



HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM
Director of Planning

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

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 5-25-2021

PROPOSED EDUARDO'S NO. 19 SUBDIVISION PRECINCT No. 3.

ENGINEER: IZAGUIRE ENGINEERING GROUP, LLC. DEVELOPER: IZAGUIRE REAL ESTATE HOLDINGS, LLC.

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 85 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INDUSTRIAL

ESTIMATED NUMBER OF STREETLIGHTS: 14

FILLING STATIONS: 5

LOCATION DESCRIPTION: NORTHWEST OF TROSPER ROAD AND MILE 6 ½ NORTH ROAD.

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

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 05-18-2021 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM THAT WILL CONNECT TO AN EXISTING TYPE "A" INLET ON XAVIER AVENUE FROM EDUARDOS NO. 18 SUBDIVISION THAT WILL DISCHARGE ONTO AN EXISTING DRAINAGE DETENTION FACILITY OWNED BY HCDD1.

ROAD R.O.W. DEDICATION: 20.00 FEET ONTO TROSPER ROAD.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 05-13-2021 BY, VICTOR GALLARDO, PCT. 3 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 03-22-2021 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: SANITARY SEWER BY: CITY OF MISSION LINE SIZE: 8" LOCATION: XAVIER AVENUE.

WATER SERVICE PROVIDER: SWSC EXISTING LINE SIZE: 8" LOCATION: TROSPER ROAD.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 03-22-2021 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: _____, __

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.

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SUBDIVISION PLAT OF EDUARDOS SUBDIVISION No. 19

A 22.03-ACRE TRACT OF LAND, OUT OF LOT 46-4 AND 47-4, WEST ADDITION TO SHARYLAND SUBDIVISION, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

METES AND BOUNDS
A 22.03-ACRE TRACT OF LAND, .72 ACRES OUT OF LOT 46-4 AND 21.31 ACRES OUT OF LOT 47-4, WEST ADDITION TO SHARYLAND SUBDIVISION, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS (REFERENCE TO WHICH IS HERE MADE FOR ALL PURPOSE), IS BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

THE POINT OF BEGINNING (P.O.B.) BEING AT FOUND COTTON PICKER SPINDLE ON THE APPARENT EXISTING TROSPER ROAD CENTERLINE, AND NORTH EAST CORNER OF EDUARDOS NO 18 SUBDIVISION AS PER THE PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS, FOR THE SOUTH EAST CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, WEST WITH THE NORTH LINE OF EDUARDOS NO 18 SUBDIVISION AND WITH THE APPARENT SOUTH LOT LINE OF SAID 22.03-ACRE TRACT, A DISTANCE OF 20.00 FEET TO A FOUND 5/8-INCH IRON ROD ON THE APPARENT EXISTING WEST RIGHT-OF-WAY LINE OF SAID TROSPER ROAD, CONTINUING WITH SAID SOUTH LOT LINE OF 22.03-ACRE TRACT AND THE APPARENT SOUTH RIGHT OF WAY LINE OF MILE 6 1/2 NORTH ROAD AND CONTINUING FOR A TOTAL DISTANCE OF 688.00 FEET TO A SET ONE-HALF INCH IRON ROD FOR THE SOUTHWEST CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, N 32°18' W, A DISTANCE OF 52.21 FEET TO A FOUND 5/8-INCH IRON ROD FOR AN INTERNAL CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, EAST, A DISTANCE OF 1.32 FEET TO A FOUND 5/8-INCH IRON ROD AN EXTERNAL CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, N 32°18' W, ALONG WITH A UNITED IRRIGATION DISTRICT CANAL RIGHT OF WAY RECORDED IN VOLUME 1, PAGE 56 MAP RECORDS, HIDALGO COUNTY, TEXAS, A DISTANCE OF 487.07 FEET TO A FOUND 5/8-INCH IRON ROD FOR AN INTERNAL CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, S 57°30' W, A DISTANCE OF 11.00 FEET TO A FOUND 5/8-INCH IRON ROD, FOR AN EXTERNAL CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, N 32°18' W, ALONG WITH A UNITED IRRIGATION DISTRICT CANAL RIGHT OF WAY RECORDED IN VOLUME 1, PAGE 56 MAP RECORDS, HIDALGO COUNTY, TEXAS, A DISTANCE OF 370.00 FEET TO A FOUND 5/8-INCH IRON ROD INTERNAL CORNER FOR THE NORTHERMOST WEST CORNER OF SAID 22.03-ACRE TRACT, OF LAND HEREIN DESCRIBED;

THENCE, N 45°0' E, ALONG A UNITED IRRIGATION DISTRICT CANAL RIGHT OF WAY, A TOTAL OF 350.00 FEET TO A FOUND 5/8-INCH IRON ROD FOR AN EXTERIOR CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, S 45°00' E, A DISTANCE OF 130.00 FEET TO A SET ONE-HALF INCH IRON ROD FOR AN INTERIOR CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, S 17°06' E, A DISTANCE OF 56.62 FEET TO A SET ONE-HALF INCH IRON ROD FOR AN INTERIOR CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, EAST, WITH THE NORTH PROPERTY LINE OF SAID 22.03-ACRE TRACT, A DISTANCE OF 323.93 FEET TO A TO A SET ONE-HALF INCH IRON ROD FOR AN INTERIOR CORNER OF SAID TRACT OF LAND HEREIN DESCRIBED;

THENCE, N 72°20' E A DISTANCE OF 52.49 FEET TO A SET ONE-HALF INCH IRON ROD FOR A POINT OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, EAST, A DISTANCE OF 280.00 FEET TO A SET ONE-HALF INCH IRON ROD FOR A POINT CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, S 8°03' E, A DISTANCE OF 50.48 FEET TO A SET ONE-HALF INCH IRON ROD FOR AN INTERIOR CORNER OF SAID TRACT OF LAND HEREIN DESCRIBED;

THENCE, EAST, A DISTANCE OF 185.00 FEET TO A SET ONE-HALF INCH IRON ROD FOR THE NORTH EAST CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

THENCE, SOUTH, ALONG THE WEST RIGHT OF WAY OF TROSPER ROAD, PASSING FOUND COTTON PICKER SPINDLE, ON THE CENTERLINE OF MILE 6 1/2 NORTH ROAD, A TOTAL DISTANCE OF 897.00 FEET TO A FOUND COTTON PICKER SPINDLE FOR THE SOUTH EAST CORNER OF SAID 22.03-ACRE TRACT OF LAND HEREIN DESCRIBED;

ALSO BEING THE POINT OF BEGINNING, CONTAINING 22.03 ACRES OF LAND, MORE OR LESS.

STATE OF TEXAS
COUNTY OF HIDALGO

OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION
I, ANICETO IZAGUIRRE, OWNER OF THE 22.03 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED EDUARDOS SUBDIVISION No.19, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT AND DEDICATE 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 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.

ANICETO IZAGUIRRE - PRESIDENT DATE
IZAGUIRRE REAL ESTATE HOLDINGS
500 SOLAR DR.
MISSION, TEXAS 78574

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, the undersigned notary public, on this day personally appeared ANICETO IZAGUIRRE proved to me through her Texas Department of Public Safety Driver License to be the person whose name is subscribed to the foregoing instrument, who, being by me first duly sworn, declared that the statements therein are true and correct and acknowledged that she executed the same for the purposes and consideration thereby expressed.

Given under my hand and seal of office this _____ day of _____, 2021.

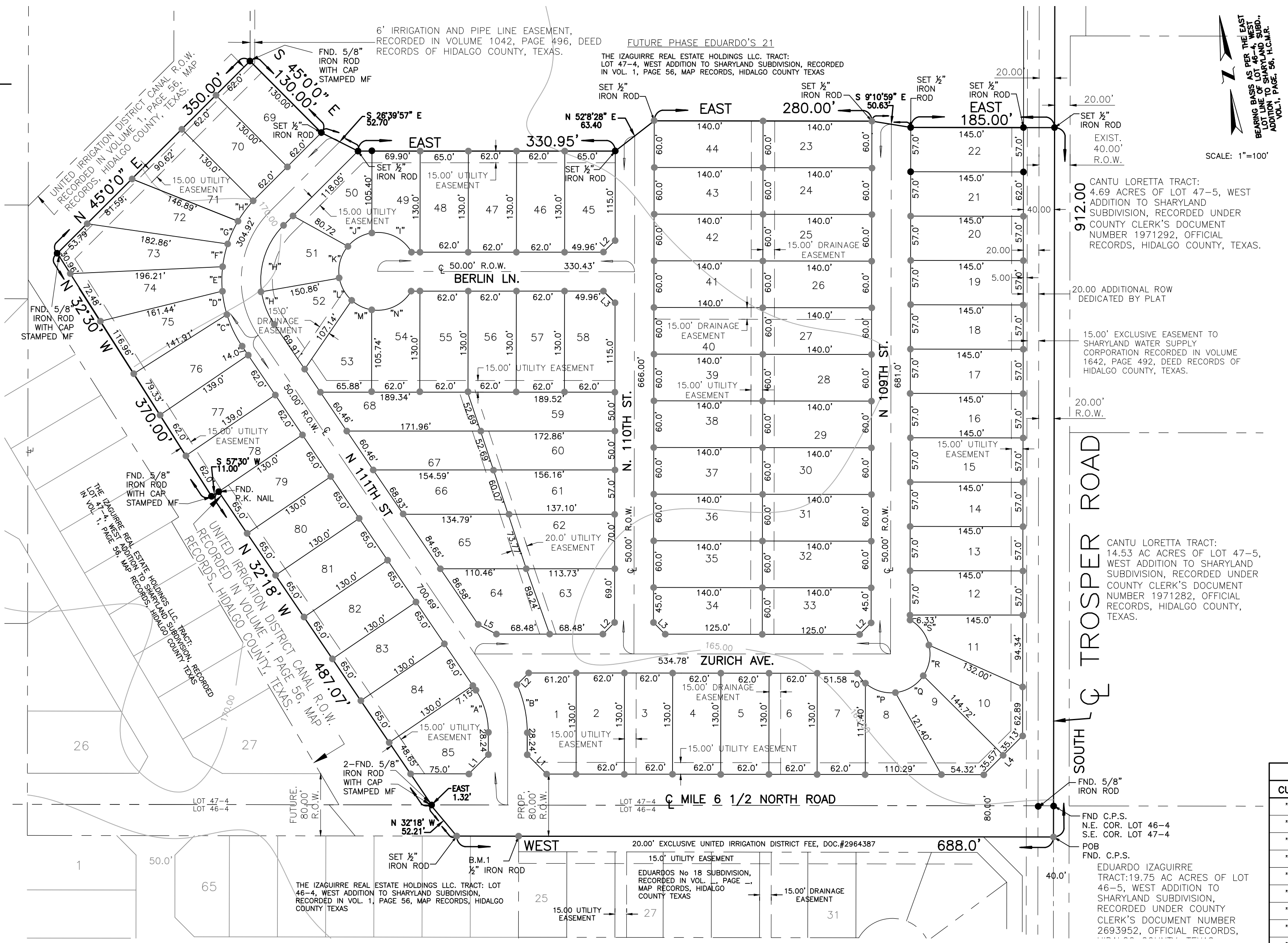
DAISY BONILLA
MY COMMISSION EXPIRES
August 02, 2021

NOTARY PUBLIC- STATE OF TEXAS

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

PRINCIPAL CONTACTS:

Name	Address	City & Zip	Phone	Fax
OWNER: ANICETO IZAGUIRRE	500 SOLAR DR.	MISSION, TEXAS 78574	(956)240-3246	(956)585-0554
ENGINEER: GILBERTO A. GRACIA	7413 N. LA HOMA	MISSION, TEXAS 78574	(956)584-0554	(956)584-0554
SURVEYOR: HOMERO LUIS GUTIERREZ	2600 SAN DIEGO ST.	MISSION, TEXAS 78574	(956)369-0988	



PLAT NOTES AND RESTRICTIONS:

- FLOOD ZONE DESIGNATION: ZONE "X" AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN. COMMUNITY-PANEL NUMBER 480334 0295 D. MAP REVISED: JUNE 6, 2000.
- GENERAL NOTE FOR SINGLE FAMILY RESIDENCES: NO MORE THAN ONE-SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON EACH LOT. APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPANCY OF THE LOT. NO COMMERCIAL USE SHALL BE ALLOWED ON ALL INTERNAL LOTS 1 - 85.
- MINIMUM FINISH FLOOR NOTE: MINIMUM FINISH FLOOR ELEVATION SHALL BE 18" ABOVE CENTERLINE OF 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 FOR APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISH FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR A DEVELOPMENT PERMIT APPLICATION.
- LEGEND - DENOTES 1/2" IRON ROD SET UNLESS OTHERWISE NOTED.
- LOTS 1-9 SHALL NOT HAVE ACCESS THRU MILE 6 1/2 NORTH ROAD, LOTS 9-22 SHALL HAVE NOT ACCESS TO TROSPER ROAD.
- MINIMUM BUILDING SETBACK LINES: FROM LOT 44 THRU LOT 48
FRONT25.00' OR GREATER FOR EASEMENTS
FRONT CUL-DE-SAC25.00' OR GREATER FOR EASEMENTS
GARAGE18.00', EXCEPT WHERE GREATER SETBACK IS REQUIRED, GREATER SETBACK APPLIES REAR15.00' OR GREATER FOR EASEMENTS, EXCEPT 25.00' FOR DOUBLE FRONTING LOTS
INTERIOR SIDES6.00', OR GREATER FOR EASEMENTS
CORNER10.0' EXCEPT 20.0' FOR LOTS ADJACENT TO A STREET WITH A ROW GREATER THAN 50.0 FEET, OR GREATER FOR EASEMENTS.
OR TO EASEMENT LINE WHICHEVER IS GREATER ON ALL CASES
- DRAINAGE: IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT No. 1 AND HIDALGO COUNTY REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO DETAIN A TOTAL OF _____ CUBIC FEET (____ ACRE FEET) OF STORM WATER RUNOFF DRAINAGE RETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: SEE DRAINAGE REPORT ON SHEET No.4.
- NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT. EASEMENTS SHALL BE KEPT CLEAR OF FENCES, 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.
- BENCHMARK NOTE: THE FOLLOWING BENCHMARK IS IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS. B.M. 1 ELEV. 165.31 AT AN IRON ROD LOCATED AT THE INTERSECTION OF EXISTING NORTH ROW LINE AND THE WEST PROPERTY LINE OF THIS DEVELOPMENT. N.A.S.D. 88 DATUM.
- 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 IRRIGATION EASEMENTS ARE EXCLUSIVE TO UNITED IRRIGATION DISTRICT, AND THE DISTRICT ALLOWS NO OTHER UTILITIES OR USE WITHOUT ITS EXPRESS WRITTEN APPROVAL.
- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CROSS ABOVE OR BELOW GROUND ANY DISTRICT EASEMENT OR RIGHT OF WAY WITH LINES, POLES, OPEN DITCHES OR OTHER USE WITHOUT FIRST OBTAINING A CROSSING PERMIT FROM UNITED IRRIGATION DISTRICT.
- 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 UNITED 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 UNITED IRRIGATION DISTRICT. ANY CONNECTION NOT AUTHORIZED BY THE DISTRICT IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE.
- AS PER LOCAL GOVERNMENT CODE REQUIREMENTS, SANITARY SEWER MUST BE CONNECTED TO RESIDENTIAL HOMES PRIOR TO RECEIVING A FINAL CLEARANCE FOR WATER METER. A SEWER TAP INSPECTION SHALL BE PROVIDED FROM THE ENTITY SERVICE PROVIDER PRIOR TO RECEIVING A CLEARANCE FOR WATER METERS).
- THE RESIDENTIAL LOTS SHOULD REFLECT SERVICE BY A 3/4" METER.
- 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.
- 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.
- DEVELOPER SHALL INSTALL A 6 FOOT CHAIN LINK FENCE ALONG THE REAR LOT LINE OF ALL SAID LOTS ADJUTING MILE 6 1/2 NORTH ROAD AND TROSPER ROAD.
- ALL SHARYLAND WATER SUPPLY CORPORATION EASEMENTS ARE EXCLUSIVE. NO OTHER USE OF THE EASEMENT IS PERMITTED WITHOUT THE EXPRESS WRITTEN APPROVAL OF SHARYLAND WATER SUPPLY CORPORATION.
- NO CURB CUT, ACCESS, OR LOT FRONTAGE PERMITTED ALONG N. TROSPER ROAD AND ALONG YALE AVE. (6 1/2 MILE NORTH ROAD).

HIDALGO COUNTY
CERTIFICATE OF PLAT APPROVAL
UNDER LOCAL GOVERNMENT CODE § 232.028(c)

WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF THE EDUARDOS SUBDIVISION No.19 was reviewed and approved by the Hidalgo County Commissioners Court on _____

Hidalgo County Judge _____ date _____
Hidalgo County Clerk _____ date _____

ATTEST:

GILBERTO A. GRACIA
REGISTERED PROFESSIONAL ENGINEER No. 62477
7413 N. LA HOMA
MISSION, TEXAS 78574

HOMERO LUIS GUTIERREZ DATE _____
R.P.L.S. No. 2791

RAUL SESIN, P.E. C.F.M.
GENERAL MANAGER

INDEX OF SHEETS

SHEET 1- HEADING; INDEX; LOCATION MAP AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOTS, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT TO THE ETJ OF A MUNICIPALITY AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D.D. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWCS CERTIFICATION; P&Z CITY CERTIFICATION; REVISION NOTES.

SHEET 2- WATER DISTRIBUTION MAP, ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATION AND STATEMENT.

SHEET 3- DETAIL SHEET

SHEET 4- SANITARY SEWER DISTRIBUTION LAYOUT

SHEET 5- PAVING DISTRIBUTION AND DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE; AND ENGINEER'S CERTIFICATION; REVISION NOTES; TYPICAL ROADWAY SECTION; CURB AND GUTTER SECTION; VALLEY GUTTER SECTION.

LOT No.	(S.F.)	(AC)
1	8,195.80	0.188
2-6	8,060.00	0.185
7	7,987.92	0.183
8	7,302.47	0.183
9	8,429.72	0.193
10	9,021.05	0.207
11	8,327.21	0.191
12-22	8,265.00	0.189
23-32	8,400.00	0.192
33-34	8,286.03	0.190
35-44	8,400.00	0.192
45	8,333.69	0.191
46-48	8,060.00	0.185
49	7,072.91	0.163
50	7,220.43	0.165
51	7,043.59	0.162
52	7,402.22	0.169
53	7,002.54	0.161
54	7,120.49	0.163
55-57	8,060.00	0.185
58	8,333.69	0.191
59	9,060.24	0.207
60	8,223.96	0.188
61	8,358.32	0.192
62	8,779.18	0.201
63	8,170.49	0.187
64	8,052.64	0.184
65	8,583.72	0.197
66	8,247.23	0.189
67	8,163.87	0.187
68	9,032.51	0.207
69-70	8,060.00	0.185
71	8,191.91	0.188
72	8,301.12	0.190
73	9,720.30	0.223
74	8,605.78	0.197
75	8,133.05	0.186
76	8,364.13	0.192
77	8,561.13	0.196
78	8,680.03	0.199
79-84	8,450.00	0.193
85	9,271.07	0.212

CURVE DATA TABLE

CURVE	DELTA	RADIUS	ARC LENGTH	CHORD LENGTH
"A"	34°18'0"	50.00'	59.86'	56.62'
"B"	24°13'11"	50.00'	63.43'	62.95'
"C"	17°38'16"	50.00'	45.28'	45.10'
"D"	11°44'24"	50.00'	30.73'	30.68'
"E"	12°01'09"	50.00'	31.46'	31.40'
"F"	11°28'24"	50.00'	30.03'	29.98'
"G"	12°17'27"	50.00'	32.17'	32.11'
"H"	11°49'13"	50.00'	32.73'	32.67'
"I"	69°3'53"	50.00'	60.27'	56.56'
"J"	41°31'37"	50.00'	36.23'	35.45'
"K"	49°58'46"	50.00'	43.61'	42.24'
"L"	38°12'30"	50.00'	33.34'	32.72'
"M"	33°3'46"	50.00'	28.85'	28.45'
"N"	68°15'54"	50.00'	59.57'	56.11'
"O"	18°52'57"	50.00'	16.47'	16.40'
"P"	47°39'39"	50.00'	41.59'	40.40'
"Q"	49°33'27"	50.00'	43.24'	41.91'
"R"	47°10'5"	50.00'	41.16'	40.00'
"S"	47°37'58"	50.00'	41.56'	40.36'

STATE OF TEXAS
COUNTY OF HIDALGO

I, HOMERO LUIS GUTIERREZ, A REGISTERED PROFESSIONAL LAND SURVEYOR IN TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT AND DESCRIPTION OF THE EDUARDOS SUBDIVISION No.19, WAS PREPARED FROM A SURVEY OF THE PROPERTY MADE ON THE GROUND BY ME OR UNDER MY SUPERVISION ON NOV. 11, 2020

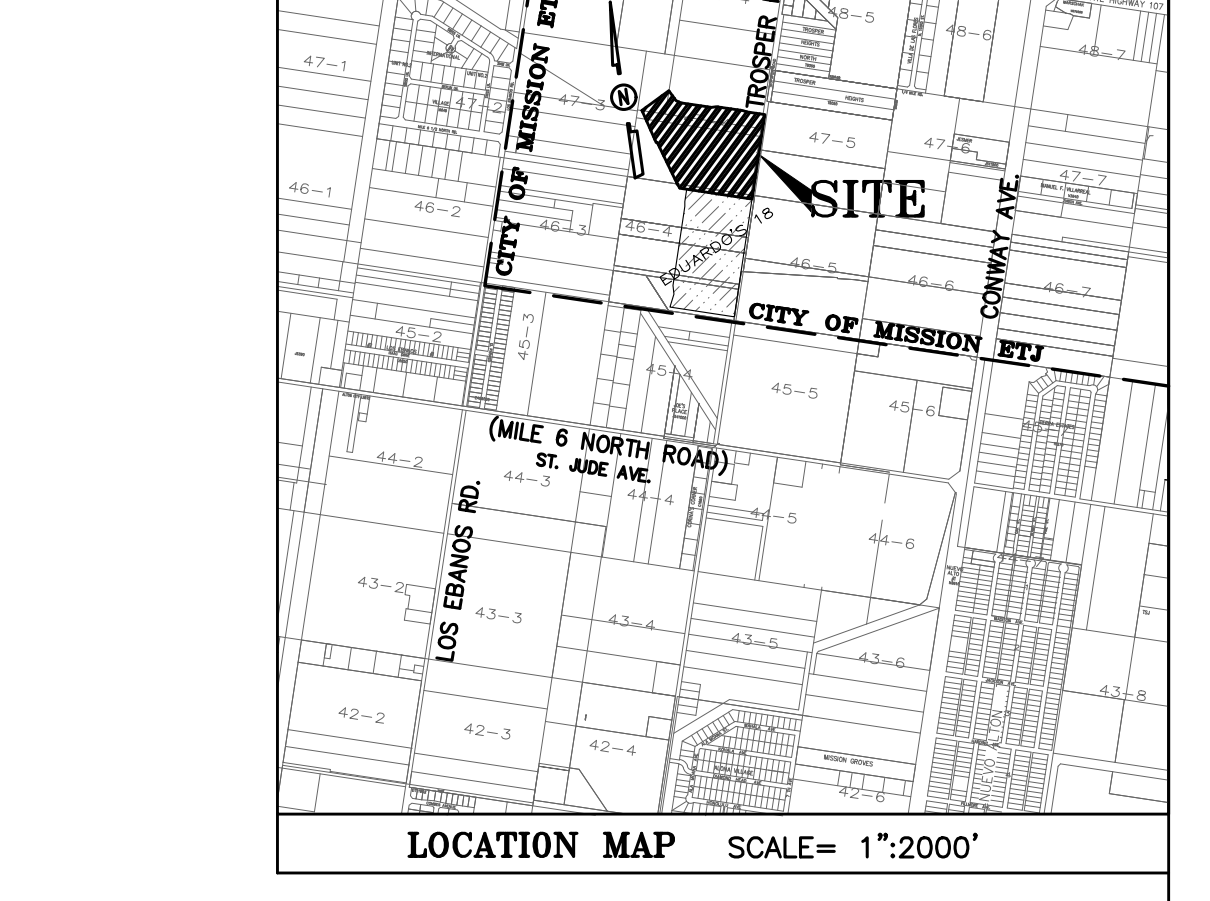
HOMERO LUIS GUTIERREZ DATE _____
R.P.L.S. No. 2791

STATE OF TEXAS
COUNTY OF HIDALGO

I, THE UNDERSIGNED, A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE PROPER ENGINEERING CONSIDERATIONS HAVE BEEN GIVEN TO THIS PLAT.

GILBERTO A. GRACIA
REGISTERED PROFESSIONAL ENGINEER No. 62477
IZAGUIRRE ENGINEERING GROUP, LLC.
7413 N. LA HOMA
MISSION, TEXAS 78574

NO.	SHEET	REVISION	DATE	APPROVED



LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY:
EDUARDOS SUBDIVISION No. 19 IS LOCATED IN WEST HIDALGO COUNTY, ON THE WEST SIDE OF TROSPER ROAD AND APPROXIMATELY 2,600.0 FEET NORTH OF MILE 6 NORTH ROAD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION ACCORDING TO THE OFFICIAL MAP IN THE OFFICE OF THE SECRETARY OF THE CITY OF MISSION (POPULATION 83,394). EDUARDOS SUBDIVISION No.19 LIES ON THE CITY LIMITS AND IT IS WITHIN THE CITY OF MISSION'S FIVE-MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE § 212.001 AND LIES IN PCT. NO. 3.

SHARYLAND WATER SUPPLY CORPORATION
Sharyland Conditional Approval Block for Preliminary Plans:

I, SHERILYN DAHLBERG, HEREBY CONDITIONALLY CERTIFY THAT POTABLE WATER SERVICE IS AVAILABLE FOR THE EDUARDOS SUBDIVISION No.19 SUBDIVISION LOCATED AT MISSIONS ETJ'S IN HIDALGO COUNTY, TEXAS, SUBJECT TO THE SUBDIVISION'S POTABLE WATER SYSTEM MEETING THE APPROVAL OF THE DEVELOPER'S DESIGN ENGINEER, ALL APPLICABLE RULES AND REGULATIONS OF SHARYLAND WATER SUPPLY CORPORATION, AND LOCAL, STATE, AND FEDERAL AGENCIES.

DEVELOPER AND ITS DESIGN ENGINEER SHALL BEAR FULL RESPONSIBILITY TO ENSURE THAT THE ABOVE REFERENCED POTABLE WATER SYSTEM IS CONSTRUCTED WITHIN THE DESIGNATED SHARYLAND WATER SUPPLY CORPORATION EXCLUSIVE EASEMENT.

SHERILYN DAHLBERG DATE _____
GENERAL MANAGER
SHARYLAND WATER SUPPLY CORPORATION

PLANNING & ZONING COMMISSION
ACKNOWLEDGMENT

THIS PLAT OF EDUARDOS SUBDIVISION No. 19 HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MISSION, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS _____ DAY OF _____, 2021.

CHAIRMAN

CITY OF MISSION
CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.0115(B) WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF EDUARDOS SUBDIVISION No.19 WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MISSION.

MAYOR OF CITY OF MISSION DATE _____

ATTEST: _____
CITY SECRETARY DATE _____

THIS PLAT IS HEREBY APPROVED BY UNITED IRRIGATION DISTRICT ON THIS THE _____ DAY OF _____, 2021.

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

ATTEST: _____ PRESIDENT _____ SECRETARY

HIDALGO COUNTY DRAINAGE DISTRICT No. 1

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 NO. 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 OF THE SUBDIVISION AND ITS ENGINEER TO MAKE THESE DETERMINATIONS.

HIDALGO COUNTY DRAINAGE DISTRICT No. 1
RAUL SESIN, P.E. C.F.M. DATE _____
GENERAL MANAGER

NO.	SHEET	REVISION	DATE	APPROVED

SHEET NO. 1 OF 5 SHEETS

FILENAME	DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
K:\PROJECTS\SUBDIVISIONS\EDUARDOS No.19\EDUARDOS 19-PLAT	11-01-20			
	DATE REVISD	REVISED BY	CHECKED BY	APPROVED BY

ALL WATERLINE CONSTRUCTION SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY CONSTRUCTION STANDARDS. CONTRACTOR SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY STANDARD DETAILS WHENEVER CONFLICTS ARISE.

FINAL ENGINEERING REPORT FOR EDUARDO'S SUBDIVISION No. 19:
BY GILBERTO A. GRACIA, P.E.

WATER SUPPLY: Description and Costs.
WATER SUPPLY: EDUARDO'S SUBDIVISION No. 19 HAS BEEN PROVIDED WITH POTABLE WATER BY THE WATER COMPANY OF SHARYLAND WATER SUPPLY COMPANY (S.W.S.C.). THE SUBDIVIDER AND COMPANY S.W.S.C. SIGNED A CONTRACT BY WHICH THE SUBDIVISION WILL RECEIVE SUFFICIENT WATER PROVISION FOR AT LEAST 30 YEARS AND S.W.S.C. HAS PROVIDED SUFFICIENT DOCUMENTATION TO ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION. S.W.S.C. HAS AN EXISTING 8" DIAMETER LINE RUNNING ALONG THE SOUTH SIDE OF XAVIER AVE.

THE WATER SYSTEM FOR EDUARDO'S SUBDIVISION No. 19 CONSISTS OF A 8" DIAMETER WATER LINE THAT TAPS INTO THE EXISTING 8" DIAMETER WATER LINE THAT RUNS ALONG THE SOUTH SIDE OF XAVIER AVE. THE 8" DIAMETER WATER LINE RUNS NORTH CROSSING MILE 6 1/2 NORTH ROAD LOOPS ON THE NORTH SIDE OF THE STREET AND CONTINUES NORTH ON THE EAST SIDE OF THE LOT. ENDING ON THE NORTH BOUNDARY LINE WITH A FLUSH VALVE. THE 8" DIAMETER WATER LINE THEN LOOPS TO THE WEST SIDE ALONG ST AND ST, ENDING WITH A FLUSH VALVE. FROM SAID 8" DIAMETER WATER LINE ON THE WEST OF ST, IT THEN CONTINUES WEST ALONG THE SOUTH OF ST, ENDING IN WITH A FLUSH VALVE. FROM THE EXISTING 8" DIAMETER WATERLINES, THIRTY-SEVEN (37) DOUBLE SERVICES OF 1" OF DIAMETER AND ONE (1) SINGLE SERVICE ARE COMING OUT OF THE LINE. SAID SERVICES TERMINATE AT THE WATER METERS OF EACH LOT. THE 8" DIAMETER LINE, THE WATER SERVICE LINES, AND THE WATER METER BOXES WILL BE INSTALLED AT A TOTAL COST OF \$ PER LOT. IN ADDITION THE SUBDIVIDER WILL PAY S.W.S.C. THE AMOUNT OF \$ OR \$ WHICH COVERS THE COST PER LOT STATED IN THE 30 YR WATER SERVICE AGREEMENT, WHICH SUM REPRESENTS THE TOTAL COST OF WATER RIGHTS ACQUISITION, WATER METER, AND OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO S.W.S.C. UPON REQUEST BY THE LOT OWNER, S.W.S.C. 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 \$1,500.00 EACH FOR A TOTAL COST OF \$. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY S.W.S.C. AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

ENGINEER CERTIFICATION:
BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWER 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 WATER AND SEWER FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES - THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$ WHICH EQUALS TO \$ PER LOT.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

REPORT FINAL DE INGENIERIA PARA EDUARDO'S SUBDIVISION No. 19.
POR: GILBERTO A. GRACIA, P.E.

PROVISION DE AGUA: DESCRIPCION, Y GASTOS.
EDUARDO'S SUBDIVISION No. 19 SERA PROVISTA DE AGUA POTABLE POR LA COMPANIA DE AGUA SHARYLAND WATER SUPPLY COMPANY (S.W.S.C.). EL SUBDIVIDOR Y LA COMPANIA DE AGUA S.W.S.C. FIRMARON UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA PROVISION DE AGUA SUFICIENTE POR LOS PROXIMOS 30 ANOS Y LA COMPANIA DE AGUA S.W.S.C. PRESENTO SUFICIENTE DOCUMENTACION PARA ESTABLECER A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ABASTECIDA PARA SERVIR EL DESARROLLO DE LA SUBDIVISION.

S.W.S.C. TIENE UNA LINEA DE 8" DE DIAMETRO EXISTENTE, CORRIENDO POR EL LADO SUR DE LA CALLE XAVIER AVE. EL SISTEMA EXISTENTE DE AGUA PARA EDUARDO'S No. 19 CONSISTE DE UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE SE CONECTA CON LA LINEA EXISTENTE DE 8" DE DIAMETRO QUE CORRE EN EL LADO SUR DE LA CALLE XAVIER AVE. LA LINEA DE 8" DE DIAMETRO CORRE APROXIMADAMENTE 1,494 PIES HACIA EL NORTE POR EL LADO OESTE DE LA CALLE XAVIER AVE. DESPUES DA VUELTA A LA IZQUIERDA POR APROXIMADAMENTE PIES POR EL LADO NORTE DE LA CALLE UNIVERSITY AVE. TERMINANDO CON UNA VALVULA DE PURGA AL FINAL DE LA CALLE. DE ESA LINEA SE CONECTA OTRA LINEA DE AGUA DE 8" DIAMETRO Y CORRE HACIA EL NORTE POR APROXIMADAMENTE PIES POR EL LADO OESTE DE LA CALLE XAVIER AVE. DESPUES DA VUELTA AL OESTE Y CORRE APROXIMADAMENTE PIES POR EL LADO SUR DE LA CALLE XAVIER AVE. TERMINANDO EN UNA VALVULA DE PURGA AL FINAL DE LA CALLE. OTRA LINEA DE AGUA DE 8" DIAMETRO SE CONECTA CON LA LINEA DE 8" DE DIAMETRO QUE ESTA EN LA CALLE XAVIER AVE. Y CORRE HACIA EL NORTE APROXIMADAMENTE PIES POR EL LADO ESTE DE LA CALLE XAVIER AVE.

DE LA LINEA DE 8" DE DIAMETRO SE DESPRENDEN TREINTA Y SIETE (37) SERVICIOS DOBLES DE 1" DE DIAMETRO Y UN (1) SERVICIOS SENCILLOS, QUE VAN HACIA LOS MEDIDORES DE CADA LOTE. LAS LINEAS DE 8" DE DIAMETRO, LAS LINEAS DE SERVICIOS DE AGUA, Y LAS CASAS DE LOS MEDIDORES SE INSTALARAN A UN COSTO TOTAL DE US \$ DE LOS CUALES SE CUBRAN US \$ POR LOTE. EL DUEÑO DE LA SUBDIVISION PAGO ADICIONALMENTE A AGUA SUD LA CANTIDAD DE US \$ O US \$ POR LOTE DE ACUERDO AL CONTRATO Y DOCUMENTO DE 30 ANOS DE SERVICIO DE AGUA POTABLE QUE CUBRE EL MEDIDOR DE AGUA. (INCLUYENDO COSTOS DE LA INSTALACION DE CADA MEDIDOR, TARIFFAS DE CONEXION Y MEMBRASAS). CUANDO EL DUEÑO DEL SOLAR SOLICITE UN MEDIDOR DE AGUA, LA COMPANIA AGUA S.W.S.C. INSTALARA EL MEDIDOR SIN COSTO ALGUNO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION HA INSTALADO (5) BOCAS DE RIEGO A UN COSTO DE US \$ 1,500.00 POR CADA UNO, EN UN COSTO TOTAL DE US \$. 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.

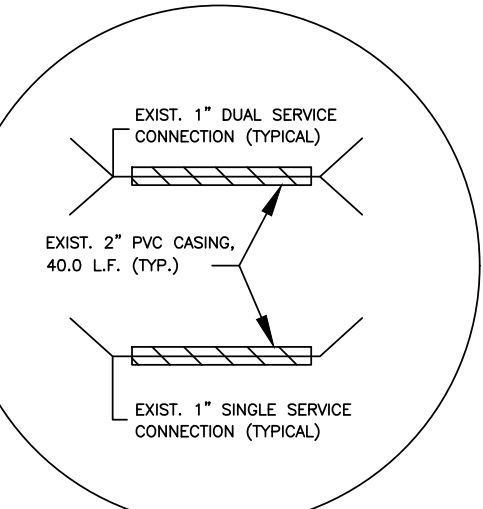
CERTIFICACION:
CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN LOS REQUISITOS DE LAS LEYES GOBERNANDO A LAS SUBDIVISIONES, ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE, (CODIGO DE AGUA DE TEXAS). CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DE DRENAJE SON:
AGUA: EL SISTEMA/SERVICIO DE AGUA SERA INSTALADO Y COMPLETAMENTE CONSTRUIDO MENOS LOS MEDIDORES MECANICOS DE AGUA QUE COSTARA UN TOTAL DE US \$ O US \$ POR LOTE



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

COST ESTIMATE

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
SANITARY SEWER IMPROVEMENTS:	\$
TOTAL:	\$



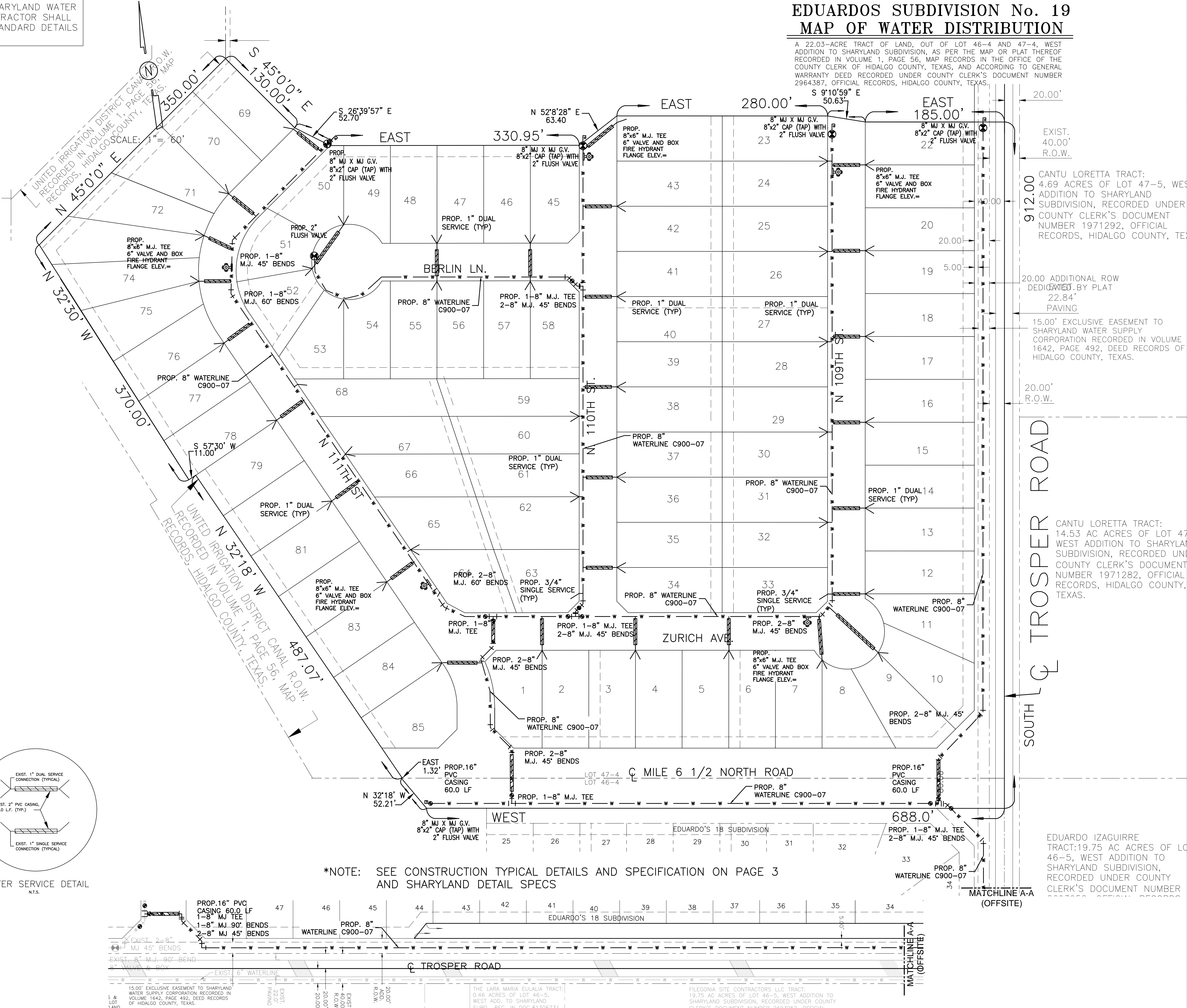
- GENERAL CONSTRUCTION NOTES:**
- ALL EXISTING WATER LINES TO BE C-900 DR-25.
 - CONTRACTOR TO INSTALL 1" SERVICE CONNECTIONS TO EVERY LOT & ALL SERVICES TO BE LOCATED IN FRONT OF LOTS APPROXIMATELY 10 FOOT FROM LOT LINE. CONTRACTOR TO UTILIZE SINGLE & DOUBLE SERVICE CONNECTIONS AS NEEDED.
 - CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES FOR VERIFICATION OF CONFLICTS PRIOR TO CONSTRUCTION ON SITE.
 - SEE WATER DETAIL SHEET FOR MORE INFORMATION.
 - ALL LOTS SHALL BE PROVIDED WITH SERVICE SUBROUTS AND SAID SERVICE LOCATIONS SHALL BE MARKED ON THE CURB AND GUTTER WITH A "W" NOT LESS THAN 1 1/2" IN SIZE OR IN A MANNER APPROVED BY THE CITY AND SHALL BE 12" BELOW FINISH GRADE ELEVATION.
 - THE RESIDENTIAL LOTS SHOULD REFLECT SERVICE BY A 3/4" METER.

EDUARDO'S SUBDIVISION No. 19 MAP OF WATER DISTRIBUTION

A 22.03-ACRE TRACT OF LAND, OUT OF LOT 46-4 AND 47-4, WEST ADDITION TO SHARYLAND SUBDIVISION, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.



EDUARDO'S SUBDIVISION No. 19
WATER DISTRIBUTION LAYOUT



*NOTE: SEE CONSTRUCTION TYPICAL DETAILS AND SPECIFICATION ON PAGE 3 AND SHARYLAND DETAIL SPECS

CANTU LORETTA TRACT:
4.69 ACRES OF LOT 47-5, WEST ADDITION TO SHARYLAND SUBDIVISION, RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 1971292, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

20.00' ADDITIONAL ROW DEDICATED BY PLAT 22.84' PAVING

15.00' EXCLUSIVE EASEMENT TO SHARYLAND WATER SUPPLY CORPORATION RECORDED IN VOLUME 1642, PAGE 492, DEED RECORDS OF HIDALGO COUNTY, TEXAS.

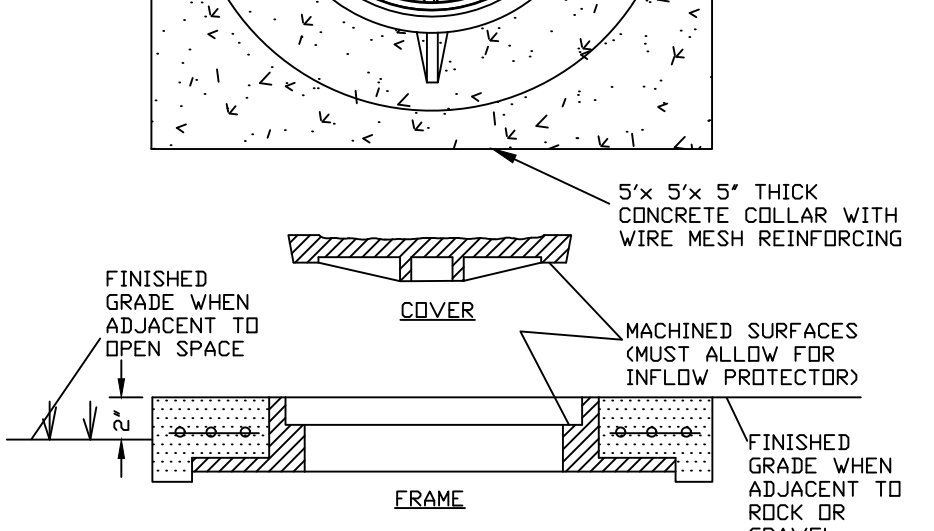
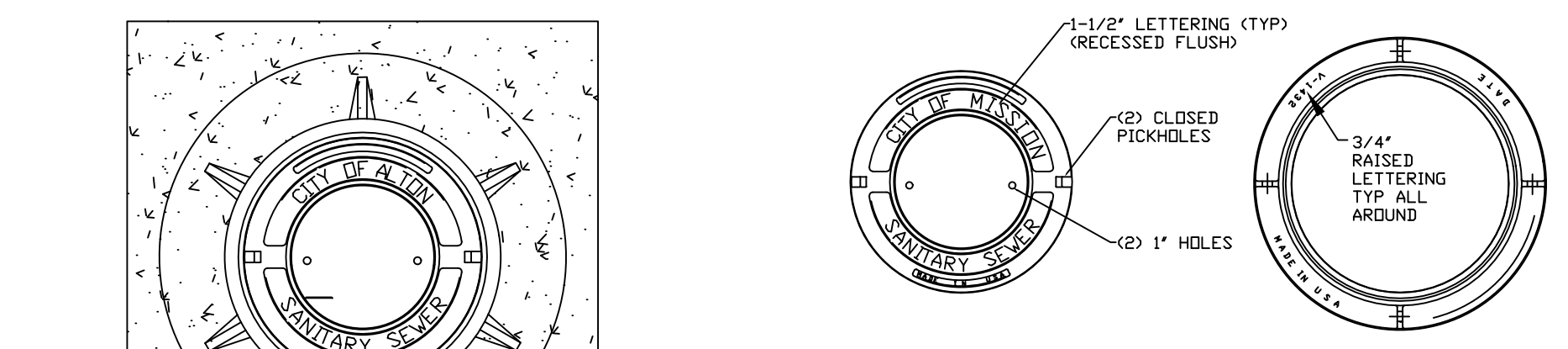
CANTU LORETTA TRACT:
14.53 AC ACRES OF LOT 47 WEST ADDITION TO SHARYLAND SUBDIVISION, RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 1971282, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

EDUARDO IZAGUIRRE TRACT: 19.75 AC ACRES OF LOT 46-5, WEST ADDITION TO SHARYLAND SUBDIVISION, RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

15.00' EXCLUSIVE EASEMENT TO SHARYLAND WATER SUPPLY CORPORATION RECORDED IN VOLUME 1642, PAGE 492, DEED RECORDS OF HIDALGO COUNTY, TEXAS.
THE LARA MARIA EULALIA TRACT: 0.46 ACRES OF LOT 46-5, WEST ADD. TO SHARYLAND SUBD., REC. IN DOC.#1306731.
FLORENCIA SITE CONTRACTORS LLC TRACT: 19.75 AC ACRES OF LOT 46-5, WEST ADDITION TO SHARYLAND SUBDIVISION, RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2693952, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

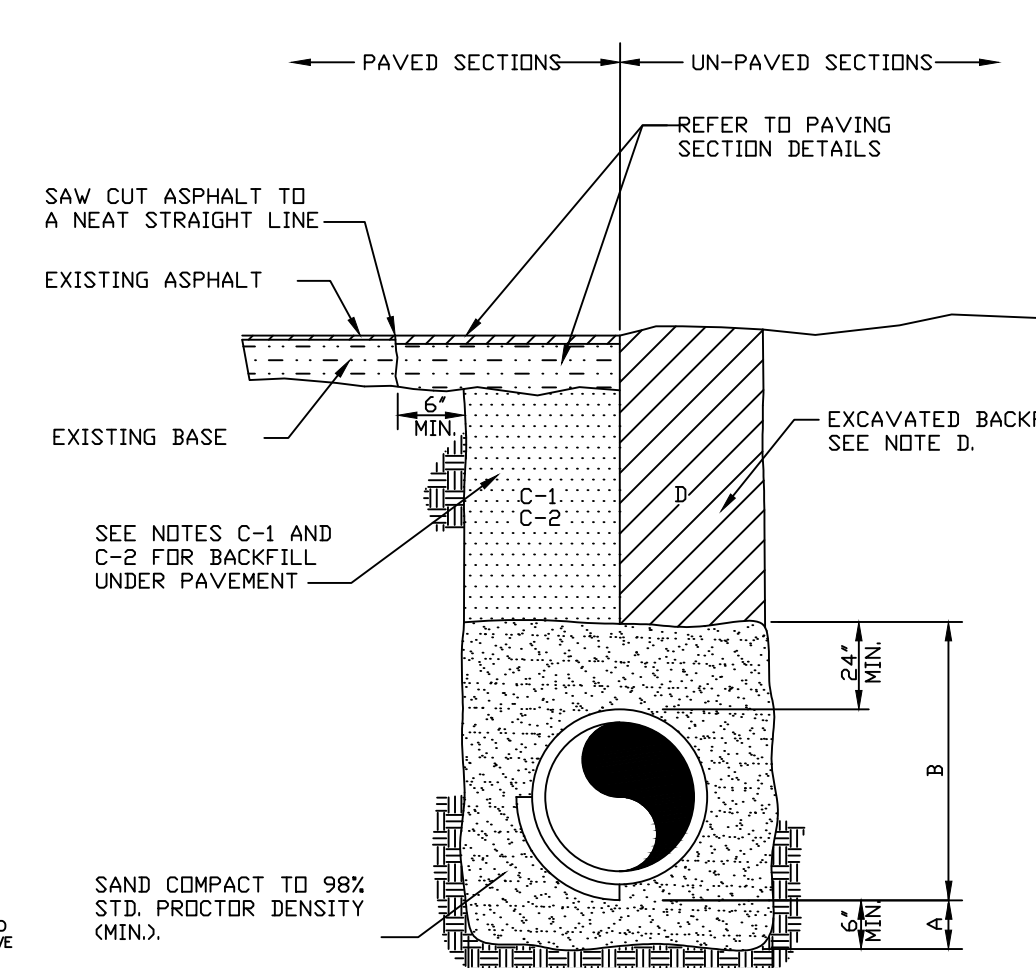
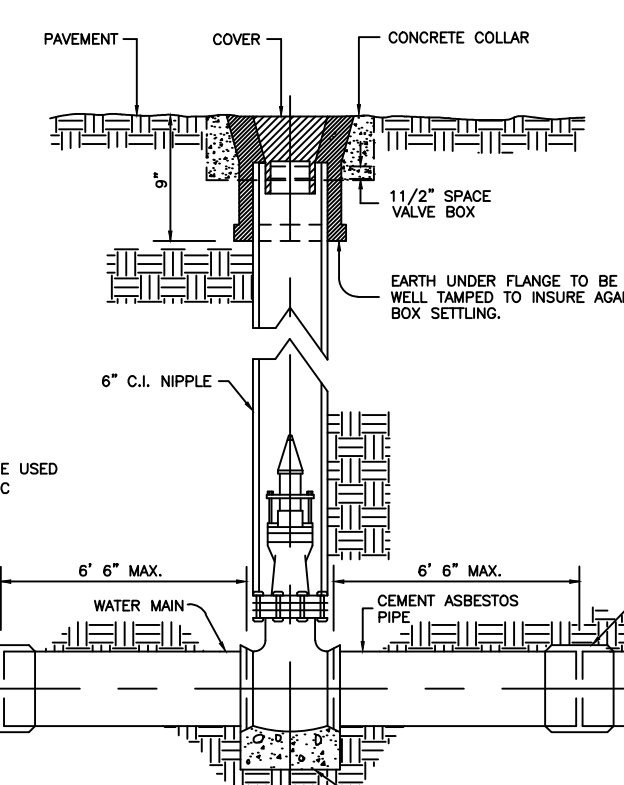
EDUARDO'S SUBDIVISION No. 19

DETAIL SHEET



- NOTES:**
1. FRAME AND COVER SHALL CONFORM TO REQUIREMENTS OF ASHTO M 306.
 2. FRAME AND COVER SHALL BE PROOF-LOAD TESTED TO 74,000 LBS.
 3. FRAME SHALL BE GRAY CAST IRON CONFORMING TO ASHTO M 105 CLASS 35B OR ASTM A48 CLASS 35B.
 4. COVER SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 80-55-06.

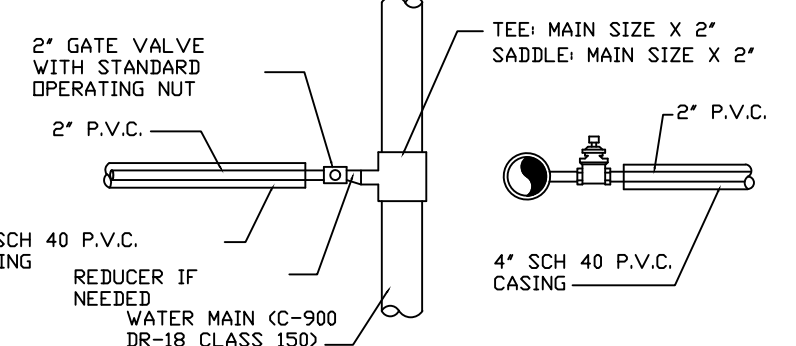
SANITARY SEWER MANHOLE STANDARD RING & COVER



- GENERAL NOTES:**
- A. SAND BEDDING PLACED, HAND LEVELED, AND COMPACTED BEFORE PIPE IS LAID, UP TO BOTTOM OF PIPE (MIN. THICKNESS = 6").
 - B. SAND EMBEDMENT PLACED AND COMPACTED AFTER PIPE IS LAID, FROM BOTTOM OF PIPE TO 24" ABOVE THE TOP OF PIPE. WORK UNDER PIPE HAUNCHES AND COMPACT BY HAND TO SPRING LINE. USE VIBRATORY-TYPE COMPACTORS FOR LIFTS ABOVE THE SPRING LINE. MAXIMUM 6" LIFTS.
 - B₁. MINIMUM TRENCH WIDTH: PIPE O.D. + 16" (FOR 16" PIPE AND SMALLER); OR PIPE O.D. X 1.25 + 12" (FOR 18" PIPE AND LARGER).
 - C-1. (CITY STREETS, PARKING AREA, AND DRIVEWAYS) SELECT EXCAVATED BACKFILL MECHANICALLY COMPACTED TO 98% STANDARD PROCTOR DENSITY IN 8" MAX. LIFTS AT 0 TO +3% OF OPTIMUM MOISTURE CONTENT.
 - C-2. (STATE MAINTAINED ROADWAY) SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - D. EXCAVATED EARTH BACKFILL MECHANICALLY COMPACTED IN 12" MAX. LIFTS. MINIMUM STANDARD PROCTOR DENSITY: 90% OUTSIDE RIGHT OF WAY; 98% AT 0 TO +3% OF OPTIMUM MOISTURE CONTENT INSIDE RIGHT OF WAY.

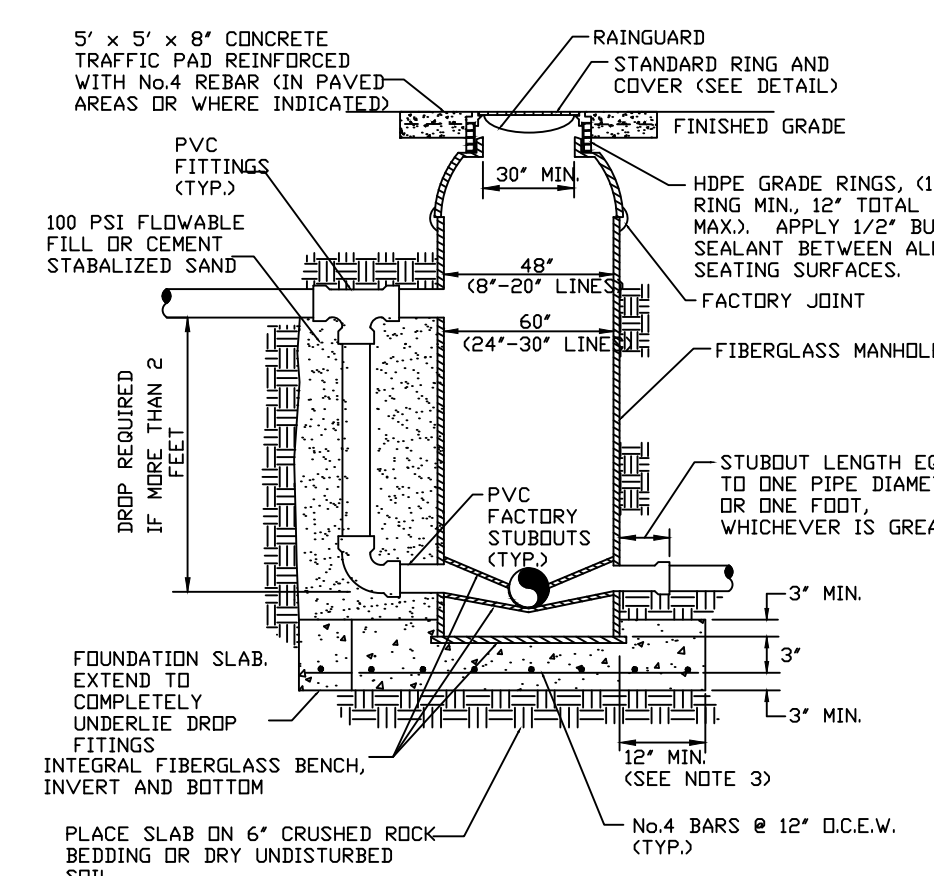
SANITARY SEWER (NON-FORCEMAIN) PIPE BEDDING DETAIL (ALTERNATE)

- NOTES:**
1. ON ALL SERVICE LINES GREATER THAN 1/2" P.V.C. SCHEDULE 40, A 2" VALVE WILL BE REQUIRED.
 2. ONE SERVICE PER EACH LIFT.



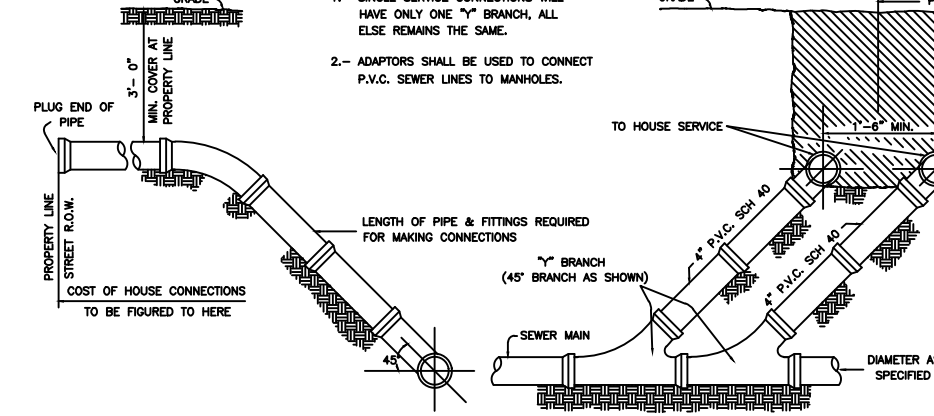
TYPICAL VALVE & BOX INSTALLATION

CONCRETE COLLAR FOR SANITARY SEWER MANHOLES

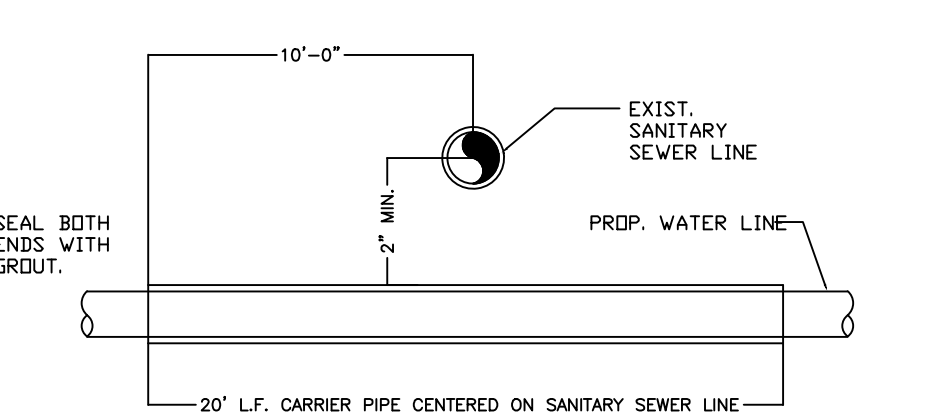


- NOTES:**
1. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 2. BACKFILL SHALL BE SAND COMPACTED TO 95% STANDARD PROCTOR.
 3. BASE SLAB SHALL BE 4" FT. LARGER THAN MANHOLE DIAMETER WHERE SOIL BEARING CAPACITY < 2000 PSF. WATER TABLE < 5 FT., OR DEPTH > 20 FT., SLAB SHALL BE DESIGNED TO PREVENT FLUTATION OF MANHOLE.
 4. COAT ALL INTERNAL CEMENTITIOUS AND METALLIC SURFACES WITH COAL TAR EPOXY.
 5. OUTLET STUBOUT SHALL BE SPIGOT END. INLET STUBOUTS SHALL BE BELL END EXCEPT FOR DRIP CONNECTIONS.

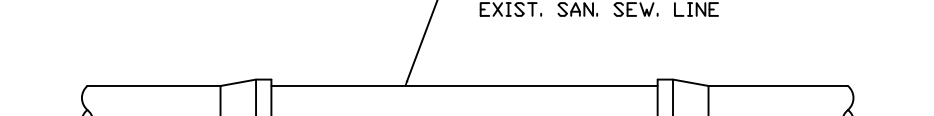
TYPICAL FIBERGLASS MANHOLE



DUAL SEWER SERVICE CONNECTION



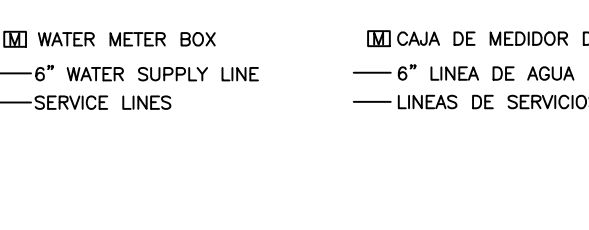
WATER LINE CROSSING UNDER EXIST. S.S.



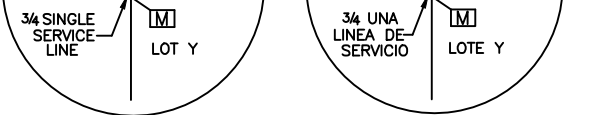
WATER LINE CROSSING OVER EXIST. S.S.

WATER LINE CROSSING OVER EXIST. S.S.

- NOTE:** ALL WATER LINES AND SERVICES MUST BE LOCATED ABOVE THE SEWER MAINS AND SERVICES. WATER LINES AND SEWER LINES SEPARATION DISTANCE AS REQUIRED BY TCEQ.

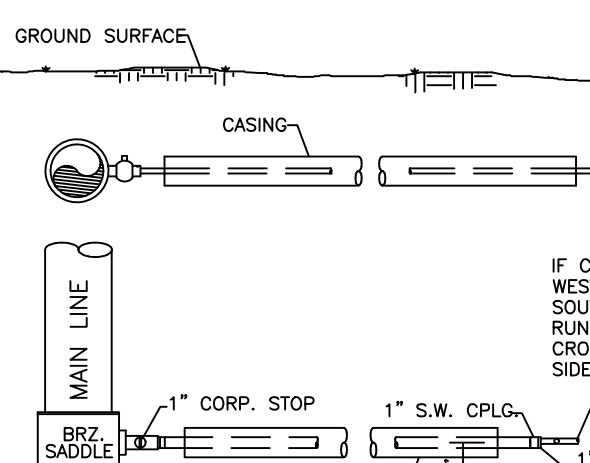


EXAMPLE METER SET-UP

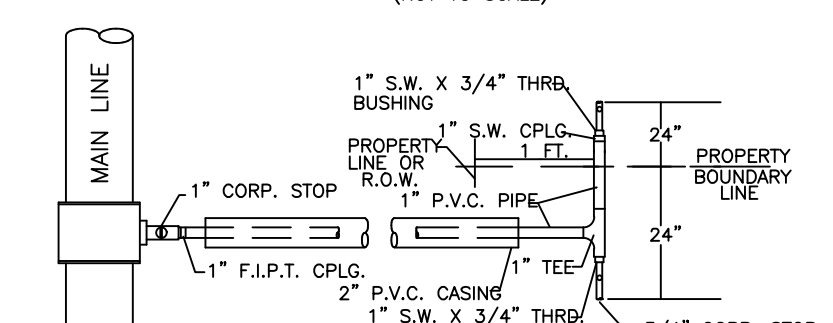


WATER LINE CROSSING OVER EXIST. S.S.

FIRE HYDRANT



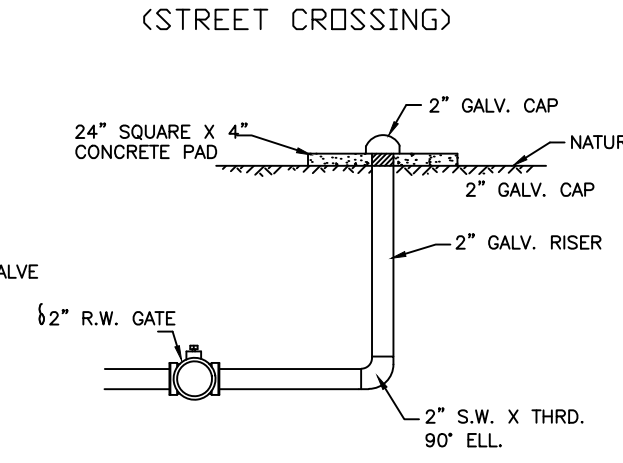
SINGLE WATER SERVICE CONNECTION



DUAL WATER SERVICE CONNECTION



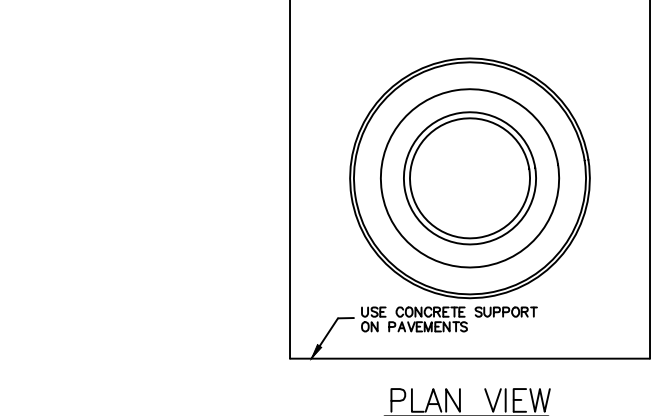
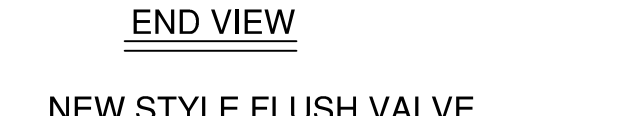
SINGLE CONNECTION



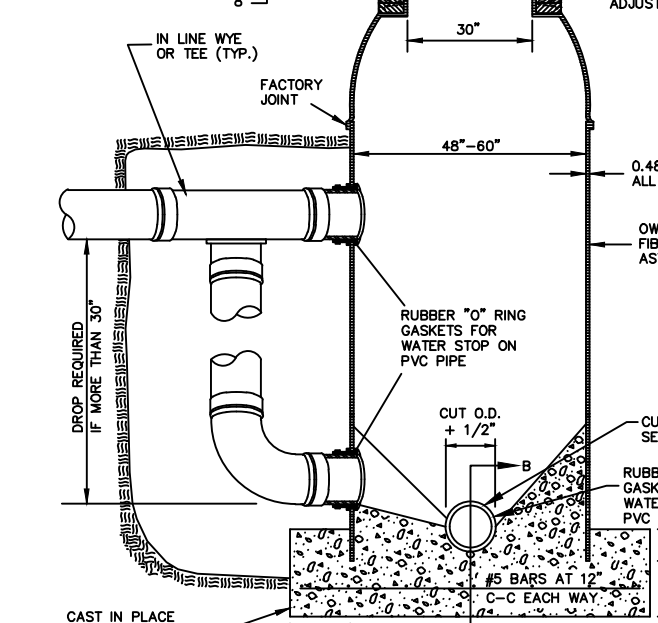
SIDE VIEW

END VIEW

NEW STYLE FLUSH VALVE INSTALLATION

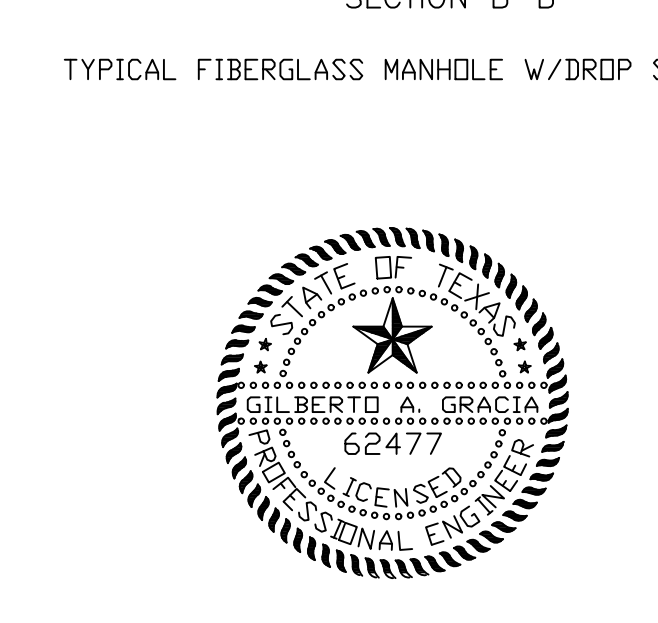


PLAN VIEW



SECTION B-B

TYPICAL FIBERGLASS MANHOLE W/DROP STRUCTURE



END VIEW

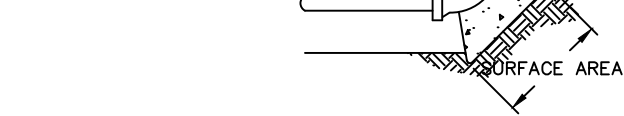
NEW STYLE FLUSH VALVE INSTALLATION



DIAMETER OF PIPE INCHES	THRUST BLOCK SIZE		WEIGHT AT VERTICAL BENDS - LBS
	SURFACE AREA SQ. FT.	THICKNESS INCHES	
6 OR LESS	2	8	1,700
8	3	12	3,000
10	3.5	12	4,500
12	4	14	6,600
14	5	18	9,000
16	6	18	11,800
45" BENDS	4	12	3,200
8	5	14	5,800
10	6	18	9,000
12	7	18	13,000
14	8	24	17,000
16	11.5	24	23,200
90" BENDS	6	12	6,000
8	8	15	10,700
10	10	18	16,700
12	12	18	24,000
14	18	24	32,600
16	21	24	42,700
TEES & DEAD ENDS	3	12	---
8 OR LESS	4	15	---
10	6	18	---
12	8.5	18	---
14	11.5	24	---
16	15	24	---

NOTE: ALL VALUES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 150 P.S.I. AND A SOIL RESISTANCE OF 2,000 LBS/SQ. FT. WITH PIPE LINE A MINIMUM OF 2 FT. OF COVER

UTILITY LINE BORE DETAIL



HORIZONTAL BENDS

VERTICAL BENDS

HYDRANT BURYS

TEES & DEAD ENDS

THRUST BLOCKS DETAIL

PAVED SECTIONS

UN-PAVED SECTIONS

REFER TO PAVING SECTION DETAILS

EXISTING ASPHALT

EXISTING BASE

SEE NOTES C-1 AND C-2 FOR BACKFILL UNDER PAVEMENT

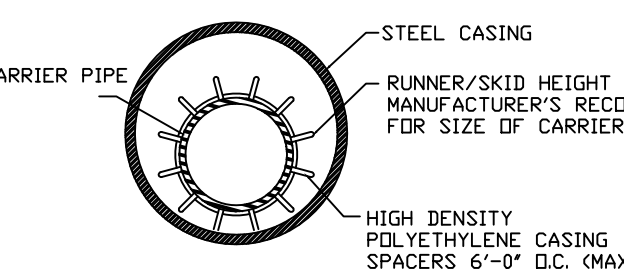
EXCAVATED BACKFILL. SEE NOTE D.

WATER LINE IDENTIFIER TAPE, LOCATOR TYPE, COLOR CODED. USE ONLY ON NON-METALLIC PIPE.

SAND, COMPACT TO 98% STD. PROCTOR DENSITY (MIN.)

WATER LINE AND SEWER FORCEMAIN BEDDING DETAIL ALTERNATE

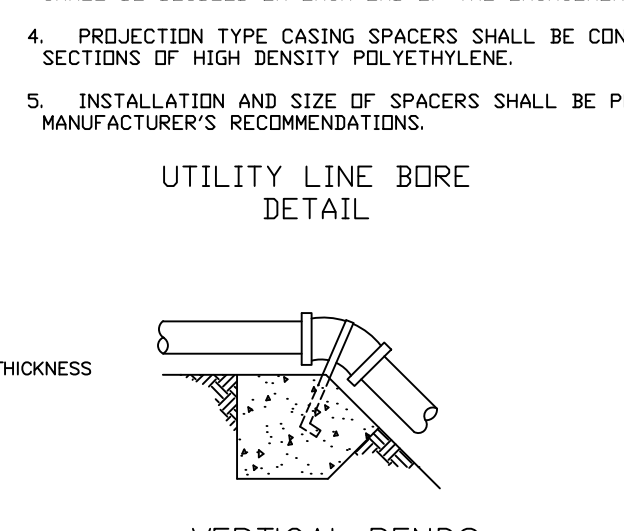
NOT TO SCALE



CARRIER PIPE SIZE	PIPE CASING SIZE	MIN. WALL THICKNESS
6"	14"	0.3125"
8"	16"	0.3125"
10"	18"	0.3750"
12"	21"	0.4375"
14"	24"	0.4375"
16"	26"	0.5000"
18"	30"	0.5625"
24"	36"	0.5625"
36"	48"	0.6250"

- GENERAL NOTES:**
1. ALL STEEL CASING SHALL BE WELDED.
 2. STEEL CASING SHALL BE CLOSED AT EACH END USING SYNTHETIC RUBBER END SEALS.
 3. CASING SPACERS SHALL BE USED TO INSTALL THE CARRIER PIPE INSIDE THE ENCASMENT PIPE. CASING SPACERS SHALL FASTEN TIGHTLY ON THE CARRIER PIPE TO PREVENT RELATIVE MOVEMENT IN PIPE DURING INSTALLATION. CASING SPACERS SHALL BE DOUBLED ON EACH END OF THE ENCASMENT.
 4. PROJECTION TYPE CASING SPACERS SHALL BE CONSTRUCTED SECTIONS OF HIGH DENSITY POLYETHYLENE.
 5. INSTALLATION AND SIZE OF SPACERS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

STORM TRENCH BEDDING AND BACKFILL DETAILS



NOTES:

- A. BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL, MAX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - P11 RUN GRAVEL 2" MAX SIZE.
- B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS II (OR CLASS II) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACT.
- 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 COMPACT.
- 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 COMPACT.
- C-3. INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS II (OR CLASS II) WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACT.
- D. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE 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 COMPACT).
- D-1. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - 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 COMPACT.
- 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 D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACT.
- 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 (ASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL. STRUCTURES BEYOND 5 FT FROM THE E.O.P./B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WELPONS, MINIMUM 4" GRAVEL OR CEMENTS 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% S.P.D. (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6".

- NOTES:**
1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. FOR D-1 AND D-2 THE COMPACTOR 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.

STANDARD SERVICE CONNECTION

LATERAL FITTING (SCH 40 X 3/4")

NOTES:

1. INDIVIDUAL SERVICE LATERALS TO BE PROVIDED TO EACH LOT.
2. SINGLE FAMILY SERVICE SHALL BE 4" MIN. MULTI-FAMILY, COMMERCIAL AND INDUSTRIAL SERVICE SHALL BE 6" OR GREATER AS REQUIRED.

NOTES:

- A. SAND BEDDING PLACED, HAND LEVELED, AND COMPACTED BEFORE PIPE IS LAID, UP TO BOTTOM OF PIPE (MIN. THICKNESS = 6").
- B. SAND EMBEDMENT PLACED AND COMPACTED AFTER PIPE IS LAID, FROM BOTTOM OF PIPE TO 6" ABOVE THE TOP OF PIPE. WORK UNDER PIPE HAUNCHES AND COMPACT BY HAND TO SPRING LINE. USE VIBRATORY-TYPE COMPACTORS FOR LIFTS ABOVE THE SPRING LINE. MAXIMUM 6" LIFTS.
- B₁. MINIMUM TRENCH WIDTH: PIPE O.D. + 16" (FOR 16" PIPE AND SMALLER); OR PIPE O.D. X 1.25 + 12" (FOR 18" PIPE AND LARGER).
- C-1. (CITY STREETS, PARKING AREA, AND DRIVEWAYS) SELECT EXCAVATED BACKFILL MECHANICALLY COMPACTED TO 98% STANDARD PROCTOR DENSITY IN 8" MAX. LIFTS AT 0 TO +3% OF OPTIMUM MOISTURE CONTENT.
- C-2. (STATE MAINTAINED ROADWAY) SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- D. EXCAVATED EARTH BACKFILL MECHANICALLY COMPACTED IN 12" MAX. LIFTS. MINIMUM STANDARD PROCTOR DENSITY: 90% OUTSIDE RIGHT OF WAY; 98% AT 0 TO +3% OF OPTIMUM MOISTURE CONTENT INSIDE RIGHT OF WAY.

EMBEDMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D 2321. EMBEDMENT MATERIAL SHALL BE CLASS II (MEETING USCS CLASSIFICATION SW OR SP) WITH <5% PASSING A No.200 SIEVE AND NON-PLASTIC.

WHERE THIS STANDARD CONFLICTS WITH THE RECOMMENDATION OF ANY GEOTECHNICAL REPORT, OBTAIN WRITTEN CLARIFICATION FROM THE UTILITY ENGINEER PRIOR TO CONSTRUCTION.

FOUNDATION PREPARATION USING COBBLES, GRAVEL, CEMENT STABILIZATION, OR OTHER METHODS AS DIRECTED BY THE ENGINEER SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE.

BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, AND COMPACTED TO 98% STANDARD PROCTOR DENSITY IN 6" MAXIMUM LIFTS. STRUCTURE BACKFILL MATERIAL SHALL BE SAND MEETING USCS CLASSIFICATION SW OR SP.

NOTE: USCS CLASSIFICATION, GRADATION, COMPACTATION, AND MOISTURE CONTENT REQUIREMENTS PROVIDED BY OWNER'S GEOTECHNICAL CONSULTANT (RABA KISTNER CONSULTANTS INC.; PROJECT NO.AM15-046-00)



GILBERTO A. GRACIA - P.E. No. 62477



2121 E. GRIFFIN PARKWAY, STE 2, MISSION TX, 78574 TEL. (956) 584-0554 FAX. (956) 584-0554

FILENAME : K:\PROJECT\SUBDIVISION\EDUARDO'S No.19\WATER-DETAIL SHEET	DATE PREPARED	CHECKED BY	APPROVED BY
SHEET No. 3 OF 5 SHEETS	11-11-20	G.A.G.	G.A.G.
	DATE REVISED	REVISOR	CHECKED BY
			APPROVED BY
			G.A.G.

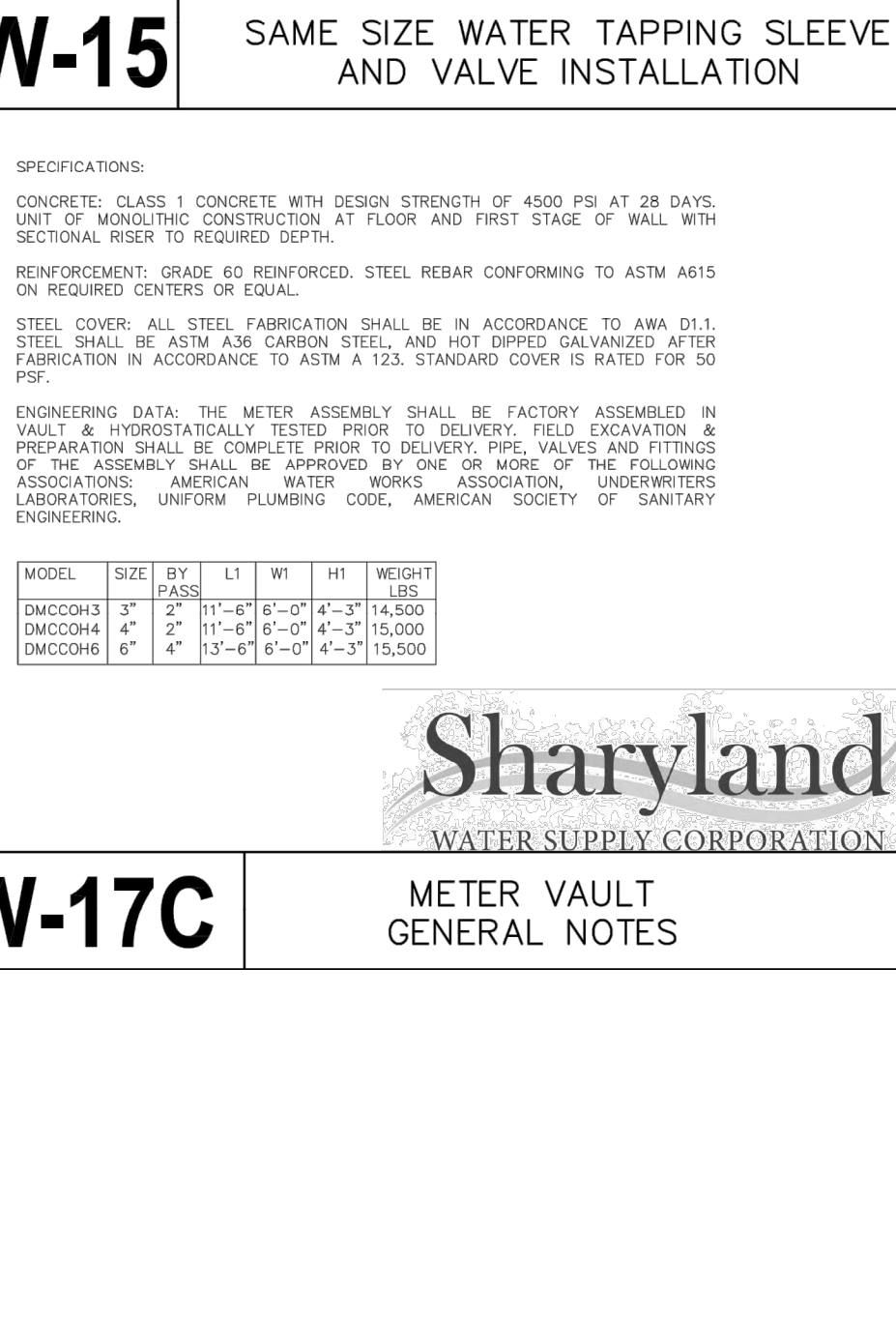
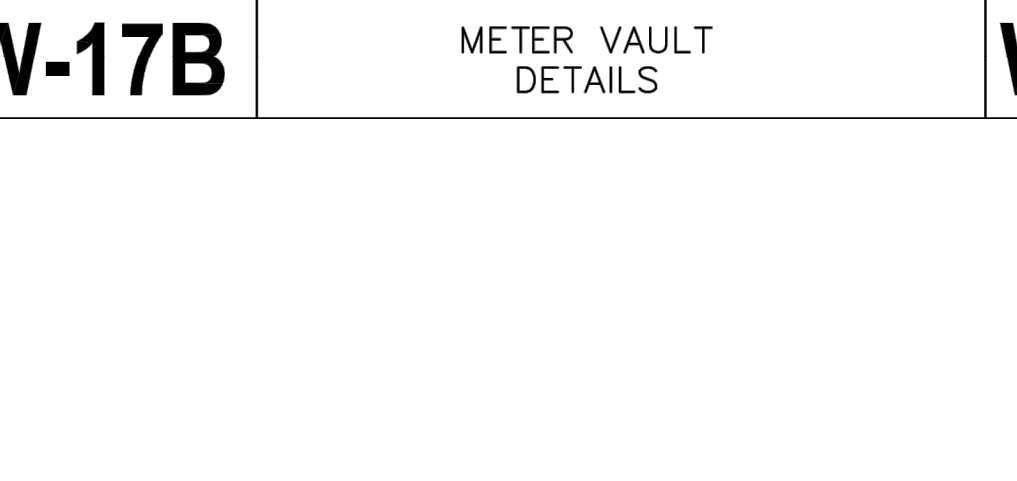
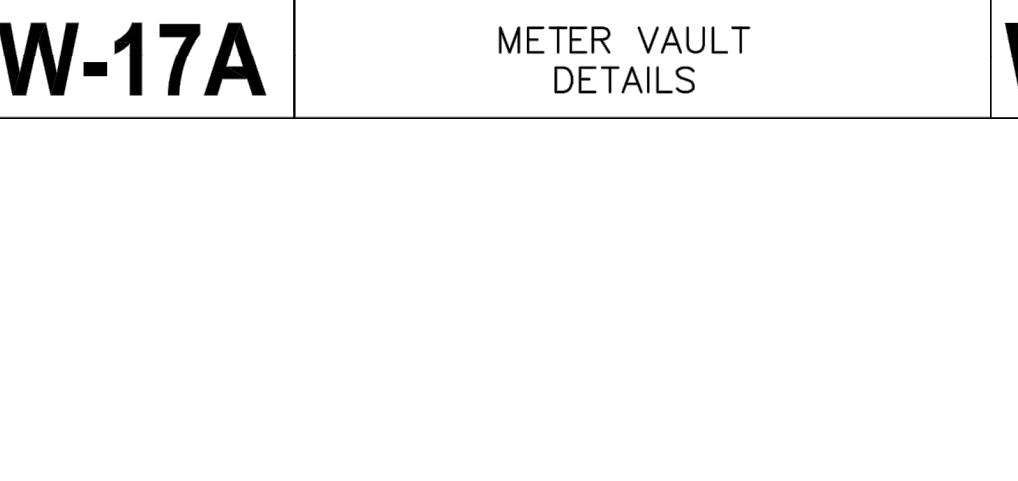
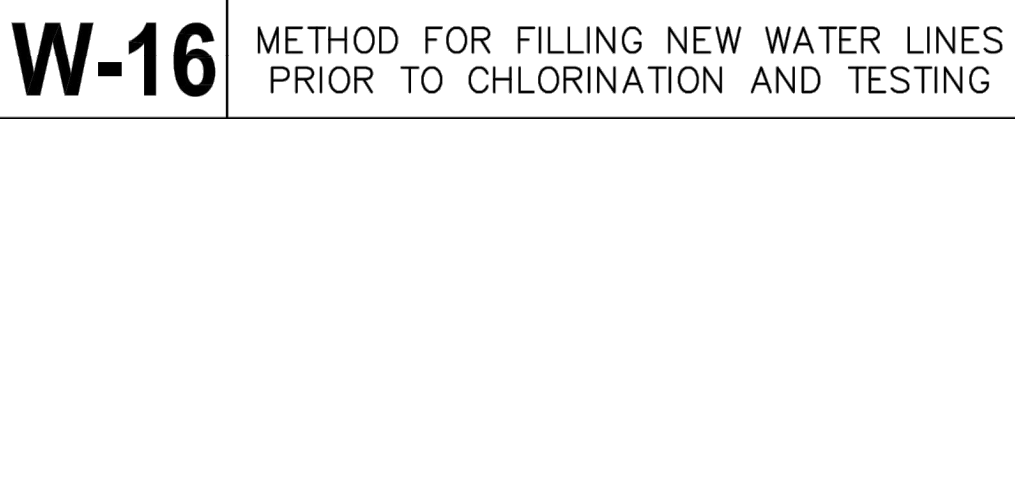
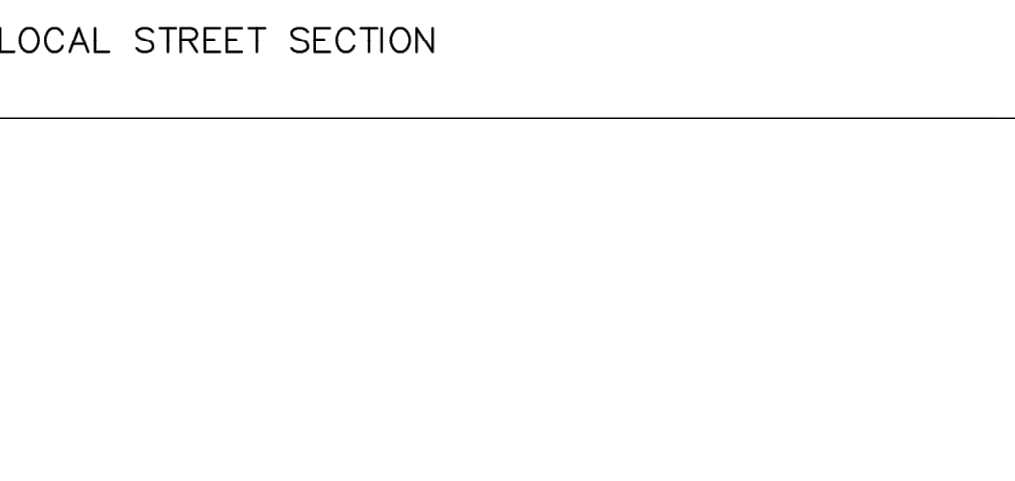
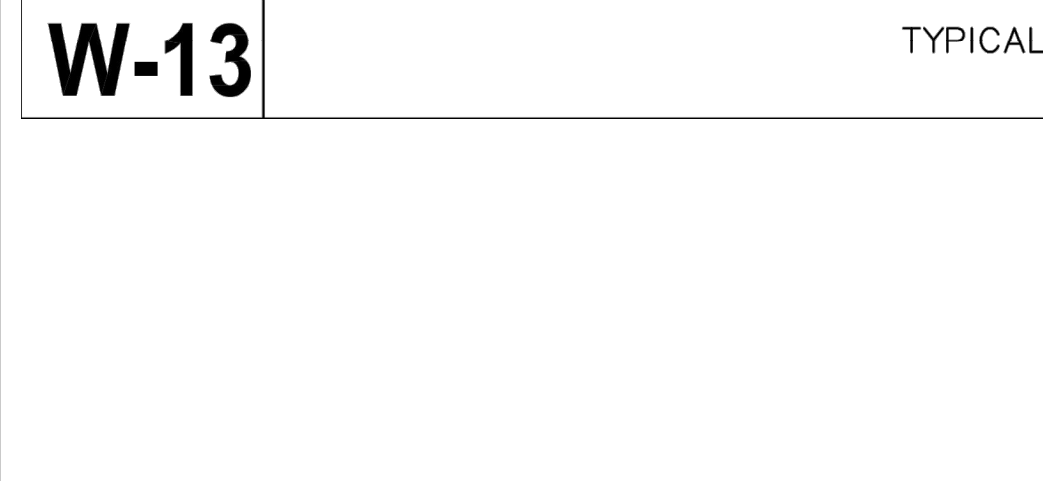
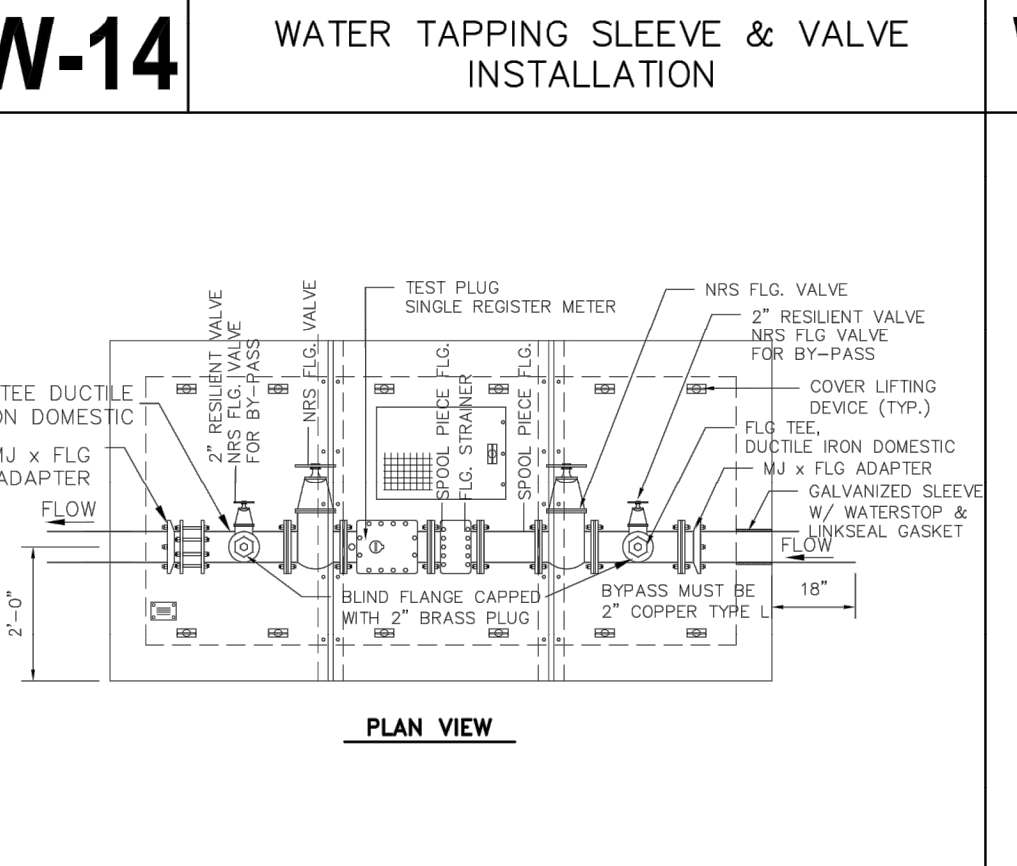
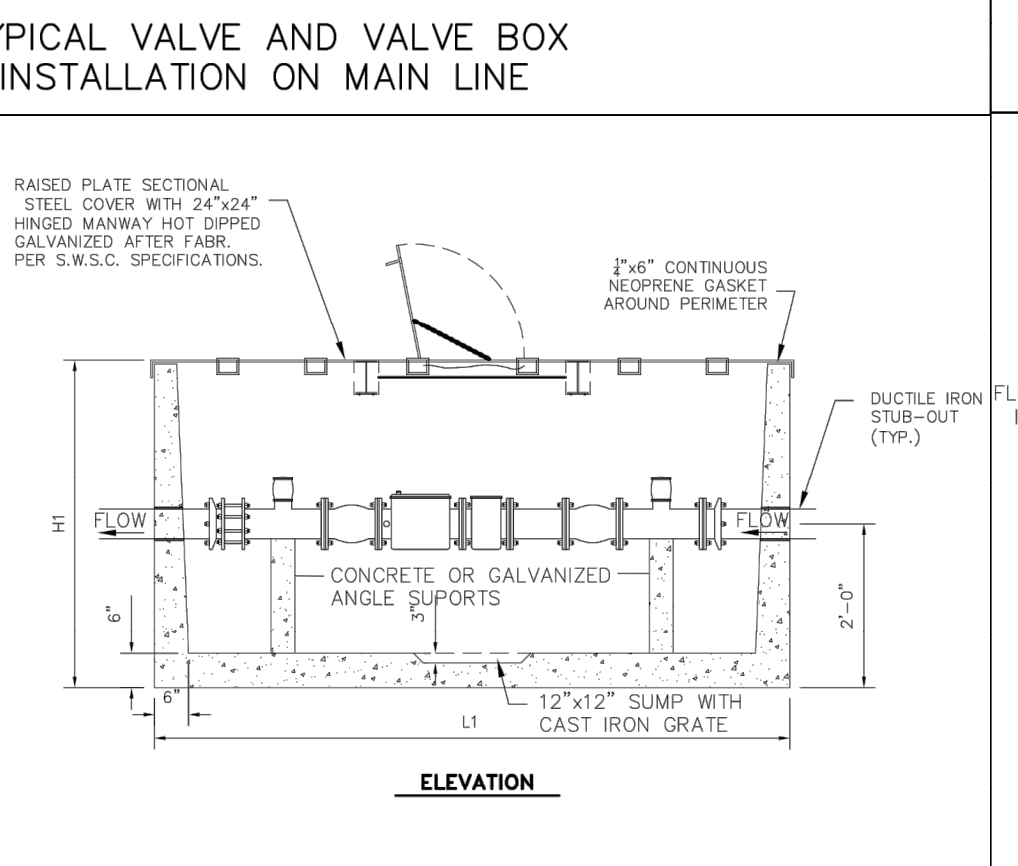
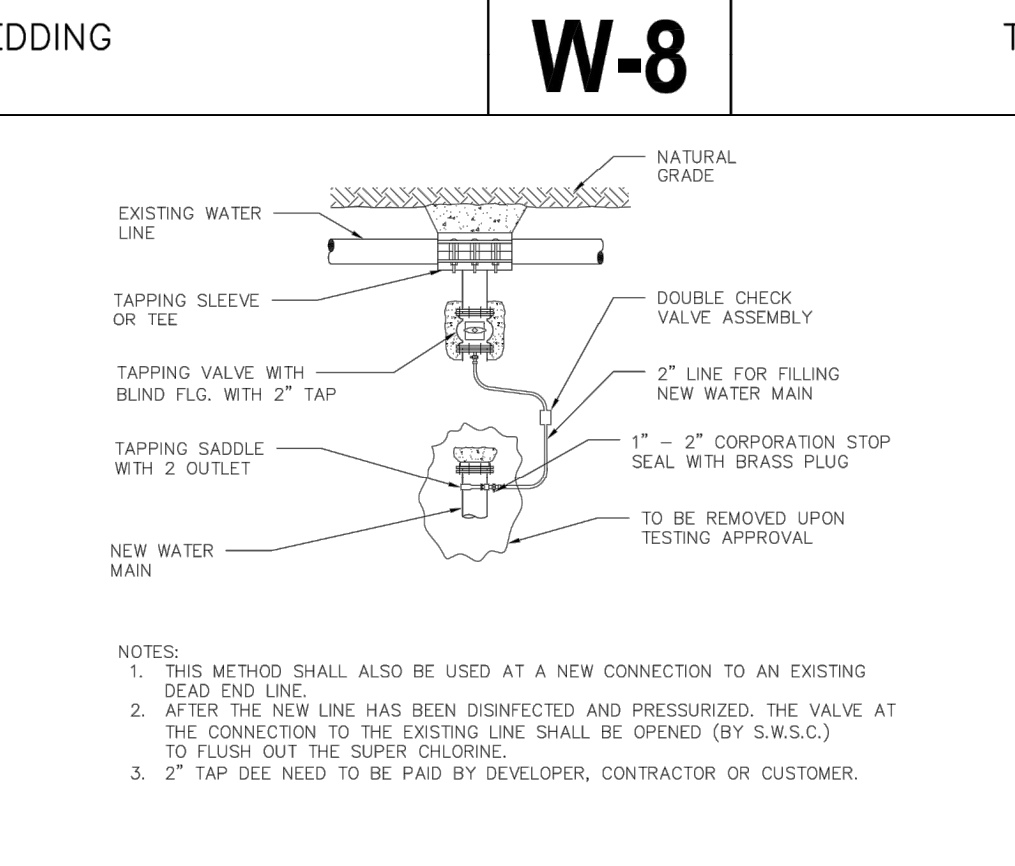
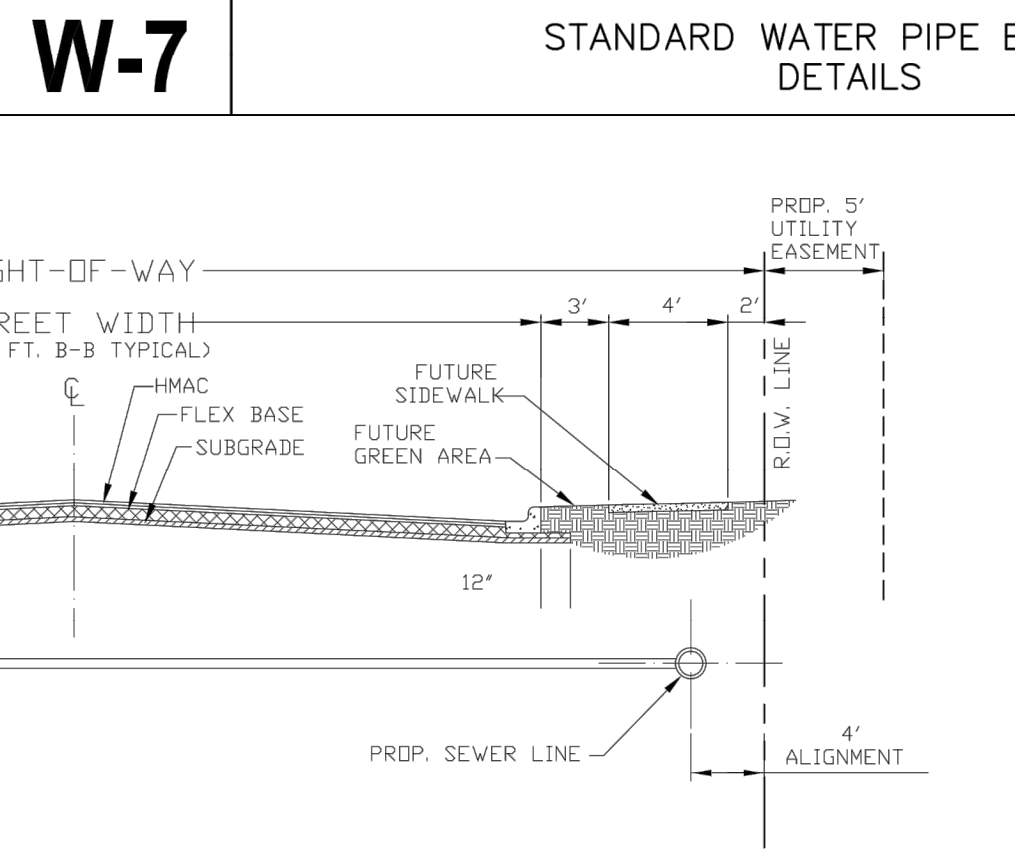
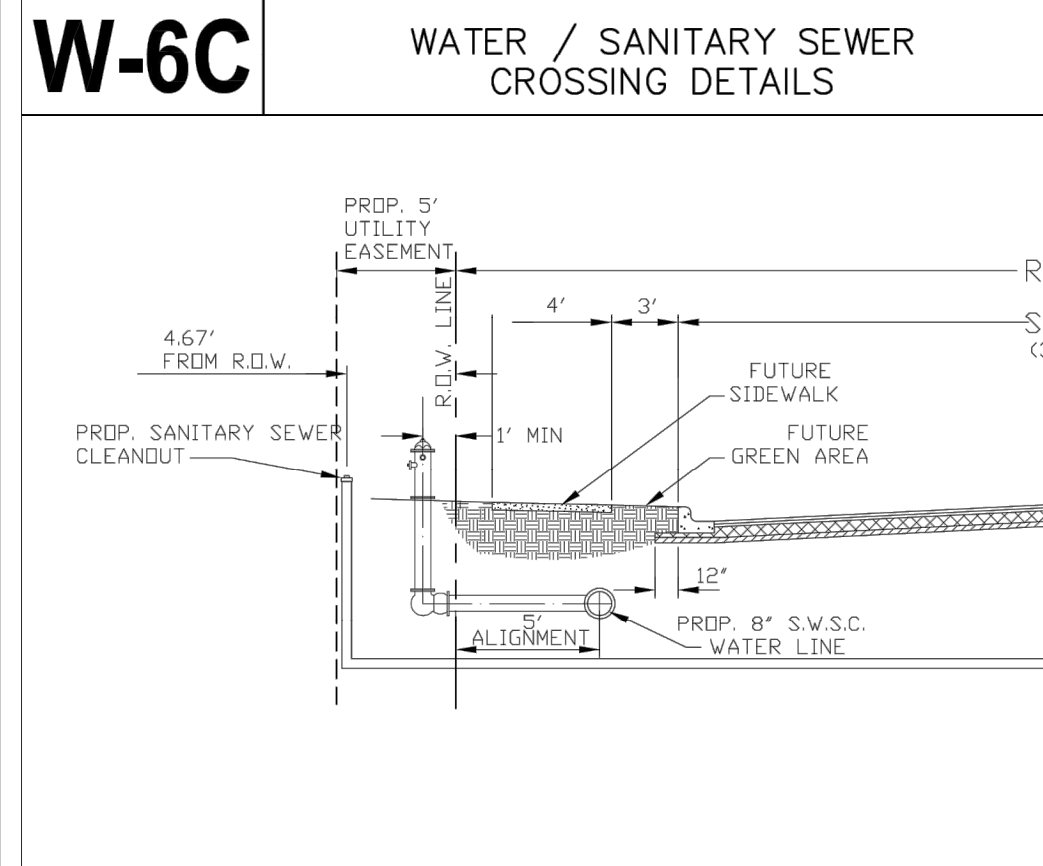
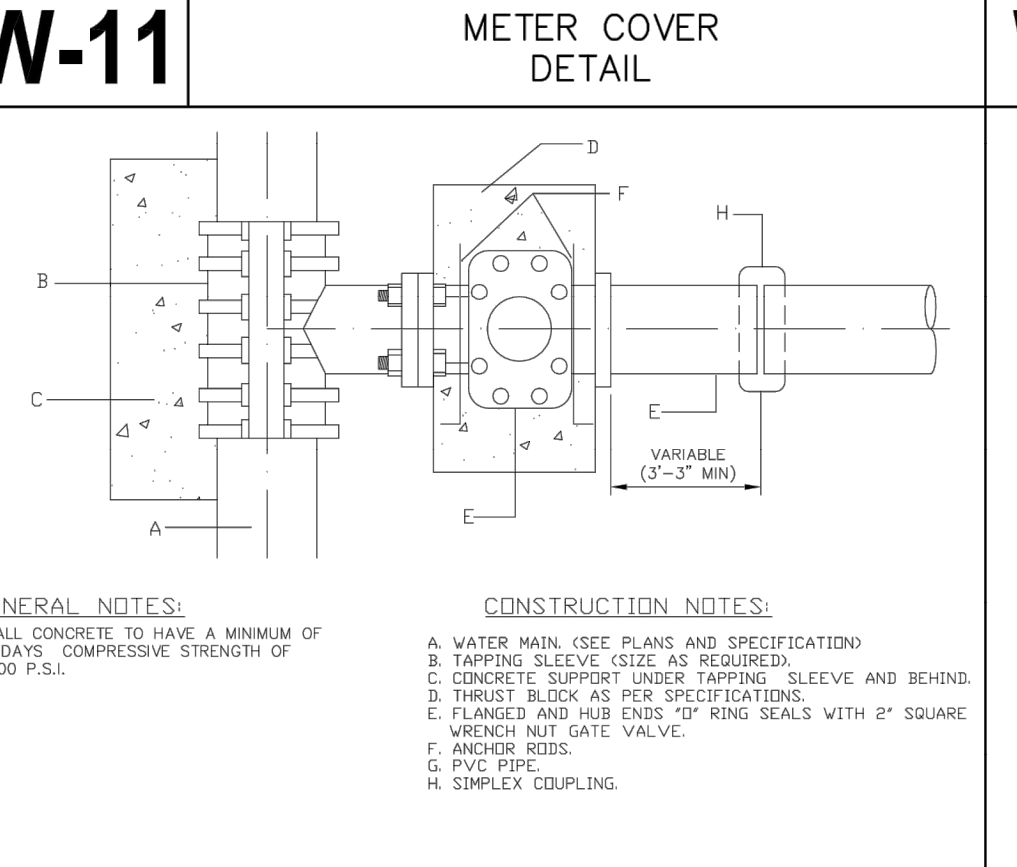
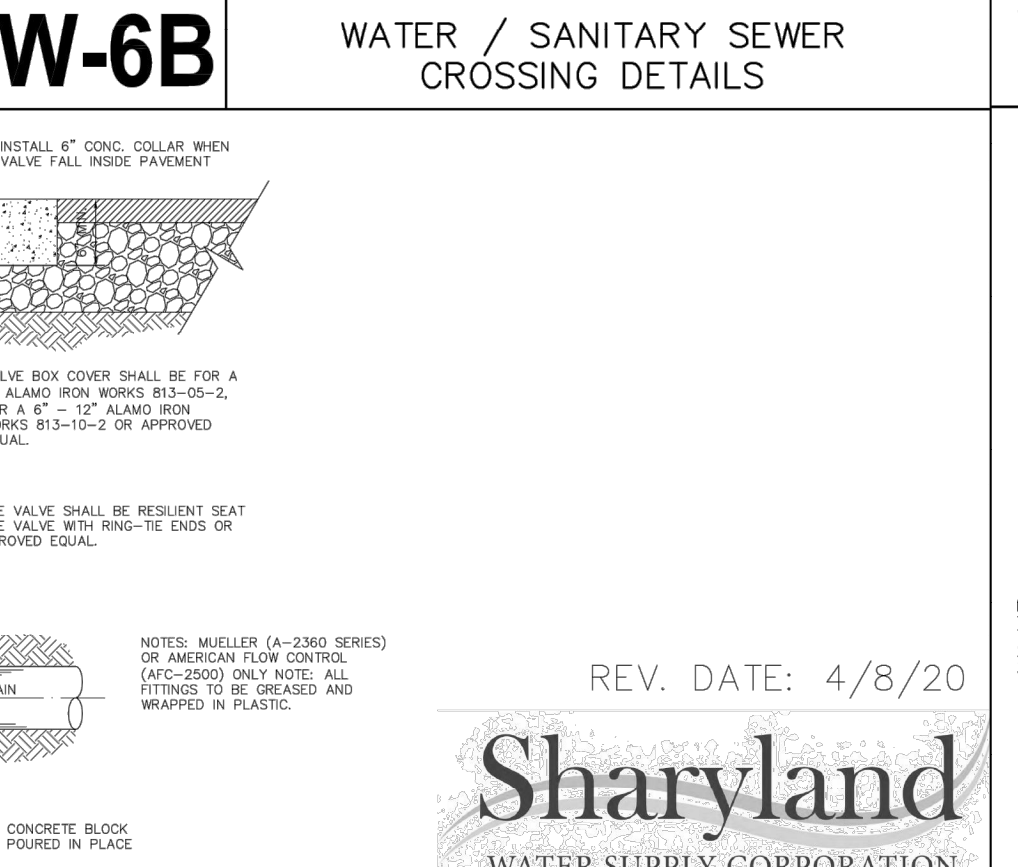
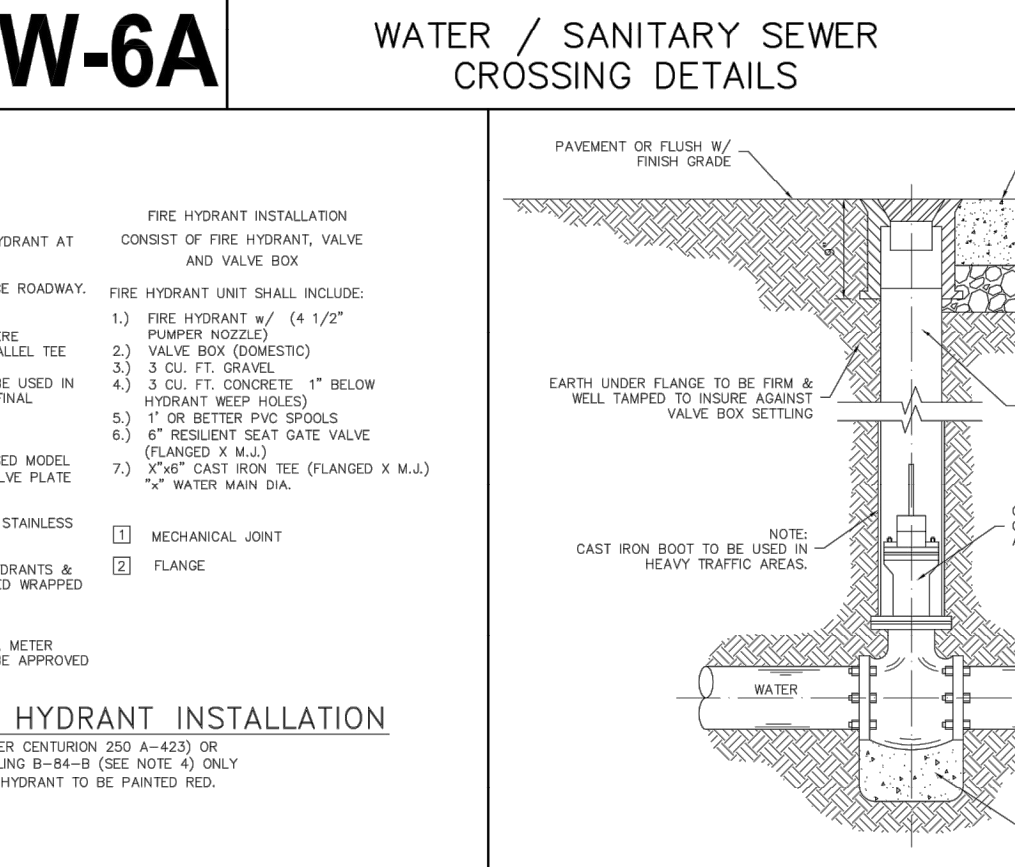
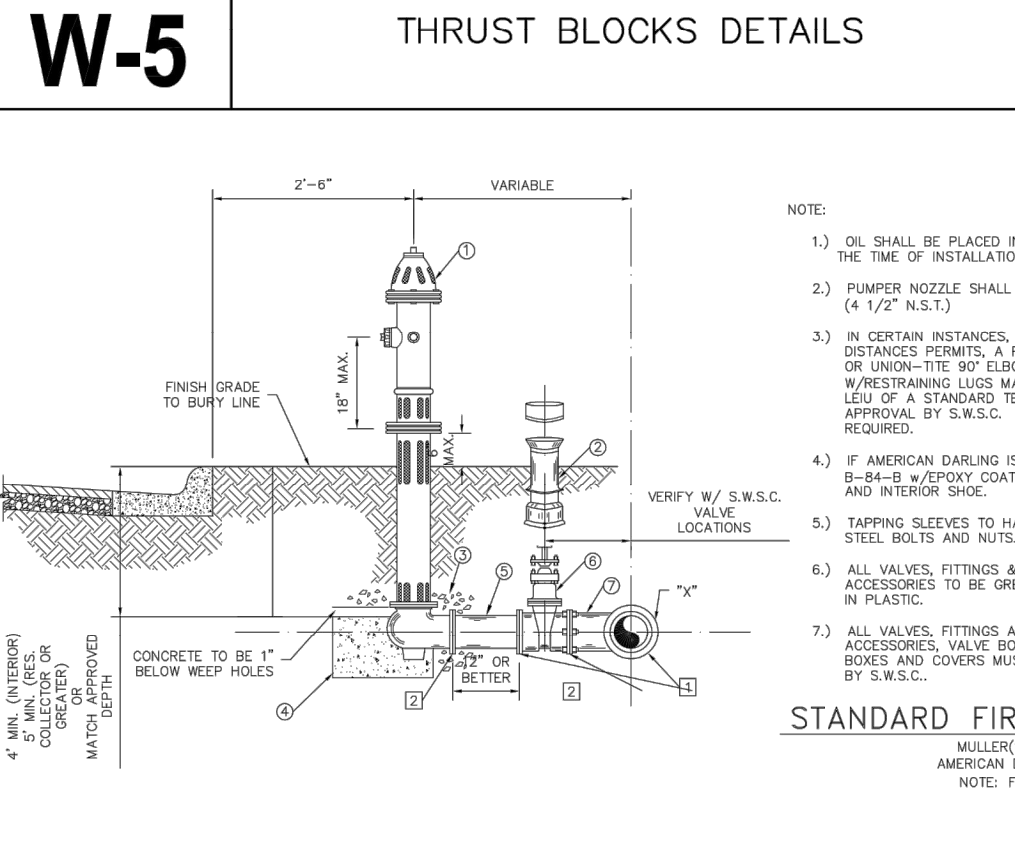
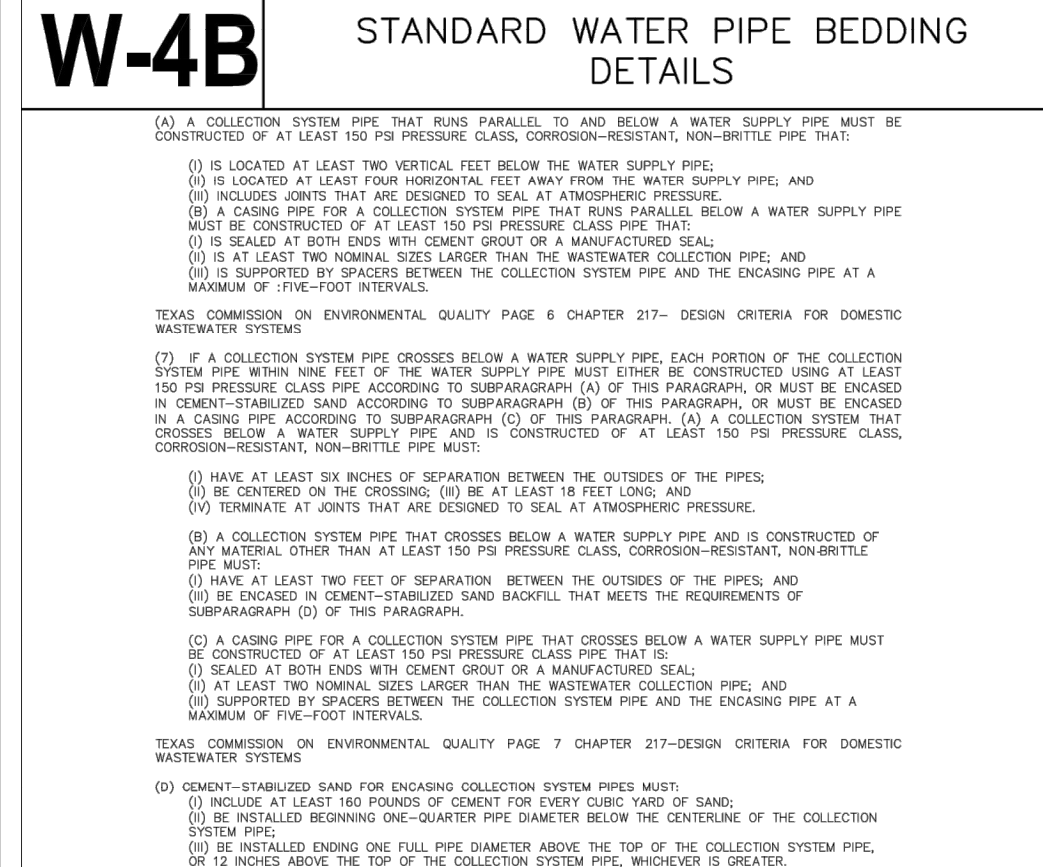
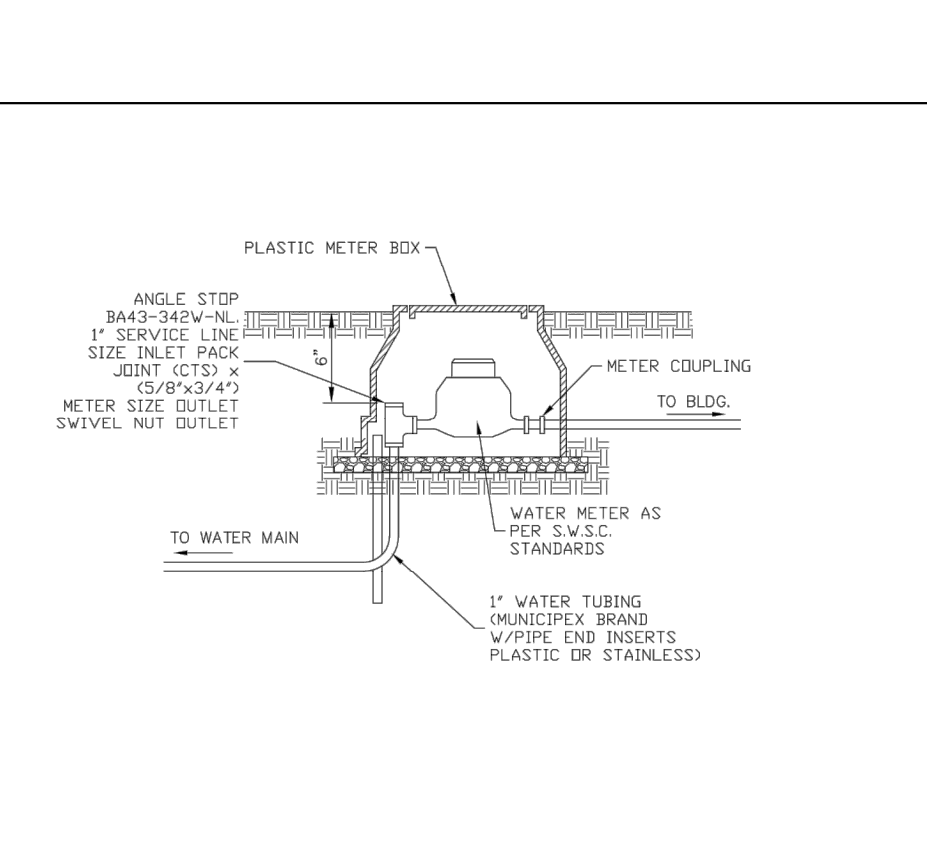
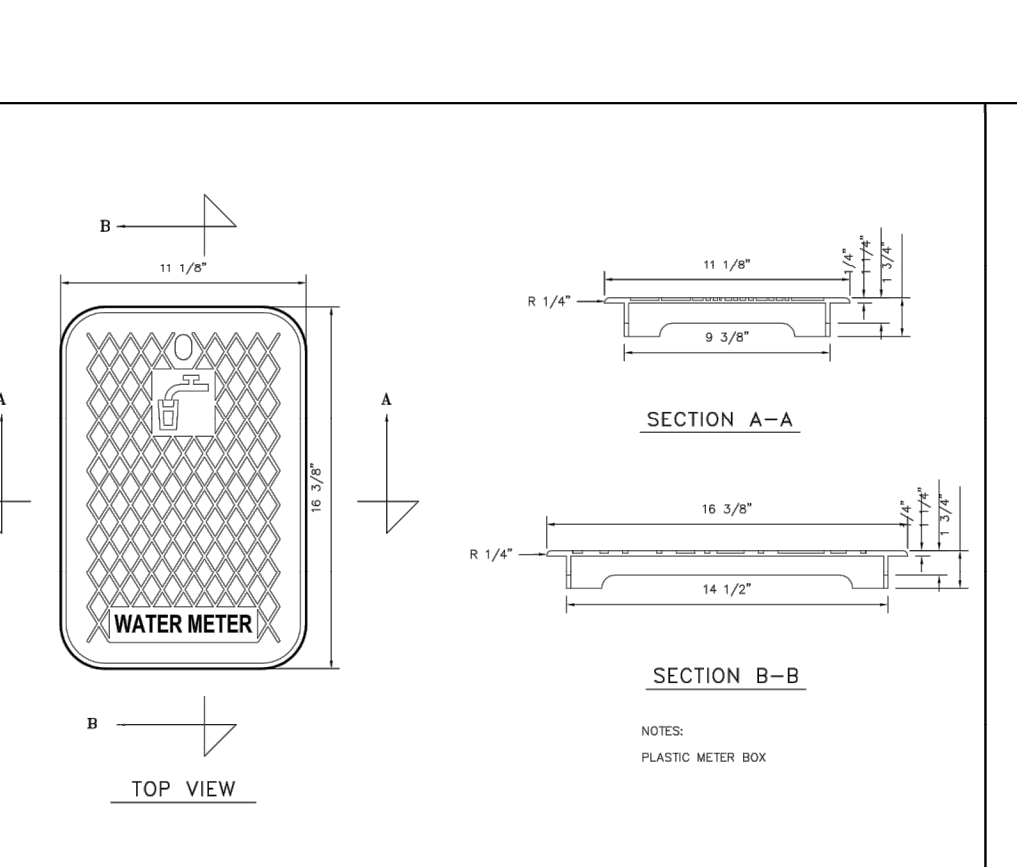
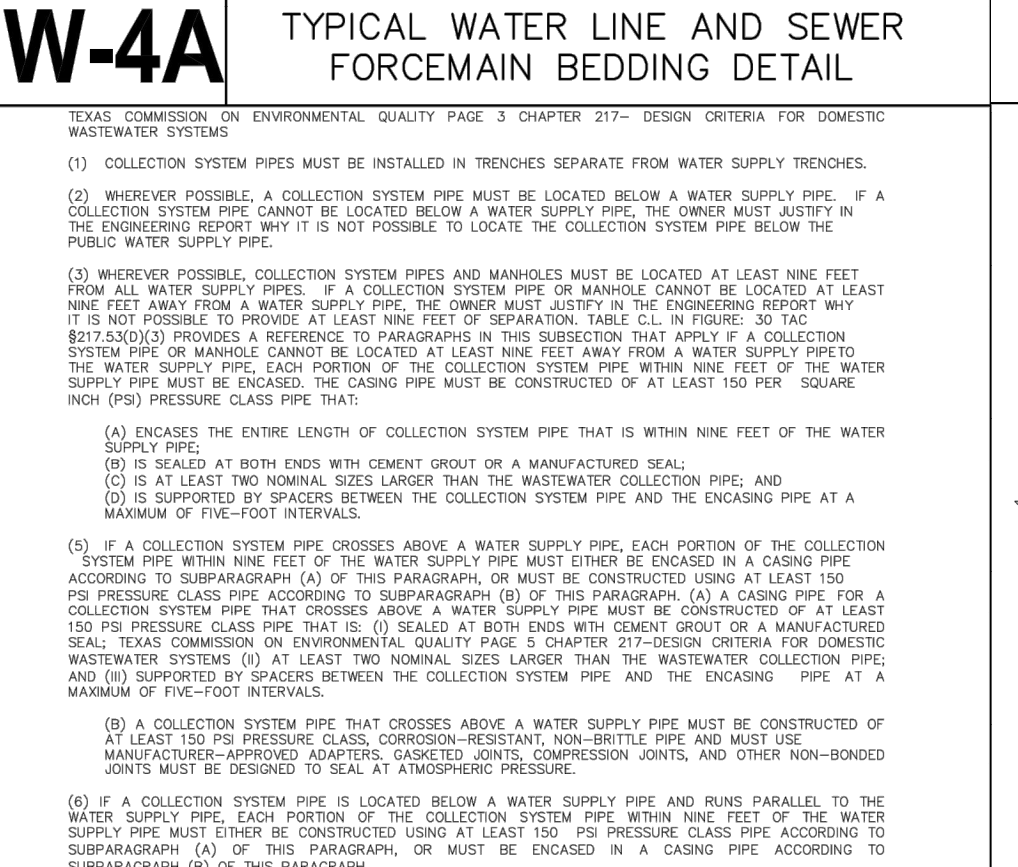
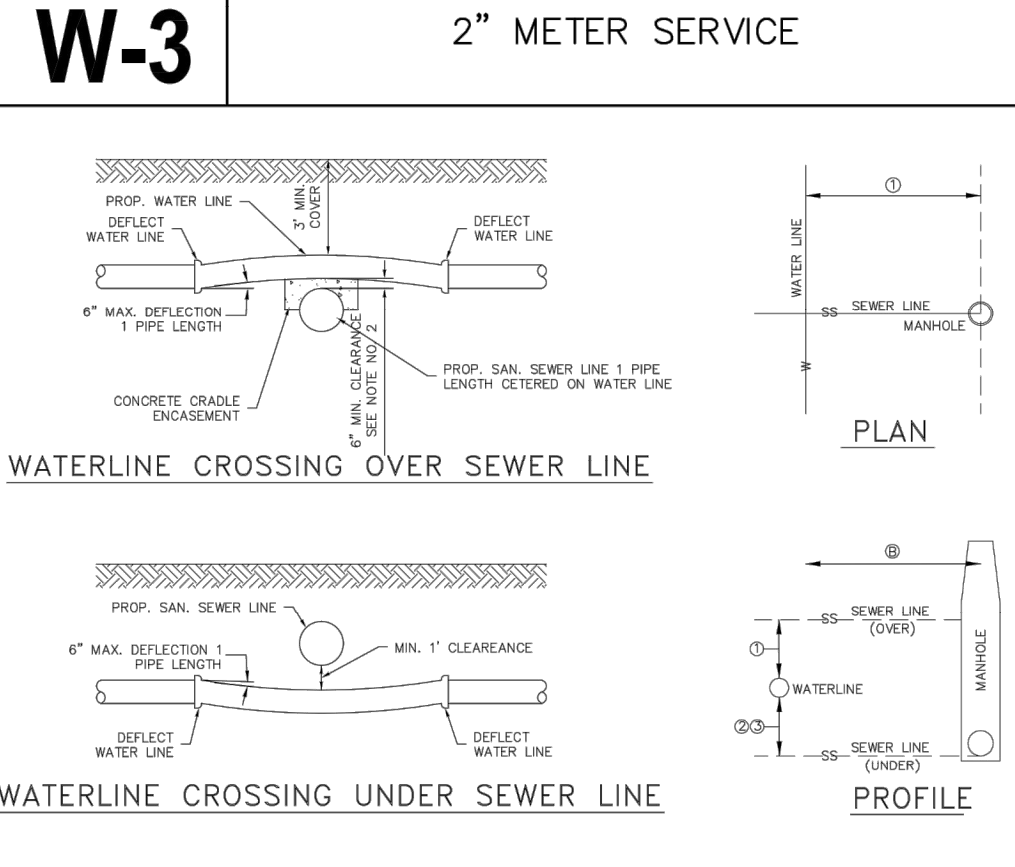
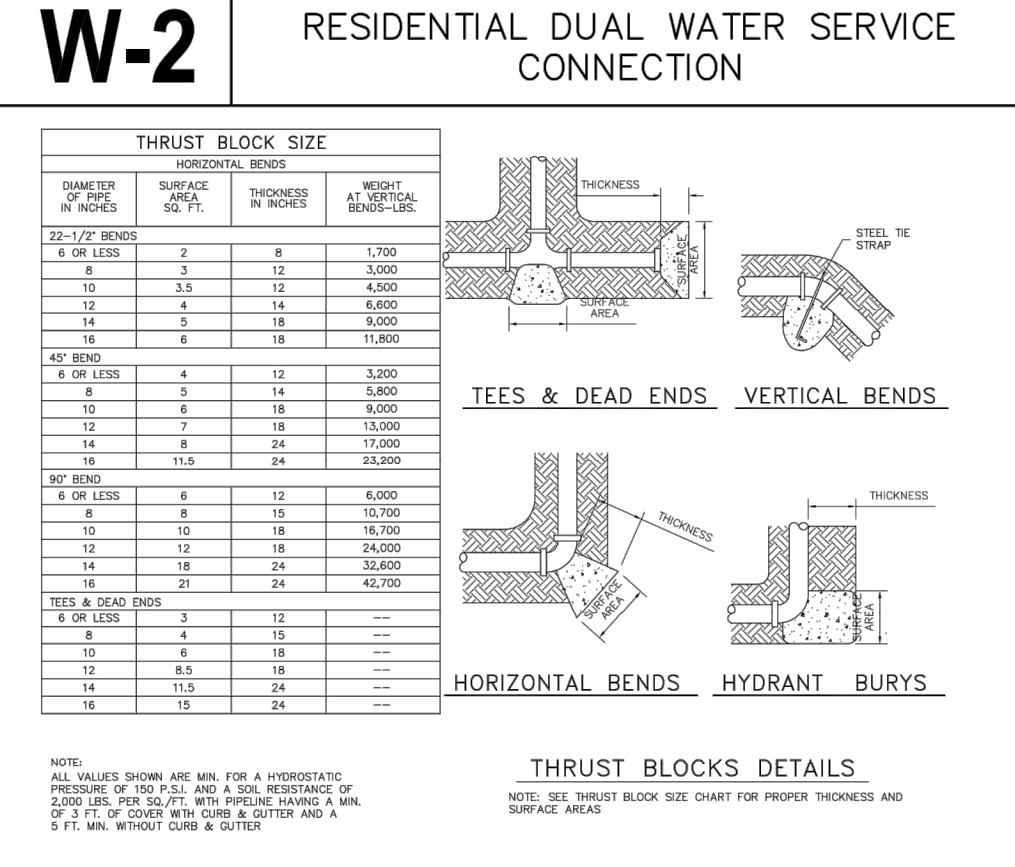
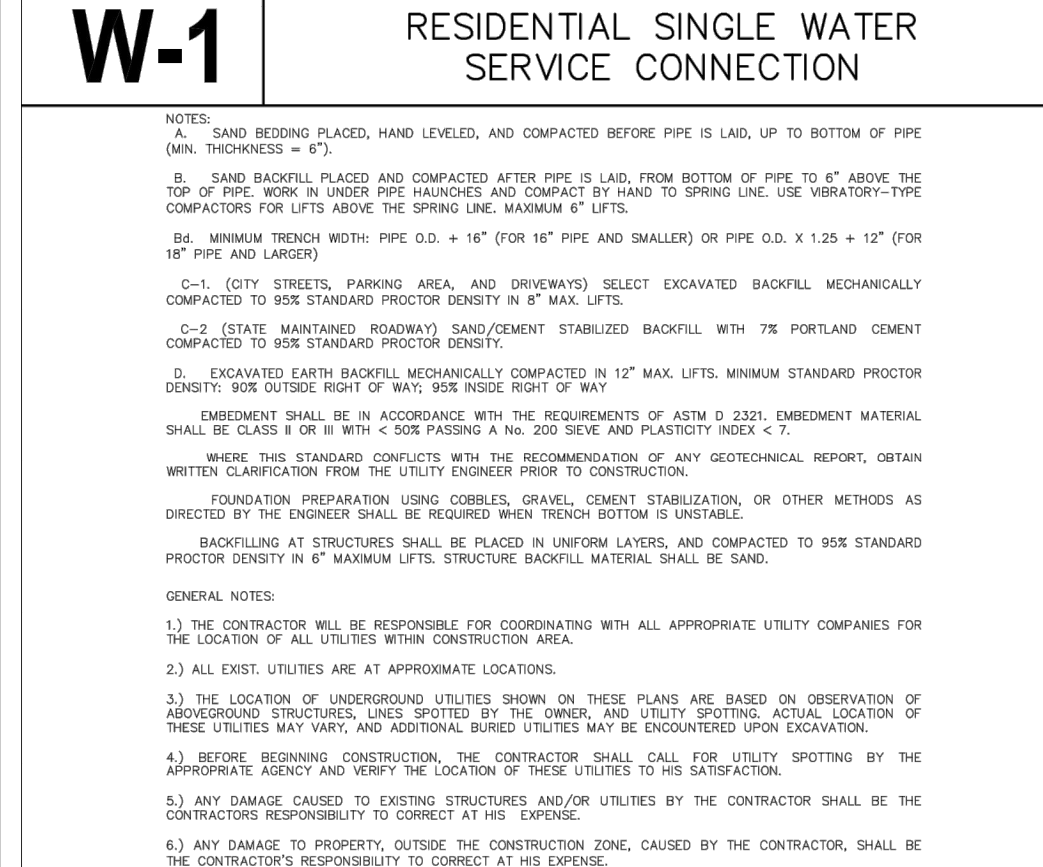
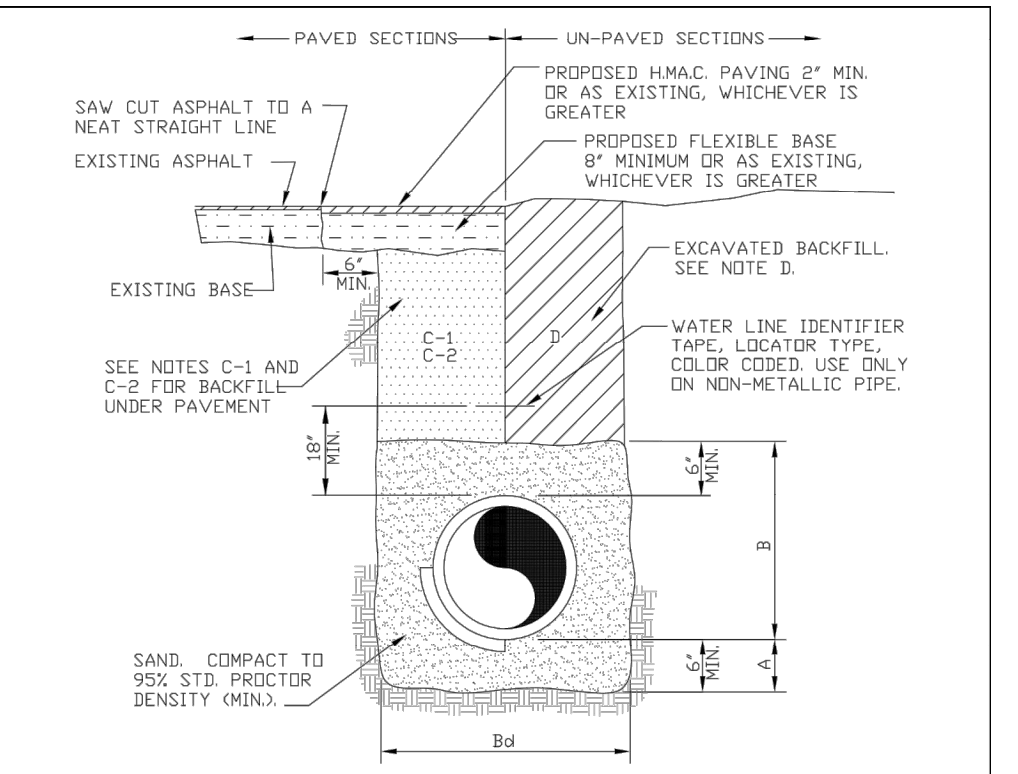
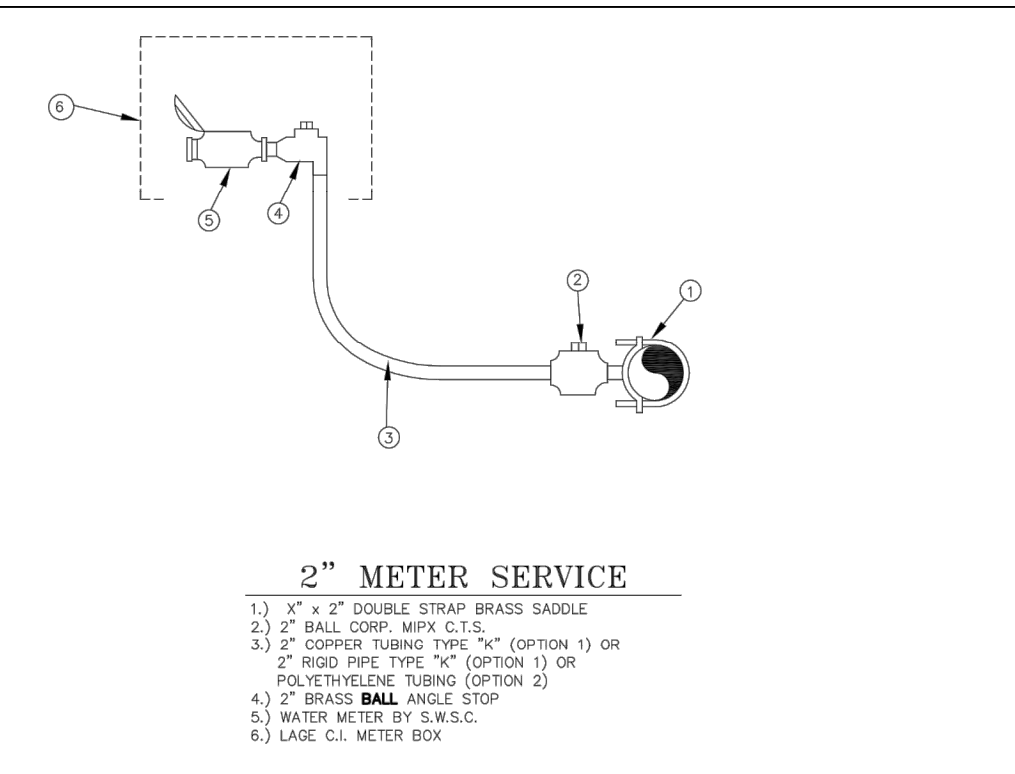
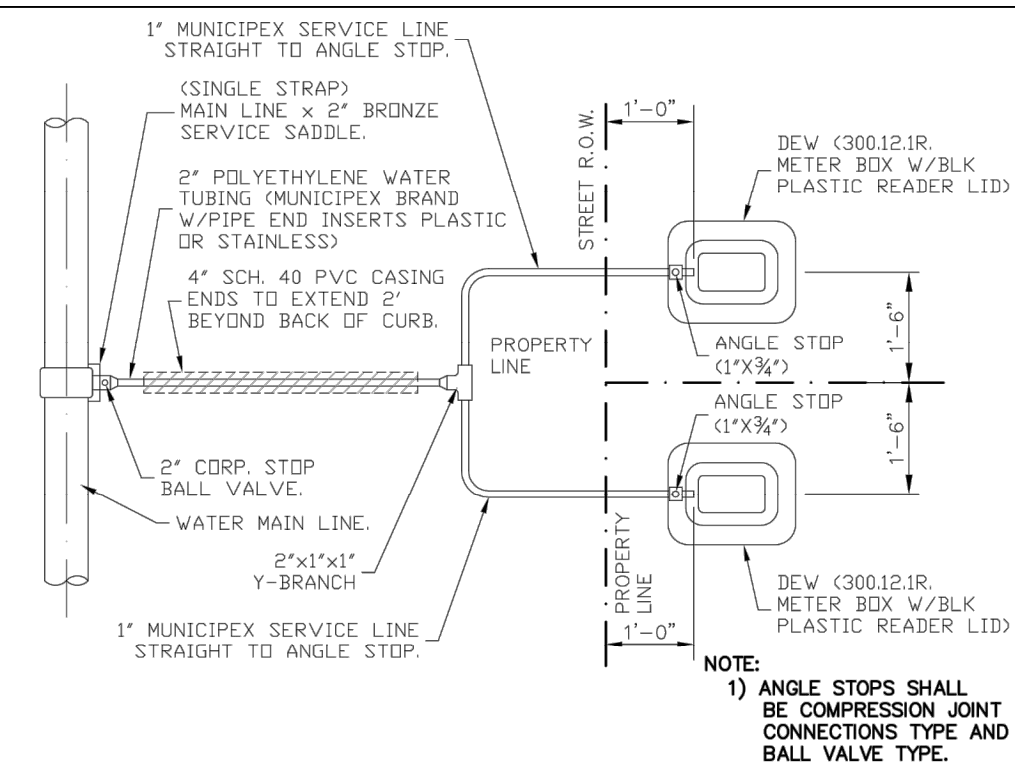
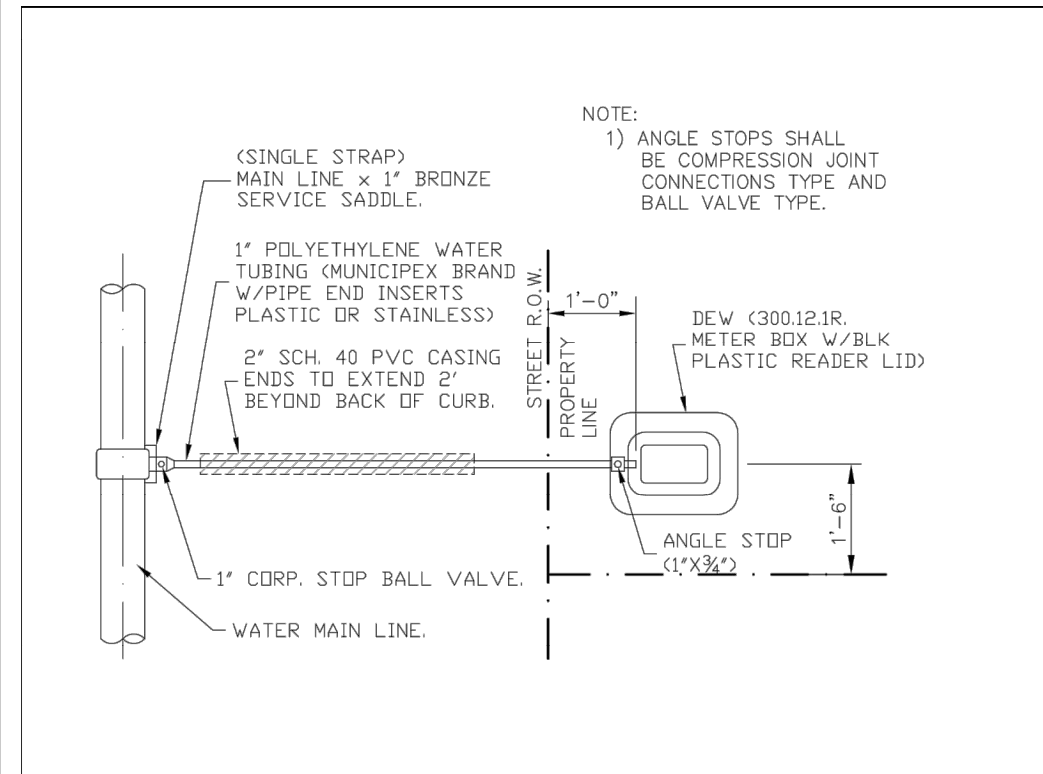
No.	SHEET	REVISION	DATE	APPROVED



EDUARDO'S SUBDIVISION No.19
SHARYLAND WATER SUPPLY CORPORATION
STANDARD DETAILS.

IZAGUIRRE
Engineering Group LLC.
TEL: (956) 584-0554
FAX: (956) 584-0554
2121 E. GRIFFIN PARKWAY,
STE. 2, MISSION TX, 78574

ALL WATERLINE CONSTRUCTION SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY CONSTRUCTION STANDARDS. CONTRACTOR SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY STANDARD DETAILS WHENEVER CONFLICTS ARISE.



EDUARDO'S SUBDIVISION No. 19 MAP OF SANITARY SEWER DISTRIBUTION

A 22.03-ACRE TRACT OF LAND, OUT OF LOT 46-4 AND 47-4, WEST ADDITION TO SHARYLAND SUBDIVISION, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.



FINAL ENGINEERING REPORT FOR EDUARDO'S SUBDIVISION No. 19:
BY GILBERTO A. GRACIA, P.E.

SANITARY SEWERAGE DESCRIPTION AND EXPENSES:
EDUARDO'S SUBDIVISION No. 19 SUBDIVISION WILL BE TREATED BY WASTEWATER SERVICE FROM CITY OF MISSION. THE SUBDIVIDER AND CITY OF MISSION HAVE ENTERED INTO A CONTRACT IN WHICH CITY OF MISSION HAS PROMISED TO TREAT THE SUFFICIENT WASTEWATER FOR AT LEAST 30 YEARS AND CITY OF MISSION HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WASTEWATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

THE CITY OF MISSION HAS AN EXISTING LIFT STATION LOCATED SOUTH OF THIS DEVELOPMENT ON EDUARDO'S No. 18 SUBDIVISION LOT 1 WHICH WILL SERVE THIS SUBDIVISION.

THE SANITARY SEWER SYSTEM OF EDUARDO'S SUBDIVISION No. 19 CONSISTS OF AN 8" DIAMETER SEWER LINE THAT TAPS INTO A MANHOLE LOCATED ON THE NORTH EAST SIDE OF THIS SUBDIVISION. SAID 8" DIAMETER SEWER LINE RUNS APPROXIMATELY 1,110.00 FEET SOUTH ON THE EAST SIDE OF N. 109TH ST. TO A MANHOLE ON THE SOUTH SIDE OF UNIVERSITY AVE. FROM THERE IT TURNS EAST AND RUNS APPROXIMATELY 145.00 FEET TO A MANHOLE AND IT TURNS SOUTH RUNNING APPROXIMATELY 85.00 FEET ALONG A 15-FT UTILITY EASEMENT TO AND CONNECTING WITH THE EXISTING LIFT STATION. ANOTHER 8" DIAMETER SEWER LINE STARTS ON THE SOUTH WEST SIDE OF UNIVERSITY AVE. AND RUNS APPROXIMATELY 449.00 FEET EAST ALONG THE SOUTH SIDE OF THE SAME STREET AND CONNECTS WITH THE MANHOLE. ANOTHER 8" DIAMETER SEWER LINE STARTS ON THE NORTH SIDE OF N. 110TH ST. AND RUNS SOUTH APPROXIMATELY 867.00 FEET ALONG THE WEST SIDE OF THE SAME STREET AND IT CONNECTS WITH THE PROPOSED 8" DIAMETER SEWER LINE. ANOTHER 8" DIAMETER SEWER LINE STARTS ON THE WEST SIDE OF XAVIER AVE. AND IT RUNS APPROXIMATELY 449.00 FEET EAST ALONG THE NORTH SIDE OF THE SAME STREET AND CONNECTS WITH THE PROPOSED MAN HOLE LOCATED ON THE CUL-DE SAC. FROM THE LIFT STATION THERE IS A 6" FORCE MAIN RUNNING TO THE EAST SIDE APPROXIMATELY 60.00 FEET AND IT BENDS SOUTH ALONG THE WEST SIDE OF TROSPER ROAD RUNNING APPROXIMATELY 1,415.00 FEET WHERE IT CONNECTS WITH AN EXISTING MAN HOLE.

SANITARY SERVICES TERMINATE AT THE SEWER METERS OF EACH LOT FOR A TOTAL OF SEVENTY SIX (76) SANITARY SEWER SERVICES.
THE 8" SEWER LINES, THE 4" SERVICE LINES, THE TEN (10) SANITARY SEWER MANHOLES HAVE BEEN INSTALLED, AT A TOTAL COST OF \$_____ PER LOT. IN ADDITION, THE ENTIRE WASTEWATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY CITY OF MISSION AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

ENGINEER CERTIFICATION:
BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWER 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 WATER AND SEWER FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

SEWERAGE FACILITIES - THESE FACILITIES FULLY CONSTRUCTED WILL COST A GRAND TOTAL OF \$_____ WHICH EQUALS TO \$_____ PER LOT.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

REPORTE FINAL DE INGENIERIA PARA EDUARDO'S SUBDIVISION No. 19.
POR: GILBERTO A. GRACIA, P.E.

DRENAJE: DESCRIPCION, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION
LA SUBDIVISION DE EDUARDO'S SUBDIVISION No. 19 RECIBIRA SU PROVISION DE DRENAJE SANITARIO DE LA CIUDAD DE MISSION. EL DUEÑO DE LA SUBDIVISION Y LA CIUDAD DE MISSION HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA SU PROVISION DE DRENAJE SANITARIO POR LOS PROXIMOS 30 AÑOS. LA CIUDAD DE MISSION HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE DRENAJE SANITARIO ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

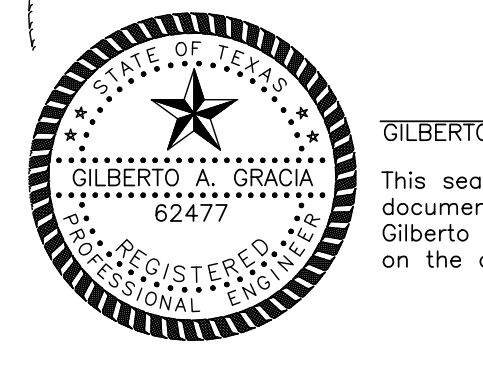
LA CIUDAD DE MISSION CUENTA CON UNA ESTACION DE BOMBEO PARA ESTE DESARROLLO LA CUAL SERVIRA A ESTA SUBDIVISION DE EDUARDO'S SUBDIVISION No. 18, LOCALIZADA EN EL LOTE 1.

EL DRENAJE SANITARIO DE EDUARDO'S SUBDIVISION No. 19 CONSISTE DE UNA LINEA DE DRENAJE SANITARIO DE 8" DE DIAMETRO QUE SE CONECTARA A UN POZO DE VISITA LOCALIZADO EN EL LADO SUR DE ESTA SUBDIVISION. ESTA LINEA MENCIONADA CORRE APROXIMADAMENTE _____ PIES AL SUR POR EL LADO ESTE DE LA CALLE _____ ST. LLEGANDO A UN POZO DE VISITA EN LA CALLE _____ DE AHI LA LINEA DA VUELTA HACIA EL ESTE Y CORRE APROXIMADAMENTE _____ PIES A UN POZO DE VISITA Y A LA VEZ DANDO VUELTA AL SUR Y CORRIENDO APROXIMADAMENTE _____ PIES. OTRA LINEA DE DRENAJE SANITARIO DE 8" DE DIAMETRO COMIENZA EN EL LADO SUR OESTE DE LA CALLE UNIVERSITY AVE. Y CORRE APROXIMADAMENTE 449.00 PIES HACIA EL ESTE POR EL LADO SUR DE LA MISMA CALLE CONECTANDOSE CON EL POZO DE VISITA. OTRA LINEA DE DRENAJE SANITARIO DE 8" DE DIAMETRO COMIENZA EN EL LADO NORTE DE LA CALLE _____ Y CORRE APROXIMADAMENTE _____ PIES POR EL LADO OESTE DE LA MISMA CALLE Y CONECTANDOSE CON LA LINEA DE LA CALLE _____. OTRA LINEA DE DRENAJE SANITARIO DE 8" DE DIAMETRO COMIENZA EN EL LADO NORTE DE LA CALLE XAVIER AVE. Y CORRE APROXIMADAMENTE _____ PIES HACIA EL ESTE POR EL LADO NORTE DE LA MISMA CALLE Y CONECTANDOSE CON EL POZO DE VISITA. DE LA ESTACION DE BOMBEO SALE UNA LINEA DE DRENAJE SANITARIO A PRESION DE 6" DE DIAMETRO QUE CORRE APROXIMADAMENTE 60.00 PIES HACIA EL ESTE Y AHI DOBLA Y CORRE HACIA EL SUR APROXIMADAMENTE _____ PIES POR EL LADO OESTE DE LA CALLE. FINALMENTE AHI SE CONECTA CON UN POZO DE VISITA EXISTENTE.

LOS SERVICIOS DE DRENAJE SANITARIO TERMINARAN EN LOS MEDIDORES DE DRENAJE SANITARIO DE CADA LOTE PARA DAR UN TOTAL DE SETENTA Y SEIS (76) SERVICIOS. LAS LINEAS DE DRENAJE SANITARIO DE 8 PULGADAS, LOS SERVICIOS DE 4 PULGADAS, LOS DIEZ (10) POZOS DE VISITA HAN SIDO INSTALADAS, A UN COSTO TOTAL DE US \$_____ O US \$_____ POR LOTE. EL SISTEMA DE DRENAJE SANITARIO ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

CERTIFICACION:
CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS MODEL SUBDIVISION RULES (LAS REGLAS GOBERNANDO A LAS SUBDIVISIONES), ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE (CODIGO DE AGUA DE TEXAS), CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DE DRENAJE SON:

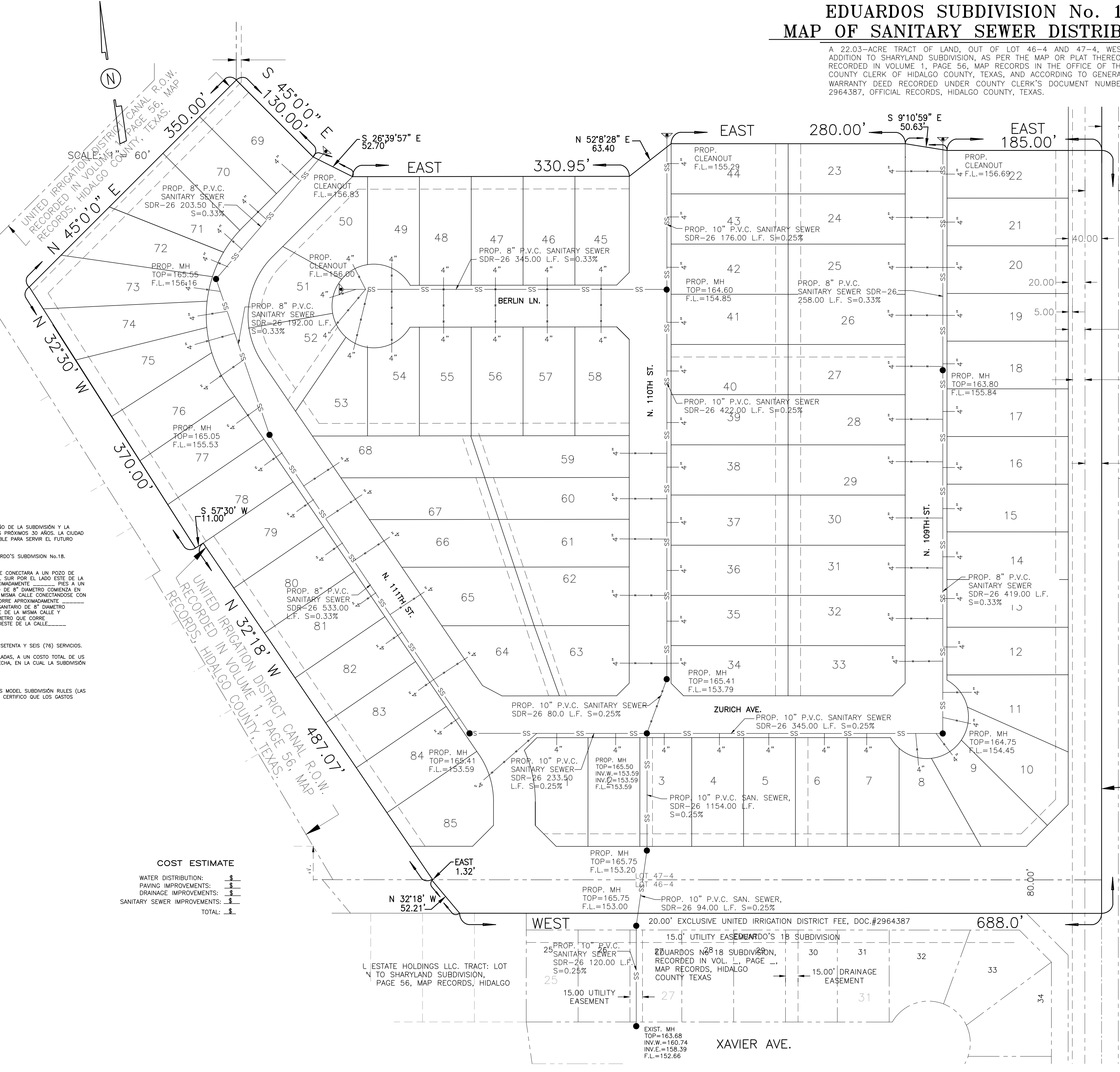
DRENAJE: SE ESTIMA QUE EL DRENAJE COSTARA UN COSTO TOTAL DE US \$_____ O US \$_____ POR LOTE.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

COST ESTIMATE

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
SANITARY SEWER IMPROVEMENTS:	\$
TOTAL:	\$



EXIST. 40.00' R.O.W.
CANTU LORETTA TRACT: 4.69 ACRES OF LOT 47 ADDITION TO SHARYLAND SUBDIVISION, RECORDED COUNTY CLERK'S DOCUMENT NUMBER 1971292, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.
20.00' ADDITIONAL ROW DEDICATED BY PLAT
15.00' EXCLUSIVE EASEMENT SHARYLAND WATER SUPPLY CORPORATION RECORDED IN 1642, PAGE 492, DEED RECORDS, HIDALGO COUNTY, TEXAS.
20.00' R.O.W.
CANTU LORETTA TRACT: 14.53 AC ACRES OF WEST ADDITION TO SHARYLAND SUBDIVISION, RECORDED COUNTY CLERK'S DOCUMENT NUMBER 1971282, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.
Eduardo Izaguirre Tract: 19.75 AC ACRES 46-5, WEST ADDITION SHARYLAND SUBDIVISION RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2693952, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

EDUARDO'S SUBDIVISION No. 19
SANITARY SEWER DISTRIBUTION LAYOUT

IZAGUIRRE
Engineering Group LLC.
2121 E. GRIFFIN PARKWAY,
STE. 2, MISSION TX, 78574
TEL: (956) 584-0554
FAX: (956) 584-0554

*NOTE: SEE CONSTRUCTION TYPICAL DETAILS AND SPECIFICATION ON PAGE 3

MASTER DRAINAGE STATEMENT FOR EDUARDO'S SUBDIVISIONS NOS. 18, 19, 20, 21, & 22

I. PROJECT CHARACTER AND LOCATION
 The Eduardo's Subdivisions Nos. 18 thru 22 master development tract acreage (refer to location map) and relative required detention volume(s) is a compilation of five (5) proposed single-family residential subdivisions as follows (refer to drainage calculation sheets):
 Eduardo's Subdivision No. 18 19,427 ac. net 77 proposed lots Det. 47,943 cuft
 Eduardo's Subdivision No. 19 17,457 ac. net 80 proposed lots Det. 43,082 cuft
 Eduardo's Subdivision No. 20 20,528 ac. net 74 proposed lots Det. 50,660 cuft
 Eduardo's Subdivision No. 21 19,810 ac. net 75 proposed lots Det. 53,012 cuft
 Eduardo's Subdivision No. 22 16,678 ac. net 60 proposed lots Det. 44,825 cuft
 Total Detention Required for Eduardo's Subdivisions Nos. 18 thru 22 Det. 236,322 cuft

Said proposed master development tract is located within the 5-Mile Extraterritorial Jurisdiction of the City of McAllen, Texas, approximately one-quarter (1/4) mile north of Mile 6 North Road and stretches between Trospier Road and Los Ebanos Road, with frontage on both of those roads. All five (5) proposed subdivision tracts consist of a combined total of 93,898 acres net out of Lots 46-4, 47-3, 47-4, & 48-4, West Addition to Sharyland Subdivision, Hidalgo County, Texas, as recorded in Volume 1, Page 56, Map Records of Hidalgo County, Texas.

II. FLOOD PLAIN
 Referring to the attached Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel No. 480334 0295 D, revised JUNE 6, 2000, the five (5) proposed subdivisions tracts are located in zones as follows:
 Eduardo's Subdivision No. 18 is located within "Zone X" and "Zone A" has been filled to elevation of 161 and redesignated Flood zone "X" as per FEMA letter.
 Eduardo's Subdivision No. 20 is located within "Zone X"
 Eduardo's Subdivision No. 21 is located within "Zone X"
 Eduardo's Subdivision No. 22 is located within "Zone X"

Flood Zone "A" is a flood area categorized as "Special Flood Hazard Area inundated by a 100-year flood" and indicates an area where no base flood elevations have been determined.

Flood Zone "X" is a flood area categorized as "Other" and indicates: a) areas determined to be areas of 500-year flood; b) areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and c) areas protected by levees from 100-year flood.

III. SOIL CONDITIONS
 Referring to the U.S.D.A. Soil Conservation Survey of Hidalgo County (1979) and attached USDA Natural Resource Conservation Service Custom Soil Report for the master development tract, the predominant soils of the master development tract are classified as Comitas-8 (loamy fine sand), Hidalgo-25 (fine sandy loam), and Hidalgo-28 (sandy clay loam). Comitas-8 soil, typically found with 0-3% slopes, consists of a surface layer of brown loamy fine sand about 28 inches thick. The soil from 28 to 80 inches down, is reddish yellow fine sandy loam. This soil: a) is noncalcareous to 49 inches down, b) is well drained, c) has medium available water capacity, d) has very slow surface runoff, e) has moderately rapid permeability, f) has an overall low shrink-swell potential, g) has a severe hazard of soil blowing, and h) has a moderate hazard of water erosion.

Hidalgo-25 soil, typically found with 0-1% slopes, consists of a surface layer of dark grayish brown fine sandy loam about 15 inches thick. The next soil layer down, from 15 to 30 inches, is brown sandy clay loam. The next soil layer down, from 30 to 39 inches, is pale brown sandy clay loam. The soil down thereafter to approximately 72 inches is a very pale brown sandy clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has medium available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential, g) has a moderate hazard of soil blowing, and h) has a slight hazard of water erosion. See attached Soil Report.

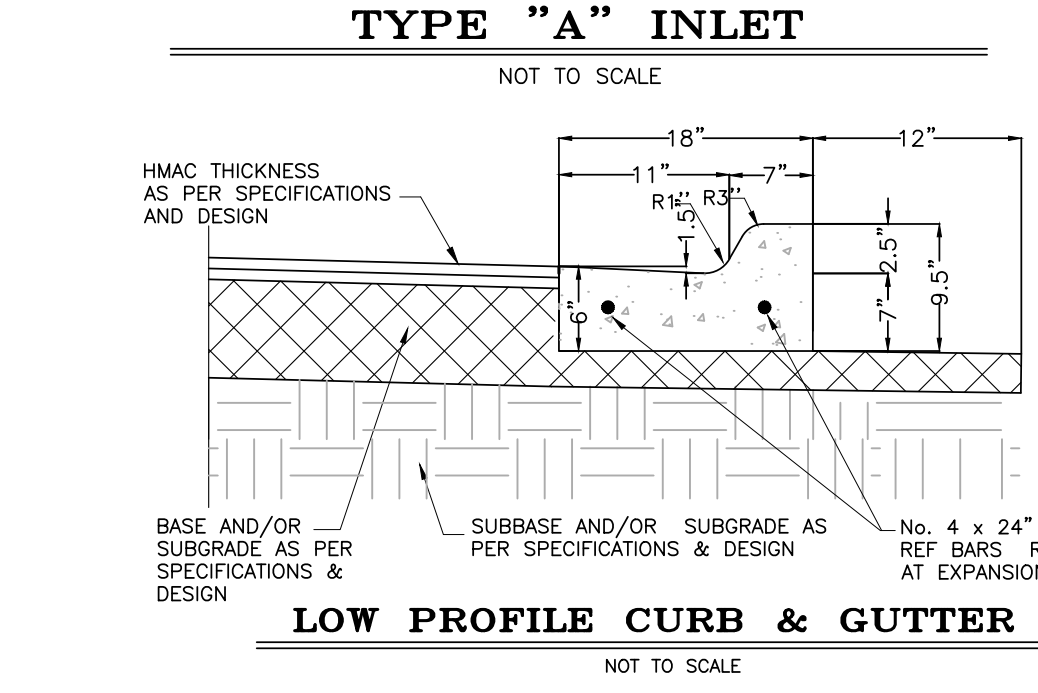
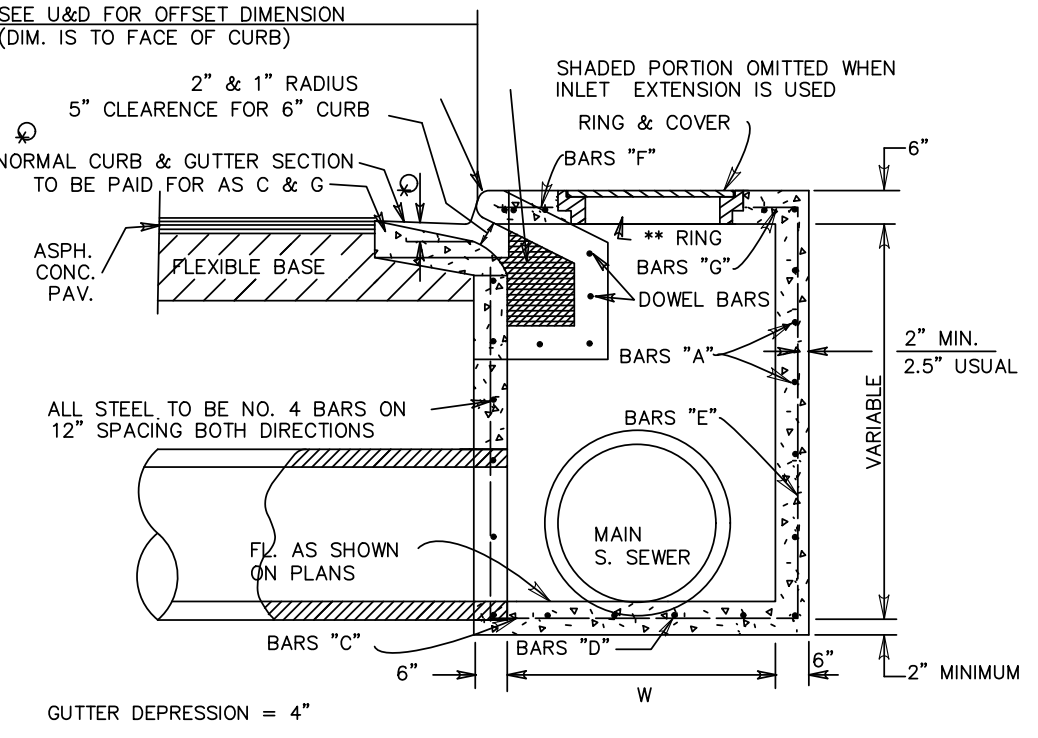
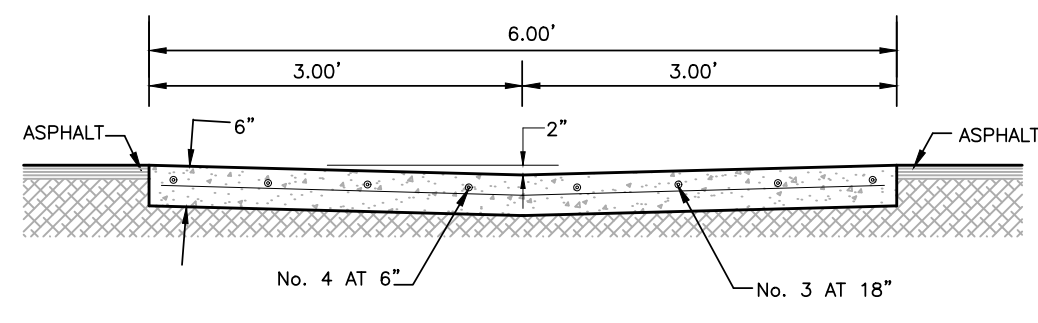
Hidalgo-28 soil, typically found with 0-1% slopes, consists of a surface layer of dark grayish brown sandy clay loam about 17 inches thick. The next soil layer down, from 17 to 28 inches, is brown sandy clay loam. The next soil layer down, from 28 to 38 inches, is pale brown clay loam. The soil down thereafter to approximately 80 inches is a very pale brown sandy clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has high available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential, g) has a slight hazard of soil blowing, and h) has a slight hazard of water erosion. See attached Soil Report.

IV. EXISTING CONDITIONS
 Historically, the master development tract consists of brush land. Topographic elevations obtained from the site indicate that the existing terrain has a slight grade to the east approximately (0.50%). Runoff from the master development tract is by sheet runoff overland towards the east and is intercepted by an existing road side ditch along the west side of Trospier Road. Said roadside ditch flows south and outfalls into the Hidalgo County Drainage District No. 1 (HCCDD#1) drain ditch known as the West Main III Outfall, which is located parallel and adjacent to the south perimeter of the subject master development tract. Said West Main III Outfall drain ditch is serviced by the HCCDD#1 drain ditch network which will ultimately outfall into the Arroyo Colorado.

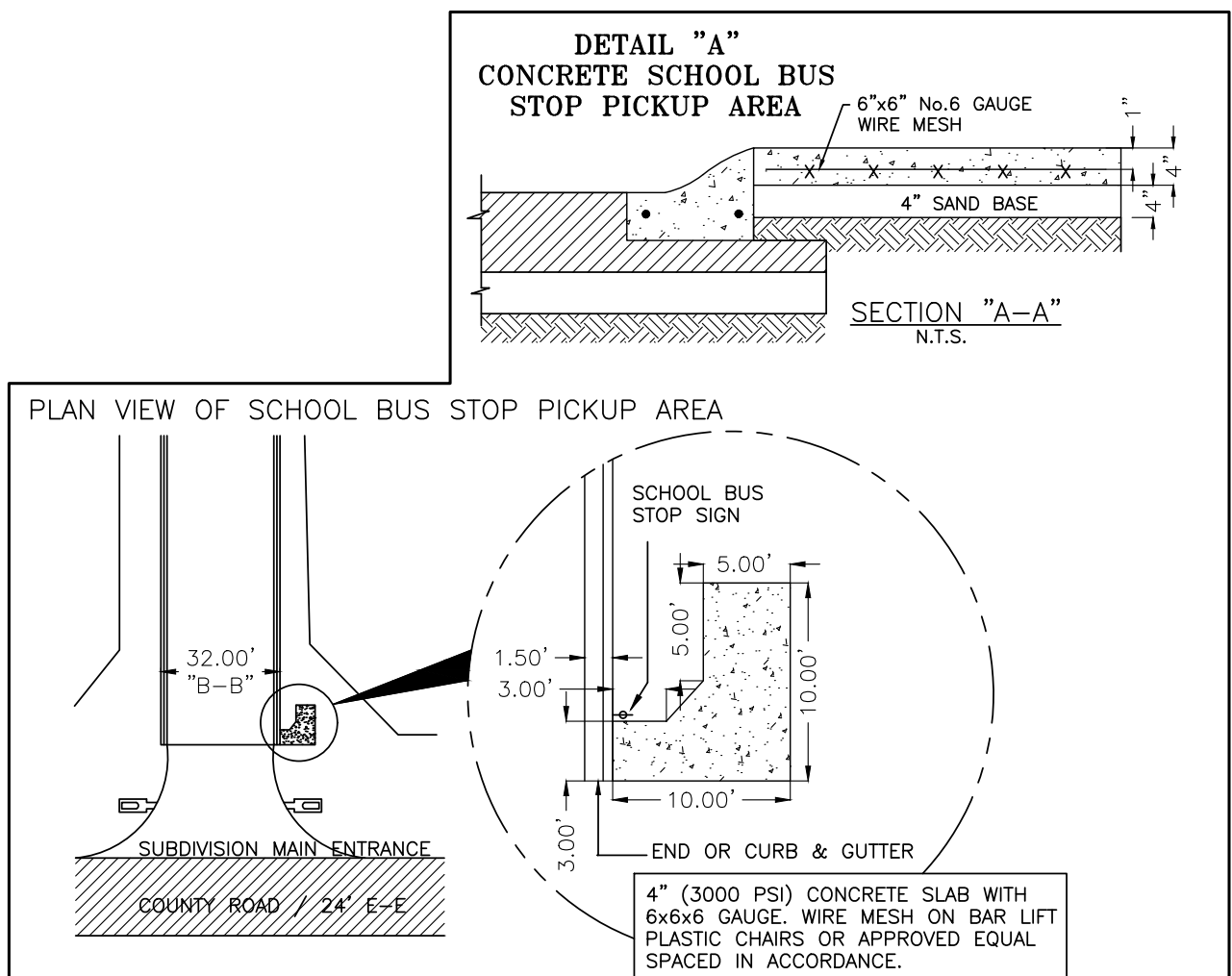
V. PROPOSED CONDITIONS
 On-site drainage improvements will be constructed in accordance with the drainage standards and requirements of HCCDD#1. The development surface is to be graded to direct storm water surface runoff towards proposed paved curb and gutter streets. Said storm water surface runoff will be intercepted by proposed type "A" curb inlets to be installed at appropriate locations. Said curb inlets will be connected to an appropriately sized drain pipeline system (refer to attached Wmstorm calculations), which will be serviced by the previously described existing HCCDD#1 West Main III Outfall Drain Ditch.

VI. RUNOFF CALCULATIONS
 In accordance with the drainage policies of HCCDD#1, the storm water surface runoff was determined utilizing the Rational Method as follows (refer to drainage calculation sheets):
 a) the 10-year storm for pre-development surface water runoff, Q_{pre} = 20.96 cfs; and
 b) the 25-year storm for post-development surface water runoff, Q_{post} = 105.98 cfs
 After-development storm water surface runoff for the entire master development tract, will be increased by Q = 8002 cfs.

In accordance with HCCDD#1, drainage requirements, the total detention requirement for the master development tract is 236,322 cu.ft. (5,425 acre feet) as outlined previously in Section I above and will be provided for the master development tract by widening the north side of the HCCDD#1 West Main III Outfall drain ditch along its frontage with said master development tract.



1. ALL HONEYCOMBING SHALL BE GROUTED TO PROVIDE A UNIFORM SURFACE.
2. WHEN HONEYCOMBING IS EXCESSIVE AS DETERMINED BY THE COUNTY OF HIDALGO COUNTY 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" (3,000 PSI)
5. REINFORCED STEEL AS SHOWN.
6. MAX. LENGTH OF CURB AND GUTTER SECTION IS 80' BETWEEN 1/2" EXPANSION JOINT.



COST ESTIMATE

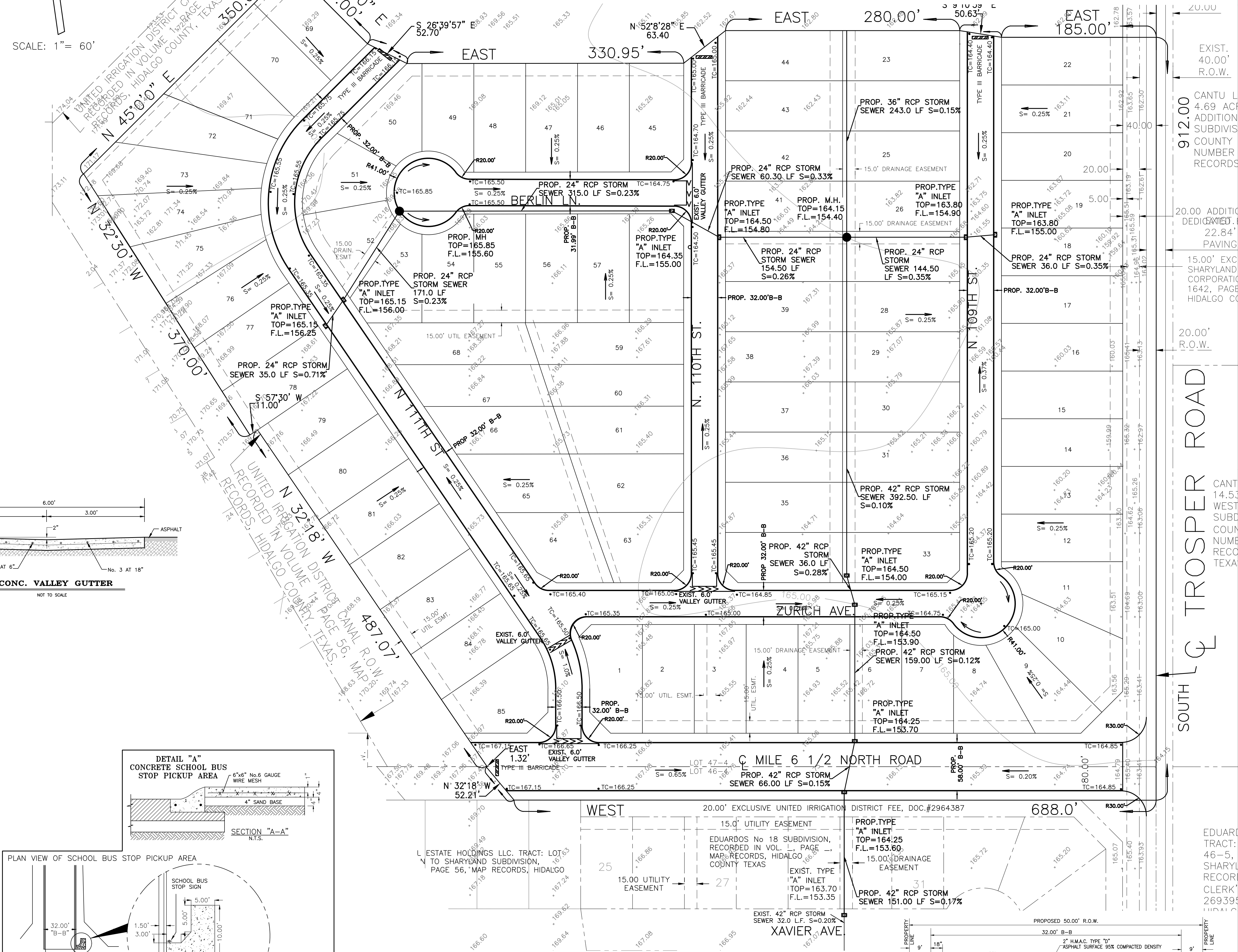
WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
SANITARY SEWER IMPROVEMENTS:	\$
TOTAL:	\$

EDUARDO'S SUBDIVISION No. 19
 MAP OF PAVING AND DRAINAGE

A 22.03-ACRE TRACT OF LAND, OUT OF LOT 46-4 AND 47-4, WEST ADDITION TO SHARYLAND SUBDIVISION, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2964387, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.



SCALE: 1" = 60'



EXIST. 40.00' R.O.W.
 CANTU L 4.69 AC ADDITION SUBDIVISION COUNTY NUMBER RECORDS
 20.00' ADDITIONAL DEDICATED PAVING
 22.84' PAVING
 15.00' EXC SHARYLAND CORPORATE 1642, PAGE HIDALGO
 20.00' R.O.W.
 CANT 14.53 WEST SUBD COUN NUM RECO TEXA

EDUARDO'S SUBDIVISION No. 19
 PAVING AND DRAINAGE LAYOUT

IZAGUIRRE
 Engineering Group LLC.
 2121 E. GRIFFIN PARKWAY,
 STE. 2, MISSION TX, 78574
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 FAX: (956) 584-0554