15.76			
TOTAL LINEAR FOOTAGE OF PIPE: 8"-3,369 LF PLAT NO 21-11800397			
NUMBER OF LOTS 79 SAWS JOB NO. 22-1624			

DATE

NO.

REVISION

WESTLAKES UNIT 11

SAN ANTONIO, TEXAS

SANITARY SEWER DETAILS

PLAT NO. 21-11800397

JOB NO. 11348-43

DATE 2000

DRAWN MGG

CHECKED MG

SHEET C4.10

STATE OF TEXAS

MATTHEW GEISTWEIDT

118861

PROFESSIONAL ENGINEER

8/17/2022

PAPE-DAWSON

ENGINEERS

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS

2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210/375-9000

TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1028860









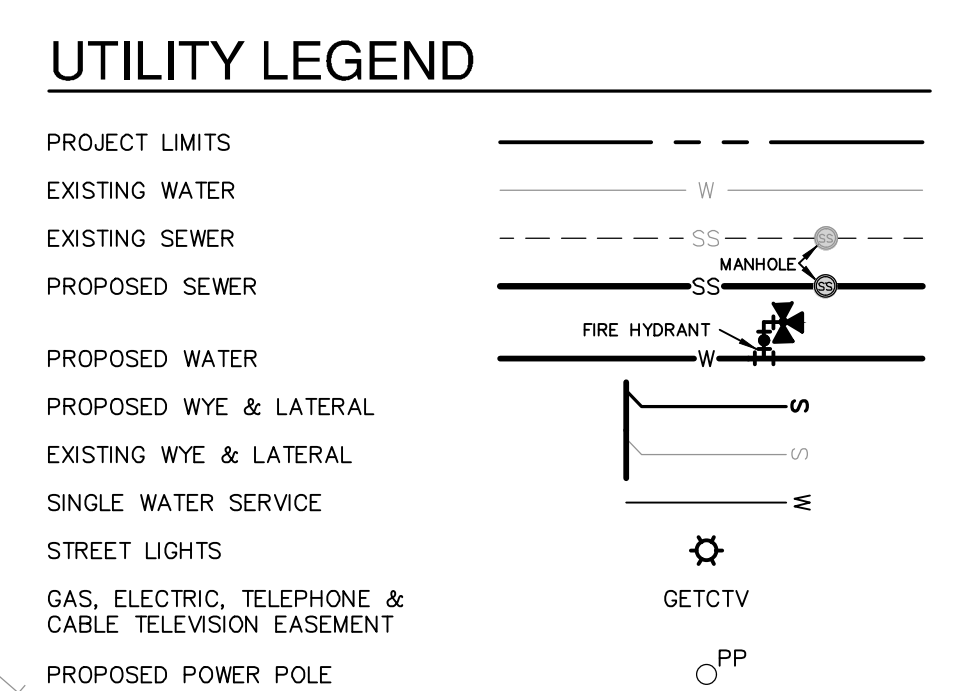
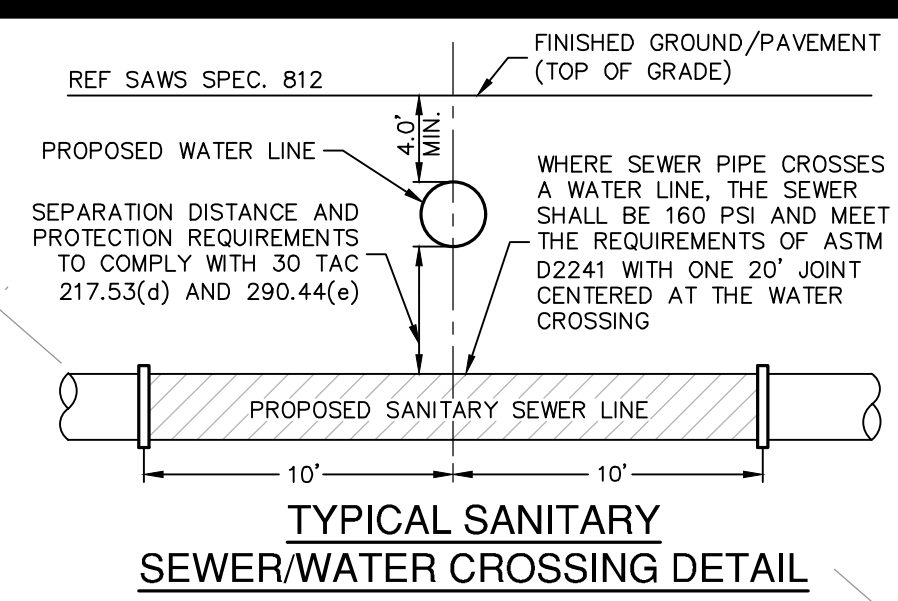












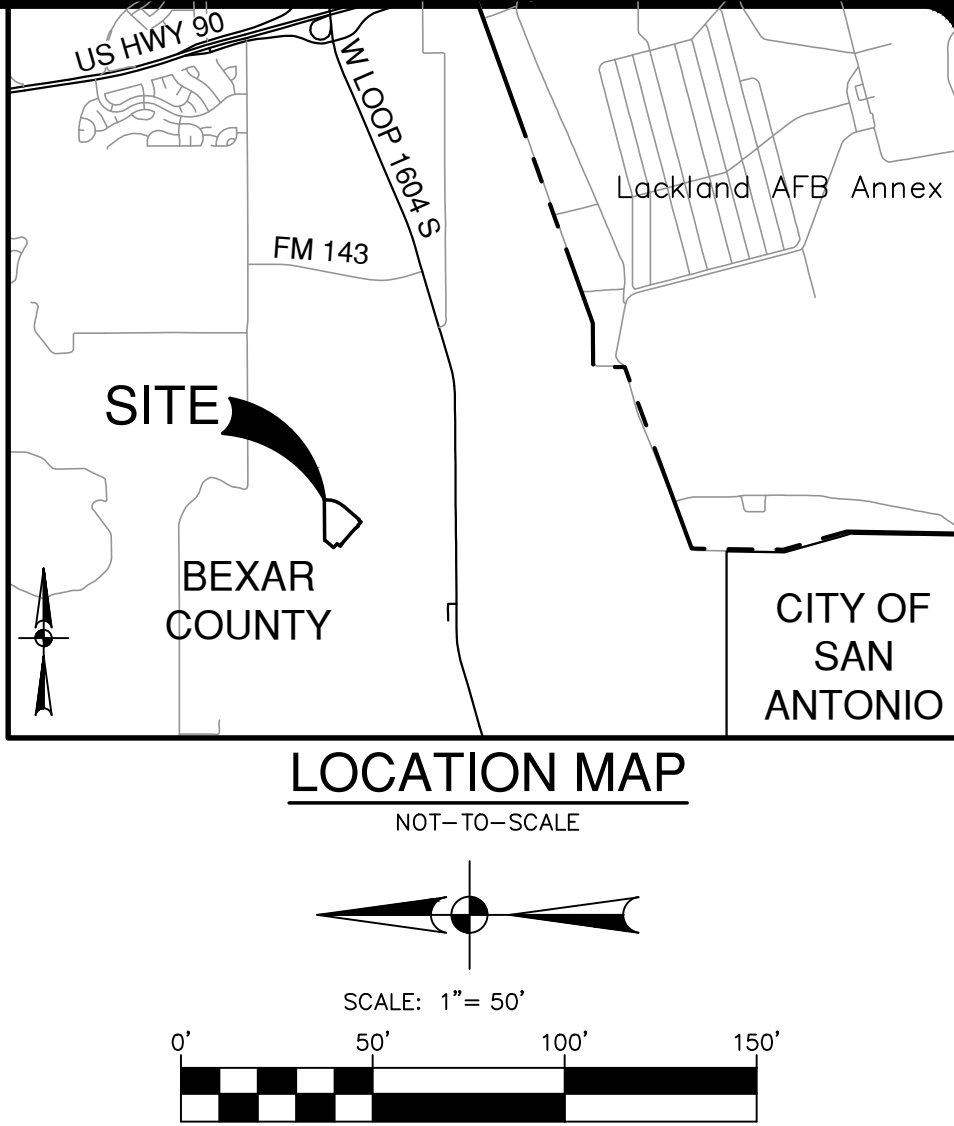
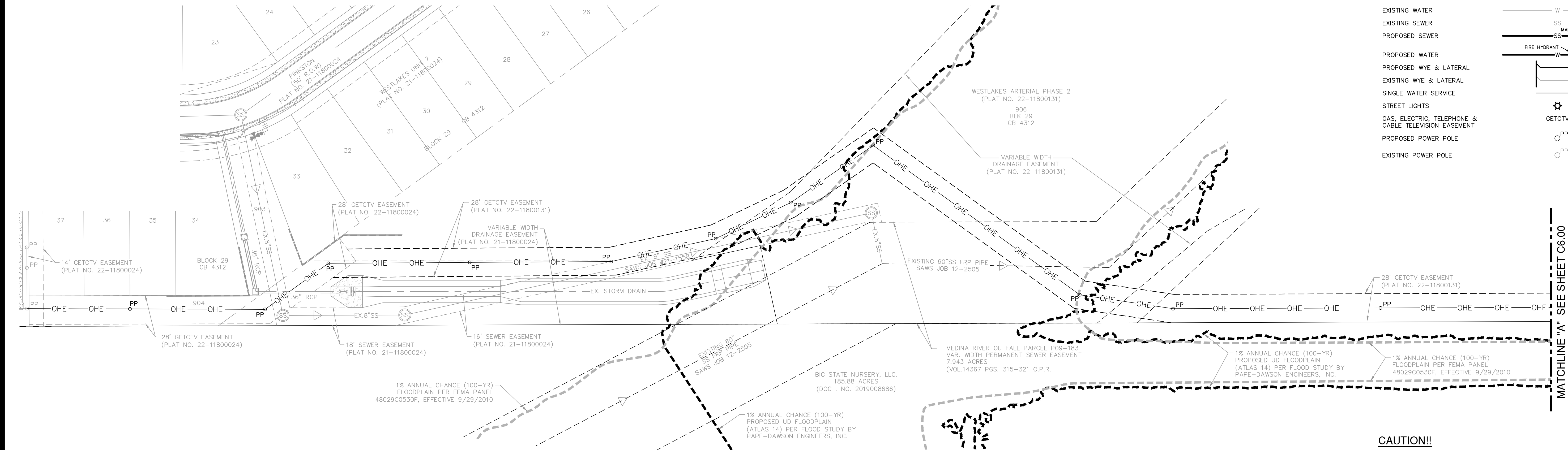
- ## **CAUTION!!**
- CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT 1-800-832-1TESS 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.
- ## **CONDUIT NOTES:**
1. CONTRACTOR SHALL INSTALL PERMANENT MARKERS IN PROPOSED CURB WHERE CONDUITS CROSS THE ROADWAY (BOTH SIDES).
  2. CONDUITS SHALL BE PVC WITH MINIMUM BURY OF 30 INCHES. SCHEDULE 40 TO BE USED FOR CPS CONDUITS, ALL OTHER CONDUITS ARE SCHEDULE 40.
  3. ALL CONDUITS SHALL BE EXTENDED BEHIND CURBS OR PROPOSED SIDEWALKS A MINIMUM OF 3 FEET AND CAPPED FOR FUTURE USE.
  4. ALL CONDUITS TO BE USED FOR ELECTRIC OR GAS UTILITY CROSSINGS SHALL BE INSTALLED TO MEET OR EXCEED DESIGN REQUIREMENTS FOR THE UTILITY WHICH THEY ARE SERVING, INCLUDING BUT NOT LIMITED TO THE DEPTH, TRENCH PLACEMENT, AND PROXIMITY TO OTHER UTILITIES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING AND INSTALLING THE CONDUITS TO MEET THESE SPECIFICATIONS.

**TRENCH EXCAVATION SAFETY PROTECTION:** CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYER OR STRUCTURAL DESIGN/ GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO DETERMINE THE NECESSITY FOR 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 PROCEDURES SHALL BE SUFFICIENT FOR ADDRESSING ALL TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYER OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES.

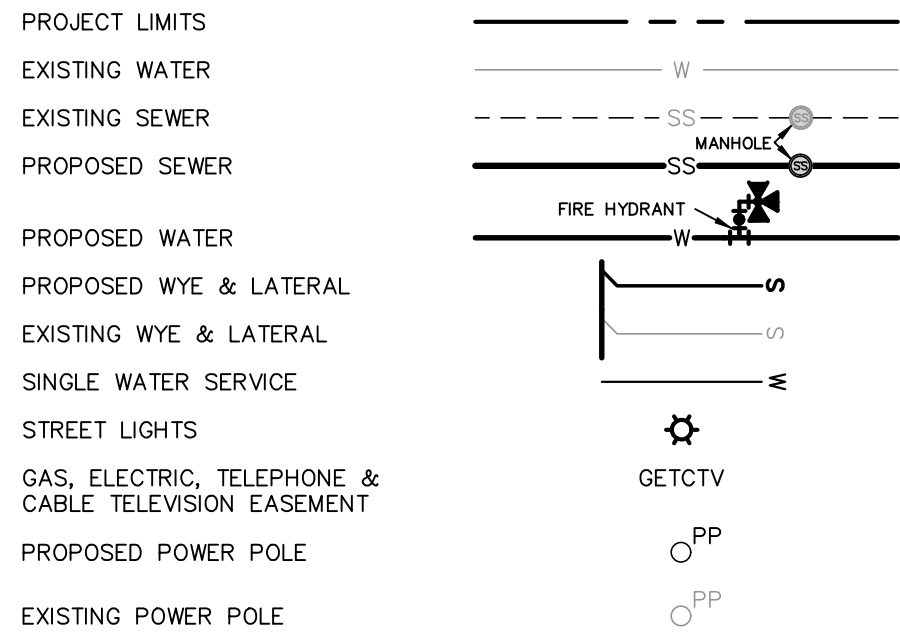
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### UTILITY LEGEND



### CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, 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.

### CONDUIT NOTES:

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- CONDUITS SHALL BE PVC WITH MINIMUM BURY OF 30 INCHES. SCHEDULE 80 TO BE USED FOR CPS CONDUITS, ALL OTHER CONDUITS ARE SCHEDULE 40.
- ALL CONDUITS SHALL BE EXTENDED BEHIND CURBS OR PROPOSED SIDEWALKS A MINIMUM OF 3 FEET AND CAPPED FOR FUTURE USE.
- ALL CONDUITS TO BE USED FOR ELECTRIC OR GAS UTILITY CROSSINGS SHALL BE INSTALLED TO MEET OR EXCEED DESIGN REQUIREMENTS FOR THE UTILITY WHICH THEY ARE SERVING, INCLUDING BUT NOT LIMITED TO THE DEPTH, TRENCH PLACEMENT, AND PROXIMITY TO OTHER UTILITIES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING AND INSTALLING THE CONDUITS TO MEET THESE SPECIFICATIONS.

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**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

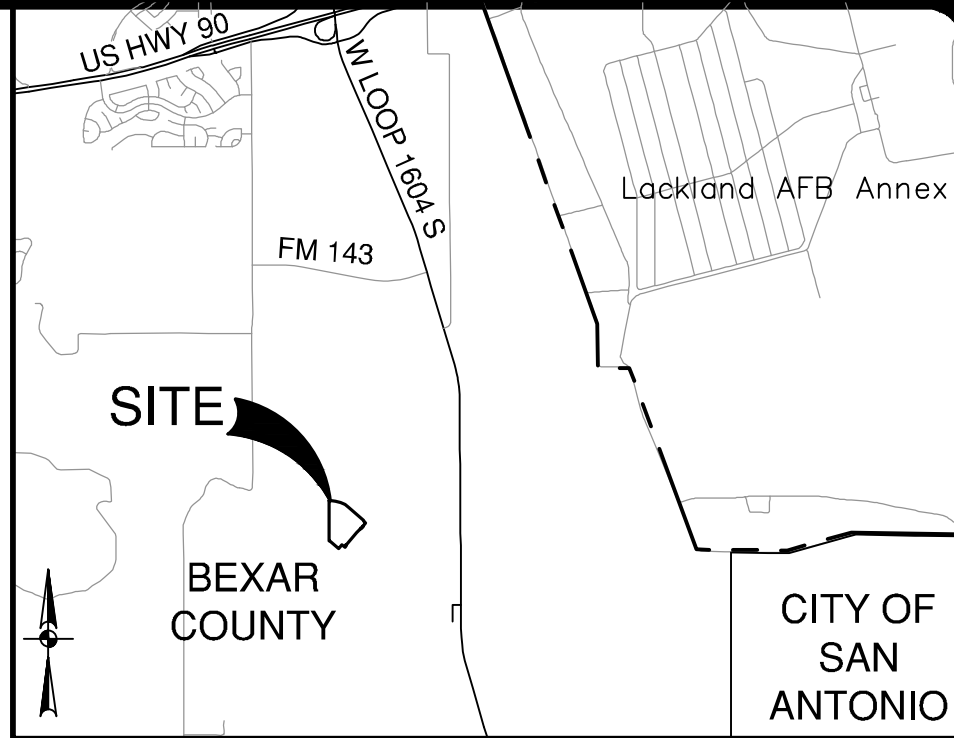
**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS  
OVERALL UTILITY PLAN  
(SHEET 2 OF 2)

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MGS  
SHEET C6.01



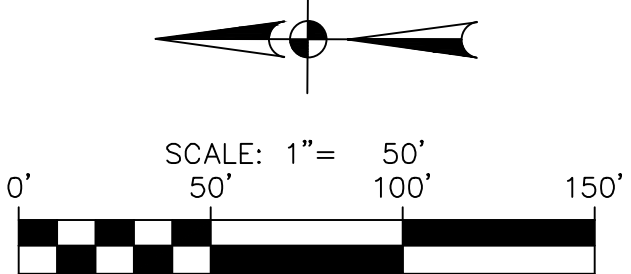
GRADING NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TxDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.
3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.
4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.
6. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
8. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.
9. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).
11. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HEREON WITHIN +/- ONE-TENTH (0.10) FOOT.
12. IN PROPOSED PAVING AREAS, STREET DESIGN PLANS SHALL CONTROL. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.
13. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY ITEMS).
15. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.
16. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.
17. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
18. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.
19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT A PERMIT.



LOCATION MAP

NOT-TO-SCALE



GRADING LEGEND

PROJECT LIMITS	---
100 YR FLOODPLAIN	---
100 YR FLOODPLAIN	---
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
FLOW ARROW (EXISTING)	---
FLOW ARROW (PROPOSED)	---
EXISTING TREE TO BE SAVED	---



**PAPE-DAWSON**  
**ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #479 | TEXAS SURVEYING FIRM #1008860

**WESTLAKES UNIT 11**  
**SAN ANTONIO, TEXAS**

**OVERALL GRADING PLAN**

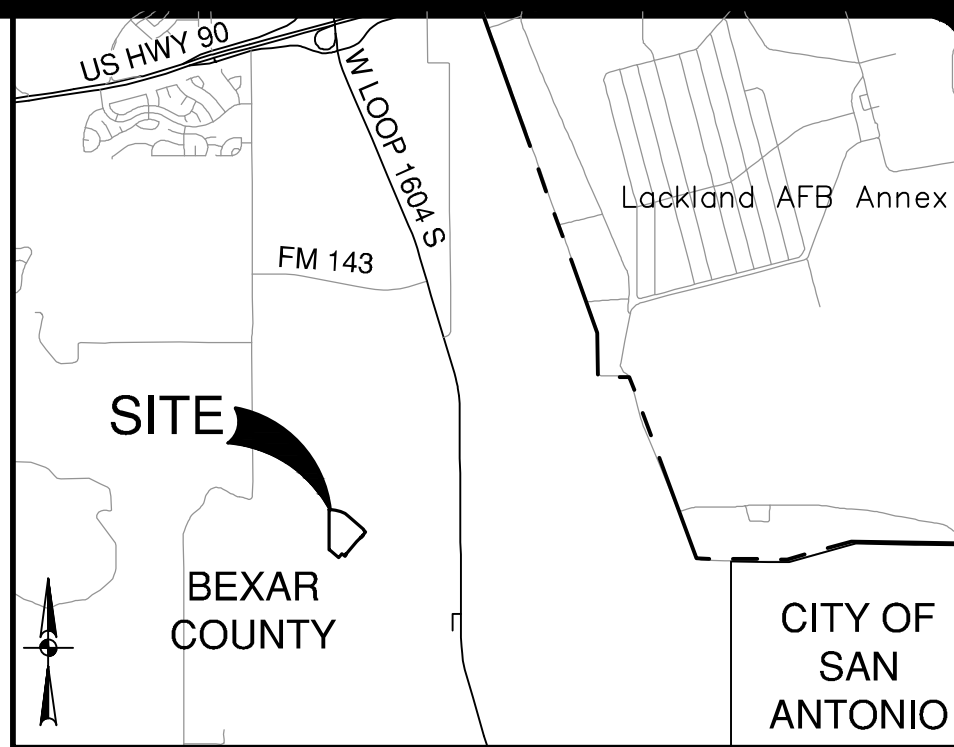
PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MGC
SHEET	C7.00





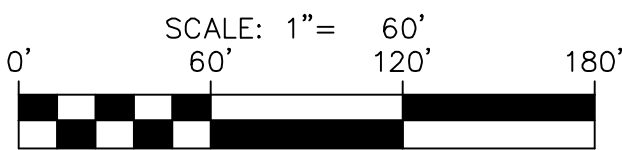
ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

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LOCATION MAP

NOT-TO-SCALE



## SWPPP LEGEND

PROJECT LIMITS

EXISTING CONTOUR

PROPOSED CONTOUR

FLOW ARROW (EXISTING)

FLOW ARROW (PROPOSED)

SILT FENCE

ROCK BERM

GRAVEL FILTER BAGS

GRATE INLET PROTECTION

SEDIMENT CONTROL ROLLS

LIMITS OF DISTURBED AREA

STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE)

CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE)


CONCRETE TRUCK WASH-OUT PIT (FIELD LOCATE)

976

970

The diagram illustrates the proposed construction site layout. It shows the project limits, existing and proposed contours, flow arrows, and various erosion control measures. The layout includes a silt fence, rock berm, gravel filter bags, grate inlet protection, sediment control rolls, and limits of disturbed area. It also shows the stabilized construction entrance/exit, construction equipment, vehicle, and materials storage area, and a concrete truck wash-out pit. The diagram is oriented with North at the top.

## GENERAL NOTES

1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.
2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.
3. STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.
4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.
5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.
6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION PREVENTION PLAN.
7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.
8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.
9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO CONCLUDE WITH THE DISTURBANCE OF UPGRADE/AREAS.
10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.
11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERM IN DRAINAGE FEATURES.
12. WHERE VEGETATED FIELD STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FIELD STRIP.
13. SHADED AREA  DENOTES LIMITS OF DISTURBED AREAS, OTHER AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF A CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT A DISTURBED AREA. THESE AREAS WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES.
14. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE THE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TWO-TWO (2/2) RIGHT-OF-WAY WITH TxDOT.
15. CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES FOR ON-SITE CONSTRUCTION AND OFF-SITE FEED TO THE PROJECT.

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR THE PURPOSES OF THE SWP3 ONLY. A CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLAN.

EXHIBIT 2



**PAPE-DAWSON  
ENGINEERS**

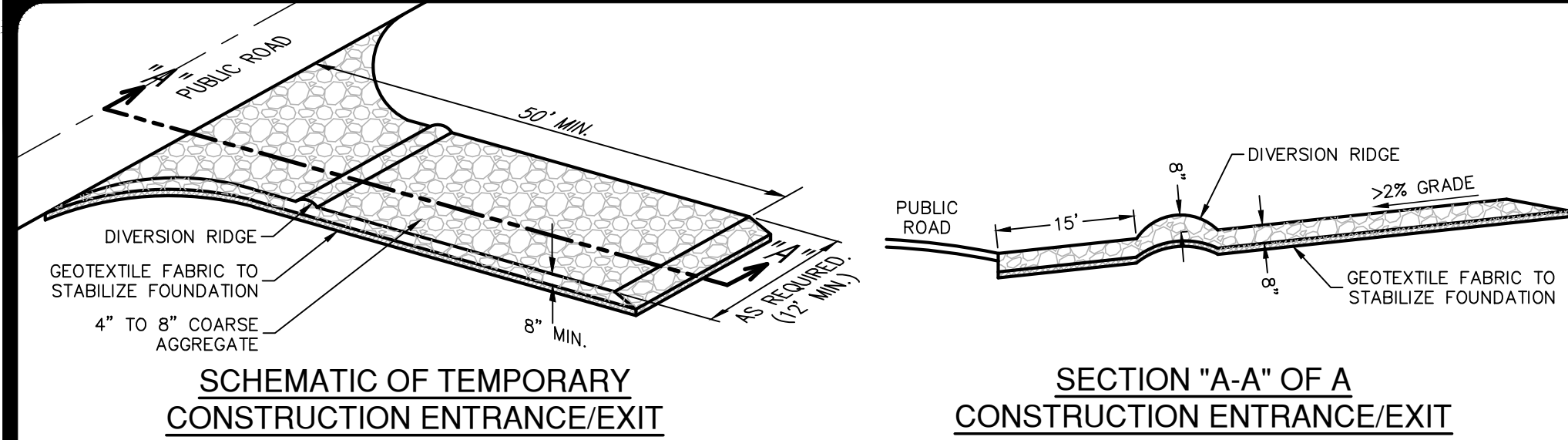
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028600

**WESTLAKES UNIT 11**  
**SAN ANTONIO, TEXAS**

# STORM WATER POLLUTION PREVENTION PLAN

PLAT NO. 21-11800397  
JOB NO. 11348-43  
DATE JUNE 2022  
DESIGNER EDK  
CHECKED MG DRAWN MG  
SHEET C8.00



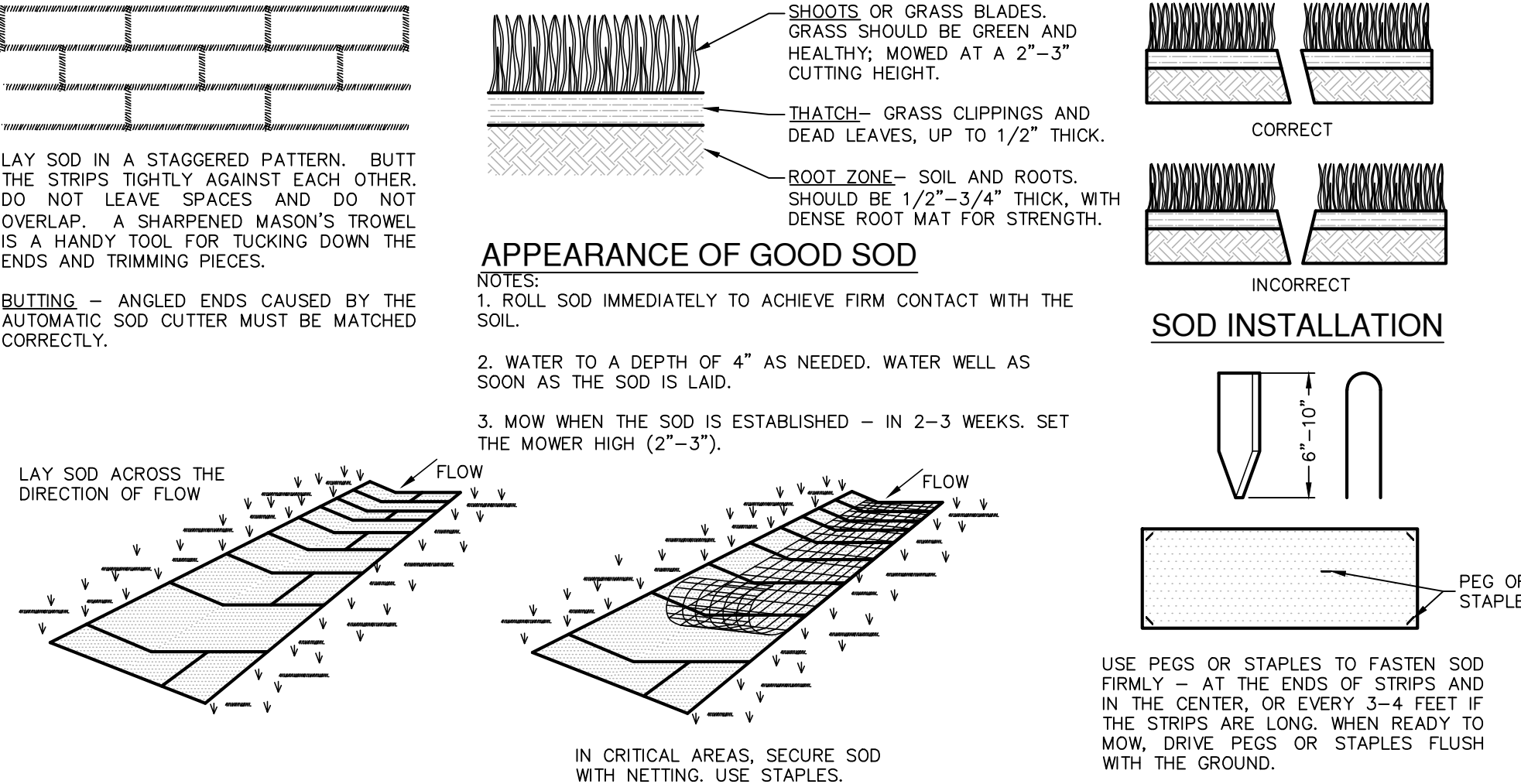


- MATERIALS**
1. THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
  2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8-INCHES.
  3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD<sup>2</sup>, A MULLEN BURST RATING OF 140 LB/IN<sup>2</sup>, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
  4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

- INSTALLATION**
1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
  2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
  3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
  4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
  5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
  6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
  7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
  8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

### STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NOT-TO-SCALE



- MATERIALS**
1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH (± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE SHOOT GROWTH AND THATCH.
  2. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.
  3. STANDARD SIZE SECTIONS OF SOD SHOULD BE SIZED AND SHAPE TO SUPPORT THEIR OWN WEIGHT AND THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.
  4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

### SITE PREPARATION

1. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.
2. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
3. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

### INSTALLATION IN CHANNELS

1. SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY (SEE FIGURE ABOVE).
2. AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

### SOD INSTALLATION DETAIL

NOT-TO-SCALE

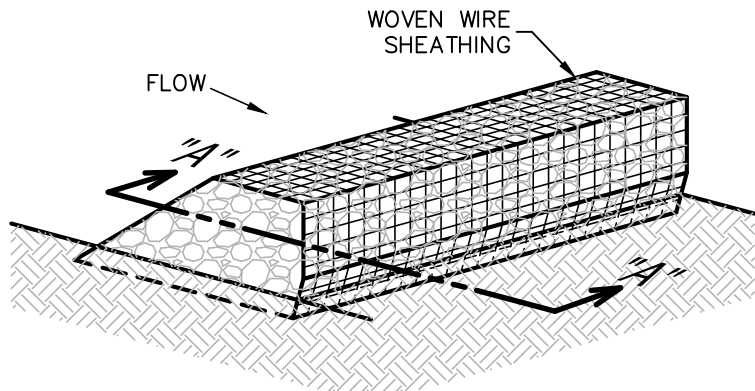
### COMMON TROUBLE POINTS

1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD.
2. STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY CONDITION AS STONE IS PRESSED INTO SOIL.
3. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC-EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.
4. PAD NOT FLARED SUFFICIENTLY AT ROAD SURFACE, RESULTS IN MUD BEING TRACKED ON TO ROAD AND POSSIBLE DAMAGE TO ROAD.

5. UNSTABLE FOUNDATION - USE GEOTEXTILE FABRIC UNDER PAD AND/OR IMPROVE FOUNDATION DRAINAGE.

### INSPECTION AND MAINTENANCE GUIDELINES

1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.



### ISOMETRIC PLAN VIEW

### ROCK BERMS

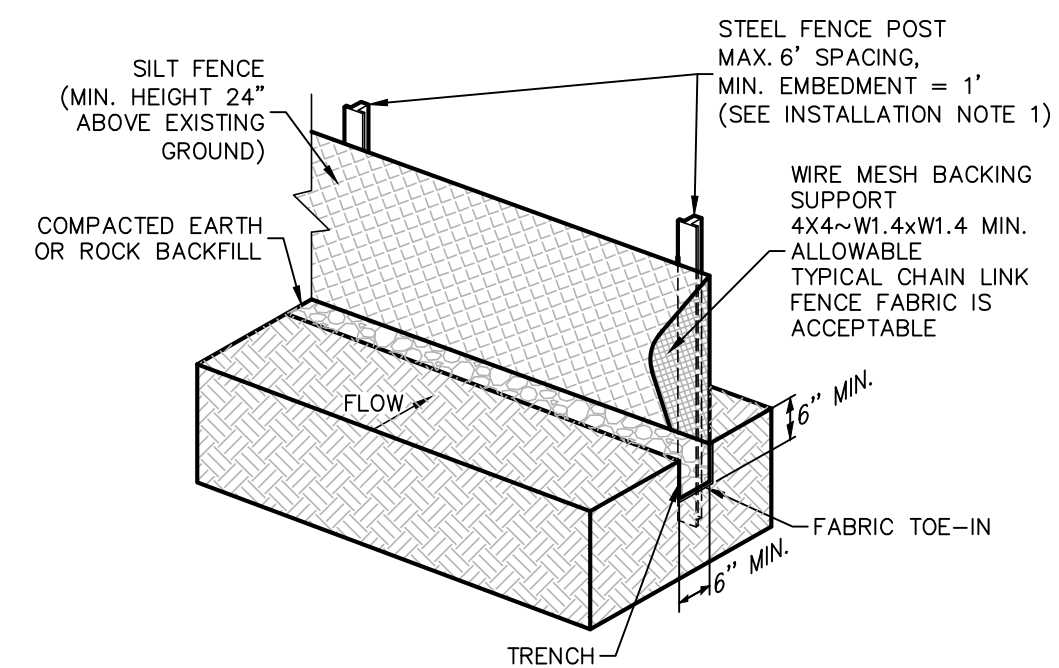
THE PURPOSE OF A ROCK BERM IS TO SERVE AS A CHECK DAM IN AREAS OF CONCENTRATED FLOW, TO INTERCEPT SEDIMENT-LADEN RUNOFF, DETAIN THE SEDIMENT AND RELEASE THE WATER IN SHEET FLOW. THE ROCK BERM SHOULD BE USED WHEN THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES. ROCK BERMS ARE USED IN AREAS WHERE THE VOLUME OF RUNOFF IS TOO GREAT FOR A SILT FENCE TO CONTAIN. THEY ARE LESS EFFECTIVE FOR SEDIMENT REMOVAL THAN SILT FENCES, PARTICULARLY FOR FINE PARTICLES, BUT ARE ABLE TO WITHSTAND HIGHER FLOWS THAN A SILT FENCE. AS SUCH, ROCK BERMS ARE OFTEN USED IN AREAS OF CHANNEL FLOWS (DITCHES, GULLIES, ETC.). ROCK BERMS ARE MOST EFFECTIVE AT REDUCING BED LOAD IN CHANNELS AND SHOULD NOT BE SUBSTITUTED FOR OTHER EROSION AND SEDIMENT CONTROL MEASURES FARTHER UP THE WATERSHED.

### INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

### ROCK BERM DETAIL

NOT-TO-SCALE



### ISOMETRIC PLAN VIEW

### SILT FENCE

A SILT FENCE IS A BARRIER CONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PREVENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, SILT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FROM DISTURBED AREAS. THEY CAUSE RUNOFF TO POND, ALLOWING HEAVIER SOLIDS TO SETTLE OUT. IF NOT PROPERLY INSTALLED, SILT FENCES ARE NOT LIKELY TO BE EFFECTIVE.

THE PURPOSE OF A SILT FENCE IS TO INTERCEPT AND DETAIN WATER-BORN SEDIMENT FROM UNPROTECTED AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONCENTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST BE TAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED FLOW.

SILT FENCING WITHIN THE SITE MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION ACTIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUND AT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE OR AROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

### MATERIALS

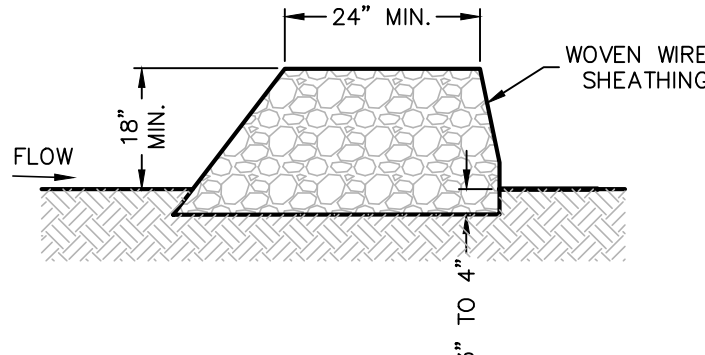
1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN<sup>2</sup>, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WEIGHT 1.25 LB/FT, AND BRINELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

### INSTALLATION

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.

### SILT FENCE DETAIL

NOT-TO-SCALE



### SECTION "A-A"

### MATERIALS

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.

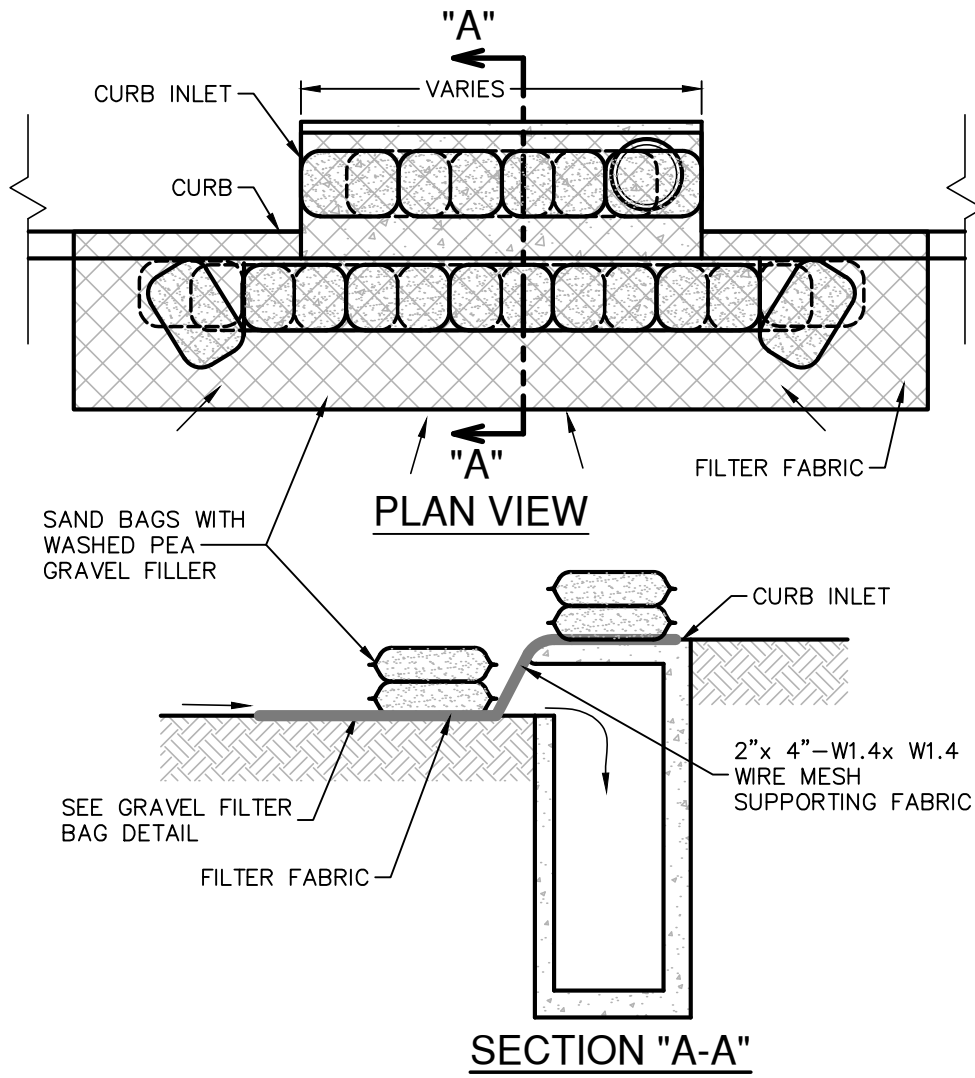
2. CLEAN, OPEN GRADED 3-INCH TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-INCH TO 8-INCH DIAMETER ROCKS MAY BE USED.

### INSTALLATION

1. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM TO A HEIGHT NOT LESS THAN 18".
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

### COMMON TROUBLE POINTS

1. INSUFFICIENT BERM HEIGHT OR LENGTH (RUNOFF QUICKLY ESCAPES OVER THE TOP OR AROUND THE SIDES OF BERM).
2. BERM NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND ONE SIDE).



### GENERAL NOTES

1. CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CUPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.

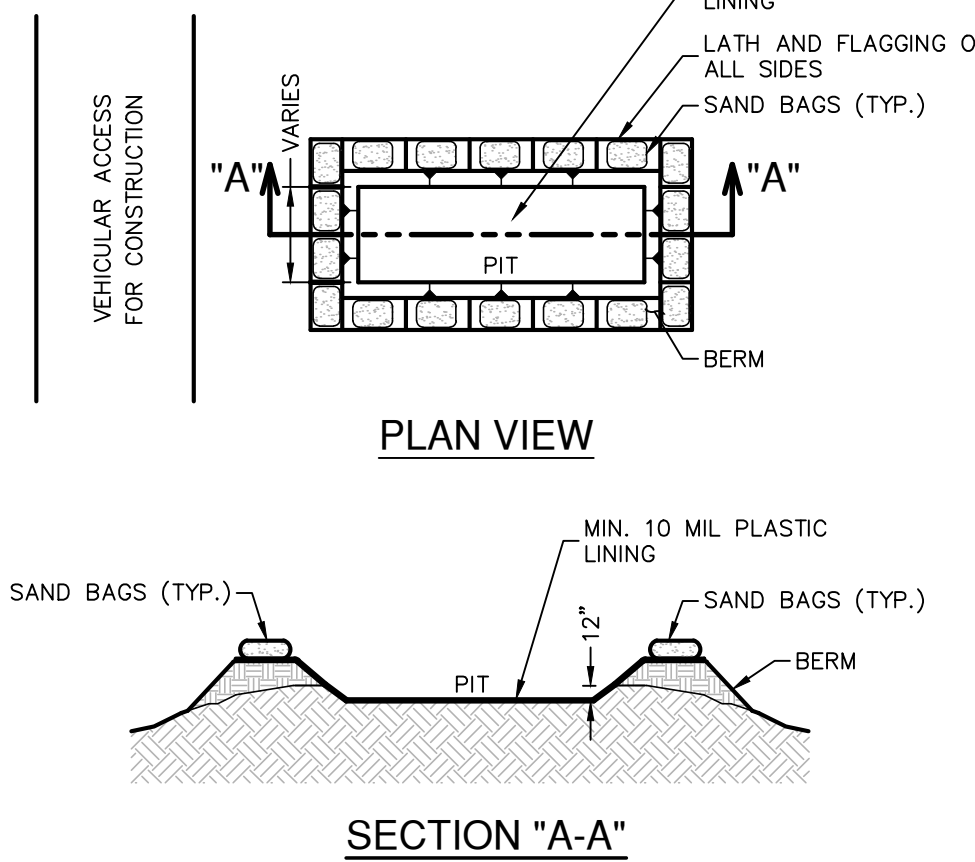
2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

### INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING.
5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

### BAGGED GRAVEL CURB INLET PROTECTION DETAIL

NOT-TO-SCALE



### GENERAL NOTES

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.
4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES OR WATER BODIES.
5. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

### MATERIALS

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

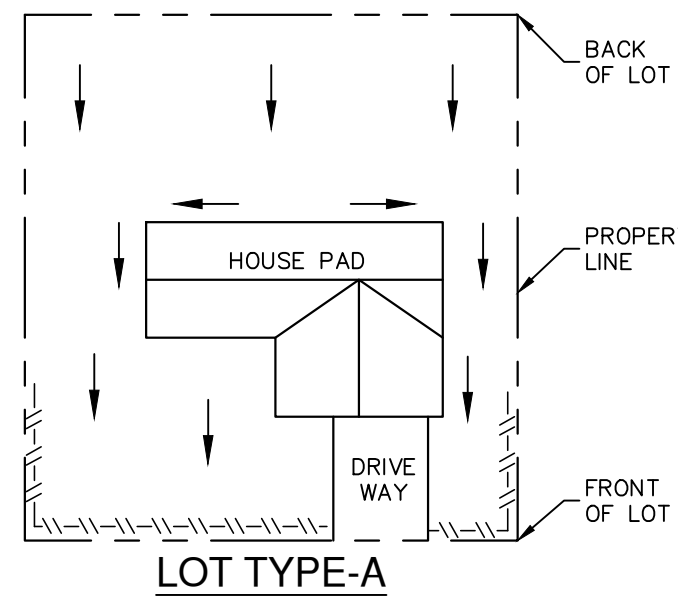
### MAINTENANCE

1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF.
2. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
3. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

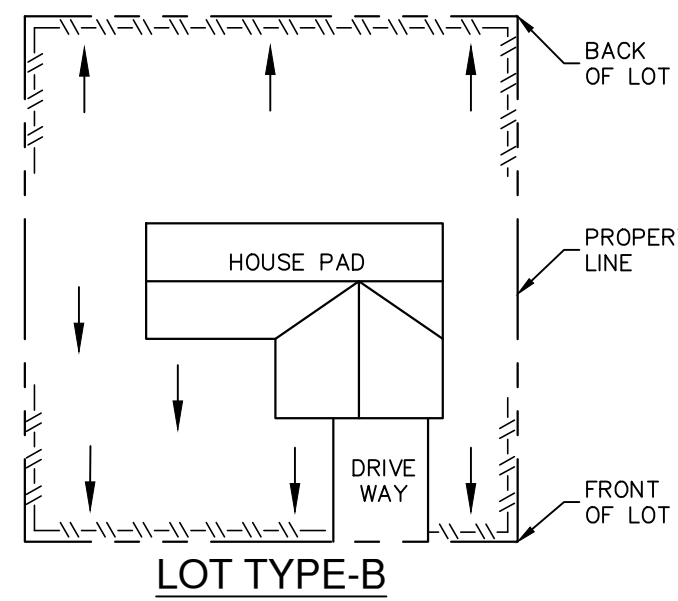
### CONCRETE TRUCK WASHOUT

### PIT DETAIL

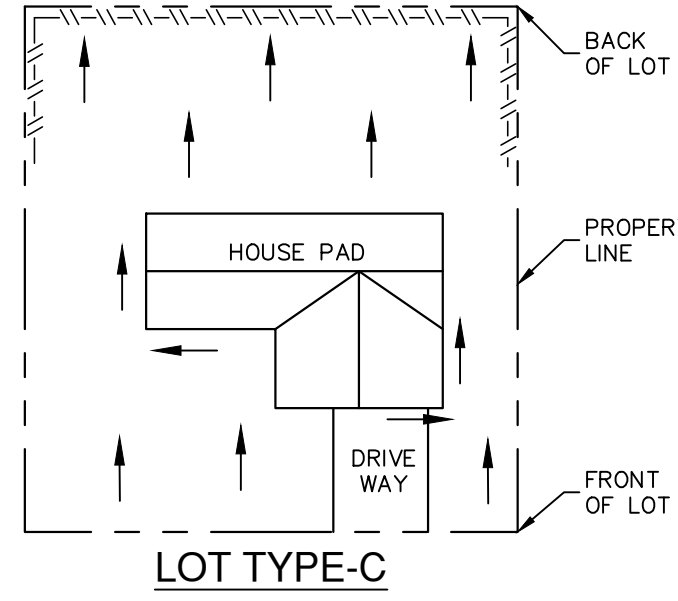
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### LOT TYPE-A



### LOT TYPE-B



### LOT TYPE-C

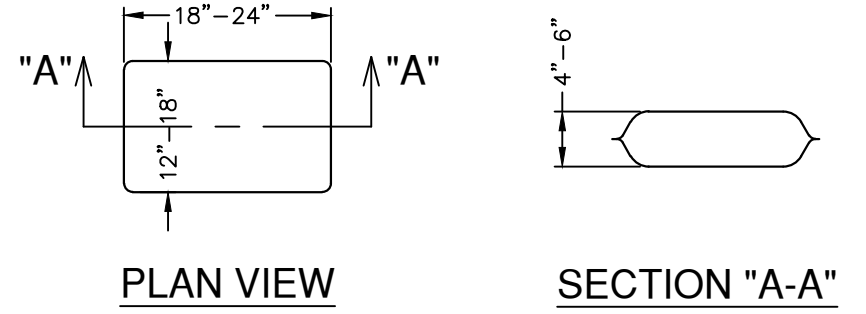
NOTE: SILT FENCE TO BE INSTALLED PER THESE DETAILS AND LOCATED ON THE DOWNGRADIENT SIDE OF EACH LOT LINE OR LIMITS OF CLEARING AS GENERALLY SHOWN ON THE OVERALL SITE PLAN.

### LEGEND

--- SILT FENCE DRAINAGE FLOW

### TYPICAL HOUSE LOT LAYOUTS

NOT-TO-SCALE



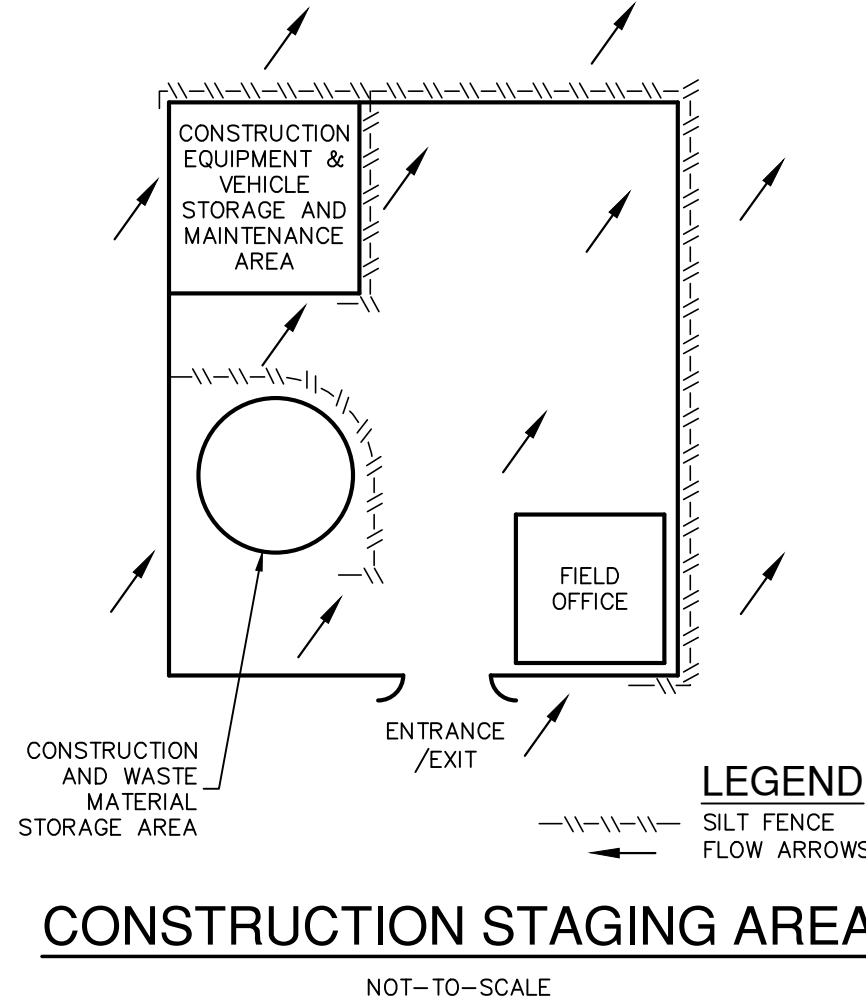
### PLAN VIEW

### SECTION "A-A"

- NOTES:
1. THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE WOVEN FABRIC, MIN. UNIT WIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.
  2. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER).
  3. SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

### GRAVEL FILTER BAG DETAIL

NOT-TO-SCALE



### LEGEND

--- SILT FENCE FLOW ARROWS

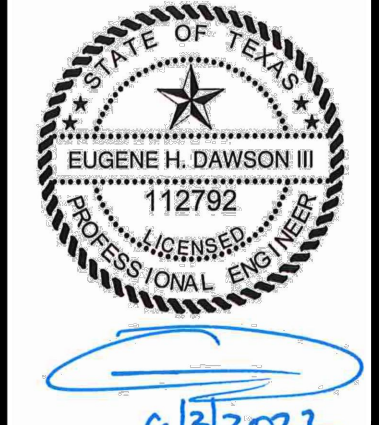
### CONSTRUCTION STAGING AREA

NOT-TO-SCALE

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

### EXHIBIT 3

DATE	
NO.	
REVISION	



**PAPE-DAWSON ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #479 | TEXAS SURVEYING FIRM #1028800

**WESTLAKES UNIT 11**  
SAN ANTONIO, TEXAS

STORM WATER POLLUTION PREVENTION PLAN DETAILS

PLAT NO.	21-11800397
JOB NO.	11348-43
DATE	JUNE 2022
DESIGNER	EDK
CHECKED	MG
DRAWN	MG
SHEET	C8.10