

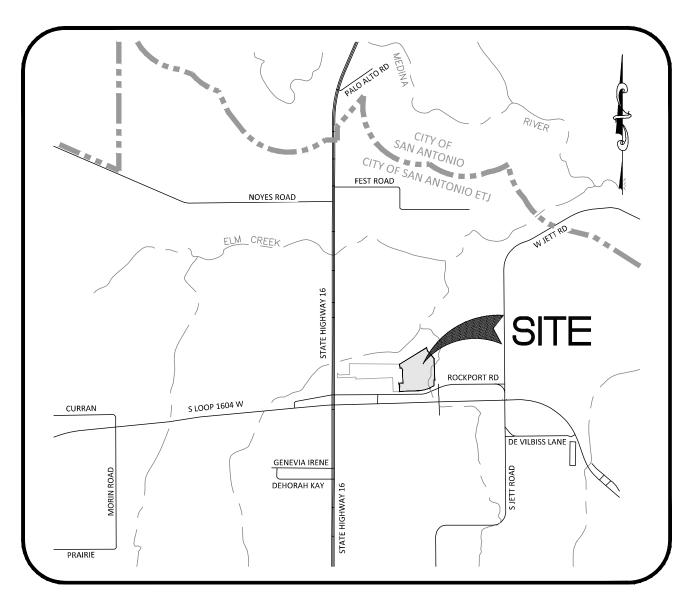
# PALO ALTO POINTE, UNIT 2

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

#### OWNER/DEVELOPER

FAX: (210) 698-5085

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



## VICINITY MAP

#### **SUBMITTAL DATE:** JUNE 2023

# PAUL LANDA, JR. 100182

#### LEGAL DESCRIPTION:

BEING A TOTAL OF 21.304 ACRES OF LAND OUT OF THE JOSE MARIA SAIS SURVEY NO. 40, ABSTRACT NO. 418, BEING A PORTION OF A 47.1460 ACRE TRACT AS CONVEYED TO SILLER DEVELOPMENT COMPANY, LLC, BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN VOLUME 14504, PAGE 1591 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS

#### Sheet List Table

Sheet Number Sheet Title

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**UTILITY PLANS** 

OVERALL COVER

C1.1

OVERALL UTILITY PLAN

WATER PLANS

WATER COVER

OVERAL WATER PLAN WATER DETAILS

C2.3 WATER DETAILS

SEWER PLANS

SEWER COVER

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SANITARY SEWER PLAN & PROFILE LINE A SANITARY SEWER PLAN & PROFILE LINE H

SANITARY SEWER PLAN & PROFILE LINE F

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C4.4 STREET P&P - MORELIA MANOR

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C4.6 STREET P&P - LEON LODGE

C4.7 STREET P&P - PASEO PATH

C4.8 STREET P&P - GARCIA GROVE C4.9 WHEEL CHAIR RAMP DETAILS

C4.10 WHEEL CHAIR RAMP DETAILS

C4.11 STANDARD STREET DETAILS C4.12 STANDARD STREET DETAILS

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C4.17A **TXDOT DETAILS** 

C4.18 DRAIN P&P - DRAIN K

TXDOT DETAILS

C4.18A

**GRADING PLANS** 

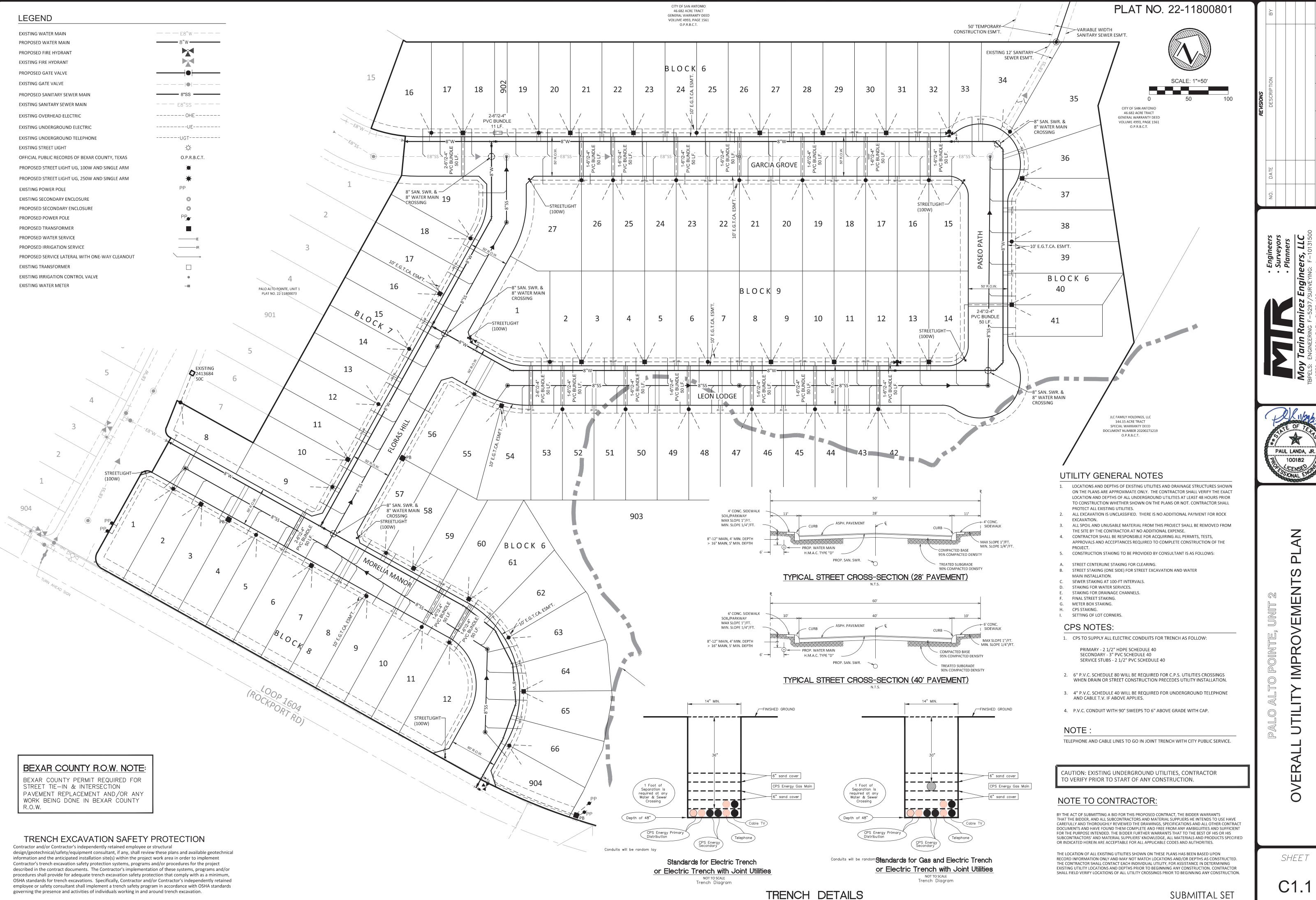
C5.0 GRADING PLAN C5.1 **GRADING DETAILS** 

SW3P PLANS

C6.0 STORMWATER POLLUTION PREVENTION PLAN

C6.1 STORMWATER POLLUTION PREVENTION PLAN DETAILS





SHEET

100182

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#### OWNER/DEVELOPER

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

## PALO ALTO POINTE, UNIT 2 WATER IMPROVEMENTS

#### **SAWS CONSTRUCTION NOTES COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT**

- 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
- 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
- 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
- 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
- 10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood 11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be
- 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
- 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
- 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.

the contractor but will be installed by SAWS Distribution and Collection staff.

- \*Note: A pressure regulator is also known as a pressure reducing valve (PRV). 7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety
- measure to protect his personnel during disinfection operations. 8. Backflow Prevention Devices:
- All irrigation services within residential areas are required to have backflow prevention devices. • All commercial backflow prevention devices must be approved by SAWS prior to installation.
- 9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use
- 10. Division Valves: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by SAWS Distribution and Collection staff and only with prior written approval of the SAWS Director of Production and Operations and proper coordination with all SAWS departments. Contractor shall provide written notification to the inspector a minimum of two weeks in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the SAWS Distribution and Collection staff. The Division Valve can only be operated by SAWS Distribution and Collection staff member not the inspector or the contractor. Operation of a Division Valve without the express prior written approval of the SAWS Distribution and Collection staff will constitute a material breach of any written SAWS contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid

labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by

#### NOTE TO CONTRACTOR:

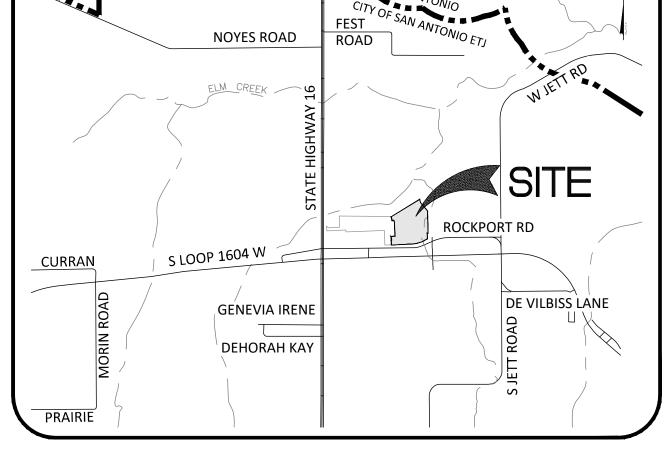
- BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT. THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS. SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE 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 ROLLTING 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

#### MISCELLANEOUS GENERAL NOTES

- MACHINE CHLORINATION BY THE SAN ANTONIO WATER SYSTEM FOR NEW WATER MAINS GREATER THAN 800 FEET. CONTRACTOR SHALL CHLORINATE NEW MAINS WITH HTH FOR NEW WATER MAINS 750 FEET AND LESS
- JUMPER CONNECTIONS TO EXISTING WATER SERVICE TO BE PROVIDED AS REQUIRED OR DIRECTED BY THE SAWS INSPECTOR.
- 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



## **VICINITY MAP**

#### SUBMITTAL DATE: **JUNE 2023**

# PAUL LANDA, JR.

#### **LEGAL DESCRIPTION:**

BEING A TOTAL OF 21.304 ACRES OF LAND SITUATED IN THE JOSE MARIA SAIS SURVEY NO. 40, ABSTRACT NO. 418, BEING A PORTION OF A 37.491 ACRE TRACT AS CONVEYED TO SAN ANTONIO LD, LLC, BY SPECIAL WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220107424 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY,

# 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

## **ESTIMATED WATER QUANTITIES**

Sheet List Table

Sheet Number Sheet Title

WATER COVER

WATER DETAILS

WATER DETAILS

OVERAL WATER PLAN

WATER PLANS

| ITEM | DESCRIPTION  | UNIT | EST/QTY |
|------|--|------|---------|
|      | Phase I  |      |         |
| 1    | 12" Water Tie-In   | EA.  | 1       |
| 2    | 8" Water Tie-In  | EA.  | 2       |
| 3    | Trench Excavation Protection                               | L.F. | 3,012   |
| 4    | 8" Pipe, C900 DR 18 PVC Class 235 (Incl. Joint Restraints) | L.F. | 3,012   |
| 4    | 12" Gate Valve, M.J. with 6" Valve Box, Complete           | EA.  | 1       |
| 5    | 8" Gate Valve, M.J. with 6" Valve Box, Complete            | EA.  | 7       |
| 6    | Standard Fire Hydrant                                      | EA.  | 4       |
| 7    | 2" Blow-Off (Temporary)                                    | EA.  | 3       |
| 8    | 3/4" Single Service: Short (Shared Trench)                 | EA.  | 63      |
| 9    | 3/4" Single Service: Long (Shared Trench)                  | EA.  | 40      |
| 10   | D.I. Fittings  | TON  | 0.50    |
| 11   | Hydrostatic Testing  | EA.  | 1       |
|      | Phase II   |      |         |
| 12   | Meter Box  | EA.  | 103     |

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

TRENCH EXCAVATION SAFETY PROTECTION

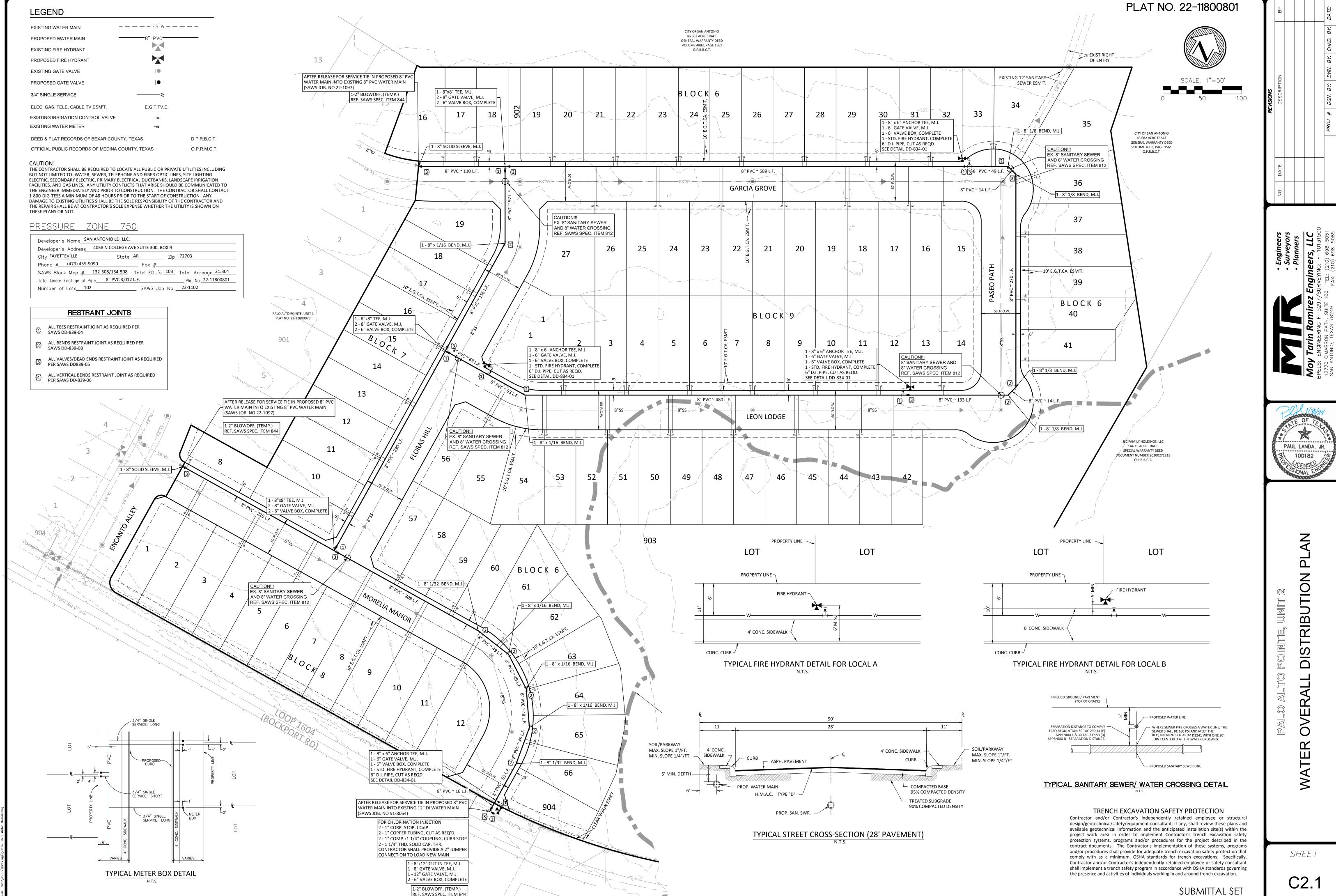
Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's 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 70NF 750

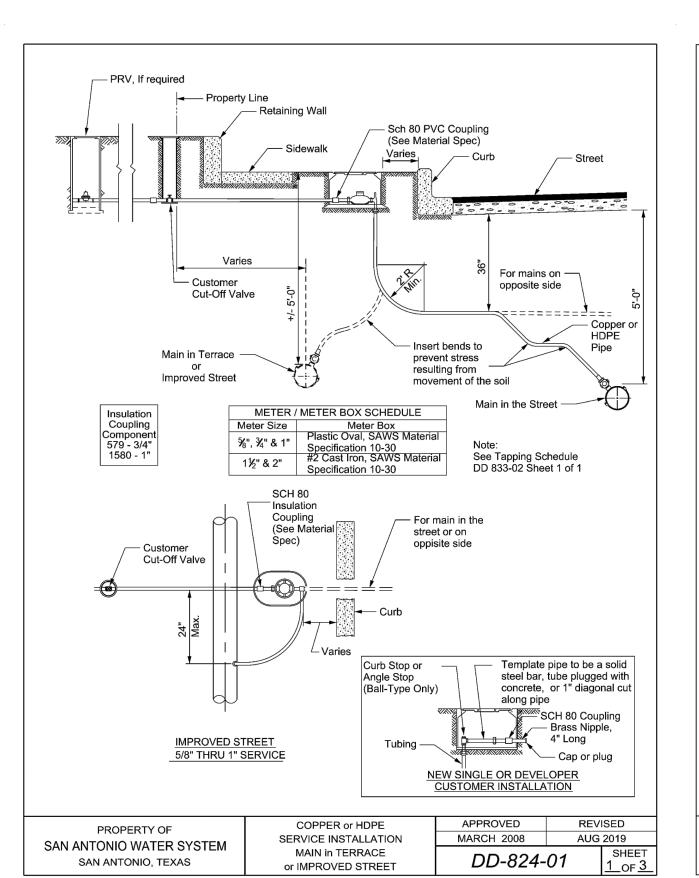
| Developer's Name     | SAN ANTONIO LD | , LLC.  |                 |       |               |          |
|----------------------|----------------|---------|-----------------|-------|---------------|----------|
| Developer's Address  | 4058 N COLL    | EGE A   | VE SUITE 300, E | 3OX 9 |               |          |
| City_FAYETTEVILLE    | S              | tate _  | AR              | Zip_  | 72703         |          |
| Phone #(479) 4       | 55-9090        |         | Fax #           |       |               |          |
| SAWS Block Map # _   | 132-508/134    | -508    | Total EDU's     | 103   | Total Acreage | 21.304   |
| Total Linear Footage | of Pipe 8" PVC | ~ 3,012 | 2 L.F.          |       | Plat No. 22-1 | 11800801 |
| Number of Lots       | 95             |         | SAWS Job        | No.   | 23-1102       |          |

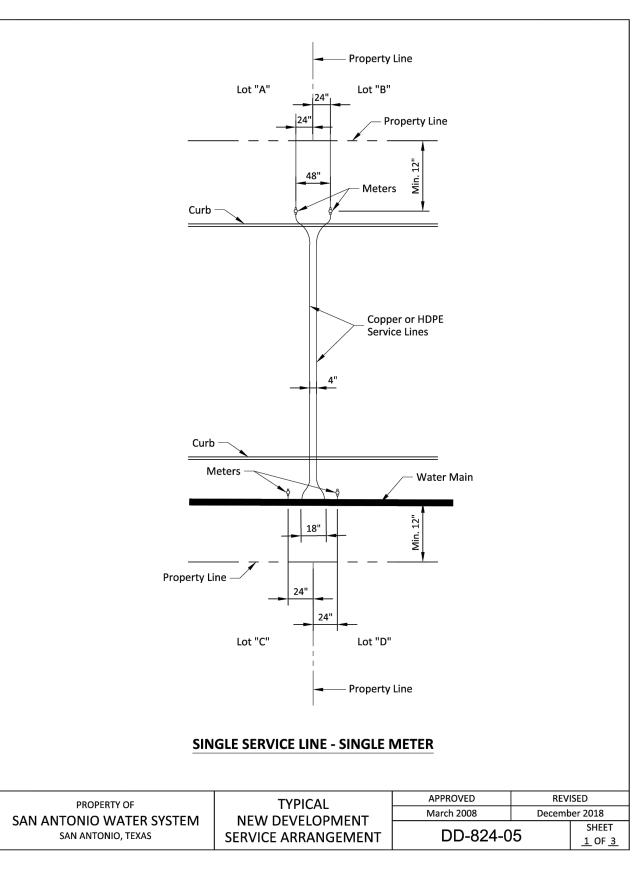
BEXAR COUNTY

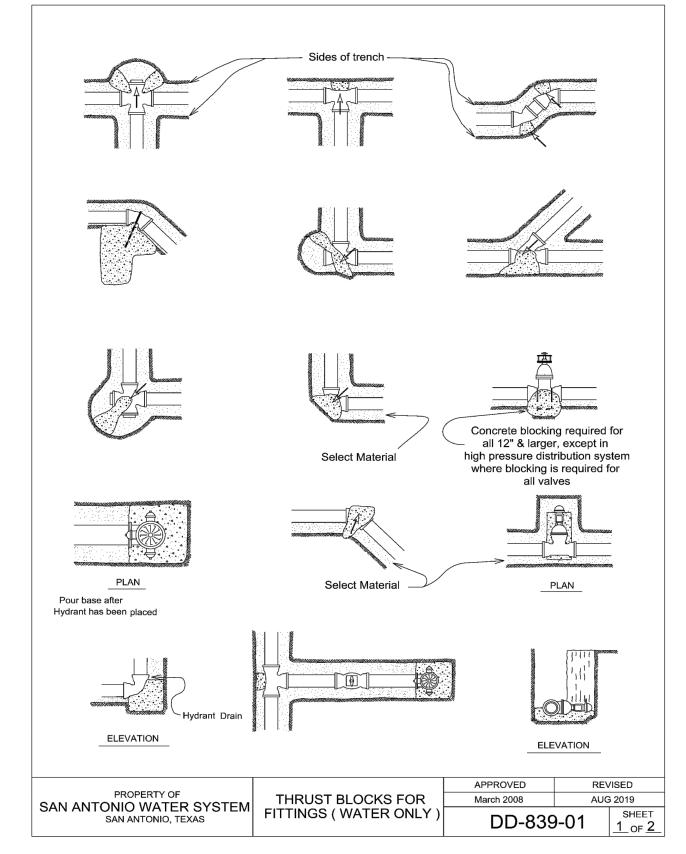
SUBMITTAL SET TEXAS C2.0

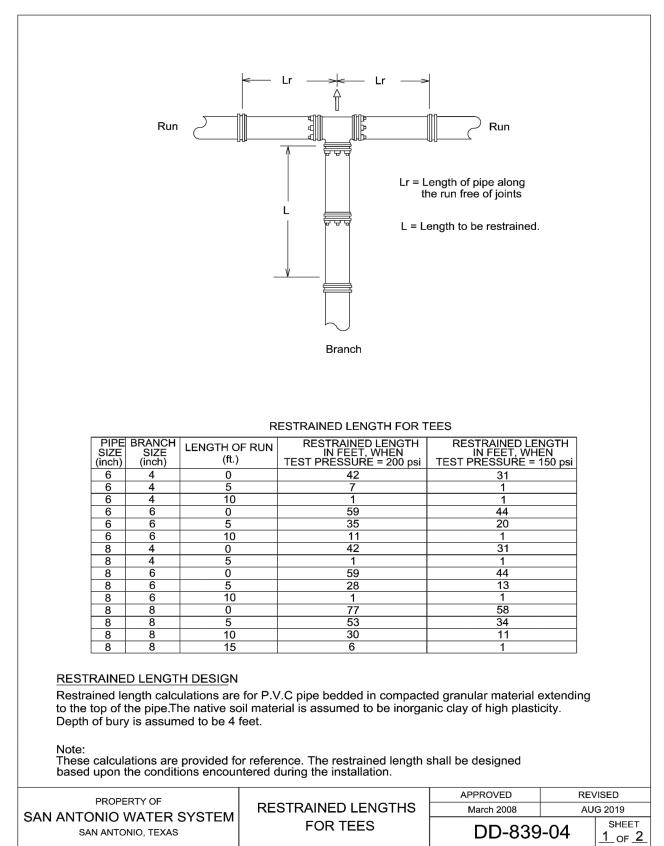


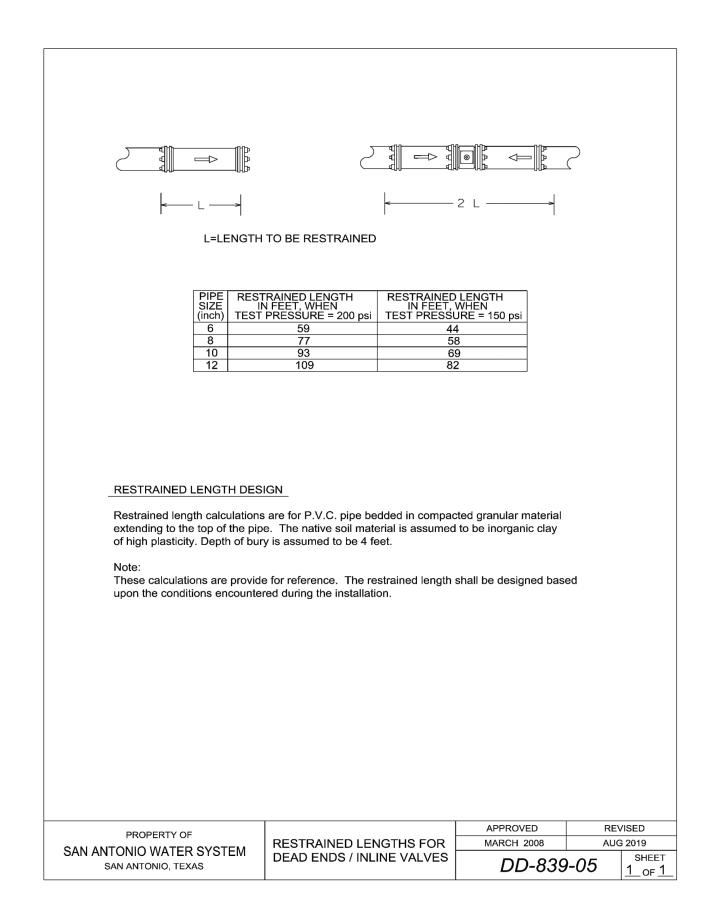
REF. SAWS SPEC. ITEM 844

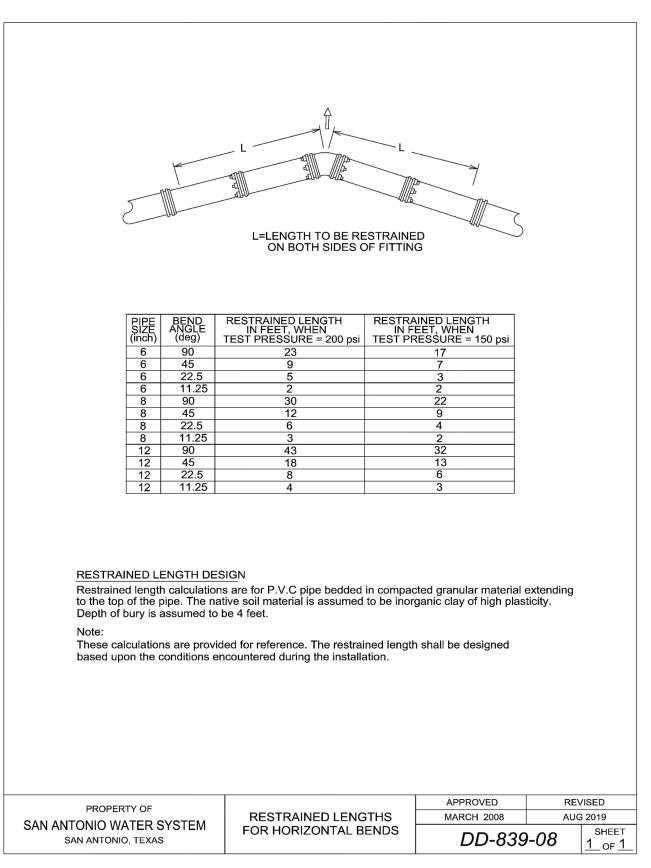


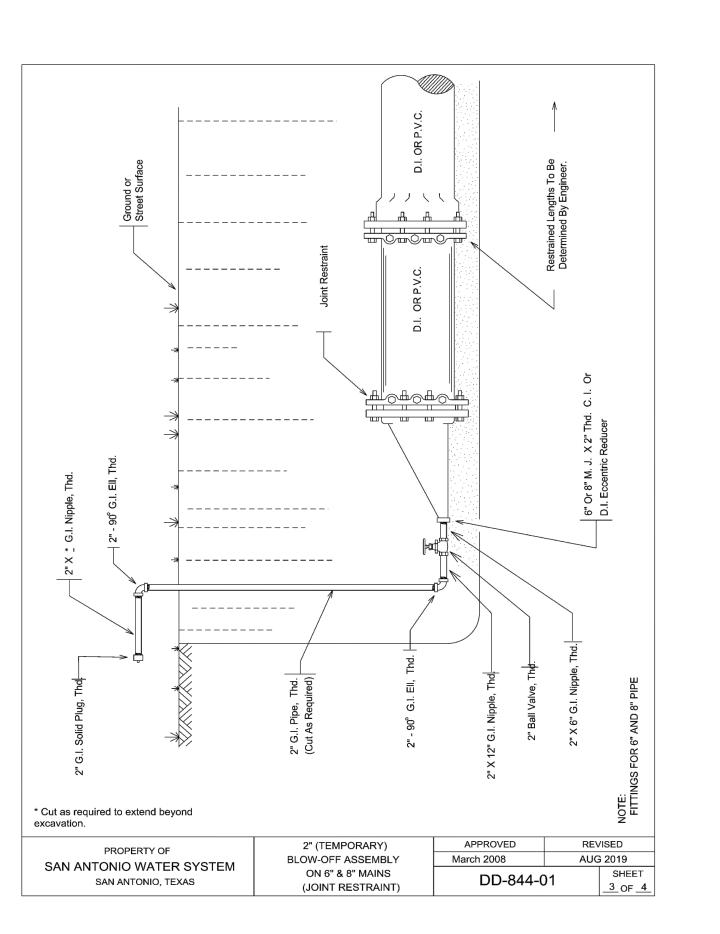












PRESSURE ZONE 750

Developer's Name SAN ANTONIO LD, LLC.

Developer's Address 4058 NORTH COLLEGE AVE, STE 300, BOX 9

City FAYETTEVILLE State AR Zip 72703

Phone # (479) 455-9090 Fax #

SAWS Block Map # 132-508/134-508 Total EDU's 103 Total Acreage 21.304

Total Linear Footage of Pipe 8" PVC 3,012 L.F. Plat No. 22-11800801

Number of Lots 103 SAWS Job No. 23-1102

SUBMITTAL SET

WATER

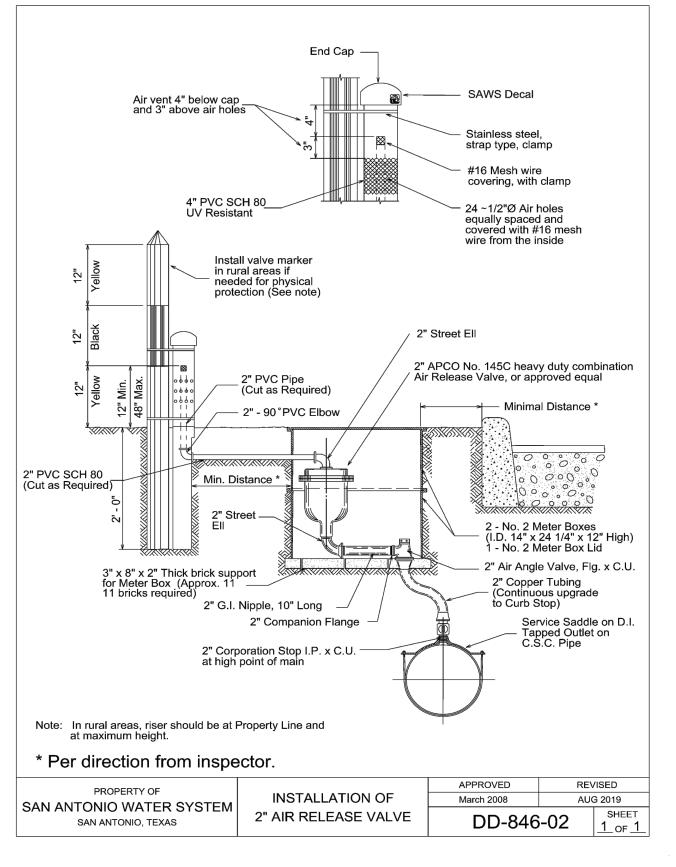
PAUL LANDA, JR. 3. 100182 :

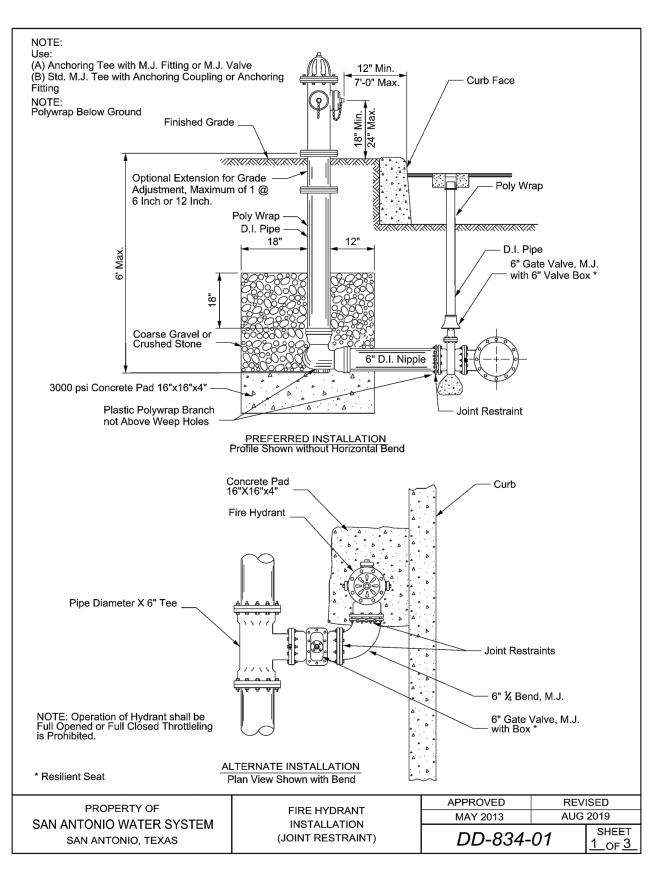
DETAII

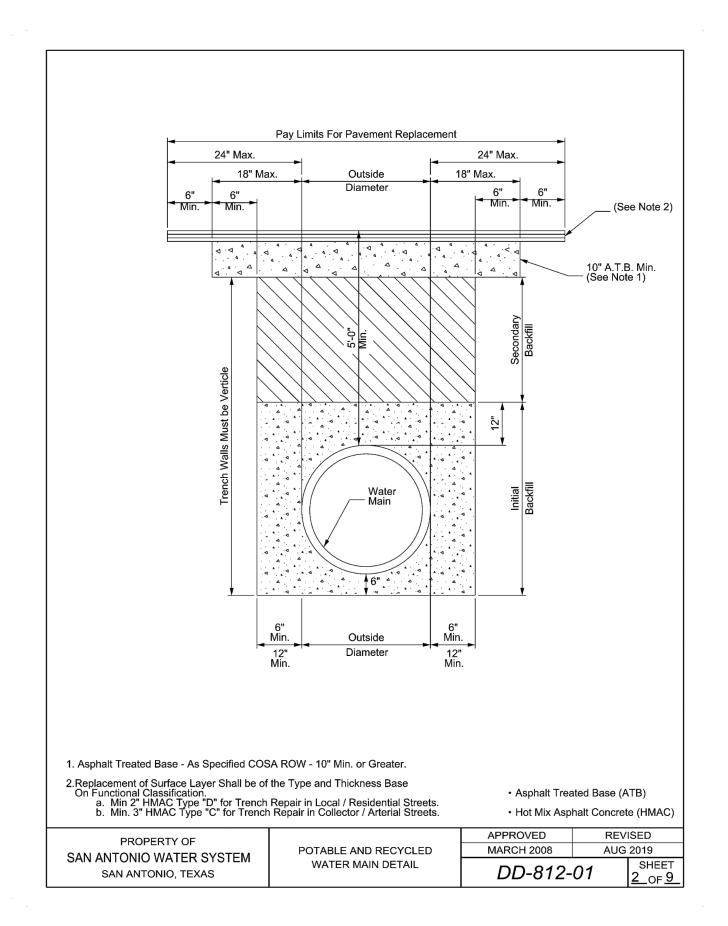
SHEET

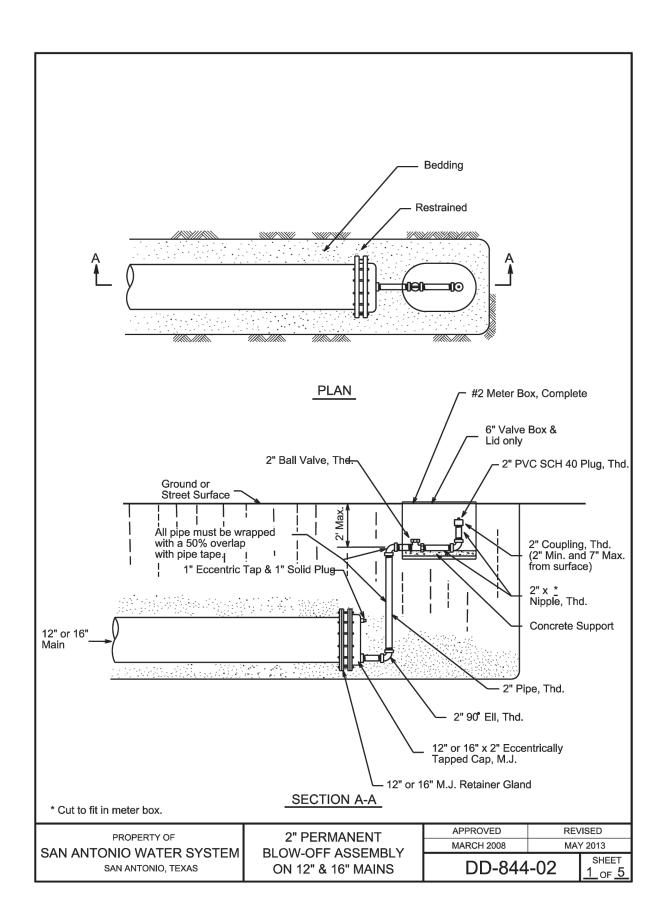
C2.2

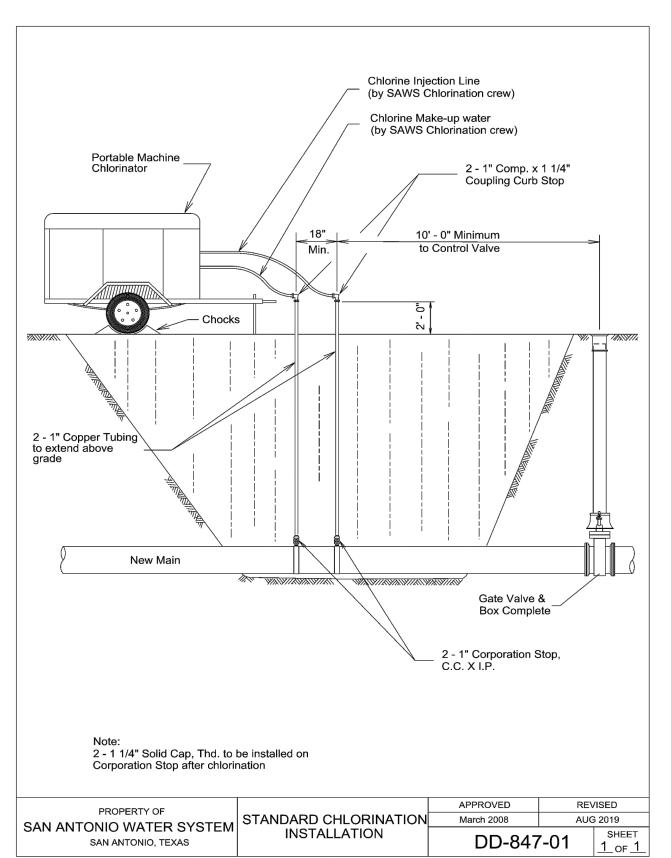
Plot Date: August 8, 2023 User ID: Maricella Pastrano P. Viller Track Unit 3/ Prominas/23159 C2 2--23 3 Water Defails











PRESSURE ZONE 750

 Developer's Name
 SAN ANTONIO LD, LLC.

 Developer's Address
 4058 NORTH COLLEGE AVE, STE 300, BOX 9

 City FAYETTEVILLE
 State
 AR
 Zip
 72703

 Phone #
 (479) 455-9090
 Fax #

 SAWS Block Map #
 132-508/134-508
 Total EDU's
 103
 Total Acreage
 21.304

 Total Linear Footage of Pipe
 8" PVC 3,012 L.F.
 Plat No. 22-11800801

 Number of Lots
 103
 SAWS Job No.
 23-1102

SUBMITTAL SET

NO. DATE DESCRIPTION

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

Surial San Antonio, Texas 78249

Surial Suri



PALO ALTO POINTE, UNIT 2
WATER DETAILS

SHEET

C2.3

SAN ANTONIO, TEXAS 78249

SUBMITTED BY:

PLAT NO. 22-11800801

MOY TARIN RAMIREZ ENGINEERS, LLC. 12770 CIMARRON PATH, SUITE 100

# PALO ALTO POINTE, UNIT 2 SANITARY SEWER IMPROVEMENTS

#### **SAWS CONSTRUCTION NOTES COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT**

- 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
- 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).
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- sent to constworkreg@saws.org. Weekend Work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to
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- Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper
- 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.

- 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
- 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.
- Attempt to eliminate the source of the SSO. Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
- Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of
- Clean the affected sewer mains and remove any debris.
- 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
- 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
- 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.

#### 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.

## BEXAR COUNTY

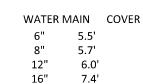
#### ADDITIONAL SEWER NOTES

HE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR/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.

- 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
- 7. QUANTITIES ARE BASED ON CURRENT SAWS SPECIFICATIONS.
- 8. ALL MANHOLES TO HAVE WATERTIGHT RING AND COVERS.

INTERCEPT ANY SILT CONTAMINATED RUNOFF.

- 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
- 13. MINIMUM COVER FROM TOP OF SANITARY SEWER LATERALS TO TOP OF
- A. IF LATERALS DO NOT CROSS WATER MAINS, 5' COVER B. IF LATERALS CROSS WATER MAIN,



NOTE TO CONTRACTOR:

#### 14. ALL MANHOLE OPENINGS SHALL BE 30".

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

- 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 160 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 160 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 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 160 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 OR CLEANOUTS SHALL NOT BE INSTALLED ANY CLOSER THAN NINE FEET TO WATER MAINS.

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

FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS

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

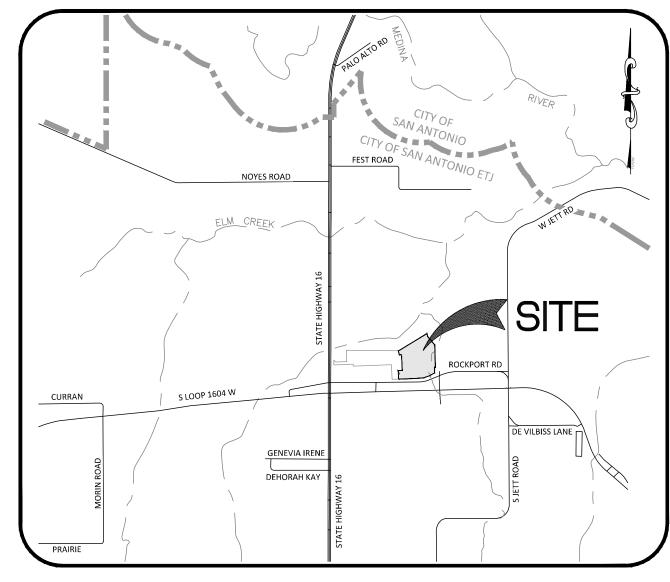
THE CONTRACTOR SHALL CONTACT FACH INDIVIDIAL LITILITY FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR

RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED.

SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS

DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT



## **VICINITY MAP**

#### SUBMITTAL DATE: **JUNE 2023**

**REVISION DATE:** 

## LEGAL DESCRIPTION:

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

BEING A TOTAL OF 21.304 ACRES OF LAND OUT OF THE JOSE MARIA SAIS SURVEY NO. 40, ABSTRACT NO. 418, BEING A PORTION OF A 47.1460 ACRE TRACT AS CONVEYED TO SILLER DEVELOPMENT COMPANY, LLC, BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN VOLUME 14504.



#### **BENCHMARK**

BM CP-1: MAG NAIL ON PAVEMENT N = 13633082.018 E = 2104074.103

ELEV.=556.03

BM CP-2: 1/2" IRON ROD WITH PINK PLASTIC CAP STAMPED "MTR ENG CONTROL" N = 13632920.263E = 2103637.066 ELEV.=560.75

BM CP-3: MAG NAIL ON HEADWALL N = 13632934.829 E = 2101316.504 ELEV.=566.32

BM CP-4: MAG NAIL ON PAVEMENT N = 13634229.776 E = 2101256.110ELEV.=557.07

BM CP-5: 1/2" IRON ROD WITH PINK PLASTIC CAP STAMPED "MTR ENG CONTROL" N = 13634361.741 E = 2104025.035 ELEV.=546.91

| 5  | Standard Sanitary Sewer Manhole             | EA.  | 9     |
|----|---|------|-------|
| 6  | Reconstruct Existing Sanitary Sewer Manhole | EA.  | 2     |
| 7  | Extra Depth Manhole                         | V.F. | 28.1  |
| 8  | Vertical Stacks                             | V.F. | 184.4 |
| 9  | Sanitary Sewer Laterals, SDR-26 Class 160   | L.F. | 3,565 |
| 10 | 8" Sewer Main Television Inspection         | L.F. | 1,977 |
|    |   |      |       |

Sanitary Sewer Plans

SEWER COVER

SANITARY SEWER OVERALL PLAN

SANITARY SEWER DETAILS

ESTIMATED SEWER QUANTITIES

DESCRIPTION

Tie into Existing Sanitary Sewer Main

8" Sanitary Sewer Pipe, SDR-26 (6'-10')

8" Sanitary Sewer Pipe, SDR-26 (10'-14')

Trench Excavation Protection

SANITARY SEWER PLAN & PROFILE LINE A

SANITARY SEWER PLAN & PROFILE LINE H

SANITARY SEWER PLAN & PROFILE LINE I

SANITARY SEWER PLAN & PROFILE LNIE (

UNIT | EST/QTY

EA. 2

L.F. 1,977

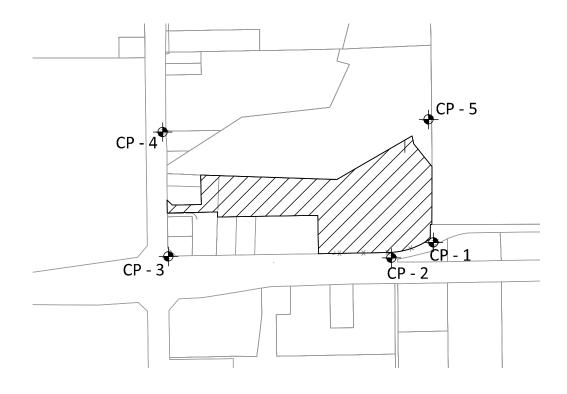
L.F. 1,805

172

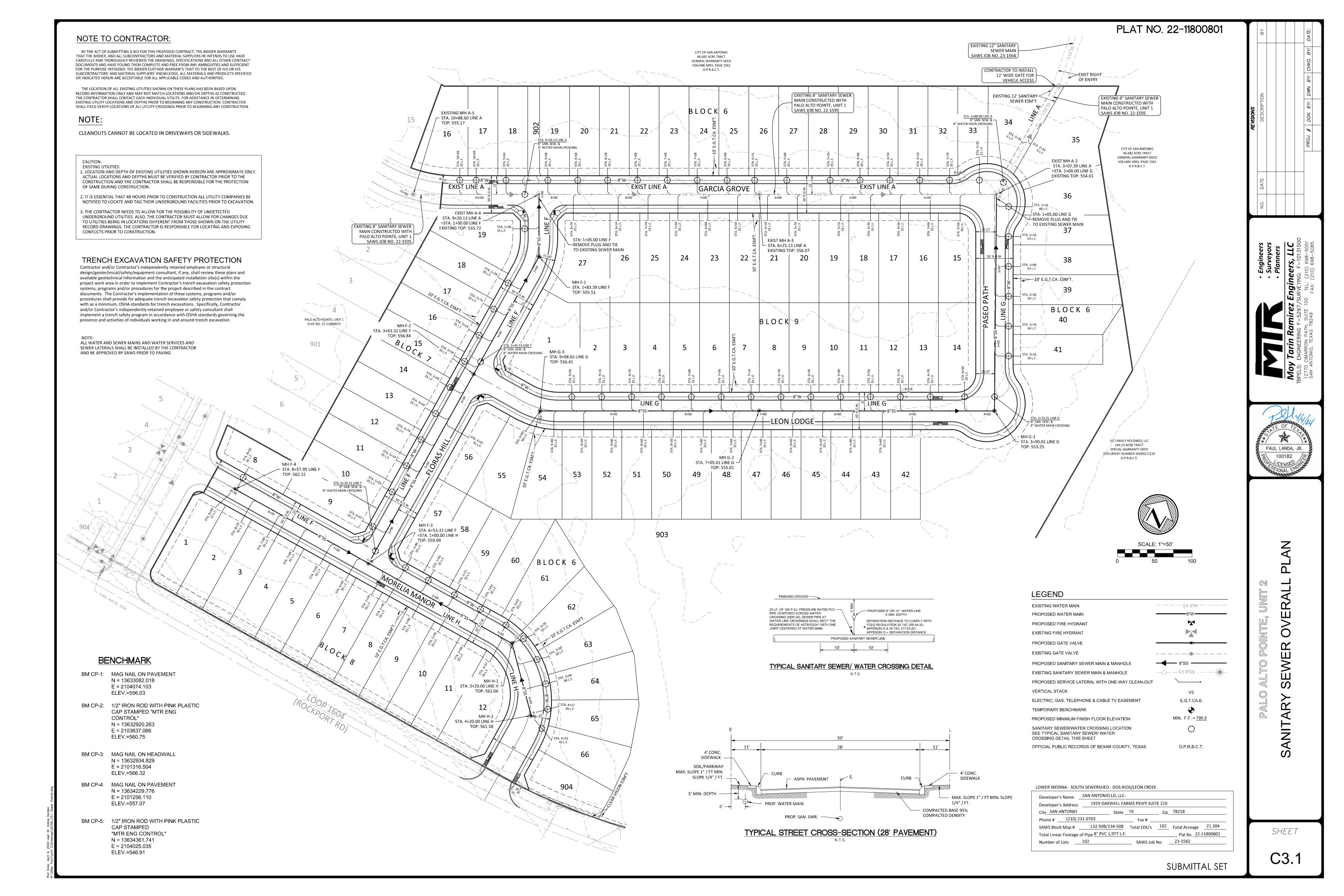
L.F.

|Sheet Number|Sheet Title

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



LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS/LEON CREEK SAN ANTONIO LD, LLC 1919 OAKWELL FARMS PKWY SUITE 210 City SAN ANTONIO Total Linear Footage of Pipe 8" PVC 1,977 L.F. SAWS Job No. 23-1582



0+50

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

9+00

10+00

11+00

12+00

PAUL LANDA, JR.

PROFILE ∞ SEWER PLA SANITARY

SHEET

C3.2



O.P.R.B.C.T.

TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

N.T.S.

PROPOSED SANITARY SEWER LINE

PROPOSED 8" OR 12" WATER LINE 5' MIN. DEPTH

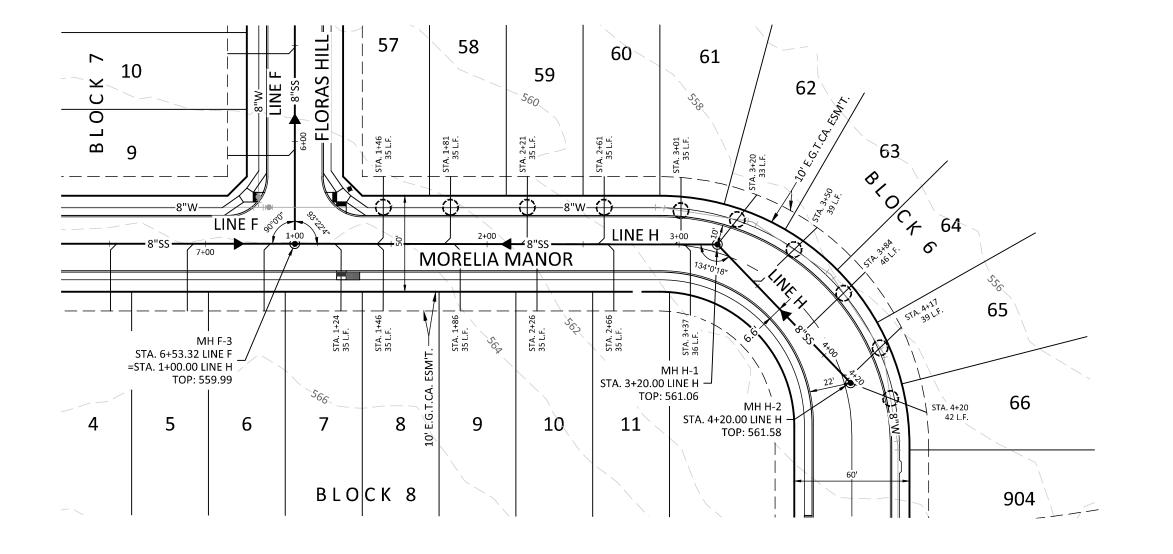
SEPARATION DISTANCE TO COMPLY WITH TCEQ REGULATION 30 TAC 290.44 (E)

\* APPENDIX E & 30 TAC 217.53 (D)
APPENDIX D -- SEPARATION DISTANCE

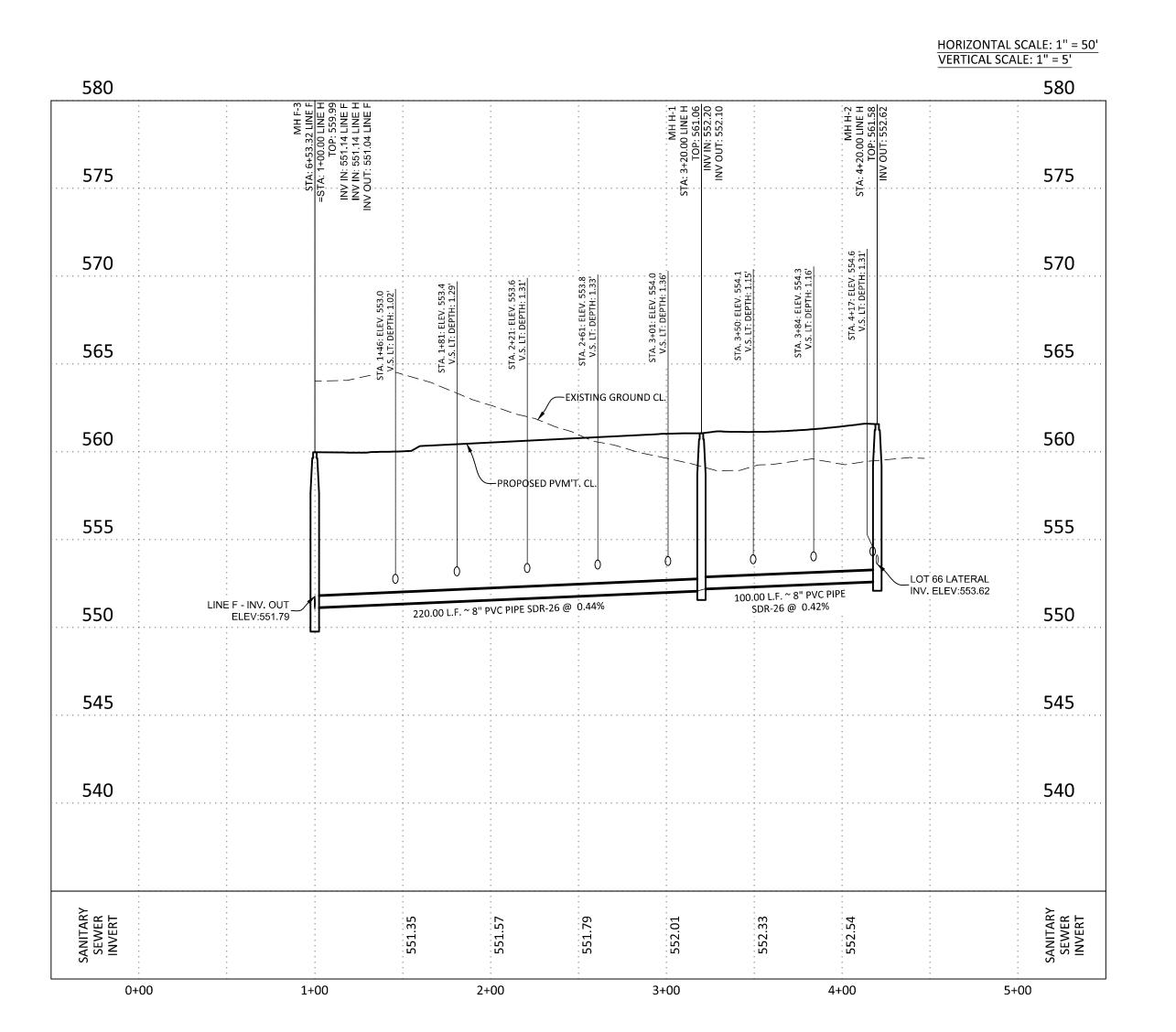
FINISHED GROUND

20 LF. OF 160 P.S.I. PRESSURE RATED PVC — PIPE CENTERED ACROSS WATER

CROSSING (SDR 26). SEWER PIPE AT
WATER LINE CROSSINGS SHALL MEET THE
REQUIREMENTS OF ASTM D2241 WITH ONE
JOINT CENTERED AT WATER MAIN.



LINE H STA. 1+00.00 TO STA. 4+46.84



LEGEND

EXISTING WATER MAIN — — — EX 8"W — — — — PROPOSED WATER MAIN -----8"W-----PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----8"SS — PROPOSED SANITARY SEWER MAIN & MANHOLE ——— EX 8"SS - — — EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK MIN. F.F. = 795.5PROPOSED MINIMUM FINISH FLOOR ELEVATION  $\bigcirc$ SANITARY SEWER/WATER CROSSING LOCATION SEE TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL THIS SHEET

OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS

PAUL LANDA, JR.

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ANITARY

TRENCH EXCAVATION SAFETY PROTECTION

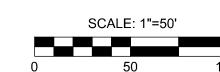
Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's 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.

LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS/LEON CREEK

ALL WATER AND SEWER MAINS AND WATER SERVICES AND SEWER LATERALS SHALL BE INSTALLED BY THE CONTRACTOR AND BE APPROVED BY SAWS PRIOR TO PAVING

| Developer's Name _   | SAN ANTONIO LD, LLC.             |                    |                       |
|----------------------|----------------------------------|--------------------|-----------------------|
| Developer's Address  | 1919 OAKWELL FAR                 | RMS PKWY SUITE 210 | 1                     |
| City_SAN ANTONIO     | State _                          | TX Zip             | 78218                 |
| Phone #(210) 2       | 31-0703                          | Fax #              |                       |
| SAWS Block Map # _   | 132-508/134-508                  | Total EDU's 102    | _ Total Acreage21.304 |
| Total Linear Footage | of Pipe <u>8" PVC 1,977 L.F.</u> |                    | Plat No. 22-11800801  |
| Number of Lots       | 102                              | SAWS Job No.       | 23-1582               |
|                      |                                  |                    |                       |

SHEET



LEGEND

HORIZONTAL SCALE: 1" = 50'

580

575

570

565

560

555

550

545

LATERAL LOT 1 - INV. IN

ELEV:555.00

VERTICAL SCALE: 1" = 5'

EXISTING WATER MAIN ————EX 8"W ———— PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----PROPOSED SANITARY SEWER MAIN & MANHOLE 8"SS — ——— EX 8"SS - — — EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK MIN F.F. = 795.5PROPOSED MINIMUM FINISH FLOOR ELEVATION

 $\bigcirc$ SANITARY SEWER/WATER CROSSING LOCATION SEE TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL THIS SHEET OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS O.P.R.B.C.T.

PROPOSED 8" OR 12" WATER LINE

TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

FINISHED GROUND —— 20 LF. OF 160 P.S.I. PRESSURE RATED PVC — PIPE CENTERED ACROSS WATER CROSSING (SDR 26). SEWER PIPE AT WATER LINE CROSSINGS SHALL MEET THE SEPARATION DISTANCE TO COMPLY WITH REQUIREMENTS OF ASTM D2241 WITH ONE JOINT CENTERED AT WATER MAIN. TCEQ REGULATION 30 TAC 290.44 (E)

\* APPENDIX E & 30 TAC 217.53 (D)
APPENDIX D -- SEPARATION DISTANCE PROPOSED SANITARY SEWER LINE

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

LOWER MEDINA - SOUTH SEWERSHED - DOS RIOS/LEON CREEK

Developer's Name SAN ANTONIO LD, LLC. 1919 OAKWELL FARMS PKWY SUITE 210 Developer's Address City\_SAN ANTONIO Phone # (210) 231-0703 \_ Fax # \_ SAWS Block Map # \_\_\_\_\_132-508/134-508 Total EDU's \_\_102 Total Acreage \_\_21.304 Total Linear Footage of Pipe 8" PVC 1,977 L.F. \_ Plat No. 22-11800801 Number of Lots \_\_\_\_\_102 SAWS Job No. <u>23-1582</u>

-160 PSI PVC CENTERED ON WATERLINE CROSSING − 83.39 L.F. ~ 8" PVC PIPE SDR-26 @ 0.96% with as a minimum, OSHA standards for trench excavations. Specifically, Contractor LINE F - INV. IN and/or Contractor's independently retained employee or safety consultant shall ELEV:544.09 implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation. 540 540 0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00

290.00 L.F. ~ 8" PVC PIPE SDR-26 @ 1.00%

EXISTING GROUND CL.

PROPOSED

INV. 554.3±

8" WATER LINE ~

MH F-1 STA. 1+83.39 LINE F TOP: 555.51

RECONSTRUCT EXIST MH A-4

STA. 9+20.13 LINE A

=STA. 1+00.00 LINE F

TOP: 555.72

PROPOSED

INV. 551.7±

8" WATER LINE —

179.93 L.F. ~ 8" PVC PIPE SDR-26 @ 1.13%

BLOCK 6<sub>S</sub>

FLORAS HILL

14

MH F-2

LINE F

STA. 1+05.00 TO STA. 8+57.95

PROPOSED PVM'T. CL.

CENTER 1:- 20' LENGTH OF

TOP: 556.84

STA. 3+63.32 LINE F

<del>-(])</del>--8"W-<del>-(])</del>

10' E.G.T.CA. ESM'T.

STA. 6+34.32 LINE F 8" SAN. SEW. & 8" WATER MAIN CROSSING

\_\_\_E8"W \_\_\_\_

----

CENTER 1 - 20' LENGTH OF —160 PSI PVC CENTERED ON

WATERLINE CROSSING

10

MH F-3

TOP: 559.99

10' E.G.T.CA. ESM'T.

MH F-4 — STA. 8+57.95 LINE F

ENCANTO ALLEY

TOP: 562.22

STA. 6+53.32 LINE F =STA. 1+00.00 LINE H

BLOCK 9

16

MAIN CONSTRUCTED WITH PALO ALTO POINTE, UNIT 1

SAWS JOB NO. 22-1595

STA: 1+05.00 LINE F

19

REMOVE PLUG AND TIE-TO EXISTING SEWER MAIN

580

575

570

565

560

555

550

545

LINE A - MH A-4

TOP ELEV:554.08

RECONSTRUCT —

SUBMITTAL SET

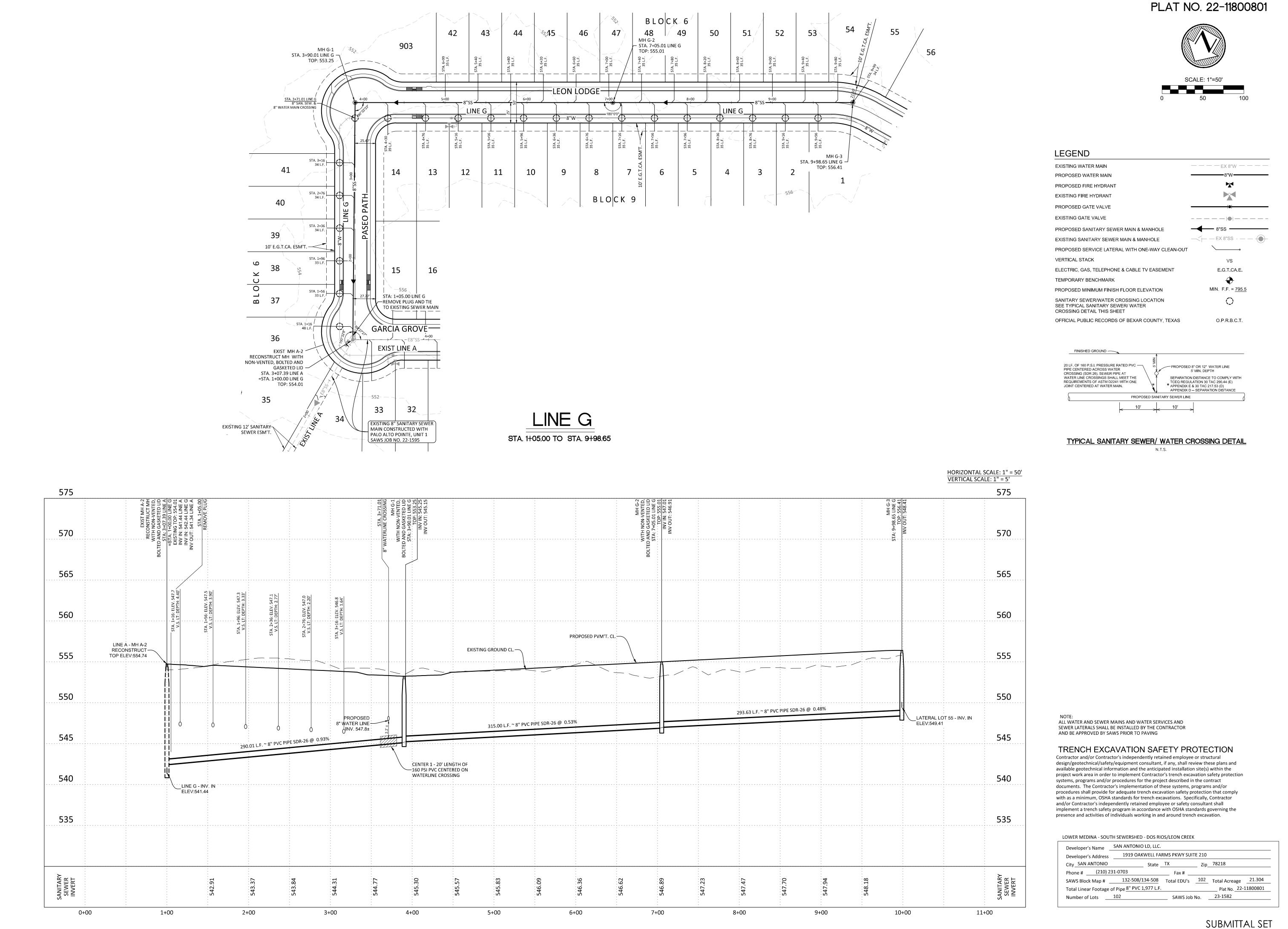


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C3.4



DESCRIPTION

J. # DGN. BY: DWN. BY: CHKL

## No. DATE NO. DATE NO. DATE | PROJ. # 1

PAUL LANDA, JR.

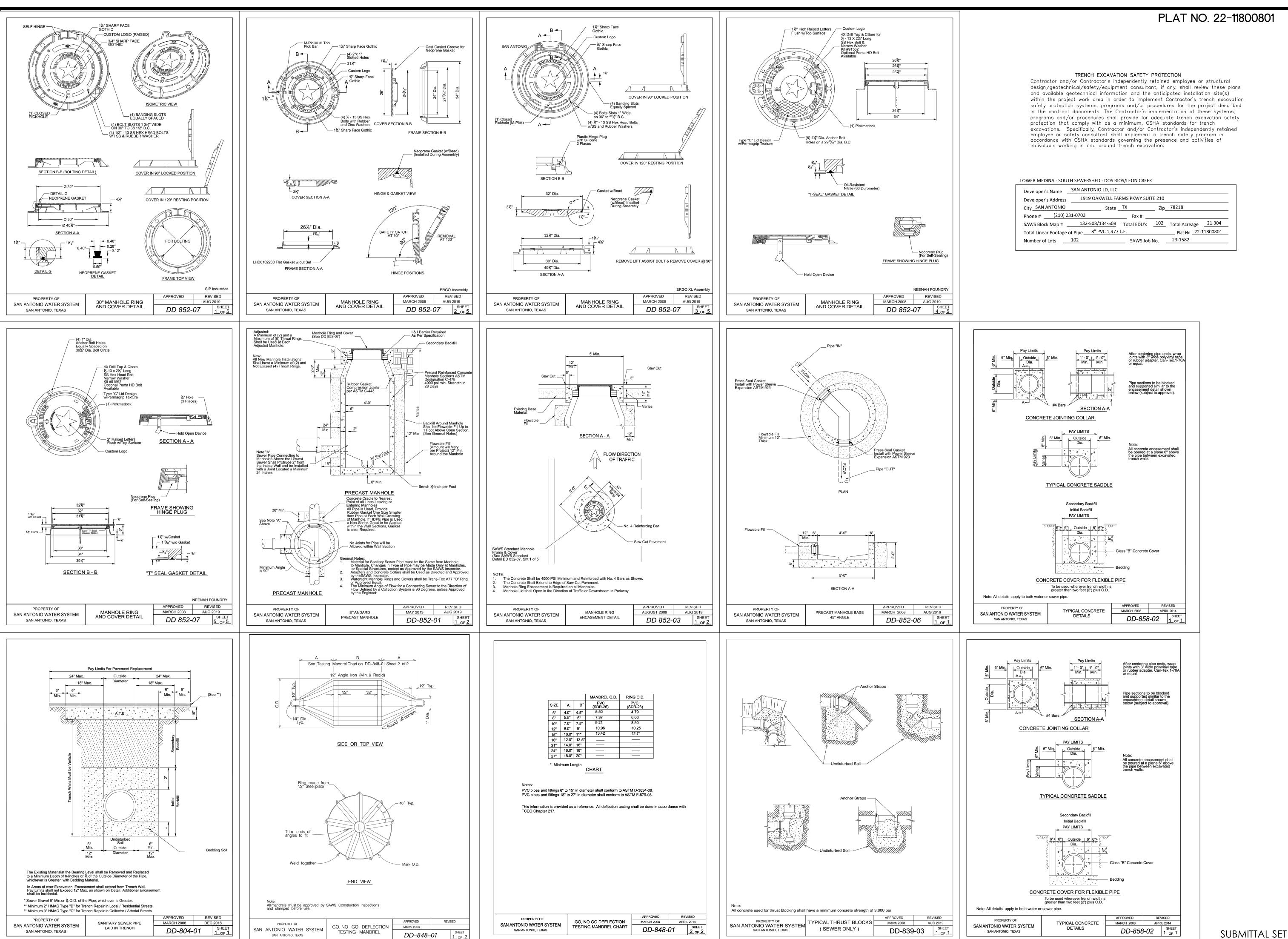
100182 &

SEWER PLAN & PROFILE
LINE G

ANITARY

C3.5

SHEET



DESCRIPTION BY DGN. BY DWN. BY CHKD. BY DATE:

· Engineers · Surveyors · Planners ez Engineers, LLC

Moy Tarin Ramirez El TBPELS: ENGINEERING F-5297/SU



PALO ALTO POINTE UNIT 2 ANITARY SEWER DETAILS

SHEET

L SET

## CONSTRUCTION PLANS FOR

#### 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

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
- 8. CONTRACTOR TO COORDINATE CONCRETE CURB DEPRESSIONS WITH THE DEVELOPER (NO SEPARATE PAY ITEM).

STRUCTURAL STEEL: CONFORM TO A.S.T.M. A-36

- 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 CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE. REFER TO 16.2.1 OF THE CITY OF SAN ANTONIO STORM WATER DESIGN CRITERIA MANUAL. NO EXTRA PAY ITEM.

#### LEGEND

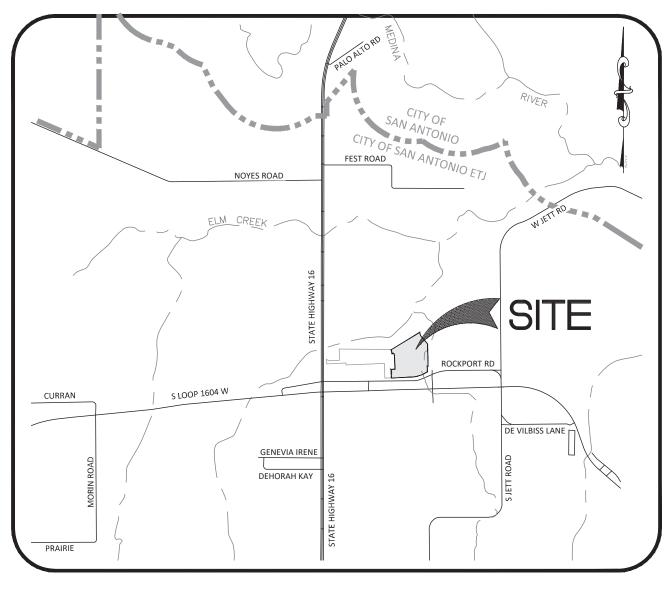
PROPOSED CONTOUR

FLOW ARROW

PROPOSED CONCRETE CURB

| LLGLND   |   |
|--|---|
| CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. | 1                                       |
| SIDEWALK WHEELCHAIR RAMP - TYPE 10<br>DIRECTIONAL RAMPS (SINGLE) - BY DEVELOPER                                  | A                                       |
| SIDEWALK WHEELCHAIR RAMP - TYPE 10<br>DIRECTIONAL RAMPS (DUAL) - BY DEVELOPER                                    | B                                       |
| SIDEWALK WHEELCHAIR RAMP - TYPE II - BY DEVELOPER  | ©                                       |
| EXISTING TOP OF CURB ELEVATION   | 805.81TC                                |
| PROPOSED TOP OF CURB ELEVATION   | 805.81                                  |
| HOME BUILDER INSTALLED SIDEWALK  |   |
| DEVELOPER INSTALLED SIDEWALK   |   |
| SIDEWALK WHEEL CHAIR RAMP  | \$0000000000000000000000000000000000000 |
| WASH-OUT CROWN   |   |
| FILL @ 95% COMPACTION  |   |
| POSSIBLE DRIVEWAY LOCATION   |   |
| PROPERTY LINE  |   |
| EXISTING CONTOUR   | — — — — — — — — — — — — — — — — — — —   |
|  |   |

# PALO ALTO POINTE, UNIT 2 STREET AND DRAINAGE IMPROVEMENTS



VICINITY MAP

SUBMITTAL DATE:

JUNE 2023

#### LEGAL DESCRIPTION:

BEING A TOTAL OF 21.304 ACRES OF LAND ESTABLISHING LOTS 16-67 & LOTS 902-904, BLOCK 1, LOTS 8-19, BLOCK 7, LOTS 1-12, BLOCK 8 AND LOTS 1-27, BLOCK 9 OUT OF THE JOSE MARIA SAIS SURVEY NO. 40, ABSTRACT NO. 418, BEING A PORTION OF A 47.1460 ACRE TRACT AS CONVEYED TO SILLER DEVELOPMENT COMPANY, LLC, BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN VOLUME 14504, PAGE 1591 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS

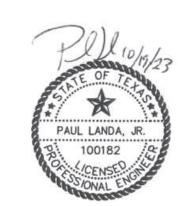
#### **Sheet List Table**

## Sheet Number Sheet Title C4.0 STREET COVER

| C4.1 | OVERALL TRAFFIC PLAN                |
|------|-------------------------------------|
| •    |                                     |
| C4.2 | TRAFFIC PLAN DETAILS                |
| C4.3 | TRAFFIC PLAN DETAILS                |
| C4.4 | STREET PLAN & PROFILE MORELIA MANOR |
| C4.5 | STREEP PLAN & PROFILE FLORAS HILL   |
| C4.6 | STREET PLAN & PROFILE LEON LODGE    |
| C4 7 | CTDEET DI ANI & DDOEILE DACEO DATH  |

C4.6 STREET PLAN & PROFILE LEON LODGE
C4.7 STREET PLAN & PROFILE PASEO PATH
C4.8 STREET PLAN & PROFILE GARCIA GROVE
C4.9 WHEEL CHAIR RAMP DETAILS
C4.10 WHEEL CHAIR RAMP DETAILS
C4.11 STANDARD STREET DETAILS
C4.12 STANDARD STREET DETAILS
C4.13 DRAIN PLAN & PROFILE DRAIN E

C4.14 DRAIN PLAN & PROFILE DRAIN F
C4.15 STANDARD DRAINAGE DETAILS
C4.16 STANDARD DRAINAGE DETAILS





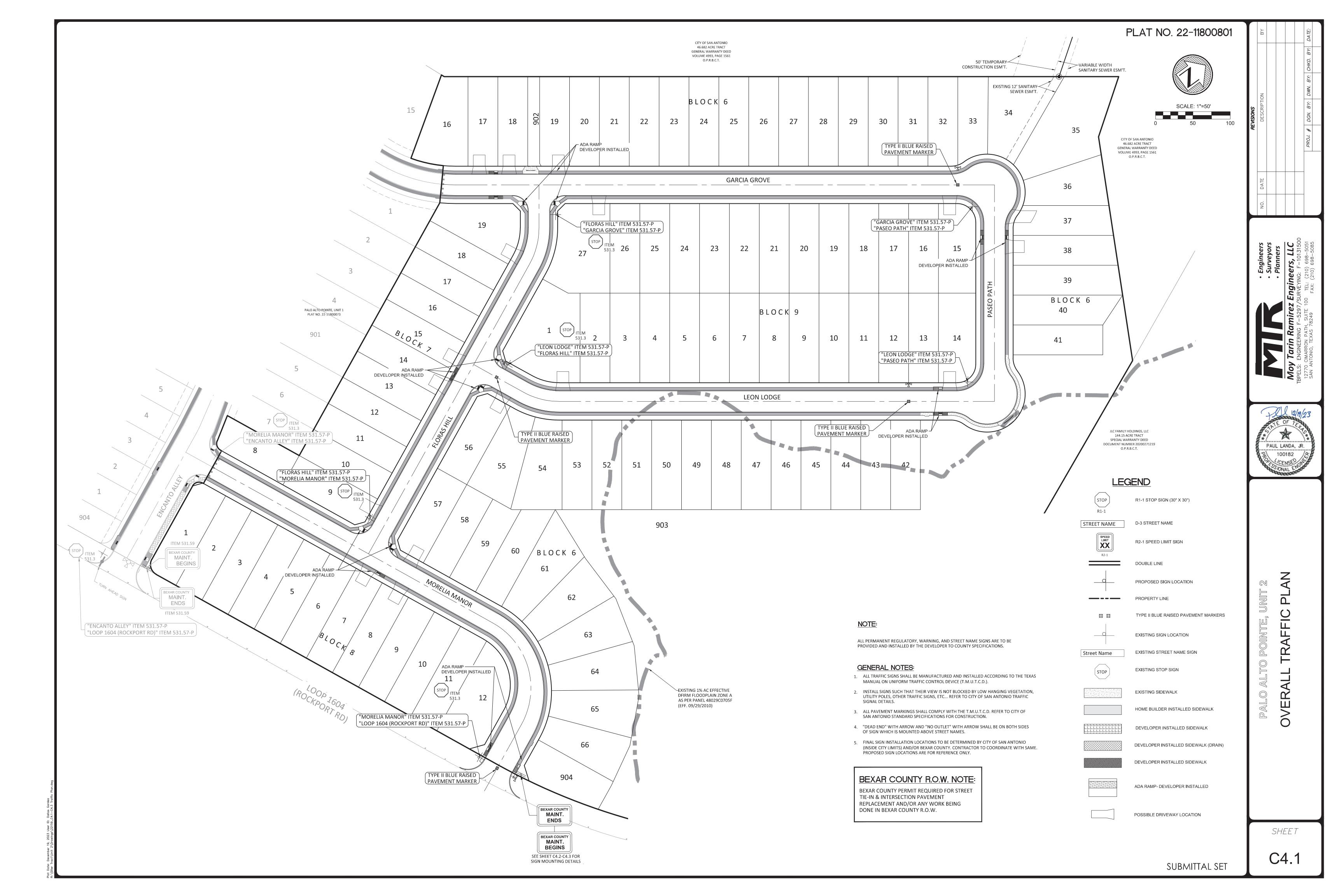
FIRM TBPELS ENG F-5297 SVY F-10131500 12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051 SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

#### 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. 1919 OAKWELL FARMS PKWY SUITE 210 SAN ANTONIO, TX 78218 (210) 231-0703



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.

10BWG(1)XX(P-BM) Y 10BWG(1)XX(T)

10BWG (1) XX (P-BM)

TY 10BWG(1)XX(T)

TY S80(1)XX(T)

TY 10BWG(1)XX(T)

TY S80(1)XX(T)

Y 10BWG(1)XX(T)

Y 10BWG(1)XX(T)

Y 10BWG(1)XX(T)

Texas Department of Transportation

Traffic Operations Division

SIGN MOUNTING DETAILS

SMALL ROADSIDE SIGNS

2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is

. Sign supports shall not be spliced except where shown.

3. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.

A 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.

Signs that require specific supports due to reasons in addition to windloading are indicated on the "REQUIRED SUPPORT" table on this sheet.

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.

rease in neight.

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.

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. Additional route markers may be added vertically, provided the total sign area does not exceed the maximum allowable amount per Note 1.

11. Additional sign clamp required on the "T-bracket" post

bottom of sign when possible. 12.Post open ends shall be fitted with Friction Caps.

REQUIRED SUPPOR

SIGN DESCRIPTION

48-inch STOP sign (R1-1)

60-inch YIELD sign (R1-2)

48x60-inch signs

48x60-inch signs

48x16-inch ONE-WAY sign (R6-1)

36x48, 48x36, and 48x48-inch signs

48-inch School X-ing sign (S2-1)

Large Arrow sign (W1-6 & W1-7)

48-inch Advance School X-ing sign (S1-1)

13. Sign blanks shall be the sizes and shapes shown on the

for 24 inch height signs. Place the clamp 3 inches above

10BWG(1)XX(P-BM) Y 10BWG(1)XX(T)

10BWG (1) XX (P-BM) Y 10BWG (1) XY (T)

10BWG(1)XX(P-BM)

Y 10BWG(1)XX(T)

TY S80(1) XX(T)

Y 10BWG(1)XX(T)

TY S80(1)XX(T)

TY 10BWG(1)XX(T)

Y 10BWG(1)XX(T)

TY 10BWG(1)XX(T)

Texas Department of Transportation

Traffic Operations Division

SIGN MOUNTING DETAILS

SMALL ROADSIDE SIGNS

RIANGULAR SLIPBASE SYSTEM

SMD(SLIP-2)-08

8. Wing channel shall meet ASTM A 1011 SS Gr 50 and be galvanized per ASTM A 123.

abnormally high due to a fill slope.

RIANGULAR SLIPBASE SYSTEM

SMD(SLIP-3)-08

REQUIRED SUPPOR

SIGN DESCRIPTION

48-inch STOP sign (R1-1)

48x60-inch signs

60-inch YIELD sign (R1-2)

48x16-inch ONE-WAY sign (R6-1)

36x48, 48x36, and 48x48-inch signs

48x48-inch signs (diamond or square)

48-inch School X-ing sign (S2-1)

Large Arrow sign (W1-6 & W1-7)

48-inch Advance School X-ing sign (S1-1)

GENERAL NOTES:

3/8" x 4" heavy hex

A307 galvanized per

T-Bracket

Clamps (Specific or Universal)

3/8" x 4 1/2"

square head

bolt, nut, flat washer and lock washer per ASTM A307 galvanized

per Item 445, "Galvanizing."

Detail E

Detail

T&U Bracket

1/2" x 4" heavy

Item 445, "Galvanizing."

\_\_\_ Post

Detail B

Sign Clamp

– hex bolt, nut, lock

A307 galvanized per

washer and 2 flat

bolt with nut, lock washer and 2 flat washers per ASTM

Drill 7/16" hole

(through) after

washers and

Extender \_\_

stiffeners attached with

for additional

assembly and insta bolt, nut, 2 flat

Detail C

Splices shall only be allowed behind the sign substrate.

nut, lock washer

2 flat washers per ASTM A307

galvanized per Item 445,

"Galvanizing."

Side View

2 7/8" 0.D. Sch. 80 -

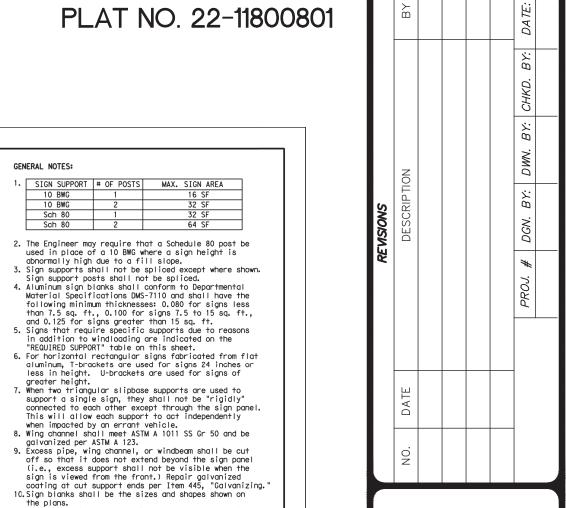
steel pipe

Detail B

w variable

Typical Sign Mount

Sign clamp —



ngi RVFY



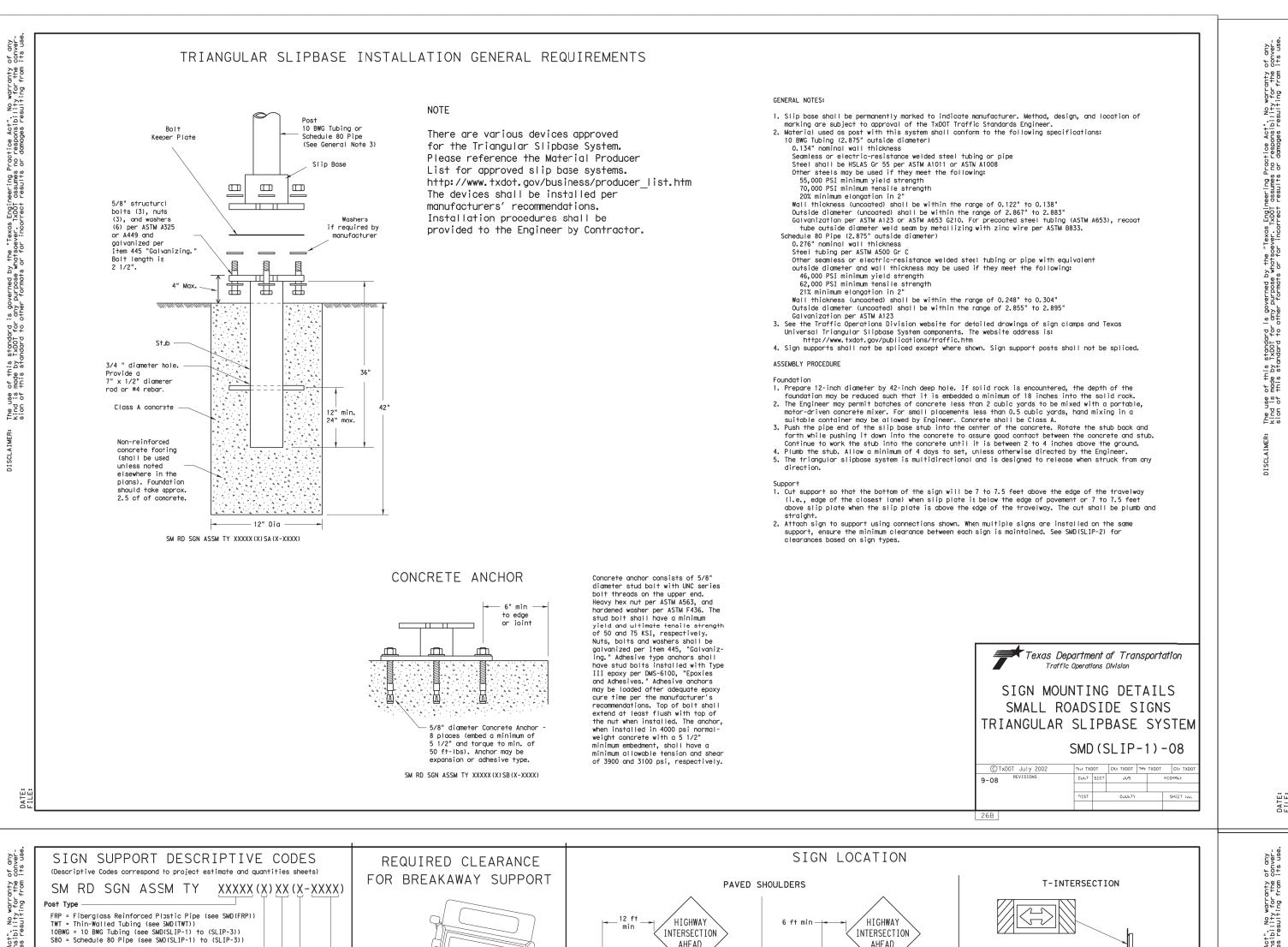


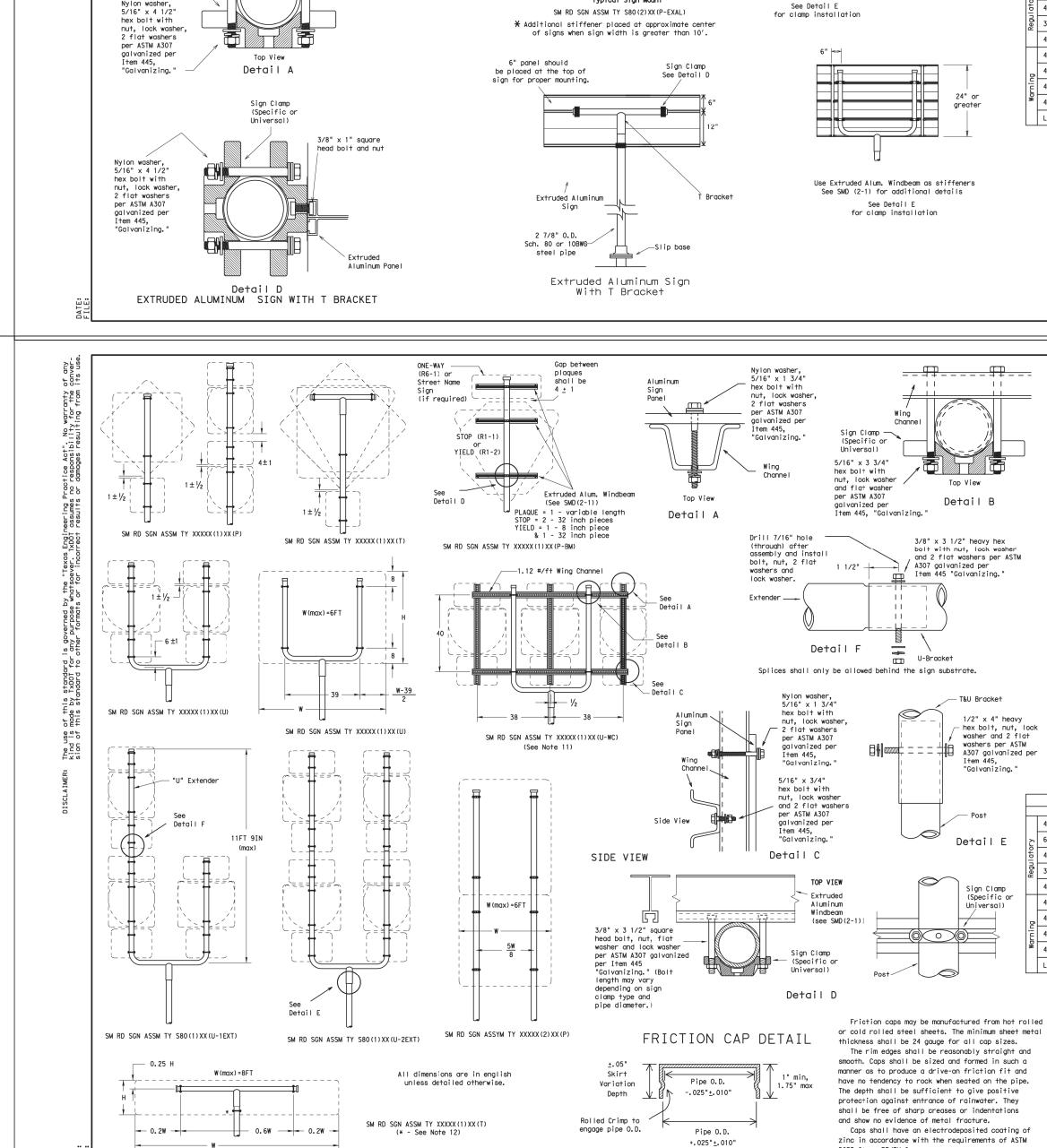






C4.2





− 0.25 H

-- 0.15W --

— 0.7W ————— 0.15W →

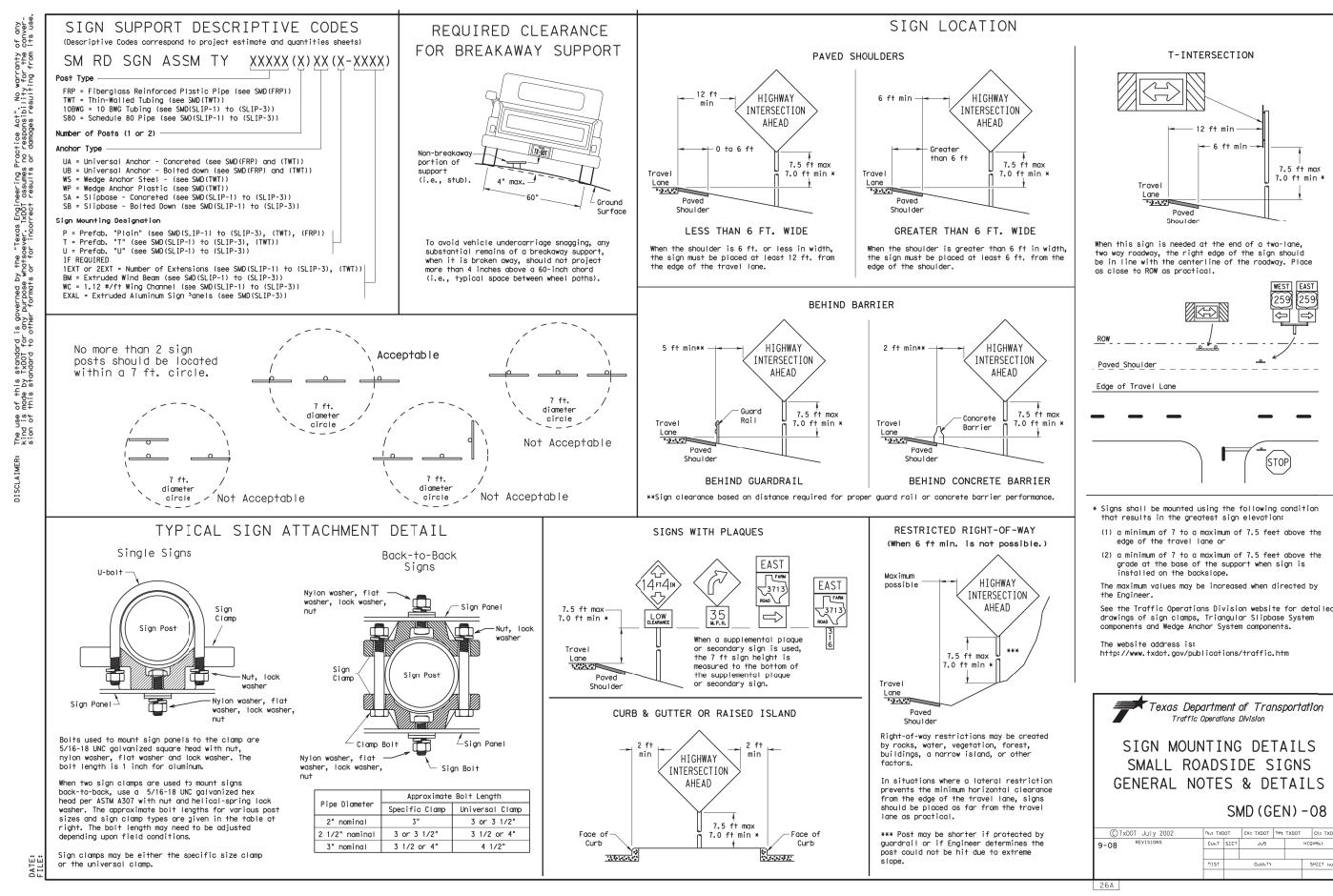
SM RD SGN ASSM TY XXXXX(1)XX(T-2EXT)

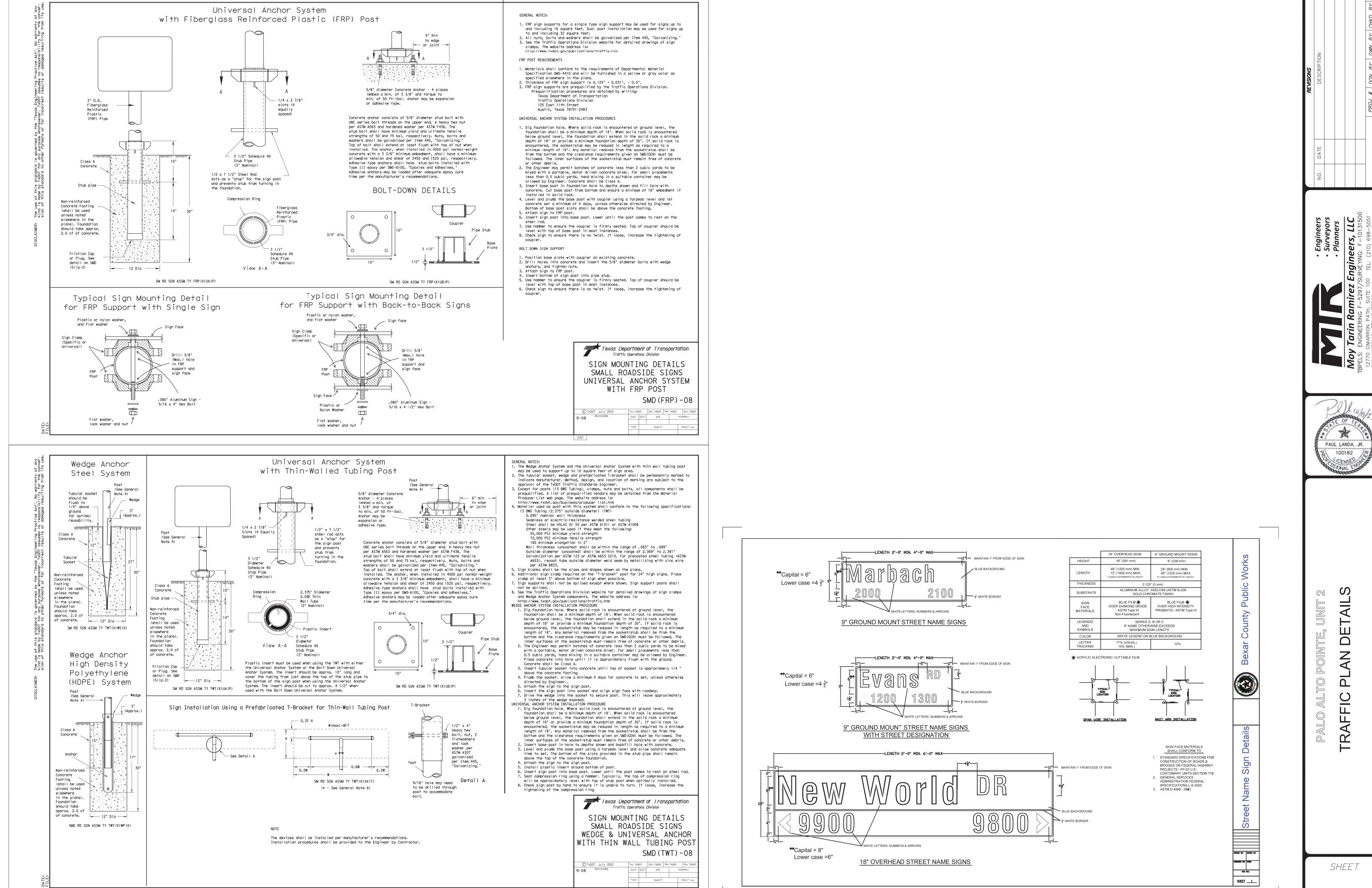
(\* - See Note 12)

Extruded Alum. Windbeam (See Detail D on SMD (SLIP-2))

SM RD SGN ASSM TY XXXXX(1)XX(U-XX)

Universal

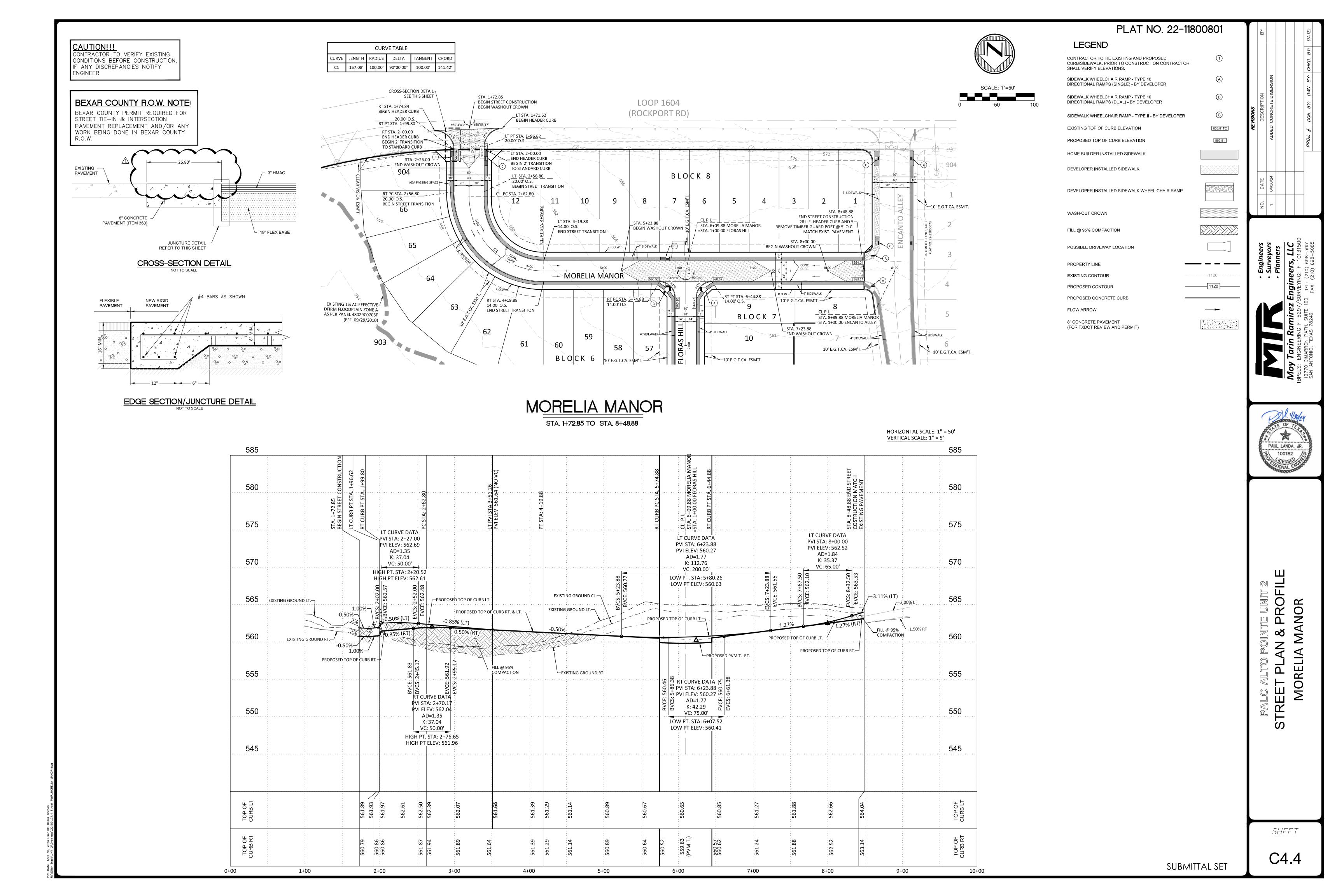




SUBMITTAL SET

PLAT NO. 22-11800801

C4.3

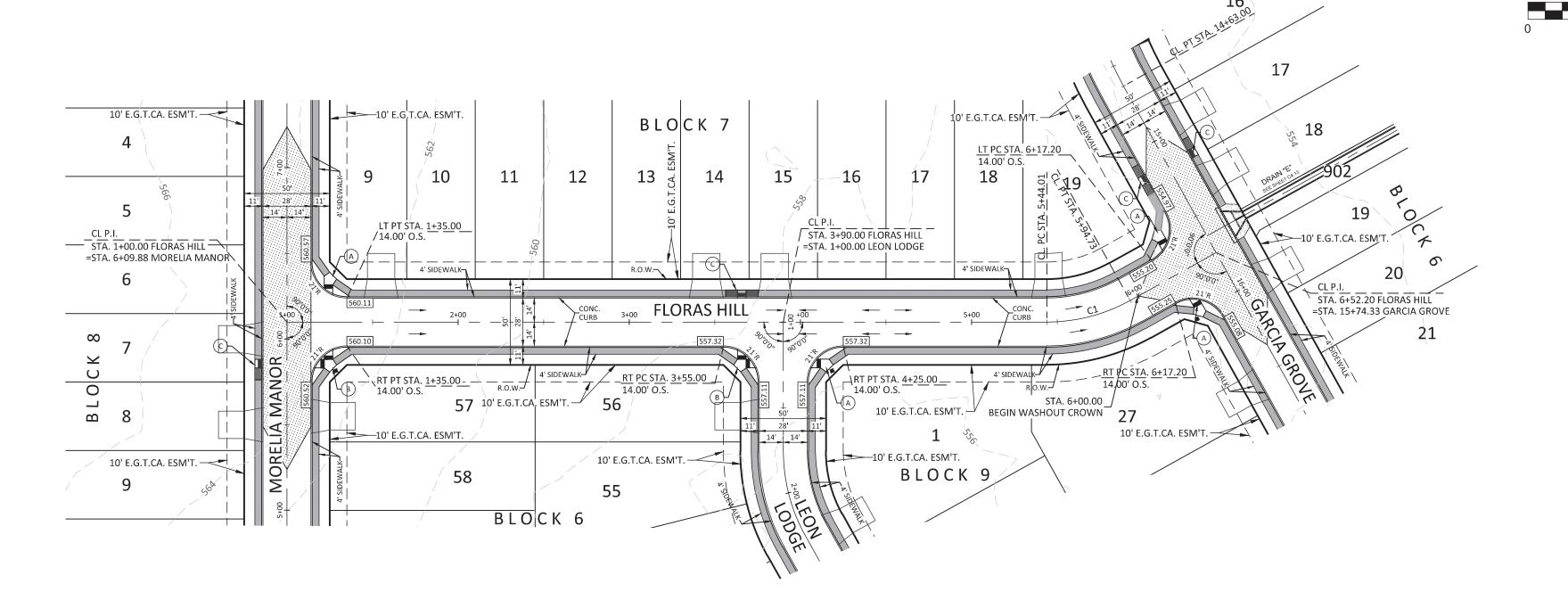


CAUTION!!! CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY ENGINEER

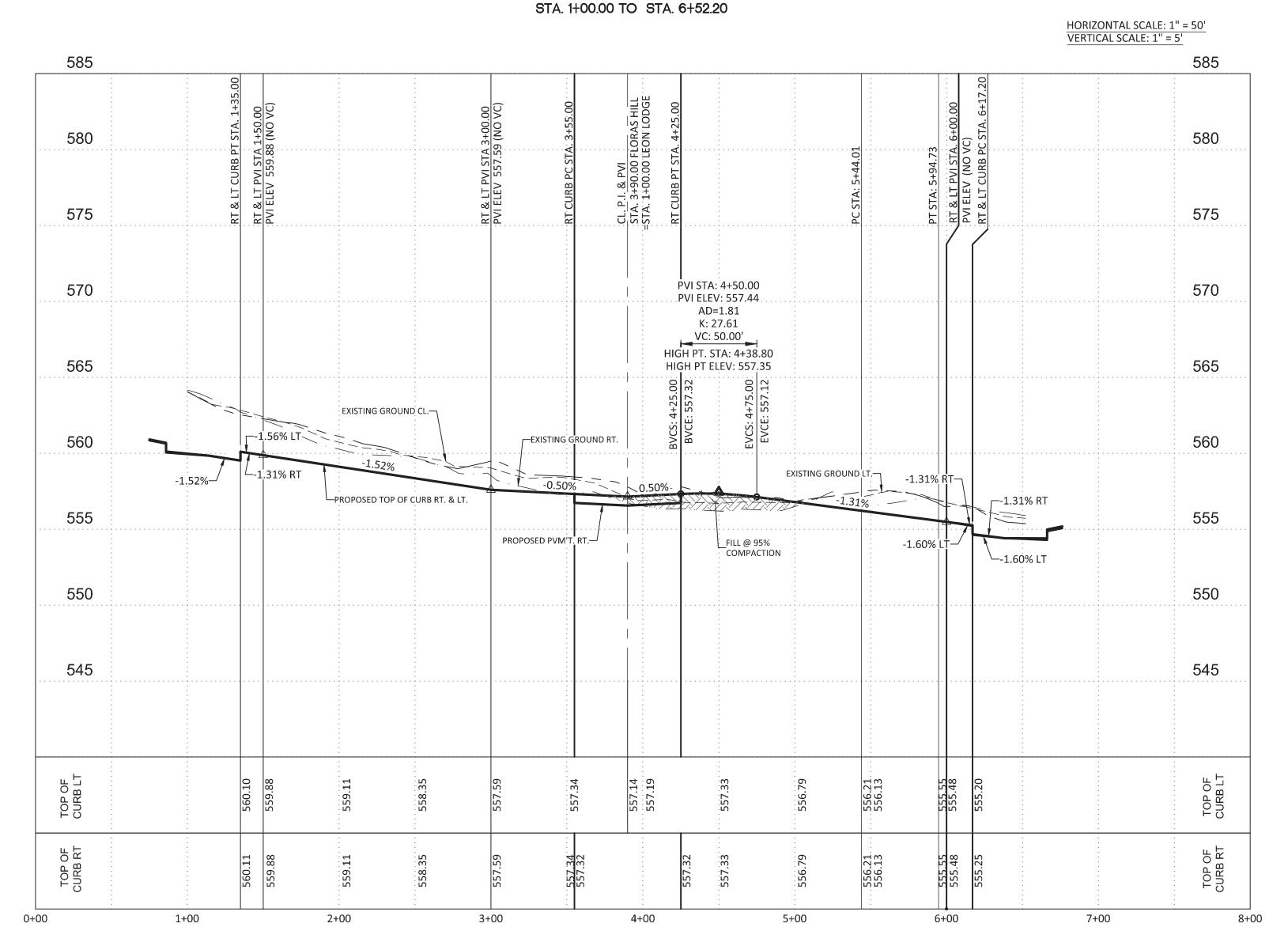
BEXAR COUNTY R.O.W. NOTE: BEXAR COUNTY PERMIT REQUIRED FOR

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

|       |                                      | CUR\    | /E TABLE  |        |        |  |  |  |
|-------|--------------------------------------|---------|-----------|--------|--------|--|--|--|
| CURVE | RVE LENGTH RADIUS DELTA TANGENT CHOR |         |           |        |        |  |  |  |
| C1    | 50.73'                               | 100.00' | 29°03'57" | 25.92' | 50.19' |  |  |  |



## FLORAS HILL



PLAT NO. 22-11800801

1

805.81TC

805.81

- - - - - 1120 - - - ·

1120

**LEGEND** CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR

> SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) - BY DEVELOPER

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) - BY DEVELOPER

SHALL VERIFY ELEVATIONS.

SIDEWALK WHEELCHAIR RAMP - TYPE II - BY DEVELOPER

EXISTING TOP OF CURB ELEVATION

HOME BUILDER INSTALLED SIDEWALK

PROPOSED TOP OF CURB ELEVATION

DEVELOPER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK WHEEL CHAIR RAMP

FILL @ 95% COMPACTION

WASH-OUT CROWN

POSSIBLE DRIVEWAY LOCATION

PROPERTY LINE **EXISTING CONTOUR** 

PROPOSED CONTOUR PROPOSED CONCRETE CURB

FLOW ARROW

PAUL LANDA, JR. 100182

SIONAL ENGL

ROFIL FLORAS TRE

SHEET

C4.5

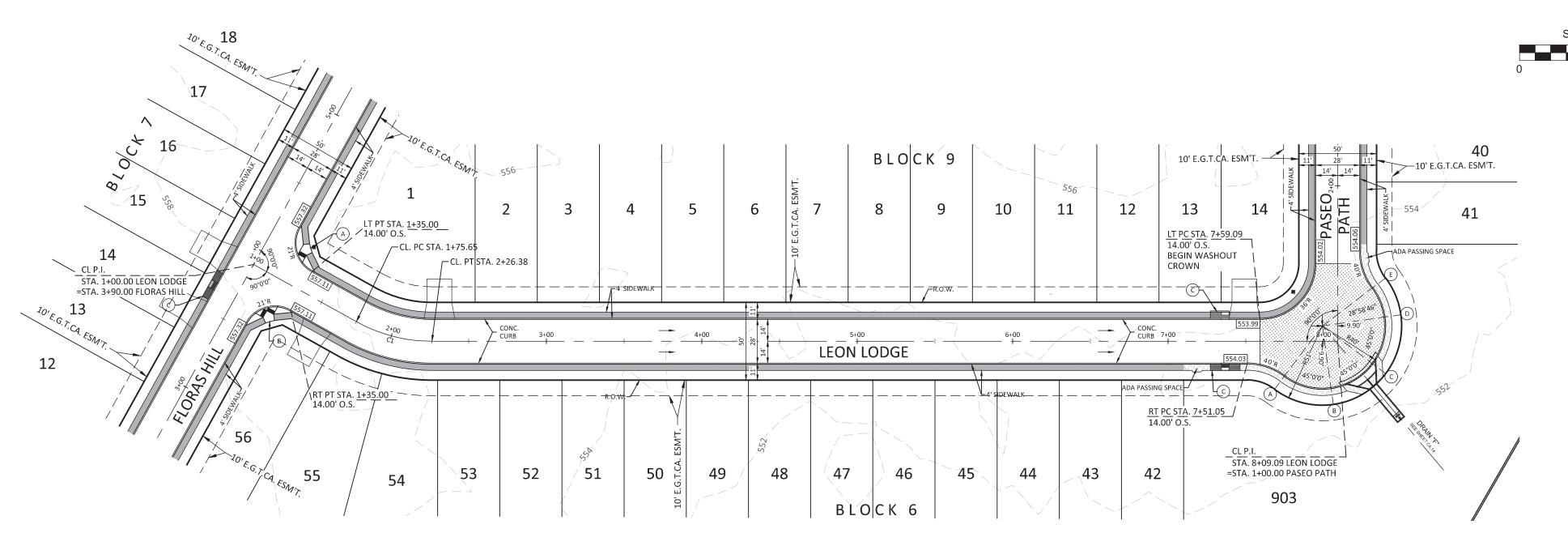
SUBMITTAL SET

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  | TANGENT CHORE |        |        |  |  |  |  |  |
| C1          | 50.73' | 100.00' | 29°03'57"     | 25.92' | 50.19' |  |  |  |  |  |



| KNUCKLE TABLE       |             |        |  |  |  |  |  |  |  |  |
|---------------------|-------------|--------|--|--|--|--|--|--|--|--|
| POINT               | TOP OF CURB | GUTTER |  |  |  |  |  |  |  |  |
| RT. PC STA. 7+51.05 | 554.03      | 553.45 |  |  |  |  |  |  |  |  |
| А                   | 553.90      | 553.32 |  |  |  |  |  |  |  |  |
| В                   | 553.74      | 553.16 |  |  |  |  |  |  |  |  |
| С                   | 553.70      | 553.12 |  |  |  |  |  |  |  |  |
| D                   | 553.83      | 553.25 |  |  |  |  |  |  |  |  |
| E                   | 553.93      | 553.35 |  |  |  |  |  |  |  |  |
| RT. PT STA. 1+58.03 | 554.06      | 553.48 |  |  |  |  |  |  |  |  |

LEON LODGE STA 1+00.00 TO STA 8+09.09

|                   |        |                 |              |        |               |        |         |                |                           | STA. 1+00.0 | O TO STA. 8 | 3+09.09          |                  |        |        |                            |                         |                    |                          |  |                         |
|-------------------|--------|-----------------|--------------|--------|---------------|--------|---------|----------------|---------------------------|-------------|-------------|------------------|------------------|--------|--------|----------------------------|-------------------------|--------------------|--------------------------|--|-------------------------|
|                   |        |                 |              |        |               |        |         |                |                           |             |             |                  |                  |        |        |                            |                         |                    |                          | HORIZONTAL SCALE:  | LE: 1" = 50'<br>1" = 5' |
| 580               |        |                 |              |        |               |        |         |                |                           |             |             |                  |                  |        |        |                            |                         |                    |                          |  | 580                     |
| 575               |        | PI SIA. 1+35.00 | 65           |        | 38.           |        |         |                |                           |             |             |                  |                  |        |        | TA. 7+51.05<br>TA. 7+59.09 |                         | (NO VC)            | 70 (NO VC)               | TA. 1+58.03  | 575                     |
| 570               |        | KI & LI COKE    | PC STA: 1+75 |        | PT STA: 2+26. |        |         |                |                           |             |             |                  |                  |        |        | RT CURB PC S               |                         | PVI<br>ELEV 553.70 | ELEV 553.70              | RT CURB PT S<br>PASEO PATH   | 570                     |
| 565               |        |                 |              |        |               |        |         |                |                           |             |             |                  |                  |        |        |                            |                         |                    |                          |  | 565                     |
| 560               |        |                 |              |        |               |        |         |                |                           |             |             |                  | COURD DT 9 LT    |        |        |                            |                         |                    |                          |  | 560                     |
| 555               | -0.509 | 6               |              |        |               |        |         |                | -(                        | 0.50%       |             | —PROPOSED TOP OF | F CORB RT. & LT. |        |        |                            | 0.50%                   | 0.00               | % E 0.                   | .50%   | 555                     |
| 550               |        |                 |              |        |               |        | EXISTII | NG GROUND LT.— | FILL @ 95%_<br>COMPACTION |             | . \         |                  | G GROUND RT.     |        |        |                            | - 24                    |                    | FILL @ 95%<br>COMPACTION |  | 550                     |
| 545               |        |                 |              |        |               |        |         |                |                           |             |             |                  |                  |        |        |                            |                         |                    |                          |  | 545                     |
| 540               |        |                 |              |        |               |        |         |                |                           |             |             |                  |                  |        |        |                            |                         |                    |                          |  | 540                     |
| TOP OF<br>CURB LT |        | 557.11          | 556.91       | 556.78 | 556.65        | 556.53 | 556.28  | 556.03         | 555.78                    | 555.53      | 555.28      | 555.03           | 554.78           | 554.53 | 554.28 | 554.03                     | A                       | B                  | © ©                      | <b>(E)</b>   | TOP OF<br>CURB LT       |
| TOP OF<br>CURB RT |        | 557.11          | 556.91       | 556.78 | 556.65        | 556.53 | 556.28  | 556.03         | 555.78                    | 555.53      | 555.28      | 555.03           | 554.78           | 554.53 | 554.28 | 25.8                       | 2' 31.42'<br>06.<br>86. | 31.42'             | $\overline{\gamma}$      | 25.82'<br>20.23' 25.82'<br>20. 66: 0.00'<br>20. 60: 0.00' | TOP OF<br>CURB RT       |
|                   | : :    |                 |              | :      |               | :      |         |                |                           | :           | :           | :                | •                |        |        | :                          | 8.09'                   | 7 -                | 7 7.27                   |  | : I                     |

PLAT NO. 22-11800801

1

805.81TC

805.81

LEGEND CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.

> SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) - BY DEVELOPER

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) - BY DEVELOPER

SIDEWALK WHEELCHAIR RAMP - TYPE II - BY DEVELOPER EXISTING TOP OF CURB ELEVATION

PROPOSED TOP OF CURB ELEVATION

HOME BUILDER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK WHEEL CHAIR RAMP

WASH-OUT CROWN

FILL @ 95% COMPACTION

POSSIBLE DRIVEWAY LOCATION

PROPERTY LINE

EXISTING CONTOUR PROPOSED CONTOUR

PROPOSED CONCRETE CURB FLOW ARROW

1120

PAUL LANDA, JR. 100182 SIONAL ENGL

PALO ALTO POINTE UNIT 2 STREET PLAN & PROFILE LEON LODGE

SHEET

C4.6

SUBMITTAL SET

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.

BLOCK 6

42 10' E.G.T.CA. ESM'T. —

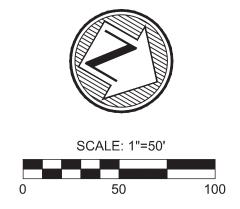
SEE SHEET C4.6 FOR

KNUCKLE PROFILE

ADA PASSING SPACE

STA. 1+00.00 PASEO PATH =STA. 8+09.09 LEON LODGE

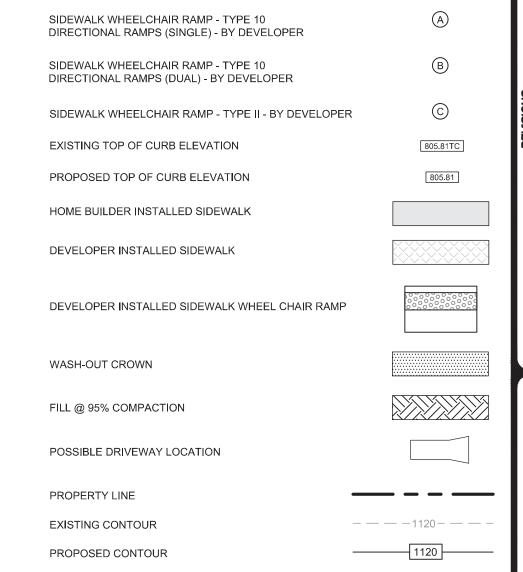
903

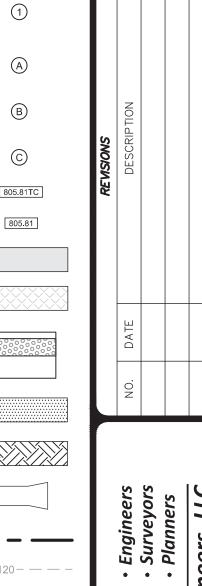


## PLAT NO. 22-11800801

## LEGEND

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.











PALO ALTO POINTE UNIT 2 STREET PLAN & PROFILE PASEO PATH

SHEET

C4.7

PROPOSED CONCRETE CURB FLOW ARROW

KNUCKLE TABLE POINT TOP OF CURB GUTTER RT. PC STA. 3+31.97 554.93 554.35 555.06 554.48 555.22 554.64 G 555.38 554.80 Н 555.53 554.95 555.63 555.05 LT. PC STA. 21+26.30 555.76 555.18

6+00

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

34

10' E.G.T.CA. ESM'T.

EXISTING 12' SANITARY\_/

SEWER ESM'T.

=STA. 21+84.33 GARCIA GROVE 35

10' E.G.T.CA. ESM'T. *─* 

BEGIN WASHOUT CROWN

RT PC STA. 3+31.97 \ 14.00' O.S.

BLOCK 9

PASEO PATH

4'SIDEWALK R.O.W.

39

PASEO PATH

STA. 1+00.00 TO STA. 3+90.00

10' E.G.T.CA. ESM'T.

LT PT STA. 1+50.00 /14.00' O.S.

END WASHOUT CROWN

\RT PT STA. <u>1+58.03</u> `14.00' O.S. ¯

ADA PASSING SPACE

| 580               | ···;·······              | ··.                                   |                          | ······;·····;·····;···· | ·····                        | 580               |
|-------------------|--------------------------|---------------------------------------|--------------------------|-------------------------|------------------------------|-------------------|
| 575               | A. 1+50.00<br>A. 1+58.03 |                                       | A. 3+31.97<br>A. 3+40.00 |                         | A. 21+26.30                  | 575               |
| 570               | LT CURB PT ST.           |                                       | RT CURB PC ST            |                         | LT CURB PC STA<br>PASEO PATH | 570               |
| 565               |                          |                                       |                          |                         |                              | 565               |
| 560               |                          | EXISTING GROUND RT.—\                 |                          |                         |                              | 560               |
| 555               | EXISTING                 | GROUND LT                             | EXISTING GROUND CL.      | 0.50%                   |                              | 555               |
| 550               | FILL                     | PROPOSED TOP OF CURE  @ 95%  MPACTION | 3 RT. & LT.              | FILL @ 95<br>COMPACT    |                              | 550               |
| 545               |                          |                                       |                          |                         |                              | 545               |
| 540               |                          |                                       |                          |                         |                              | 540               |
| TOP OF<br>CURB LT | 554.02                   | 554.27                                | 554.97                   | )                       | S55.76                       | TOP OF<br>CURB LT |
| TOP OF<br>CURB RT | 554.06                   | 554.27                                | 25.83                    | T T                     | 20.23' 25.82'                | TOP OF<br>CURB RT |

3+00

4+00

5+00

2+00

1+00

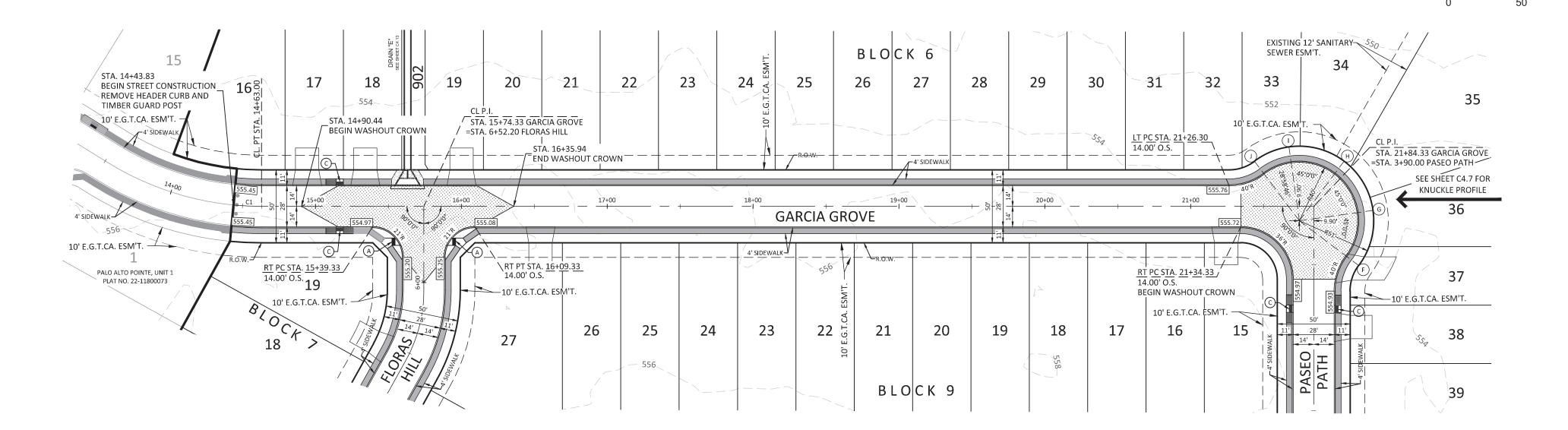
SUBMITTAL SET

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

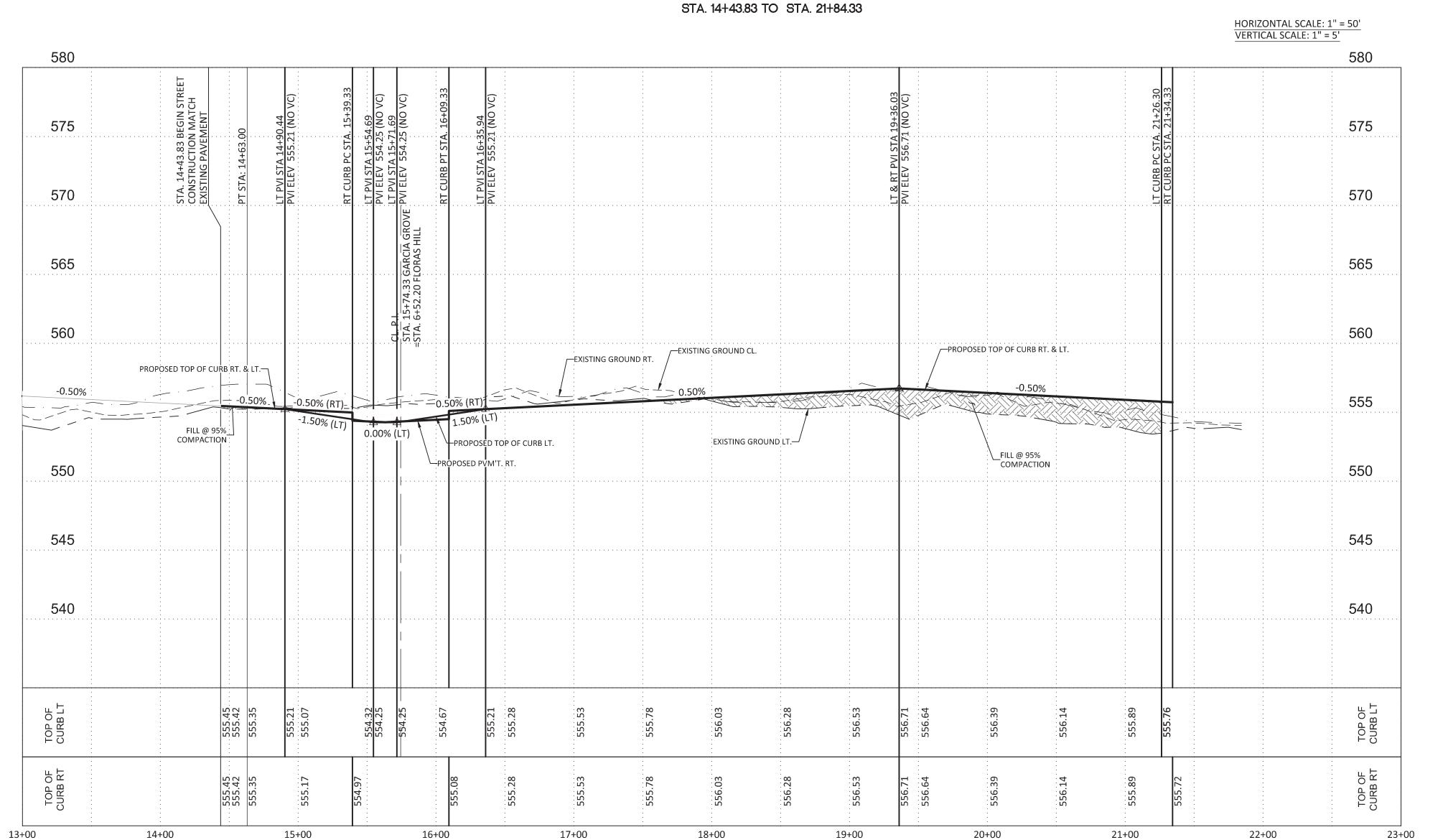
BEXAR COUNTY R.O.W. NOTE: BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY

R.O.W.

|       |        | CURV    | 'E TABLE |         |        |
|-------|--------|---------|----------|---------|--------|
| CURVE | LENGTH | RADIUS  | DELTA    | TANGENT | CHORD  |
| C1    | 19.18' | 200.00' | 5°29'36" | 9.59'   | 19.17' |



GARCIA GROVE



PLAT NO. 22-11800801

**LEGEND** CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) - BY DEVELOPER

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) - BY DEVELOPER

SIDEWALK WHEELCHAIR RAMP - TYPE II - BY DEVELOPER EXISTING TOP OF CURB ELEVATION

PROPOSED TOP OF CURB ELEVATION

HOME BUILDER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK WHEEL CHAIR RAMP

WASH-OUT CROWN

FILL @ 95% COMPACTION

POSSIBLE DRIVEWAY LOCATION PROPERTY LINE

**EXISTING CONTOUR** PROPOSED CONTOUR

PROPOSED CONCRETE CURB FLOW ARROW

- - - - - 1120 - - - · 1120

1

805.81TC

805.81

汝 PAUL LANDA, JR. 100182

SIONAL ENGL

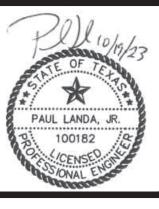
ROFIL GROVE TRE

SHEET

C4.8

SUBMITTAL SET





DETAII **RAMP** WHEELCHAIR

SHEET

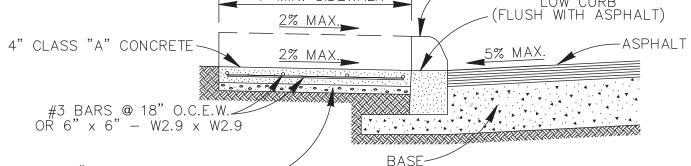
C4.9

- 1. SIDEWALKS IN THIS SUBDIVISION SHALL BE PLACED NEXT TO THE CURB. 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 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, 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
- 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 WITH A DIAMETER OF A NOMINAL 0.9 INCHES (23 MM), A HEIGHT OF NOMINAL 0.2 INCHES (5 MM) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 MM). THE DETECTABLE WARNING SURFACE SHALL BE PAVERS CONFORMING TO TXDOT STANDARD PED-18,
- 6. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE
- 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.

PEDESTRIAN FACILITIES.

- 8. CONSTRUCTION OF ALL WHEELCHAIR RAMPS TO BE INCLUDED UNDER ITEMS "500 CONCRETE CURBING", "501 - MACHINE LAID CURB" AND / OR "502 - 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. COUNTY CONSTRUCTION INSPECTOR CAN ADJUST LOCATIONS FOR SAFETY OR
- 10. SIDEWALKS 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" 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 2%. LANDINGS SHALL HAVE A MAXIMUM SLOPE
- 15. THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES SHALL BE LESS THAN 11%. THE CHANGE OF GRADE SHALL BE DEFINED AS THE ALGEBRAIC DIFFERENCE OF THE ADJACENT SURFACE SLOPES. IN THE CASE OF A STREET ACCESS RAMP DESIGNED AT THE 8.33% MAXIMUM SLOPE, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN 2.67% (I.E. 8.33-(-2.67)=11). IN ADDITION, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN OR EQUAL TO 5%.
- 16. IF THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES IS GREATER THAN OR EQUAL TO 11%, A LEVELING STRIP, 2 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.

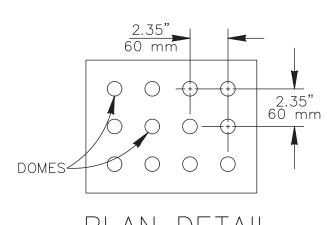




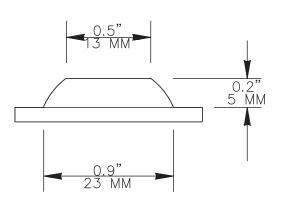
- CURB AND SIDEWALK BEYOND

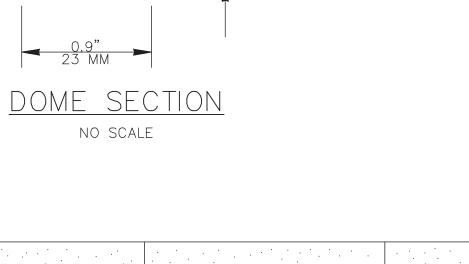
2" GRAVEL, CRUSHED ROCK OR FLEX. BASE MATERIAL SCALE : 1"=2'

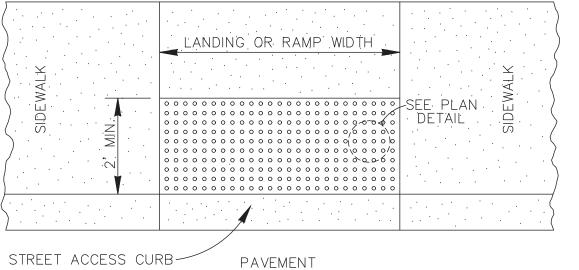
| TABLE 1<br>(SEE NOTE 4) |                             |           |  |  |  |
|-------------------------|-----------------------------|-----------|--|--|--|
|                         |                             |           |  |  |  |
| GUTTER                  | SIDEWALK RAMP LENGTH (1:12) |           |  |  |  |
| SLOPE                   | LOW SIDE                    | HIGH SIDE |  |  |  |
| 1%                      | 5'-6"                       | 7'-2"     |  |  |  |
| 2%                      | 5'-0"                       | 8'-4"     |  |  |  |
| 3%                      | 4'-6"                       | 10'-0"    |  |  |  |
| 4%                      | 4'-2"                       | 12'-6"    |  |  |  |
| 5%                      | 3'-10"                      | 16'-8"    |  |  |  |



NO SCALE







DETECTABLE WARNING AREA

| LOW SIDE RAMP  | 5' MIN. LANDING | HIGH SIDE RAMP |                         |
|----------------|-----------------|----------------|-------------------------|
| <br>8.33% MAX. |                 | 8.33% MAX.     | TOP OF ASPHALT PAVEMENT |
|                | SECTION C-C     |                |                         |

SCALE : 1"=2'

CONCRETE SIDEWALK

LAID CURB

TYPICAL CONCRETE

SIDEWALK

MAX.

2' MIN. DETECTABLE WARNING. SEE NOTE 5.

NOT TO EXCEED 200'

2' MIN. DETECTABLE WARNING.

MACHINE

LAID CURB

CONCRETE

SIDEWALK

SEE NOTE 5

2' MIN. DETECTABLE

CURB RETURN

WARNING. SEE NOTE 5

CONCRETE-SIDEWALK

TYPICAL SIDEWALK RAMP - TYPE

SIDEWALK ABUTS THE CURB

SCALE : 1"=5'

TYPICAL SIDEWALK RAMP - TYPE II

USED AT TEE INTERSECTIONS WHERE SIDEWALK ABUTS CURB

SCALE : 1"=5'

SIDEWALK PASSING SPACE

SCALE : 1"=5'

8.33%

MAX.

(1:12)

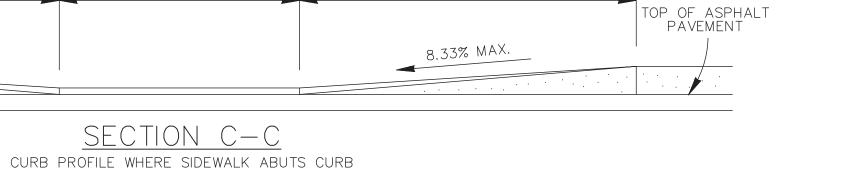
 $A \longrightarrow$ 

1. INNER SIDEWALK RAMPS MUST START AT THE

EDGE OF THE 5' MID LANDING. THE EDGE OF THE STREET ACCESS LANDING MAY NOT NECESSARILY OCCUR AT THE BEGINNING OF THE CURB RETURN.

MAX.





FLUSH CURB FULL CURB HEIGHT DUAL ADA RAMP INTERSECTION LAYOUT DETAIL

(TYPE 10 DIRECTIONAL RAMPS)

5'x5' LANDING (2% MAX SLOPE IN

5'x5' LANDING (2% MAX SLOPE IN

∠ CURB PC

SINGLE ADA RAMP INTERSECTION LAYOUT DETAIL

(TYPE 10 DIRECTIONAL RAMPS)

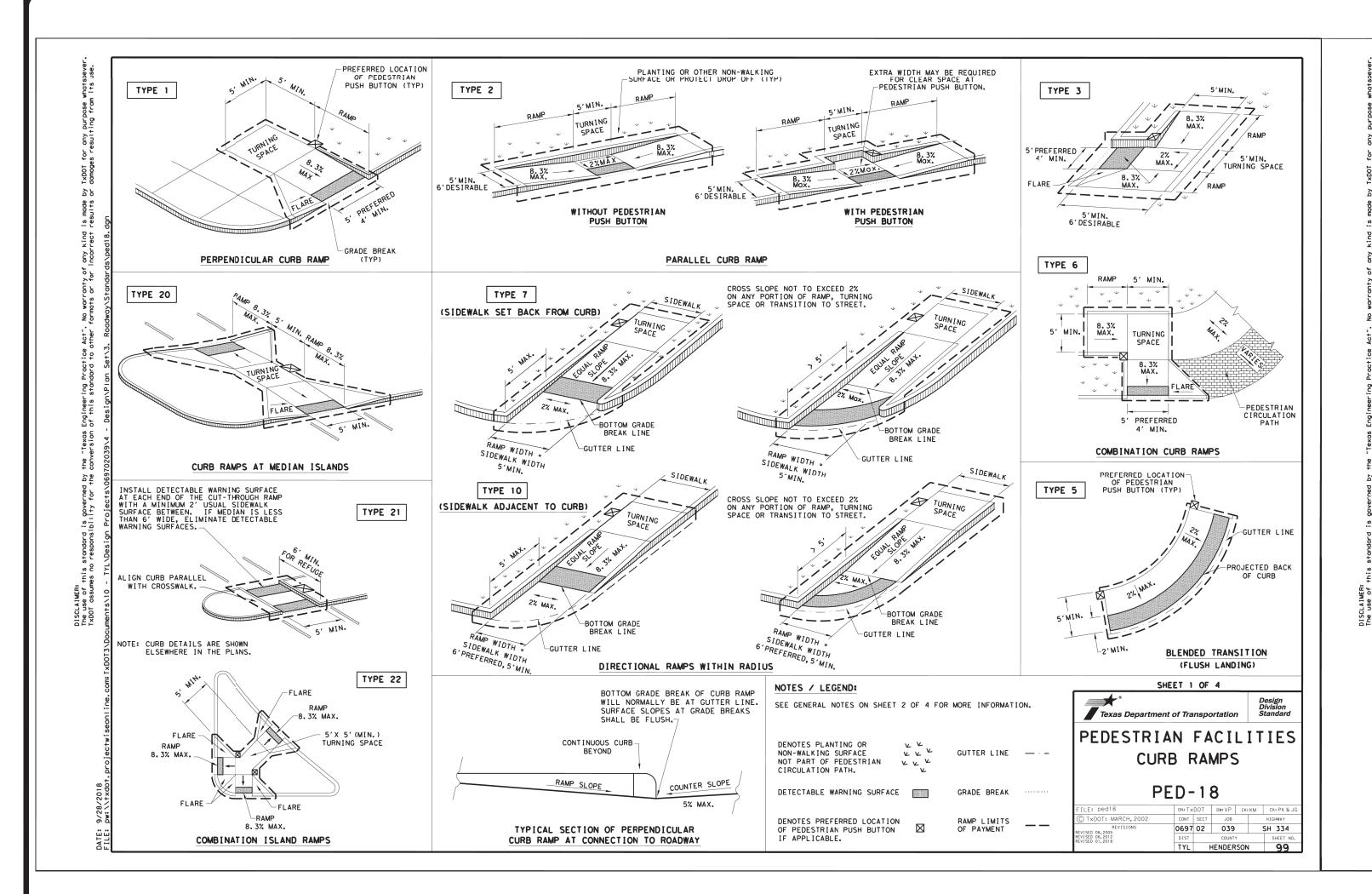
CURB PC -

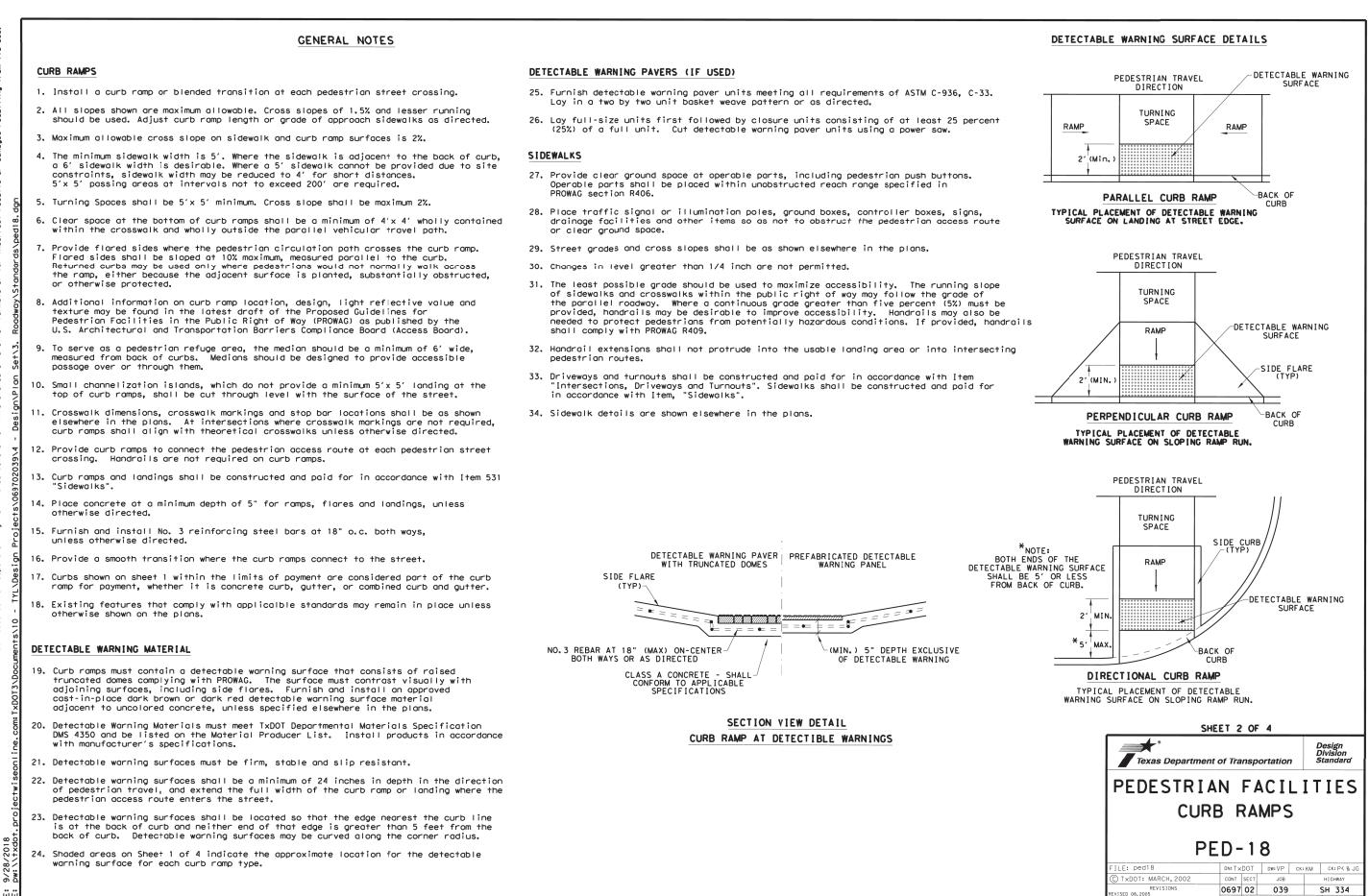
FULL CURB HEIGHT

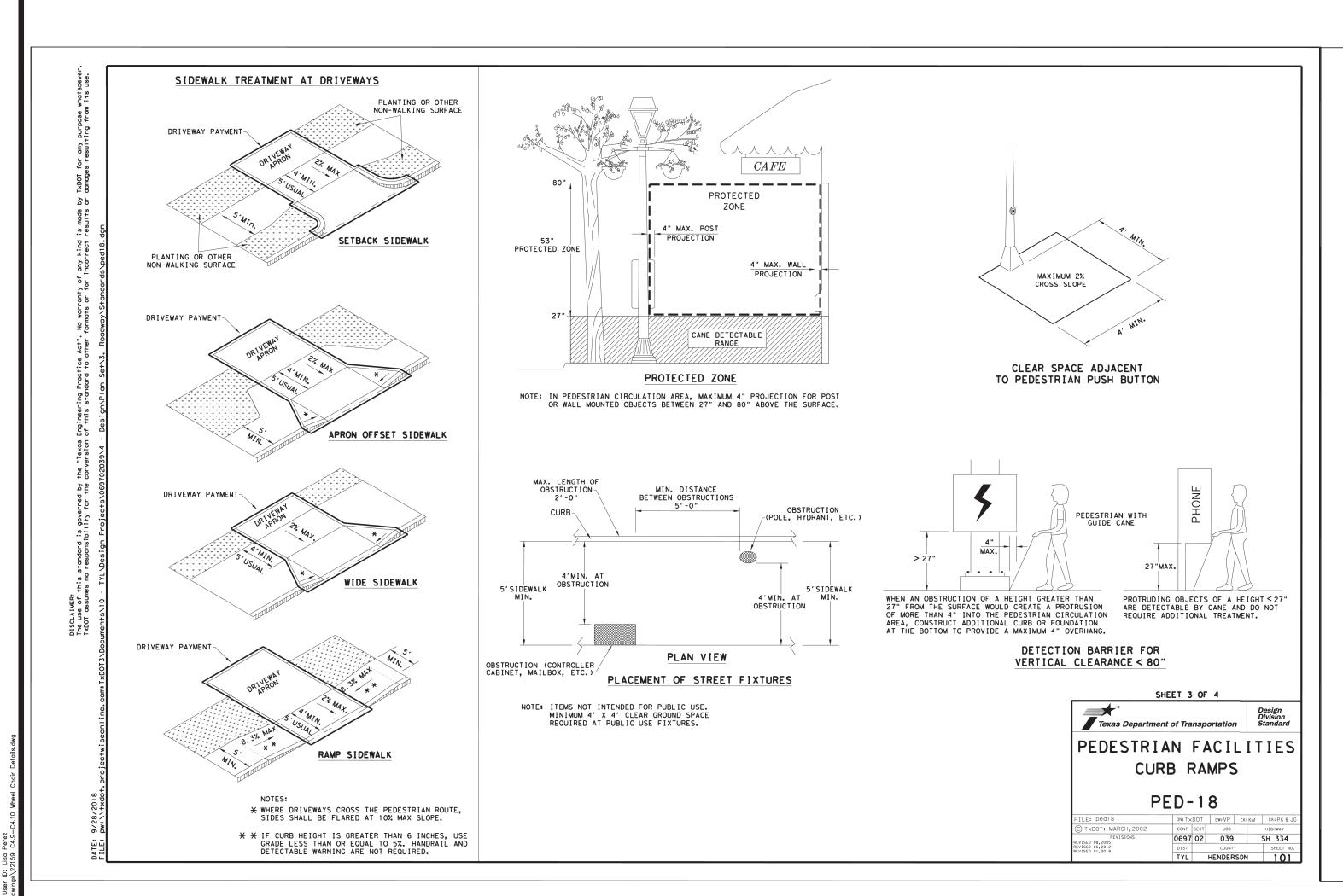
FULL CURB HEIGHT

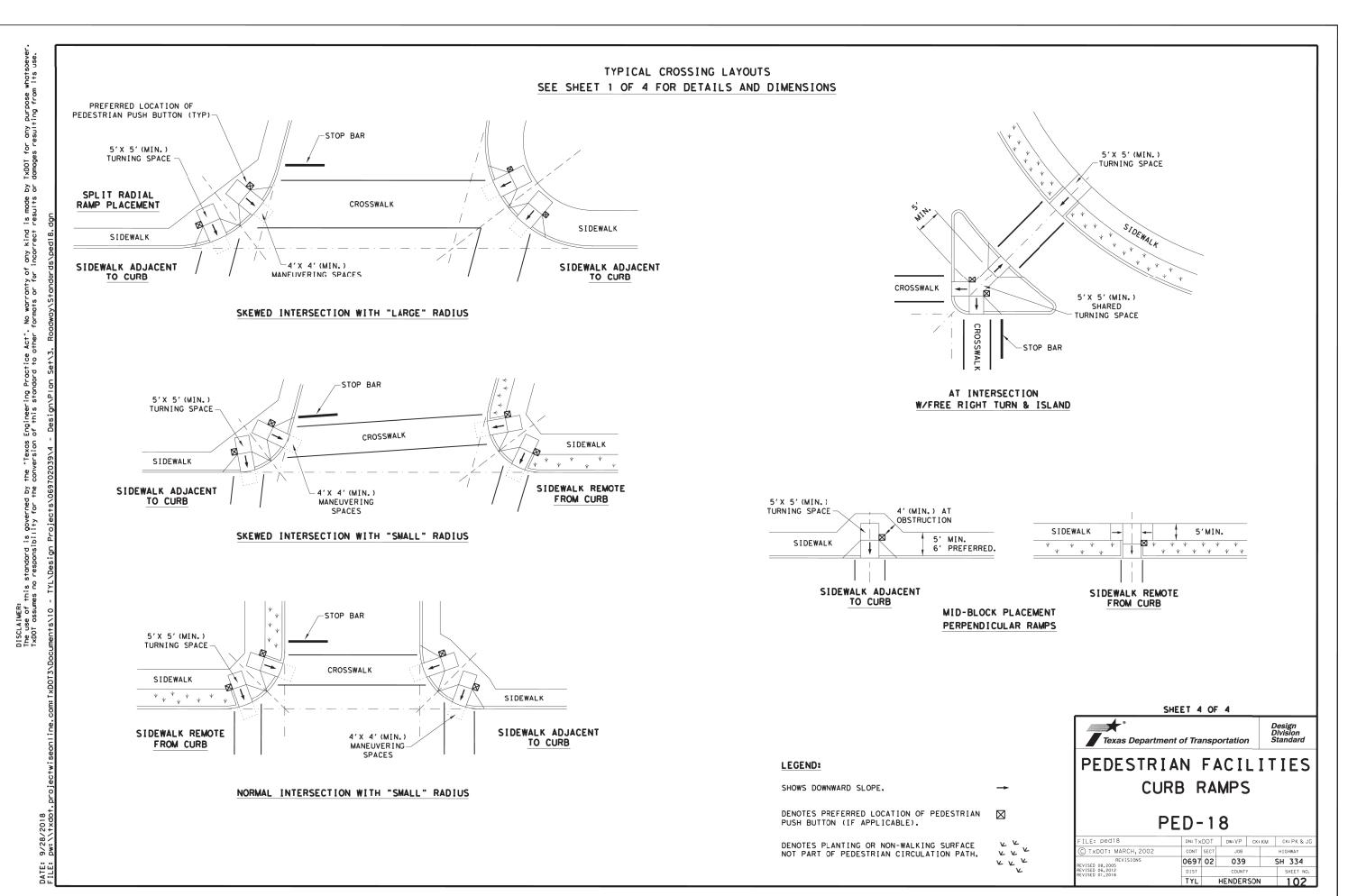
FLUSH CURB -

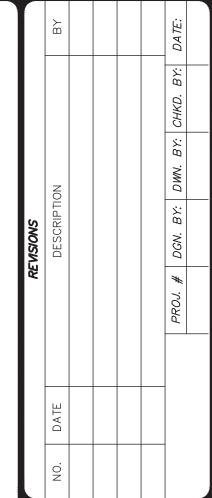
FULL CURB HEIGHT-













WHEELCHAIR RAMP DETAILS

SHEET

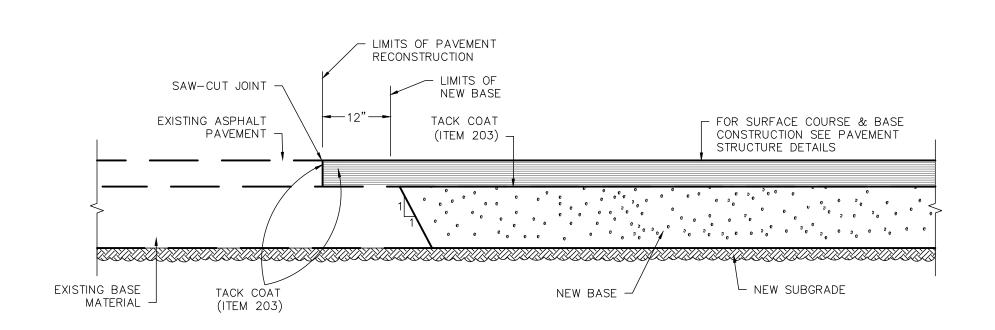
#### TYPICAL STREET CROSS-SECTION (28' PAVEMENT)

N.T.S. MORELIA MANOR - 4+19.88 TO 8+48.88 FLORAS HILL - 1+00.00 TO 6+52.20 LEON LODGE - 1+00.00 TO 8+09.09 PASEO PATH - 1+00.00 TO 3+90.00 GARCIA GROVE - 14+43.83 TO 21+84.33

#### \* PAVEMENT SECTIONS

CLAY SUBGRADE (CBR 4.0) PAVEMENT MATERIAL LOCAL A TYPE D ASPHALTIC CONCRETE 2.0 IN. FLEXIBLE BASE TXDOT ITEM 247 10.0 IN. TYPE A GRADE 2

LIME TREATED SUBGRADE 6.0 IN. (27 LB./SY.)



PAVEMENT JUNCTION DETAILS

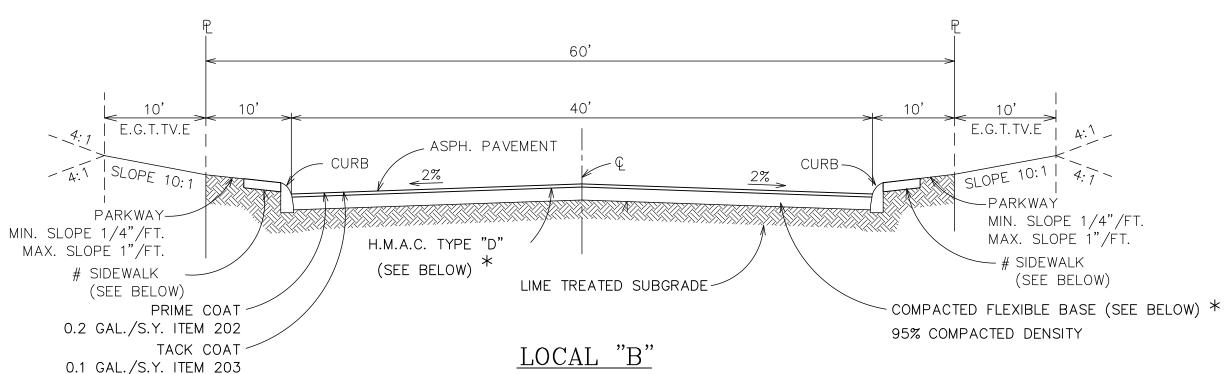
#### CONCRETE DRIVEWAY NOTES:

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.

0.1 GAL./S.Y. ITEM 203



### TYPICAL STREET CROSS-SECTION (40' PAVEMENT)

# 6' SIDEWALK WITH NO HOUSES FRONTING AND 4' SIDEWALK WITH HOUSES FRONTING

2% SLOPE TO CURB

- 6"X6" W2.9 X W2.9 WELDED

CONCRETE SIDEWALK DETAIL

WIRE FLAT SHEETS (ITEM 303)

OR #3 BARS AT 18" O.C. EACH

WAY CENTERED IN SLAB (ITEM 301)

– EXISING GROUND

CLASS "A" CONCRETE -

2" GRAVEL, CRUSHED ROCK, OR FLEX BASE MATERIAL.

#4 BARS @ 14" O.C.E.W.

NOTES:

6" CONC.

SLAB -

MORELIA MANOR - 2+00.00 TO 4+19.88

N.T.S.

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

#### LAND-PLAT-22-11800801

#### NOTES:

- APPLICABLE SPECIFICATIONS FROM "CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION"- JUNE 200 - FLEXIBLE BASE
  - 202 PRIME COAT 203 TACK COAT 205 - HOT MIX ASPHALT CONCRETE PAVEMENT

REFER TO INTEC GEOTECHNICAL REPORTS FOR ADDITIONAL PAVEMENT CONSTRUCTION INFORMATION A. SUBSURFACE EXPLORATION AND PAVEMENT ANALYSIS FOR PROPOSED NEW

STREETS - PALO ALTO POINTE (SILLER TRACT), SAN ANTONIO,

2. CONTRACTOR TO COORDINATE ALL MATERIAL TESTING

TX, DATED APRIL 19, 2023.

FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF LESS THAN 20 AND A CALIFORNIA BEARING RATIO (CBR) OF AT LEAST 4.0

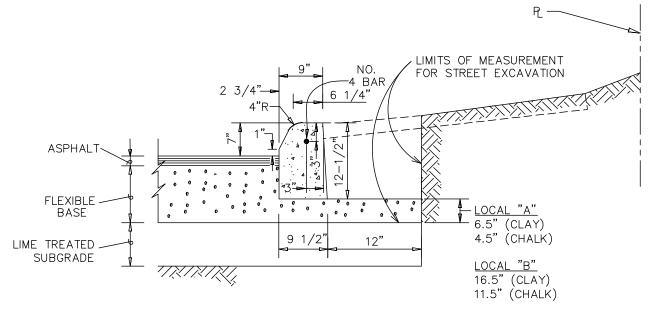
NOTE:
THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF LIME OR CEMENT

#### \* PAVEMENT SECTIONS

PAVEMENT MATERIAL <u>CLAY SUBGRADE</u> (CBR 4.0)

LOCAL B TYPE D ASPHALTIC CONCRETE 3.0 IN. FLEXIBLE BASE TXDOT ITEM 247 19.0 IN. TYPE A GRADE 2

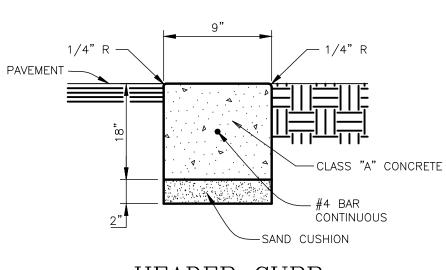
LIME TREATED SUBGRADE 6.0 IN. (27 LB./SY.)



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

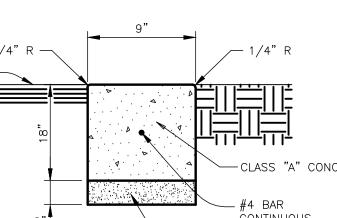
MACHINE LAID CURB ITEM 500

CURB NOTE: THE COST OF BASE



#### Subgrade Notes (\*):

- The pavement sections are based on Design CBR (California Bearing Ratio) value of 4.0.
- The cut and fill information are not known at this time.
- If fill is used to raise the grade, approved fill material free of deleterious material with a minimum CBR value of 4.0 and a maximum Plasticity Index value of 20 should be used. The material should be placed as per all applicable city / county guidelines.
- We anticipate the final pavement subgrade Plasticity Index value to be either less than or equal to 20 or greater than 20.
- o the final pavement subgrade Plasticity Index values are less than or equal to 20
- o thicker clay (Plasticity Index values greater than 20) stratum is encountered.
- The subgrade soils should be tested for soil sulfate content prior to treatment. If the soil sulfate content is over 3000 ppm, an alternate procedure will be needed.



- Sandy clay subgrades are anticipated.
- Subgrade treatment is not needed if:
- Subgrade **treatment**, to a depth of 6 inches, is needed if:
- Lime application rate (5 percent) 27 lbs per sq yard for 6 inch depth of treatment may be used.
- Cement may be used in lieu of lime. Please contact InTEC to determine the cement application rate at the time of construction.

SHEET

C4.11

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TAN

PAUL LANDA, JR. 100182

SUBMITTAL SET

TEMPORARY MAIL BOX COLLECTION PAD

- SUBGRADE COMPACTED TO 90% DENSITY

CONCRETE SIDEWALKS AND DRIVEWAYS"

NO SEPARATE PAY ITEM.

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.

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

THE CONSTRUCTION OF SLABS SHALL CONFORM TO ITEM NO. 502

#### **COUNTY OF BEXAR**

PUBLIC WORKS DEPARTMENT

233 N. Pecos La Trinidad, Suite 420 San Antonio, Texas 78207-3188 Main 210-335-6700

#### STANDARD SPECIFICATIONS FOR **BEXAR COUNTY RIGHT-OF-WAY PERMITS**

#### General Requirements

(SEE NOTE NO. 6)

UTILITY LINE

SAW CUT-

CONDUIT CASING

(SEE NOTE NO. 3)

- 1) A site development plan shall be drawn to scale, and shall indicate:
  - a. Dimensions and locations of sidewalks, pedestrian passing spaces, driveways, curb ramps or median crossovers being requested,
  - b. Locations of existing and proposed roads or roadway intersections if within 100 feet of
  - c. Locations of existing or proposed structures, storm sewer inlets, fire hydrants, curb ramps, utility poles, fences and service fixtures within 20' of the proposed improvement within the right-of-way.
- 2) Any work in a floodplain will require a floodplain development permit.
- 3) Separate permits are required for temporary construction and permanent entrances.
- 4) Drip irrigation (or equivalent) systems will be permitted provided an approved City of San Antonio irrigation permit (in the ETJ) and an approved license landscape agreement is submitted with the application. No other irrigation system will be allowed.
- 5) Monuments or "special" landscaping will not be permitted without an approved license
- 6) All utility road crossings will be bored a minimum of 30 inches below the pavement structural section. Water jetting under a street will not be permitted. Casing will be required on any pressurized utility line crossing. No open cuts will be permitted on any paved roadway, curb, sidewalk, or driveway unless utility connection is located within the street.
- 7) If a partial or total road closure will be needed, a traffic control plan shall be submitted with the permit application.
- 8) For all work that requires a partial road closure, Contractor will maintain at least one (1) 12-foot traffic lane, controlled with flagmen, during working hours and open the roadway up to two (2) traffic lanes (24 ft.) during all non-working hours. Contractor will furnish and maintain all required traffic control devices, per TMUTCD and as directed by the design Engineer, to properly warn, guide, and control traffic at all times during construction.
- 9) For work that requires a total road closure, Contractor must notify Bexar County Public Works Traffic Section (210-335-6700) at least 72 hours before closing the road.
- 10) Notify the Inspection Section at 210-335-6700 with permit number at least 24 hours before starting the activity. No inspection shall be made without a permit.
- 11) Storage of materials within 10 linear feet of edge of pavement without appropriate traffic safety barrier is prohibited.
- 12) Driveway, sidewalk and curb repairs will follow current City of San Antonio specifications.
- 13) All disturbed ADA routes must be brought up to current ADA standards. (Brick pavers, slopes,
- 14) Alternative ADA accessible routes shall be designated during construction where an existing accessible route is disturbed.
- 15) When a driveway culvert is required or replaced, the minimum pipe size for the culvert shall be 15 inches, unless a larger diameter pipe is required as determined in the field or during the permit review (e.g., larger pipe cross-sectional area will be required if the existing culvert upstream of the proposed driveway is larger the proposed culvert). (See Culvert Detail).
- 16) Concrete end treatments, safety end treatments and/or headwalls, shall be installed where culverts under roadways, driveways, or other structures in the right-of way are required,

STREET CUT REPAIR DETAIL W/O SEAL COAT

PAVEMENT REPLACEMENT LIMITS

VARIES (SEE NOTE NO. 2)

MIN. 2" HMAC, TYPE "D" AT

TRENCH WIDTH

>3' - <6' >6' - <9'

>9'

I. ALL UTILITIES WILL BE BORED UNDER EXISTING PAVEMENT. ONLY AT THOSE LOCATIONS AT WHICH IT IS PHYSICALLY IMPOSSIBLE TO BORE WILL THE PAVEMENT BE ALLOWED TO BE CUT AND RESTORED ACCORDING TO THIS DETAIL.

2. THE LIMITS OF THE PAVEMENT REPLACEMENT WILL BE DETERMINED AT THE TIME A PERMIT IS REVIEWED AND MUST BE SAW

CUT STRAIGHT. TACK OIL AT A RATE OF 0.10 GAL/SY SHALL BE PLACED PRIOR TO PLACEMENT OF 2" HMAC TYPE "D" FINISHED

SURFACE. LONGITUDINAL ROADWAY CUTS WILL BE PAVED WITH THE CLOSEST LINE EXTENSION OF THE EXISTING PAVEMENT

3. CONDUIT CASING TO BE PROVIDED AND INSTALLED BY UTILITY COMPANY FOR ALL UTILITIES, EXCEPT FOR SANITARY SEWER

GRAVITY LINES AND NATURAL GAS SERVICE LINES. MATERIAL TO BE USED SHALL BE DUCTILE IRON (FOR DEPTHE LESS THAN OR EQUAL TO 36"),SCHEDULE 40 PVC PIPE (GREATER THAN 36" DEEP), OR APPROVED EQUAL BY COUNTY ENGINEER. THE CONDUIT CASING SHALL EXTEND A MINUMUM OF FIVE FEET OUTSIDE THE EDGE OF SHOULDER OR CURBING DEPENDING ON FUTURE

4. A 10" TYPE B (aggregated base) , BENCHED (A) FEET EACH SIDE OF TRENCH, WILL BE USED FOR THE FINAL LIFT

OF THE TRENCH REPAIR. THE ASPHALT TREATED BASE, PLACED IN 5" LIFTS, SHALL BE BROUGHT UP TO WITHIN 2 INCHES OF THE

5. THE UTILITY COMPANY WILL BE RESPONSIBLE FOR THE MAINTENANCE OF OF THE STREET CUT THEREAFTER UNTIL AND IF THE

7. WHEN GEOGRID OR OTHER GEOSYNTHETIC SUBGRADE/BASE REINFORCEMENT IS PRESENT, THE CONTRACTOR SHALL

95% STD. PROCTOR DENSITY

(SEE NOTE NO. 6)

♠- OUTSIDE - TRENCH LIMITS

- EXIST. ASPHALT

FEBRUARY 09, 2011

LEXIST. ROADWAY

10" TYPE B (aggregated base

CAP AT 95% STD. PROCTOR

SUITABLE AND APPROVED BACKFILL MATERIAL PLACED IN LOOSE MEASUREMENT AND COMPACTED TO

95% STANDARD PROCTOR DENSITY OR

QUICKSET FLASH FILL OR OTHER

METHOD APPROVED BY COUNTY

SAND, GRAVEL SUBGRADE FILLER,

OR PEA GRAVEL FOR THE FILL

AROUND THE CONDUIT CASING

\*SEE NOTE 7

\*\*ROUNDED TO NEAREST FOOT

UNDISTURBED SUBGRADE

(A) (FEET- NO GEOGRID)\*

W/3\*\*

DENSITY (SEE NOTE NO. 4)

Bexar County ROW Standard Specifications June 4, 2013

Page 2 of 3

- modified or replaced. (See Culvert Detail). 17) Where existing guardrail is removed, it shall be replaced according to latest version of TxDOT
- 18) Trenches excavated in parkways where existing surface grade exceeds 5% shall require cement stabilization or approved equivalent. The cement stabilized base will consist of a 1½-2 sack mix per CY with the trench being over excavated by at least one foot on each side to a depth of 6"-8" for the stabilized base backfill. (See Cement Stabilized Trench Backfill Detail).
- 19) Trenches excavated outside of the roadway and within 2 linear feet of the edge of pavement shall be backfilled with cement stabilized as noted above or approved equivalent. (See Cement Stabilized Trench Backfill Detail).
- 20) All damaged pavement shall be reconstructed to existing or better condition. Limits of reconstruction shall be determined by the Development Services Engineer or Inspector.
- 21) Where roadway markings are added or replaced, thermoplastic pavement marking material shall be used in accordance with the latest TxDOT standards.
- 22) Pavement design for auxiliary lanes abutting an existing road shall be minimum 2" HMAC Type D (or Type C) and 12" HMAC Type B or match existing pavement section (if known). 23) If crack sealing is required, the sealant shall be hot pour.
- 24) If a chip seal is required, follow TXDOT Spec Item 316. Use CRS-2P emulsion at a rate of 0.30 gal/SY with a Grade 5T, Trap rock aggregate at a rate of 16.5 #/SY.

#### 25) If a fog seal is required, [Specified Appropriate Types] at a rate specified by the manufacturer. 26) If a mail box is replaced, the mail box shall comply with the latest version of TxDOT standards.

#### **Trenches**

#### Roadway

- 1) If a trench cut is allowed, trench repairs on roadways with pavement over 5 years old or have an OCI less than 85 will require minimum patch width of 10' with no less than 2' of pavement extending outside open cut edge in all directions at a minimum. Intersections, knuckles, cul-desacs, and roadway pavement that is less than 5 years old or has an OCI greater than or equal to 85 may require additional pavement replacement. Existing asphalt to be removed shall be saw cut, milled and overlayed as determined during the permit review.
- 2) Unless otherwise noted in the issued permit, trenches are to be back filled no less than 10" from bottom of final surface treatment with flowable fill. Above the flowable fill, a minimum 10" Type B HMAC and no less than 2" of HMAC Type C asphalt benched 1' outside trench will be required. New roads may require 2" HMAC Type "D" asphalt.
- 3) Curb repairs that disturb the edge of roadway will require minimum 18" wide asphalt replacement (minimum 2" depth) from the face of curb. The replacement will extend a minimum of 18" from each end of the curb replacement area.
- 4) For additional repair information, please refer to General Requirements 20 through 25.

#### Driveway

1) If a bore underneath an existing driveway is not possible, the entire driveway will need to be

SEE NOTE 3

CURB PROFILE AT DRIVEWAY

SEE NOTE 3

CONCRETE DRIVEWAY

(2) 45° FOR COMMERCIAL DRIVEWAY

WITH SIDEWALK ABUTTING CURB

**CURB TRANSITION DETAIL** 

TYPICAL DRIVEWAY PLAN VIEW

WITH SIDEWALK ABUTTING CURB

2' MAX.

EXPANSION JOINT

SEE NOTE 7

RESIDENTIAL

MAX.

NO CURB (REFER TO

STREET PLAN AND PROFILE SHEETS)

- replaced from ROW to edge of pavement or curb. 2) For additional repairs, please refer to Trenches – Roadway and General Requirements 12
- through 19.

SLOPE (1:12)

MAXIMUM

Bexar County ROW Standard Specifications June 4, 2013

#### Sidewalk and Curb

1) If a bore underneath an existing sidewalks or curb is not possible, the sidewalk and/or curb will need to be replaced from expansion joint to expansion joint.

Page 3 of 3

2) For additional repairs, please refer to Roadway Trenches and General Requirements 12

#### **Emergency Repairs**

TOP OF ASPHALT PAVEMENT

SLOPE (1:12)

MAXIMUM

WHERE RETAINING WALL COMBINATION TYPE IS REQUIRED AT DRIVEWAYS, IT

SHALL BE CONSTRUCTED AS SHOWN

/2" EXPANSION JOINT

DUMMY JOINTS

- NEW 7" CURB, TYPICAL

NEW ASPHALT OR CONCRETE

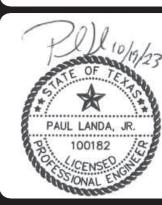
PAVEMENT REFERENCE GRADING

1' OR AS INDICATED ON

STREET PLAN AND PROFILES

MATERIAL OR 3 / 4" REDWOOD OR CYPRESS WOOD JOINT

- A repair is considered to be an emergency if:
  - a) Repair will protect public health or safety; and
- b) Repair must be started before obtaining a ROW permit. 1) Submit a Bexar County ROW permit application within 24 hours of the start of the repair. (Fax
- 335-6713; email: row.permit@bexar.org) 2) Provide photographs, plan and/or detail of area of repair identifying description of work (e.g.
- driveway, sidewalk, roadway, drain structures etc.)
- 3) Permanent repairs are to be completed within a month of permit application submittal and require a Bexar County Inspector to be present during construction.



Ш  $\propto$  $\propto$ NA

## TYPICAL RESIDENTIAL DRIVEWAY SECTION

DRIVEWAY APRON LENGTH

AS SHOWN ON PLANS

5" CLASS "A" CONCRETE

DRIVEWAY

PENETRATION

2" MINIMUM GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL

SEE NOTE 1

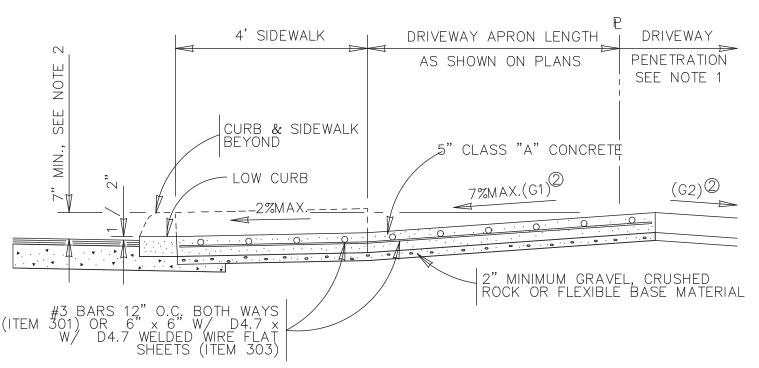
WITH SIDEWALK ABUTTING CURB ITEM 502-2

4' SIDEWALK

CURB & SIDEWALI BEYOND

-LOW CURB

---2%MAX:----



#### TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS ABUTTING CURB ITEM 502-2

# 2) THE ALGEBRAIC DIFFERENCE OF G1 & G2 SHALL BE 14% OR LESS

C4.12

SHEET

CONDUCT EXCAVATION TO PROVIDE APPROPRIATE OVERLAP (2' MIN.) AND TIE TO EXISTING UNDISTURBED REINFORCEMENT AS

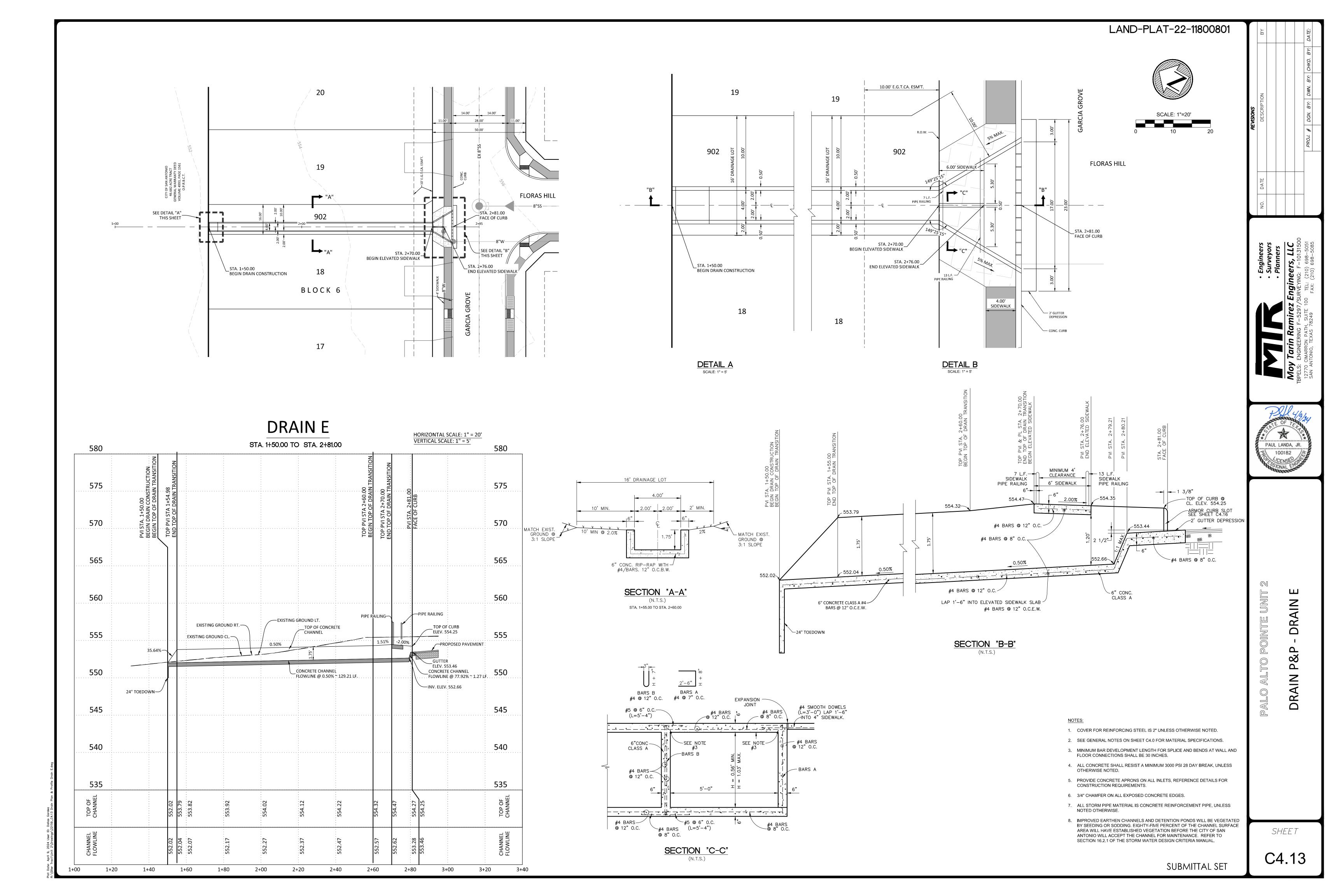
REQUIRED BY MANUFACTURER FOR EACH LAYER OF REINFORCEMENT ENCOUNTERED. PREPARED BY: BEXAR COUNTY PUBLIC WORKS DIVISION

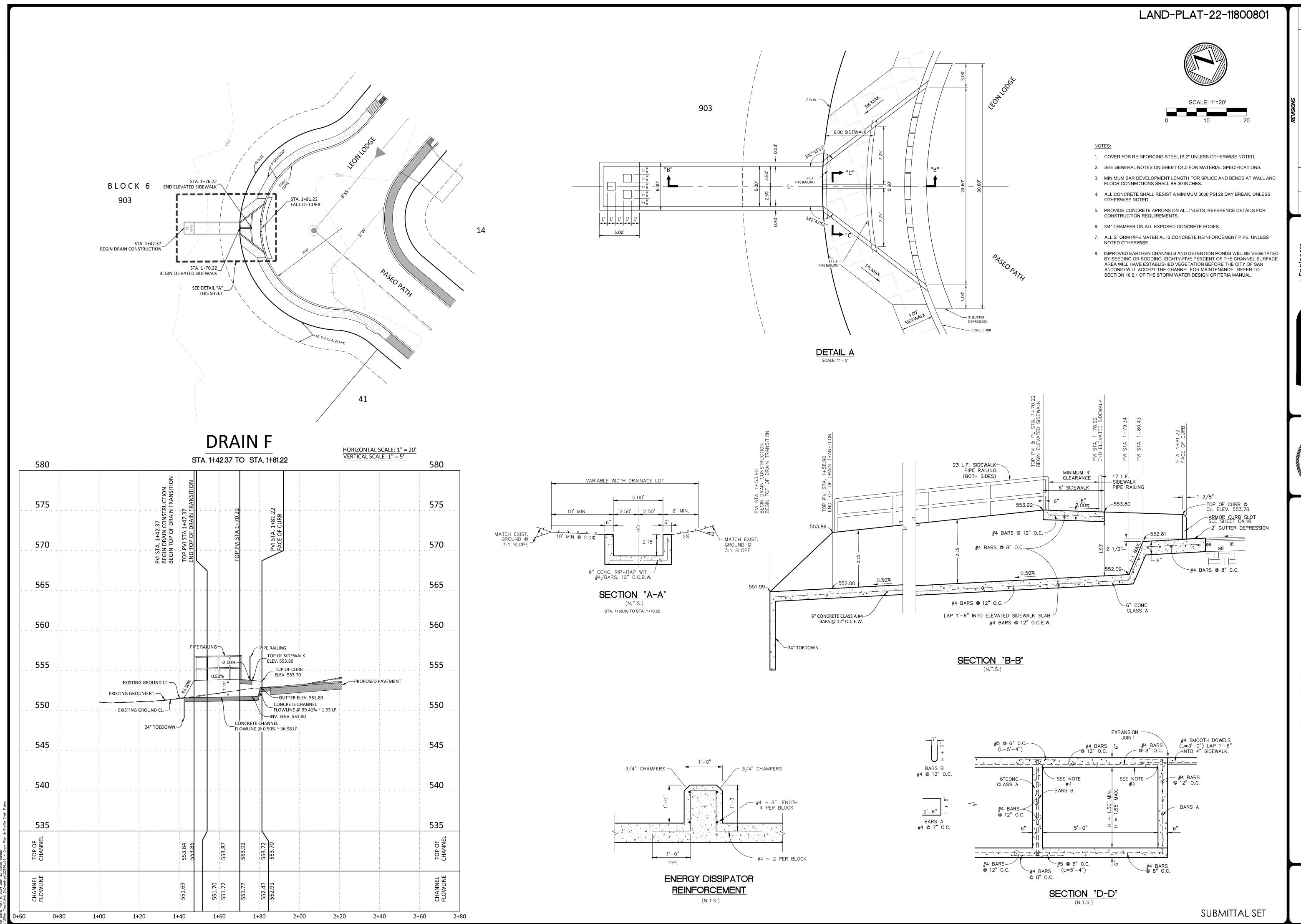
COUNTY REMOVES THE STREET CUT THROUGH RECONSTRUCTION.

6. HMAC PAVEMENT MUST BE MILLED & REPLACED 50 FT EACH DIRECTION.

EXPANSION OF STREET WIDTH.

SUBMITTAL SET





NO. DATE DESCRIPTION BY CHKD. BY DATE:

Surveyors
Surveyors
Planners
Engineers, LLC
YSURVEYING: F-10131500

Moy Tarin Ramirez EngiPELS: ENGINEERING F-5297/SURVESIAN ANTONIO, TEXAS 78249 FAX

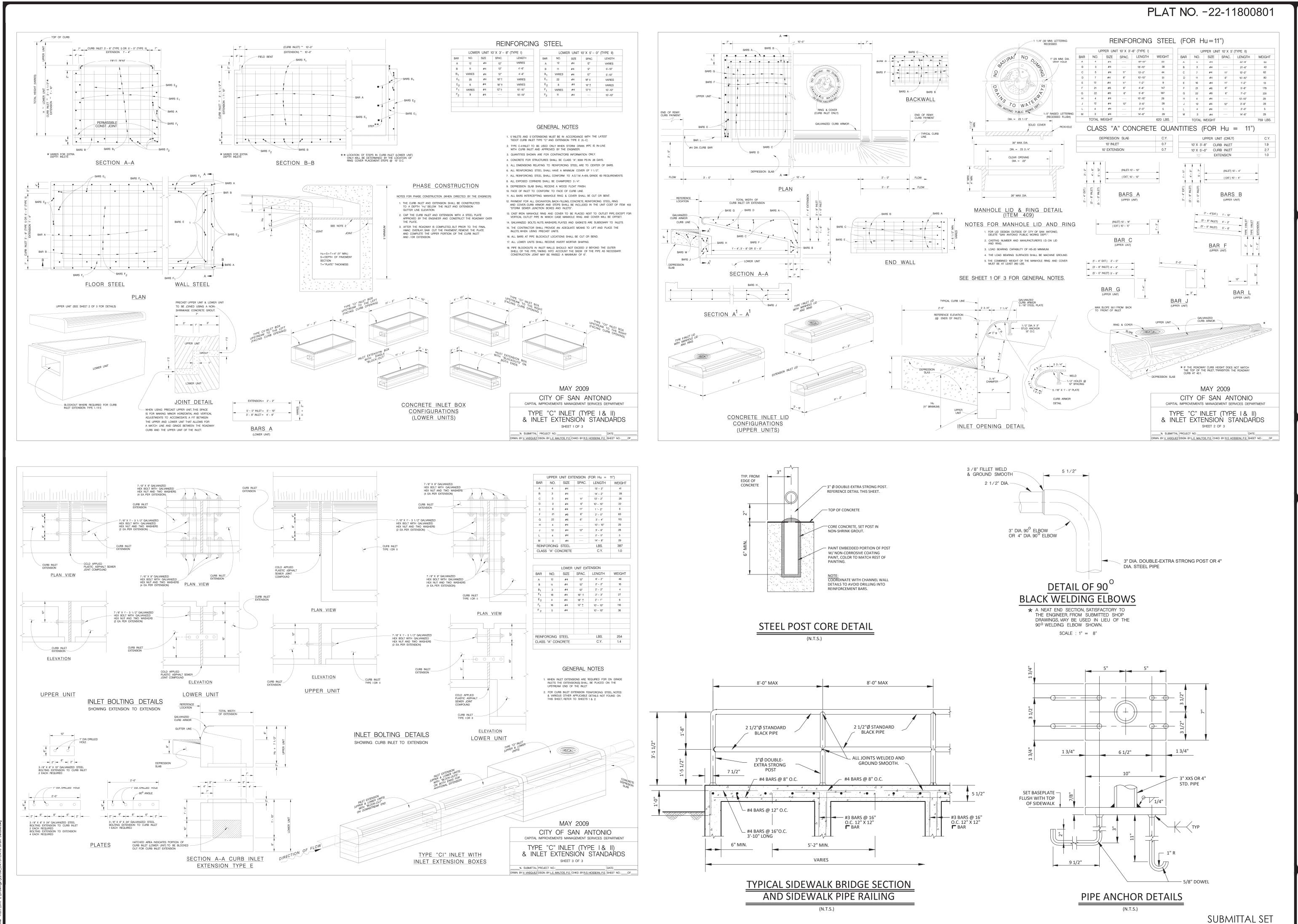
PAUL LANDA, JR.

9 100182 G
CENSE

DRAIN P&P - DRAIN F

SHEET

C4.14



NO. DATE DESCRIPTION BY: CHKD. BY: DATE:

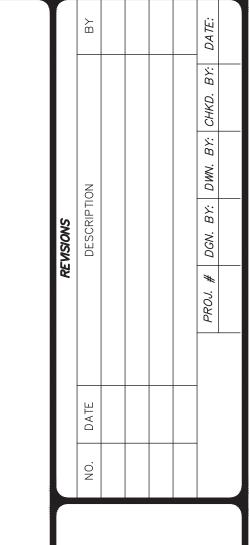
• Surveyo
• Planner
in Ramirez Engineers, Ll
EERING F-5297/SURVEYING: F-1013
ON PATH, SUITE 100 TEL: (210) 698-5



STANDARD DRAINAGE DETAILS

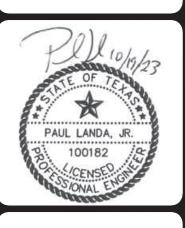
SHEET

C4.15



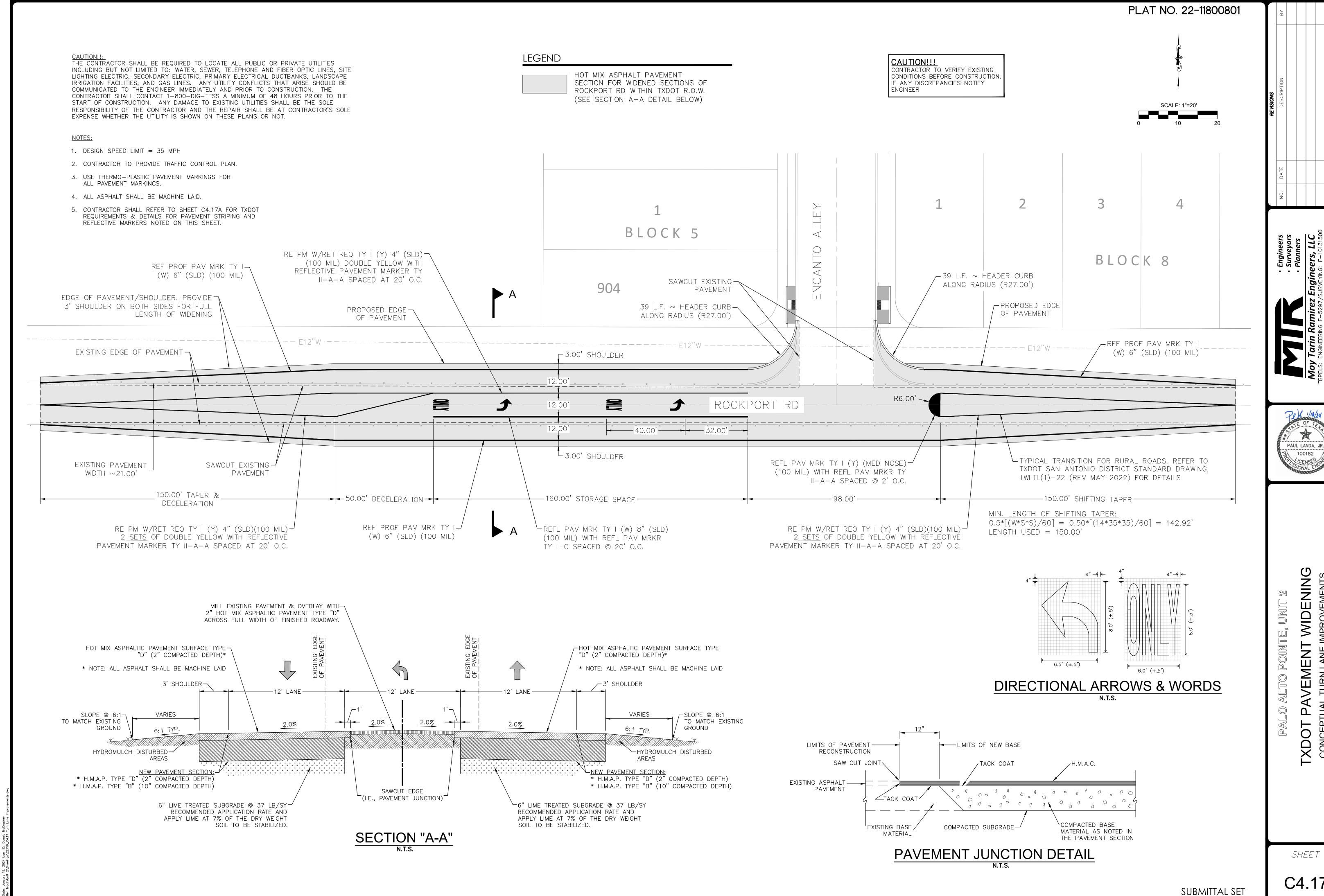
• Engineers
• Surveyors
• Surveyors
• Planners
irez Engineers, LLC
•5297/SURVEYING: F-10131500





STANDARD DRAINAGE DETAILS

SHEET

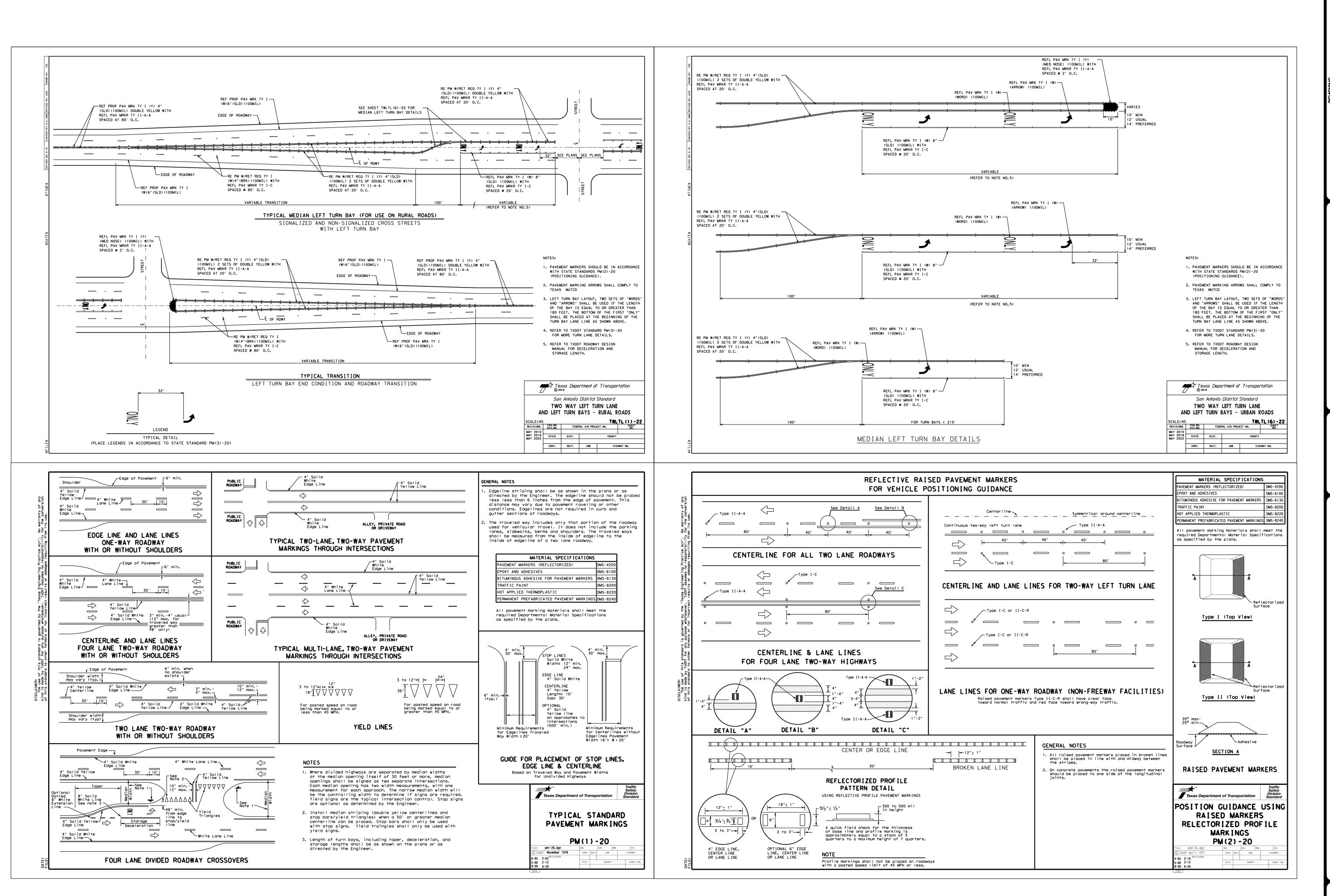


C4.17

100182

PAVEMENT WIDENING FUAL TURN LANE IMPROVEMENTS

CONCEPTUAL TO CO



DESCRIPTION

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

Surveyors

Surveyors

Planners

Ramirez Engineers, LLC

NG F-5297/SURVEYING: F-10131500

ATH, SUITE 100 TEL: (210) 698-5051

PAUL LANDA, JR.

100182

CENSE
SONAL ENGINE

TXDOT PAVEMENT WIDENING

TXDOT STANDARD DETAILS

SHEET

### NOTES:

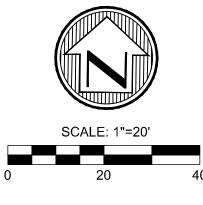
PROPOSED CONTOUR

DRAINAGE FLOW DIRECTION

- 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 WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE TXDOT WILL ACCEPT THE CHANNEL FOR MAINTENANCE.

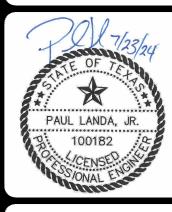
## FLOW CALCULATION DATA:

- \* TOTAL CONTRIBUTING FLOW AREA = 0.654 ACRES
- \* TIME-OF-CONCENTRATION, Tc = 15.5 min. MAXIMUM
- \* RAINFALL INTENSITY VALUES FOR PRECIPITATION AREA 5 = 5-YEAR STORM (i5) = 5.11 in/hr
- 25-YR STORM (i25) = 7.07 in/hr
- 100-YR STORM (i100) = 8.86 in/hr
- \* RUNOFF COEFFICIENT (C) = 0.77
- THEREFORE, RESULTANT FLOWS:
- --- Q5 = 2.57 cfs --- Q25 = 3.56 cfs
- --- Q100 = 4.46 cfs





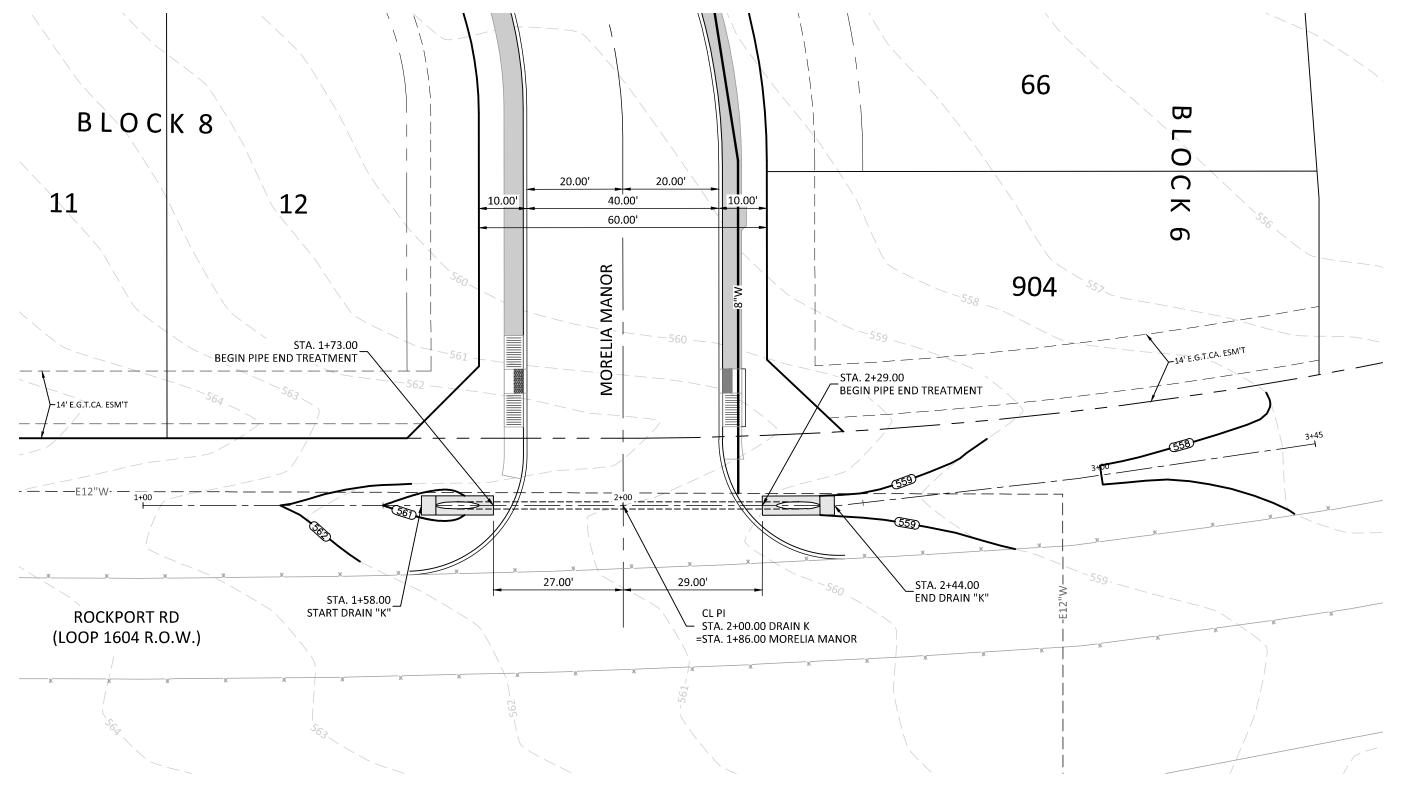


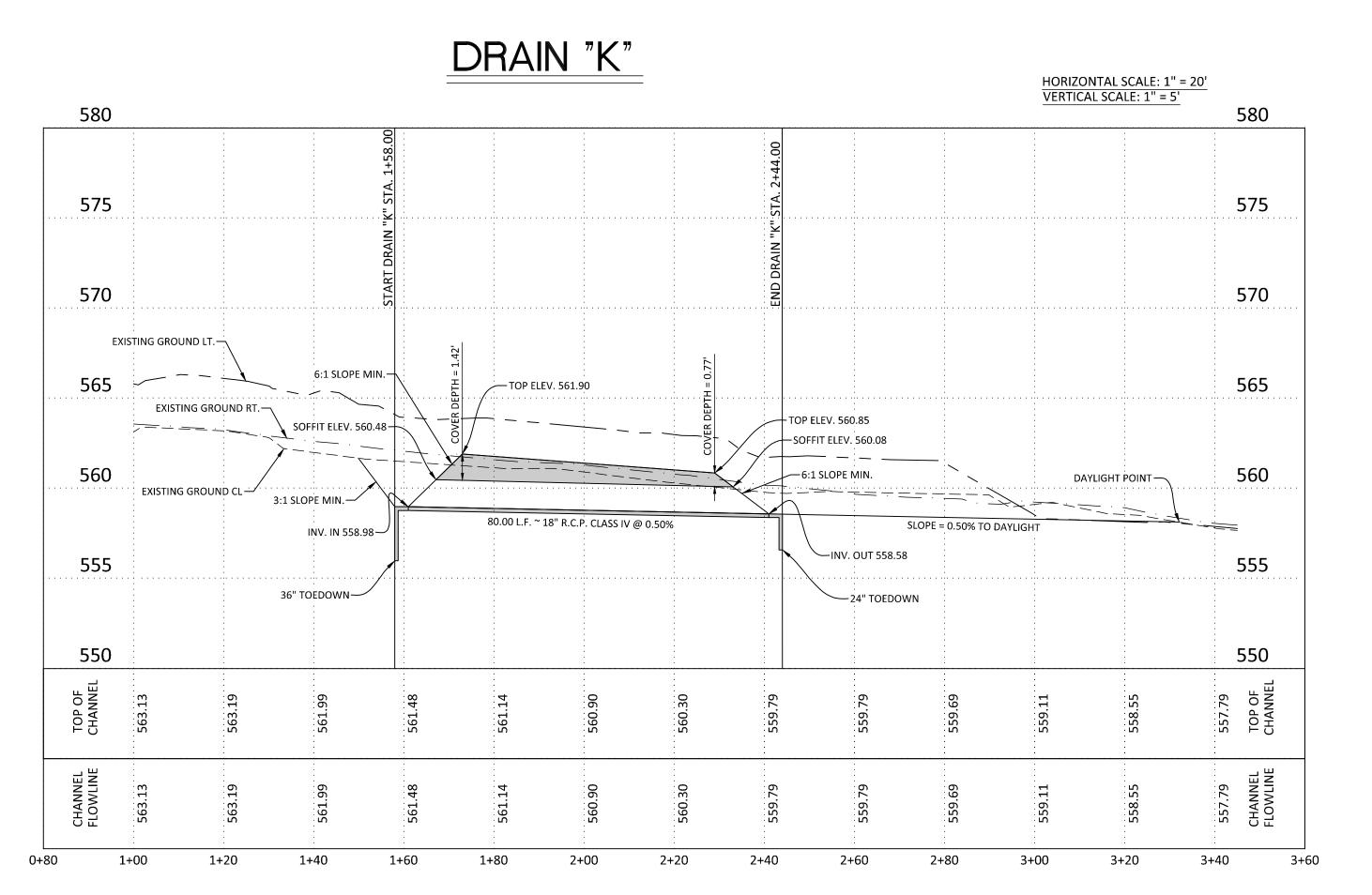


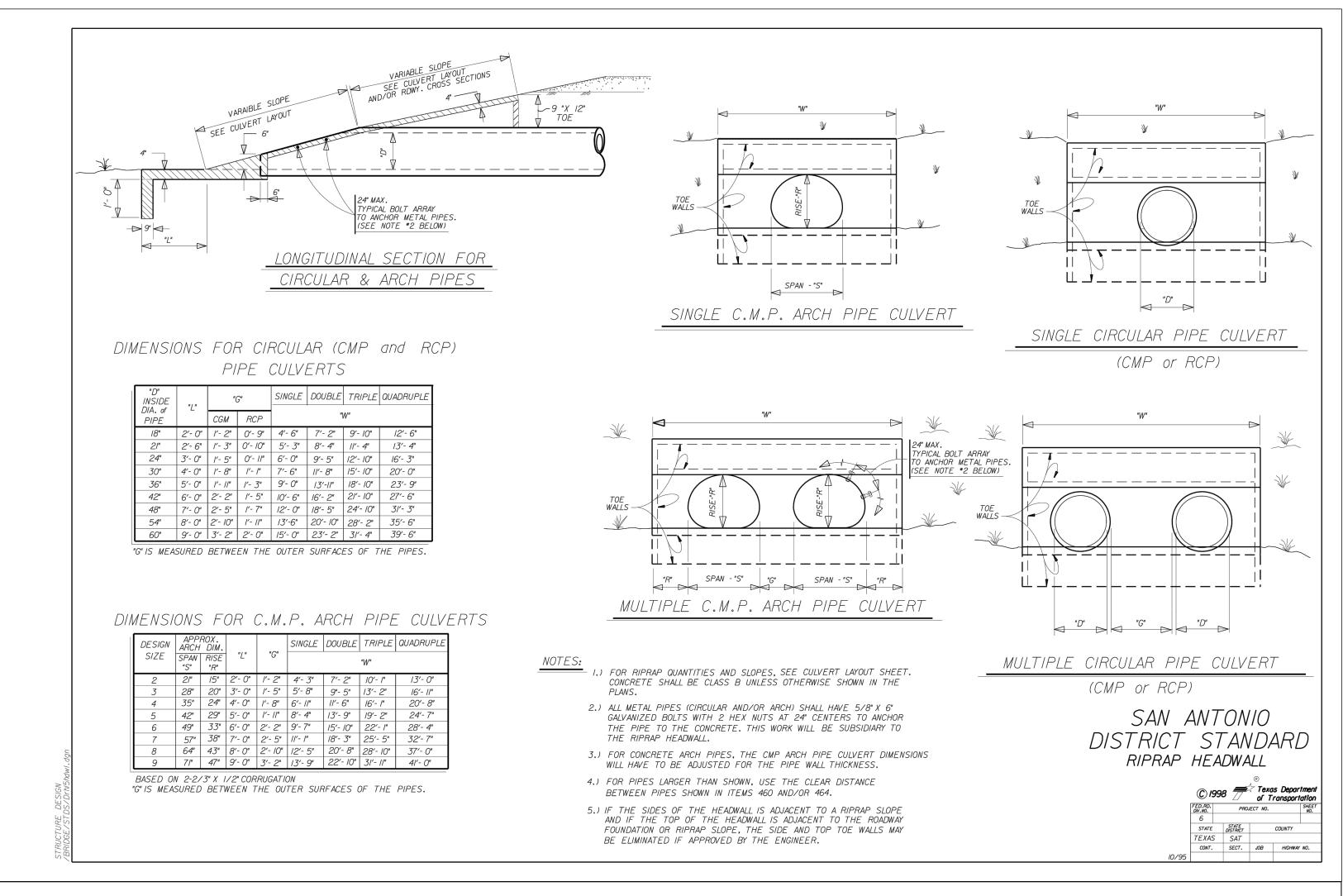
DRAIN DRAIN

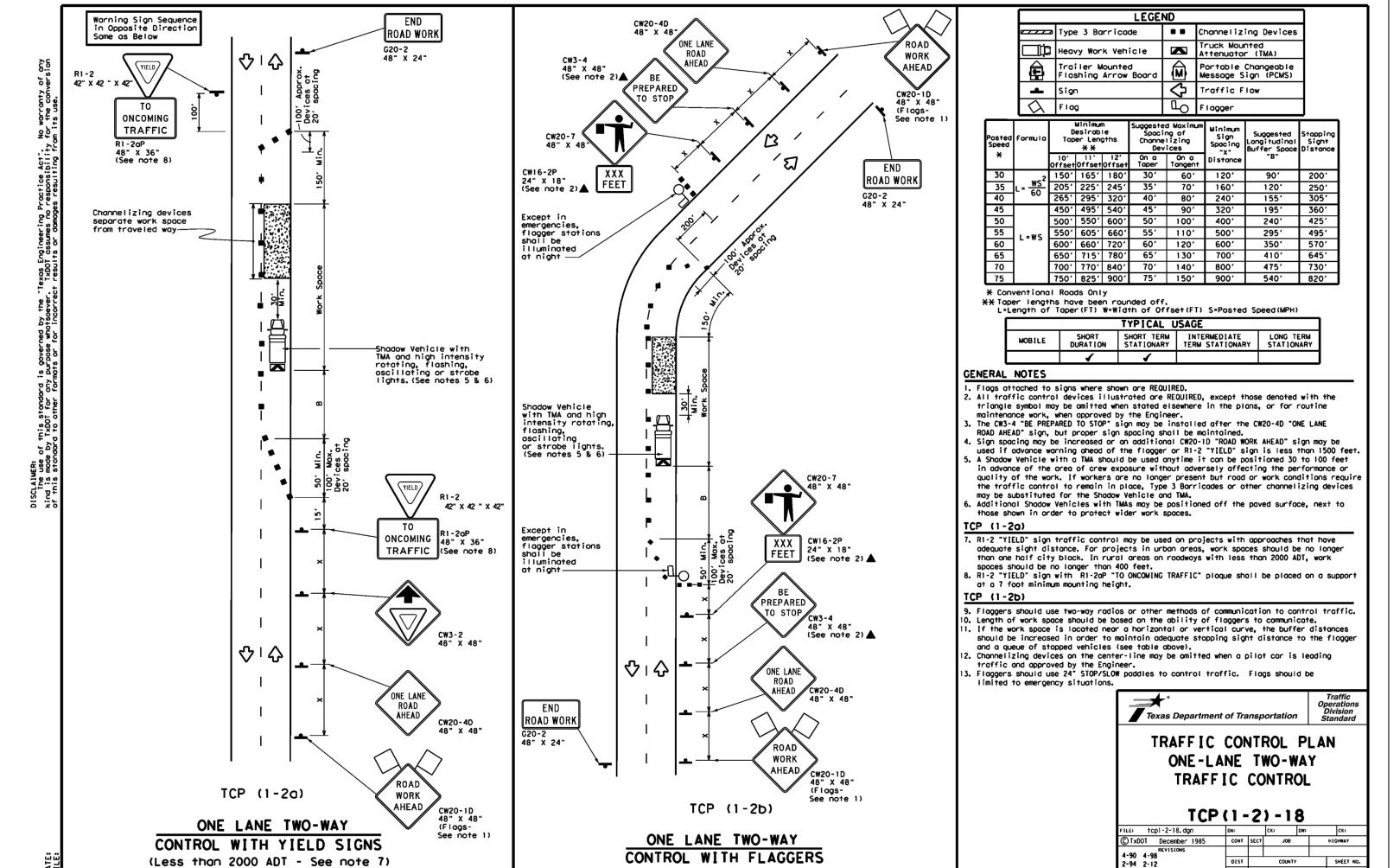
SHEET

C4.18









NO. DATE DESCRIPTION B

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

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

• Engineers
• Surveyors
• Surveyors
• Planners
rez Engineers, LLC
297/SURVEYING: F-10131500

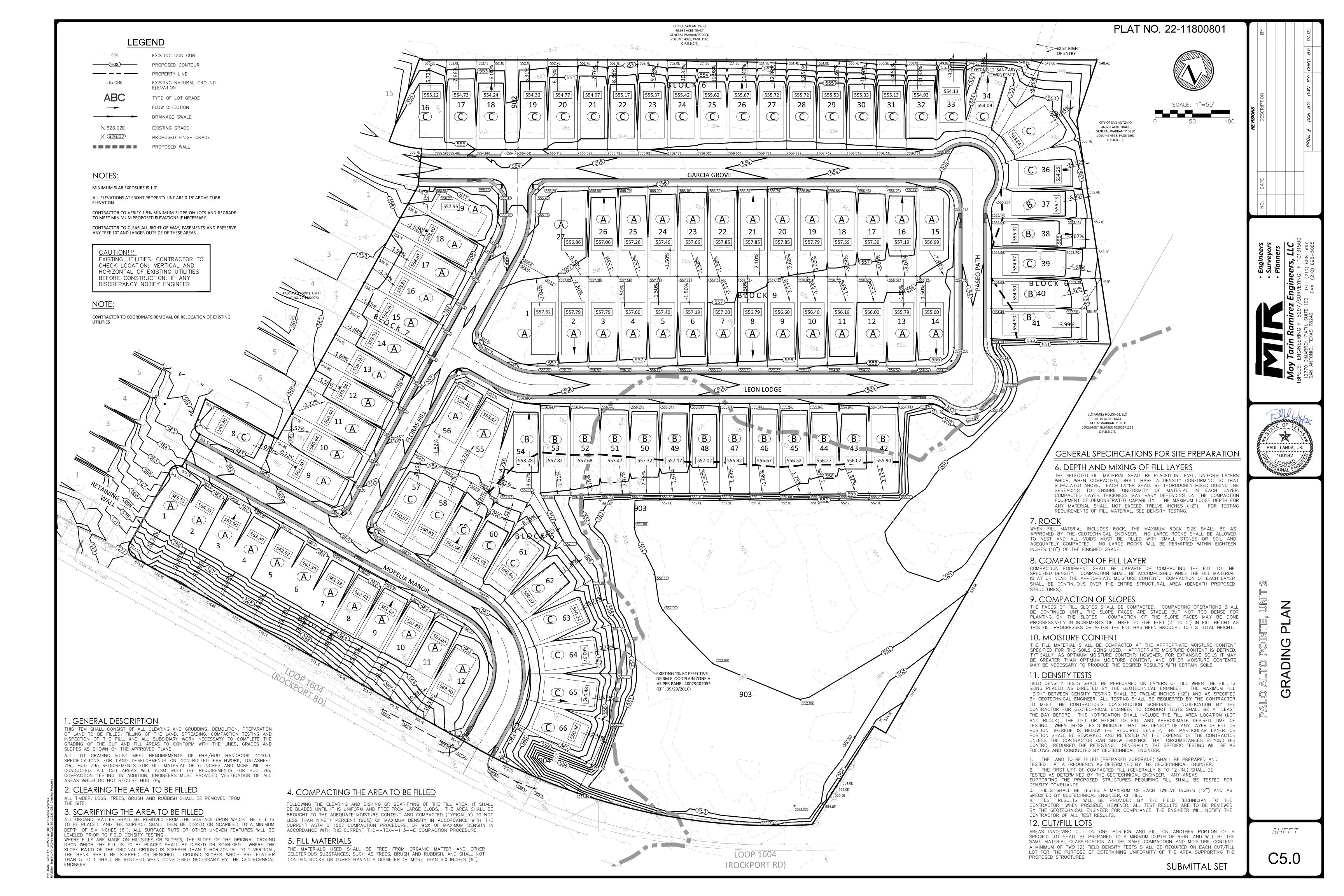




TXDOT STANDARD DETAILS

DRAIN "K"

SHEET



MINIMUM SLAB EXPOSURE IS 1.0'.

ALL ELEVATIONS AT FRONT PROPERTY LINE ARE 0.18' ABOVE CURB

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

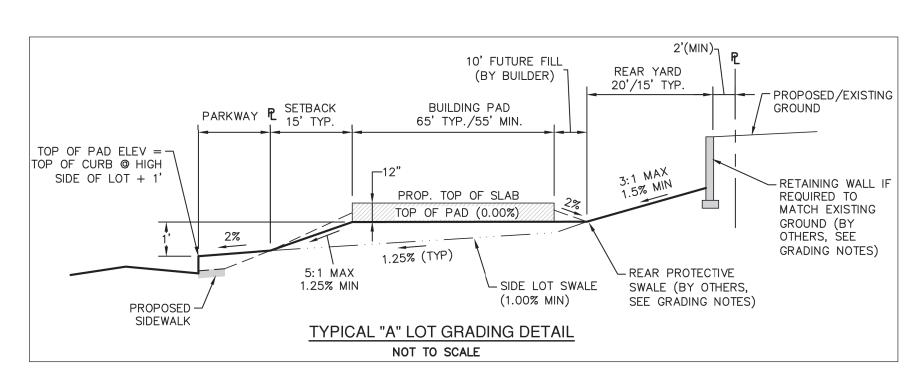
CONTRACTOR TO CLEAR ALL RIGHT OF WAY, EASEMENTS AND PRESERVE ANY TREE 10" AND LARGER OUTSIDE OF THESE AREAS.

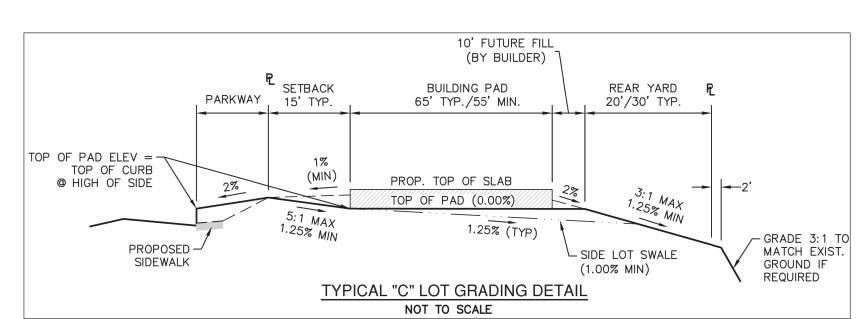
CAUTION!!!

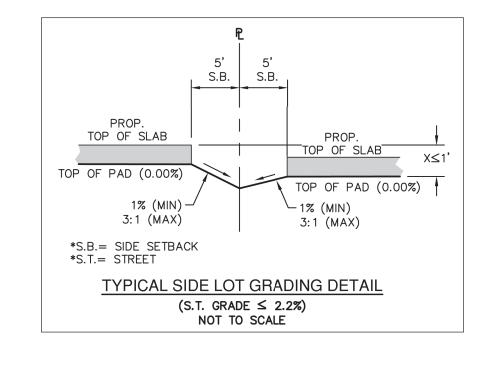
EXISTING UTILITIES. CONTRACTOR TO CHECK LOCATION; VERTICAL AND HORIZONTAL OF EXISTING UTILITIES BEFORE CONSTRUCTION. IF ANY DISCREPANCY NOTIFY ENGINEER

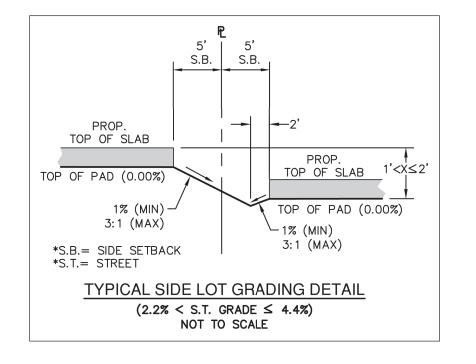
#### NOTE

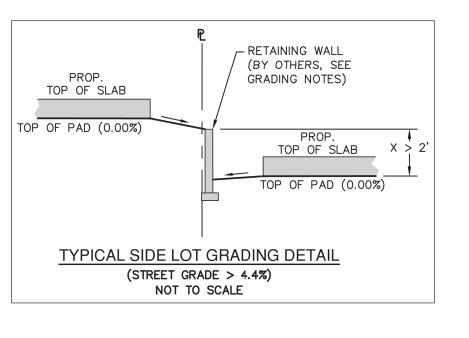
CONTRACTOR TO COORDINATE REMOVAL OR RELOCATION OF EXISTING UTILITIES

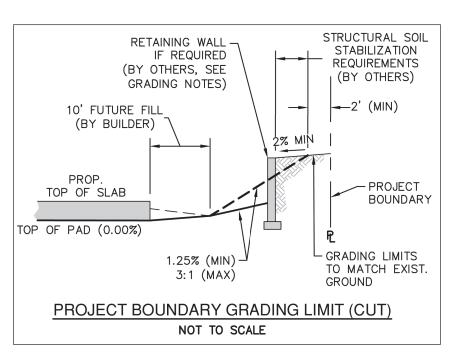


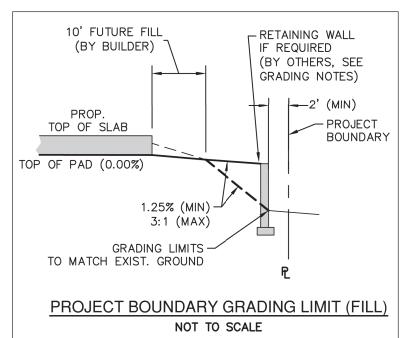


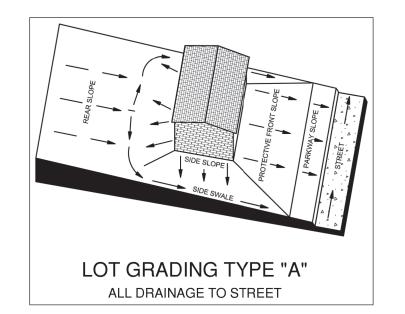


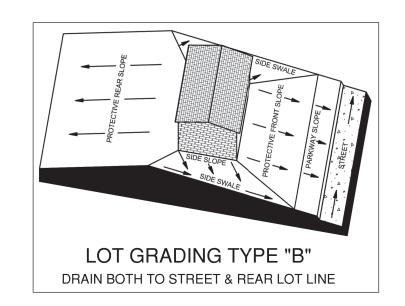


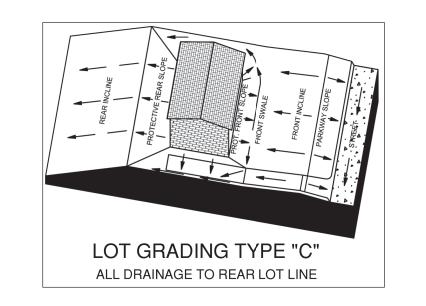


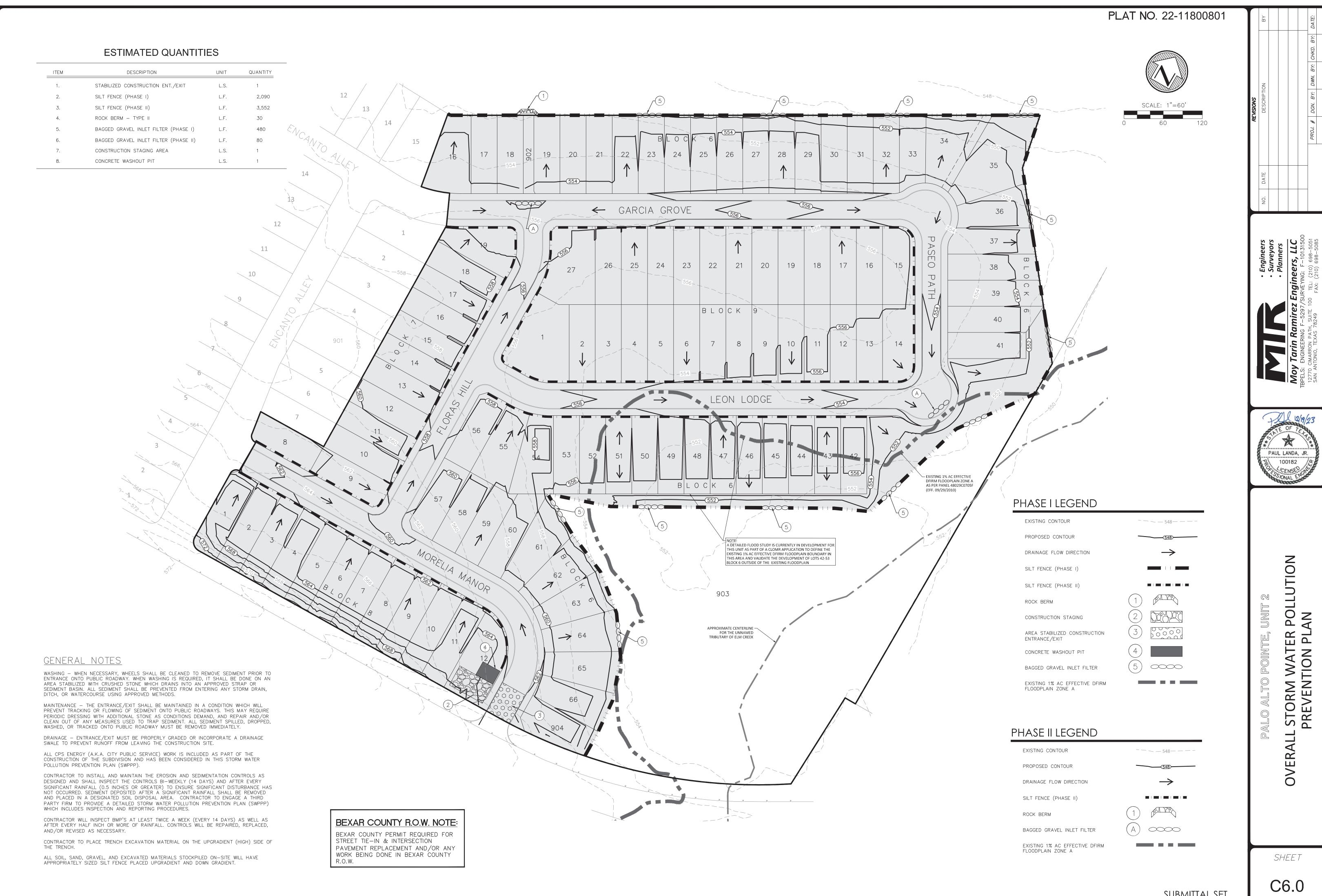








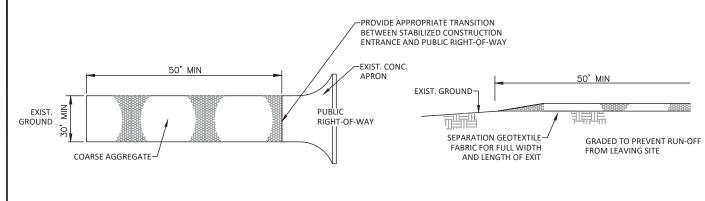




SUBMITTAL SET

#### 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 1/4 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
- 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.



#### TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

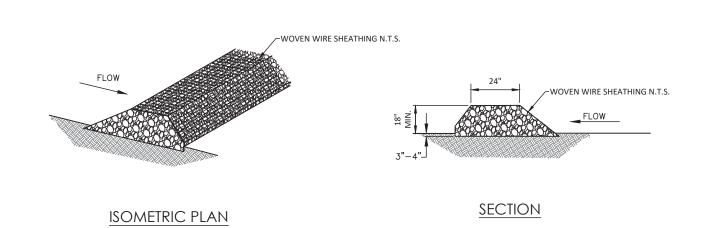
- 1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
- 2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.

PLAN VIEW

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.

**PROFILE** 

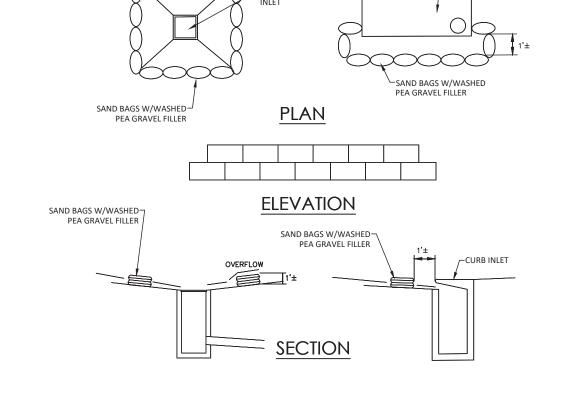
- AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
- 5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
- 6. THE CONSTRUCTION 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
- 13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.



#### **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
- 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 11. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS,

12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.



- . 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
- 3. THE GRAVEL BAGS SHOULD BE FILLED WITH 34" GRAVEL .

MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

- 4. WHEN A GRAVEL BAG IS FILLED WITH GRAVEL, THE OPEN END OF THE GRAVEL BAG SHOULD BE STAPLED OR
- 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
- 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.

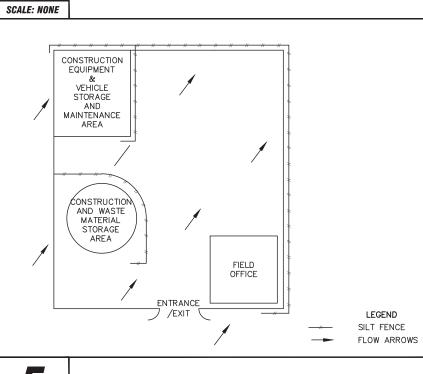


BAGGED GRAVEL INLET FILTER

STABILIZED CONSTRUCTION ENTRANCE / EXIT



ROCK BERM



SILT FENCE DETAIL

**CONSTRUCTION STAGING AREA** SCALE: NONE

\_10 MIL PLASTIC LINING BERM <u>\_\_\_\_\_</u> 10 MIL PLASTIC LINING 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.

SCALE: NONE

SCALE: NONE

CONCRETE TRUCK WASHOUT PIT

PAUL LANDA, JR. 100182 SHEER

> **EVENTION** PR OLLUTION WATER

SHEET

TORM

C6.1