



# HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM  
Director of Planning

1304 SOUTH 25<sup>TH</sup> STREET  
EDINBURG TEXAS 78539  
Tel. 956-318-2840 Fax. 956-318-2844

## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 8-24-2021

PROPOSED MATERMI SUBDIVISION PRECINCT No. 3.

ENGINEER: SOUTH TEXAS INFRASTRUCTURE GROUP DEVELOPER: MATERMI L.L.C.

PRELIMINARY APPROVAL     FINAL APPROVAL     FINAL APPROVAL WITH FINANCIAL GUARANTEE     WITH VARIANCE

NUMBER OF LOTS: 34  \*SINGLE FAMILY     \*MULTI-FAMILY     COMMERCIAL     INDUSTRIAL

NUMBER OF STREETLIGHTS: 5

FILLING STATIONS: 3

LOCATION DESCRIPTION: EAST OF WESTERN ROAD APPROXIMATELY ¼ MILE SOUTH OF MILE 7 NORTH ROAD

SUBDIVISION LIES WITHIN THE:  ETJ OF MISSION AND WAS APPROVED BY THE P&Z AND CITY COMMISSION OF SAID CITY

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 11-18-2020 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE HAS BEEN PROVIDED BY STORM SEWER SYSTEM DISCHARGING ONTO HCDD#1 REGIONAL FACILITY.

ROAD R.O.W. DEDICATION: NO R.O.W. DEDICATION.

H.C.R.O.W. FINAL APPROVAL DATE: 08-04-2021 BY, VICTOR GALLARDO, PCT. 3 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 08-03-2021 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM:  OSSFS HAVE BEEN INSTALLED.

WATER SERVICE PROVIDER: AGUA SUD EXISTING LINE SIZE: 8" LOCATION: WESTERN PALM DRIVE.

H.C.E.O.C. FINAL APPROVAL DATE: 08-03-2021 : BY ENVIRONMENTAL COMPLIANCE COORDINATOR

**LARGE CONSTRUCTION**

The applicant has submitted the required NOI as per Part II, Section E of the TPDES General Permit for Construction Activities (TXR150000) along with a copy of the Erosion Control Plan for the proposed project.

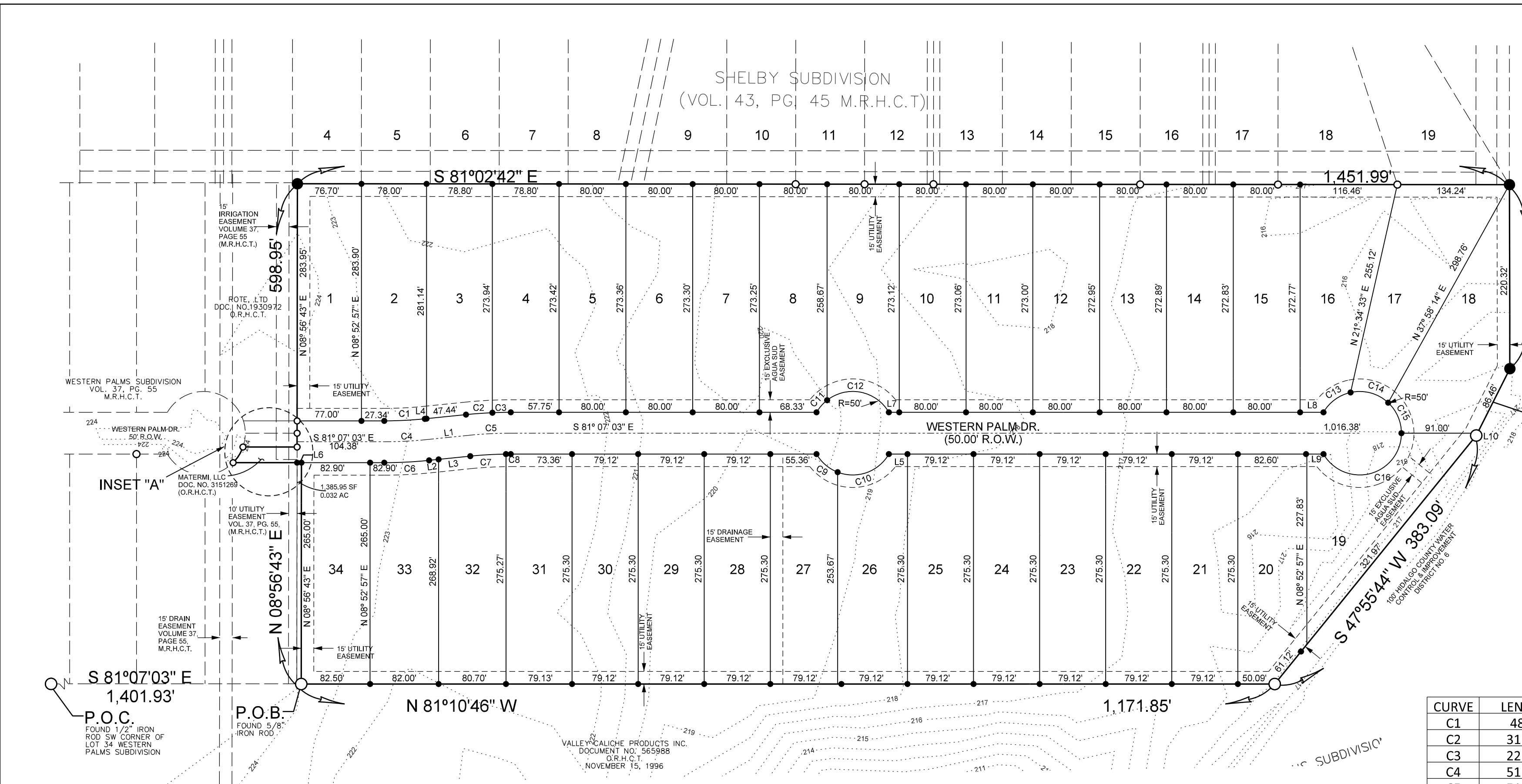
PRELIMINARY APPROVAL FROM THE  
HIDALGO COUNTY COMMISSIONERS COURT ON: JANUARY 26, 2021

STAFF RECOMMENDS:  **Preliminary Approval** *subject comments and future recommendations by planning, other departments and the approval of the City of MISSION.*

**Final Approval** *subject to recommendations other departments*

*This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules, Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.*

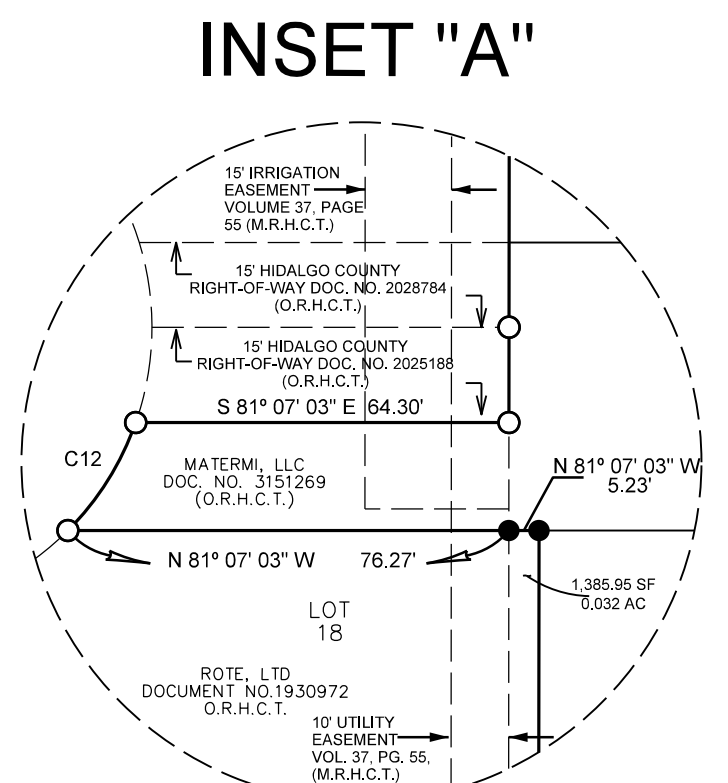
\*



LOT	SQUARE FT.	ACRES
1	21,821	0.501
2	22,096	0.507
3	21,842	0.501
4	21,825	0.501
5	21,871	0.502
6	21,867	0.502
7	21,862	0.502
8	21,857	0.502
9	21,853	0.502
10	21,848	0.502
11	21,843	0.501
12	21,839	0.501
13	21,834	0.501
14	21,829	0.501
15	21,825	0.501
16	21,820	0.501
17	22,334	0.513
18	25,093	0.576
19	21,787	0.500
20	21,853	0.502
21-30	21,782	0.500
31	21,785	0.500
32	22,009	0.505
33	21,817	0.501
34	21,824	0.501

LINE	LENGTH	BEARING
L1	49.56'	S 86°59'02"E
L2	11.43'	S 86°59'02"E
L3	38.12'	S 86°59'02"E
L4	13.33'	S 81°07'03"E
L5	33.00'	S 81°07'03"E
L6	5.23'	S 81°07'03"E

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	48.63'	475.00'	05°51'59"	S 84°03'02" E	48.61'
C2	31.70'	525.00'	69°54'50"	S 34°54'25" E	57.29'
C3	22.06'	525.00'	02°24'25"	S 82°19'16" E	22.05'
C4	51.19'	500.00'	05°51'59"	S 84°03'02" E	51.17'
C5	51.19'	500.00'	05°51'59"	S 84°03'02" E	51.17'
C6	53.75'	525.00'	05°51'59"	S 84°03'02" E	53.73'
C7	42.86'	475.00'	05°10'12"	S 84°23'56" E	42.85'
C8	5.77'	475.00'	00°41'47"	S 84°27'57" E	5.77'
C9	65.78'	50.00'	75°23'01"	N 76°34'28" E	61.14'
C10	65.12'	50.00'	74°43'48"	N 28°25'32" W	60.61'
C11	130.90'	50.00'	150°00'00"	S 83°52'57" W	96.59'
C12	23.54'	50.00'	26°58'10"	N 39°49'29" E	23.52'



STATE OF TEXAS  
COUNTY OF HIDALGO

OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION:

MATERMI, LLC, AS OWNER OF THE 18.81 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED MATERMI SUBDIVISION, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT AND DEDICATED TO PUBLIC USE THE STREET, PARK, AND EASEMENTS SHOWN HEREIN.

I CERTIFY THAT I HAVE COMPLIED WITH THE REQUIREMENTS OF TEXAS LOCAL GOVERNMENT CODE 232.032 AND THAT:

(A) THE WATER QUALITY AND CONNECTIONS TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.

(B) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET, OR WILL MEET, THE MINIMUM REQUIREMENTS OF THE STATE STANDARDS.

(C) ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.

(D) GAS CONNECTIONS, IF AVAILABLE, PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.

I ATTEST THAT THE MATTERS ASSERTED IN THIS PLAT ARE TRUE AND COMPLETE

APPROVED BY DRAINAGE DISTRICT:

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 HEREBY CERTIFIES THAT THE DRAINAGE PLANS FOR THIS SUBDIVISION COMPLY WITH THE MINIMUM STANDARDS OF THE DISTRICT ADOPTED UNDER TEXAS WATER CODE 49.211(C). THE DISTRICT HAS NOT REVIEWED AND DOES NOT CERTIFY THAT THE DRAINAGE STRUCTURES DESCRIBED ARE APPROPRIATE FOR THE SPECIFIC SUBDIVISION BASED ON GENERALLY ACCEPTED ENGINEERING CRITERIA. IT IS THE RESPONSIBILITY OF THE DEVELOPER AND HIS ENGINEER TO MAKE THEIR DETERMINATIONS.

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

RAUL E. SESIN, P.E., C.F.M. DATE \_\_\_\_\_

THIS PLAT IS HEREBY APPROVED BY THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 16 ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

NO IMPROVEMENTS OF ANY KIND (INCLUDING WITHOUT LIMITATION TREES, FENCES AND BUILDINGS) SHALL BE PLACED UPON IRRIGATION DISTRICT NO. 16 RIGHT OF WAYS OR EASEMENTS. APPROVAL OF THIS PLAT DOES NOT RELEASE ANY RIGHTS THAT THE DISTRICT MAY HAVE WHETHER SHOWN OR NOT.

ATTEST: \_\_\_\_\_ PRESIDENT

SECRETARY \_\_\_\_\_

HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL

I, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF MATERMI SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON \_\_\_\_\_

ENVIRONMENTAL HEALTH DIVISION MANAGER DATE \_\_\_\_\_

STATE OF TEXAS  
COUNTY OF HIDALGO

WE, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF MATERMI SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON \_\_\_\_\_

HIDALGO COUNTY JUDGE DATE \_\_\_\_\_

ATTEST: \_\_\_\_\_ DATE \_\_\_\_\_

HIDALGO COUNTY CLERK DATE \_\_\_\_\_

I, JOSE E. SAENZ, HEREBY CERTIFY THAT THE AGUA SPECIAL UTILITY DISTRICT HAS APPROVED THE POTABLE WATER SUPPLY FOR THE MATERMI SUBDIVISION, HIDALGO COUNTY, TEXAS. THE AGUA SPECIAL UTILITY DISTRICT IS THE HOLDER OF THE CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN) ISSUED BY THE STATE OF TEXAS TO FURNISH POTABLE WATER TO AN AREA IN HIDALGO COUNTY, TEXAS THAT INCLUDES THIS SUBDIVISION AND IS THEREFORE OBLIGATED TO SERVE THIS SUBDIVISION WITH POTABLE WATER TO THE EXTENT REQUIRED BY THE LAWS OF THE STATE OF TEXAS. THE AGUA SPECIAL UTILITY DISTRICT AGREES THAT IT WILL PROVIDE WATER TO THIS SUBDIVISION AT THE TIME WHEN ALL OF THE INFRASTRUCTURE REQUIREMENTS FOR THE SUBDIVISION ARE MET. WATER METERS ARE IMMEDIATELY AVAILABLE FOR THIS PURPOSE UPON COMPLETION OF THE WATER FACILITIES SHOWN ON THE PLAT OF THE SUBDIVISION.

JOSE E. SAENZ  
GENERAL MANAGER  
AGUA SPECIAL UTILITY DISTRICT

CITY OF MISSION CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.0115(B) WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF MATERMI SUBDIVISION WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MISSION.

MAYOR CITY OF MISSION DATE \_\_\_\_\_

ATTEST: \_\_\_\_\_ DATE \_\_\_\_\_

CITY SECRETARY DATE \_\_\_\_\_

THIS PLAT OF MATERMI SUBDIVISION HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MISSION, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

CHAIRMAN		REVISION NOTES		
No.	SHEET	REVISION	DATE	APPROVED

METES AND BOUNDS

BEING AN 18.81-ACRE TRACT OF LAND OUT OF THE NORTH 10 ACRES OUT OF THE SOUTH 58.40 ACRES OUT OF THE EAST 1/4 OF BLOCK 16, LYING WEST OF HIDALGO CANAL AND SOUTH OF OTRUS CITY TOWNSITE TEXAS GARDENS SUBDIVISION HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGE 57, MAP RECORDS, HIDALGO COUNTY, TEXAS CONVEYED BY SPECIAL WARRANTY DEED DATED MAY 08, 1998, TO OMEGA SOLIS AND ANNA L. SOLIS (WIFE), AS RECORDED IN DOCUMENT NUMBER 586388, OF THE OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS SAID 18.81 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A FOUND 5/8" IRON ROD FOR THE SOUTHWEST CORNER OF LOT 34, WESTERN PALMS SUBDIVISION AS RECORDED IN VOLUME 37, PAGE 56, HIDALGO COUNTY MAP RECORDS, SAID POINT BEING 20 FEET EAST OF THE ORIGINAL 50-FOOT RIGHT-OF-WAY FOR WESTERN AVENUE:

THENCE SOUTH 81°07'03" EAST 1,401.93 FEET (CALLED 1,402.00), TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" FOUND FOR THE SOUTHWEST CORNER OF SAID 18.81 ACRE TRACT OF LAND;

THENCE NORTH 08°56'43" EAST 300.32 FEET, WITH THE EAST LINE WESTERN PALMS SUBDIVISION TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" SET FOR A COMMON CORNER OF A 81.40 ACRE TRACT OF LAND CONVEYED BY A WARRANTY DEED DATED DECEMBER 13, 2018 FROM EL GARZALES LLC, A TEXAS CORPORATION, AS RECORDED IN DOCUMENT NUMBER 2972303, OF THE OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS AND POINT OF BEGINNING OF SAID 9.93 ACRE TRACT; CONTINUING WITH THE EAST LINE OF WESTERN PALMS SUBDIVISION 298.63 FEET, FOR A TOTAL DISTANCE OF 598.95 FEET TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" SET FOR THE NORTHWEST CORNER OF SAID 18.81 ACRE TRACT;

THENCE SOUTH 81°04'32" EAST 1,451.33 FEET, WITH THE SOUTH LINE OF SHELBY SUBDIVISION AS RECORDED IN VOLUME 13, PAGE 45 OF HIDALGO COUNTY MAP RECORDS TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" SET FOR ON THE WEST RIGHT OF WAY LINE OF A 100-FOOT HIDALGO COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 6 CANAL, TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" SET FOR A CORNER OF SAID 18.81 ACRE TRACT;

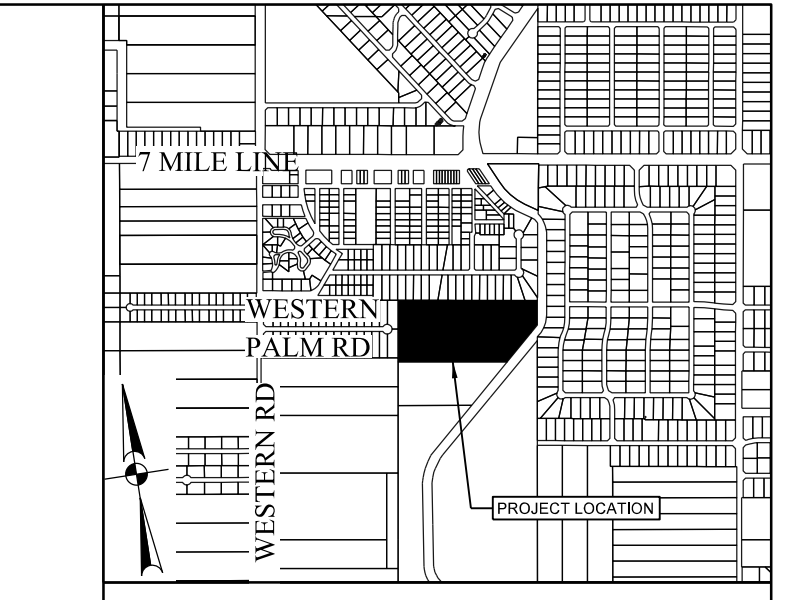
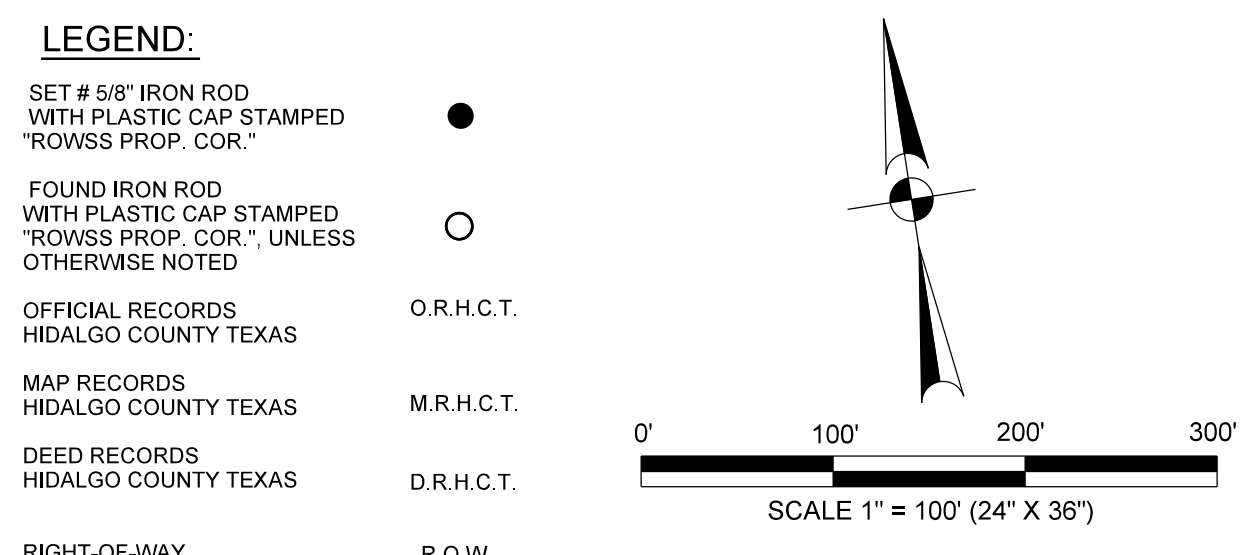
THENCE SOUTH 35°01'25" WEST 89.25 FEET, WITH THE WEST RIGHT OF WAY LINE OF A 100-FOOT HIDALGO COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 6 CANAL TO A 5/8" IRON ROD WITH PLASTIC CAP STAMPED "R.O.W. PROP COR" FOUND A CORNER OF SAID 18.81 ACRE TRACT;

THENCE SOUTH 47°55'44" WEST 383.09 FEET, WITH THE WEST RIGHT OF WAY LINE OF A 100-FOOT HIDALGO COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 6 CANAL, TO A COMMON CORNER OF SAID CARIZALES TRACT AND SAID 18.81 ACRE TRACT;

THENCE NORTH 81°07'03" WEST 1,170.85 FEET, WITH THE NORTH LINE OF SAID CARIZALES TRACT TO THE POINT OF BEGINNING OF SAID 18.81 ACRE TRACT OF LAND;

BEARING BASIS, TEXAS COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983.

PRINCIPAL CONTACTS					
	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	JULIO CERDA	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 584-6555	
ENGINEER:	VICTOR H. TREVIÑO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JUAN E. GALVAN, R.P.L.S.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132



LOCATION MAP  
SCALE: 1:2000

LOCATION DESCRIPTION

MATERMI SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY, PRECINCT NO. 3 IN THE WEST SIDE OF HIDALGO COUNTY. APPROXIMATE 0.33 MILES SOUTH OF THE INTERSECTION OF 7 MILE LINE AND WESTERN RD., THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION. ACCORDING TO THE OFFICIAL MAP IN THE CITY OFFICE OF PLANNING AND ZONING (POPULATION 83,394, 2015 CENSUS), MATERMI SUBDIVISION LIES APPROXIMATELY 2 1/2 MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3 1/2 MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001

GENERAL NOTES:

1. FLOOD ZONE STATEMENT:  
FLOOD ZONE DESIGNATION: "X"  
ZONE "X" AREA OF 500-YEAR FLOOD, COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000.

2. MINIMUM BUILDING SETBACK LINES:  
FRONT SETBACK:  
25 FEET OR EASEMENT WHICHEVER IS GREATER  
50 FEET FOR LOTS FRONTING WESTERN PALM ROAD  
SIDE SETBACK:  
INTERNAL LOT: 6.00 FEET OR EASEMENT WHICHEVER IS GREATER  
EXTERNAL LOT: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER  
REAR SETBACK: 15.00 FEET OR EASEMENT WHICHEVER IS GREATER

3. NO MORE THAN ONE SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON THE LOTS 1 THROUGH 34 THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS.

4. MINIMUM FINISHED FLOOR ELEVATION SHALL BE 24" ABOVE TOP OF CURB OR 24" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME OF APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISHED FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR DEVELOPMENT PERMIT APPLICATION.

5. THE FOLLOWING BENCHMARKS ARE IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS.

BM-1 IS A SET 5/8" IRON PIN WITH PLASTIC CAP "PROVSS CONTROL" LOCATED ON EAST WESTERN PALM ROAD INTERSECTION.  
N= 16642412.1203  
E= 1020846.2252  
ELEV.= 224.17

6. IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 A TOTAL OF 70,553 CUBIC FEET, 1.62 ACRE-FEET OF DETENTION IS REQUIRED FOR THIS SUBDIVISION.

7. NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT EASEMENTS SHALL BE KEPT CLEAR OF BUILDINGS, SHEDS, SHRUBS, TREES, AND OTHER PLANTINGS (EXCEPT LOW LESS THAN 18 INCHES MATURE HEIGHT, GROUND COVER GRASS, OR FLOWERS) AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH THE OPERATIONS AND MAINTENANCE OF THE EASEMENT.

8. EACH PURCHASE CONTRACT MADE BETWEEN A SUBDIVIDER AND PURCHASER OF A LOT IN THIS SUBDIVISION SHALL CONTAIN A STATEMENT DESCRIBING HOW AND WHEN WATER, SEWER, ELECTRICITY, AND GAS SERVICES WILL BE MADE AVAILABLE TO THE SUBDIVISION.

9. ALL PUBLIC UTILITIES EASEMENTS DEDICATED BY THIS PLAT SHALL BE A MINIMUM WIDTH OF 15.00 FEET AS PER THE HIDALGO COUNTY MODEL SUBDIVISION RULES. BY SIGNING THIS PLAT, DEVELOPER AND ENGINEER CERTIFY THAT ALL OTHER EASEMENTS SHOWN COMPLY WITH THE SIZE REQUIRED BY EACH UTILITY PROVIDER OCCUPYING AN EASEMENT.

10. ON-SITE SEWAGE FACILITIES (OSSF) NOTE: THIS SUBDIVISION SHALL USE ON-SITE SEWAGE FACILITIES IN ACCORDANCE WITH TCEQ AND HIDALGO COUNTY REGULATIONS FOR SEWAGE DISPOSAL. THE SUBDIVIDER IS RESPONSIBLE FOR PROVIDING AN OSSF ON LOT.

A OSSF SYSTEM IS BEING DESIGNER FOR DISPOSAL OF DOMESTIC SEWAGE ONLY.

BEACH LOT ON THIS PLAT COMPLIES WITH THE MINIMUM 21,780 SQUARE FEET LOT AREA WITH POTABLE WATER SUPPLY.

C OSSF SYSTEM SHALL REQUIRE INSPECTION AND APPROVAL BY HIDALGO COUNTY AUTHORIZED DEPARTMENT.

D SOIL ANALYSIS HAVE BEEN SUBMITTED TO THE AUTHORIZED HIDALGO COUNTY DEPARTMENT AND EXCERPTS MAY BE ALSO SEEN ON THE UTILITY LAYOUT FOR THIS SUBDIVISION AS SUBMITTED TO THE HIDALGO COUNTY PLANNING DEPARTMENT. THE ENGINEER HAS DETERMINED THAT THE SOIL IS SUITABLE FOR A STANDARD SEPTIC TANK AND ABSORPTIVE DRAINFIELD SYSTEM.

E APPROVED "OSSF" PERMIT APPLICATION IS REQUIRED INCLUDING INDIVIDUAL LOT PLANNING MATERIALS PRIOR TO OCCUPANCY A LOT.

11. THERE ARE NO WATER WELLS WITHIN 150 FEET FROM THE BOUNDARIES ON THIS SUBDIVISION.

12. JULIO CERDA, THE OWNER & SUBDIVIDER OF MATERMI SUBDIVISION, RETAINS A BLANKET EASEMENT UPON EACH LOT FOR THE PURPOSE OF INSTALLING AN APPROVED OSSF ON THE LOT AS DESCRIBED ON SHEET NO. 3 OF THIS PLAT.

13. ALL LOTS SHALL HAVE A POST DEVELOPMENT FINISHED GRADE FROM THE REAR OF THE LOT TO THE CURB AND/OR ROADSIDE DITCH AT A 0.25% SLOPE TO ACCOMPLISH POSITIVE DRAINAGE. THIS IS IN ACCORDANCE WITH HIDALGO COUNTY APPENDIX 5: COUNTY CONSTRUCTION SPECIFICATIONS 3.1.4.

14. THE DEVELOPER SHALL BE RESPONSIBLE FOR DETAININ AND ACCOMODATING MORE THAN THE DETAINED VOLUME SHOWN ON THIS PLAT IF IT IS DETERMINED, AT THE DEVELOPMENT STAGE, THAT THE DETENTION REQUIREMENTS ARE GREATER THAN STATED ON THIS PLAT DUE TO THE IMPERVIOUS AREA BEING GREATER THAN THE PLAT ENGINEER CONSIDERED IN THE HYDRAULIC CALCULATIONS FOR THIS SUBDIVISION.

INDEX OF SHEETS

SHEET 1- HEADING INDEX, LOCATION MAP AND ETJ, PRINCIPAL CONTACTS, LOT, STREETS AND EASEMENT LAYOUT, ENGINEERS AND SURVEYORS CERTIFICATION, HIDALGO COUNTY CLERK'S RECORDING CERTIFICATE, PLAT NOTES AND RESTRICTIONS, DESCRIPTION (METES & BOUNDS), OWNER'S ACKNOWLEDGMENT, HIDALGO COUNTY HEALTH DEPT. CERTIFICATE, H.C.D.D. NO. 1 CERTIFICATION, COUNTY CLERK RECORDING CERTIFICATE, H.C.D.D. NO. 16 CERTIFICATE, ENGINEERS AND SURVEYOR'S CERTIFICATION, CITY OF MISSION CERTIFICATE OF APPROVAL, HIDALGO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT CERTIFICATE.

SHEET 2- WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP, ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTE WATER/OSSF AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH) SUBDIVIDER CERTIFICATE & STATEMENT.

SHEET 3- DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE, MAP OF TOPOGRAPHY, DRAINAGE AND PAVING MAP, ENGINEERING CERTIFICATION, DRAINAGE AREAS, PIPE CALCULATIONS, REVISION NOTES.

SHEET 4- STORM WATER POLLUTION PREVENTION PLAN

SHEET 5- WATER DISTRIBUTION STANDARDS DETAILS

SHEET 6- PAVING AND DRAINAGE DETAILS

FILED FOR RECORD IN HIDALGO COUNTY ARTURO GUAJARDO, JR. HIDALGO COUNTY CLERK

ON \_\_\_\_\_ AT \_\_\_\_\_ AM/PM  
INSTRUMENT NUMBER \_\_\_\_\_  
OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS

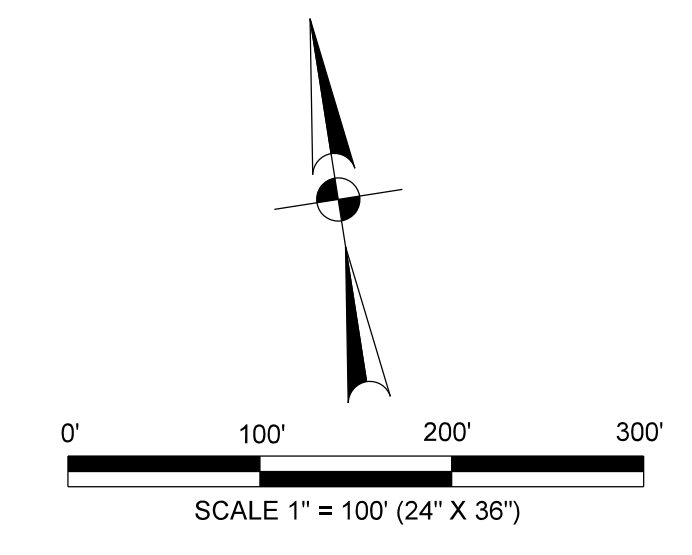
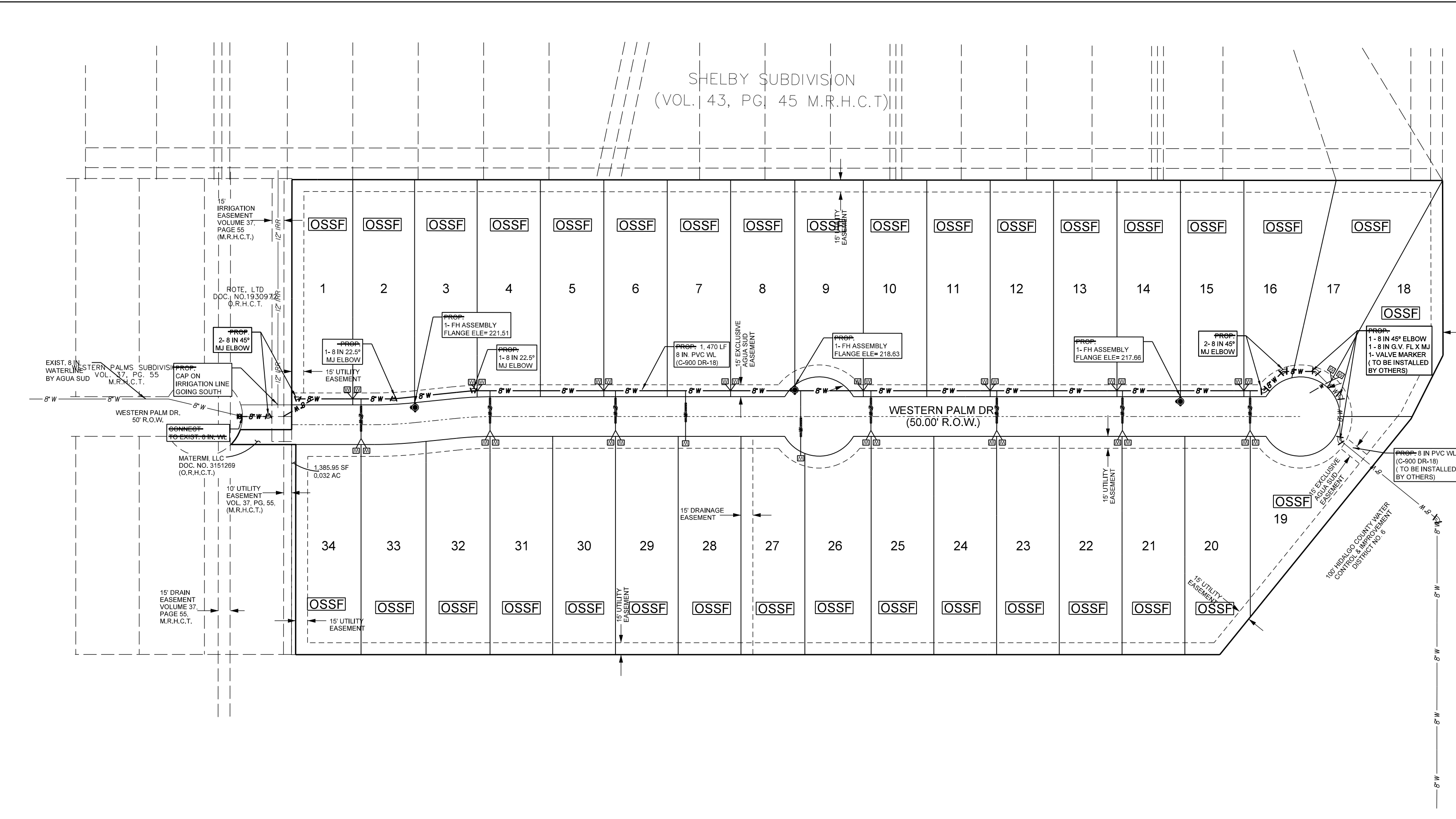
BY: \_\_\_\_\_ DEPUTY

**LOT LAYOUT**  
**MATERMI SUBDIVISION**

BEING A 18.81 ACRE TRACT OF LAND OUT OF BLOCK 16, TEXAN GARDENS SUBDIVISION, RECORDED IN VOLUME 8, PAGE 57, MAP RECORDS, HIDALGO COUNTY, TEXAS.

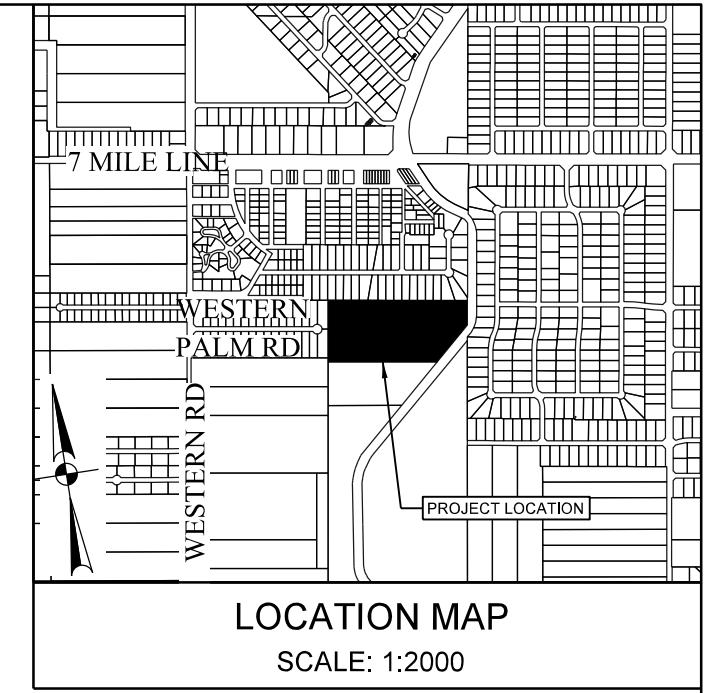
**SOUTH TEXAS INFRASTRUCTURE GROUP**

900 S. STEWART, SUITE 13  
MISSION, TEXAS 78572  
PH: (956) 424-3335  
FAX: (956) 424-3132  
TBPE REG # 1500



**LEGEND:**

- CHAIN LINK FENCE
- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED TROWSS PROP. COR.
- FOUND IRON ROD
- WOOD FENCE
- PROPOSED PAVEMENT
- PROPOSED WATER METER
- OVERHEAD ELECTRIC
- PROPOSED CASING
- FOR 8" WATERLINE= 16" STEEL CASING
- FOR 2" WATER LINES= 3" PVC CASING
- FOR 1" WATER LINE= 2" PVC CASING
- PROPOSED STREET LIGHT
- SOIL BORING LOCATION



**LOCATION DESCRIPTION**

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- SHEET 4- STORM WATER POLLUTION PREVENTION PLAN
- SHEET 5- WATER DISTRIBUTION STANDARDS DETAILS
- SHEET 6- PAVING AND DRAINAGE DETAILS

**WATER AND SEWER ENGINEERING REPORT**

**WATER SUPPLY (DESCRIPTION, COST, AND OPERABILITY DATE):**

MATERMI SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND AGUA SUD HAVE ENTERED INTO A CONTRACT IN WHICH AGUA SUD HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND AGUA SUD HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

MATERMI SUBDIVISION HAS 34 LOTS. AGUA SUD HAS ONE EXISTING WATER LINE RUNNING IN THE WESTERN PALM RD. IT IS A 8" DIAMETER LINE RUNNING THROUGH THE NORTH SIDE OF THE RIGHT-OF-WAY OF WESTERN PALM RD. MATERMI SUBDIVISION WILL BE CONNECTED TO THE EXISTING WATER SYSTEM EXTENDING THE EXISTING 8" ACROSS AND THROUGH MATERMI SUBDIVISION.

WATER DISTRIBUTION FOR MATERMI SUBDIVISION CONSISTS OF NINE (9) 2" DIAMETER DOUBLE SERVICE SHORT LINES THAT RUN INTO THE LOTS AND EIGHT (8) DOUBLE SERVICE LONG. THE 8" LINE, THE 2" DOUBLE SERVICE LINES AND THE METER BOXES HAVE ALREADY BEEN INSTALLED. AT A TOTAL OF \$32,256.00 OR \$948.71 PER LOT. IN ADDITION THE SUBDIVIDER HAS PAID AGUA SUD THE SUM OF \$86,530.00, WHICH COVERS THE \$2,545.00 COST PER LOT AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO AGUA SUD UPON REQUEST BY THE LOT OWNER, AGUA SUD WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED THREE (3) FIRE HYDRANTS AT A UNIT COST OF \$4,000.00 FOR A TOTAL COST OF \$12,000.00. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY AGUA SUD AND SAID DISTRIBUTION SYSTEM OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

**SEWAGE FACILITIES: DESCRIPTION, COSTS, AND OPERABILITY DATE**

SEWAGE FROM MATERMI SUBDIVISION WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND DRAIN FIELD ON LOTS 1 TO 34. THE UNDERSIGNED PROFESSIONAL ENGINEER HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

**SOIL EVALUATION REPORT:**

EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM SOIL FOR THE AREA. AT LEAST TWO SOIL EXCAVATIONS WERE PERFORMED ON THE SITE, AT OPPOSITE AREAS OF THE SUBDIVISION, A TOTAL OF 14 SOIL BORING EXCAVATION WERE PERFORMED. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMIT AREA). THE SOIL IS A UNIFORM SANDY LOAM EXTENDING UP TO 36" BELOW THE BOTTOM OF ANY PROPOSED EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

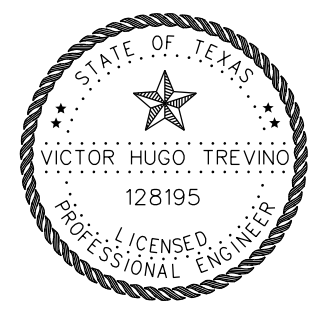
THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$1,550.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST \$2,700.00. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ONE OSSF ON 06/23/2021.

**ENGINEER CERTIFICATION:**

BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWAGE SERVICE FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL RULES ADOPTED UNDER SECTION 16.343, WATER CODE. I CERTIFY THAT THE COSTS TO INSTALL THE WATER AND THE UNCONSTRUCTED ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:  
 WATER FACILITIES- THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$ 44,256.00  
 SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$ 2,700.00

*[Signature]*  
 VICTOR H. TREVINO, P.E.  
 LICENSED PROFESSIONAL  
 ENGINEER, TEXAS LIC. NO. 128195

08/03/2021



**REPORTE DE INGENIERIA DE AGUA Y DRENAJE**

**WATER SUPPLY (DESCRIPCIÓN, GASTOS Y FECHAS DE INICIO):**

LA SUBDIVISIÓN MATERMI RECIBIRÁ SU PROVISIÓN DE AGUA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL DUEÑO DE LA SUBDIVISIÓN Y AGUA SUD HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISIÓN RECIBIRÁ SU PROVISIÓN DE AGUA POR LOS PRÓXIMOS 30 AÑOS. AGUA SUD HA PRESENTADO DOCUMENTACIÓN PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISIÓN.

LA SUBDIVISIÓN MATERMI TIENE 34 LOTES. AGUA SUD TIENE UNA LÍNEA EXISTENTE DE AGUA CORRIENDO SOBRE LA CALLE WESTERN PALM. ES DE 8 PULGADAS DE DIÁMETRO Y CORRE SOBRE EL LADO NORTE DE LA CALLE WESTERN PALM. LA SUBDIVISIÓN MATERMI SE CONECTARÁ A ESTA LÍNEA Y LA EXTENDERÁ POR TODA LA SUBDIVISIÓN.

LA DISTRIBUCIÓN DE AGUA PARA LA SUBDIVISIÓN MATERMI CONSISTE EN NUEVE (9) SERVICIOS DOBLES CORTOS DE 2" DE DIÁMETRO QUE CORREN HACIA LOS LOTES Y OCHO (8) SERVICIOS DOBLES LARGOS DE 2" DE DIÁMETRO. SE HAN INSTALADO YA LA LÍNEA DE 8", LOS SERVICIOS DE 2" Y LAS CAJAS DE LOS MEDIDORES A UN COSTO TOTAL DE \$32,256.00 O \$948.71 POR LOTE. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISIÓN LE HA PAGADO A AGUA SUD LA CANTIDAD DE \$86,530.00 QUE CUBRE EL COSTO DE LOS MEDIDORES (\$2,545.00 POR CADA LOTE), ESTE PRECIO INCLUYE TAMBIÉN EL COSTO DE LA INSTALACIÓN DE CADA MEDIDOR Y LOS GASTOS DE CONEXIÓN CUANDO EL DUEÑO DE ALGUNO DE LOS LOTES SOLICITE UN MEDIDOR DE AGUA. AGUA SUD LO INSTALARÁ SIN COSTO ALGUNO. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISIÓN HA INSTALADO 3 HIDRANTES CONTRA INCENDIO A UN COSTO DE \$4,000.00 POR CADA UNO, LO CUAL REPRESENTA UNA CANTIDAD TOTAL DE \$12,000.00. EL SISTEMA DE AGUA ESTARÁ EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA EN LA CUAL LA SUBDIVISIÓN SEA REGISTRADA EN EL CONDADO DE HIDALGO.

**DRENAJE: DESCRIPCIÓN, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISIÓN**

SE INSTALARÁ UNA FOSA SÉPTICA EN CADA SOLAR. ESTA FOSA SÉPTICA CONSISTE DE UN TANQUE SÉPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL INGENIERO AUTOR DE ESTE DOCUMENTO HA EVALUADO EL ÁREA DONDE SE ENCUENTRA LA SUBDIVISIÓN Y HA PREPARADO UN REPORTE QUE CONCLUYE QUE ESTE TERRENO ES ADECUADO PARA ESAS FOSAS SÉPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT) SEGÚN EL REPORTE.

**REPORTE DE EVALUACIÓN DE SUELO:**

CADA LOTE EN LA SUBDIVISIÓN PROPUESTA MIDE MÁS DE MEDIO ACRE. SE HICIERON DOS EXCAVACIONES DE EVALUACIÓN EN LUGARES OPUESTOS DE LA SUBDIVISIÓN, UN TOTAL DE 14 EXCAVACIONES DE EVALUACIÓN FUERON REALIZADAS. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA ÁREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME (TERRENO ARCILLOSO Y SUELO FRANCO) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES PROPUESTAS. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MÁS ARRIBA DE LO MÁS BAJO DE LAS EXCAVACIONES PROPUESTAS. EL AGUA EN ÉSTA ÁREA FLUYE BIEN.

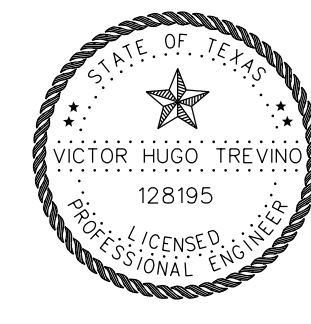
EL COSTO TOTAL PARA LA INSTALACIÓN DE UN SISTEMA INDIVIDUAL DE FOSA SÉPTICA ES DE \$1,550.00 DÓLARES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSAS SÉPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACIÓN FINAL A UN COSTO TOTAL DE \$2,700.00. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO Y HA APROBADO LA INSTALACIÓN DE LA FOSA SÉPTICA DESDE 06/23/2021.

**CERTIFICACIÓN:**

CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS REGLAS GOBERNANDO LAS SUBDIVISIONES, ADOPTADAS EN LA SECCIÓN 16.343 DEL TEXAS WATER CODE (CÓDIGO DE AGUA DE TEXAS), CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DRENAJE SON:  
 AGUA- EL SISTEMA/SERVICIO DE AGUA SERÁ INSTALADO Y COMPLETAMENTE CONSTRUÍDO MENOS EL MEDIDOR MECÁNICO DE AGUA QUE COSTARÁ UN TOTAL DE \$ 44,256.00  
 DRENAJE- SE ESTIMA QUE LA FOSA SÉPTICA COSTARÁ \$ 2,700.00

*[Signature]*  
 VICTOR H. TREVINO, P.E.  
 LICENSED PROFESSIONAL  
 ENGINEER, TEXAS LIC. NO. 128195

08/03/2021



**SUBDIVIDER CERTIFICATION**

1- BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, SUBDIVIDER WILL COMPLY WITH MINIMUM STATE STANDARDS AND THAT (a) WATER QUALITY AND CONNECTIONS INCLUDING WATER METERS TO THE LOTS MEET SUCH STANDARDS AND (b) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET OR WILL MEET SUCH STANDARDS AND WILL BE CONSTRUCTED IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS.

**SUBDIVIDER STATEMENT:**

1- I (WE), JULIO CERDA SUBDIVIDER FOR MATERMI SUBDIVISION HEREBY CERTIFY SEWER PERMITS, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY AND QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS

JULIO CERDA \_\_\_\_\_ DATE \_\_\_\_\_

STATE OF TEXAS  
 COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED JULIO CERDA KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS \_\_\_\_ DAY OF \_\_\_\_\_



*[Signature]*  
 VICTOR H. TREVINO, P.E.  
 LICENSED PROFESSIONAL  
 ENGINEER, TEXAS LIC. NO. 128195

03/16/2021

COST ESTIMATE		PRINCIPAL CONTACTS				
		NOTARY PUBLIC				
		NAME	ADDRESS	CITY & ZIP	PHONE	FAX
WATER DISTRIBUTION:	\$ 44,256	OWNER:	JULIO CERDA	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 584-6555
DRAINAGE IMPROVEMENT:	\$ 62,416	ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132
PAVING IMPROVEMENT:	\$ 140,572.50	SURVEYOR:	JUAN E. GALVAN, R.P.L.S.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132
SEPTIC TANK (OSSF):	\$ 52,700					

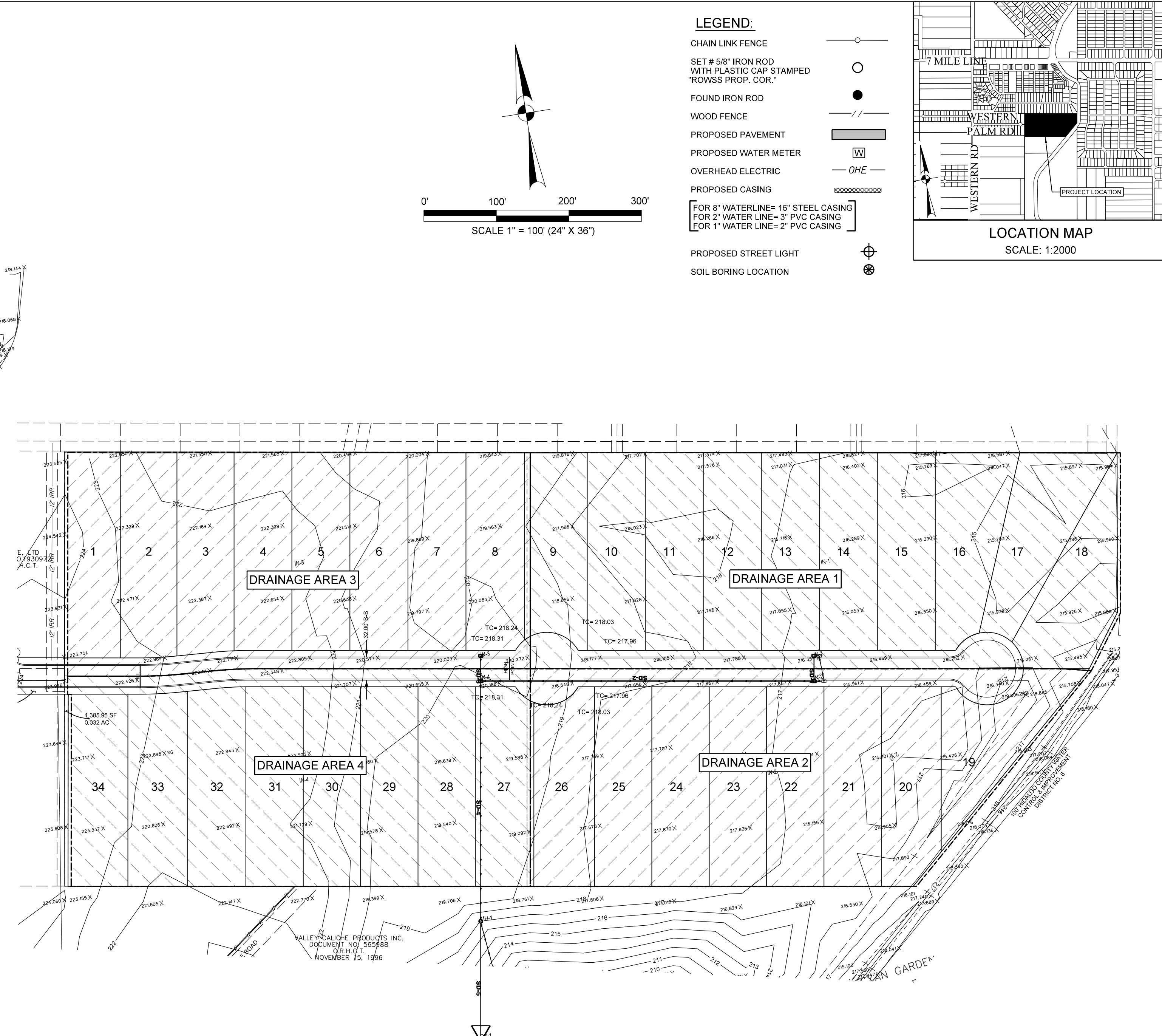
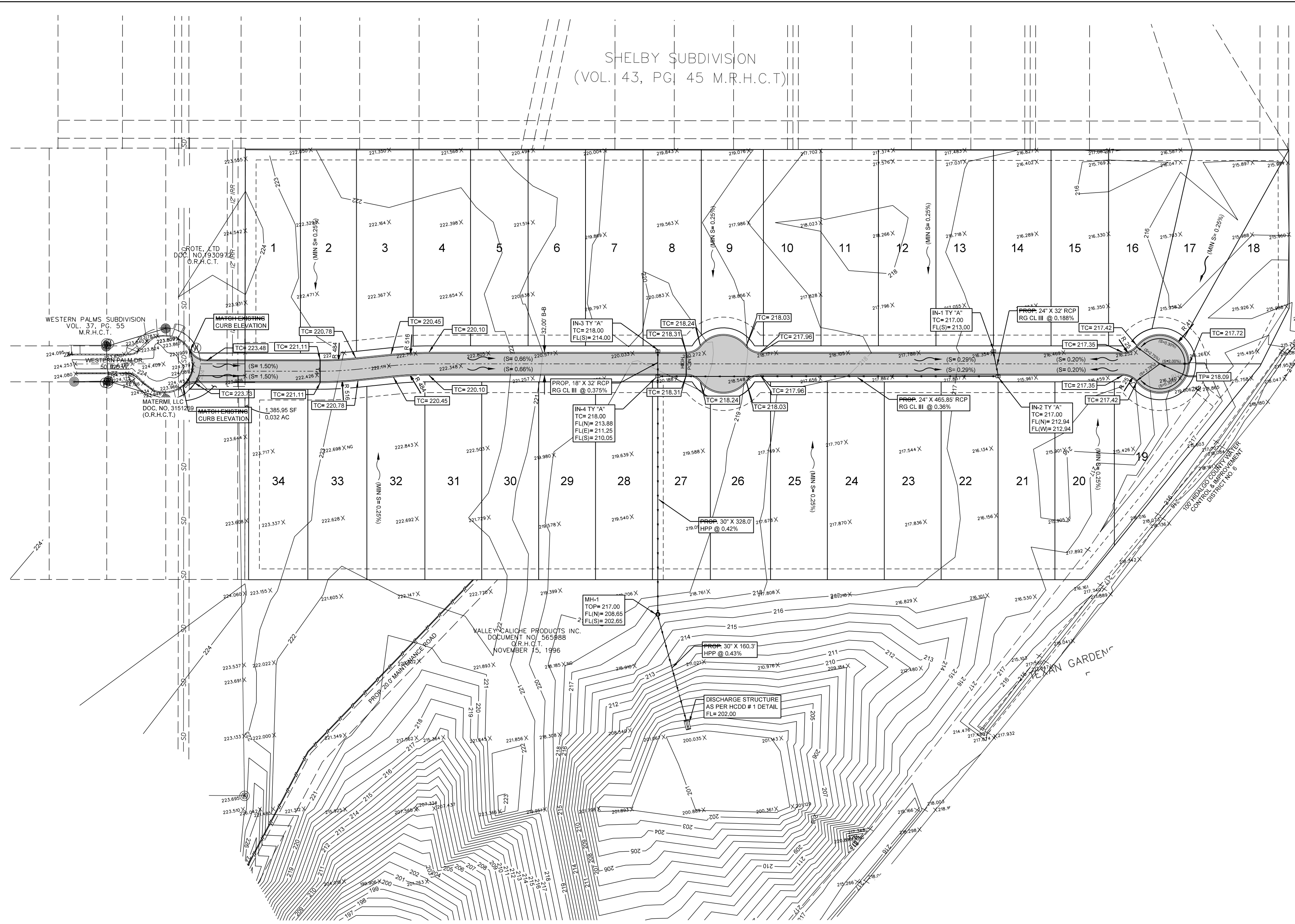
**SOUTH TEXAS INFRASTRUCTURE GROUP**  
 900 S. STEWART, SUITE 13  
 MISSION, TEXAS 78572  
 PH: (956) 424-3335  
 FAX: (956) 424-3132  
 TBP REG # 1500



**UTILITY LAYOUT**  
**MATERMI SUBDIVISION**

BEING A 19.81 ACRE TRACT OF LAND  
 OUT OF BLOCK 16, TEXAN GARDENS SUBDIVISION,  
 RECORDED IN VOLUME 8, PAGE 57,  
 MAP RECORDS, HIDALGO COUNTY, TEXAS.

SHELBY SUBDIVISION  
(VOL. 143, PG. 45 M.R.H.C.T.)



LEGEND:

- CHAIN LINK FENCE
- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
- FOUND IRON ROD
- WOOD FENCE
- PROPOSED PAVEMENT
- PROPOSED WATER METER
- OVERHEAD ELECTRIC
- PROPOSED CASING
- FOR 8" WATERLINE= 16" STEEL CASING
- FOR 2" WATER LINE= 3" PVC CASING
- FOR 1" WATER LINE= 2" PVC CASING
- PROPOSED STREET LIGHT
- SOIL BORING LOCATION

SCALE 1" = 100' (24" X 36")

**PROJECT LOCATION**  
MATERMI SUBDIVISION IS A PROPOSED 34 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED WITHIN THE CITY OF MISSION 3/4 MILE EXTRATERRITORIAL JURISDICTION (E.T.J.), BEING A 18.81 ACRE TRACT OF LAND, MORE OR LESS, OUT OF BLOCK 16, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, AS PER MAP OR PLAT THEREOF RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS AND ACCORDING TO WARRANTY DEED RECORDED IN VOLUME 2314, PAGE 379, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

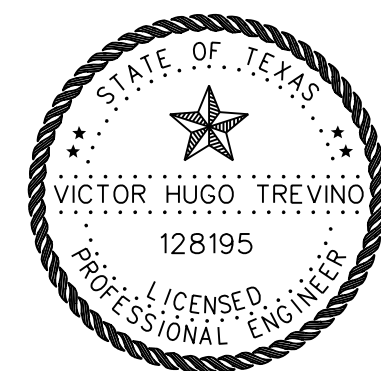
**FLOOD PLAIN**  
THE PROPERTY IS IN ZONE "X"  
ZONE "X" ARE AREAS OF 500-YEAR FLOOD  
COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000.

**SOIL CONDITIONS**  
ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 91.9% OF BRENNAN FINE SANDY LOAM, WITH 0 TO 1 PERCENT SLOPES; 8.1% OF HIDALGO FINE SANDY LOAM, 0 TO 1 PERCENT SLOPES. EXISTING TERRAIN HAS A SOUTHEASTERLY NATURAL FLOW DIRECTION. THESE SOILS ARE WELL DRAINED, SURFACE RUNOFF IS NEGLIGIBLE, PERMEABILITY IS MODERATELY HIGH TO HIGH, AND THE WATER CAPACITY IS HIGH. THESE SOILS ARE LISTED IN HYDROLOGIC GROUP B AND C. SEE APPENDIX C.

**EXISTING CONDITIONS**  
THE SUBJECT PROPERTY IS CURRENTLY UNDEVELOPED. TOPOGRAPHIC ELEVATIONS OBTAINED FROM THE SITE INDICATE THAT THE EXISTING TERRAIN HAS A GRADE APPROXIMATELY (0-0.33%). IN ACCORDANCE WITH THE DRAINAGE POLICIES OF THE CITY OF MISSION AND COUNTY OF HIDALGO, THE RATIONALE METHOD, 10-YEAR FREQUENCY STORM EVENT WAS UTILIZED TO DETERMINE THE EXISTING STORM WATER RUNOFF FOR THIS SITE. THE TOTAL CONTRIBUTING 10-YEAR EXISTING STORM WATER RUNOFF FROM THIS SITE IS APPROXIMATELY 17.46 CFS.

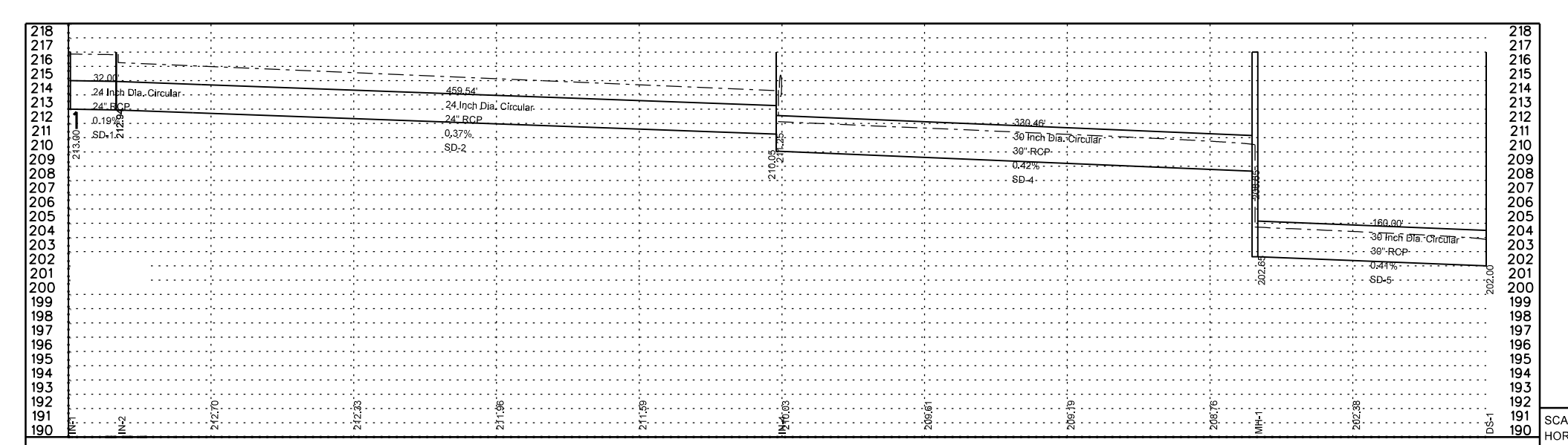
**PROPOSED CONDITIONS**  
THE PROPOSED DRAINAGE SYSTEM SHALL CONSIST ON THE INSTALLATION OF AN INTERNAL STORM SEWER SYSTEM WITH INLETS IN THE STREET TO COLLECT SURFACE RUNOFF FROM LOTS AND STREET. THIS SYSTEM WILL BE SIZED AS PER CALCULATIONS ON APPENDIX F. PIPE SIZES RANGE FROM 18" TO 24" AND WILL CONSIST OF A PROPOSED OUTFALL TO A REGIONAL DETENTION POND, THAT BEING DEDICATED TO THE HIDALGO COUNTY DRAINAGE DISTRICT #1. THIS REGIONAL DETENTION POND WITH AN AVERAGE DEPTH OF 30 FT. HAS A TOTAL CAPACITY OF 111.50 ACRE-FT.

IN ACCORDANCE WITH THE CITY OF MISSION AND COUNTY OF HIDALGO DRAINAGE POLICY, THE PEAK RATE FOR RUNOFF FOR THIS DEVELOPMENT WILL BE MITIGATED TO THE PROPOSED 50-YEAR STORM WATER RUNOFF. THE PEAK RATE WILL BE 63.42 CFS WHICH WILL GIVE US A NET INCREASE OF 45.96 CFS. FOR PROPOSED LAS COMADRES NO. 8 SUBDIVISION ONLY 70.653 CUBIC-FEET, OR 1.62 ACRE-FEET OF STORM WATER RUNOFF WILL BE REQUIRED TO BE DETAINED. THE TOTAL 1.62 ACRE-FEET WILL BE DETAINED ON THE PREVIOUSLY MENTIONED REGIONAL DETENTION POND LOCATED ON THE SOUTH SIDE OF MATERMI SUBDIVISION.



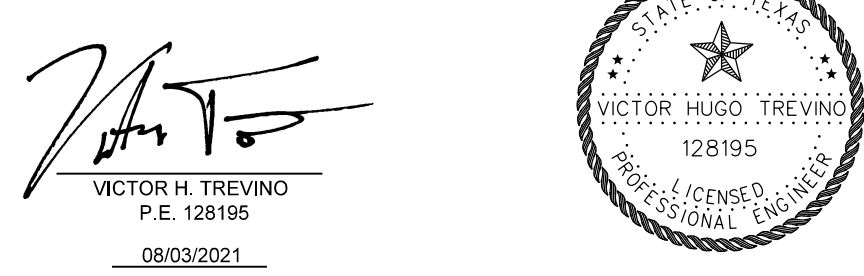
VICTOR H. TREVINO, P.E.  
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

08/03/2021



PIPE CALCULATIONS

ID	ID	HGL	HGL	Discharge	Capacity	Slope	Loss	Velocity	Depth	Velocity	Depth	
SD-5	MH-1	DS-1	204.723	203.833	28.903	30.466	0.398	0	6.495	2.127	7.492	1.833
SD-4	IN-4	MH-1	214.285	210.483	28.903	31.112	0.421	2.176	6.699	2.053	7.492	1.833
SD-2	IN-2	IN-4	216.815	214.285	15.958	15.987	0.366	0.569	5.211	1.877	5.079	2
SD-3	IN-3	IN-4	215.648	214.909	7.058	7.496	0.383	0.35	4.544	1.232	5.463	1.029
SD-1	IN-1	IN-2	216.986	216.815	8.871	11.415	0.184	0.124	3.753	1.408	3.100	2



VICTOR H. TREVINO  
P.E. 128195  
08/03/2021  
DATE

PRINCIPAL CONTACTS

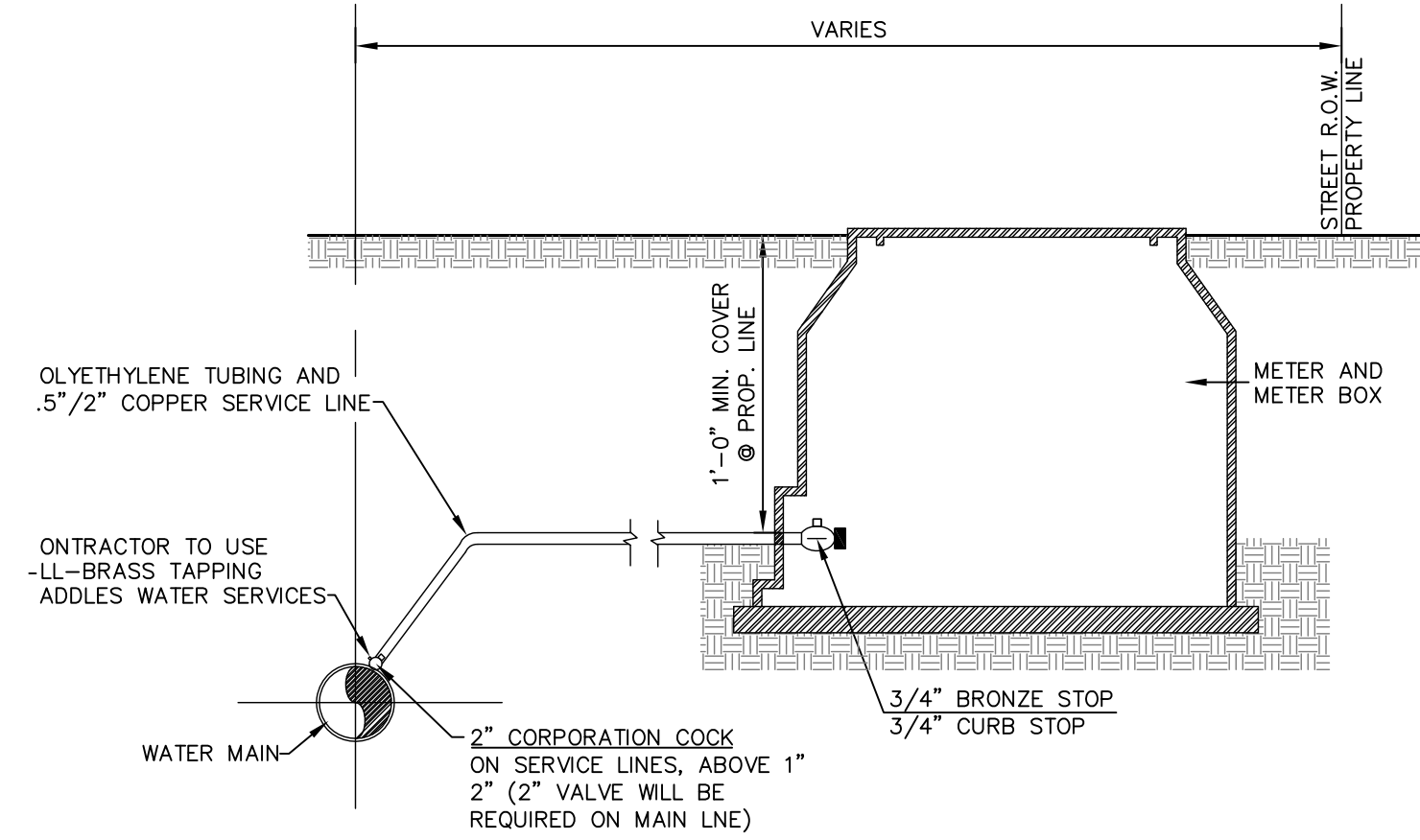
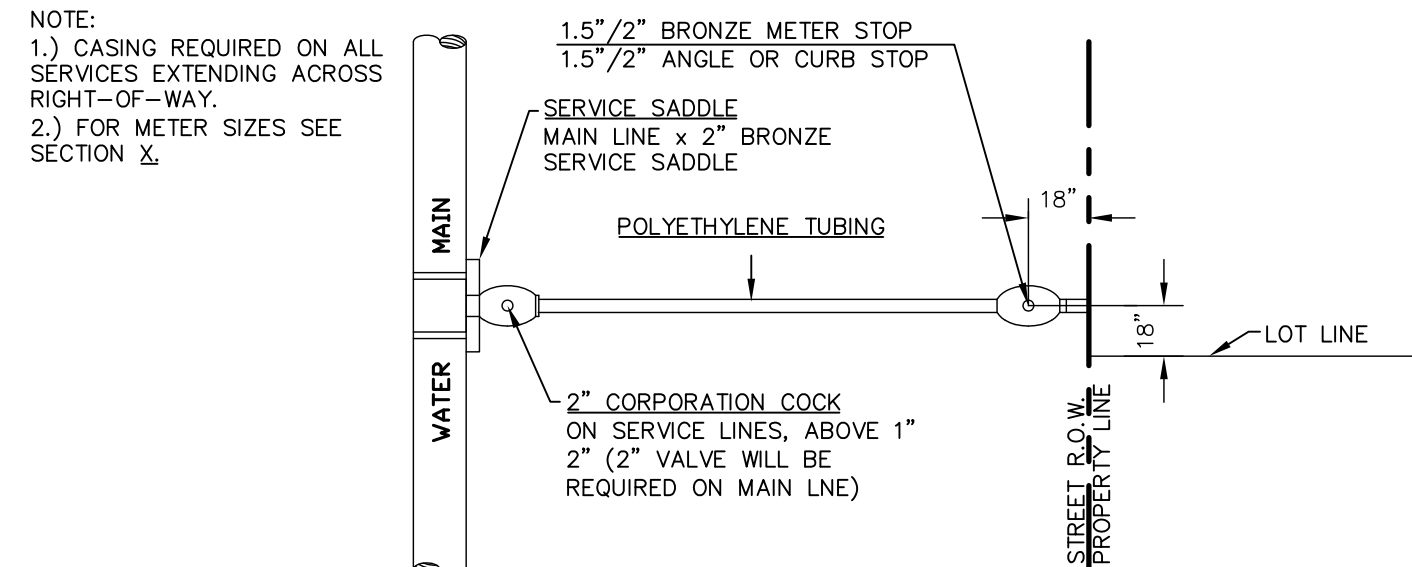
	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	NORBERTO SALINAS	500 E. 9TH ST.	MISSION, TEXAS 78572	(956) 584-5555	
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JUAN E. GALVAN, R.P.L.S.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132

SOUTH TEXAS INFRASTRUCTURE GROUP  
900 S. STEWART, SUITE 13  
MISSION, TEXAS 78572  
PH: (956) 424-3335  
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TBPE REG # 1500

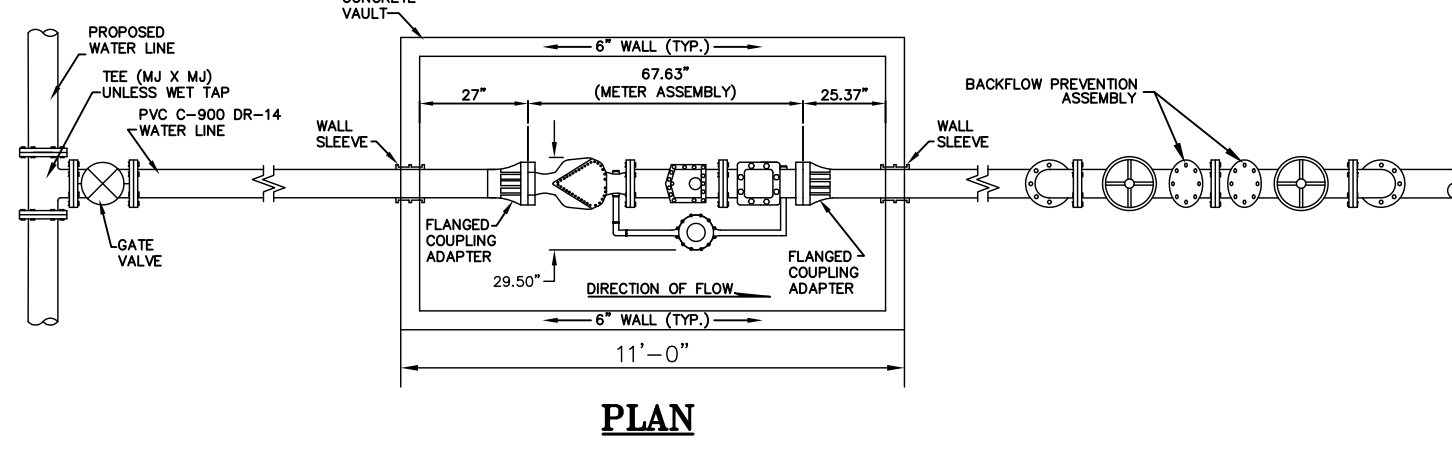
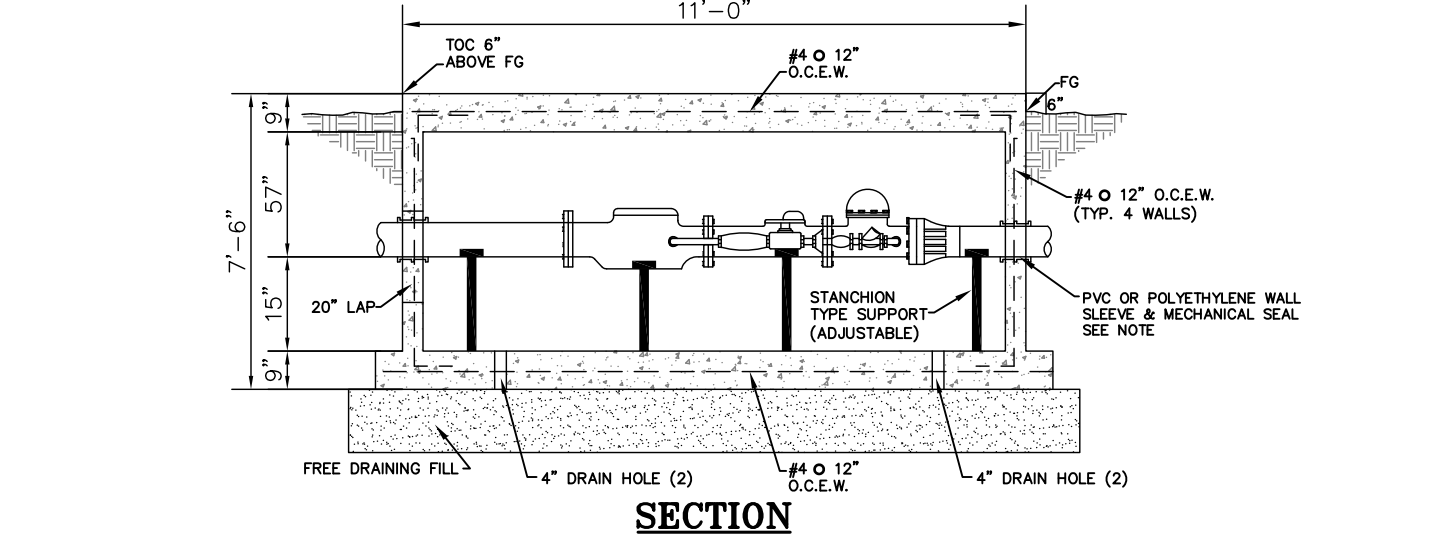
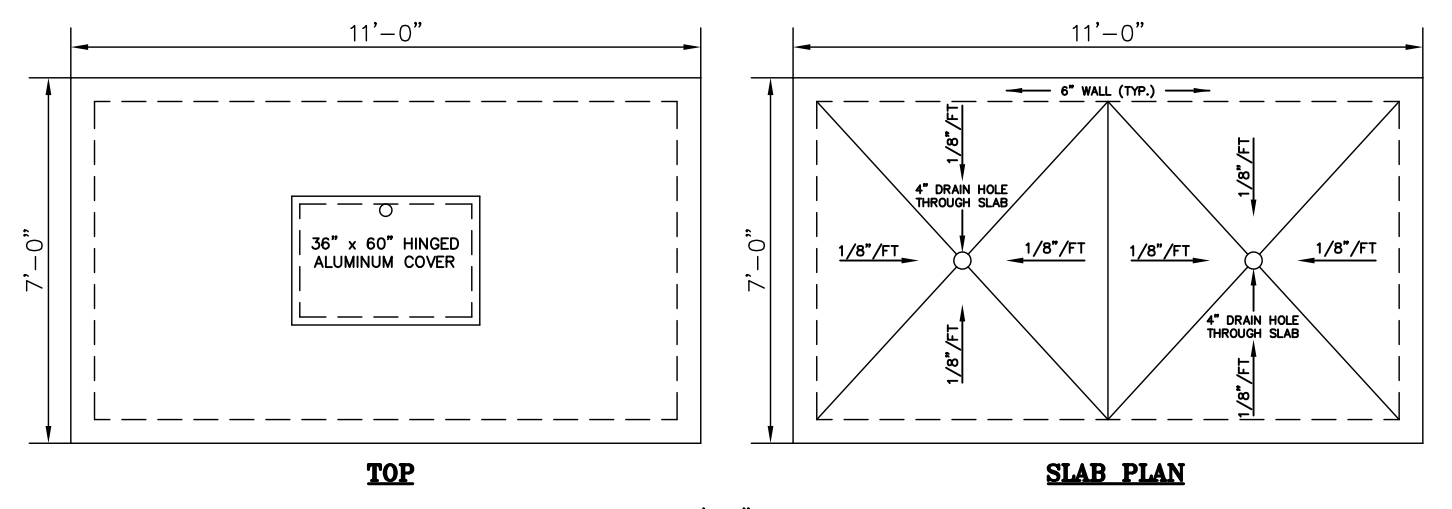
PAVING & DRAINAGE  
MATERMI SUBDIVISION

BEING A 18.81 ACRE TRACT OF LAND  
OUT OF BLOCK 16, TEXAN GARDENS SUBDIVISION,  
RECORDED IN VOLUME 8, PAGE 57,  
MAP RECORDS, HIDALGO COUNTY, TEXAS.

**SOUTH TEXAS INFRASTRUCTURE GROUP**



**SINGLE WATER SERVICE CONNECTION**

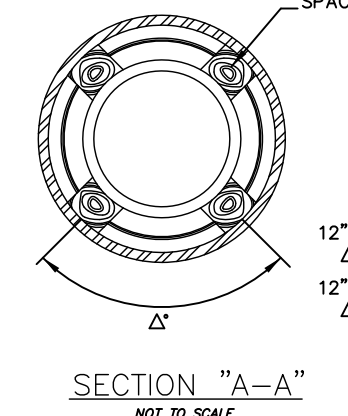


METER VAULT		QUANTITIES		METER ASSEMBLY			
NO.	NAME	QTY.	MATERIAL	NO.	NAME	QTY.	MATERIAL
1	36" x 40" HINGED ALUM. COVER	1		1	SENSUS TURBO METER (FIRE RATED)	1	BRONZE
2	2" GATE VALVE	1		2	SPACERS (FIRE RATED)	1	CAST IRON
3	CONCRETE BLOCK SUPPORTS	4		3	SPHERICAL DETECTOR	1	BRONZE
4	WALL SLEEVES & MECHANICAL SEALS	2		4	SENSUS SP METER	1	BRONZE
5	CONCRETE BLOCK SUPPORTS	4		5	CHECK VALVE	1	BRONZE
6	WALL SLEEVES & MECHANICAL SEALS	2		6	BALL VALVE-CLOSING	2	BRONZE

TABLE OF CASING SIZES

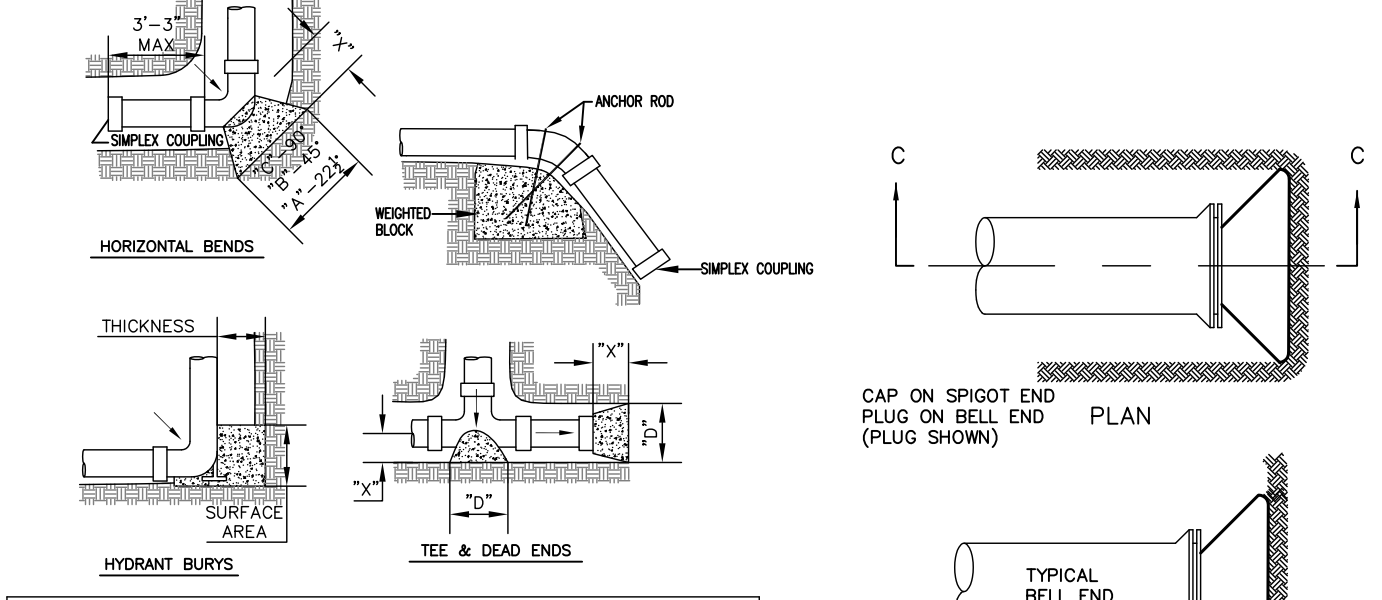
NOMINAL PIPE SIZE	CASING SIZE (INSIDE DIA.)	CASING MINIMUM WALL THICKNESS
4"	3"-10"	0.25"
6"	10"-12"	0.25"
8"	14"-16"	0.25"
12"	22"	0.25"

CARRIER PIPE - P.V.C. C900 DR-18



NOTE:  
WATERLINE TO BE SLOPED DOWN OR UP @ CROSSING IF IT CONFLICTS W/ EXISTING SEWER LINES OR DRAINAGE STRUCTURES.

GENERAL NOTES:  
1.) THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE DIRECTION OF THRUST AND TYPE OF FITTINGS.  
2.) THRUST BLOCK CALCULATIONS ARE BASED ON A WATER LINE PRESSURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING VALUE OF 2,500 POUNDS PER SQUARE FOOT.  
3.) "C" DIMENSIONS SHALL BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO LARGER THAN 45°.  
4.) ANGLE Θ SHALL BE EQUAL TO OR LARGER THAN 45°.  
5.) ALL FITTINGS TO BE WRAPPED IN PLASTIC.

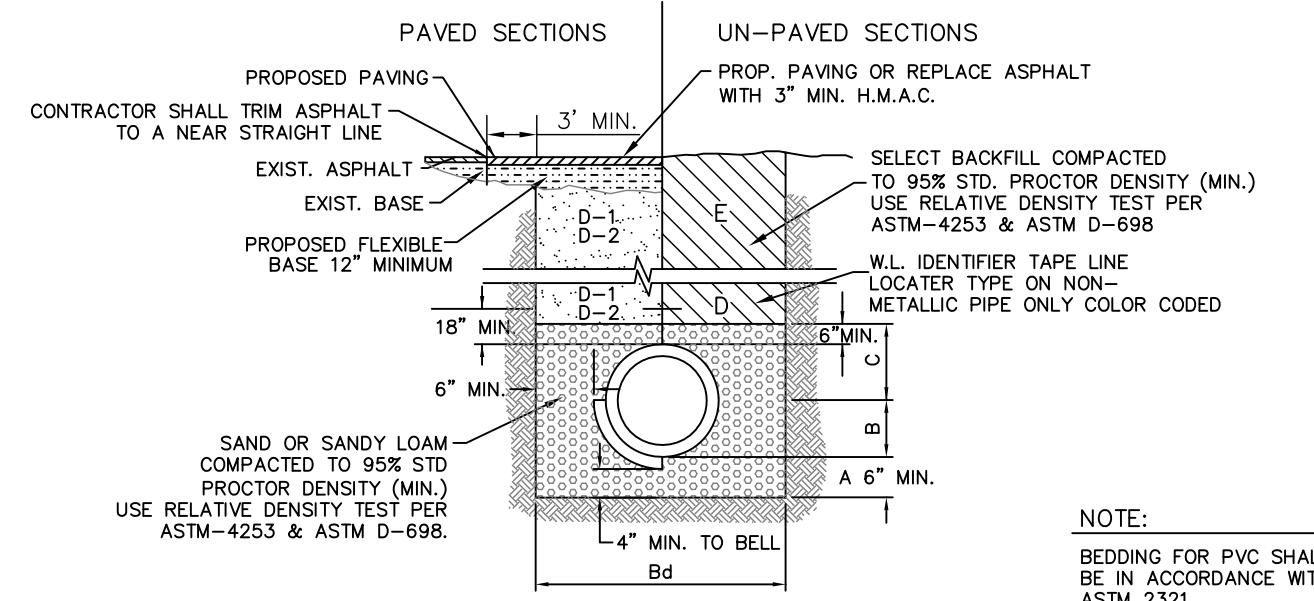


HORIZONTAL BLOCKING TABLE

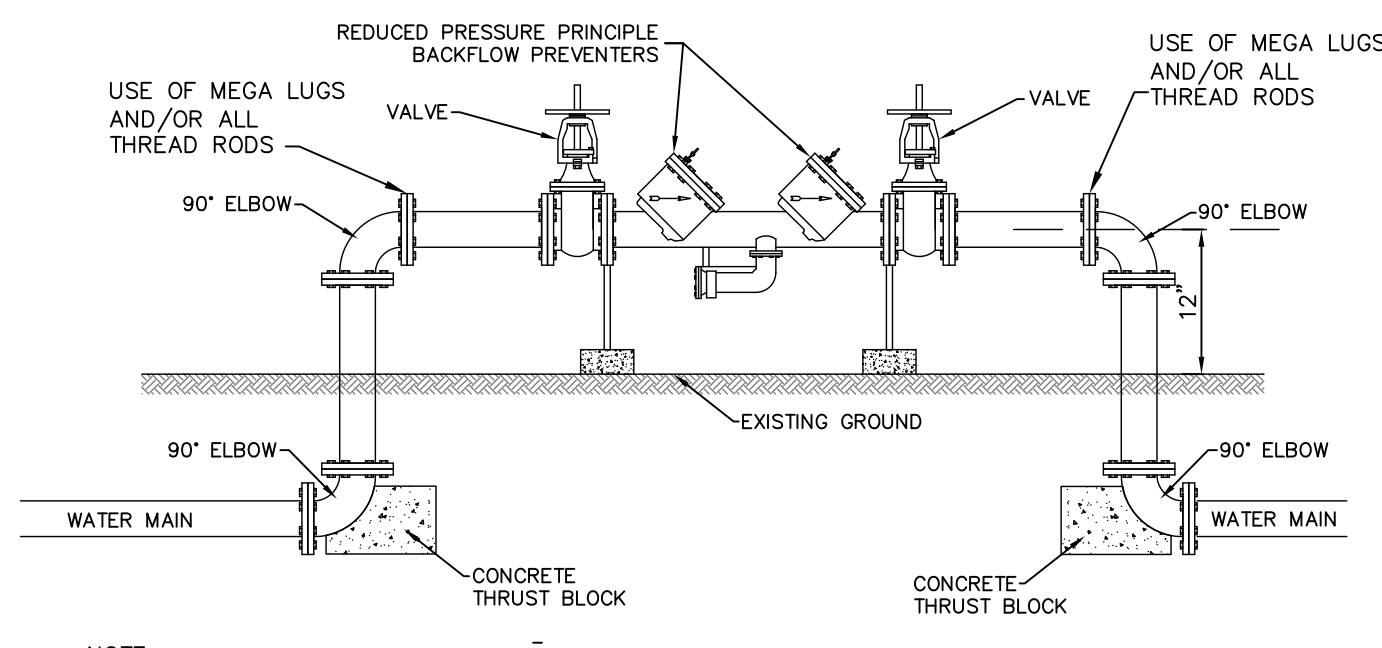
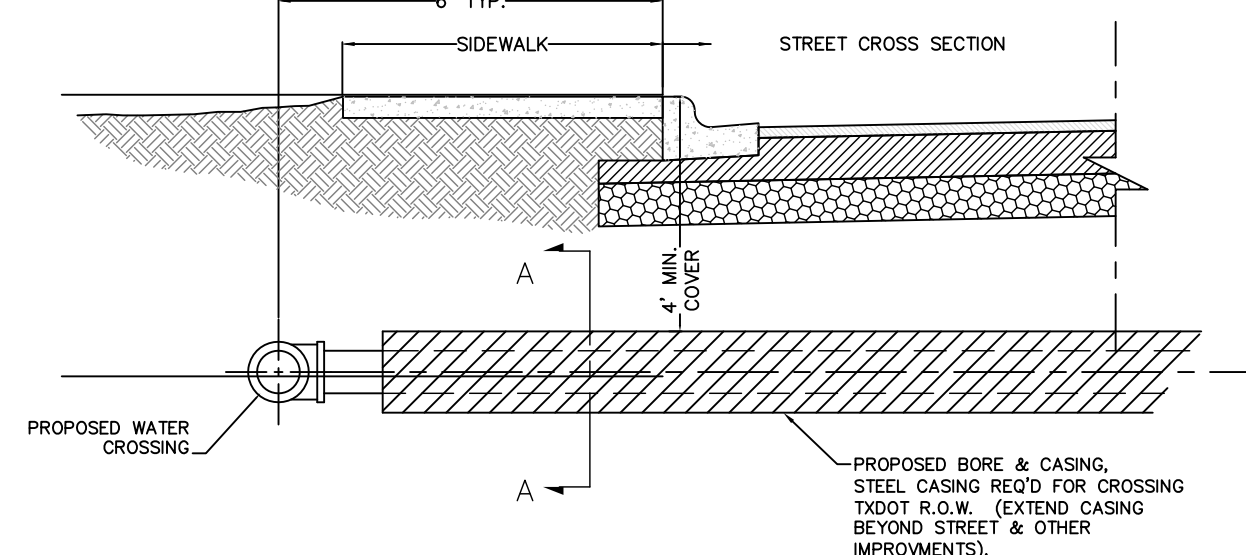
PIPE SIZE	22 1/2 DEGREES		45 DEGREES		90 DEGREES		TEE & PLUG	
	MIN. AREA	MIN. AREA	MIN. AREA	MIN. AREA	MIN. AREA	MIN. AREA	MIN. AREA	MIN. AREA
4"	1.50	1.00	1.00	1.00	1.00	1.06	1.00	1.06
6"	1.50	1.00	1.00	1.14	1.30	1.55	2.40	1.30
8"	1.50	1.08	1.16	1.52	2.31	2.07	4.27	1.74
10"	1.50	1.35	1.84	1.90	3.61	2.58	6.66	2.17
12"	1.50	1.63	2.65	1.86	5.19	3.10	9.60	2.61

TABLE OF CASING SIZES

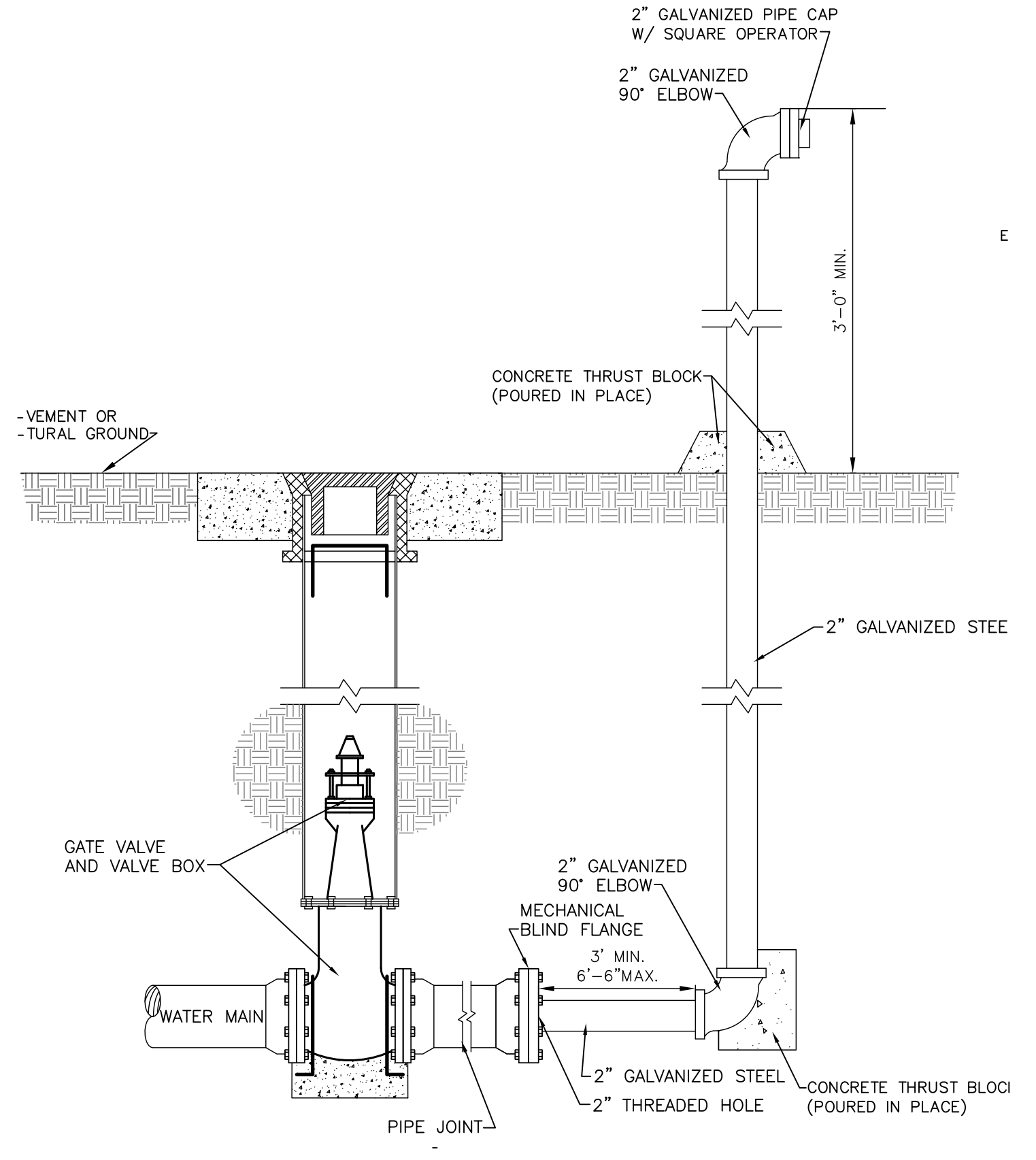
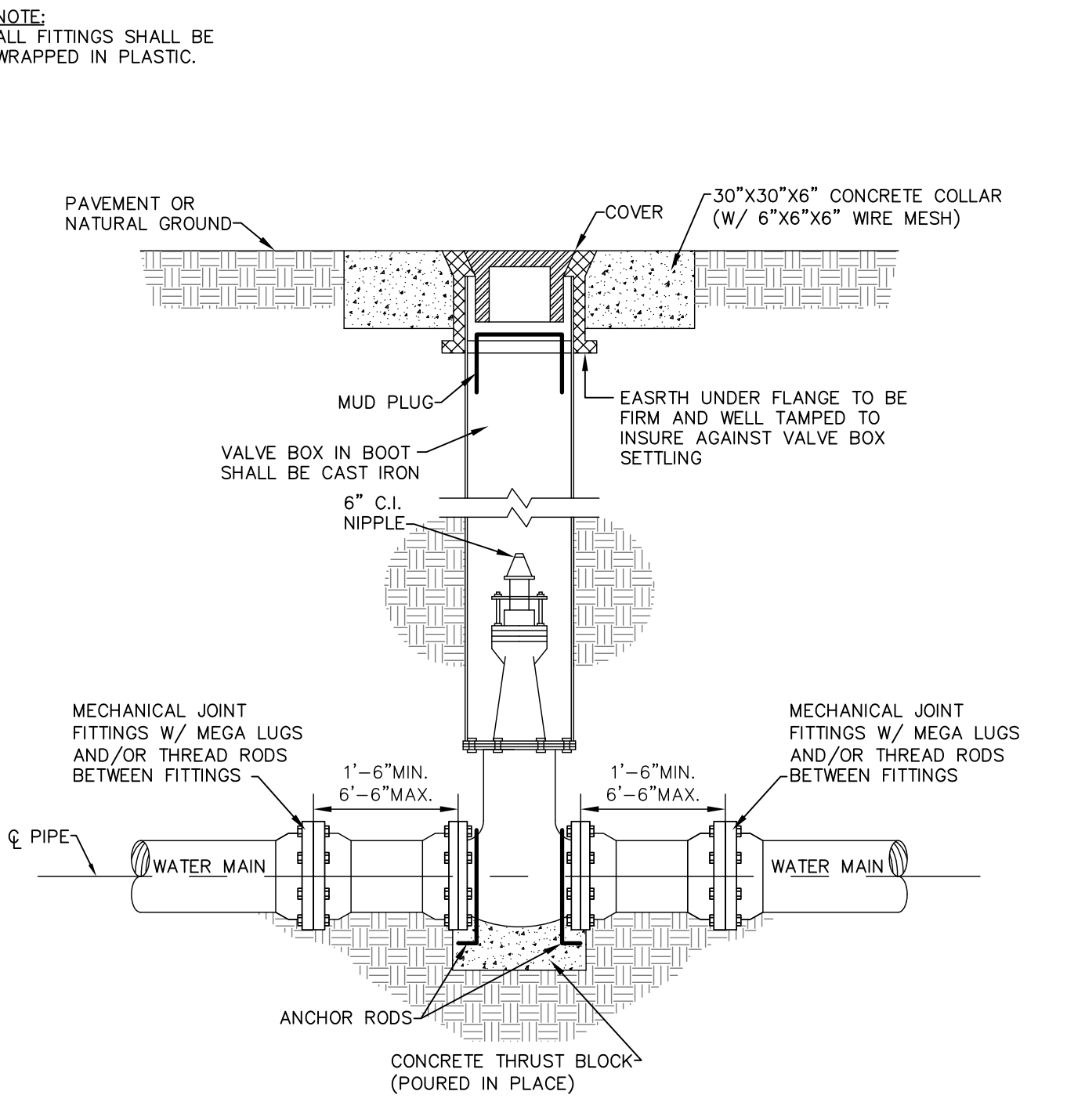
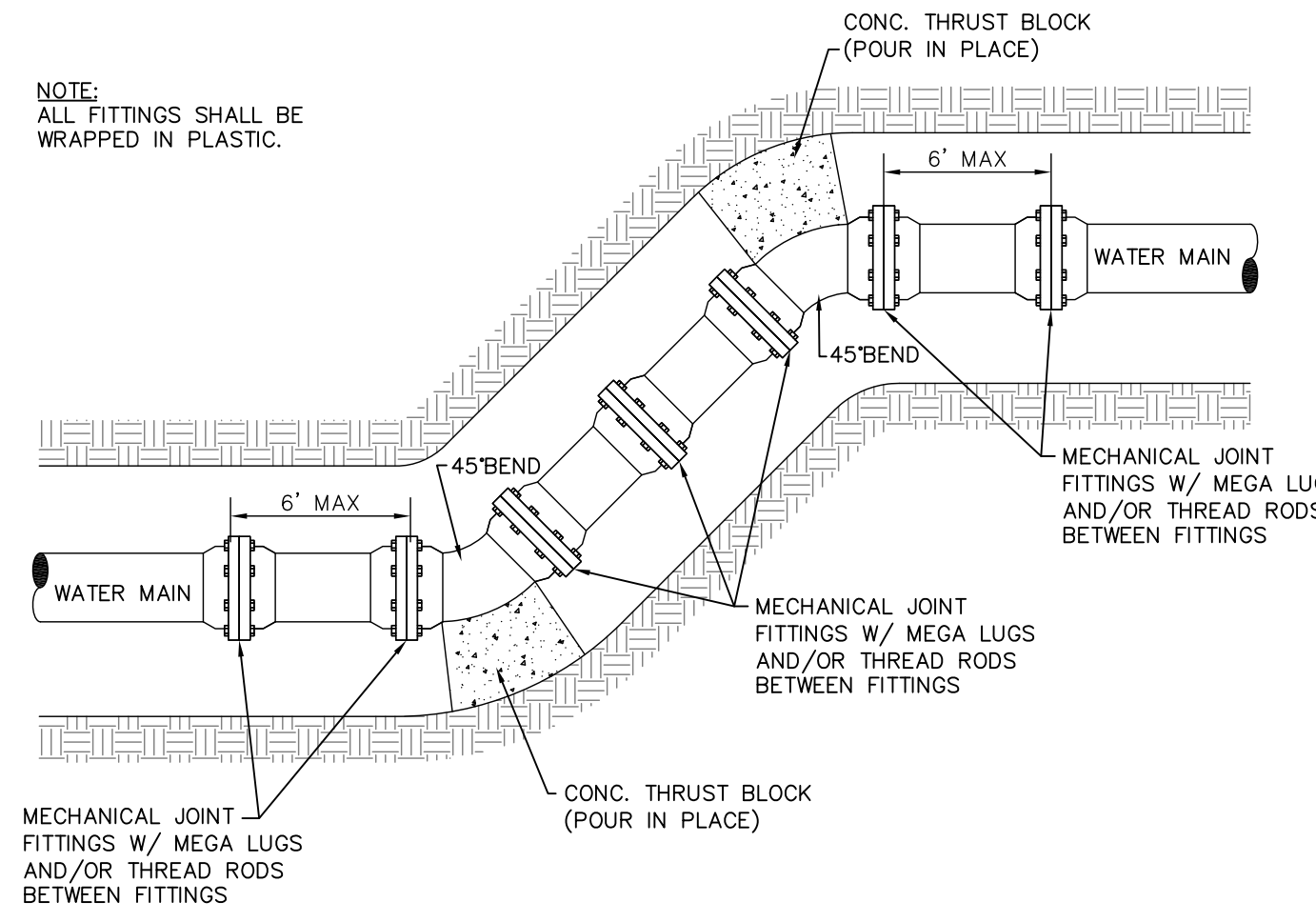
NOMINAL PIPE SIZE	CASING SIZE (INSIDE DIA.)	CASING MINIMUM WALL THICKNESS
16"	24"	0.25"



- NOTE:  
BEDDING FOR PVC SHALL BE IN ACCORDANCE WITH ASTM 2321.
- SAND OR SANDY LOAM BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE. (MIN. THICKNESS=6")
  - SAND OR SANDY LOAM BACKFILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE (4" LIFTS, HAND TAMPED) BUT TRENCH WIDTHS SHALL BE PIPE O.D. + 12" OR IN ACCORDANCE WITH ASTM 2331 FOR PVC PIPE.
  - SAND OR SANDY LOAM BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)
  1. (CITY STREETS, PARKING AREA, SELECT EXCAVATED BACKFILL MATERIAL COMPACTED TO 95% SPD. (8" LIFTS, MECHANICAL COMPACTION)
  2. (STATE MAINTAINED ROADWAY) COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED AS PER ASTM D-4253 AND ASTM D-698.
  - SELECTED EARTH BACKFILL COMPACTED TO 90% STANDARD PROCTOR DENSITY (12" LIFT, MECHANICAL COMPACTION). FOUNDATION PREPARATION (WELLPONTS, GRAVEL OR CEMENT STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 95% STANDARD PROCTOR DENSITY (USE RELATIVE DENSITY TEST PER ASTM D-4253 & ASTM D-698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6". STRUCTURE BACKFILL MATERIAL SHALL BE SAND, APPROVED SITE SOIL, OR OTHER APPROVED SUBSTITUTE.



NOTE:  
1.) ALL THE ABOVE-GROUND PIPE & FITTINGS TO BE DUCTILE IRON AWWA C-110-87 OR BETTER WITH MEGA-LUGS.  
2.) BELOW GROUND FITTINGS TO BE WRAPPED IN PLASTIC.



**WATER DETAILS**

**MATERMI SUBDIVISION**

BEING A 18.81 ACRE TRACT OF LAND OUT OF BLOCK 16, TEXAN GARDENS SUBDIVISION, RECORDED IN VOL. 106, PAGE 57, MAP RECORDS, HIDALGO COUNTY, TEXAS.

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