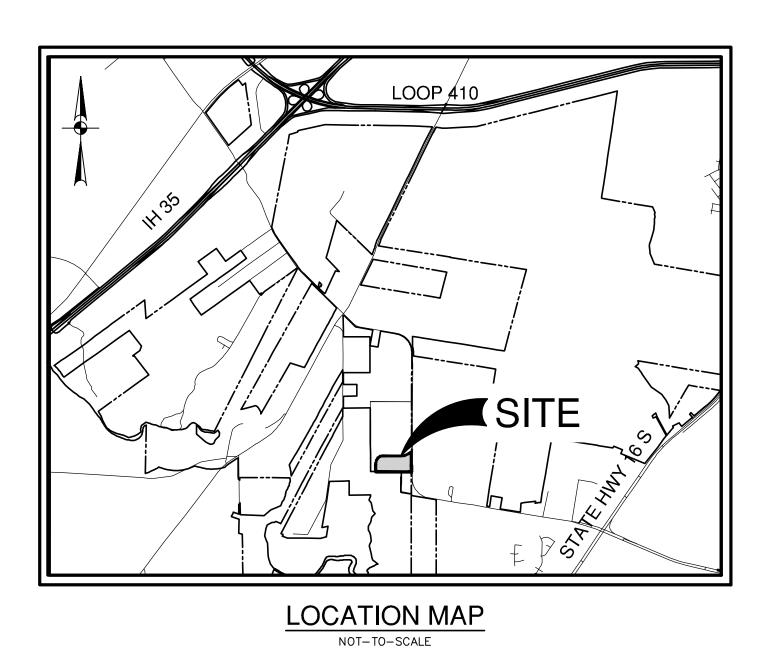
RANCHO CARLOTA UNITS 7 & 8

SAN ANTONIO, TEXAS

CIVIL CONSTRUCTION PLANS

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DRAIN B PLAN & PROFILE	C1.02
DRAINAGE DETAILS	C1.10
FARMSTEAD CROSSING PLAN & PROFILE	C2.00
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SANITARY SEWER LINE A PLAN & PROFILE	C5.01
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SANITARY SEWER LINE B PLAN & PROFILE	C5.03
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OVERALL UTILITY PLAN	C6.00
OVERALL GRADING PLAN	C7.00
STORM WATER POLLUTION PREVENTION PLAN	C8.00
STORM WATER POLLUTION PREVENTION PLAN DETAILS	C8.10

PREPARED FOR:

HABITAT FOR HUMANITY OF SAN ANTONIO
311 PROBANDT
SAN ANTONIO, TEXAS 78204

AUGUST 2023



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

WATER (SAWS PRESSURE ZONE 790 HGL)

DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO
ADDRESS: 311 PROBANDT

CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204

PHONE# (210) 223-5203 FAX#

SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.70

TOTAL LINEAR FOOTAGE OF PIPE:8" - 2.911 LF PLAT NO. 23-11800285

NUMBER OF LOTS 99 SAWS JOB NO. 23-1140

SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK

DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO
ADDRESS: 311 PROBANDT
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204
PHONE# (210) 223-5203 FAX#
SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.7
TOTAL LINEAR FOOTAGE OF PIPE: 8" 2,645 LF PLAT NO. 23-1180028
NUMBER OF LOTS 99 SAWS JOB NO. 23-1611
3AW3 00B NO. 28 1011

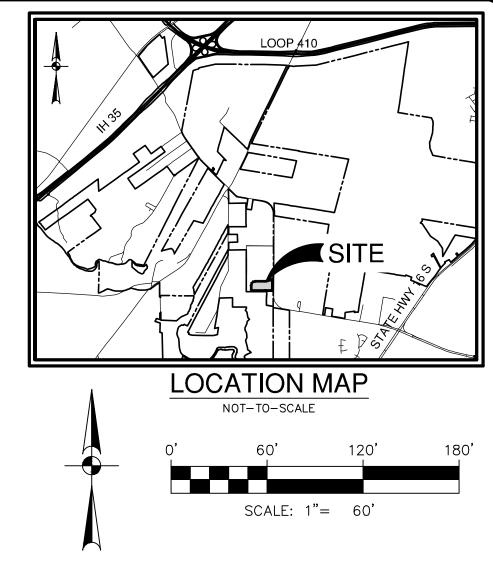
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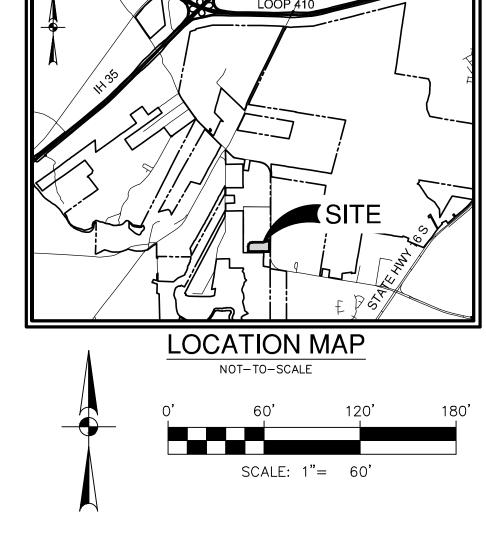
RANCHO CARLOTA UNITS

PD JOB NO.

23-11800285

		Dra	inage Area	36	(₩	Overl	and/She	et Flow	Shall	ow Co	ncentrat	ed Flor	M 1**	Chann	hazila	Flow**		Rationa	al Method	Q=CIA
		₩ W I G	inage Area	23	at _		(Seelye)	Jilan	OW CO:	i Comi at	.cu i ioi	VV 1	Onami	GIIZGU I	1044		IDF Curve:	CoSA_A	14_PA5
Ref. Point	Structure / Description	#	Area (Ac)	С	Total Flowpa	L _O (FT)	S _○ (ft/ft)	T _O * (MIN)	L _{SC} (FT)	Condition***	Slope (ft/ft)	V _{SC} (FPS)	T _{SC} ** (MIN)	L _{CH} (FT)	V _{CH} (FPS)	T _{CH} ** (MIN)	Тс-тот	Return Year	Intensity (in/hr)	Q (cfs)
	3~6'																16	5	5.03	19.7
1	SIDEWALK	Α	5.85	0.67	653	100	0.01	14	160	U	0.02	2.0	1.3	393	6.0	1.1	16	25	6.95	27.2
	BOX																16	100	8.71	34.1
	1~10' CURB																16	5	5.03	10.2
2	1	В	3.03	0.67	595	84	0.02	14	115	P	0.005	1.4	1.3	396	6.0	1.1	16	25	6.95	14.1
	INLET IN SAG													***************************************			16	100	8.71	17.7





MASTER DRAINAGE LEGEND

PROJECT LIMITS EXISTING CONTOUR 100 YR FLOODPLAIN RUNOFF FLOW PATH DRAINAGE AREA BOUNDARY FHA LOT GRADING TYPE PROPOSED DIRECTION OF FLOW DRAINAGE CALCULATION POINT DRAINAGE AREA

A,B,C

11 <u>AREA I</u> 9.12 AC NOTE:
CONTRACTOR SHALL REFERENCE
GRADING PLAN FOR PROPOSED
CONTOURS.

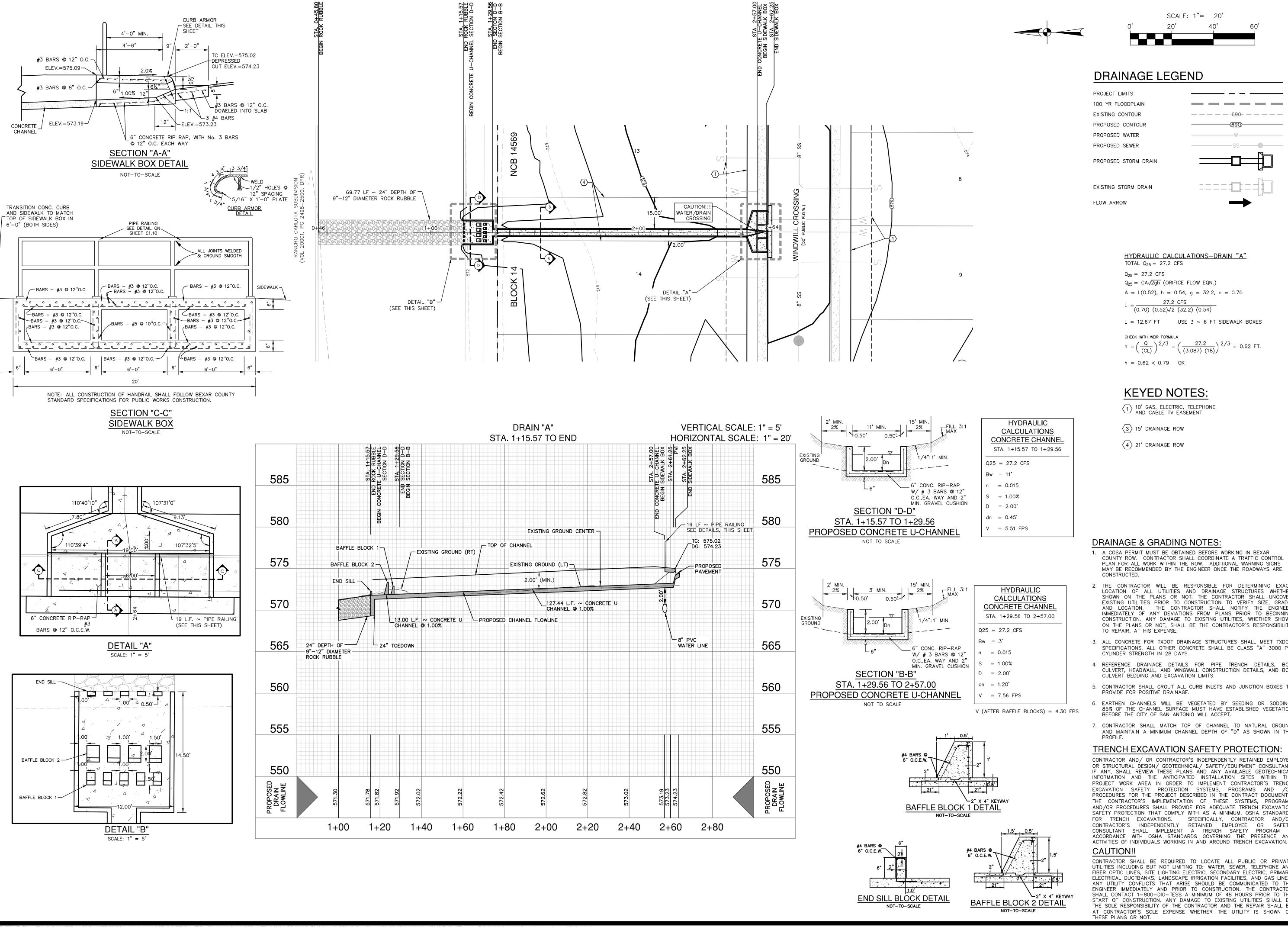
CALEB M. CHANCE

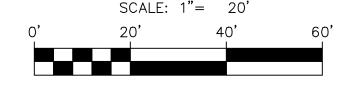
RANCHO CARLOTA UNIT SAN ANTONIO, TEXAS

¹_{PLAT NO.} 23-1180028ξ JOB NO. 12386-04 DESIGNER_ CHECKED AS DRAWN RD

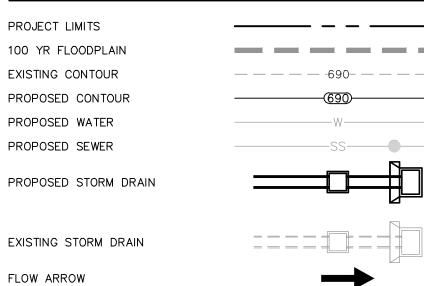
SHEET _____C1.00

← DRAIN "A" (SEE SHEET C1.01) RANCHO CARLOTA SUBDIVISION (VOL 20001, PG 2498-2500, DPR) WINDMILL CROSSING (50' PUBLIC R.O.W.) Α FARMSTEAD CROSSING (50' PUBLIC R.O.W.) RANCHO CARLOTA SUBDIVISION (VOL 20001, PG 2498-2500, DPR) С С DRAIN "B" — (SEE SHEET C1.02) VAQUERO CREEK (50' PUBLIC R.O.W.) GARCIA RAMON & MARIA G (VOL. 7427, PG. 0575, DPR) VELASQUEZ ABELARDO G & MARTHA (VOL. 18898, PG. 1735 DPR)





DRAINAGE LEGEND



HYDRAULIC CALCULATIONS-DRAIN "A" TOTAL $Q_{25} = 27.2 \text{ CFS}$

 $Q_{25} = 27.2 \text{ CFS}$ $Q_{25} = CA\sqrt{2gh}$ (ORIFICE FLOW EQN.)

A = L(0.52), h = 0.54, g = 32.2, c = 0.70

 $L = \frac{2.72 \cdot 5.2}{(0.70) (0.52)\sqrt{2 (32.2) (0.54)}}$

L = 12.67 FT USE 3 \sim 6 FT SIDEWALK BOXES

CHECK WITH WEIR FORMULA

h = $\left(\frac{Q}{(CL)}\right)^{2/3} = \left(\frac{27.2}{(3.087)(18)}\right)^{2/3} = 0.62 \text{ FT.}$

h = 0.62 < 0.79 OK

KEYED NOTES:

10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT

(3) 15' DRAINAGE ROW

 $\langle 4 \rangle$ 21' DRAINAGE ROW

- 1. A COSA 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
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXAC 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.
- 3. ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PS CYLINDER STRENGTH IN 28 DAYS.
- CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
- 5. CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES T 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 WILL ACCEPT.
- 7. CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN TH

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYE 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 /O PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENT THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFÉTY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OF CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM I ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

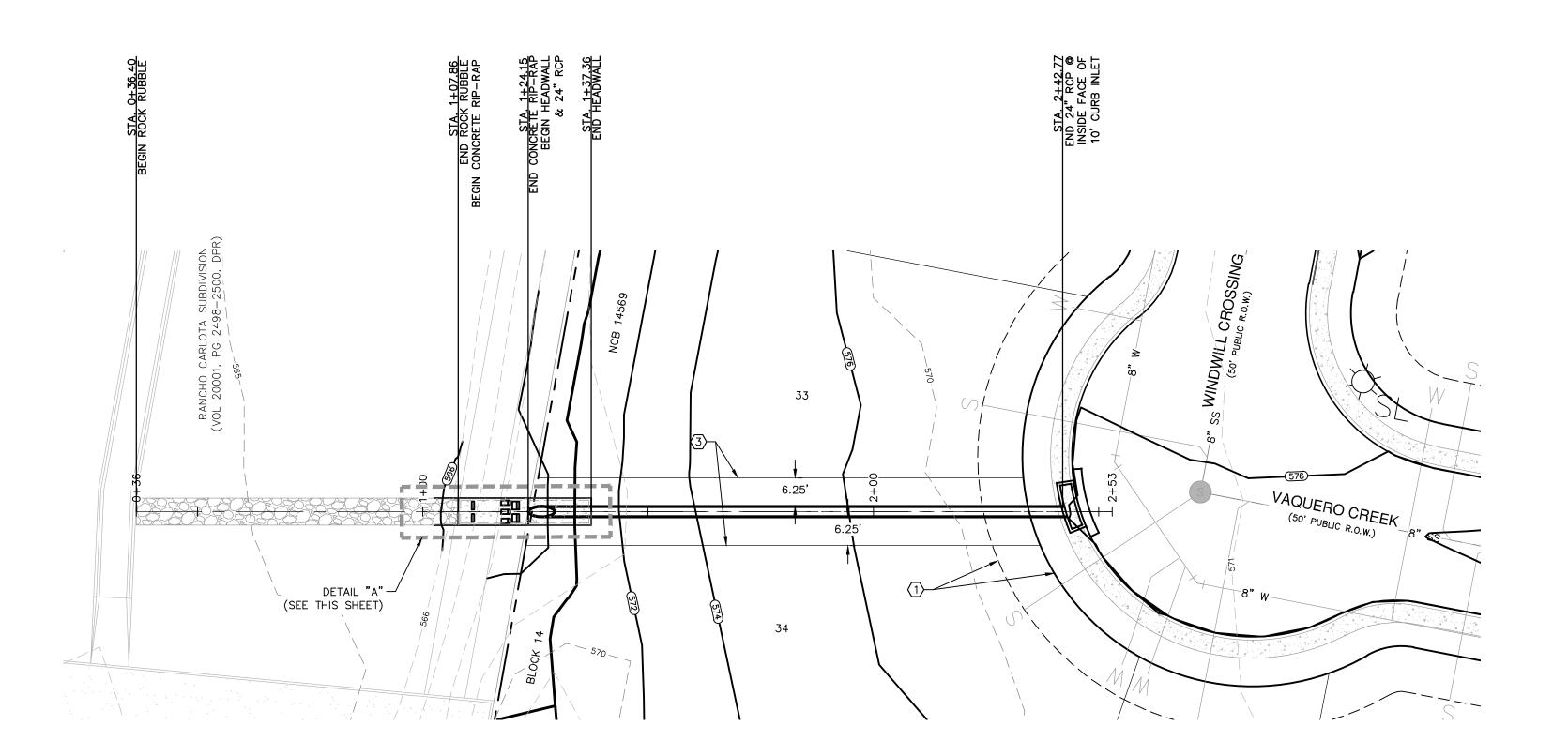
CAUTION!!

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 TH START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL B THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL E AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

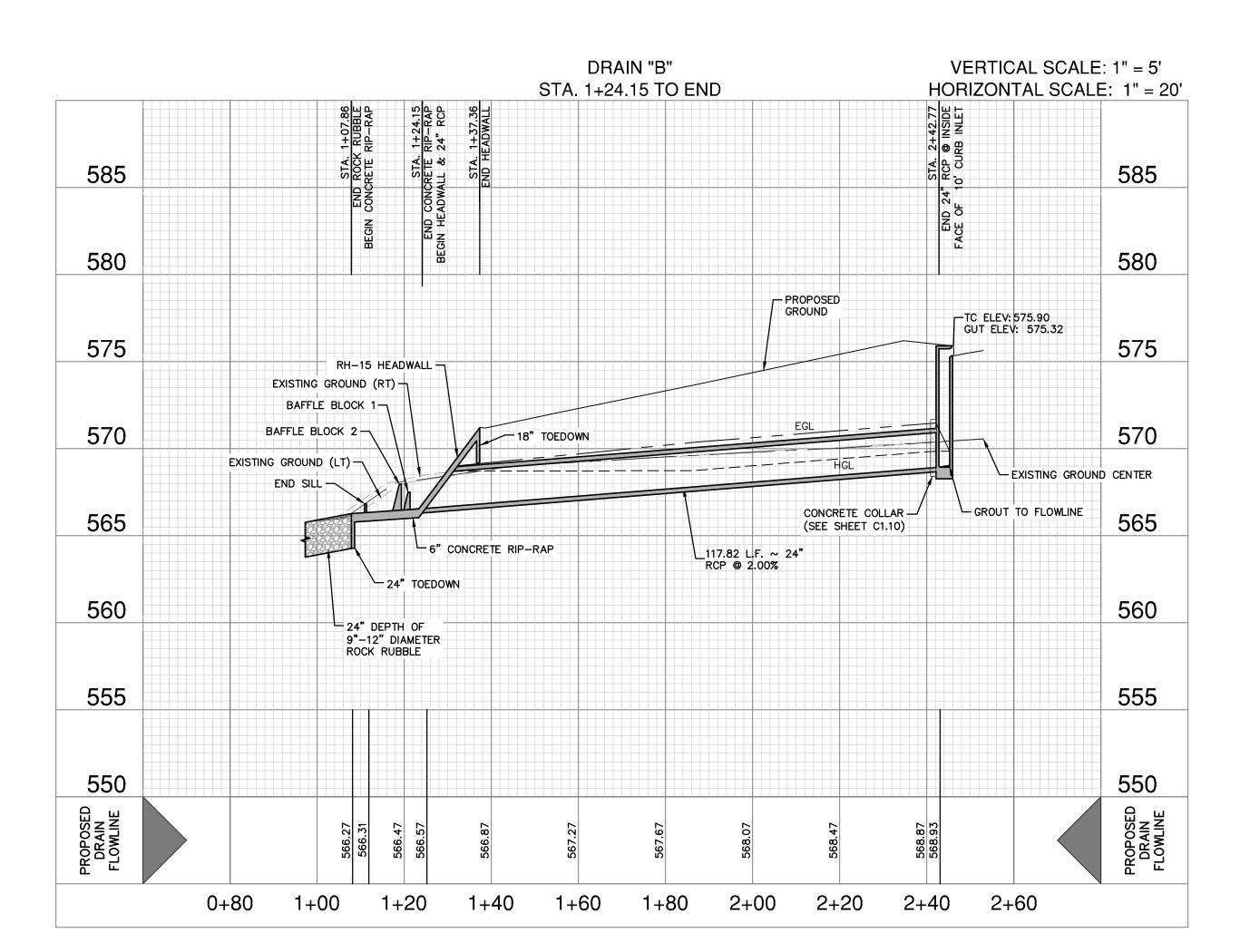
CALEB M. CHANCE

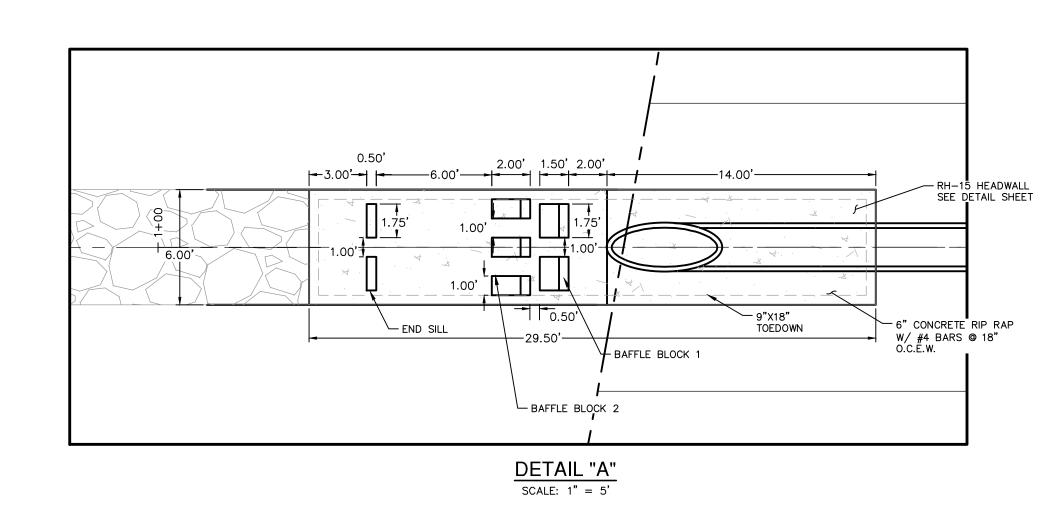
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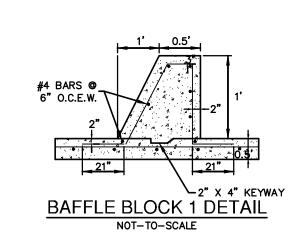
_{r NO.} 23-1180028 JOB NO. 12386-04 AUGUST 2023 DESIGNER HECKED AS DRAWN RD C1.01

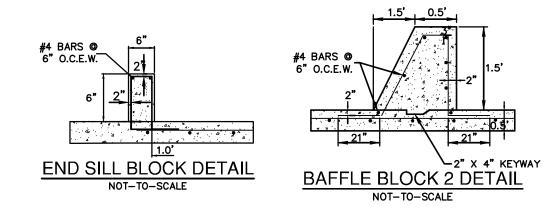


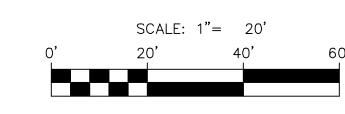
HYDRAULIC CALCULATIONS STORM DRAIN "B" STA. 1+24.15 TO 2+42.77 Q25 = 14.1 CFSDn = 0.94'Sf = 0.39%V = 9.73 FPSn = 0.013D = 2.0'V (AFTER BAFFLE BLOCKS) = 4.00 FPS











DRAINAGE LEGEND

PROJECT LIMITS 100 YR FLOODPLAIN EXISTING CONTOUR PROPOSED CONTOUR PROPOSED WATER PROPOSED SEWER PROPOSED STORM DRAIN EXISTING STORM DRAIN FLOW ARROW

 $\frac{\text{HYDRAULIC CALCULATIONS-DRAIN "B"}}{\text{TOTAL Q}_{25} = 14.1 \text{ CFS}}$

 $Q_{25} = 14.1 \text{ CFS}$ $Q_{25} = CA\sqrt{2gh}$ (ORIFICE FLOW EQN.)

A = L(0.52), h = 0.54, g = 32.2, c = 0.70 $L = \frac{14.1 \text{ CFS}}{(0.70) (0.52)\sqrt{2 (32.2) (0.54)}}$

L = 6.57 FT USE 1 ~ 10 FT CURB INLET

CHECK WITH WEIR FORMULA $h = \left(\frac{Q}{(CL)}\right)^{2/3} = \left(\frac{14.1}{(3.087)(10)}\right)^{2/3} = 0.59 \text{ FT.}$ h = 0.59 < 0.79 OK

KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 3 15' DRAINAGE ROW
- $\langle 4 \rangle$ 21' DRAINAGE ROW

DRAINAGE & GRADING NOTES:

- 1. A COSA 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. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXAC 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.
- 3. ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PS CYLINDER STRENGTH IN 28 DAYS.

4. REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BO

- 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.
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- 7. CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN TH

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CAUTION!!

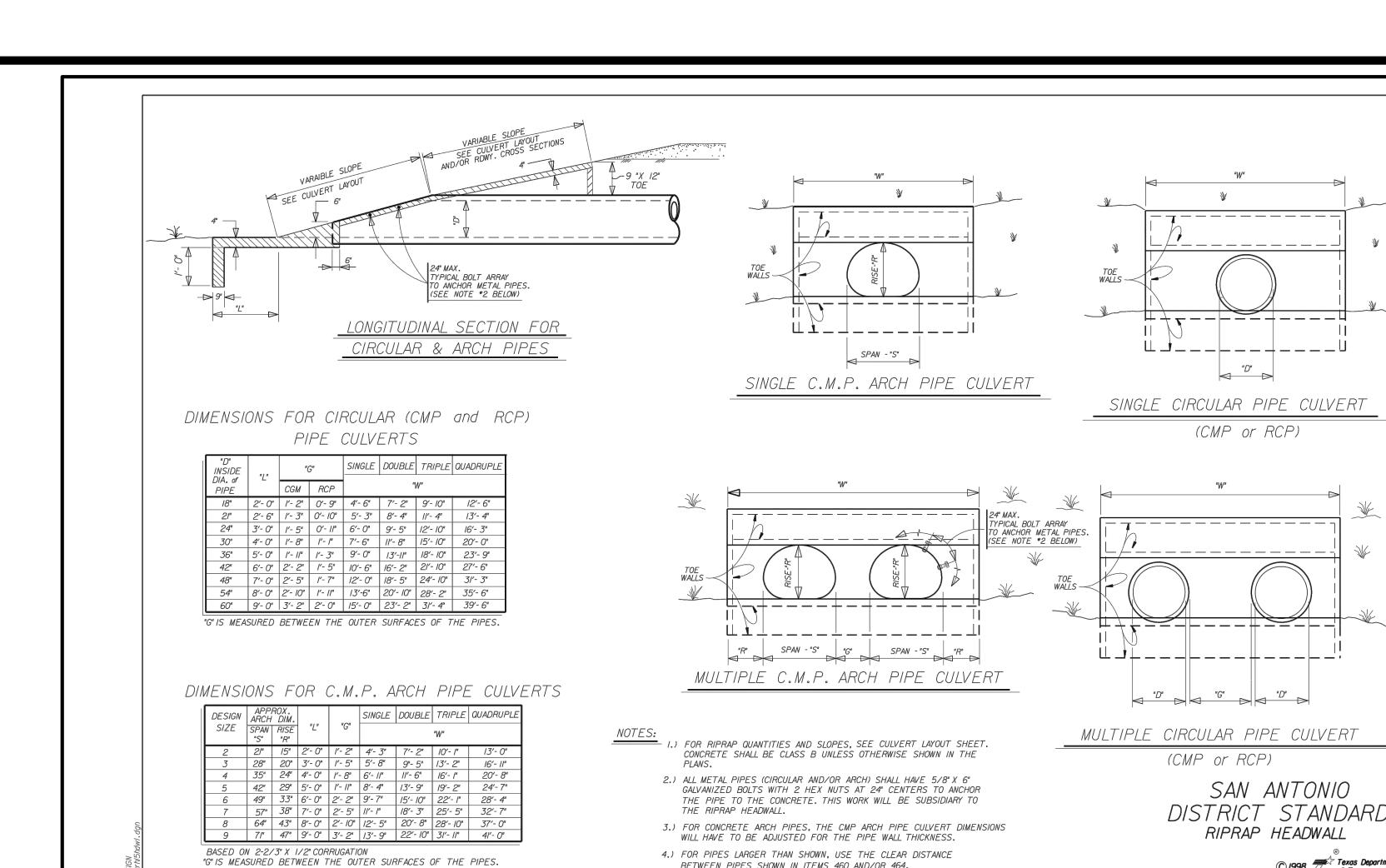
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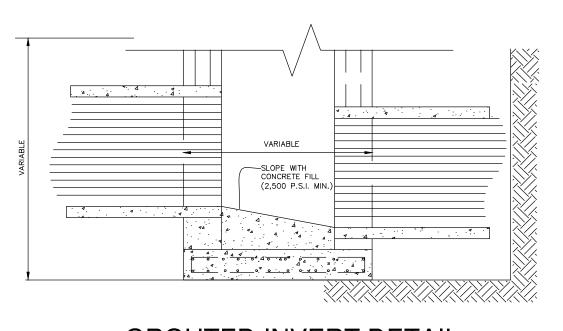
CALEB M. CHANCE

PAPE-DAWSON ENGINEERS

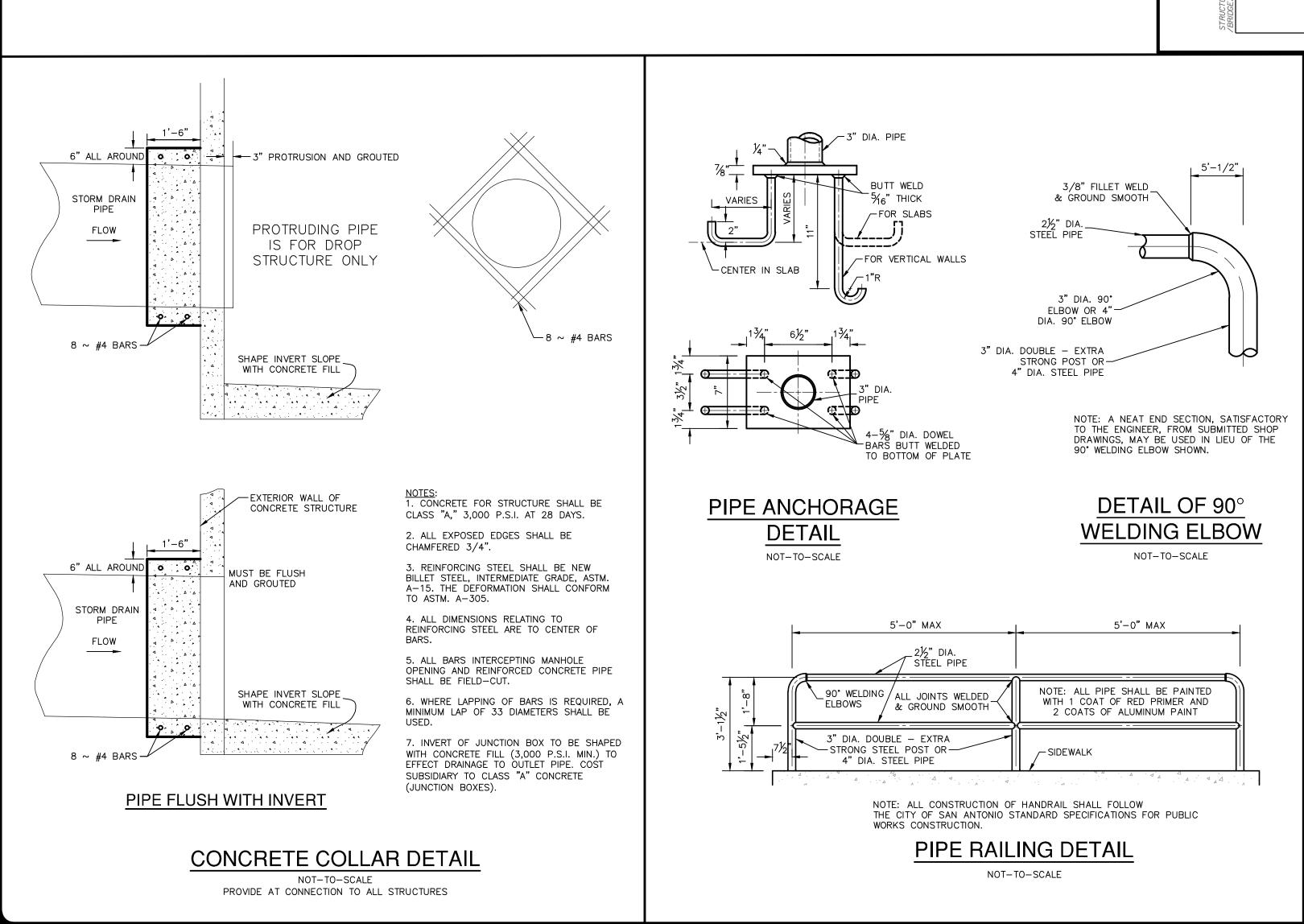
_{г NO.} 23-11800285 JOB NO. 12386-04 AUGUST 2023 DESIGNER

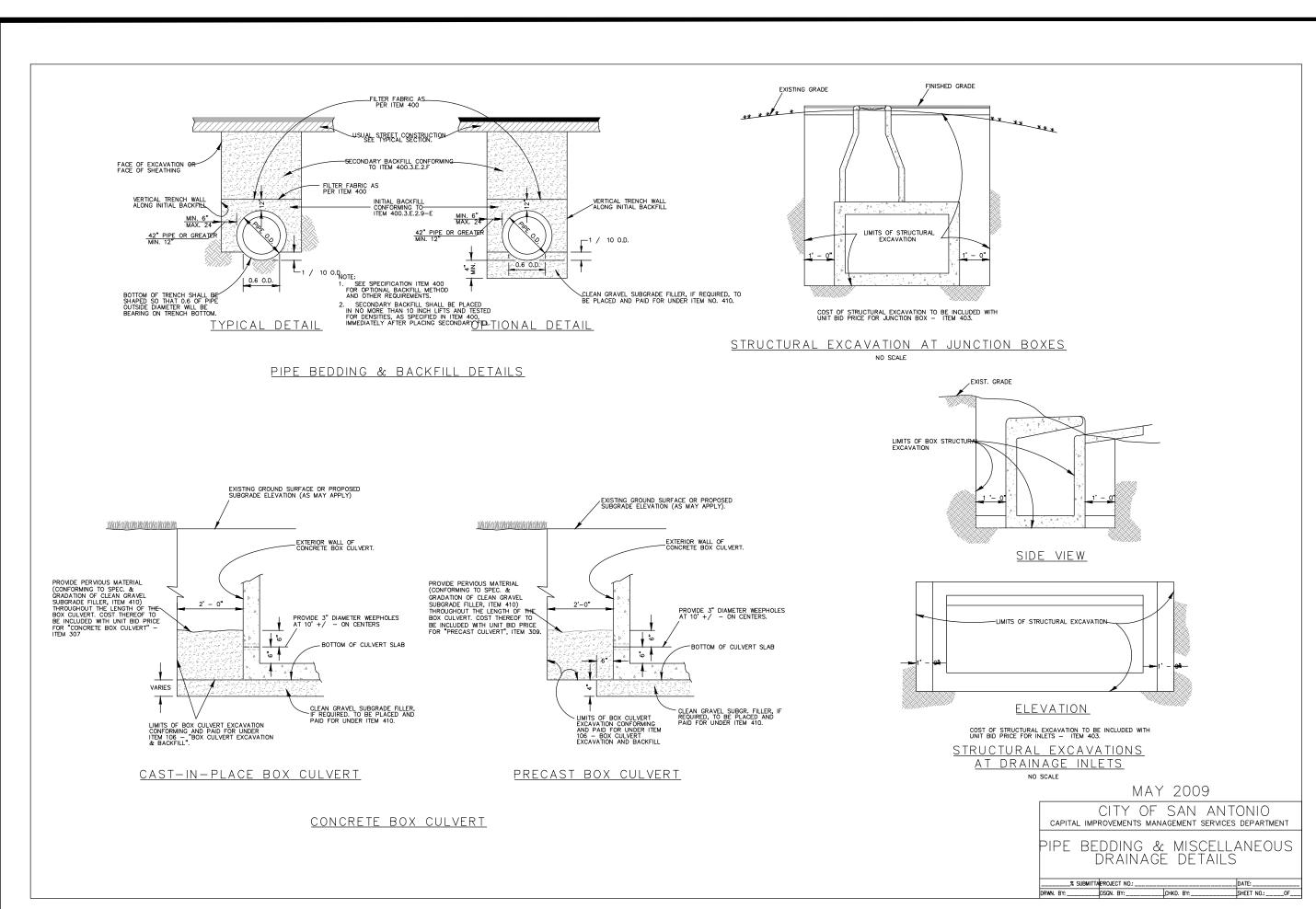
HECKED AS DRAWN RD C1.02





GROUTED INVERT DETAIL NOT-TO-SCALE





BETWEEN PIPES SHOWN IN ITEMS 460 AND/OR 464.

BE ELIMINATED IF APPROVED BY THE ENGINEER.

5.) IF THE SIDES OF THE HEADWALL IS ADJACENT TO A RIPRAP SLOPE AND IF THE TOP OF THE HEADWALL IS ADJACENT TO THE ROADWAY

FOUNDATION OR RIPRAP SLOPE, THE SIDE AND TOP TOE WALLS MAY

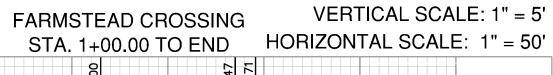
∞ ∞ UNIT ARL I ANTC RANCHO (

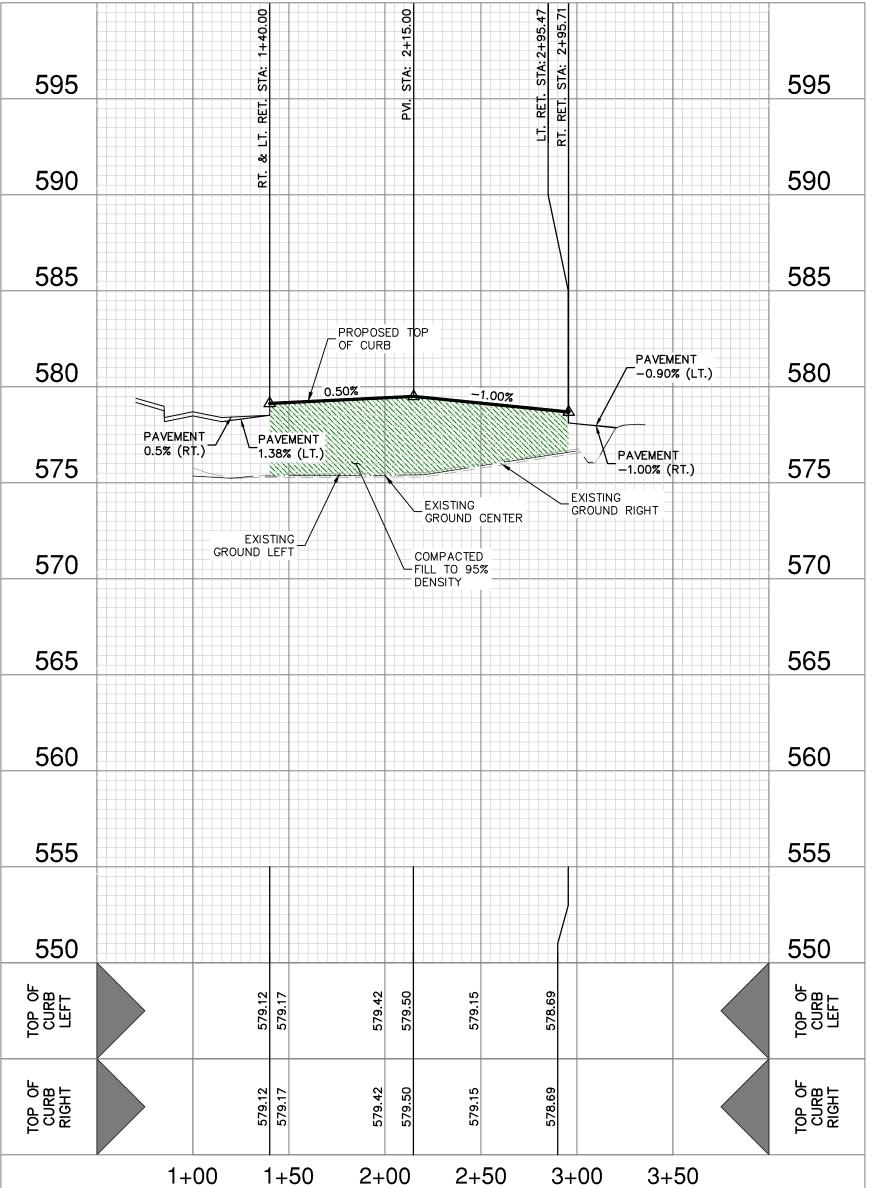
CALEB M. CHANCE

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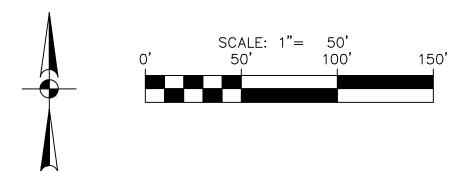
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NO 23-1180028 OB NO. 12386-04 ATE AUGUST 2023 DESIGNER CHECKED AS DRAWN RD C1.10





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STREET LEGEND

PROJECT LIMITS -	
MAINTAIN GUTTER	$-\!$
EXISTING CONTOUR	———— 970-——
WHEELCHAIR RAMP	•
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 (DEVELOPER RESPONSIBILITY	
DRIVEWAY	

KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION
- (3) 15' DRAINAGE ROW
- 4 21' DRAINAGE ROW
- 5 14' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 6 20' PERMANENT SEWER EASEMENT (VOL 16880, PG 2023, OPR)

CALEB M. CHANCE 98401 SONAL ELGO 10/441/23

INGINERRS

AUSTIN | HOUSTON | FORT WORTH | DALLA
110 | SAN ANTONIO, TX 78213 | 210.375.900

G FIRM #470 | TEXAS SURVEYING FIRM #100288C

SAN ANTONIO I AUSTIN I HOUST 2000 NW LOOP 410 I SAN ANTON

O CARLOTA UNITS 7 & 8 SAN ANTONIO, TEXAS

ARMSTEAD CROSSING PLAN & STA. 1+00.00 TO END

STREET NOTES:

- 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.
- 5. DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.
- 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.

PLAT NO. 23-11800285

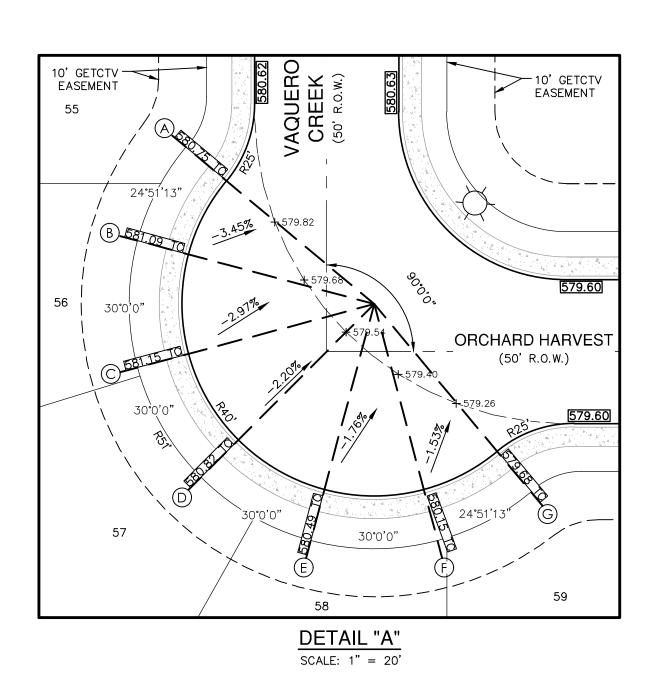
JOB NO. 12386-04

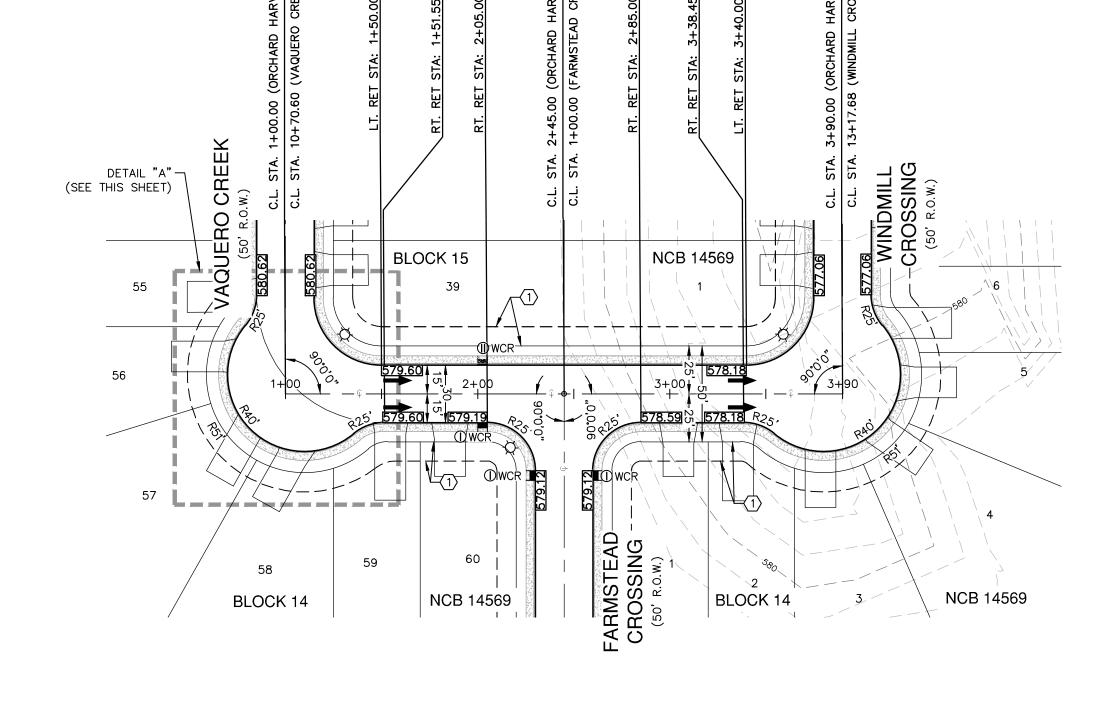
DATE AUGUST 2023

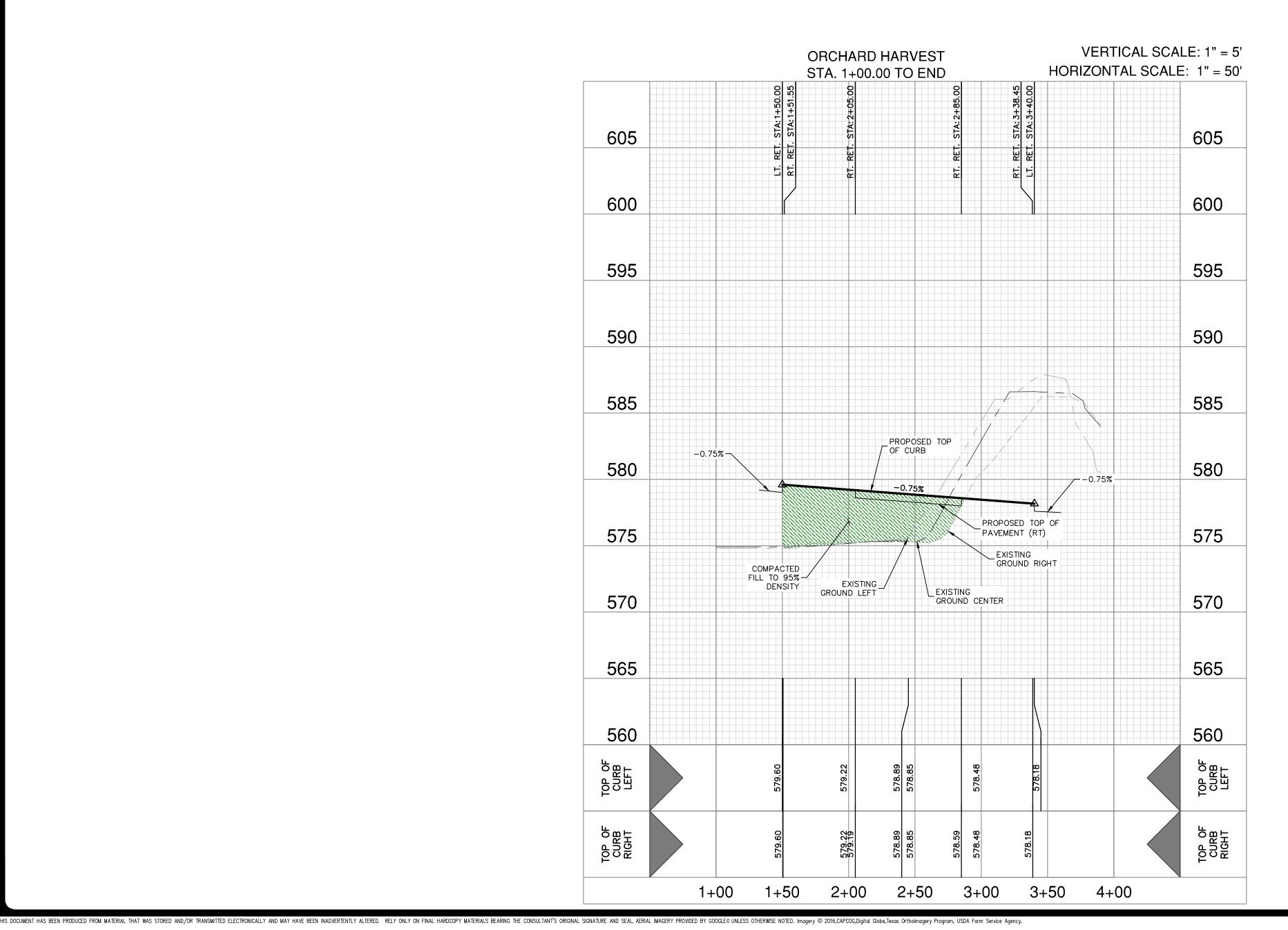
DESIGNER RG

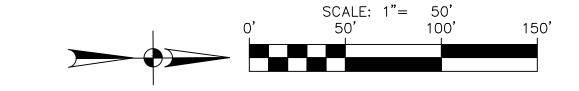
CHECKED AS DRAWN RD

C2.00









STREET LEGEND

PROJECT LIMITS	
MAINTAIN GUTTER	$- \rightarrow \rightarrow$
EXISTING CONTOUR	———— 970-——
WHEELCHAIR RAMP	lacktriangle
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) ×
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SIDEWALK (DEVELOPER RESPONS	IBILITY)
DRIVEWAY	
DIMPERAT	

KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
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PAPE-DAMS ENGINEERS I AUSTIN | HOUSTON | FORT WORT

80

CALEB M. CHANCE

SAN ANTONIO I AUSTIN I HOUSTON

JCHO CARLOTA UNITS 7 & SAN ANTONIO, TEXAS

ORCHARD HARVEST PLAN & PROFIL STA. 1+00.00 TO END

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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.

5. DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

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.

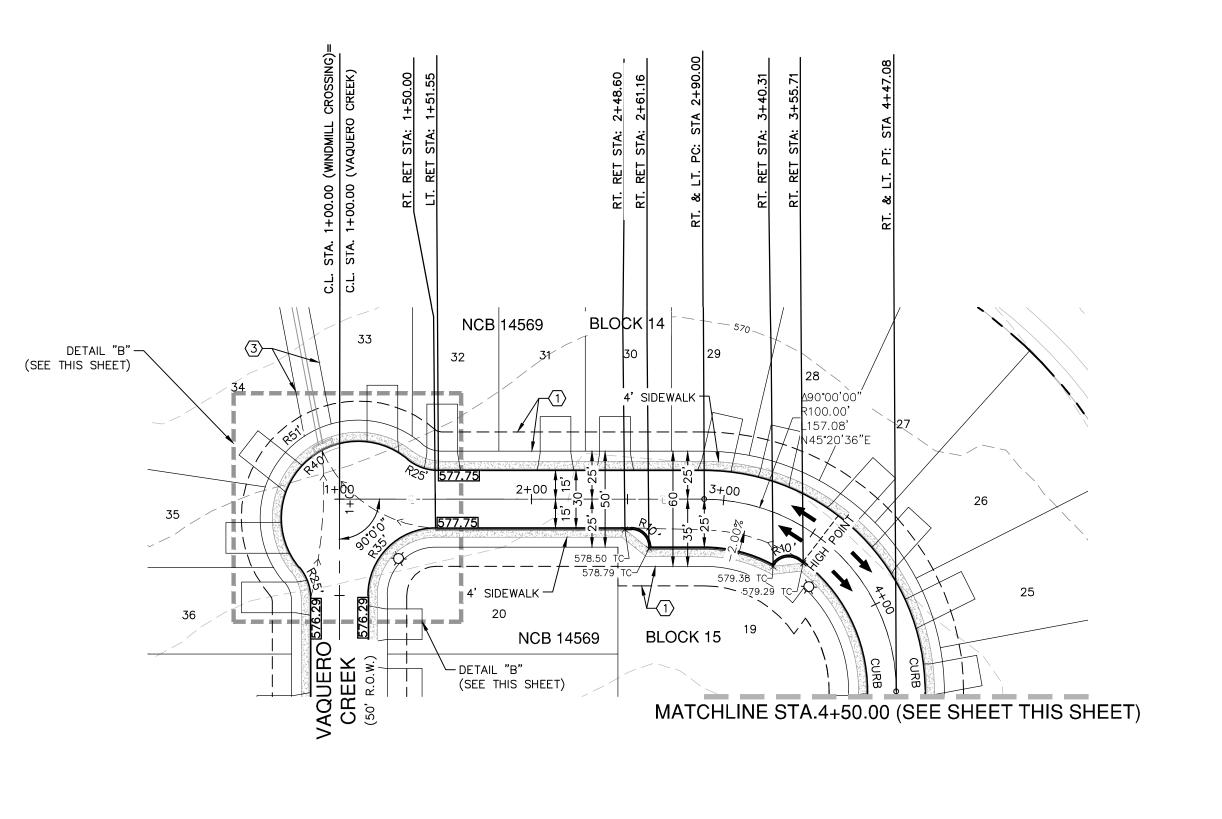
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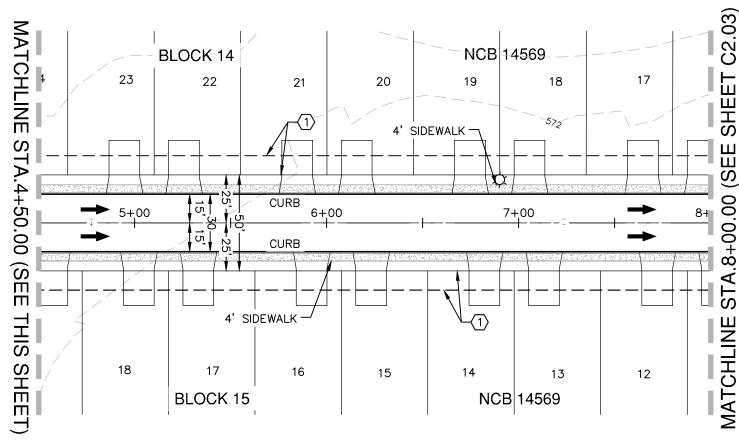
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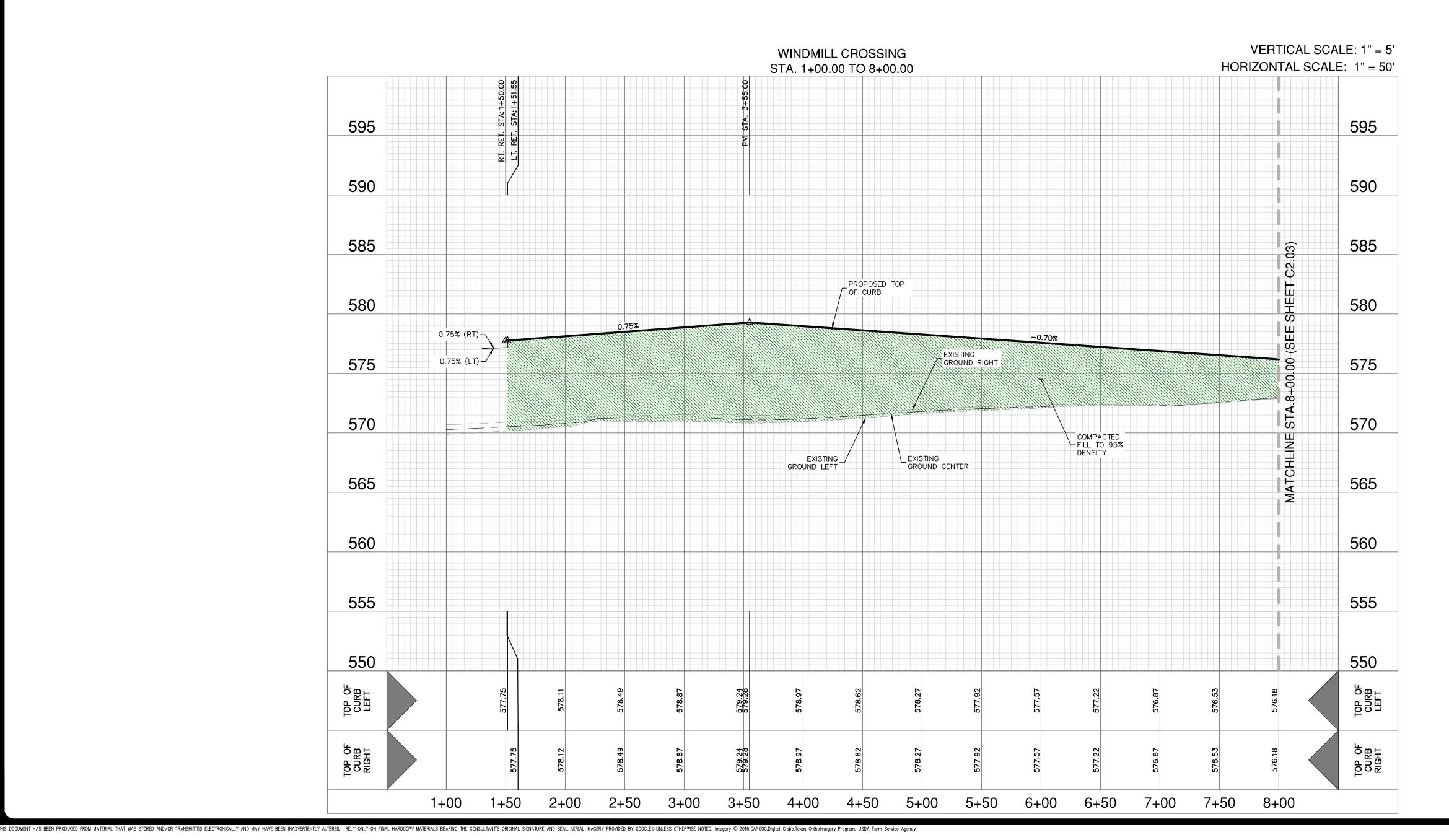
DESIGNER RG

CHECKED AS DRAWN RD

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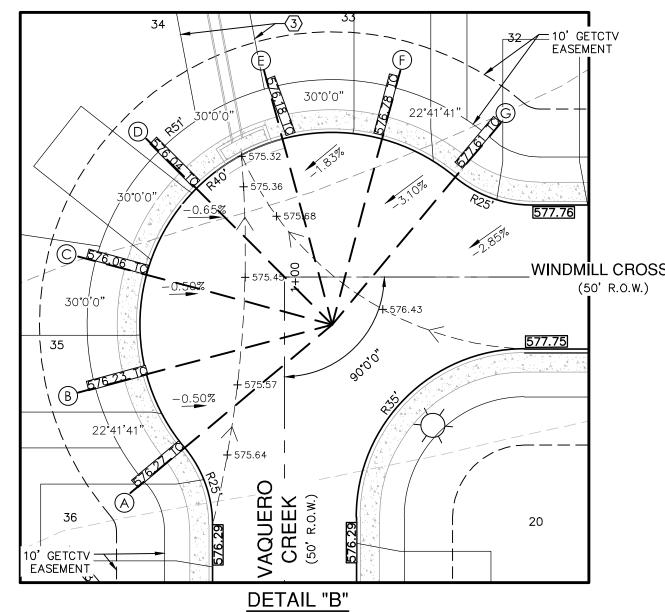






STREET LEGEND

PROJECT LIMITS	
MAINTAIN GUTTER	$-\!\!\!\!\!- \rightarrow -\!\!\!\!\!- \rightarrow$
EXISTING CONTOUR	———— 970-——
WHEELCHAIR RAMP	lacktriangle
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 (DEVELOPER RESPONSIBILIT	Y)
DRIVEWAY	



STREET NOTES:

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- 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 CUR 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 TH 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.

WINDMILL CROSSING STA. 1+00.00

CALEB M. CHANCE

_{r NO.} 23-11800285 OB NO. 12386-04 AUGUST 2023 DESIGNER

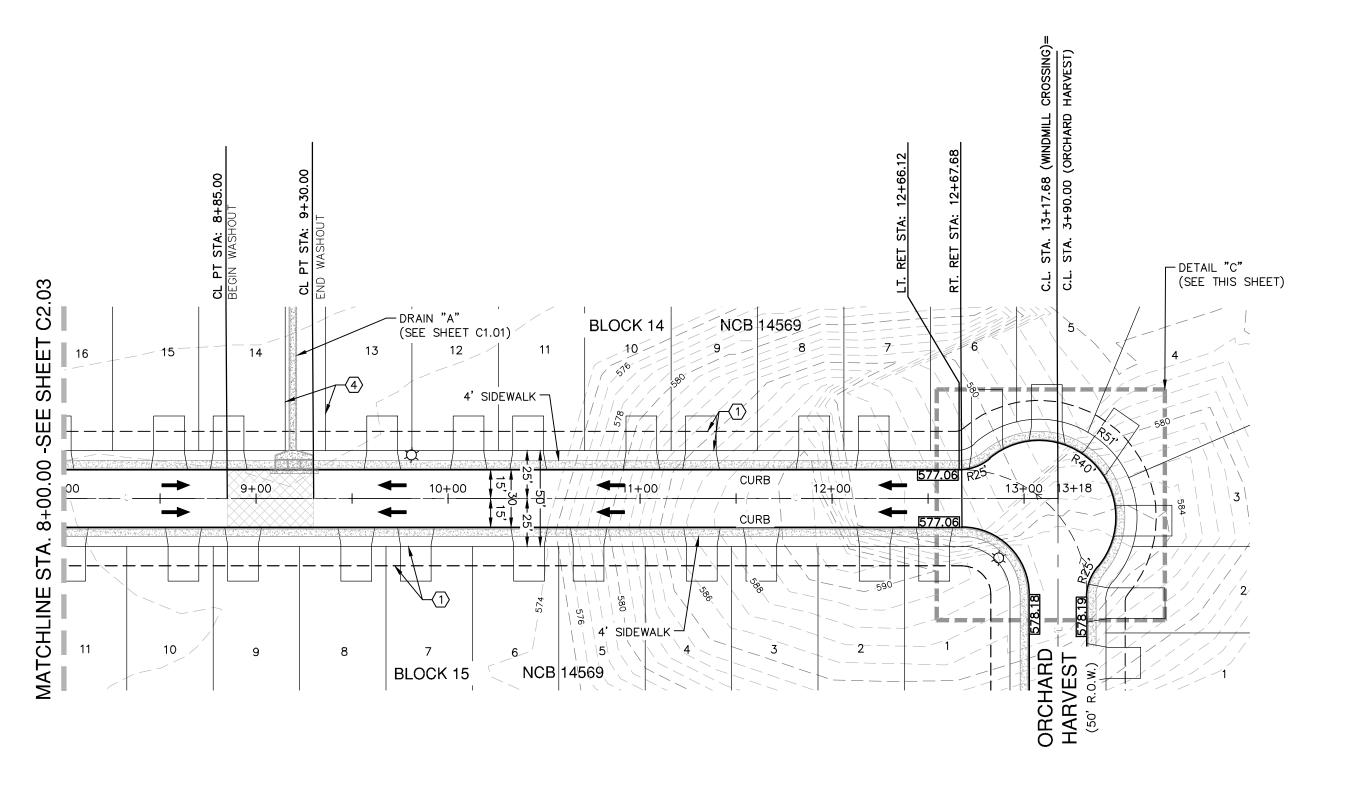
HECKED<u>AS</u> DRAWN<u>RD</u>

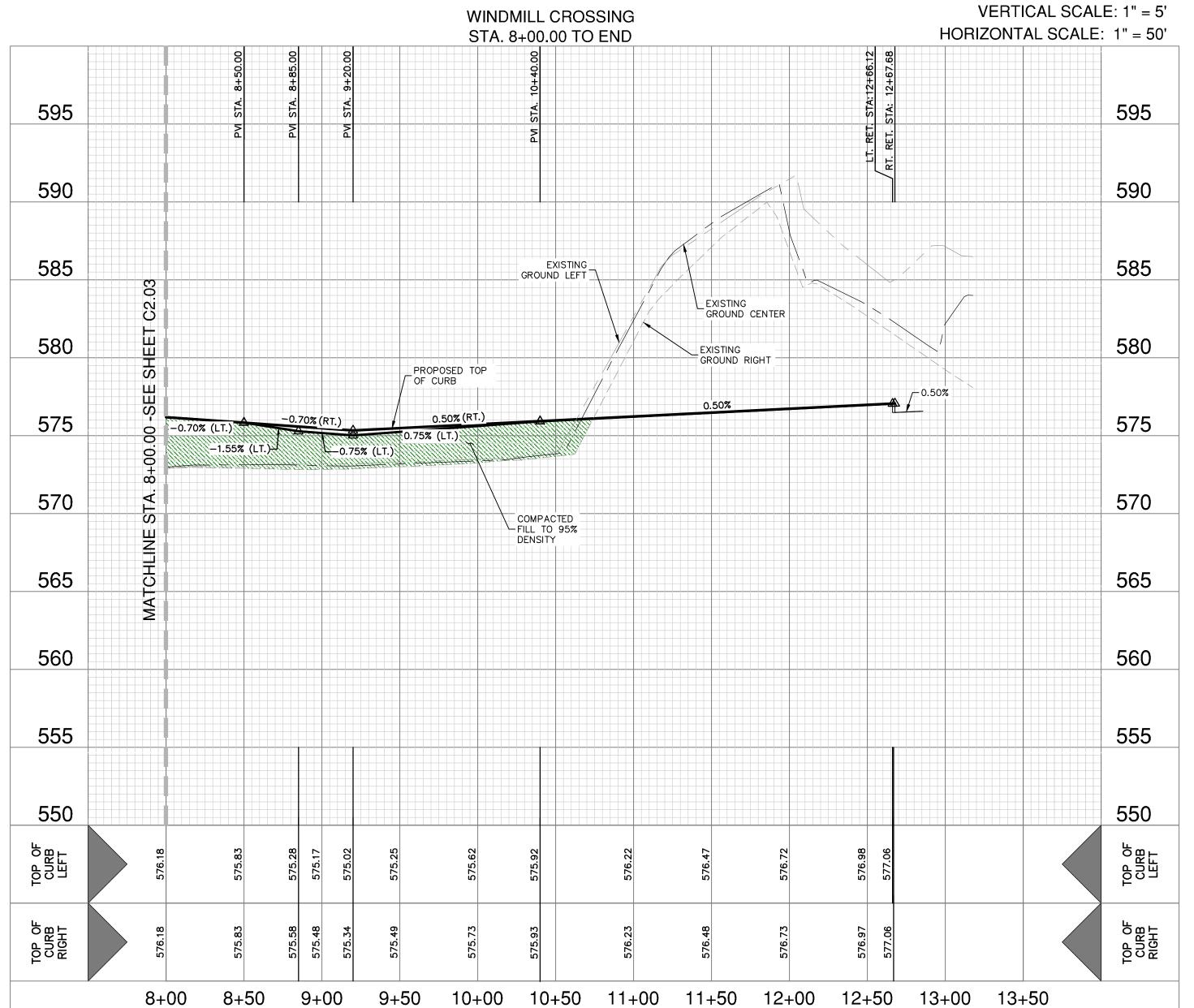
C2.02

PAPE-DAWSON ENGINEERS **KEYED NOTES:** 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION (3) 15' DRAINAGE ROW 4 21' DRAINAGE ROW

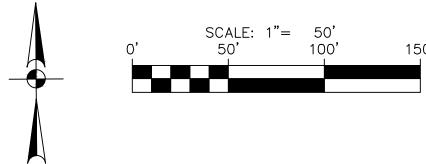
WINDMILL CROSSING

SCALE: 1" = 20'

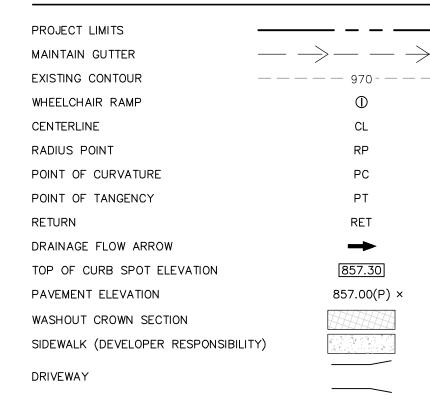




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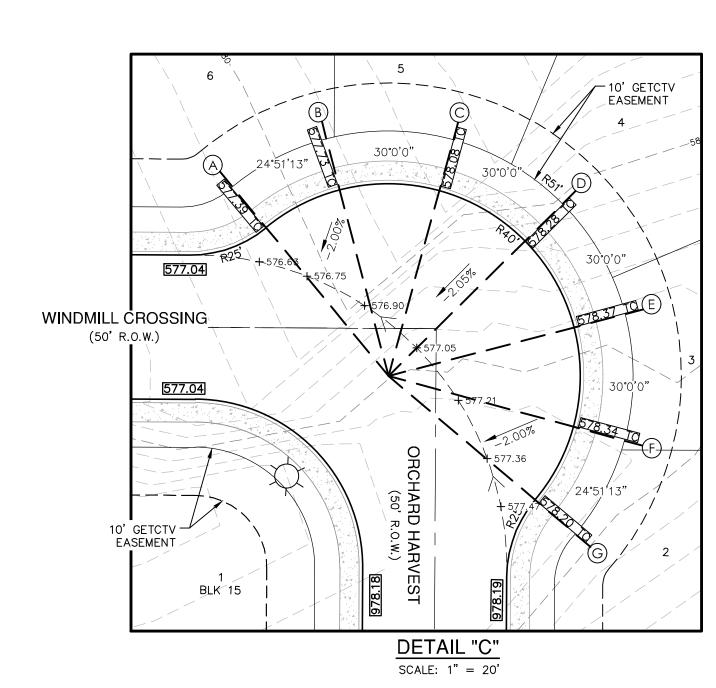


STREET LEGEND



KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION
- 3 15' DRAINAGE ROW
- 4 21' DRAINAGE ROW



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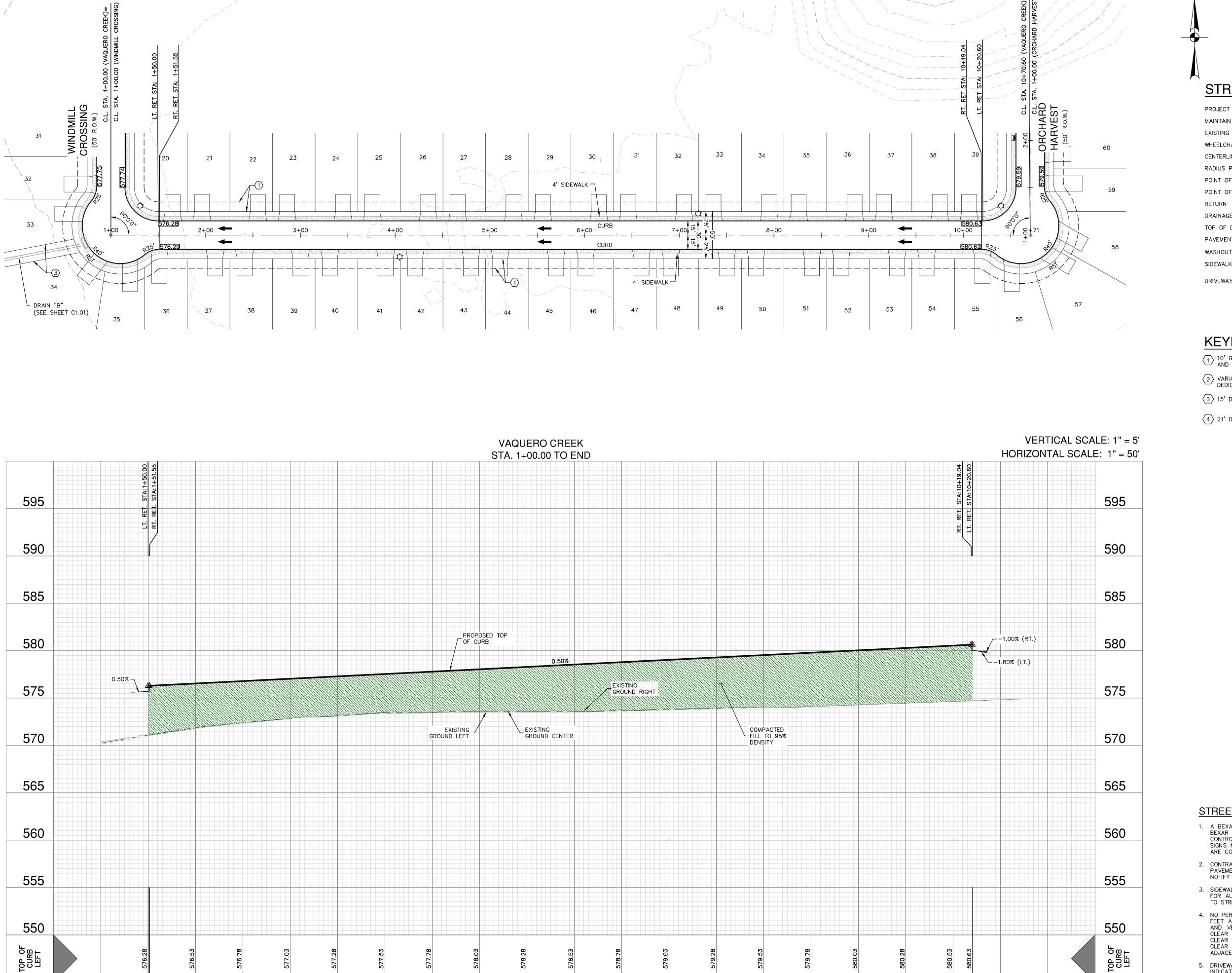
WINDMILL CROSSING STA. 8+00.00

CALEB M. CHANCE

PAPE-DAWSON ENGINEERS

_{r NO.} 23-11800285 OB NO. 12386-04 AUGUST 2023

DESIGNER HECKED<u>AS</u> DRAWN<u>RD</u> C2.03



2+50

2+00

3+00

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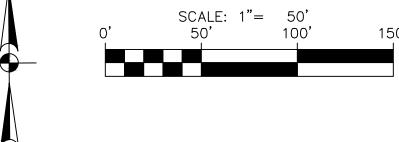
3+50

4+00 4+50 5+00

5+50 6+00

6+50 7+00 7+50 8+00 8+50 9+00 9+50

10+00 10+50 11+00



STREET LEGEND

PROJECT LIMITS	
MAINTAIN GUTTER	\longrightarrow — — –
EXISTING CONTOUR	———— 970-——
WHEELCHAIR RAMP	•
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
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SIDEWALK (DEVELOPER RESPONSIBILITY	TY)
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CALEB M. CHANCE

10 CARLOTA UNITS 7 &

AQUERO CREEK PLAN & PROSTA. 1+00.00 TO END

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PLAT NO. 23-11800285

JOB NO. 12386-04

DATE AUGUST 2023

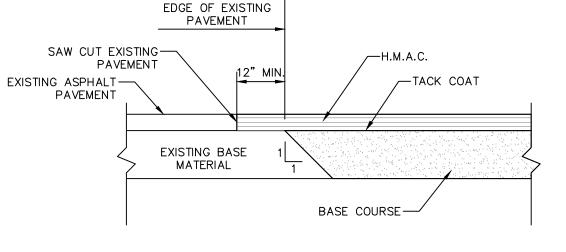
PR DESIGNER RG

CHECKED AS DRAWN RD

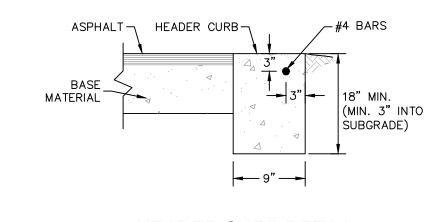
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	PAVEMENT SECTION DETAIL							
STREET NAME	CLASSIFICATION	STATION	TYPE "D" HMAC SURFACE TXDOT ITEM 340, in.		AGGREGATE BASE, in. (TxDOT ITEM 247 TYPE A GRADE 1 OR 2)	TREATED SUBGRADE	STRUCTURAL NUMBER	
FARMSTEAD CROSSING	LOCAL A	1+00.00 TO END	2"	_	10"	6*	2.76	
ORCHARD HARVEST	LOCAL A	1+00.00 TO END	2"	_	10"	6*	2.76	
WINDMILL CROSSING	LOCAL A	1+00.00 TO END	2"	_	10"	6*	2.76	
VAQUERO CREEK	LOCAL A	1+00.00 TO END	2"	_	10"	6*	2.76	

PARKWAY ,4' SIDEWALK ASPHALTIC CONC. PARKWAY 4' SIDEWALK 1/4" PER FT (MIN) 1/4" PER FT (MIN) -PAVEMENT TYPE "D" ∕-CURB ,1" PER FT (MAX) ´ 1" PER FT (MAX)-SUBGRADE -LFLEXIBLE (GRANULAR) BASE (COMPACTED 95% MAXIMUM DENSITY) SAN. SEWER LINE (TYP.) [\]8" WATER LINE (TYP.) 50' (LOCAL TYPE "A") ROW STREET SECTION



ASPHALT/ASPHALT JUNCTURE DETAIL NOT-TO-SCALE



CONCRETE CURB DETAIL NOT-TO-SCALE

LIMITS OF MEASUREMENT

FOR STREET EXCAVATION

PER PROJECT

DRAINAGE

*THICKNESS OF BASE IN OVER EXCAVATION AREA I

5.5", OR 4" MINIMUM

EQUAL TO TOTAL PAVEMENT

SECTIONS THICKNESS MINUS

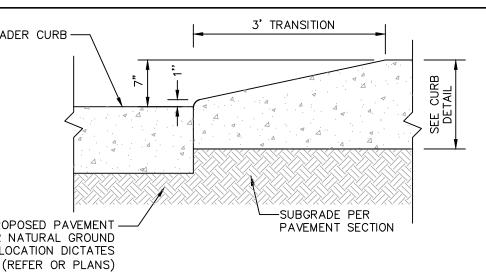
CALEB M. CHANCE

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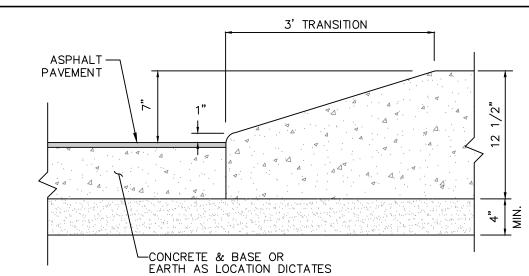
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SPECIFICATIONS.

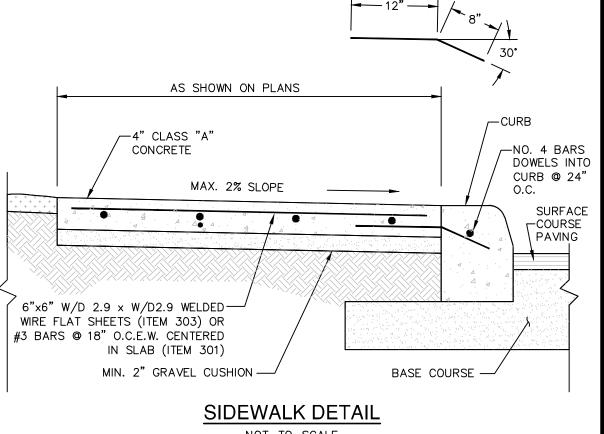
MAINTAIN POSITIVE

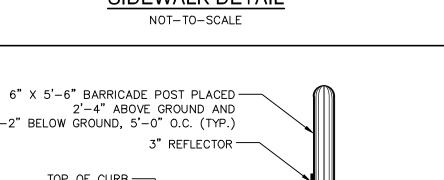


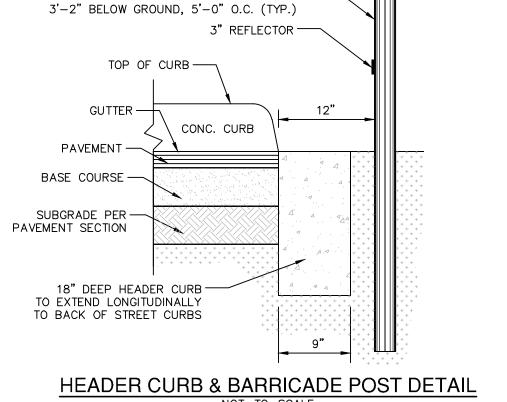
CURB TRANSITION DETAIL (FROM HEADER CURB TO STANDARD CURB



CURB TRANSITION DETAIL (FROM PAVEMENT TO STANDARD CURB)





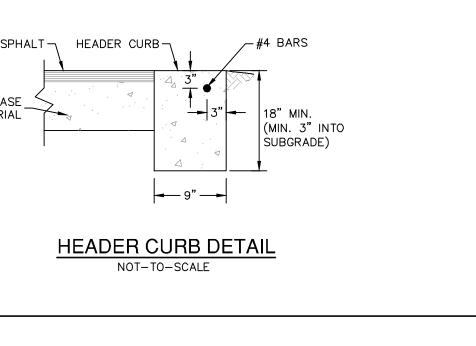


GENERAL NOTES:

- CONTRACTOR SHALL REFERENCE THE PROJECT PAVEMENT DESIGN REPORT PREPARED BY INTEC DATED MAY 14, 2021, PROJECT NO. S211159-P.
- 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
- 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 CBR TESTING AND THICKER PAVEMENT SECTIONS ARE
- WHERE PAVEMENT SUBGRADE IS LOCATED WITHIN 2-FEET OF THE EXISTING GROUND 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 WHERE 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 HOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2 AND A PI WITHIN RANGE OF 5 AND 20. 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 BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN THE 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. STREET SUBGRADE NOTES:
- 1. CUT AND FILL DATA ARE NOT AVAILABLE AT THIS TIME.
- 2. BASED ON THE SOILS ENCOUNTERED IN THE BORINGS, WE ANTICIPATE THE FINAL PAVEMENT SUBGRADE PLASTICITY INDEX VALUES TO BE LESS THAN OR EQUAL TO 20 OR GREATER THAN 20.
- 3. IF THE SUBGRADE PLASTICITY INDEX VALUES ARE LESS THAN OR EQUAL TO 20, AS PER CITY OF SAN ANTONIO OR BEXAR COUNTY REQUIREMENTS, SUBGRADE STABILIZATION IS NOT NEEDED.
- 4. IF THE FINAL STREET SUBGRADE PLASTICITY INDEX VALUES ARE GREATER THAN 20, THEN THE SUBGRADE SHOULD BE LIME STABILIZED.
- 5. THE SUBGRADE SHOULD BE STABILIZED TO A DEPTH OF 6 OR 8 INCHES USING 6 $\frac{1}{2}$ PERCENT LIME
- 6. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGH, AN ALTERNATE PROCEDURE WILL BE NEEDED. IT IS OUR UNDERSTANDING THAT BEXAR COUNTY GUIDELINES REQUIRE THAT THE SUBGRADE BE STABILIZED REGARDLESS OF THE SOIL SULFATE LEVELS. IF THE HIGH SULFATE LEVELS ARE PRESENT, THEN DOUBLE APPLICATION OF LIME MAY
- 7. LIME APPLICATION RATE OF 30 LBS PER SQ YARD FOR 6-INCH DEPTH OF STABILIZATION IS RECOMMENDED.
- 8. LIME APPLICATION RATE OF 40 LBS PER SQ YARD FOR 8-INCH DEPTH OF STABILIZATION IS
- 9. IF FILL IS USED TO RAISE THE GRADE, FILL MATERIAL UNDERNEATH THE PAVEMENT SHOULD BE APPROVED FILL MATERIAL FREE OF DELETEIOUS RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

LIME NOTES:

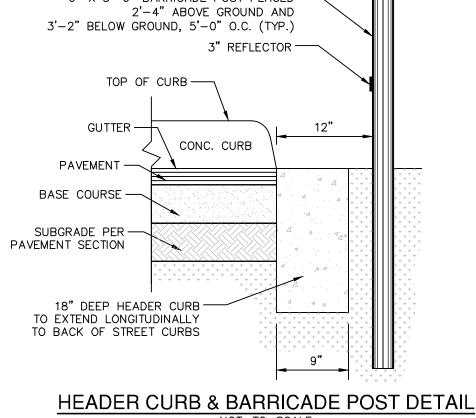
- FOR LIME STABILIZATION CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED ON THE FIELD: 1. AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2-3) DAYS. MAINTAIN MOISTURE DURING MELLOWING.
- 2. AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SLAKING AGGREGATES RETAINED ON THE 3 INCH SIEVE FROM THE SAMPLE): MINIMUM PASSING 1¾ SIEVE
- MINIMUM PASSING ¾ SIEVE MINIMUM PASSING NO. 4 SIEVE
- 3. SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD). IN THE LABORATORY, MOLD 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 BEXAR 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.



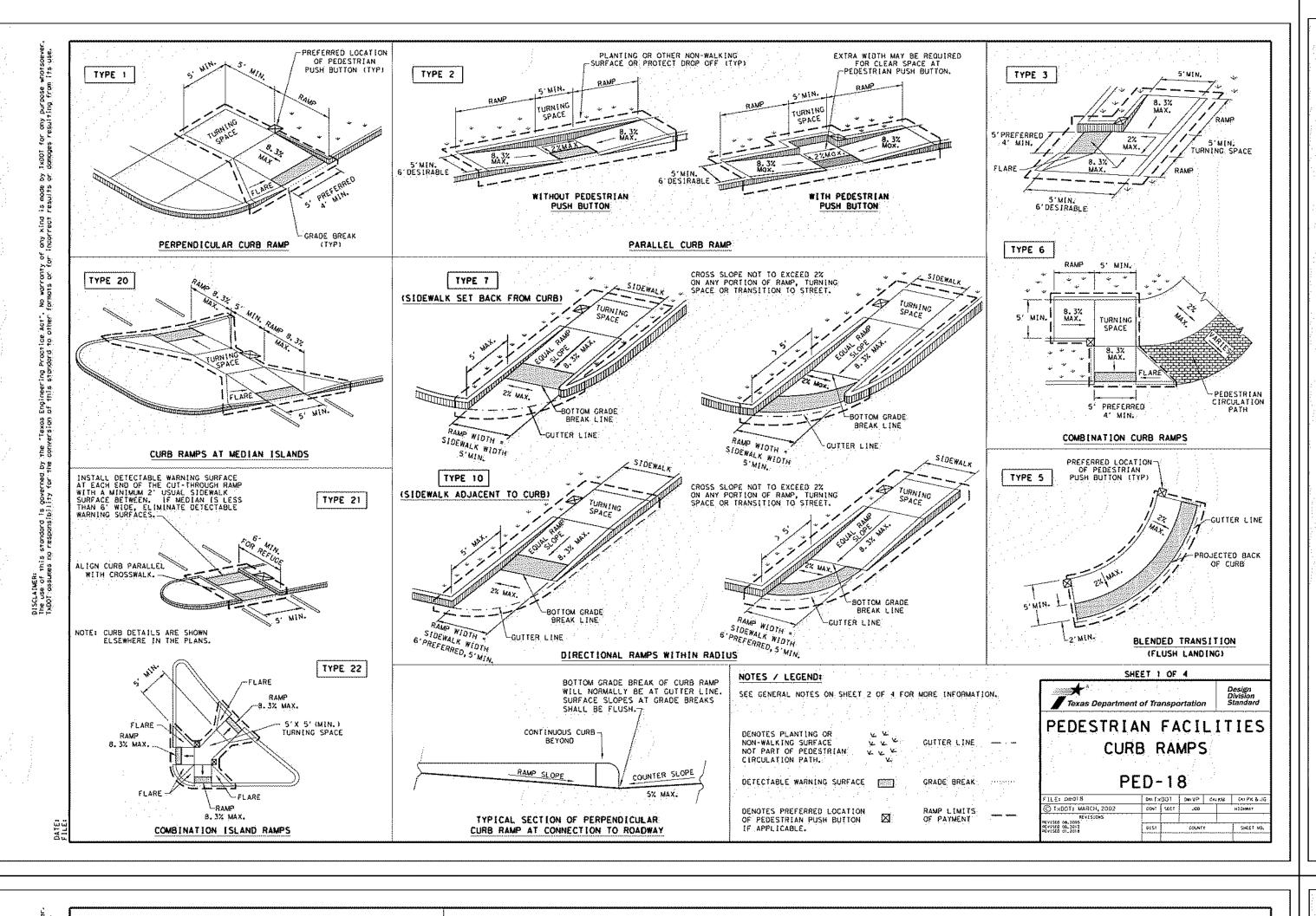
SUBGRADE PER -PAVEMENT SECTION PAY LIMITS FOR STREET EXCAVATION LIME — TREATMENT FOR SUBGRADE, FLEXIBLE BASE, ASPHALT TREATED BASE AND PRIME COAT HEADER CURB -PROPOSED PAVEMENT ---OR NATURAL GROUND AS LOCATION DICTATES (REFER OR PLANS) NOT-TO-SCALE NOT-TO-SCALE

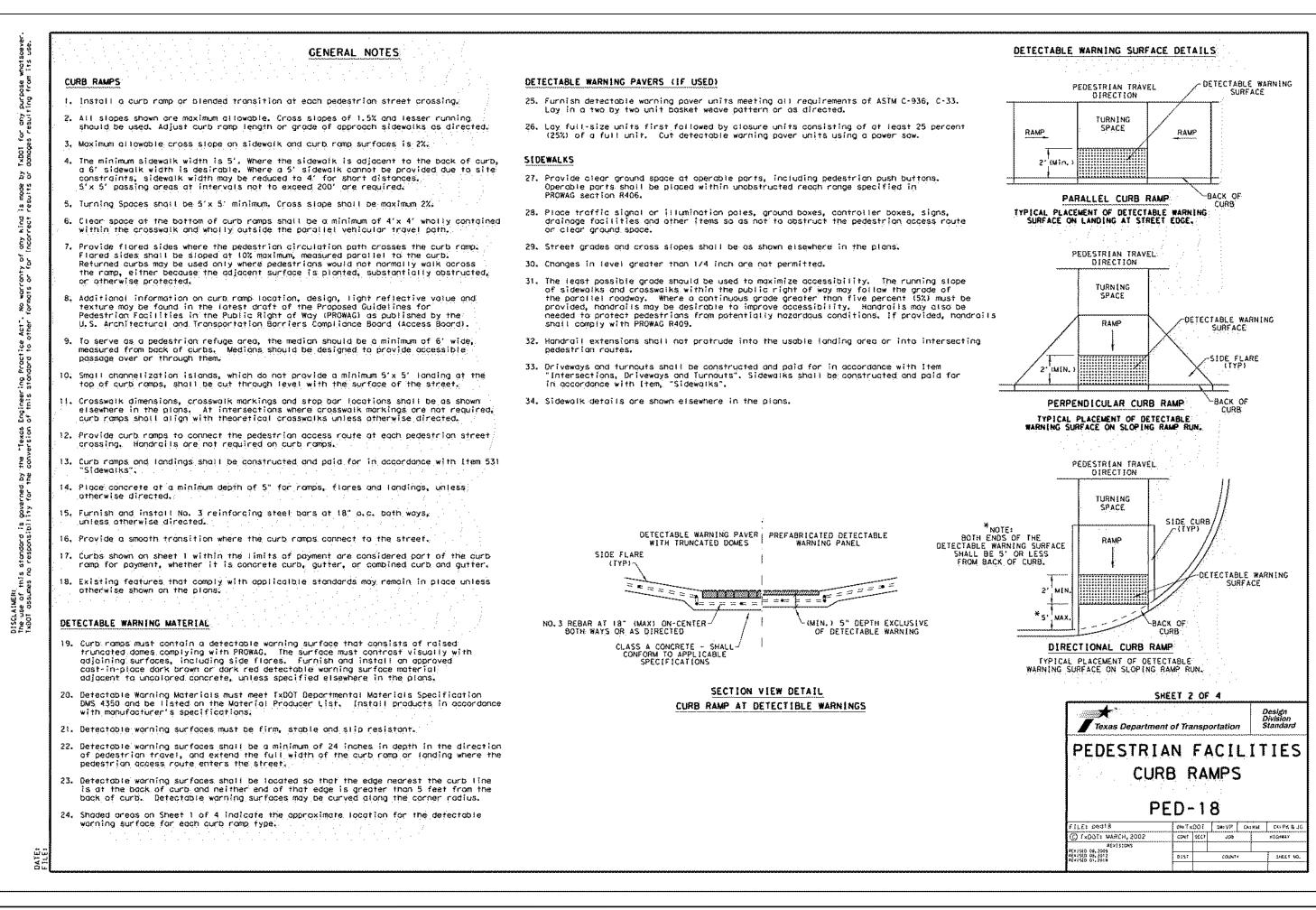
ASPHAL⁻ THICKNESS-

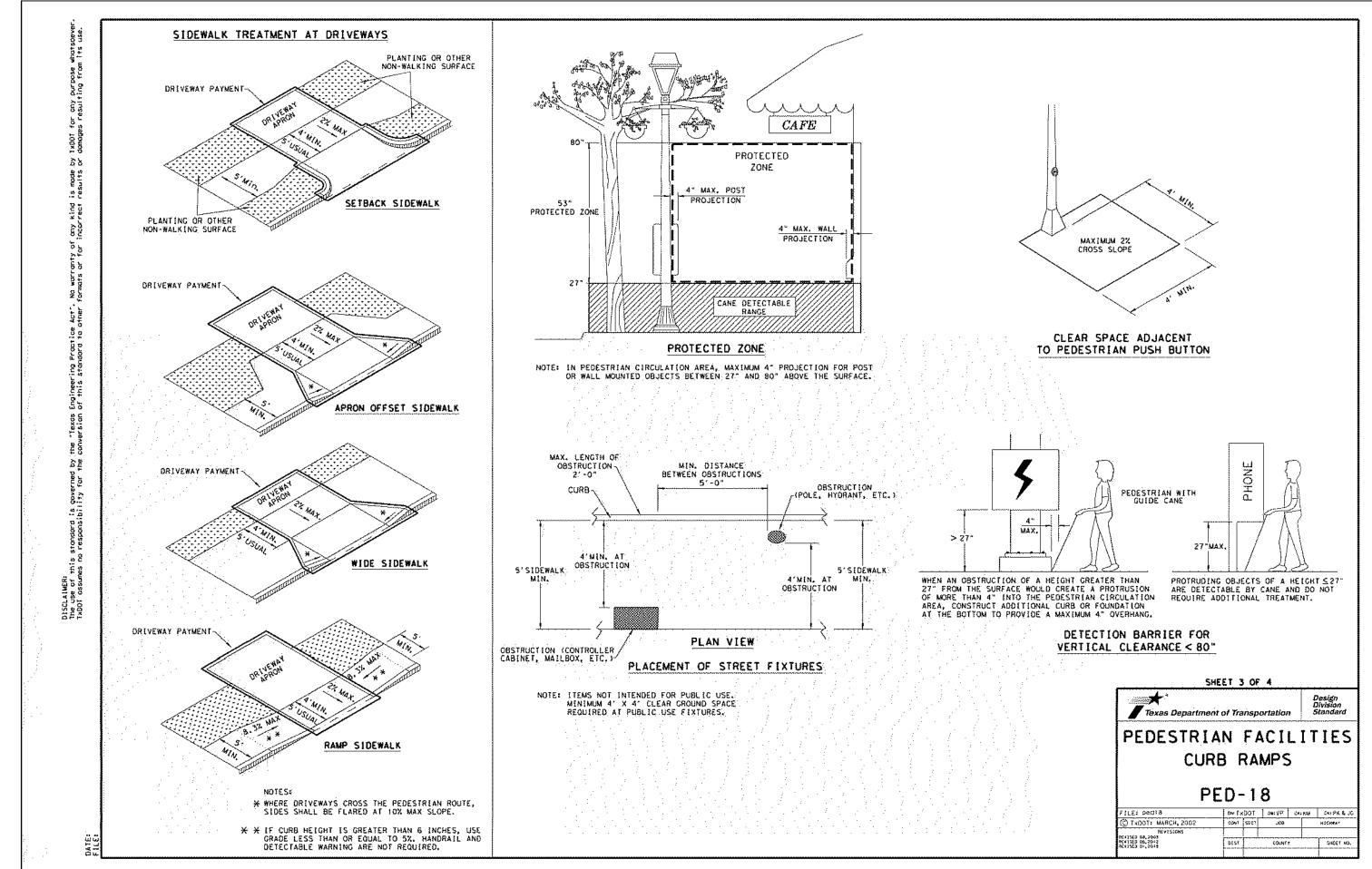
THICKNESS

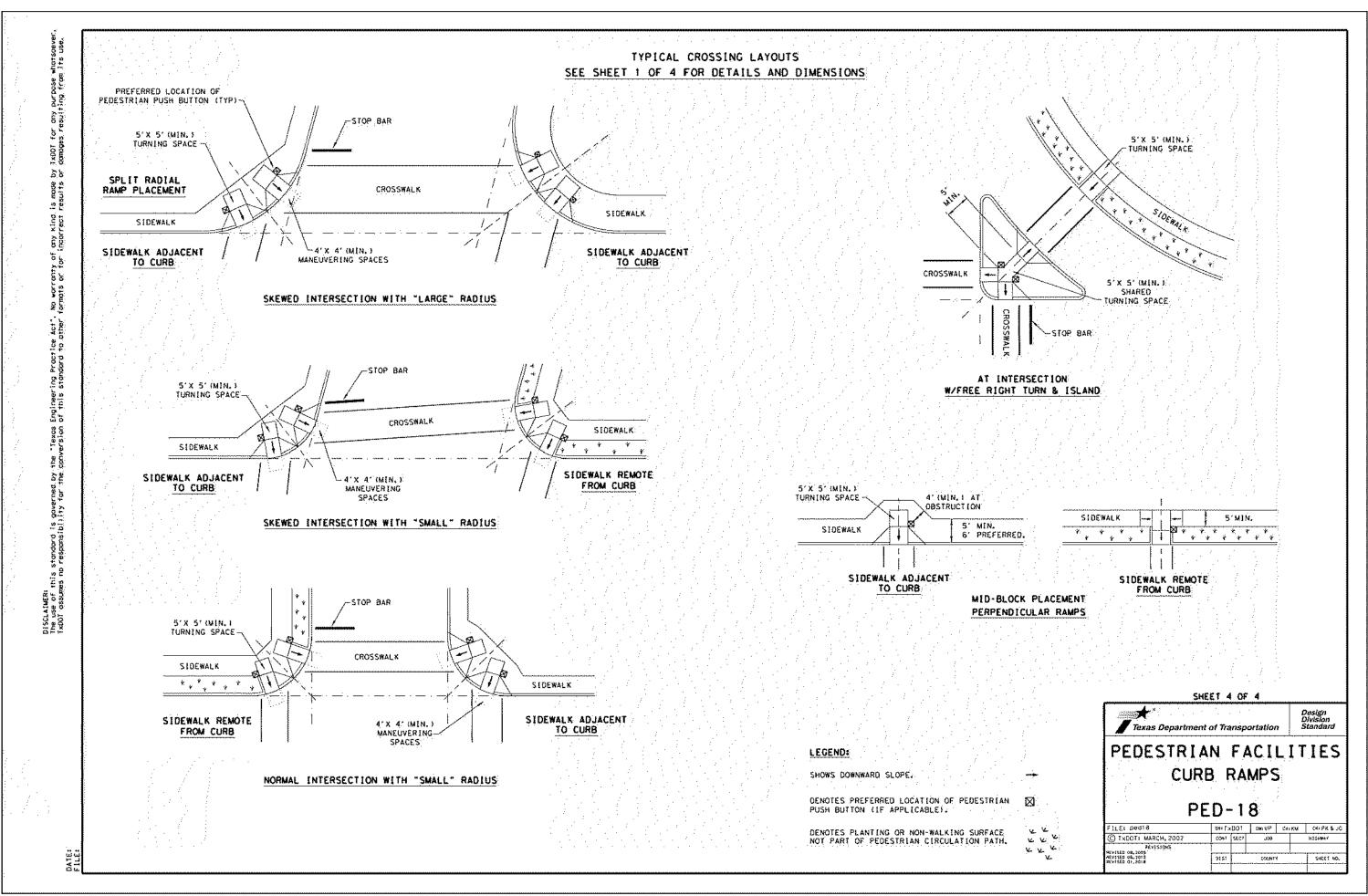


PLAT NO. 23-1180028 JOB NO. 12386-04 AUGUST 2023 DESIGNER HECKED AS DRAWN RD C2.10









NO. REVISION

OF 700



PAPE-DAWSON
ENGINEERS
10 I AUSTIN I HOUSTON I FORT WORTH I DALLAS

HO CARLOTA UNITS 7 & 8 SAN ANTONIO, TEXAS

PLAT NO. 23-11800285

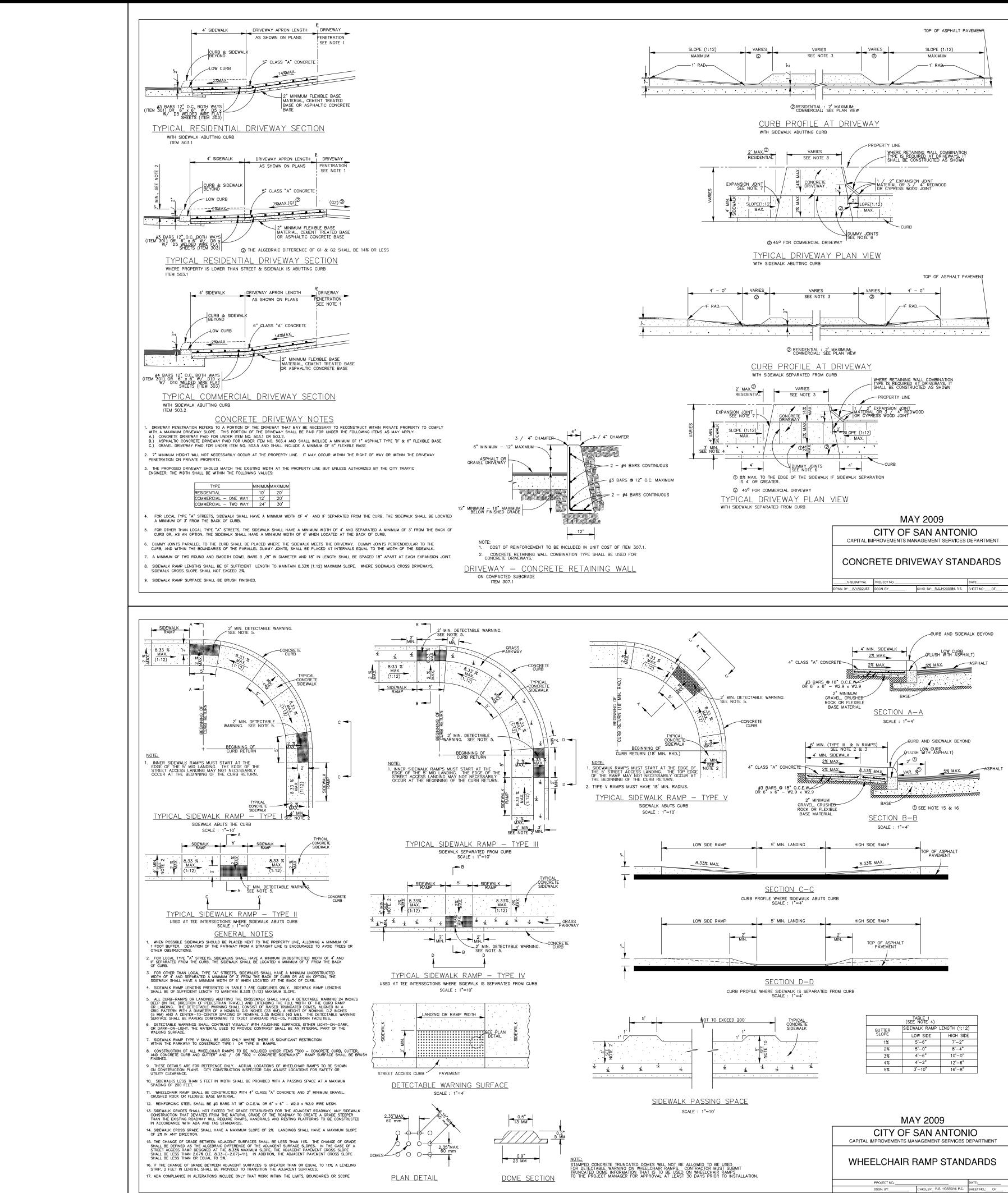
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DESIGNER RG

CHECKED AS DRAWN RD

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CALEB M. CHANCE
98401

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VORTH 1 DALLAS
3 1 210.375.9000

DNIO I AUSTIN I HOUSTON I FORT WORTH I DALLAS
LOOP 410 I SAN ANTONIO, TX 78213 I 210.375.9000
SINEERING FIRM #470 I TEXAS SURVEYING FIRM #10028800

SAN ANTONIO I AUSTIN I HOUSTON 2000 NW LOOP 410 I SAN ANTONIO,

NCHO CARLOTA UNITS 7 SAN ANTONIO, TEXAS

PLAT NO. 23-11800285

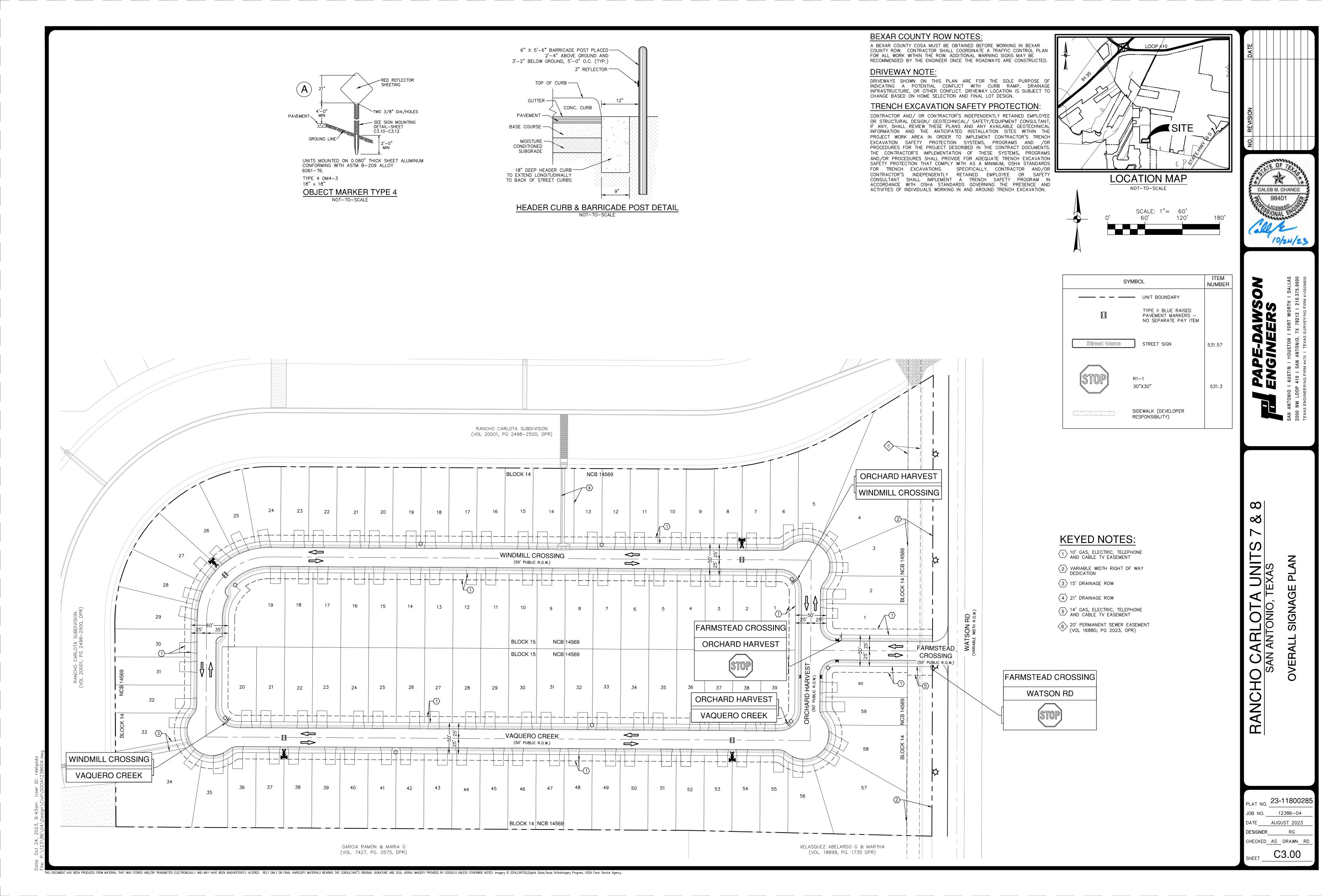
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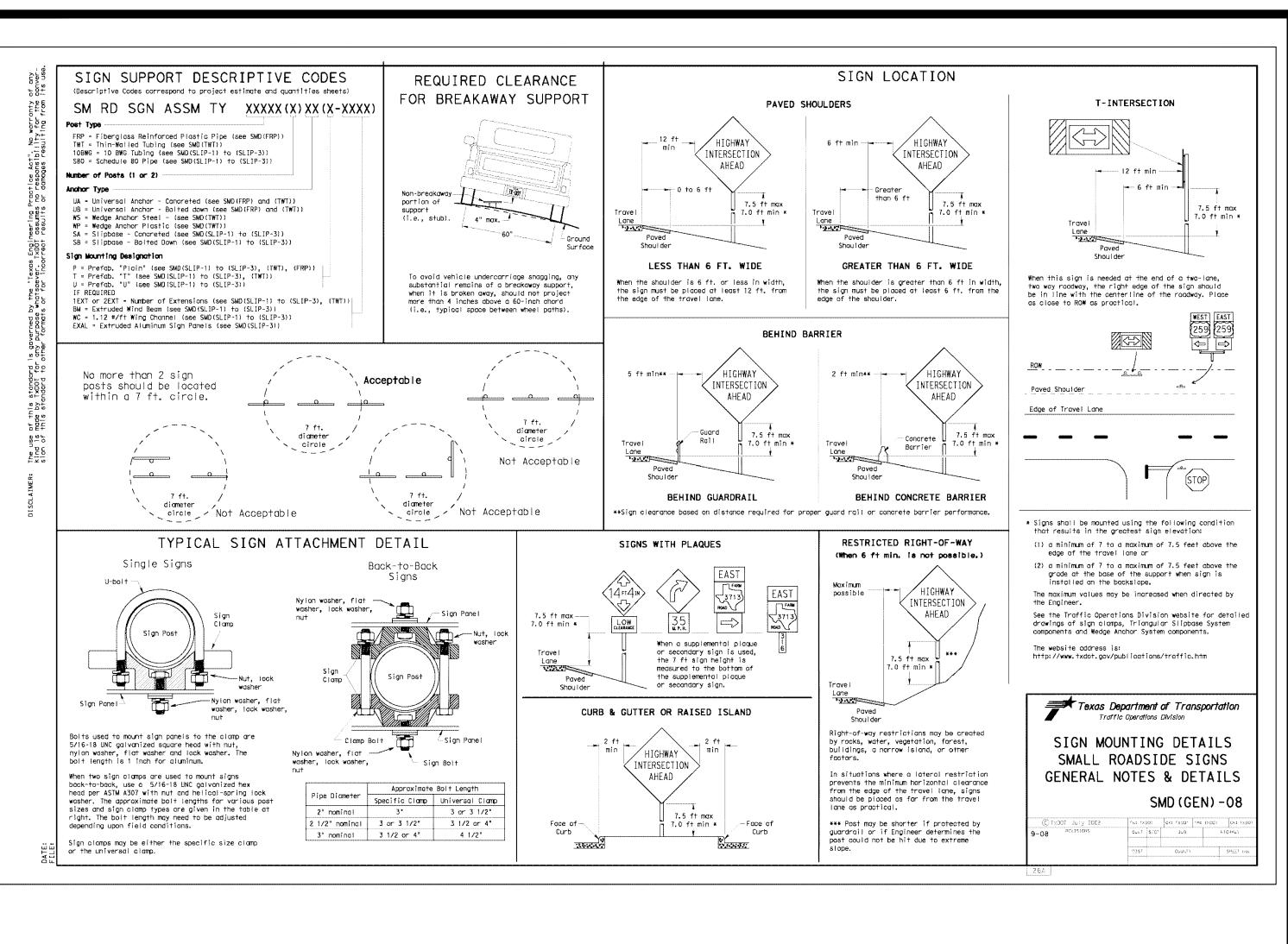
DATE AUGUST 2023

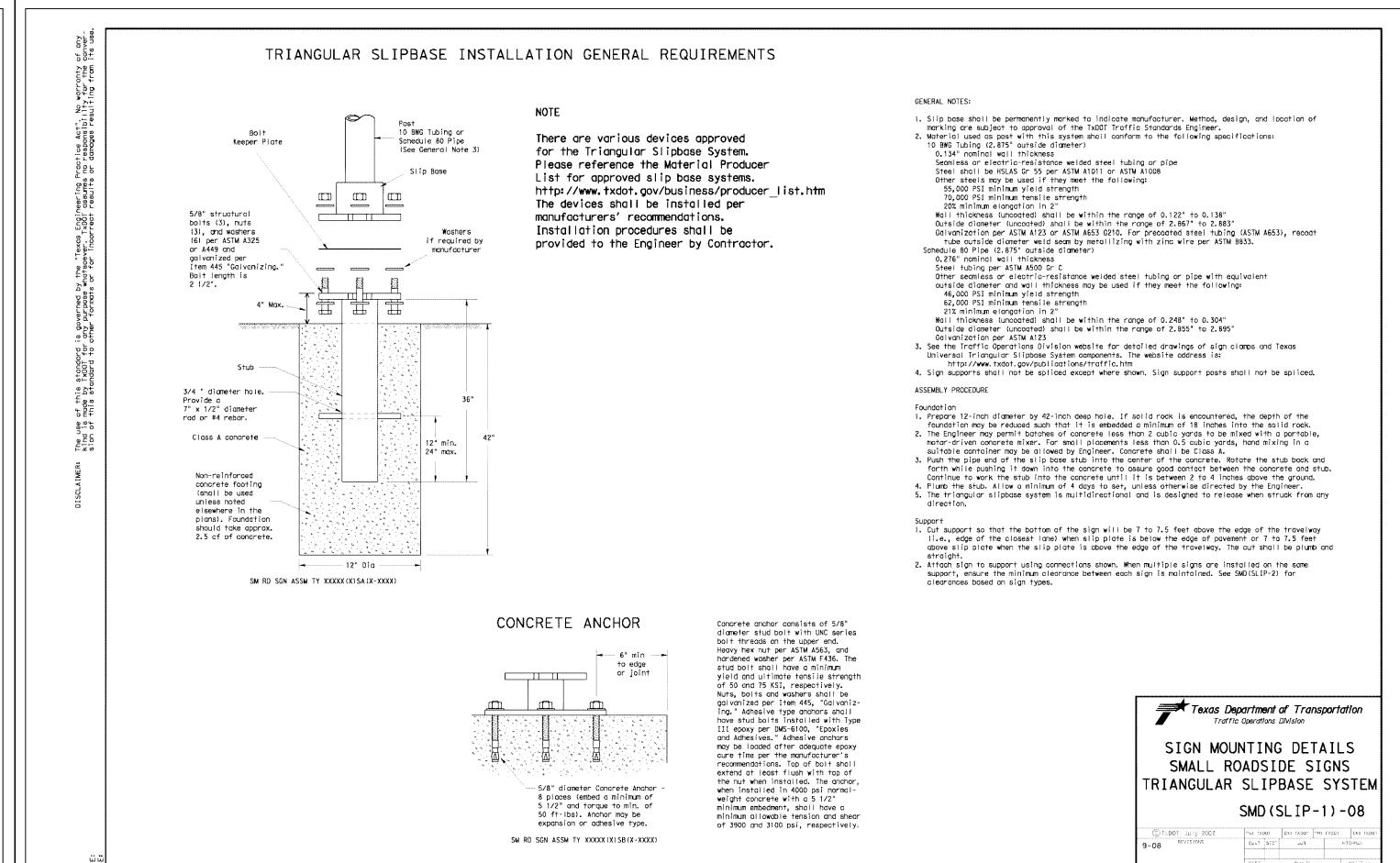
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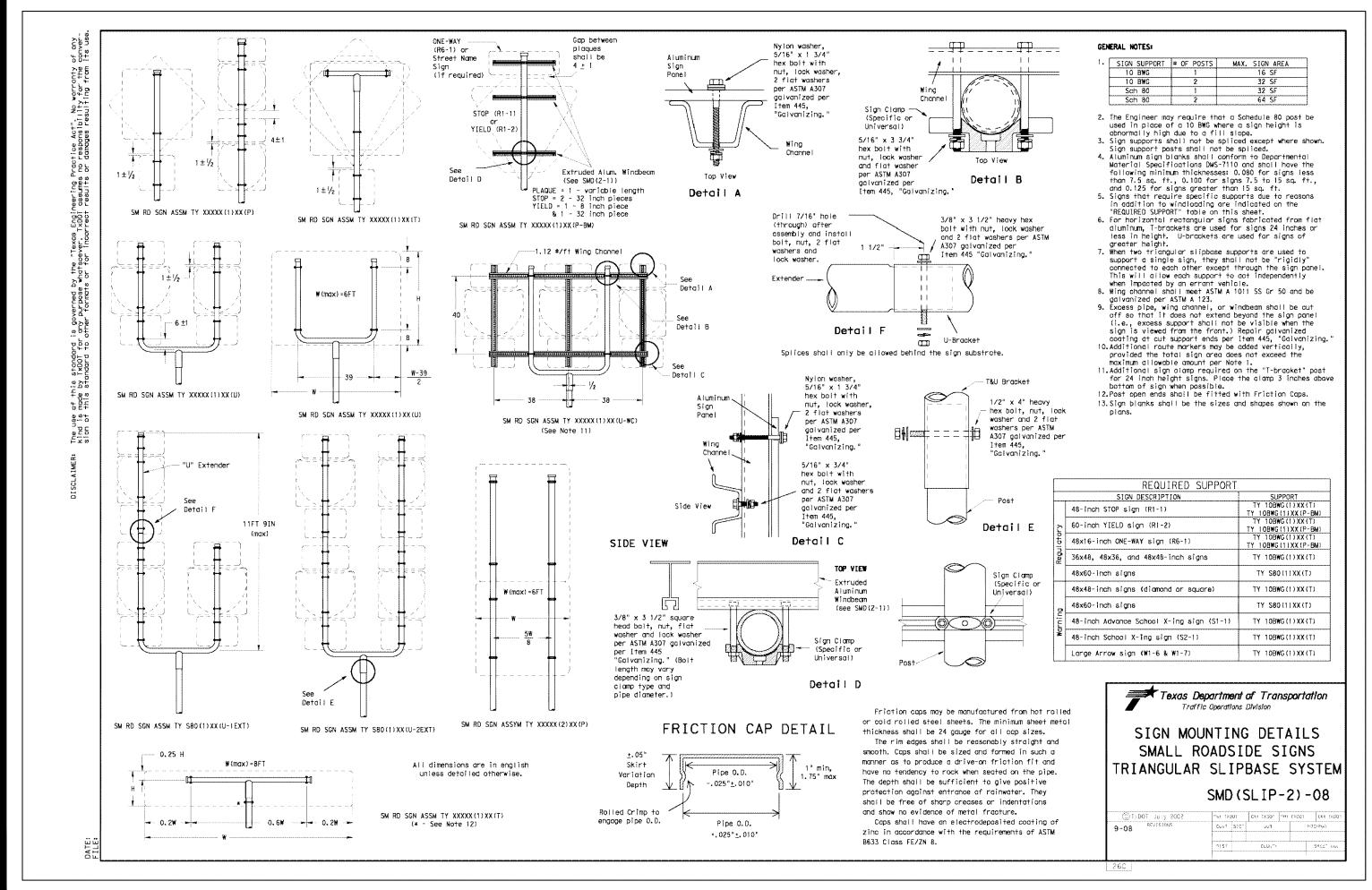
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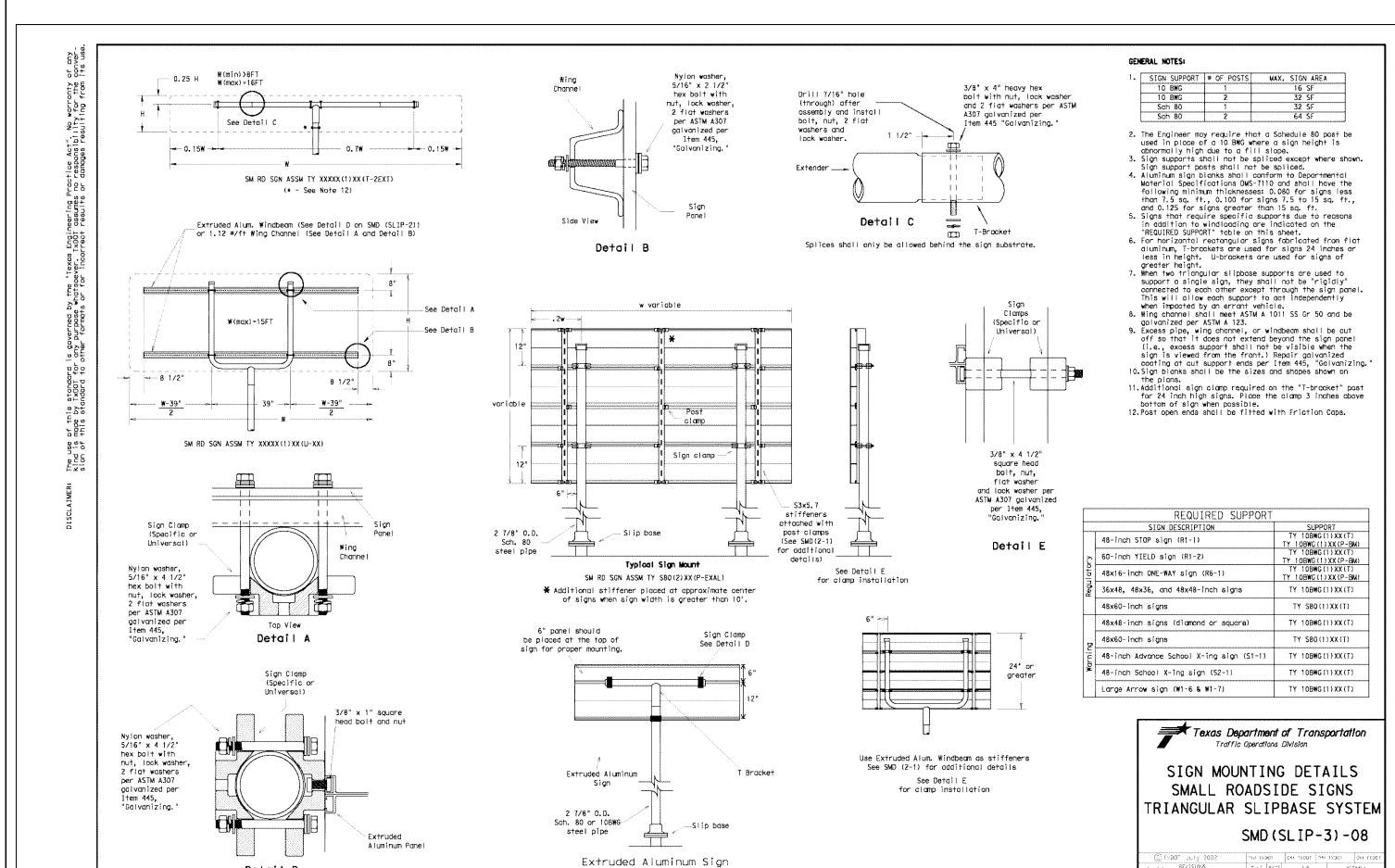
C2.12





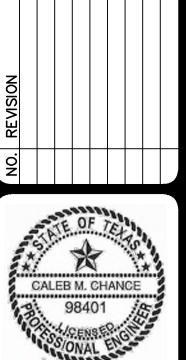






With T Bracket

EXTRUDED ALUMINUM SIGN WITH T BRACKET



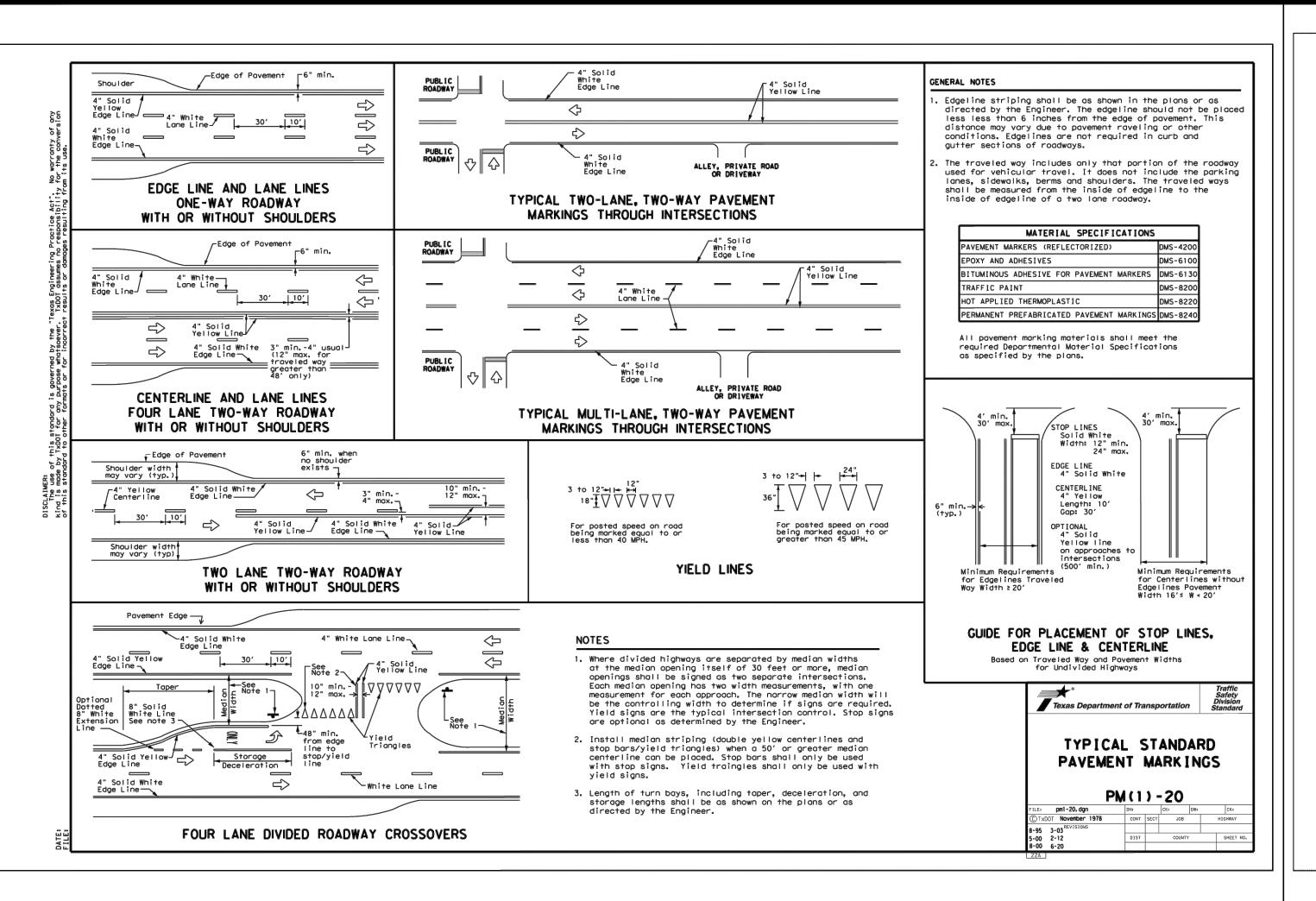


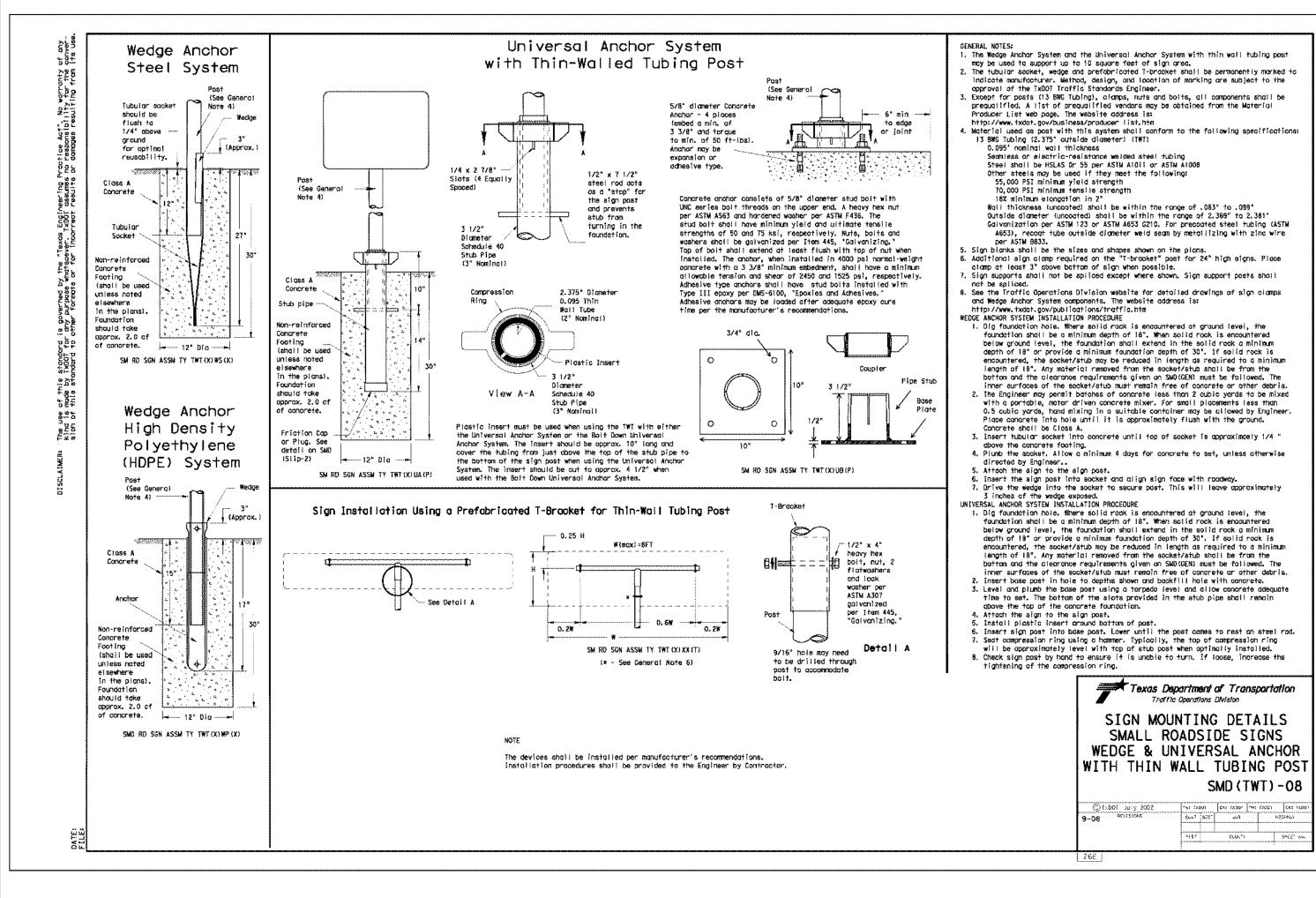
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NO 23-1180028 12386-04 AUGUST 2023 HECKED AS DRAWN RI C3.10

ESIGNER

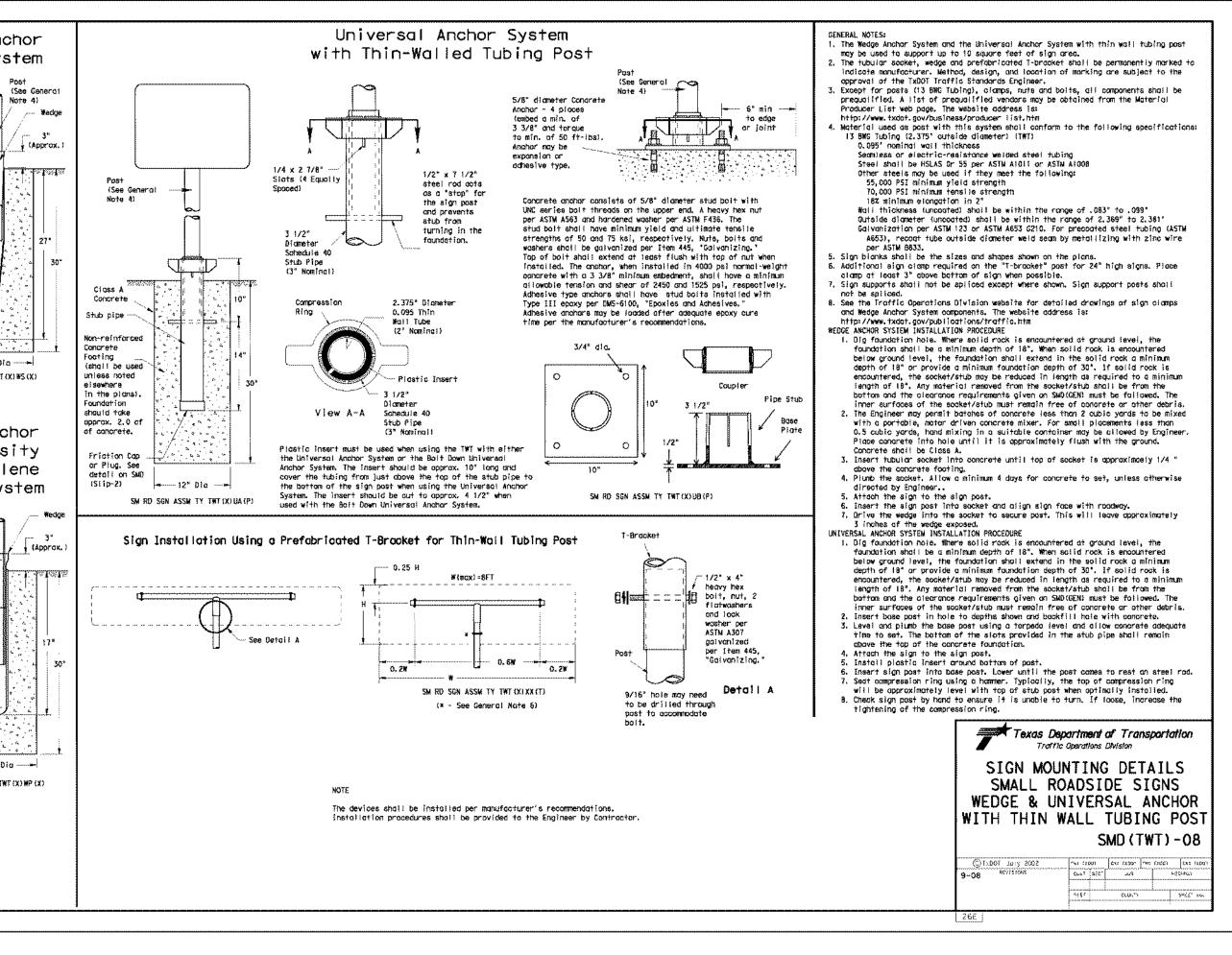
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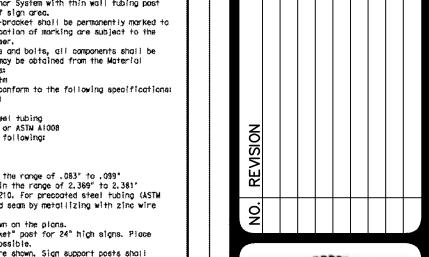


Universal Anchor System

with Fiberglass Reinforced Plastic (FRP) Post



GENERAL NOTES:





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UNI EXAS

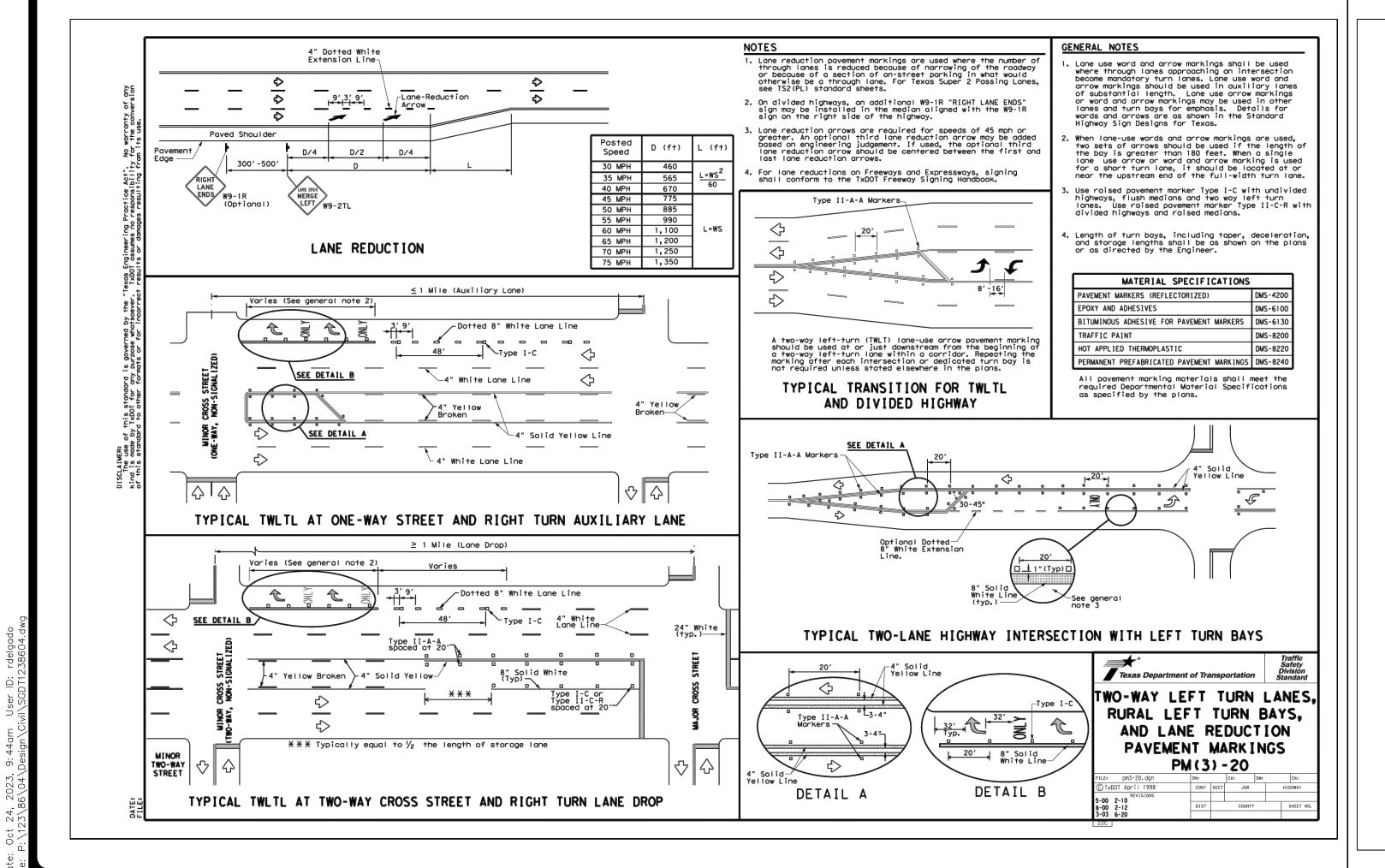
23-1180028 12386-04 AUGUST 2023 ESIGNER HECKED AS DRAWN RI

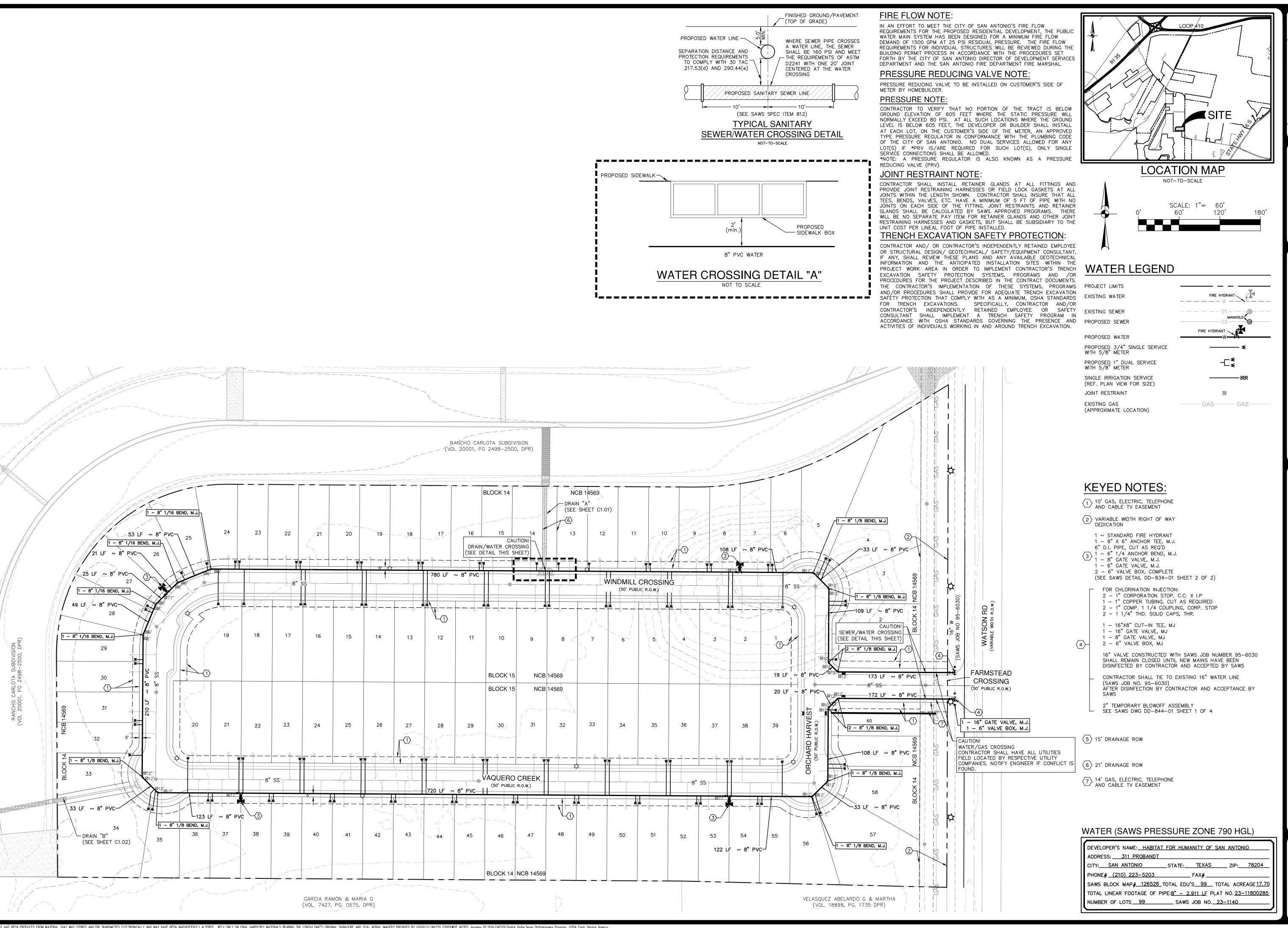
C3.11

1. FRP sign supports for a single type sign support may be used for signs up to and including 16 square feet. Dual post installation may be used for signs up to and including 32 square feet. I nuts, boits and washers shall be gaivanized per Item 445, "Gaivanizing." to edge 3. See the Traffic Operations Division website for detailed drawings of sign clamps. The website address is: http://www.txdot.gov/publications/traffic.htm FRP POST REQUIREMENTS 1. Materials shall conform to the requirements of Departmental Material Specification DMS-4410 and will be furnished in a yellow or gray color as specified elsewhere in the plans. 2. Thickness of FRP sign support is 0.125" + 0.031", - 0.0".

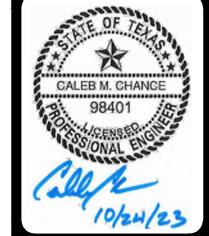
3. FRP sign supports are prequalified by the Traffic Operations Division. 5/8" diameter Concrete Anchor - 4 places Pregualification procedures are obtained by writing: Texas Department of Transportation (embed a min. of 3 3/8" and torque to min. of 50 ft-(bs). Anchor may be expansion - 1/4 x 2 7/8 3" Q.D. Traffic Operations Division or adhesive type. Fiberglass Reinforced equally Austin, Texas 78701-2483 Plastic (FRP) Pipe Concrete anchor consists of 5/8" diameter stud bolt with UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURES UNC series bolt threads on the upper end. A heavy hex nut per ASTM A563 and hardened washer per ASTM F436. The stud bolt shall have minimum yield and ultimate tensile 1. Dig foundation hole. Where solid rock is encountered at ground level, the foundation shall be a minimum depth of 18". When solid rock is encountered strengths of 50 and 75 ksi, respectively. Nuts, bolts and below ground level, the foundation shall extend in the solid rock a minimum washers shall be galvanized per Item 445, "Galvanizing." depth of 18" or provide a minimum foundation depth of 30". If solid rock is encountered, the socket/stub may be reduced in length as required to a minimum length of 18°. Any material removed from the socket/stub shall be Top of boit shall extend at least flush with top of nut when installed. The anchor, when installed in 4000 psi normal-weight concrete with a 3 3/8" minimum embedment, shall have a minimum from the bottom and the clearance requirements given on SMD(GEN) must be - 3 1/2" Schedule 40 allowable tension and shear of 2450 and 1525 psi, respectively. Adhesive type anchors shall have stud bolts installed with followed. The inner surfaces of the socket/stub must remain free of concrete or other debris. (3" Nominal) The Engineer may permit batches of concrete less than 2 cubic yards to be mixed with a portable, motor driven concrete mixer. For small placements Type III apoxy per DMS-6100, "Epoxies and Adhesives," Adhesive anchors may be loaded after adequate epoxy cure 1/2 x 7 1/2" Steel Rod less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.

3. Insert base post in foundation hale to depths shown and fill hale with time per the manufacturer's recommendations. Acts as a "stop" for the sign post and prevents stub from turning in Stub pipe the foundation. BOLT-DOWN DETAILS concrete. Cut base post from bottom and ensure a minimum of 18" embedment if installed in solid rock. Compression Ring 4. Level and plumb the base post with coupler using a torpedo level and let Non-reinforced concrete set a minimum of 4 days, unless otherwise directed by Engineer. Concrete Footing Bottom of base post slots shall be above the concrete footing. (shall be used unless noted Reinforced 5. Attach sign to FRP post. 6. Insert sign post into base post. Lower until the post comes to rest on the elsewhere in the (FRP) Pipe 7. Use hammer to ensure the coupler is firmly seated. Top of coupler should be should take approx level with top of base past in most instances. 8. Check sign to ensure there is no twist. If loose, increase the tightening of coupler. Friction Cap . Position base plate with coupler on existing concrete. or Plug. See Stub Pipe 2. Drill holes into concrete and insert the 5/8" diameter bolts with wedge anchors, and tighten nuts.
3. Attach sign to FRP post. (Slip-2) View A-A 12 Dia ----4. Insert bottom of sign post into pipe stub. 5. Use hommer to ensure the coupler is firmly seated. Top of coupler should be SM RD SGN ASSM TY FRP(X)UA(P SM RD SGN ASSM TY FRP(X)UB(P) level with top of base post in most instances. 6. Check sign to ensure there is no twist. If loose, increase the tightening of Typical Sign Mounting Detail Typical Sign Mounting Detail for FRP Support with Back-to-Back Signs for FRP Support with Single Sign Plastic or nylon washer, Plastic or nylon washer, and flat washer and flat washer Sign Clamp Sign Clamp Universal) (Specific or Texas Department of Transportation (Max.) hole SIGN MOUNTING DETAILS support and support and SMALL ROADSIDE SIGNS UNIVERSAL ANCHOR SYSTEM WITH FRP POST SMD (FRP) -08 .080" Aluminum Sign 5/16 x 4" Hex Bold Nylon Washer Flat washer. Flat washer, lock washer and nut





NO. REVISION DATE



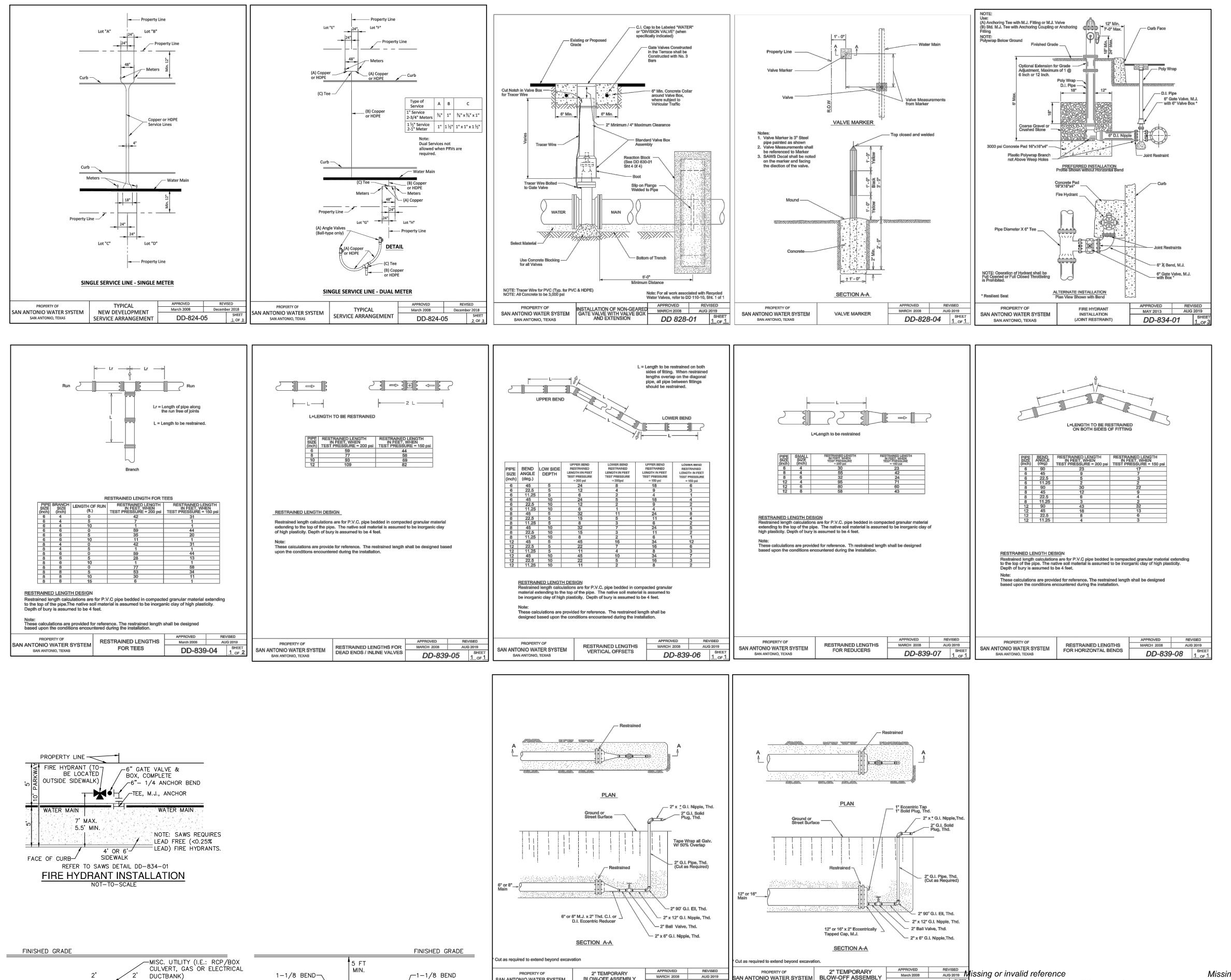
PLAT NO. 23-11800285

JOB NO. 12386-04

DATE AUGUST 2023

DESIGNER RG

CHECKED DRAWN RD



Missing or invalid reference Sheet ATER (SAWS PRESSURE ZONE 790 HGL)

DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO
ADDRESS: 311 PROBANDT
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204
PHONE# <u>(210) 223–5203</u> FAX#
SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.70
TOTAL LINEAR FOOTAGE OF PIPE:8" - 2,911 LF PLAT NO. 23-11800285
NUMBER OF LOTS 99 SAWS JOB NO. 23-1140

PLAT NO. 23-1180028 OB NO. 12386-04 AUGUST 2023 ESIGNER HECKED AS DRAWN RD

CALEB M. CHANCE

98401

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SAN ANTONIO WATER SYSTEM

SAN ANTONIO, TEXAS

-1-1/8 BEND

WATER MAIN→

─MISC. UTILITY (I.E.:RCP/BOX CULVERT, GAS OR ELECTRICAL

DUCTBANK)

-WATER MAIN

1-1/8 BEND-

DUCTBANK)

V—WATER MAIN

TABLE DD-839-06.

ALL JOINTS ARE FULLY RESTRAINED IN

TYPICAL UTILITY/WATER CROSSING DETAIL NOT-TO-SCALE

ACCORDANCE WITH SAWS SPECIFICATION

-1-1/8 BEND

-WATER MAIN

1-1/8 BEND-

1-1/8 BEND-

WATER MAIN-

BLOW-OFF ASSEMBLY ON 6" & 8" MAINS

DD-844-01

AN ANTONIO WATER SYSTEM BLOW-OFF ASSEMBLY

ON 12" & 16" MAINS

SAN ANTONIO, TEXAS

SAWS CONSTRUCTION NOTES

(LAST REVISED JANUARY 2022)

SAWS GENERAL SECTION

(UECM).

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
- A.CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) 'DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING
- WATER", TAC TITLE 30 PART 1 CHAPTER 290. B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE' C.CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR
- WATER AND SANITARY SEWER CONSTRUCTION". D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION". E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL"
- THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.
- THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.
- THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.
- LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIFLD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
- SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES - COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480 COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
- TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.
- . ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.
- . THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- 10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT CONSTWORKREQ@SAWS.ORG.
- WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- . ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
- 12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY, COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED. OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
- 13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

SAWS WATER NOTES

- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST | 1. MACHINE CHLORINATION BY THE S.A.W.S. BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
 - FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014
- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS- CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".
- VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN. THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)
- SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS, IN ACCORDANCE WITH THE STANDARD DRAWINGS DD-839 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- 5. ALL VALVES SHALL READ "OPEN RIGHT".
- 6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 605 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 605 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF *PRV IS/ARE REQUIRED FOR SUCH LOT(S) ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED. *NOTE: PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE
- PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET. (ITEM NO. 847.3): MAINS SHALL BE DISINFECTED WITH DRY HTH WHERE SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE INSPECTOR, AND SHALL NOT EXCEED A TOTAL LENGTH OF 800 FEET. THIS METHOD OF DISINFECTION WILL ALSO BE FOLLOWED FOR MAIN REPAIRS. TH CONTRACTOR SHALL UTILIZE ALL APPROPRIATE SAFETY MEASURE TO PROTECT HIS PERSONNEL DURING DISINFECTION OPERATIONS.
- 8. BACKFLOW PREVENTION DEVICES:
- ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES. - ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.
- FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE | 14. SAWS REQUIRES LEAD FREE (< 0.25%) FIRE HYDRANTS. UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.
- 10. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN SAWS CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES OR OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATION OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAID FOR BY THE CONTRACTOR BUT

WILL BE INSTALLED BY SAWS DISTRIBUTION AND COLLECTION STAFF.

PROJECT WATER NOTES

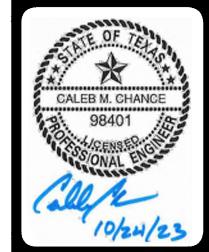
PROVIDED FOR IN THE SPECIAL CONDITIONS.

- ALL 8", 12" AND 16" PIPE SHALL BE P.V.C. C-900 CLASS 235 DR 18.
- . ALL MAINS SHALL BE HYDROSTATICALLY TESTED BY THE CONTRACTOR, AS
- THE WATER LINES WILL BE SET FROM THE STREET HUBS BEFORE THIS CONTRACT BEGINS. STREET CUT SHEETS WILL BE SUPPLIED TO THI CONTRACTOR. THERE SHOULD BE NO ADDITIONAL STAKES REQUIRED, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE SITE AND VERIFY THAT ALL STAKES REQUIRED FOR HIS WORK ARE IN PLACE AT THE TIME THE CONSTRUCTION BEGINS. IF ANY STAKES ARE MISSING TH ENGINEER SHOULD BE NOTIFIED IMMEDIATELY. AFTER CONSTRUCTION BEGINS, ALL CONSTRUCTION STAKES, MARKS, ETC., SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR, AND IN CASE OF DESTRUCTION OR REMOVAL BY THI CONTRACTOR, HIS EMPLOYEE OR ANY OTHER MEANS, SUCH STAKES, MARKS, ETC., SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL THE FINAL MEASUREMENTS, TAPS AND LENGTH OF SERVICE CONNECTIONS.
- THE LOT CORNERS WILL BE SET BY THE ENGINEER FOR INSTALLATION OF ALI WATER SERVICES. THESE LOT CORNERS SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR SO THE METER BOXES CAN BE SET IN PHASE II. ANY LOT CORNER DESTROYED OR REMOVED BY THE CONTRACTOR, HIS EMPLOYEES, OR BY ANY OTHER MEANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- STREETS WILL HAVE BEEN EXCAVATED DOWN TO SUBGRADE AND THI PARKWAY WILL BE CUT DOWN TO TOP OF CURB BY THE STREET CONTRACTOR, PRIOR TO CONSTRUCTION OF THE WATER MAINS. IT WILL BE THE UTILITY CONTRACTOR'S RESPONSIBILITY TO PROVIDE A PAD FOR HIS EQUIPMENT.
- WATER METER BOXES IF APPLICABLE SHALL BE INSTALLED NINE FEET FROM FACE OF CURB TO CENTER OF THE METER BOX.
- . ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
- IO. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED AND THE S.A.W.S.
- RELEASES THE MAIN FOR TIE-IN AND USE. . UNIT PRICE BID FOR "STANDARD FIRE HYDRANT ASSEMBLY" SHALL INCLUDE FIRE HYDRANT, 6-INCH GATE VALVE AND 6-INCH VALVE BOX COMPLETE,
- ANCHOR BEND, AND ALL 6-INCH DI PIPE REQUIRED (DI PIPE REQUIRED SHALL INCLUDE ALL PIPE FROM THE TEE ON THE MAIN LINE TO THE FIRE HYDRANT). 2. WHEN SEWER LINES ARE INSTALLED IN THE VICINITY OF WATER MAINS, SUCH INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION "RULES AND REGULATIONS FOR PUBLIC
- 13. A CLEAR SPACE SHALL BE PROVIDED AROUND ALL FIRE HYDRANTS. THIS AREA SHOULD HAVE A MINIMUM DIAMETER OF 3.0' AND BE CLEAN OF

WATER SYSTEMS" (1988 OR ANY REVISIONS THERETO).

VERTICAL OBSTRUCTIONS, VALVES, AND METER BOXES.

15. UNLESS OTHERWISE NOTED ALL SERVICES SHALL BE 3/4" WITH 5/8" METER.



WATER (SAWS PRESSURE ZONE 790 HGL)

NUMBER OF LOTS <u>99</u>

DEVELOPER'S NAME: <u>HABITAT FOR HUMANITY OF SAN ANTONIO</u> ADDRESS: 311 PROBANDT

CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204 PHONE# <u>(210) 223-5203</u> FAX# __

SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.70 TOTAL LINEAR FOOTAGE OF PIPE:8" - 2,911 LF PLAT NO. 23-11800285

____ SAWS JOB NO. <u>23-1140</u>

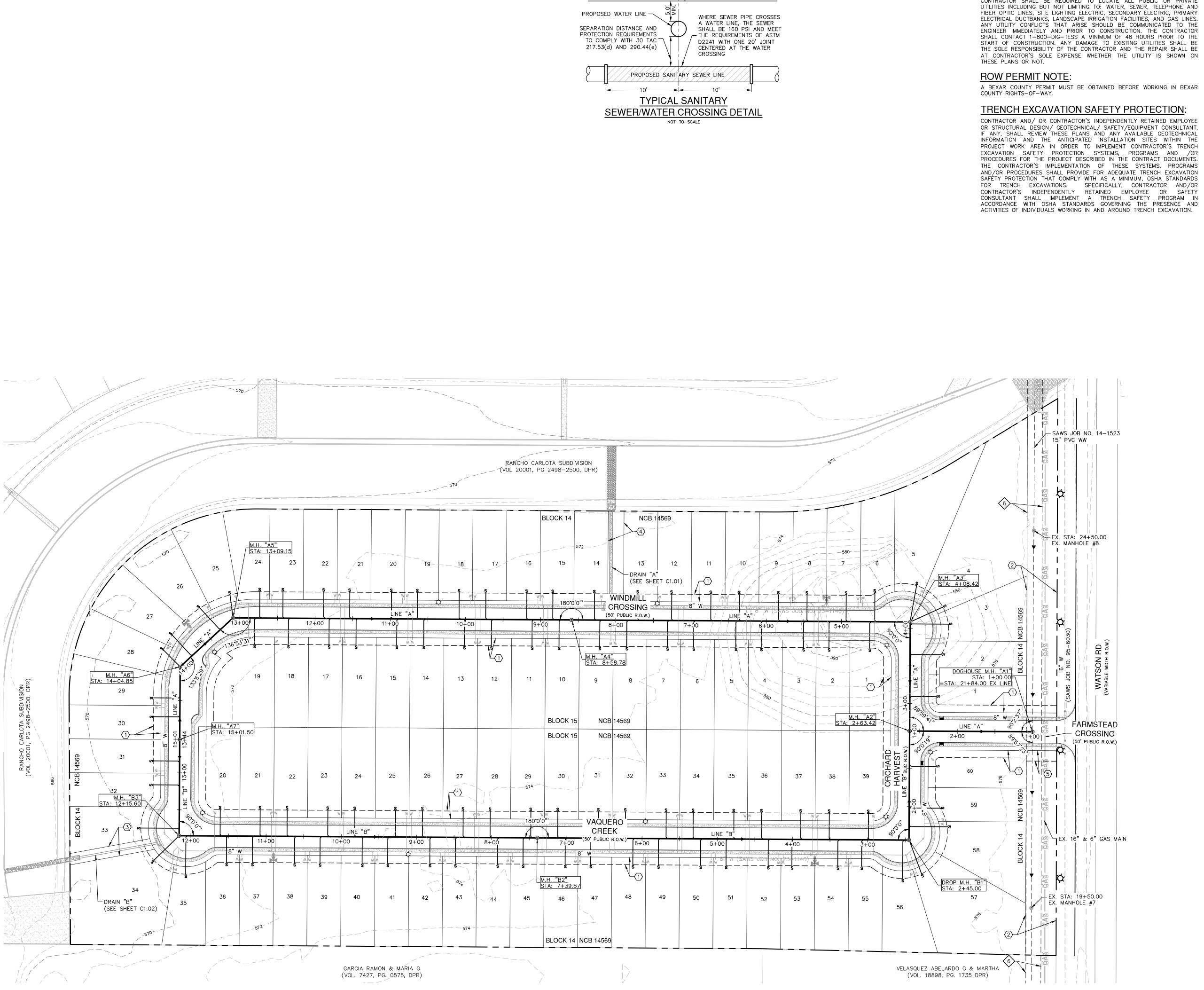
DESIGNER CHECKED AS DRAWN RD

SHEET

NO 23-1180028

12386-04

AUGUST 2023



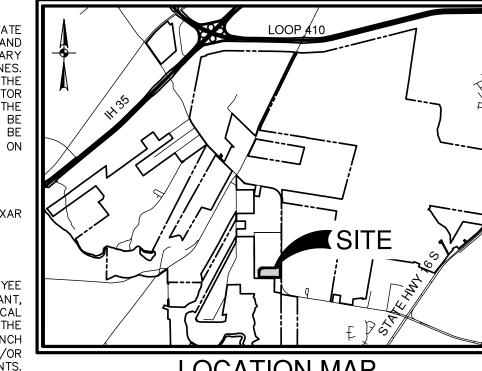
FINISHED GROUND/PAVEMENT

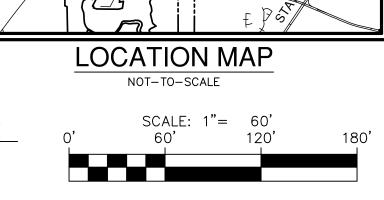
(TOP OF GRADE)

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

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





SEWER LEGEND

PROJECT LIMITS EXISTING WATER EXISTING SEWER PROPOSED SEWER FIRE HYDRANT PROPOSED WATER PROPOSED SEWER LATERAL EXISTING GAS

———GAS ———GAS —

KEYED NOTES:

10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT

(APPROXIMATE LOCATION)

- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION
- (3) 15' DRAINAGE ROW
- $\langle 4 \rangle$ 21' DRAINAGE ROW
- 5 14' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 6 20' PERMANENT SEWER EASEMENT (VOL 16880, PG 2023, OPR)

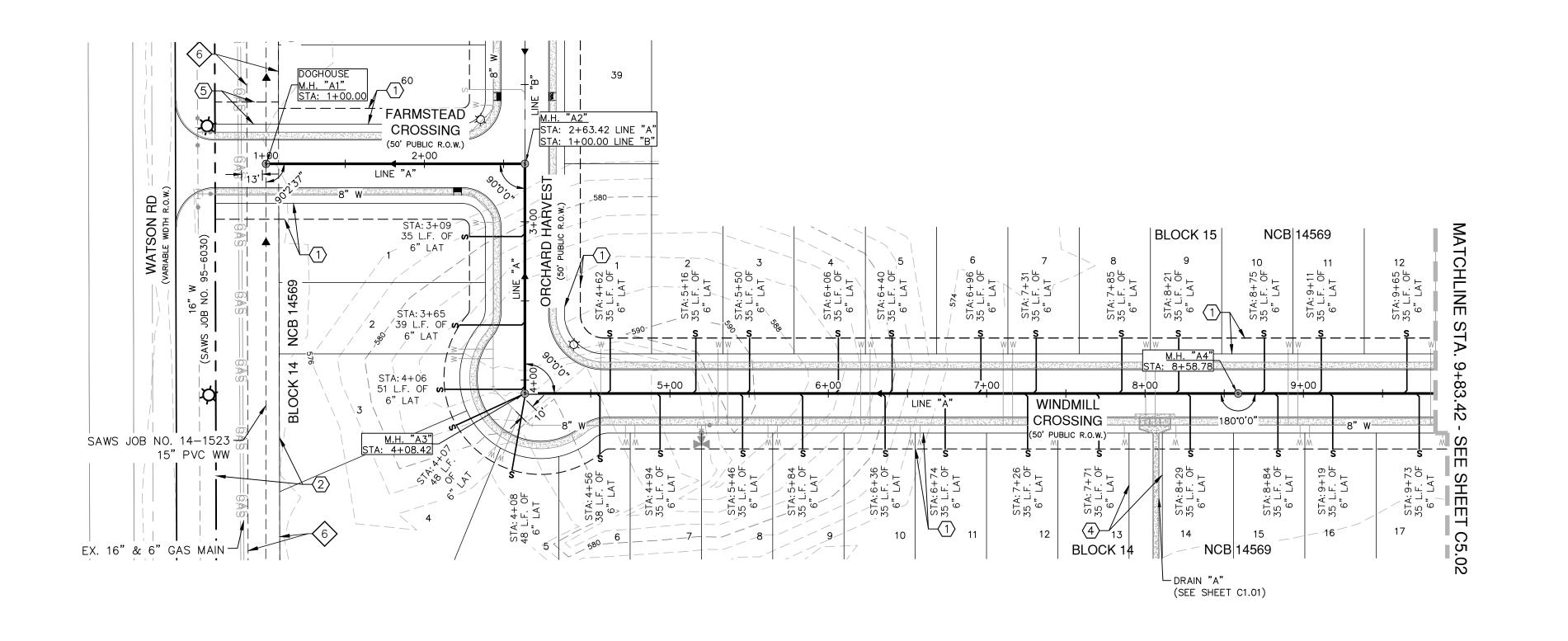
CALEB M. CHANCE

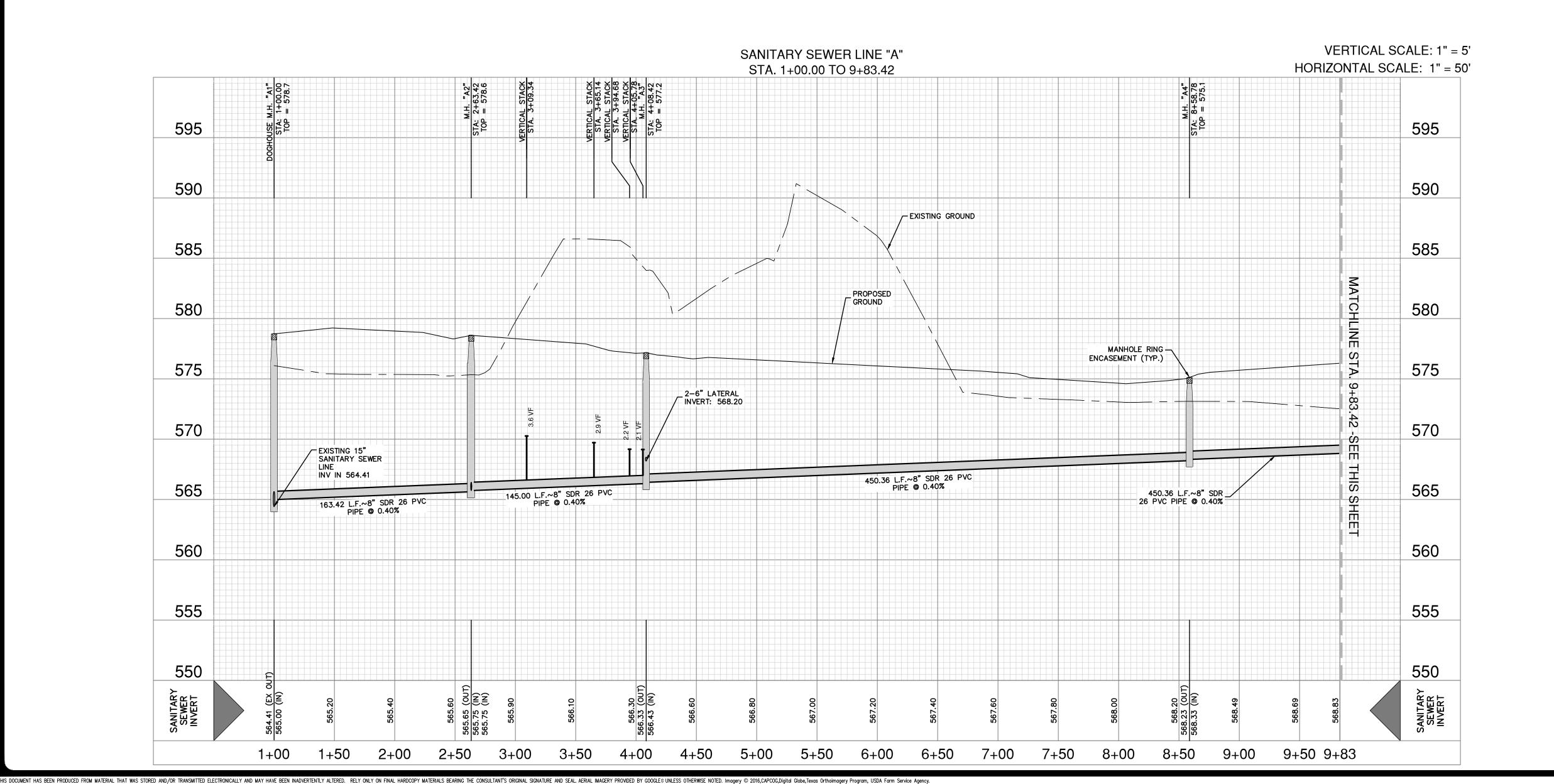
RANCHO (

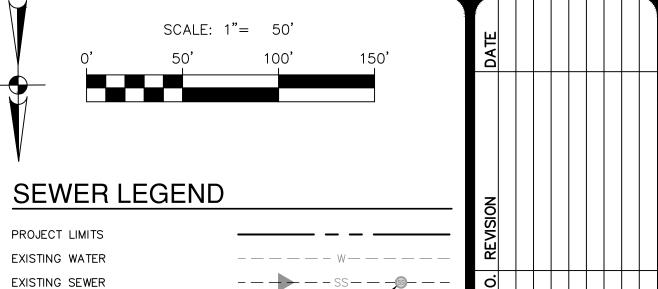
SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO ADDRESS: 311 PROBANDT SAWS BLOCK MAP<u># 126526</u> TOTAL EDU'S<u>99</u> TOTAL ACREAGE<u>17.70</u>

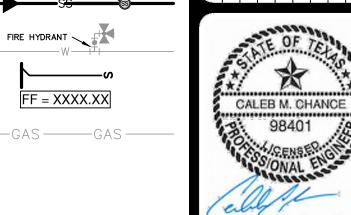
12386-04 CHECKED<u>AS</u> DRAWN<u>RD</u>

_{r NO.} 23-11800285









KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION
- $\langle 3 \rangle$ 15' DRAINAGE ROW
- 4 21' DRAINAGE ROW

PROPOSED SEWER

PROPOSED WATER

FOR SEWER

EXISTING GAS

PROPOSED SEWER LATERAL

FINISHED FLOOR ELEVATION

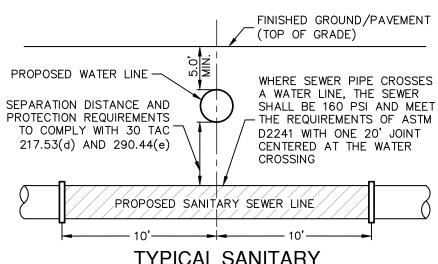
(APPROXIMATE LOCATION)

- 5 14' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 6 20' PERMANENT SEWER EASEMENT (VOL 16880, PG 2023, OPR)

PAPE-DAWSC ENGINEERS

PROFIL

S



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AN 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 ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO TI START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL E THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN (

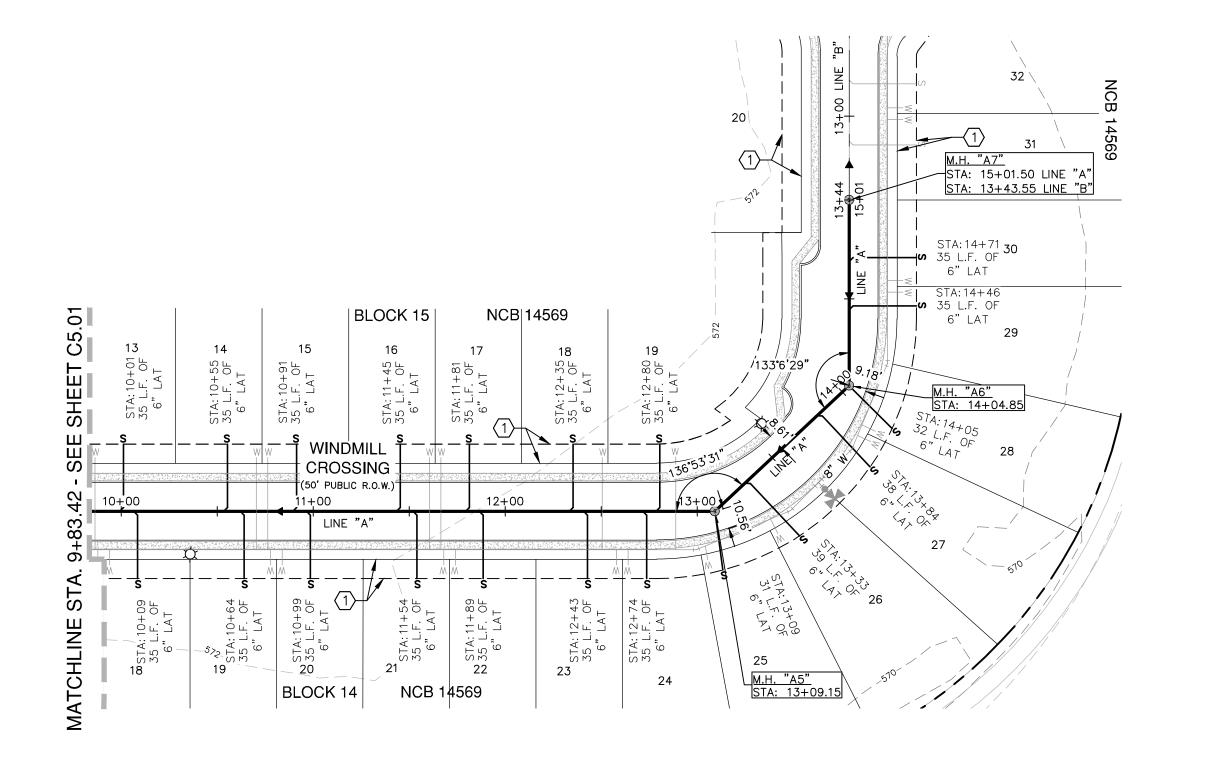
TRENCH EXCAVATION SAFETY PROTECTION:

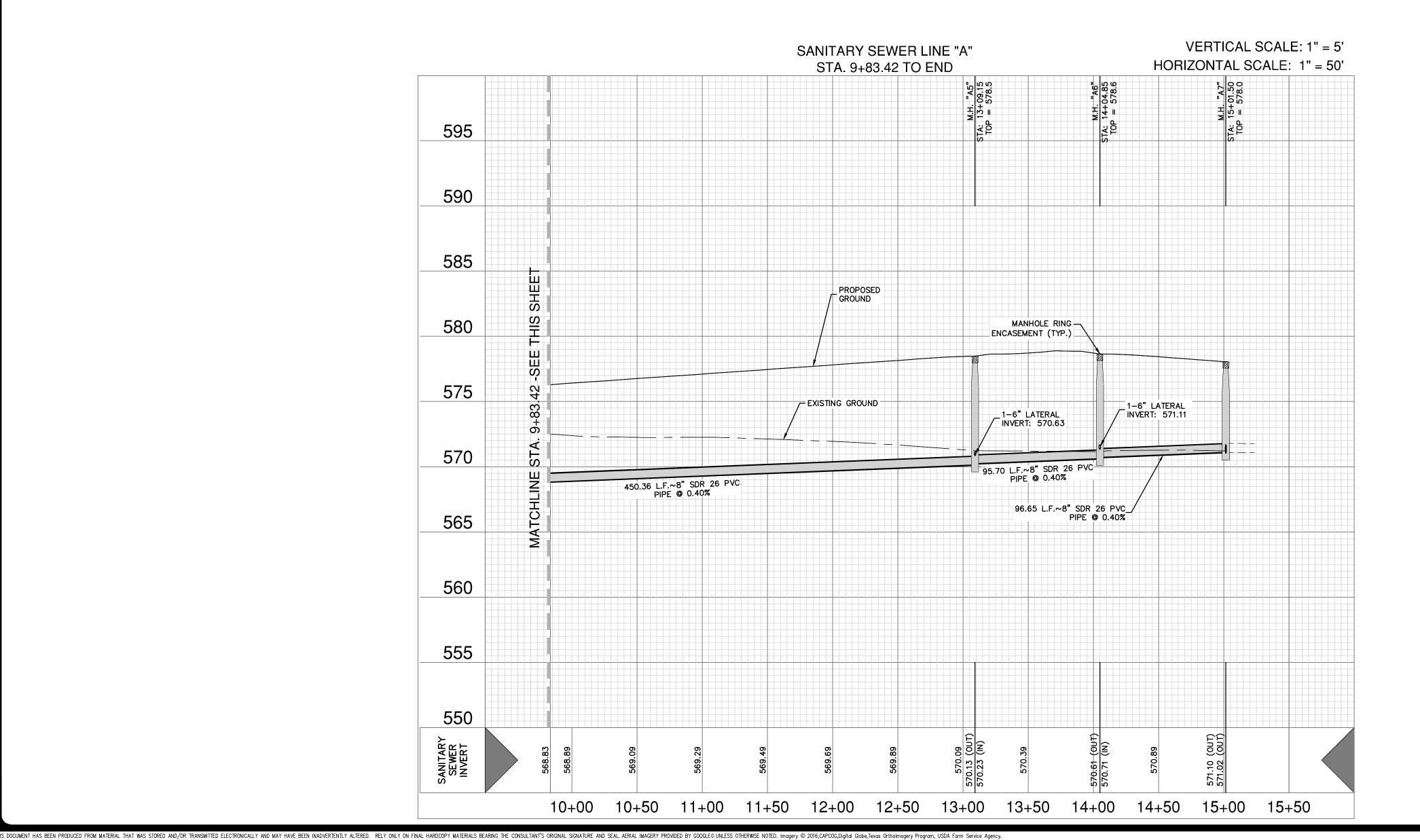
CONTRACTOR AND / OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN TH PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENC EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND / 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 SAFÉTY 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 ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AN ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

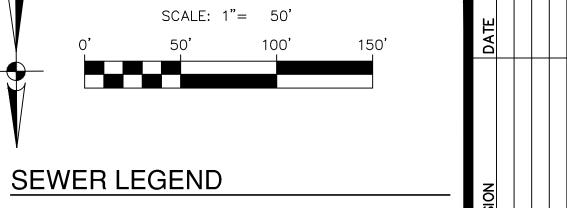
SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK

- 1	
	DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO
	ADDRESS: 311 PROBANDT
	CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204
	PHONE# (210) 223-5203 FAX#
	SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.70
	TOTAL LINEAR FOOTAGE OF PIPE: 8" 2.645 LF PLAT NO. 23-11800285
	NUMBER OF LOTS 99 SAWS JOB NO 23-1611

 	- 1
PLAT NO.	23-1180028
JOB NO.	12386-04
DATE_	AUGUST 2023
DESIGNER	RG
CHECKED_	AS DRAWN RD
	05.04

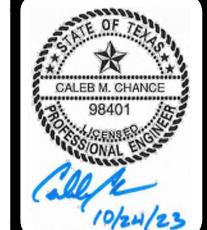






PROJECT LIMITS EXISTING WATER EXISTING SEWER PROPOSED SEWER

PROPOSED WATER PROPOSED SEWER LATERAL



KEYED NOTES:

- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION



- 3 15' DRAINAGE ROW
- 4 21' DRAINAGE ROW

PAPE-DAWSON ENGINEERS

FINISHED GROUND/PAVEMENT (TOP OF GRADE) WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING

PROPOSED SANITARY SEWER LINE TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

NOT-TO-SCALE

CAUTION!!

PROPOSED WATER LINE —

SEPARATION DISTANCE AND PROTECTION REQUIREMENTS

TO COMPLY WITH 30 TAC

217.53(d) AND 290.44(e)

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 T ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO TI START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL B THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN (THESE PLANS OR NOT.

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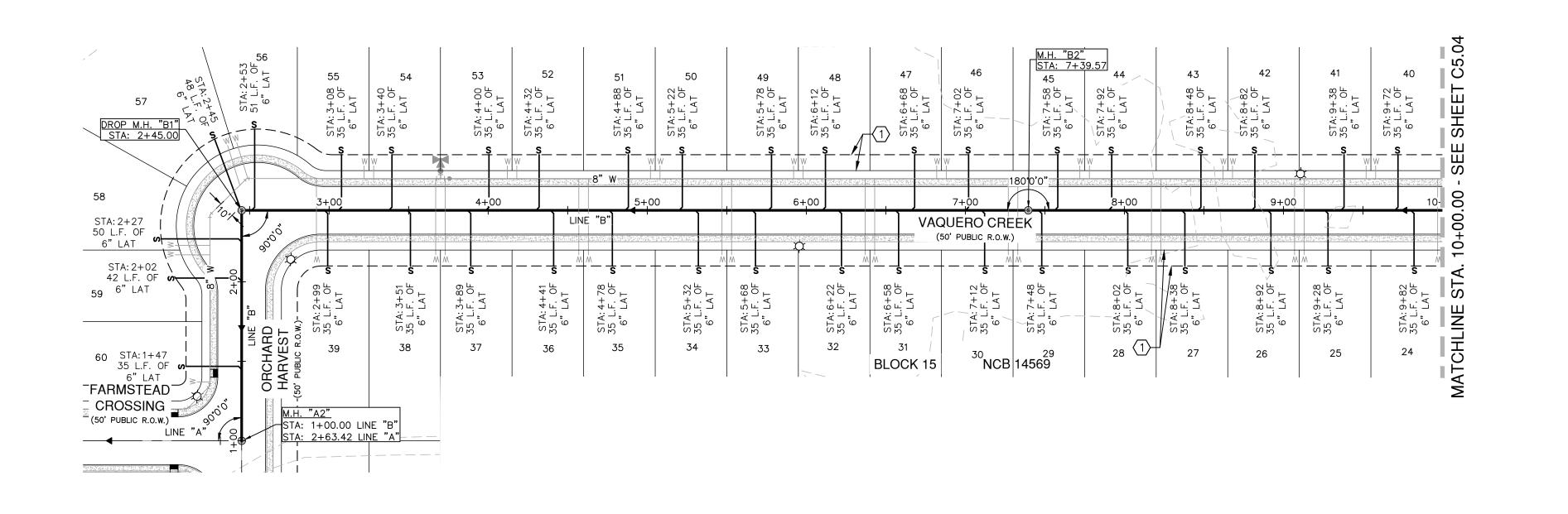
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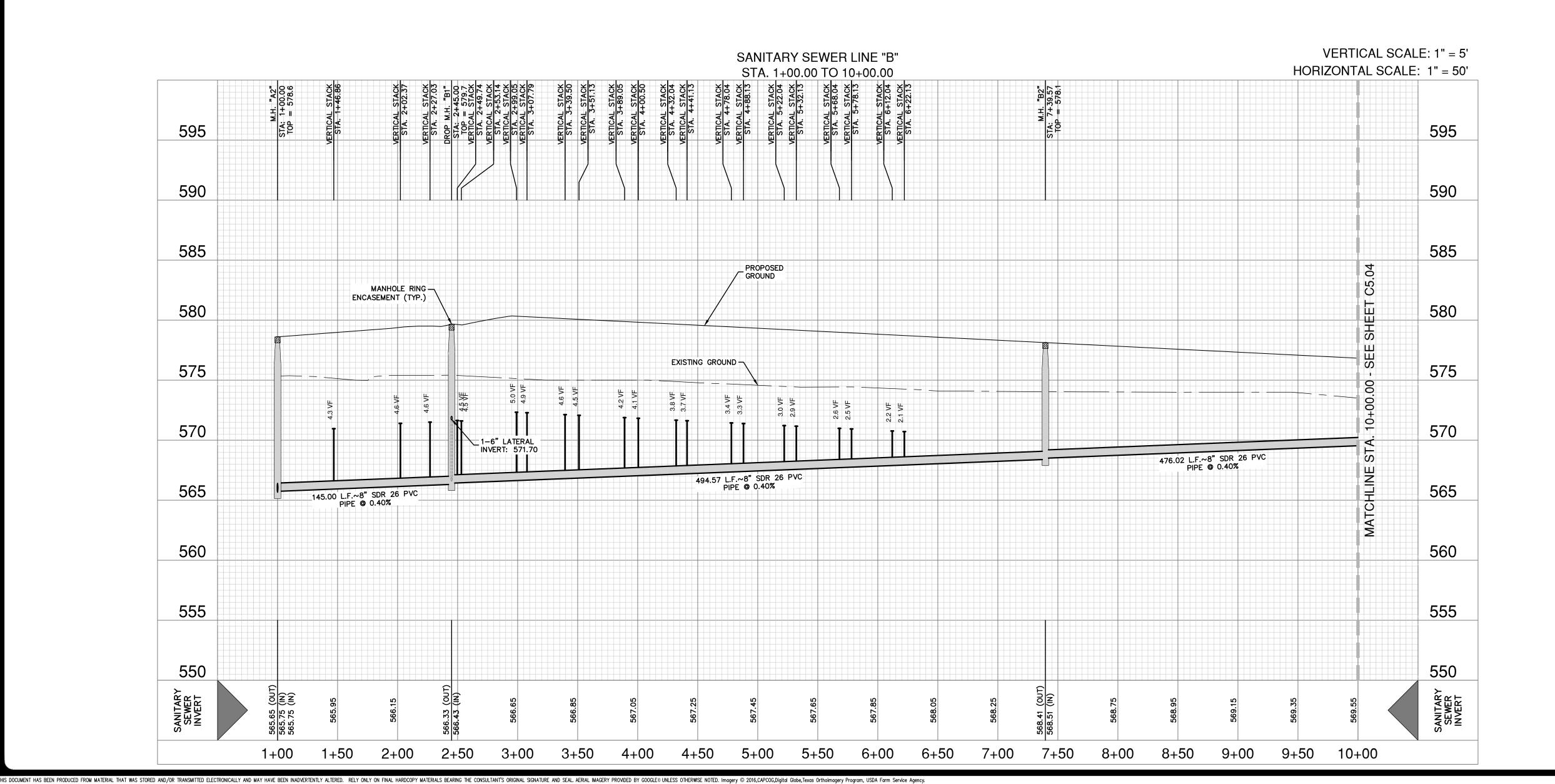
ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION. SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK

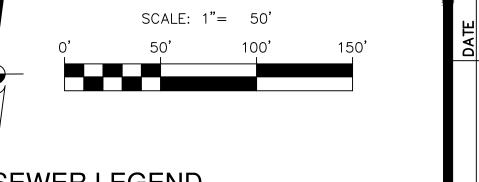
DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO ADDRESS: 311 PROBANDT CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204 PHONE# (210) 223-5203 FAX# ___ SAWS BLOCK MAP# 126526 TOTAL EDU'S 99 TOTAL ACREAGE 17.70 TOTAL LINEAR FOOTAGE OF PIPE: 8" 2,645 LF PLAT NO. 23-11800285 NUMBER OF LOTS 99 SAWS JOB NO. 23-1611

. _{NO.} 23-11800285 12386-04 AUGUST 2023 DESIGNER CHECKED AS DRAWN RD

C5.02







SEWER LEGEND

PROJECT LIMITS EXISTING WATER EXISTING SEWER

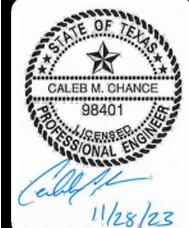
PROPOSED SEWER

PROPOSED WATER

PROPOSED SEWER LATERAL

KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
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- 3 15' DRAINAGE ROW
- $\langle 4 \rangle$ 21' DRAINAGE ROW



PAPE-DAWSON ENGINEERS

PROFIL

3 PLAN 10+00.

FINISHED GROUND/PAVEMENT (TOP OF GRADE) PROPOSED WATER LINE -WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER SHALL BE 160 PSI AND MEET SEPARATION DISTANCE AND PROTECTION REQUIREMENTS THE REQUIREMENTS OF ASTM TO COMPLY WITH 30 TAC -D2241 WITH ONE 20' JOINT 217.53(d) AND 290.44(e) CENTERED AT THE WATER CROSSING PROPOSED SANITARY SEWER LINE

> TYPICAL SANITARY SEWER/WATER CROSSING DETAIL NOT-TO-SCALE

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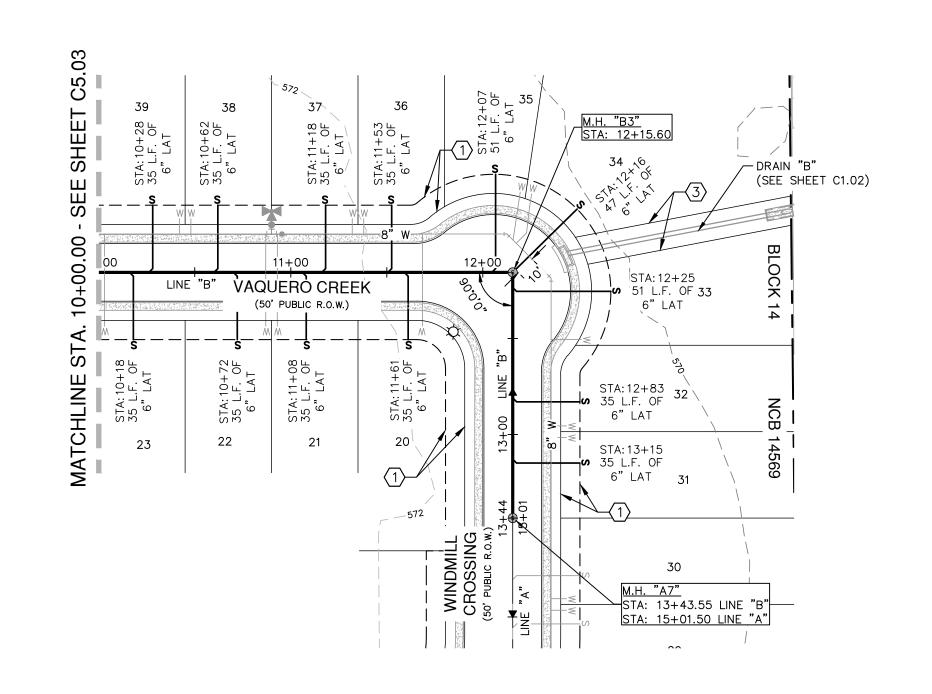
TRENCH EXCAVATION SAFETY PROTECTION:

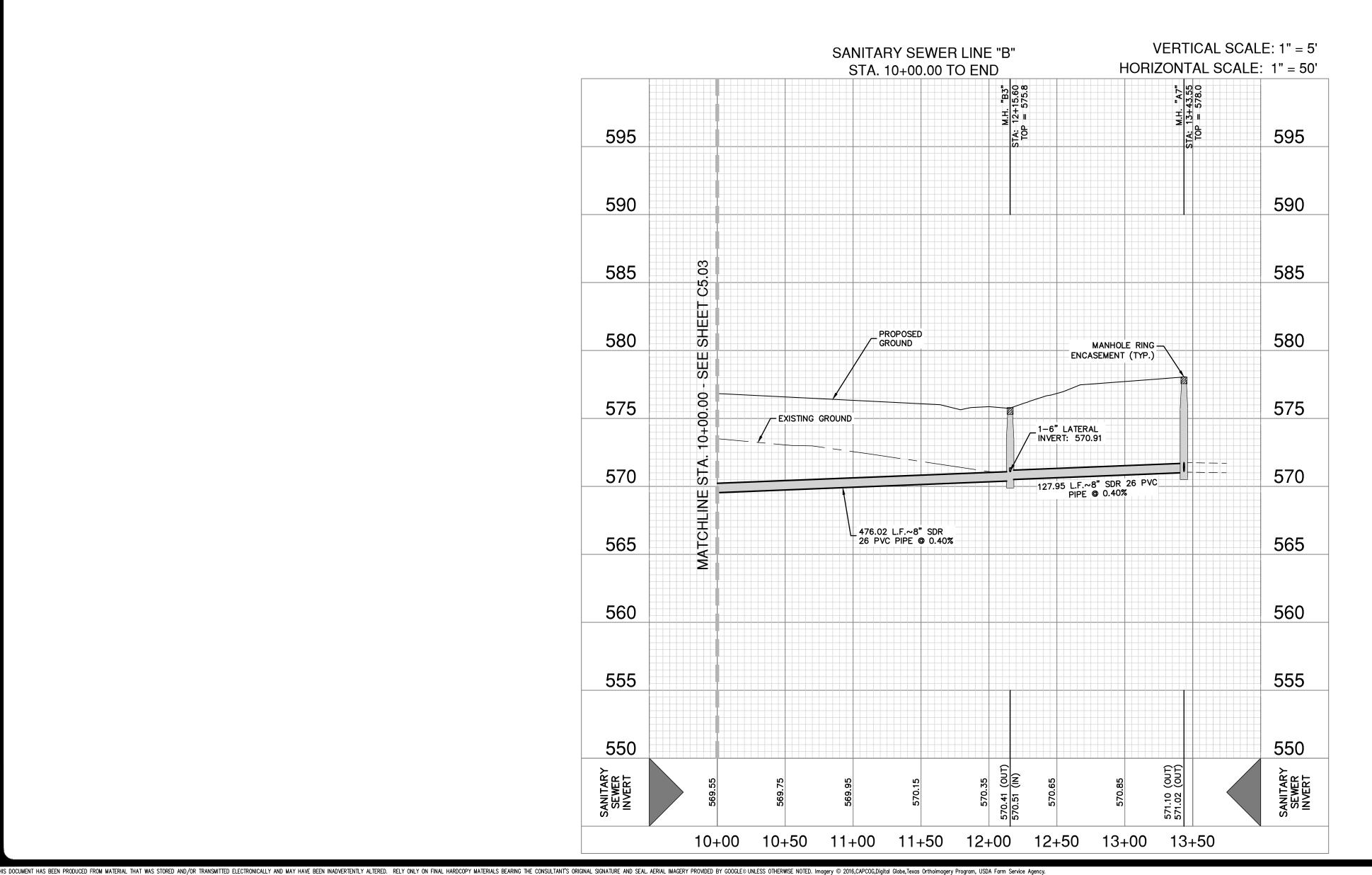
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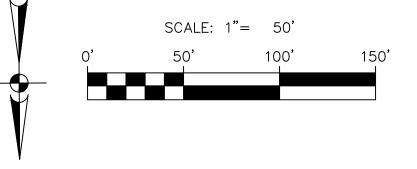
SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK

	DEVELOPER'S NAME: HABITAT FOR HUMANITY OF SAN ANTONIO
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Ш	CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204
	PHONE# <u>(210) 223-5203</u> FAX#
Ш	SAWS BLOCK MAP# <u>126526</u> TOTAL EDU'S <u>99</u> TOTAL ACREAGE <u>17.70</u>
Ш	TOTAL LINEAR FOOTAGE OF PIPE: <u>8" 2,645 LF</u> PLAT NO. <u>23–1180028</u> 5
Ш	NUMBER OF LOTS 99 SAWS JOB NO. 23-1611

_{r NO.} 23-1180028 JOB NO. 12386-04 AUGUST 2023 DESIGNER CHECKED AS DRAWN RD C5.03





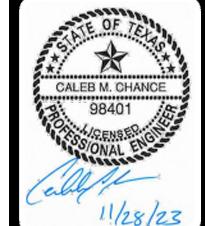


SEWER LEGEND

PROJECT LIMITS EXISTING WATER EXISTING SEWER

PROPOSED SEWER

PROPOSED WATER PROPOSED SEWER LATERAL



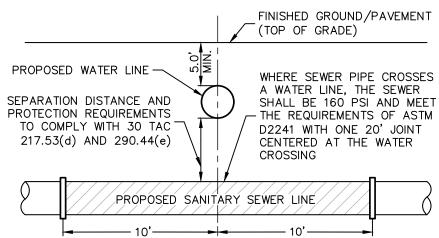
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KEYED NOTES:

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PAPE-DAWSON ENGINEERS



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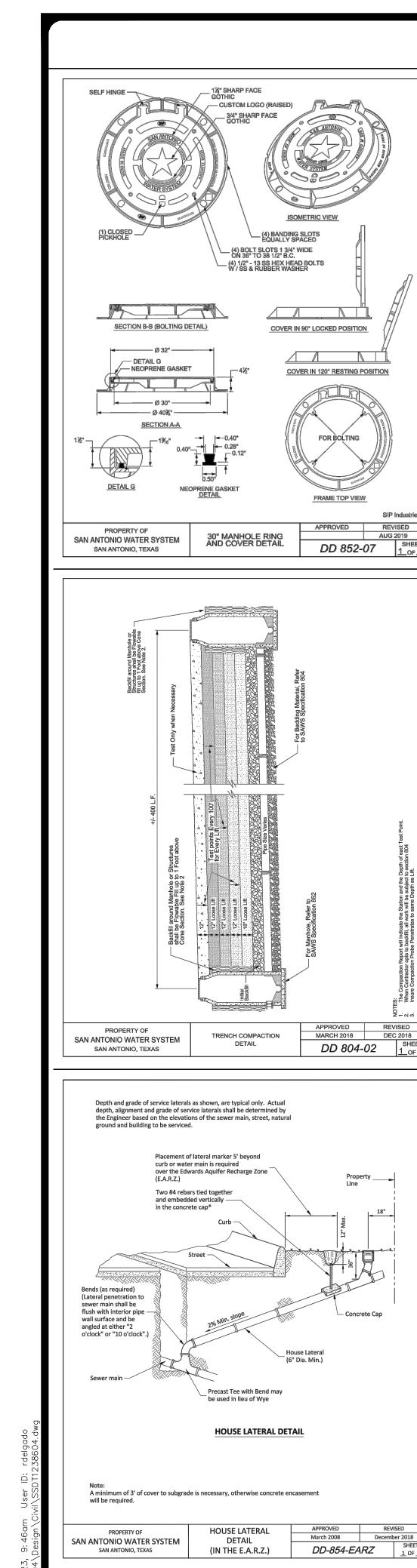
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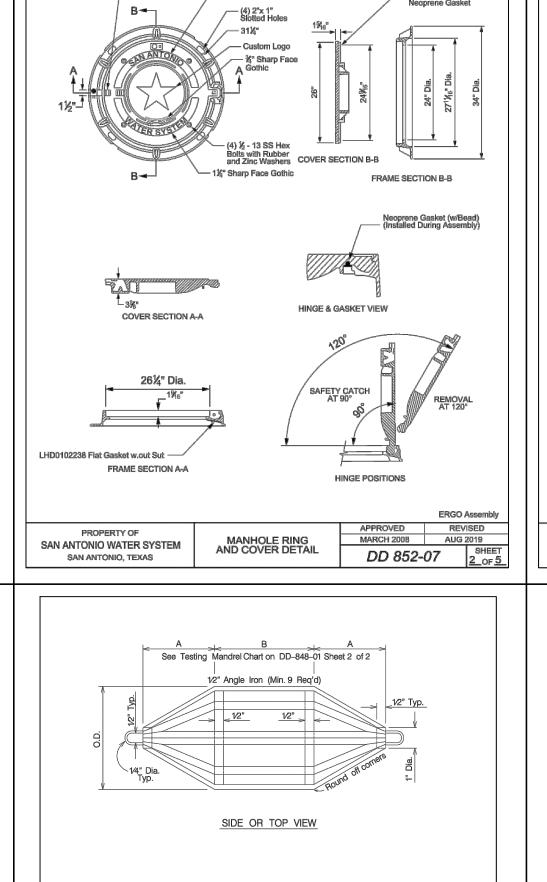
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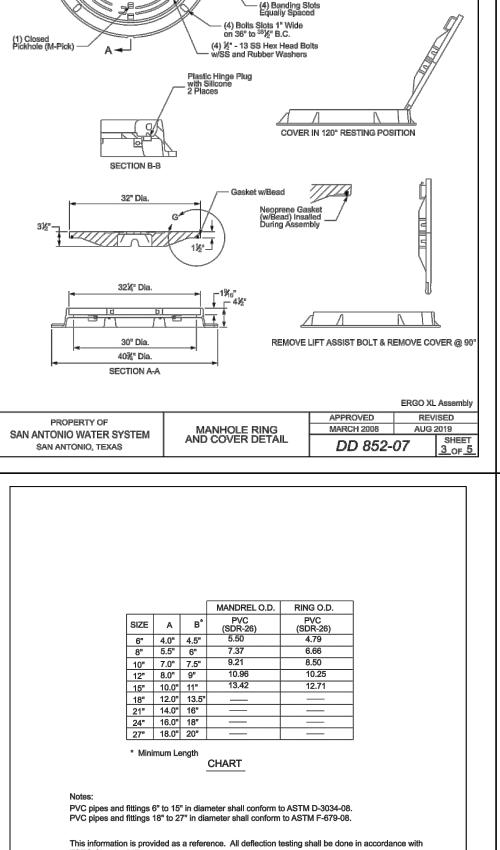
DEVEL	OPER'S N	IAME:_	HABITA	T FOR HUN	IANITY OF S	SAN ANTO	NIO NIO
ADDRE	:SS: <u>3</u>	11 PRO	BANDT				
CITY:_	SAN A	NTONIO		STATE:_	TEXAS	ZIP:_	78204
PHONE	# <u>(210</u>)	223-	5203		_ FAX#		
SAWS	BLOCK N	IAP# <u>12</u>	26526	_TOTAL ED	J'S <u>99</u> T	OTAL ACE	REAGE <u>17.70</u>
TOTAL	LINEAR	FOOTA	E OF	PIPE: <u>8"2</u>	.645 LF PI	LAT NO. 23	<u>3–1180028</u> 5
NUMBE	R OF LO	TS <u>9</u>	9	SAWS	JOB NO	23-1611	

PLAT NO. 23-11800285 JOB NO. 12386-04 ATE AUGUST 2023 DESIGNER CHECKED<u>AS</u> DRAWN<u>RD</u>

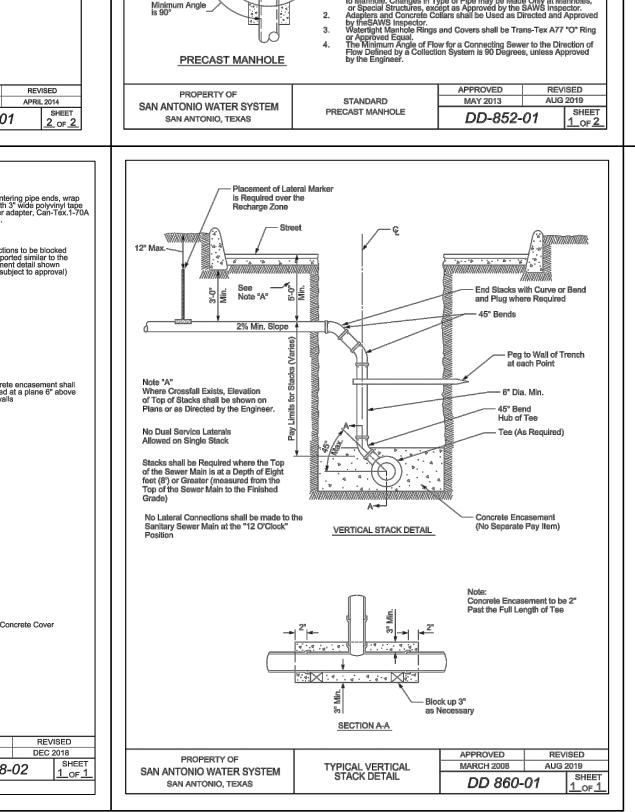
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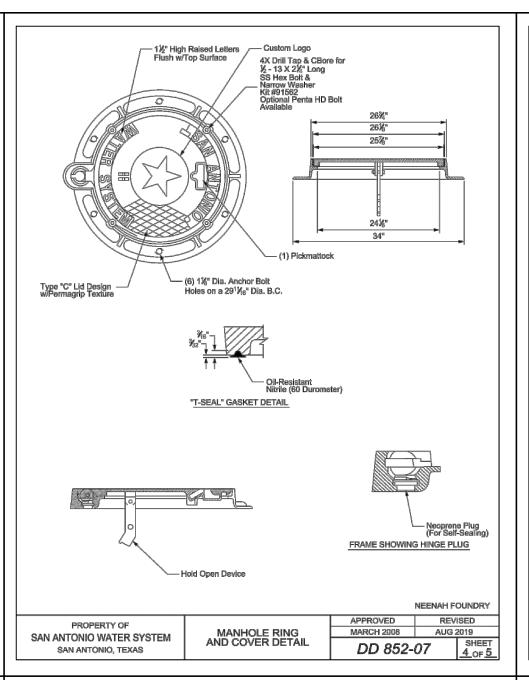


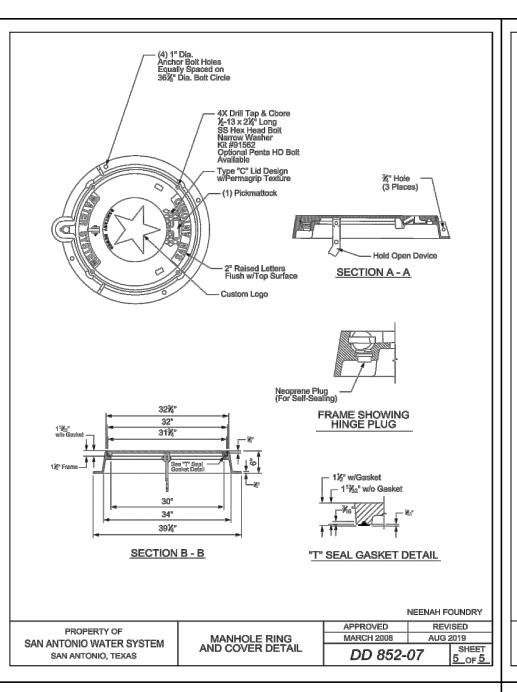


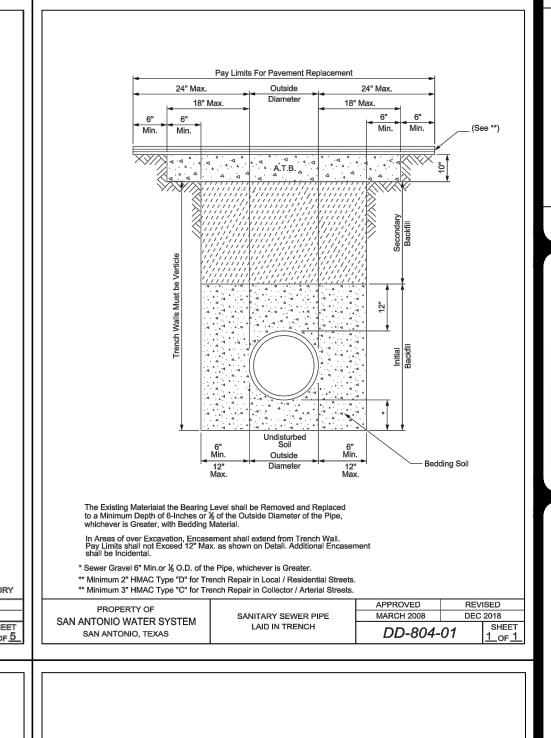


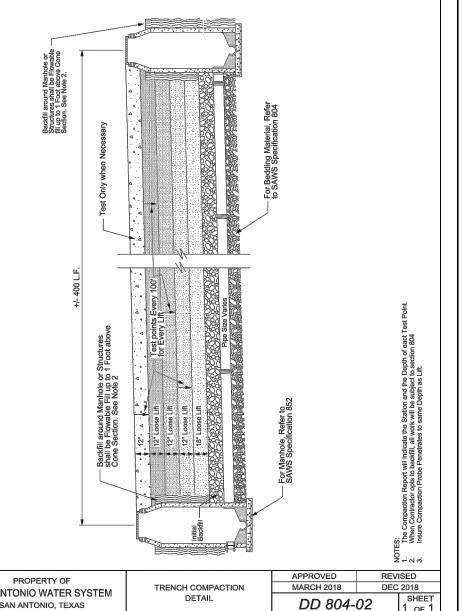
COVER IN 90° LOCKED POSITION

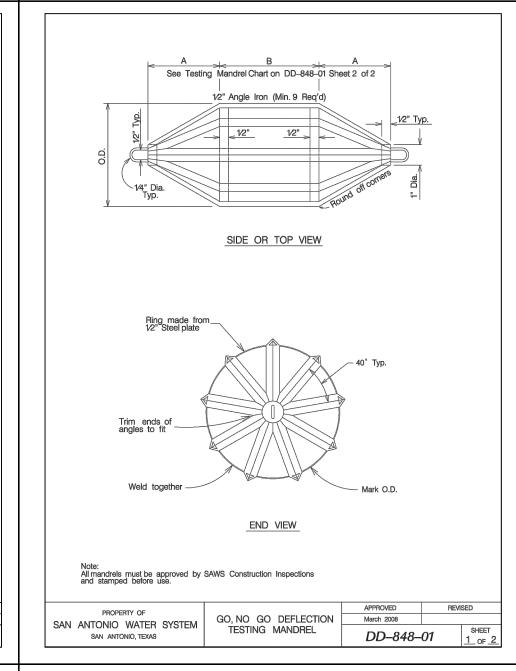


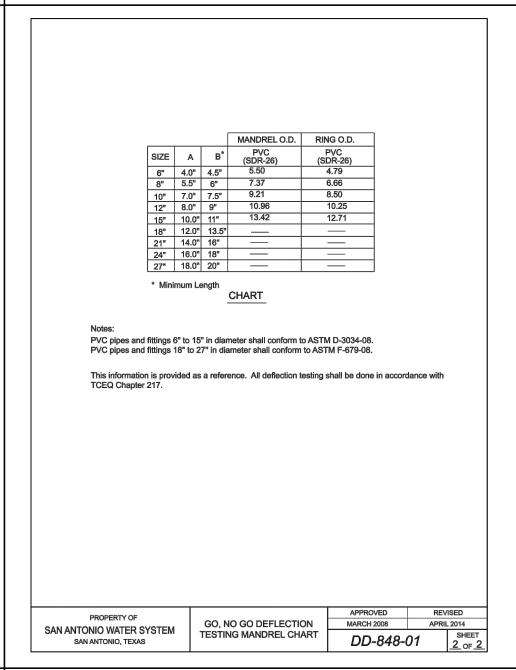


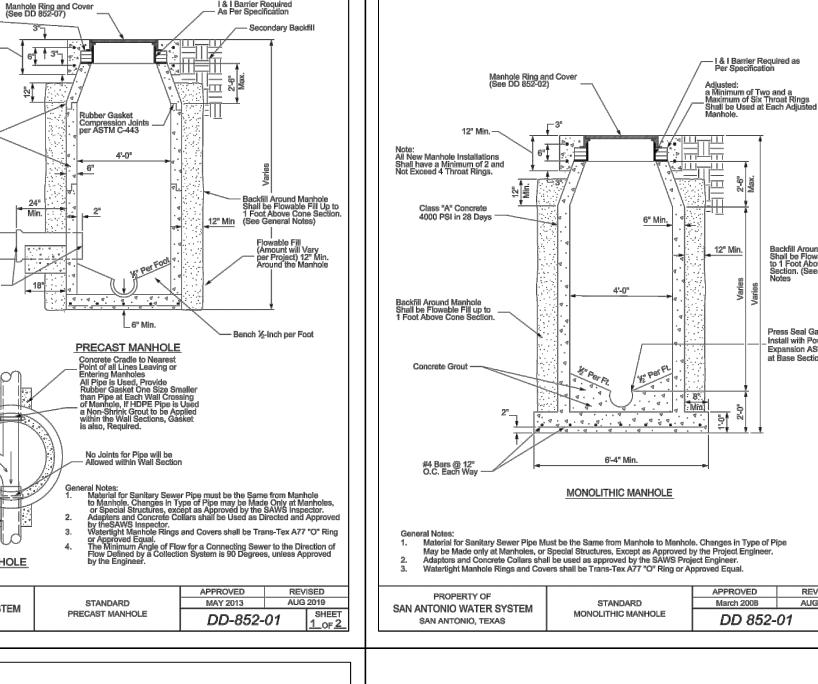


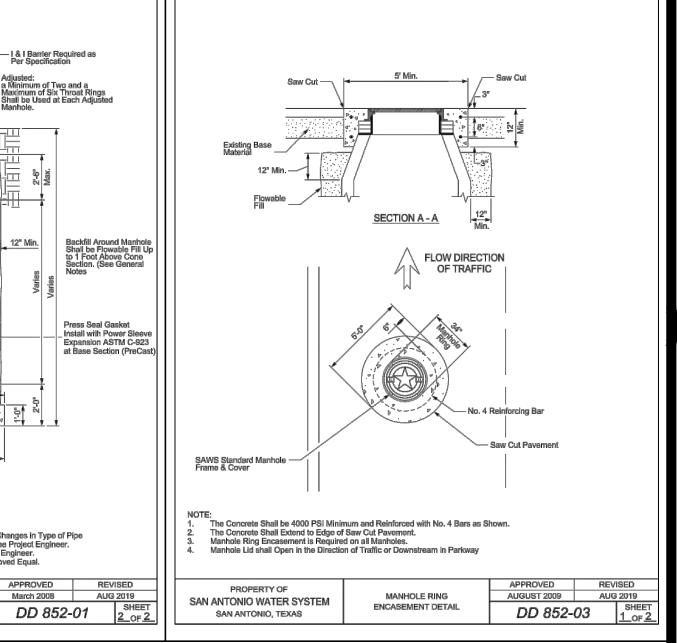


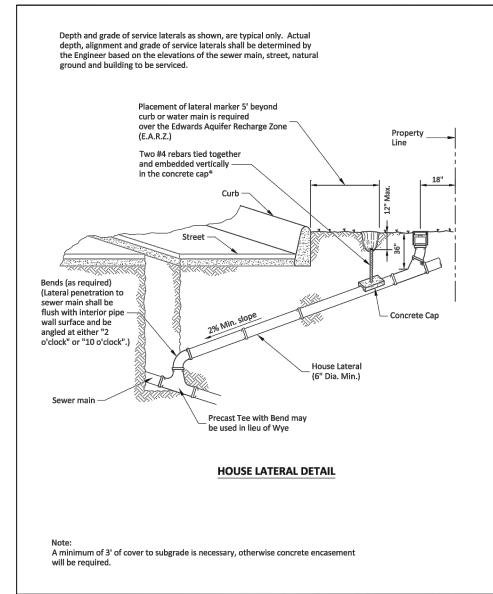


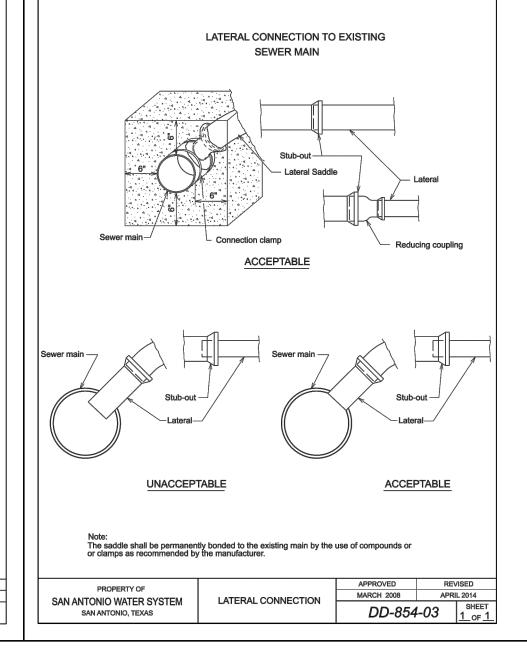


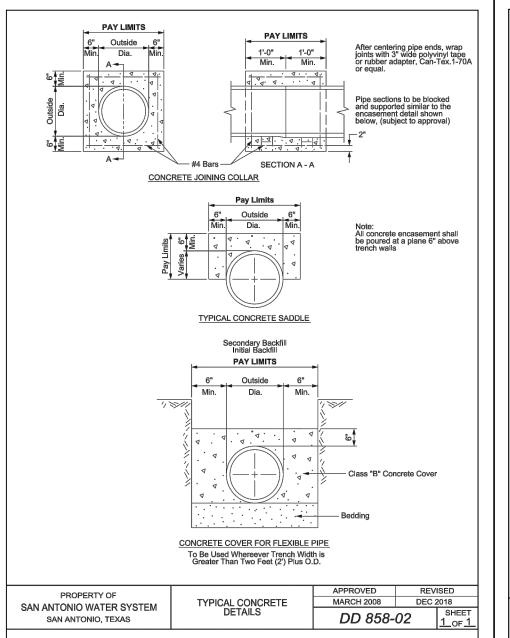












SEWER LOWER	R MEDINA - SOUTH SEWERSHED - DOS RIOS	LEON CREE
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ADDRESS:	311 PROBANDT	

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RANCHO (

CALEB M. CHANCE

98401

PLAT NO. 23-1180028 OB NO. 12386-04 AUGUST 2023 DESIGNER CHECKED AS DRAWN RD C5.10

SHEET

	SAWS CONSTRUCTION (LAST REVISED JANUARY 20)
	SAWS GENERAL SECTION
	ALL MATERIALS AND CONSTRUCTION PROCEDURES CONTRACT SHALL BE APPROVED BY THE SAN ANTONI COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL FOLLOWING AS APPLICABLE:
	A.CURRENT TEXAS COMMISSION ON ENVIRONMENTAL CRITERIA FOR DOMESTIC WASTEWATER SYSTEM CODE (TAC) TITLE 30 PART 1 CHAPTER 217 WATER", TAC TITLE 30 PART 1 CHAPTER 290. B.CURRENT TXDOT "STANDARD SPECIFICATIONS HIGHWAYS, STREETS AND DRAINAGE". C.CURRENT "SAN ANTONIO WATER SYSTEM STAND WATER AND SANITARY SEWER CONSTRUCTION". D.CURRENT CITY OF SAN ANTONIO "STANDARD SEWORKS CONSTRUCTION". E.CURRENT CITY OF SAN ANTONIO "UTILITY EXCA" (UECM).
	2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PITHEY OBTAIN A COPY OF THE APPROVED COLCONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT SAWS CONSTRUCTION INSPECTION DIVISION TO PROCE ARRANGED A MEETING WITH THE INSPECTOR AND REQUIREMENTS. WORK COMPLETED BY THE CONTRACTORY OF THE CONTRACTORY OF THE CONTRACTORY
	3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDA WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/NOTED WITHIN THE DESIGN PLANS.
	4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WINSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT AFFECTED HOME RESIDENTS AND/OR PROPERTY OW BEGINNING ANY WORK.
	5. LOCATION AND DEPTH OF EXISTING UTILITIES AND S THE PLANS ARE UNDERSTOOD TO BE APPROXIMA DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AT NO COST TO SAWS.
	6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIC AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEL WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW LOCATES REQUESTING PIPE LOCATION MARKERS FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR
	 SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/ COSA DRAINAGE (210) 207-0724 OR (210) 207- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-84 COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951 TEXAS STATE WIDE ONE CALL LOCATOR 1-800-5
	7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR I CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAP ORIGINAL OR BETTER CONDITION IF DAMAGES ARE PROJECT'S CONSTRUCTION.
	8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTA COUNTY RIGHT—OF—WAY SHALL BE DONE IN AC CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREM
	9. THE CONTRACTOR SHALL COMPLY WITH CITY OF GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN E
	10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE I FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED
	11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SE CONSTWORKREQ@SAWS.ORG.
	WEEKEND WORK: CONTRACTORS ARE REQUIRED TO I CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.
	ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR
	12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR MEETING THE COMPACTION REQUIREMENTS ON ALL PAYING FOR THE TESTS PERFORMED BY A THIRD PA BE DONE AT ONE LOCATION POINT RANDOMLY SELECT SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROAND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT PROVIDING ALL NECESSARY DOCUMENTED TEST RESULT
	13. A COPY OF ALL TESTING REPORTS SHALL BE FORWA INSPECTION DIVISION.

AWS CONSTRUCTION NOTES (LAST REVISED JANUARY 2022)

ERAL SECTION

- AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS L BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND HE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE
- EXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) 'DESIGN FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING"
- TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF STREETS AND DRAINAGE". SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR
- SANITARY SEWER CONSTRUCTION". TITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC
- ISTRUCTION". ITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL"
- OR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY CTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED IIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND T THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.
- OR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS //WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE
- OR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION 3, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO
- DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM JCTION AT NO COST TO SAWS.
- OR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR ESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. TH FACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
- TY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES NAGE (210) 207-0724 OR (210) 207-6026
- FIC SIGNAL OPERATIONS (210) 206-8480 FIC SIGNAL DAMAGES (210) 207-3951
- ATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
- OR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO IT ETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE
- TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR -OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE SPECIFICATIONS AND PERMIT REQUIREMENTS.
- OR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER ICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- OR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR THOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- ED HOLIDAYS. REQUEST SHOULD BE SENT TO

CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. D BE SENT TO CONSTWORKREQ@SAWS.ORG.

AWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

- TE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPÀCTION RÉQUIREMENTS ON ALL TRENCH BACKFILL AND FOR TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL E LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE R AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE NEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY NECESSARY DOCUMENTED TEST RESULTS.
- TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION

SAWS SEWER NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
 - A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT (210) 233-2014. PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
- B.ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO. C.CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- D.CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE
- COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
- E.CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS. F.MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.

SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA, TCEQ AND/OR ANY OTHER FEDERAL, STATE OR LOCAL AGENCIES.

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ

. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR SHALL PERFORM SUCH WORK IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 864, "BYPASS PUMPING".

PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973 AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

SEWER PIPE WHERE WATER LINE CROSSES SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241, TAC 217.53 AND TCEQ 290.44(E)(4)(B). CONTRACTOR SHALL CENTER A 20' JOINT OF 160 PSI PRESSÙRÉ RÀTED PVC AT THE PROPOSED WATER CROSSING.

- ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS. (NSPI)
- 6. SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER: ALL SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER, RECYCLED WATER, PETROLEUM PRODUCTS, OR CHEMICALS MUST BE REPORTED IMMEDIATELY TO THE SAWS INSPECTOR ASSIGNED TO THE COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP). THIS REQUIREMENT APPLIES TO EVERY SPILL, OVERFLOW, OR DISCHARGE RÉGARDLESS OF SIZE.
- MANHOLE AND ALL PIPE TESTING (INCLUDING THE TV INSPECTION) MUST BE PERFORMED AND PASSED PRIOR TO FINAL FIELD ACCEPTANCE BY SAWS CONSTRUCTION INSPECTION DIVISION, AS PER THE SAWS SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
- . ALL PVC PIPE OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH WITH MINIMUM PIPE STIFFNESS OF 115 PSI.

CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON | PROJECT SEWER NOTES

THE PROPERTY LINE.

- ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND SHALL BE EXTENDED TO 10' PAST THE PROPERTY LINE AND CAPPED AND SEALED. CONTRACTOR SHALL INSTALL A 2" X 4" STAKE, FOUR (4) FEET LONG, TWO 2) FEET DEEP INTO THE GROUND AT THE END OF EACH SERVICE. NO SEPARATE PAY ITEM.
- CONTRACTOR TO INSTALL CLEANOUTS AT THE END OF ALL SEWER LATERALS, PER LATERAL DETAIL SHEET C5.10
- . NO VERTICAL STACKS ALLOWED FOR ANY LOTS UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- ALL 6" SEWER LATERALS WILL BE SET AT 2% GRADE FROM THE MAIN TO
- WHEN HORIZONTAL DISTANCE BETWEEN SEWER PIPES AND WATER MAIN IS LESS THAN 9 FOOT OF SEPARATION, SEWER MAIN SHALL BE INSTALLED WITH 150 PSI (MIN) PRESSURE PIPE AND FITTINGS IN ACCORDANCE WITH SAWS CONSTRUCTION CRITERIA FOR CONSTRUCTION OF SEWER MAINS IN THE VICINITY OF WATER MAINS.
- . CONTRACTOR SHALL ENSURE THAT MANHOLES OUTSIDE OF PAVED AREAS ARE SET WITH TOP ELEVATIONS 6" ABOVE FINISHED GRADE WITH CONCRETE
- 7. ALL SEWER PIPES SHALL BE 8" PVC (SDR 26), UNLESS OTHERWISE NOTED.
- 8. CONTRACTOR IS TO VERIFY EXISTING INVERT OF EXISTING SANITARY SEWER MAINS AND ALERT ENGINEER IMMEDIATELY OF ANY DIFFERENCE FROM INVERT SHOWN ON PLANS.
- 9. CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. ANY FENCE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR
- 10. 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.
- I. CONCRETE RING ENCASEMENT TO BE INSTALLED ON ALL MANHOLES AND, WITHIN LIMITS OF PAVEMENT, BE INSTALLED TO THE TOP OF THE BASE LAYER WITH A MINIMUM OF 2" OF ASPHALT ON TOP OF THE RING
- 12. MANHOLE OPENING INCREASED TO 30" AS PER TAC CHAPTER 217.55.
- 13. ALL SEWER PIPE LATERALS SHALL BE SDR 26 (CLASS 160) PVC PIPE.
- 14. IF THE GIVEN TOP OF MANHOLE ELEVATION DOES NOT AGREE ON ACTUAL GROUND SURFACE OR FINISH PAVEMENT, THE CONTRACTOR SHALL ADJUST ELEVATIONS SUCH THAT THE TOP OF MANHOLE SHALL BE 0.5' ABOVE EXISTING GROUND, OR FLUSH TO FINISH ASPHALT PAVEMENT.
- 15. ALL MANHOLES CONSTRUCTED OVER THE EDWARDS AQUIFER RECHARGE ZONE SHOULD BE WATERTIGHT.

SEWER LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS\LEON CREEK

DEVELOPER'S NAME: <u>HABITAT FOR HUMANITY OF SAN ANTONIO</u> ADDRESS: 311 PROBANDT CITY: SAN ANTONIO STATE: TEXAS ZIP: 78204 PHONE# (210) 223-5203 FAX# SAWS BLOCK MAP#<u>126526</u> TOTAL EDU'S<u>99</u> TOTAL ACREAGE<u>17.70</u>

TOTAL LINEAR FOOTAGE OF PIPE: 8" 2,645 LF PLAT NO. 23-11800285

NUMBER OF LOTS 99 SAWS JOB NO. 23-1611

CHECKED AS DRAWN RD

12386-04 AUGUST 2023 DESIGNER

NO 23-11800285

CALEB M. CHANCE

98401

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CONDUIT NOTES:

- . CONTRACTOR SHALL INSTALL PERMANENT MARKERS IN PROPOSED CURB WHERE CONDUITS CROSS THE ROADWAY (BOTH SIDES).
- CONDUITS SHALL BE PVC WITH MINIMUM BURY OF 36 INCHES BELOW PROPOSED FINISHED GRADE. SCHEDULE 80 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 CONDUIT SLEEVES TO BE USED FOR ELECTRIC, GAS, OR TELECOMMUNICATION UTILITY CROSSINGS SHALL BE INSTALLED TO MEET OR EXCEED DESIGN REQUIREMENTS FOR THE UTILITY AGENCY 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 CONDUIT SLEEVES TO MEET THESE SPECIFICATIONS INCLUDING COORDINATING WITH THE UTILITY AGENCY FOR ANY REQUIRED INSPECTIONS

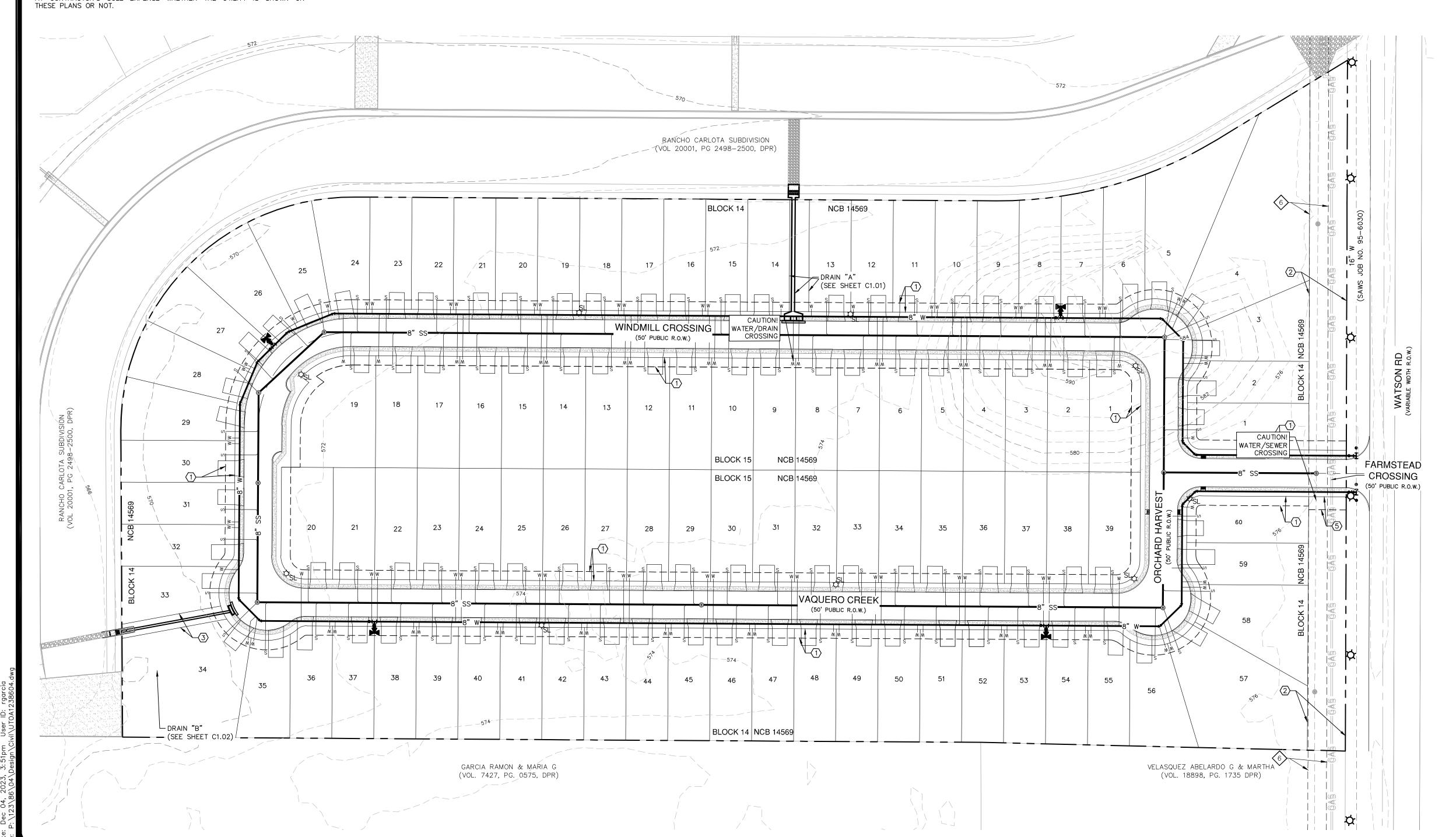
TRENCH EXCAVATION SAFETY PROTECTION:

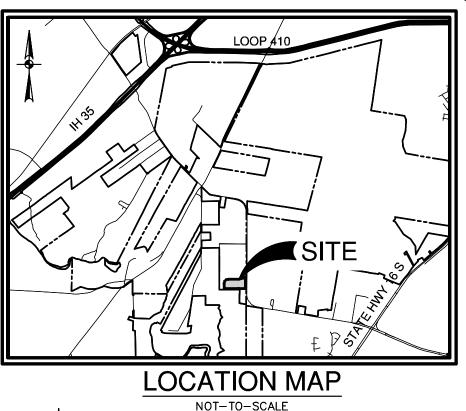
OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /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 SAFÉTY 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.

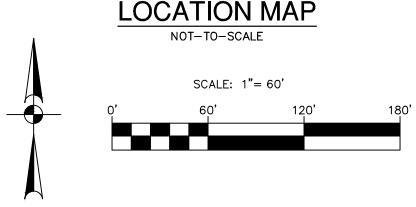
CONTRACTOR AND / OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE

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







UTILITY LEGEND

PROJECT LIMITS EXISTING WATER ----EXISTING SEWER PROPOSED SEWER PROPOSED WATER PROPOSED WYE & LATERAL SINGLE WATER SERVICE DUAL WATER SERVICE -Ö-SL 100W LED STREET LIGHTS 250W LED STREET LIGHTS GAS, ELECTRIC, TELEPHONE & **GETCTV** CABLE TELEVISION EASEMENT EXISTING GAS (APPROXIMATE LOCATION)

KEYED NOTES:

- 1) 10' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 2 VARIABLE WIDTH RIGHT OF WAY DEDICATION
- $\langle 3 \rangle$ 15' DRAINAGE ROW
- $\langle 4 \rangle$ 21' DRAINAGE ROW
- 5 14' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT
- 6 20' PERMANENT SEWER EASEMENT (VOL 16880, PG 2023, OPR)

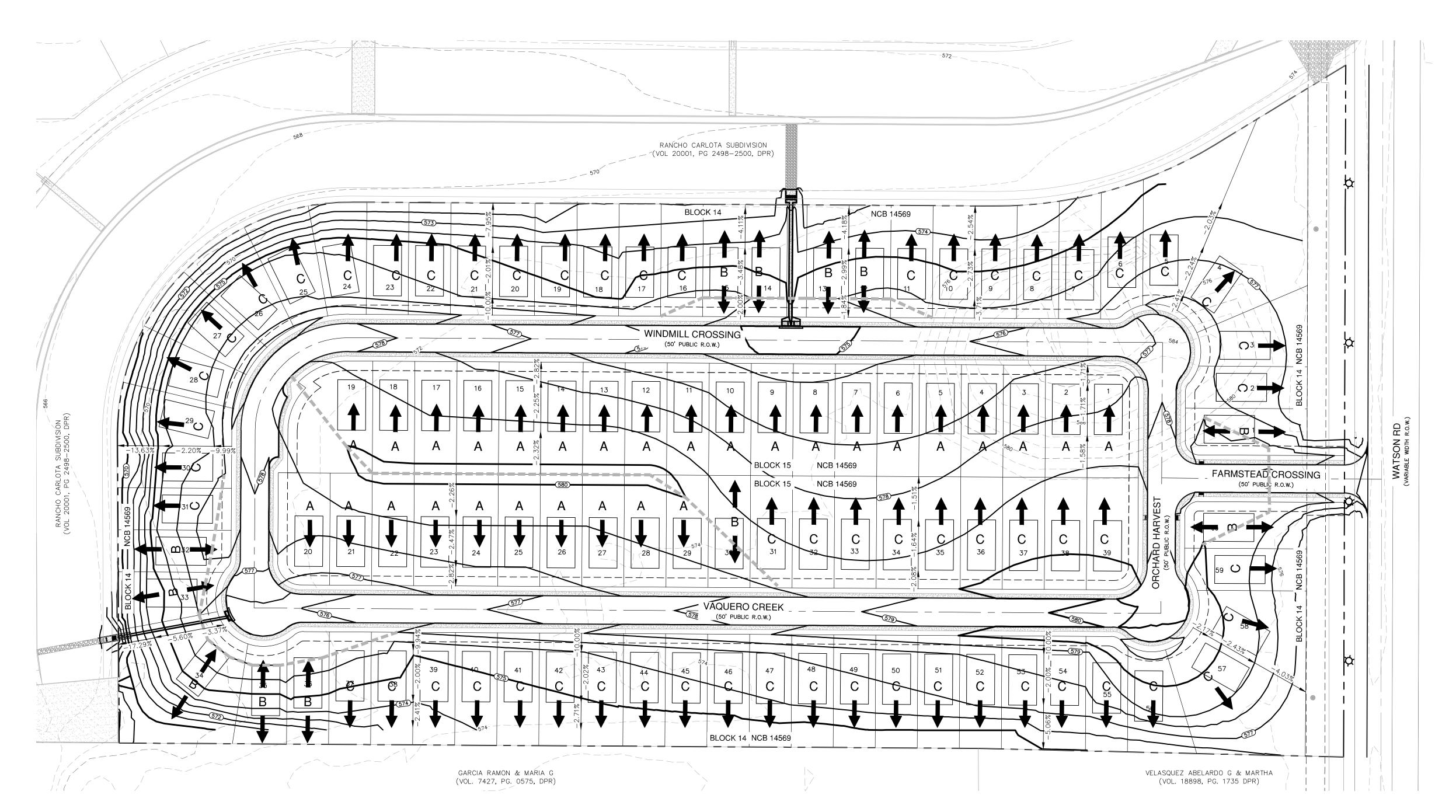


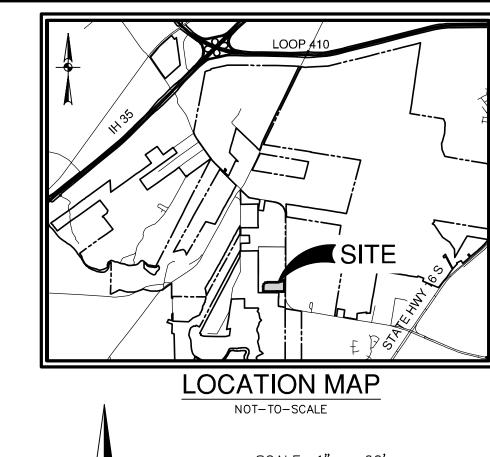
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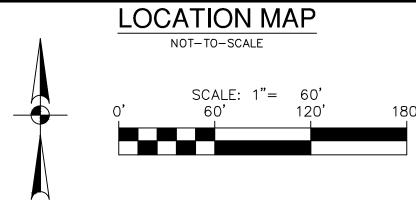
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Y_{PLAT NO.} 23-1180028 ATE AUGUST 2023 CHECKED AS DRAWN RD

JOB NO. 12386-04 DESIGNER C6.00







CALEB M. CHANCE

GRADING LEGEND

PROJECT LIMITS 100 YR FLOODPLAIN EXISTING CONTOUR PROPOSED CONTOUR FLOW ARROW (EXISTING) FLOW ARROW (PROPOSED) |FF = XXXX.XX|MINIMUM FINISHED FLOOR ELEVATION

TREES TO REMAIN HIGH POINT

GRADING NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE 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 GRADIN PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING. BASE. GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE

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

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, ET 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 INT 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

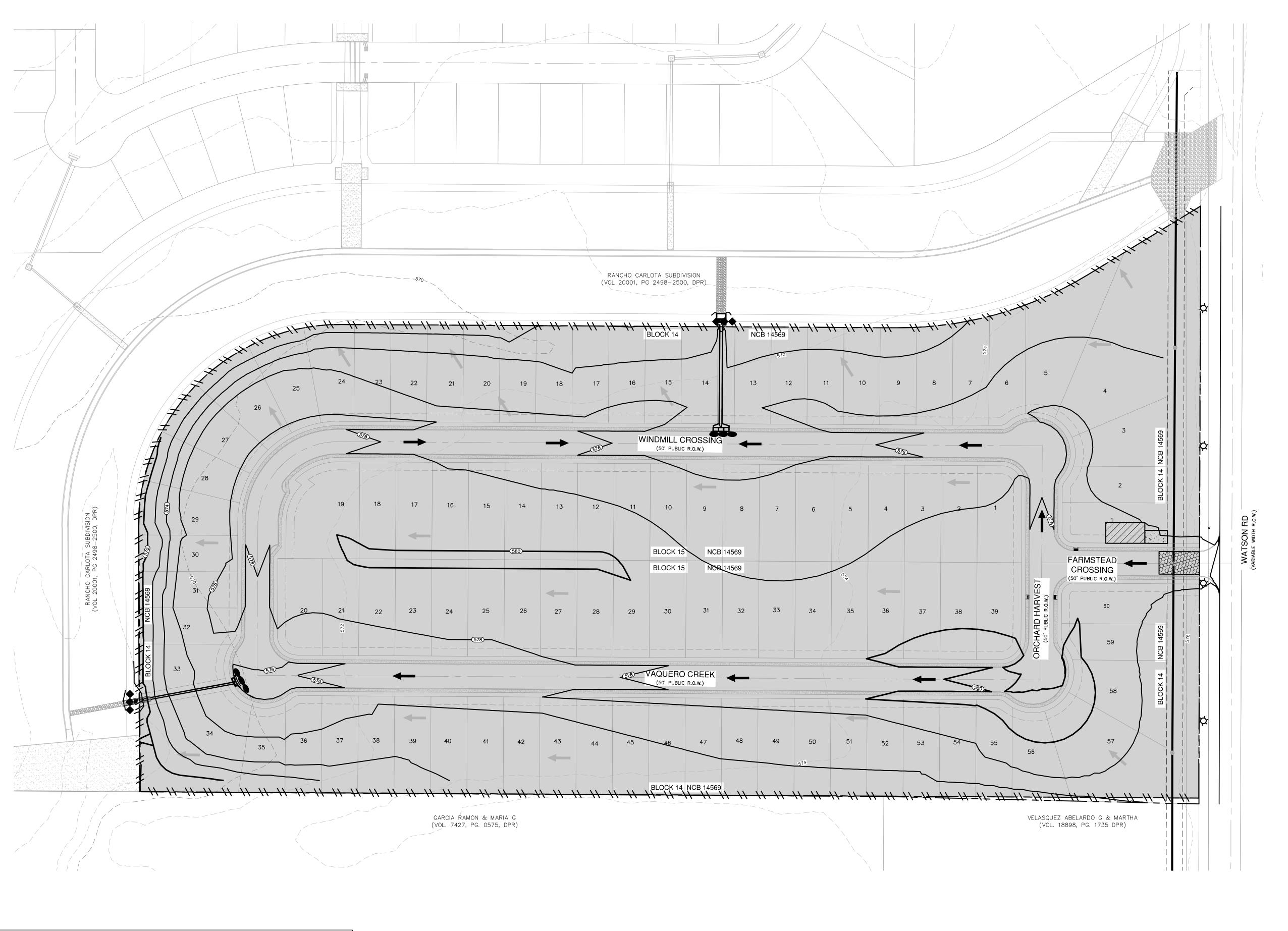
IF ANY UTILITY CONFLICTS ARE DISCOVERED. 16. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON TH PLANS OR 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 B THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.

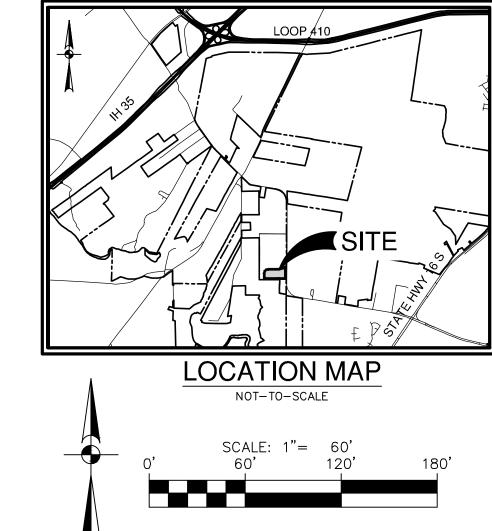
17. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE O THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.

18. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AN GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING. 19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT A PERMIT.

NO. 23-11800285 JOB NO. 12386-04 AUGUST 2023 DESIGNER CHECKED AS DRAWN RD

C7.00





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)

GENERAL NOTES

CONCRETE TRUCK WASH-OUT PIT

(FIELD LOCATE)

PREVENTION PLAN.

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 I MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. A 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

7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL

8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT B 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 COINCIDE WITH THE DISTURBANCE OF UPGRADIENT 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

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 BERMS IN DRAINAGE FEATURES.

12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.

13. SHADED AREA DENOTES LIMITS OF DISTURBED AREAS. OTHE AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP3) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.

14. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TXDOT RIGHT-OF-WAY WITH TXDOT.

15. CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON TH 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 TH PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

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.

23-11800285 JOB NO. 12386-04 AUGUST 2023 DESIGNER CHECKED AS DRAWN RD

C8.00

CALEB M. CHANCE

	SWP3 MODIFICATIONS					
DATE	SIGNATURE	DESCRIPTION				

SCHEMATIC OF TEMPORARY CONSTRUCTION ENTRANCE/EXIT

MATERIALS

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/YD2, A MULLEN BURST RATING OF 140 LB/IN2, 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 OF

INSTALLATION

DRAINAGE

CORRECTLY.

MATERIALS

OF 36 HOURS.

SHOOT GROWTH AND THATCH.

SITE PREPARATION

TIGHTLY (SEE FIGURE ABOVE).

LAY SOD IN A STAGGERED PATTERN. BUTT

THE STRIPS TIGHTLY AGAINST EACH OTHER.

DO NOT LEAVE SPACES AND DO NOT

OVERLAP. A SHARPENED MASON'S TROWEL

IS A HANDY TOOL FOR TUCKING DOWN THE

AUTOMATIC SOD CUTTER MUST BE MATCHED

ANGLED ENDS CAUSED BY THE

ENDS AND TRIMMING PIECES.

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. 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.

PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD

WOVEN WIRI SHEATHING

ISOMETRIC PLAN VIEW

ROCK BERMS

GEOTEXTILE FABRIC TO

SECTION "A-A" OF A

CONSTRUCTION ENTRANCE/EXIT

. STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY

PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC-EXTEND PAD BEYOND

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

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

2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC

3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT

4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED

WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR

5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN,

RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.

PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

DITCH OR WATER COURSE BY USING APPROVED METHODS.

INSPECTION AND MAINTENANCE GUIDELINES THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL

1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD.

COMMON TROUBLE POINTS

CONDITION AS STONE IS PRESSED INTO SOIL.

IMPROVE FOUNDATION DRAINAGE.

USED TO TRAP SEDIMENT

SEDIMENT BASIN.

SHOOTS OR GRASS BLADES.

CUTTING HEIGHT.

GRASS SHOULD BE GREEN AND

- THATCH- GRASS CLIPPINGS AND

ROOT ZONE - SOIL AND ROOTS.

DEAD LEAVES, UP TO 1/2" THICK.

SHOULD BE 1/2"-3/4" THICK, WITH

DENSE ROOT MAT FOR STRENGTH.

HEALTHY; MOWED AT A 2"-3"

THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

STABILIZE FOUNDATION

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

INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.

. 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.

MATERIALS 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 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

SECTION "A-A"

WOVEN WIRE SHEATHING

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

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.

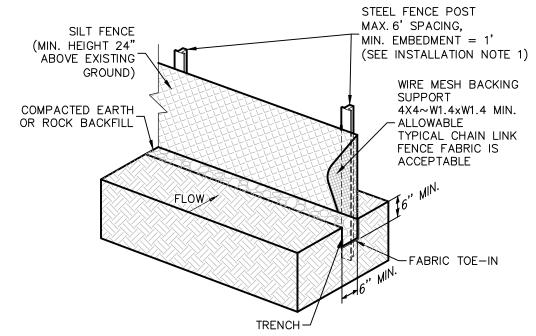
COMMON TROUBLE POINTS

. 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).

ROCK BERM DETAIL

NOT-TO-SCALE



INCORRECT

SOD INSTALLATION

USE PEGS OR STAPLES TO FASTEN SOD

FIRMLY - AT THE ENDS OF STRIPS AND

IN THE CENTER, OR EVERY 3-4 FEET IF

THE STRIPS ARE LONG. WHEN READY TO

MOW, DRIVE PEGS OR STAPLES FLUSH

CORRECT

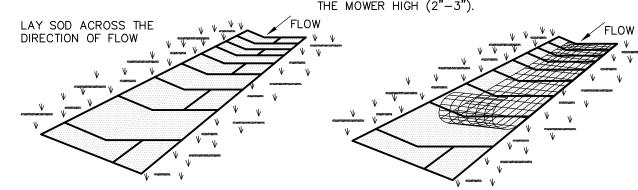
1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.

APPEARANCE OF GOOD SOD

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NOT-TO-SCALE

2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID. 3. MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET



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

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%.

STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO

SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN

4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD

PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT

THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL

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,

FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE

SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE

DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS

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

TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.

SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.

TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.

INSTALLATION IN CHANNELS

INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.

IN CRITICAL AREAS, SECURE SOD WITH NETTING. USE STAPLES.

GENERAL INSTALLATION (VA. DEPT. OF CONSERVATION, 1992

SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN. 2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.

WITH THE GROUND.

THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).

4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).

5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL. AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS

UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE

ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4 8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

NSPECTION AND MAINTENANCE GUIDELINES SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.

. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

SOD INSTALLATION 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.

. 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/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.

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 BRINDELL HARDNESS

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.

. 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 1/4 ACRE/100 FEET OF FENCE.

3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.

TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL. 5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE

4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE

POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET. 6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

COMMON TROUBLE POINTS FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE.

2. FABRIC NOT SEATED SECURELY TO GROUND (RUNOFF PASSING UNDER FENCE). 3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING

4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL

2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.

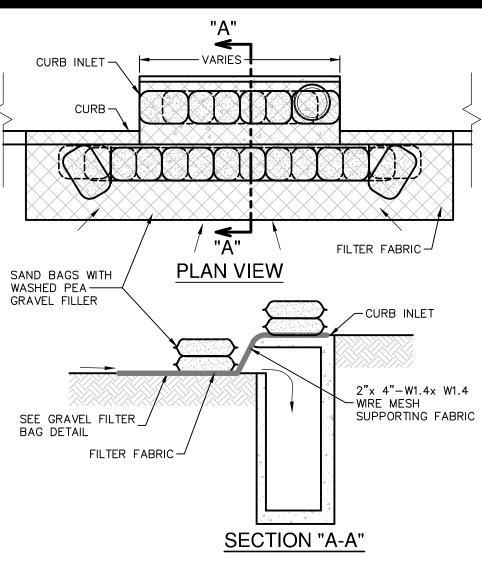
3. REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.

4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED . HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE

OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL

NOT-TO-SCALE



GENERAL NOTES

. 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 CLIPS 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 I. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE

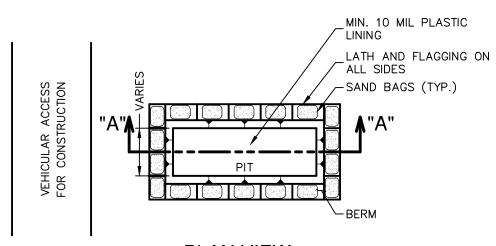
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND

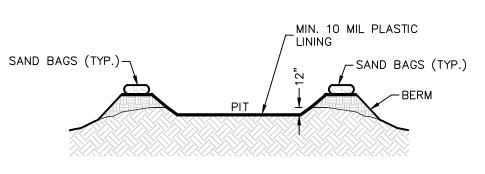
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING. 5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL CURB INLET PROTECTION DETAIL

NOT-TO-SCALE



PLAN VIEW



GENERAL NOTES

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

SECTION "A-A'

CONSTRUCTION TRAFFIC. 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. . 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

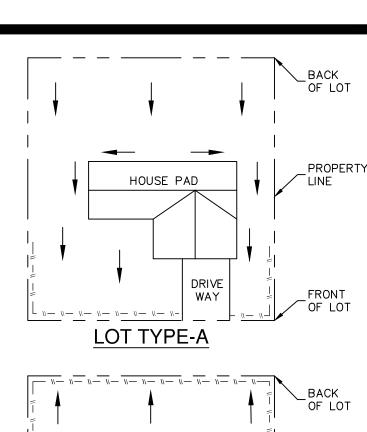
MAINTENANCE WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER

BACKFILLED AND REPAIRED.

REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. . MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED

> CONCRETE TRUCK WASHOUT PIT DETAIL

NOT-TO-SCALE



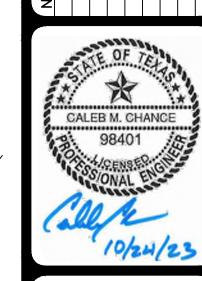
HOUSE PAD

LOT TYPE-B

HOUSE PAD

WAY

DRIVE WAY



PROPERT

PROPER1

LEGENE

DOWNGRADIENT SIDE OF EACH LOT LINE → DRAINAGE FLO OR LIMITS OF CLEARING AS GENERALLY

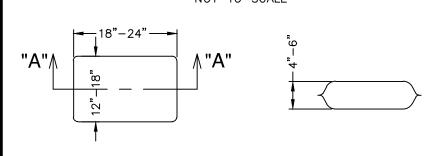
TYPICAL HOUSE LOT LAYOUTS NOT-TO-SCALE

LOT TYPE-C

NOTE: SILT FENCE TO BE INSTALLED PER

THESE DETAILS AND LOCATED ON THE

SHOWN ON THE OVERALL SITE PLAN.



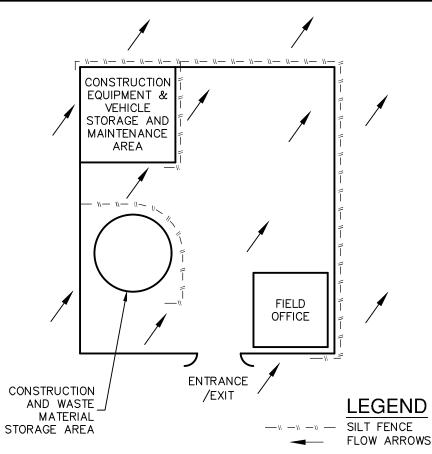
PLAN VIEW SECTION "A-A" THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND

ULTRAVIOLET STABILITY EXCEEDING 70%. 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



CONSTRUCTION STAGING AREA

NOT-TO-SCALE

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 PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE

SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT

23-1180028 12386-04 AUGUST 2023 SIGNER IECKED AS DRAWN RD

C8.10