



# HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM  
Director of Planning

1304 SOUTH 25<sup>TH</sup> STREET  
EDINBURG TEXAS 78539  
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## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 4-27-2021

PROPOSED EL CRUCERO SUBDIVISION PRECINCT No. 3.

ENGINEER: SOUTH TEXAS INFRASTRUCTURE GROUP DEVELOPER: PEÑA CHAPA DEVELOPMENT

PRELIMINARY APPROVAL     FINAL APPROVAL     FINAL APPROVAL WITH FINANCIAL GUARANTEE     WITH VARIANCE

NUMBER OF LOTS: 25  \*SINGLE FAMILY     \*MULTI-FAMILY     COMMERCIAL     INDUSTRIAL

NUMBER OF STREETLIGHTS: N/A

FILLING STATIONS: 4

LOCATION DESCRIPTION: NORTHEAST CORNER OF MILE 5 ROAD AND IOWA 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 8-07-2020 PROPERTY LIES WITHIN FLOOD ZONE: "X" & "A". FLOOD ZONE "A" FOR LOTS 21-25 HAVE BEEN REMOVED UNDER LOMR-F CASE NO. 21-06-0645A AND CONVERTED TO FLOOD ZONE "X" (UNSHADED) AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY NATURAL PERCULATION AND SURFACE RUN-OFF ONTO MILE 5 ROAD AND IOWA ROAD SIDE DITCH.

ROAD R.O.W. DEDICATION: 30.00 FEET ONTO IOWA ROAD & 30.00 FEET ONTO MILE 5 ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 04-09-2021 BY VICTOR GALLARDO, PCT. 3 R.O.W. AGENT.

H.C.H.D. FINAL APPROVAL DATE: 04-20-2021 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM:  OSSF'S HAVE BEEN INSTALLED.

WATER SERVICE PROVIDER: AGUA SUD EXISTING LINE SIZE: 12" LOCATION: MILE 5 ROAD.

H.C.E.O.C. FINAL APPROVAL DATE: 04-20-2021: 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.

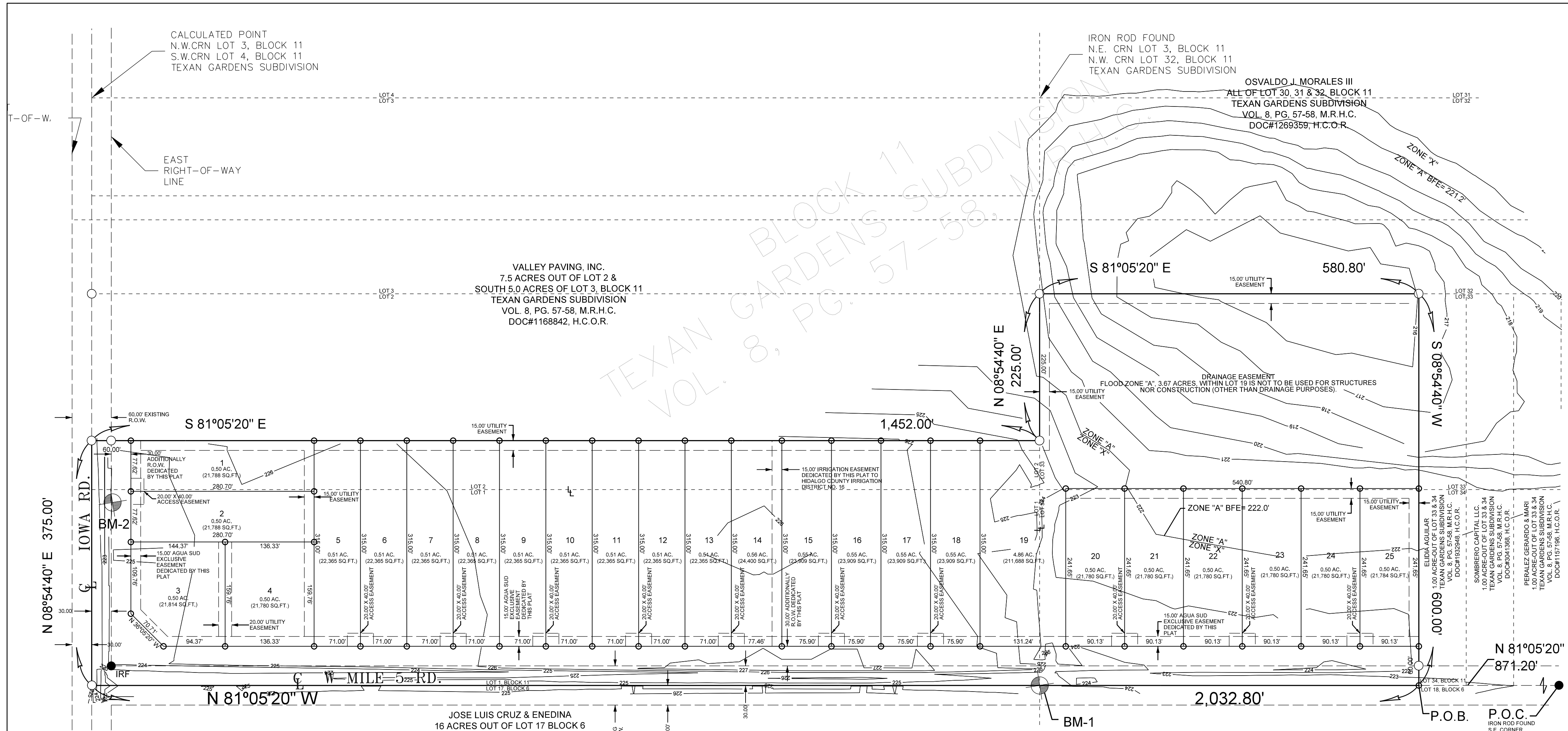
PRELIMINARY APPROVAL FROM THE  
HIDALGO COUNTY COMMISSIONERS COURT ON: SEPTEMBER 22, 2020

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

**Final Approval** subject to recommendations other departments

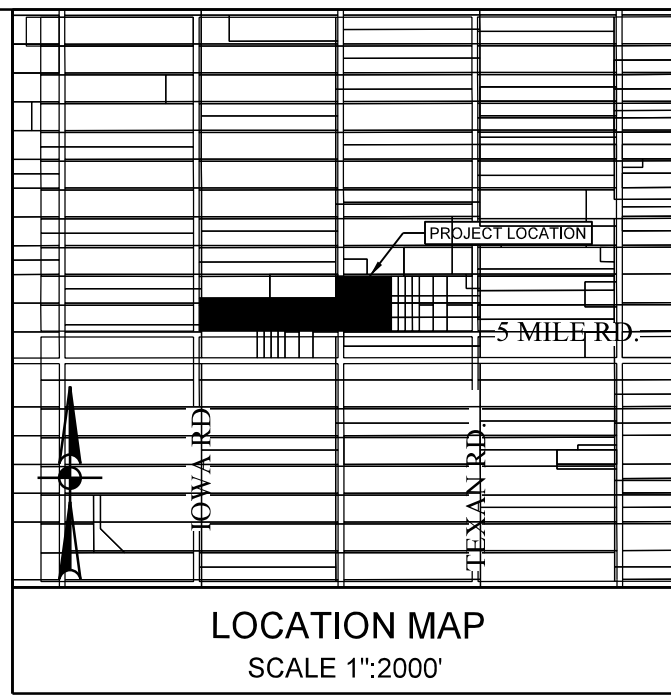
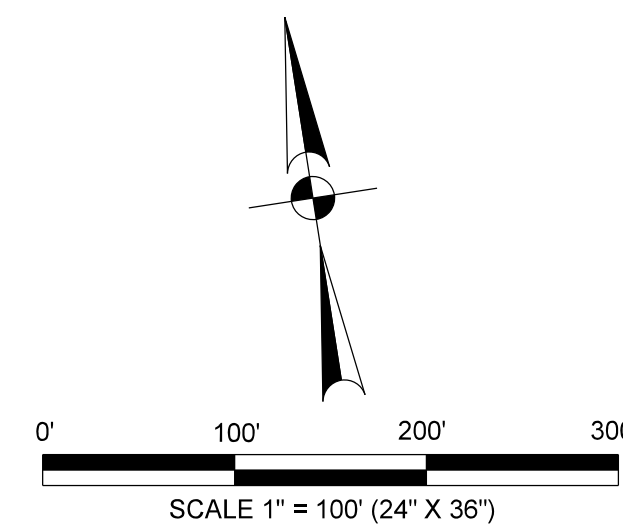
This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules, Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.

\*



**LEGEND:**

- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
- FOUND IRON ROD



**GENERAL NOTES:**

- FLOOD ZONE STATEMENT:**  
FLOOD ZONE DESIGNATION: "X" & "A" ZONE "X" 500-YEAR FLOOD ZONE  
ZONE "A" NO BASE FLOOD ELEVATIONS DETERMINED, COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000. BASED ON LIDAR AND TOPOGRAPHIC DATA FROM THE SITE, WE HAVE DETERMINED THAT THE BASE FLOOD ELEVATION FOR THIS ZONE "A" ON THIS SPECIFIC PROPERTY IS 222.0 FEET. PROPERTY HAS BEEN TAKEN OUT OF THE FLOOD ZONE, EXCEPT FOR LOT 19 AS SHOWN ON GRADING PLAN, WITH LOMR CASE NO.
- MINIMUM BUILDING SETBACK LINES:**  
FRONT SETBACK:  
50 FEET FOR LOTS FRONTING 5 MILE  
50 FEET FOR LOTS FRONTING IOWA RD.  
SIDE SETBACK:  
8 FEET OR EASEMENT, WHICHEVER IS GREATER  
REAR SETBACK:  
15 FEET OR EASEMENT, WHICHEVER IS GREATER
- NO MORE THAN ONE SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON THE LOT. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS.**
- MINIMUM FINISHED FLOOR ELEVATION SHALL BE 18" ABOVE CENTERLINE OF THE STREET OR 18" 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.**
- THE FOLLOWING BENCHMARKS ARE IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS.**  
BM-1 IS A FOUND COTTON PICKER SPINDLE AT THE CENTERLINE OF 5 MILE LINE.  
N# 16.634.632.5630  
E# 1.013.746.7284  
ELEV# = 224.70  
BM-2 IS A SET 5/8" IRON PIN WITH PLASTIC CAP "ROWSS CONTROL" LOCATED ON EAST IOWA ROAD & 5 MILE LINE INTERSECTION.  
N# 16.635.129.3659  
E# 1.012.287.1992  
ELEV# = 224.97
- IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 A TOTAL OF 48,039 CUBIC FEET, 1.103 ACRE-FEET OF DETENTION IS REQUIRED FOR THIS SUBDIVISION.**
- ALL IRRIGATION EASEMENTS ARE EXCLUSIVE TO HIDALGO COUNTY IRRIGATION DISTRICT NO. 16, AND THE DISTRICT ALLOWS NO OTHER UTILITIES OR OUTSIDE USE WITHOUT ITS EXPRESS WRITTEN APPROVAL.**
- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CROSS ABOVE OR BELOW GROUND ANY IRRIGATION DISTRICT EASEMENT OR RIGHT OF WAY WITH LINES, POLES, OPEN DITCHES OR OTHER USE WITHOUT FIRST OBTAINING A CROSSING PERMIT FROM HIDALGO COUNTY IRRIGATION DISTRICT NO. 16.**
- NO PERMANENT STRUCTURE, UTILITY POLE, HOLE, WALL, FENCE, DRIVEWAY OR ROAD WILL BE ALLOWED TO BE CONSTRUCTED OR EXIST ON ANY DISTRICT EASEMENT OR RIGHT OF WAY WITHOUT WRITTEN APPROVAL BY IRRIGATION DISTRICT. ANY UNAUTHORIZED STRUCTURE WITHIN THE EASEMENT BOUNDARY IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE.**
- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CONNECT TO ANY DISTRICT FACILITY WITHOUT FIRST OBTAINING A PERMIT FROM IRRIGATION DISTRICT. ANY CONNECTION NOT AUTHORIZED BY THE DISTRICT IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE.**
- 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.**
- 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.**
- 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.**
- AN OSSF SYSTEM IS BEING DESIGNED FOR DISPOSAL OF DOMESTIC SEWAGE ONLY.**
- EACH LOT ON THIS PLAT COMPLIES WITH THE MINIMUM 21,790 SQUARE FEET LOT AREA WITH POTABLE WATER SUPPLY.**
- CROSS SYSTEM SHALL REQUIRE INSPECTION AND APPROVAL BY HIDALGO COUNTY AUTHORIZED DEPARTMENT**
- 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 OCCUPYING A LOT.**
- THERE ARE NO WATER WELLS WITHIN 150 FEET FROM THE BOUNDARIES ON THIS SUBDIVISION.**
- PENA CHAPA DEVELOPMENT, THE OWNER & SUBDIVIDER OF EL CRUCERO SUBDIVISION, RETAINS A BLANKET EASEMENT UPON EACH LOT FOR THE PURPOSE OF INSTALLING AN APPROVED OSSF ON THE LOT AS DESCRIBED ON SHEET NO. 2 OF THIS PLAT.**
- 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.**
- NO INDIVIDUAL LOT DRIVEWAY ACCESS WILL BE ALLOWED FROM (5 MILE LINE RD) ON LOTS 3, 4 & 19. A 24" SHARED DRIVEWAY ENTRANCE SHALL BE CONSTRUCTED BY DEVELOPER BETWEEN LOTS 1 & 2, 5 & 6, 7 & 8, 9 & 10, 11 & 12, 13 & 14, 15 & 16, 17 & 18, 20 & 21, 22 & 23, AND 24 & 25.**
- THE DEVELOPER SHALL BE RESPONSIBLE FOR DETAINING AND ACCOMMODATING MORE THAN THE DETAINED VOLUME SHOWN ON THIS PLAT IF IT IS DETERMINED, AT THE DEVELOPMENT STAGE, THAT THE DETENTION REQUIREMENTS ARE GREATER THAN THAT STATED ON THIS PLAT, DUE TO THE IMPERVIOUS ARE BEING GREATER THAN THE PLAT ENGINEER CONSIDERED IN THE HYDRAULIC CALCULATIONS FOR THIS SUBDIVISION.**

**LOCATION DESCRIPTION**

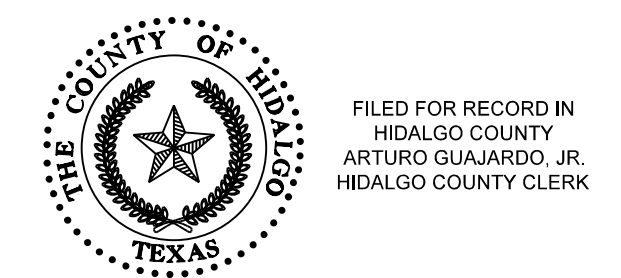
EL CRUCERO SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY PRECINCT NO. 3 IN THE WEST SIDE OF HIDALGO COUNTY, IN THE INTERSECTION OF 5 MILE RD AND IOWA RD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION, ACCORDING TO THE OFFICIAL MAP IN THE CITY OFFICE OF PLANNING AND ZONING (POPULATION 83,394, 2015 CENSUS), EL CRUCERO 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 212.01.

**SHEET 1 - HEADING INDEX**

LOCATION MAP AND ETJ. PRINCIPAL CONTACTS, LOT, STREETS AND EASEMENT LAYOUT, ENGINEER'S AND SURVEYOR'S CERTIFICATION, HIDALGO COUNTY CLERK'S RECORDING CERTIFICATE, PLAT NOTES AND RESTRICTIONS, DESCRIPTION (METES & BOUNDS), OWNER'S ACKNOWLEDGMENT, H.C.D. NO. 1 COUNTY CERTIFICATION, COUNTY CLERK RECORDING CERTIFICATE, H.C.I.D. NO. 6 CERTIFICATE, ENGINEER'S AND SURVEYOR'S CERTIFICATION, CITY OF MISSION CERTIFICATE OF APPROVAL, HIDALGO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT CERTIFICATE, AGUA SPECIAL UTILITY DISTRICT CERTIFICATE.

**SHEET 2 - WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP, ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTE WATER/OSSF DOCUMENT NUMBERS, 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, REVISION NOTES.**



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

**LOT LAYOUT EL CRUCERO SUBDIVISION**

BEING A 20.5 ACRE TRACT OF LAND OUT OF ALL OF LOT ONE (1) AND THE SOUTH 2 AND 1/2 (2.5) ACRES OF LOT TWO (2), BLOCK ELEVEN (11), AND A 8.0 ACRE TRACT OF LAND, MORE OR LESS, OUT OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.



**METES AND BOUNDS**

BEING A 20.5 ACRE TRACT OF LAND, LYING AND SITUATED IN HIDALGO COUNTY, TEXAS, SAID 20.5 ACRES TRACT BEING ALL OF ALL OF LOT ONE (1) AND THE SOUTH 1 AND 1/2 (2.50) ACRES OF LOT TWO (2), BLOCK (11), AND BEING OUT OF AND FORMING A PART OF PORTION OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, RECORDED IN VOLUME 8, PAGES 57 AND 58, MAP RECORDS OF HIDALGO COUNTY, TEXAS, AND SAID 20.5 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON ROD FOUND AT THE SOUTHEAST CORNER OF LOT 34, BLOCK 11 OF THE SAID TEXAN GARDENS, SAME POINT BEING THE INTERSECTION BETWEEN THE CENTERLINES OF W. MILE 5 ROAD AND TEXAN ROAD;

THENCE N 81°05' 20" W ALONG THE SOUTH LINE OF THE SAID LOT 34, SAME BEING ALONG THE CENTERLINE OF W. MILE 5 ROAD, TO THE SOUTHWEST CORNER OF A CALLED 1.00 ACRE TRACT DESCRIBED IN WARRANTY DEED FROM FELIPE E. PERALEZ AND HILDA D. PERALEZ TO ELIDIA AGUILAR, DATED SEPTEMBER 25, 2008, RECORDED IN DOCUMENT NUMBER 1932948, OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS, A DISTANCE OF 871.20 FEET TO A IRON ROD SET FOR THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT AND POINT OF BEGINNING;

THENCE N 81°05' 20" W ALONG THE SOUTH LINE OF THE SAID LOT 34, SAME BEING ALONG THE CENTERLINE OF W. MILE 5 ROAD, TO THE SOUTHWEST CORNER OF THE SAID LOT 34, A DISTANCE OF 2032.80 FEET TO A IRON ROD SET FOR THE SOUTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT;

THENCE N 08°54' 20" E ALONG THE WEST LINE OF THE LOT 1, BLOCK 11, TEXAN GARDENS, SAME BEING ALONG THE CENTERLINE OF IOWA ROAD, TO THE SOUTHWEST CORNER OF THE SAID A CALLED 12.5 ACRES TRACT DESCRIBED IN A WARRANTY DEED FROM NEVA H. BELL TO VALLEY PAVING, DATED FEBRUARY 07, 2003, RECORDED IN DOCUMENT NUMBER 1168842, OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS, A DISTANCE OF 375.00 FEET TO A IRON ROD SET FOR THE NORTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT;

THENCE S 81°05' 20" W ACROSS THE SAID LOT 2, BLOCK 11, TEXAN GARDENS, SAME BEING ALONG THE SOUTH BOUNDARY LINE OF THE SAID 12.5 ACRES VALLEY PAVING TRACT, PASSING AT 30.00 FEET A 1/2-INCH IRON ROD SET ON THE EXISTING RIGHT-OF-WAY LINE OF IOWA ROAD, AND CONTINUING A TOTAL DISTANCE OF 1452.00 FEET TO A IRON ROD FOUND FOR AN INTERIOR CORNER OF THIS HEREIN DESCRIBED TRACT;

THENCE N 08°54' 40" E ALONG THE WEST LINE OF THE SAID LOTS 33 AND 34, TO THE NORTHWEST CORNER OF THE SAID LOT 33, A DISTANCE OF 225.00 FEET TO AN IRON ROD SET FOR THE NORTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE S 81°05' 20" E ALONG THE NORTH LINE OF THE SAID LOT 33, TO THE SOUTHWEST CORNER OF THE SAID 1.00 ACRE ELIDIA AGUILAR TRACT, A DISTANCE OF 580.80 FEET TO A IRON ROD SET FOR THE NORTHEAST CORNER OF THIS HEREIN DESCRIBED TRACT;

THENCE S 08° 54' 40" W ACROSS THE SAID LOTS 33 AND 34, SAME BEING PARALLEL TO THE EAST LINE OF THE SAID LOTS 33 AND 34, AND SAME BEING ALONG THE WEST BOUNDARY LINE OF THE SAID 1.00 ACRE ELIDIA AGUILAR TRACT, PASSING 570.00 FEET TO A IRON ROD SET ON THE EXISTING NORTH RIGHT-OF-WAY OF W. MILE 5 ROAD, AND CONTINUING A TOTAL DISTANCE OF 600.00 FEET TO THE POINT OF BEGINNING AND BEING MORE OR LESS A 20.5 ACRE TRACT OF LAND.

BEARING BASIS, TEXAS COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983  
A SURVEY PLAT OF EVEN DATE ACCOMPANIES THIS HEREIN METES AND BOUNDS DESCRIPTION

**CITY OF MISSION CERTIFICATE OF APPROVAL**

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

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

ATTEST: CITY SECRETARY \_\_\_\_\_ DATE \_\_\_\_\_

REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

**PRINCIPAL CONTACTS**

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78752	(956) 581-3918	
ENGINEER:	VICTOR H. TREVIÑO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78752	(956) 424-3335	(956) 424-3132
SURVEYOR:	IVAN GARCIA, R.P.L.S.	921 S. 10TH AVE.	EDINBURG, TEXAS 78539	(956) 380-6152	(956) 380-6083

**SOUTH TEXAS INFRASTRUCTURE GROUP**

900 S. STEWART RD., SUITE 13  
MISSION, TEXAS 78752  
PH: (956) 424-3335  
FAX: (956) 424-3132  
TBP REG # 1500

STATE OF TEXAS  
COUNTY OF HIDALGO

**OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION:**  
PENA CHAPA DEVELOPMENT AS OWNER OF THE 20.5 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED EL CRUCERO 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

\_\_\_\_\_  
PENA CHAPA DEVELOPMENT  
MANUEL CHAPA (MEMBER)  
P.O. BOX 1958  
MISSION, TEXAS 78752

STATE OF TEXAS  
COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA 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 \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC  
STATE OF TEXAS  
COUNTY OF HIDALGO

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

ATTEST: \_\_\_\_\_  
HIDALGO COUNTY JUDGE  
DATE \_\_\_\_\_  
HIDALGO COUNTY CLERK  
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 HIDALGO COUNTY 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

STATE OF TEXAS  
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, VICTOR H. TREVIÑO, A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, LICENSE NUMBER 128195, DO HEREBY CERTIFY THAT THIS PLAT HAS BEEN GIVEN PROPER AND ADEQUATE ENGINEERING CONSIDERATION.

\_\_\_\_\_  
VICTOR H. TREVIÑO, P.E.  
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

STATE OF TEXAS  
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, IVAN GARCIA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE AND PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND ON \_\_\_\_\_ UNDER MY DIRECTION.

\_\_\_\_\_  
IVAN GARCIA, R.P.L.S.  
REG. PROFESSIONAL LAND SURVEYOR # 6496

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.

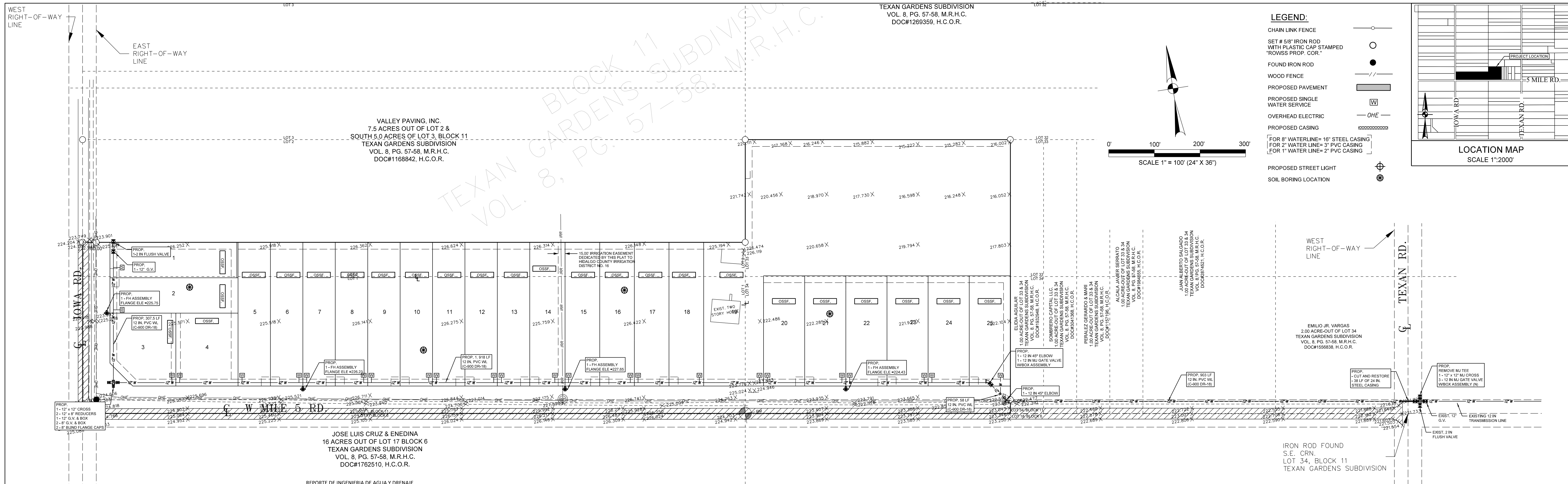
\_\_\_\_\_  
HIDALGO COUNTY DRAINAGE DISTRICT NO. 1  
RAUL E. SESIN, P.E., C.F.M.  
DATE \_\_\_\_\_

I, JOSE E. SAENZ, HEREBY CERTIFY THAT THE AGUA SPECIAL UTILITY DISTRICT HAS APPROVED THE POTABLE WATER SUPPLY FOR THE EL CRUCERO 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  
HIDALGO COUNTY  
CERTIFICATE OF PLAT APPROVAL

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

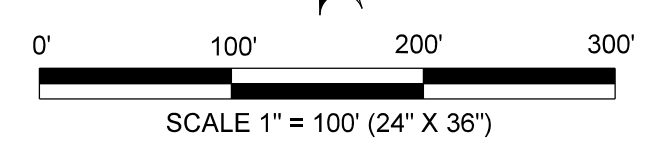
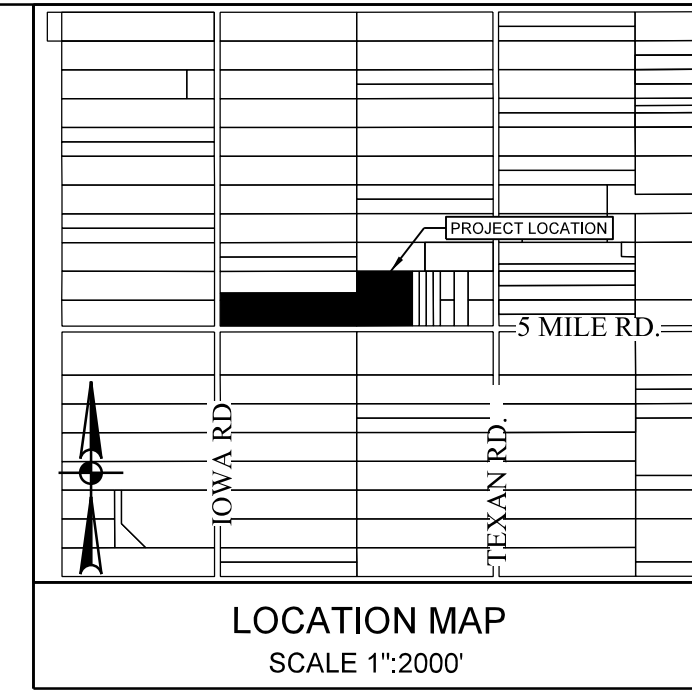
\_\_\_\_\_  
ENVIRONMENTAL HEALTH DIVISION MANAGER  
DATE \_\_\_\_\_



**LEGEND:**

- CHAIN LINK FENCE
- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
- FOUND IRON ROD
- WOOD FENCE
- PROPOSED PAVEMENT
- PROPOSED SINGLE WATER SERVICE
- OVERHEAD ELECTRIC
- PROPOSED CASING
- PROPOSED STREET LIGHT
- SOIL BORING LOCATION

FOR 8" WATERLINE= 16" STEEL CASING  
FOR 2" WATER LINE= 3" PVC CASING  
FOR 1" WATER LINE= 2" PVC CASING



**WATER AND SEWER ENGINEERING REPORT**

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

AGUA SUD HAS ONE EXISTING WATER LINE RUNNING IN THE 5 MILE LINE RD. THE WATER LINE IS A 12" DIAMETER LINE RUNNING THROUGH THE NORTH SIDE OF THE RIGHT-OF-WAY OF 5 MILE LINE RD AND ITS STOPS WITH A 2" FLUSH VALVE AT THE INTERSECTION OF 5 MILE LINE RD AND TEXAN RD.

EL CRUCERO SUBDIVISION WILL BE CONNECTED TO THE EXISTING WATER SYSTEM, ON 5 MILE LINE RD AND TEXAN RD, WITH ONE (1) 12" x 12" MI CROSS WITH THREE (3) GATE VALVES. AFTER CROSSING THE TEXAN RD, THE WATER LINE WILL CONTINUE, ON THE NORTH SIDE OF THE 5 MILE LINE RD, UP TO THE WHERE THE SUBDIVISION STARTS.

EL CRUCERO SUBDIVISION HAS 25 LOTS. WATER DISTRIBUTION FOR EL CRUCERO SUBDIVISION CONSISTS OF TWENTY (25) 1" DIAMETER SINGLE SERVICE SHORT LINES THAT RUN INTO THE LOTS. THE 12" LINE, THE 1" SINGLE SERVICE LINES AND THE METER BOXES HAVE ALREADY BEEN INSTALLED. AT A TOTAL OF \$ \_\_\_\_\_ OR \$ \_\_\_\_\_ PER LOT. IN ADDITION THE SUBDIVIDER HAS PAID AGUA SUD THE SUM OF \$ \_\_\_\_\_ WHICH COVERS THE \$ \_\_\_\_\_ 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 FIVE (4) FIRE HYDRANTS AT A UNIT COST OF \$ 4,900.00 FOR A TOTAL COST OF \$ 19,600.00. 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 EL CRUCERO 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 25. 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 INDICATING 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 \$ \_\_\_\_\_ 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 OF \$ \_\_\_\_\_. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ONE OSSF SINCE \_\_\_\_/\_\_\_\_/\_\_\_\_.

**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 \$ \_\_\_\_\_  
 SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$ \_\_\_\_\_



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

**REPORT DE INGENIERIA DE AGUA Y DRENAJE**

**WATER SUPPLY (DESCRIPCION, GASTOS Y FECHAS DE INICIO):**  
 LA SUBDIVISION EL CRUCERO RECIBIRÁ SU PROVISION DE AGUA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL DUEÑO DE LA SUBDIVISION Y AGUA SUD HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRÁ SU PROVISION DE AGUA POR LOS PROXIMOS 30 AÑOS. AGUA SUD HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

AGUA SUD TIENE UNA LINEA EXISTENTE QUE CORRE EN LA 5 MILE LINE RD. LA LINEA DE AGUA ES DE 12 PULGADAS DE DIAMETRO Y CORRE POR EL LADO NORTE DEL DERECHO-DE-VIA DE 5 MILE LINE RD Y SE DETIENE CON UNA VALVULA DE 2 PULGADAS EN LA INTERSECCION DE 5 MILE LINE RD Y TEXAN RD.

LA SUBDIVISION EL CRUCERO SERA CONECTADA AL SISTEMA DE AGUA EXISTENTE, UBICADO EN LA 5 MILE LINE RD Y TEXAN RD, CON UNA (1) 12" x 12" MI CROSS CON TRES (3) VALVULAS. DESPUES DE CRUZAR LA TEXAN RD, LA LINEA DE AGUA CONTINUARA, EN EL LADO NORTE DE LA 5 MILE LINE RD, HASTA LLEGAR A LA SUBDIVISION.

LA SUBDIVISION EL CRUCERO TIENE 25 LOTES. LA DISTRIBUCION DE AGUA PARA LA SUBDIVISION CARRIZALES CONSISTE EN VEINTE (25) SERVICIOS SENCILLOS CORTOS DE 1" DE DIAMETRO QUE CORREN HACIA LOS LOTES. SE HAN INSTALADO YA LA LINEA DE 12", LOS SERVICIOS DE 1" Y LAS CAJAS DE LOS MEDIDORES A UN COSTO TOTAL DE \$ \_\_\_\_\_ POR LOTE. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISION LE HA PAGADO A AGUA SUD LA CANTIDAD DE \$ \_\_\_\_\_ QUE CUBRE EL COSTO DE LOS MEDIDORES (\$ \_\_\_\_\_ POR CADA LOTE), ESTE PRECIO INCLUYE TAMBIEN EL COSTO DE LA INSTALACION DE CADA MEDIDOR Y LOS GASTOS DE CONEXION CUANDO EL DUEÑO DE ALGUNO DE LOS LOTES SOLICITE UN MEDIDOR DE AGUA, AGUA SUD LO INSTALARA SIN COSTO ALGUNO. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISION HA INSTALADO 4 HIDRANTES CONTRA INCENDIO (FIRE HYDRANTS) A UN COSTO DE \$ 4,900.00 POR CADA UNO, LO CUAL REPRESENTA UNA CANTIDAD TOTAL DE \$ 19,600.00. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

**DRENAJE: DESCRIPCION, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION**  
 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 SUBDIVISION 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) SEGUN EL REPORTE.

**REPORT DE EVALUACION DE SUELO:**  
 CADA LOTE EN LA SUBDIVISION PROPUESTA MIDE MÁS DE MEDIO ACRE. SE HICIERON DOS EXCAVACIONES DE EVALUACION EN LUGARES OPUESTOS DE LA SUBDIVISION, UN TOTAL DE 14 EXCAVACIONES DE EVALUACION FUERON REALIZADAS. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA ÁREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME (TIERRENO 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 ESTA ÁREA FLUYE BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSA SÉPTICA ES DE \$ \_\_\_\_\_ DÓLARES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSAS SÉPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACION FINAL A UN COSTO TOTAL DE \$ \_\_\_\_\_. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO Y HA APROBADO LA INSTALACION DE LA FOSA SÉPTICA DESDE \_\_\_\_/\_\_\_\_/\_\_\_\_.

**CERTIFICACION:**  
 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 SECCION 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 \$ \_\_\_\_\_  
 DRENAJE- SE ESTIMA QUE LA FOSA SÉPTICA COSTARÁ \$ \_\_\_\_\_

**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:**  
 I, PENA CHAPA DEVELOPMENT SUBDIVIDER FOR EL CRUCERO 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

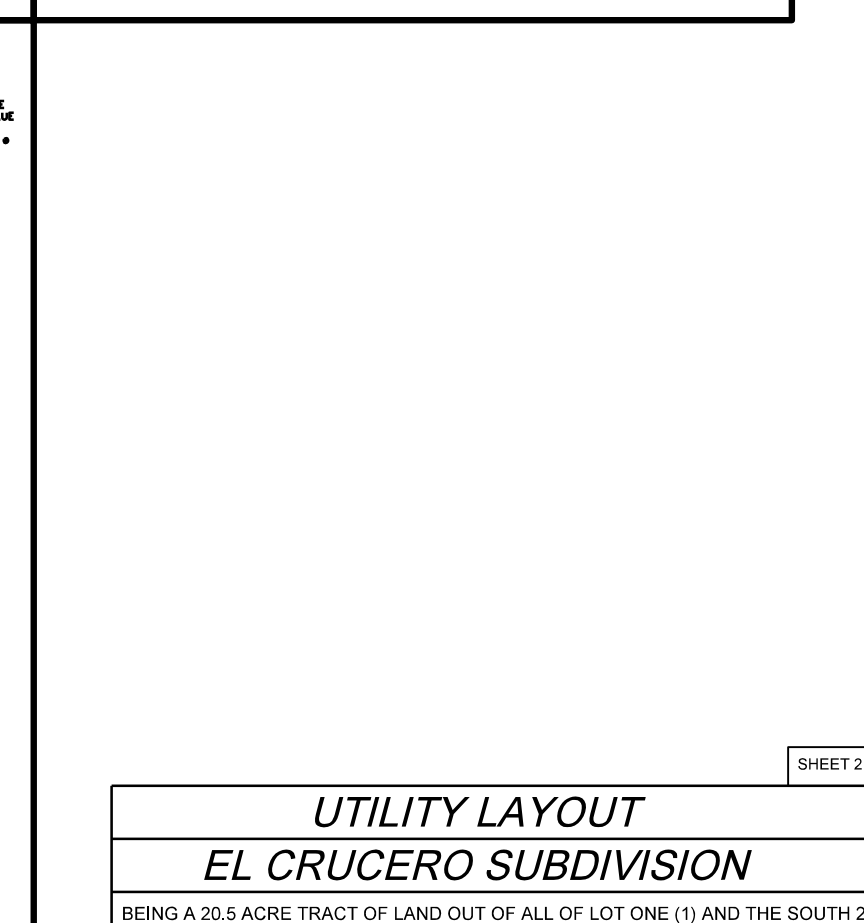
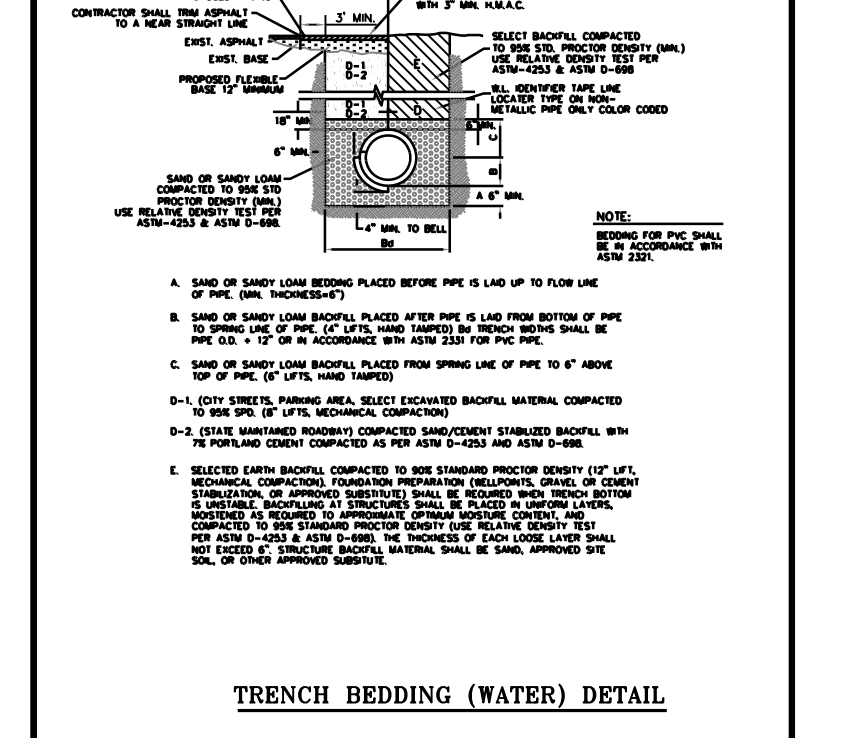
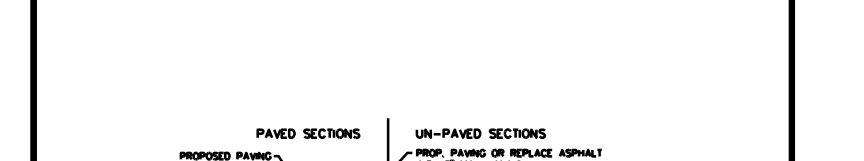
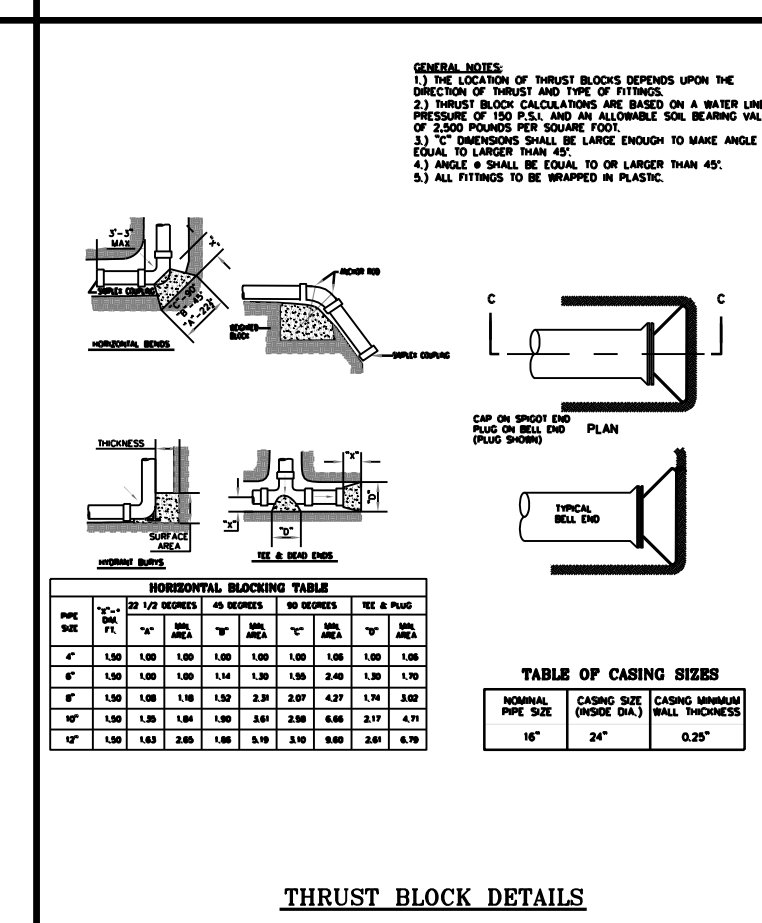
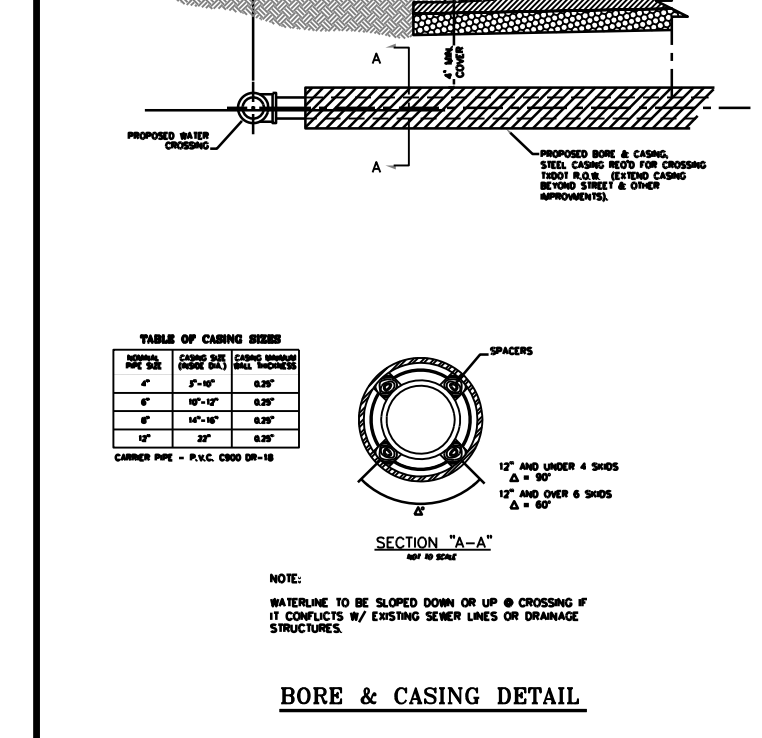
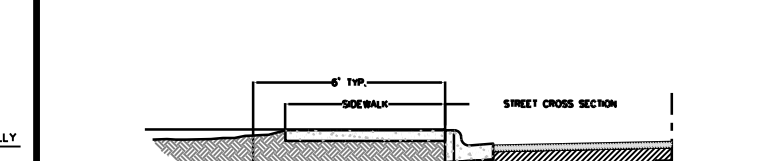
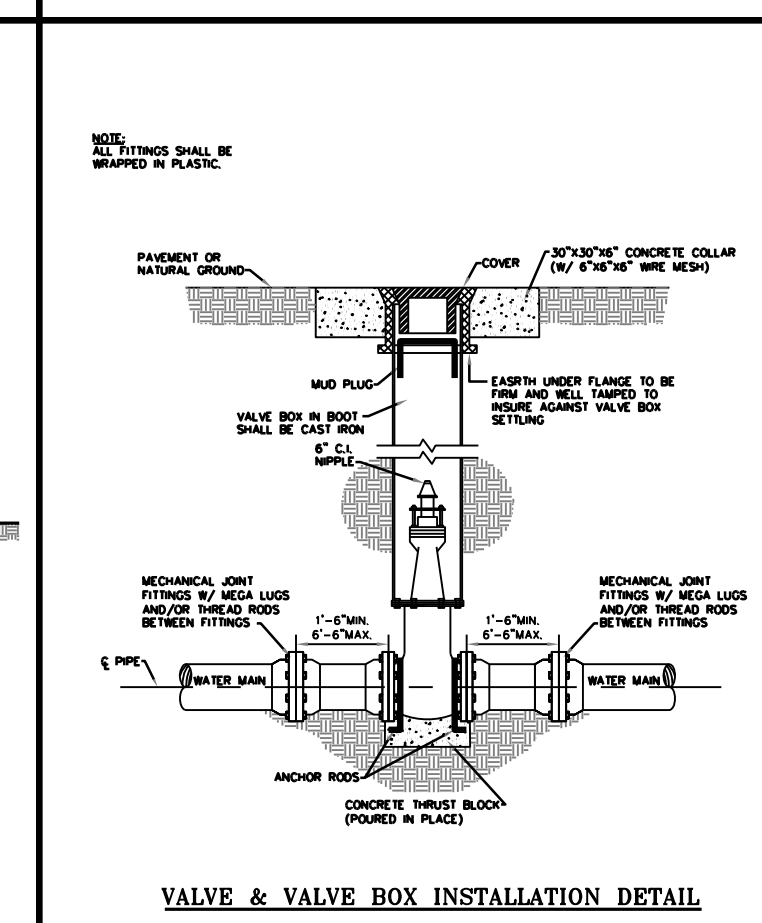
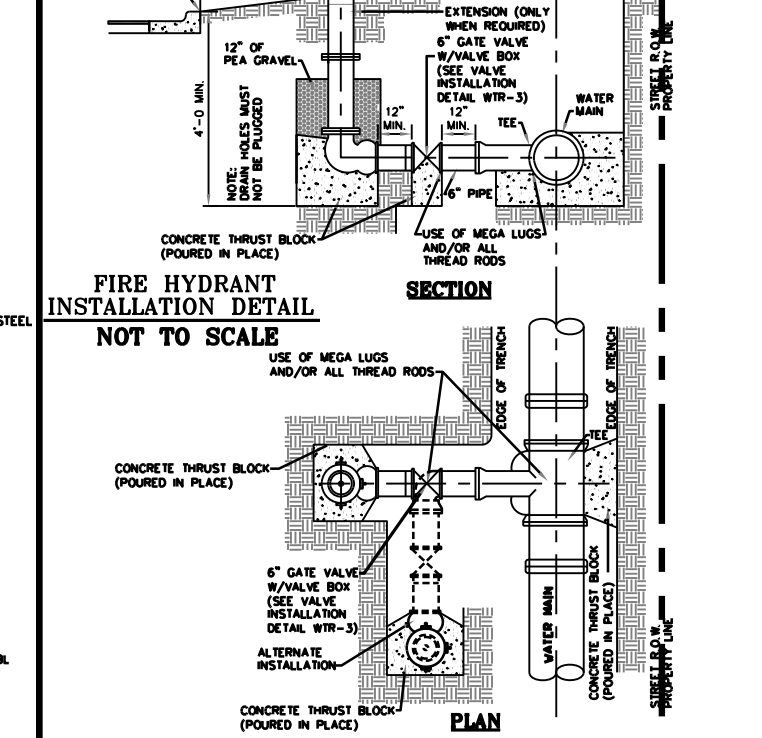
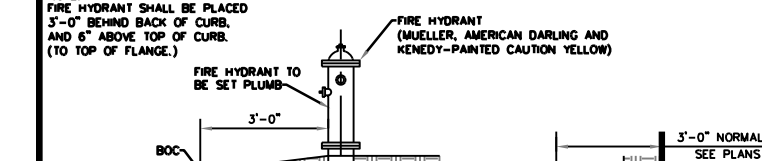
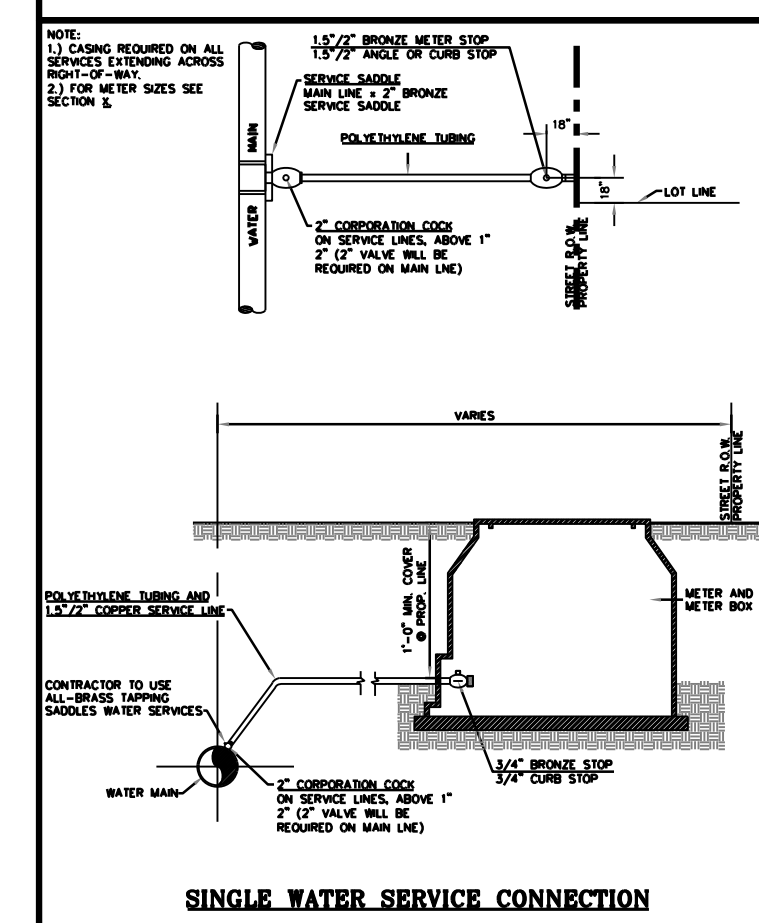
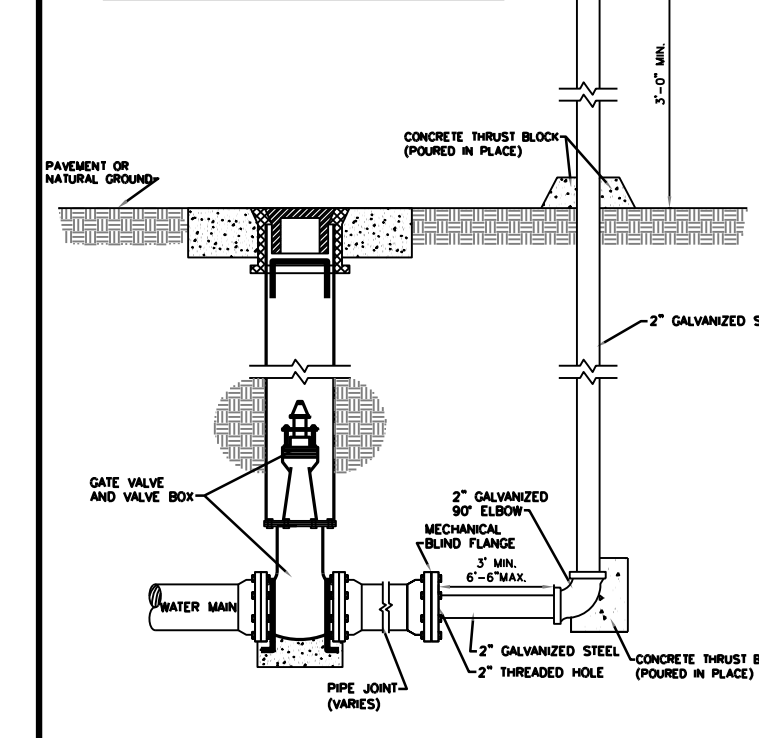
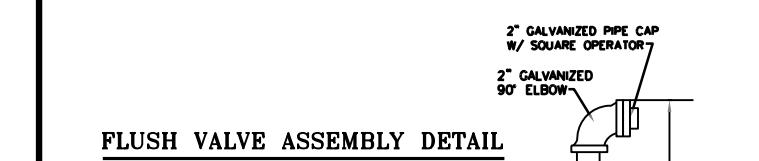
PENA CHAPA DEVELOPMENT  
 MANUEL CHAPA (MEMBER)  
 DATE \_\_\_\_\_

STATE OF TEXAS  
 COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA 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 \_\_\_\_\_

NOTARY PUBLIC



REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

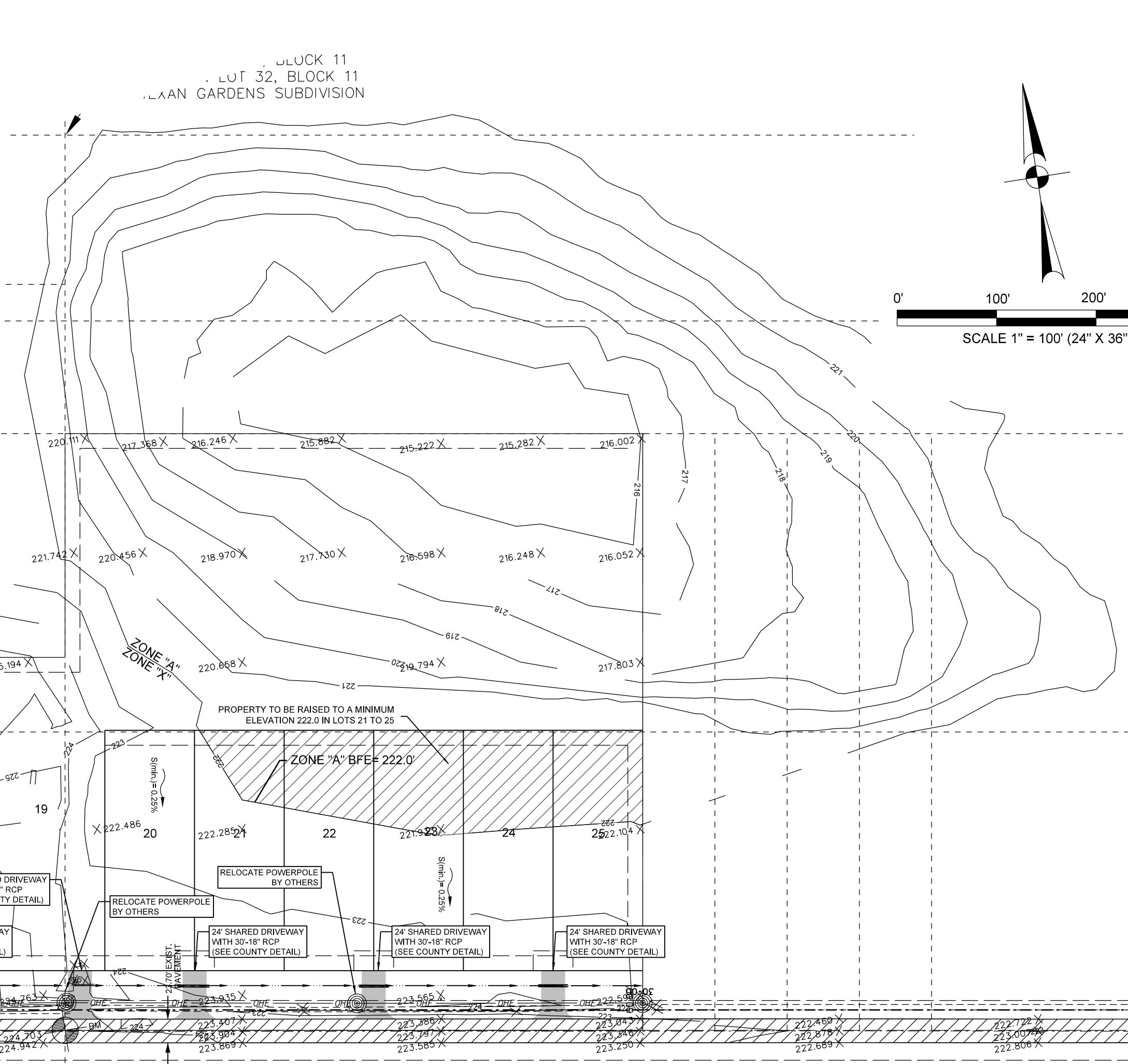
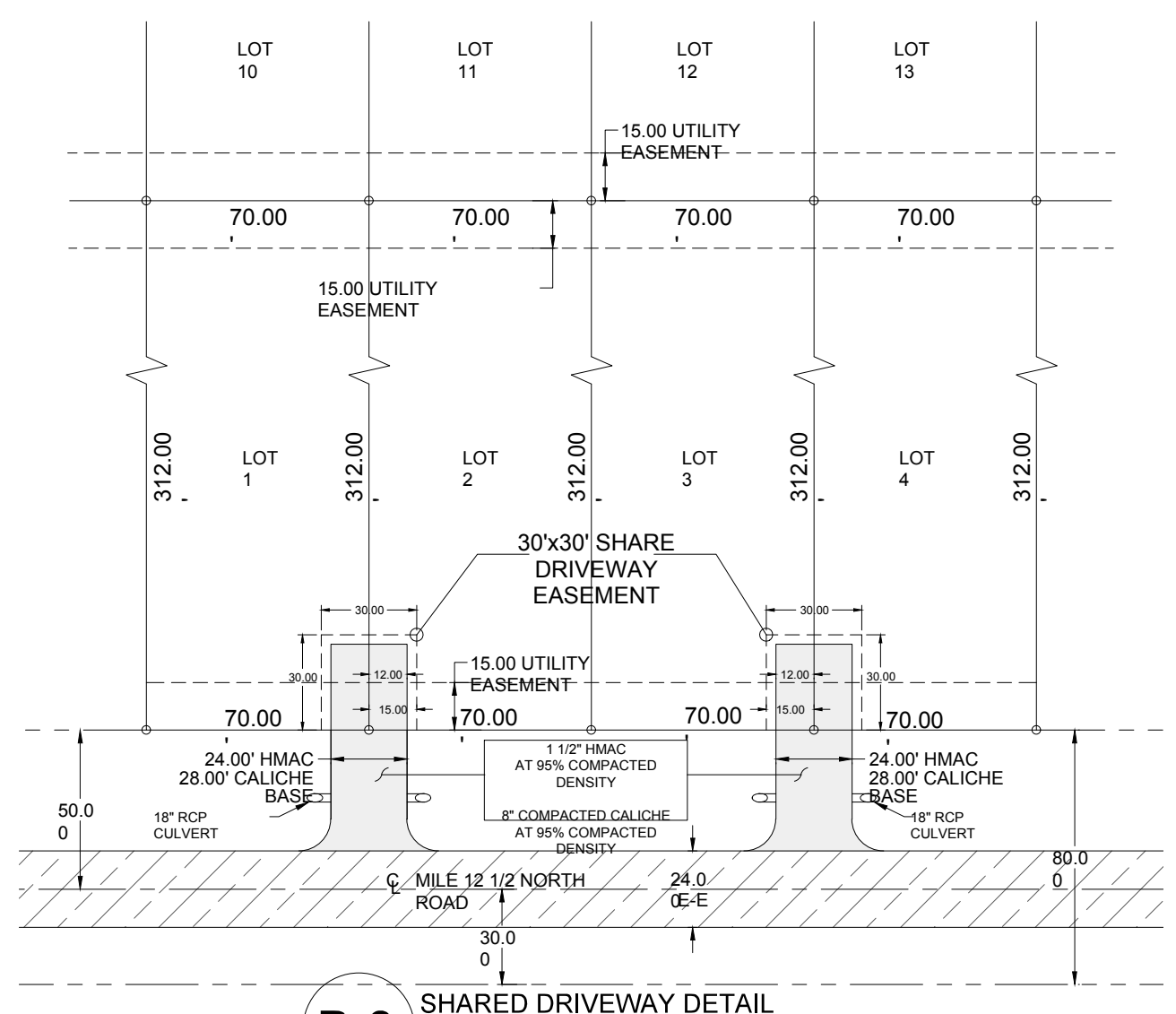
PRINCIPAL CONTACTS

NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1698	MISSION, TEXAS 78572	(956) 584-3918
ENGINEER:	VICTOR H. TREVINO, P.E.	800 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132
SURVEYOR:	IVAN GARCIA, R.P.L.S.	800 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132

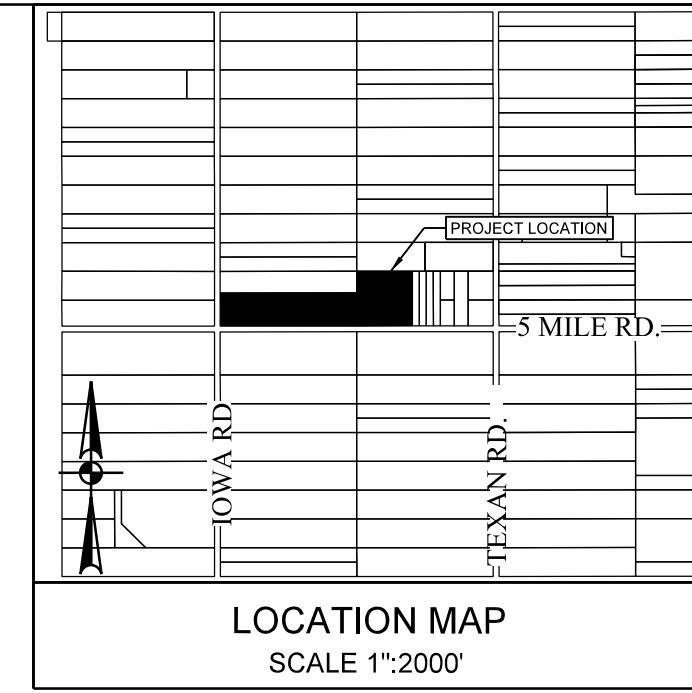
**UTILITY LAYOUT EL CRUCERO SUBDIVISION**

BEING A 20.5 ACRE TRACT OF LAND OUT OF ALL OF LOT ONE (1) AND THE SOUTH 2 AND 1/2 (2) 1/2 ACRES OF LOT TWO (2), BLOCK ELEVEN (11), AND A 8.0 ACRE TRACT OF LAND, MORE LESS, OUT OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGES 27-28, MAP RECORDS, HIDALGO COUNTY, TEXAS.

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

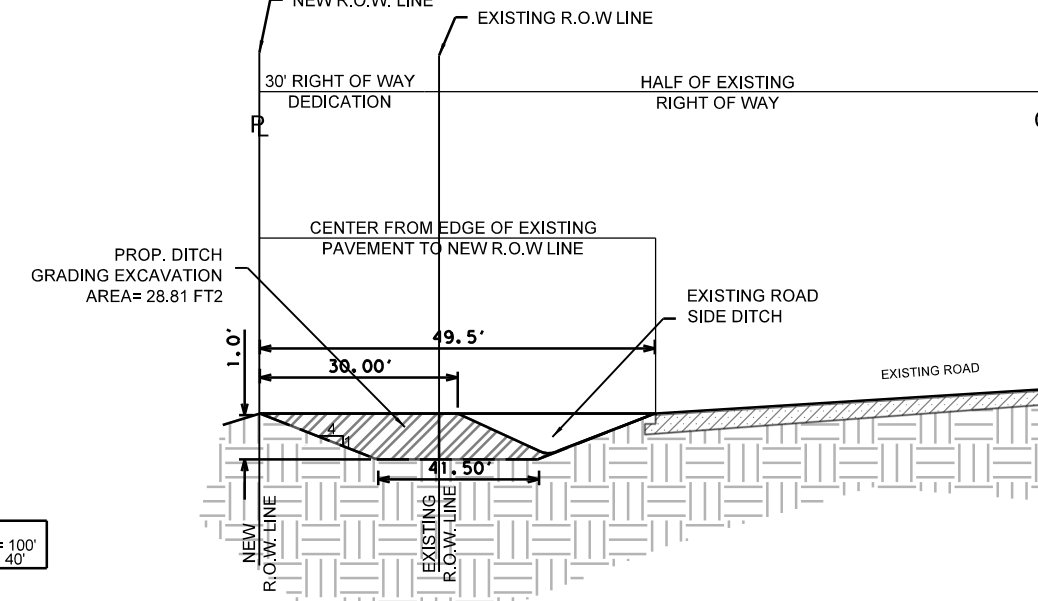
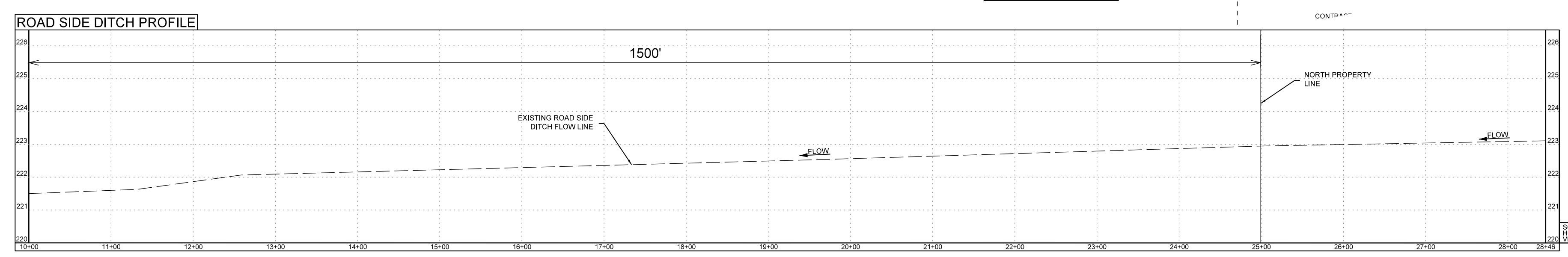
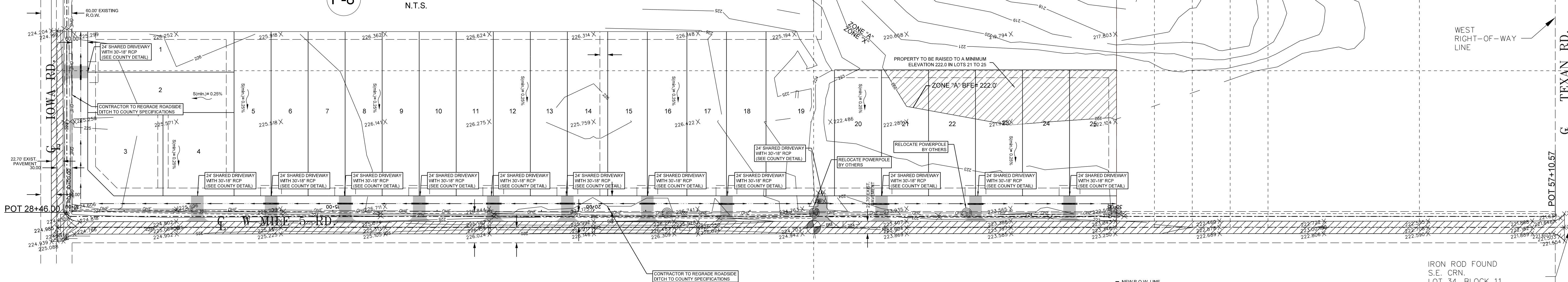


- LEGEND:**
- CHAIN LINK FENCE
  - SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
  - FOUND IRON ROD
  - WOOD FENCE
  - PROPOSED PAVEMENT
  - PROPOSED WATER METER
  - OVERHEAD ELECTRIC
  - PROPOSED CASING
  - FOR 8" WATERLINE= 16" STEEL CASING
  - FOR 2" WATER LINE= 3" PVC CASING
  -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

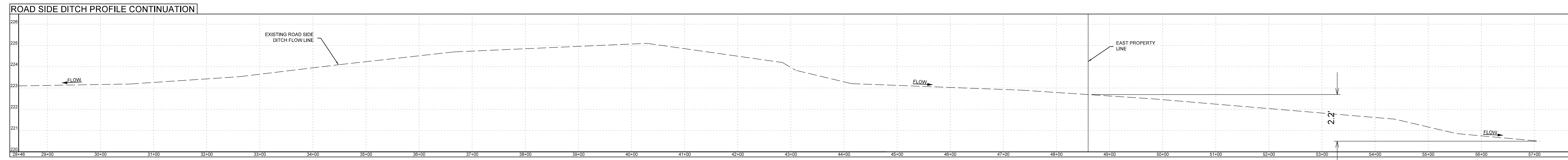


**B-1**  
POT 10+00.00

**P-8**  
SHARED DRIVEWAY DETAIL  
N.T.S.



**VOLUME PROVIDED ON ROAD SIDE DITCH**  
 VOLUME REQUIRED = 48,038 FT<sup>3</sup>  
 VOLUME PROVIDED = 56,993 FT<sup>3</sup>  
 CROSS SECTION AREA = 30 FT<sup>2</sup>  
 LENGTH = 1,947 FT  
 VOLUME PROVIDED = (28.81 FT<sup>2</sup>) (1,947 FT) = 56,993 FT<sup>3</sup>



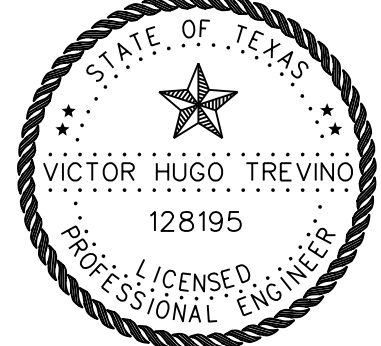
**PROJECT LOCATION**  
 EL CRUCERO SUBDIVISION IS A PROPOSED 25 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED WITHIN THE CITY OF MISSION JURISDICTION, BEING A 20.5 ACRE TRACT OF LAND OUT OF ALL OF LOT ONE (1) AND THE SOUTH 2 AND 1/4 (2.5) ACRES OF LOT TWO (2), BLOCK ELEVEN (11), AND A 8.0 ACRE TRACT OF LAND, MORE LESS, OUT OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.

**FLOOD PLAN**  
 THE PROPERTY IS IN ZONE "X" & "A"; ZONE "X" ARE AREAS OF 500-YEAR FLOOD AND ZONE "A" ARE AREAS WITH NO BASE FLOOD ELEVATIONS DETERMINED; COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000, BASED ON LIDAR AND TOPOGRAPHIC DATA FROM THE SITE, WE HAVE DETERMINED THAT THE BASE FLOOD ELEVATION FOR THIS ZONE "A" ON THIS SPECIFIC PROPERTY IS 222.0 FEET. PROPERTY HAS BEEN TAKEN OUT OF THE FLOOD ZONE, EXCEPT FOR LOT 19 AS SHOWN ON GRADING PLAN, WITH LOWR CASE NO. 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 93.1% OF BRENNAN FINE SANDY LOAM(S), WITH 0 TO 1 PERCENT SLOPES; 6.9% OF CUEVITAS-RANDADO COMPLEX(S); 0 TO 1 PERCENT SLOPES. THESE SOILS ARE WELL DRAINED, SURFACE RUNOFF IS NEGLIGIBLE, PERMEABILITY IS MODERATELY HIGH TO HIGH, AND THE WATER CAPACITY IS HIGH. THIS SOILS ARE LISTED IN HYDROLOGIC GROUP B, C-D AND D. SEE APPENDIX C.

**EXISTING CONDITIONS**  
 THE SUBJECT PROPERTY IS CURRENTLY UNDEVELOPED. TOPOGRAPHIC ELEVATIONS OBTAINED FROM THE SITE INDICATE THAT THE EXISTING TERRAIN HAS A SLIGHT GRADE TOWARDS THE NORTHEAST CORNER OF THE PROPERTY. IN ACCORDANCE WITH THE DRAINAGE POLICIES OF THE CITY OF MISSION AND COUNTY OF HIDALGO, THE RATIONAL 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 16.68 CFS.

**PROPOSED CONDITIONS**  
 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 5-YEAR STORM WATER RUNOFF. AS PER ATTACHED CALCULATIONS, THE PEAK RATE WILL BE 43.38 CFS, WHICH WILL GIVE US A NET INCREASE OF 26.7 CFS. FOR PROPOSED EL CRUCERO SUBDIVISION, WE HAVE CALCULATED THAT APPROXIMATELY A TOTAL OF 48,038 CFT OR 1,103 ACRE-FT. WILL NEED TO BE DETAINED IN THE GREEN AREAS OF THE PROPOSED LOTS AND BY RE-GRADING AND EXCAVATING THE EXISTING ROADSIDE DITCH ALONG THE FRONTAGE OF THE PROPERTY (5 MILE RD.).



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

08/05/2020

REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS					
	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
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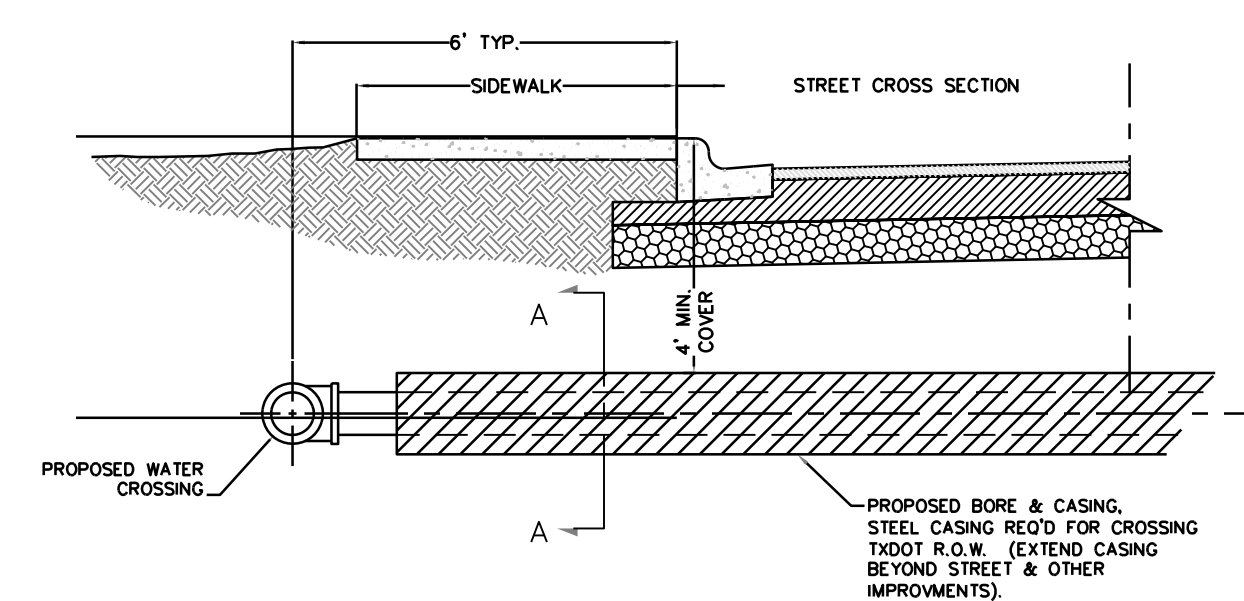
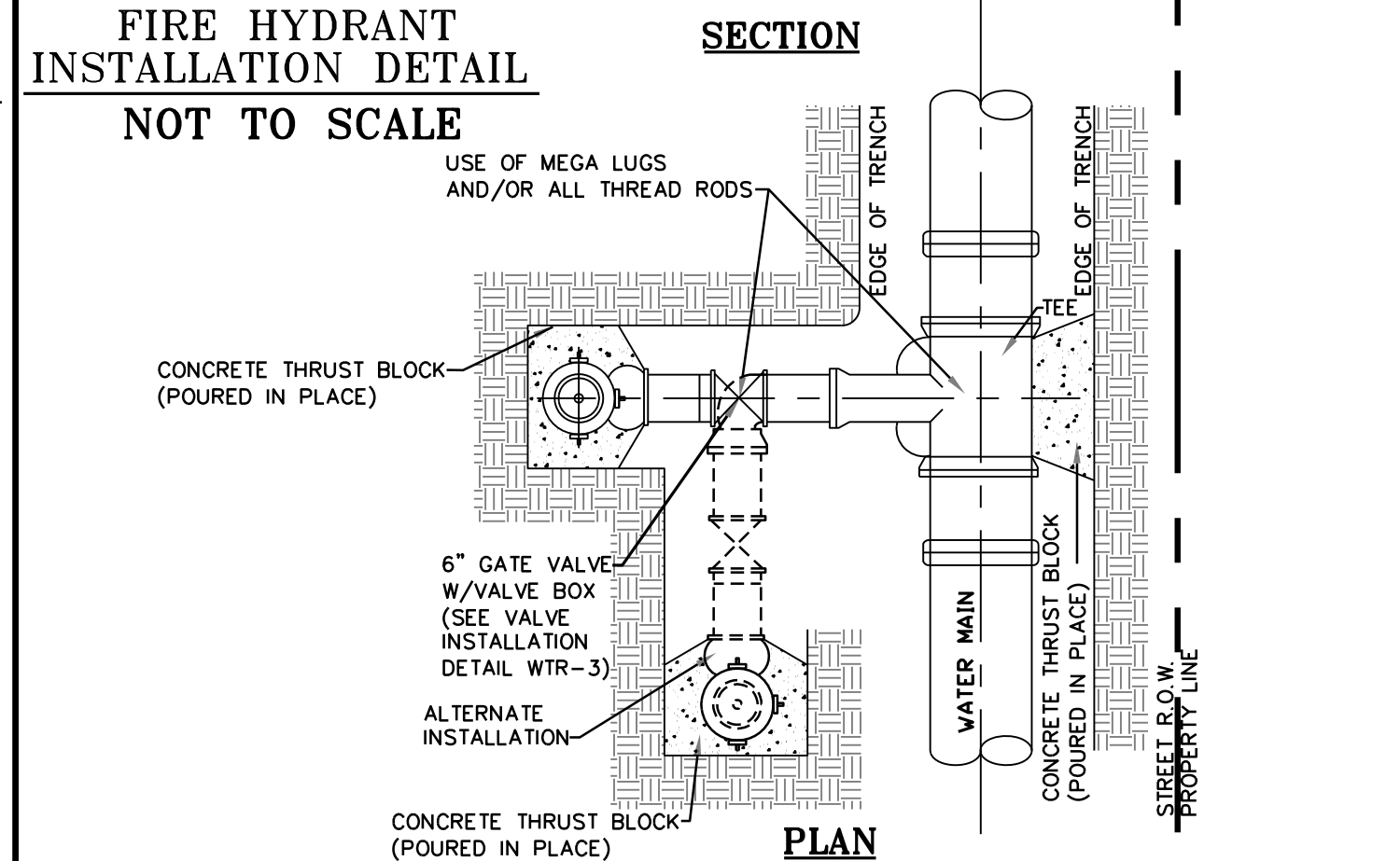
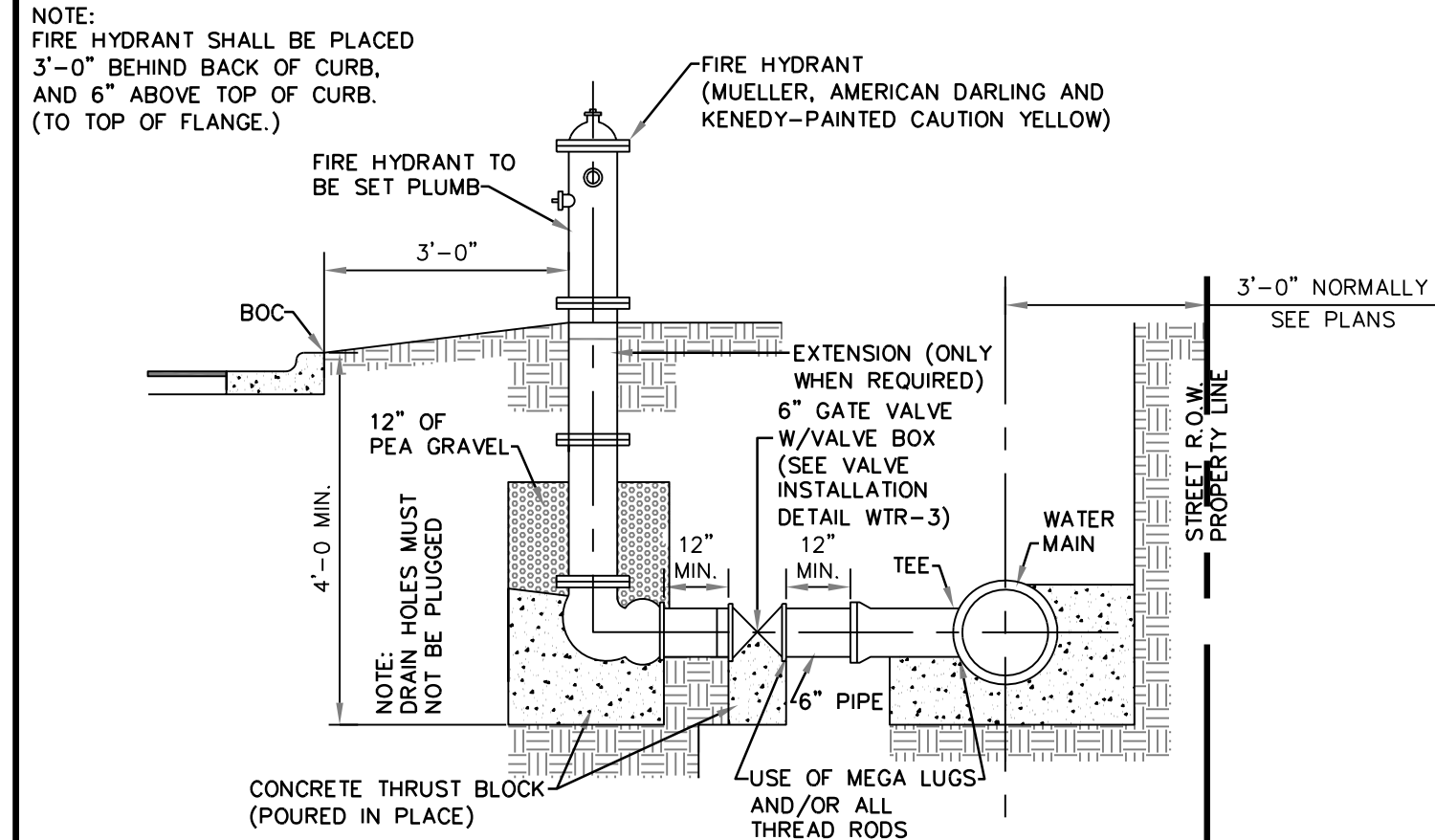
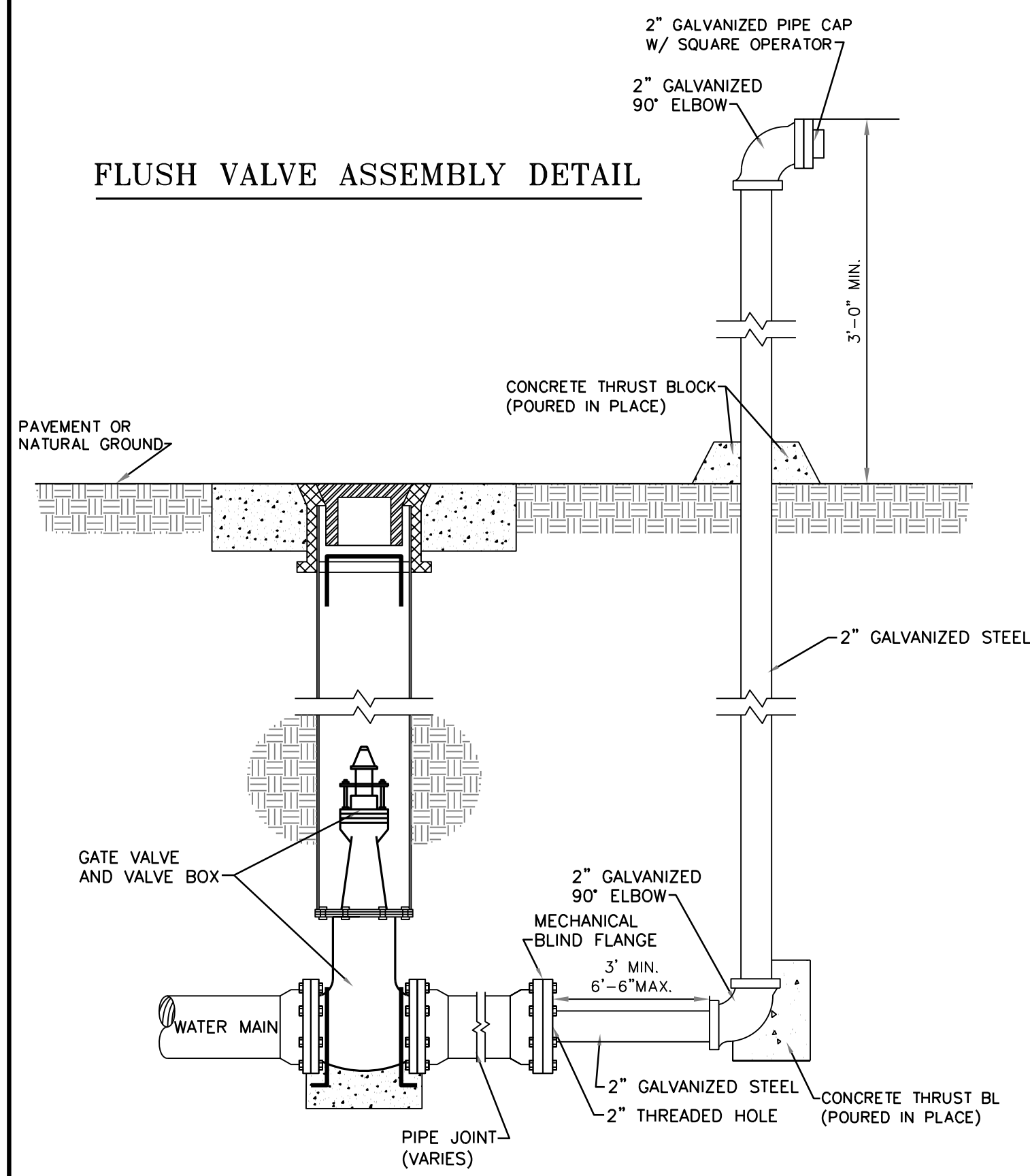
**GRADING PLAN**  
**EL CRUCERO SUBDIVISION**

BEING A 20.5 ACRE TRACT OF LAND OUT OF ALL OF LOT ONE (1) AND THE SOUTH 2 AND 1/4 (2.5) ACRES OF LOT TWO (2), BLOCK ELEVEN (11), AND A 8.0 ACRE TRACT OF LAND, MORE LESS, OUT OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.

**SOUTH TEXAS INFRASTRUCTURE GROUP**

SHEET 3

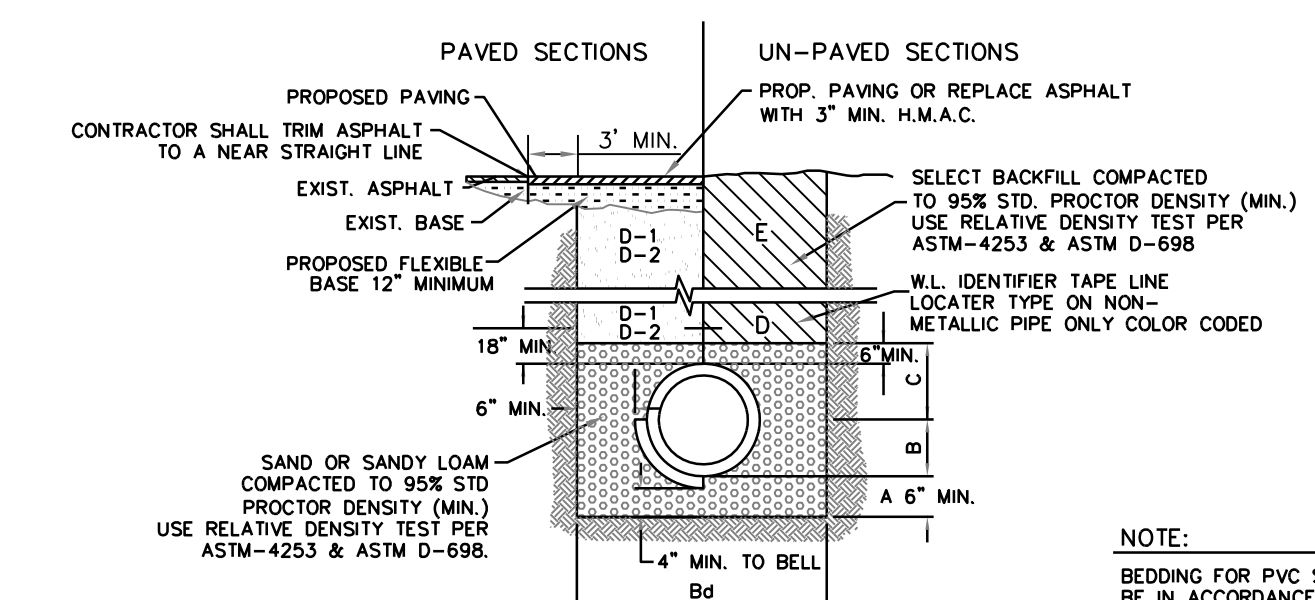
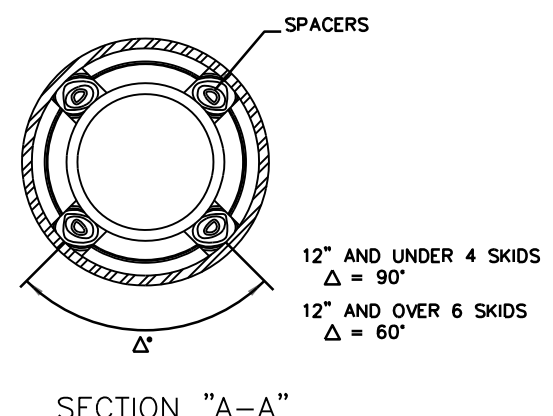
**FLUSH VALVE ASSEMBLY DETAIL**



**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"

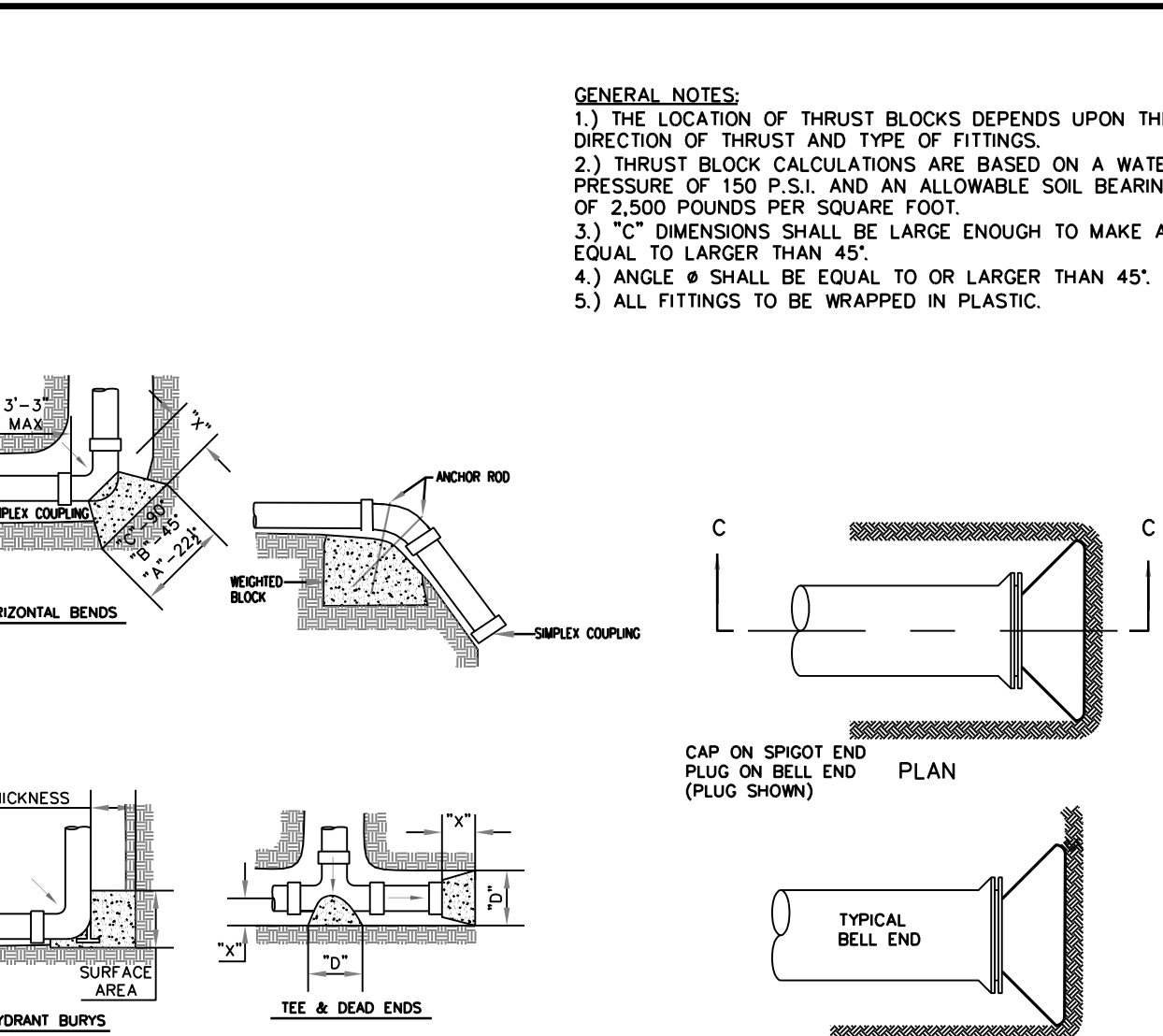
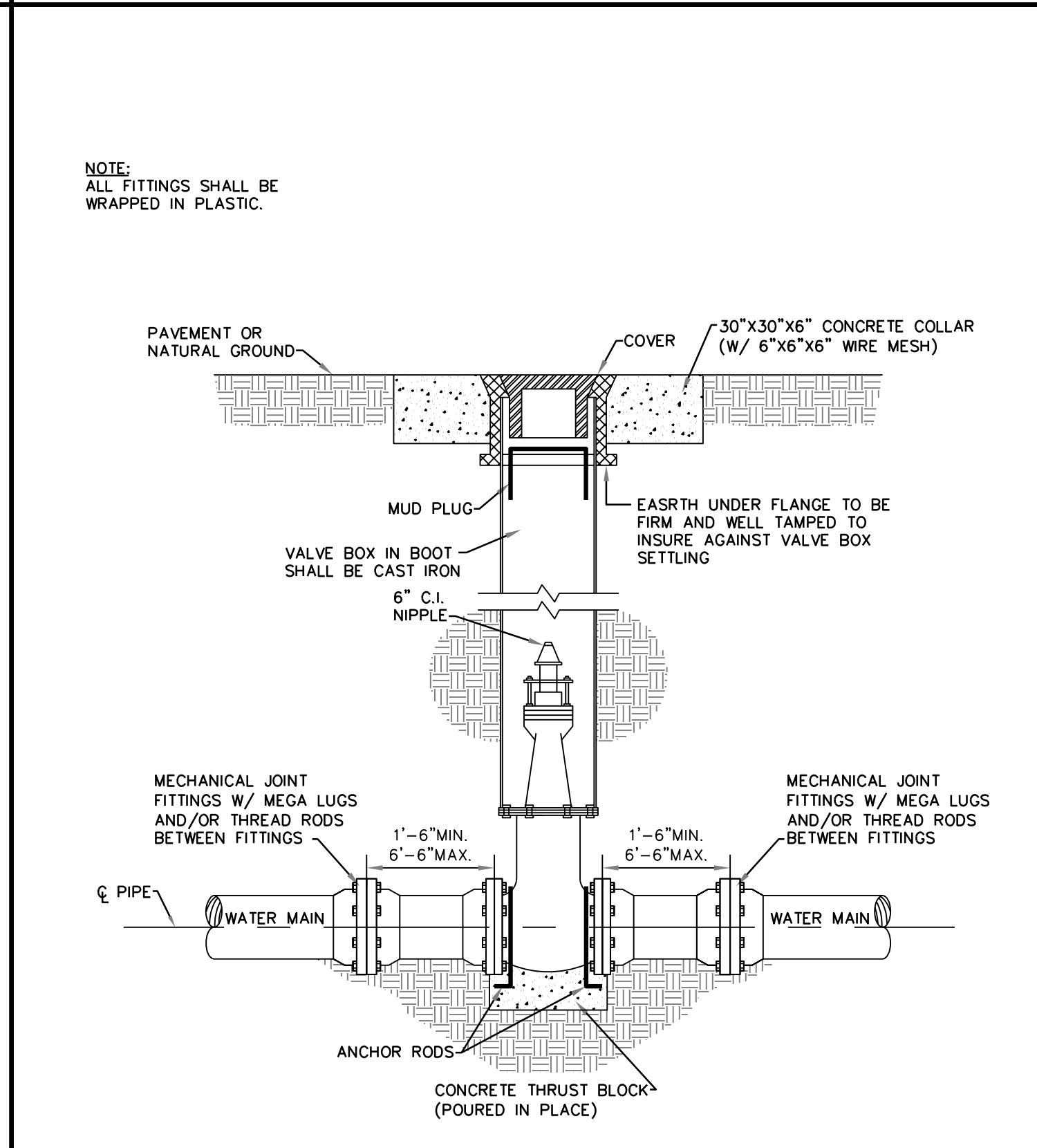
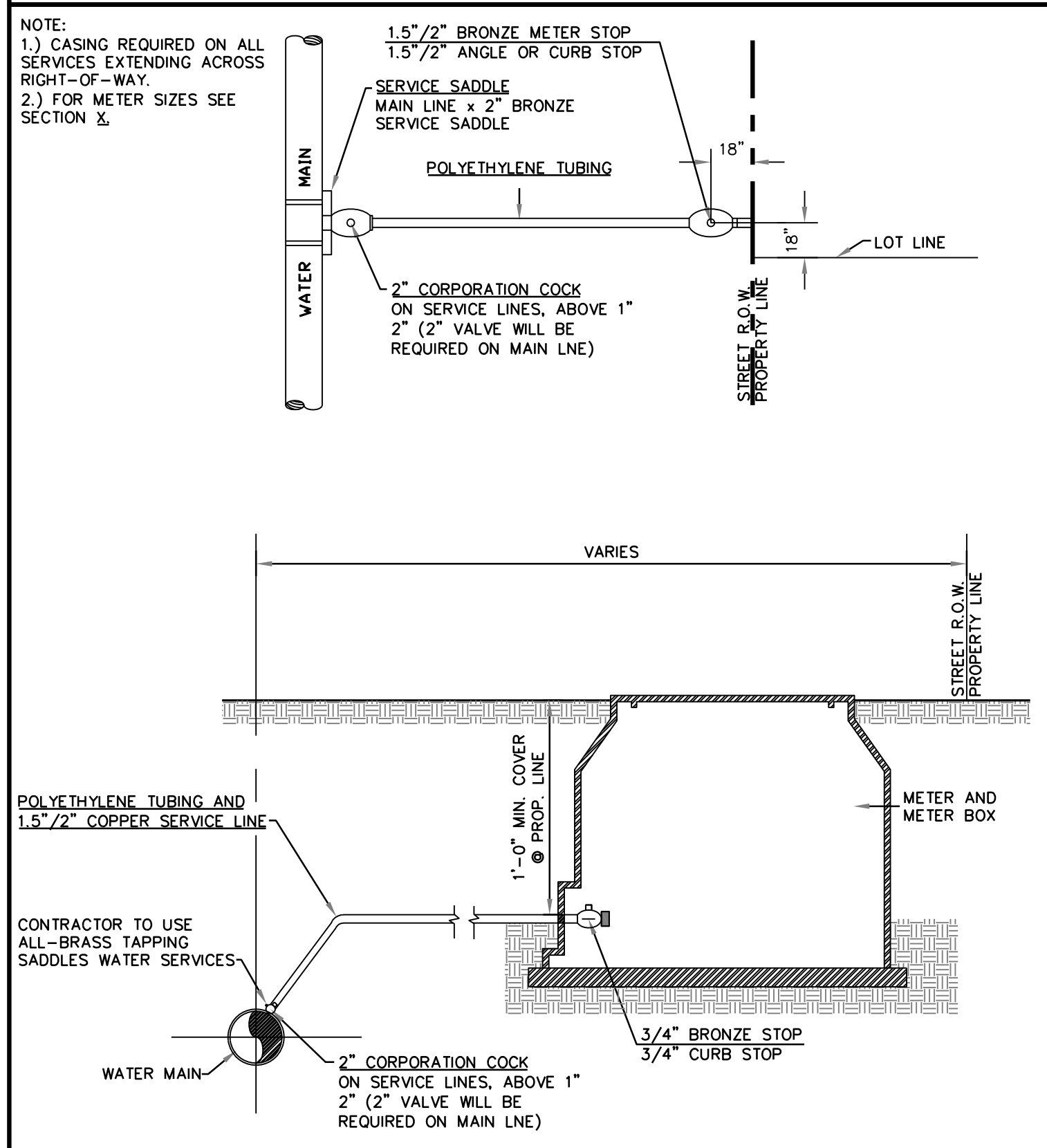
CARRIER PIPE - P.V.C. C900 DR-18



- NOTE:**  
BEDDING FOR PVC SHALL BE IN ACCORDANCE WITH ASTM 2321.
- A. SAND OR SANDY LOAM BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE. (MIN. THICKNESS=6")
  - B. SAND OR SANDY LOAM BACKFILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. (4" LIFTS, HAND TAMPED) BY TRENCH WIDTHS SHALL BE PIPE O.D. + 12" OR IN ACCORDANCE WITH ASTM 2331 FOR PVC PIPE.
  - C. SAND OR SANDY LOAM BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)
  - D-1. (CITY STREETS, PARKING AREA, SELECT EXCAVATED BACKFILL MATERIAL COMPACTED TO 95% SPD. (8" LIFTS, MECHANICAL COMPACTION)
  - D-2. (STATE MAINTAINED ROADWAY) COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED AS PER ASTM D-4253 AND ASTM D-698.
  - E. 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.

**BORE & CASING DETAIL**

**TRENCH BEDDING (WATER) DETAIL**



**HORIZONTAL BLOCKING TABLE**

PIPE SIZE	T-TEE DIM. FT.	22 1/2 DEGREES		45 DEGREES		90 DEGREES		TEE & PLUG	
		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
4"	1.50	1.00	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	1.70
8"	1.50	1.08	1.18	1.52	2.31	2.07	4.27	1.74	3.02
10"	1.50	1.35	1.84	1.90	3.61	2.58	6.66	2.17	4.71
12"	1.50	1.63	2.65	1.86	5.19	3.10	9.60	2.61	6.79

**TABLE OF CASING SIZES**

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

**THRUST BLOCK DETAILS**

**SINGLE WATER SERVICE CONNECTION**

**VALVE & VALVE BOX INSTALLATION DETAIL**

**PRINCIPAL CONTACTS**

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78572	(956) 584-3918	
ENGINEER:	VICTOR H. TREVIÑO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	IVAN GARCIA, 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  
 FAX: (956) 424-3132  
 TBPE REG # 1500

**WATER DETAILS**  
**EL CRUCERO SUBDIVISION**

BEING A 20.5 ACRE TRACT OF LAND OUT OF ALL OF LOT ONE (1) AND THE SOUTH 2 AND 1/2 (2) ACRES OF LOT TWO (2), BLOCK ELEVEN (11), AND A 8.0 ACRE TRACT OF LAND, MORE OR LESS, OUT OF LOTS 33 AND 34, BLOCK 11, TEXAN GARDENS, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.