LAND-PLAT-22-11800353

CONSTRUCTION PLANS FOR

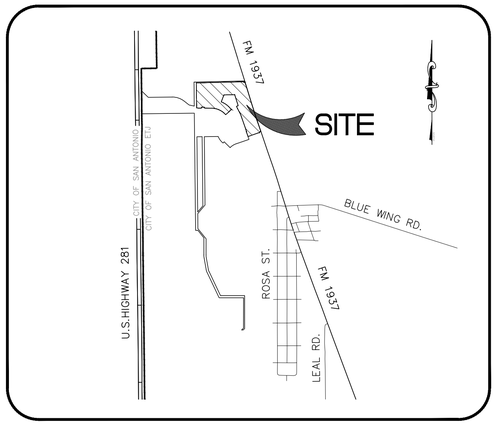
ROOSEVELT LANDING, UNIT 2

SUBMITTED BY:

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

OWNER/DEVELOPER

SAN ANTONIO, LD. LLC.
4058 NORTH COLLEGE STE. 300, BOX 9
FAYETTEVILLE, AR 72703
(479) 455-9090



VICINITY MAP
N.T.S.

SUBMITTAL DATE:

8/22/2022

LEGAL DESCRIPTION:

BEING A 19.548 ACRE TRACT OUT OF A 52.24 ACRE TRACT OF LAND SITUATED IN THE JOSE ANTONIO DE LA GARZA SURVEY ABSTRACT NO. 3, COUNTY BLOCK 4006, BEXAR COUNTY, TEXAS AS CONVEYED TO SAN ANTONIO LD, LLC, BY WARRANTY DEED AS RECORDED IN DOCUMENT NUMBER 20220056276 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

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C1.0	UTILITY COVER
C1.1	OVERALL UTILITY PLAN
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C5.0	GRADING PLAN
C5.1	GRADING PLAN
C6.0	SW3P PLAN
C6.1	SW3P DETAILS

• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC
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BEXAR COUNTY

SUBMITTAL SET

TEXAS C0.0

LAND-PLAT-22-11800353

TRENCH EXCAVATION SAFETY PROTECTION

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

UTILITY GENERAL NOTES

1. LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF ALL UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON THE PLANS OR NOT. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
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4. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THE PROJECT.
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F. FINAL STREET STAKING.
G. METER BOX STAKING.
H. CPS STAKING.
I. SETTING OF LOT CORNERS.

CPS NOTES:

1. CPS TO SUPPLY ALL ELECTRIC CONDUITS FOR TRENCH AS FOLLOW:

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NOTE :

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UTILITY IMPROVEMENTS

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LEGEND

EXISTING WATER MAIN	E8"W
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PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN	8"SS
EXISTING SANITARY SEWER MAIN	E8"SS
EXISTING OVERHEAD ELECTRIC	OHE
EXISTING UNDERGROUND ELECTRIC	UE
EXISTING UNDERGROUND TELEPHONE	UGT
EXISTING STREET LIGHT	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	D.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.
PROPOSED STREET LIGHT UG, 100W AND SINGLE ARM	
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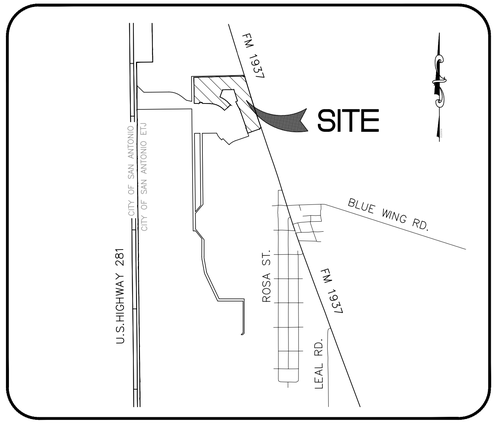
EXISTING POWER POLE	PP
EXISTING SECONDARY ENCLOSURE	
PROPOSED SECONDARY ENCLOSURE	
PROPOSED POWER POLE	PP
PROPOSED TRANSFORMER	
PROPOSED WATER SERVICE	
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEANOUT	
EXISTING TRANSFORMER	
EXISTING IRRIGATION CONTROL VALVE	
EXISTING WATER METER	



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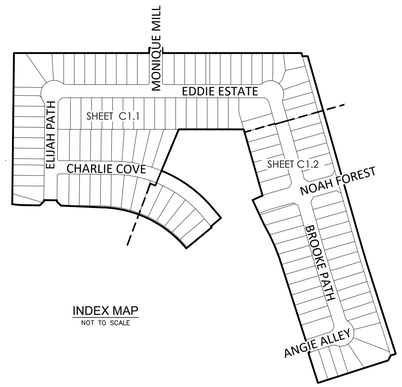
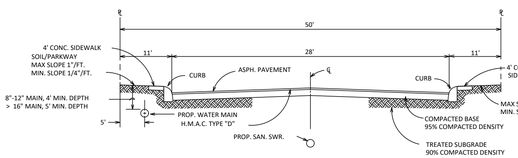
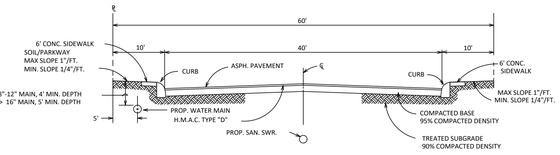


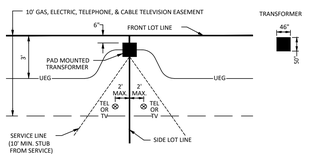
INDEX MAP
NOT TO SCALE



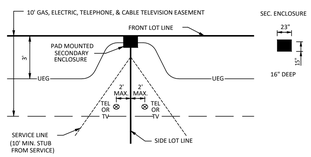
TYPICAL STREET CROSS-SECTION (28' PAVEMENT)
N.T.S.



TYPICAL STREET CROSS-SECTION (40' PAVEMENT)
N.T.S.



TRANSFORMER



SECONDARY ENCLOSURE
FRONT LOADED

SUBMITTAL DATE:

8/22/2022

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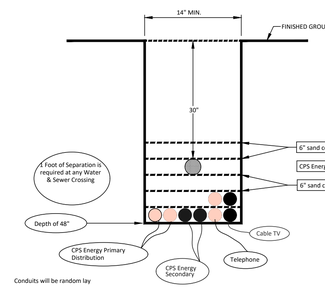
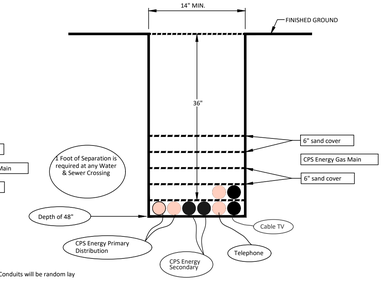


Standards for Gas and Electric Trench
or Electric Trench with Joint Utilities
NOT TO SCALE
Trench Diagram



Standards for Electric Trench
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Trench Diagram

TRENCH DETAILS

• *Engineers*
• *Surveyors*
• *Planners*

Moy Tarin Ramirez Engineers, LLC
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12770 CIMARRON PATH, SUITE 100
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BEXAR COUNTY

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TEXAS C1.0

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SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
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STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER
2/13/24

ROOSEVELT LANDING, UNIT 2

OVERALL UTILITY IMPROVEMENTS PLAN

SHEET

C1.1

Plot Date: April 9, 2021 User ID: Maricella Pastrano
R:\Nicholas Tract\Unit 2\Drawings\22090_C1.1_C1.2_Overall_Utility.dwg

LAND-PLAT-22-11800353

N

SCALE: 1"=50'

0 50 100

LEGEND

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Plot Date: April 9, 2021 User ID: Maricela Pastrano
R:\Nicholas Tract\Unit 2\Drawings\22090_C1.1_C1.2_Overall_Utility.dwg

NO.	DATE	REVISIONS DESCRIPTION	BY

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ROOSEVELT LANDING, UNIT 2

OVERALL UTILITY IMPROVEMENTS PLAN

SHEET

C1.2

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CONSTRUCTION PLANS FOR

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SANITARY SEWER IMPROVEMENTS

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SAWS CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT
JANUARY 2022

General Section

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
   A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
   B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage".
   C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
   D. Current City of San Antonio "Standard Specifications for Public Works Construction".
   E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).
2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.
3. The Contractor shall obtain the SAWS Standard Details from the SAWS website, http://www.saws.org/business_center/specs. Unless otherwise noted within the design plans.
4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.
5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.
6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:
   - SAWS Utility Locates: http://www.saws.org/Service/Locates
   - COSA Drainage (210) 207-0724 or (210) 207-6026
   - COSA Traffic Signal Operations (210) 206-8480
   - COSA Traffic Signal Damages (210) 207-3951
   - Texas State Wide One Call Locator 1-800-545-6005 or 811
7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.
8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.
9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.
10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.
11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to constworkreq@saws.org.
    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.

Sewer Notes

1. 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 and SAWS.

2. 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".
3. 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.
4. 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 pressure rated PVC at the proposed water crossing.
5. 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 regardless of size.

NOTES:

1. SANITARY SEWER LATERALS TO BE LOCATED AS SHOWN ON THE SANITARY SEWER PLANS.
2. PAY CUTS FOR SANITARY SEWERS LOCATED IN STREETS ARE ESTIMATED TO THE FINISHED SUBGRADE ELEVATION. PAY CUTS ARE TO EXISTING GROUND IN UNPAVED AREAS.
3. EXTEND ALL SANITARY SEWER LATERALS TO THE PROPERTY LINE OR TO THE EASEMENT LINE AS INDICATED. ALL LATERALS ARE 35' LONG UNLESS OTHERWISE NOTED.
4. SANITARY SEWER LINES AND LATERALS WILL BE PVC SDR 26 ASTM D 3034 UNLESS OTHERWISE NOTED ON PLAN AND PROFILE SHEETS.
5. SDR FITTINGS WILL MATCH SDR SEWER MAIN, NO SEPARATE PAY ITEM.
6. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPGRADIENT SIDE OF THE SEWER TRENCH THUS ALLOWING THE TRENCH TO INTERCEPT ANY SILT CONTAMINATED RUNOFF.
7. QUANTITIES ARE BASED ON CURRENT SAWS SPECIFICATIONS.
8. ALL MANHOLES TO HAVE WATERTIGHT RING AND COVERS.
9. ALL MANHOLES TO BE CONCRETE RING ENCASED.
10. MANHOLES TO BE VENTED AS SHOWN ON THE SANITARY SEWER PLANS.
11. AN "*" DENOTES AN EXISTING TEE.
12. ALL SANITARY SEWER LATERALS SHALL HAVE A MIN. 2.0 % SLOPE TO THE PROPERTY LINE.
13. MINIMUM COVER FROM TOP OF SANITARY SEWER LATERALS TO TOP OF CURB WILL BE:
    A. IF LATERALS DO NOT CROSS WATER MAINS, 5' COVER
    B. IF LATERALS CROSS WATER MAIN,

WATER MAIN	COVER
6"	5.5'
8"	5.7'
12"	6.0'
16"	7.4'

14. ALL MANHOLE OPENINGS SHALL BE 30".

SAN ANTONIO WATER SYSTEM
CRITERIA FOR SEWER MAIN CONSTRUCTION
IN THE VICINITY OF WATER MAINS

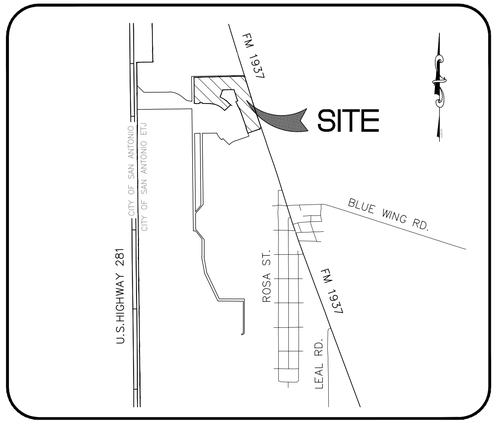
I. WHERE A SEWER MAIN CROSSES OVER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE (9) FEET, ALL PORTIONS OF THE SEWER MAIN WITHIN NINE FEET (9) OF THE WATER LINE SHALL BE CONSTRUCTED USING 150 PSI PRESSURE RATED DUCTILE IRON, CAST IRON OR PVC PIPE AND JOINED WITH EQUALLY PRESSURE RATED PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE AT LEAST EIGHTEEN (18) FEET IN LENGTH MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM)

II. WHERE A SEMI-RIGID OR RIGID SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET BUT GREATER THAN TWO FEET, THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF THE SEWER WITHIN NINE FEET OF THE WATER MAIN.

III. WHERE A SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN TWO FEET, THE SEWER MAIN SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI WITHIN NINE FEET OF THE WATER MAIN, SHALL HAVE A SEGMENT OF SEWER PIPE CENTERED ON THE WATER MAIN, SHALL BE PLACED NO CLOSER THAN SIX INCHES BETWEEN OUTER DIAMETERS, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE OF A LENGTH GREATER THAN EIGHTEEN (18) FEET MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM)

IV. WHERE A SEWER MAIN PARALLELS A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET, THE SEWER MAIN SHALL BE BELOW THE WATER MAIN, SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI FOR BOTH PIPE AND JOINTS FOR A DISTANCE OF NINE FEET BEYOND THE POINT OF CONFLICT, SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE BETWEEN OUTER DIAMETERS OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL.

SANITARY SEWER MANHOLES SHALL NOT BE INSTALLED ANY CLOSER THAN NINE FEET TO WATER MAINS.



VICINITY MAP
N.T.S.

SUBMITTAL DATE:
8/22/2022

REVISION DATE:

LEGAL DESCRIPTION:

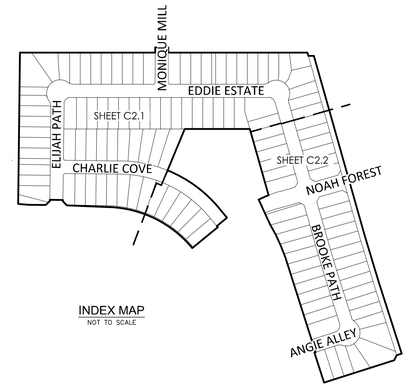
BEING A 19.541 ACRE TRACT OUT OF A 52.24 ACRE TRACT OF LAND SITUATED IN THE JOSE ANTONIO DE LA GARZA SURVEY ABSTRACT NO. 3, COUNTY BLOCK 4006, BEXAR COUNTY, TEXAS AS CONVEYED TO SAN ANTONIO LD, LLC, BY WARRANTY DEED AS RECORDED IN DOCUMENT NUMBER 20220056276 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

P.G.L. 2/13/24
STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

NOTE TO CONTRACTOR:

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

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



INDEX MAP
NOT TO SCALE

ESTIMATED SEWER QUANTITIES

ITEM	DESCRIPTION	UNIT	EST/QTY
1	TIE INTO EXISTING SANITARY SEWER MAIN	E.A.	**2**
2	TRENCH EXCAVATION SAFETY PROTECTION	L.F.	**2082**
3	8" SANITARY SEWER PIPE, SDR-26 (6'-10')	L.F.	**2,082**
4	STANDARD SANITARY SEWER MANHOLE	EA.	**6**
5	RECONSTRUCT EXISTING MANHOLE	EA.	**4**
6	EXTRA DEPTH MANHOLE	V.F.	**9.6**
7	6" SANITARY SEWER LATERALS, SDR-26	L.F.	**4,364**
8	8" SEWER MAIN TELEVISION INSPECTION	L.F.	**2,082**

TABLE OF CONTENTS

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

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

MTR
• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC
FIRM TBPELS ENG F-5297 SVY F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

Developer's Name	SAN ANTONIO, LD. LLC.
Developer's Address	4058 NORTH COLLEGE STE. 300, BOX 9
City	FAYETTEVILLE State AR Zip 72703
Phone #	(479) 455-9090 Fax #
SAWS Block Map #	170-520 Total EDU's 121 Total Acreage 19.458
Total Linear Footage of Pipe	8" ~ 2082 L.F. Plat No. 22-11800353
Number of Lots	121 SAWS Job No. 22-1659

BEXAR COUNTY

SUBMITTAL SET

TEXAS C2.0

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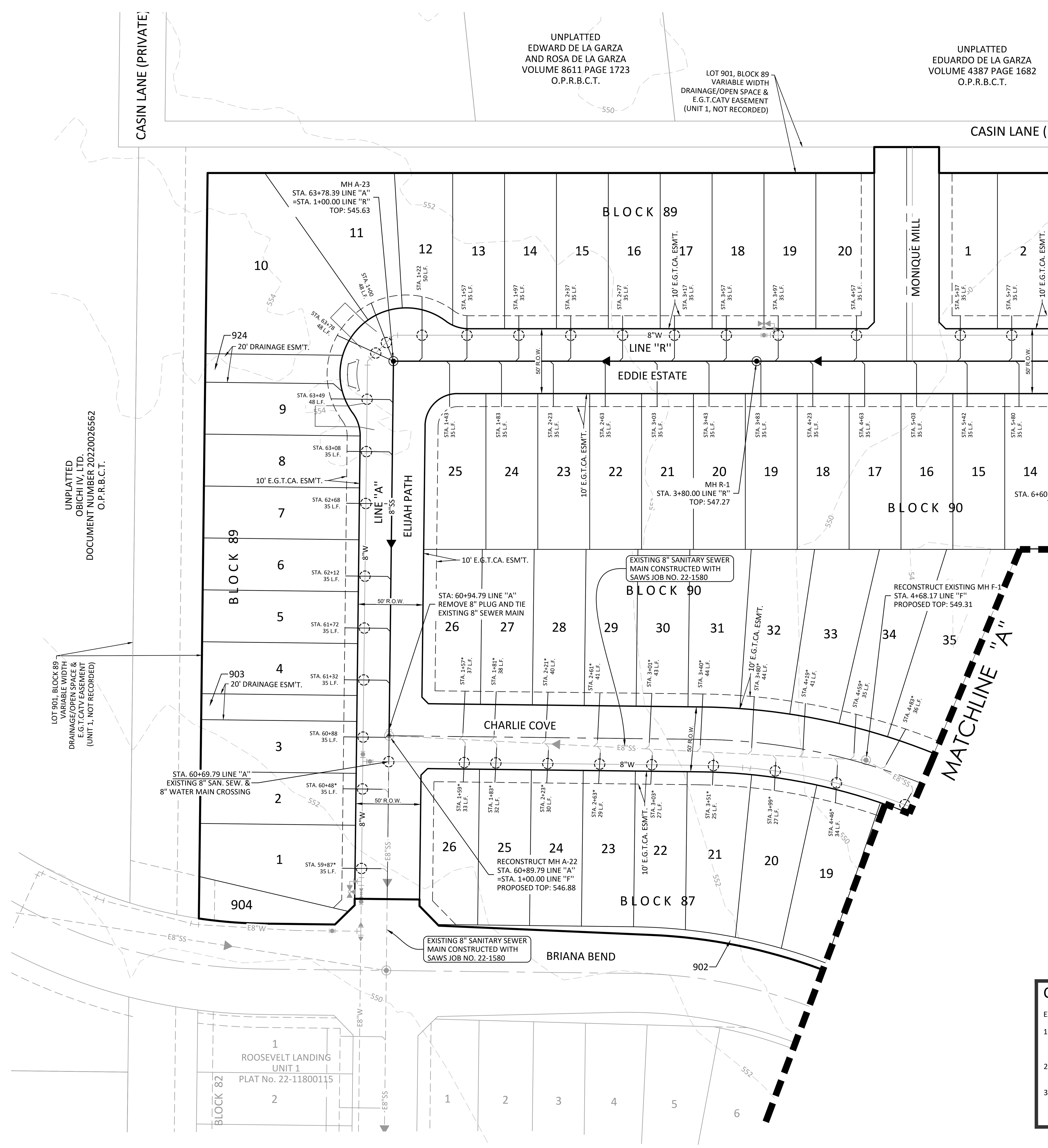
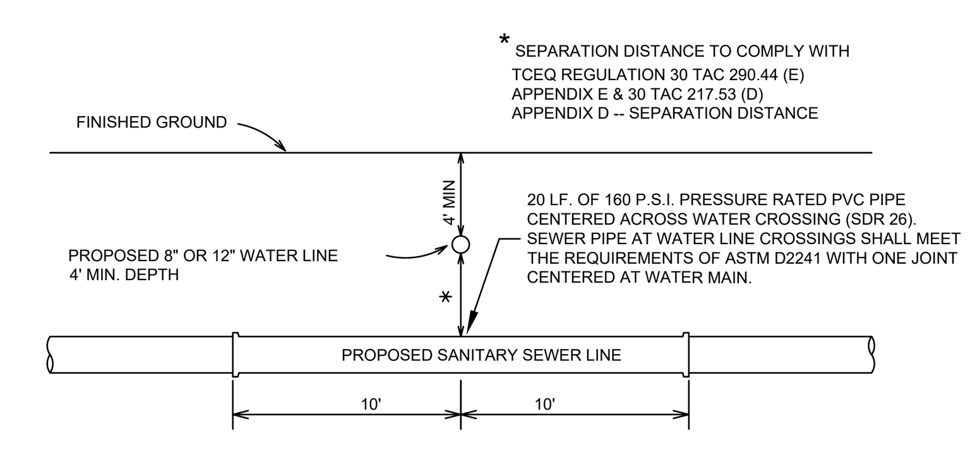
Plot Date: July 19, 2022 User ID: Maricella Pastrano

LAND-PLAT-22-11800353





TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

REFERNCE SAWS SPEC. ITEM 812

N.T.S.

LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN & MANHOLE	8"SS
EXISTING SANITARY SEWER MAIN & MANHOLE	EX 8"SS
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT	
VERTICAL STACK	VS
ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT	E.G.T.CA.E.
TEMPORARY BENCHMARK	
PROPOSED MINIMUM FINISH FLOOR ELEVATION	MIN. F.F. = 795.5
SANITARY SEWER/WATER CROSSING LOCATION	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.

*** DENOTES EXISTING WYE WITH NEW LATERAL**

CAUTION:

EXISTING UTILITIES:

1. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF SAME DURING CONSTRUCTION.
2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION.
3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.

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TRENCH EXCAVATION SAFETY PROTECTION

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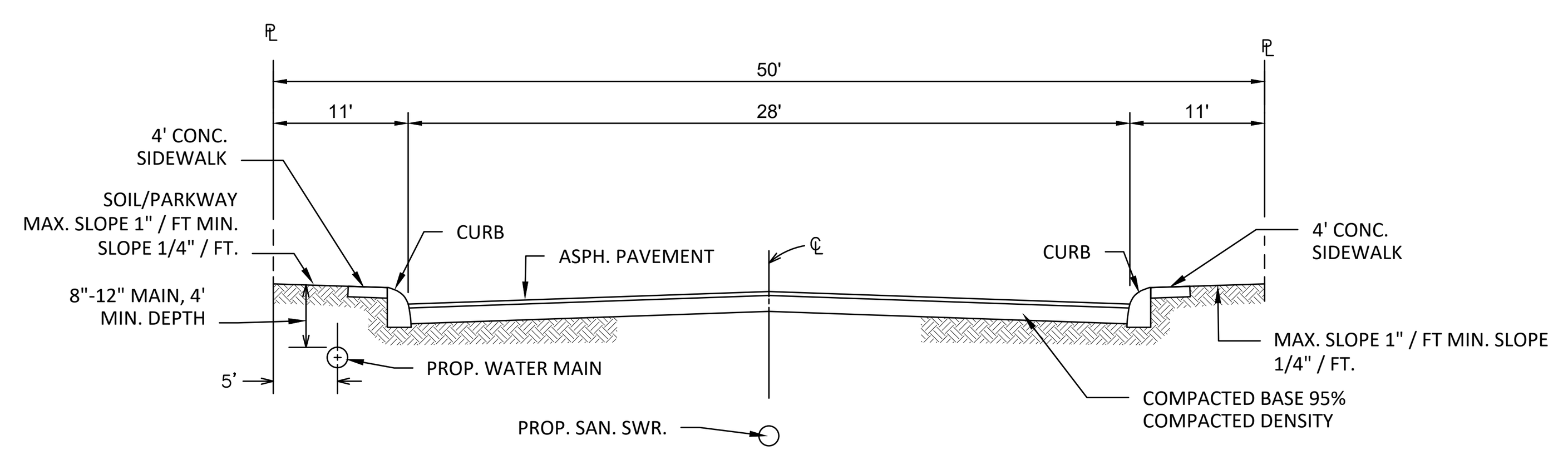
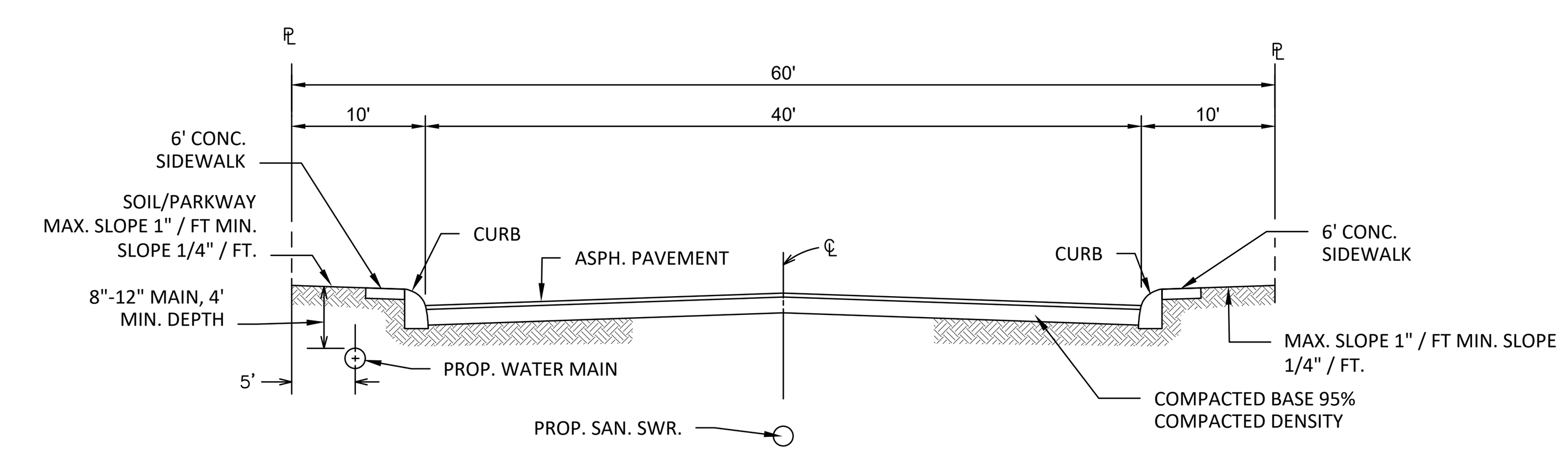


TYPICAL STREET CROSS-SECTION (28' PAVEMENT)

N.T.S.



TYPICAL STREET CROSS-SECTION (40' PAVEMENT)

N.T.S.

Developer's Name	SAN ANTONIO, LD. LLC.		
Developer's Address	4058 NORTH COLLEGE STE. 300, BOX 9		
City	FAYETTEVILLE	State AR	Zip 72703
Phone #	479-455-9090	Fax #	
SAWS Block Map #	170-520	Total EDU's 121	Total Acreage 21.461
Total Linear Footage of Pipe	8" ~ 2082 L.F.	Plat No. 22-11800353	
Number of Lots	121	SAWS Job No. 22-1659	

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #: DGN. BY: DWN. BY: CHKD. BY: DATE:

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

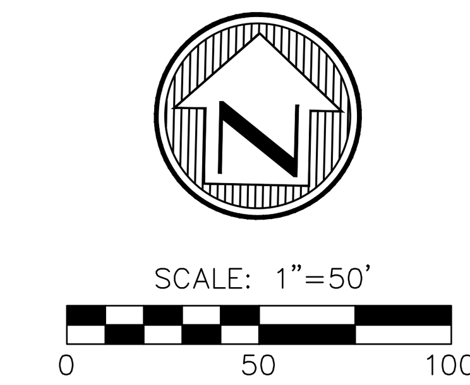
STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
SANITARY SEWER OVERALL PLAN

SHEET

C2.1

LAND-PLAT-22-11800353



LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
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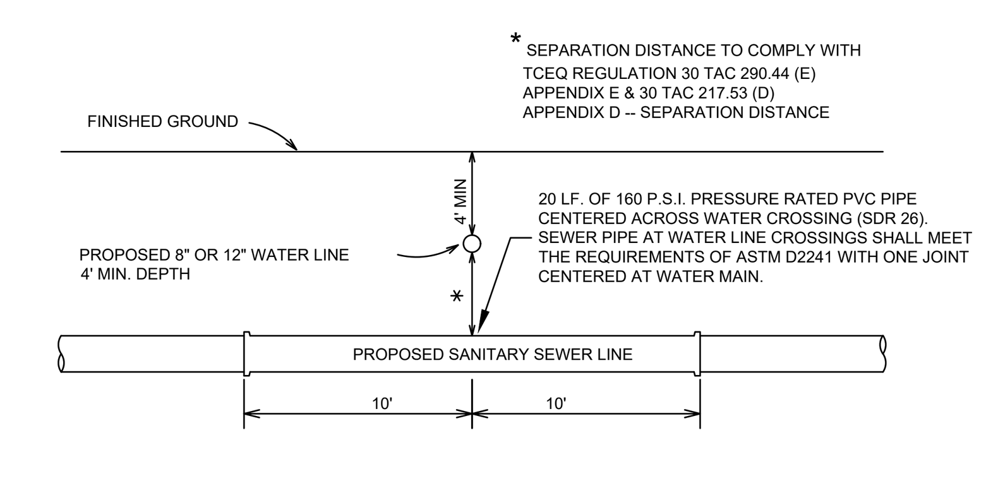

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REFERNCE SAWS SPEC. ITEM 812

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Total Linear Footage of Pipe	8" ~ 2082 L.F.	Plat No.	22-11800353		
Number of Lots	121	SAWS Job No.	22-1659		

SUBMITTAL SET

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED
PROFESSIONAL ENGINEER
9/14/22

ROOSEVELT LANDING, UNIT 2

SANITARY SEWER OVERALL PLAN

SHEET

C2.2

LAND-PLAT-22-11800353

CAUTION:
EXISTING UTILITIES:
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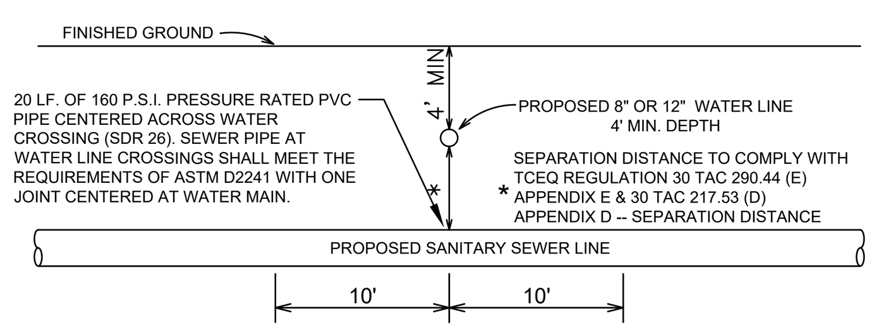
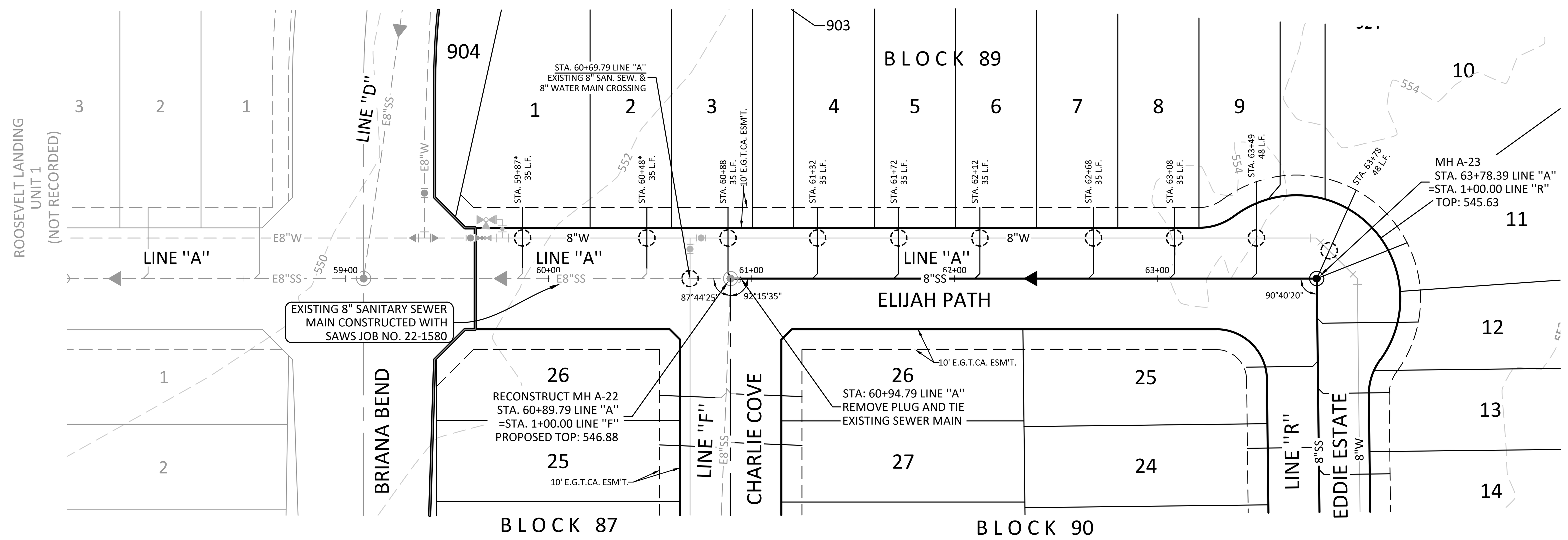


TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

REFERNCE SAWS SPEC. ITEM 812 N.T.S.



LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN & MANHOLE	8"SS
EXISTING SANITARY SEWER MAIN & MANHOLE	EX 8"SS
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT	
VERTICAL STACK	VS
ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT	E.G.T.CA.E.
TEMPORARY BENCHMARK	
PROPOSED MINIMUM FINISH FLOOR ELEVATION	MIN. F.F. = 795.5
SANITARY SEWER/WATER CROSSING LOCATION	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.

*** DENOTES EXISTING WYE WITH NEW LATERAL**

SCALE: 1"=50'

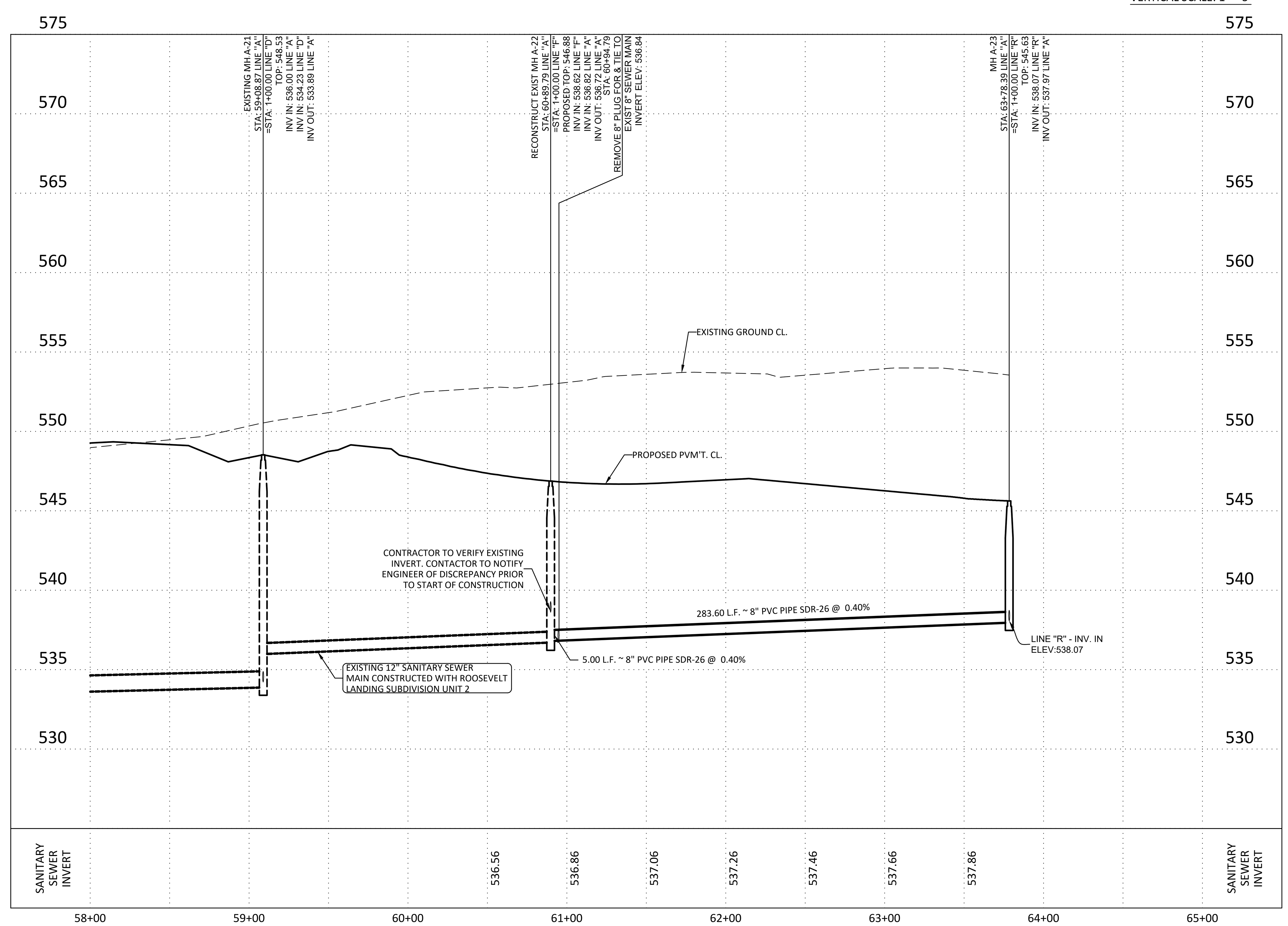
0 50 100

Developer's Name	SAN ANTONIO, LD. LLC.
Developer's Address	4058 NORTH COLLEGE STE. 300, BOX 9
City	FAYETTEVILLE
State	AR
Zip	72703
Phone #	479-455-9090
Fax #	
SAWS Block Map #	170-520
Total EDU's	121
Total Acreage	21.461
Total Linear Footage of Pipe	8" ~ 2082 L.F.
Plat No.	22-11800353
Number of Lots	121
SAWS Job No.	22-1659

LINE "A"

STA. 60+94.79 TO STA. 63+78.39

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



SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2

SANITARY SEWER PLAN & PROFILE LINE "A"

STA. 60+94.79 TO STA. 63+78.39

SHEET

C2.3

LAND-PLAT-22-11800353

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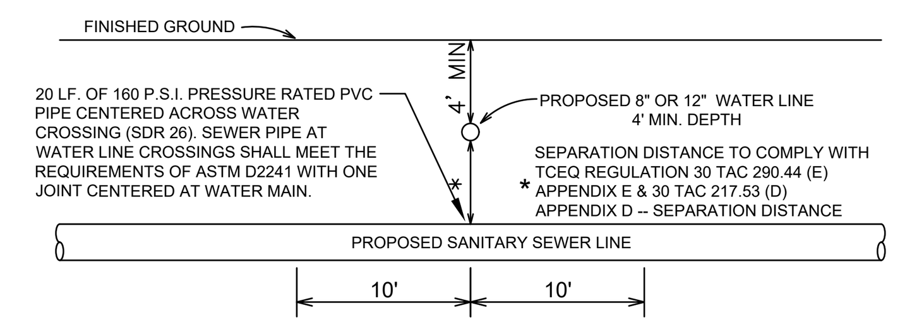


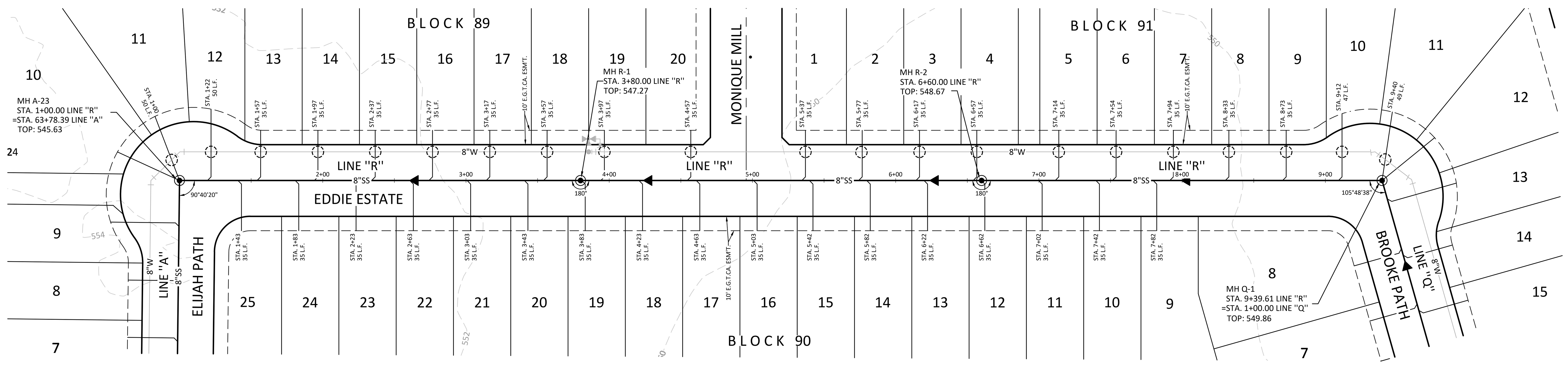
TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

REFERNCE SAWS SPEC. ITEM 812

N.T.S.

LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN & MANHOLE	8"SS
EXISTING SANITARY SEWER MAIN & MANHOLE	EX 8"SS
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT	
VERTICAL STACK	VS
ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT	E.G.T.CA.E.
TEMPORARY BENCHMARK	
PROPOSED MINIMUM FINISH FLOOR ELEVATION	MIN. F.F. = 795.5
SANITARY SEWER/WATER CROSSING LOCATION	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.



SCALE: 1"=50'

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Fax #	
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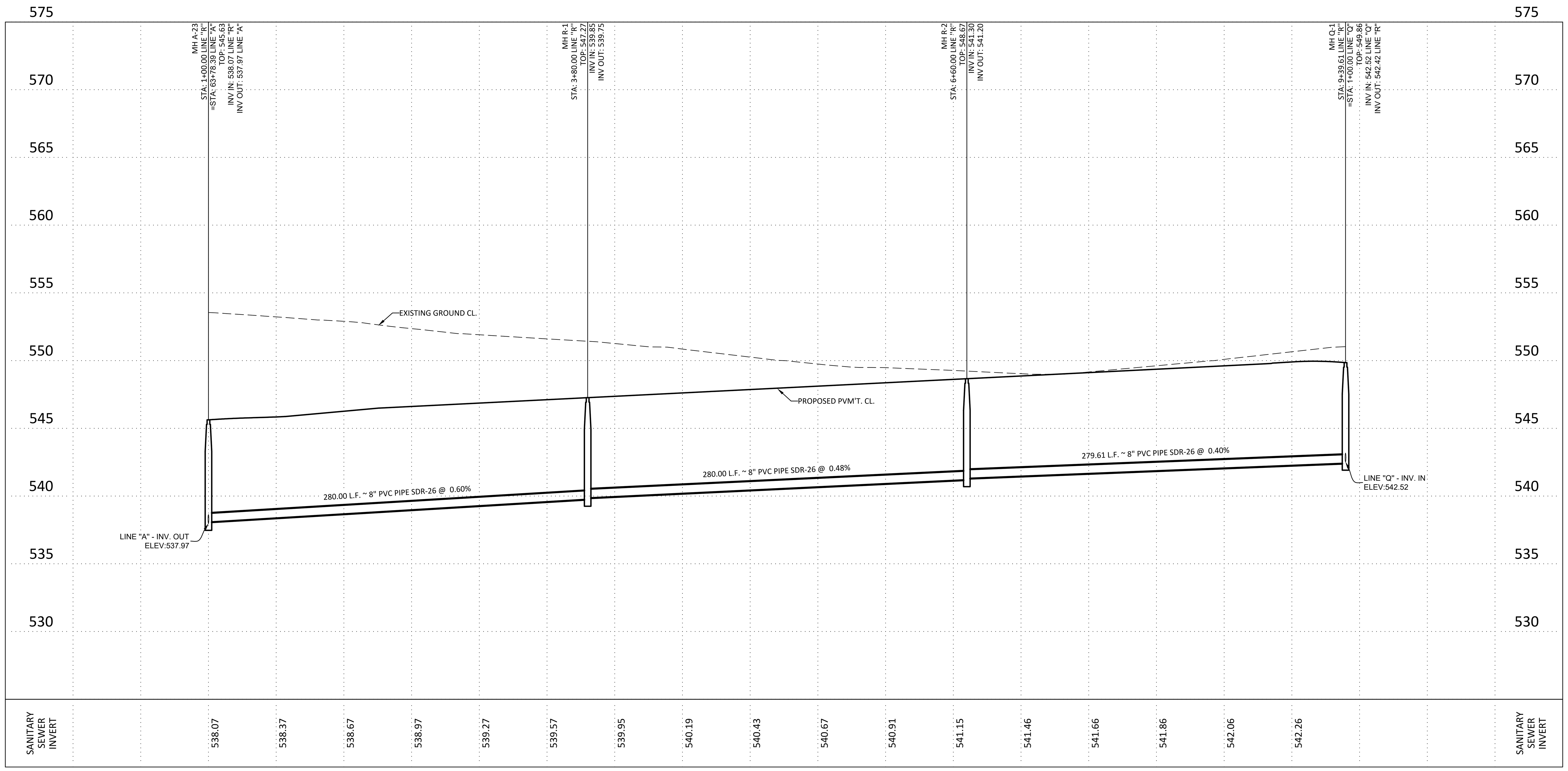
Total Acreage	21.461
Total Linear Footage of Pipe	8" ~ 2082 L.F.
Plat No.	22-11800353
Number of Lots	121
SAWS Job No.	22-1659

LINE "R"

STA. 1+00.00 TO STA. 9+39.61

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



SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2

SANITARY SEWER PLAN & PROFILE LINE "R"

STA. 1+00.00 TO STA. 9+39.61

SHEET

C2.4

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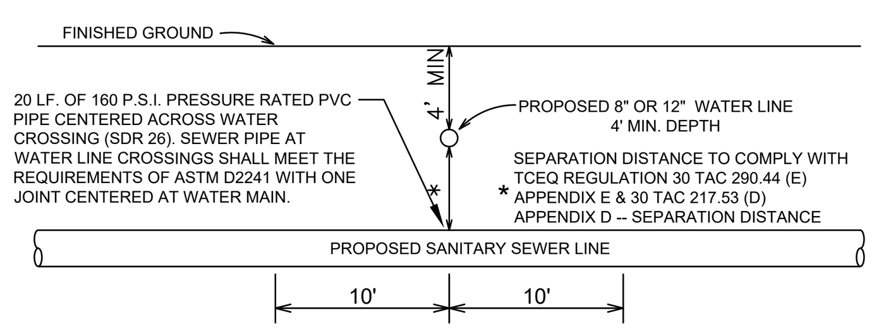
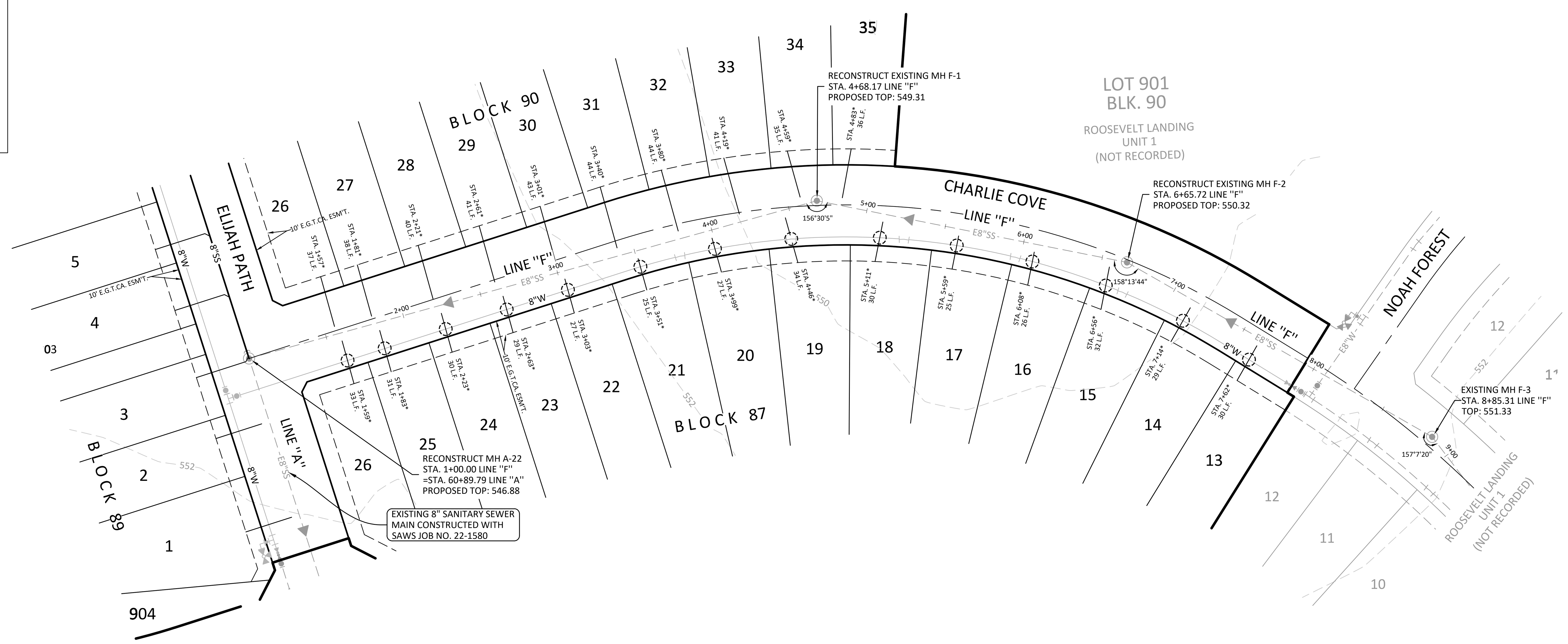


TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL
REFERNCE SAWS SPEC. ITEM 812
N.T.S.



LAND-PLAT-22-11800353

LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN & MANHOLE	8"SS
EXISTING SANITARY SEWER MAIN & MANHOLE	EX 8"SS
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT	
VERTICAL STACK	VS
ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT	E.G.T.CA.E.
TEMPORARY BENCHMARK	
PROPOSED MINIMUM FINISH FLOOR ELEVATION	MIN. F.F. = 795.5
SANITARY SEWER/WATER CROSSING LOCATION	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.

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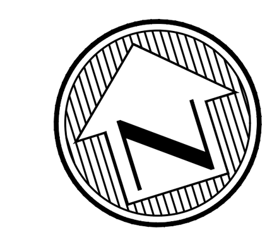


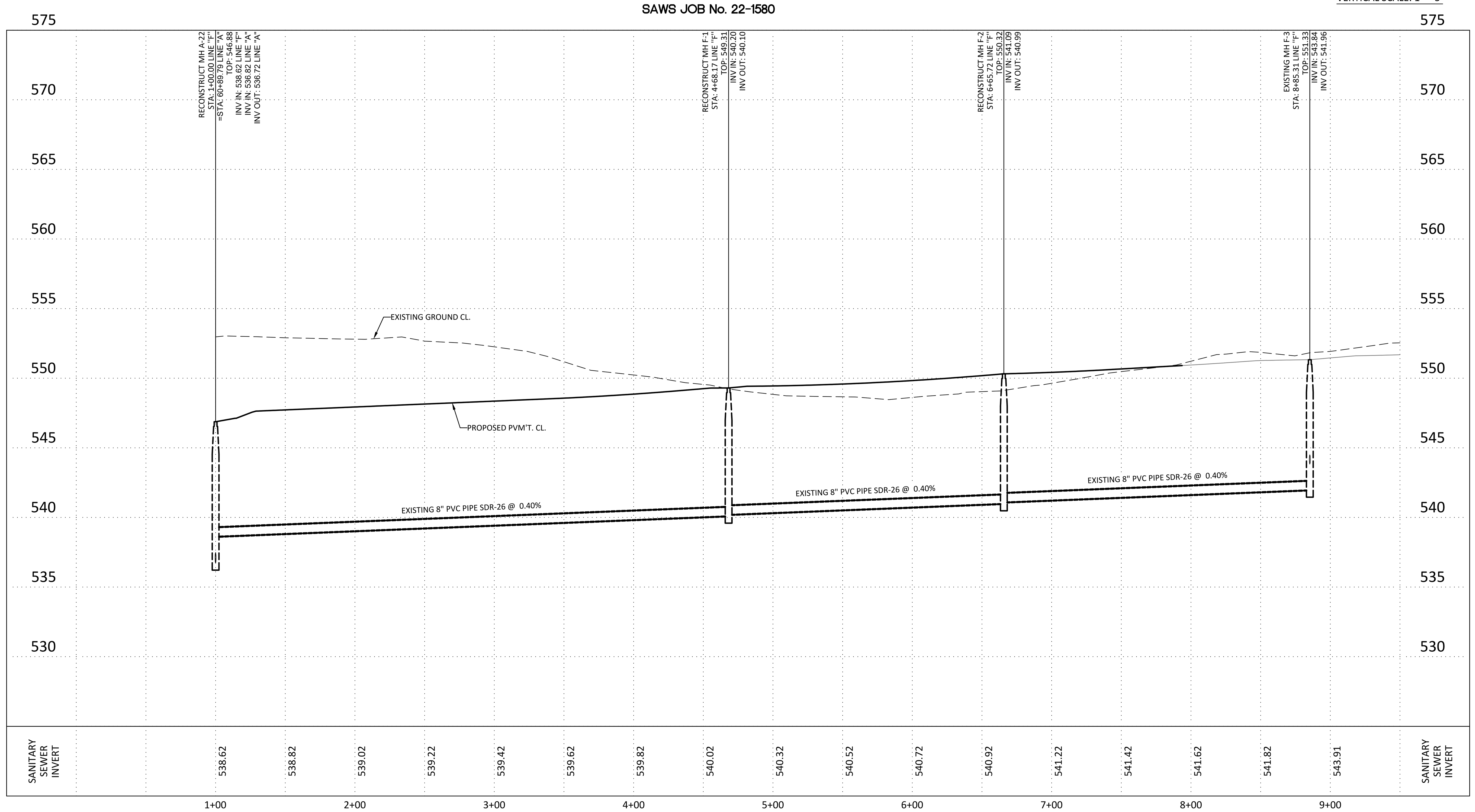
SCALE: 1"=50'
0 50 100

Developer's Name: SAN ANTONIO, LD. LLC.
Developer's Address: 4058 NORTH COLLEGE STE. 300, BOX 9
City: FAYETTEVILLE State: AR Zip: 72703
Phone #: 479-455-9090 Fax #:
SAWS Block Map #: 170-520 Total EDU's: 121 Total Acreage: 21.461
Total Linear Footage of Pipe: 8" ~ 2082 L.F. Plat No. 22-11800353
Number of Lots: 121 SAWS Job No. 22-1659

LINE "F"

EXISTING SEWER MAIN CONSTRUCTED WITH
ROOSEVELT LANDING UNIT 1
SAWS JOB No. 22-1580

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



REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #
DGN. BY:
DWN. BY:
CHKD. BY:
DATE:

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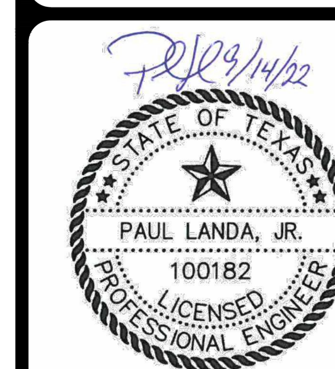

ROOSEVELT LANDING UNIT 2
SANITARY SEWER PLAN & PROFILE
LINE "F"
STA. 1+00.00 TO STA. 8+85.31

SHEET
C2.5

SUBMITTAL SET

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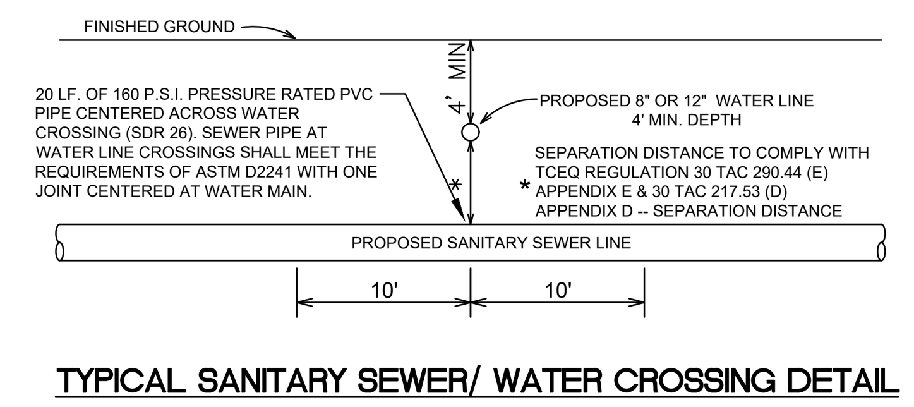
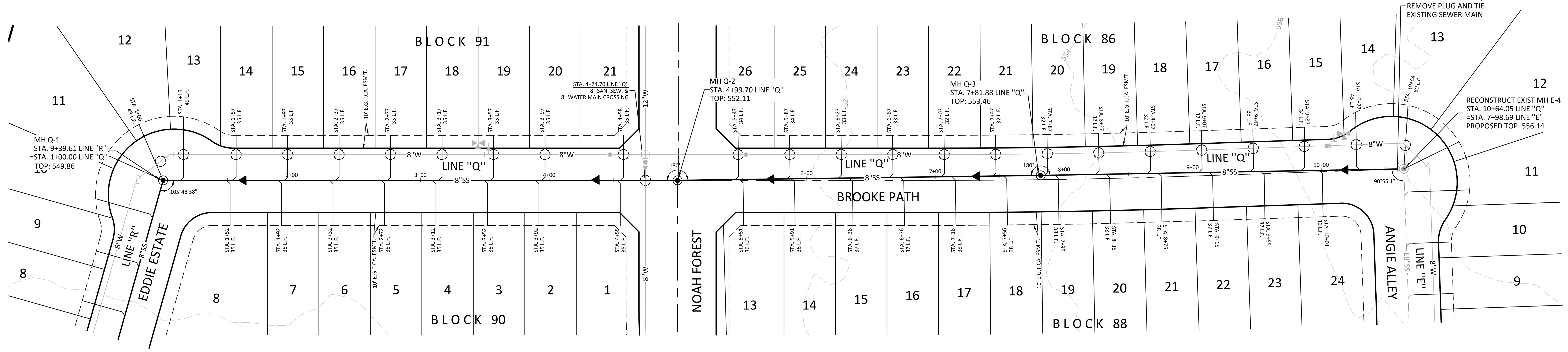


TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL
REFERNCE SAWS SPEC. ITEM 812
N.T.S.

LAND-PLAT-22-11800353

LEGEND

EXISTING WATER MAIN	EX 8"W
PROPOSED WATER MAIN	8"W
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER MAIN & MANHOLE	8"SS
EXISTING SANITARY SEWER MAIN & MANHOLE	EX 8"SS
PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT	
VERTICAL STACK	VS
ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT	E.G.T.CA.E.
TEMPORARY BENCHMARK	
PROPOSED MINIMUM FINISH FLOOR ELEVATION	MIN. F.F. = 795.5
SANITARY SEWER/WATER CROSSING LOCATION	
OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS	O.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.



SCALE: 1"=50'
0 50 100

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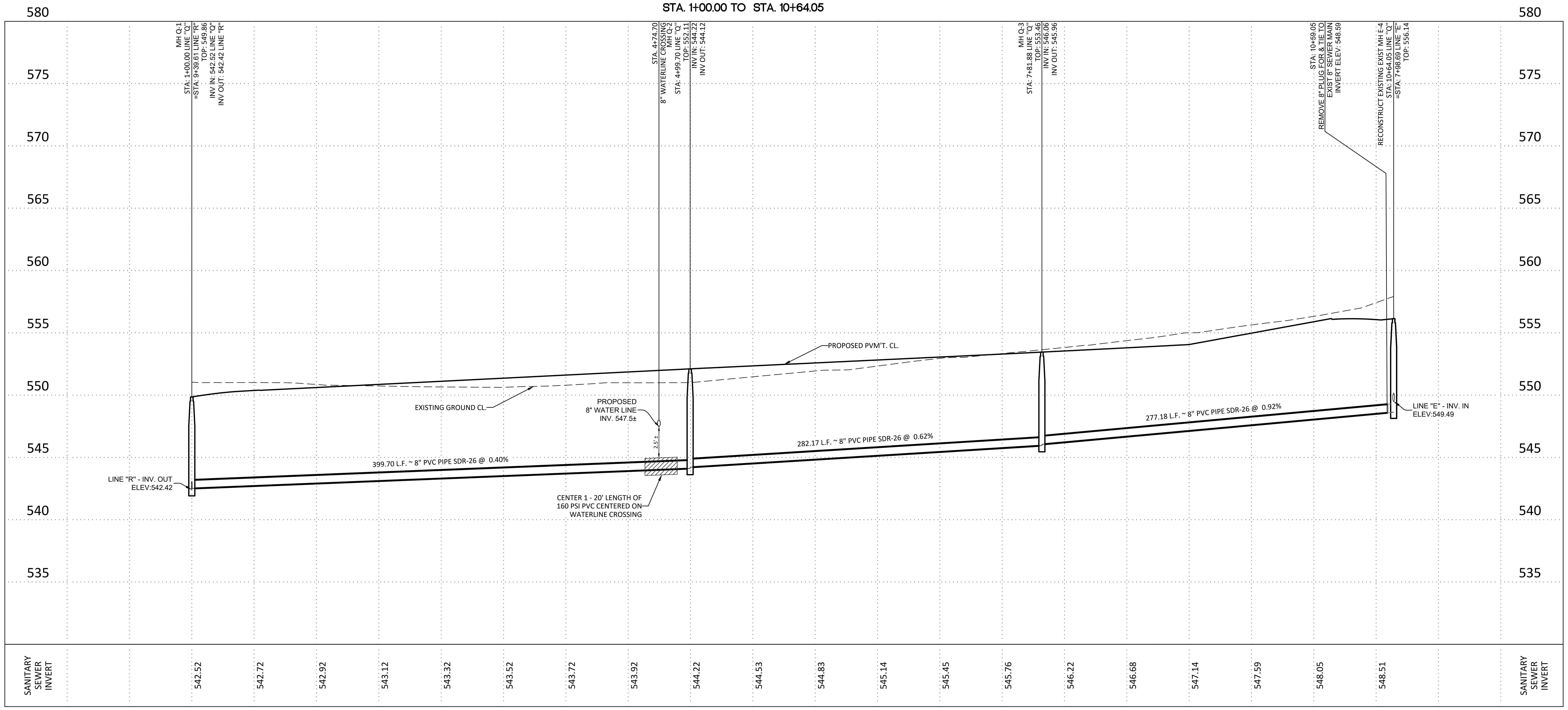
Plat No.	22-11800353
Number of Lots	121
SAWS Job No.	22-1659

LINE "Q"

STA. 1+00.00 TO STA. 10+64.05

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



REVISIONS
NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

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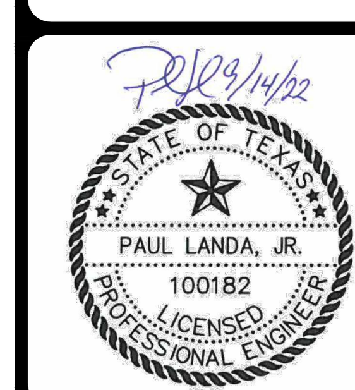
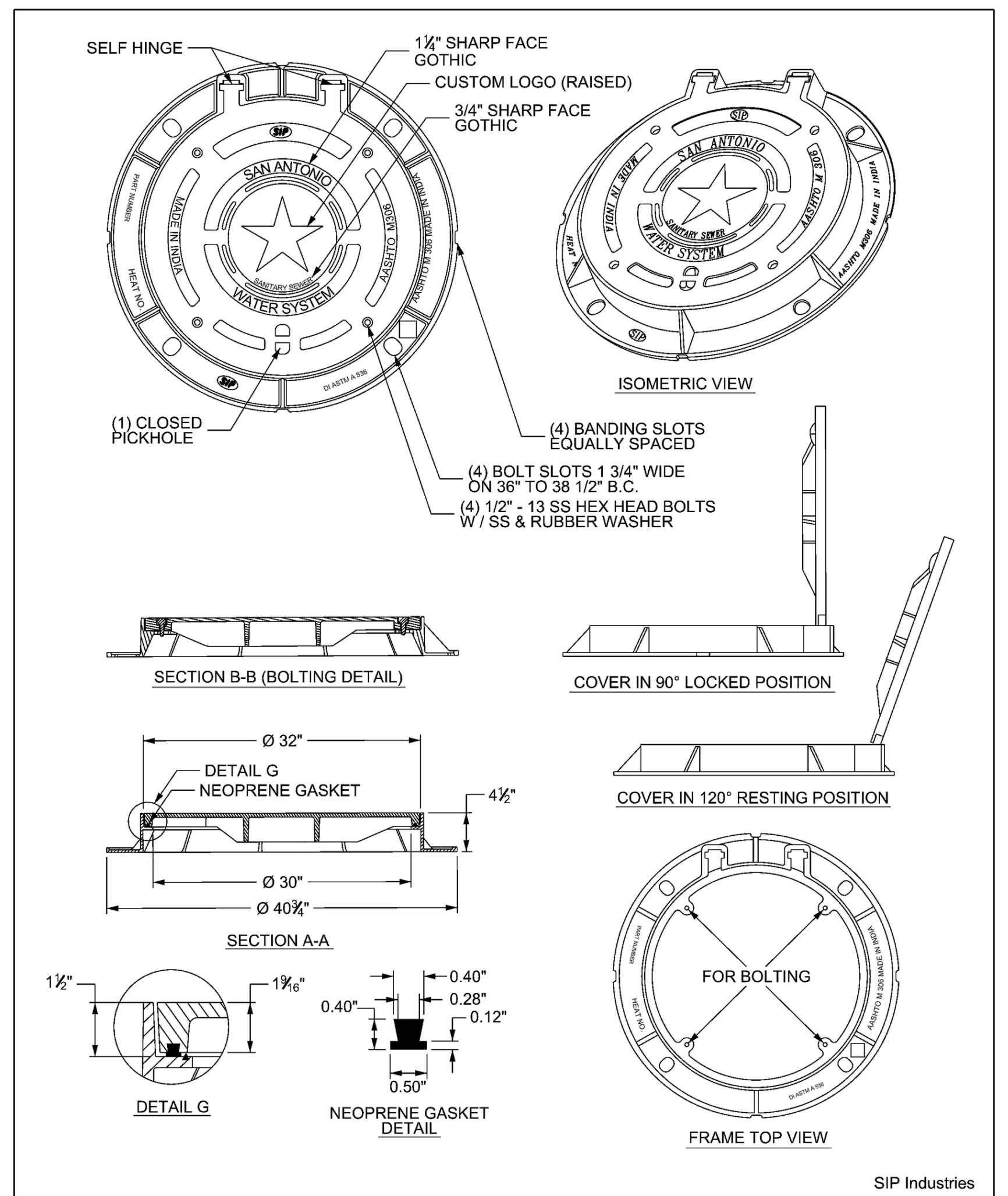


ROOSEVELT LANDING UNIT 2
SANITARY SEWER PLAN & PROFILE
LINE "Q"
STA. 1+00.00 TO STA. 10+64.05

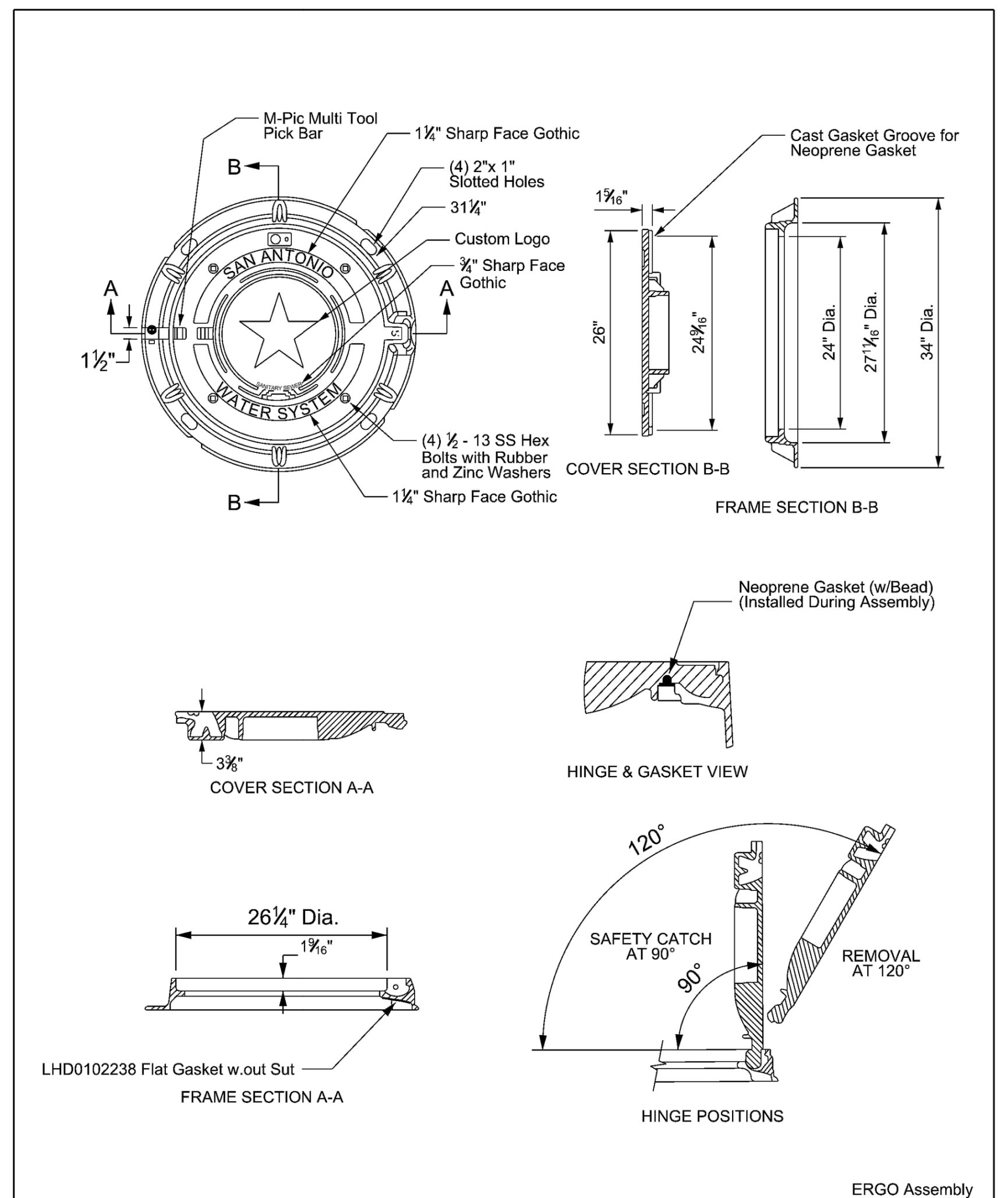
SHEET
C2.6

SUBMITTAL SET

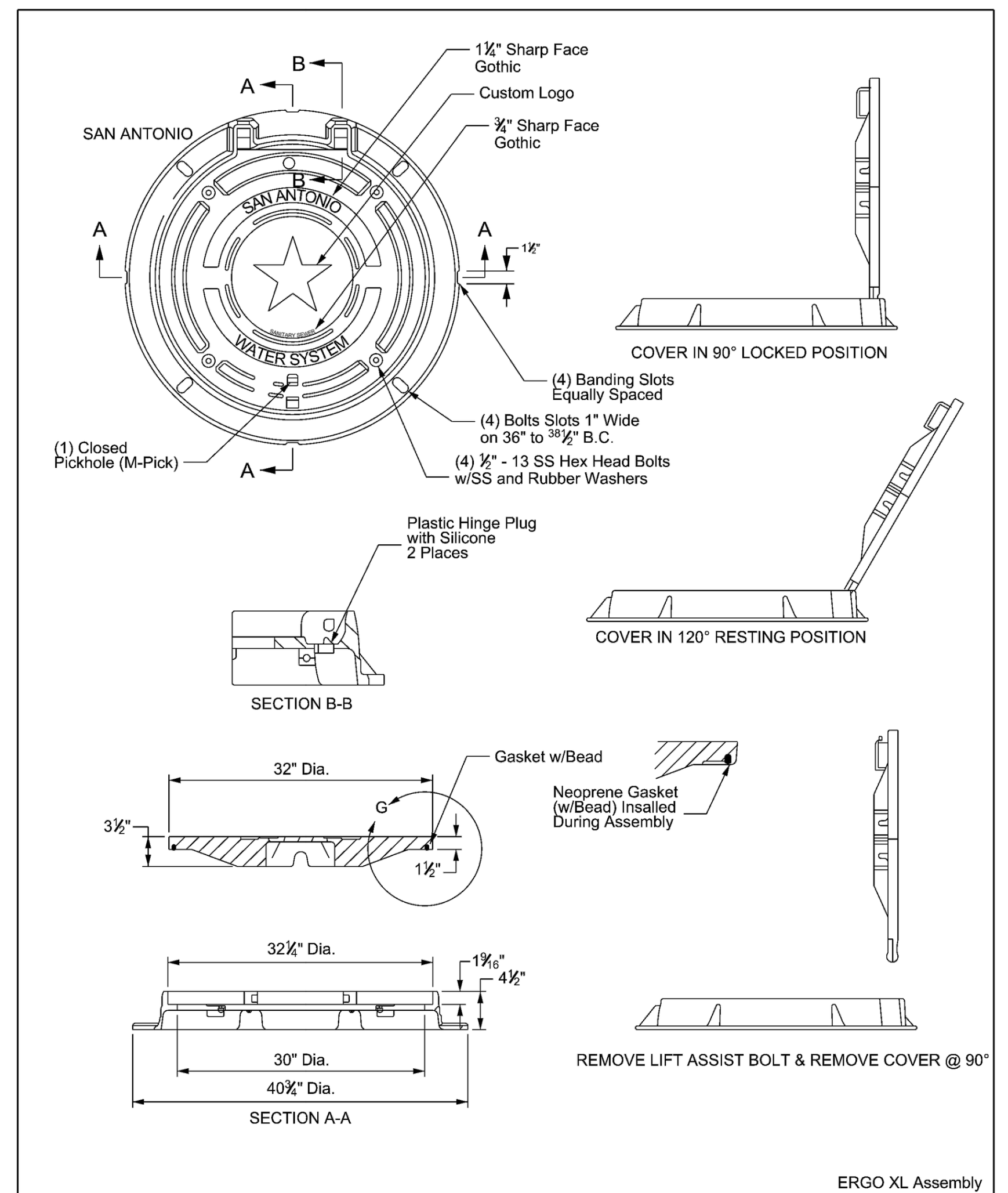
LAND-PLAT-22-11800353



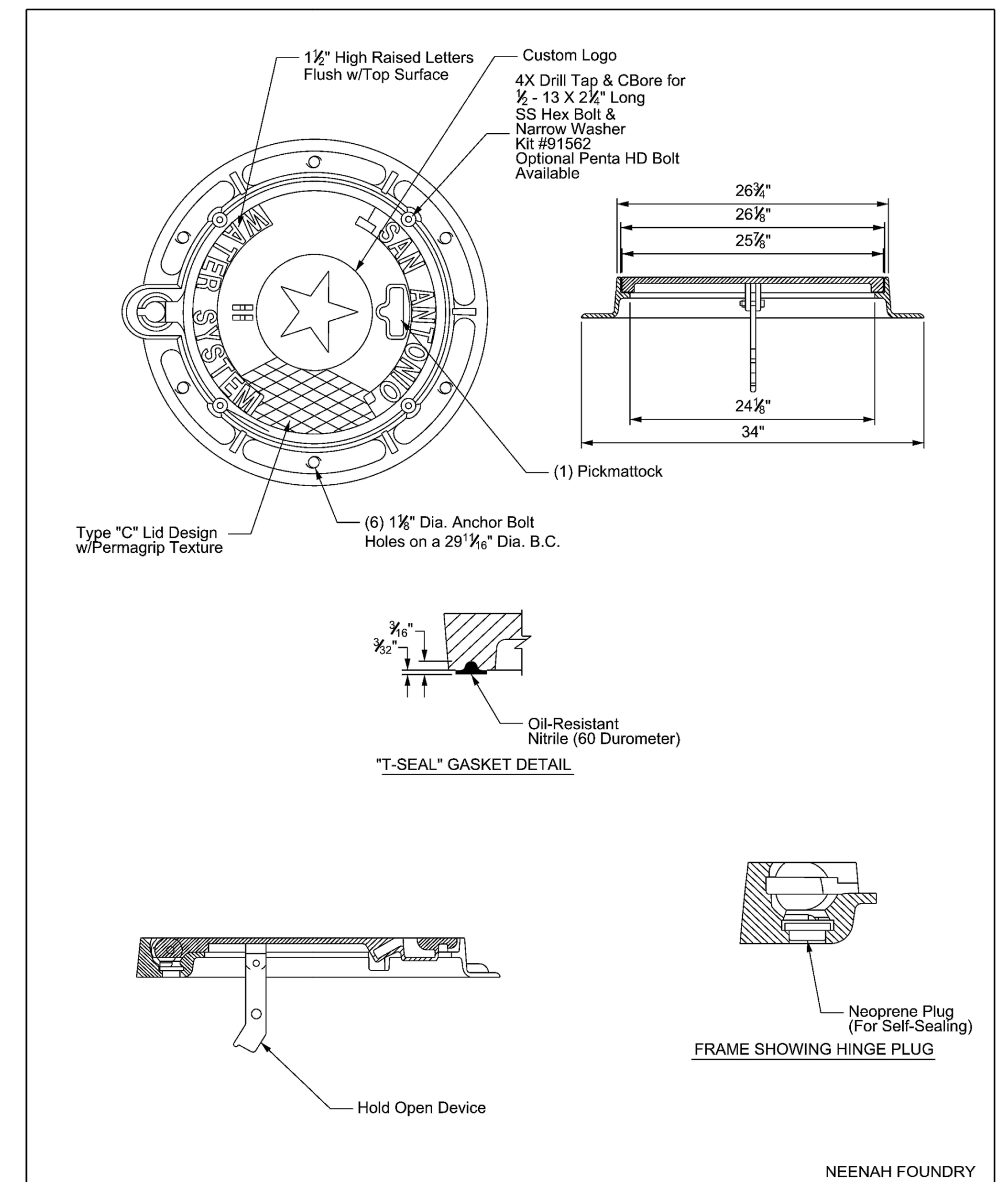
PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	30" MANHOLE RING AND COVER DETAIL	APPROVED	REVISED	
			AUG 2019	
		DD 852-07		SHEET 1 OF 5



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	MANHOLE RING AND COVER DETAIL	APPROVED	REVISED	
		MARCH 2008	AUG 2019	
		DD 852-07		SHEET 2 OF 5



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	MANHOLE RING AND COVER DETAIL	APPROVED	REVISED	
		MARCH 2008	AUG 2019	
		DD 852-07		SHEET 3 OF 5



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	MANHOLE RING AND COVER DETAIL	APPROVED	REVISED	
		MARCH 2008	AUG 2019	
		DD 852-07		SHEET 4 OF 5

TRENCH EXCAVATION SAFETY PROTECTION

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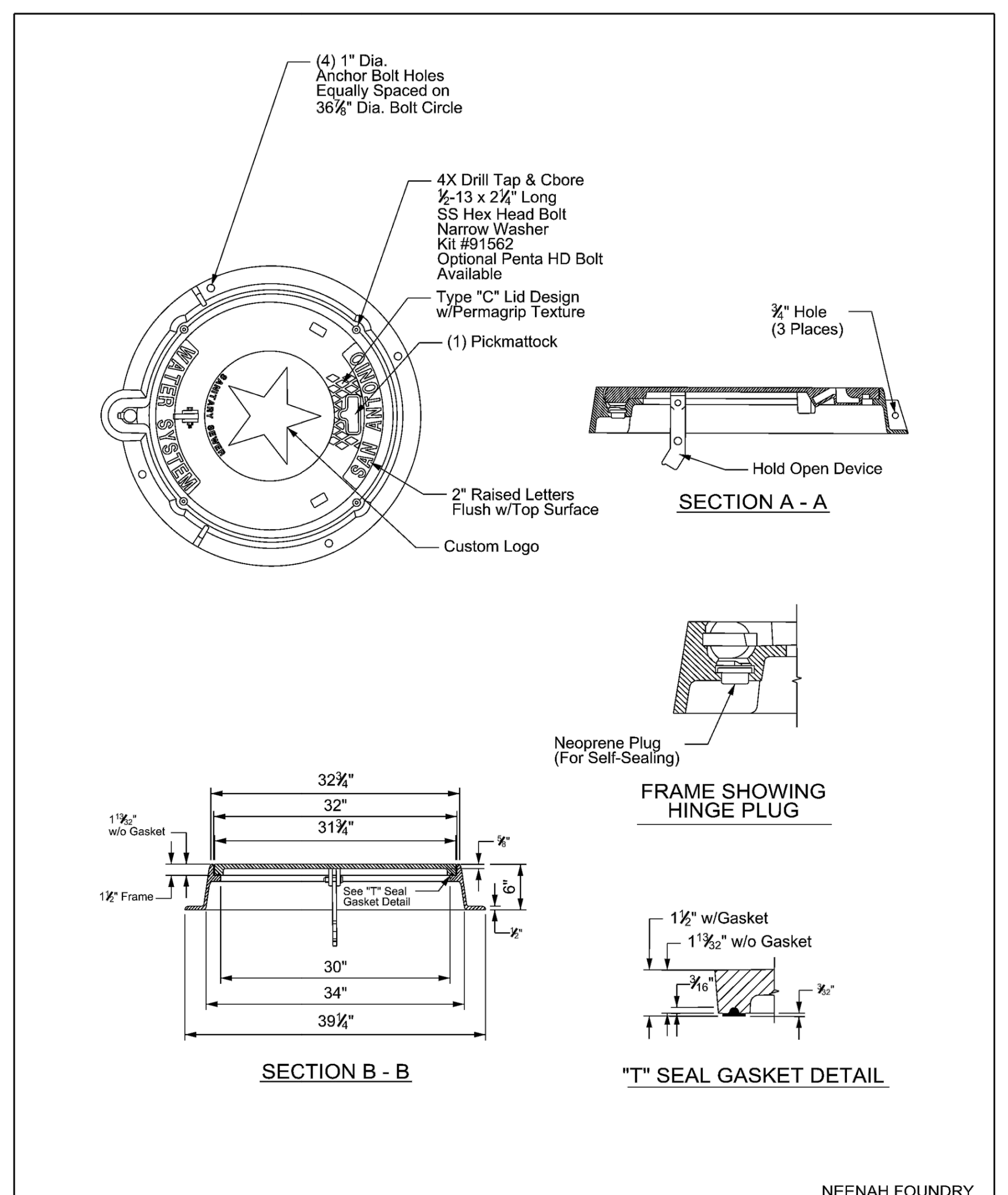
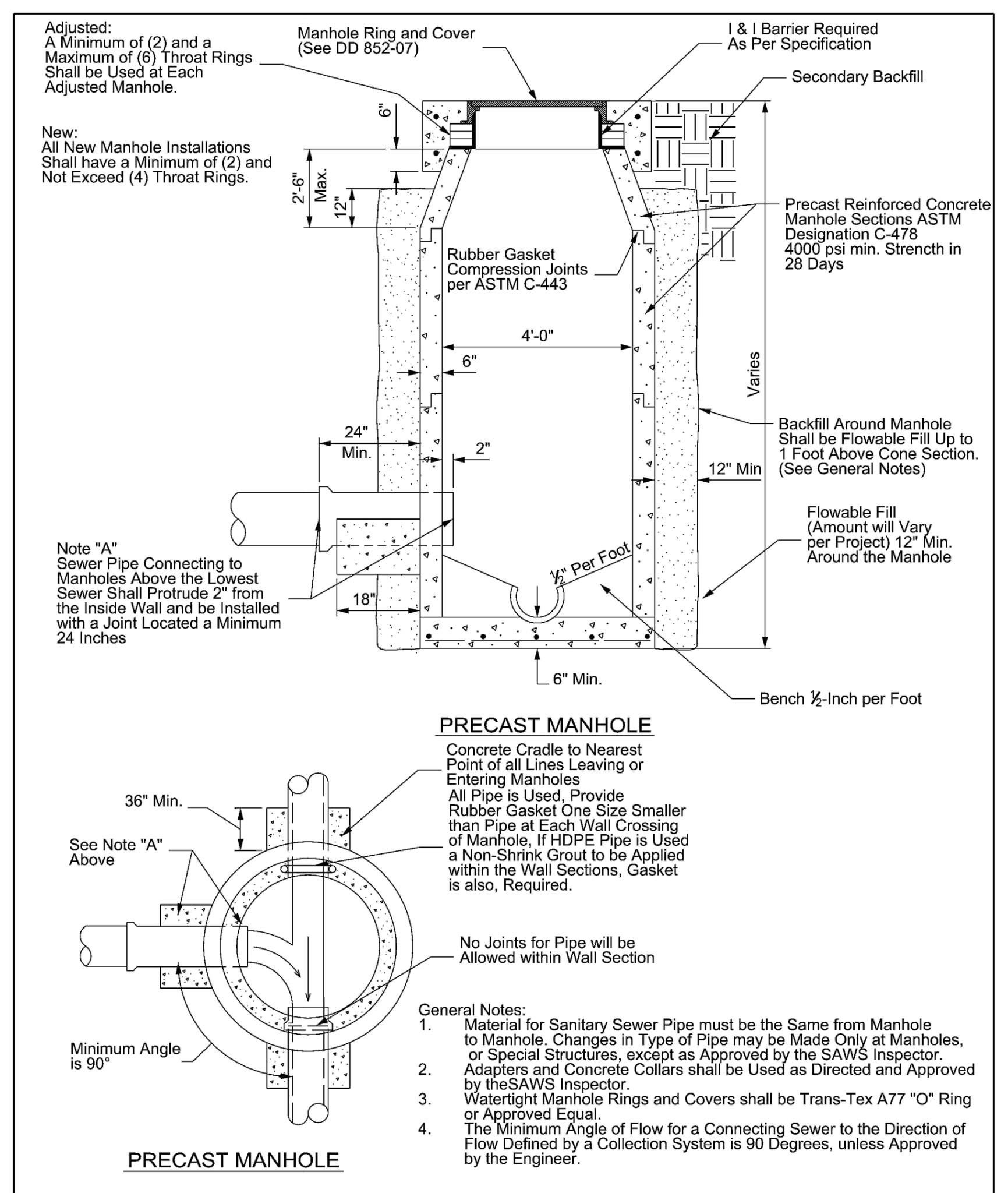
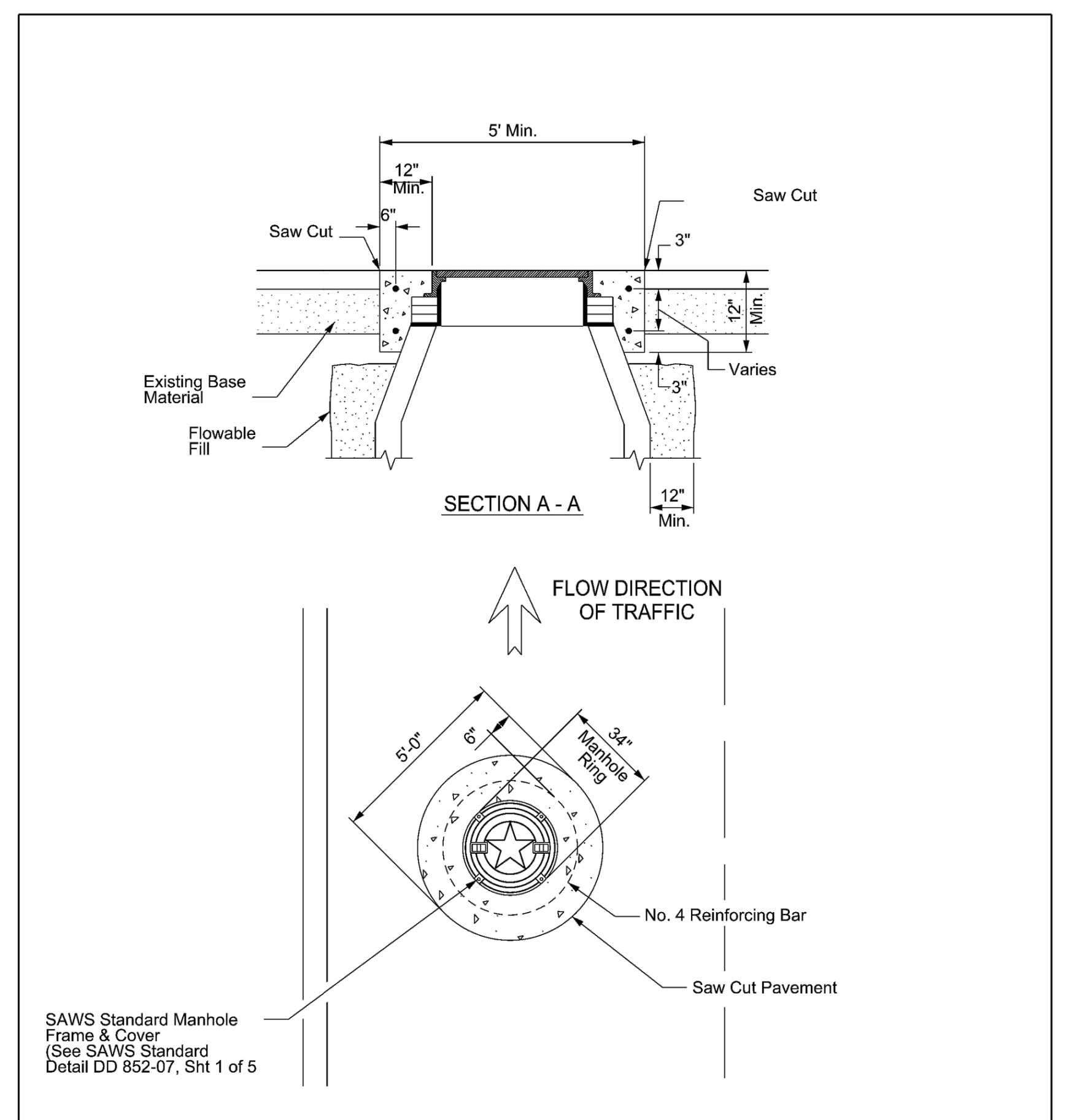


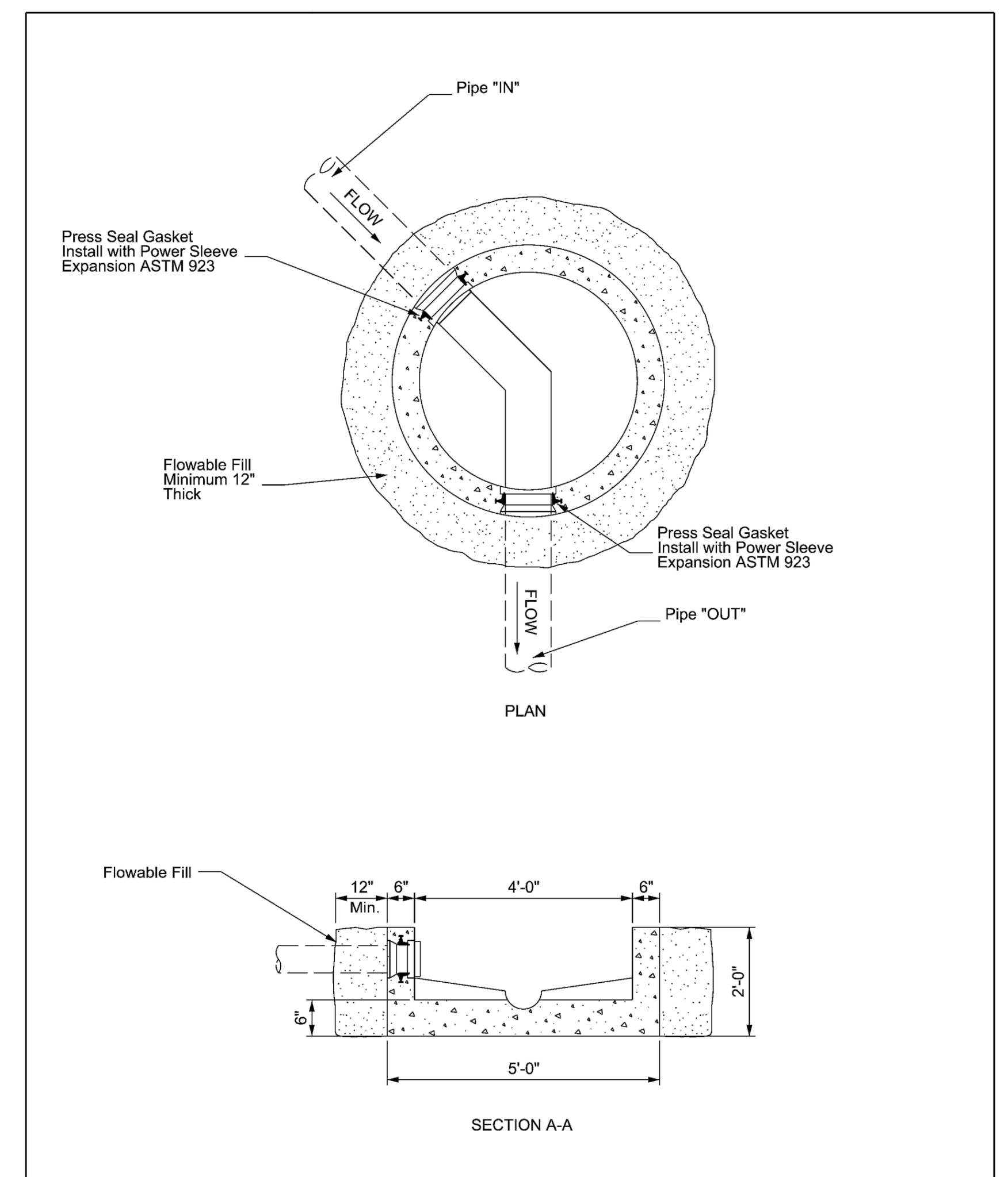
PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	MANHOLE RING AND COVER DETAIL	APPROVED	REVISED	
		MARCH 2008	AUG 2019	
		DD 852-07		SHEET 5 OF 5



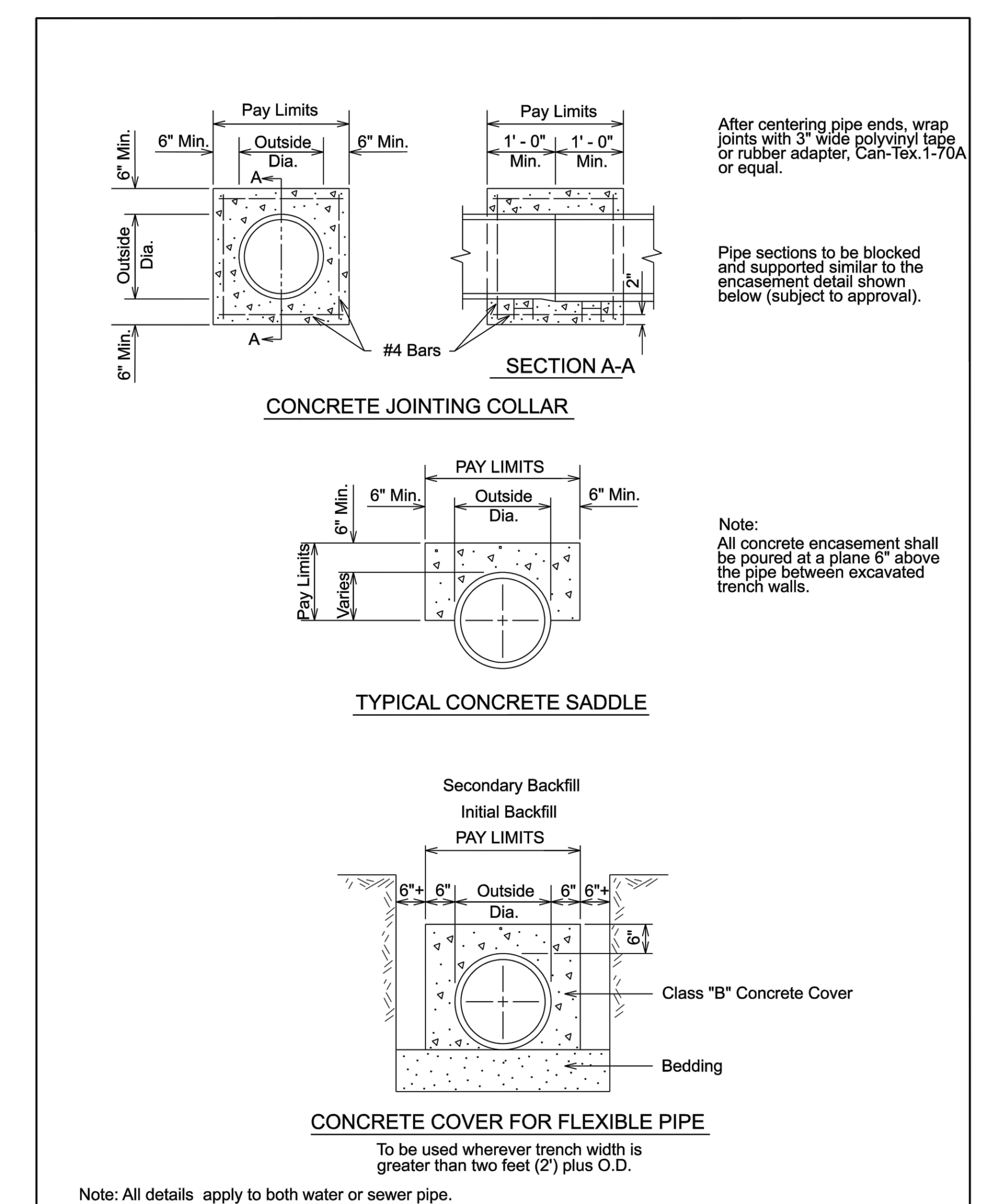
PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	STANDARD PRECAST MANHOLE	APPROVED	REVISED	
		MAY 2013	AUG 2019	
		DD-852-01		SHEET 1 OF 2



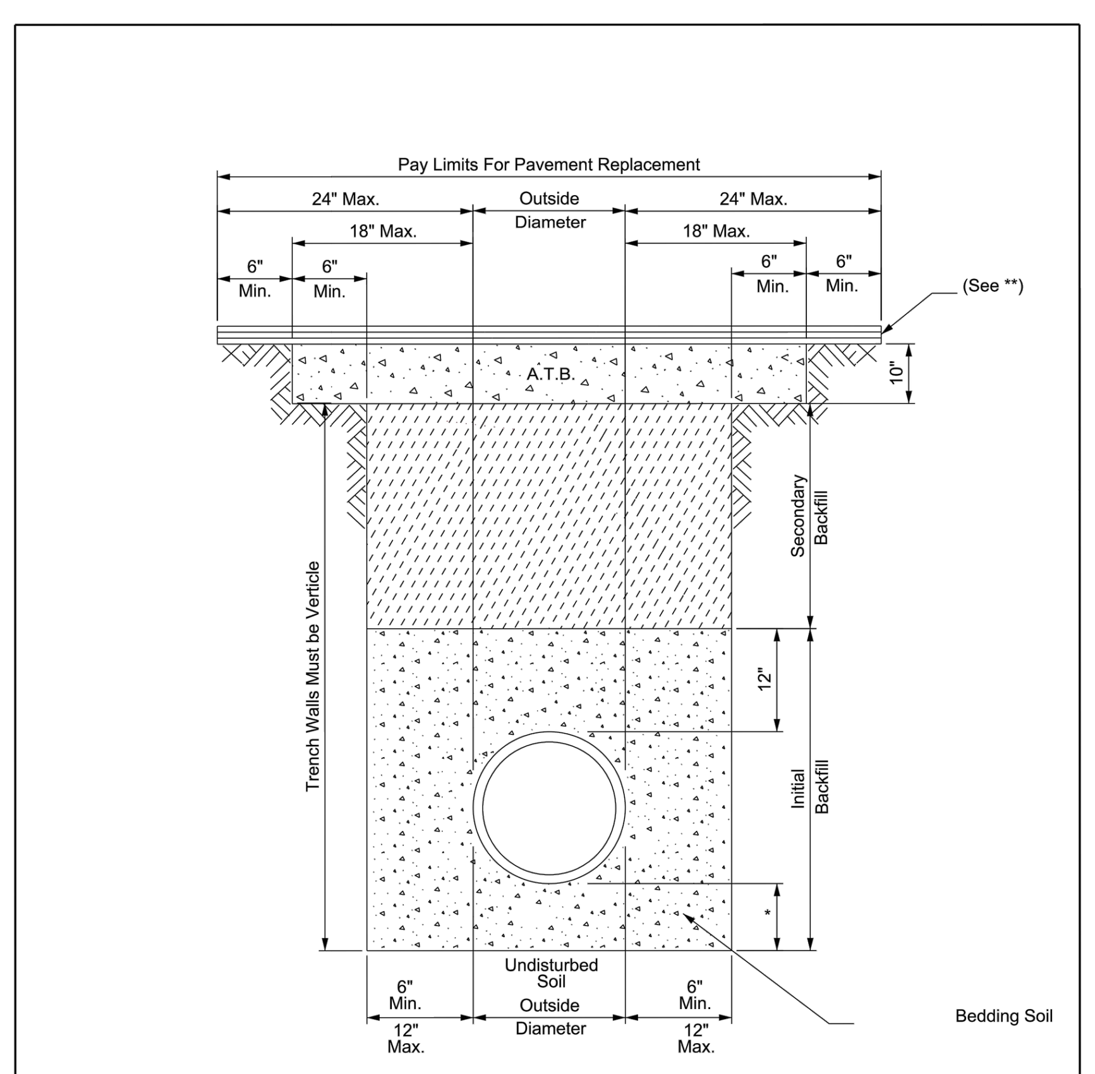
PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	MANHOLE RING ENCASEMENT DETAIL	APPROVED	REVISED	
		AUGUST 2009	AUG 2019	
		DD 852-03		SHEET 1 OF 1



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	PRECAST MANHOLE BASE 45° ANGLE	APPROVED	REVISED	
		MARCH 2008	AUG 2019	
		DD-852-06		SHEET 1 OF 1



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	TYPICAL CONCRETE DETAILS	APPROVED	REVISED	
		MARCH 2008	APRIL 2014	
		DD-858-02		SHEET 1 OF 1

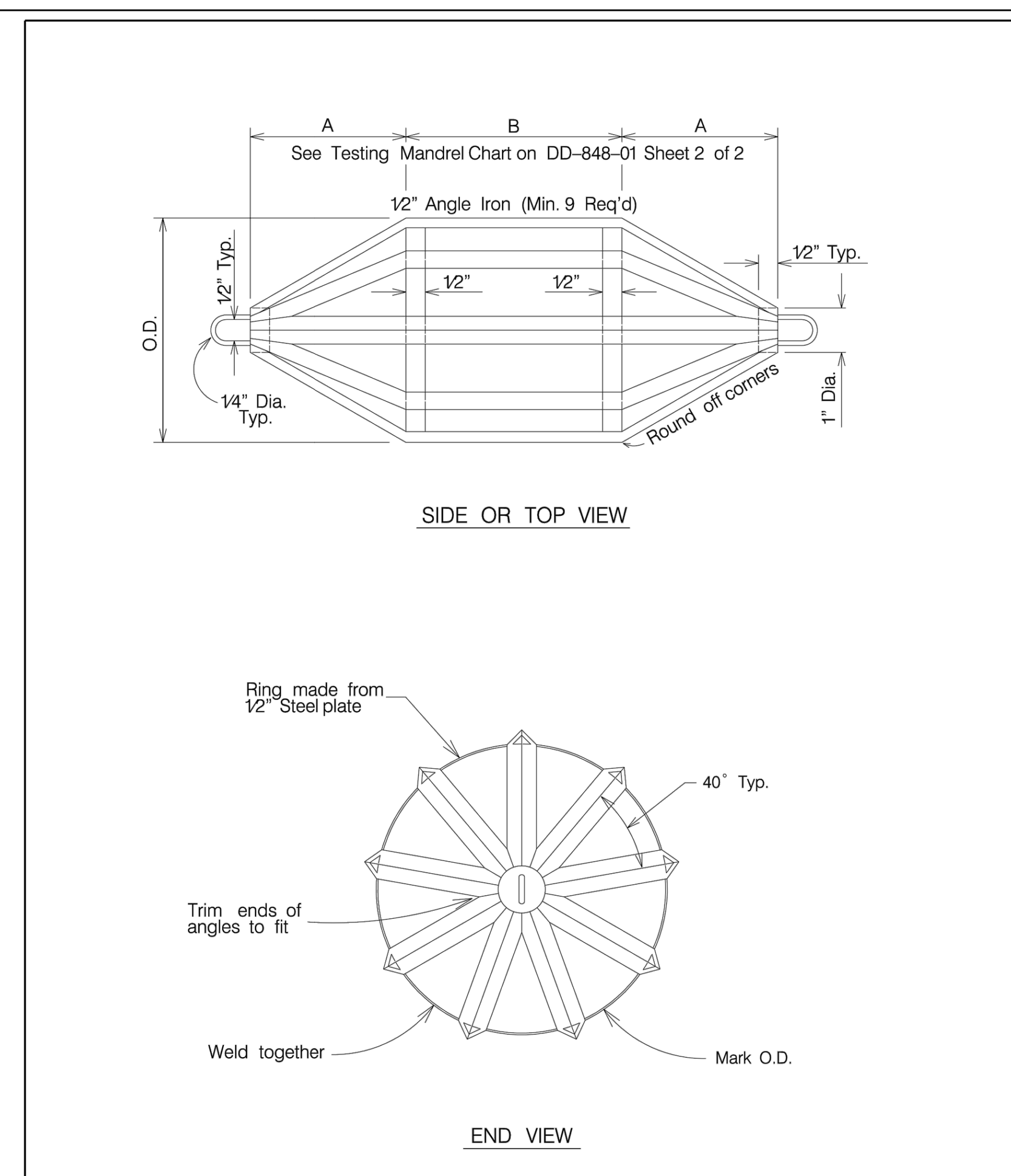


The Existing Materialat the Bearing Level shall be Removed and Replaced to a Minimum Depth of 6-Inches or ¼ of the Outside Diameter of the Pipe, whichever is Greater, with Bedding Material.

In Areas of over Excavation, Encasement shall extend from Trench Wall. Pay Limits shall not Exceed 12" Max. as shown on Detail. Additional Encasement shall be Incidental.

* Sewer Gravel 6" Min.or ¼ O.D. of the Pipe, whichever is Greater.
** Minimum 2" HMAC Type "D" for Trench Repair in Local / Residential Streets.
** Minimum 3" HMAC Type "C" for Trench Repair in Collector / Arterial Streets.

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	SANITARY SEWER PIPE LAID IN TRENCH	APPROVED	REVISED	
		MARCH 2008	DEC 2018	
		DD-804-01		SHEET 1 OF 1



Note:
All mandrels must be approved by SAWS Construction Inspections and stamped before use.

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	GO, NO GO DEFLECTION TESTING MANDREL	APPROVED	REVISED	
		March 2008		
		DD-848-01		SHEET 1 OF 2

			MANDREL O.D.	RING O.D.
SIZE	A	B*	PVC (SDR-26)	PVC (SDR-26)
6"	4.0"	4.5"	5.50	4.79
8"	5.5"	6"	7.37	6.66
10"	7.0"	7.5"	9.21	8.50
12"	8.0"	9"	10.96	10.25
15"	10.0"	11"	13.42	12.71
18"	12.0"	13.5"	——	——
21"	14.0"	16"	——	——
24"	16.0"	18"	——	——
27"	18.0"	20"	——	——

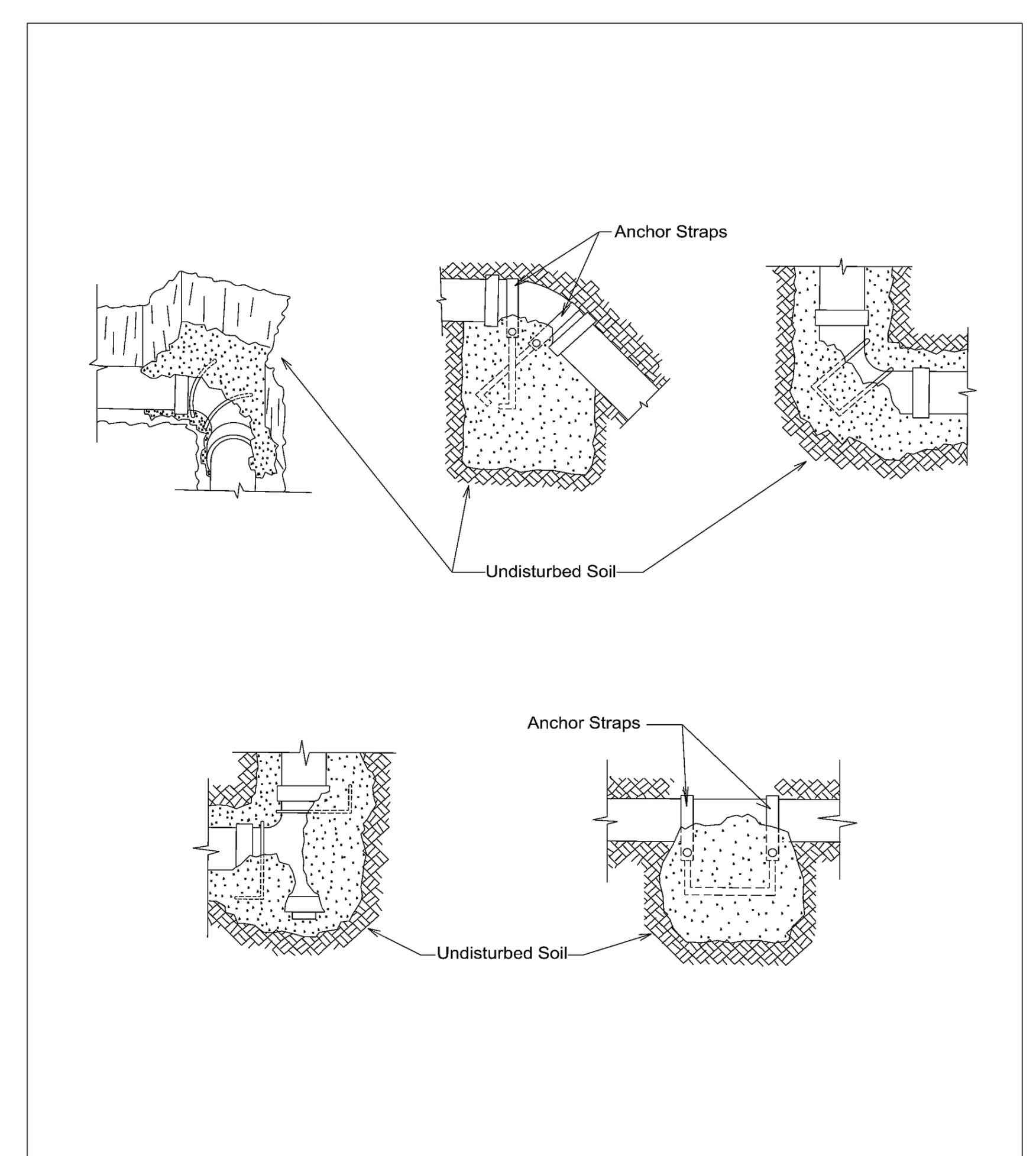
* Minimum Length

CHART

Notes:
PVC pipes and fittings 6" to 15" in diameter shall conform to ASTM D-3034-08.
PVC pipes and fittings 18" to 27" in diameter shall conform to ASTM F-679-08.

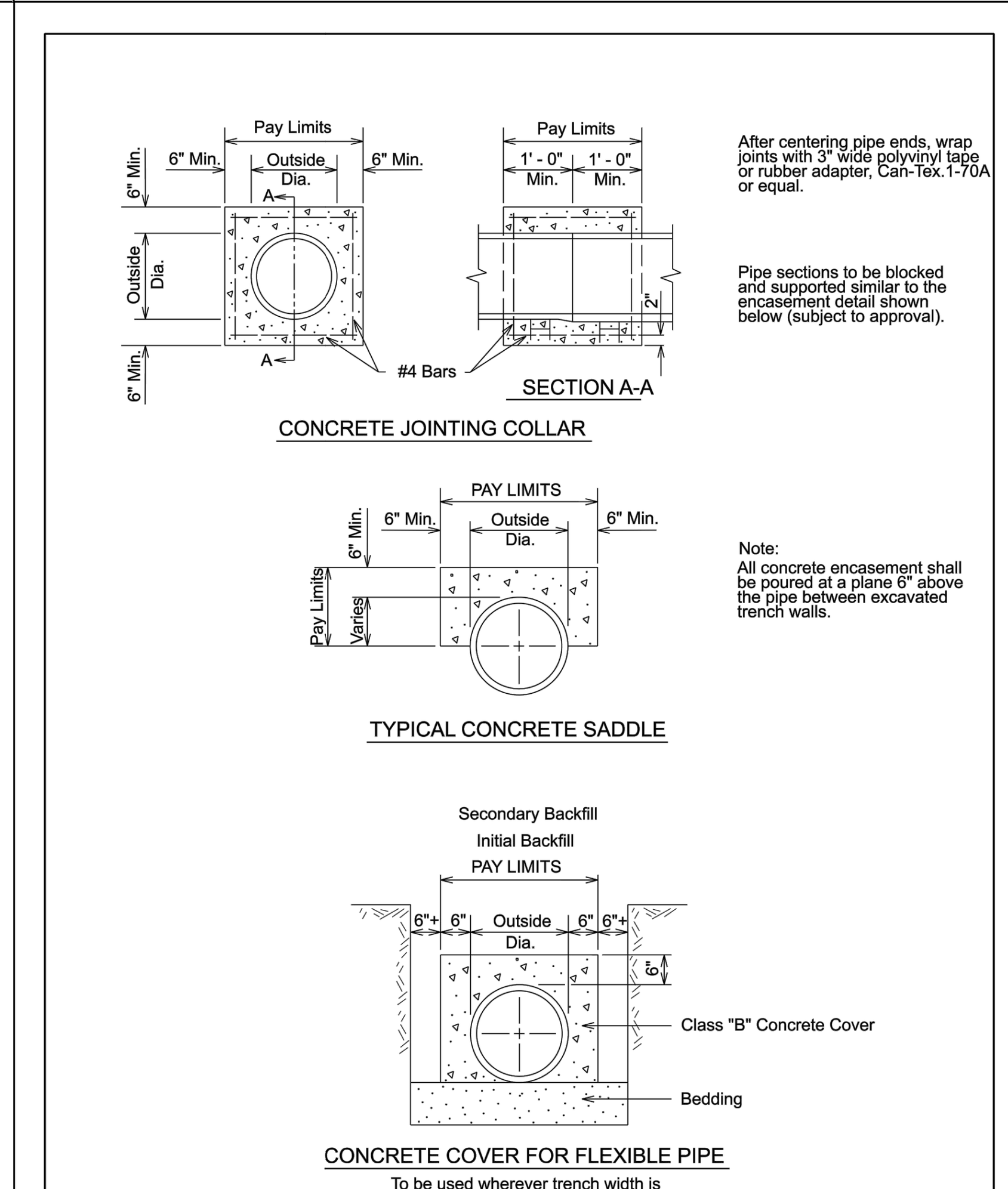
This information is provided as a reference. All deflection testing shall be done in accordance with TCEQ Chapter 217.

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	GO, NO GO DEFLECTION TESTING MANDREL CHART	APPROVED	REVISED	
		MARCH 2008	APRIL 2014	
		DD-848-01		SHEET 2 OF 2



Note:
All concrete used for thrust blocking shall have a minimum concrete strength of 3,000 psi

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	TYPICAL THRUST BLOCKS (SEWER ONLY)	APPROVED	REVISED	
		March 2008	AUG 2019	
		DD-839-03		SHEET 1 OF 1



PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	TYPICAL CONCRETE DETAILS	APPROVED	REVISED	
		MARCH 2008	APRIL 2014	
		DD-858-02		SHEET 1 OF 1

SUBMITTAL SET

REVISIONS: NO. | DATE | DESCRIPTION | BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

STATE OF TEXAS — PAUL LANDA, JR. — 100182 — LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2

SANITARY SEWER DETAILS

SHEET C2.7

LAND-PLAT-22-11800353

CONSTRUCTION PLANS FOR

ROOSEVELT LANDING, UNIT 2

WATER IMPROVEMENTS

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

OWNER/DEVELOPER
SAN ANTONIO, LD. LLC.
4058 NORTH COLLEGE STE. 300, BOX 9
FAYETTEVILLE, AR 72703
(479) 455-9090

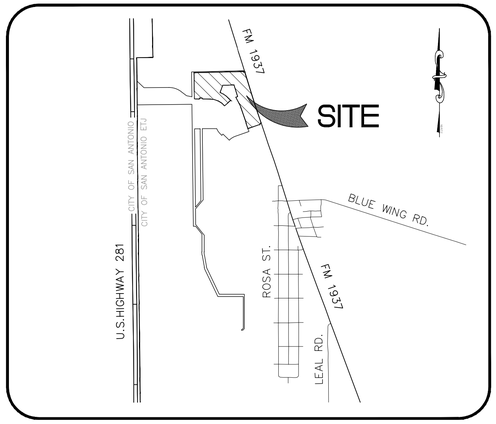
SAWS CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT
JANUARY 2022

General Section

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
   A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
   B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage".
   C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
   D. Current City of San Antonio "Standard Specifications for Public Works Construction".
   E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).
2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.
3. The Contractor shall obtain the SAWS Standard Details from the SAWS website, http://www.saws.org/business_center/specs. Unless otherwise noted within the design plans.
4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.
5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.
6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:
   - SAWS Utility Locates: http://www.saws.org/Service/Locates
   - COSA Drainage (210) 207-0724 or (210) 207-6026
   - COSA Traffic Signal Operations (210) 206-8480
   - COSA Traffic Signal Damages (210) 207-3951
   - Texas State Wide One Call Locator 1-800-545-6005 or 811
7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.
8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.
9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.
10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.
11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to constworkreq@saws.org.
    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.

Water Section

1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the SAWS Construction Inspection Division at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.
   - For water mains 12" or higher: SAWS Emergency Operations Center (210) 233-2014
2. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos- containing material (ACM), may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe".
3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a cap/plug. (NSPI)
4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves, and bends, in accordance with the Standard Drawings DD-839 Series and Item No. 839, in the SAWS Standard Specifications for Construction.
5. All valves shall read "open right".
6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of 565 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below 565 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if
   *PRV is/are required for such lot(s), only single service connections shall be allowed.
   *Note: A pressure regulator is also known as a pressure reducing valve (PRV).
7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry HTH when in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.
8. Backflow Prevention Devices:
   - All irrigation services within residential areas are required to have backflow prevention devices.
   - All commercial backflow prevention devices must be approved by SAWS prior to installation.
9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use.
10. Division Valves: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by SAWS Distribution and Collection staff and only with prior written approval of the SAWS Director of Production and Operations and proper coordination with all SAWS departments. Contractor shall provide written notification to the inspector a minimum of two weeks in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the SAWS Distribution and Collection staff. The Division Valve can only be operated by SAWS Distribution and Collection staff member not the inspector or the contractor. Operation of a Division Valve without the express prior written approval of the SAWS Distribution and Collection staff will constitute a material breach of any written SAWS contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by the contractor but will be installed by SAWS Distribution and Collection staff.



VICINITY MAP
N.T.S.

NOTE TO CONTRACTOR:

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

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

TRAFFIC CONTROL NOTE:

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

MISCELLANEOUS GENERAL NOTES

1. MACHINE CHLORINATION BY THE SAN ANTONIO WATER SYSTEM FOR NEW WATER MAINS GREATER THAN 800 FEET. CONTRACTOR SHALL CHLORINATE NEW MAINS WITH HTH FOR NEW WATER MAINS 750 FEET AND LESS.
2. JUMPER CONNECTIONS TO EXISTING WATER SERVICE TO BE PROVIDED AS REQUIRED OR DIRECTED BY THE SAWS INSPECTOR.
3. ALL MAINS ARE ON-SITE.
4. FITTINGS WEIGHT IS BASED ON M.J. DUCTILE IRON FITTINGS (COMPACT).
5. CONTRACTOR TO OBTAIN STREET CUT PERMITS AS NECESSARY FOR WATER MAIN INSTALLATION. REPLACEMENT OF CURB, SIDEWALKS, BASE AND PAVEMENT WILL BE SUBSIDIARY TO THE ITEMS THAT THE STREET CUT WAS NEEDED FOR.

*6. MINIMUM COVER OVER WATER MAIN BASED ON FINISHED GROUND.

WATER LINE DIA.	MIN. DEPTH
8"-12"	4'
≥16"	5'

SUBMITTAL DATE:

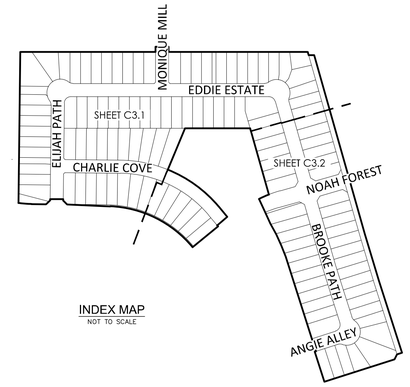
8/23/2022

LEGAL DESCRIPTION:

BEING A 19.541 ACRE TRACT OUT OF A 52.24 ACRE TRACT OF LAND SITUATED IN THE JOSE ANTONIO DE LA GARZA SURVEY ABSTRACT NO. 3, COUNTY BLOCK 4006, BEXAR COUNTY, TEXAS AS CONVEYED TO SAN ANTONIO LD, LLC, BY WARRANTY DEED AS RECORDED IN DOCUMENT NUMBER 20220056276 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

P.A.L. 2/13/24
STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

MTR
• Engineers
• Surveyors
• Planners
Moy Tarin Ramirez Engineers, LLC
FIRM TBPELS ENG F-5297 SVY F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085



INDEX MAP
NOT TO SCALE

TABLE OF CONTENTS

ESTIMATED WATER QUANTITIES

ITEM	DESCRIPTION	UNIT	EST/QTY
1	8" WATER MAIN TIE-IN	L.S.	4
2	TRENCH EXCAVATION PROTECTION	L.F.	3,496
3	8" PIPE, C900 DR 18 PVC CLASS 235 (Includes Joint Restraints)	L.F.	3,341
4	12" PIPE, C900 DR 18 PVC CLASS 235 (Includes Joint Restraints)	L.F.	155
5	8" GATE VALVE, M.J. (COMPLETE WITH RESTRAINTS) WITH VALVE BOX	EA.	4
6	12" GATE VALVE, M.J. (COMPLETE WITH RESTRAINTS) WITH VALVE BOX	EA.	5
7	STANDARD FIRE HYDRANT (COMPLETE WITH TEE, VALVE, BENDS AND RESTRAINTS)	EA.	4
8	2" TEMPORARY BLOW-OFF	EA.	5
9	3/4" SINGLE SERVICE with 5/8" METER : SHORT	EA.	60
10	3/4" SINGLE SERVICE with 5/8" METER : LONG	EA.	61
11	IRRIGATION SERVICE with 1" METER : SHORT	EA.	1
12	12"x12" CUT-IN TEE	EA.	1
13	D.I. FITTINGS (RESTRAINED)	TON	1.80
14	HYDROSTATIC TESTING	EA.	1
15	METER BOXES	EA.	122

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

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

PRESSURE ZONE 750

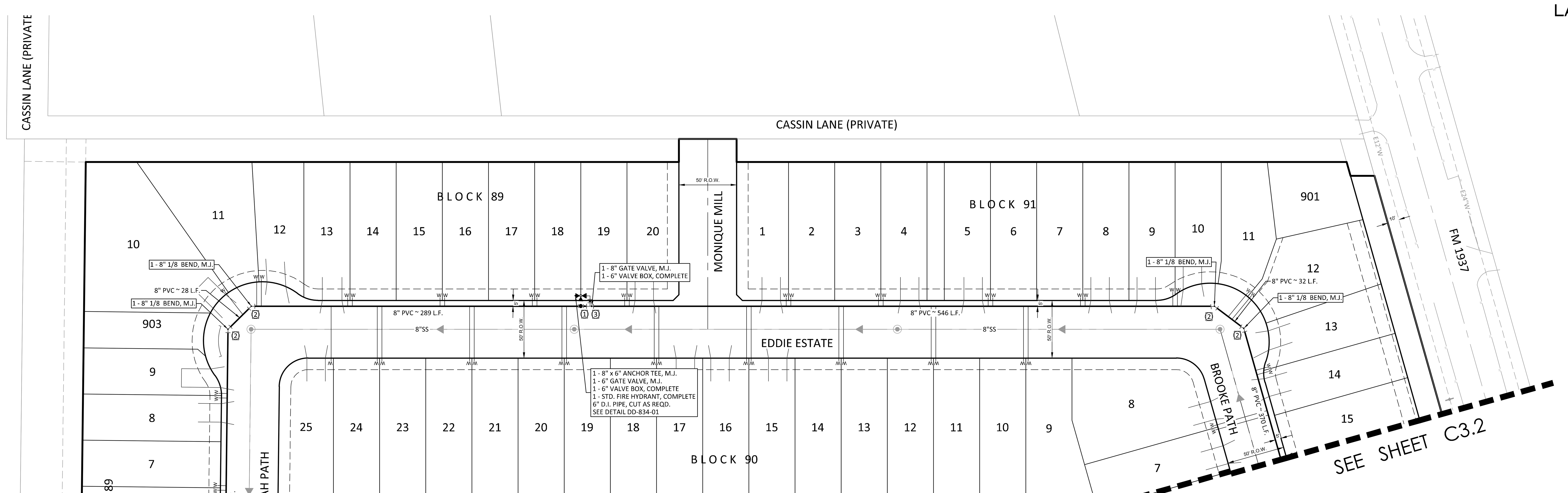
Developer's Name SAN ANTONIO, LD. LLC.
Developer's Address 4058 NORTH COLLEGE STE. 300, BOX 9
City FAYETTEVILLE State AR Zip 72703
Phone # (479) 455-9090 Fax #
SAWS Block Map # 170-520 Total EDU's 123 Total Acreage 19.458
Total Linear Footage of Pipe 8" ~ 3341 L.F. / 12" ~ 155 L.F. Plat No. 22-11800353
Number of Lots 121 SAWS Job No. 22-1166

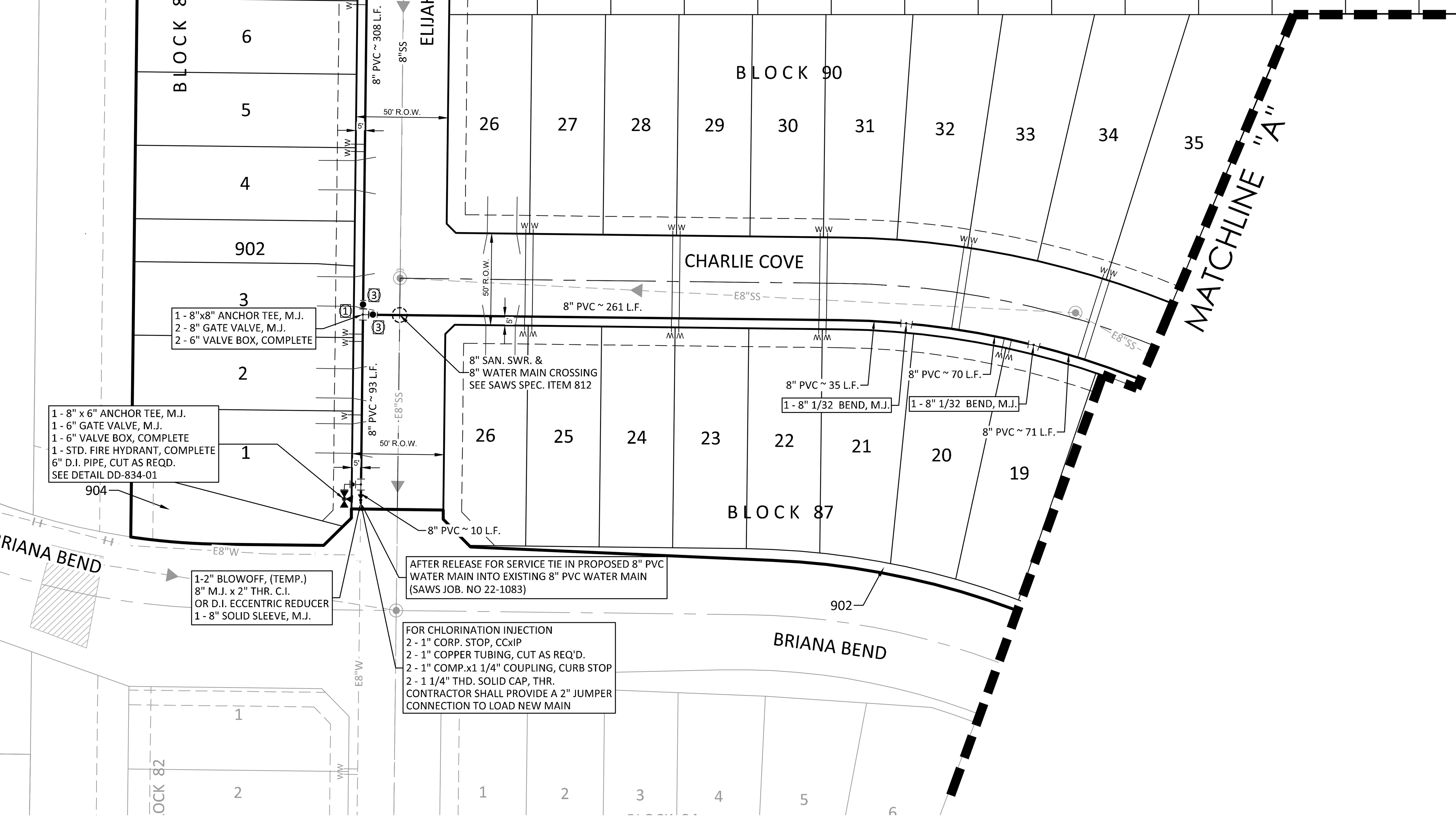
BEXAR COUNTY TEXAS

SUBMITTAL SET C3.0

R:\Nicholas Tract\Unit 2\Drawings\22090_C3.0-Water Cover.dwg
Plot Date: March 2, 2023 User ID: Maricella Pastrano

LAND-PLAT-22-11800353





LEGEND

EXISTING WATER MAIN	E8"W
PROPOSED WATER MAIN	8" PVC
EXISTING FIRE HYDRANT	
PROPOSED FIRE HYDRANT	
EXISTING GATE VALVE	
PROPOSED GATE VALVE	
3/4" SINGLE SERVICE	W
ELEC, GAS, TELE, CABLE TV ESM'T.	E.G.T.TV.E.
EXISTING IRRIGATION CONTROL VALVE	
EXISTING WATER METER	
DEED & PLAT RECORDS OF BEXAR COUNTY, TEXAS	D.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.

TRENCH EXCAVATION SAFETY PROTECTION

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

CAUTION!

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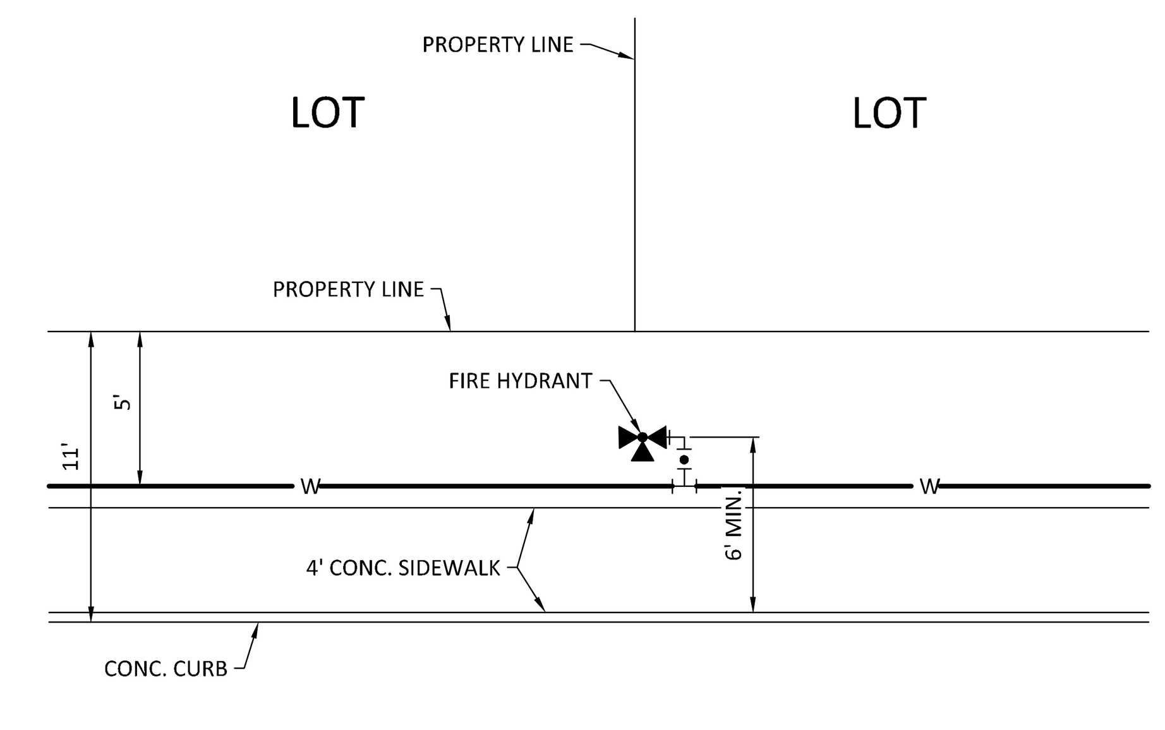
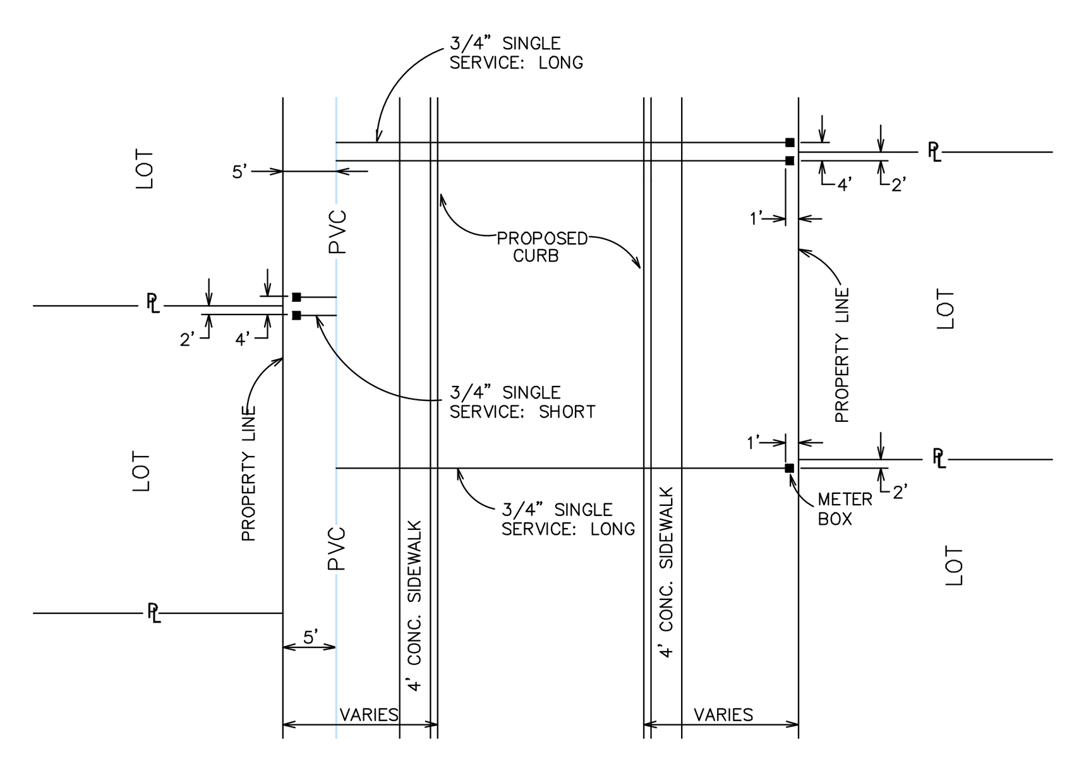
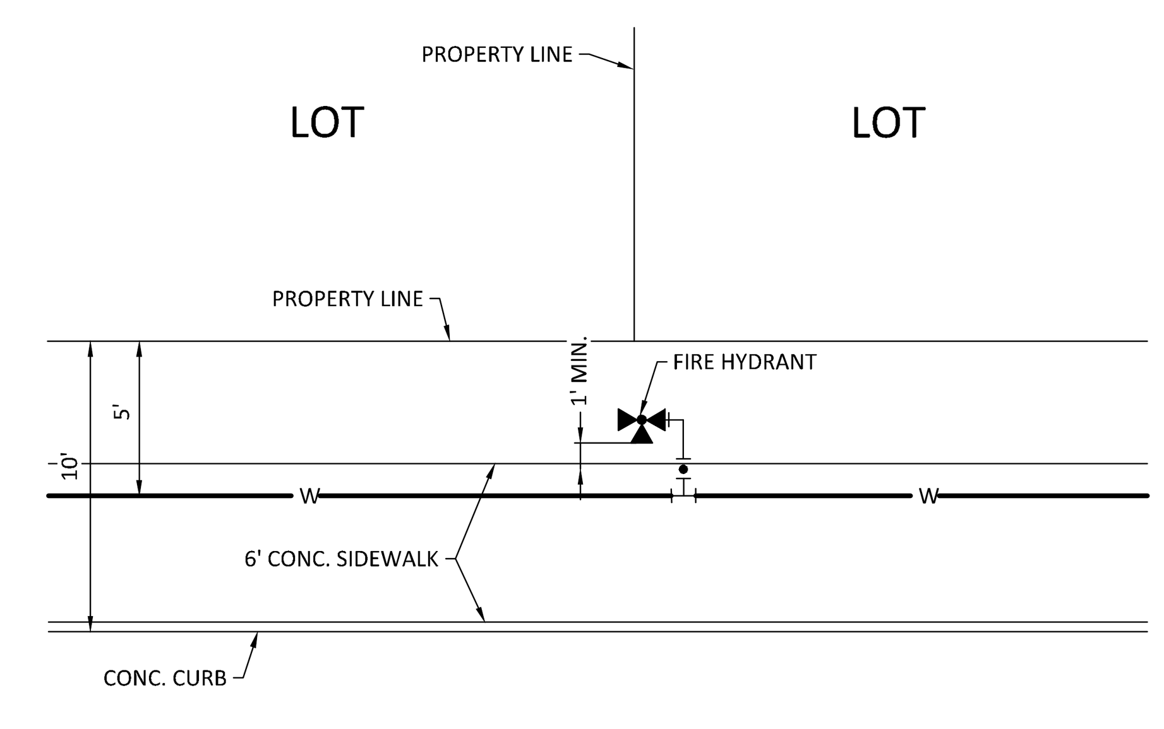


TYPICAL FIRE HYDRANT DETAIL FOR LOCAL A
N.T.S.



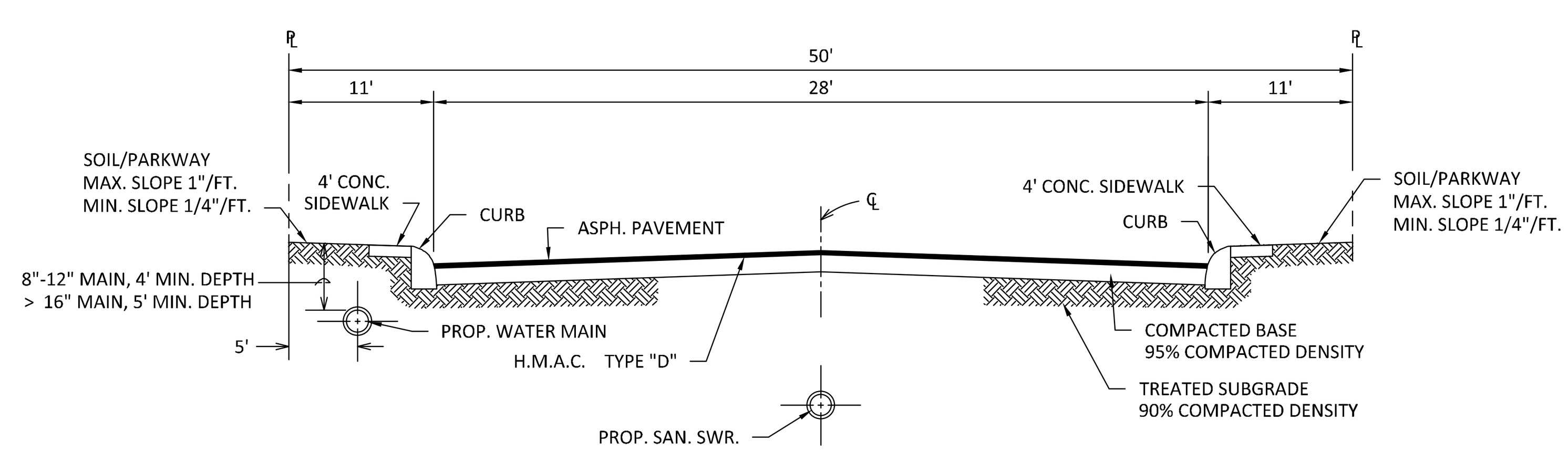
TYPICAL METER BOX DETAIL
N.T.S.



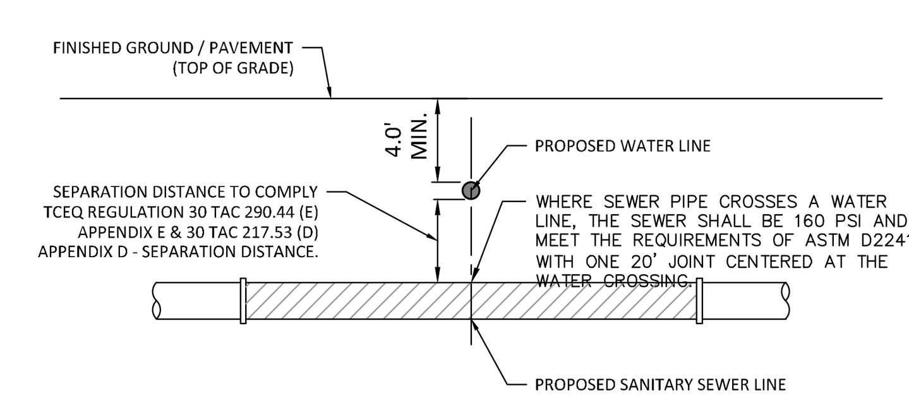
TYPICAL FIRE HYDRANT DETAIL FOR LOCAL B
N.T.S.

RESTRAINT JOINTS

1. ALL TEES RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-04
2. ALL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-08
3. ALL VALVES/DEAD ENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD839-05
4. ALL VERTICAL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-06



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



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

PRESSURE ZONE 750

Developer's Name	SAN ANTONIO, LD. LLC.
Developer's Address	4058 NORTH COLLEGE STE. 300, BOX 9
City	FAYETTEVILLE
State	AR
Zip	72703
Phone #	(479) 455-9090
Fax #	479-455-2041
SAWS Block Map #	170-520
Total EDU's	123
Total Acreage	19.458
Total Linear Footage of Pipe	8" ~ 3341 L.F. / 12" ~ 155 L.F.
Plat No.	22-11800353
Number of Lots	121
SAWS Job No.	22-1166

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

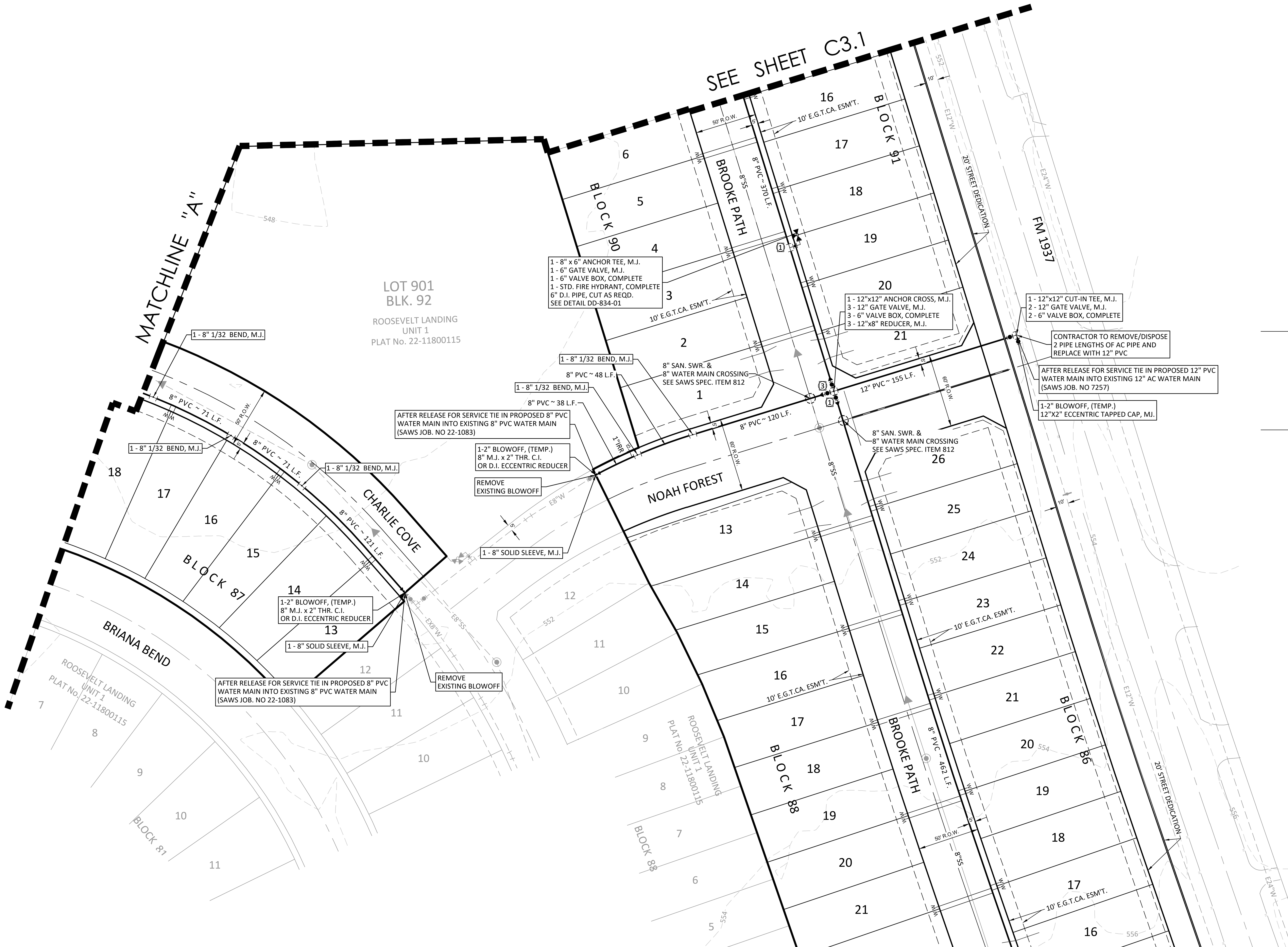
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100, SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

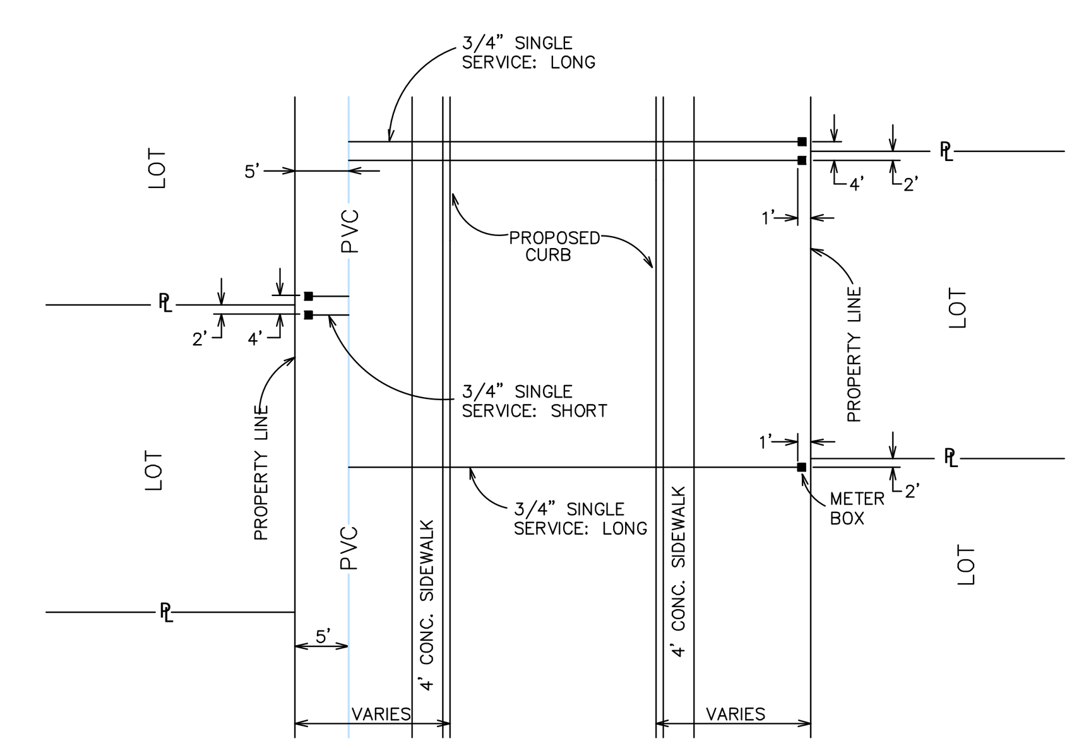
STATE OF TEXAS — PAUL LANDA, JR. — 100182 — LICENSED PROFESSIONAL ENGINEER
2/13/24

ROOSEVELT LANDING, UNIT 2

WATER OVERALL DISTRIBUTION PLAN

SHEET
C3.1





TYPICAL METER BOX DETAIL
N.T.S.

LEGEND

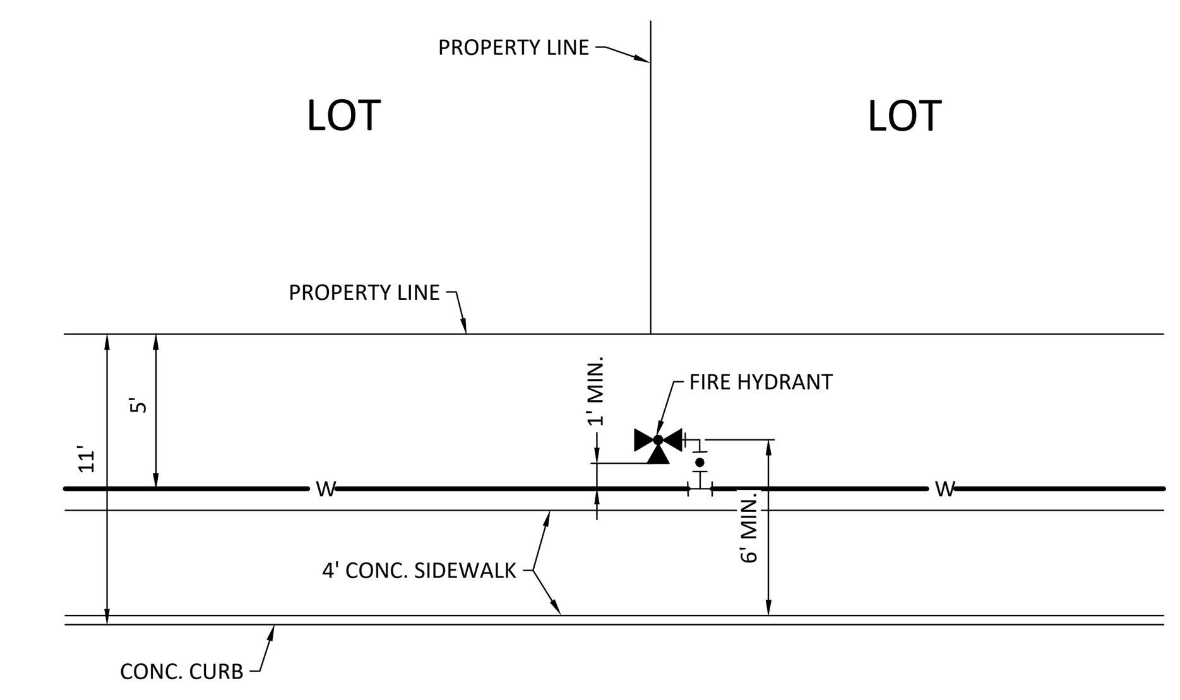
EXISTING WATER MAIN	E8"W
PROPOSED WATER MAIN	8" PVC
EXISTING FIRE HYDRANT	
PROPOSED FIRE HYDRANT	
EXISTING GATE VALVE	
PROPOSED GATE VALVE	
3/4" SINGLE SERVICE	
ELEC, GAS, TELE, CABLE TV ESM'T.	E.G.T.TV.E.
EXISTING IRRIGATION CONTROL VALVE	
EXISTING WATER METER	
DEED & PLAT RECORDS OF BEXAR COUNTY, TEXAS	D.P.R.B.C.T.
OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS	O.P.R.M.C.T.

CAUTION!

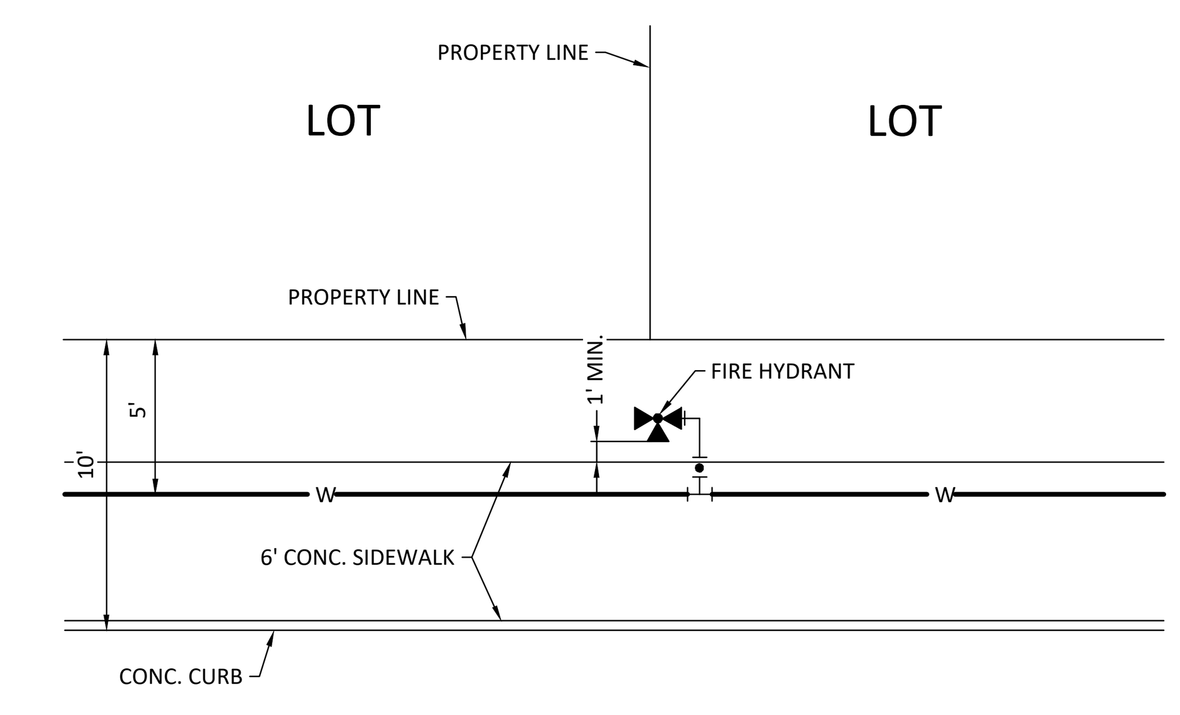
THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT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

TRENCH EXCAVATION SAFETY PROTECTION

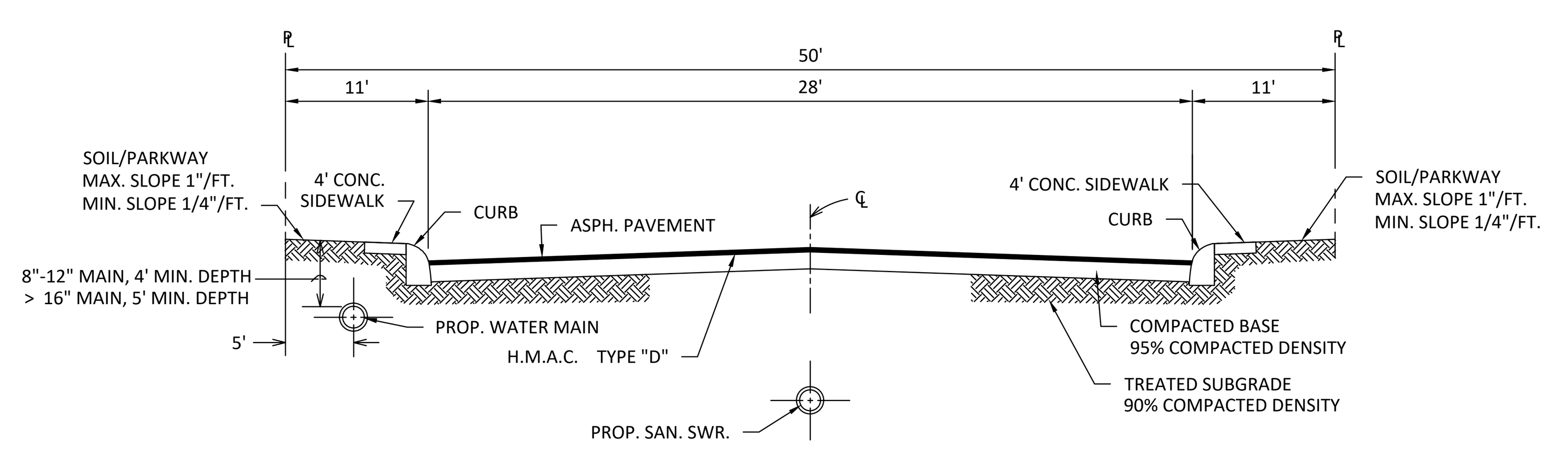
Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's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



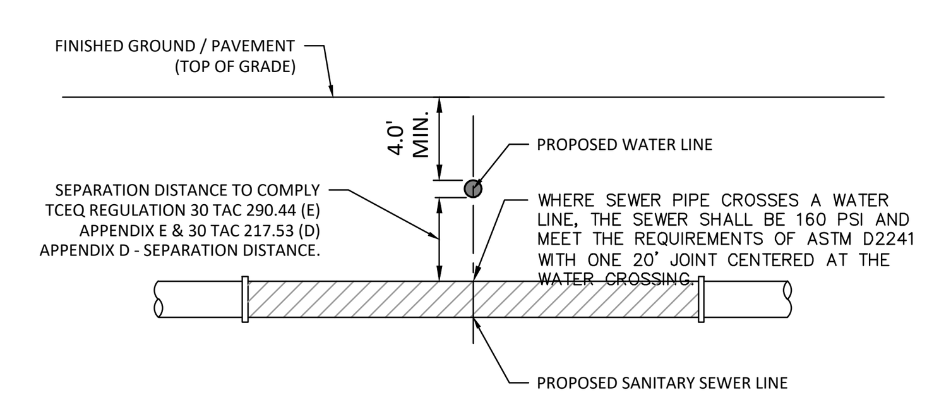
TYPICAL FIRE HYDRANT DETAIL FOR LOCAL A
N.T.S.



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



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



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

RESTRAINT JOINTS

1. ALL TEES RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-04
2. ALL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-08
3. ALL VALVES/DEAD ENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD839-05
4. ALL VERTICAL BENDS RESTRAINT JOINT AS REQUIRED PER SAWS DD-839-06

PRESSURE ZONE 750

Developer's Name SAN ANTONIO, LD. LLC.
Developer's Address 4058 NORTH COLLEGE STE. 300, BOX 9
City FAYETTEVILLE State AR Zip 72703
Phone # 479-455-9090 Fax # 479-455-2041
SAWS Block Map # 170-520 Total EDU's 123 Total Acreage 19.458
Total Linear Footage of Pipe 8" ~ 3341 L.F. / 12" ~ 155 L.F. Plat No. 22-11800353
Number of Lots 121 SAWS Job No. 22-1166

SUBMITTAL SET

Plot Date: March 2, 2023 User ID: Maricella Pastrano
R:\Nicholas Tract\Unit 2\Drawings\22090_C3.1-Water Overall.dwg

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
• Engineers • Surveyors • Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED
PROFESSIONAL ENGINEER

ROOSEVELT LANDING, UNIT 2

WATER OVERALL DISTRIBUTION PLAN

SHEET
C3.2

LAND-PLAT-22-11800353

CONSTRUCTION PLANS FOR

ROOSEVELT LANDING, UNIT 2

STREET AND DRAINAGE IMPROVEMENTS

SUBMITTED BY:

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

OWNER/DEVELOPER

SAN ANTONIO, LD. LLC.
4058 NORTH COLLEGE STE. 300, BOX 9
FAYETTEVILLE, AR 72703
(479) 455-9090

NOTES:

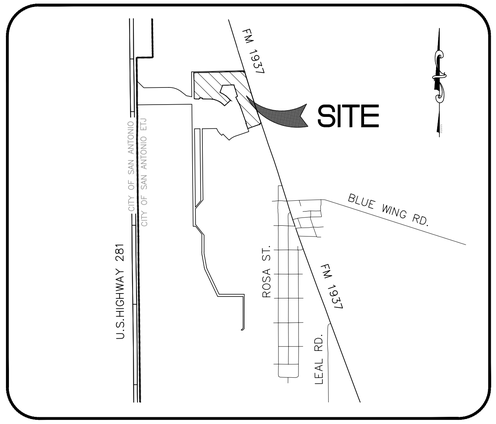
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF SAN ANTONIO SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. ALL CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF SAN ANTONIO.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES DURING CONSTRUCTION. THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION:

SAN ANTONIO WATER SYSTEM	TELE. NO.: 210-704-7109
TEXAS STATE WIDE ONE CALL LOCATOR	TELE. NO.: 800-545-6005
CITY PUBLIC SERVICE	
AT&T	
TIME WARNER CABLE	

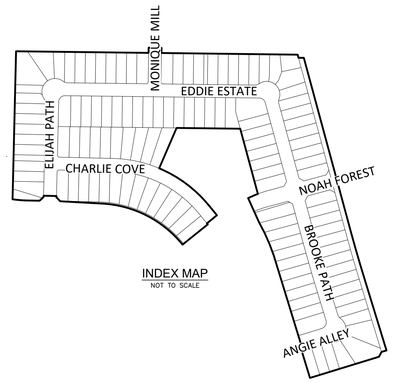
4. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
5. THE CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT THE TELEPHONE COMPANY DURING CONSTRUCTION.
6. THE CONTRACTOR HAS THE RESPONSIBILITY OF RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGE DONE TO THE EXISTING PAVEMENT, STRUCTURES OR FENCES (NO SEPARATE PAY ITEM).
7. MATERIAL SPECIFICATIONS:
   - CONCRETE/CONCRETE RIPRAP: CLASS A 3000 PSI IN 28 DAYS UNLESS OTHERWISE NOTED ON PLANS
   - REINFORCING STEEL: CONFORM TO A.S.T.M. A-615, GRADE 60 (2" COVER UNLESS OTHERWISE NOTED ON PLANS)
   - PIPE RAILING: CONFORM TO A.S.T.M. A-53, GRADE B, OR A-501
   - STRUCTURAL STEEL: CONFORM TO A.S.T.M. A-36
8. CONTRACTOR TO COORDINATE CONCRETE CURB DEPRESSIONS WITH THE DEVELOPER (NO SEPARATE PAY ITEM).
9. TRANSITION TO/FROM WASHOUT CROWNS IN TWENTY-FIVE FEET (25').
10. IMPROVED EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SUBGRADE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CHANNEL IS ACCEPTED FOR MAINTENANCE. REFER TO APPENDIX H, CHAPTER 16, SECTION 2.1 - GRASSES OF THE CITY OF SAN ANTONIO UDC. NO EXTRA PAY ITEM.

LEGEND

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.	(1)
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE)	(A)
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL)	(B)
SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED)	(C)
SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)	(D)
SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP	(E)
EXISTING TOP OF CURB ELEVATION	805.81TC
PROPOSED TOP OF CURB ELEVATION	805.81
HOME BUILDER INSTALLED SIDEWALK	
DEVELOPER INSTALLED SIDEWALK	
EXISTING SIDEWALK	
SIDEWALK WHEEL CHAIR RAMP	
WASH-OUT CROWN	
FILL @ 95% COMPACTION	
POSSIBLE DRIVEWAY LOCATION	
PROPERTY LINE	
EXISTING CONTOUR	1120
PROPOSED CONTOUR	1120
PROPOSED CONCRETE CURB	
FLOW ARROW	



VICINITY MAP
N.T.S.



INDEX MAP
NOT TO SCALE

SUBMITTAL DATE:

9/12/22

LEGAL DESCRIPTION:

BEING A 19.548 ACRE TRACT OUT OF A 52.24 ACRE TRACT OF LAND SITUATED IN THE JOSE ANTONIO DE LA GARZA SURVEY ABSTRACT NO. 3, COUNTY BLOCK 4006, BEXAR COUNTY, TEXAS AS CONVEYED TO SAN ANTONIO LD, LLC, BY WARRANTY DEED AS RECORDED IN DOCUMENT NUMBER 20220056276 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

Sheet List Table

Sheet Number	Sheet Title
C4.0	STREET COVER
C4.1	TRAFFIC PLAN
C4.2	TRAFFIC PLAN
C4.2A	PAVEMENT MARKINGS
C4.3	TRAFFIC DETAILS
C4.4	TRAFFIC DETAILS
C4.5	ELIJAH PATH PLAN AND PROFILE
C4.6	CHARLIE COVE PLAN AND PROFILE
C4.7	EDDIE ESTATE PLAN AND PROFILE
C4.8	BROOKE PATH PLAN AND PROFILE
C4.9	NOAH FOREST PLAN AND PROFILE
C4.10	MONIQUE MILL & ANGIE ALLEY PLAN AND PROFILE
C4.11	DRAIN "A"
C4.12	DRAIN "F"
C4.13	DRAIN "G"
C4.14	DRAIN "H"
C4.15	DRAIN DETAILS
C4.16	STANDARD DETAILS
C4.17	STANDARD DETAILS
C4.18	STANDARD STREET SECTIONS

• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC
FIRM TBPELS ENG F-5297 SVY F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

BEXAR COUNTY

TEXAS

SUBMITTAL SET C4.0

R:\Nicholas Tract\Unit 2\Drawings\122090_C4.0-Street Cover.dwg

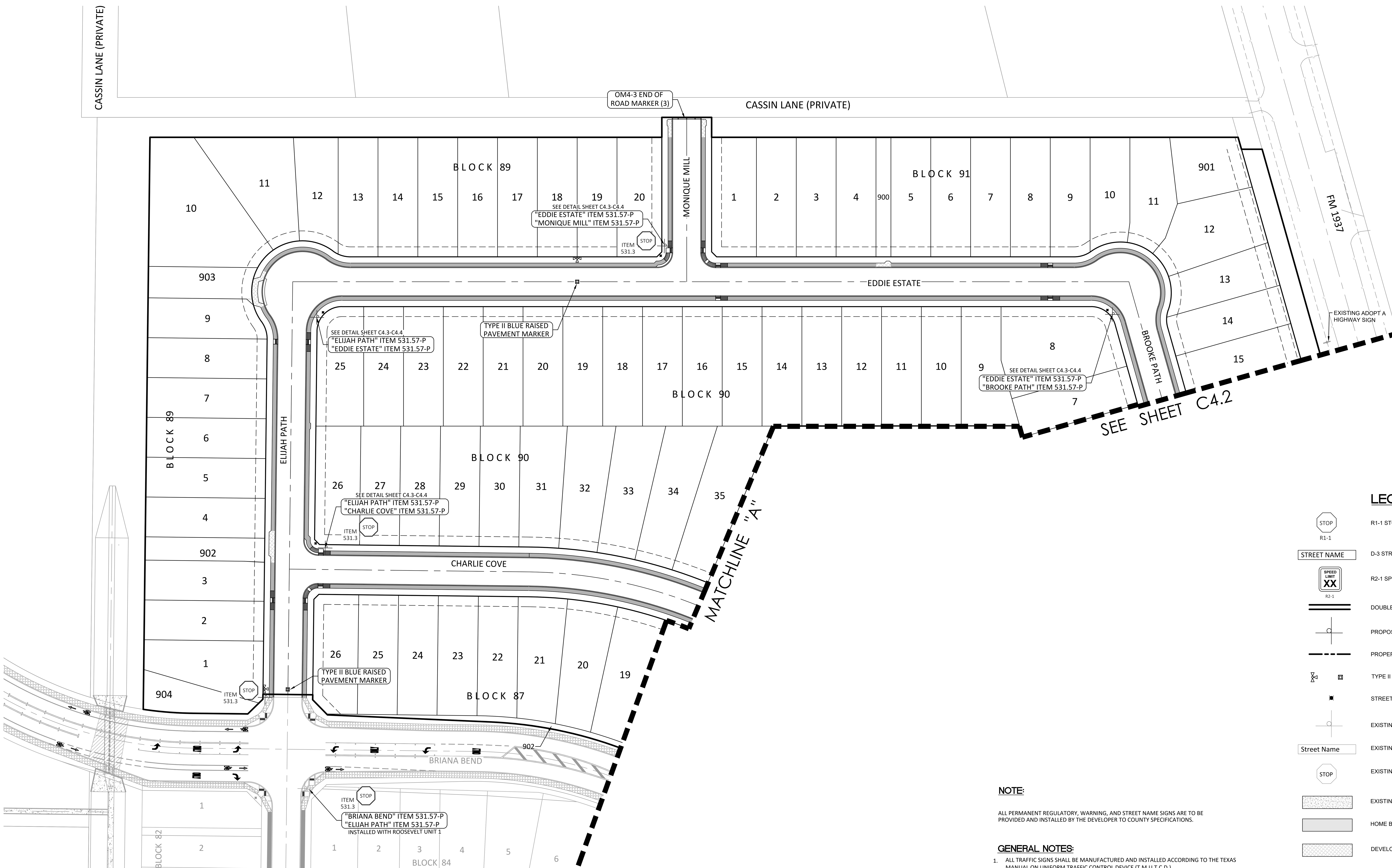
LAND-PLAT-22-11800353

BEXAR COUNTY R.O.W. NOTE:

BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.

SCALE: 1"=50'

0 50 100



LEGEND

- STOP R1-1 — R1-1 STOP SIGN (30" X 30")
- STREET NAME — D-3 STREET NAME
- SPEED LIMIT XX R2-1 — R2-1 SPEED LIMIT SIGN
- DOUBLE LINE
- PROPOSED SIGN LOCATION
- PROPERTY LINE
- TYPE II BLUE RAISED PAVEMENT MARKERS
- STREET LIGHT
- EXISTING SIGN LOCATION
- Street Name — EXISTING STREET NAME SIGN
- STOP — EXISTING STOP SIGN
- EXISTING SIDEWALK
- HOME BUILDER INSTALLED SIDEWALK
- DEVELOPER SIDEWALK
- ADA RAMP- DEVELOPER INSTALLED
- POSSIBLE DRIVEWAY LOCATION

NOTE:

ALL PERMANENT REGULATORY, WARNING, AND STREET NAME SIGNS ARE TO BE PROVIDED AND INSTALLED BY THE DEVELOPER TO COUNTY SPECIFICATIONS.

GENERAL NOTES:

1. ALL TRAFFIC SIGNS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE (T.M.U.T.C.D.).
2. INSTALL SIGNS SUCH THAT THEIR VIEW IS NOT BLOCKED BY LOW HANGING VEGETATION, UTILITY POLES, OTHER TRAFFIC SIGNS, ETC... REFER TO CITY OF SAN ANTONIO TRAFFIC SIGNAL DETAILS.
3. ALL PAVEMENT MARKINGS SHALL COMPLY WITH THE T.M.U.T.C.D. REFER TO CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
4. "DEAD END" WITH ARROW AND "NO OUTLET" WITH ARROW SHALL BE ON BOTH SIDES OF SIGN WHICH IS MOUNTED ABOVE STREET NAMES.
5. FINAL SIGN INSTALLATION LOCATIONS TO BE DETERMINED BY CITY OF SAN ANTONIO (INSIDE CITY LIMITS) AND/OR BEXAR COUNTY. CONTRACTOR TO COORDINATE WITH SAME. PROPOSED SIGN LOCATIONS ARE FOR REFERENCE ONLY.

SUBMITTAL SET

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

STATE OF TEXAS — PAUL LANDA, JR — 100182 — LICENSED PROFESSIONAL ENGINEER — 4/6/23

ROOSEVELT LANDING, UNIT 2

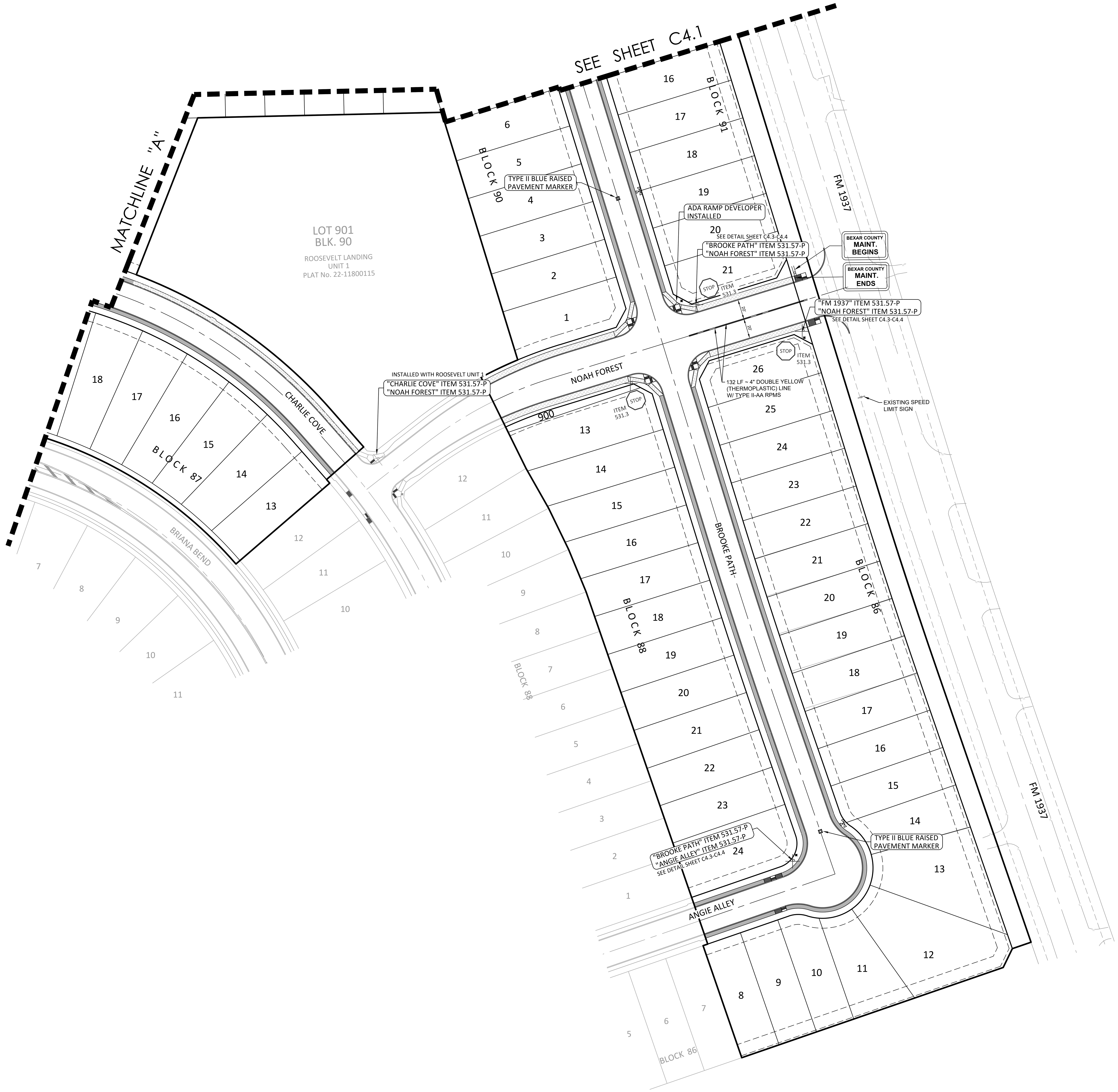
OVERALL TRAFFIC PLAN

SHEET C4.1

LAND-PLAT-22-11800353

BEXAR COUNTY R.O.W. NOTE:

BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.



LEGEND

- R1-1 STOP SIGN (30" X 30")
- STREET NAME — D-3 STREET NAME
- SPEED LIMIT XX — R2-1 SPEED LIMIT SIGN
- DOUBLE LINE
- PROPOSED SIGN LOCATION
- PROPERTY LINE
- TYPE II BLUE RAISED PAVEMENT MARKERS
- STREET LIGHT
- EXISTING SIGN LOCATION
- Street Name — EXISTING STREET NAME SIGN
- STOP — EXISTING STOP SIGN
- EXISTING SIDEWALK
- HOME BUILDER INSTALLED SIDEWALK
- DEVELOPER SIDEWALK
- ADA RAMP- DEVELOPER INSTALLED

NOTE:

ALL PERMANENT REGULATORY, WARNING, AND STREET NAME SIGNS ARE TO BE PROVIDED AND INSTALLED BY THE DEVELOPER TO COUNTY SPECIFICATIONS.

GENERAL NOTES:

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2. INSTALL SIGNS SUCH THAT THEIR VIEW IS NOT BLOCKED BY LOW HANGING VEGETATION, UTILITY POLES, OTHER TRAFFIC SIGNS, ETC... REFER TO CITY OF SAN ANTONIO TRAFFIC SIGNAL DETAILS.
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SUBMITTAL SET

REVISIONS							
NO.	DATE	DESCRIPTION	BY				
PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:			

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
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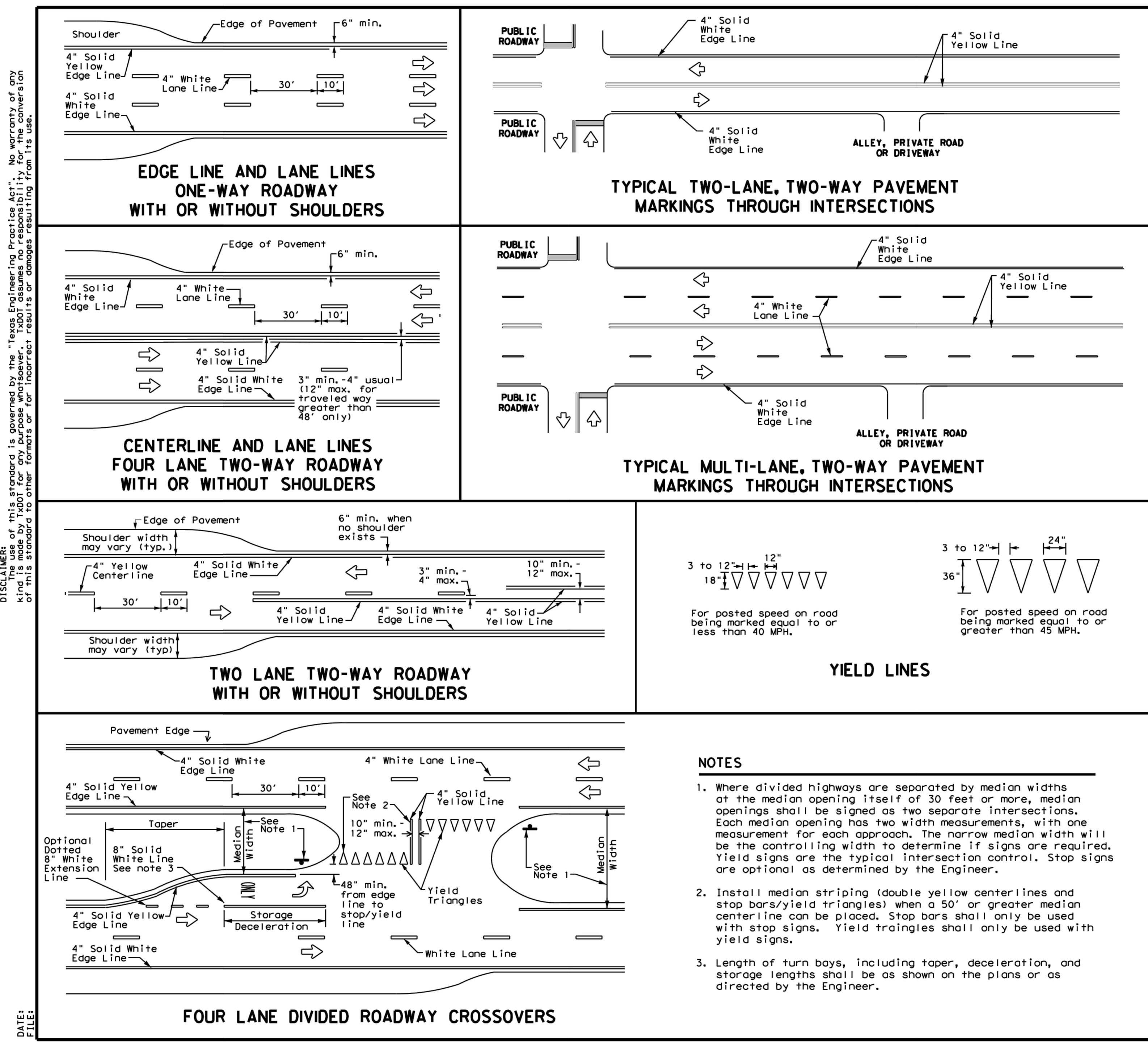
FAX: (210) 698-5085

STATE OF TEXAS · PAUL LANDA, JR · 100182 · LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING, UNIT 2
OVERALL TRAFFIC PLAN

SHEET C4.2



NOTES

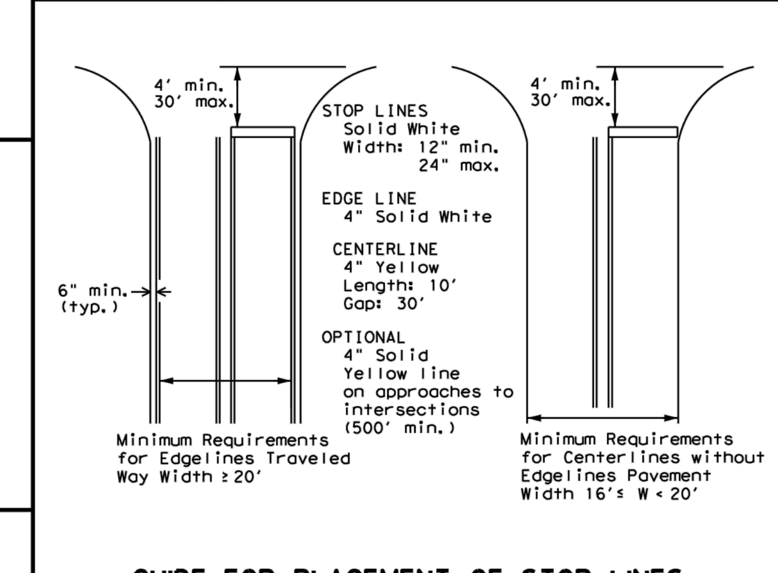
1. Where divided highways are separated by median widths at the median opening itself of 30 feet or more, median openings shall be signed as two separate intersections. Each median opening has two width measurements, with one measurement for each approach. The narrow median width will be the controlling width to determine if signs are required. Yield signs are the typical intersection control. Stop signs are optional as determined by the Engineer.
2. Install median striping (double yellow centerlines and stop bars/yield triangles) when a 50' or greater median centerline can be placed. Stop bars shall only be used with stop signs. Yield traingles shall only be used with yield signs.
3. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer.

GENERAL NOTES

1. Edgeline striping shall be as shown in the plans or as directed by the Engineer. The edgeline should not be placed less less than 6 inches from the edge of pavement. This distance may vary due to pavement raveling or other conditions. Edgelines are not required in curb and gutter sections of roadways.
2. The traveled way includes only that portion of the roadway used for vehicular travel. It does not include the parking lanes, sidewalks, berms and shoulders. The traveled ways shall be measured from the inside of edgeline to the inside of edgeline of a two lane roadway.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



GUIDE FOR PLACEMENT OF STOP LINES, EDGE LINE & CENTERLINE
Based on Traveled Way and Pavement Widths for Undivided Highways

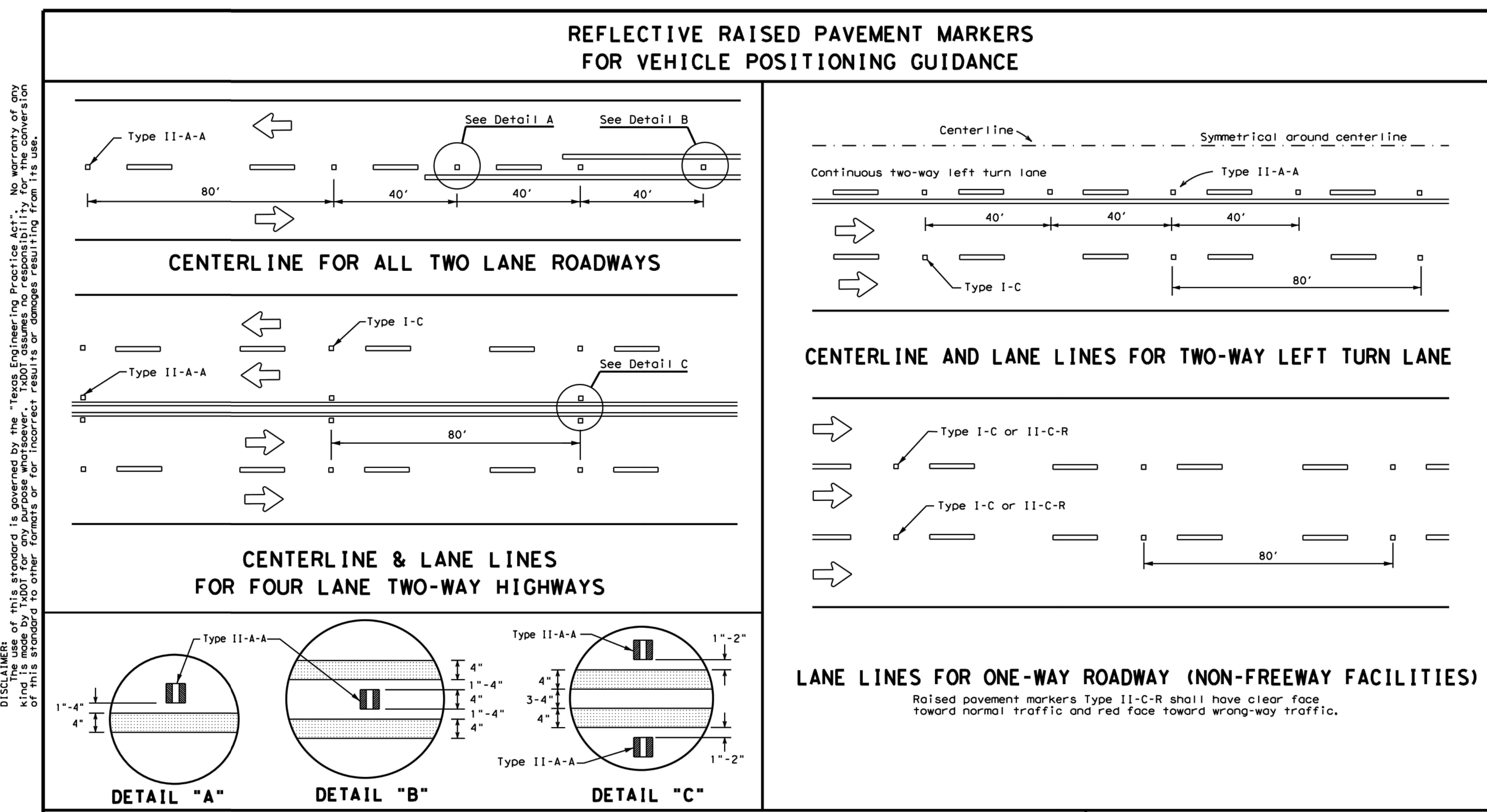
Texas Department of Transportation — Traffic Safety Division Standard

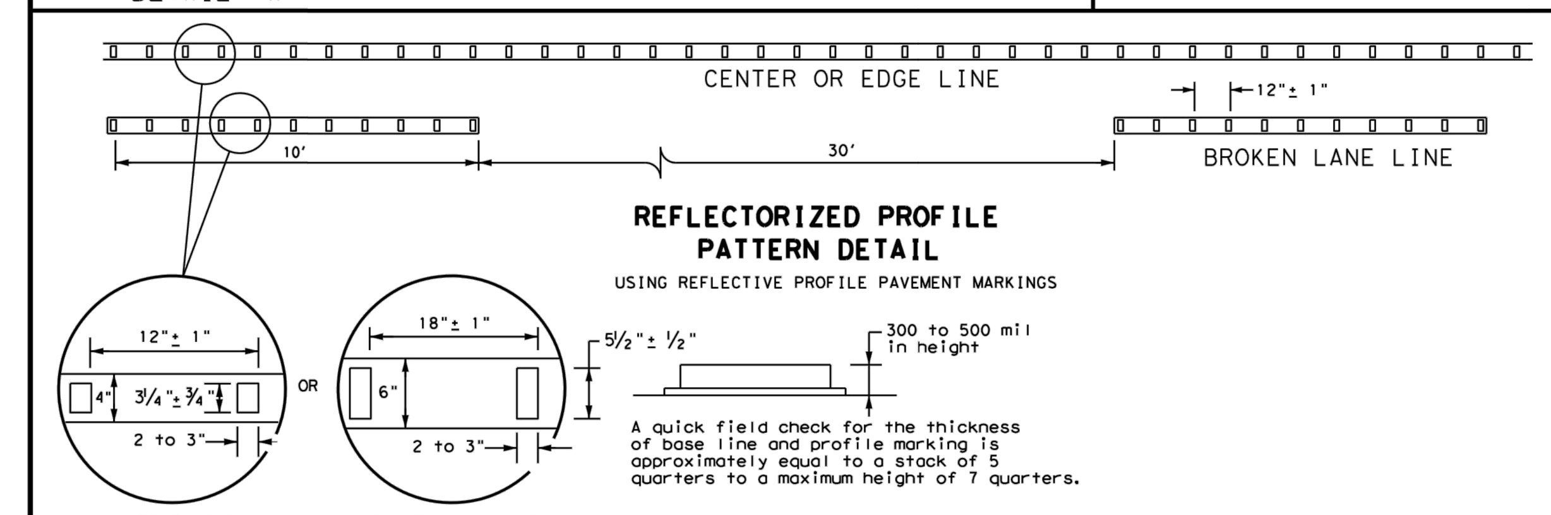
TYPICAL STANDARD PAVEMENT MARKINGS
PM(1)-20

FILE: pm1-20.dgn	DN:	CK:	DW:	CK:
© TxDOT November 1978	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03 5-00 2-12 8-00 6-20	DIST	COUNTY		SHEET NO.

22A

REFLECTIVE RAISED PAVEMENT MARKERS
FOR VEHICLE POSITIONING GUIDANCE





NOTE

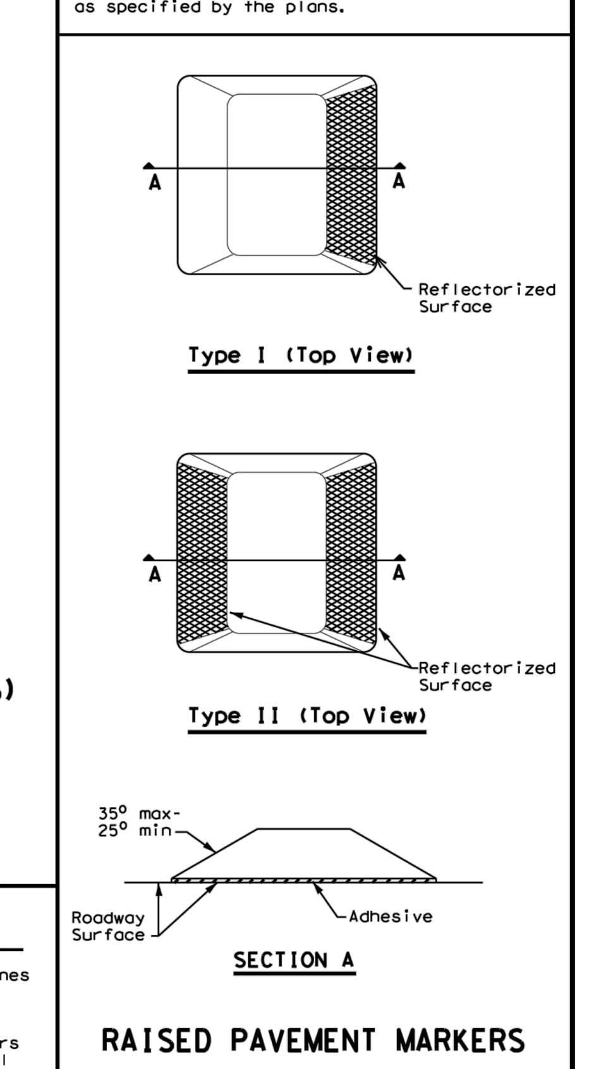
Profile markings shall not be placed on roadways with a posted speed limit of 45 MPH or less.

GENERAL NOTES

1. All raised pavement markers placed in broken lines shall be placed in line with and midway between the stripes.
2. On concrete pavements the raised pavement markers should be placed to one side of the longitudinal joints.

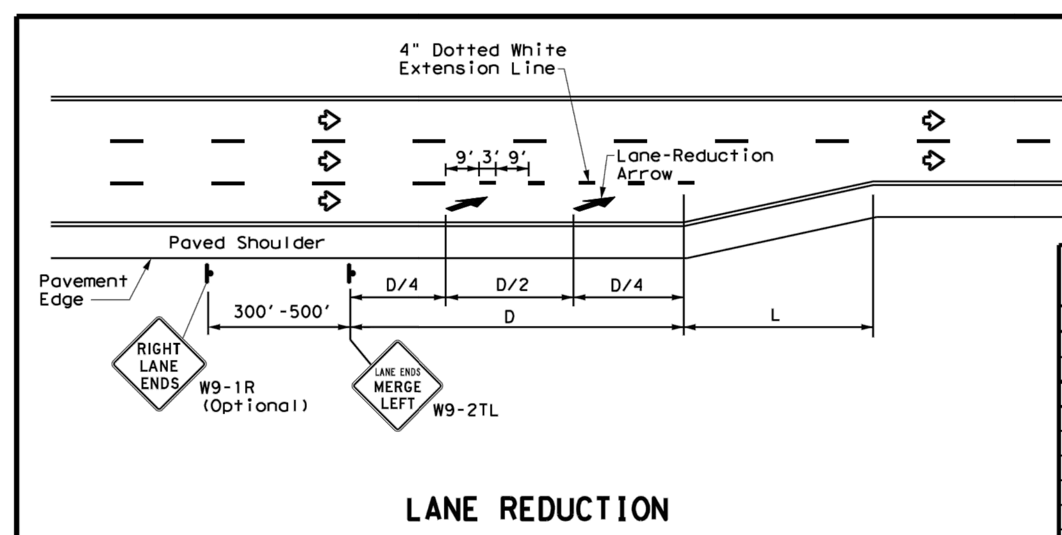
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



Texas Department of Transportation — Traffic Safety Division Standard

POSITION GUIDANCE USING RAISED MARKERS RELECTORIZED PROFILE MARKINGS
PM(2)-20



Posted Speed	D (ft)	L (ft)
30 MPH	460	$L = \frac{WS^2}{60}$
35 MPH	565	
40 MPH	670	
45 MPH	775	L=WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	

NOTES

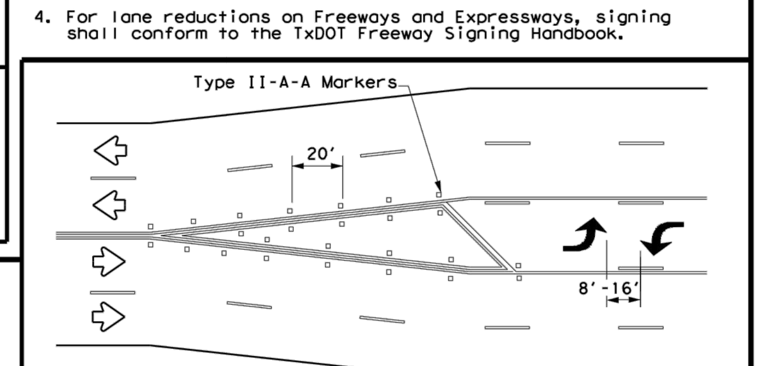
1. Lane reduction pavement markings are used where the number of through lanes is reduced because of narrowing of the roadway or because of a section of on-street parking in what would otherwise be a through lane. For Texas Super 2 Passing Lanes, see TS2(PL) standard sheets.
2. On divided highways, an additional W9-1R "RIGHT LANE ENDS" sign may be installed in the median aligned with the W9-1R sign on the right side of the highway.
3. Lane reduction arrows are required for speeds of 45 mph or greater. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
4. For lane reductions on Freeways and Expressways, signing shall conform to the TxDOT Freeway Signing Handbook.

GENERAL NOTES

1. Lane use word and arrow markings shall be used where through lanes approaching an intersection become mandatory turn lanes. Lane use word and arrow markings should be used in auxiliary lanes of substantial length. Lane use arrow markings or word and arrow markings may be used in other lanes and turn bays for emphasis. Details for words and arrows are as shown in the Standard Highway Sign Designs for Texas.
2. When lane-use words and arrow markings are used, two sets of arrows should be used if the length of the bay is greater than 180 feet. When a single lane use arrow or word and arrow marking is used for a short turn lane, it should be located at or near the upstream end of the full-width turn lane.
3. Use raised pavement marker Type I-C with undivided highways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.
4. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer.

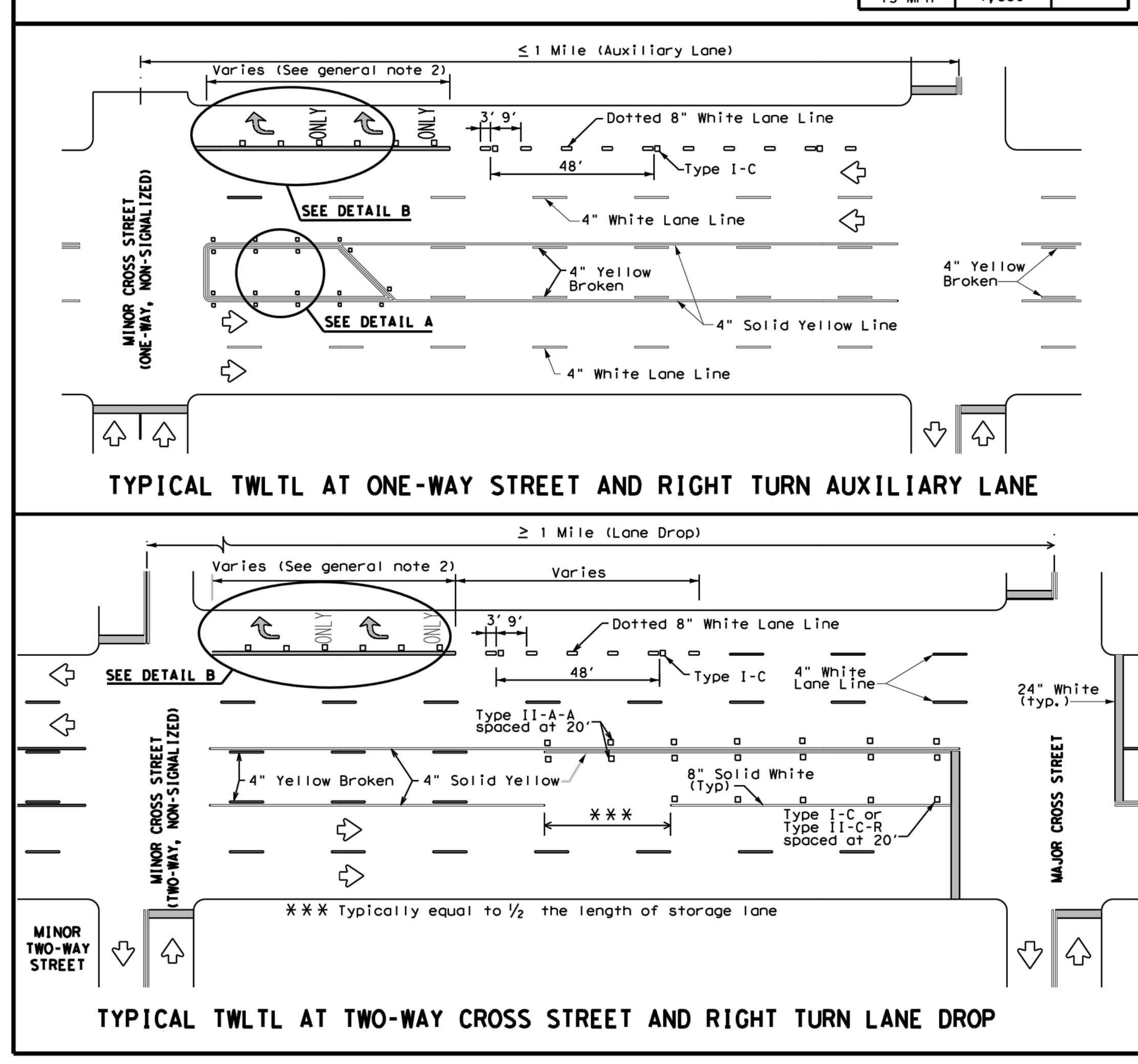
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

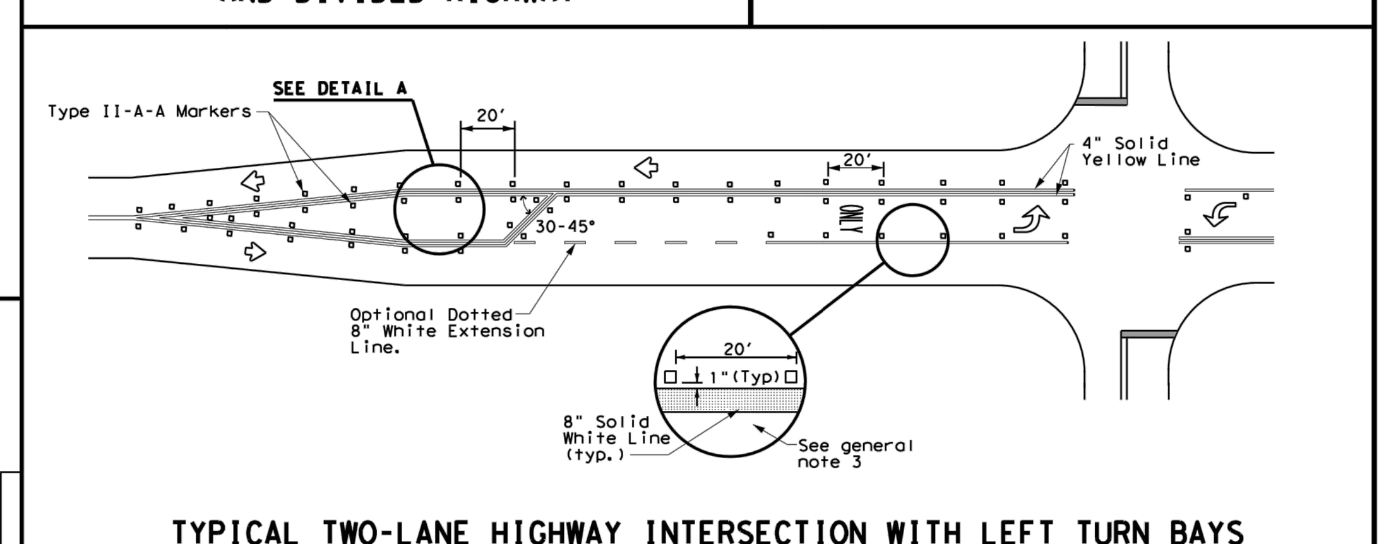
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

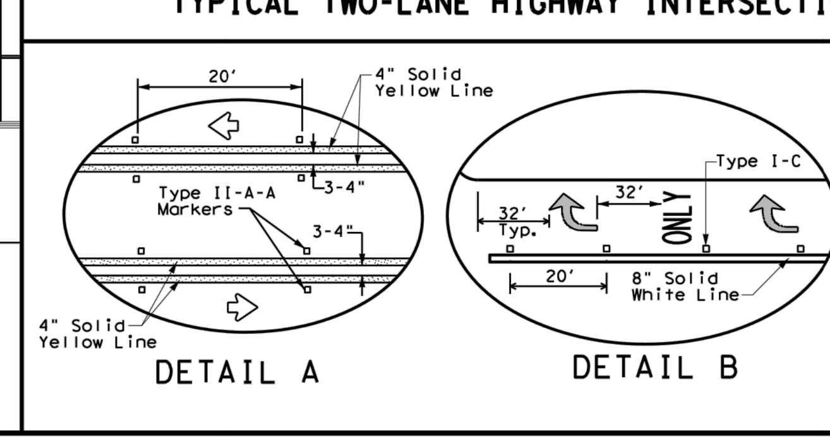


A two-way left-turn (TWLT) lane-use arrow pavement marking should be used at or just downstream from the beginning of a two-way left-turn lane within a corridor. Repeating the marking after each intersection or dedicated turn bay is not required unless stated elsewhere in the plans.

TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY







Texas Department of Transportation — Traffic Safety Division Standard

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS
PM(3)-20

MTR
Moy Tarin Ramirez Engineers, LLC
• Engineers • Surveyors • Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

STATE OF TEXAS — PAUL LANDA, JR — 100182 — LICENSED PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

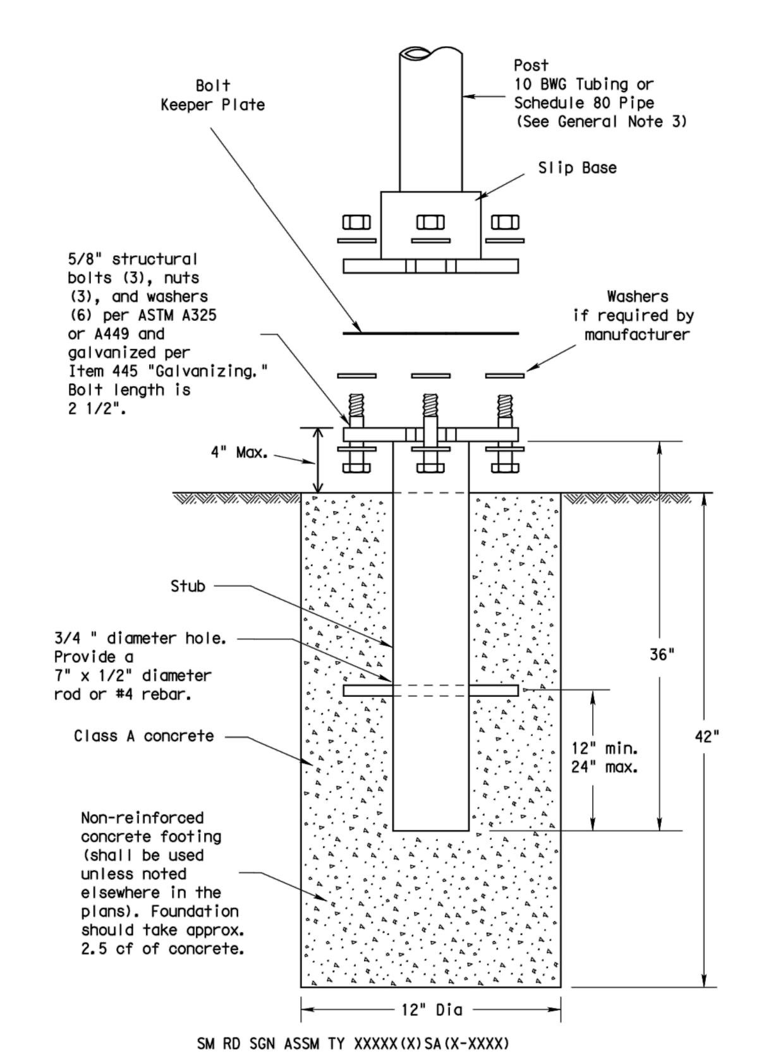
ROOSEVELT LANDING, UNIT 2
PAVEMENT MARKINGS

SUBMITTAL SET

SHEET C4.2A

LAND-PLAT-22-11800353

TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS



NOTE

There are various devices approved for the Triangular Slipbase System. Please reference the Material Producer List for approved slip base systems. http://www.txdot.gov/business/producer_list.htm The devices shall be installed per manufacturers' recommendations. Installation procedures shall be provided to the Engineer by Contractor.

GENERAL NOTES:

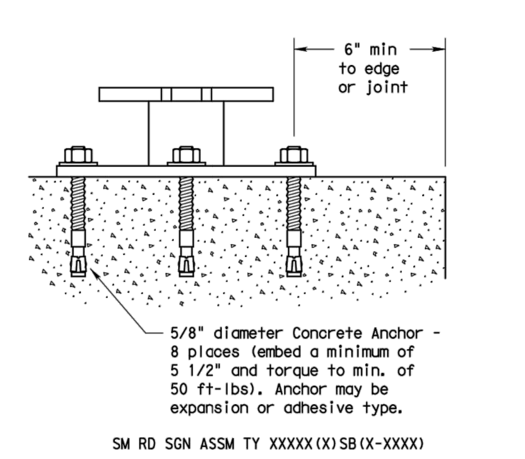
1. Slip base shall be permanently marked to indicate manufacturer. Method, design, and location of marking are subject to approval of the TxDOT Traffic Standards Engineer.
2. Material used as post with this system shall conform to the following specifications:
   10 BWG Tubing (2.875" outside diameter)
   0.134" nominal wall thickness
   Seamless or electric-resistance welded steel tubing or pipe
   Steel shall be HSLAS Gr 55 per ASTM A1011 or ASTM A1008
   Other steels may be used if they meet the following:
   55,000 PSI minimum yield strength
   70,000 PSI minimum tensile strength
   20% minimum elongation in 2"
   Wall thickness (uncoated) shall be within the range of 0.122" to 0.138"
   Outside diameter (uncoated) shall be within the range of 2.867" to 2.883"
   Galvanization per ASTM A123 or ASTM A653 G210. For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metallizing with zinc wire per ASTM B833.
   Schedule 80 Pipe (2.875" outside diameter)
   0.276" nominal wall thickness
   Steel tubing per ASTM A500 Gr C
   Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:
   46,000 PSI minimum yield strength
   62,000 PSI minimum tensile strength
   21% minimum elongation in 2"
   Wall thickness (uncoated) shall be within the range of 0.248" to 0.304"
   Outside diameter (uncoated) shall be within the range of 2.855" to 2.895"
   Galvanization per ASTM A123
3. See the Traffic Operations Division website for detailed drawings of sign clamps and Texas Universal Triangular Slipbase System components. The website address is: http://www.txdot.gov/publications/traffic.htm
4. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.

ASSEMBLY PROCEDURE

Foundation
1. Prepare 12-inch diameter by 42-inch deep hole. If solid rock is encountered, the depth of the foundation may be reduced such that it is embedded a minimum of 18 inches into the solid rock.
2. 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 less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
3. Push the pipe end of the slip base stub into the center of the concrete. Rotate the stub back and forth while pushing it down into the concrete to assure good contact between the concrete and stub. Continue to work the stub into the concrete until it is between 2 to 4 inches above the ground.
4. Plumb the stub. Allow a minimum of 4 days to set, unless otherwise directed by the Engineer.
5. The triangular slipbase system is multidirectional and is designed to release when struck from any direction.

Support
1. Cut support so that the bottom of the sign will be 7 to 7.5 feet above the edge of the travelway (i.e., edge of the closest lane) when slip plate is below the edge of pavement or 7 to 7.5 feet above slip plate when the slip plate is above the edge of the travelway. The cut shall be plumb and straight.
2. Attach sign to support using connections shown. When multiple signs are installed on the same support, ensure the minimum clearance between each sign is maintained. See SMD(SLIP-2) for clearances based on sign types.

CONCRETE ANCHOR



Concrete anchor consists of 5/8" diameter stud bolt with UNC series bolt threads on the upper end. Heavy hex nut per ASTM A563, and hardened washer per ASTM F436. The stud bolt shall have a minimum yield and ultimate tensile strength of 50 and 75 KSI, respectively. Nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing." Adhesive type anchors shall have stud bolts installed with Type III epoxy per DMS-6100, "Epoxies and Adhesives." Adhesive anchors may be loaded after adequate epoxy cure time per the manufacturer's recommendations. Top of bolt shall extend at least flush with top of the nut when installed. The anchor, when installed in 4000 psi normal-weight concrete with a 5 1/2" minimum embedment, shall have a minimum allowable tension and shear of 3900 and 3100 psi, respectively.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-1)-08

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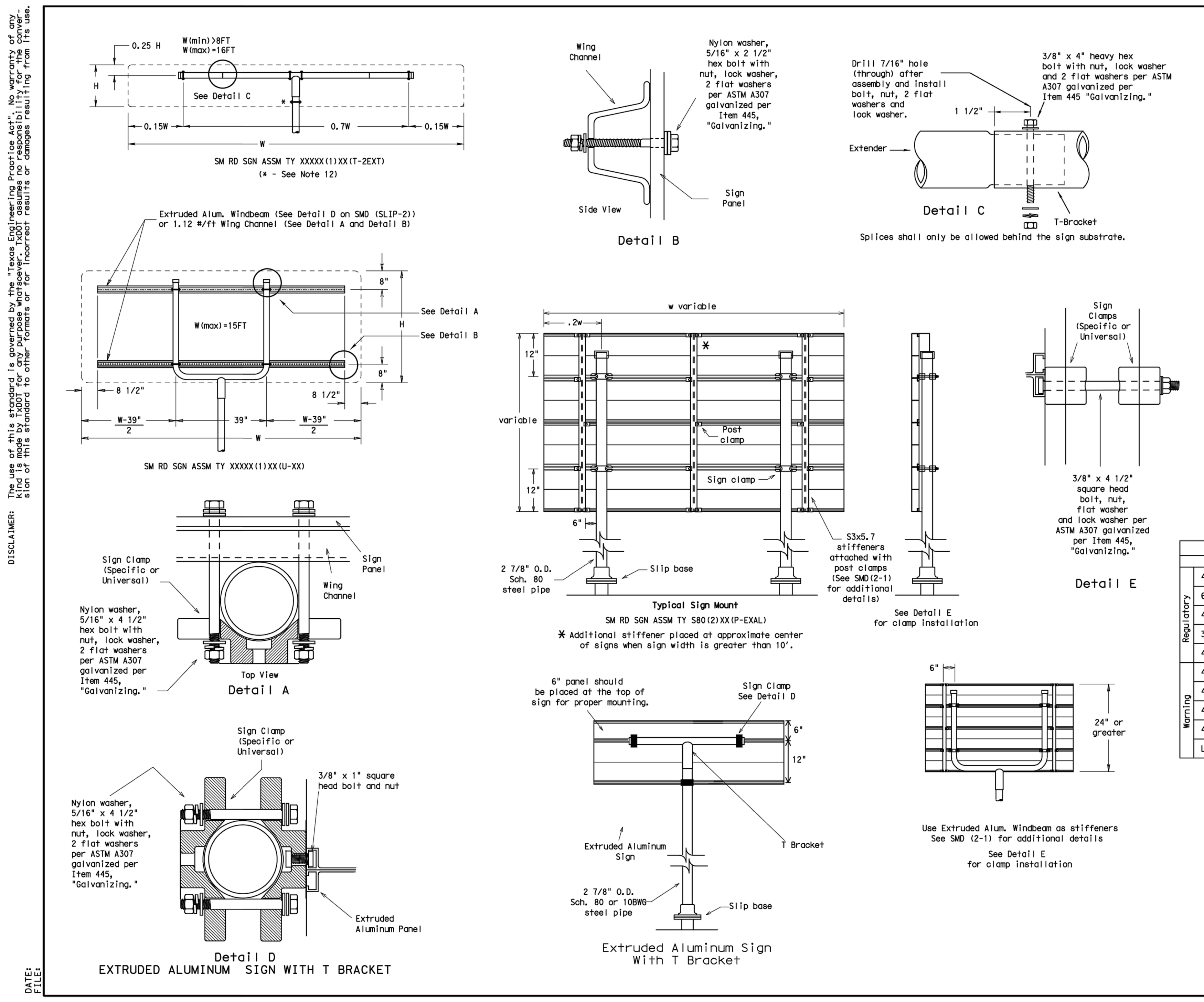

GENERAL NOTES:

1.

SIGN SUPPORT	# OF POSTS	MAX. SIGN AREA
10 BWG	1	16 SF
10 BWG	2	32 SF
Sch 80	1	32 SF
Sch 80	2	64 SF

2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
3. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
4. Aluminum sign blanks shall conform to Departmental Material Specifications DMS-7110 and shall have the following minimum thicknesses: 0.080 for signs less than 7.5 sq. ft., 0.100 for signs 7.5 to 15 sq. ft., and 0.125 for signs greater than 15 sq. ft.
5. Signs that require specific supports due to reasons in addition to windloading are indicated on the "REQUIRED SUPPORT" table on this sheet.
6. For horizontal rectangular signs fabricated from flat aluminum, T-brackets are used for signs 24 inches or less in height. U-brackets are used for signs of greater height.
7. When two triangular slipbase supports are used to support a single sign, they shall not be "rigidly" connected to each other except through the sign panel. This will allow each support to act independently when impacted by an errant vehicle.
8. Wing channel shall meet ASTM A 1011 SS Gr 50 and be galvanized per ASTM A 123.
9. Excess pipe, wing channel, or windbeam shall be cut off so that it does not extend beyond the sign panel (i.e., excess support shall not be visible when the sign is viewed from the front.) Repair galvanized coating at cut support ends per Item 445, "Galvanizing."
10. Sign blanks shall be the sizes and shapes shown on the plans.
11. Additional sign clamp required on the "T-bracket" post for 24 inch high signs. Place the clamp 3 inches above bottom of sign when possible.
12. Post open ends shall be fitted with Friction Caps.

REQUIRED SUPPORT

	SIGN DESCRIPTION	SUPPORT
Regulatory	48-inch STOP sign (R1-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	60-inch YIELD sign (R1-2)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	48x16-inch ONE-WAY sign (R6-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	36x48, 48x36, and 48x48-inch signs	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
Warning	48x48-inch signs (diamond or square)	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
	48-inch Advance School X-ing sign (S1-1)	TY 10BWG(1)XX(T)
	48-inch School X-ing sign (S2-1)	TY 10BWG(1)XX(T)
	Large Arrow sign (W1-6 & W1-7)	TY 10BWG(1)XX(T)

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-3)-08

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SIGN SUPPORT DESCRIPTIVE CODES

(Descriptive Codes correspond to project estimate and quantities sheets)

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

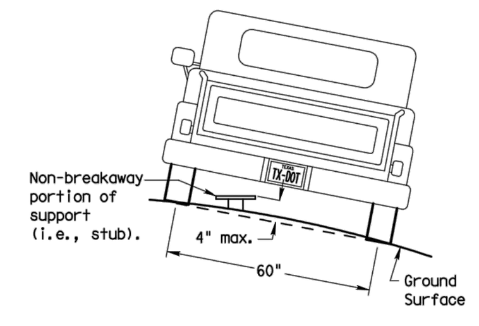
Post Type
- FRP = Fiberglass Reinforced Plastic Pipe (see SMD(FRP))
- TWT = Thin-Walled Tubing (see SMD(TWT))
- 10BWG = 10 BWG Tubing (see SMD(SLIP-1) to (SLIP-3))
- S80 = Schedule 80 Pipe (see SMD(SLIP-1) to (SLIP-3))

Number of Posts (1 or 2)

Anchor Type
- UA = Universal Anchor - Concreted (see SMD(FRP) and (TWT))
- UB = Universal Anchor - Bolted down (see SMD(FRP) and (TWT))
- WS = Wedge Anchor Steel - (see SMD(TWT))
- WP = Wedge Anchor Plastic (see SMD(TWT))
- SA = Slipbase - Concreted (see SMD(SLIP-1) to (SLIP-3))
- SB = Slipbase - Bolted Down (see SMD(SLIP-1) to (SLIP-3))

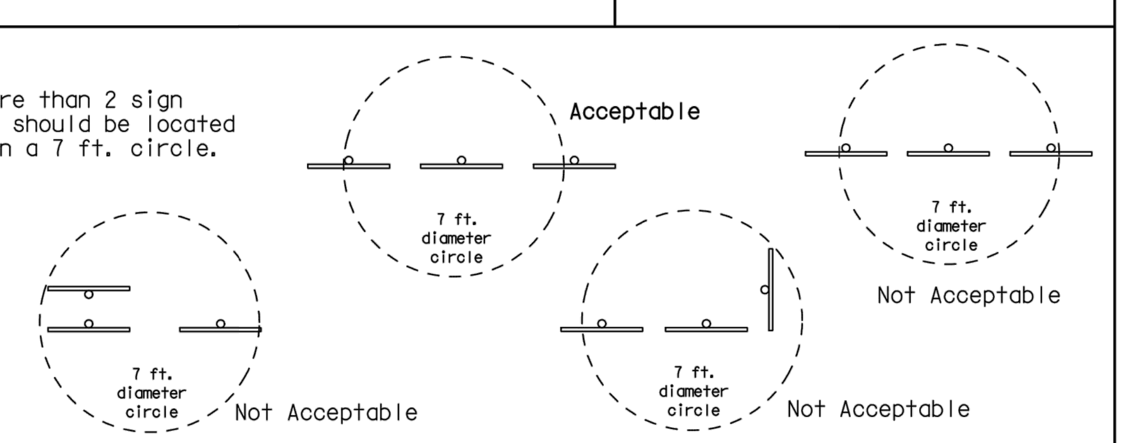
Sign Mounting Designation
- P = Prefab. "Plain" (see SMD(SLIP-1) to (SLIP-3), (TWT), (FRP))
- T = Prefab. "T" (see SMD(SLIP-1) to (SLIP-3), (TWT))
- U = Prefab. "U" (see SMD(SLIP-1) to (SLIP-3))
- IF REQUIRED
- 1EXT or 2EXT = Number of Extensions (see SMD(SLIP-1) to (SLIP-3), (TWT))
- BM = Extruded Wind Beam (see SMD(SLIP-1) to (SLIP-3))
- WC = 1.12 #/ft Wing Channel (see SMD(SLIP-1) to (SLIP-3))
- EXAL = Extruded Aluminum Sign Panels (see SMD(SLIP-3))

REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT

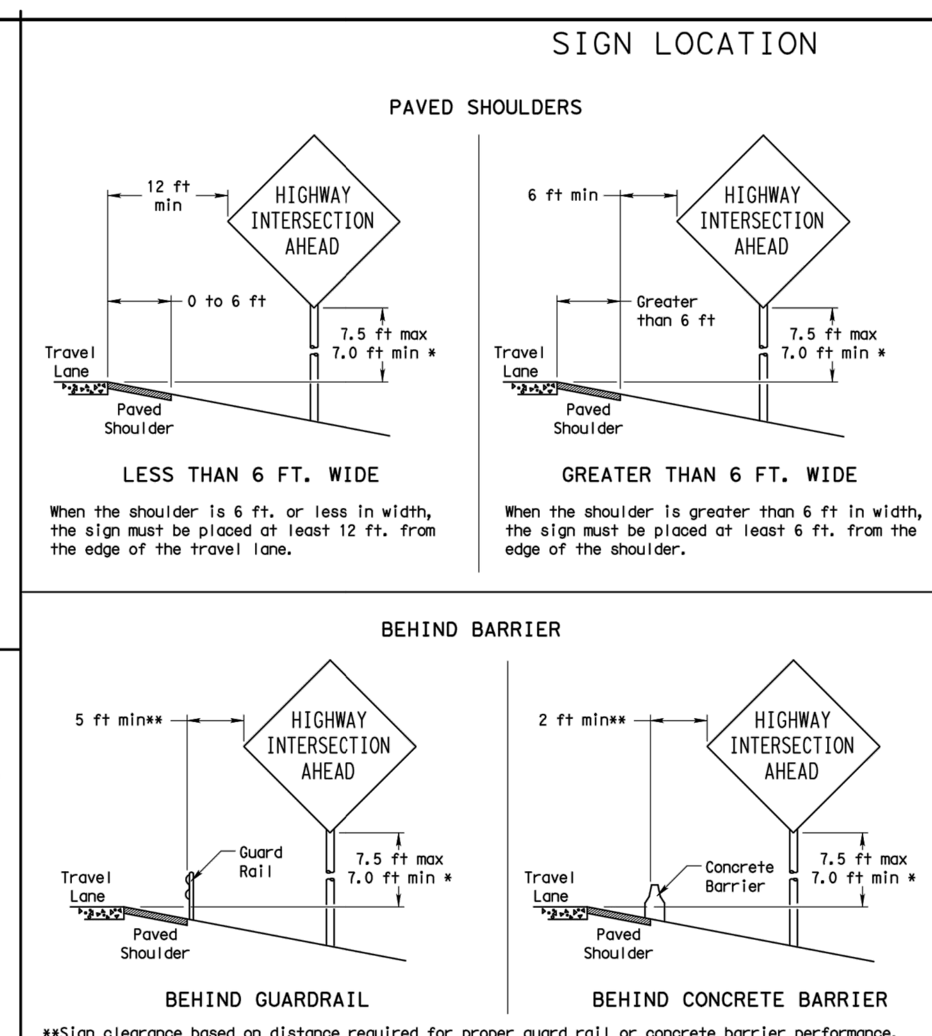


To avoid vehicle undercarriage snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., typical space between wheel paths).

No more than 2 sign posts should be located within a 7 ft. circle.



SIGN LOCATION

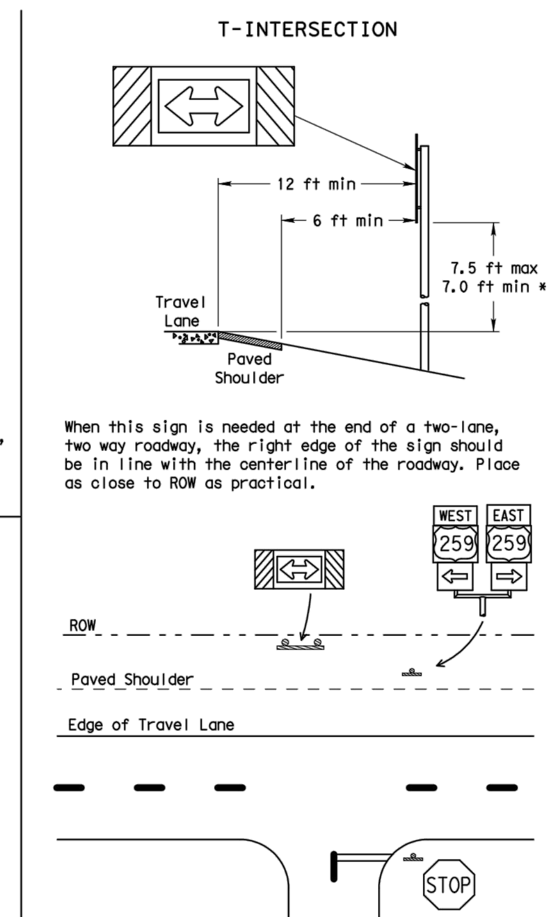


When the shoulder is 6 ft. or less in width, the sign must be placed at least 12 ft. from the edge of the travel lane.

When the shoulder is greater than 6 ft. in width, the sign must be placed at least 6 ft. from the edge of the shoulder.

**Sign clearance based on distance required for proper guard rail or concrete barrier performance.

T-INTERSECTION



When this sign is needed at the end of a two-lane, two way roadway, the right edge of the sign should be in line with the centerline of the roadway. Place as close to ROW as practical.

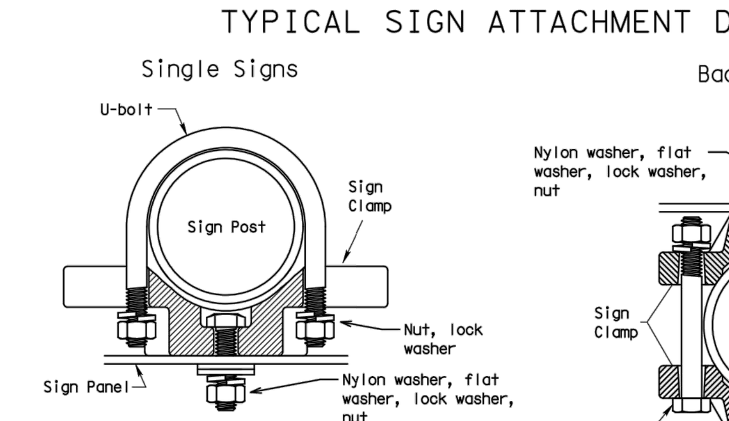
* Signs shall be mounted using the following condition that results in the greatest sign elevation:
(1) a minimum of 7 to a maximum of 7.5 feet above the edge of the travel lane or
(2) a minimum of 7 to a maximum of 7.5 feet above the grade at the base of the support when sign is installed on the backslope.

The maximum values may be increased when directed by the Engineer.

See the Traffic Operations Division website for detailed drawings of sign clamps, Triangular Slipbase System components and Wedge Anchor System components.

The website address is: http://www.txdot.gov/publications/traffic.htm

TYPICAL SIGN ATTACHMENT DETAIL



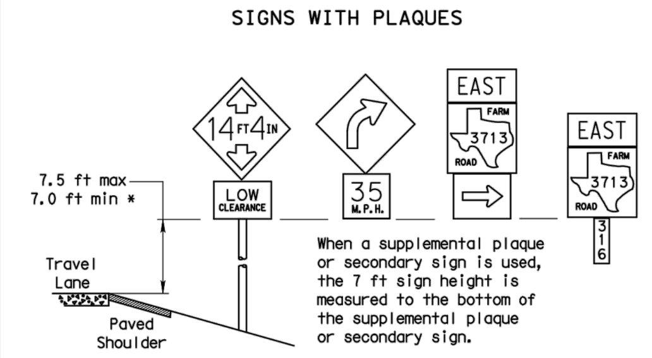
Bolts used to mount sign panels to the clamps are 5/16-18 UNC galvanized hex head with nut, nylon washer, flat washer and lock washer. The bolt length is 1 inch for aluminum.

When two sign clamps are used to mount signs back-to-back, use a 5/16-18 UNC galvanized hex head per ASTM A307 with nut and helical-spring lock washer. The approximate bolt lengths for various post sizes and sign clamp types are given in the table at right. The bolt length may need to be adjusted depending upon field conditions.

Sign clamps may be either the specific size clamp or the universal clamp.

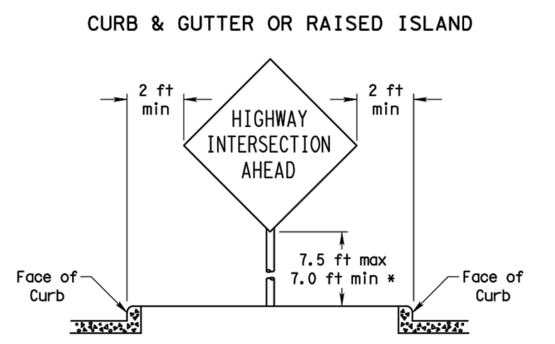
Pipe Diameter	Approximate Bolt Length: Specific Clamp	Approximate Bolt Length: Universal Clamp
2" nominal	3"	3 or 3 1/2"
2 1/2" nominal	3 or 3 1/2"	3 1/2" or 4"
3" nominal	3 1/2" or 4"	4 1/2"

SIGNS WITH PLAQUES

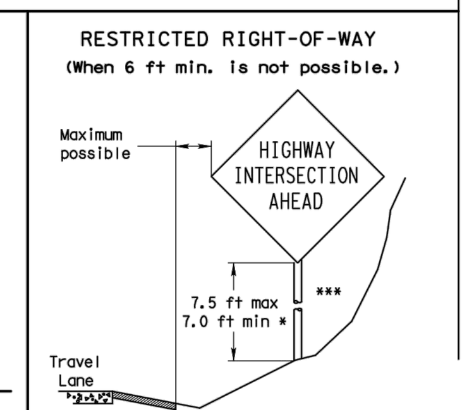


When a supplemental plaque or secondary sign is used, the 7 ft sign height is measured to the bottom of the supplemental plaque or secondary sign.

CURB & GUTTER OR RAISED ISLAND



RESTRICTED RIGHT-OF-WAY
(When 6 ft min. is not possible.)



Right-of-way restrictions may be created by rocks, water, vegetation, forest, buildings, a narrow island, or other factors.

In situations where a lateral restriction prevents the minimum horizontal clearance from the edge of the travel lane, signs should be placed as far from the travel lane as practical.

*** Post may be shorter if protected by guardrail or if Engineer determines the post could not be hit due to extreme slope.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
GENERAL NOTES & DETAILS

SMD(GEN)-08

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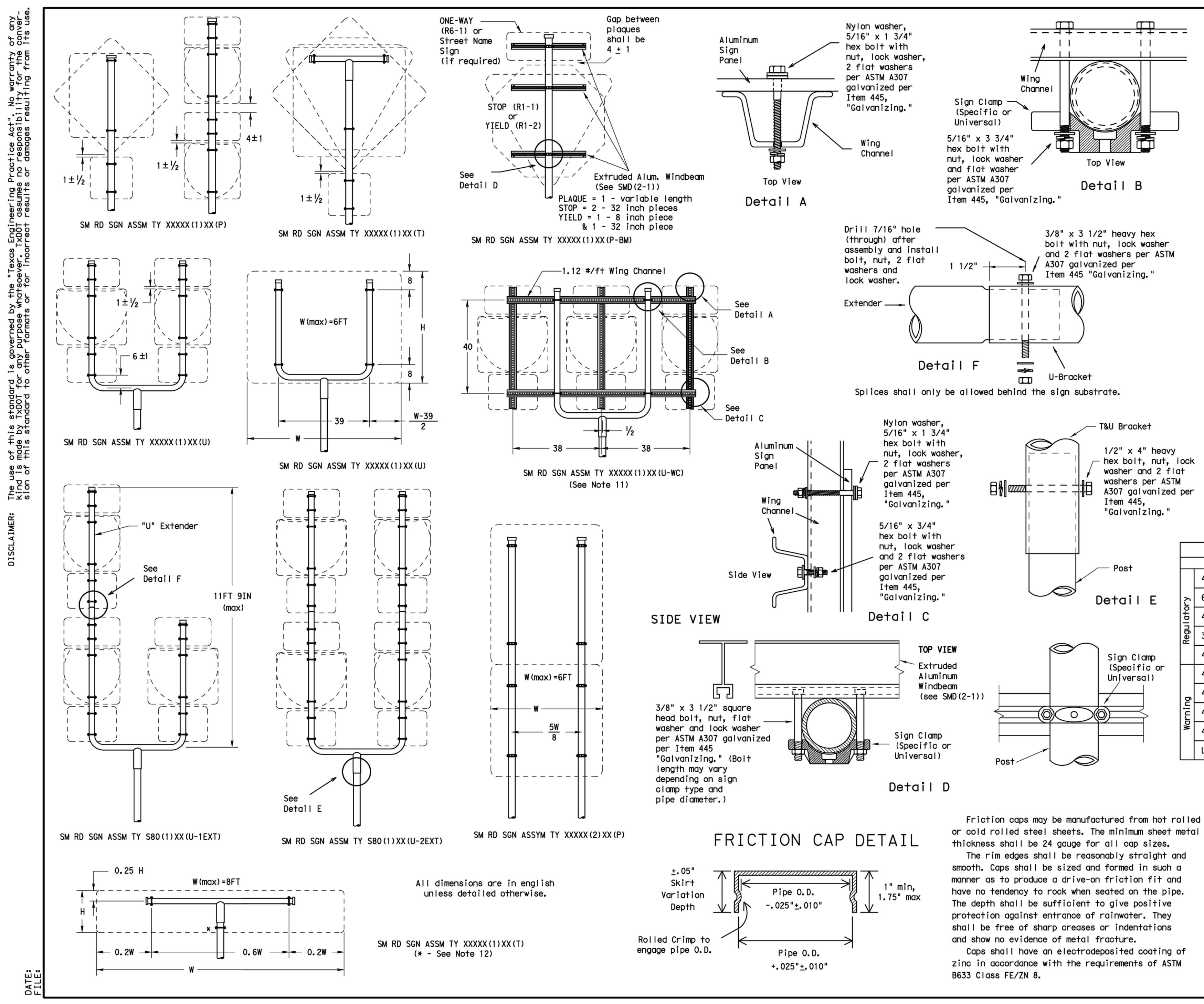

FRICTION CAP DETAIL

Friction caps may be manufactured from hot rolled or cold rolled steel sheets. The minimum sheet metal thickness shall be 24 gauge for all cap sizes.

The rim edges shall be reasonably straight and smooth. Caps shall be sized and formed in such a manner as to produce a drive-on friction fit and have no tendency to rock when seated on the pipe. The depth shall be sufficient to give positive protection against entrance of rainwater. They shall be free of sharp creases or indentations and show no evidence of metal fracture.

Caps shall have an electrodeposited coating of zinc in accordance with the requirements of ASTM B633 Class FE/ZN 8.

GENERAL NOTES: (as on SMD(SLIP-3), with REQUIRED SUPPORT table)

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-2)-08

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REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
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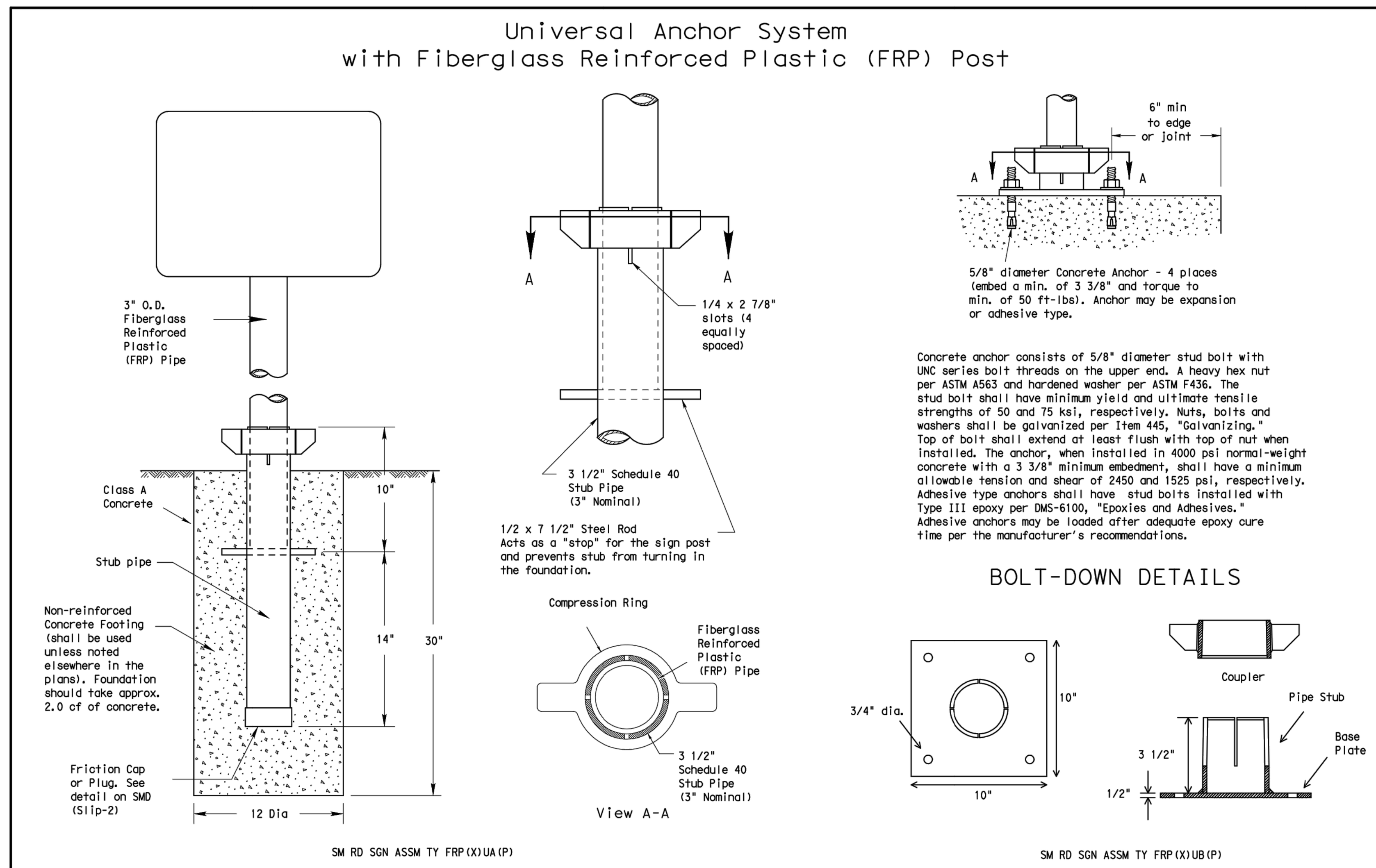
STATE OF TEXAS — PAUL LANDA, JR — 100182 — LICENSED PROFESSIONAL ENGINEER — 6/6/23

ROOSEVELT LANDING, UNIT 2

TRAFFIC PLAN DETAILS

SHEET C4.3

SUBMITTAL SET



GENERAL NOTES:

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.
2. All nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing."
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

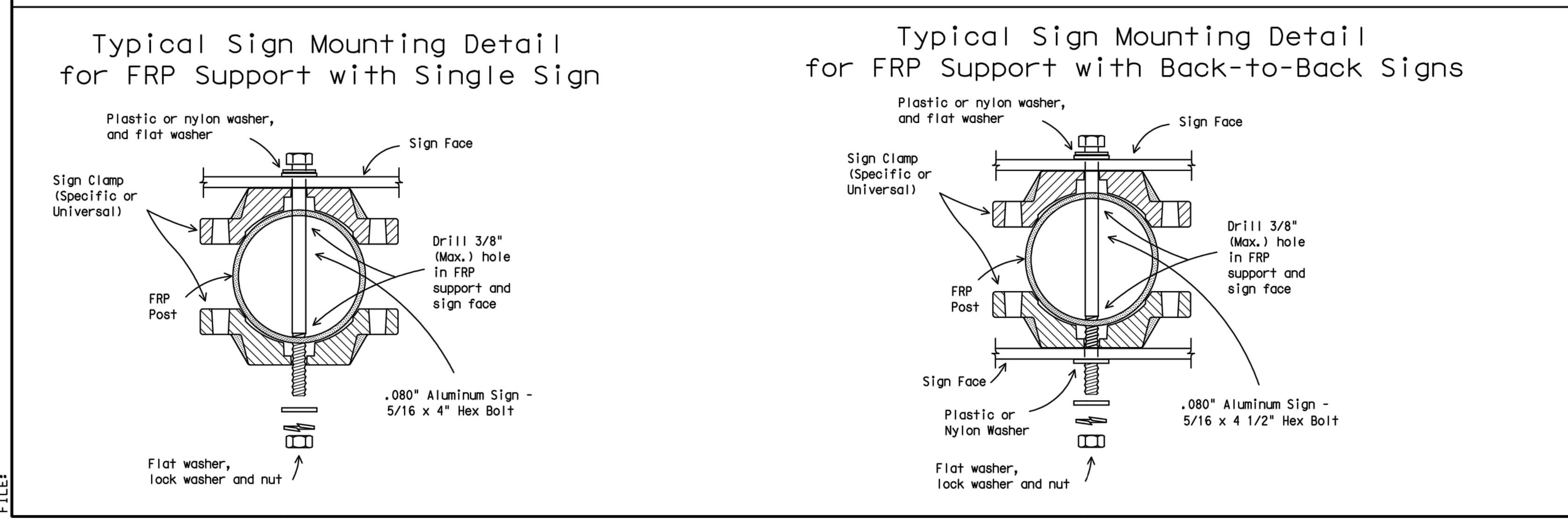
1. Materials shall conform to the requirements of Departmental Material Specification DMS-4410 and will be furnished in a yellow or gray color as specified elsewhere in the plans.
2. Thickness of FRP sign support is 0.125" + 0.031", - 0.0".
3. FRP sign supports are prequalified by the Traffic Operations Division. Prequalification procedures are obtained by writing:
   Texas Department of Transportation
   Traffic Operations Division
   125 East 11th Street
   Austin, Texas 78701-2483

UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURES

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 below ground level, the foundation shall extend in the solid rock a minimum 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 from the bottom and the clearance requirements given on SMD(GEN) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
2. 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 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 hole to depths shown and fill hole with concrete. Cut base post from bottom and ensure a minimum of 18" embedment if installed in solid rock.
4. Level and plumb the base post with coupler using a torpedo level and let concrete set a minimum of 4 days, unless otherwise directed by Engineer. Bottom of base post slots shall be above the concrete footing.
5. Attach sign to FRP post.
6. Insert sign post into base post. Lower until the post comes to rest on the steel rod.
7. Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
8. Check sign to ensure there is no twist. If loose, increase the tightening of coupler.

BOLT DOWN SIGN SUPPORT

1. Position base plate with coupler on existing concrete.
2. Drill holes into concrete and insert the 5/8" diameter bolts with wedge anchors, and tighten nuts.
3. Attach sign to FRP post.
4. Insert bottom of sign post into pipe stub.
5. Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
6. Check sign to ensure there is no twist. If loose, increase the tightening of coupler.



Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
UNIVERSAL ANCHOR SYSTEM
WITH FRP POST

SMD(FRP)-08

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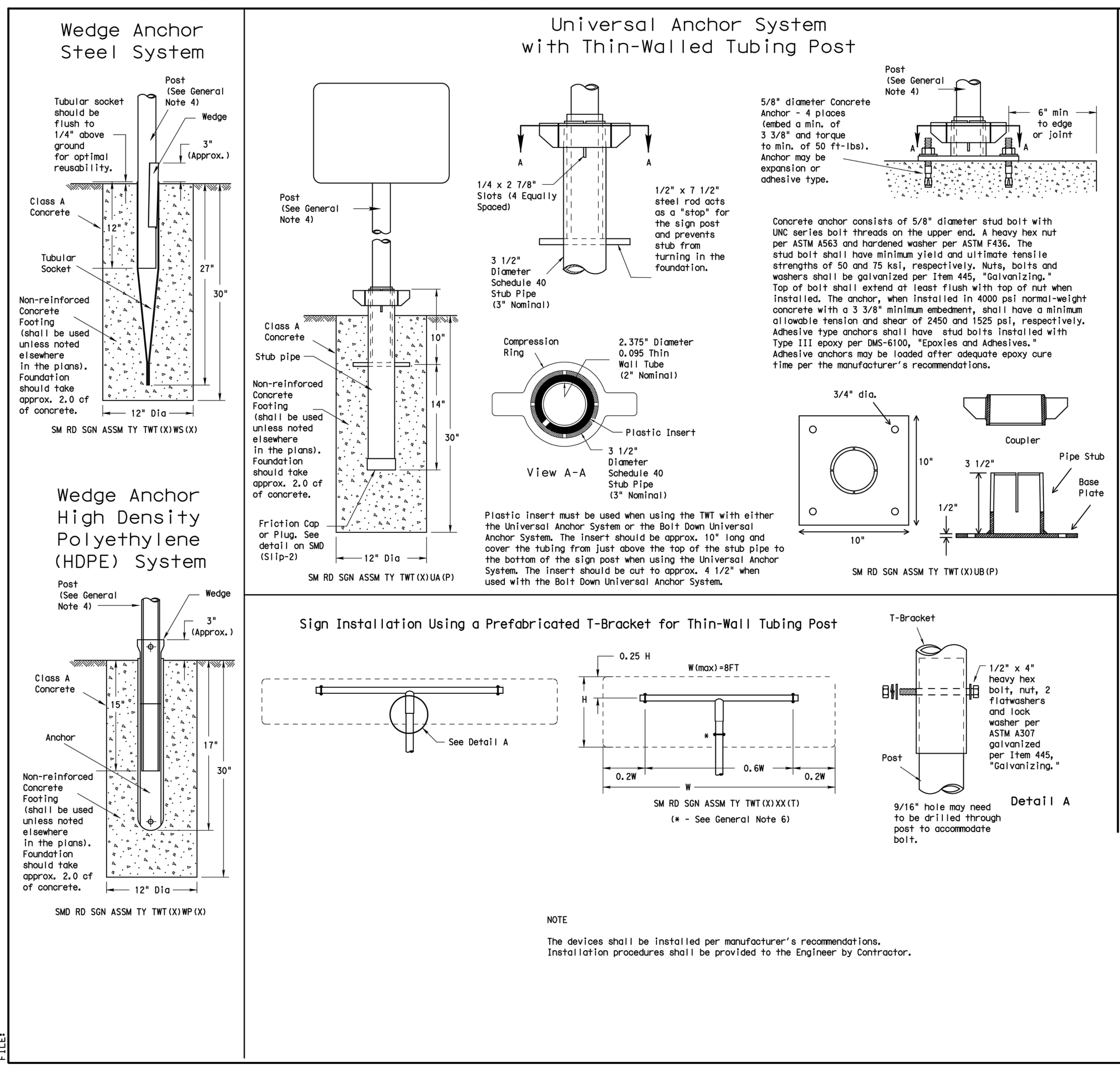


NOTE

The devices shall be installed per manufacturer's recommendations. Installation procedures shall be provided to the Engineer by Contractor.

GENERAL NOTES:

1. The Wedge Anchor System and the Universal Anchor System with thin wall tubing post may be used to support up to 10 square feet of sign area.
2. The tubular socket, wedge and prefabricated T-bracket shall be permanently marked to indicate manufacturer. Method, design, and location of marking are subject to the approval of the TxDOT Traffic Standards Engineer.
3. Except for posts (13 BWG Tubing), clamps, nuts and bolts, all components shall be prequalified. A list of prequalified vendors may be obtained from the Material Producer List web page. The website address is: http://www.txdot.gov/business/producer list.htm
4. Material used as post with this system shall conform to the following specifications:
   13 BWG Tubing (2.375" outside diameter) (TWT)
   0.095" nominal wall thickness
   Seamless or electric-resistance welded steel tubing
   Steel shall be HSLAS Gr 55 per ASTM A1011 or ASTM A1008
   Other steels may be used if they meet the following:
   55,000 PSI minimum yield strength
   70,000 PSI minimum tensile strength
   18% minimum elongation in 2"
   Wall thickness (uncoated) shall be within the range of .083" to .099"
   Outside diameter (uncoated) shall be within the range of 2.369" to 2.381"
   Galvanization per ASTM 123 or ASTM A653 G210. For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metallizing with zinc wire per ASTM B833.
5. Sign blanks shall be the sizes and shapes shown on the plans.
6. Additional sign clamp required on the "T-bracket" post for 24" high signs. Place clamp at least 3" above bottom of sign when possible.
7. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
8. See the Traffic Operations Division website for detailed drawings of sign clamps and Wedge Anchor System components. The website address is: http://www.txdot.gov/publications/traffic.htm

WEDGE ANCHOR SYSTEM INSTALLATION PROCEDURE

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 below ground level, the foundation shall extend in the solid rock a minimum 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 from the bottom and the clearance requirements given on SMD(GEN) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
2. 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 less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Place concrete into hole until it is approximately flush with the ground. Concrete shall be Class A.
3. Insert tubular socket into concrete until top of socket is approximaely 1/4 " above the concrete footing.
4. Plumb the socket. Allow a minimum 4 days for concrete to set, unless otherwise directed by Engineer..
5. Attach the sign to the sign post.
6. Insert the sign post into socket and align sign face with roadway.
7. Drive the wedge into the socket to secure post. This will leave approximately 3 inches of the wedge exposed.

UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURE

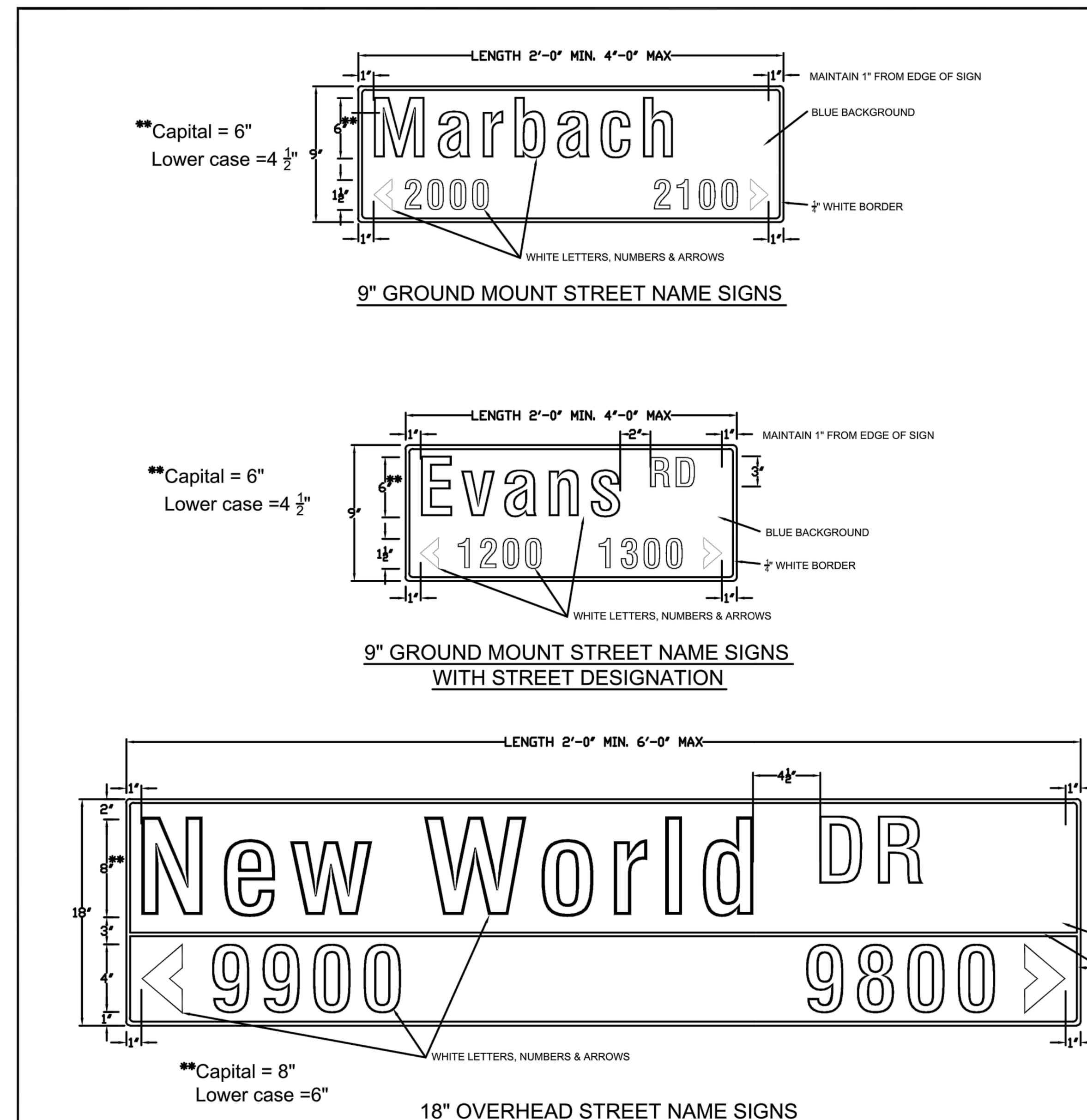
1. Dig foundation hole. Where solid rock is encountered at ground level, the foundation shall be a minimum depth of 18". When solid rock is encountered below ground level, the foundation shall extend in the solid rock a minimum depth of 18" or provide a minimum foundation depth of 30". If solid rock 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 from the bottom and the clearance requirements given on SMD(GEN) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
2. Insert base post in hole to depths shown and backfill hole with concrete.
3. Level and plumb the base post using a torpedo level and allow concrete adequate time to set. The bottom of the slots provided in the stub pipe shall remain above the top of the concrete foundation.
4. Attach the sign to the sign post.
5. Install plastic insert around bottom of post.
6. Insert sign post into base post. Lower until the post comes to rest on steel rod.
7. Seat compression ring using a hammer. Typically, the top of compression ring will be approximately level with top of stub post when optimally installed.
8. Check sign post by hand to ensure it is unable to turn. If loose, increase the tightening of the compression ring.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
WEDGE & UNIVERSAL ANCHOR
WITH THIN WALL TUBING POST

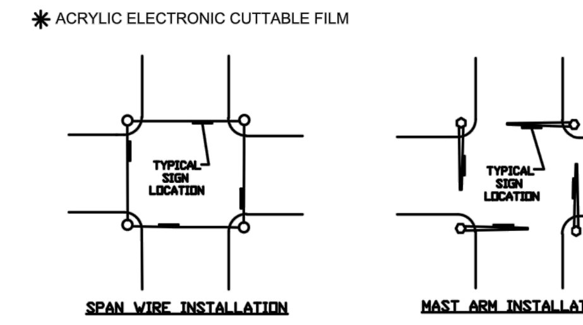
SMD(TWT)-08

© TxDOT July 2002 — 9-08 REVISIONS — 26E



	18" OVERHEAD SIGN	9" GROUND MOUNT SIGNS
HEIGHT	18" (381 mm)	9" (228 mm)
LENGTH	48" (1200 mm) MIN. 72" (1800 mm) MAX. 1' (300mm) INCREMENTS OF LENGTH	24" (600 mm) MIN. 48" (1200 mm) MAX. 6" (150mm) INCREMENTS OF LENGTH
THICKNESS	0.125" (3 mm)	
SUBSTRATE	ALUMINUM ALLOY, 5052-H38 (ASTM B-209 GOLD CHROMATE FINISH	
SIGN FACE MATERIALS	BLUE FILM ✱ OVER DIAMOND GRADE - ASTM Type XI Non-Fluorescent	BLUE FILM ✱ OVER HIGH INTENSITY PRISMATIC- ASTM Type IV
LEGENDS AND SYMBOLS	SERIES D, B OR C IF NAME OTHERWISE EXCEEDS MAXIMUM SIGN LENGTH	
COLOR	WHITE LEGEND ON BLUE BACKGROUND	
LETTER TRACKING	17% (USUAL) 10% (MIN.)	10%

✱ ACRYLIC ELECTRONIC CUTTABLE FILM



SIGN FACE MATERIALS SHALL CONFORM TO:

1. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS & BRIDGES ON FEDERAL HIGHWAY PROJECTS - FP-03 U.S. CUSTOMARY UNITS SECTION 718
2. GENERAL SERVICES ADMINISTRATION FEDERAL SPECIFICATIONS L-S-300C
3. ASTM D 4956 - 09ε1

Bexar County Public Works
Street Name Sign Details

SUBMITTAL SET

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS — PAUL LANDA, JR — 100182 — LICENSED PROFESSIONAL ENGINEER

REVISIONS — NO. | DATE | DESCRIPTION | BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

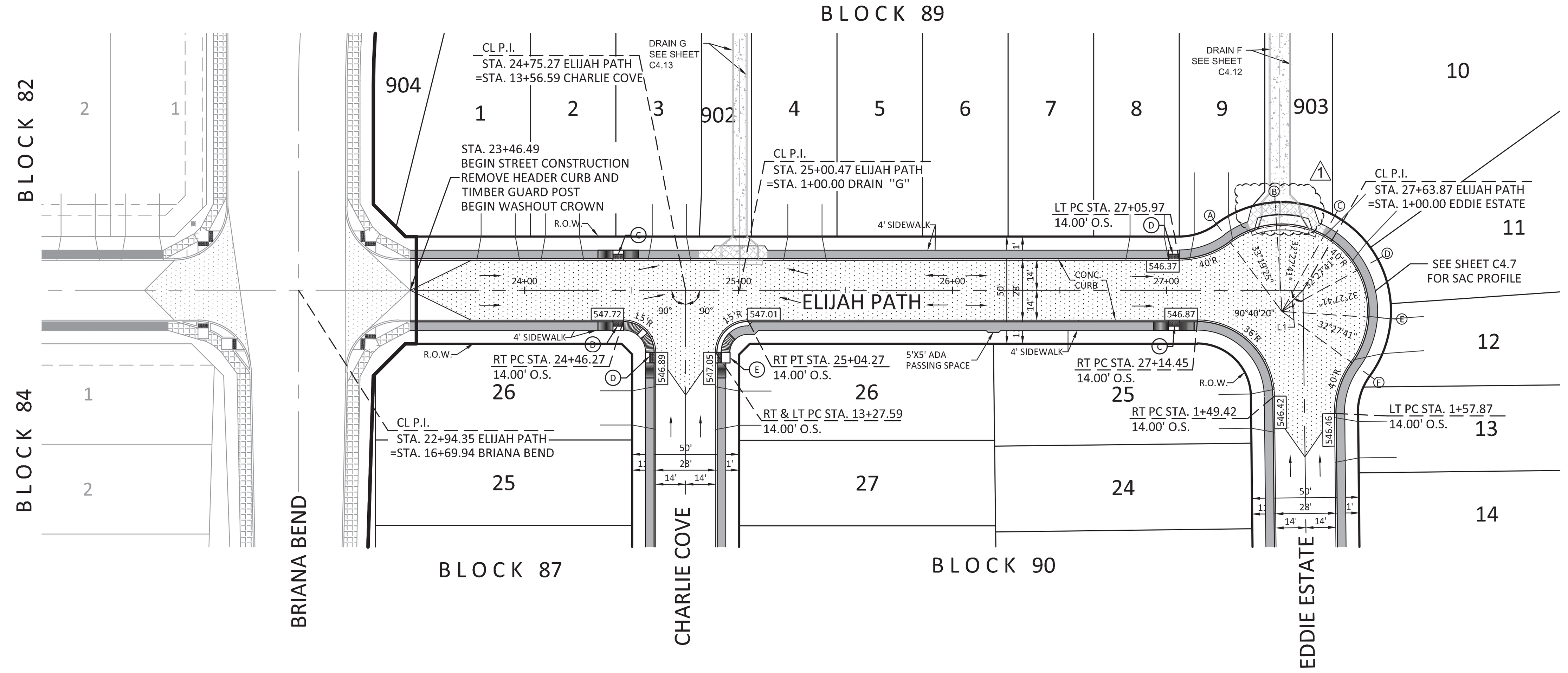
ROOSEVELT LANDING, UNIT 2
TRAFFIC PLAN DETAILS

SHEET
C4.4

LAND-PLAT-22-11800353

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:
BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE–IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.



SCALE: 1"=50'
0 50 100

LINE TABLE		
LINE	LENGTH	BEARING
L1	14.00'	N45°57'26"W

KNUCKLE SAC TABLE		
POINT	TOP OF CURB	GUTTER
RT PT STA. 27+05.97	546.37	545.79
A	546.11	545.53
B	545.88	545.30
C	546.00	545.42
D	546.11	545.53
E	546.22	545.64
F	546.34	545.64
LT PC STA. 1+57.87	546.46	545.88

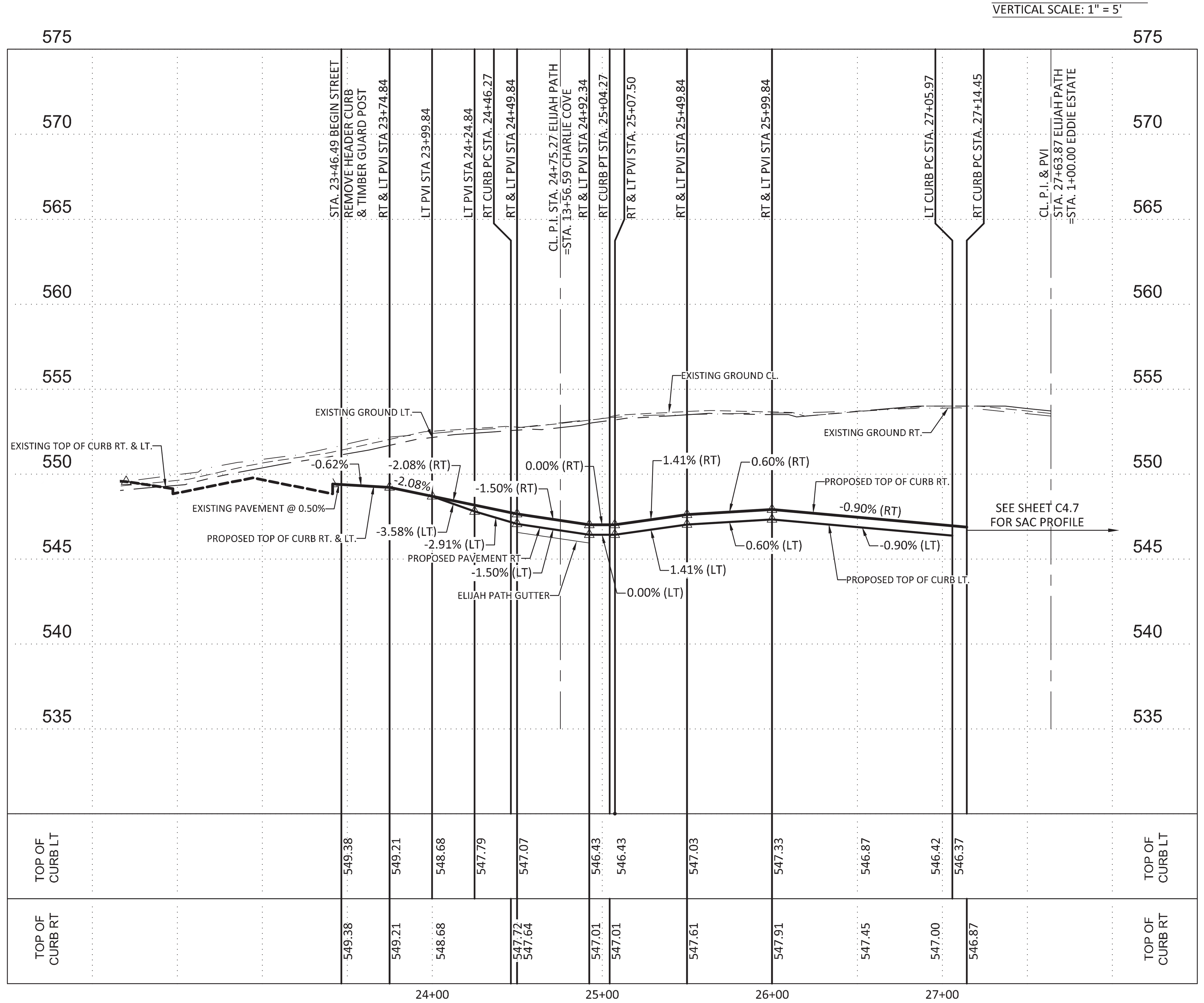
LEGEND

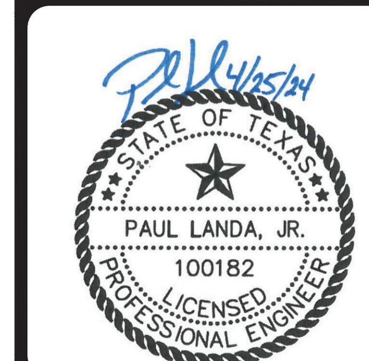
- CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. (1)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) (A)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) (B)
- SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) (C)
- SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED) (D)
- SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP (E)
- EXISTING TOP OF CURB ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- HOME BUILDER INSTALLED SIDEWALK
- DEVELOPER INSTALLED SIDEWALK
- EXISTING SIDEWALK
- SIDEWALK WHEEL CHAIR RAMP
- WASH-OUT CROWN
- FILL @ 95% COMPACTION
- POSSIBLE DRIVEWAY LOCATION
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CONCRETE CURB
- FLOW ARROW

ELIJAH PATH

STA. 23+49.35 TO STA. 27+63.87

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





REVISIONS

NO.	DATE	DESCRIPTION	BY
1	04/25/24	DRAIN REVISION	

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
ELIJAH PATH
STA. 23+49.35 TO STA. 27+63.87

REVISED
4:43 pm, May 01, 2024

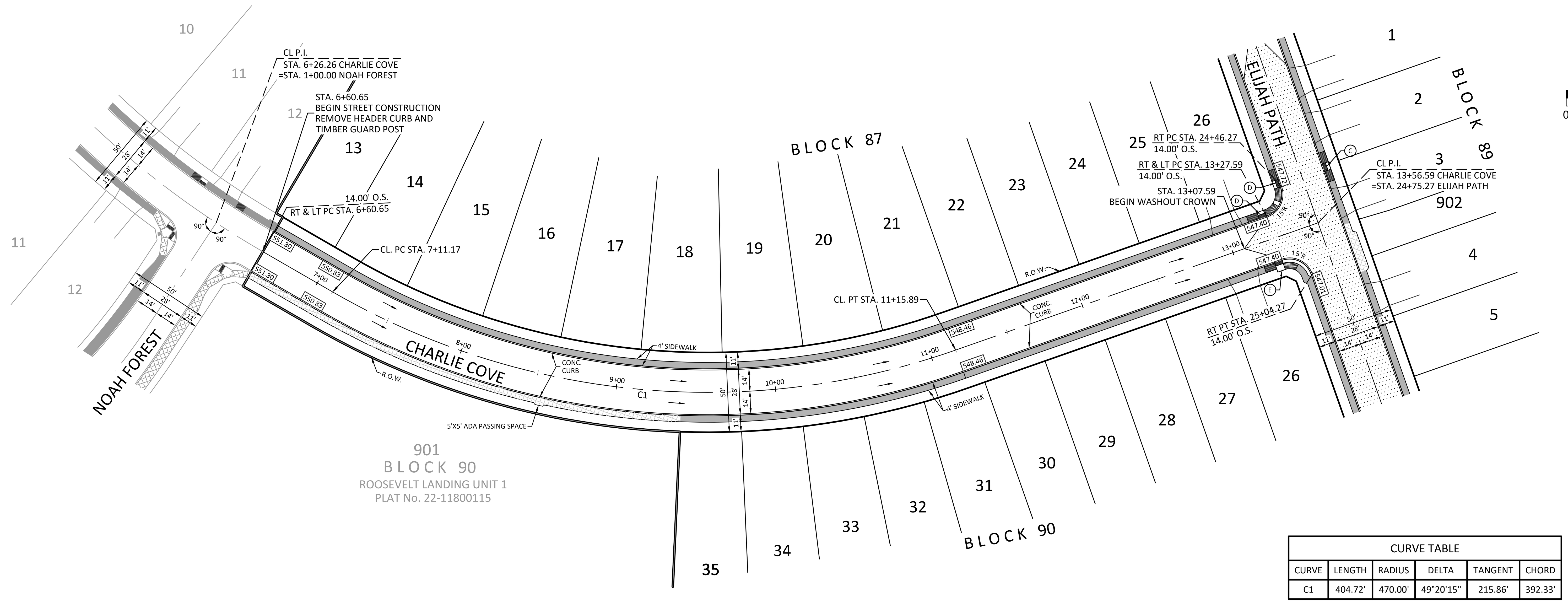
SUBMITTAL SET

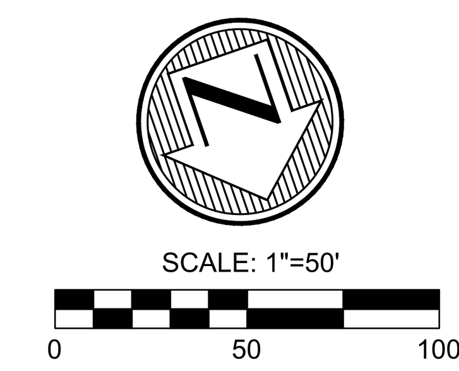
SHEET
C4.5

LAND-PLAT-22-11800353

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:
BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.





CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	404.72'	470.00'	49°20'15"	215.86'	392.33'

LEGEND

- CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. (1)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) (A)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) (B)
- SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) (C)
- SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED) (D)
- SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP (E)
- EXISTING TOP OF CURB ELEVATION 805.81TC
- PROPOSED TOP OF CURB ELEVATION 805.81
- HOME BUILDER INSTALLED SIDEWALK
- DEVELOPER INSTALLED SIDEWALK
- EXISTING SIDEWALK
- SIDEWALK WHEEL CHAIR RAMP
- WASH-OUT CROWN
- FILL @ 95% COMPACTION
- POSSIBLE DRIVEWAY LOCATION
- PROPERTY LINE
- EXISTING CONTOUR 1120
- PROPOSED CONTOUR 1120
- PROPOSED CONCRETE CURB
- FLOW ARROW

CHARLIE COVE

STA. 6+60.65 TO STA. 13+27.59

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

TOP OF CURB LT	551.30	550.93	550.83	550.46	550.09	550.04	549.79	549.54	549.29	549.04	548.79	548.54	548.46	548.29	548.04	547.79	547.54	547.40
TOP OF CURB RT	551.30	550.93	550.83	550.46	550.09	550.04	549.79	549.54	549.29	549.04	548.79	548.54	548.46	548.29	548.04	547.79	547.54	547.40

6+00 | 7+00 | 8+00 | 9+00 | 10+00 | 11+00 | 12+00 | 13+00

SUBMITTAL SET

REVISIONS
NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-1013150
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
CHARLIE COVE
STA. 6+60.65 TO STA. 13+27.59

SHEET
C4.6

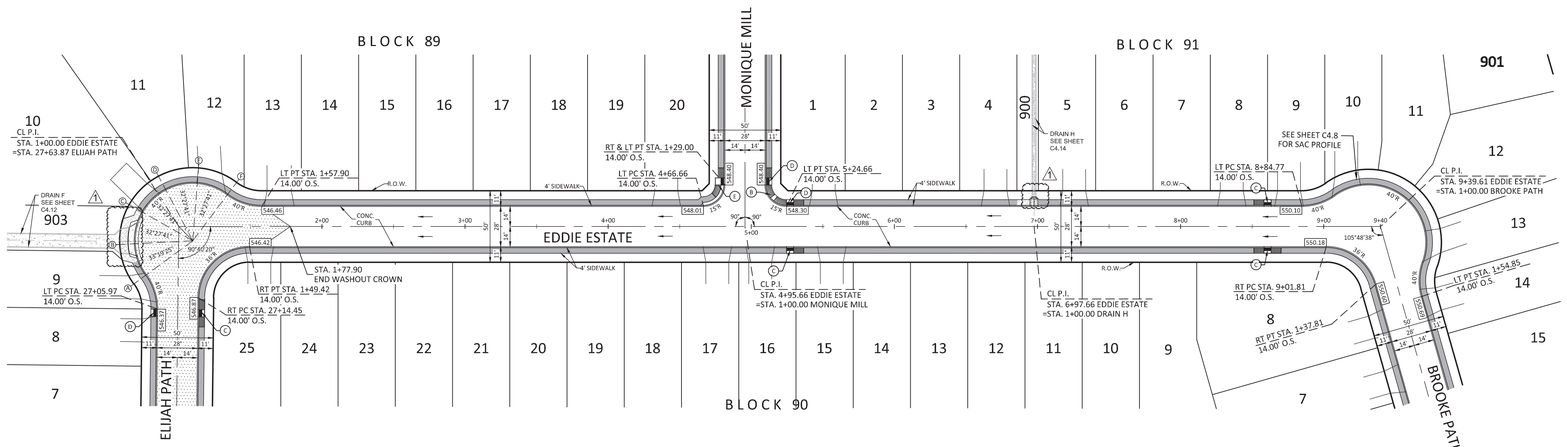
LAND-PLAT-22-11800353

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:
BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.

KNUCKLE SAC TABLE		
POINT	TOP OF CURB	GUTTER
RT PT STA. 27+05.97	546.37	545.79
A	546.11	545.53
B	545.88	545.30
C	546.00	545.42
D	546.11	545.53
E	546.22	545.64
F	546.34	545.64
LT PT STA. 1+57.90	546.42	545.84

LINE TABLE		
LINE	LENGTH	BEARING
L1	14.00'	N45°57'26"W



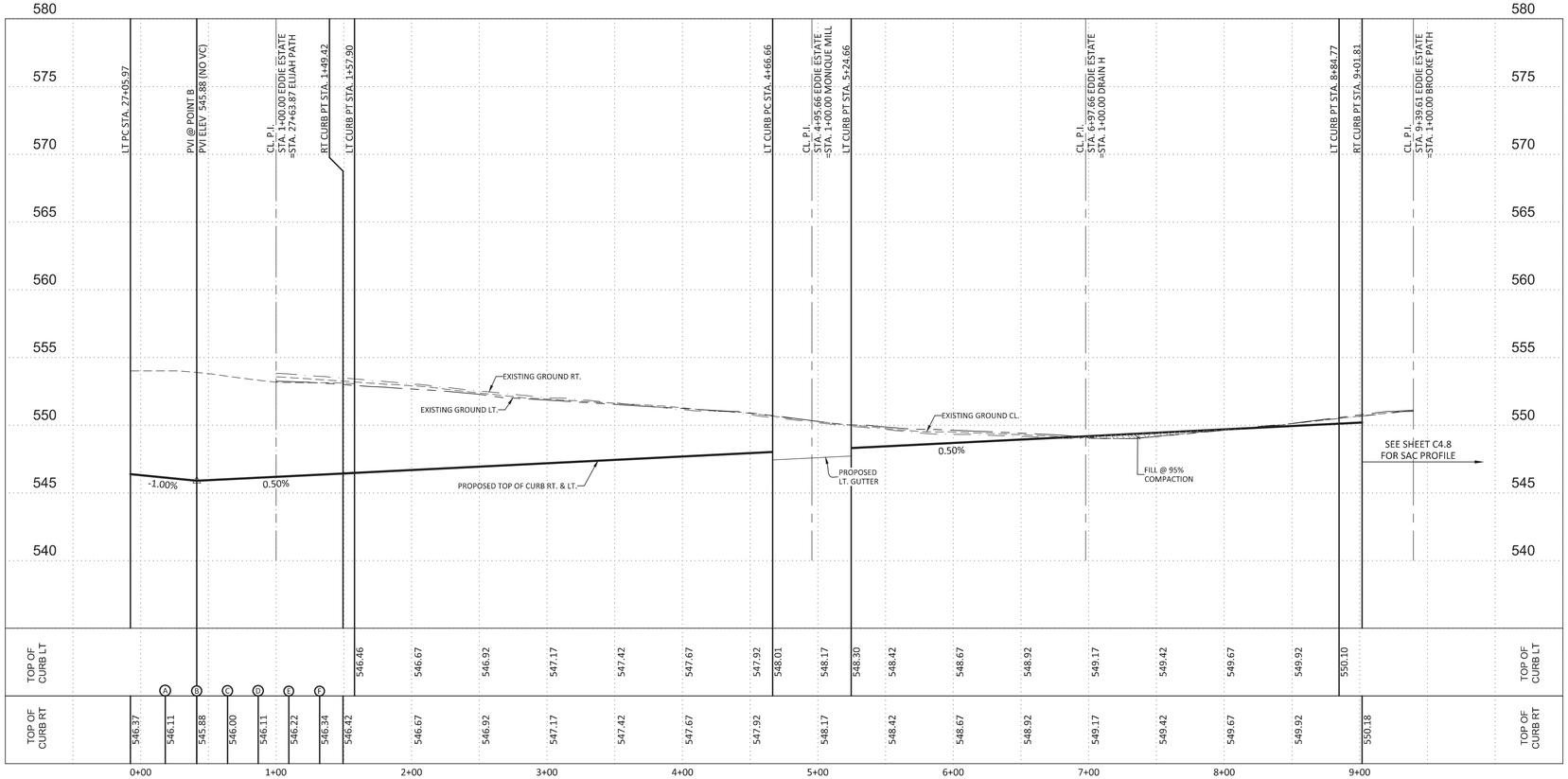
LEGEND

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.	1
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE)	A
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL)	B
SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED)	C
SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)	D
SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP	E
EXISTING TOP OF CURB ELEVATION	805.81TC
PROPOSED TOP OF CURB ELEVATION	805.81
HOME BUILDER INSTALLED SIDEWALK	
DEVELOPER INSTALLED SIDEWALK	
EXISTING SIDEWALK	
SIDEWALK WHEEL CHAIR RAMP	
WASH-OUT CROWN	
FILL @ 95% COMPACTION	
POSSIBLE DRIVEWAY LOCATION	
PROPERTY LINE	
EXISTING CONTOUR	1120
PROPOSED CONTOUR	1120
PROPOSED CONCRETE CURB	
FLOW ARROW	

EDDIE ESTATE

STA. 1+00.00 TO STA. 9+39.61

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



SCALE: 1"=50'
0 50 100

• Engineers • Surveyors • Planners
MTR
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F-5297 /SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER

REVISIONS								
NO.	DATE	DESCRIPTION	PROJ. #	DSN. BY:	DWN. BY:	CHKD. BY:	DATE:	BY:
1	04/25/24	DRAIN REVISION						

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
EDDIE ESTATE
STA. 1+00.00 TO STA. 9+39.61

REVISED
4:43 pm, May 01, 2024

SUBMITTAL SET

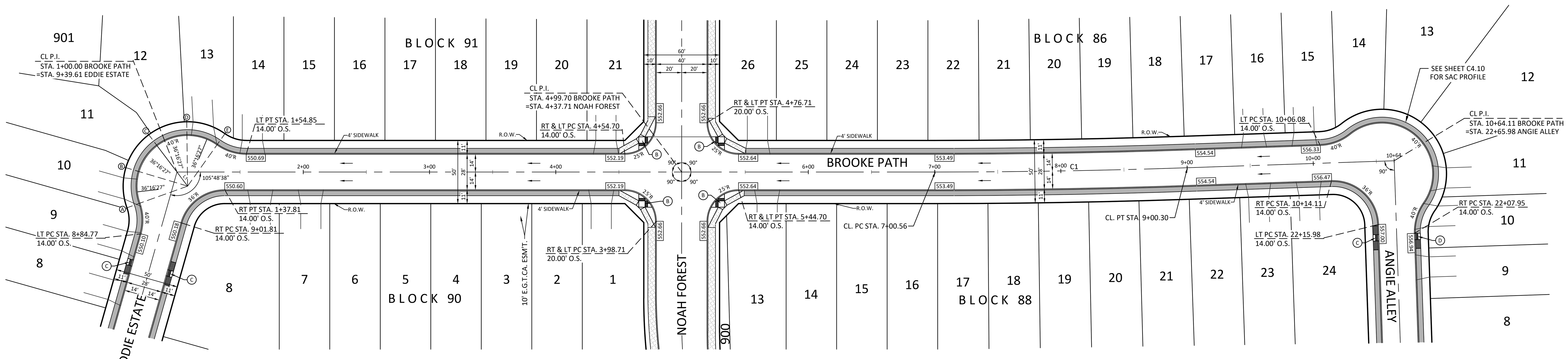
SHEET
C4.7

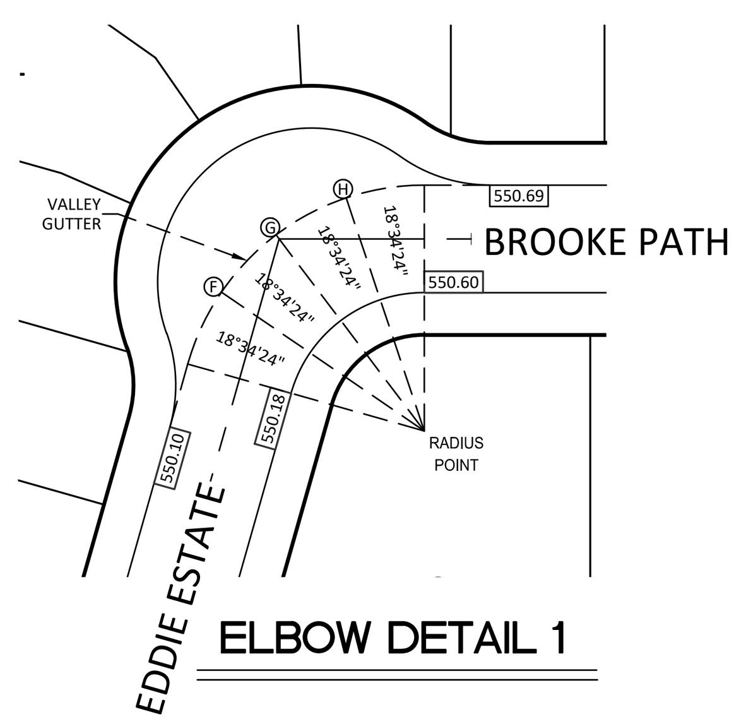
Plot Date: April 9, 2024 | User ID: Marcella Pastrana
R:\Active Yard\Unit 2\Sheets\Final_Plan Sheets.dwg

LAND-PLAT-22-11800353

LEGEND

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.	1
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE)	A
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL)	B
SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED)	C
SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)	D
SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP	E
EXISTING TOP OF CURB ELEVATION	805.61TC
PROPOSED TOP OF CURB ELEVATION	805.61
HOME BUILDER INSTALLED SIDEWALK	
DEVELOPER INSTALLED SIDEWALK	
EXISTING SIDEWALK	
SIDEWALK WHEEL CHAIR RAMP	
WASH-OUT CROWN	
FILL @ 95% COMPACTION	
POSSIBLE DRIVEWAY LOCATION	
PROPERTY LINE	
EXISTING CONTOUR	1120
PROPOSED CONTOUR	1120
PROPOSED CONCRETE CURB	
FLOW ARROW	





ELBOW DETAIL 1

ELBOW SAC TABLE		
POINT	TOP OF CURB	GUTTER
LT. PC STA. 8+84.77	550.10	549.52
A	550.32	549.74
B	550.53	549.95
C	550.66	550.08
D	550.70	550.12
E	550.66	550.08
F	-	549.63
G	-	549.73
H	-	549.82
RL PT STA. 1+54.85	550.69	550.11

LINE TABLE		
LINE	LENGTH	BEARING
L1	14.00'	N35°48'05"E

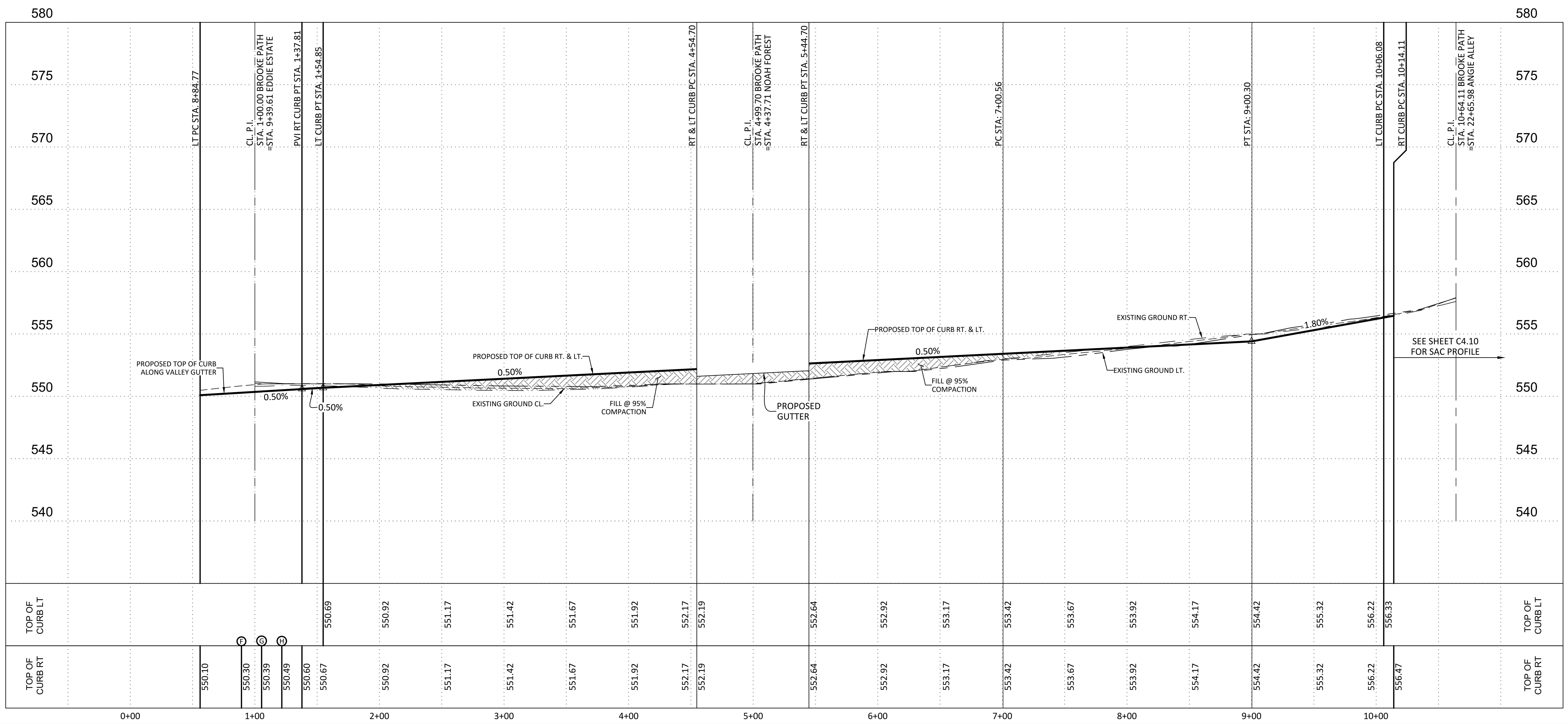
CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	191.68'	5934.20'	1°51'03"	95.85'	191.67'

BROOKE PATH

STA. 1+00.00 TO STA. 10+64.11

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

SCALE: 1"=50'



CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:
BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
BROOKE PATH
STA. 1+00.00 TO STA. 10+64.11

SHEET
C4.8

LAND-PLAT-22-11800353

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

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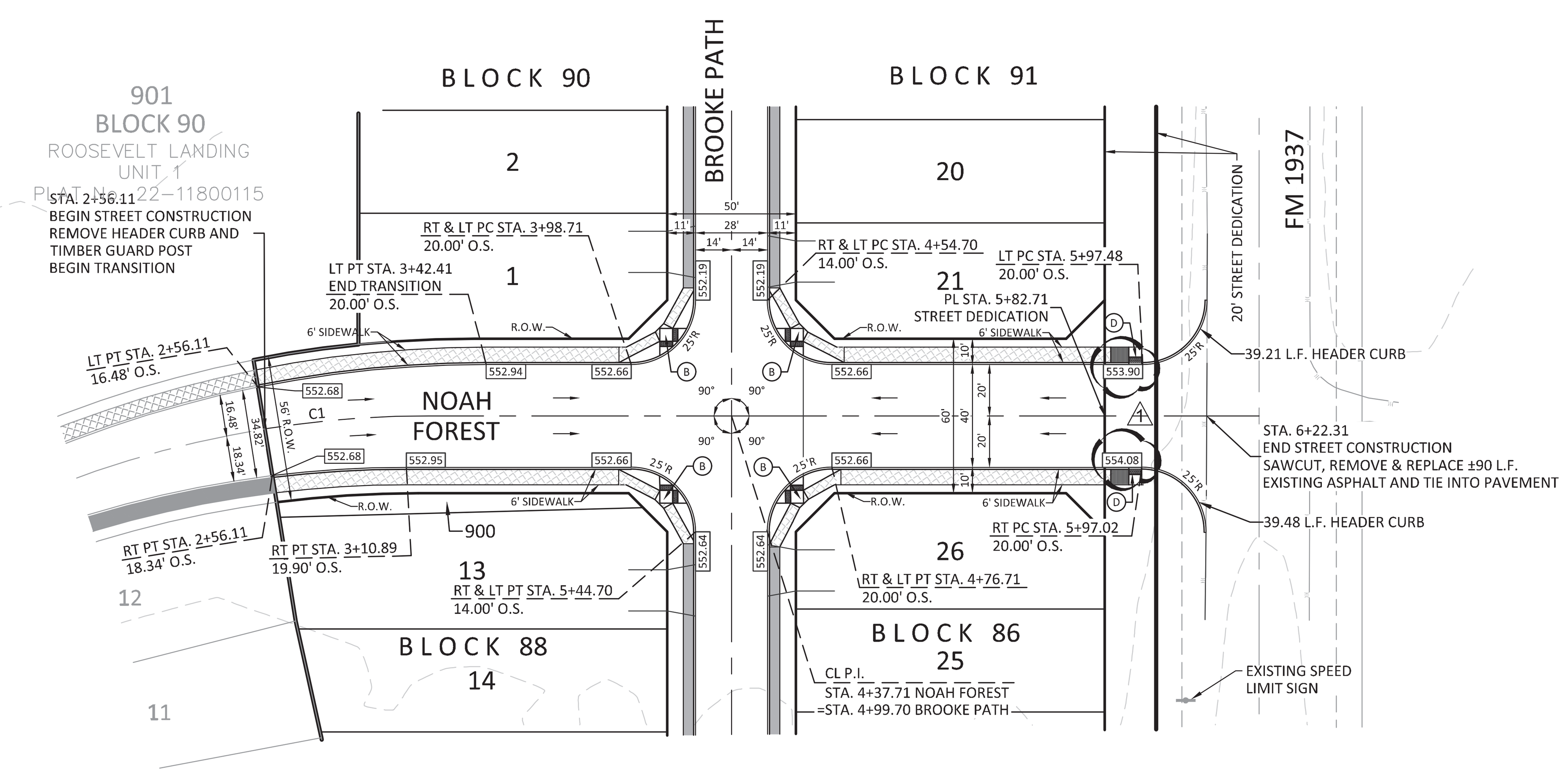


LEGEND

- CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. (1)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) (A)
- SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) (B)
- SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) (C)
- SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED) (D)
- SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP (E)
- EXISTING TOP OF CURB ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- HOME BUILDER INSTALLED SIDEWALK
- DEVELOPER INSTALLED SIDEWALK
- EXISTING SIDEWALK
- SIDEWALK WHEEL CHAIR RAMP
- WASH-OUT CROWN
- FILL @ 95% COMPACTION
- POSSIBLE DRIVEWAY LOCATION
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CONCRETE CURB
- FLOW ARROW

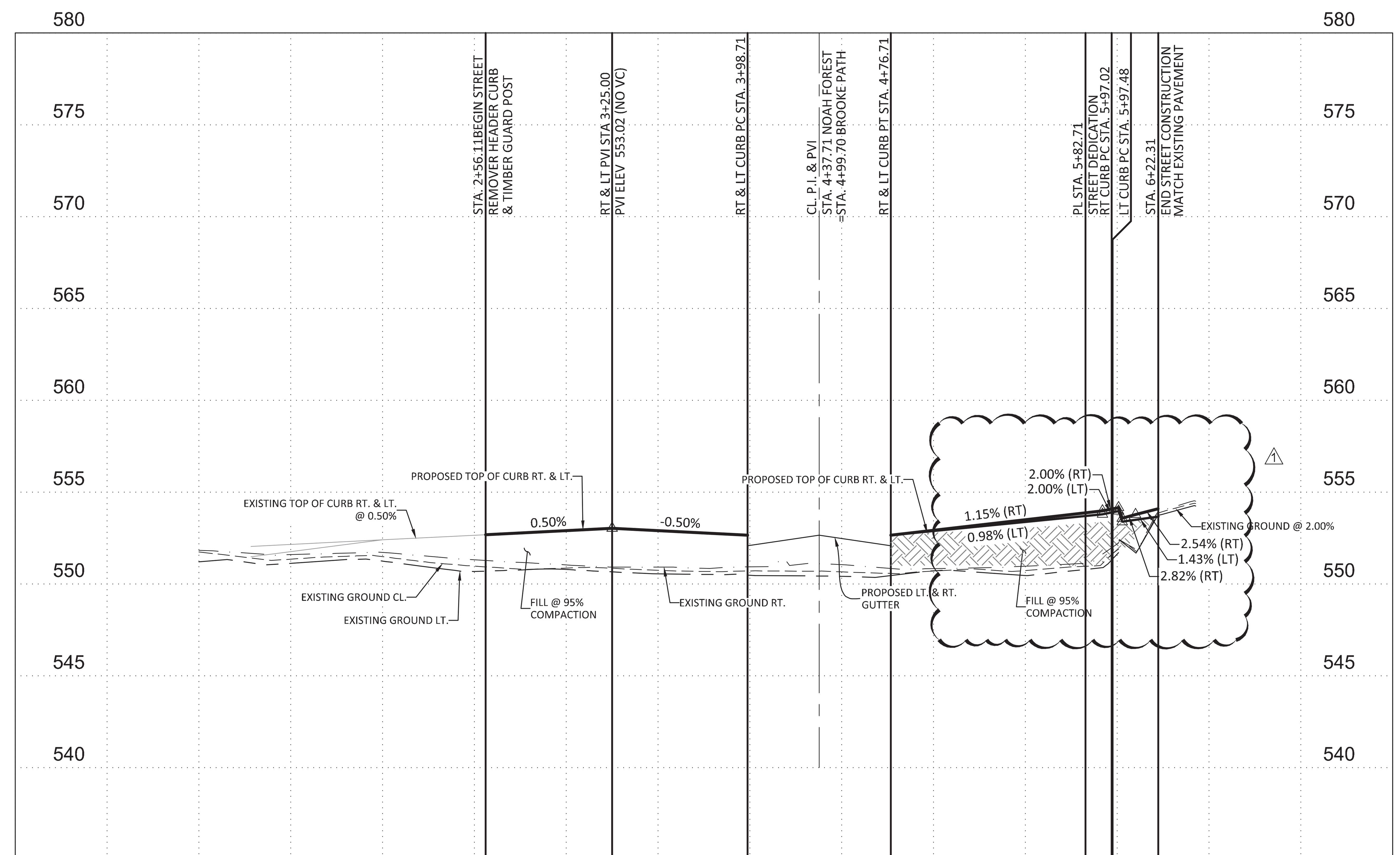
CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	63.88'	400.00'	9°09'01"	32.01'	63.81'

NOAH FOREST

STA. 2+56.11 TO STA. 6+22.31

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



TOP OF CURB LT	552.68	552.90	553.02	552.90	552.66	552.66	552.89	553.38	553.70	553.90	553.67
TOP OF CURB RT	552.68	552.90	553.02	552.90	552.66	552.66	552.92	553.50	553.87	554.08	554.50

REVISED
4:43 pm, May 01, 2024

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	03/27/24	STREET DESIGN REVISION	

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

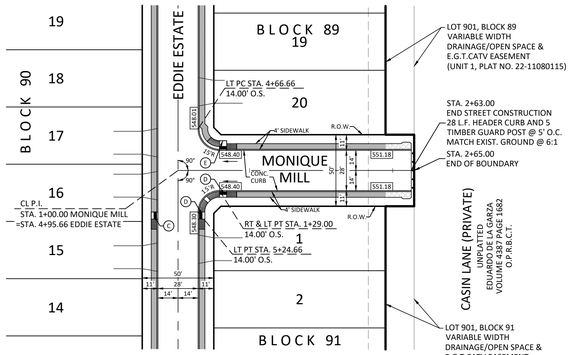
MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085

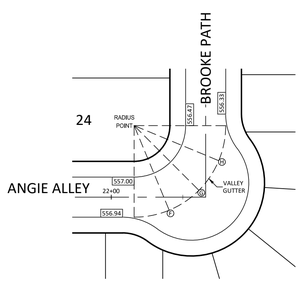
STATE OF TEXAS · PAUL LANDA, JR. · 100182 · LICENSED PROFESSIONAL ENGINEER 4/1/24

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
NOAH FOREST
STA. 2+56.11 TO STA. 6+22.31

SHEET
C4.9

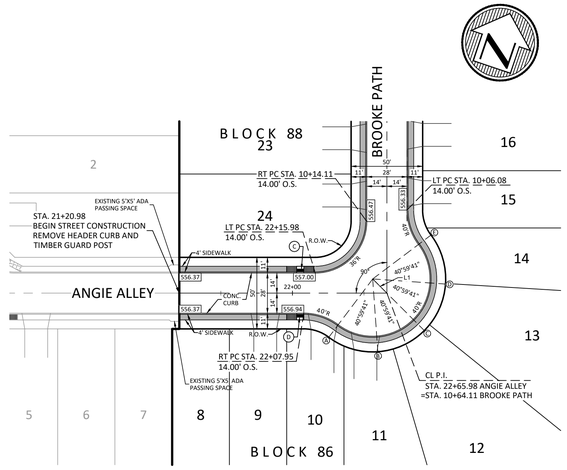
LAND-PLAT-22-11800353





ELBOW DETAIL 1

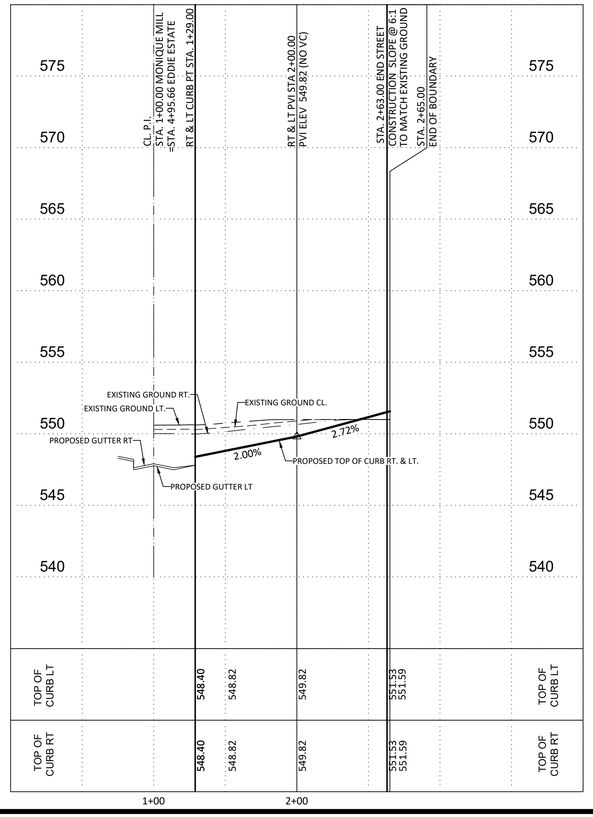
ELBOW SAC TABLE		
POINT	TOP OF CURB	GUTTER
RT. PC STA. 22+07.95	556.94	556.36
A	556.94	556.36
B	557.02	556.44
C	556.98	556.40
D	556.83	556.25
E	556.57	555.99
F	-	556.18
G	-	556.05
H	-	555.93
RT PC STA. 10+06.08	556.33	555.75



MONIQUE MILL

STA. 1+00.00 TO STA. 2+63.00

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

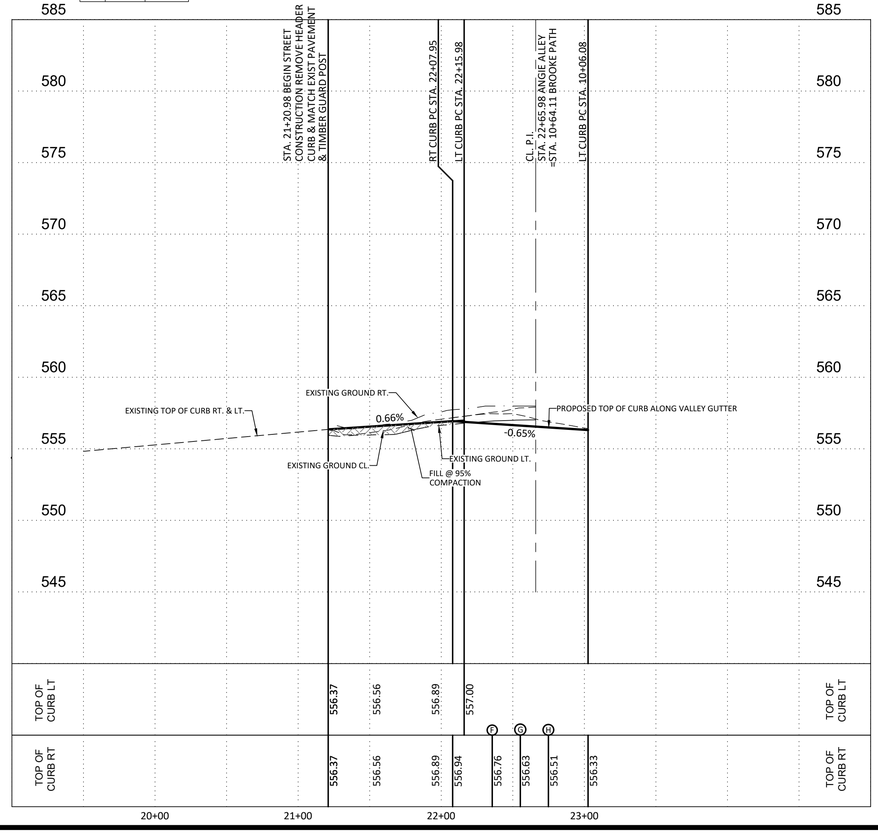


ANGIE ALLEY

STA. 21+20.98 TO STA. 22+65.98

LINE TABLE		
LINE	LENGTH	BEARING
L1	14.00'	S64°02'37"E

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



LEGEND

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.	1
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE)	A
SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL)	B
SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED)	C
SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)	D
SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP	E
EXISTING TOP OF CURB ELEVATION	805.81TC
PROPOSED TOP OF CURB ELEVATION	805.81
HOME BUILDER INSTALLED SIDEWALK	
DEVELOPER INSTALLED SIDEWALK	
EXISTING SIDEWALK	
SIDEWALK WHEEL CHAIR RAMP	
WASH-OUT CROWN	
FILL @ 95% COMPACTION	
POSSIBLE DRIVEWAY LOCATION	
PROPERTY LINE	
EXISTING CONTOUR	1120
PROPOSED CONTOUR	1120
PROPOSED CONCRETE CURB	
FLOW ARROW	

SCALE: 1"=50'
0 50 100

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:
BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE–IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY:

PROJ. #: | DSN. BY: | DWN. BY: | CHKD. BY: | DATE:

• Engineers • Surveyors • Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F–5297 /SURVEYING: F–10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698–5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698–5085

PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2

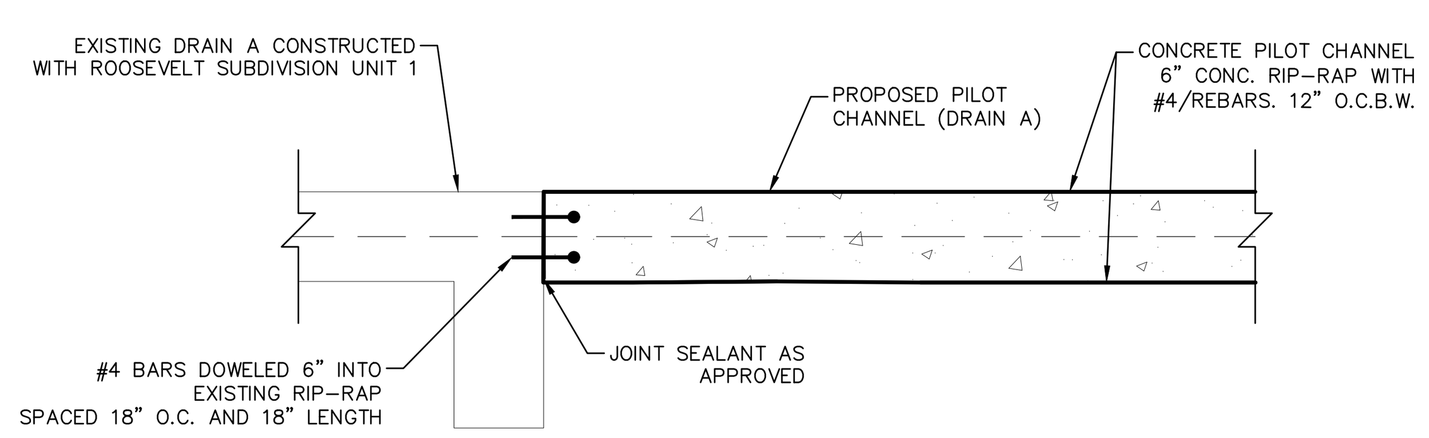
STREET PLAN & PROFILE
MONIQUE MILL & ANGIE ALLEY

SHEET
C4.10

Plot Date: June 6, 2023 User ID: Lisa Perez
N:\Active Projects\2Drawings\220825_01-Monique Mill & Angie Alley_PAP.dwg

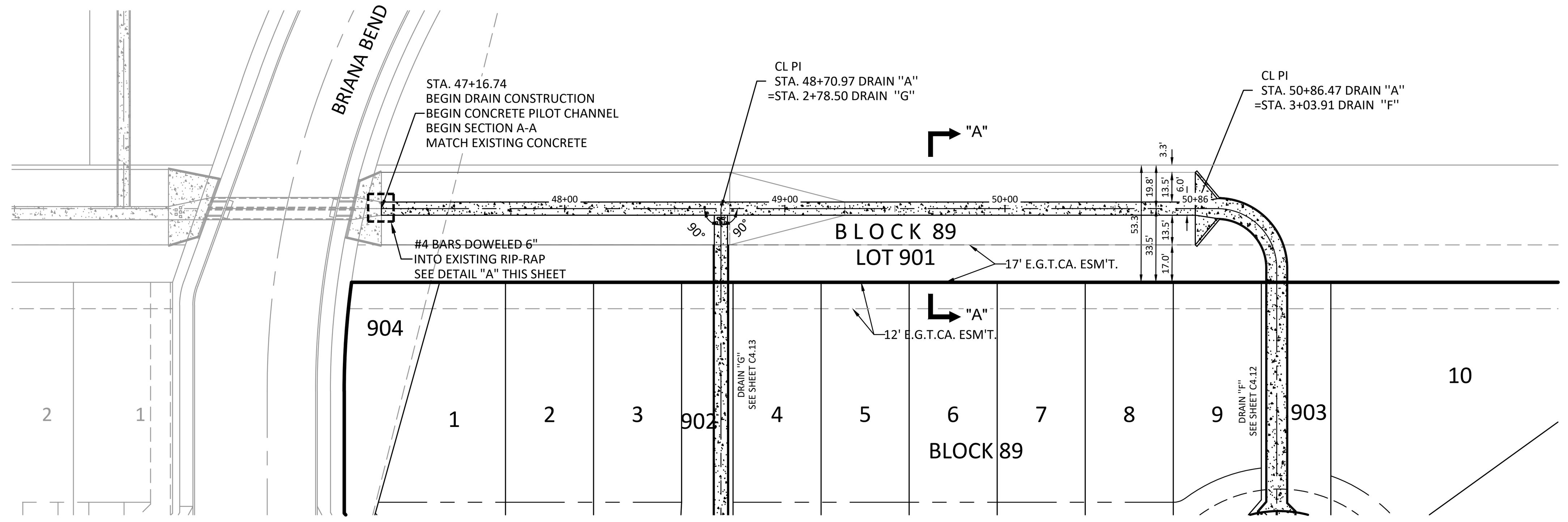
LAND-PLAT-22-11800353

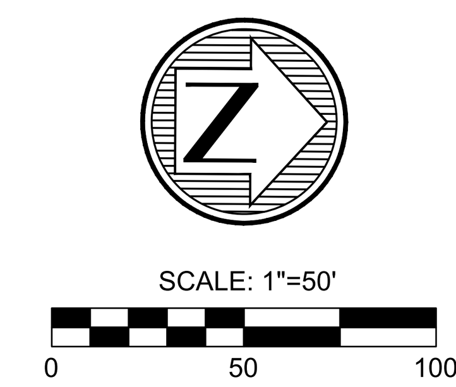
EXISTING TO PROPOSED TIE DETAIL



DETAIL "A"

(N.T.S.)

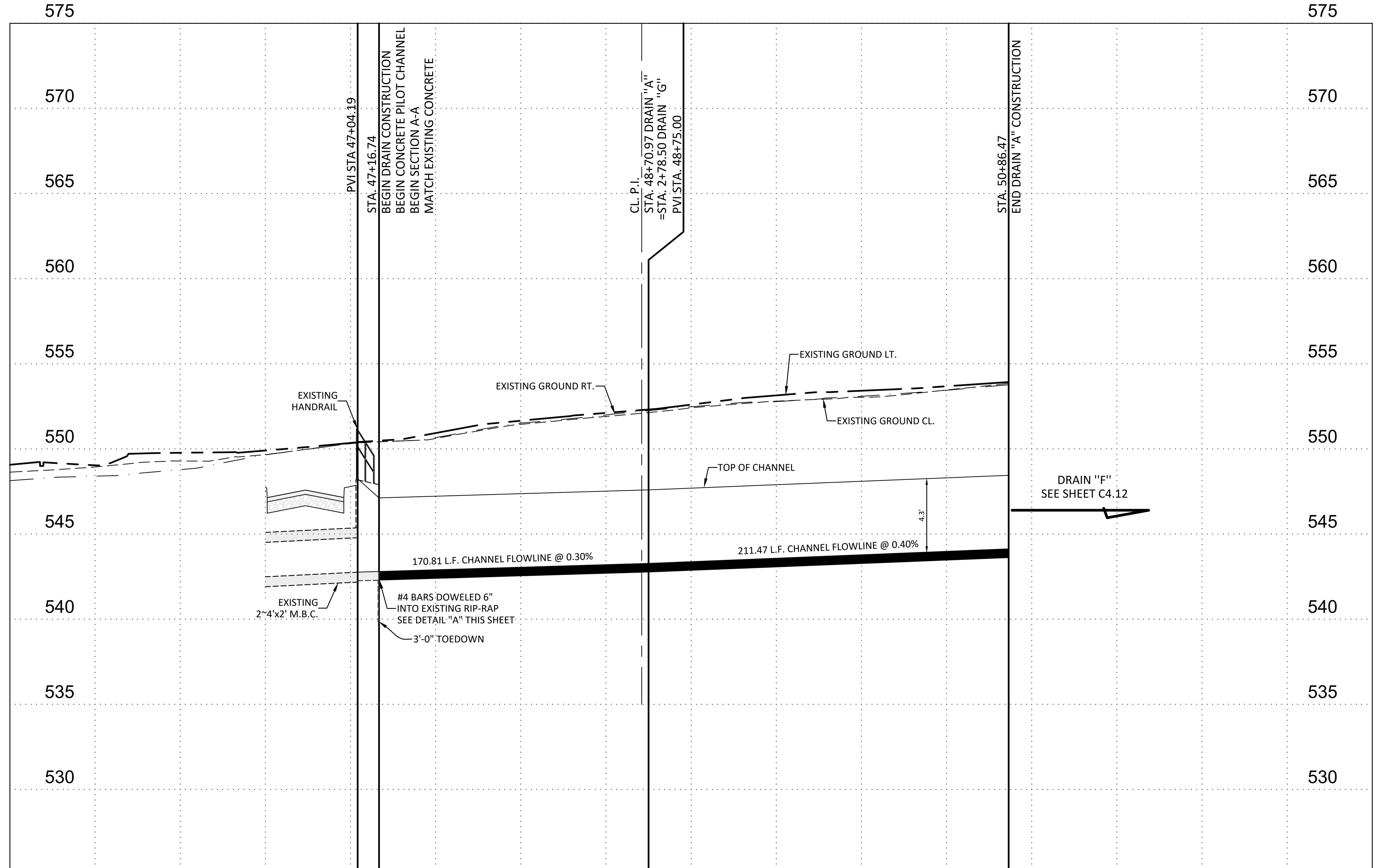




DRAIN "A"

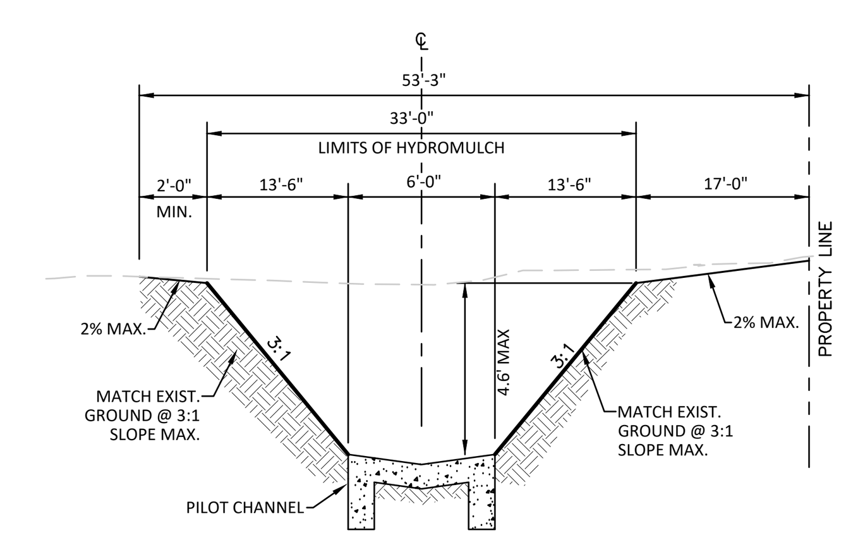
STA. 47+16.74 TO STA. 50+88.47

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



TOP OF BANK	547.13	547.23	547.38	547.53	547.60	547.70	547.90	548.11	548.31	548.46	TOP OF BANK
CHANNEL FLOWLINE	542.80	542.90	543.05	543.20	543.28	543.38	543.58	543.78	543.98	544.13	CHANNEL FLOWLINE

47+00 48+00 49+00 50+00 51+00



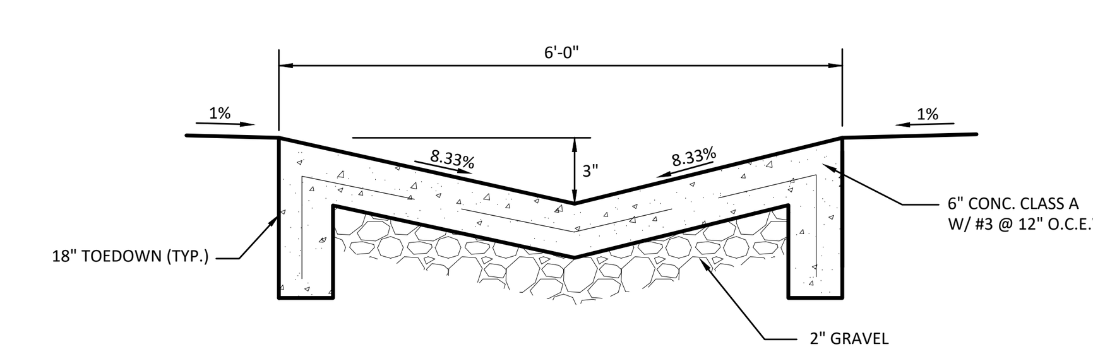
SECTION "A-A"

(N.T.S.)

STA. 47+16.74 TO STA. 50+86.47

NOTE: IMPROVED EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT (85%) OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO OR BEXAR COUNTY WILL ACCEPT THE CHANNEL FOR MAINTENANCE.

NOTE: ALL CONCRETE LINING SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.



PILOT CHANNEL

(N.T.S.)

SUBMITTAL SET

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED
PROFESSIONAL ENGINEER
4/6/23

ROOSEVELT LANDING UNIT 2

DRAIN PLAN & PROFILE DRAIN "A"

STA. 47+16.74 TO STA. 50+88.47

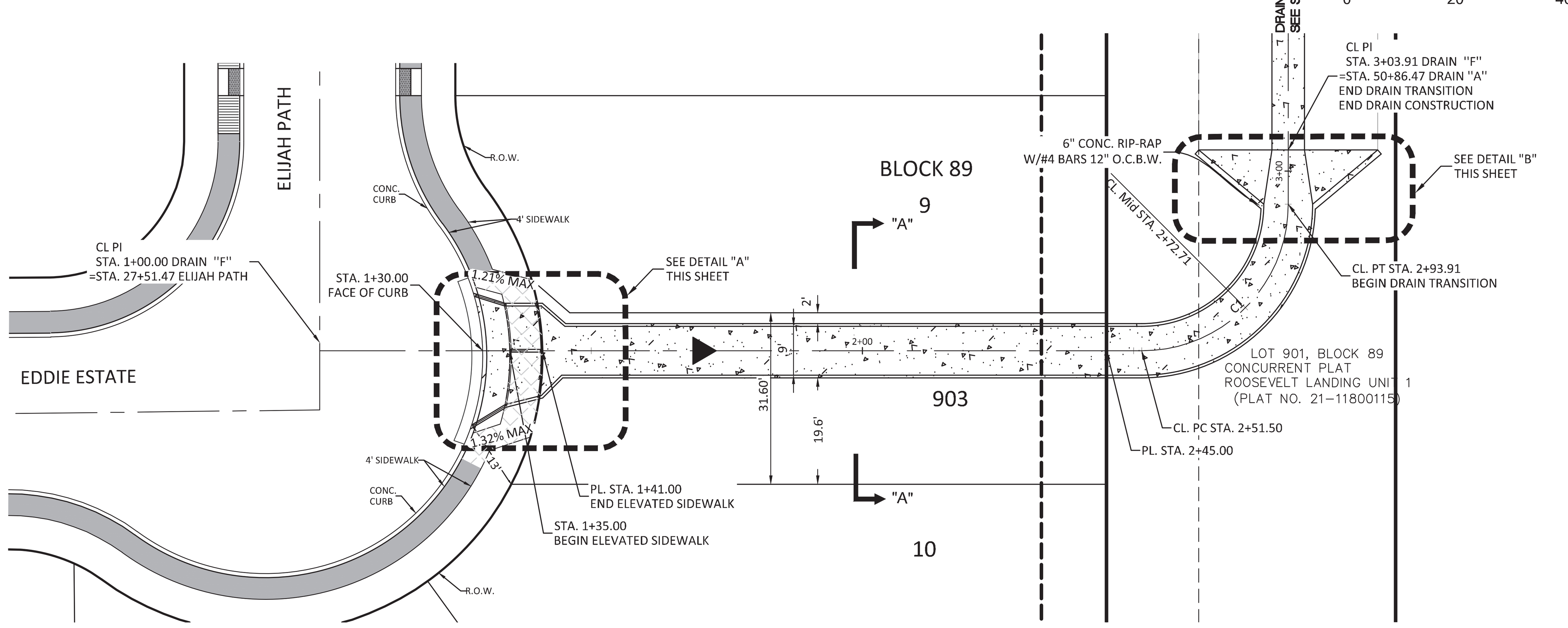
SHEET

C4.11

LAND-PLAT-22-11800353

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	42.41'	27.00'	89°59'57"	27.00'	38.18'

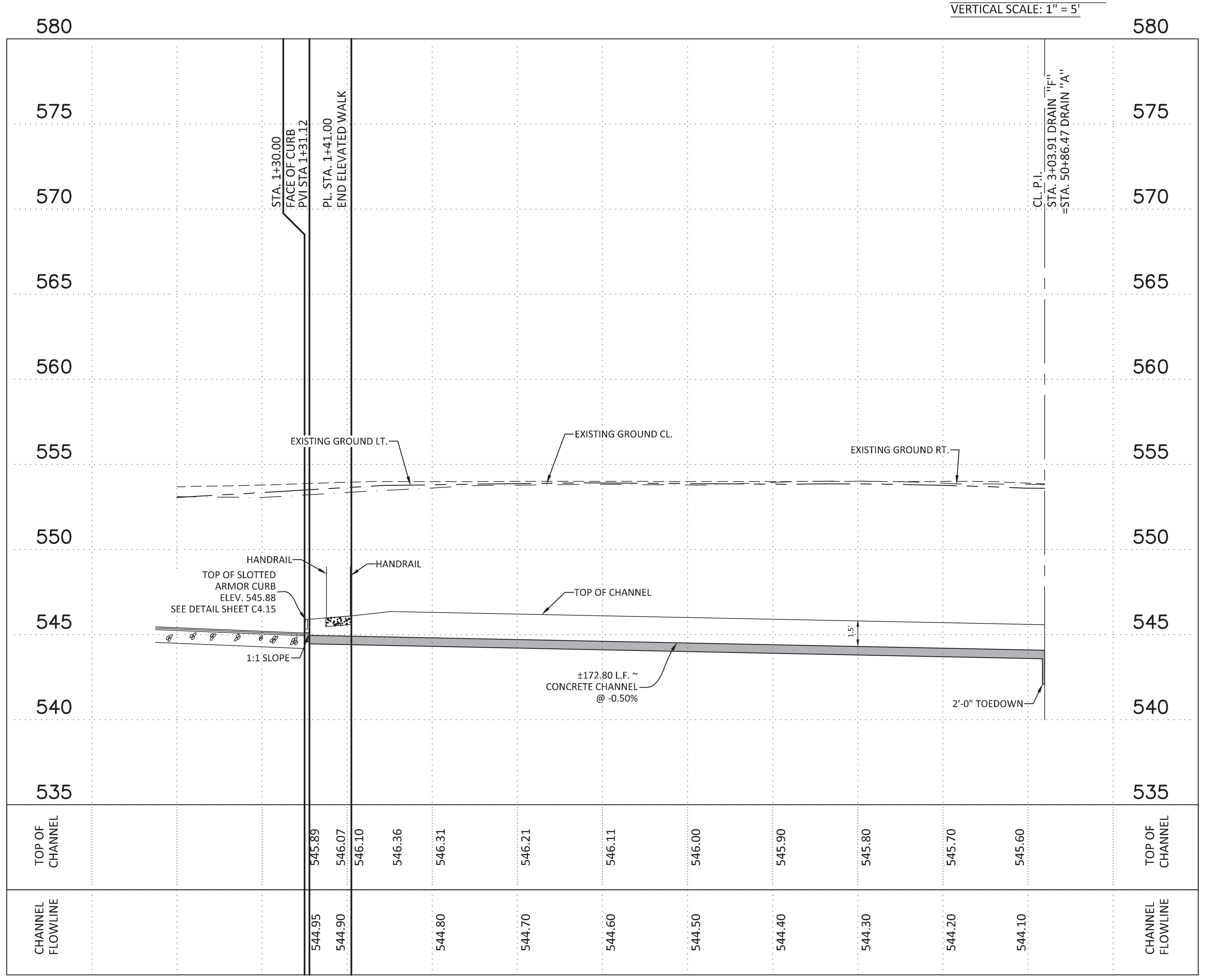
SCALE: 1"=20'

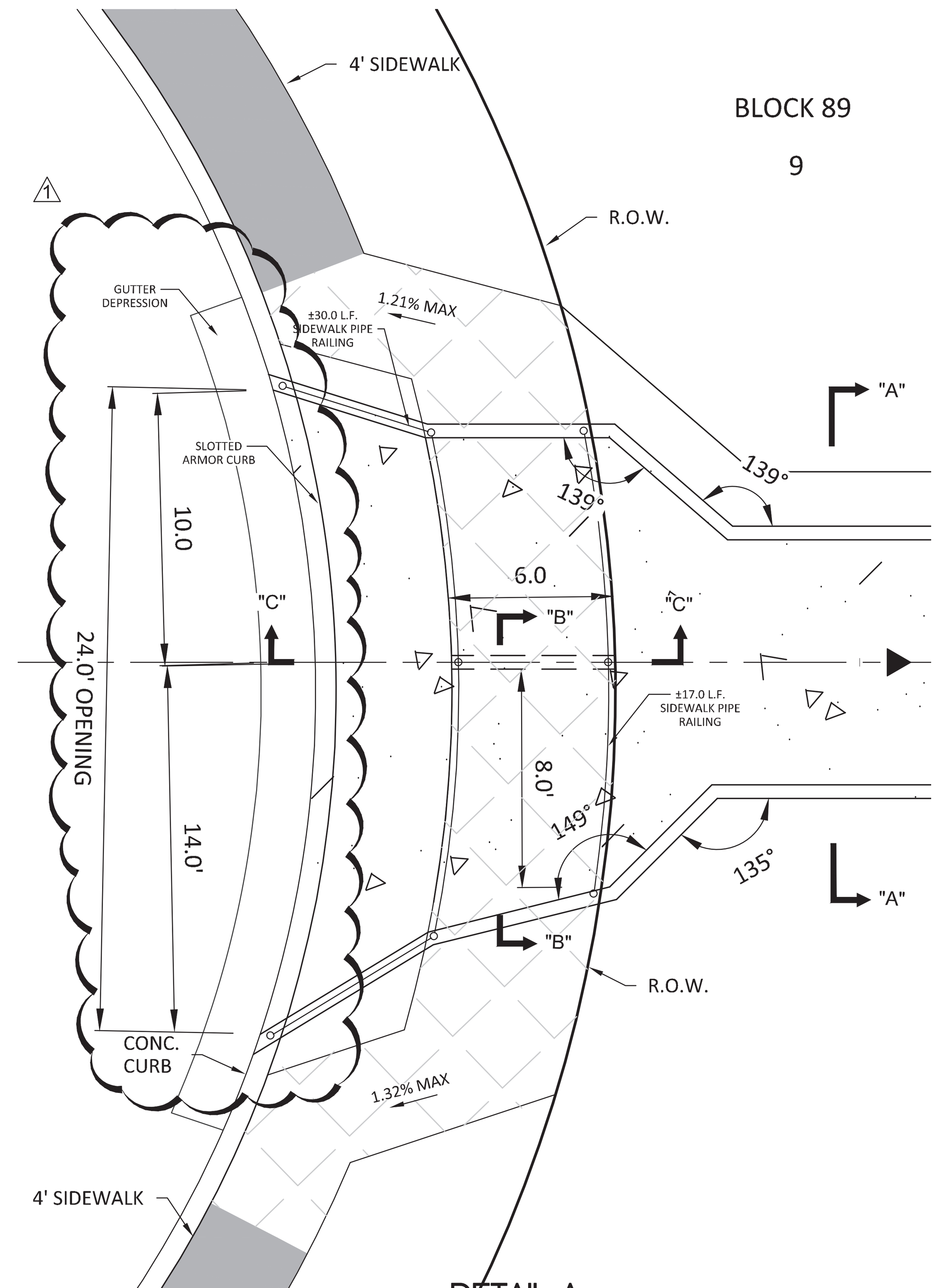


DRAIN "F"

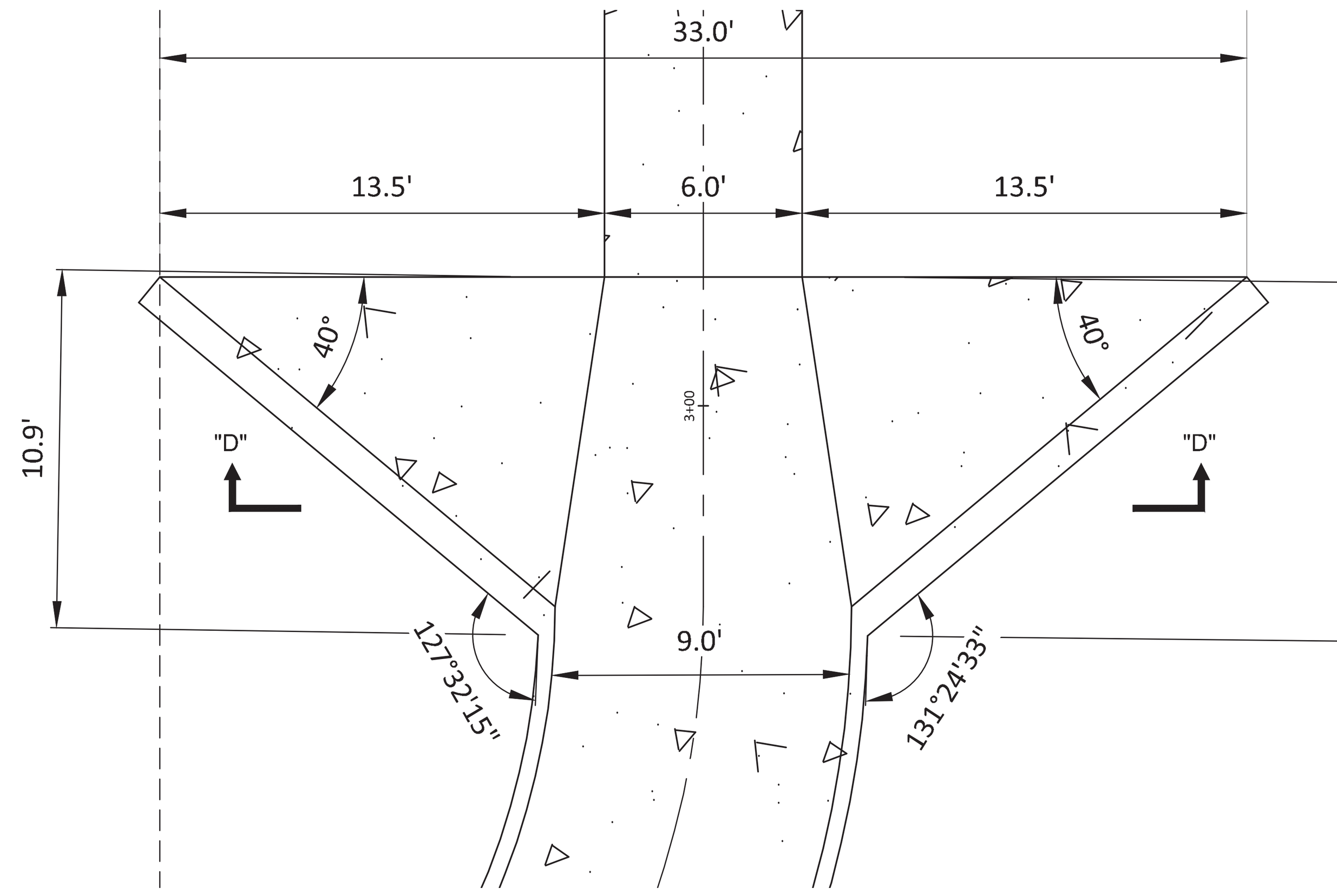
STA. 1+30.00 TO STA. 3+03.91

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





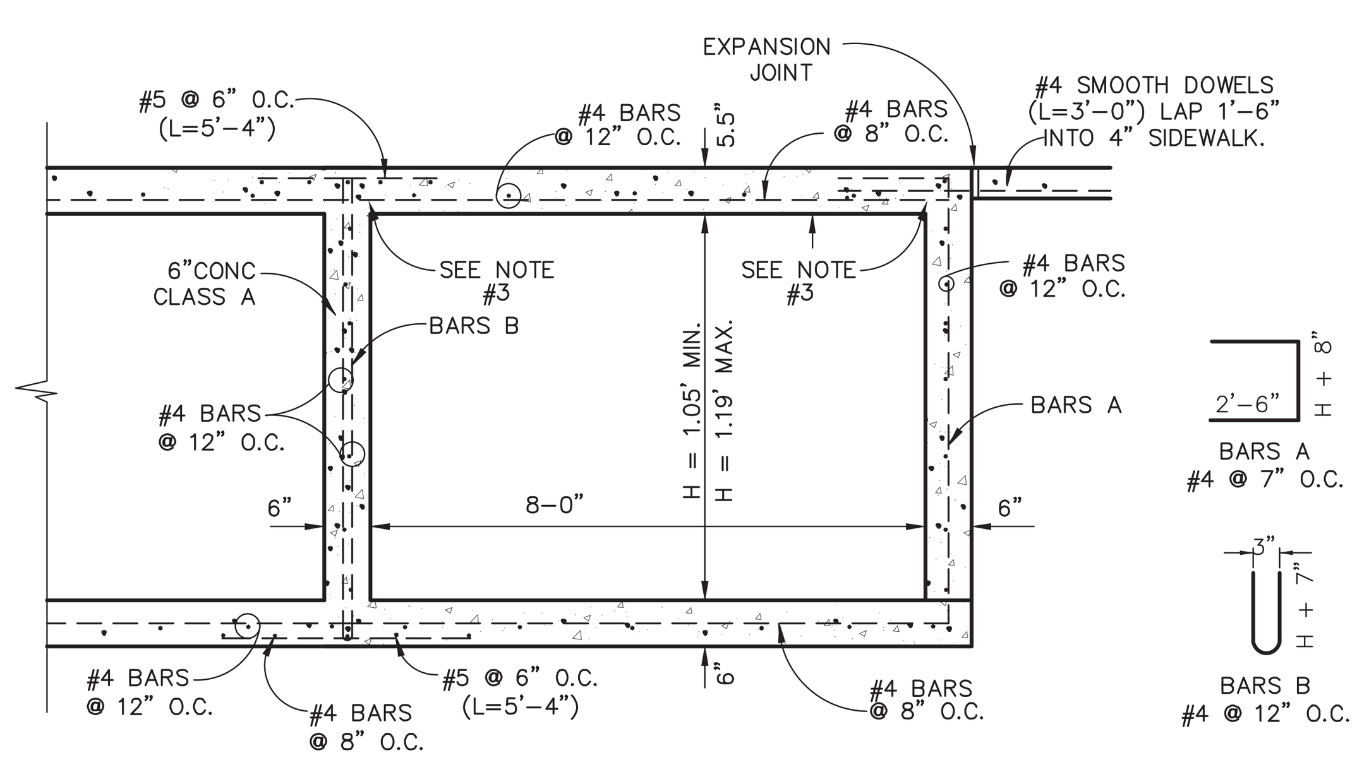
DETAIL A
SCALE: 1" = 5'



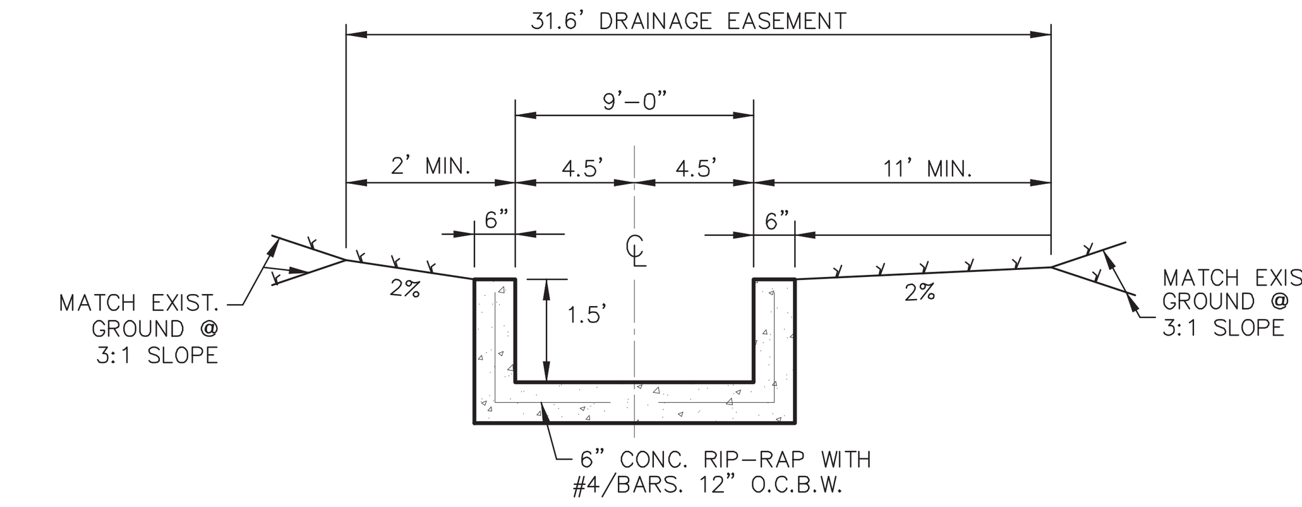
DETAIL B
SCALE: 1" = 5'

NOTES:

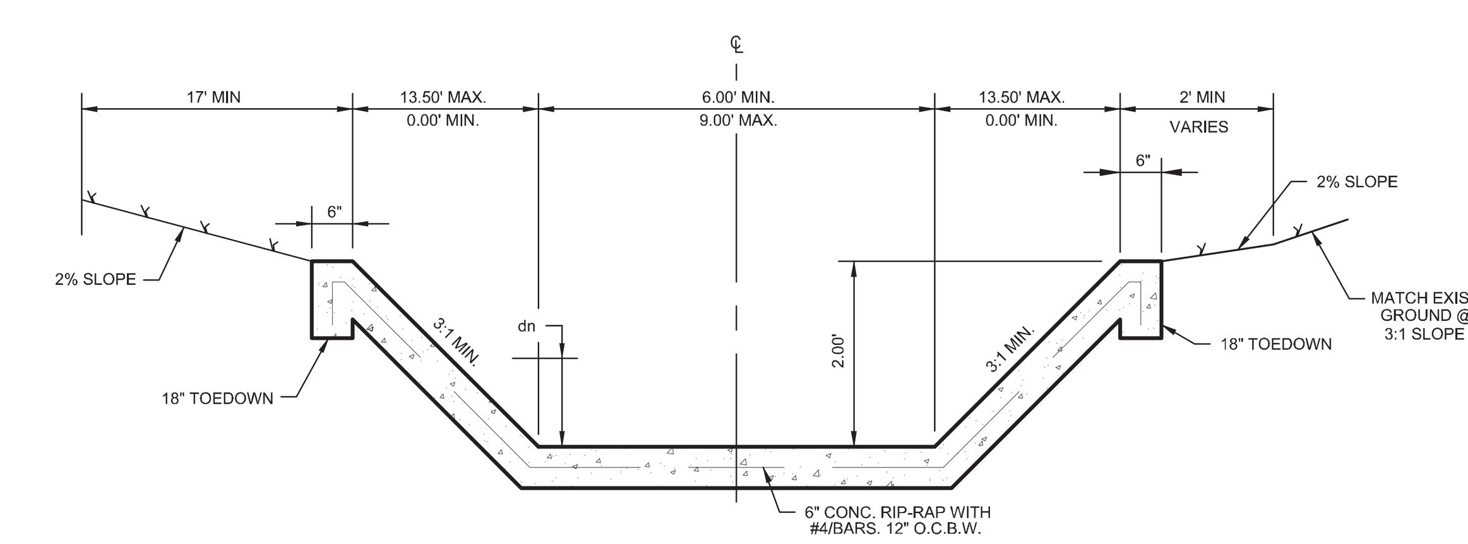
1. COVER FOR REINFORCING STEEL IS 2" UNLESS OTHERWISE NOTED.
2. SEE GENERAL NOTES ON SHEET C4.0 FOR MATERIAL SPECIFICATIONS.
3. MINIMUM BAR DEVELOPMENT LENGTH FOR SPLICE AND BENDS AT WALL AND FLOOR CONNECTIONS SHALL BE 30 INCHES.
4. ALL CONCRETE SHALL RESIST A MINIMUM 3000 PSI 28 DAY BREAK, UNLESS OTHERWISE NOTED.
5. PROVIDE CONCRETE APRONS ON ALL INLETS, REFERENCE DETAILS FOR CONSTRUCTION REQUIREMENTS.
6. 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.
7. ALL STORM PIPE MATERIAL IS CONCRETE REINFORCEMENT PIPE, UNLESS NOTED OTHERWISE.
8. IMPROVED EARTHEN CHANNELS AND DETENTION PONDS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA WILL HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE. REFER TO SECTION 16.2.1 OF THE STORM WATER DESIGN CRITERIA MANUAL.



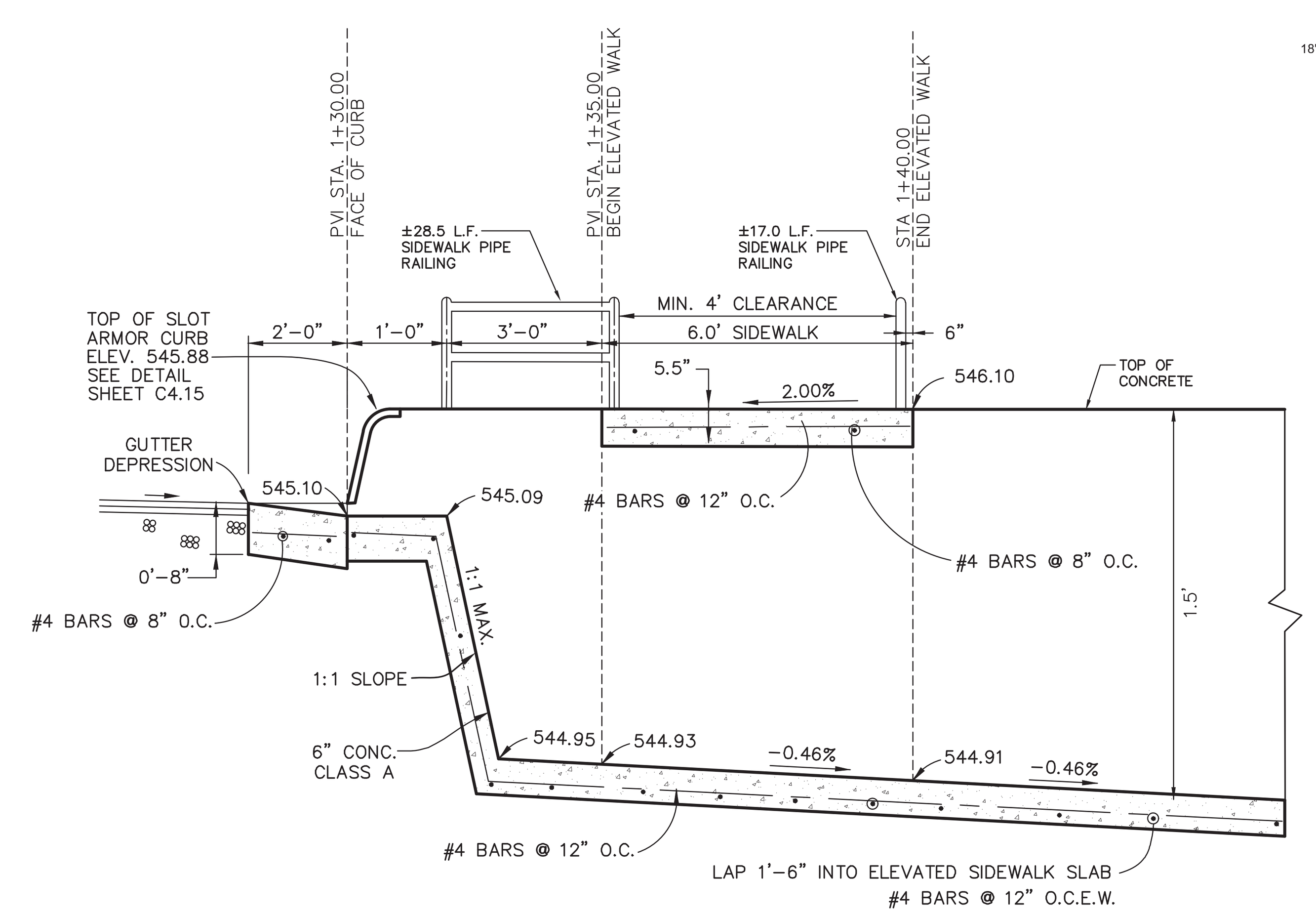
SECTION "B-B"
(N.T.S.)



SECTION "A-A"
(N.T.S.)
STA. 1+45.16 TO STA. 2+93.91



SECTION "D-D"
(N.T.S.)
STA. 2+93.91 TO STA. 3+03.91



SECTION "C-C"
(N.T.S.)

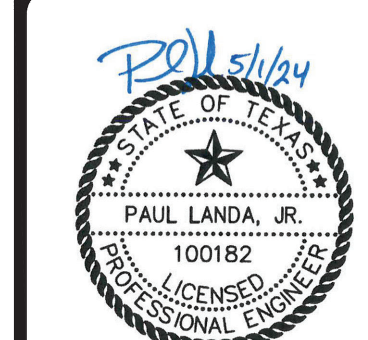
REVISED
4:43 pm, May 01, 2024

SUBMITTAL SET

NO.	DATE	DESCRIPTION	BY
1	04/25/24	DRAIN REVISION	

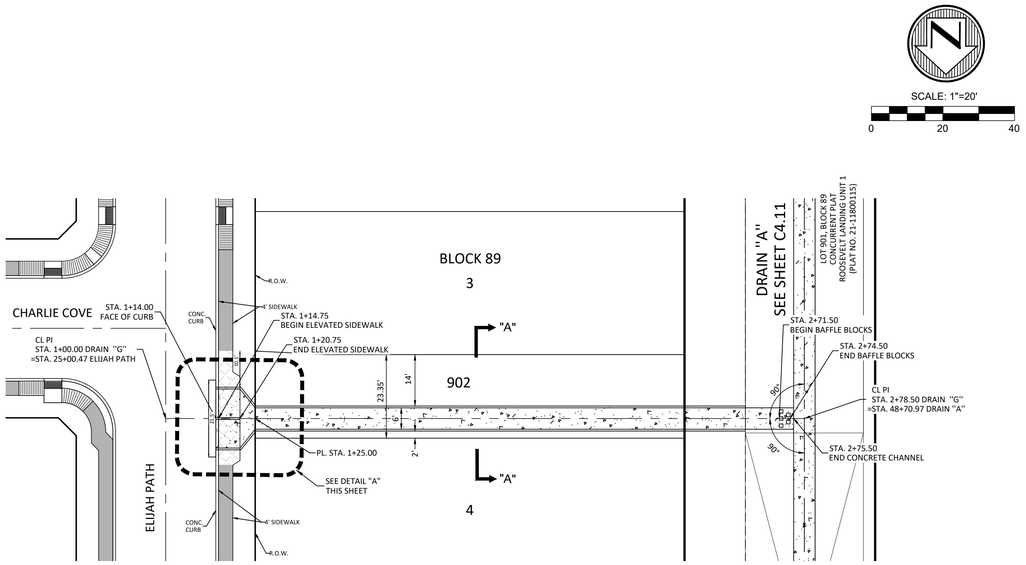
REVISIONS
PROJ. # DGN. BY: DWN. BY: CHKD. BY: DATE:

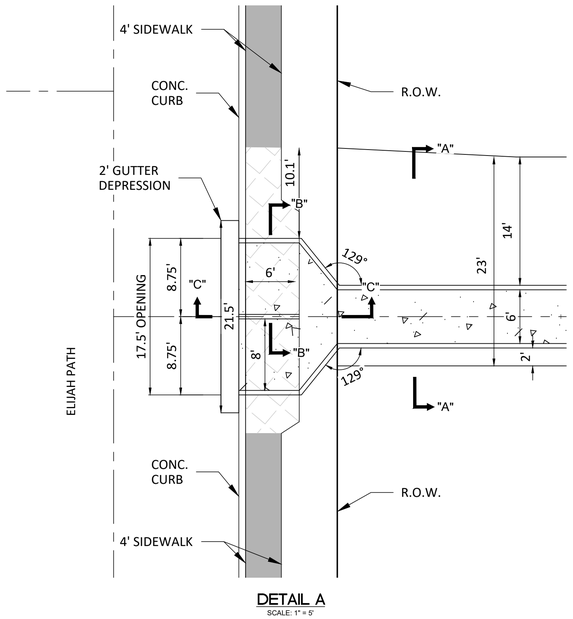
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051 FAX: (210) 698-5085



ROOSEVELT LANDING UNIT 2
DRAIN PLAN & PROFILE
DRAIN "F"
STA. 1+30.00 TO STA. 3+03.91

SHEET
C4.12





DETAIL A
SCALE: 1" = 5'

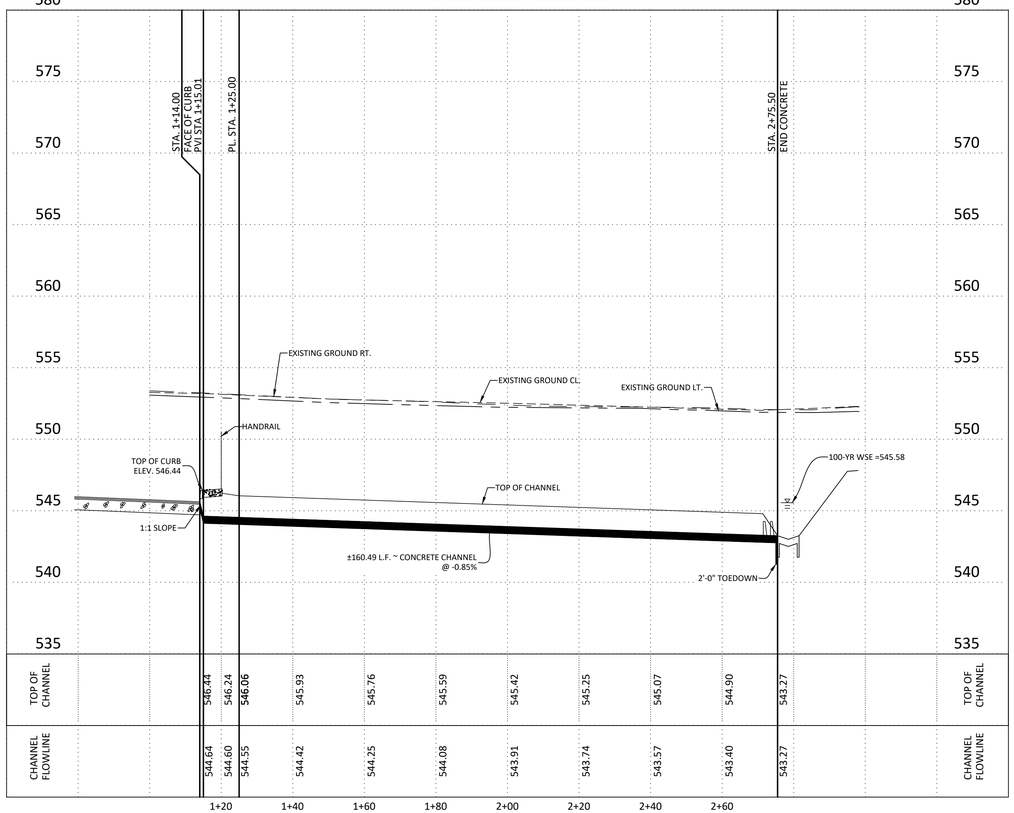
NOTES:

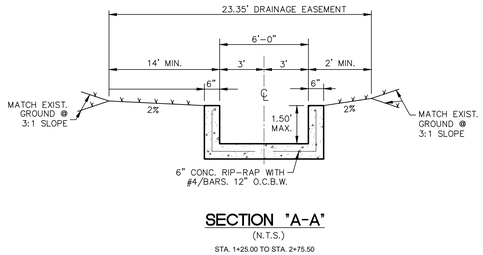
1. COVER FOR REINFORCING STEEL IS 2" UNLESS OTHERWISE NOTED.
2. SEE GENERAL NOTES ON SHEET C4.0 FOR MATERIAL SPECIFICATIONS.
3. MINIMUM BAR DEVELOPMENT LENGTH FOR SPLICE AND BENDS AT WALL AND FLOOR CONNECTIONS SHALL BE 30 INCHES.
4. ALL CONCRETE SHALL RESIST A MINIMUM 3000 PSI 28 DAY BREAK, UNLESS OTHERWISE NOTED.
5. PROVIDE CONCRETE APRONS ON ALL INLETS, REFERENCE DETAILS FOR CONSTRUCTION REQUIREMENTS.
6. 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.
7. ALL STORM PIPE MATERIAL IS CONCRETE REINFORCEMENT PIPE, UNLESS NOTED OTHERWISE.
8. IMPROVED EARTHEN CHANNELS AND DETENTION PONDS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA WILL HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE. REFER TO SECTION 16.2.1 OF THE STORM WATER DESIGN CRITERIA MANUAL.

DRAIN "G"

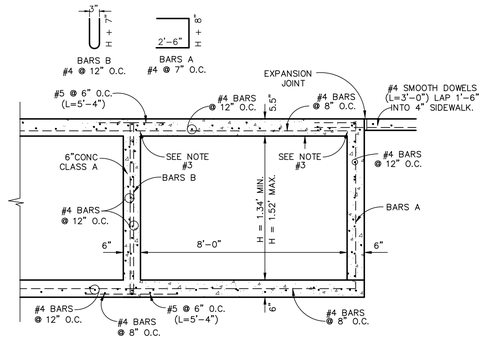
STA. 1+14.00 TO STA. 2+75.50

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

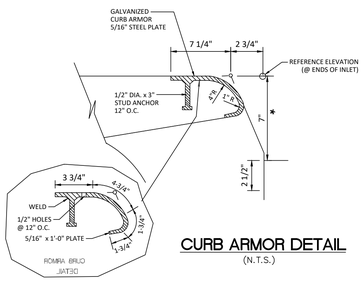




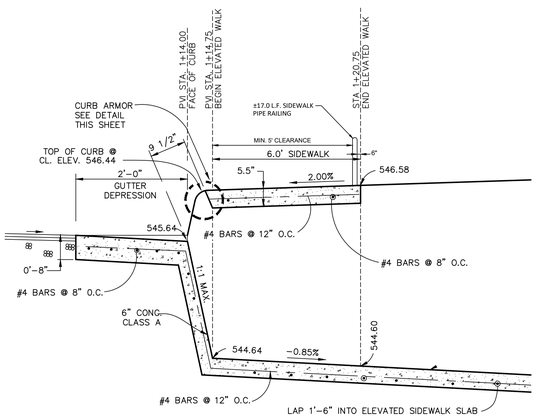
SECTION "A-A"
(N.T.S.)
STA. 1+25.00 TO STA. 2+75.50



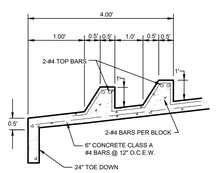
SECTION "B-B"
(N.T.S.)



CURB ARMOR DETAIL
(N.T.S.)



SECTION "C-C"
(N.T.S.)



BAFFLE BLOCK DETAIL
(N.T.S.)

SUBMITTAL SET

REVISIONS							
NO.	DATE	DESCRIPTION	BY:	PROJ. #:	DSN. BY:	DWN. BY:	CHKD. BY:	DATE:

• Engineers
• Surveyors
• Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING: F-5297 /SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

PAUL LANDA, JR
100182
LICENSED
PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
DRAIN PLAN & PROFILE
DRAIN "G"
STA. 1+14.00 TO STA. 2+75.50

SHEET
C4.13

Plot Date: June 6, 2023 User ID: Luis Perez
G:\Active Projects\2 Drawings\220907_C4.13 Drain G P&P.dwg

LAND-PLAT-22-11800353

NOTES:

1. COVER FOR REINFORCING STEEL IS 2" UNLESS OTHERWISE NOTED.
2. SEE GENERAL NOTES ON SHEET C4.0 FOR MATERIAL SPECIFICATIONS.
3. MINIMUM BAR DEVELOPMENT LENGTH FOR SPLICE AND BENDS AT WALL AND FLOOR CONNECTIONS SHALL BE 30 INCHES.
4. ALL CONCRETE SHALL RESIST A MINIMUM 3000 PSI 28 DAY BREAK, UNLESS OTHERWISE NOTED.
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7. ALL STORM PIPE MATERIAL IS CONCRETE REINFORCEMENT PIPE, UNLESS NOTED OTHERWISE.
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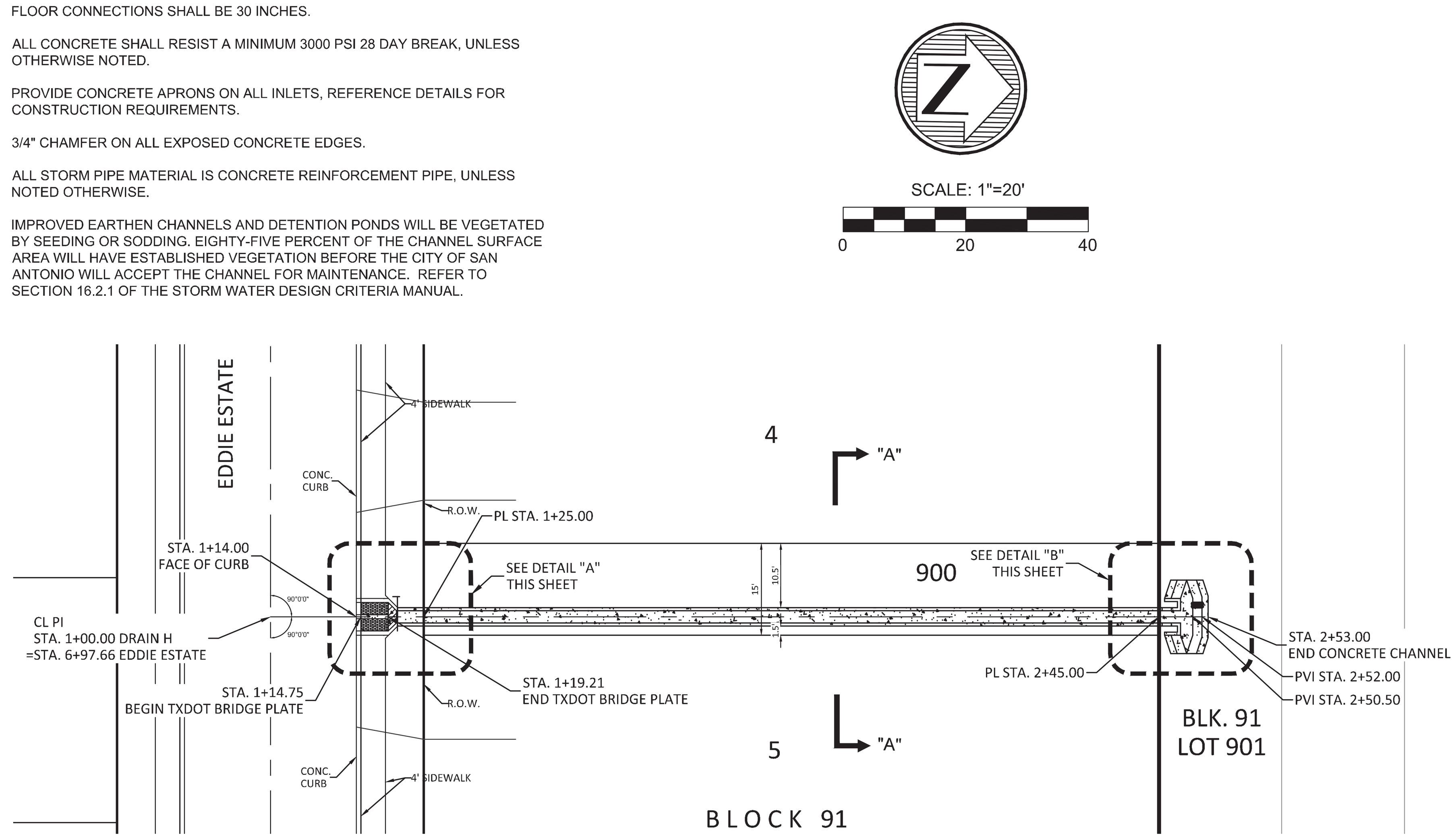
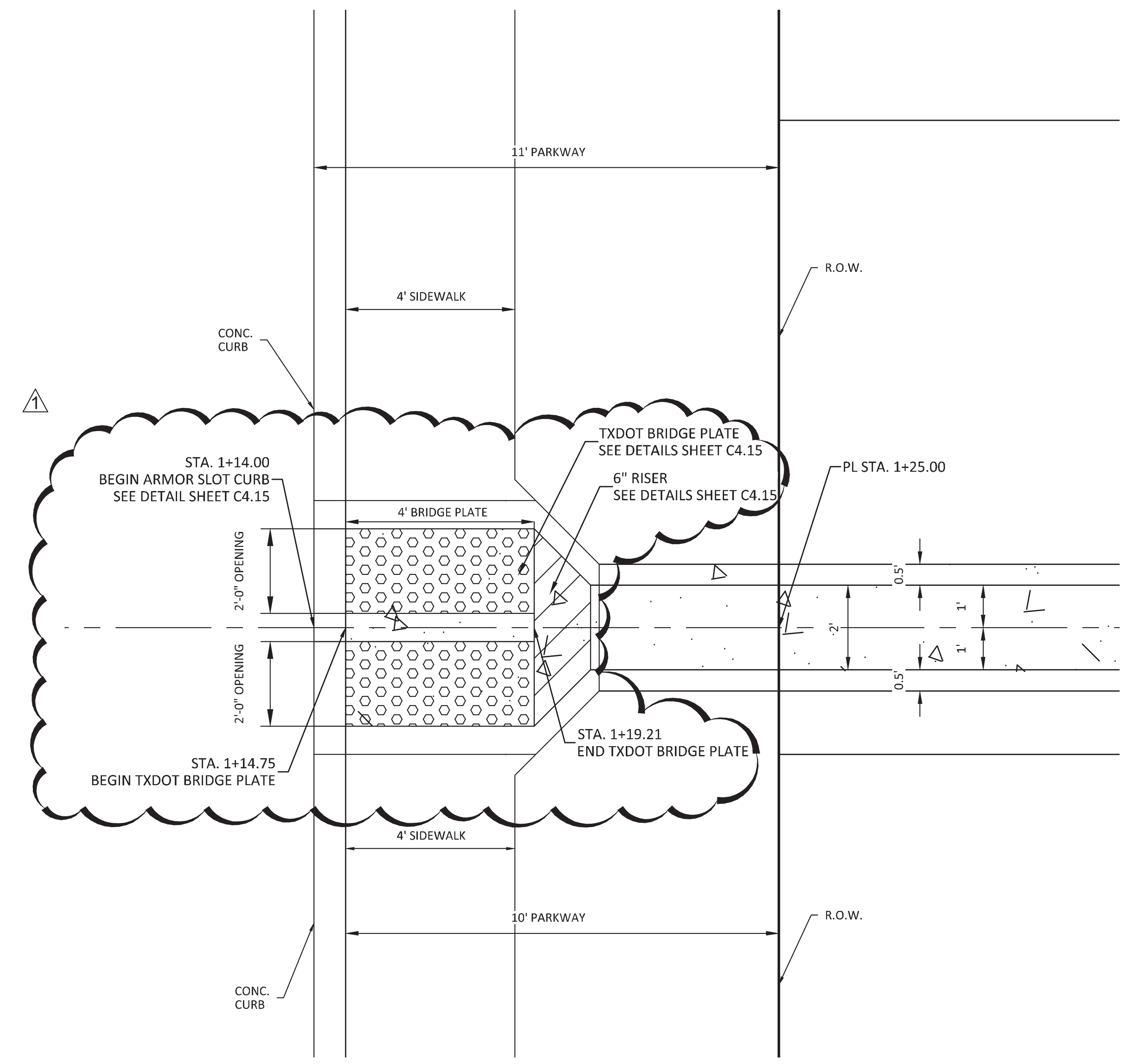
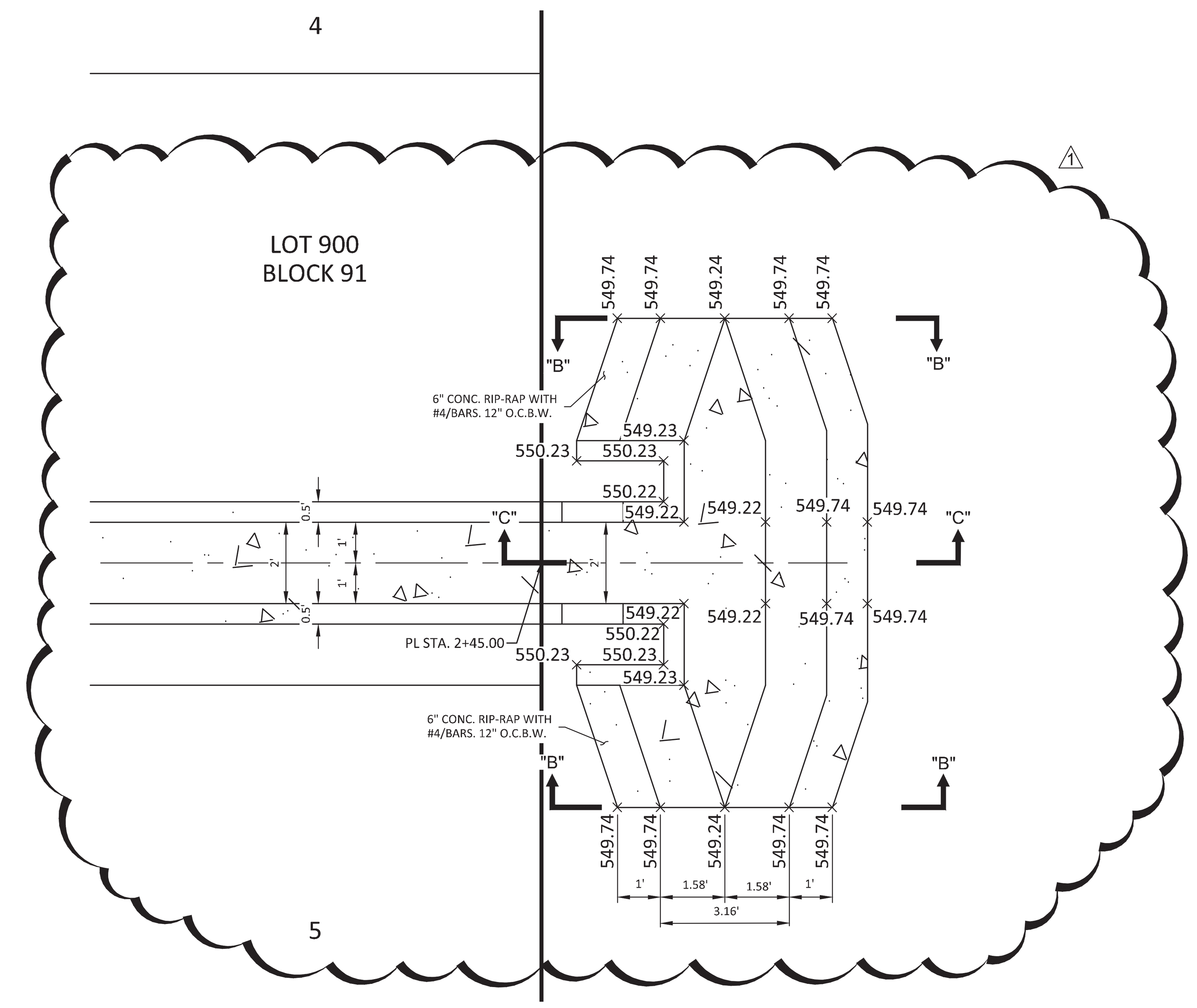




DETAIL A

SCALE: 1" = 5'



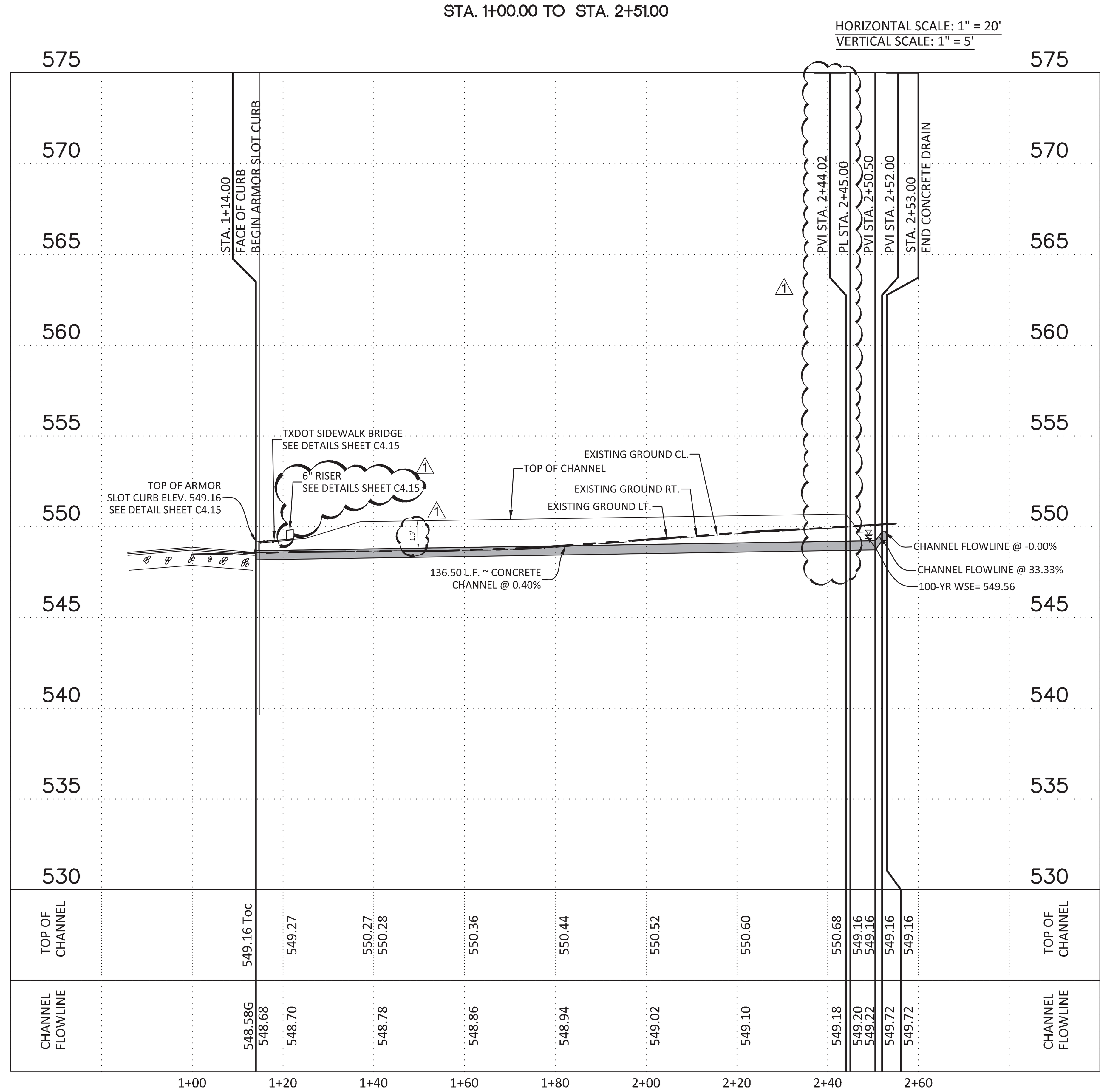
DETAIL B

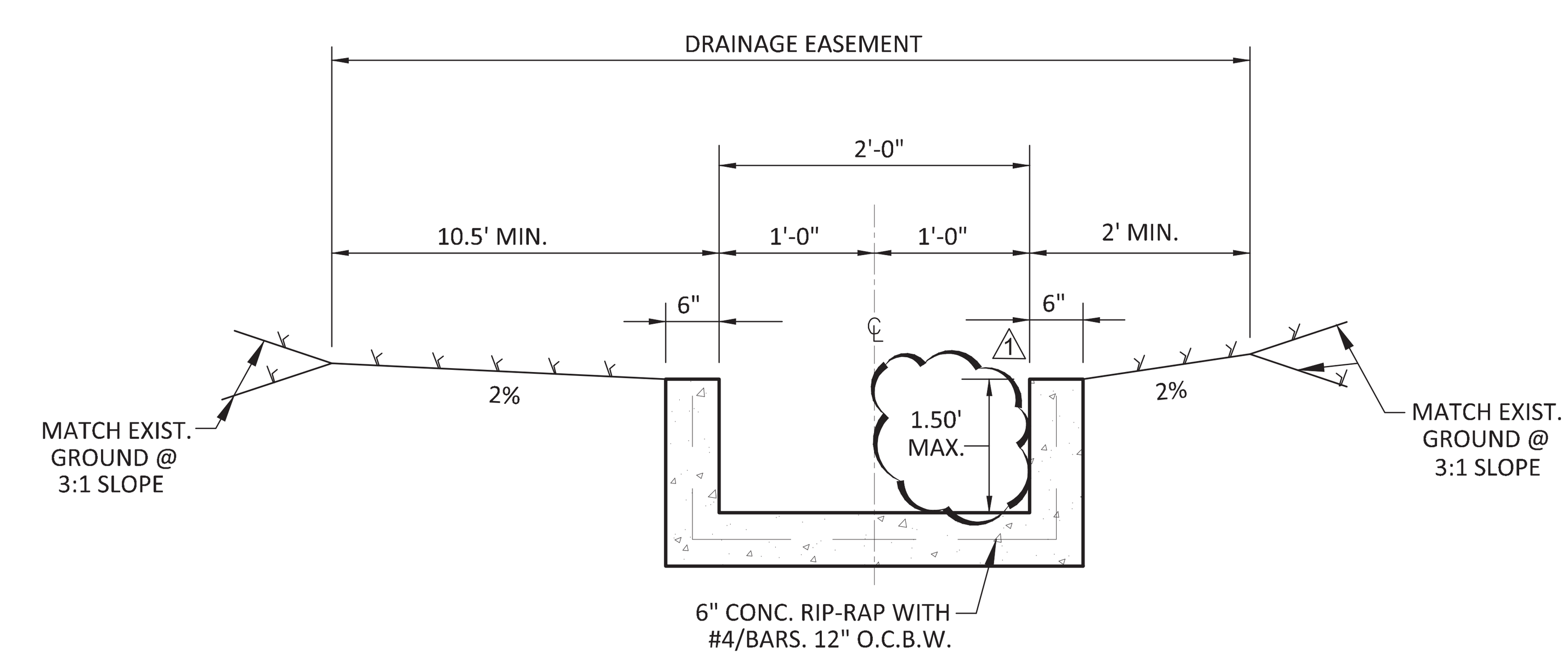
SCALE: 1" = 5'

DRAIN "H"

STA. 1+00.00 TO STA. 2+51.00

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

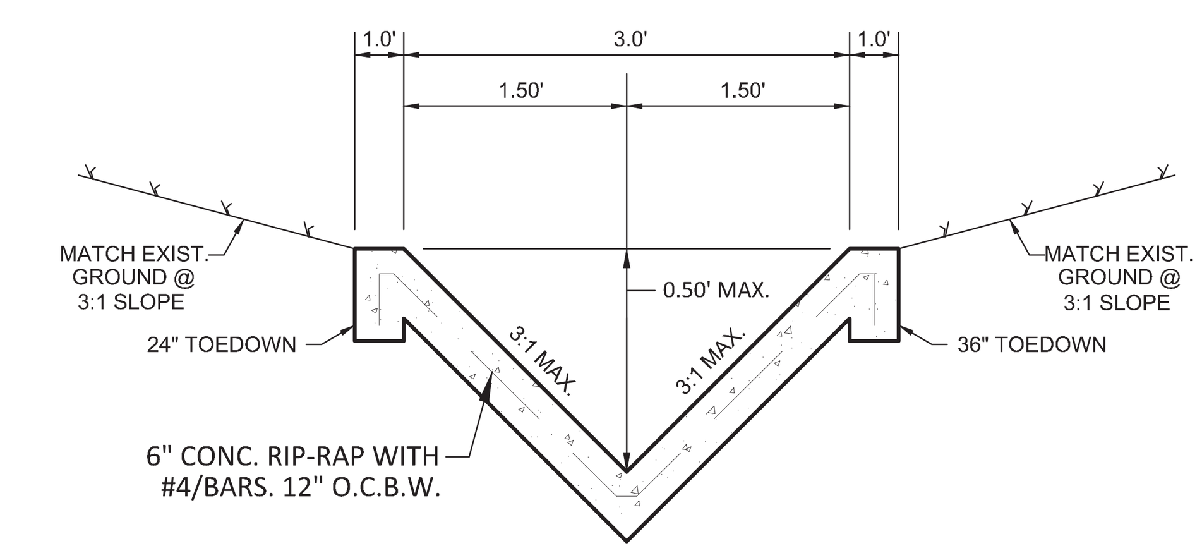




SECTION "A-A"

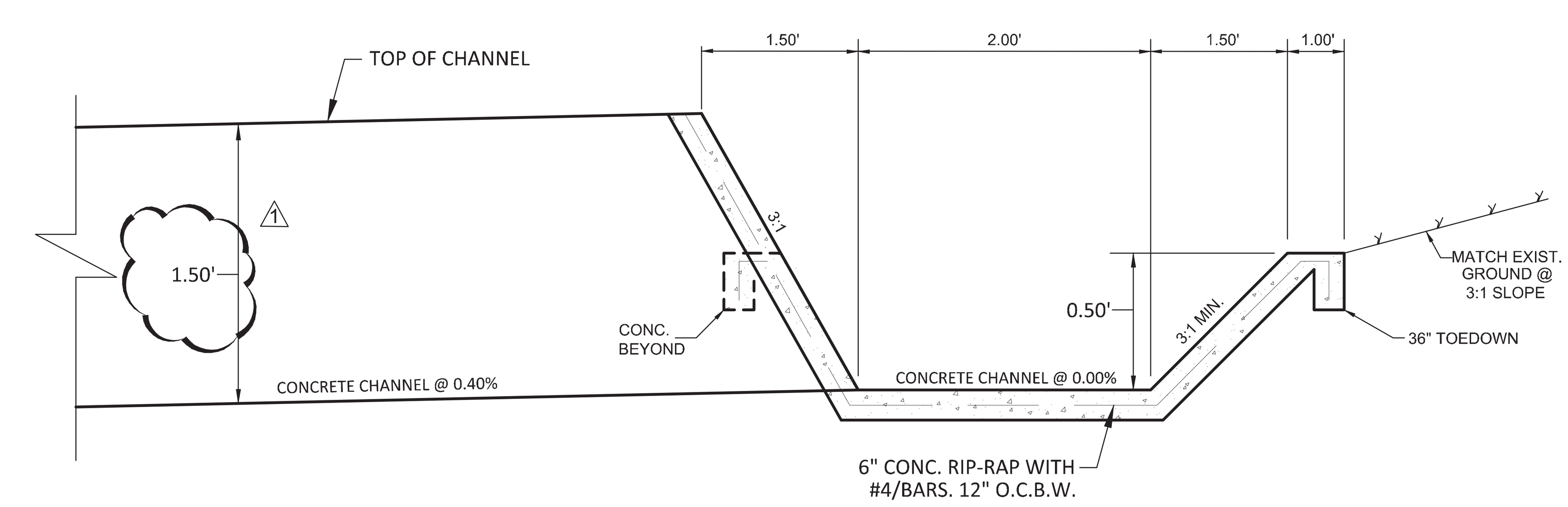
(N.T.S.)

STA. 1+20.75 TO STA. 2+50.00



SECTION "B-B"

(N.T.S.)



SECTION "C-C"

(N.T.S.)

SUBMITTAL SET

REVISED
4:43 pm, May 01, 2024

NO.	DATE	DESCRIPTION	BY
1	04/23/24	DRAIN REVISION	

REVISIONS

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED PROFESSIONAL ENGINEER
4/23/24

ROOSEVELT LANDING UNIT 2

DRAIN PLAN & PROFILE

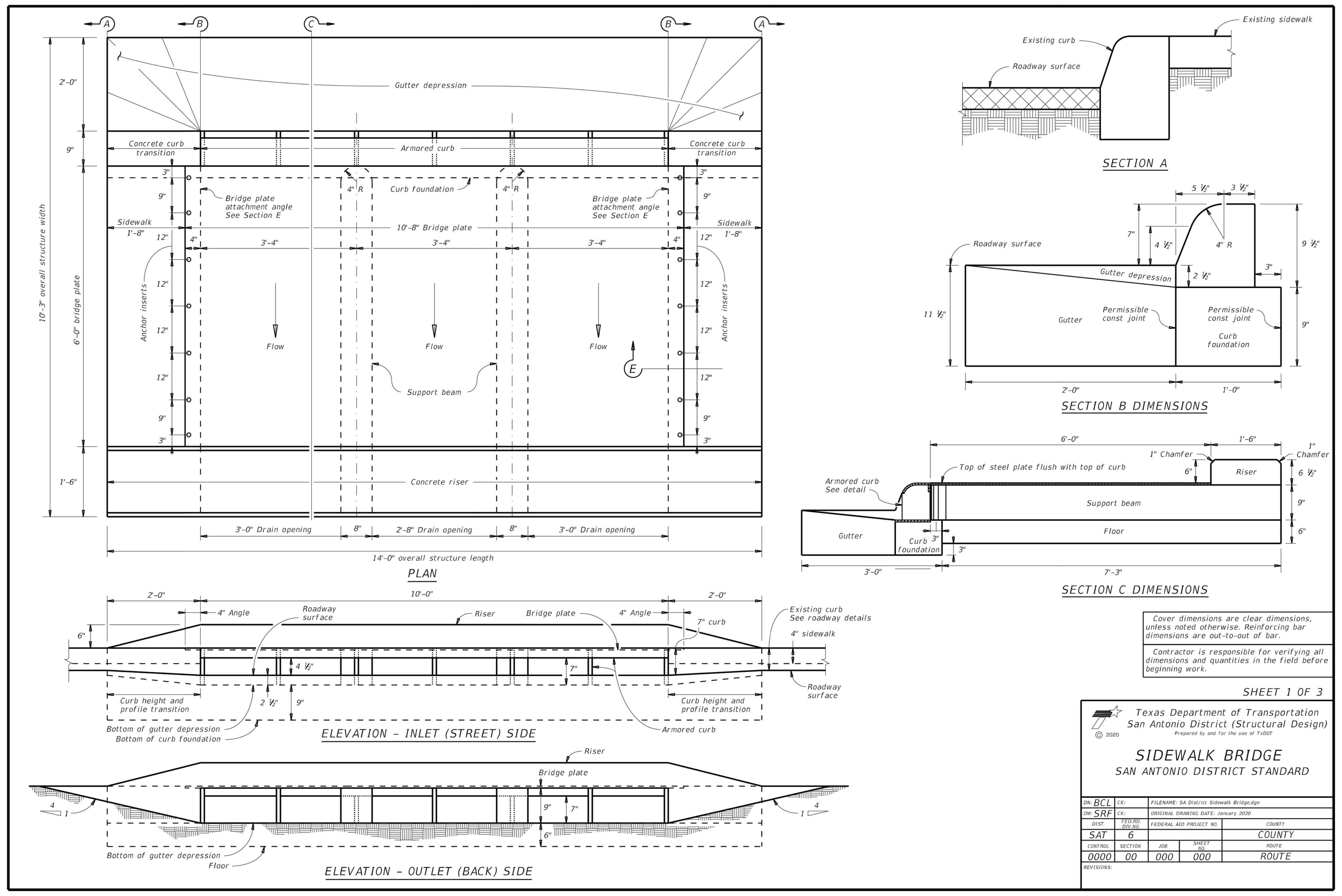
DRAIN "H"

STA. 1+14.00 TO STA. 2+51.00

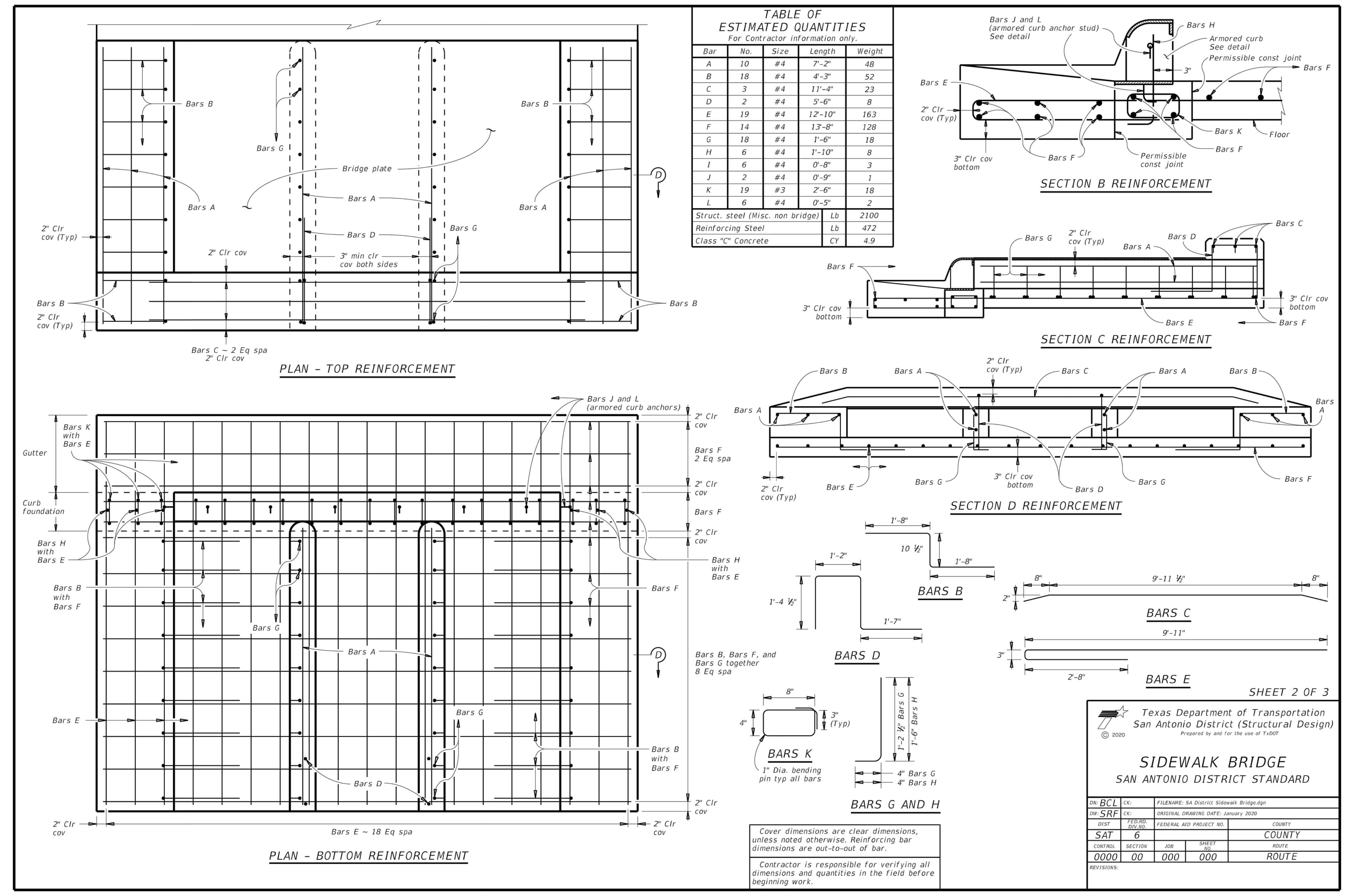
SHEET

C4.14

LAND-PLAT-22-11800353



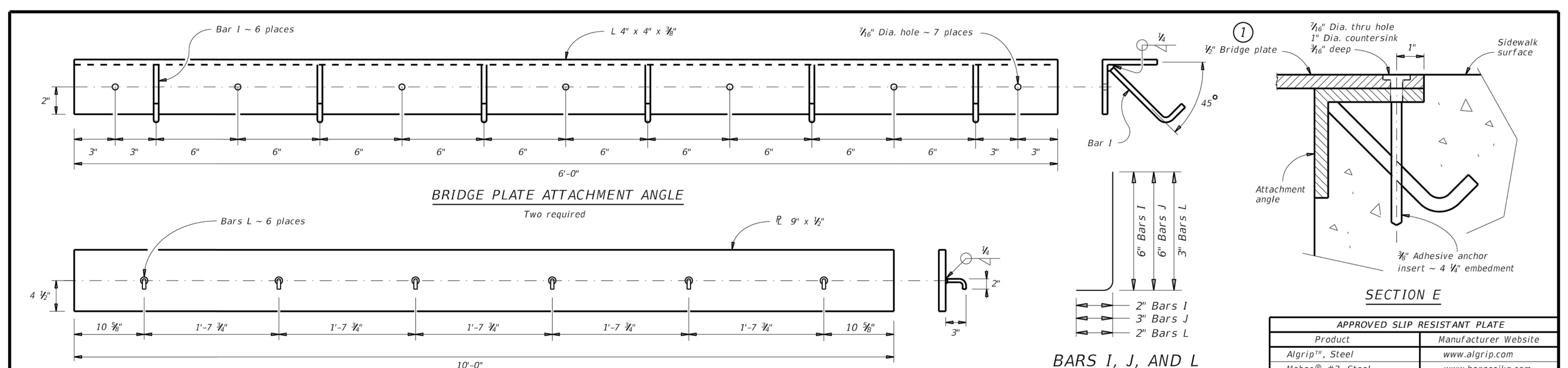
PLAN
SECTION A
SECTION B DIMENSIONS
SECTION C DIMENSIONS
ELEVATION - INLET (STREET) SIDE
ELEVATION - OUTLET (BACK) SIDE
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions are out-to-out of bar.
Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.
SHEET 1 OF 3
Texas Department of Transportation
San Antonio District (Structural Design)
SIDEWALK BRIDGE
SAN ANTONIO DISTRICT STANDARD



PLAN - TOP REINFORCEMENT
PLAN - BOTTOM REINFORCEMENT
SECTION B REINFORCEMENT
SECTION C REINFORCEMENT
SECTION D REINFORCEMENT
BARS B
BARS C
BARS D
BARS E
BARS K
BARS G AND H
SHEET 2 OF 3
Texas Department of Transportation
San Antonio District (Structural Design)
SIDEWALK BRIDGE
SAN ANTONIO DISTRICT STANDARD

TABLE OF ESTIMATED QUANTITIES
For Contractor information only.

Bar	No.	Size	Length	Weight
A	10	#4	7'-2"	48
B	18	#4	4'-3"	52
C	3	#4	11'-4"	23
D	2	#4	5'-6"	8
E	19	#4	12'-10"	163
F	14	#4	13'-8"	128
G	18	#4	1'-6"	18
H	6	#4	1'-10"	8
I	6	#4	0'-8"	3
J	2	#4	0'-9"	1
K	19	#3	2'-6"	18
L	6	#4	0'-5"	2
Struct. steel (Misc. non bridge)			Lb	2100
Reinforcing Steel			Lb	472
Class "C" Concrete			CY	4.9

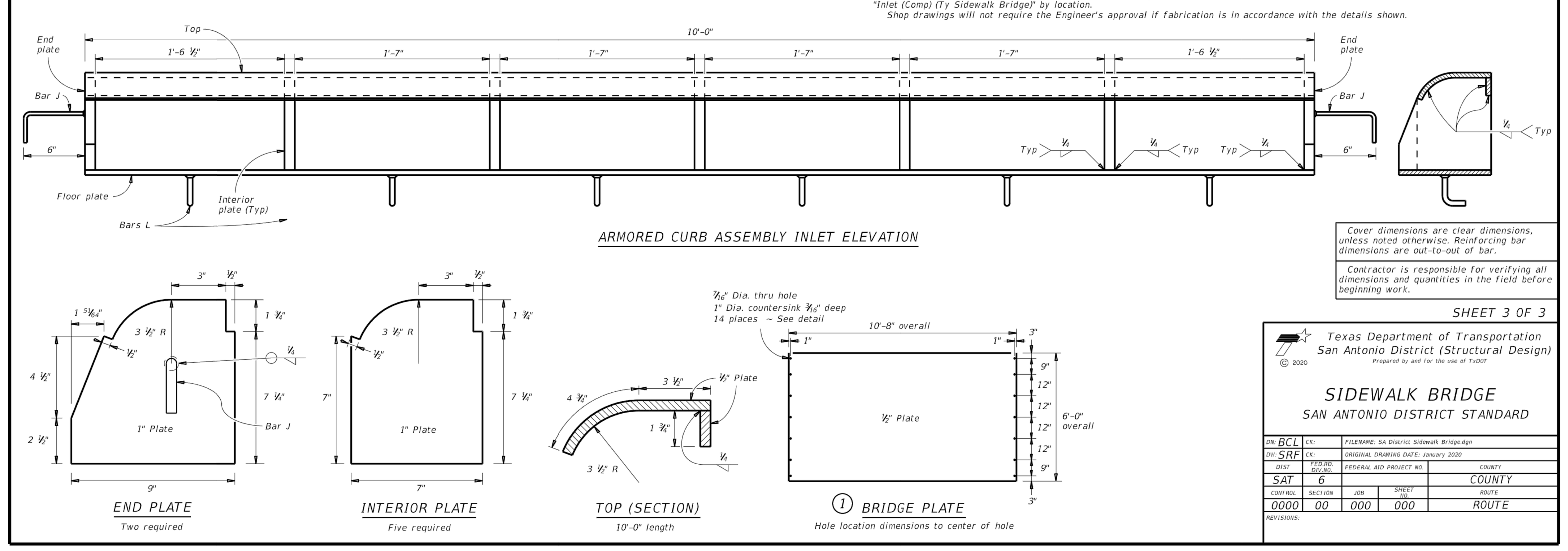


APPROVED SLIP RESISTANT PLATE	
Product	Manufacturer Website
Algrip™, Steel	www.algrip.com
Mebac® #3, Steel	www.harscoikg.com
SlipNOT® Grade 2, Steel	www.slipnot.com

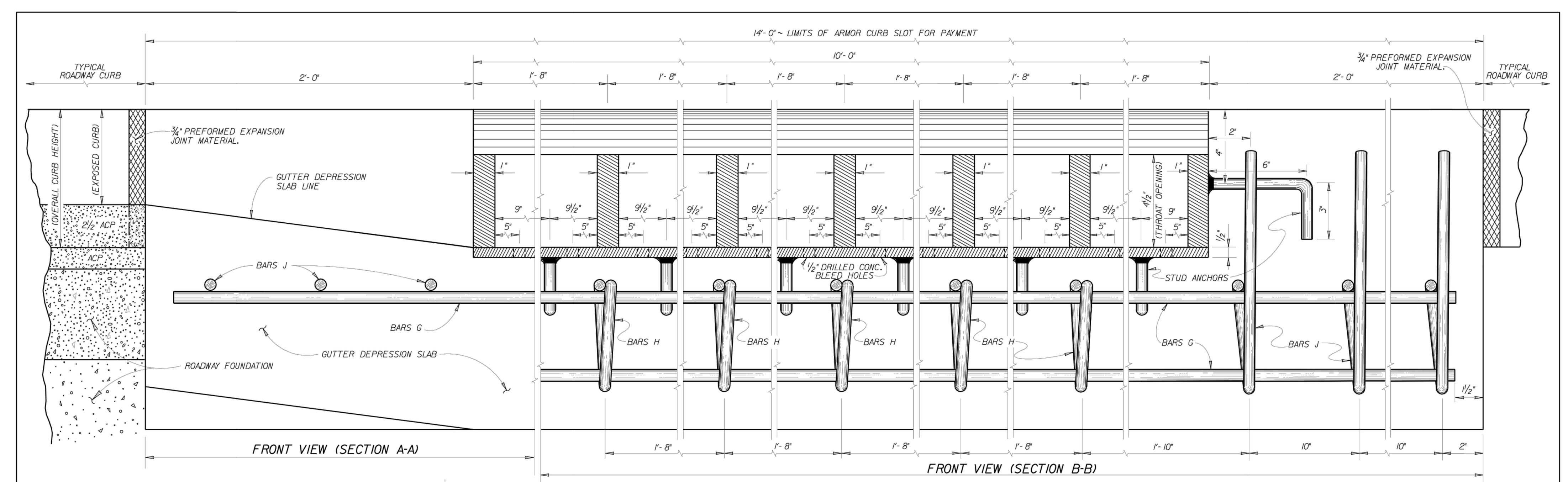
(1) Provide cover plates fabricated with a product from this list. No exceptions are permitted.

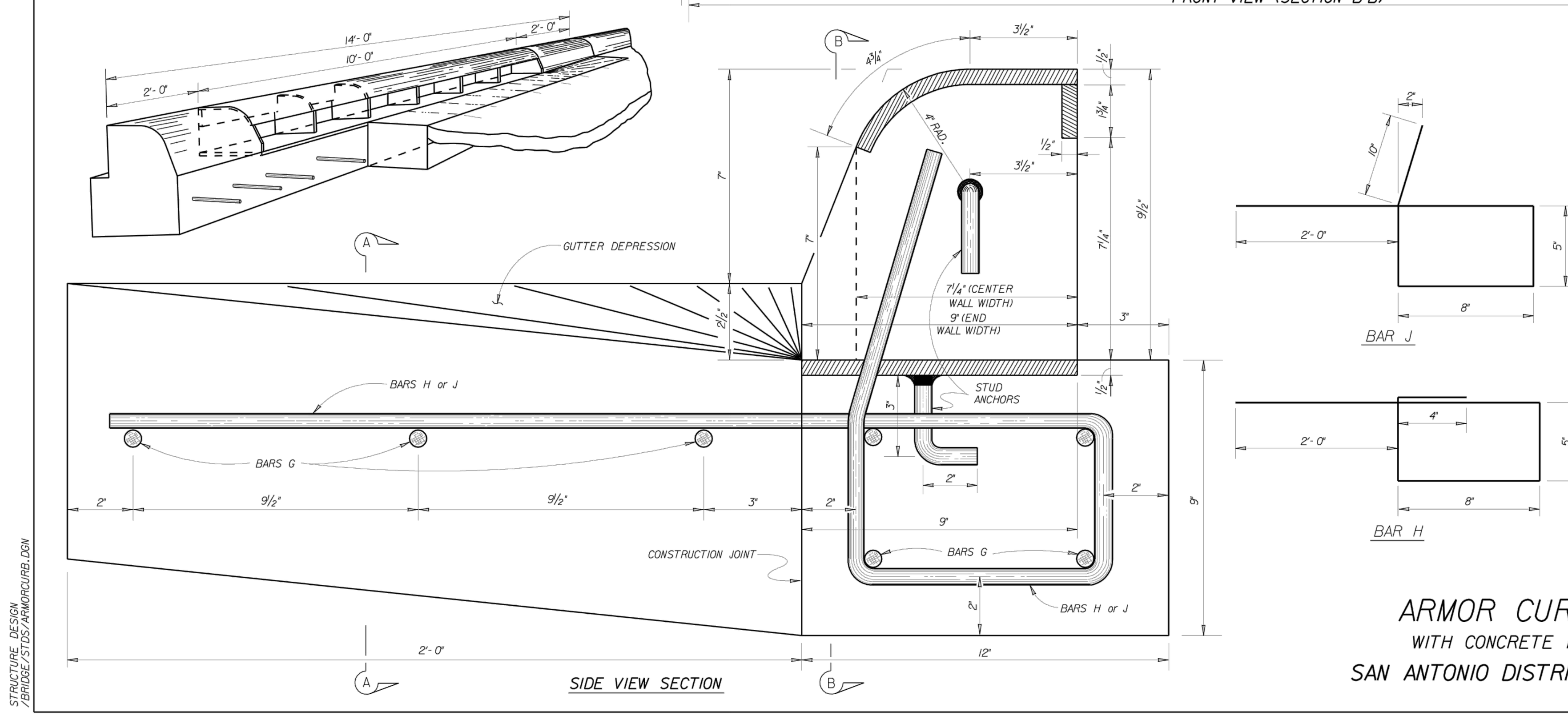
GENERAL NOTES:

Provide Class A concrete (f'c = 3000 psi).
Provide Grade 60 reinforcing steel.
Structural steel components must be Grade A36.
All exposed edges of the armored curb must receive a ⅛" bevel.
All structural steel components must be galvanized after fabrication in accordance with Item 445, "Galvanizing".
Galvanizing damaged during transport or construction must be repaired in accordance with the Specification.
The bridge plate must be hot-dip galvanized slip resistant steel (see table). Checker or diamond plate is not allowed, nor are slip resistant tapes, films, or non-metallic coatings.
Adhesive anchor system must be HIT HY 150 H.I.S. internally threaded inserts as furnished by Hilti, Inc., Tulsa, OK, or approved equivalent.
Sidewalk bridge, including all labor, armored curb, bridge plate, and other material complete and in place must be paid for under Item 465, "Inlet (Comp) (Ty Sidewalk Bridge)" by location.
Shop drawings will not require the Engineer's approval if fabrication is in accordance with the details shown.



ARMORED CURB ASSEMBLY INLET ELEVATION
END PLATE
Two required
INTERIOR PLATE
Five required
TOP (SECTION)
10'-0" length
BRIDGE PLATE
Hole location dimensions to center of hole
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions are out-to-out of bar.
Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.
SHEET 3 OF 3
Texas Department of Transportation
San Antonio District (Structural Design)
SIDEWALK BRIDGE
SAN ANTONIO DISTRICT STANDARD





ESTIMATED QUANTITIES
FOR REINFORCING STEEL

BAR	NO.	SIZE	SPAC.	LENGTH	WEIGHT
G	7	#4	SHOWN	13'-9"	64
H	5	#4	1'-8"	4'-6"	15
J	6	#4	8"	5'-0"	20
TOTAL WEIGHT *				LBS.	99
CONCRETE FOR FOUNDATION *				C.Y.	0.47
CONCRETE FOR GUTTER DEPRESSION *				C.Y.	0.78

STRUCTURAL STEEL FOR ARMOR CURB SLOT		
STUD ANCHORS (½"DIA.)	LBS.	3.5
STEEL PLATE	LBS.	451
TOTAL WEIGHT *	LBS.	454.5

* FOR CONTRACTORS INFO ONLY.

GENERAL NOTES:

ALL CONCRETE SHALL BE CL."A".
ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
ALL SIDES OF ARMOR CURB SLOT AND STUD ANCHORS SHALL BE ¼" FILLET WELDS.
ALL EXPOSED STRUCTURAL STEEL (ARMOR) SHALL BE GALVANIZED.
ALL EXPOSED EDGES ON ARMOR CURB SHALL RECEIVE A ⅛" BEVEL.
THE SHAPE OF THE TYPICAL ROADWAY CURB SHALL TRANSITION TO THE ARMOR CURB AS APPROVED BY THE ENGINEER.

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
6			
STATE	STATE DISTRICT	COUNTY	
TEXAS	SAT		
CONT.	SECT.	JOB	HIGHWAY NO.

10/95
REV.07/01

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

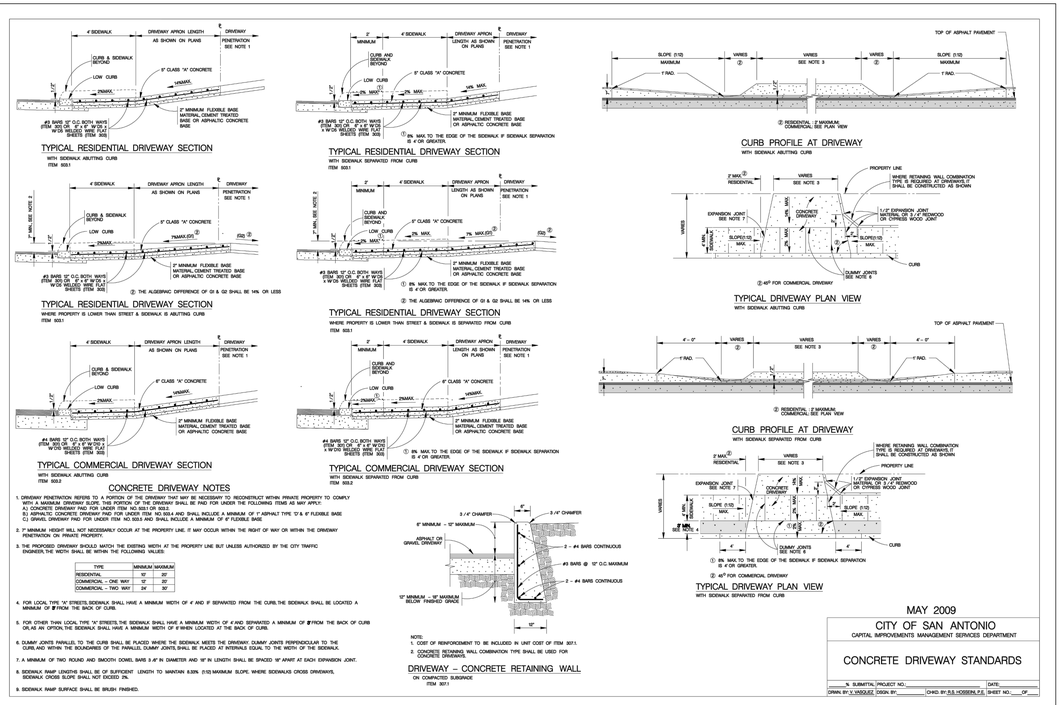
· Engineers · Surveyors · Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

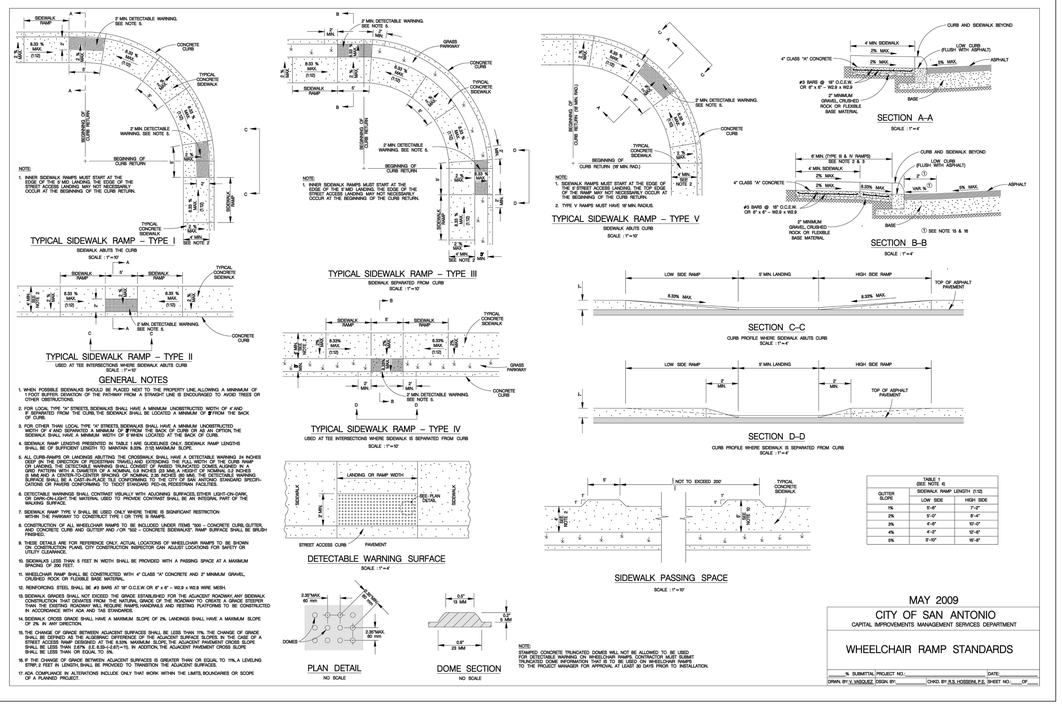
PAUL LANDA, JR
100182
STATE OF TEXAS
LICENSED PROFESSIONAL ENGINEER
4/6/23

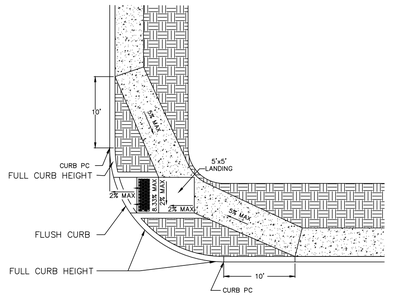
ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
DRAIN DETAILS

SUBMITTAL SET

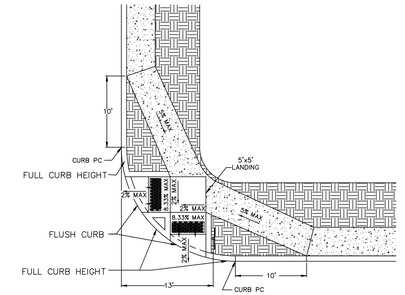
SHEET
C4.15


4' SIDEWALK
DRIVEWAY APRON LENGTH AS SHOWN ON PLANS
DRIVEWAY PENETRATION SEE NOTE 1
CURB & SIDEWALK BEYOND
LOW CURB
5" CLASS "A" CONCRETE
#3 BARS 12" O.C. BOTH WAYS (ITEM 303.05) 6" x 6" W7.0 x W7.0 WELDED WIRE FABRIC SHEETS (ITEM 308)
2" MINIMUM FLEXIBLE BASE MATERIAL, CEMENT TREATED BASE OR ASPHALTIC CONCRETE BASE
TYPICAL RESIDENTIAL DRIVEWAY SECTION
WITH SIDEWALK ABUTTING CURB
ITEM 503.1
3' MINIMUM
CURB AND SIDEWALK BEYOND
2% MAX.
7% MAX.
① 8% MAX. TO THE EDGE OF THE SIDEWALK IF SIDEWALK SEPARATION IS 4' OR GREATER.
TYPICAL RESIDENTIAL DRIVEWAY SECTION
WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.1
② THE ALGEBRAIC DIFFERENCE OF G1 & G2 SHALL BE 14% OR LESS
6" CLASS "A" CONCRETE
#4 BARS 12" O.C. BOTH WAYS (ITEM 303.05) 6" x 6" W7.0 x W7.0 WELDED WIRE FABRIC SHEETS (ITEM 308)
TYPICAL COMMERCIAL DRIVEWAY SECTION
WITH SIDEWALK ABUTTING CURB
ITEM 503.2
TYPICAL COMMERCIAL DRIVEWAY SECTION
WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.2
CONCRETE DRIVEWAY NOTES
1. DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY THAT MAY BE NECESSARY TO RECONSTRUCT WITHIN PRIVATE PROPERTY TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE. THIS PORTION OF THE DRIVEWAY SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS AS MAY APPLY.
a.) CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO. 503.1
b.) ASPHALTIC CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO.503.4 AND SHALL INCLUDE A MINIMUM OF 1" ASPHALT TYPE "D" & 6" FLEXIBLE BASE
c.) GRAVEL DRIVEWAY PAD FOR UNDER ITEM NO. 503.5 AND SHALL INCLUDE A MINIMUM OF 6" FLEXIBLE BASE
2. 3" MINIMUM HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE. IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.
3. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:
TYPE | MINIMUM | MAXIMUM
RESIDENTIAL | 10' | 20'
COMMERCIAL – ONE WAY | 12' | 20'
COMMERCIAL – TWO WAY | 24' | 30'
4. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB,THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.
5. FOR OTHER THAN LOCAL TYPE "A" STREETS,THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND SEPARATED A MINIMUM OF 3' FROM THE BACK OF CURB OR, AS AN OPTION,THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
6. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
7. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3/4" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.
8. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 3%.
9. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.
TYPICAL RESIDENTIAL DRIVEWAY SECTION
WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS ABUTTING CURB
ITEM 503.1
TYPICAL RESIDENTIAL DRIVEWAY SECTION
WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS SEPARATED FROM CURB
ITEM 503.1
TYPICAL COMMERCIAL DRIVEWAY SECTION
WITH SIDEWALK ABUTTING CURB
ITEM 503.2
TYPICAL COMMERCIAL DRIVEWAY SECTION
WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.2
3 / 4" CHAMFER
6" MINIMUM – 12" MAXIMUM
ASPHALT OR GRAVEL DRIVEWAY
2 – #4 BARS CONTINUOUS
#3 BARS @ 12" O.C. MAXIMUM
2 – #4 BARS CONTINUOUS
12" MINIMUM – 18" MAXIMUM BELOW FINISHED GRADE
12"
NOTE:
1. COST OF REINFORCEMENT TO BE INCLUDED IN UNIT COST OF ITEM 307.1.
2. CONCRETE RETAINING WALL COMBINATION TYPE SHALL BE USED FOR DRIVEWAYS.
DRIVEWAY – CONCRETE RETAINING WALL
ON COMPACTED SUBGRADE
ITEM 307.1
TOP OF ASPHALT PAVEMENT
SLOPE (1/2) MAXIMUM
VARIES
VARIES SEE NOTE 3
f.f.ND.
② RESIDENTIAL 2' MAXIMUM, COMMERCIAL SEE PLAN VIEW
CURB PROFILE AT DRIVEWAY
WITH SIDEWALK ABUTTING CURB
2' MAX. ② RESIDENTIAL
PROPERTY LINE
WHERE RETAINING WALL COMBINATION TYPE IS REQUIRED AT DRIVEWAYS, IT SHALL BE CONSTRUCTED AS SHOWN
EXPANSION JOINT SEE NOTE 7
6" CONCRETE DRIVEWAY
1/2" EXPANSION JOINT MATERIAL OR 3/4" REDWOOD OR CYPRESS WOOD JOINT
SLOPE(1/2) MAX.
SLOPE(1/2) MIN.
CURB
DUMMY JOINTS SEE NOTE 6
② 40° FOR COMMERCIAL DRIVEWAY
TYPICAL DRIVEWAY PLAN VIEW
WITH SIDEWALK ABUTTING CURB
4'-0"
CURB PROFILE AT DRIVEWAY
WITH SIDEWALK SEPARATED FROM CURB
SLOPE (1/2) MAX.
SLOPE (1/2) MIN.
4"
① 8% MAX. TO THE EDGE OF THE SIDEWALK IF SIDEWALK SEPARATION IS 4' OR GREATER.
TYPICAL DRIVEWAY PLAN VIEW
WITH SIDEWALK SEPARATED FROM CURB
MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
CONCRETE DRIVEWAY STANDARDS
% SUBMITTAL PROJECT NO.: DATE:
DRWN. BY: V. VASQUEZ DSGN. BY: CHKD. BY: R.S. HOSSEINI, P.E. SHEET NO.: OF

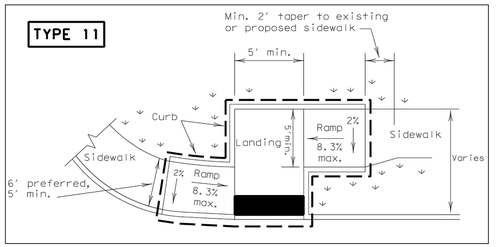

SIDEWALK RAMP
2' MIN. DETECTABLE WARNING. SEE NOTE 5
CONCRETE CURB
TYPICAL CONCRETE SIDEWALK
BEGINNING OF CURB RETURN
2' MIN. DETECTABLE WARNING. SEE NOTE 5
8.33 % MAX. (1:12)
NOTE:
1. INNER SIDEWALK RAMPS MUST START AT THE EDGE OF THE 5' MIN. LANDING THE EDGE OF THE STREET ACCESS LANDING MAY NOT NECESSARILY OCCUR AT THE BEGINNING OF THE CURB RETURN.
TYPICAL SIDEWALK RAMP – TYPE I
SIDEWALK ABUTS THE CURB
SCALE: 1"=10'
TYPICAL SIDEWALK RAMP – TYPE II
USED AT TEE INTERSECTIONS WHERE SIDEWALK ABUTS CURB
SCALE: 1"=10'
GENERAL NOTES
1. WHEN POSSIBLE SIDEWALKS SHOULD BE PLACED NEXT TO THE PROPERTY LINE ALLOWING A MINIMUM OF 1-FOOT BUFFER (DEVIATION OF THE PATHWAY FROM A STRAIGHT LINE IS ENCOURAGED TO AVOID TREES OR OTHER OBSTRUCTIONS.
2. FOR LOCAL TYPE "A" STREETS, SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND SEPARATED FROM THE CURB.THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 3'FROM THE BACK OF CURB.
3. FOR OTHER THAN LOCAL TYPE "A" STREETS,SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND SEPARATED A MINIMUM OF 3'FROM THE BACK OF CURB OR AS AN OPTION,THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
4. SIDEWALK RAMP LENGTHS PRESENTED IN TABLE 1 ARE GUIDELINES ONLY. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE.
5. ALL CURB RAMPS OR LANDINGS ABUTTING THE CROSSWALK SHALL HAVE A DETECTABLE WARNING 24 INCHES DEEP (IN THE DIRECTION OF PEDESTRIAN TRAVEL) AND EXTENDING THE FULL WIDTH OF THE CURB RAMP OR LANDING. THE DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES ALIGNED IN A GRID PATTERN. THE DOMES SHALL HAVE A BASE DIAMETER OF 0.9 INCHES, A HEIGHT OF 0.2 INCHES, AND BE 0.9 MM AND A CENTER-TO-CENTER SPACING OF NOMINALLY 2.35 INCHES. AS AN ALTERNATIVE, THE DETECTABLE WARNING SURFACE SHALL BE A CAST-IN-PLACE TILE CONFORMING TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS OR PAVERS CONFORMING TO TXDOT STANDARD PED-VL-PEDESTRIAN FACILITIES.
6. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES,EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. COLOR OF THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
7. SIDEWALK RAMP TYPE V SHALL BE USED ONLY WHERE THERE IS SIGNIFICANT RESTRICTION WITHIN THE PARKWAY TO CONSTRUCT TYPE I OR TYPE III RAMPS.
8. CONSTRUCTION OF ALL WHEELCHAIR RAMPS TO BE INCLUDED UNDER ITEMS "506 – CONCRETE CURB,GUTTER, AND CONCRETE CURB AND GUTTER" AND / OR "506 – CONCRETE SIDEWALKS". RAMP SURFACE SHALL BE BRUSH FINISHED.
9. THESE DETAILS ARE FOR REFERENCE ONLY. ACTUAL LOCATIONS OF WHEELCHAIR RAMPS TO BE SHOWN ON CONSTRUCTION PLANS. CITY CONSTRUCTION INSPECTOR CAN ADJUST LOCATIONS FOR SAFETY OR UTILITY CLEARANCE.
10. SIDEWALK LESS THAN 5 FEET IN WIDTH SHALL BE PROVIDED WITH A PASSING SPACE AT A MAXIMUM SPACING OF 200 FEET.
11. WHEELCHAIR RAMP SHALL BE CONSTRUCTED WITH 4' CLASS "A" CONCRETE AND 2" MINIMUM GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL.
12. REINFORCING STEEL SHALL BE #3 BARS AT 18" O.C.E.W. OR 6" x 6" – W2.9 x W2.9 WIRE MESH.
13. SIDEWALK GRADES SHALL NOT EXCEED THE GRADE ESTABLISHED FOR THE ADJACENT ROADWAY. ANY SIDEWALK CONSTRUCTION THAT DEVIATES FROM THE NATURAL GRADE OF THE ROADWAY TO CREATE A GRADE STEEPER THAN THE EXISTING ROADWAY WILL REQUIRE RAMPS,HANDRAILS AND RESTING PLATFORMS TO BE CONSTRUCTED IN ACCORDANCE WITH ADA AND TAS STANDARDS.
14. SIDEWALK CROSS GRADE SHALL HAVE A MAXIMUM SLOPE OF 3% .LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 3% IN ANY DIRECTION.
15. THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES SHALL BE LESS THAN 13%. THE CHANGE OF GRADE BETWEEN THE STREET ACCESS LANDING AND THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN THE STREET ACCESS RAMP DESIGNED AT THE 8.33% MAXIMUM SLOPE.THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN 2.0% (I.E.8.33–2.0=7.+/–%. IN ADDITION,THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN OR EQUAL TO 3%.
16. IF THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES IS GREATER THAN OR EQUAL TO 11% A LEVELING STRIP 3 FEET IN LENGTH SHALL BE PROVIDED TO TRANSITION THE ADJACENT SURFACES.
17. ADA COMPLIANCE IN ALTERATIONS INCLUDE ONLY THAT WORK WITHIN THE LIMITS,BOUNDARIES OR SCOPE OF A PLANNED PROJECT.
TYPICAL SIDEWALK RAMP – TYPE III
SIDEWALK SEPARATED FROM CURB
SCALE: 1"=10'
TYPICAL SIDEWALK RAMP – TYPE IV
USED AT TEE INTERSECTIONS WHERE SIDEWALK IS SEPARATED FROM CURB
SCALE: 1"=10'
LANDING OR RAMP WIDTH
SIDEWALK
SEE PLAN DETAIL
STREET ACCESS CURB
PAVEMENT
DETECTABLE WARNING SURFACE
SCALE: 1"=4'
0.20"MAX. 60 MM
0.90" 23 MM
0.20"MAX. 5 MM
DOMES
PLAN DETAIL
NO SCALE
0.9" 23 MM
0.2" 5 MM
DOME SECTION
NO SCALE
NOTE:
EXAMPLE: CONCRETE TRUNCATED DOMES WILL NOT BE ALLOWED TO BE USED FOR DETECTABLE WARNING ON WHEELCHAIR RAMPS. CONTRACTOR MUST SUBMIT TRUNCATED DOME INFORMATION THAT IS TO BE USED ON WHEELCHAIR RAMPS TO THE PROJECT MANAGER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO INSTALLATION.
LOW SIDE RAMP
5' MIN. LANDING
HIGH SIDE RAMP
8.33% MAX.
TOP OF ASPHALT PAVEMENT
SECTION C–C
CURB PROFILE WHERE SIDEWALK ABUTS CURB
SCALE: 1"=4'
SECTION D–D
CURB PROFILE WHERE SIDEWALK IS SEPARATED FROM CURB
SCALE: 1"=4'
NOT TO EXCEED 200'
TYPICAL CONCRETE SIDEWALK
SIDEWALK PASSING SPACE
SCALE: 1"=10'
TABLE 1 (SEE NOTE 4)
GUTTER SLOPE | SIDEWALK RAMP LENGTH (1:12)
LOW SIDE | HIGH SIDE
1% | 5'-6" | 7'-0"
2% | 5'-0" | 6'-4"
3% | 4'-8" | 10'-0"
4% | 4'-2" | 10'-0"
5% | 3'-10" | 16'-8"
4' MIN. SIDEWALK
2% MAX.
6% MAX.
ASPHALT
4" CLASS "A" CONCRETE
#3 BARS @ 18" O.C.E.W. OR 6" x 6" – W2.9 x W2.9
2" MINIMUM GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL
BASE
SECTION A–A
SCALE: 1"=4'
6' MIN. (TYPE II & V RAMPS SEE NOTE 2 & 3)
SEE NOTE 15 & 16
SECTION B–B
SCALE: 1"=4'
MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
WHEELCHAIR RAMP STANDARDS
% SUBMITTAL PROJECT NO.: DATE:
DRWN. BY: V. VASQUEZ DSGN. BY: CHKD. BY: R.S. HOSSEINI, P.E. SHEET NO.: OF



SINGLE ADA RAMP INTERSECTION LAYOUT DETAIL
(TYPE 10 DIRECTIONAL RAMPS)



DUAL ADA RAMP INTERSECTION LAYOUT DETAIL
(TYPE 10 DIRECTIONAL RAMPS)



OFFSET PARALLEL CURB RAMP
(TYPE 11)

REVISIONS

NO.	DATE	DESCRIPTION	PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:

• Engineers
• Surveyors
• Planners
MTR
Moy Tarin Ramirez Engineers, LLC
TBPE/ES: ENGINEERING: F–10291500 SURVEYING: F–10131500
7272 W. Interstate 10 Suite 100 TEL: (210) 698–5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698–5055

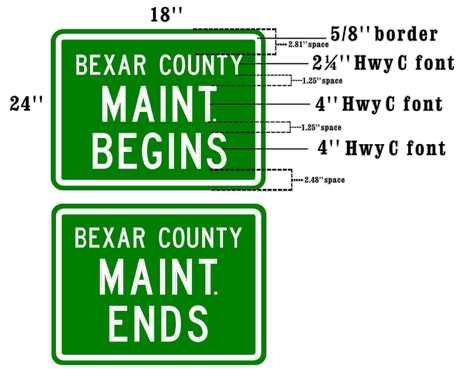
STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
STANDARD DETAILS

SUBMITTAL SET

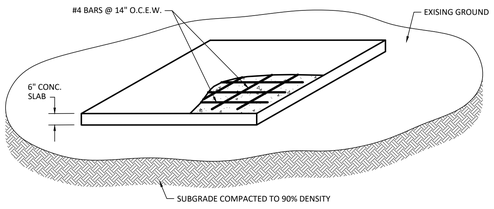
SHEET
C4.16

Plot Date: June 6, 2023 User ID: Lisa Perez
R:\Nicholas Trail\Unit 2\Drawings\U2000_C4.16_Standard Details.dwg



18'' x 24''
White Prismatic Background
Green Overlay Film
Hwy C lettering

BEXAR COUNTY MAINTENANCE SIGNAGE
N.T.S.



NOTES:

1) THE CONTRACTOR WILL CONSTRUCT CONCRETE SLABS FOR "TEMPORARY MAIL BOX COLLECTION PAD" FOR THE UNITED STATES POSTAL SERVICE AT THE LOCATIONS AND SIZES SPECIFIED BY THE CITY ENGINEER DURING CONSTRUCTION.

2) THE CONSTRUCTION OF SLABS SHALL CONFORM TO ITEM NO. 502 "CONCRETE SIDEWALKS AND DRIVEWAYS"

3) PAYMENT WILL BE MADE UNDER ITEM NO. 502–2 DRIVEWAYS – PER SQUARE YARD.

4) UNIT PRICE WILL INCLUDE REMOVAL OF "TEMPORARY MAIL BOX COLLECTION PAD" SLABS AT THE END OF THE PROJECT. NO SEPARATE PAY ITEM.

TEMPORARY MAIL BOX COLLECTION PAD

CONCRETE DRIVEWAY NOTES:

1. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

TYPE	MINIMUM	MAXIMUM
RESIDENTIAL	10'	20'
COMMERCIAL – ONE WAY	12'	20'
COMMERCIAL – TWO WAY	24'	30'

2. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.

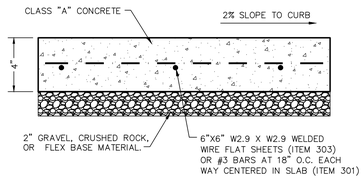
3. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH 4' AND SEPARATED A MINIMUM OF 3' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.

4. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.

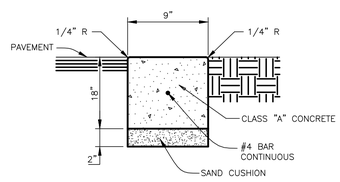
5. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3/8" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.

6. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%..

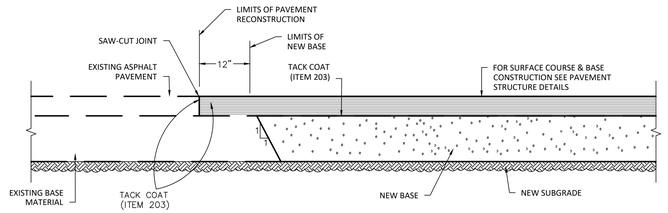
7. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



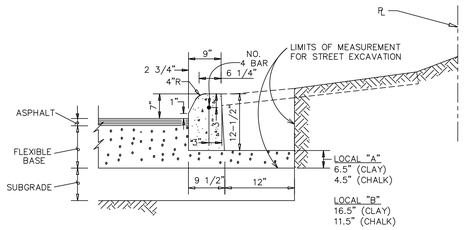
CONCRETE SIDEWALK DETAIL
N.T.S.



HEADER CURB
N.T.S.

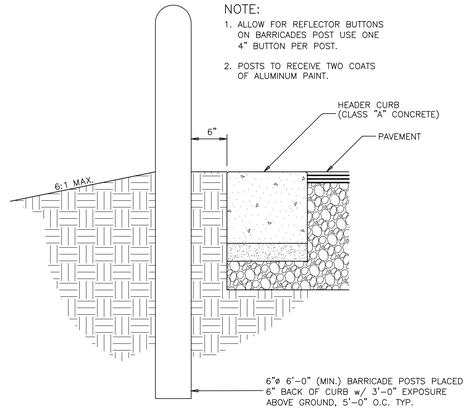


PAVEMENT JUNCTION DETAILS
N.T.S.



CURB NOTE: THE COST OF BASE MATERIAL UNDER & BEHIND THE CURB SHALL BE INCLUDED IN THE COST OF THE CURB.

MACHINE LAID CURB
N.T.S. ITEM 500



GUARD POST
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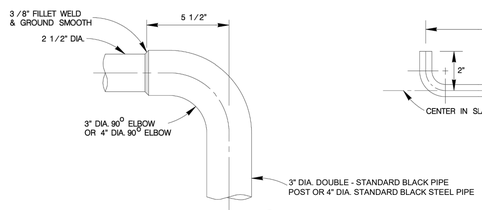
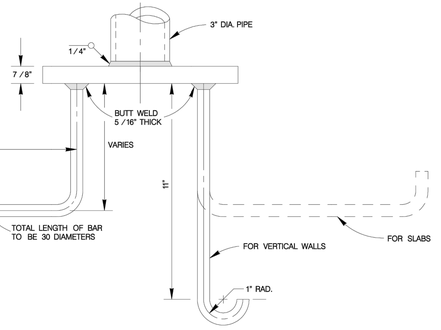


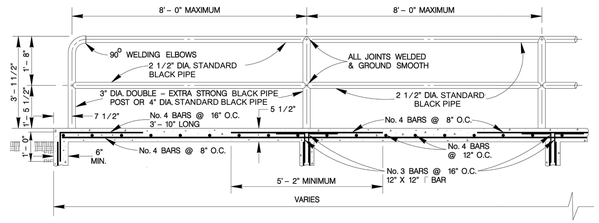
DETAIL OF 90° WELDING ELBOWS

* A NEAT END SECTION, SATISFACTORY TO THE ENGINEER, FROM SUBMITTED SHOP DRAWINGS, MAY BE USED IN LIEU OF THE 90° WELDING ELBOW SHOWN.

SCALE : 1" = 8"



PIPE ANCHORAGE DETAILS
SCALE : 1" = 6"



TYPICAL SIDEWALK BRIDGE & SIDEWALK PIPE RAILING SECTION
SCALE : 1" = 4'

SUBMITTAL SET

NO.	DATE	DESCRIPTION	BY	PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:
		REVISIONS						

• Engineers • Surveyors • Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING: F–5297/SURVEYING: F–10131500
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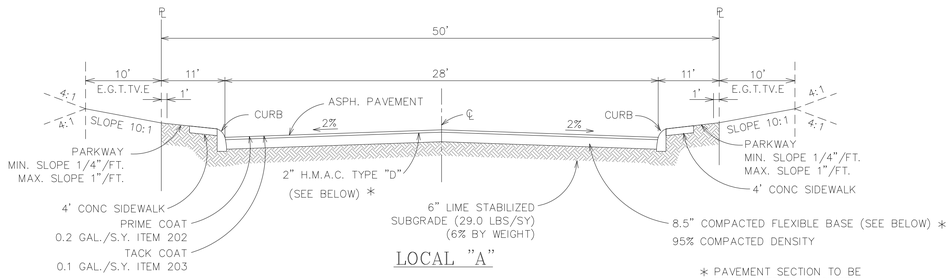
STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING UNIT 2
STREET PLAN & PROFILE
STANDARD DETAILS

SHEET
C4.17



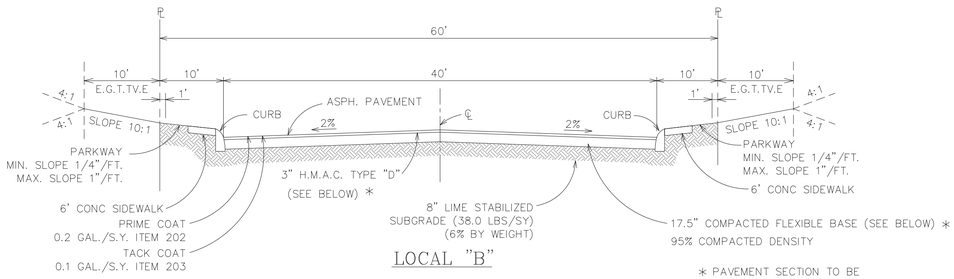
LOCAL "A"

TYPICAL STREET CROSS-SECTION (28' PAVEMENT)

* PAVEMENT SECTION TO BE DETERMINED BY ENGINEER AFTER INSPECTION OF SUBGRADE DURING CONSTRUCTION.

N.T.S.

ELIJAH PATH ~ STA. 23+49.35 TO STA. 27+63.87
CHARLIE COVE ~ STA. 6+60.65 TO STA. 13+27.59
EDDIE ESTATE ~ STA. 1+00.00 TO STA. 9+39.61
BROOKE PATH ~ STA. 1+00.00 TO STA. 4+54.70
STA. 5+44.70 TO STA. 10+64.11
MONIQUE MILL ~ STA. 1+00.00 TO STA. 2+63.00
ANGIE ALLEY ~ STA. 21+20.98 TO STA. 22+65.98



LOCAL "B"

TYPICAL STREET CROSS-SECTION (40' PAVEMENT)

* PAVEMENT SECTION TO BE DETERMINED BY ENGINEER AFTER INSPECTION OF SUBGRADE DURING CONSTRUCTION.

N.T.S.

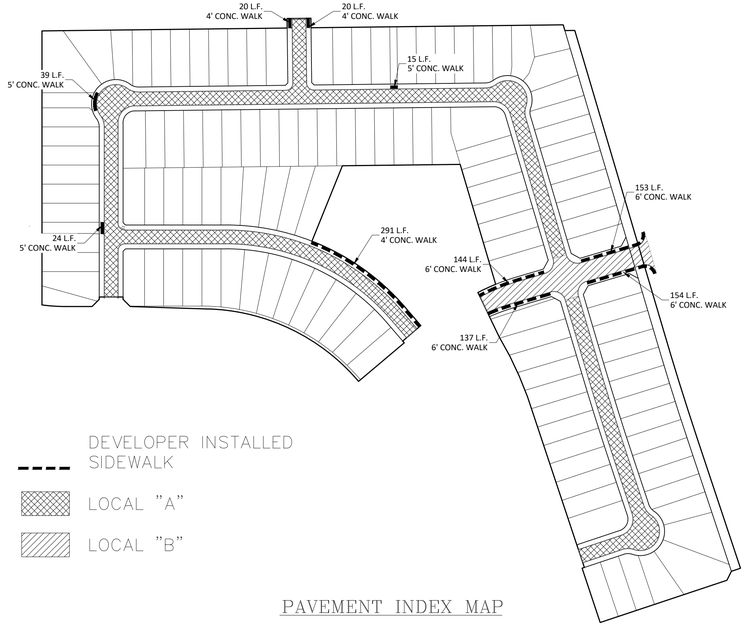
NOAH FOREST ~ STA. 2+56.11 TO STA. 6+22.31

* PAVEMENT SECTIONS

PAVEMENT MATERIAL	CLAY SUBGRADE (CBR 3.0) LOCAL A	LOCAL B	COLLECTOR
TYPE D ASPHALTIC CONCRETE	2.0 IN.	3.0 IN.	3.0 IN.
FLEXIBLE BASE (TxDOT ITEM 247 TYPE A GRADE 2)	8.5 IN.	17.5 IN.	19.5 IN.
LIME STABILIZED SUBGRADE (29.0 LBS/SY) (6% BY WEIGHT)	6.0 IN.	---	---
LIME STABILIZED SUBGRADE (38.0 LBS/SY) (6% BY WEIGHT)	---	8.0 IN.	8.0 IN.

NOTES:

1. APPLICABLE SPECIFICATIONS FROM "CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION"- JUNE 2008
   200 - FLEXIBLE BASE
   202 - PRIME COAT
   203 - TACK COAT
   205 - HOT MIX ASPHALT CONCRETE PAVEMENT
2. REFER TO INTEC GEOTECHNICAL REPORTS FOR ADDITIONAL PAVEMENT CONSTRUCTION INFORMATION A. "SUBSURFACE EXPLORATION & PAVEMENT ANALYSIS FOR PROPOSED NEW STREETS - 171 ACRE NICHOLAS TRACT, SAN ANTONIO, TEXAS, DATED SEPTEMBER 10, 2021.
3. CONTRACTOR TO COORDINATE ALL MATERIAL TESTING



PAVEMENT INDEX MAP

FOR CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED IN THE FIELD:

- AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2-3) DAYS. MAINTAIN MOISTURE DURING MELLOWING;
- AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SLAKING AGGREGATES RETAINED ON THE ¾ INCH SIEVE FROM THE SAMPLE):
  - MINIMUM PASSING 1¾ SIEVE 100
  - MINIMUM PASSING ¾ SIEVE 85
  - MINIMUM PASSING NO. 4 SIEVE 60
- 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 ABOVE FOR MIXTURE DESIGN.
- COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED);
- CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
- VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN ±1.0 INCH.

NOTE:
THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF LIME OR CEMENT

NOTE:
SELECT FILL MATERIAL SHALL HAVE A MAXIMUM PLASTICITY INDEX OF 45 AND A CALIFORNIA BEARING RATIO (CBR) OF AT LEAST 3.0

GEOTECHNICAL REPORT::
INTEGRATED TESTING AND ENGINEERING COMPANY OF SAN ANTONIO, L.P.

PROPOSED NEW STREETS 171 ACRE NICHOLAS TRACT

INTEC PROJECT NO. S211240-P (SEPTEMBER 10, 2021)

GEOTECHNICAL REPORT NOTES

SUBGRADE NOTES:

- CUT AND FILL DATA ARE NOT AVAILABLE AT THIS TIME.
- BASED ON THE SOILS ENCOUNTERED IN THE BORING LOGS, THE FINAL PAVEMENT SUBGRADE IS LIKELY TO CONSIST OF BROWN CLAYS OR BROWN SANDY CLAYS AND THE PLASTICITY INDEX VALUES ARE ANTICIPATED TO BE GREATER THAN 20.
- SUBGRADE STABILIZATION IS RECOMMENDED.
  - LIME STABILIZATION SUBGRADE SOILS STABILIZED TO A DEPTH OF 6 OR 8 INCHES AS NOTED ABOVE. SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO TREATMENT. IF ELEVATED LEVELS OF SULFATE ARE ENCOUNTERED, THEN OTHER OPTIONS SHOULD BE CONSIDERED. AN APPLICATION RATE OF 6 PERCENT BY WEIGHT IS RECOMMENDED:
    - 6" LS: 29 LBS PER SQ YARD FOR 6-INCH DEPTH
    - 8" LS: 38 LBS PER SQ YARD FOR 8-INCH DEPTH
  - CEMENT MAY BE USED IN LIEU OF LIME FOR STABILIZATION, CEMENT APPLICATION RATE SHOULD BE DETERMINED AT THE TIME OF CONSTRUCTION.
- FILL USED TO RAISE THE GRADE SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE. THE FILL MATERIAL SHOULD HAVE A MINIMUM CBR VALUE OF 3.0 AND A MAXIMUM PLASTICITY INDEX VALUE OF 45. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY GUIDELINES.
- THE SUBGRADE, PRIOR TO PLACEMENT OF FILL, SHOULD BE PROOF ROLLED TO IDENTIFY WEAK AREAS. ANY IDENTIFIED WEAK AREAS SHOULD BE RECOMPACTED.

GENERAL NOTES:

- INPUT PARAMETERS USED IN PAVEMENT SECTION CALCULATIONS ARE SHOWN IN TABLE NO. 4. PLEASE CALL US TO PROVIDE PAVEMENT RECOMMENDATIONS, IF NEEDED, FOR DIFFERENT INPUT VALUES.
- IF REPETITIVE TRUCK OR HEAVY TRUCK TRAFFIC IS ANTICIPATED, PLEASE CONTACT US FOR REVISED PAVEMENT RECOMMENDATIONS.
- PAVEMENT SECTION RECOMMENDATIONS ARE BASED ON THE DESIGN CBR VALUE. THE PAVEMENT RECOMMENDATIONS ARE NOT BASED ON THE SHRINK / SWELL CHARACTERISTICS OF THE UNDERLYING SOILS. THE PAVEMENT CAN EXPERIENCE CRACKING AND DEFORMATION DUE TO SHRINKAGE AND SWELLING CHARACTERISTICS OF THE SOILS AS DESCRIBED IN THE VERTICAL MOVEMENTS SECTION OF THIS REPORT. USE OF GEOGRID WILL HELP REDUCE THE SHRINK / SWELL RELATED REFLECTIVE CRACKING.
- BASED ON OUR OBSERVATIONS, SIGNIFICANT PAVEMENT DISTRESS HAS BEEN OBSERVED DUE TO WATER GETTING UNDERNEATH AND RELATIVELY HEAVY CONSTRUCTION TRAFFIC.
- IF WATER IS ALLOWED TO GET UNDERNEATH THE ASPHALT OR IF MOISTURE CONTENT OF THE BASE OR SUBGRADE CHANGES SIGNIFICANTLY, THEN PAVEMENT DISTRESS WILL OCCUR. MOISTURE PENETRATION UNDERNEATH THE ASPHALT PAVEMENT SURFACE MAY BE REDUCED BY INSTALLING A VERTICAL MOISTURE BARRIER, SUCH AS DEEPER CURBS; CURBS EXTENDING A MINIMUM OF 6 INCHES INTO SUBGRADE.

REVISIONS

NO.	DESCRIPTION	DATE	PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:

• Engineers
• Surveyors
• Planners
Moy Tarin Ramirez Engineers, LLC
TBPE/ES: ENGINEERING: F-5297/SURVEYING: F-10751500
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STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

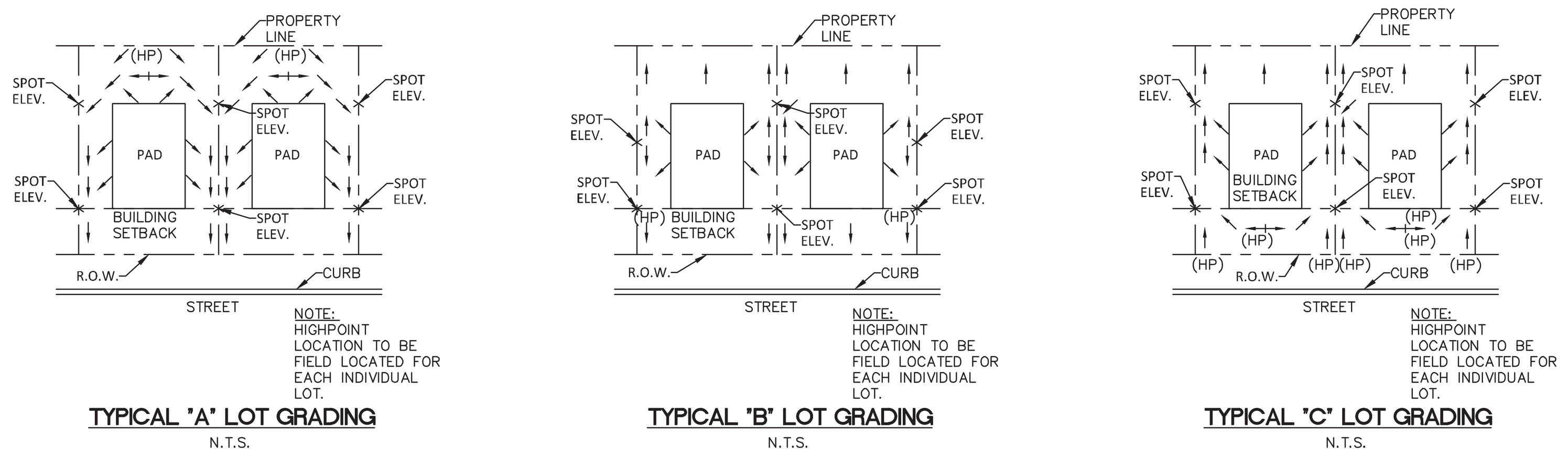
ROOSEVELT LANDING UNIT 2

STANDARD STREET SECTIONS

SHEET
C4.18

SUBMITTAL SET

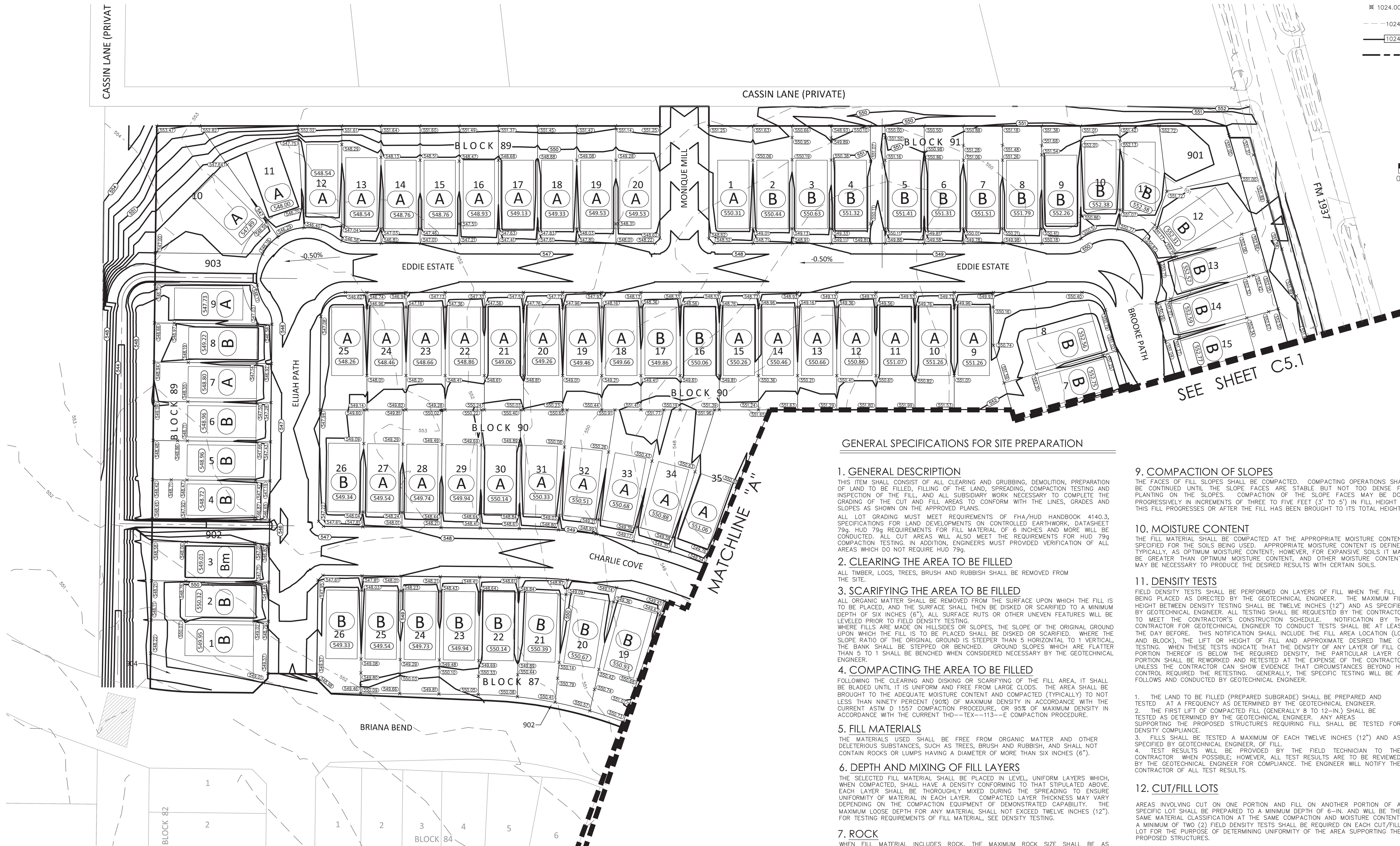
LAND-PLAT-22-11800353



LEGEND

- (A) = DRAINAGE TO FRONT OF LOT
- (B) = DRAINAGE TO BOTH FRONT AND REAR LOT
- (C) = DRAINAGE TO REAR OF LOT
- = CLEARING AND/OR GRADING OF UTILITY EASEMENTS
- × (1024.00) = PROPOSED ELEVATION
- 1024.00E = EXISTING ELEVATION
- 1024 = EXISTING CONTOUR
- 1024 = PROPOSED CONTOUR
- = PROPERTY LINE

SCALE: 1"=50'



GENERAL SPECIFICATIONS FOR SITE PREPARATION

1. GENERAL DESCRIPTION

THIS ITEM SHALL CONSIST OF ALL CLEARING AND GRUBBING, DEMOLITION, PREPARATION OF LAND TO BE FILLED, FILLING OF THE LAND, SPREADING, COMPACTION TESTING AND INSPECTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES AND SLOPES AS SHOWN ON THE APPROVED PLANS.

ALL LOT GRADING MUST MEET REQUIREMENTS OF FHA/HUD HANDBOOK 4140.3, SPECIFICATIONS FOR LAND DEVELOPMENTS ON CONTROLLED EARTHWORK, DATASHEET 79g. HUD 79g REQUIREMENTS FOR FILL MATERIAL OF 6 INCHES AND MORE WILL BE CONDUCTED. ALL CUT AREAS WILL ALSO MEET THE REQUIREMENTS FOR HUD 79g COMPACTION TESTING. IN ADDITION, ENGINEERS MUST PROVIDED VERIFICATION OF ALL AREAS WHICH DO NOT REQUIRE HUD 79g.

2. CLEARING THE AREA TO BE FILLED

ALL TIMBER, LOGS, TREES, BRUSH AND RUBBISH SHALL BE REMOVED FROM THE SITE.

3. SCARIFYING THE AREA TO BE FILLED

ALL ORGANIC MATTER SHALL BE REMOVED FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED, AND THE SURFACE SHALL THEN BE DISKED OR SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES (6"), ALL SURFACE RUTS OR OTHER UNEVEN FEATURES WILL BE LEVELED PRIOR TO FIELD DENSITY TESTING.

WHERE FILLS ARE MADE ON HILLSIDES OR SLOPES, THE SLOPE OF THE ORIGINAL GROUND UPON WHICH THE FILL IS TO BE PLACED SHALL BE DISKED OR SCARIFIED. WHERE THE SLOPE RATIO OF THE ORIGINAL GROUND IS STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL, THE BANK SHALL BE STEPPED OR BENCHED. GROUND SLOPES WHICH ARE FLATTER THAN 5 TO 1 SHALL BE BENCHED WHEN CONSIDERED NECESSARY BY THE GEOTECHNICAL ENGINEER.

4. COMPACTING THE AREA TO BE FILLED

FOLLOWING THE CLEARING AND DISKING OR SCARIFYING OF THE FILL AREA, IT SHALL BE BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS. THE AREA SHALL BE BROUGHT TO THE ADEQUATE MOISTURE CONTENT AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT ASTM D 1557 COMPACTION PROCEDURE, OR 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT THD--TEX--113--E COMPACTION PROCEDURE.

5. FILL MATERIALS

THE MATERIALS USED SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, SUCH AS TREES, BRUSH AND RUBBISH, AND SHALL NOT CONTAIN ROCKS OR LUMPS HAVING A DIAMETER OF MORE THAN SIX INCHES (6").

6. DEPTH AND MIXING OF FILL LAYERS

THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THAT STIPULATED ABOVE. EACH LAYER SHALL BE THOROUGHLY MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. COMPACTED LAYER THICKNESS MAY VARY DEPENDING ON THE COMPACTION EQUIPMENT OF DEMONSTRATED CAPABILITY. THE MAXIMUM LOOSE DEPTH FOR ANY MATERIAL SHALL NOT EXCEED TWELVE INCHES (12"). FOR TESTING REQUIREMENTS OF FILL MATERIAL, SEE DENSITY TESTING.

7. ROCK

WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE SHALL BE AS APPROVED BY THE GEOTECHNICAL ENGINEER. NO LARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE FILLED WITH SMALL STONES OR SOIL AND ADEQUATELY COMPACTED. NO LARGE ROCKS WILL BE PERMITTED WITHIN EIGHTEEN INCHES (18") OF THE FINISHED GRADE.

8. COMPACTION OF FILL LAYER

COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE FILL TO THE SPECIFIED DENSITY. COMPACTION SHALL BE ACCOMPLISHED WHILE THE FILL MATERIAL IS AT OR NEAR THE APPROPRIATE MOISTURE CONTENT. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER THE ENTIRE STRUCTURAL AREA (BENEATH PROPOSED STRUCTURES).

9. COMPACTION OF SLOPES

THE FACES OF FILL SLOPES SHALL BE COMPACTED. COMPACTING OPERATIONS SHALL BE CONTINUED UNTIL THE SLOPE FACES ARE STABLE BUT NOT TOO DENSE FOR PLANTING ON THE SLOPES. COMPACTION OF THE SLOPE FACES MAY BE DONE PROGRESSIVELY IN INCREMENTS OF THREE TO FIVE FEET (3' TO 5') IN FILL HEIGHT AS THIS FILL PROGRESSES OR AFTER THE FILL HAS BEEN BROUGHT TO ITS TOTAL HEIGHT.

10. MOISTURE CONTENT

THE FILL MATERIAL SHALL BE COMPACTED AT THE APPROPRIATE MOISTURE CONTENT SPECIFIED FOR THE SOILS BEING USED. APPROPRIATE MOISTURE CONTENT IS DEFINED, TYPICALLY, AS OPTIMUM MOISTURE CONTENT; HOWEVER, FOR EXPANSIVE SOILS IT MAY BE GREATER THAN OPTIMUM MOISTURE CONTENT, AND OTHER MOISTURE CONTENTS MAY BE NECESSARY TO PRODUCE THE DESIRED RESULTS WITH CERTAIN SOILS.

11. DENSITY TESTS

FIELD DENSITY TESTS SHALL BE PERFORMED ON LAYERS OF FILL WHEN THE FILL IS BEING PLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MAXIMUM FILL HEIGHT BETWEEN DENSITY TESTING SHALL BE TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER. ALL TESTING SHALL BE REQUESTED BY THE CONTRACTOR TO MEET THE CONTRACTOR'S CONSTRUCTION SCHEDULE. NOTIFICATION BY THE CONTRACTOR FOR GEOTECHNICAL ENGINEER TO CONDUCT TESTS SHALL BE AT LEAST THE DAY BEFORE. THIS NOTIFICATION SHALL INCLUDE THE FILL AREA LOCATION (LOT AND BLOCK), THE LIFT OR HEIGHT OF FILL AND APPROXIMATE DESIRED TIME OF TESTING. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED AND RETESTED AT THE EXPENSE OF THE CONTRACTOR UNLESS THE CONTRACTOR CAN SHOW EVIDENCE THAT CIRCUMSTANCES BEYOND HIS CONTROL REQUIRED THE RETESTING. GENERALLY, THE SPECIFIC TESTING WILL BE AS FOLLOWS AND CONDUCTED BY GEOTECHNICAL ENGINEER.

1. THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
2. THE FIRST LIFT OF COMPACTED FILL (GENERALLY 8 TO 12-IN.) SHALL BE TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY AREAS SUPPORTING THE PROPOSED STRUCTURES REQUIRING FILL SHALL BE TESTED FOR DENSITY COMPLIANCE.
3. FILLS SHALL BE TESTED A MAXIMUM OF EACH TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER, OF FILL.
4. TEST RESULTS WILL BE PROVIDED BY THE FIELD TECHNICIAN TO THE CONTRACTOR WHEN POSSIBLE; HOWEVER, ALL TEST RESULTS ARE TO BE REVIEWED BY THE GEOTECHNICAL ENGINEER FOR COMPLIANCE. THE ENGINEER WILL NOTIFY THE CONTRACTOR OF ALL TEST RESULTS.

12. CUT/FILL LOTS

AREAS INVOLVING CUT ON ONE PORTION AND FILL ON ANOTHER PORTION OF A SPECIFIC LOT SHALL BE PREPARED TO A MINIMUM DEPTH OF 6-IN. AND WILL BE THE SAME MATERIAL CLASSIFICATION AT THE SAME COMPACTION AND MOISTURE CONTENT. A MINIMUM OF TWO (2) FIELD DENSITY TESTS SHALL BE REQUIRED ON EACH CUT/FILL LOT FOR THE PURPOSE OF DETERMINING UNIFORMITY OF THE AREA SUPPORTING THE PROPOSED STRUCTURES.

NOTES:

MINIMUM SLAB EXPOSURE IS 1.0'.

ALL ELEVATIONS AT FRONT PROPERTY LINE ARE 0.18' ABOVE CURB ELEVATION.

CONTRACTOR TO VERIFY 1.5% MINIMUM SLOPE ON LOTS AND REGRADE TO MEET MINIMUM PROPOSED ELEVATIONS IF NECESSARY.

CONTRACTOR TO CLEAR ALL RIGHT OF WAY, EASEMENTS AND PRESERVE ANY TREE 10" AND LARGER OUTSIDE OF THESE AREAS.

REVISED
4:43 pm, May 01, 2024

SUBMITTAL SET

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. # | DSN. BY: | DWN. BY: | CHKD. BY: | DATE:

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
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12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
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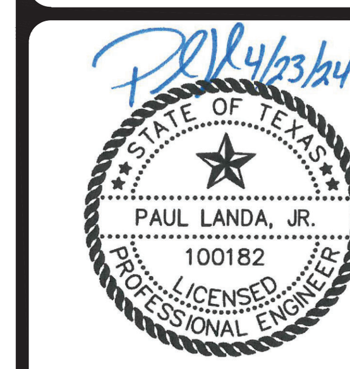

ROOSEVELT LANDING, UNIT 2

GRADING PLAN

SHEET

C5.0

LAND-PLAT-22-11800353

GENERAL SPECIFICATIONS FOR SITE PREPARATION

1. GENERAL DESCRIPTION

THIS ITEM SHALL CONSIST OF ALL CLEARING AND GRUBBING, DEMOLITION, PREPARATION OF LAND TO BE FILLED, FILLING OF THE LAND, SPREADING, COMPACTION TESTING AND INSPECTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES AND SLOPES AS SHOWN ON THE APPROVED PLANS.

ALL LOT GRADING MUST MEET REQUIREMENTS OF FHA/HUD HANDBOOK 4140.3, SPECIFICATIONS FOR LAND DEVELOPMENTS ON CONTROLLED EARTHWORK, DATASHEET 79g. HUD 79g REQUIREMENTS FOR FILL MATERIAL OF 6 INCHES AND MORE WILL BE CONDUCTED. ALL CUT AREAS WILL ALSO MEET THE REQUIREMENTS FOR HUD 79g COMPACTION TESTING. IN ADDITION, ENGINEERS MUST PROVIDED VERIFICATION OF ALL AREAS WHICH DO NOT REQUIRE HUD 79g.

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WHERE FILLS ARE MADE ON HILLSIDES OR SLOPES, THE SLOPE OF THE ORIGINAL GROUND UPON WHICH THE FILL IS TO BE PLACED SHALL BE DISKED OR SCARIFIED. WHERE THE SLOPE RATIO OF THE ORIGINAL GROUND IS STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL, THE BANK SHALL BE STEPPED OR BENCHED. GROUND SLOPES WHICH ARE FLATTER THAN 5 TO 1 SHALL BE BENCHED WHEN CONSIDERED NECESSARY BY THE GEOTECHNICAL ENGINEER.

4. COMPACTING THE AREA TO BE FILLED

FOLLOWING THE CLEARING AND DISKING OR SCARIFYING OF THE FILL AREA, IT SHALL BE BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS. THE AREA SHALL BE BROUGHT TO THE ADEQUATE MOISTURE CONTENT AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT ASTM D 1557 COMPACTION PROCEDURE, OR 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT THD--TEX--113--E COMPACTION PROCEDURE.

5. FILL MATERIALS

THE MATERIALS USED SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, SUCH AS TREES, BRUSH AND RUBBISH, AND SHALL NOT CONTAIN ROCKS OR LUMPS HAVING A DIAMETER OF MORE THAN SIX INCHES (6").

6. DEPTH AND MIXING OF FILL LAYERS

THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THAT STIPULATED ABOVE. EACH LAYER SHALL BE THOROUGHLY MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. COMPACTED LAYER THICKNESS MAY VARY DEPENDING ON THE COMPACTION EQUIPMENT OF DEMONSTRATED CAPABILITY. THE MAXIMUM LOOSE DEPTH FOR ANY MATERIAL SHALL NOT EXCEED TWELVE INCHES (12"). FOR TESTING REQUIREMENTS OF FILL MATERIAL, SEE DENSITY TESTING.

7. ROCK

WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE SHALL BE AS APPROVED BY THE GEOTECHNICAL ENGINEER. NO LARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE FILLED WITH SMALL STONES OR SOIL AND ADEQUATELY COMPACTED. NO LARGE ROCKS WILL BE PERMITTED WITHIN EIGHTEEN INCHES (18") OF THE FINISHED GRADE.

8. COMPACTION OF FILL LAYER

COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE FILL TO THE SPECIFIED DENSITY. COMPACTION SHALL BE ACCOMPLISHED WHILE THE FILL MATERIAL IS AT OR NEAR THE APPROPRIATE MOISTURE CONTENT. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER THE ENTIRE STRUCTURAL AREA (BENEATH PROPOSED STRUCTURES).

9. COMPACTION OF SLOPES

THE FACES OF FILL SLOPES SHALL BE COMPACTED. COMPACTING OPERATIONS SHALL BE CONTINUED UNTIL THE SLOPE FACES ARE STABLE BUT NOT TOO DENSE FOR PLANTING ON THE SLOPES. COMPACTION OF THE SLOPE FACES MAY BE DONE PROGRESSIVELY IN INCREMENTS OF THREE TO FIVE FEET (3' TO 5') IN FILL HEIGHT AS THIS FILL PROGRESSES OR AFTER THE FILL HAS BEEN BROUGHT TO ITS TOTAL HEIGHT.

10. MOISTURE CONTENT

THE FILL MATERIAL SHALL BE COMPACTED AT THE APPROPRIATE MOISTURE CONTENT SPECIFIED FOR THE SOILS BEING USED. APPROPRIATE MOISTURE CONTENT IS DEFINED, TYPICALLY, AS OPTIMUM MOISTURE CONTENT; HOWEVER, FOR EXPANSIVE SOILS IT MAY BE GREATER THAN OPTIMUM MOISTURE CONTENT, AND OTHER MOISTURE CONTENTS MAY BE NECESSARY TO PRODUCE THE DESIRED RESULTS WITH CERTAIN SOILS.

11. DENSITY TESTS

FIELD DENSITY TESTS SHALL BE PERFORMED ON LAYERS OF FILL WHEN THE FILL IS BEING PLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MAXIMUM FILL HEIGHT BETWEEN DENSITY TESTING SHALL BE TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER. ALL TESTING SHALL BE REQUESTED BY THE CONTRACTOR TO MEET THE CONTRACTOR'S CONSTRUCTION SCHEDULE. NOTIFICATION BY THE CONTRACTOR FOR GEOTECHNICAL ENGINEER TO CONDUCT TESTS SHALL BE AT LEAST THE DAY BEFORE. THIS NOTIFICATION SHALL INCLUDE THE FILL AREA LOCATION (LOT AND BLOCK), THE LIFT OR HEIGHT OF FILL AND APPROXIMATE DESIRED TIME OF TESTING. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED AND RETESTED AT THE EXPENSE OF THE CONTRACTOR UNLESS THE CONTRACTOR CAN SHOW EVIDENCE THAT CIRCUMSTANCES BEYOND HIS CONTROL REQUIRED THE RETESTING. GENERALLY, THE SPECIFIC TESTING WILL BE AS FOLLOWS AND CONDUCTED BY GEOTECHNICAL ENGINEER.

1. THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
2. THE FIRST LIFT OF COMPACTED FILL (GENERALLY 8 TO 12-IN.) SHALL BE TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY AREAS SUPPORTING THE PROPOSED STRUCTURES REQUIRING FILL SHALL BE TESTED FOR DENSITY COMPLIANCE.
3. FILLS SHALL BE TESTED A MAXIMUM OF EACH TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER, OF FILL.
4. TEST RESULTS WILL BE PROVIDED BY THE FIELD TECHNICIAN TO THE CONTRACTOR WHEN POSSIBLE; HOWEVER, ALL TEST RESULTS ARE TO BE REVIEWED BY THE GEOTECHNICAL ENGINEER FOR COMPLIANCE. THE ENGINEER WILL NOTIFY THE CONTRACTOR OF ALL TEST RESULTS.

12. CUT/FILL LOTS

AREAS INVOLVING CUT ON ONE PORTION AND FILL ON ANOTHER PORTION OF A SPECIFIC LOT SHALL BE PREPARED TO A MINIMUM DEPTH OF 6-IN. AND WILL BE THE SAME MATERIAL CLASSIFICATION AT THE SAME COMPACTION AND MOISTURE CONTENT. A MINIMUM OF TWO (2) FIELD DENSITY TESTS SHALL BE REQUIRED ON EACH CUT/FILL LOT FOR THE PURPOSE OF DETERMINING UNIFORMITY OF THE AREA SUPPORTING THE PROPOSED STRUCTURES.

NOTES:

MINIMUM SLAB EXPOSURE IS 1.0'.

ALL ELEVATIONS AT FRONT PROPERTY LINE ARE 0.18' ABOVE CURB ELEVATION.

CONTRACTOR TO VERIFY 1.5% MINIMUM SLOPE ON LOTS AND REGRADE TO MEET MINIMUM PROPOSED ELEVATIONS IF NECESSARY.

CONTRACTOR TO CLEAR ALL RIGHT OF WAY, EASEMENTS AND PRESERVE ANY TREE 10" AND LARGER OUTSIDE OF THESE AREAS.

TYPICAL "A" LOT GRADING
N.T.S.

TYPICAL "B" LOT GRADING
N.T.S.

TYPICAL "C" LOT GRADING
N.T.S.

LEGEND

A	= DRAINAGE TO FRONT OF LOT
B	= DRAINAGE TO BOTH FRONT AND REAR LOT
C	= DRAINAGE TO REAR OF LOT
(stippled area)	= CLEARING AND/OR GRADING OF UTILITY EASEMENTS
× (1024.00)	= PROPOSED ELEVATION
1024.00E	= EXISTING ELEVATION
— — —1024— — —	= EXISTING CONTOUR
——[1024]——	= PROPOSED CONTOUR
—— – – ——	= PROPERTY LINE

SCALE: 1"=50'

0 50 100

NO.	DATE	DESCRIPTION	BY

REVISIONS

PROJ. # DGN. BY: DWN. BY: CHKD. BY: DATE:

MTR
· Engineers
· Surveyors
· Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
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PLL 4/23/24
STATE OF TEXAS
PAUL LANDA, JR.
100182
LICENSED
PROFESSIONAL ENGINEER

ROOSEVELT LANDING, UNIT 2

GRADING PLAN

REVISED
4:43 pm, May 01, 2024

SHEET
C5.1

SUBMITTAL SET

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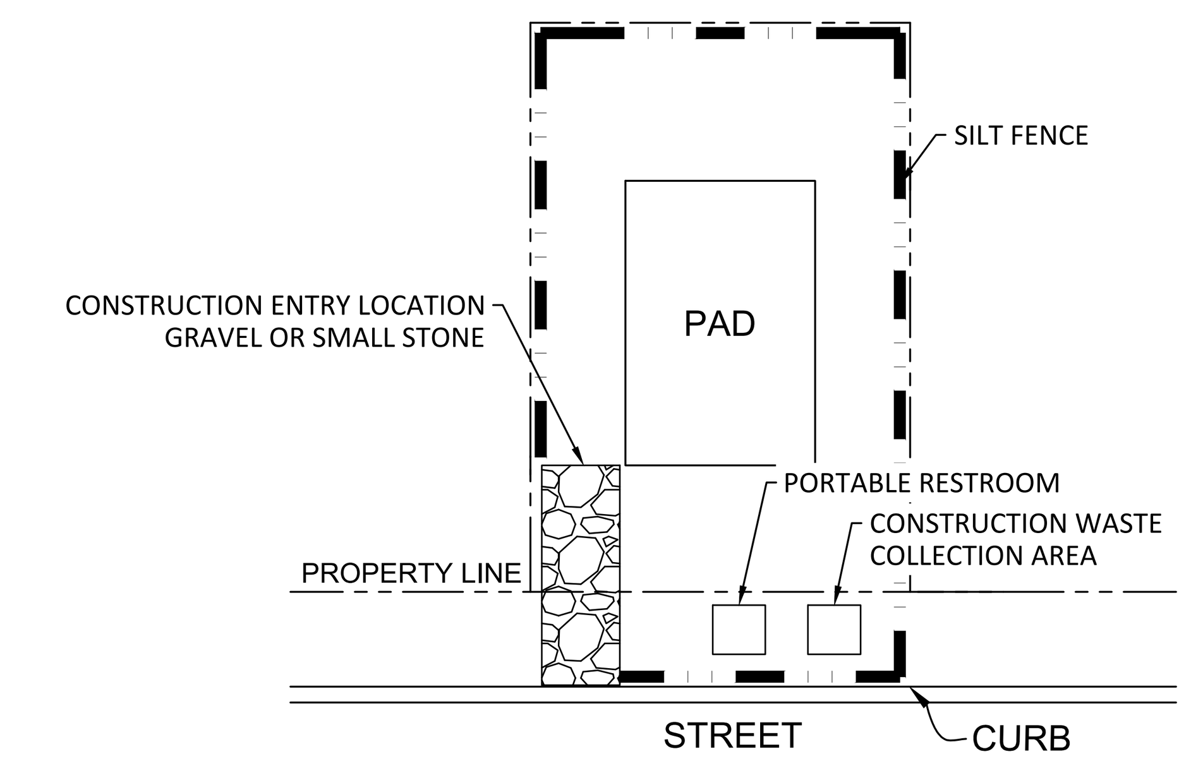
LAND-PLAT- 22-11800353



TYPICAL PHASE II LOT BMP CONFIGURATION

N.T.S.

PHASE II BMP LEGEND

BAGGED GRAVEL INLET FILTER (A)

SCALE: 1"=50'

0 50 100

LEGEND

EXISTING CONTOUR	100
PROPOSED CONTOUR	100
SILT FENCE	
ROCK BERM	1
CONSTRUCTION STAGING AREA	2
STABILIZED CONSTRUCTION ENTRANCE/EXIT	3
CONCRETE WASHOUT PIT	4
BAGGED GRAVEL INLET FILTER	5

GENERAL NOTES:

WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED STRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.

MAINTENANCE - THE ENTRANCE/EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

DRAINAGE - ENTRANCE/EXIT MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

ALL CITY PUBLIC SERVICE WORK IS INCLUDED AS PART OF THE CONSTRUCTION OF THE SUBDIVISION AND HAS BEEN CONSIDERED IN THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

CONTRACTOR TO INSTALL AND MAINTAIN THE EROSION AND SEDIMENTATION CONTROLS AS DESIGNED AND SHALL INSPECT THE CONTROLS BI-WEEKLY (14 DAYS) AND AFTER EVERY SIGNIFICANT RAINFALL (0.5 INCHES OR GREATER) TO ENSURE SIGNIFICANT DISTURBANCE HAS NOT OCCURRED. SEDIMENT DEPOSITED AFTER A SIGNIFICANT RAINFALL SHALL BE REMOVED AND PLACED IN A DESIGNATED SOIL DISPOSAL AREA. CONTRACTOR TO ENGAGE A THIRD PARTY FIRM TO PROVIDE A DETAILED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WHICH INCLUDES INSPECTION AND REPORTING PROCEDURES.

CONTRACTOR WILL INSPECT BMP'S AT LEAST TWICE A WEEK (EVERY 14 DAYS) AS WELL AS AFTER EVERY HALF INCH OR MORE OF RAINFALL. CONTROLS WILL BE REPAIRED, REPLACED, AND/OR REVISED AS NECESSARY.

CONTRACTOR TO PLACE TRENCH EXCAVATION MATERIAL ON THE UPGRADIENT (HIGH) SIDE OF THE TRENCH.

ALL SOIL, SAND, GRAVEL, AND EXCAVATED MATERIALS STOCKPILED ON-SITE WILL HAVE APPROPRIATELY SIZED SILT FENCE PLACED UPGRADIENT AND DOWN GRADIENT.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
1	STABILIZED CONSTRUCTION ENT./EXIT	L.S.	1
2	SILT FENCE	L.F.	3515
3	ROCK BERM – TYPE II	L.F.	40
4	BAGGED GRAVEL INLET FILTER AND/OR APPROPRIATE SUBSTITUTE	L.F.	450
5	CONSTRUCTION STAGING AREA	L.S.	1
6	CONCRETE WASHOUT PIT	L.S.	1

SUBMITTAL SET

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING: F-10131500
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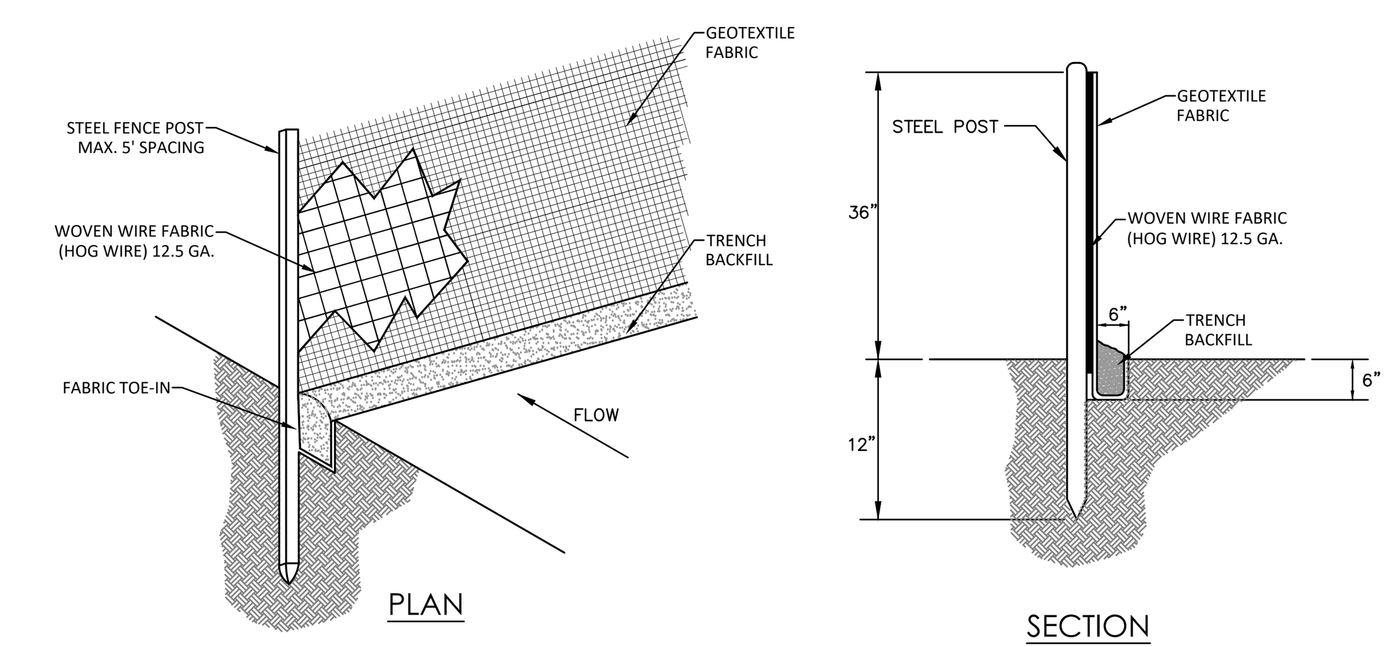
STATE OF TEXAS
PAUL LANDA, JR
100182
LICENSED PROFESSIONAL ENGINEER

ROOSEVELT LANDING, UNIT 2

OVERALL STORM WATER POLLUTION PREVENTION PLAN

SHEET

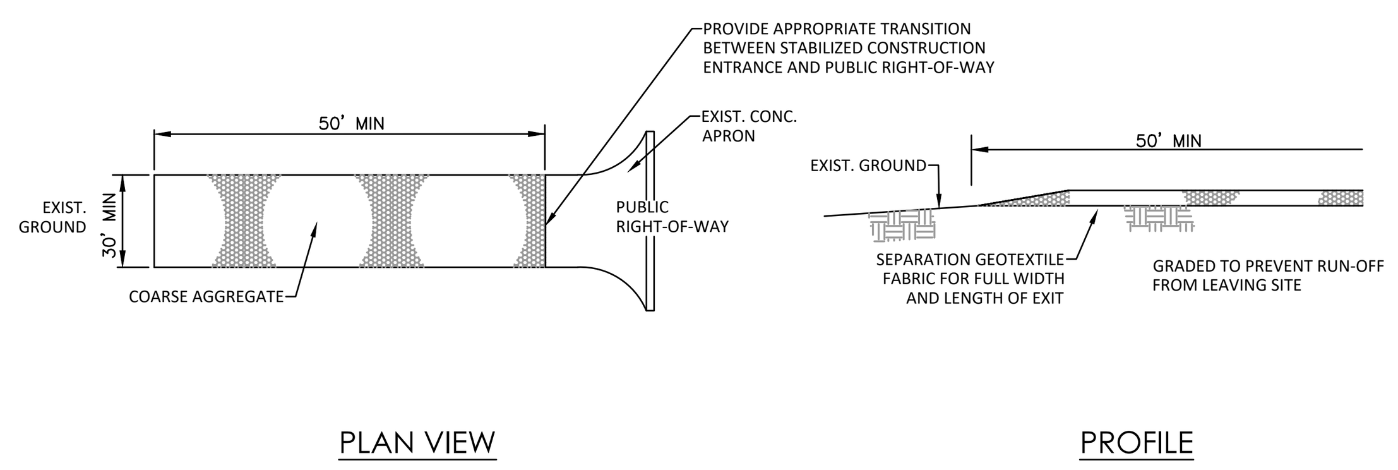
C6.0



SILT FENCE NOTES

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT 2 , AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12.5 GAUGE MINIMUM.
4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT DEEP AND SPACED NOT MORE THAN 5 FEET ON CENTER.
5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
6. 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.
7. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
9. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
10. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES, OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE OLD FENCE.
11. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
12. REPLACE OR REPAIR ANY 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.

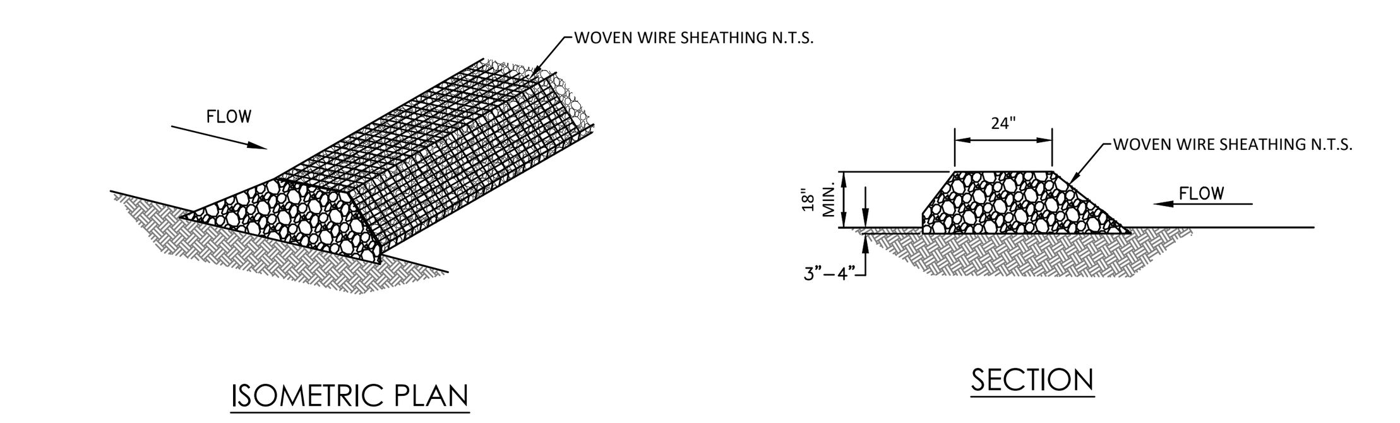
1 — SILT FENCE DETAIL
SCALE: NONE



TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD 2 , A MULLEN BURST RATING OF 140 LB/IN 2 , AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
6. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
7. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
8. PLACE STONE TO DIMENSIONS AND GRADE SHOWN. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
9. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
10. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
11. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
12. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.

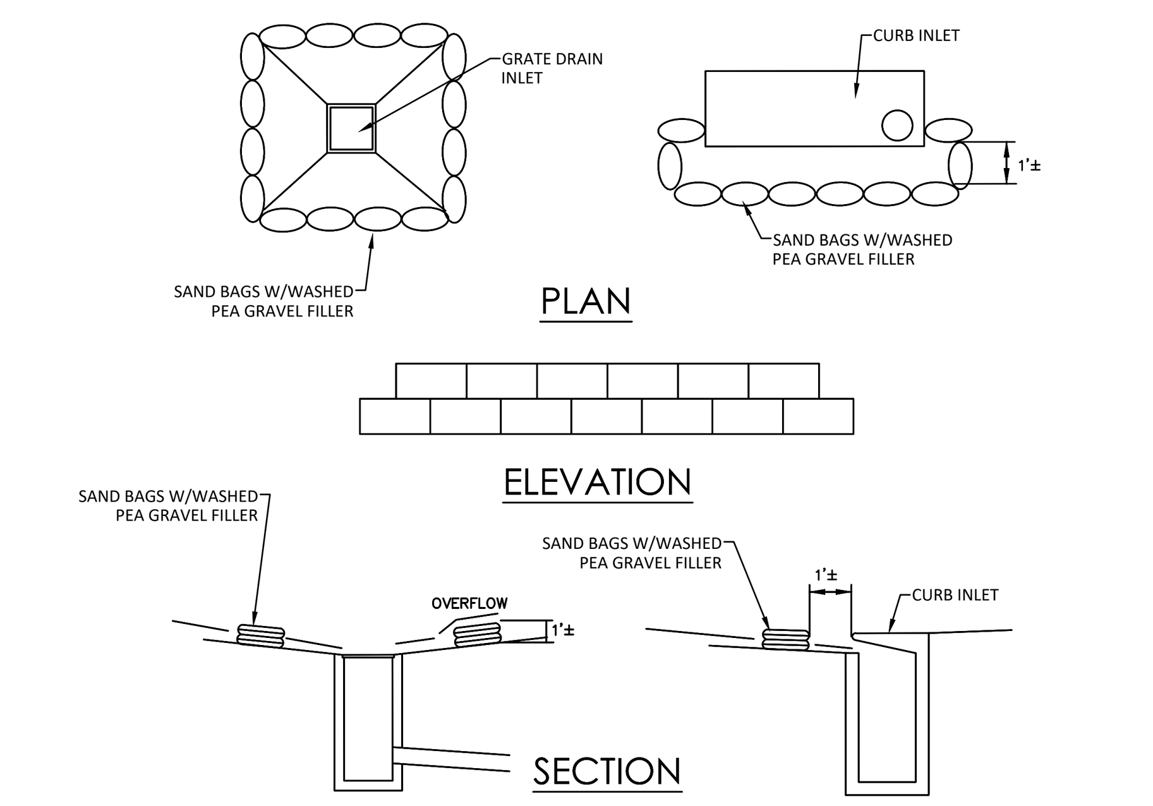
2 — STABILIZED CONSTRUCTION ENTRANCE / EXIT
SCALE: NONE



ROCK BERM NOTES

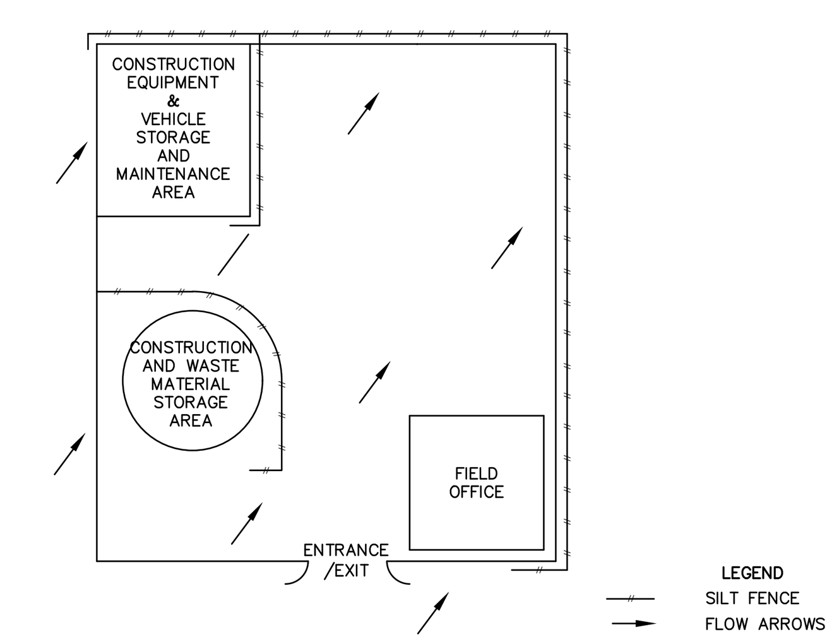
1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3-TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-TO 8-INCH DIAMETER ROCKS MAY BE USED.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
5. PLACE THE ROCK ALONG THE SHEATHING TO A HEIGHT NOT LESS THAN 18".
6. 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.
7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
8. 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.
9. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER AND REPAIR ANY LOOSE WIRE SHEATHING.
11. 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.
12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

3 — ROCK BERM
SCALE: NONE

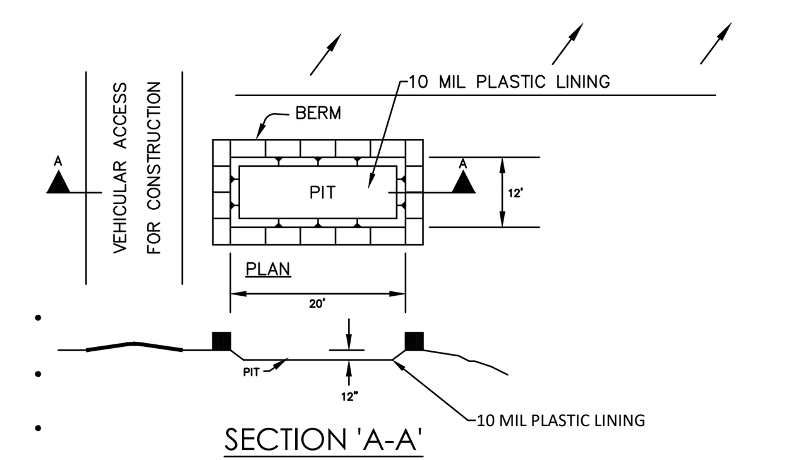


1. THE GRAVEL BAG MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, POLYAMIDE OR COTTON BURLAP WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OZ/YD 2 , MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70 PERCENT.
2. THE BAG LENGTH SHOULD BE 24 INCHES, WIDTH SHOULD BE 18 INCHES AND THICKNESS SHOULD BE 6 INCHES.
3. THE GRAVEL BAGS SHOULD BE FILLED WITH ¾" GRAVEL .
4. WHEN A GRAVEL BAG IS FILLED WITH GRAVEL, THE OPEN END OF THE GRAVEL BAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CORD.
5. THE GRAVEL BAGS SHOULD BE PLACED AS SHOWN ON THE DETAIL. THE GRAVEL BAGS SHALL BE STACKED TO FORM A CONTINUOUS BARRIER AROUND THE INLETS. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.
6. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
7. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
8. 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.
9. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

4 — BAGGED GRAVEL INLET FILTER
SCALE: NONE



5 — CONSTRUCTION STAGING AREA
SCALE: NONE



GENERAL NOTES:

DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.

WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.

WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

6 — CONCRETE TRUCK WASHOUT PIT
SCALE: NONE

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:

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4/6/23

ROOSEVELT LANDING, UNIT 2

STORM WATER POLLUTION PREVENTION PLAN

DETAILS

SHEET

C6.1

SUBMITTAL SET

Plot Date: June 6, 2023 User ID: Lisa Perez
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