T.J. Arredondo
Director of Planning

HIDALGO COUNTY
PLANNING DEPARTMENT

2818 S. BUSINESS HWY 281
EDINBURG TEXAS 78539
Tel. 956-318-2840 Fax. 956-318-2844

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 12-20-2022

PROPOSED **LAS COMADRES NO. 11 SUBDIVISION** PRECINCT No. **3.**

ENGINEER: **SOUTH TEXAS INFRASTRUCTURE GROUP.** DEVELOPER: **CARLOS G. LEAL JR.**

☒ PRELIMINARY APPROVAL ☐ FINAL APPROVAL ☐ FINAL APPROVAL WITH FINANCIAL GUARANTEE ☐ WITH VARIANCE

NUMBER OF LOTS: **68** ☒*SINGLE FAMILY ___☐*MULTI-FAMILY ___☐COMMERCIAL ___☐ INDUSTRIAL

NUMBER OF STREETLIGHTS: **20**

FILLING STATIONS: **7**

LOCATION DESCRIPTION: **WEST OF DOFFING ROAD APPROXIMATELY ½ OF MILE NORTH OF MILE 3 ROAD.**

SUBDIVISION LIES WITHIN THE: ☒ **ETJ OF THE CITY OF MISSION**

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON **9-14-2022** PROPERTY LIES WITHIN FLOOD ZONE: **"X"** AS PER FEMA.

DRAINAGE DESIGN: **DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM DISCHARGING INTO A HCDD#1 REGIONAL FACILITY.**

ROAD R.O.W. DEDICATION: **20.00 FEET ADDITIONAL R.O.W. ONTO DOFFING ROAD.**

H.C.R.O.W. PRELIMINARY APPROVAL DATE: **12-2-2022** BY, **VICTOR GALLARDO, PCT. 3** R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: **11-9-2022** BY, ENVIRONMENTAL HEALTH DIVISION
SEWER SYSTEM: ☒ OSSF'S

WATER SERVICE PROVIDER: **AGUA SUD** EXISTING LINE SIZE: **8"** LOCATION: **DOFFING ROAD.**

H.C.E.O.C. PRELIMINARY APPROVAL DATE: **10-06-2022** : 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:

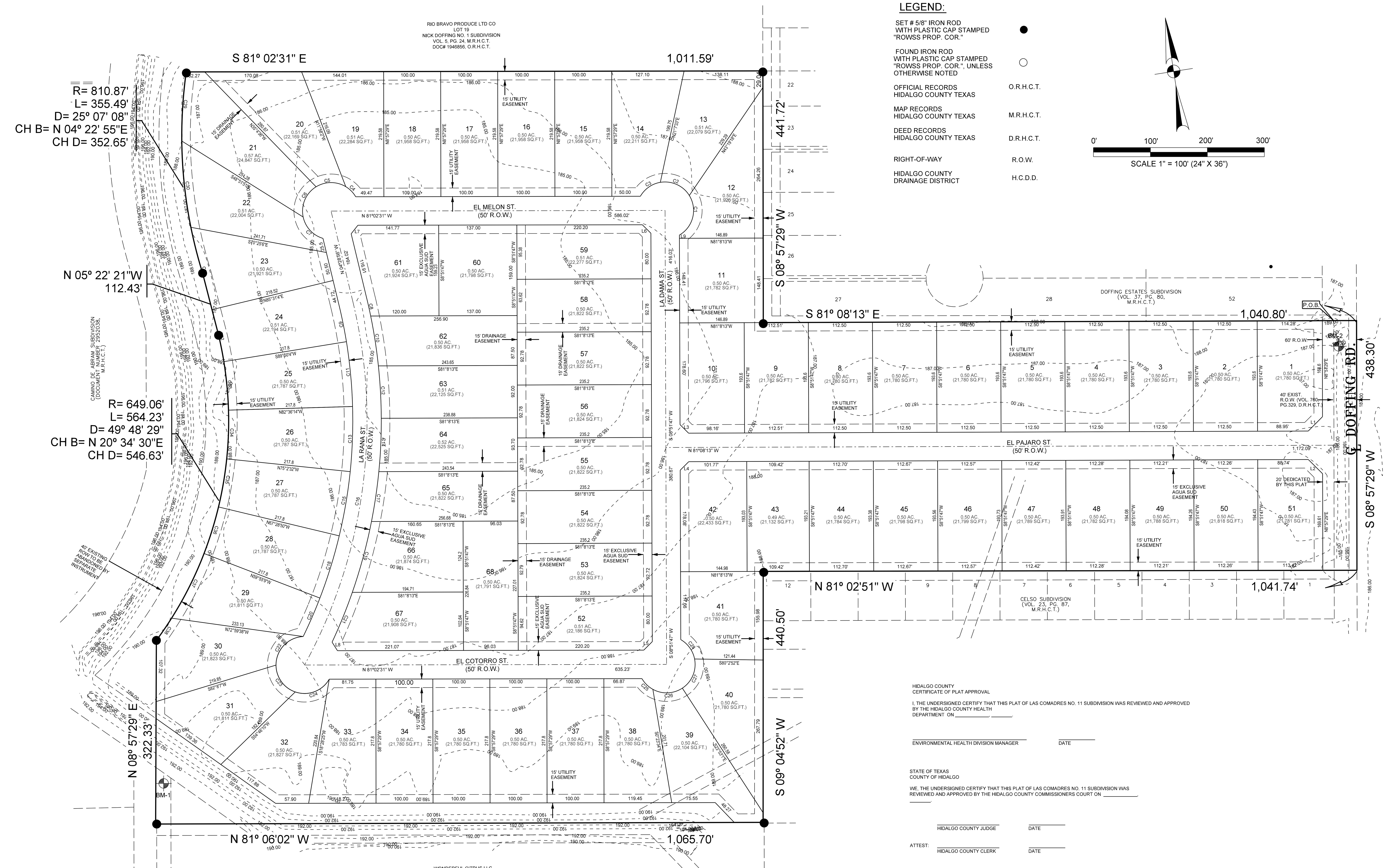
STAFF RECOMMENDS:
☒ **Preliminary Approval** *subject to comments and future recommendations by planning and other departments. and the approval of the City of* **MISSION.**
☐ **Final Approval** *subject to recommendations other departments*
This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules,
* *Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.*

LEGEND:

Symbol / Term	Abbreviation
SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."	●
FOUND IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR.", UNLESS OTHERWISE NOTED	○
OFFICIAL RECORDS HIDALGO COUNTY TEXAS	O.R.H.C.T.
MAP RECORDS HIDALGO COUNTY TEXAS	M.R.H.C.T.
DEED RECORDS HIDALGO COUNTY TEXAS	D.R.H.C.T.
RIGHT-OF-WAY	R.O.W.
HIDALGO COUNTY DRAINAGE DISTRICT	H.C.D.D.

0' 100' 200' 300'

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



GENERAL NOTES:

1. FLOOD ZONE STATEMENT:
THE PROPERTY IS IN ZONE "C", ZONE "C" ARE AREAS OF MINIMAL FLOODING; COMMUNITY PANEL NO. 480334 0400 C, REVISED NOVEMBER 1982.
ALSO, IN ZONE "X", ZONE "X" ARE AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN; COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000.

CONSTRUCTION OF RESIDENTIAL HOUSING WITHIN ANY AREA OF THE SUBDIVISION THAT IS IN THE 100-YEAR FLOOD PLAIN IS PROHIBITED UNLESS THE HOUSING QUALIFIES FOR INSURANCE UNDER THE NATIONAL FLOOD INSURANCE ACT OF 1968 (42 U.S.C. SECTIONS 4001 THROUGH 4127).

2. MINIMUM BUILDING SETBACK LINES:
FRONT SETBACK:
25 FEET OR EASEMENT WHICHEVER IS GREATER
50 FEET FOR LOTS FRONTING DOFFING ROAD
SIDE SETBACK:
INTERNAL LOT: 6.00 FEET OR EASEMENT WHICHEVER IS GREATER
CORNER LOT: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER. 20 FEET IF ROW IS GREATER THAN 50 FT 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 LOT. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS. APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPYING THE LOT. NO COMMERCIAL USE SHALL BE ALLOWED ON ANY OF THE INTERNAL LOTS. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS.

4. NO COMMERCIAL USE SHALL BE ALLOWED ON ALL INTERNAL LOTS.

5. MINIMUM FINISHED FLOOR ELEVATION SHALL BE 18" ABOVE TOP OF CURB, 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

6. 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 ROD WITH BLUE PLASTIC CAP "R.O.W.S. CONTROL"
LOCATED ON EAST RIGHT-OF-WAY OF BRUSHLINE ROAD.
N= 16625430.2358
E= 1021782.8073
ELEV.= 190.94'

BM-2 IS A SET 5/8" IRON ROD WITH
BLUE PLASTIC CAP "R.O.W.S. CONTROL"
LOCATED ON WEST RIGHT-OF-WAY OF DOFFING ROAD.
N= 16625863.3656
E= 1023939.0813
ELEV.= 185.47'

7. IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 A TOTAL OF 103,179 CUBIC FEET, 2.36 ACRE-FEET OF DETENTION IS REQUIRED FOR THIS SUBDIVISION. DRAINAGE REQUIREMENT IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: (SEE SHEET 4 FOR PAVING LAYOUT AND DRAINAGE DESIGN)

8. 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.

9. 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.

10. ALL PUBLIC UTILITY 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.

11. AN OFF-STREET PARKING LOT SITE PLAN & DRAINAGE PLAN APPROVED BY THE HIDALGO COUNTY PLANNING DEPARTMENT AND THE OFFICE OF ENVIRONMENTAL COMPLIANCE SHALL BE REQUIRED FOR COMMERCIAL USE AT THE TIME OF APPLICATION FOR CONSTRUCTION PRIOR TO THE ISSUANCE OF A BUILDING AND/OR DEVELOPMENT PERMIT. NO WATER OR LIGHT CLEARANCES SHALL BE ISSUED UNTIL THE SITE PLAN, DRAINAGE PLAN AND OSSF PLAN ARE APPROVED AND PROPOSED IMPROVEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH COUNTY AND STATE STANDARDS.

12. 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 DESIGNED FOR DISPOSAL OF DOMESTIC SEWERAGE ONLY.
A SEPARTE DESIGN SHALL BE SUBMITTED FOR COMMERCIAL USE AND MULTI-FAMILY USE.

B.EACH 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 OCCUPYING A LOT.

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

14. CARLOS LEAL JR, THE OWNER & SUBDIVIDER OF LAS COMADRES NO. 11 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.

15. 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.

16. THE DEVELOPER SHALL BE RESPONSIBLE FOR DETAINING AND ACCOMMODATING MOREN 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.

LOCATION MAP

SCALE: 1:2000

LOCATION DESCRIPTION

LAS COMADRES NO. 11 SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY PRECINCT No. 3 IN THE WEST SIDE OF HIDALGO COUNTY, APPROXIMATE 0.4 MILES NORTH OF THE INTERSECTION OF 6 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). LAS COMADRES NO. 11 SUBDIVISION LIES APPROXIMATELY 2½ MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3½ MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.

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

METES AND BOUNDS

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS, CONVEYED TO CARLOS LEAL JR., BY GENERAL WARRANTY DEED, AS DESCRIBED IN DOCUMENT NUMBER 3327164, OF THE OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS 40.85 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING, AT A MAGNAIL FOUND FOR THE CENTERLINE OF DOFFING ROAD;

THENCE, SOUTH 08°57'29" WEST 438.30 FEET, WITH THE CENTERLINE OF DOFFING ROAD, TO A POINT ON THE CENTERLINE OF DOFFING ROAD;

THENCE, NORTH 81°08'13" WEST 1,040.80 FEET, ALONG THE COMMON LINE OF CELSO SUBDIVISION AS RECORDED ON VOLUME 23, PAGE 87, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND SAID LOT 16, TO A IRON SET FOR A CORNER OF THIS TRACT;

THENCE, SOUTH 08°57'29" WEST 439.97 FEET, ALONG THE COMMON LINE OF SAID CELSO SUBDIVISION AND SAID LOT 14, TO AN IRON ROD SET FOR A CORNER OF THIS TRACT;

THENCE, NORTH 81°02'31" WEST AT 1,065.70 FEET, ALONG THE COMMON LINE A TRACT OF LAND CONVEYED TO WONDERFUL CITRUS II, LLC AND SAID LOT 14, TO A IRON ROD SET FOR A CORNER OF THIS TRACT;

THENCE, NORTH 08°57'29" EAST 322.33 FEET, WITH THE WEST LINE OF SAID LOT 14, NICK DOFFING, TO AN IRON ROD SET FOR CORNER OF THIS TRACT ALSO BEING A POINT OF CURVATURE;

THENCE, WITH THE EAST LINE OF A 40.0 FOOT COUNTY ROAD AS RECORDED IN VOLUME 5, PAGE 24, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND SAID CURVE TO THE LEFT HAVING A RADIUS OF 649.06 FEET, AN ARC LENGTH OF 564.23 FEET , A CHORD BEARING OF NORTH 20°34'30" EAST, A CHORD DISTANCE OF 546.63 FEET, TO A IRON ROD SET FOR A CORNER OF THIS TRACT;

THENCE, NORTH 05°22'21" EAST 112.43 FEET, WITH THE WEST LINE OF SAID LOT 14, NICK DOFFING, TO AN IRON ROD SET FOR CORNER OF THIS TRACT ALSO BEING A POINT OF CURVATURE;

THENCE, WITH THE EAST LINE OF A 40.0 FOOT COUNTY ROAD AS RECORDED IN VOLUME 5, PAGE 24, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND SAID CURVE TO THE LEFT HAVING A RADIUS OF 810.87 FEET, AN ARC LENGTH OF 355.49 FEET , A CHORD BEARING OF NORTH 04°22'55" EAST, A CHORD DISTANCE OF 352.65 FEET, TO A IRON ROD SET FOR A CORNER OF THIS TRACT;

THENCE, SOUTH 81°02'31" EAST 1,011.59 FEET, WITH THE NORTH LINE OF SAID LOT 18, NICK DOFFING, AND A TRACT OF LAND CONVEYED TO RIO BRAVO PRODUCE LTD, BY DOCUMENT NUMBER 1949856, OF THE OFFICIAL RECORDS, HIDALG COUNTY, TEXAS,TO AN IRON ROD SET FOR CORNER OF THIS TRACT;

THENCE, SOUTH 08°57'29" WEST 441.72 FEET, WITH THE EAST LINE OF SAID LOT 18, NICK DOFFING, AND THE WEST LINE OF DOFFING ESTATES SUBDIVISION AS RECORDED IN VOLUME 37, PAGE 80, MAP RECORDS, HIDALGO COUNTY, TEXAS, TO AN IRON ROD SET FOR CORNER OF THIS TRACT;

THENCE, SOUTH 81°08'13" EAST 1,040.80 FEET, WITH THE NORTH LINE OF SAID LOT 16, TO THE POINT OF BEGINNING OF THIS TRACT BEING A COMPUTED AREA OF 40.85 ACRES.

CURVE TABLE

CURVE	DELTA	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
C1	91°35'03"	50	79.92	N23°04'16"E	71.68
C2	67°48'55"	50	59.18	N56°37'43"W	55.78
C3	50°30'20"	50	44.07	S64°12'39"W	42.66
C4	28°44'54"	50	25.08	N35°24'58"W	24.82
C5	62°42'05"	50	54.71	N81°08'27"W	52.02
C6	70°36'02"	50	61.61	S32°12'29"W	57.78
C7	61°23'24"	50	53.57	S33°47'14"E	51.04
C8	01°58'41"	916.85	31.65	S03°30'19"E	31.65
C9	04°19'00"	866.85	65.30	S02°19'26"E	65.29
C10	05°31'57"	916.85	88.53	S00°14'59"W	88.5
C11	07°33'42"	866.85	114.40	S03°36'55"W	114.32
C12	05°45'34"	916.85	92.16	S05°53'45"W	92.12
C13	07°33'42"	866.85	114.40	S11°10'37"W	114.32
C14	05°51'53"	916.85	93.85	S11°42'28"W	93.81
C15	07°33'42"	866.85	114.40	S18°44'19"W	114.32
C16	42°15'23"	891.85	657.75	S16°38'46"W	642.95
C17	05°31'53"	916.85	88.51	S17°24'22"W	88.48
C18	07°33'42"	866.85	114.40	S26°18'0"W	114.32
C19	08°03'17"	916.85	128.89	S24°11'57"W	128.78
C20	04°52'17"	866.85	73.70	S32°31'00"W	73.68
C21	05°53'49"	916.85	94.36	S31°10'30"W	94.32
C22	87°30'37"	50	76.36	S52°37'05"W	69.16
C23	70°50'45"	50	61.82	S26°33'35"E	57.96
C24	79°03'34"	50	68.99	N78°29'15"E	63.65
C25	31°05'10"	50	27.12	S36°35'06"E	26.8
C26	62°15'22"	50	54.32	S83°15'22"E	51.7
C27	67°27'58"	50	58.87	N31°52'58"E	55.53
C28	49°17'12"	50	43.01	N26°29'37"W	41.7
C29	08°35'25"	810.87	121.57	S00°00'00"W	0
C30	10°46'56"	810.87	152.59	S00°00'00"W	1
C31	00°00'00"	0	0.00	S00°00'00"W	2
C32	00°00'00"	0	0.00	S00°00'00"W	3
C33	07°33'42"	649.05	85.66	S00°00'00"W	4
C34	07°33'42"	649.05	85.66	S00°00'00"W	5
C35	07°33'42"	649.05	85.66	S00°00'00"W	6
C36	07°33'42"	649.05	85.66	S00°00'00"W	7
C37	11°13'32"	649.05	127.17	S00°00'00"W	8
C38	04°10'21"	649.05	47.27	S00°00'00"W	9

LINE TABLE

LINE	BEARING	DISTANCE
L1	N53°54'38"E	35.38
L2	N36°05'22"W	35.32
L3	S36°08'13"E	21.21
L4	S53°51'47"W	21.21
L5	N53°54'38"E	21.20
L6	S36°05'22"E	21.23
L7	N47°14'17"E	19.11
L8	S23°18'43"E	17.74

STATE OF TEXAS
COUNTY OF HIDALGO

OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION:

CARLOS LEAL AS OWNER OF THE 40.85 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED LAS COMADRES NO. 11 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

______________________ ______________
CARLOS LEAL DATE
1801 MOZELLE ST.
PHARR, TEXAS 78577

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED CARLOS LEAL 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

THIS PLAT IS HEREBY APPROVED BY THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 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. 6 RIGHT OF WAYS OR EASEMENTS. APPROVAL OF THIS PLAT DOES NOT RELEASE ANY RIGHTS THAT THE DISTRICT MAY HAVE WHETHER SHOWN OR NOT.

ATTIEST: ________________
PRESIDENT

____
SECRETARY

THIS PLAT OF LAS COMADRES NO. 11 SUBDIVISION HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMISSION OF THE CITY OF MISSION, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS ________DAY OF_____, 20___.

____
CHAIRMAN

CITY OF MISSION CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.0115(B) WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF LAS COMADRES NO. 11 SUBDIVISION WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MISSION.

______________________ ____________
MAYOR CITY OF MISSION DATE

______________________ ____________
ATTEST: CITY SECRETARY DATE

APPROVED BY DRAINAGE DISTRICT:

HIDALGO COUNTY DRAINGE 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

HIDALGO COUNTY
CERTIFICATE OF PLAT APPROVAL

I, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF LAS COMADRES NO. 11 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 LAS COMADRES NO. 11 SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON ____________, _______.

______________________ ____________
HIDALGO COUNTY JUDGE DATE

ATTEST: ______________________ ____________
HIDALGO COUNTY CLERK DATE

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 CAMERON

KNOW ALL MEN BY THESE PRESENTS:

I, JUAN E. GALVAN, 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.

____
JUAN E. GALVAN, R.P.L.S.
REG. PROFESSIONAL LAND SURVEYOR # 4011

I, ROBERTO SALINAS, HEREBY CERTIFY THAT THE AGUA SPECIAL UTILITY DISTRICT HAS APPROVED THE POTABLE WATER SUPPLY FOR THE CARRIZALES 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.

____
ROBERTO SALINAS, P.E.
GENERAL MANAGER
AGUA SPECIAL UTILITY DISTRICT

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS:

	NAME	ADRESS	CITY & ZIP	PHONE	FAX
OWNER:	CARLOS LEAL JR.	P.O. BOX 631	MISSION, TEXAS 78573	(956) 607-0444	
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
FAX: (956) 424-3132
TBPE REG. # 15000

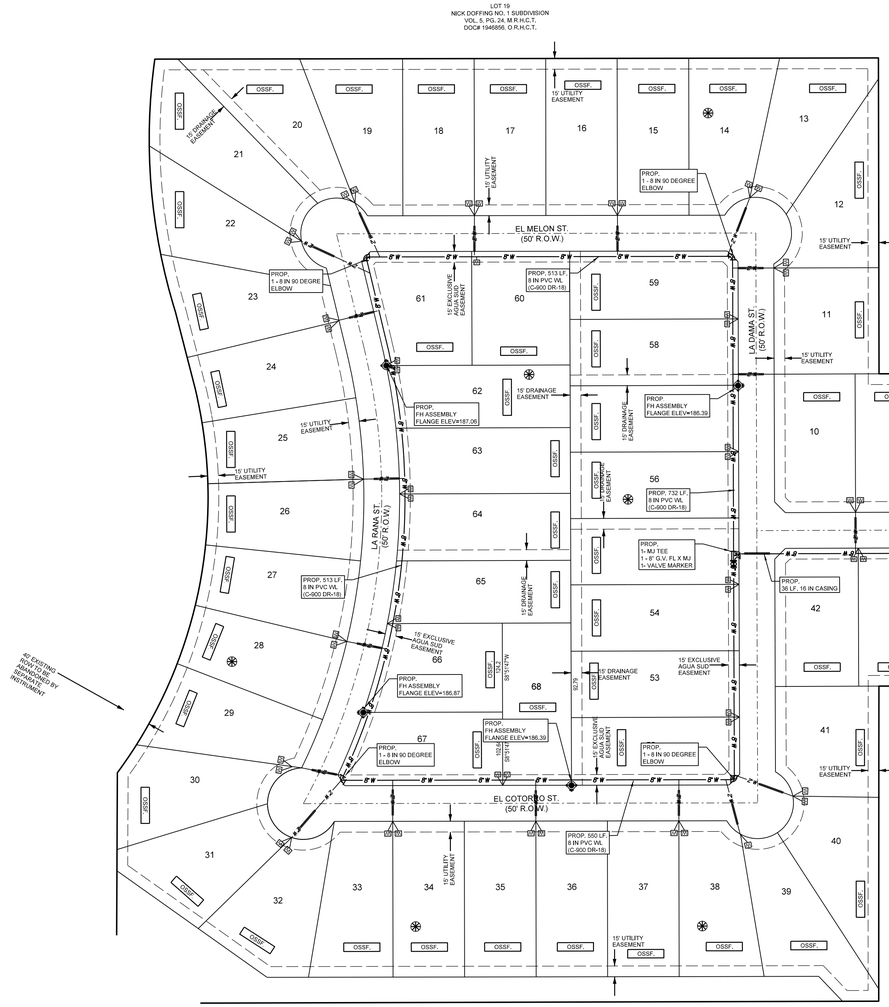
SHEET 1

LOT LAYOUT

LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS

SOUTH TEXAS INFRASTRUCTURE GROUP

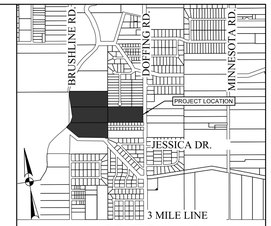


LEGEND:

- CHAIN LINK FENCE
- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
- FOUND IRON ROD
- WOOD FENCE
- PROPOSED PAVEMENT
- 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
- EXISTING POWER POLE
- 1 IN SINGLE WATER SERVICE
- 2 IN DOUBLE WATER SERVICE



LOCATION MAP
SCALE: 1:2000

LOCATION DESCRIPTION

CARRIZALES II SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY PRECINCT No. 3 IN THE WEST SIDE OF HIDALGO COUNTY, APPROXIMATE 0.4 MILES NORTH OF THE INTERSECTION OF 6 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), CARRIZALES II SUBDIVISION LIES APPROXIMATELY 2½ MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3½ MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.

WATER AND SEWER ENGINEERING REPORT

WATER SUPPLY (DESCRIPTION, COST, AND OPERABILITY DATE:

LAS COMADRES NO. 11 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.

LAS COMADRES NO. 11 SUBDIVISION HAS 68 LOTS. AGUA SUD HAS TWO EXISTING WATER LINES RUNNING IN THE WESTERN RD. ONE OF THEM IS A 8" DIAMETER LINE RUNING THROUGH THE WEST SIDE OF THE RIGHT-OF-WAY OF WESTERN RD, THE OTHER WATER LINE IS A 3" DIAMETER RUNNING THROUGH THE EAST SIDE OF THE RIGHT-OF-WAY OF WESTERN RD.

LAS COMADRES NO. 11 SUBDIVISION WILL BE CONNECTED TO THE EXISTING WATER SYSTEM WITH A TWO (2) 8" MJ TEE EACH WITH TWO (2) GATE VALVES. WATER DISTRIBUTION FOR CARRIZALES SUBDIVISION CONSISTS OF TEN (10) 1" DIAMETER DOUBLE SERVICE SHORT LINES, FORTEEN (14) 1" DIAMETER DOUBLE SERVICE LONG LINES, TWO (2) 1" DIAMETER SINGLE SERVICES SHORT AND TWO (2) 1" DIAMETER SINGLE SERVICE LONG THAT RUN INTO THE LOTS . THE 8"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 (5) FIRE HYDRANTS AT A UNIT COST OF $_____ FOR A TOTAL COST OF $ _____. 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 CARRIZALES II 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 68. 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 8 SOIL BORING EXCAVATION WERE PERFORMED. (ADDITIONAL BORINGS WERE UNNECESARY 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 $_____, 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 $ _____. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ONE OSSF ON __/__/__.

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 $_____ PER LOT (ALL INCLUSIVE), FOR A TOTAL OF $ _____ FOR THE ENTIRE SUBDIVISION.

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

REPORTE DE INGENIERIA DE AGUA Y DRENAJE

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

LA SUBDIVISIÓN LAS COMADRES NO. 11 RECIBIRÁSU 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 RECIBIRÁSU PROVISIÓN DE AGUA POR LOS PRÓXIMOS 30 AÑOS. AUGA 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 LAS COMADRES NO. 11 TIENE 68 LOTES. AGUA SUD TIENE DOS LINEAS EXISTENTES DE AGUA CORRIENDO SOBRE LA CALLE WESTERN. UNA DE ELLAS ES DE 8 PULGADAS DE DIAMETRO Y CORRE SOBRE EL LADO OESTE DE LA CALLE WESTERN, LA OTRA LINEA EXISTENTE DE AGUA ES DE 3 PULGADAS DE DIAMETRO Y CORRE POR EL LADO ESTE DE LA CALLE WESTERN.

LA SUBDIVISION LAS COMADRES NO. 11 SERA CONECTADA CON DOS MJ TEE DE 8 PULGADAS DE DIAMETRO CADA UNA CON DOS VALVULAS. LA DISTRIBUCION DE AGUA PARA LA SUBDIVISIÓN CARRIZALES CONSISTE EN DIEZ (10) SERVICIOS DOBLES CORTOS DE 1" DE DIAMETRO, CATORCE (14) SERVICIOS DOBLES LARGOS DE 1" DE DIAMETRO, DOS (2) SERVICIOS SENCILLOS CORTOS DE 1" DE DIAMETRO Y DOS (2) SERVICIOS SENCILLOS LARGOS DE 1" DE DIAMETROQUE CORREN HACIA LOS LOTES. SE HAN INSTALADO YA LA LINEA DE 8", LOS SERVICIOS DE 1" Y LAS CAJAS DE LOS MEDIDORES A UN COSTO TOAL DE $_____O $_____ 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 5 HIDRANTES CONTRA INCENDIO (FIRE HYDRANTS) A UN COSTO DE $_____ POR CADA UNO, LO CUAL REPRESENTA UNA CANTIDAD TOTAL DE $ _____, 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: DESCRIPCIÓN, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISIÓN

SE INSTALARÁUNA 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 EVALUACION DE SUELO:

CADA LOTE EN LA SUBDIVISION PROPUESTA MIDE MÁS DE MEDIO ACRE. SE HICIERON DOS EXCAVACIONES DE EVALUACIÓN EN LUGARES OPUESTOS DE LA SUBDIVISIÓN. UN TOTAL DE 8 EXCAVACIONES DE EVALUACION FUERON REALIZADAS. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA ÁREA ES SIGNIFICANTEMENTE 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 $_____, 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 $_____. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO Y HA APROBADO LA INSTALACIÓN DE LA FOSA SÉPTICA DESDE __/__/__.

CERTIFICACION:

CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DRENAJE, DESCRITOS EN ESTE DOCUMENT 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 SITEMAS DE AGUA Y DRENAJE SON:
AGUA- EL SISTEMA/SERVICIO DE AGUA SERÁ INSTALADO Y COMPLETAMENTE CONSTRUIDO MENOS EL MEDIDOR MECÁNICO DE AGUA QUE COSTAR UN TOTAL DE $_____
DRENAJE- SE ESTIMA QUE LA FOSA SÉPTICA COSTARA $ _____ A UN COSTO TOTAL DE $ _____ TODA LA SUBDIVISION.

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

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, CARLOS LEAL JR. SUBDIVIDER FOR LAS COMADRES NO. 11 SUBDIVISION HEREBY CERTIFY SEWER PERMITS, AS APLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARMENT AND THAT AN ADEQUATE DRINKIN 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

_____ _____
CARLOS LEAL JR. DATE

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED CARLOS LEAL JR. 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

COST ESTIMATE
WATER DISTRIBUTION: $ _____
DRAINAGE IMPROVEMENT: $ _____
PAVING IMPROVEMENT: $ _____
SEPTIC TANK (OSSF): $ _____
FIRE HYDRANT: $ _____
EROSION CONTROL: $ _____

PRINCIPAL CONTACTS:

	NAME	ADRESS	CITY & ZIP	PHONE	FAX
OWNER:	CARLOS LEAL JR.	P.O. BOX 631	MISSION, TEXAS 78573	(956) 607-0444	
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

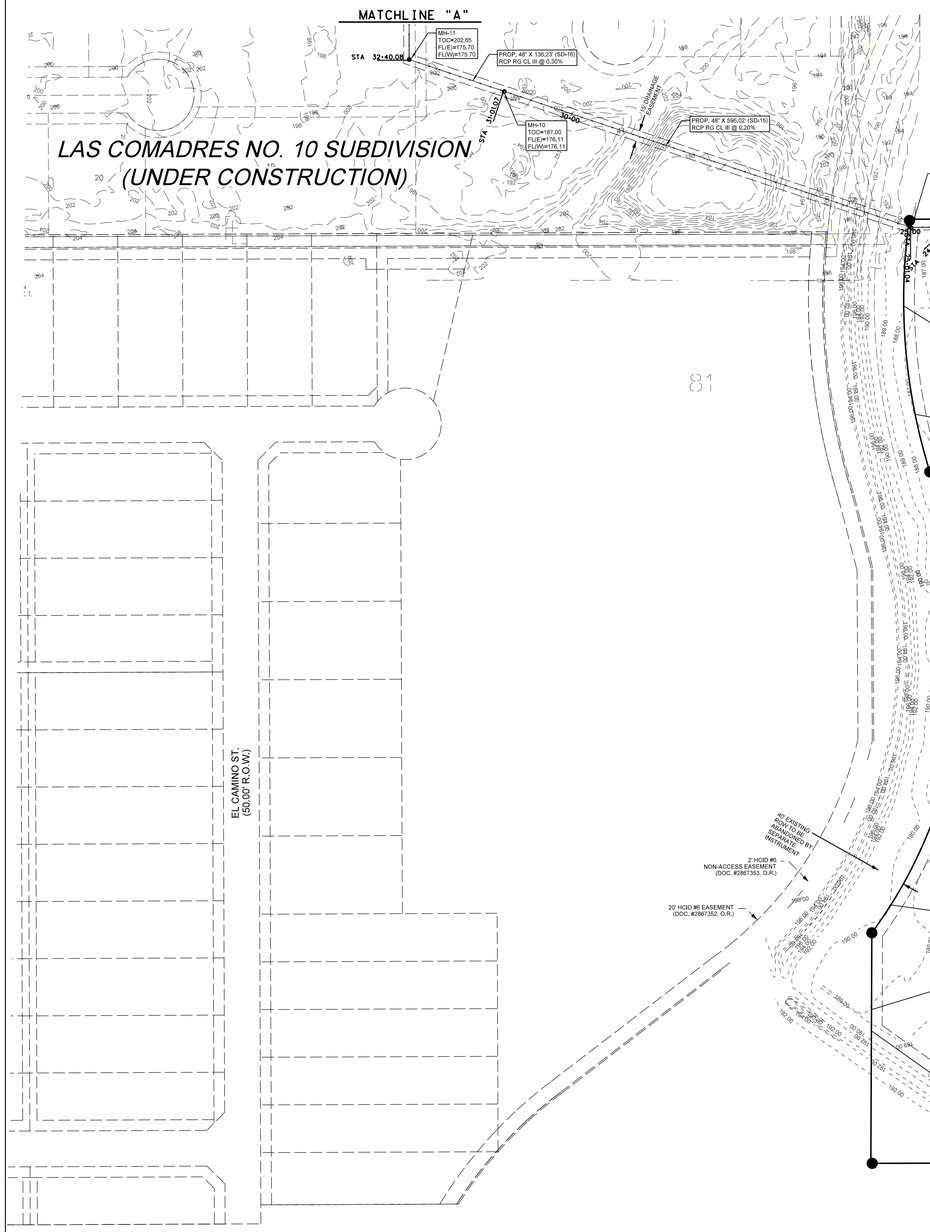
SOUTH TEXAS INFRASTRUCTURE GROUP
900 S. STEWART, SUITE 13
MISSION, TEXAS 78572
PH: (956) 424-3335
FAX: (956) 424-3132
TBPE REG. # 1500

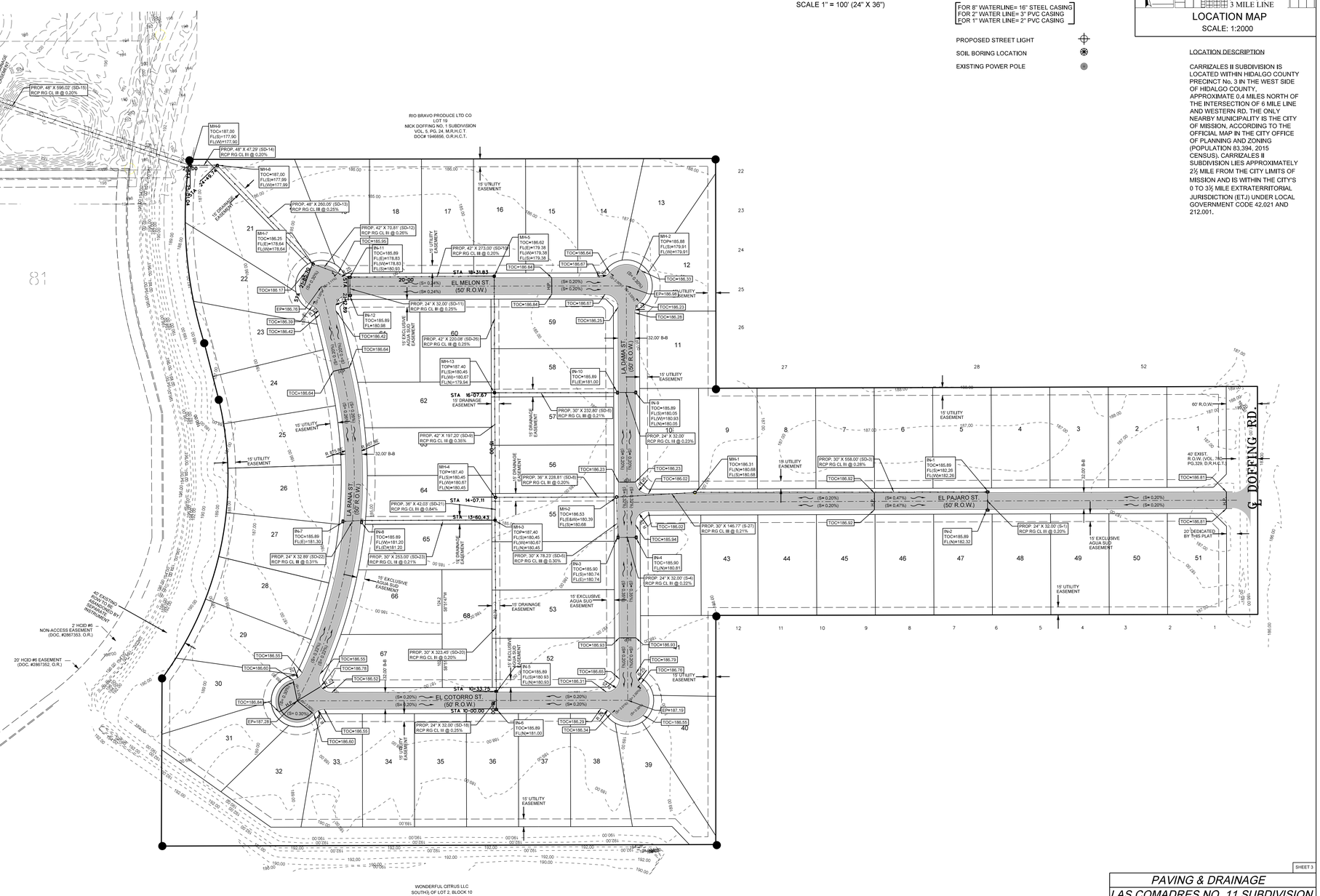
SOUTH TEXAS INFRASTRUCTURE GROUP

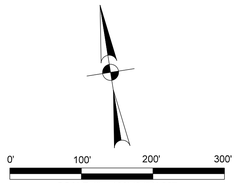
SHEET 2

UTILITY LAYOUT
LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS







LEGEND:

- CHAIN LINK FENCE
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- FOUND IRON ROD
- BUFFER FENCE
- PROPOSED PAVEMENT
- PROPOSED WATER METER [W]
- OVERHEAD ELECTRIC
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  - FOR 8" WATERLINE= 16" STEEL CASING
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- PROPOSED STREET LIGHT
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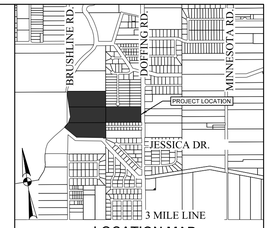

LOCATION MAP
SCALE: 1:2000

LOCATION DESCRIPTION

CARRIZALES II SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY PRECINCT NO. 3 IN THE WEST SIDE OF HIDALGO COUNTY, APPROXIMATE 0.4 MILES NORTH OF THE INTERSECTION OF 6 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), CARRIZALES II SUBDIVISION LIES APPROXIMATELY 2½ MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3½ MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

SHEET 3

PAVING & DRAINAGE
LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS

PRINCIPAL CONTACTS:

	NAME	ADRESS	CITY & ZIP	PHONE	FAX
OWNER:	CARLOS LEAL JR.	P.O. BOX 631	MISSION, TEXAS 78573	(956) 607-0444	
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
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SOUTH TEXAS INFRASTRUCTURE GROUP

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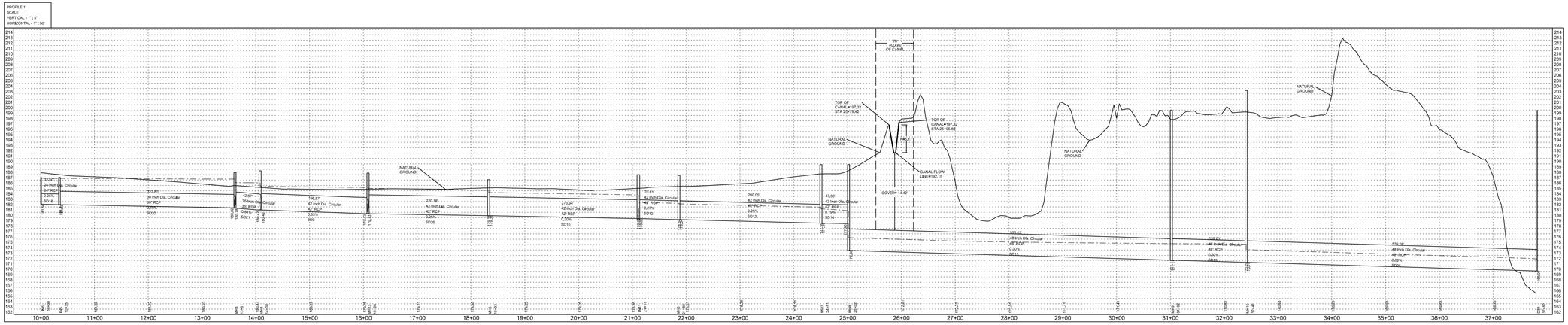
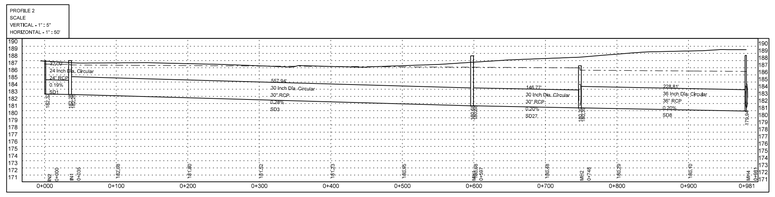
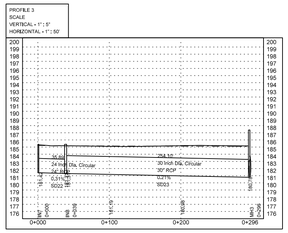
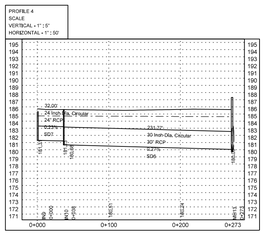
PH: (956) 424-3335
FAX: (956) 424-3132
TBPE REG. # 1500

SOUTH TEXAS INFRASTRUCTURE GROUP









PROJECT LOCATION
LAS COMADRES NO. 11 SUBDIVISION IS A PROPOSED 66 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED WITHIN THE CITY OF MISSION 3 ½ MILE EXTRATERRITORIAL JURISDICTION (ETJ), BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14,15 & 16, NICK DOFFING CO. SUBDIVISION NO.1 , RECORDED IN VOLUME 5, PAGE 54, MAP RECORDS, HIDALGO COUNTY, TEXAS.

FLOOD PLAIN
THE PROPERTY IS IN ZONE "C", ZONE "C" ARE AREAS OF MINIMAL FLOODING; COMMUNITY PANEL NO. 480334 0400 C, REVISED NOVEMBER 1982.
ALSO, IN ZONE "X", ZONE "X" ARE AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN; COMMUNITY PANEL NO. 480334 0290 D, REVISED JUNE 06, 2000.

SOIL CONDTIONS
ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 61.5% OF HIDALGO FINE SANDY LOAM, WITH 0 TO 1 PERCENT SLOPES; 31.7% OF RAMADERO SANDY CLAY LOAM, , AND 6.8% HIDALGO FINE SANDY LOAM, PONDED, 1 TO 3 PERCENT SLOPES. EXISTING TERRAIN HAS A WESTERLY 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, C 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 VERY SLIGHT GRADE APPROXIMATELY (0-0.44%). 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 27.56 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 36", AND WILL CONSIST OF A REGIONAL DETENTION POND. THAT WILL BE DONATED BY THE OWNER OF LAS COMADRES NO. 11 SUBDIVISION TO THE HIDALGO COUNTY DRAINAGE DISTRICT #1 FOR DRAINAGE DETENTION PURPOSES.

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 72.66 CFS WHICH WILL GIVE US A NET INCREASE OF 45.10 CFS , FOR PROPOSED LAS COMADRES 11 SUBDIVISION ONLY 103,179 CUBIC-FEET, OR 2.36 ACRE-FEET OF STORM WATER RUNOFF WILL BE REQUIRED TO BE DETAINED. THE TOTAL 2.36 ACRE-FEET WILL BE DETAINED ON THE REGIONAL DETENTION POND LOCATED ON THE WEST SIDE OF LAS COMADRES NO.11 SUBDIVISION.(SEE APPENDIX D).

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

10/22/2021

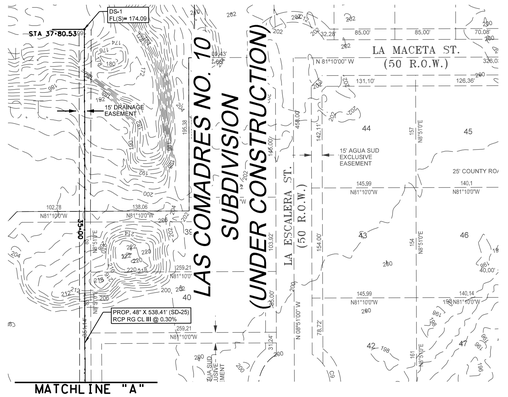
STATE OF TEXAS
VICTOR HUGO TREVINO
128195
LICENSED
PROFESSIONAL ENGINEER

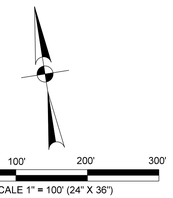
Hydraulic Calculation

ID	ID	ID	HGL	HGL	Discharge	Capacity	Slope	Loss	Velocity	Depth	Velocity	Depth
SD25	MH10	DS1	178.79	176.47	54.65	91.85	0.29	1.05	7.132	2.35	7.62	2.22
SD16	MH9	MH10	178.90	178.79	54.65	92.25	0.31	0.00	7.241	2.32	4.81	3.39
SD15	MH8	MH9	180.05	178.90	54.65	91.74	0.29	0.10	7.132	2.35	5.25	3.09
SD14	MH7	MH8	180.64	180.05	54.65	63.79	0.29	0.34	6.941	2.67	7.58	2.45
SD13	MH6	MH7	181.37	180.64	54.65	64.21	0.29	0.12	6.941	2.67	6.42	2.90
SD12	IN11	MH6	183.13	181.37	54.65	63.85	0.29	1.58	6.941	2.67	6.52	2.85
SD10	MH5	IN11	183.99	183.13	43.43	58.42	0.25	0.42	6.289	2.36	4.51	3.50
SD11	IN12	IN11	183.17	183.13	4.33	13.18	0.25	0.03	3.563	0.82	1.38	2.00
SD26	MH13	MH5	184.35	183.99	43.43	58.76	0.25	0.15	6.289	2.36	4.51	3.50
SD6	IN10	MH13	184.44	184.35	8.60	24.76	0.26	0.00	4.32	1.06	1.75	2.50
SD9	MH4	MH13	185.29	184.35	35.90	58.80	0.26	0.65	6.12	2.05	3.73	3.50
SD7	IN9	IN10	184.49	184.44	5.05	13.18	0.25	0.04	3.71	0.90	1.61	2.00
SD8	MH2	MH4	185.48	185.29	19.77	38.84	0.25	0.01	5.22	1.58	2.80	3.00
SD21	MH3	MH4	186.05	185.29	16.94	39.13	0.25	0.67	5.00	1.45	2.40	3.00
SD5	IN3	MH2	186.46	185.48	19.77	38.59	0.25	0.94	5.22	1.58	2.80	3.00
SD20	IN5	MH3	186.15	186.05	8.85	23.98	0.25	0.00	4.25	1.10	1.80	2.50
SD23	IN8	MH3	186.17	186.05	8.88	21.31	0.20	0.02	3.93	1.17	1.81	2.50
SD3	IN1	IN3	186.87	186.46	10.54	23.90	0.25	0.10	4.48	1.21	2.15	2.50
SD4	IN4	IN3	186.56	186.46	6.76	14.61	0.31	0.07	4.32	1.00	2.15	2.00
SD18	IN6	IN5	186.24	186.15	6.46	13.18	0.25	0.07	3.98	1.03	2.06	2.00
SD22	IN7	IN8	186.27	186.17	6.05	11.93	0.20	0.06	3.59	1.06	1.93	2.00
SD1	IN2	IN1	186.93	186.87	5.29	13.18	0.26	0.04	3.81	0.91	1.68	2.00

Hydraulic Configuration

ID	ID	ID	Discharge (ft3/seg)	Length (ft)	Shape	#	Rise (ft)	Span	n	Slope	Invert (ft)	Invert (ft)
SD25	MH10	DS1	54.48	538.41	Circular	1.00	4.00	n/a	0.012	0.30	170.70	169.09
SD16	MH9	MH10	54.48	136.23	Circular	1.00	4.00	n/a	0.012	0.30	171.11	170.70
SD15	MH8	MH9	54.48	596.03	Circular	1.00	4.00	n/a	0.012	0.30	172.90	171.11
SD14	MH7	MH8	54.48	47.30	Circular	1.00	4.00	n/a	0.012	0.19	177.99	177.90
SD13	MH6	MH7	54.48	260.05	Circular	1.00	4.00	n/a	0.012	0.25	178.64	177.99
SD12	IN11	MH6	54.48	70.81	Circular	1.00	3.50	n/a	0.012	0.27	178.83	178.64
SD10	MH5	IN11	43.59	273.00	Circular	1.00	3.50	n/a	0.012	0.20	179.38	178.83
SD11	IN12	IN11	4.33	32.00	Circular	1.00	2.00	n/a	0.012	0.25	178.81	178.73
SD26	MH13	MH5	43.59	220.08	Circular	1.00	3.50	n/a	0.012	0.25	179.94	179.38
SD6	IN10	MH13	8.60	232.80	Circular	1.00	2.50	n/a	0.012	0.27	180.68	180.05
SD9	MH4	MH13	35.81	197.21	Circular	1.00	3.50	n/a	0.012	0.35	180.42	179.73
SD7	IN9	IN10	5.05	32.08	Circular	1.00	2.00	n/a	0.012	0.25	181.31	181.23
SD8	MH2	MH4	19.50	228.81	Circular	1.00	3.00	n/a	0.012	0.20	180.39	179.94
SD21	MH3	MH4	16.75	42.03	Circular	1.00	3.00	n/a	0.012	0.86	180.78	180.42
SD5	IN3	MH2	9.80	78.24	Circular	1.00	2.50	n/a	0.012	0.40	181.05	180.74
SD27	MH1	MH2	10.53	146.77	Circular	1.00	2.50	n/a	0.012	0.20	180.68	180.39
SD20	IN5	MH3	8.85	323.46	Circular	1.00	2.50	n/a	0.012	0.19	181.42	180.82
SD23	IN8	MH3	8.91	253.00	Circular	1.00	2.50	n/a	0.012	0.21	181.31	180.78
SD4	IN4	IN3	6.76	32.04	Circular	1.00	2.00	n/a	0.012	0.22	180.81	180.74
SD3	IN1	MH1	10.53	557.94	Circular	1.00	2.50	n/a	0.012	0.28	182.26	180.68
SD18	IN6	IN5	6.46	32.00	Circular	1.00	2.00	n/a	0.012	0.25	181.50	181.42
SD22	IN7	IN8	6.05	32.89	Circular	1.00	2.00	n/a	0.012	0.33	181.42	181.31
SD1	IN2	IN1	5.29	32.00	Circular	1.00	2.00	n/a	0.012	0.19	182.32	182.26





SHEET 4

PAVING & DRAINAGE CONTINUATION
LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS

PRINCIPAL CONTACTS:

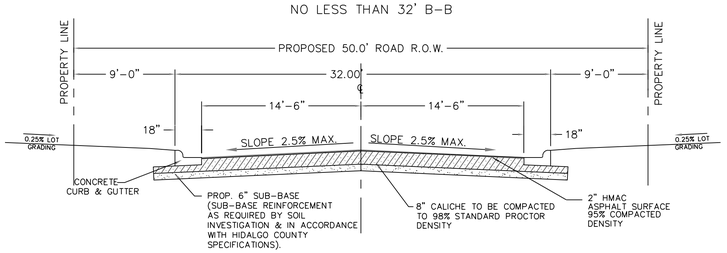
	NAME	ADRESS	CITY & ZIP	PHONE	FAX
OWNER:	CARLOS LEAL JR.	P.O. BOX 631	MISSION, TEXAS 78573	(956) 607-0444	
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JUAN E. GALVAN, R.P.L.S.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132

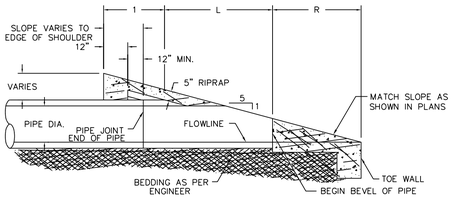
SOUTH TEXAS INFRASTRUCTURE GROUP

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

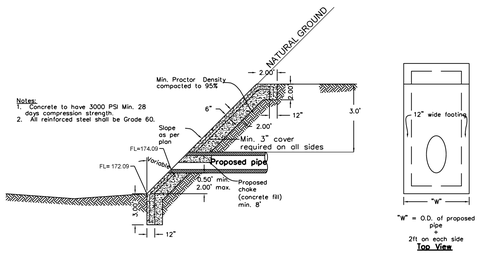
SOUTH TEXAS INFRASTRUCTURE GROUP

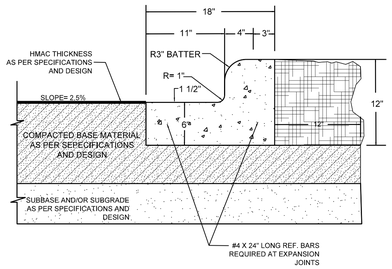
MINOR RESIDENTIAL STREET SECTION



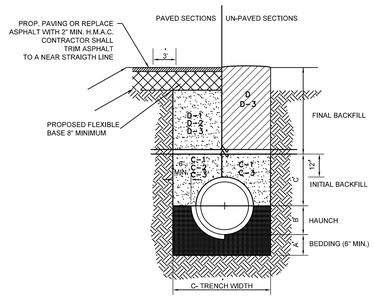


SAFETY END TREATMENT (TYPE "P OR C")





D-2 STORM DISCHARGE STRUCTURE



D-3 STORM TRENCH BEDDING AND BACKFILL DETAILS
N.T.S.

A. BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE- SAND AND /OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - PIT RUN GRAVEL 3/4" MAX SIZE.

B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE- SHALL BE CLASS I OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12". MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4 FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.

C-1. INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREETS, PARKING, AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3, WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% S.P.D. 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-2. INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS- COMPACTED SAND/ CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D698. 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-3. INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPATION.

D. FINAL BACKFILL FOR CLASS III HIGH PERFORMANCE POLYPROPYLE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS I, II,III OR IV, COMPACTED TO 92% S.P.D. (12" LOOSE LIFT, MECHANICAL COMPACTION).

D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND CITY COUNTY ROADS- SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS- COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D 4253 AND ASTM D698. 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-3 FINAL BACKFILL FOR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT. BEYOND THE EDGE OF PAVEMENT/BACK OF CURB SHALL HAVE CLASS I OR CLASS II (ASTM D2321) OR SOIL TYPE A1, A2, OR A3 (AASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL STRUCTURES BEYOND 5 FT FROM THE E.O.P./ BO.C. SHALL HAVE CLASS I, II, III, OR IV (ASTM D2321) BACKFILL MATERIAL . FOUNDATION PREPARATION (WELLPOINTS, MIN. 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE PLACED IN UNIFOM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D. (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".

NOTE: 1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIDTH IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

P-2 TYPICAL CURB AND GUTTER DETAIL)
N.T.S.

1. ALL HONEYCOMBING SHALL BE GROUTED TO RPOVIDE A UNIFORM SURFACE.

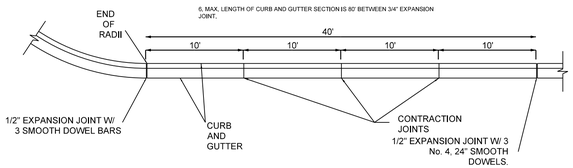
2. WHEN HONEYCOMBING IS EXCESSIVE AS DETERMINED BY THE COUNTY OF HIDALGO DESIGNATED REPRESENTATIVE, CURB AND GUTTER SHALL BE REPLACED.

3. BACKFILL BEHIND CURBS SHALL BE ACCOMPLISHED WITHIN 24 HOURS AFTER BACK FORM IS REMOVED OR 48 HOURS AFTER SLIP FORMING.

4. CURB AND GUTTER CONCRETE SHALL BE CLASS "A" (3000 PSI).

5. REINFORCING STEEL AS SHOWN.

6. MAX. LENGTH OF CURB AND GUTTER SECTION IS 80' BETWEEN 3/4" EXPANSION JOINT.

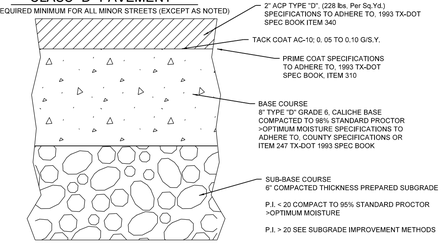


P-3 TYPICAL JOINTS
N.T.S.

GENERAL NOTES

1. THE GUIDELINES SHOW HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

CLASS "D" PAVEMENT
REQUIRED MINIMUM FOR ALL MINOR STREETS (EXCEPT AS NOTED)



GENERAL NOTES:
1. IN LIEU OF THE ABOVE BASE DESIGN, AN ALTERNATE BASE MAY BE USED THAT USES 5" OF TYPE "A" GRADE 1 (CRUSHED LIMESTONE) COMPACTED TO STANDARD PROCTOR > OPTIMUM MOISTURE AS PER ITEM 247 1993 TX DOT SPEC BOOK.

SUBGRADE IMPROVEMENT METHODS:

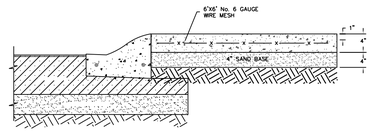
1. MECHANICAL STABILIZATION—AN APPROVED GEOGRID PLACED UNDERNEATH THE BASE COURSE PER COUNTY SPECIFICATIONS
2. CHEMICAL STABILIZATION—MODIFY SUBBASE COURSE THICKNESS AS FOLLOWS:

20<P.I.< 40 3%LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR >OPTIMUM MOISTURE
P.I. > 40 6% LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR > OPTIMUM MOISTURE

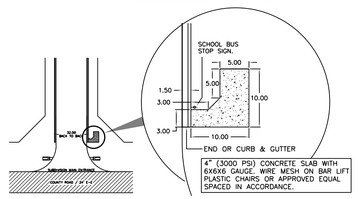
3. OVER EXCAVATION & REPLACEMENT—A MINIMUM OF 18" OF SELECT FILL WITH A P.I. < 20 COMPACTED TO 95% STANDARD PROCTOR > OPTIMUM MOISTURE

DESIGN ENGINEER MAY SPECIFY A DIFFERENT PAVEMENT SECTION TO ADDRESS FIELD AND TRAFFIC CONDITIONS. THESE SPECIFICATIONS OUTLINE THE MINIMUM REQUIREMENTS FOR THE COUNTY OF HIDALGO. WHERE FURTHER GUIDANCE FOR CONSTRUCTION SPECIFICATIONS IS NEED, THE COUNTY PLANNING DEPARTMENT MAY REQUIRE CONSTRUCTION IN ACCORDANCE WITH THE 1993 TX DOT STANDARD SPECIFICATIONS BOOK.

CONCRETE SCHOOL BUS STOP PICKUP AREA

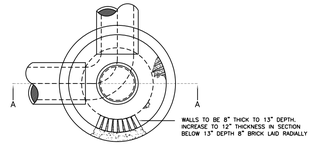


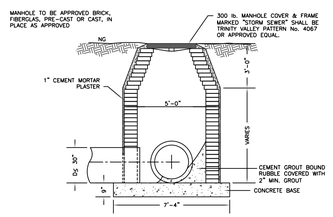
SECTION A-A

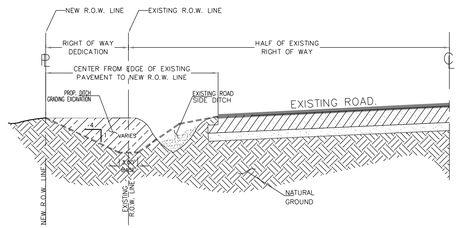


PLAN VIEW OF SCHOOL BUS STOP PICKUP AREA

DRAINAGE MANHOLE DETAILS







RECONSTRUCTION OF ROAD SIDE DITCH

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

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

SHEET 5

PAVING & DRAINAGE DETAILS

LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS

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ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-5154	(956) 380-5156

SOUTH TEXAS INFRASTRUCTURE GROUP

900 S. STEWART, SUITE 13
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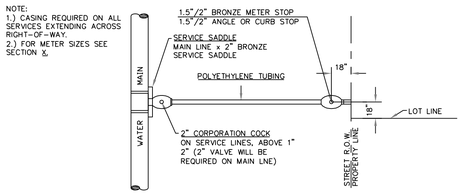
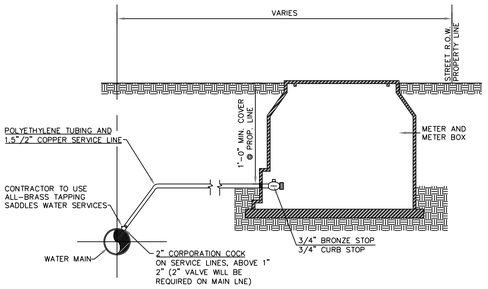
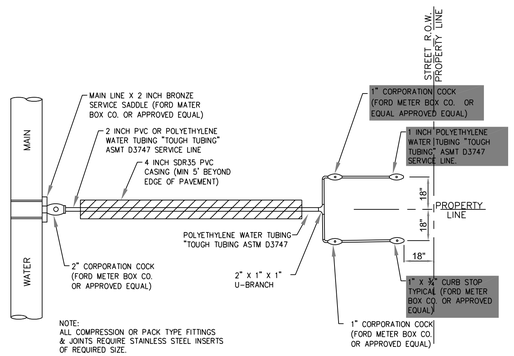
SOUTH TEXAS INFRASTRUCTURE GROUP



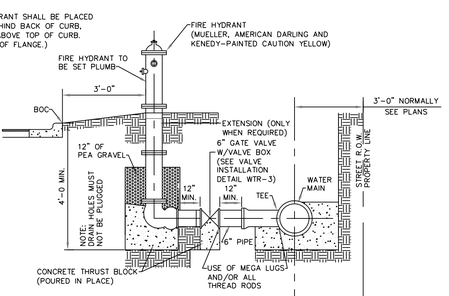


SINGLE WATER SERVICE CONNECTION

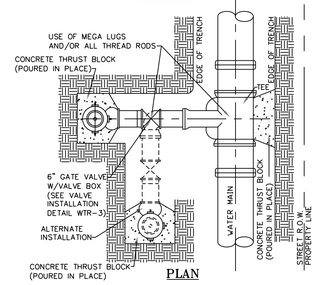


DUAL WATER SERVICE CONNECTION

N.T.S.



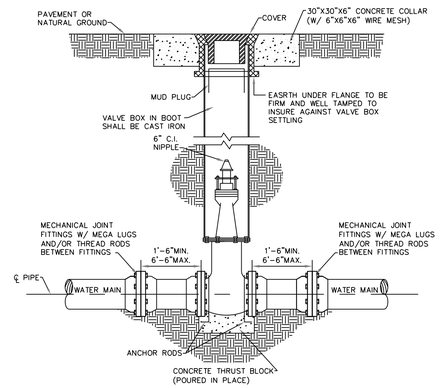
SECTION



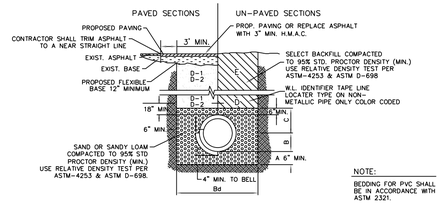
PLAN

NOT TO SCALE
FIRE HYDRANT INSTALLATION DETAIL

NOTE:
ALL FITTINGS SHALL BE WRAPPED IN PLASTIC.



VALVE & VALVE BOX INSTALLATION DETAIL



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) Bd TRENCH WIDTHS SHALL BE PIPE O.D. + 12" OR IN ACCORDANCE WITH ASTM 2331 FOR PVC PIPE.

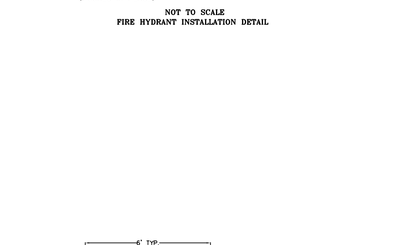
C. SAND OR SANDY LOAM BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)

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 (WELLPOINTS, 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.

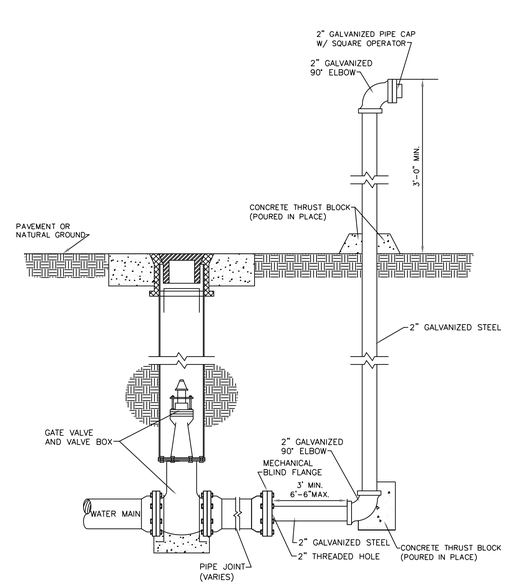
TRENCH BEDDING (WATER) DETAIL



NOTE:

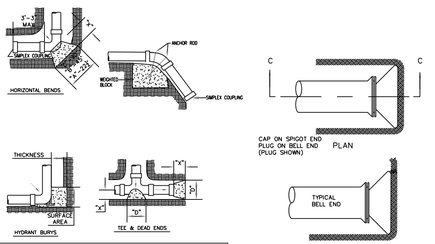
WATERLINE TO BE SLOPED DOWN OR UP @ CROSSING IF IT CONFLICTS W/ EXISTING SEWER LINES OR DRAINAGE STRUCTURES.

BORE & CASING DETAIL



FLUSH VALVE ASSEMBLY DETAIL

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 ø EQUAL TO LARGER THAN 45°.
4.) ANGLE ø SHALL BE EQUAL TO OR LARGER THAN 45°.
5.) ALL FITTINGS TO BE WRAPPED IN PLASTIC.



HORIZONTAL BLOCKING TABLE

PIPE SIZE	"X"-DIM. FT.	22 1/2 DEGREES		45 DEGREES		90 DEGREES		TEE & PLUG	
		"A"	MIN. AREA	"B"	MIN. AREA	"C"	MIN. AREA	"D"	MIN. AREA
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	1.00	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

THRUST BLOCK DETAILS

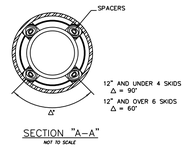
TABLE OF CASING SIZES

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

TABLE OF CASING SIZES

NOMINAL PIPE SIZE	CASING SIZE (INSIDE DIA.)	CASING MINIMUM WALL THICKNESS
4"	7"-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



SECTION "A-A"
NOT TO SCALE

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

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS:

	NAME	ADRESS	CITY & ZIP	PHONE	FAX
OWNER:	CARLOS LEAL JR.	P.O. BOX 631	MISSION, TEXAS 78573	(956) 607-0444	
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-5154	(956) 380-5156

SOUTH TEXAS INFRASTRUCTURE GROUP

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

SOUTH TEXAS INFRASTRUCTURE GROUP

SHEET 6

WATER DISTRIBUTION STANDARD DETAILS

LAS COMADRES NO. 11 SUBDIVISION

BEING A 40.85 ACRE TRACT OF LAND OUT OF ALL OF LOTS 14, 15, 16 & 18, NICK DOFFING CO. SUBDIVISION AS RECORDED IN VOLUME 5, PAGE 54, OF THE MAP RECORDS, HIDALGO COUNTY, TEXAS