



Anthony Uresti,
Director of Planning

HIDALGO COUNTY PLANNING DEPARTMENT

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

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 3-31-2026

PROPOSE IOWA GROVES SUBDIVISION, PRECINCT No. 3.

ENGINEER IZAGUIRRE ENGINEERING. DEVELOPER: F & T LLC.

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 42 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INSTITUTIONAL

NUMBER OF STREETLIGHTS: 7

FILLING STATIONS: 4

LOCATION DESCRIPTION: WEST OF IOWA ROAD APPROXIMATELY ¼ MILE SOUTH OF MILE 8 NORTH ROAD.

SUBDIVISION LIES WITHIN THE: RUAL AREA

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 03-03-2026 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM AND DETENTION WILL BE PROVIDED BY WIDENING THE EXISTING DRAIN DITCH.

SEWER SYSTEM: OSSF'S

WATER SERVICE PROVIDER: AGUA SUD. LINE SIZE: 12" LOCATION: IOWA ROAD

STAFF RECOMMENDS: **Preliminary Approval** subject to comments and future recommendations by planning, Other departments.

Final Approval with financial guarantee.

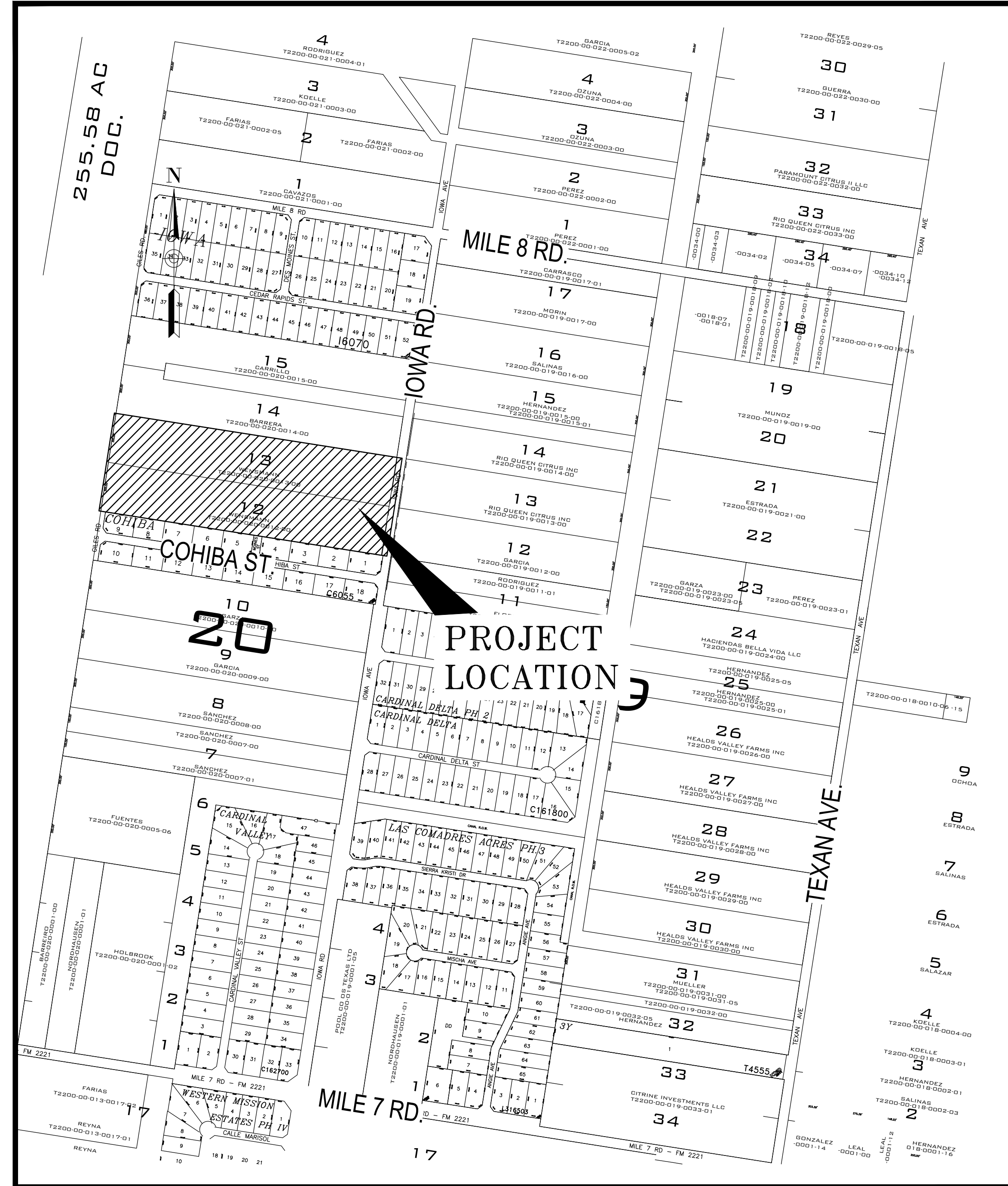
This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules,

** Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.*

IOWA GROVES SUBDIVISION

HIDALGO COUNTY

TEXAS



LOCATION MAP - SCALE: 1"=500'

APPROVED FOR CONSTRUCTION
Hidalgo County Planning Department

By: _____ DATE _____
SUBDIVISION COORDINATOR

By: _____ DATE _____
HIDALGO COUNTY DRAINAGE DISTRICT No.1

By: _____ DATE _____
CONSTRUCTION PROJECT ENGINEER

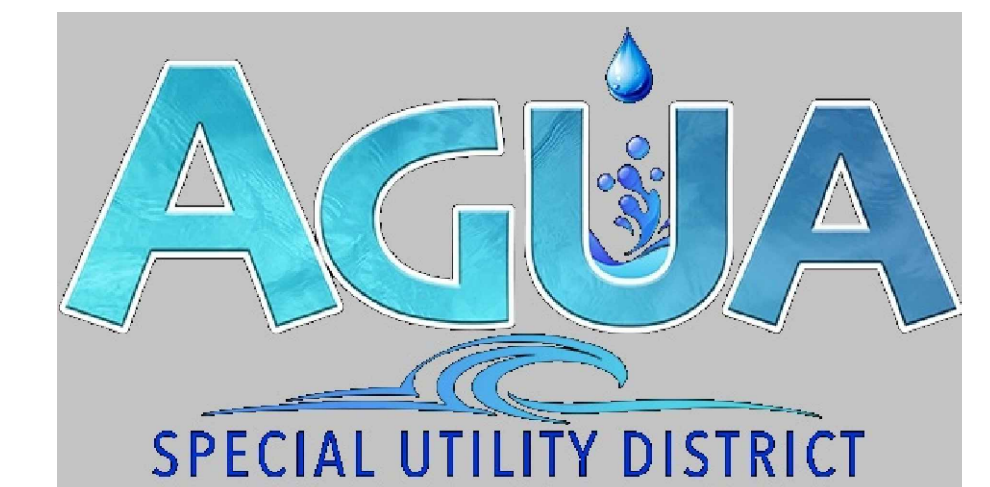
By: _____ DATE _____
PAVING CONTRACTOR

By: _____ DATE _____
DRAINAGE CONTRACTOR

THESE PLANS HAVE BEEN REVIEWED FOR COMPLIANCE BY THE HIDALGO COUNTY PLANNING DEPARTMENT AND THE HIDALGO COUNTY DRAINAGE DISTRICT No.1. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE, COUNTY, FEDERAL, UTILITY PROVIDERS AND SOUND ENGINEERING PRACTICE. ANY DEVIATION FROM THE PLANS SHALL BE REPORTED TO THE APPROPRIATE DEPARTMENTS AND A WRITTEN ACKNOWLEDGEMENT FROM THE PLANNING DEPARTMENT SHALL BE OBTAINED BY THE ENGINEER BEFORE ANY WORK MAY BE CONDUCTED.



COMMISSIONER
Everardo "Ever" Villarreal



INDEX

COVER SHEET

1. SUBDIVISION PLAT
2. UTILITY LAYOUT
- 2.1. AGUA SUD DETAILS
3. PAVING & DRAINAGE LAYOUT AND DETAILS
4. STREETLIGHT LAYOUT
5. EROSION PLAN

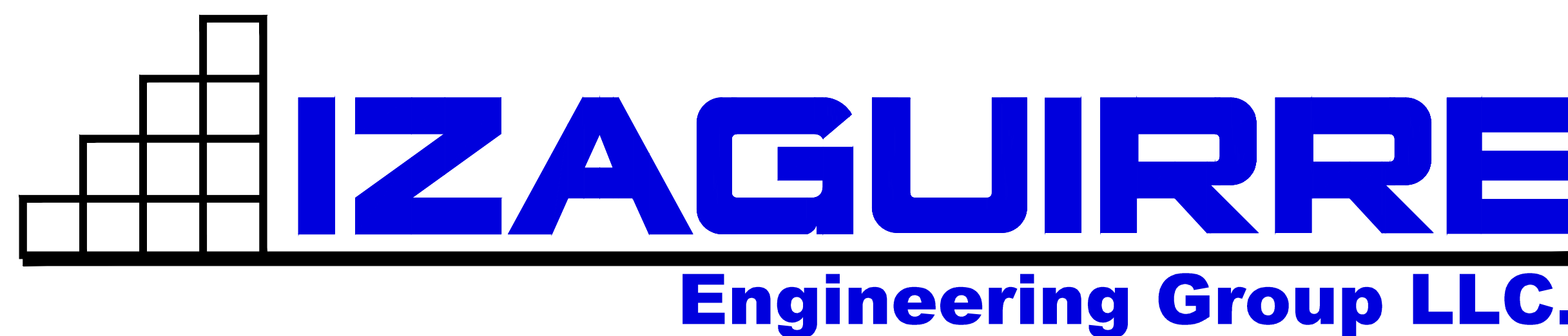


3-3-2026
Gilberto A. Gracia
GILBERTO A. GRACIA
REGISTERED PROFESSIONAL ENGINEER No. 62477
IZAGUIRRE ENGINEERING GROUP, LLC.
2121 E. GRIFFIN PKWY SUITE 2
MISSION, TEXAS 78574

DATE OF PREPARATION:

3-3-2026

Name	Address	City & Zip	Phone Fax
OWNER: FORD SASSER	2121 E. GRIFFIN PARKWAY SUITE 2	MISSION, TEXAS 78574	(956)240-3246
ENGINEER: GILBERTO A. GRACIA	2121 E. GRIFFIN PARKWAY SUITE 2	MISSION, TEXAS 78574	(956)584-0554
SURVEYOR: OSCAR HERNANDEZ, R.P.L.S.	2020 E. GRIFFIN PKWY	MISSION, TEXAS 78574	(956)403-9787



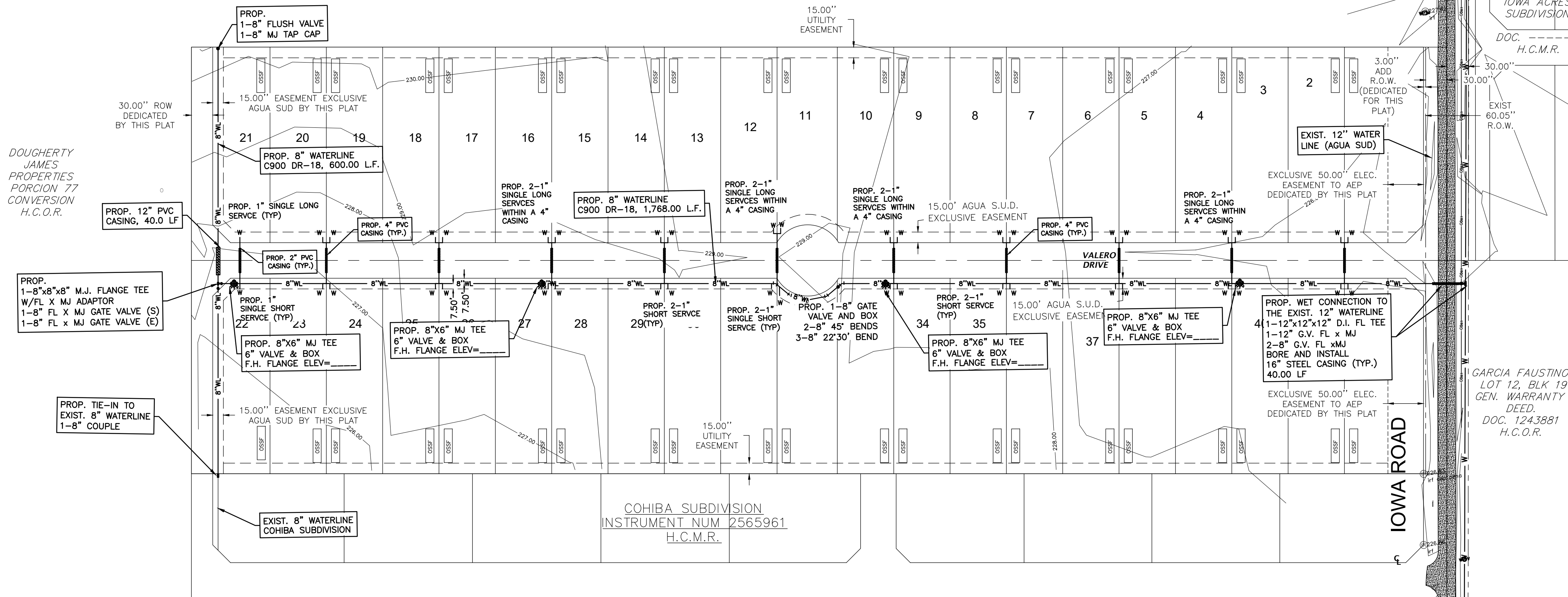
2121 E GRIFFIN PKWY SUITE 2 F-10214 PHONE (956) 584-0554
MISSION TEXAS, 78574 FAX (956) 584-0049

ALL WATERLINE CONSTRUCTION SHALL REFERENCE AGUA SPECIAL UTILITY DISTRICT STANDARDS. CONTRACTOR SHALL REFERENCE AGUA SPECIAL UTILITY DISTRICT DETAILS WHENEVER CONFLICTS ARISE.

IOWA GROVES SUBDIVISION

MAP OF UTILITIES DISTRIBUTION

CHAVEZ MARIA & GUILLERMO ELIZONDO
LOT 14, BLK 20
WARRANTY DEED
INSTRUMENT NUM 2265994
H.C.O.R.



FINAL ENGINEERING REPORT FOR IOWA GROVES SUBDIVISION:
BY GILBERTO A. GRACIA, P.E.

WATER SUPPLY: Description and Costs.

WATER SUPPLY: IOWA GROVES SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY THE WATER COMPANY OF AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND COMPANY AGUA SUD SIGNED A CONTRACT BY WHICH, THE SUBDIVISION WILL RECEIVE SUFFICIENT WATER PROVISION FOR AT LEAST 30 YEARS AND AGUA SUD 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.

AGUA SUD HAS AN EXISTING 12" WATERLINE RUNNING ALONG THE EAST SIDE OF IOWA RD. AGUA SUD HAS ANOTHER EXISTING 8" WATERLINE LOCATED ON THE SOUTHWEST CORNER OF THIS PROPERTY FROM COHIBA SUBDIVISION.

THE WATER SYSTEM FOR IOWA GROVES SUBDIVISION CONSISTS OF AN 8" WATERLINE THAT TAPS INTO THE EXISTING 12" DIAMETER WATER LINE, THEN THE PROPOSED 8" WATERLINE TAPS AND RUNS 1768.0 LF WEST ALONG A 15.0 FT AGUA EASEMENT ON THE SOUTH SIDE OF VALERO DRIVE. FROM THERE ANOTHER PROPOSED 8" WATERLINE RUNS NORTH AND SOUTH APPROXIMATELY 300.00 NORTH ALONG A 15.0 FT AGUA EASEMENT ENDING WITH A PROPOSED FLUSH VALVE AND APPROXIMATELY 300.00 SOUTH ALONG A 15.0 FT AGUA EASEMENT MAKING LOOP WITH THE EXISTING 8" WATERLINE FROM COHIBA SUBDIVISION.

FROM THE PROPOSED 8" DIAMETER WATERLINE, TWENTY (20) DUAL SERVICES OF 2" OF DIAMETER AND TWO (2) SINGLE SERVICES OF 1" OF DIAMETER ARE COMING OUT OF THIS 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 HAS PAID AGUA SUD THE AMOUNT OF \$ WHICH COVERS THE COST PER LOT STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, WATER RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO THE AGUA SUD WATER SUPPLY SYSTEM. UPON REQUEST BY THE LOT OWNER, AGUA SUD WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE ENTIRE WATER FACILITIES WILL BE APPROVED AND ACCEPTED BY AGUA SUD AND SAID DISTRIBUTION SYSTEM WILL BE OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES: Description and Costs.
SEWAGE FROM THE IOWA GROVES SUBDIVISION IS TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND A DRAINFIELD ON EACH LOT. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT 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.

EACH LOT IN THE EXISTING SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A FINE SANDY LOAM, SANDY CLAY LOAM AND CLAY LOAM SOIL FOR THE AREA. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAD FOUR (4) TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMITED AREA). THE SOIL IS A UNIFORM SANDY LOAM (CLASS II) EXTENDING UP TO 36" BELOW THE BOTTOM OF ANY EXISTING EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE EXISTING EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 3,500.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSFS HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ 147,000.00 THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF AS OF THE DATE OF THE RECORDING OF THE PLAT.

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 CONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES- THESE FACILITIES WILL BE CONSTRUCTED, WITH THE INSTALLATION OF WATER METER BOXES, HAVE COST A GRAND TOTAL OF \$ WHICH EQUALS TO \$ PER LOT.

SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$ 3,500.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$ 147,000.00 FOR THE ENTIRE SUBDIVISION.

3-3-2026

Gilberto A. Gracia
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.

IOWA GROVES SUBDIVISION.
FOR: GILBERTO A. GRACIA, P.E.
PROVISION OF AGUA: DESCRIPCIÓN, Y COSTOS.
IOWA GROVES SUBDIVISION SERA PROVISTA DE AGUA POTABLE POR LA COMPAÑIA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL SUBDIVIDOR Y LA COMPAÑIA DE AGUA SUD FIRMARON UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA PROVISION DE AGUA SUFICIENTE POR LOS PROXIMOS 30 AÑOS Y LA COMPAÑIA DE AGUA SUD PRESENTA SUFICIENTE DOCUMENTACION PARA ESTABLECER A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ABASTECIDA PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

AGUA SUD TIENE UNA LINEA DE 12" DE DIAMETRO EXISTENTE, CORRIENDO POR EL LADO ESTE DE LA CALLE IOWA ROAD; TAMBIEN TIENE OTRA LINEA EXISTENTE DE 8" DE DIAMETRO LOCALIZADA EN LA ESQUINA SUROESTE DE ESTA PROPIEDAD.

EL SISTEMA DE AGUA PARA IOWA GROVES SUBDIVISION CONSISTE EN UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE SE CONECTA CON AGUA EXISTENTE DE 12" DE DIAMETRO, DE AHI LA LINEA PROPUESTA CORRE 1,768.0 PIES POR UN EASEMENT DE AGUA SUD DE 15.0 PIES, POR EL LADO SUR DE VALERO DRIVE. DESPUES ESTA LINEA PROPUESTA SE ABRE AL NORTE Y AL SUR CORRIENDO EN AMBAS DIRECCIONES POR UN EASEMENT DE AGUA SUD DE 15.0 PIES, Y POR 300.00 PIES HACIA AMBOS LADOS Y AL NORTE TERMINA CON UNA VALVULA DE PURGA DE 8"; AL SUR SE CONECTA Y HACE CIRCUITO CON LA LINEA EXISTENTE QUE PROVIENE DE LA SUBDIVISION COHIBA AL SUR DE ESTA PROPIEDAD.

DE LA LINEA DE 8" DE DIAMETRO SE DESPRENDEN DIEZ (10) SERVICIOS DOBLES DE 2" DE DIAMETRO Y DOS (2) SERVICIOS SENCILLOS DE 1" DE DIAMETRO 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 \$ PER LOTE. EL DUEÑO DE LA SUBDIVISION PAGARA ADICIONALMENTE A AGUA SUD LA CANTIDAD DE \$ PER LOTE DE ACUERDO AL CONTRATO Y DOCUMENTO DE 30 AÑOS DE SERVICIO DE AGUA POTABLE QUE CUBRE EL MEDIDOR DE AGUA, (INCLUYENDO COSTOS DE LA INSTALACION DE CADA MEDIDOR, TARIFAS DE CONEXION Y MEMBERSIAS). CUANDO EL DUEÑO DEL SOLAR SOLICITE UN MEDIDOR DE AGUA, LA COMPAÑIA AGUA SUD INSTALARA EL MEDIDOR SIN COSTO ALGUNO AL DUEÑO. 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.

PROVISION DE DRENAJE SANITARIO: DESCRIPCIÓN Y COSTOS
SE INSTALARA UNA FOSA SEPTICA EN CADA SUBDIVISION IOWA GROVES SUBDIVISION. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL EVALUADOR (LIC# OS 12258) AUTOR DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE ENCUENTRA LA SUBDIVISION Y HA PREPARADO UN REPORTE QUE CONCLUYE QUE ESTE TERRENO ES ADECUADO PARA ESAS FOSAS SEPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT) SEGUN EL REPORTE.

CADA LOTE EN LA SUBDIVISION MIDE MEDIO ACRE. EL EVALUADOR (LIC# OS 12258) HIZO CUATRO (4) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME FRANCO ARENOSO (CLASS II) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES PROPUESTAS. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MAS ARRIBA DE LO MAS BAJO DE LAS EXCAVACIONES PROPUESTAS. EL AGUA EN ESTA AREA FLUYE BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON \$ 3,500.00, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSAS SEPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACION FINAL. A UN COSTO TOTAL DE \$ 147,000.00 EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO TODAS LAS FOSAS SEPTICAS Y HA APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS 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:

AGUA: EL SISTEMA/SERVICIO DE AGUA ESTA TOTALMENTE CONSTRUIDO, CON LA INSTALACION DE LOS MEDIDORES DE AGUA, EL GRAN COSTO TOTAL ES DE \$ LO CUAL EQUIVALE A \$ PER LOTE.

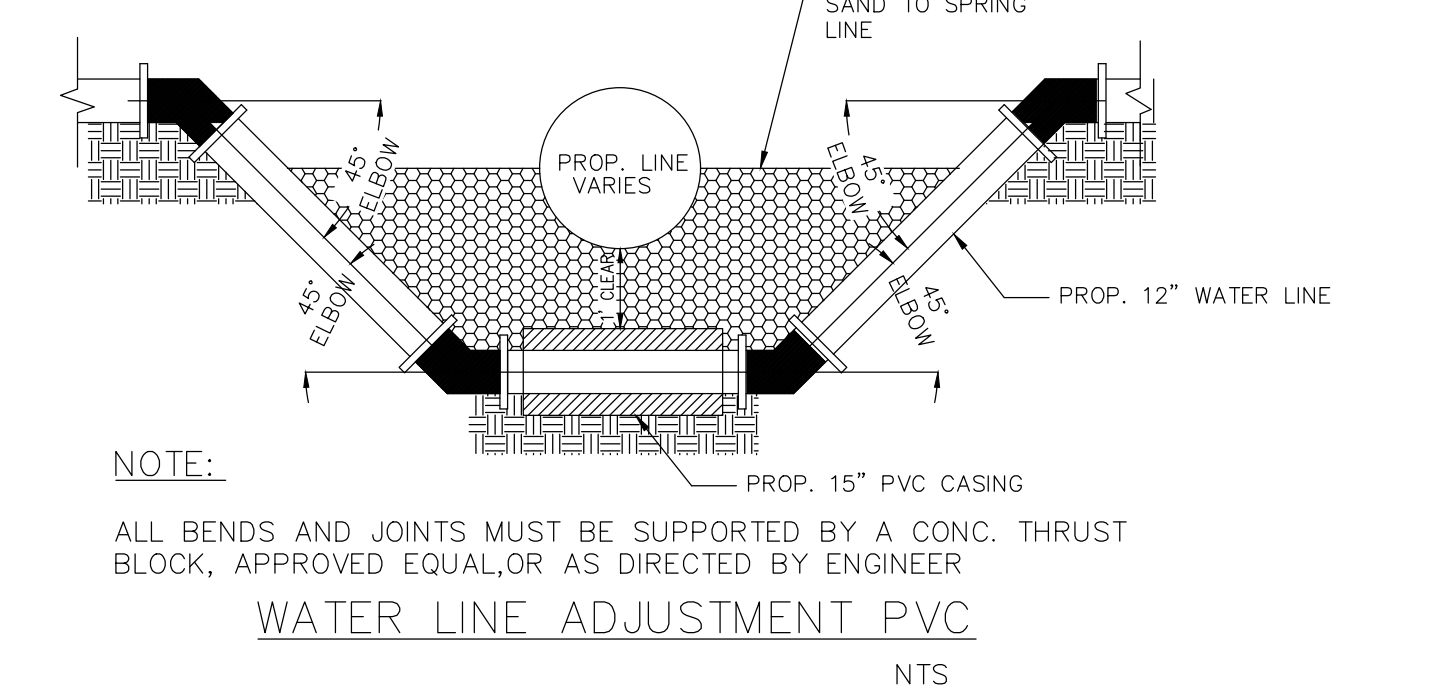
DRENAJE: SE ESTIMA QUE LA FOSA SEPTICA COSTARA \$ 3,500.00 A UN COSTO TOTAL DE \$ 147,000.00 TODA LA SUBDIVISION.

3-3-2026

Gilberto A. Gracia
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: \$
OSSF IMPROVEMENTS: \$
TOTAL: \$

ON-SITE SEWAGE FACILITIES



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; OWNERS 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, ON-SITE SEWAGE FACILITIES 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 CERTIFICATE AND STATEMENT.

SHEET 2.1- AGUA SUD DETAIL SHEET

SHEET 3.- 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; DETAILS

SHEET 4.- STREETLIGHT LAYOUT

SHEET 5.- EROSION CONTROL PLAN

GENERAL CONSTRUCTION NOTES:

- ALL PROPOSED WATER LINES TO BE C-900 DR-18.
- CONTRACTOR TO INSTALL 1" SINGLE SERVICE CONNECTIONS AND 2" DOUBLE SERVICE CONNECTIONS TO EVERY LOT & ALL SERVICES TO BE LOCATED IN FRONT OF LOTS 1.0 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 STUBOUTS 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.

STATE OF TEXAS
COUNTY OF HIDALGO
BEFORE ME, the undersigned notary public, on this day personally appeared **FORD SASSER** 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.

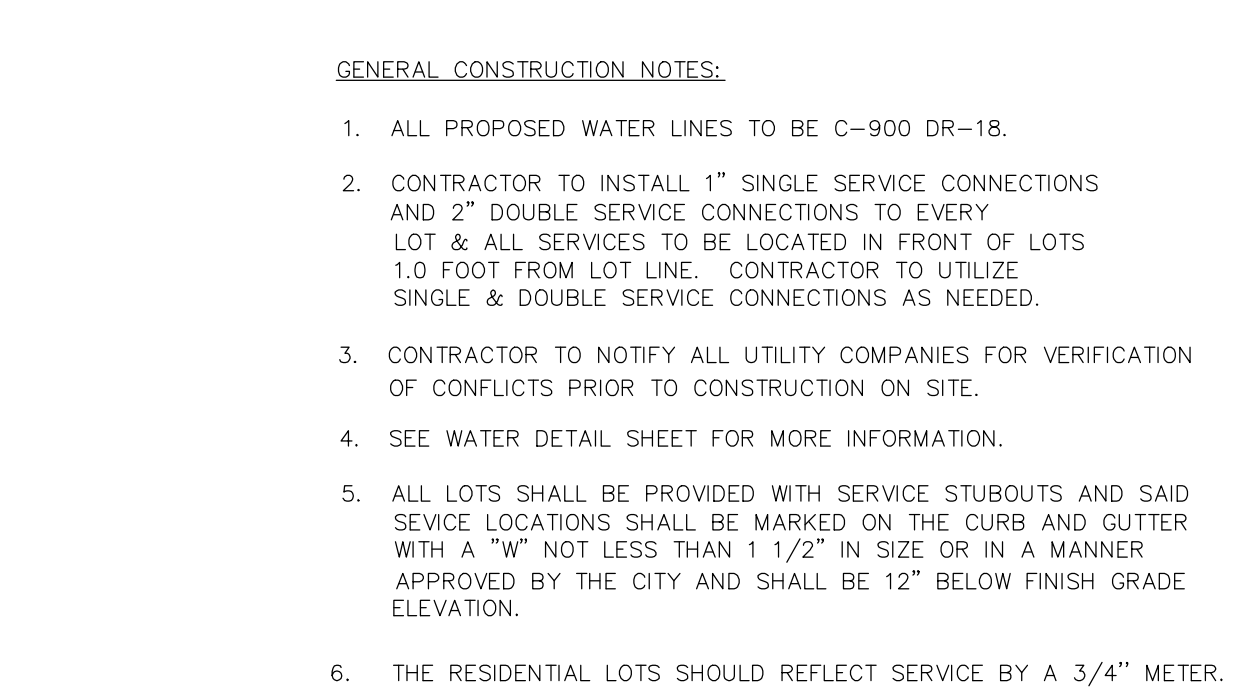
Given under my hand and seal of office this _____ day of _____, 2026.

FORD SASSER - PRESIDENT
2020 E. GRIFFIN PARKWAY
MISSION, TEXAS 78572

DATE _____

ALEJANDRA ELIZABETH RIVERA
Notary Public State of Texas
Comm. Expires 04-14-2029
Notary ID: 132644013

NOTARY PUBLIC- STATE OF TEXAS



WATER SERVICE DETAIL
N.T.S.

COST ESTIMATE
WATER DISTRIBUTION: \$
PAVING IMPROVEMENTS: \$
DRAINAGE IMPROVEMENTS: \$
OSSF IMPROVEMENTS: \$
TOTAL: \$

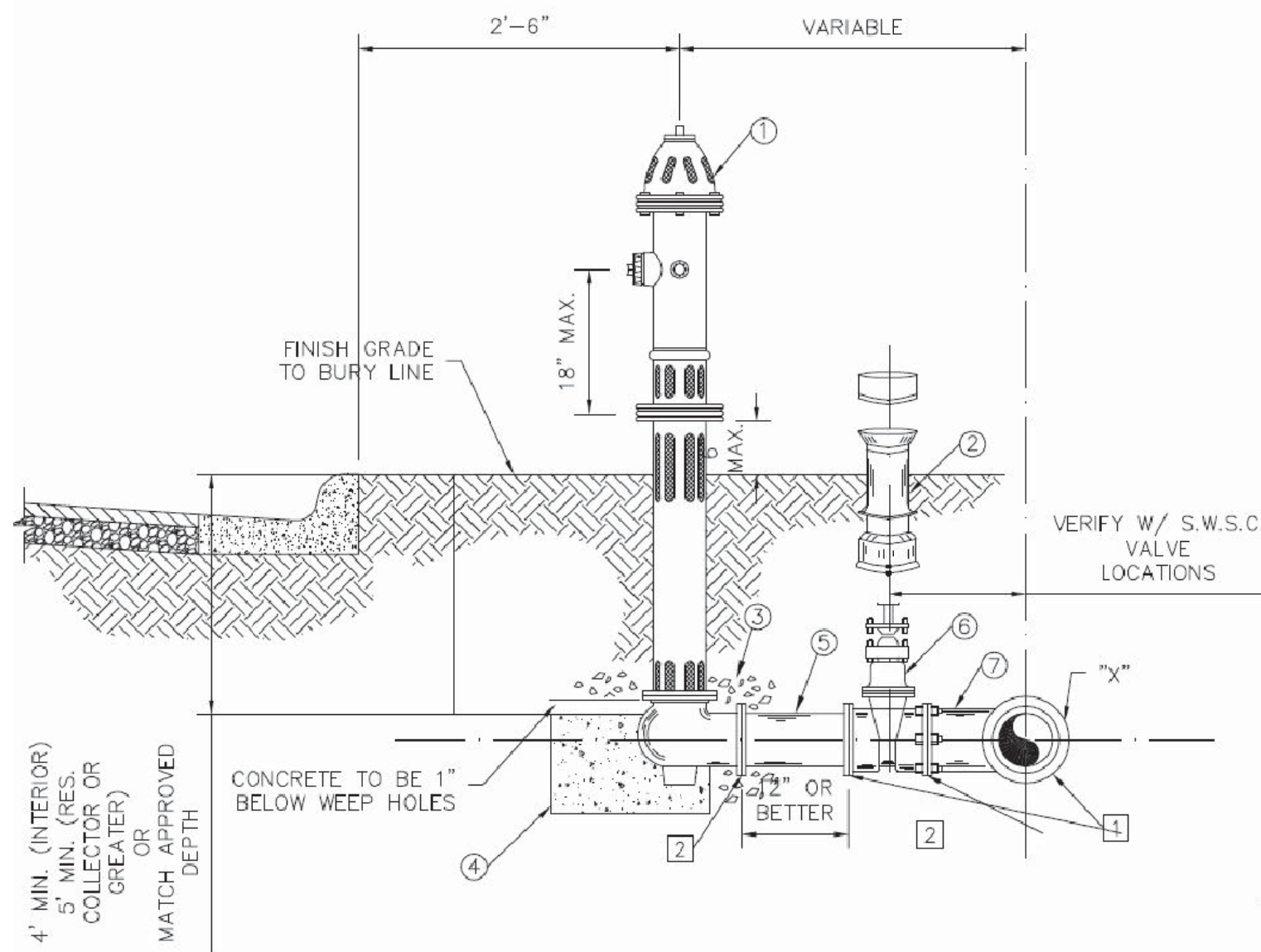


IOWA GROVES SUBDIVISION
UTILITIES LAYOUT

IZAGUIRRE
Engineering Group LLC.
2121 E GRIFFIN PKWY SUITE 2
MISSION TEXAS, 78574
PHONE (956) 584-0554
FAX (956) 584-0049
F-10214
SHEET NO. 2
OF 5 SHEETS

DATE OF PREPARATION:
3-3-2026

IOWA GROVES SUBDIVISION

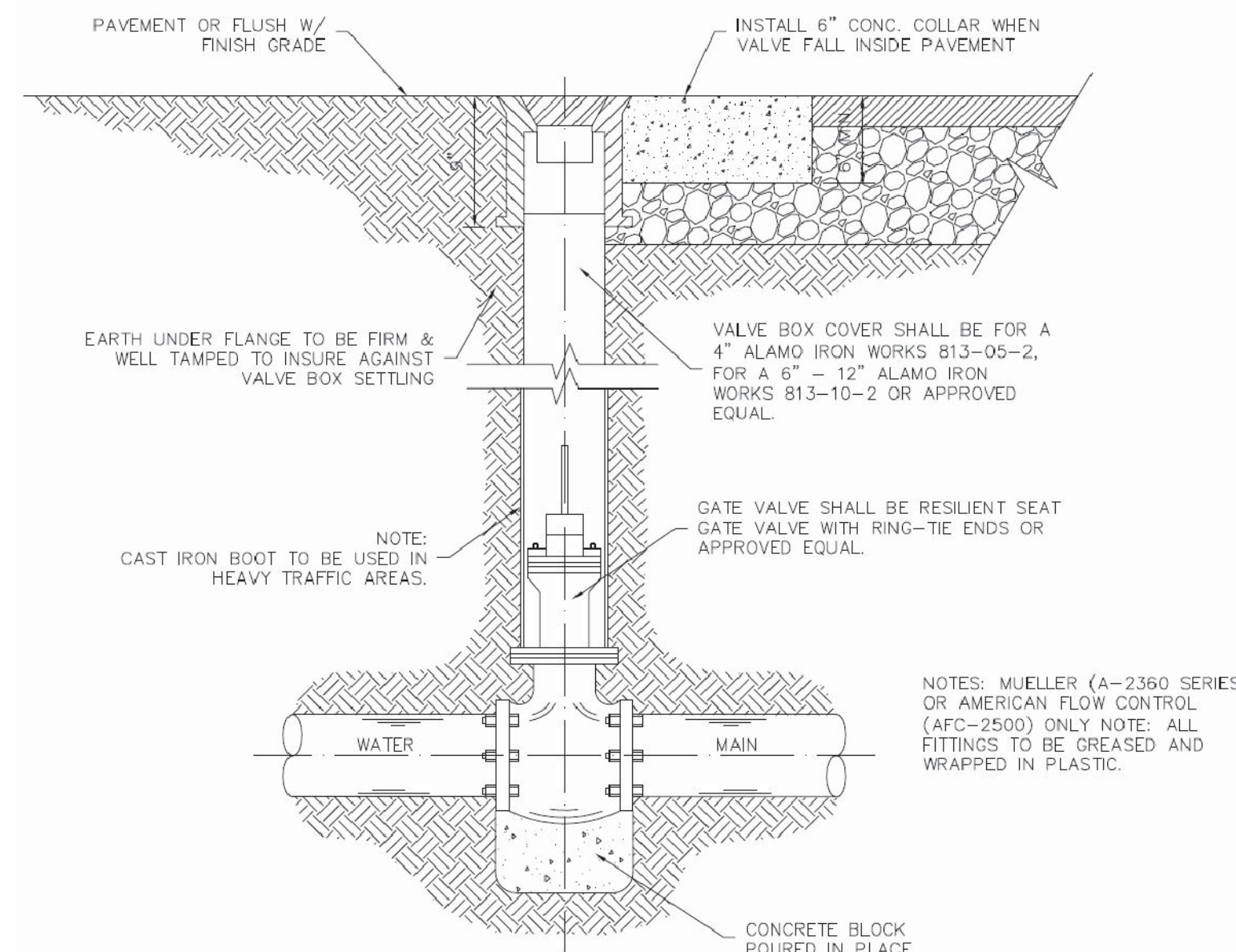


TYPICAL FIRE HYDRANT DETAIL

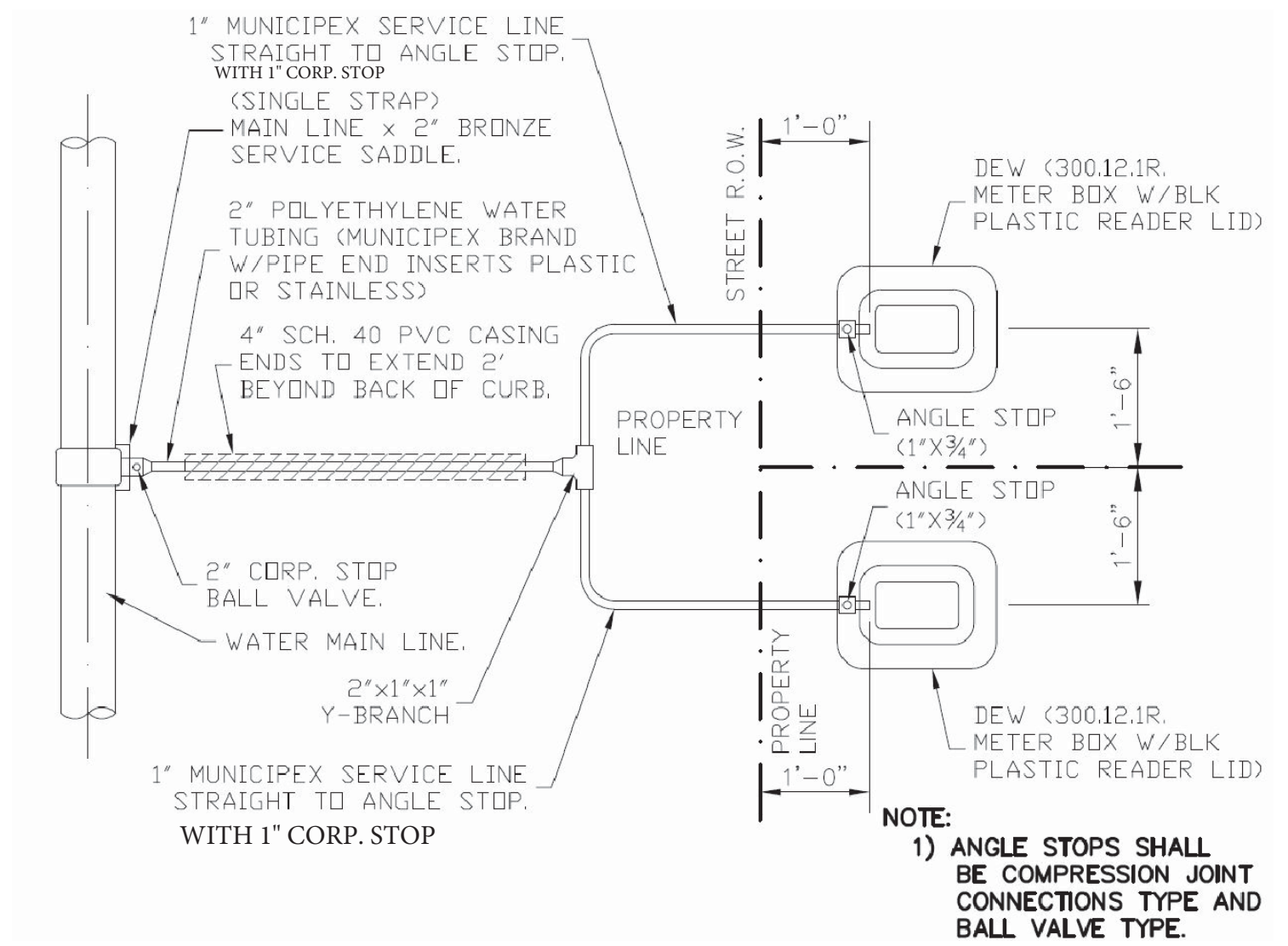
- NOTE:
- OIL SHALL BE PLACED IN HYDRANT AT THE TIME OF INSTALLATION.
 - PUMPER NOZZLE SHALL FACE ROADWAY. (4 1/2" N.S.T.)
 - IN CERTAIN INSTANCES, WHERE DISTANCES PERMITS, A PARALLEL TEE OR UNION-TITE 90° ELBOW W/RESTRAINING LUGS MAY BE USED IN LEU OF A STANDARD TEE. FINAL APPROVAL BY S.W.S.C. REQUIRED.
 - IF AMERICAN DARLING IS USED MODEL B-84-B w/EPOXY COAT VALVE PLATE AND INTERIOR SHOE.
 - TAPPING SLEEVES TO HAVE STAINLESS STEEL BOLTS AND NUTS.
 - ALL VALVES, FITTINGS & HYDRANTS & ACCESSORIES TO BE GREASED WRAPPED IN PLASTIC.
 - ALL VALVES, FITTINGS AND ACCESSORIES, VALVE BOXES, METER BOXES AND COVERS MUST BE APPROVED BY S.W.S.C.
- FIRE HYDRANT INSTALLATION
CONSIST OF FIRE HYDRANT, VALVE AND VALVE BOX
- FIRE HYDRANT UNIT SHALL INCLUDE:
- FIRE HYDRANT w/ (4 1/2" PUMPER NOZZLE)
 - VALVE BOX (DOMESTIC)
 - 3 CU. FT. GRAVEL
 - 3 CU. FT. CONCRETE 1" BELOW HYDRANT WEEP HOLES
 - 1" OR BETTER PVC SPOOLS
 - 8" RESILIENT SEAT GATE VALVE (FLANGED X M.J.)
 - X"6" CAST IRON TEE (FLANGED X M.J.)
- 1 MECHANICAL JOINT
2 FLANGE

STANDARD FIRE HYDRANT INSTALLATION

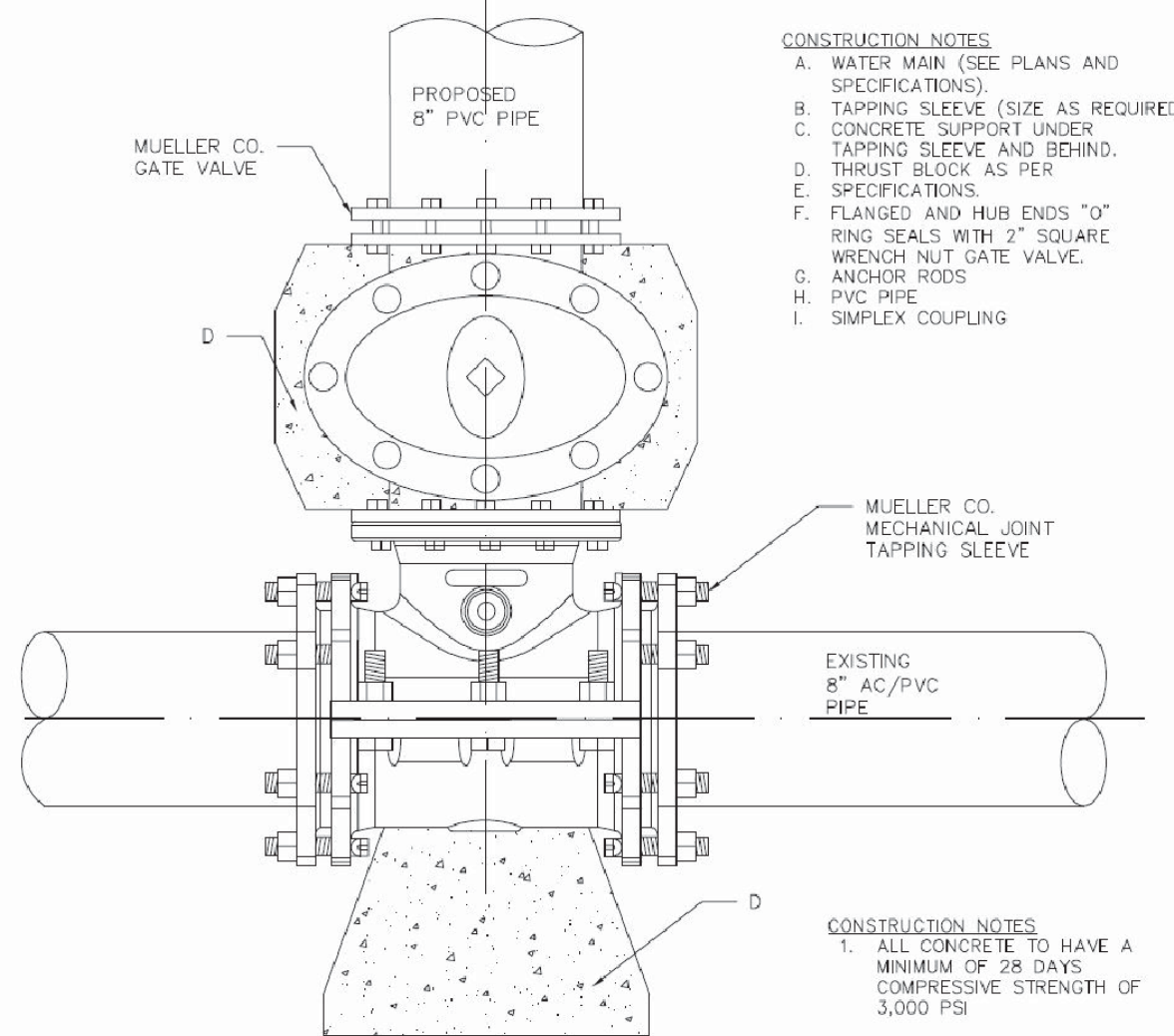
MULLER/SUPER CENTURION 250 A-423) OR AMERICAN DARLING E-84-B (SEE NOTE 4) ONLY
NOTE: FIRE HYDRANT TO BE PAINTED RED.



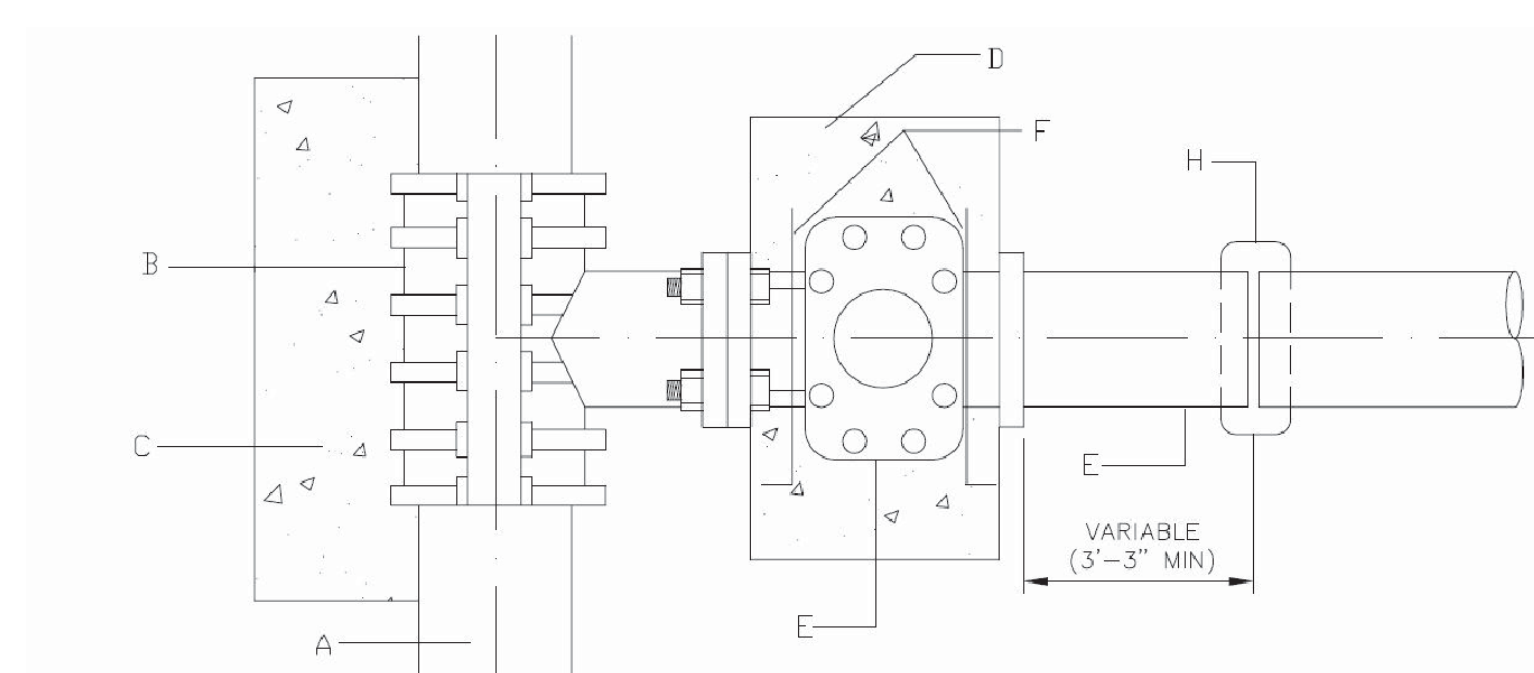
TYPICAL VALVE AND VALVE BOX INSTALLATION



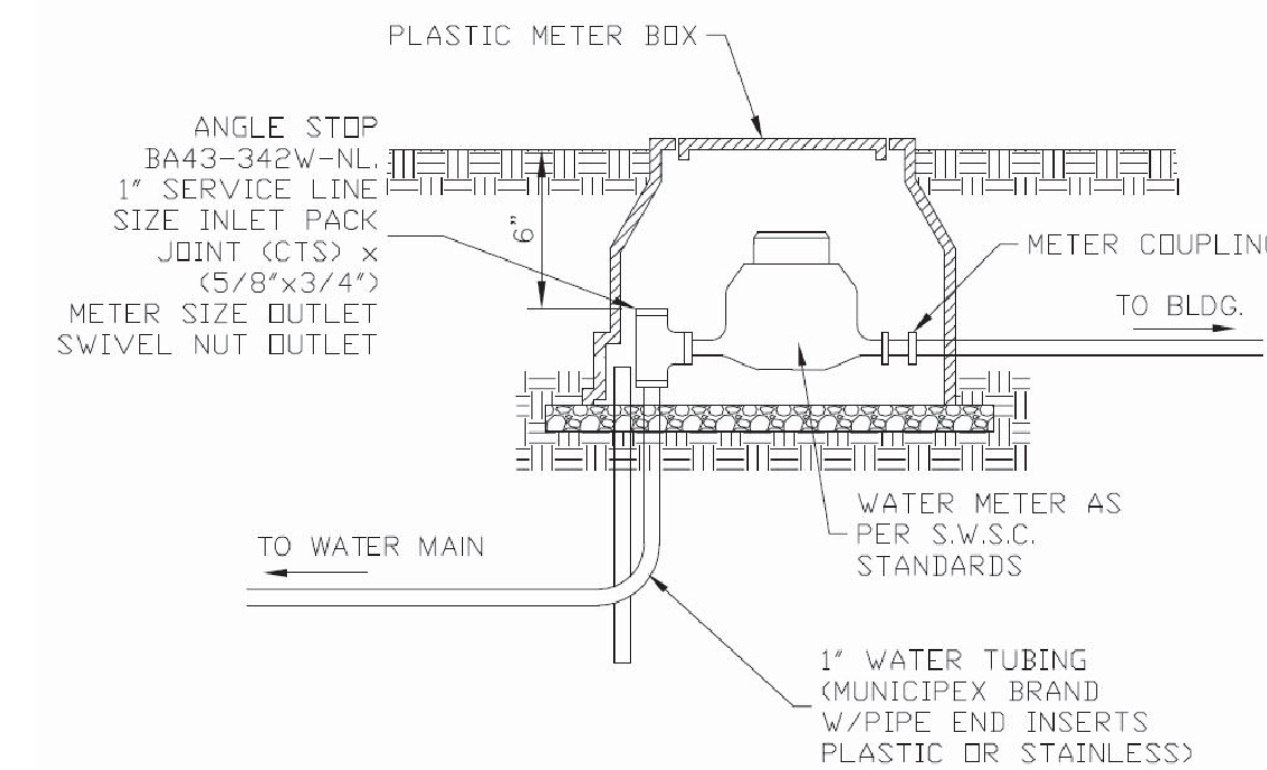
TYPICAL DUAL WATER SERVICE CONNECTION



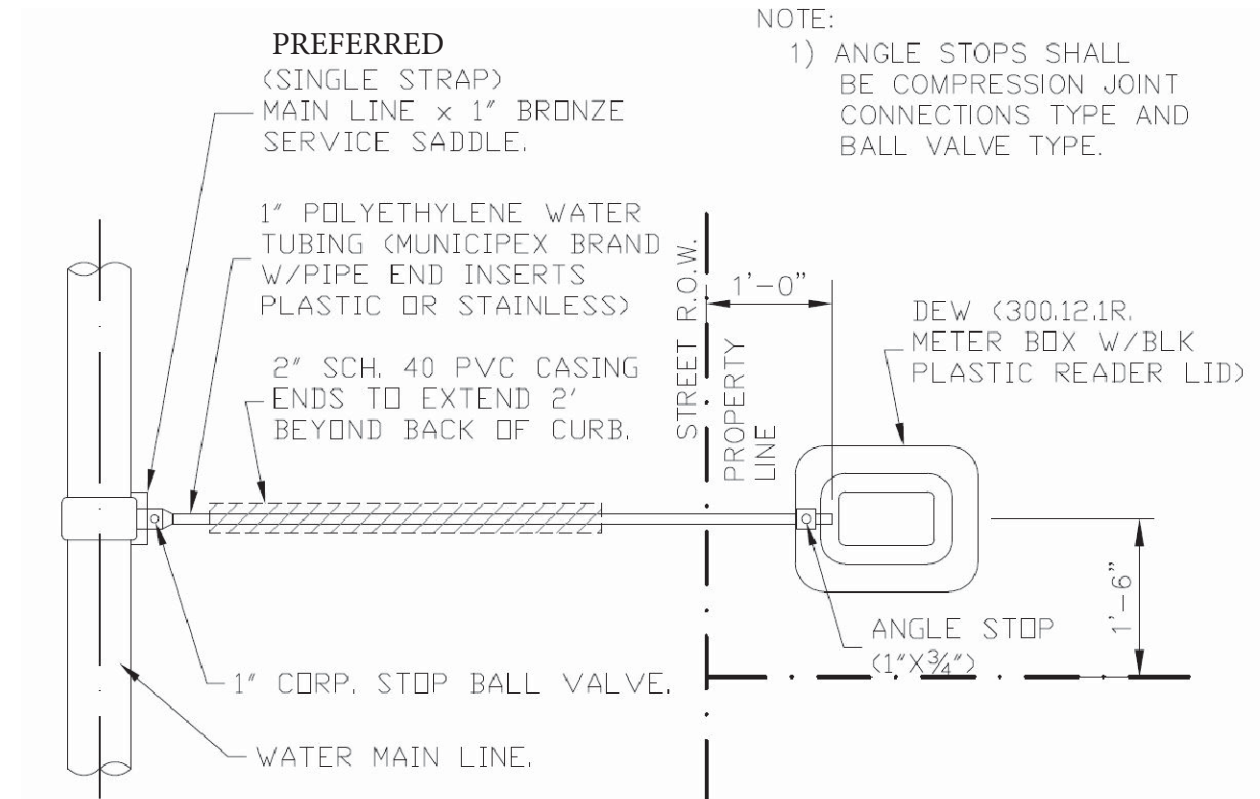
SAME SIZE WATER TAPPING SLEEVE AND VALVE INSTALLATION



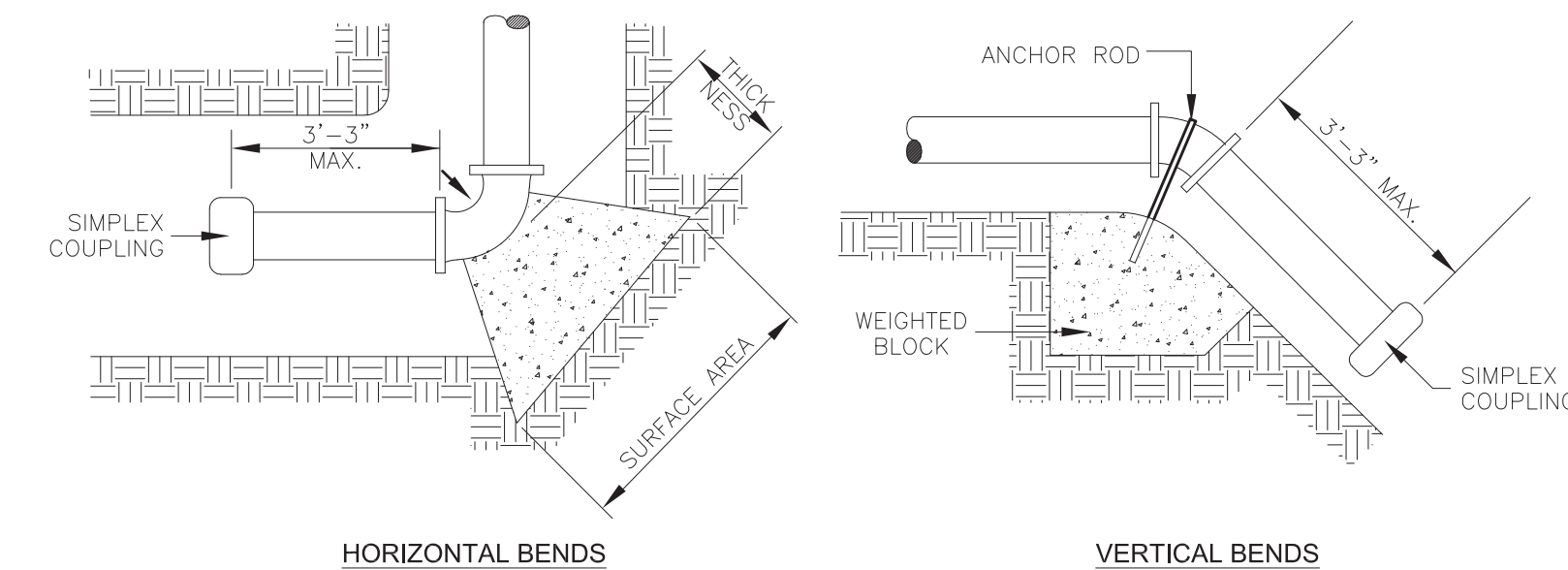
WATER TAPPING SLEEVE AND VALVE INSTALLATION



TYPICAL WATER SERVICE CONNECTION

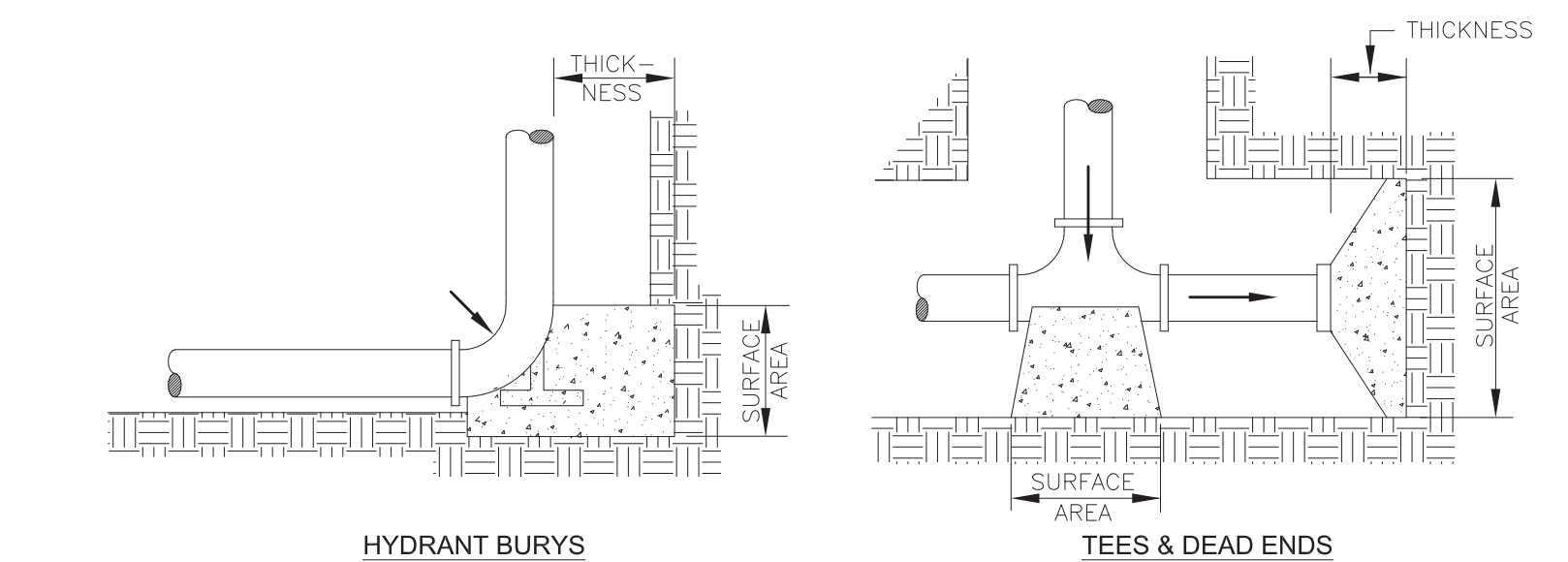


TYPICAL SINGLE WATER SERVICE CONNECTION



HORIZONTAL BENDS

VERTICAL BENDS



HYDRANT BURYS

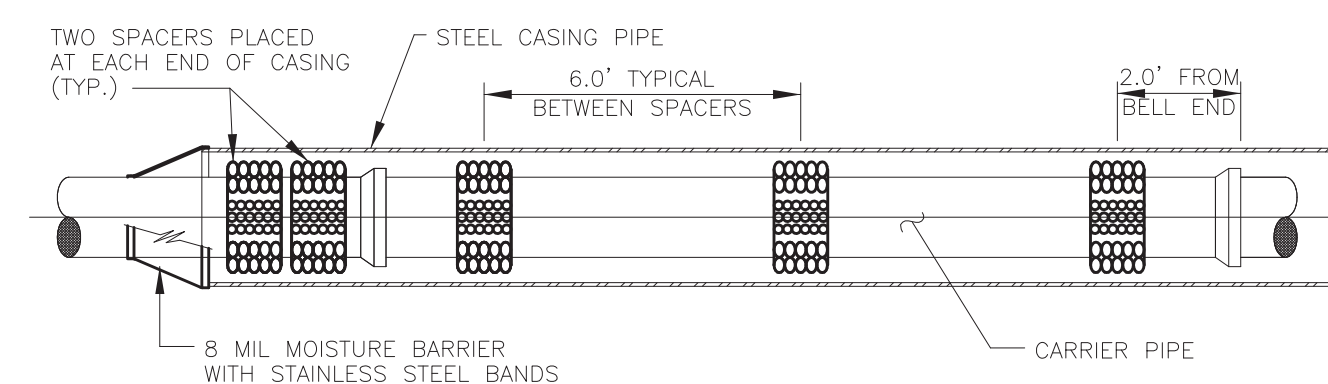
TEES & DEAD ENDS

TYPICAL THRUST BLOCK DETAILS

THRUST BLOCK SIZE			
DIAMETER OF PIPE INCHES	HORIZONTAL BEND		WEIGHT AT VERTICAL BENDS - lbs.
	SURFACE AREA SQ. FT.	THICKNESS INCHES	
22 1/2 BENDS			
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			
6 OR LESS	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 OR LESS	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			
6 OR LESS	3	12	---
8	4	15	---
10	6	18	---
12	8.5	18	---
14	11.5	24	---
16	15	24	---

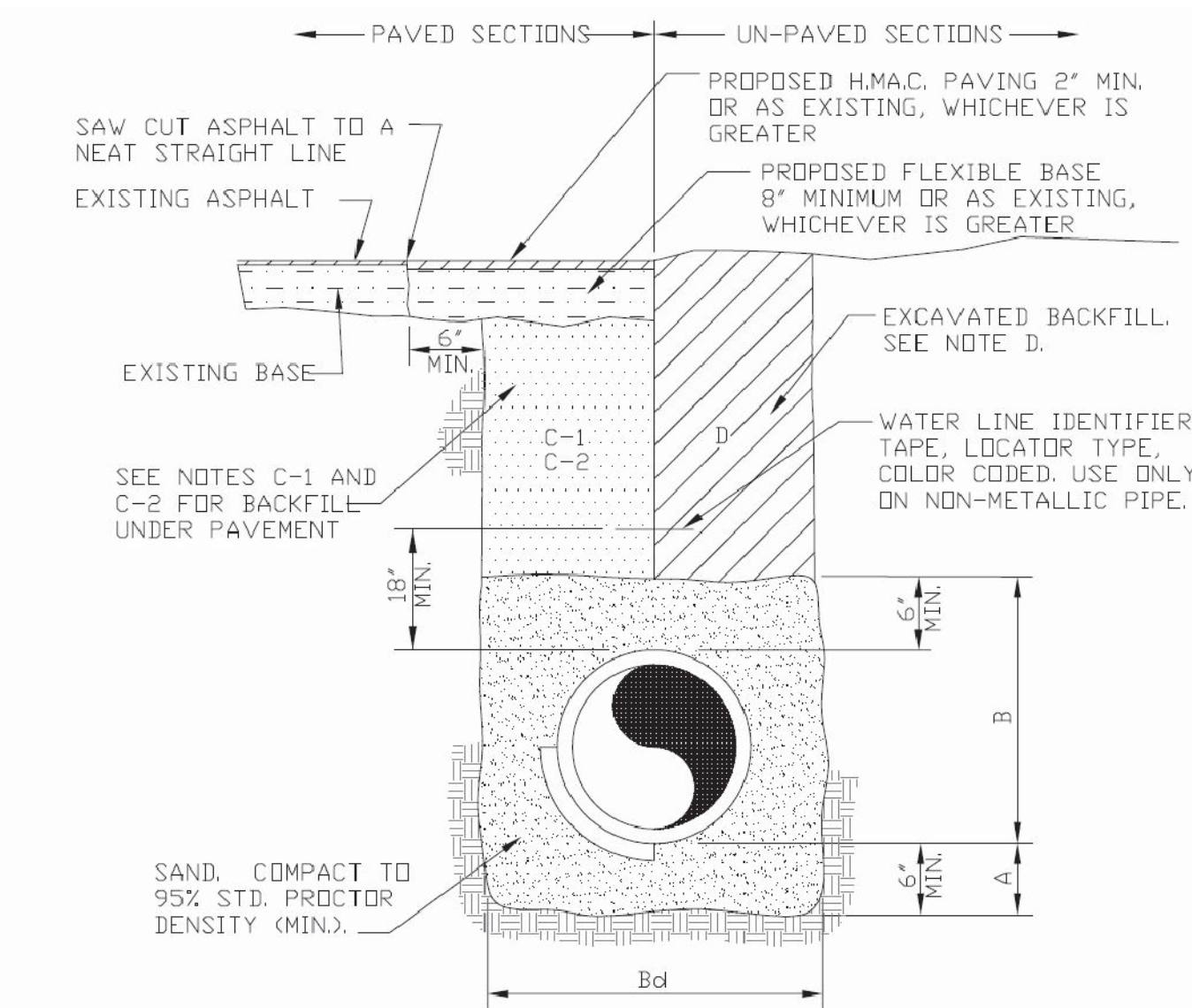
- GENERAL NOTES:
- ALL VALVES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 150 P.S.I. AND A SOIL RESISTANCE OF 2,000 LBS./SQ.FT. WITH PIPELINE HAVING A MINIMUM OF 3' OF COVER WITH C&G AND A 5' MIN. W/O C&G.
 - THE CONTRACTOR SHALL CONSIDER REDUCTIONS OF THRUST BLOCK SURFACE AREA UPON SUBMITTAL OF APPROVED SOIL RESISTANT TEST RESULTS GREATER THAN 2000 LBS./SQ.FT.
 - THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE DIRECTION OF THRUST AND TYPE OF FITTINGS.

BORING INSTALLATION	
PIPE CASING SIZE	CARRIER PIPE SIZE
12" 0.375 WALL	4"-6"
16" 0.375 WALL	8"
18" 0.375 WALL	10"
20" 0.375 WALL	12"
24" 0.375 WALL	14"
26" 0.375 WALL	16"
32" 0.375 WALL	18"
36" 0.375 WALL	20"
40" 0.375 WALL	24"



TYPICAL BORING AND CASING DETAIL

- GENERAL NOTES:
- ALL DETAILS ARE TYPICAL AND NOT TO SCALE.
 - PART OF THESE DETAILS MAY NOT APPLY TO THIS PROJECT.
 - ALL DETAILS ARE TYPICAL; CONTRACTOR IS RESPONSIBLE TO MEET THE LATEST INSTALLATION REQUIREMENTS AS PER CITY OF ALTON, AND SHARYLAND WATER SUPPLY CORP. (S.W.S.C.).

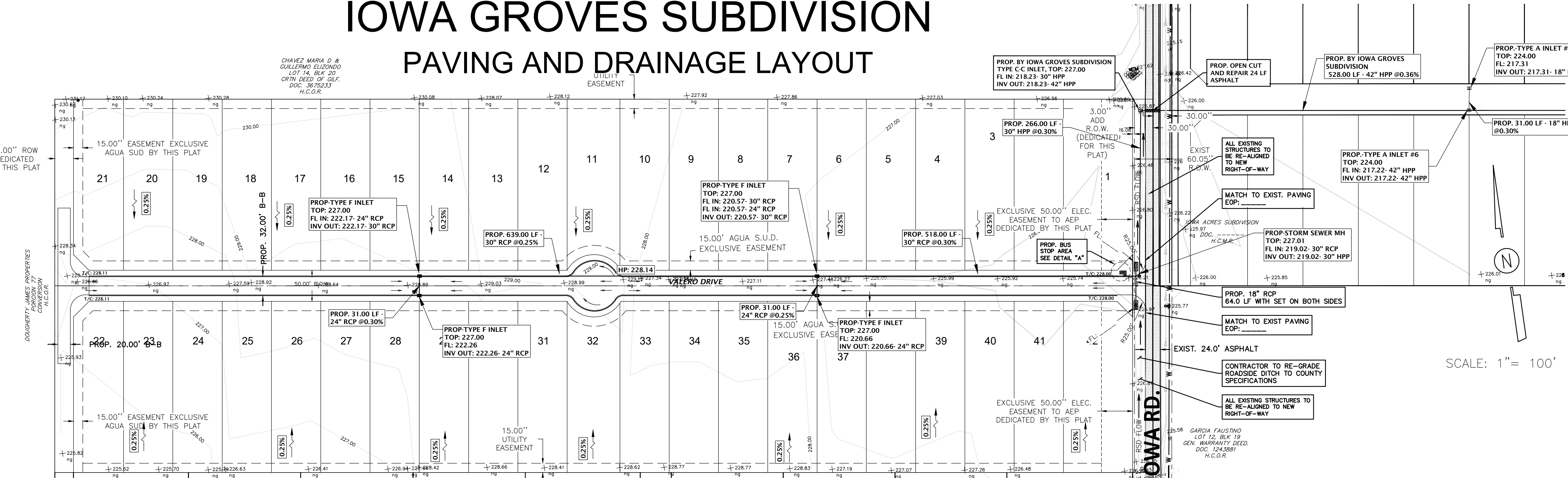
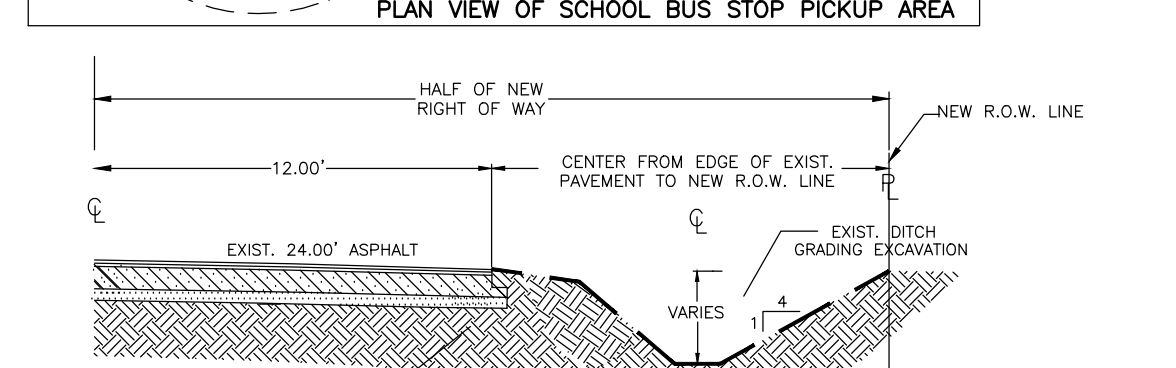
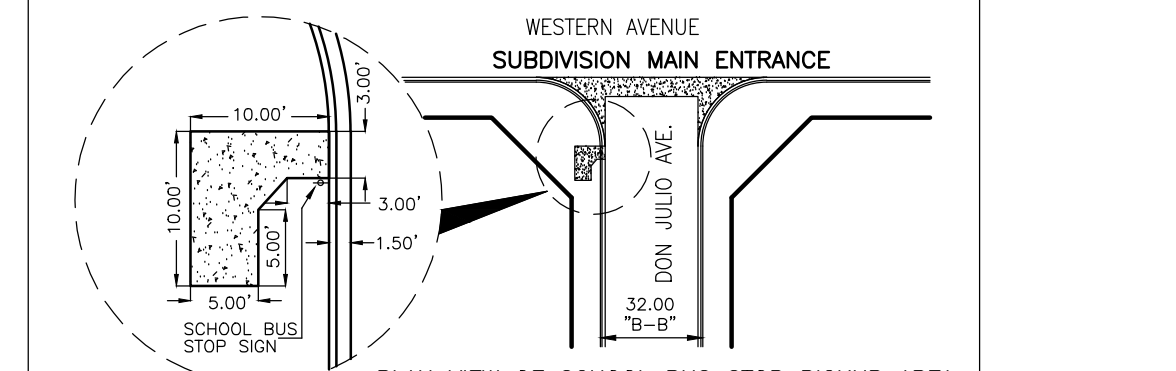
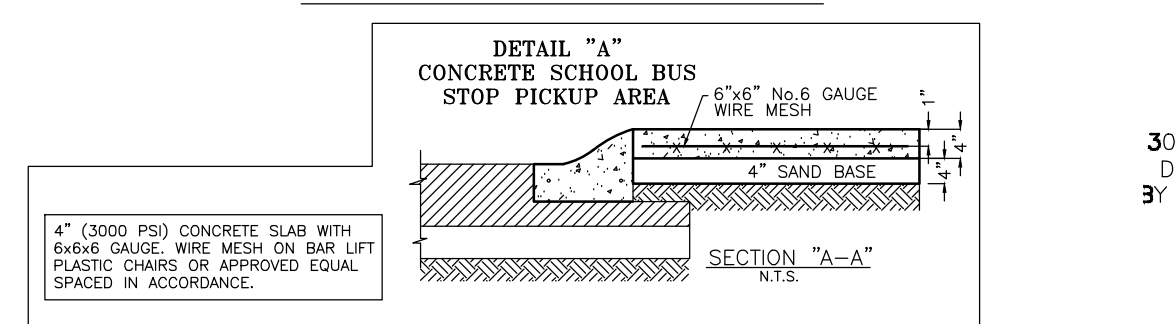
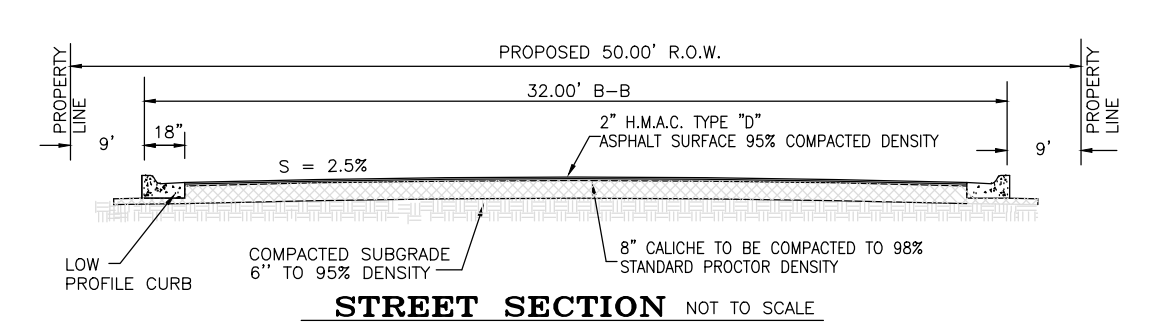


TYPICAL WATER LINE & SEWER FORCE MAIN BEDDING DETAIL

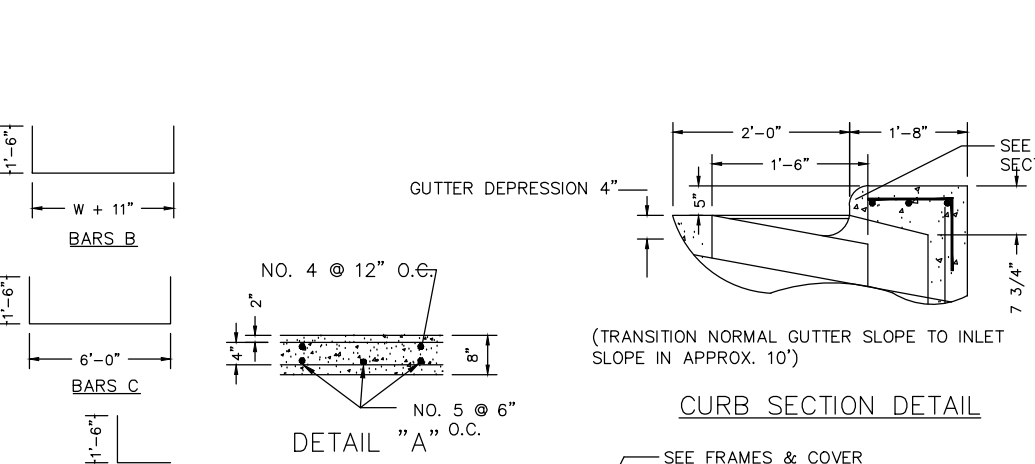
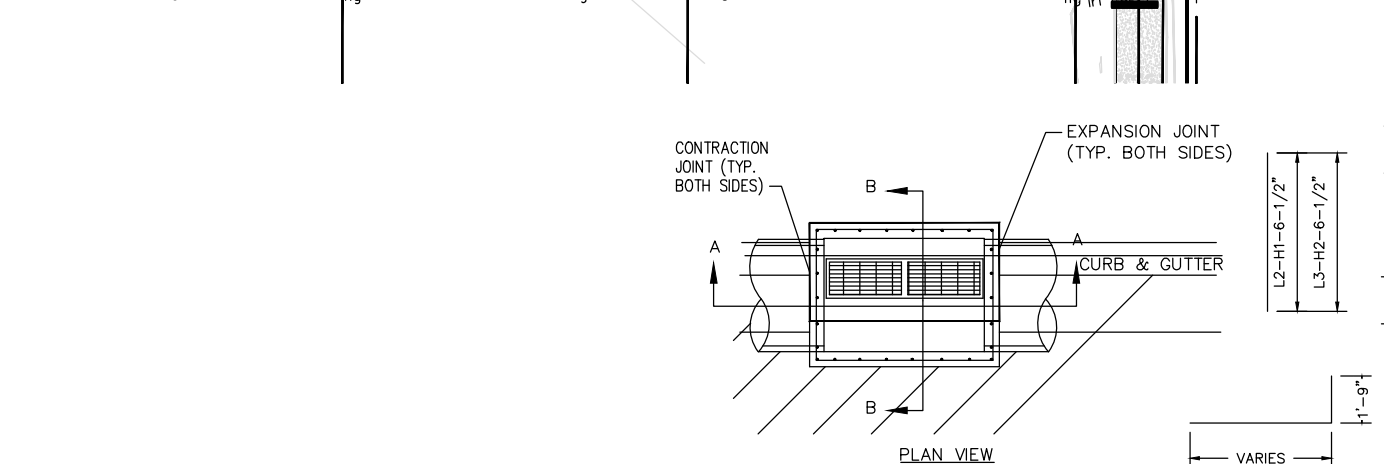
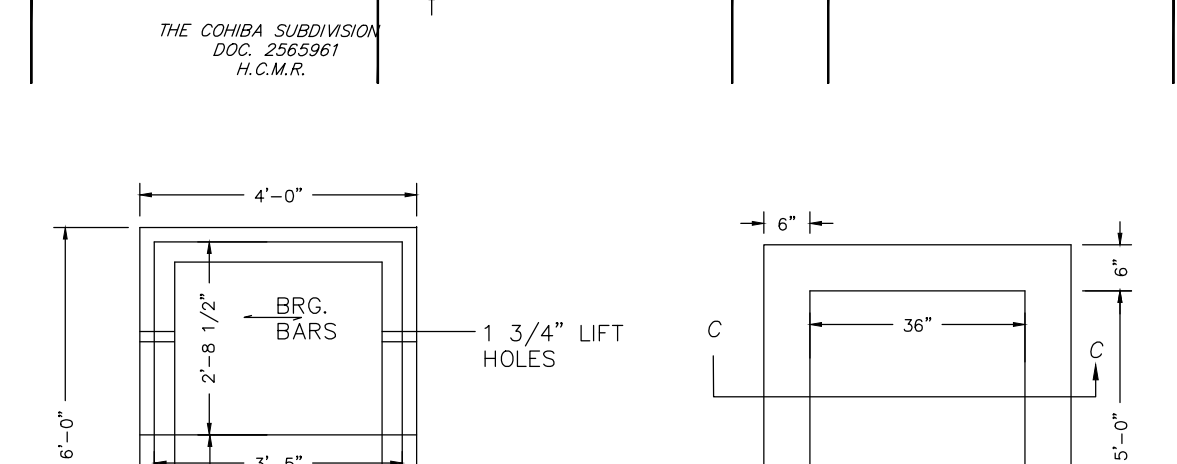
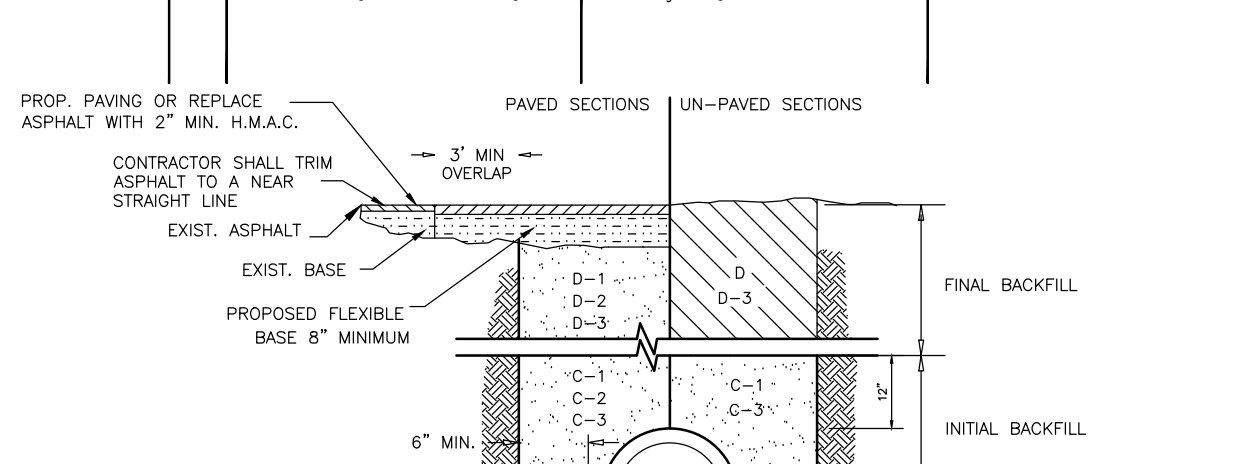
IOWA GROVES SUBDIVISION
TYPICAL WATER SYSTEM DETAILS

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

IOWA GROVES SUBDIVISION PAVING AND DRAINAGE LAYOUT



SCALE: 1" = 100'



PROJECT LOCATION
THE SUBJECT TRACT IS LOCATED WITHIN FLOOD ZONE 'X' (NO SHADING) INDICATES AREAS OF MINIMAL FLOODING. FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 480334 0290 D, MAP REVISED JUNE 6, 2000.

FLOOD PLAN
THE SUBJECT TRACT IS LOCATED WITHIN FLOOD ZONE 'X' (NO SHADING) INDICATES AREAS OF MINIMAL FLOODING. FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 480334 0290 D, MAP REVISED JUNE 6, 2000.

SOIL CONDITIONS
A REVIEW OF THE U.S. SOIL CONSERVATION SURVEY OF HIDALGO COUNTY INDICATES THAT THE PREDOMINANT SOIL OF THE SUBJECT SITE IS CLASSIFIED AS BRENNAN 3 (FINE SANDY LOAM) AND RAMADERO 50 (SANDY CLAY LOAM).

3- BRENNAN FINE SANDY LOAM (HYDROLOGIC GROUP B, UNIFIED CLASS SO), TYPICALLY FOUND WITH 0-1% SLOPES, CONSISTS OF A SURFACE LAYER OF DARK BROWN FINE SANDY LOAM ABOUT 12 INCHES THICK. THE NEXT SOIL LAYER DOWN, FROM 12 TO 28 INCHES, IS BROWN SANDY SILTY LOAM. FROM 28 TO 40 INCHES, IS PALE BROWN SANDY CLAY LOAM. THE SOIL DOWN THEREAFTER TO APPROXIMATELY 80 INCHES IS A VERY PALE BROWN SANDY CLAY LOAM. THIS SOIL (A) IS NONCALCAREOUS DOWN TO 29 INCHES, (B) IS WELL DRAINED, (C) HAS MEDIUM AVAILABLE WATER CAPACITY, (D) HAS MEDIUM SURFACE RUNOFF, (E) HAS MODERATE PERMEABILITY, (F) HAS AN OVERALL LOW SHRINK-SWELL POTENTIAL, (G) HAS A MODERATE HAZARD OF SOIL BLOWING, AND (H) HAS A SLIGHT HAZARD OF WATER EROSION.

50-RAMADERO SANDY CLAY LOAM (HYDROLOGIC GROUP C, UNIFIED CLASS CL-C) TYPICALLY SLOPES RANGE FROM 0% TO 1% AND CONSIST OF A SURFACE LAYER OF DARK GRAYISH BROWN CLAY LOAM ABOUT 18 INCHES THICK. THE NEXT SOIL LAYER DOWN, FROM 18 TO 42 INCHES, IS LIGHT BROWNISH GRAY CLAY LOAM, AND BELOW THAT, FROM 42 TO 72 INCHES, IS PALE BROWN SILTY CLAY LOAM. THIS SOIL (A) IS CALCAREOUS THROUGHOUT, (B) IS MODERATELY WELL DRAINED, (C) HAS MODERATE TO HIGH AVAILABLE WATER CAPACITY, (D) HAS SLOW SURFACE RUNOFF, (E) HAS SLOW PERMEABILITY, (F) HAS A HIGH SHRINK-SWELL POTENTIAL, (G) HAS A SLIGHT HAZARD OF SOIL BLOWING, AND (H) HAS A SLIGHT TO MODERATE HAZARD OF WATER EROSION. SEE ATTACHED SOIL SURVEY OF HIDALGO COUNTY, TEXAS.

IV. EXISTING CONDITIONS
THE SUBJECT TRACT IS CURRENTLY UNDEVELOPED HEAVY BRUSH-LAND. EXISTING RUNOFF FROM THE SUBJECT SITE IS BY FORM OF SHEET OVERLAND FLOW TOWARDS THE WEST TOPOGRAPHIC ELEVATIONS OBTAINED FROM THE SITE INDICATE THAT THE EXISTING TERRAIN HAS A GRADE TO THE WEST APPROXIMATELY (0.46%).

THE RATIONALE METHOD WAS UTILIZED TO DETERMINE THE EXISTING 10-YEAR FREQUENCY EVENT STORM WATER RUNOFF (Q_{EXIST} = 26.38 CFS) FOR THIS SITE.

V. PROPOSED CONDITIONS
UTILIZING THE 50-YEAR FREQUENCY STORM EVENT, AFTER DEVELOPMENT OF THIS SUBDIVISION STORM WATER RUNOFF WILL BE 73.99 CFS WITH AN INCREASED DETENTION VOLUME. IN ACCORDANCE WITH THE COUNTY OF HIDALGO'S DRAINAGE REQUIREMENTS, IS 51,791 CUBIC FEET (1.20 ACRE-FEET) (REFER TO ATTACHED DRAINAGE CALCULATIONS).

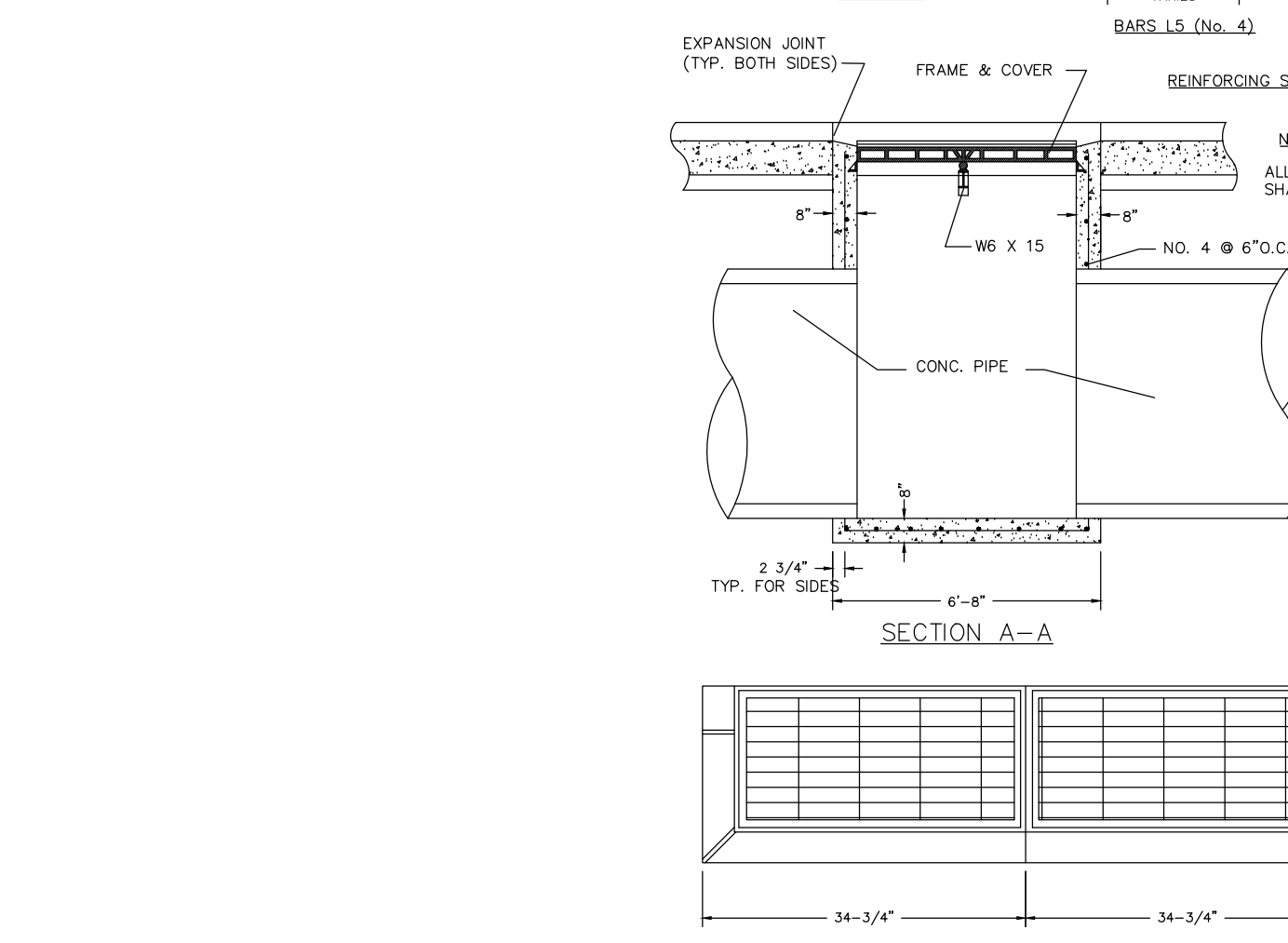
THE PROPOSED DEVELOPMENT SITE'S SURFACE STORMWATER RUNOFF WILL BE COLLECTED BY PROPOSED TYPE 'A-A' INLETS. THE INLETS WILL CONVEY FLOW INTO PROPOSED STORM SEWER LINES, WHICH WILL CONNECT TO THE PROPOSED STORM SYSTEM FOR THE IOWA ACRES SUBDIVISION LOCATED WEST OF IOWA RD. THE PROPOSED STORM SEWER WITHIN IOWA ACRES WILL BE UTILIZED AS NECESSARY TO ACCOMMODATE THE ADDITIONAL FLOW FROM THIS DEVELOPMENT. THE COMBINED SYSTEM WILL ULTIMATELY DISCHARGE INTO A FUTURE POTENTIAL EXTENSION, WHICH IS CURRENTLY OWNED AND MAINTAINED BY IRRIGATION DISTRICT #16. AN ADDITIONAL HCCO1 EAST ROW WILL BE DEDICATED BY IOWA ACRES. THIS REQUIRED DETENTION VOLUME FOR BOTH IOWA ACRES AND IOWA GROVES WILL BE PROVIDED BY EXCAVATING THE ADDITIONAL ROW. A TOTAL OF 102,728.50 CF OF DETENTION VOLUME WILL BE PROVIDED.

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 C.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

TYPE 'C-C' INLET
NOT TO SCALE

COST ESTIMATE

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
OSFS IMPROVEMENTS:	\$
TOTAL:	\$



TYPE 'F' INLET
NOT TO SCALE

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; OWNERS 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. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWCS CERTIFICATION; P&Z CITY CERTIFICATION; REVISION NOTES.

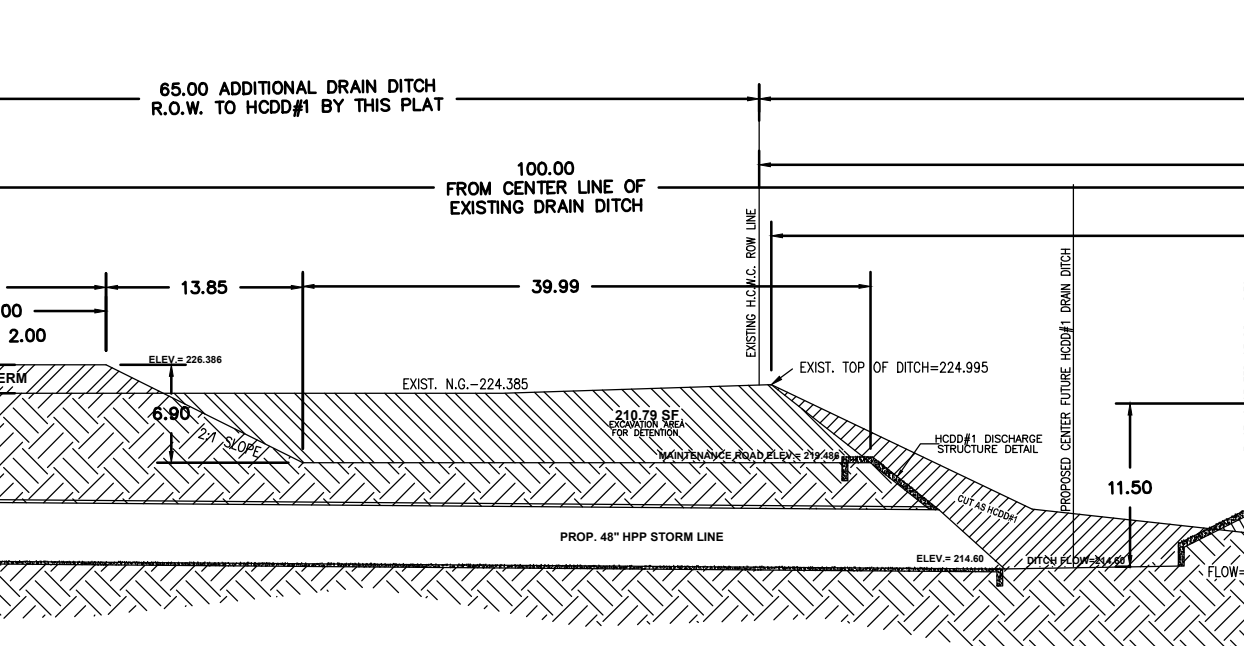
SHEET 2 - WATER DISTRIBUTION MAP, ON-SITE SEWAGE FACILITIES DISTRIBUTION MAP, ENGINEERING REPORT (ENGLISH AND SPANISH VERSIONS), INCLUDING DESCRIPTION OF WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATE AND STATEMENT.

SHEET 2.1 - AGUA SUD DETAIL SHEET

SHEET 3 - 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; DETAILS.

SHEET 4 - STREETLIGHT LAYOUT

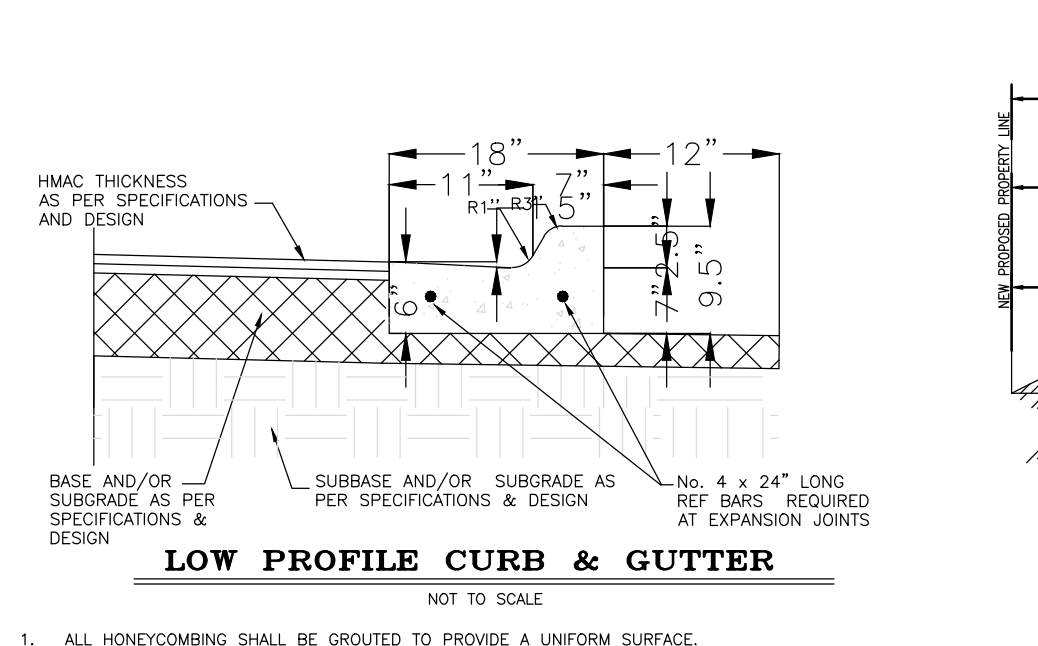
SHEET 5 - EROSION CONTROL PLAN



DRAIN DITCH LINEAR DETENTION EXCAVATION:
210.79 SF x 487.35 LF Drainage Ditch = 102,728.51 CF

IOWA ACRES DETENTION REQUIRED = 47,533 CF
IOWA GROVES DETENTION REQUIRED = 51,791 CF
TOTAL REQUIRED = 99,324 CF
DETENTION PROVIDED = 102,728.51 CF

03/03/26
Gilberto A. Gracia
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.



LOW PROFILE CURB & GUTTER
NOT TO SCALE

1. ALL HONEYCOMBING SHALL BE GROUDED 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 RECOMPACTED 24 HOURS AFTER BACK FORM IS REMOVED OR 48 HOURS AFTER SLP FORMING.
4. CURB AND GUTTER CONCRETE SHALL BE CLASS 'A' (5,000 PSI)
5. REINFORCED STEEL AS SHOWN.
6. MAX. LENGTH OF CURB AND GUTTER SECTION IS 80' BETWEEN 1" EXPANSION JOINT.

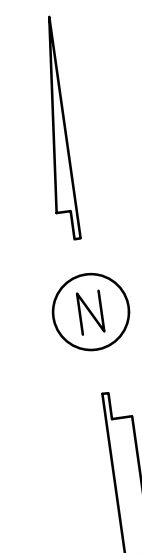
IOWA GROVES SUBDIVISION
PAVING AND DRAINAGE LAYOUT
& STANDARD DETAILS

IZAGUIRRE
Engineering Group LLC.
2121 E GRIFFIN PKWY SUITE 2
MISSION TEXAS, 78574
PHONE (956) 584-0554
FAX (956) 584-0049
F-10214
SHEET NO. 3
OF 5 SHEETS

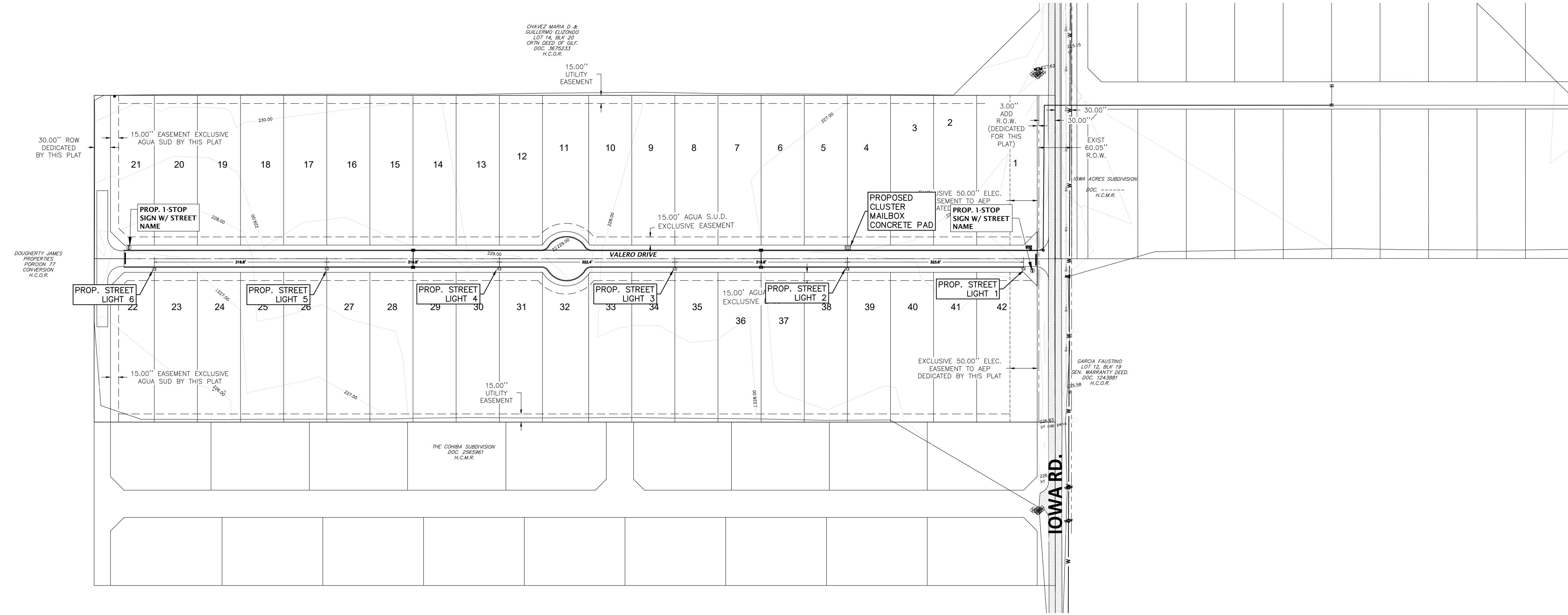
DATE OF PREPARATION:
03/03/26



IOWA GROVES SUBDIVISION STREET LIGHT LAYOUT



SCALE: 1" = 100'



PROPOSED STREET LIGHT FIXTURES

THE STREET LIGHT FIXTURES FOR RESIDENTIAL STREETS ARE TO CONSIST OF 250 WATT HIGH PRESSURE SODIUM, COBRA TYPE FIXTURES WITH 6' EXTENSIONS MOUNTED ON 35' CONCRETE STANDARD.

SIGN LOCATION DETAIL

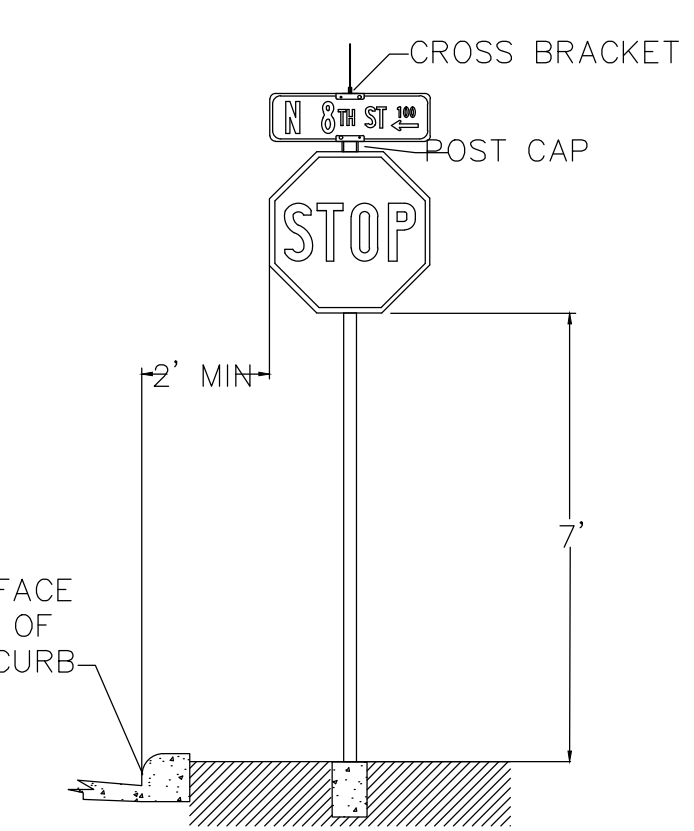
WARNING/ SPEED LIMIT SIGNS TYPICALLY CENTERED ON PROPERTY LINE
SPEED LIMIT SIGNS TYPICALLY 100 - 200 FT FROM INTERSECTION

SIGN LOCATION STANDARDS

NOT TO SCALE

GENERAL NOTES

- CONTRACTOR IS RESPONSIBLE FOR LOCATING SPRINKLERS AND UTILITIES PRIOR TO INSTALLATION
- SIGN SHALL BE INSTALLED ACCORDING TO APPROVED PLAN SHEETS
- ANY DAMAGE TO EXISTING FENCES, WALLS, OR PRIVATE PROPERTY SHALL BE REPAIRED BY AND AT THE EXPENSE OF THE CONTRACTOR
- THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING PREINSTALLATION AND POST INSTALLATION INSPECTS THROUGH THE CITY'S DESIGNATED INSPECTOR 24 HOURS PRIOR TO INSPECTION DURING NORMAL WORKING HOURS, MONDAY THROUGH FRIDAY



SIGN CLEARANCE DETAIL

- 2-3/8" OD 12 GA. GALVANIZED STEEL SIGN POST
- STREET NAME SIGNS TO HAVE 3/8" X 1" HEX HEAD SET SCREW THROUGH BRACKET ON SIGN CAP AND CROSS
- MAINTAIN 32" ADA CLEARANCE ON ALL SIDEWALKS
- INSTALL AT LEAST FIVE FEET AWAY FROM WOOD POWER POLES
- INSTALL POST AT LEAST THREE FEET AWAY FROM ALL FIRE HYDRANTS

INDEX OF SHEETS

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- SHEET 4.- STREETLIGHT LAYOUT
- SHEET 5.- EROSION CONTROL PLAN

DATE OF PREPARATION:

3-3-2026

IOWA GROVES SUBDIVISION
STREETLIGHT LAYOUT

IZAGUIRRE
Engineering Group LLC.

2121 E GRIFFIN PKWY SUITE 2
MISSION TEXAS, 78574

F-10214
PHONE (956) 584-0554
FAX (956) 584-0049

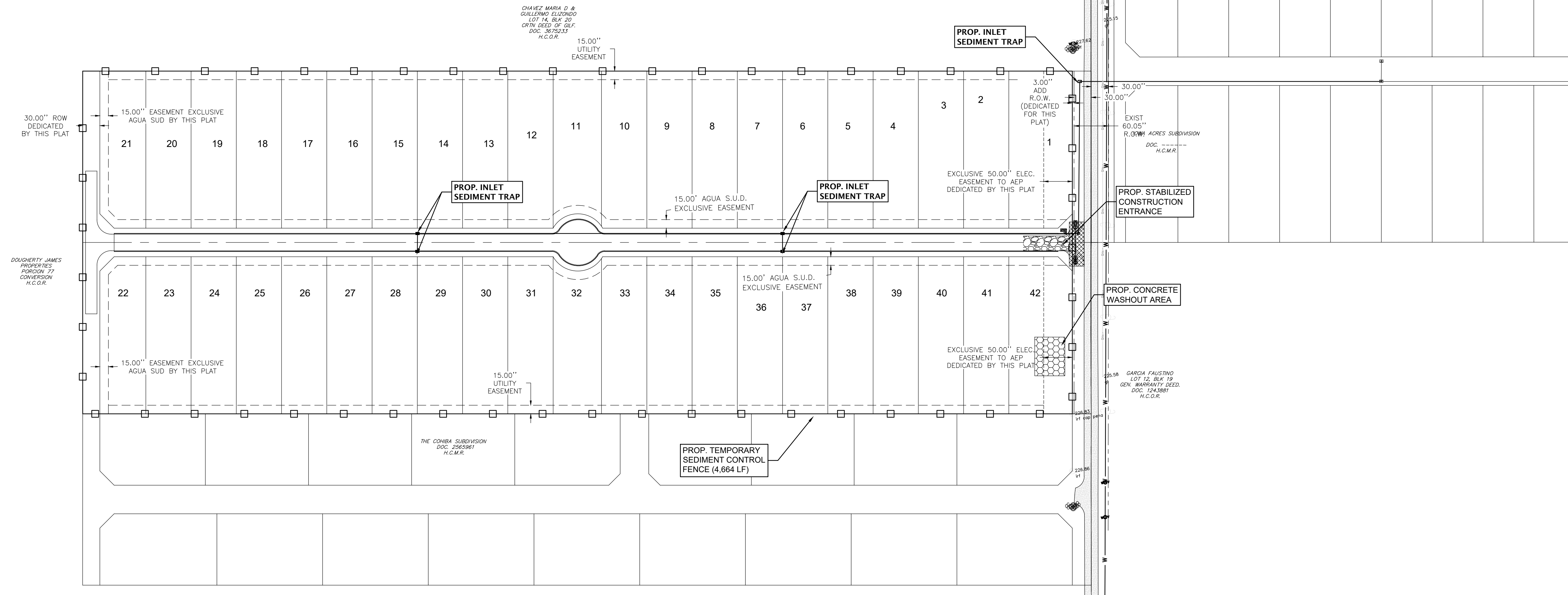
SHEET NO. 4
OF 5 SHEETS

IOWA GROVES SUBDIVISION EROSION CONTROL PLAN

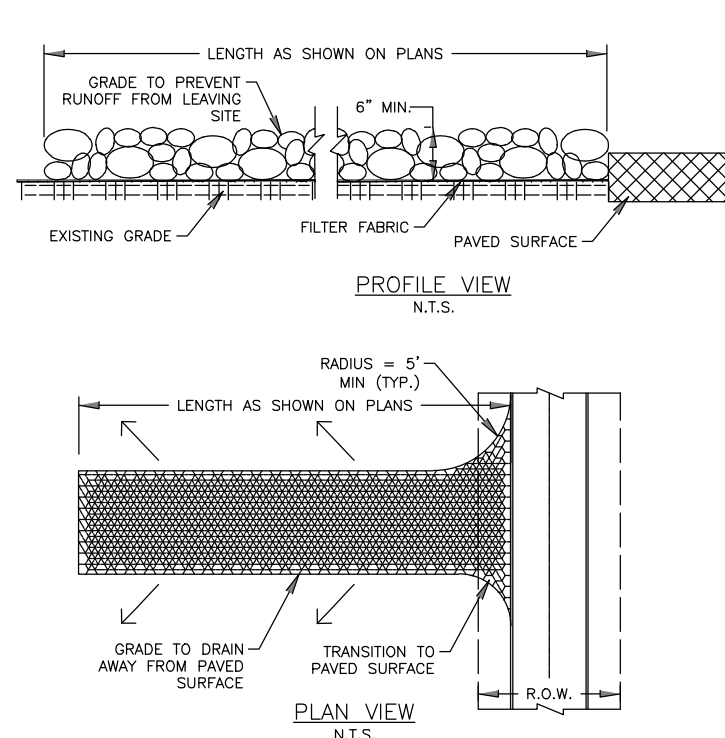
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SCALE: 1" = 100'

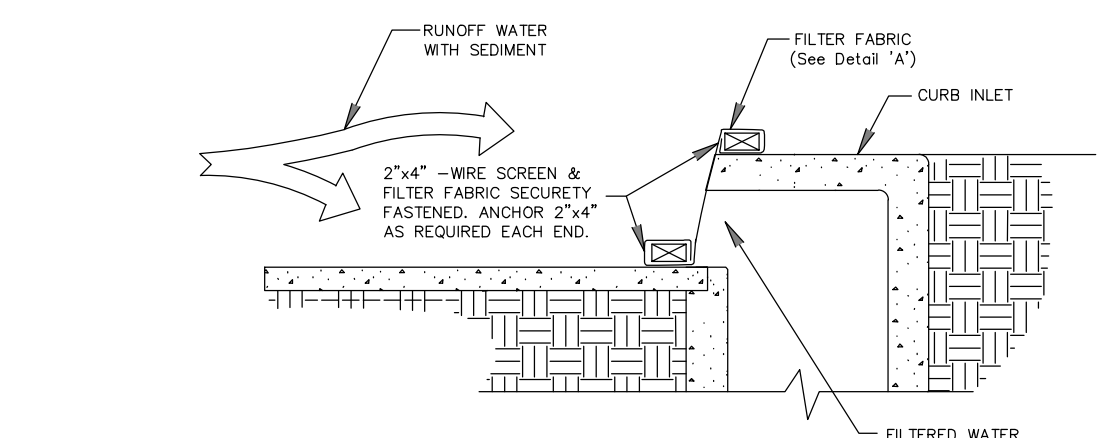
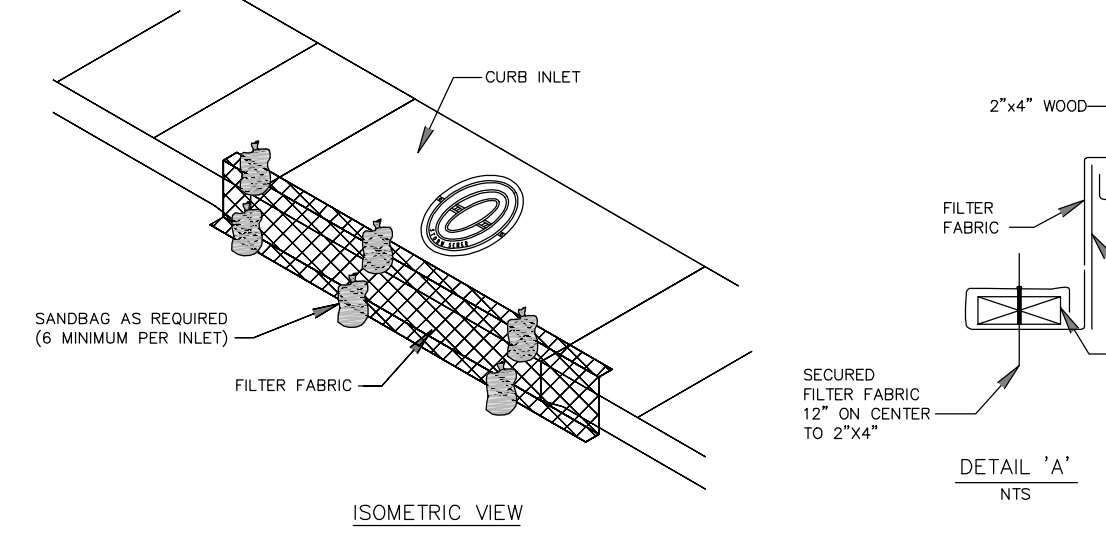


IOWA GROVES SUBDIVISION EROSION CONTROL PLAN

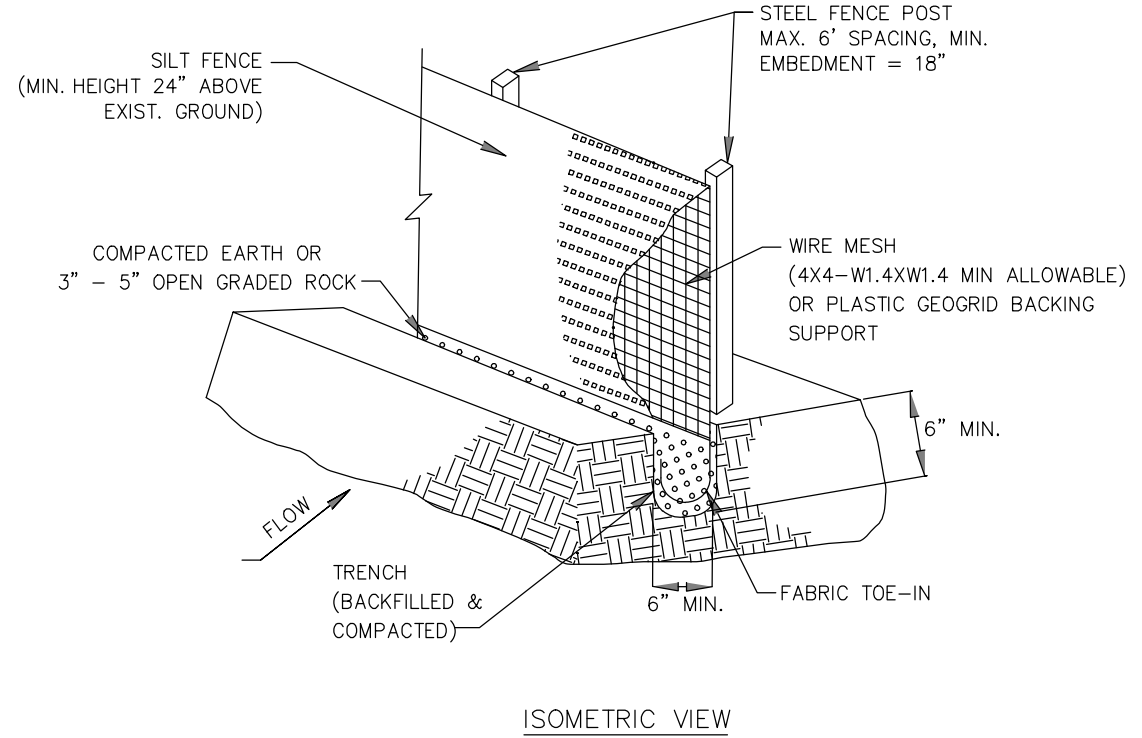


DISTURBED AREA	MINIMUM EXIT DIMENSIONS	
	MIN. WIDTH OF EXIT	MIN. LENGTH OF EXIT
< 1 ACRE BUT < 5 ACRE	15 FEET	20 FEET
≥ 5 ACRES	25 FEET	50 FEET
≥ 5 ACRES	30 FEET	50 FEET

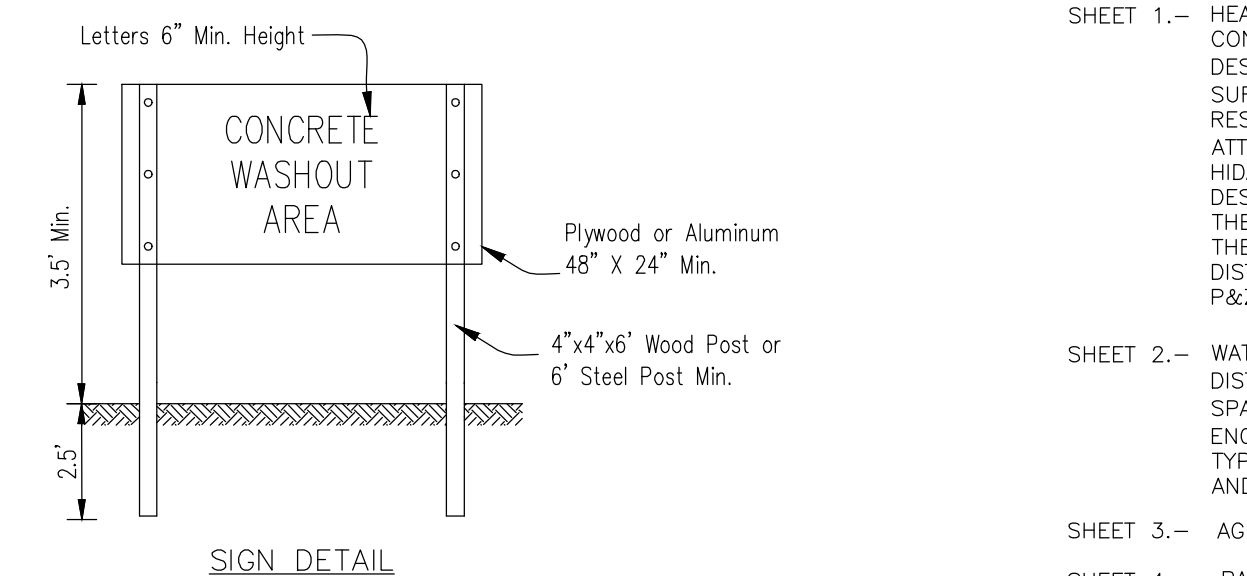
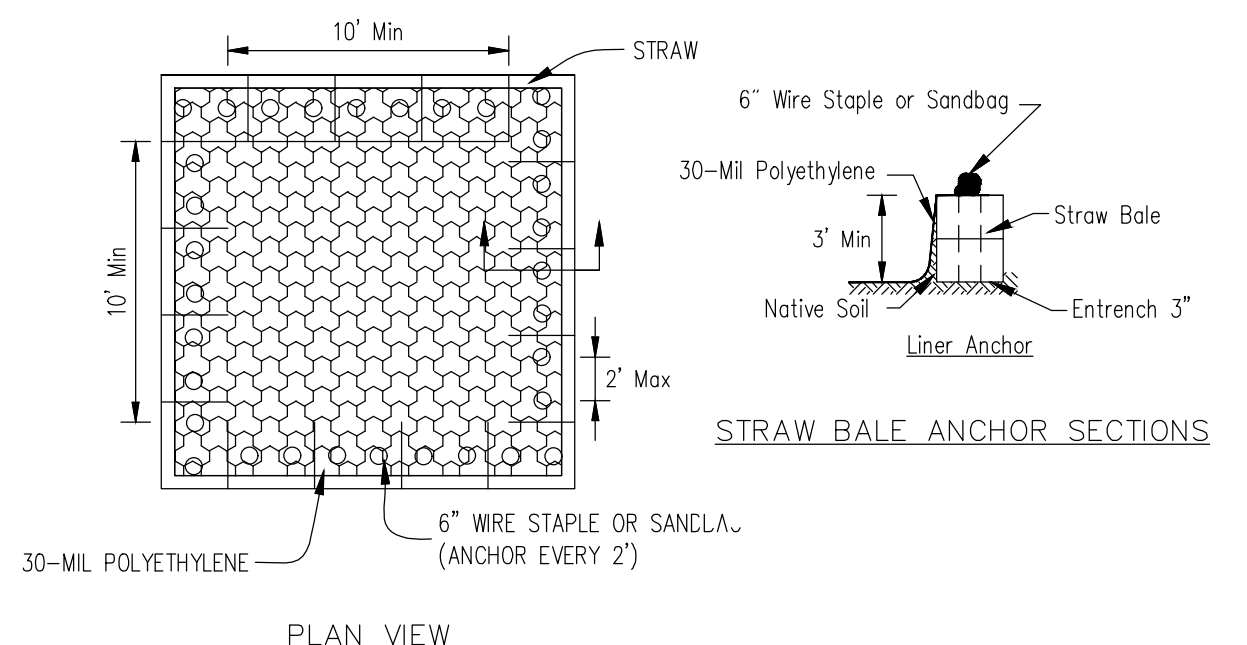
- STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:**
1. LIMIT SITE ACCESS TO ONE ROUTE DURING CONSTRUCTION. IF POSSIBLE, TWO ROUTES FOR LINEAR AND LARGER PROJECTS.
 2. PREVENT TRAFFIC FROM AVOIDING OR SHORTCUTTING THE FULL LENGTH OF THE CONSTRUCTION EXIT BY INSTALLING BARRIERS. BARRIERS MAY CONSIST OF SILT FENCE, CONSTRUCTION SAFETY FENCING, OR SIMILAR BARRIERS.
 3. DESIGN THE ACCESS POINT(S) TO BE AT THE UPSLOPE SIDE OF THE CONSTRUCTION SITE. DO NOT PLACE CONSTRUCTION ACCESS AT THE LOWEST POINT ON THE CONSTRUCTION SITE.
 4. STABILIZED CONSTRUCTION EXITS ARE TO BE CONSTRUCTED SUCH THAT DRAINAGE ACROSS THE EXIT IS DIRECTED TO A CONTROLLED, STABILIZED OUTLET ON-SITE WITH PROVISIONS FOR STORAGE, PROPER FILTRATION, AND REMOVAL OF WASH WATER.
 5. THE EXIT MUST BE SLOPED AWAY FROM THE PAVED SURFACE SO THAT STORM WATER FROM THE SITE DOES NOT DISCHARGE THROUGH THE EXIT ONTO ROADWAYS.
 6. MINIMUM WIDTH OF EXIT SHALL BE 15 FEET.
 7. THE CONSTRUCTION EXIT MATERIAL SHALL BE A MINIMUM THICKNESS OF 6 INCHES. THE STONE OR RECYCLED CONCRETE USED SHALL BE 3-6 INCHES IN SIZE WITH LITTLE OR NO FINES.
 8. THE GEO-TEXTILE FABRIC MUST MEET THE FOLLOWING CRITERIA:
 - TENSILE STRENGTH, ASTM D4632 TEST METHOD FOR GRAB BREAKING LOAD AND ELONGATION OF GEO-TEXTILES, 300 LBS.
 - PUNCTURE STRENGTH, ASTM D4833 TEST METHOD FOR INDEX PUNCTURE RESISTANCE OF GEO-TEXTILES, GEO-MEMBRANES, AND RELATED PRODUCTS, 120 LBS.
 - MULLEN BURST RATING, ASTM D3786 STANDARD TEST METHOD FOR HYDRAULIC BURSTING STRENGTH OF TEXTILE FABRICS-DIAPHRAGM BURSTING STRENGTH TESTER METHOD, 600 PSI.
 - APPARENT OPENING SIZE, ASTM D4751 TEST METHOD FOR DETERMINING APPARENT OPENING SIZE OF A GEO-TEXTILE, U.S. SIEVE NO. 40 (MAX).
 9. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
 10. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.



- NOTE:**
1. FILTER FABRIC CURB INLET PROTECTION TO BE REMOVED WHEN SITE IS FULLY STABILIZED.
 2. FILTER FABRIC TO BE CLEANED AFTER EACH RAIN EVENT.
 3. 2"x4" LUMBER TO BE CUT AS REQUIRED TO FIT CONTOURS OF CUTTER LINE.
 4. ALL BAGS TO BE USED FOR INLET PROTECTION TO BE U.V. RESISTANT.



- SILT FENCE NOTES:**
1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED WITH A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 18".
 2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE, AS NECESSARY, TO PREVENT FLOW UNDER FENCE.
 3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED.
 4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO BACKING SUPPORT, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. FABRIC SHALL OVERLAP AT ABUTTING ENDS A MINIMUM OF 3 FEET AND SHALL BE JOINED SUCH THAT NO BYPASS OR LEAKAGE OCCURS.
 5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.



- NOTES:**
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
 2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
 3. Each straw bale is to be staked in place using (2) 2"x2"x4" wooden stakes.

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; OWNERS DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT TO THE PROJECT IS SITUATED; H.C.D.D. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWSC CERTIFICATION; P&Z CITY CERTIFICATION; REVISION NOTES.
SHEET 2.-	WATER DISTRIBUTION MAP, ON-SITE SEWAGE FACILITIES 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 CERTIFICATE AND STATEMENT.
SHEET 3.-	AGUA SUD DETAIL SHEET
SHEET 4.-	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.
SHEET 5.-	STREETLIGHT LAYOUT
SHEET 6.-	EROSION CONTROL PLAN

EROSION CONTROL DETAILS
STABILIZED CONSTRUCTION ENTRANCE / EXIT

EROSION CONTROL DETAILS
FILTER FABRIC CURB INLET PROTECTION

EROSION CONTROL DETAILS
TEMPORARY SILT FENCE

TEMPORARY CONCRETE
WASHOUT FACILITY

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IZAGUIRRE
Engineering Group LLC.

2121 E. GRIFFIN PKWY SUITE 2
MISSION TEXAS, 78574

PHONE (956) 584-0554
FAX (956) 584-0049

F-10214