



# HIDALGO COUNTY PLANNING DEPARTMENT

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

T.J. Arredondo  
Director of Planning

## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 5-30-2023

PROPOSED G.E.O. SUBDIVISION, PRECINCT No. 3

ENGINEER QUINTANILLA HEADLEY & ASSOCIATES DEVELOPER: ANTIOCO G. CANTU GARZA

PRELIMINARY APPROVAL  FINAL APPROVAL  FINAL APPROVAL WITH FINANCIAL GUARANTEE  WITH VARIANCE

NUMBER OF LOTS: 4  \*SINGLE FAMILY  \*MULTI-FAMILY  COMMERCIAL  INSTITUTIONAL

ESTIMATED NUMBER OF STREETLIGHTS: N/A

FILLING STATIONS: 1

LOCATION DESCRIPTION: EAST SIDE OF DOFFING ROAD, APPROXIMATELY ¼ MILE NORTH OF MILE 3 NORTH ROAD.

SUBDIVISION LIES WITHIN THE:  ETJ OF CITY OF MISSION

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 12-19-2022 PROPERTY LIES WITHIN FLOOD ZONE: "C" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY NATURAL PERCULATION AND DETENTION WILL BE PROVIDED BY DETENTION SWALE OVERFLOWING TO A TXDOT SYSTEM.

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

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 1-6-2023 BY, PRECINCT 3 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 1-20-2023 BY, ENVIRONMENTAL HEALTH DIVISION MANAGER

SEWER SYSTEM:  OSSF

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

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 1-6-2023: 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: N/A

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.*

G.E.O. SUBDIVISION

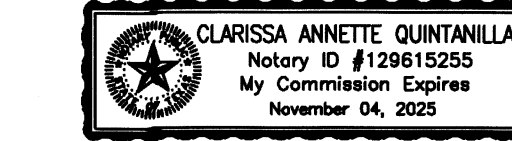
A 7.47 ACRE TRACT OF LAND BEING THE SOUTH 7.47 ACRES (DEED RECORD: 7.50 ACRES) OF LOT 1, NICK DOFFING SUBDIVISION No.5, HIDALGO COUNTY, TEXAS, ACCORDING TO THE PLAT OR MAP THEREOF RECORDED IN VOLUME 1, PAGE 2, MAP RECORDS HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 3299901, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS

STATE OF TEXAS COUNTY OF HIDALGO OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION WE, ANTOCOO G. CANTU GARZA, OWNERS OF THE 7.47 ACRES TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED G.E.O. SUBDIVISION, 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; AND (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.

ANTOOCO G. CANTU GARZA DATE 5909 REDBIRD ST. EDINBURG, TEXAS 78542 HIDALGO COUNTY

BEFORE ME, the undersigned notary public, on this day personally appeared ANTOCOO G. CANTU GARZA proved to me through his 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 he executed the same for the purpose and consideration thereby expressed.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.



CLARISSA ANNETTE QUINTANILLA - NOTARY PUBLIC

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

WE THE UNDERSIGNED CERTIFY that this plat of the G.E.O. SUBDIVISION was reviewed and approved by the Hidalgo County Commissioners Court on \_\_\_\_\_

Hidalgo County Judge Date Hidalgo County Clerk Date

PLANNING & ZONING COMMISSION CERTIFICATION

I, the undersigned, Chairperson of the Planning and Zoning Commission of the City of Mission, hereby certify that this subdivision plat known as G.E.O. SUBDIVISION conforms to all requirements of the Subdivision Regulations of this City wherein my approval is required and has been approved for recording on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

CHAIRPERSON-PLANNING & ZONING COMMISSION

AGUA SPECIAL UTILITY SUPPLY DISTRICT CERTIFICATE

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

ROBERTO SALINAS DATE GENERAL MANAGER AGUA SPECIAL UTILITY DISTRICT

THIS PLAN IS HEREBY APPROVED BY THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 SUBJECT TO THE CONDITION THAT IF IRRIGATION FROM THE SAID DISTRICT IS DESIRED TO THE INDIVIDUAL LOTS IN SAID SUBDIVISION, PROVISION SHALL BE MADE FOR APPROPRIATE EASEMENT FOR THE INSTALLATION OF NECESSARY IRRIGATION FACILITIES TO SUCH LOT FROM INDIVIDUAL LOTS IN SAID SUBDIVISION. PROVISION SHALL BE MADE FOR APPROPRIATE EASEMENT FOR THE INSTALLATION OF NECESSARY IRRIGATION FACILITIES TO SUCH LOTS FROM THE CLOSEST WATER DISTRICT DELIVERY POINT AND IT SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY TO INSTALL SUCH NECESSARY FACILITIES.

PRESIDENT DATE SECRETARY DATE

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

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

HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL

I, THE UNDERSIGNED, CERTIFY THAT THIS G.E.O. SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON \_\_\_\_\_ ENVIRONMENTAL HEALTH DIVISION MANAGER DATE

QUINTANILLA, HEADLEY AND ASSOCIATES, INC. CONSULTING ENGINEERS

124 E. STUBBS ST. EDINBURG, TEXAS 78539 ENGINEERING REGISTRATION NUMBER F-1513 SURVEYING REGISTRATION NUMBER 100411-00

LAND SURVEYORS PHONE 956-381-6480 FAX 956-381-0527 ALFONSO@QHA-ENG.COM DATE OF PREPARATION MARCH 12, 2022

Table with columns: SHEET NO. 1 OF 2 SHEETS, DATE PREPARED, PREPARED BY, CHECKED BY, APPROVED BY, DATE REVISION, REVISION BY, CHECKED BY, APPROVED BY.

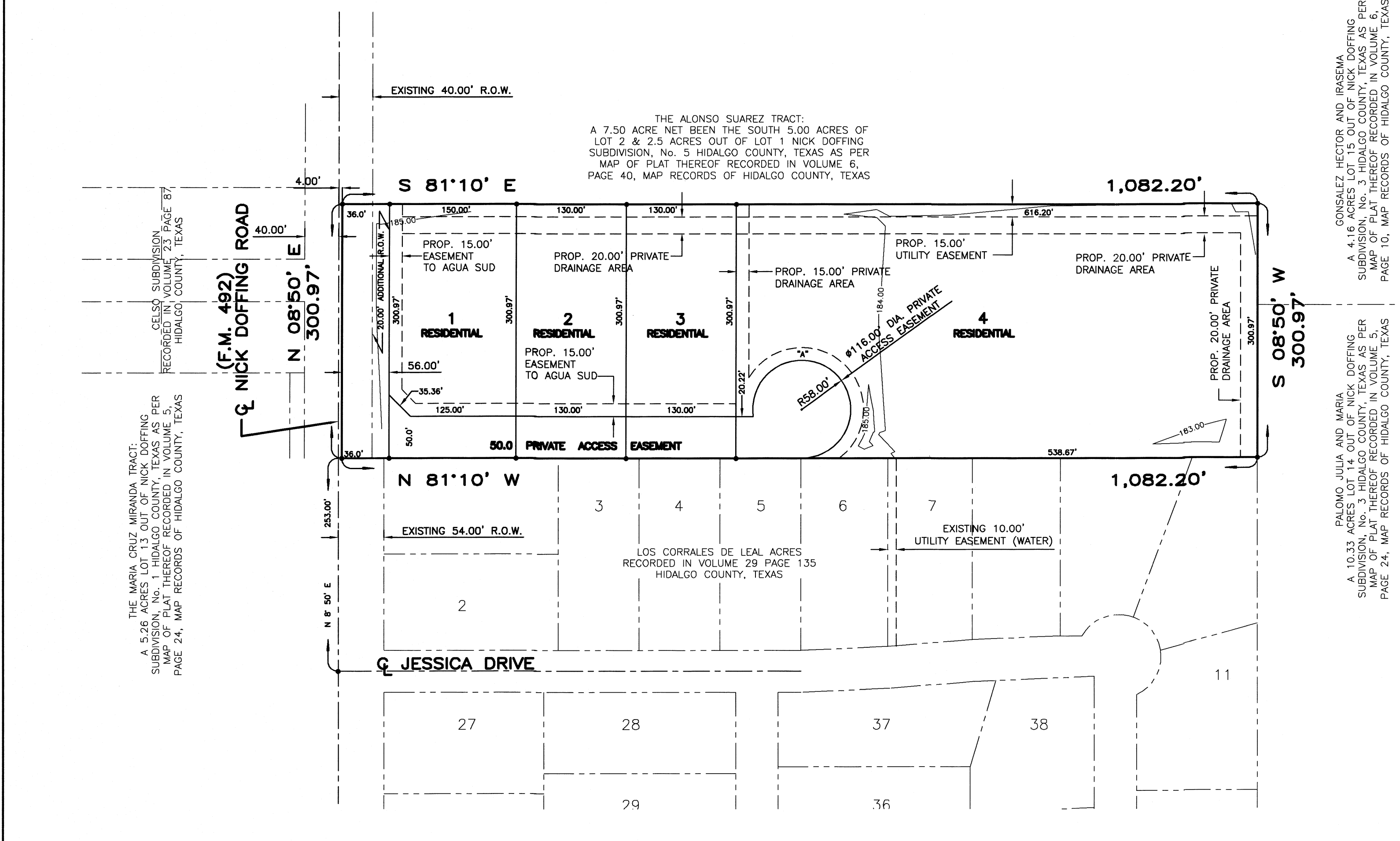
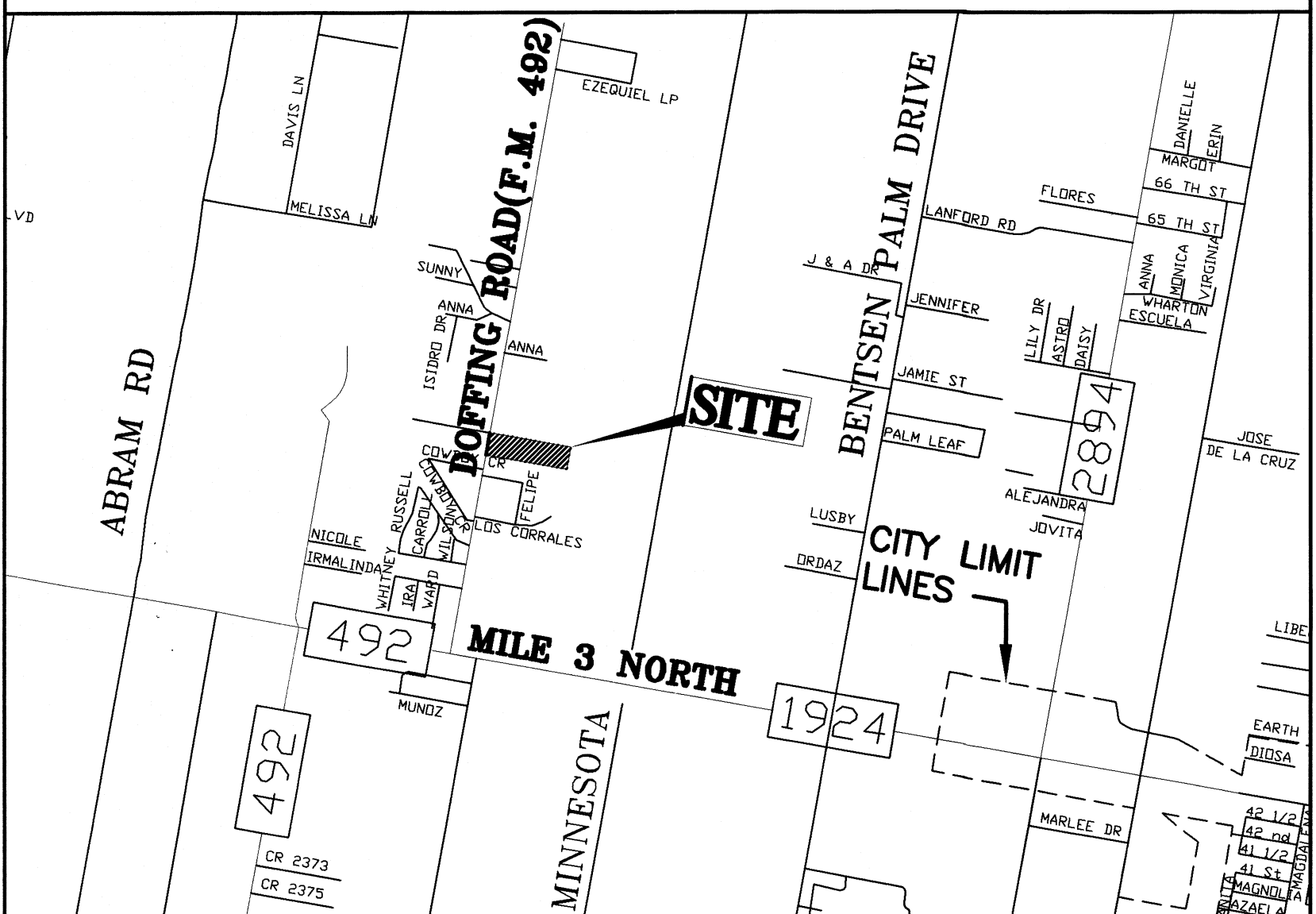


Table with columns: LOT, AREA (S.F.), AC, CURVE DATA (CURVE, DELTA, RADIUS, ARC LENGTH, CHORD LENGTH).

- PLAT NOTES AND RESTRICTIONS: 1.- FLOOD ZONE DESIGNATION: ZONE "C" AREAS OF MINIMAL FLOODING (NO SHADING) COMMUNITY-PANEL NUMBER 480334 0400 C MAP REVISED: NOVEMBER 16, 1982. 2.- MINIMUM BUILDING SETBACKS: FM 492 DOFFING ROAD: 25.00 FEET FRONT: 25.00 FEET REAR: 15.00 FEET SIDE: 6.00 FEET CORNER SIDE: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER ON ALL CASES. 3.- GENERAL NOTE FOR SINGLE FAMILY RESIDENTIAL: NO MORE THAN ONE-SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON LOTS 1-4. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS, APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPANCY OF THE LOT. THERE SHALL BE NO OTHER USE. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACT FOR DEEDS, APPLICATIONS FOR CONSTRUCTION APPROVED BY THE PLANNING DEPARTMENT, HEALTH DEPARTMENT AND FIRE MARSHALL ARE REQUIRED PRIOR TO OCCUPANCY OF THE LOT. 4.- MINIMUM FINISH FLOOR NOTE: MINIMUM FINISH FLOOR ELEVATION SHALL BE 18" ABOVE CENTERLINE OF THE STREET OR 18" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME 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. 5.- BENCHMARK NOTE: THE FOLLOWING BENCHMARK IS IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS. B.M. No.1 - ELEV=185.12 LOCATED ON FOUND 1/2" IRON ROD 36.0 FEET EAST OF THE SOUTHWEST OF THIS PROPERTY NAVD 88 DATUM 6.- 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 32,783.30 CUBIC FEET (0.75 ACRE FEET) OF STORM WATER RUNOFF. DRAINAGE DETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: SEE DRAINAGE REPORT ON SHEET No. 3. DRAINAGE DETENTION \_\_\_\_\_ CUBIC- FEET \_\_\_\_\_ ACRE FEET DRAINAGE DETENTION TO BE PROVIDED ON SITE LOCATED ON EACH LOT. LOT OWNER SHALL BE RESPONSIBLE TO MAINTAIN THE DETENTION AREA LOCATED ON THEIR LOT. 7.- THE DEVELOPER SHALL BE RESPONSIBLE TO INSTALL DRIVEWAY WITH CULVERT OF REINFORCED CONCRETE PIPE OF NO LESS THAN 15 INCHES IN DIAMETER AND 24 FEET IN LENGTH 8.- THERE ARE NO WATER WELLS WITHIN 150 FEET FROM THE BOUNDARIES ON THIS SUBDIVISION 9.- LEGEND \* - DENOTES 1/2" IRON ROD SET WITH PLASTIC CAP STAMPED RPLS 4856, UNLESS OTHERWISE NOTED. 10. 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. LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY: G.E.O. SUBDIVISION IS LOCATED IN SOUTHWEST HIDALGO COUNTY ON THE EAST SIDE OF DOFFING ROAD (FM 492), AND NORTH OF MILE 3 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 84,859). G.E.O. SUBDIVISION LIES APPROXIMATELY 2 MILES FROM THE CITY LIMITS AND IT IS WITHIN THE CITY'S 3 1/2 EXTRA-TERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE § 42.021. IT LIES IN PCT. 3. PRINCIPAL CONTACTS: Name Address City & Zip Phone Fax OWNER: ANTOCOO G. CANTU GARZA 5909 REDBIRD ST. EDINBURG, TX 78539 ENGINEER: EULALIO RAMIREZ 124 E. STUBBS EDINBURG, TX 78539 (956)381-6480 (956)381-0527 SURVEYOR: ALFONSO QUINTANILLA 124 E. STUBBS EDINBURG, TX 78539 (956)381-6480 (956)381-0527

LOCATION MAP SCALE 1" = 2000'



MAP OF WATER DISTRIBUTION SYSTEM AND SEWER SYSTEM/ MAPA DE DISTRIBUCION DE AGUA Y SISTEMA DE DRENAJE

SUBDIVISION PLAT OF:

G.E.O SUBDIVISION

A 7.47 ACRE TRACT OF LAND BEING THE SOUTH 7.47 ACRES (DEED RECORD: 7.50 ACRES) OF LOT 1, NICK DOFFING SUBDIVISION No.5, HIDALGO COUNTY, TEXAS, ACCORDING TO THE PLAT OR MAP THEREOF RECORDED IN VOLUME 1, PAGE 2, MAP RECORDS HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 3299901, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS

FINAL ENGINEERING REPORT FOR G.E.O SUBDIVISION :

By ALFONSO QUINTANILLA P.E.  
 WATER SUPPLY: Description and Costs.  
 G.E.O SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND AGUA SUD HAVE ENTERED INTO A CONTRACT IN WHICH AGUA SUD PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND AGUA SUD HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THE SUBDIVISION. AGUA SUD HAS AN EXISTING 8" DIAMETER WATERLINE LOCATED ON THE WEST SIDE OF DOFFING ROAD (F.M. 492). FROM THE 8" DIAMETER WATERLINE 4-1" SINGLE SERVICE LINES WILL RUN TO THE WATER METERS OF EACH LOT.  
 WATER SYSTEM FOR G.E.O SUBDIVISION CONSISTS OF AN 8" WATER LINE THAT TIES IN TO EXISTING 8" WATER LINE ALONG THE WEST SIDE OF DOFFING ROAD (F.M. 492). THE 8" DIAMETER WATERLINE RUNS EAST THROUGH A 15' EASEMENT TO AGUA SUD, ENDING WITH A 2" FLUSH VALVE.  
 THE 8" WATER LINE, THE 4-1" SINGLE SERVICE LINES AND THE WATER METER BOXES HAVE BEEN INSTALLED AT A TOTAL COST OF \$ OR \$ PER LOT. IN ADDITION, THE SUBDIVIDER WILL PAY AGUA SUD THE SUM OF \$ OR \$ PER LOT AS STATED IN THE INVESTIGATION REPORT \$ OR \$ PER LOT. AND 30 YEAR WATER SERVICE AGREEMENT \$ WHICH SUM REPRESENTS THE TOTAL COST OF WATER METERS, RIGHTS ACQUISITION FEES AND ALL MEMBERSHIPS OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO AGUA SUD. UPON REQUEST BY THE LOT OWNER OF A LOT, AGUA SUD WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED ONE (1) FIRE HYDRANT AT A UNIT COST OF \$ FOR A TOTAL COST OF \$. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY AGUA SUD AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES: Description and Costs.

SEWAGE FROM G.E.O 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 001121) HAS CONDUCTED THE NECESSARY INSPECTIONS 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 SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE UNITED STATES OF AGRICULTURE SOIL CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM. THE SITE EVALUATOR (LICENSE NUMBER OS 001121) HAD FOUR (4) TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS 1, 2, 3 AND 4. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMITED AREA) THE SOIL REPORT AS PREPARED BY THE SITE EVALUATOR (LICENSE NUMBER OS 001121) INDICATES A FINE SANDY LOAM (WITH TEXTURE CLASS II) EXTENDING MORE THAN 24" BELOW THE BOTTOM OF ANY EXIST EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF'S HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ . THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON 2023.

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 ESTIMATED COSTS FOR CONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DESCRIBED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES— THESE FACILITIES FULLY CONSTRUCTED WILL COST, WITH INSTALLATION OF WATER METERS, AT A TOTAL COST OF \$ OR \$ PER LOT.

SEWAGE FACILITIES— THESE FACILITIES FULLY CONSTRUCTED WILL COST A GRAND TOTAL OF \$ WHICH EQUALS TO \$ PER LOT.



Signature of Alfonso Quintanilla P.E.  
 ALFONSO QUINTANILLA  
 P.E. No. 95534  
 DATE 5-2-23

FINAL ENGINEERING REPORT FOR G.E.O SUBDIVISION :

By ALFONSO QUINTANILLA P.E.  
 AGUA: Descripción y Gastos.

G.E.O SUBDIVISION SERA PROVISITA DE AGUA POTABLE POR LA COMPAÑIA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL DUEÑO DE LA SUBDIVISION Y LA COMPAÑIA DE AGUA SUD, SE HAN COMPROMETIDO A PROVEER DE AGUA SUFICIENTE A LA SUBDIVISION POR UN PERIODO DE 30 AÑOS. LA COMPAÑIA DE AGUA SUD, HA PRESENTADO LA DOCUMENTACION DEMOSTRANDO LA DISPONIBILIDAD DE CANTIDAD Y CALIDAD DE AGUA A LARGO PLAZO QUE SERVIRA PARA EL FUTURO DESARROLLO DE LA SUBDIVISION. AGUA SUD TIENE UNA LINEA EXISTENTE DE 8" DE DIAMETRO DE AGUA EN EL LADO OESTE DE DOFFING ROAD (F.M. 492).  
 EL SISTEMA DE AGUA PARA G.E.O SUBDIVISION CONSISTE DE UNA LINEA DE 8" DE DIAMETRO DE AGUA QUE SE CONECTA CON LA LINEA EXISTENTE DE 8" DE DIAMETRO DE AGUA A LO LARGO DE LA CALLE DOFFING ROAD (F.M. 492). LA LINEA DE 8" DE DIAMETRO CORRE AL ESTE POR UN ESPACIO DESIGNADO DE 15'0" PARA AGUA SUD, TERMINANDO CON UNA VALVULA DE ESCAPE DE 2" DE LA LINEA DE 8" DE DIAMETRO 4-1" SERVICIOS SENCILLOS CORREN A CADA LOTE ASIA LOS MEDIDORES DE AGUA.

LA LINEA DE 8" DE DIAMETRO DE AGUA, LAS 4 LINEAS DE SERVICIOS SENCILLOS DE AGUA DE 1" DE DIAMETRO, Y LAS CAJAS DE LOS MEDIDORES DE AGUA HAN SIDO INSTALADOS A UN COSTO TOTAL DE US\$ POR LOTE. ADICIONALMENTE, EL DUEÑO DE LA SUBDIVISION PAGARA A AGUA SUD, LA CANTIDAD DE US\$ POR SOLAR DE ACUERDO AL REPORTE DE INVESTIGACION \$ DE 30 AÑOS DE SERVICIO DE AGUA POTABLE EL CUAL CUBRE LOS MEDIDORES DE AGUA, INSTALACION, CONEXION Y MEMBRASIAS \$ CUANDO EL DUEÑO DE CADA LOTE SOLICITE UN MEDIDOR DE AGUA, LA COMPAÑIA AGUA SUD, LO INSTALARA SIN ALGUN COSTO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO UNA (1) BOCA DE RIEGO (FIRE HYDRANTS) A UN COSTO DE \$ POR CADA LOTE CUAL GASTA UNA CANTIDAD TOTAL \$ 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.

EL DRENAJE PARA LA SUBDIVISION G.E.O SUBDIVISION , TENDRA FOSAS SEPTICAS INDIVIDUALES (OSSF) CONSISTIENDO EN UN DISEÑO NORMAL, CON DOBLE COMPARTIMIENTO DE FOSA SEPTICA (OSSF) Y UN CAMPO DE DRENAJE EN CADA SOLAR. EL EVALUADOR (LIC# OS 001121) DE ESCUELA HA INSPECCIONADO, EVALUADO Y REPORTADO QUE LA UBICACION DE LA SUBDIVISION ES CONVENIENTE PARA FOSAS SEPTICAS (OSSF). EL REPORTE FUE EXAMINADO Y APROBADO POR EL DEPARTAMENTO DE SALUD DEL CONDADO DE HIDALGO.  
 CADA SOLAR EN LA SUBDIVISION MIDE MEDIO ACRE DE TAMARO. EL LIBRO DE SERVICIOS Y CONSERVACION DEL SUELO DEL DEPARTAMENTO DE AGRICULTURA DE LOS ESTADOS UNIDOS (USDA) INDICA UNA MEZCLA DE BARRO ARENOSO. EL EVALUADOR (LIC# OS 001121) HIZO ( ) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES 1, 2, 3 Y 4. (PRUEBAS ADICIONALES NO FUERON NECESARIAS PORQUE EL SUELO ES MUY UNIFORME DENTRO DEL AREA DELIMITADA). EL SUELO ES UN MARGA DE BARRO ARENOSO (CON TEXTURA CLASE II) EXTENDIDO A MAS DE 24 PULGADAS BAJO EL FONDO DE CUALQUIER EXCAVACION POR EL EVALUADOR (LIC# OS 001121). NO HAY PRESENCIA DE AGUA SUBTERRANEA BAJO LA CAPA DE 24 PULGADAS DE FONDO DE LAS EXCAVACIONES.  
 EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON US\$ INCLUTENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSA SEPTICAS HAN SI INSTALADAS EN EL PROCESO DE LA APROBACION FINAL. A UN COSTO TOTAL DE US\$ . EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO TODOS LAS FOSAS SEPTICAS Y HA APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE EL 2020.  
 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 DE AGUA FUE CONSTRUICDO, CON LA INSTALACION DE LOS MEDIDORES DE AGUA, EL COSTO TOTAL ES DE US\$ OR US\$ POR LOTE.  
 DRENAJE: SE ESTIMA QUE LAS FOSAS SEPTICAS COSTARAN US\$ POR LOTE (TODO INCLUIDO) A UN COSTO TOTAL DE US\$ PARA TODA LA SUBDIVISION.

DRENAJE: Descripción y Gastos.

EL DRENAJE PARA LA SUBDIVISION G.E.O SUBDIVISION , TENDRA FOSAS SEPTICAS INDIVIDUALES (OSSF) CONSISTIENDO EN UN DISEÑO NORMAL, CON DOBLE COMPARTIMIENTO DE FOSA SEPTICA (OSSF) Y UN CAMPO DE DRENAJE EN CADA SOLAR. EL EVALUADOR (LIC# OS 001121) DE ESCUELA HA INSPECCIONADO, EVALUADO Y REPORTADO QUE LA UBICACION DE LA SUBDIVISION ES CONVENIENTE PARA FOSAS SEPTICAS (OSSF). EL REPORTE FUE EXAMINADO Y APROBADO POR EL DEPARTAMENTO DE SALUD DEL CONDADO DE HIDALGO.

CADA SOLAR EN LA SUBDIVISION MIDE MEDIO ACRE DE TAMARO. EL LIBRO DE SERVICIOS Y CONSERVACION DEL SUELO DEL DEPARTAMENTO DE AGRICULTURA DE LOS ESTADOS UNIDOS (USDA) INDICA UNA MEZCLA DE BARRO ARENOSO. EL EVALUADOR (LIC# OS 001121) HIZO ( ) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES 1, 2, 3 Y 4. (PRUEBAS ADICIONALES NO FUERON NECESARIAS PORQUE EL SUELO ES MUY UNIFORME DENTRO DEL AREA DELIMITADA). EL SUELO ES UN MARGA DE BARRO ARENOSO (CON TEXTURA CLASE II) EXTENDIDO A MAS DE 24 PULGADAS BAJO EL FONDO DE CUALQUIER EXCAVACION POR EL EVALUADOR (LIC# OS 001121). NO HAY PRESENCIA DE AGUA SUBTERRANEA BAJO LA CAPA DE 24 PULGADAS DE FONDO DE LAS EXCAVACIONES.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON US\$ INCLUTENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSA SEPTICAS HAN SI INSTALADAS EN EL PROCESO DE LA APROBACION FINAL. A UN COSTO TOTAL DE US\$ . EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO TODOS LAS FOSAS SEPTICAS Y HA APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE EL 2020.

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 DE AGUA FUE CONSTRUICDO, CON LA INSTALACION DE LOS MEDIDORES DE AGUA, EL COSTO TOTAL ES DE US\$ OR US\$ POR LOTE.  
 DRENAJE: SE ESTIMA QUE LAS FOSAS SEPTICAS COSTARAN US\$ POR LOTE (TODO INCLUIDO) A UN COSTO TOTAL DE US\$ PARA TODA LA SUBDIVISION.



Signature of Alfonso Quintanilla P.E.  
 ALFONSO QUINTANILLA  
 P.E. No. 95534  
 DATE 5-2-23

SUBDIVIDER CERTIFICATION:

1. - BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, SUBDIVIDER WILL COMPLY WITH MINIMUM STATE STANDARDS AND THAT (a) WATER QUALITY AND CONNECTIONS INCLUDING WATER METERS TO THE LOTS MEET SUCH STANDARDS AND (b) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET OR WILL MEET SUCH STANDARDS AND WILL BE BY THE SELLER AS REQUIRED BY SECTION 7.25.12 OF THE COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:

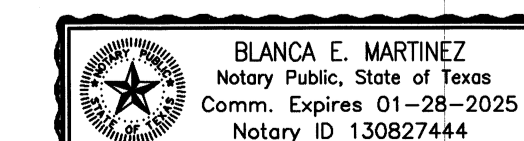
1. - I (WE), ANTONIO G. CANTU GARZA SUBDIVIDER (S) OF G.E.O SUBDIVISION HEREBY CERTIFY SEWER FEES, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY PLANNING DEPARTMENT; THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS TO THE STATE AS REQUIRED BY SECTION 7.4.1.4. (S) OF THE COUNTY REGULATIONS.

ANTONIO G. CANTU GARZA  
 5909 REDBIRD ST  
 EDINBURG, TX 78542  
 HIDALGO COUNTY, TEXAS

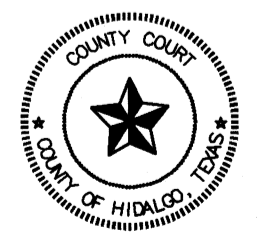
DATE

STATE OF TEXAS  
 COUNTY OF HIDALGO

BEFORE ME, the undersigned authority, on this day personally appeared ANTONIO G. CANTU GARZA known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for purposes and considerations therein stated. Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.



BLANCA E. MARTINEZ - NOTARY PUBLIC



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

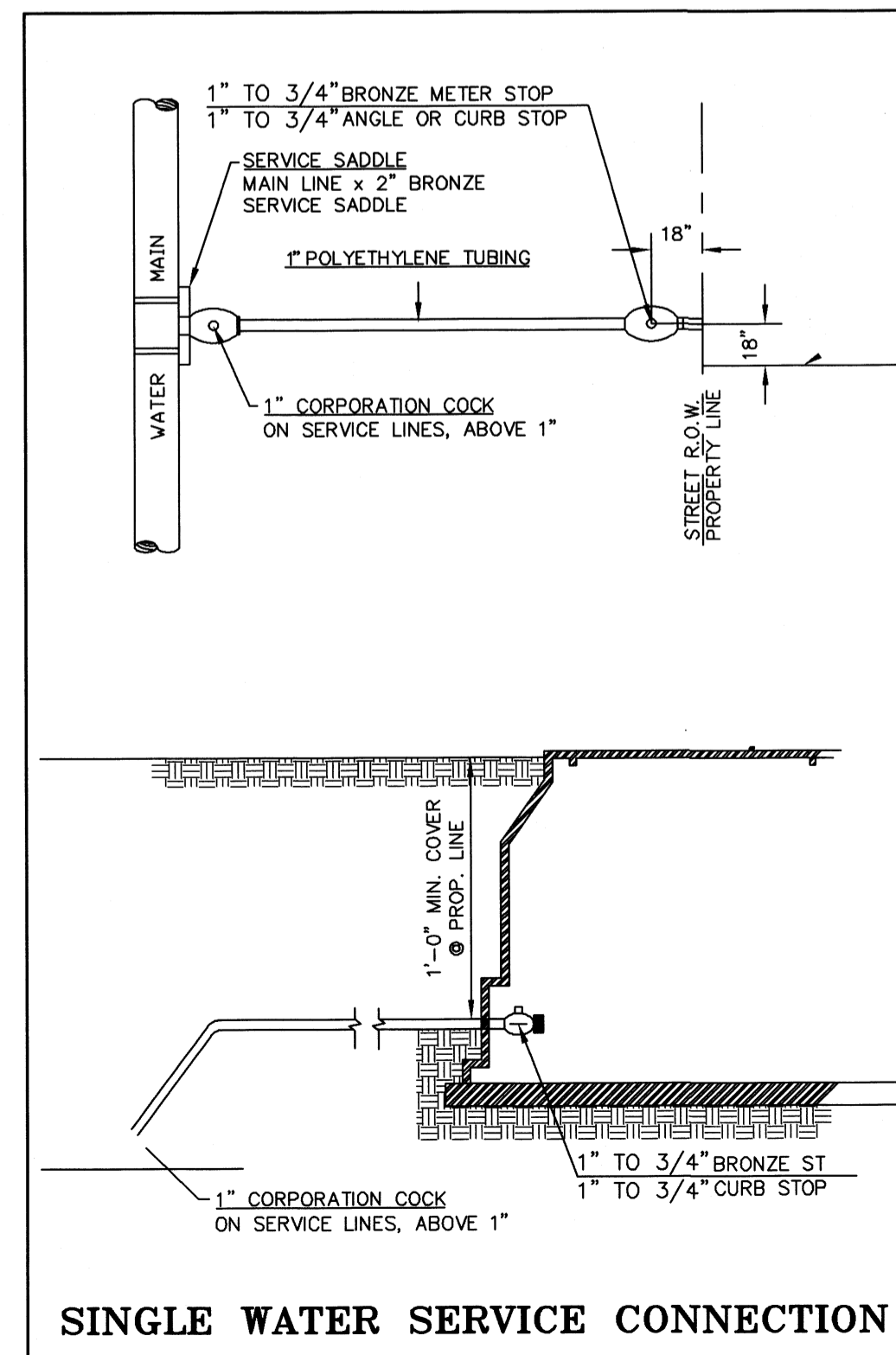
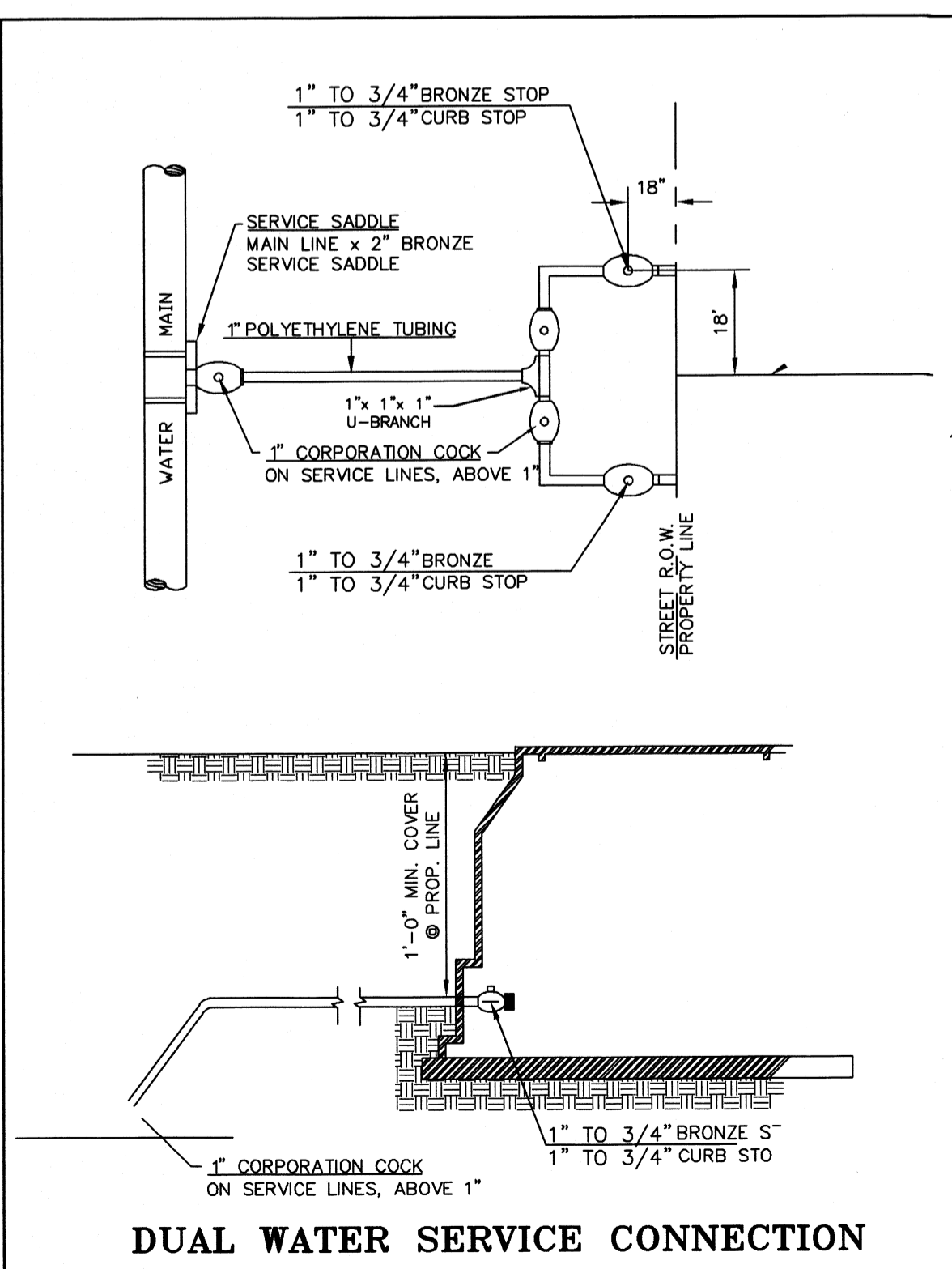
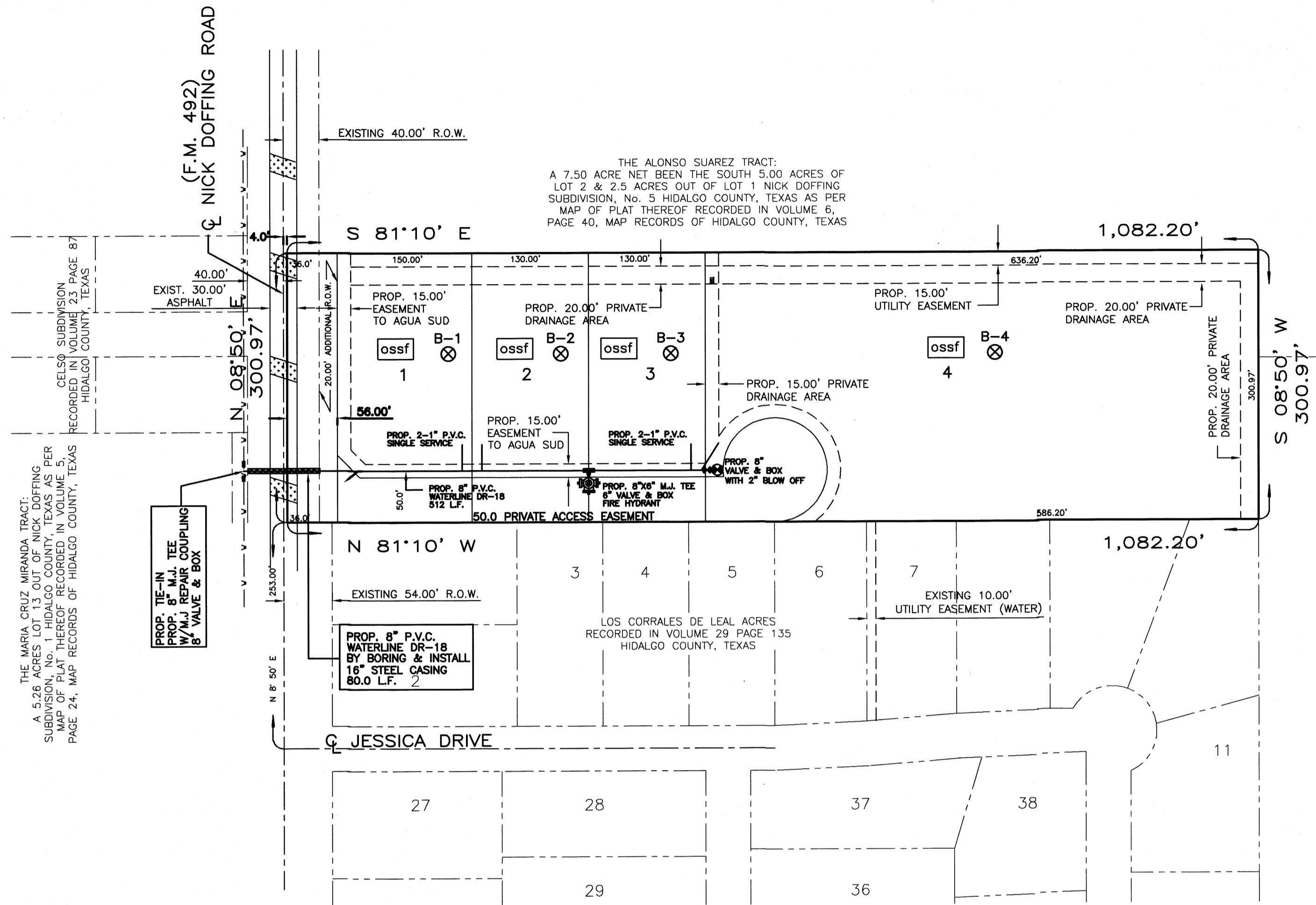
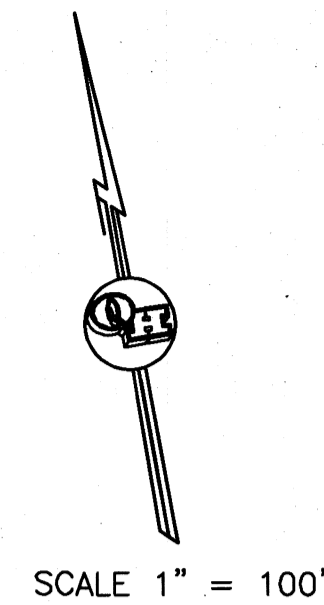
ON: \_\_\_\_\_ AT \_\_\_\_\_ AM/PM

INSTRUMENT NUMBER \_\_\_\_\_  
 OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS

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

FILE NAME: F:\DATA\SUBDIVISION\GEO SUBDIVISION\UTILITIES			
DATE PREPARED: 1-10-23	PREPARED BY: SERAPIO	CHECKED BY:	APPROVED BY:
DATE REVISION:	REVISION BY:	CHECKED BY:	APPROVED BY:

SHEET NO. 2 OF 3



- NOTES:**
- 1.-GATE VALVE MARKERS TO BE INSTALLED AT ALL GATE VALVES
  - 2.-CONTRACTOR IS REQUIRED TO FILL WATERLINES WITH THE USE OF A 2-INCH TRAVELING METER TO REGISTER/CHARGE WATER USAGE.
  - 3.-PRESSURE TESTS TO HOLD FOR 2 HOURS AT 150 PSI.

**COST ESTIMATE**

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
OSSE FACILITIES:	\$

REVISION NOTES

No.	Sheet	REVISION	Date	Approved

**QUINTANILLA, HEADLEY AND ASSOCIATES, INC.**  
 CONSULTING ENGINEERS • LAND SURVEYORS  
 124 E. STUBBS ST. EDINBURG, TEXAS 78539  
 ENGINEERING REGISTRATION NUMBER F-1315 SURVEYING REGISTRATION NUMBER 100411-00  
 PHONE 956-381-6480 FAX 956-381-0527  
 ALFONSO@QHA-ENG.COM

SUBDIVISION PLAT OF:

# G.E.O SUBDIVISION

A 7.47 ACRE TRACT OF LAND BEING THE SOUTH 7.47 ACRES (DEED RECORD: 7.50 ACRES) OF LOT 1, NICK DOFFING SUBDIVISION No.5, HIDALGO COUNTY, TEXAS, ACCORDING TO THE PLAT OR MAP THEREOF RECORDED IN VOLUME 1, PAGE 2, MAP RECORDS HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 3299901, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS

RAINAGE REPORT  
FOR  
G.E.O. SUBDIVISION

A 7.47 acre tract being the South 7.47 acres (deed record: 7.50 acres) of Lot 1, Nick Doffing Subdivision No.5, Hidalgo County, Texas, according to the plat or map thereof recorded in volume 1, page 2, map records, Hidalgo County, Texas, and according to warranty deed with vendor's lien recorded under County Clerk's Document number 3299901, official records, Hidalgo County, Texas. This subdivision is located on the east side of F.M. 492 (Doffing Road) 2,670.0 feet north of the intersection of Mile 3 North Road. This subdivision is located in the City of Mission ETJ. The proposed subdivision will consist of four residential lots.

The tract is Zone "C", areas of minimal flooding as per FEMA Flood Insurance Rate Map, Community Panel No. 480334 0400 C, dated on November 16, 1982.

The soil is Hidalgo (25) and Rio (60) and is in soil group "B" and "D". It is fine sandy loam (SC, SM-SC), sandy clay loam (SC, CL). This soil is well drained. Permeability is generally moderate. Plasticity Index has a range of 4-27. See attached Soil Survey of Hidalgo County, Texas tables.

Presently, the site runoff is minimal in an easterly direction. The existing runoff for the proposed subdivision is Q= 3.13 cubic feet per second based on a 10-year storm.

After development the runoff will be Q= 13.25 cubic feet per second for an increase of Q= 10.12 cubic feet per second (50 year storm). Detention for Lot 1 is 2,314.50 cubic feet (0.053 acre-feet), Lot 2 is 3,658.62 cubic feet (0.054 acre-feet), Lot 3 is 5,324.01 cubic feet (0.12 acre-feet), and Lot 4 is 21,486.17 cubic feet (0.049 acre-feet) for a total detention for the subdivision will be 32,783.30 cubic feet (0.75 acre feet) in accordance with the county and city's drainage requirements. Detention will be provided by excavating a private drainage area along the north side of property which will outfall via a proposed 18" storm sewer that will connect into a proposed storm sewer by Hidalgo County Drainage District No.1 along the east side of Doffing Road (F.M. 492).

**CERTIFICATION:**

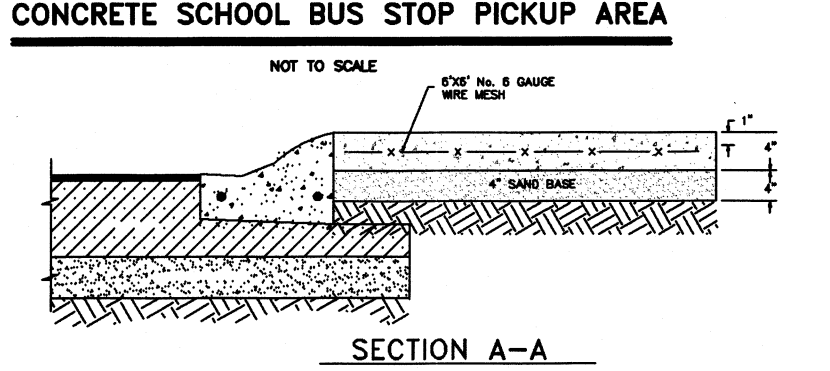
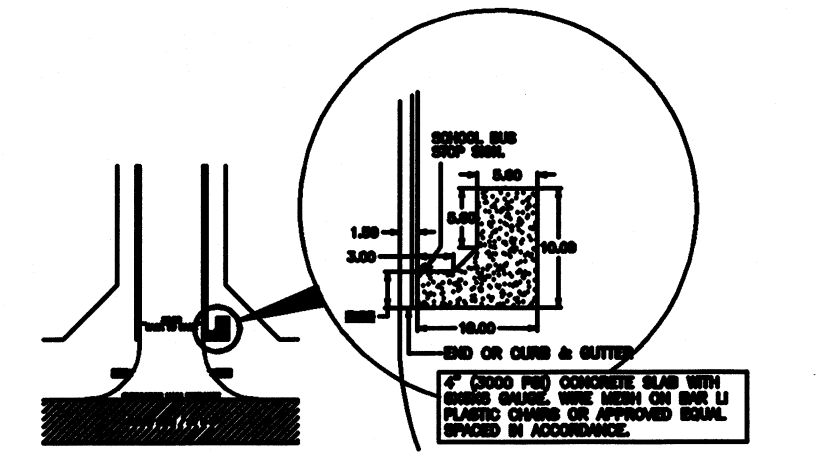
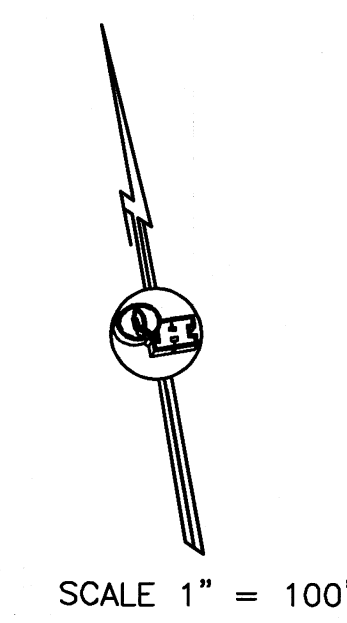
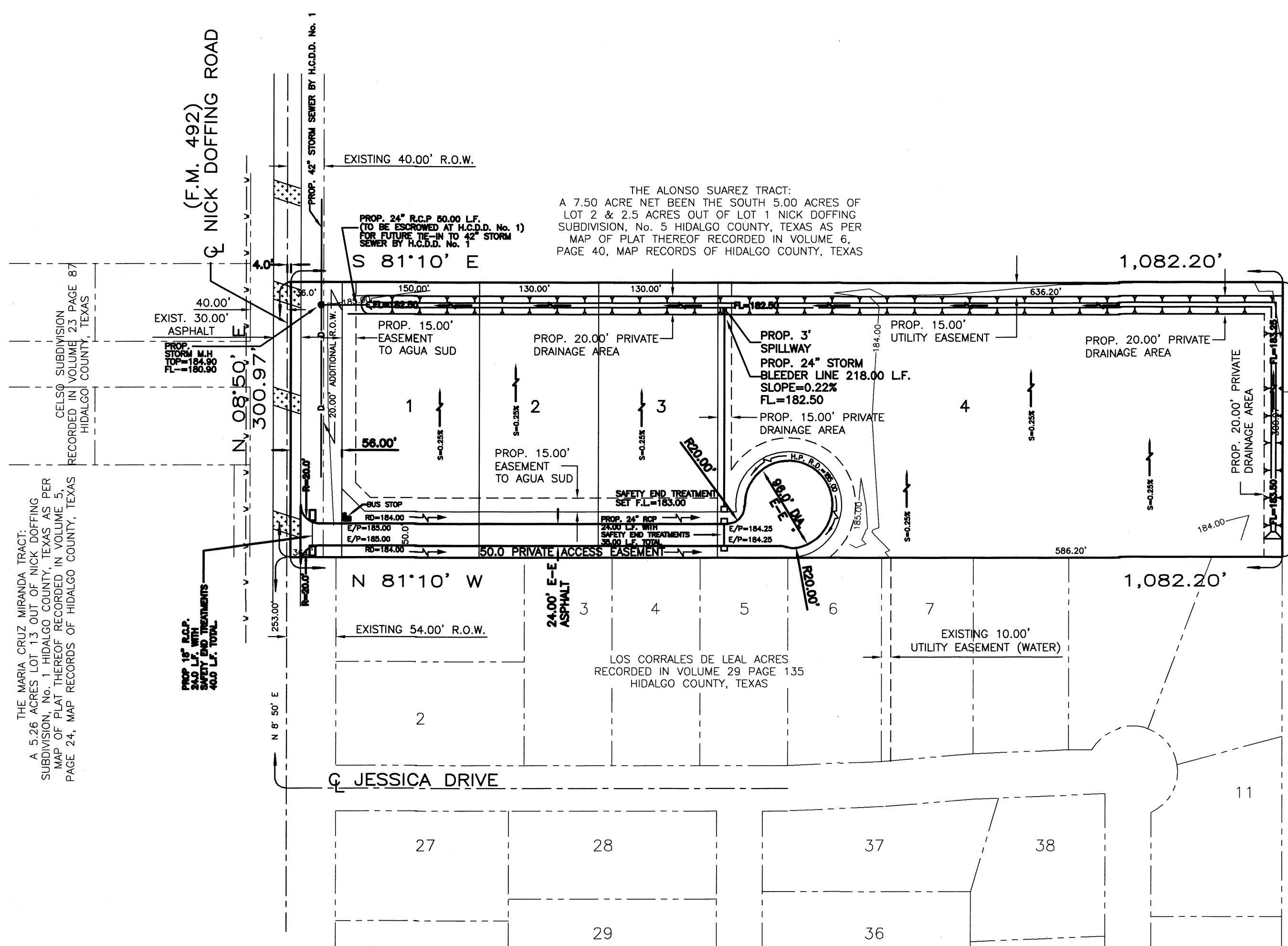
BY MY SIGNATURE BELOW, I CERTIFY THAT THE 100-YEAR FLOODPLAIN FOR ZONE "C" AREAS OF MINIMAL FLOODING (NO SHADING) COMMUNITY-PANEL NUMBER 480334 0400 C MAP REVISED: NOVEMBER 16, 1982



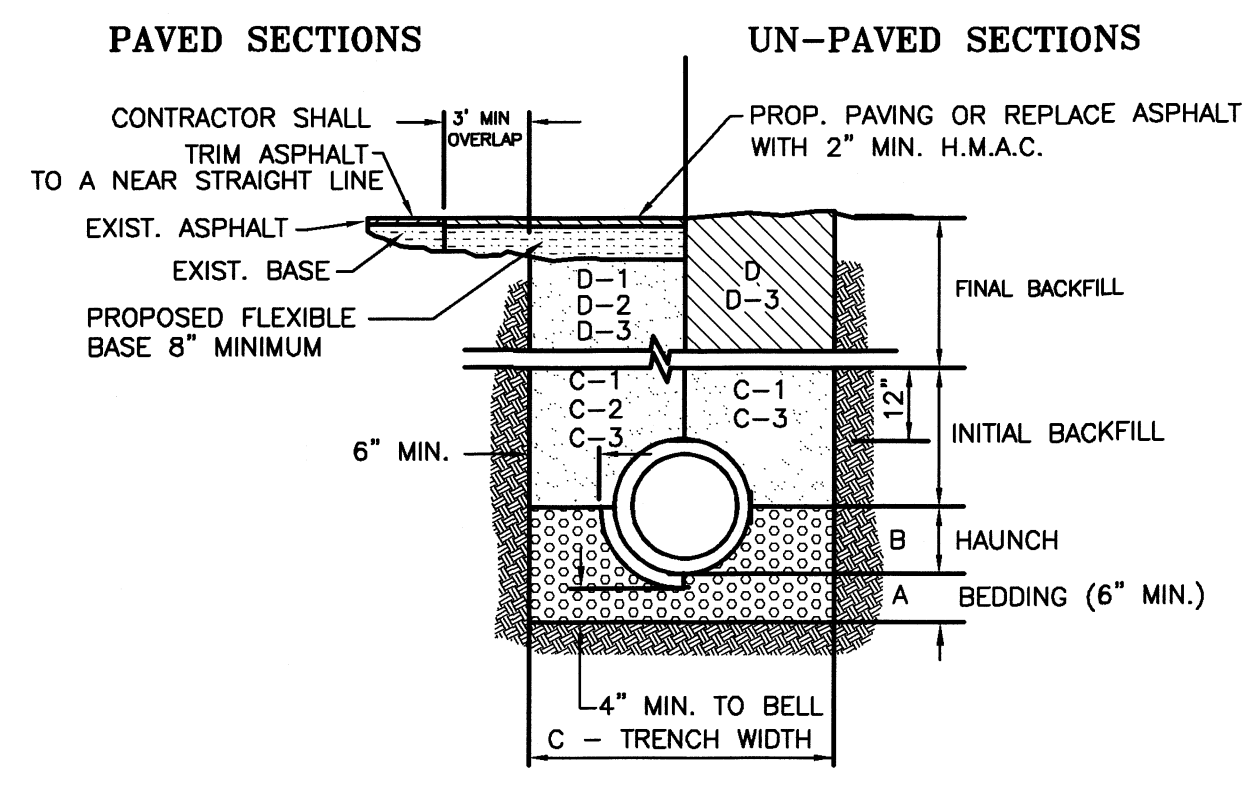
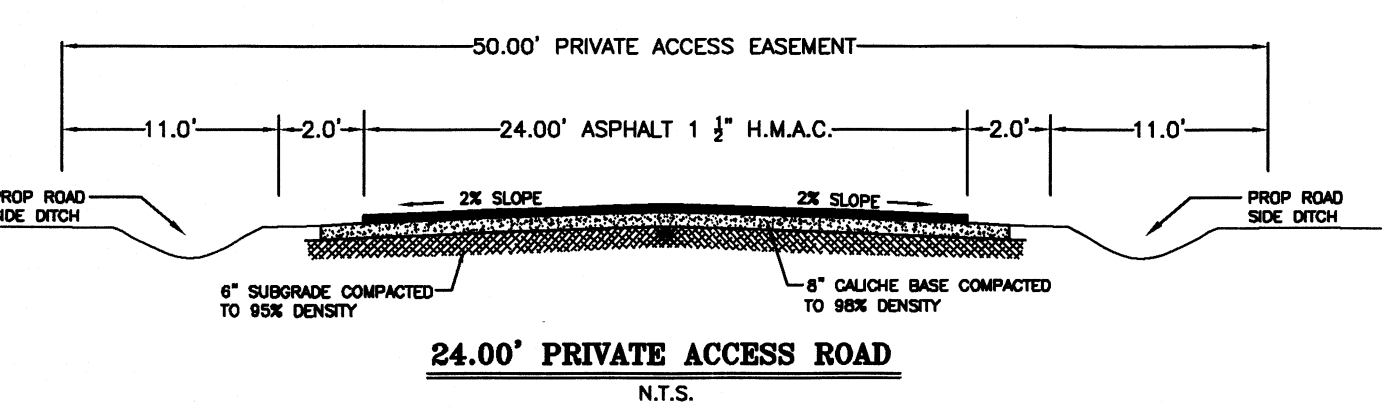
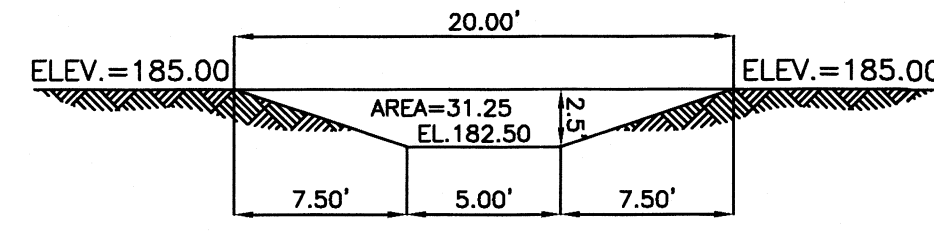
*Alfonso Quintanilla*  
ALFONSO QUINTANILLA  
P.E. No. 95534  
DATE 5-2-83

**COST ESTIMATE**

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
OSSF FACILITIES:	\$



**LEGEND**  
TOTAL DETENTION REQUIRED - 32,783.30 C.F.  
TOTAL DETENTION EXCAVATED - 39,062.60 C.F.  
(31.25 S.F. \* 1,250.00 L.F.)



REVISION NOTES

No.	Sheet	REVISION	Date	Approved

**STORM TRENCH BEDDING AND BACKFILL DETAILS**

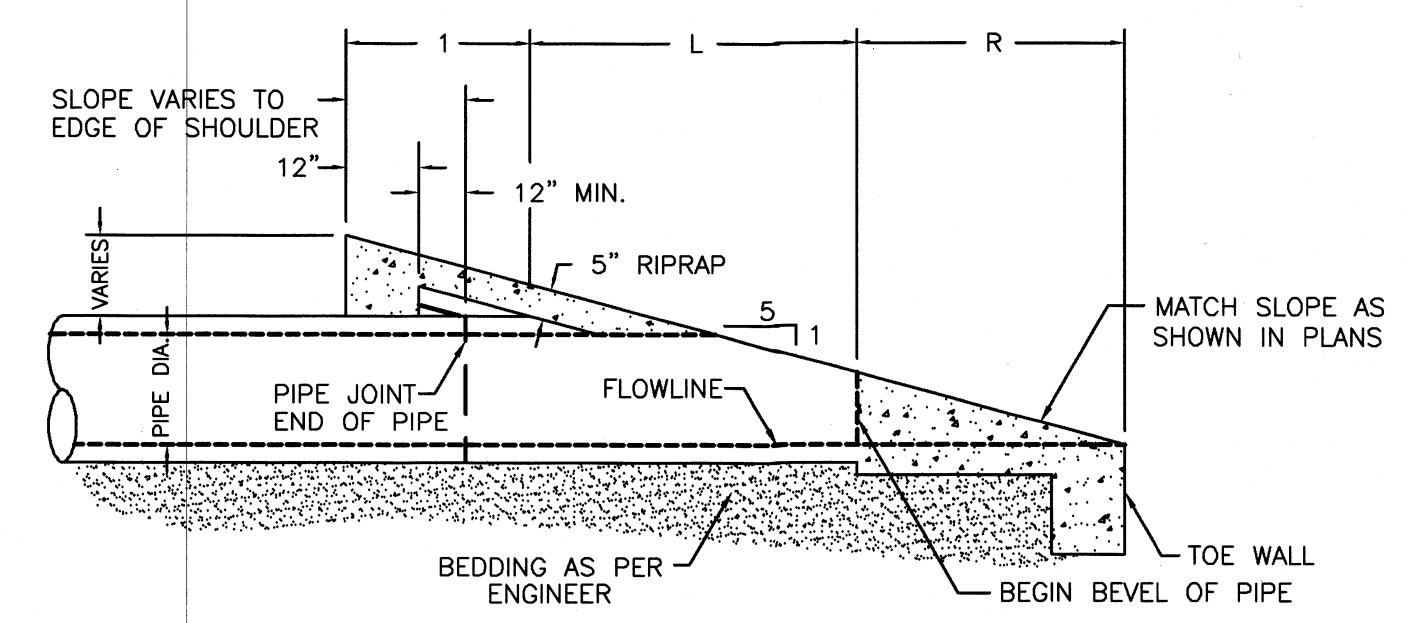
- N.T.S.
- A. BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. THICKNESS = 6") - PIT RUN GRAVEL 3/4" MAX. SIZE.
  - B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12" MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4 FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.
  - C-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREETS, PARKING AREA, DRIVEWAYS, COUNTY ROAD & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3, WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - C-2 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D-698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - C-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - 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% SPD (12" LOOSE LIFTS, MECHANICAL COMPACTION).
  - D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREA, DRIVEWAYS, AND COUNTY ROAD - SHALL BE SOIL TYPE A1, A2, A3, WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D-4253 AND ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
  - D-3 FINAL BACKFILL FOR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT. FROM THE EDGE OF PAVEMENT/BOX 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 (WELDPITS, MINIMUM 4" DRILL 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 92% S.P.D. (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698), THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".

- NOTES:
1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
  2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 92% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
  3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF 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.

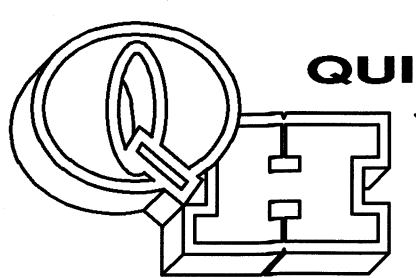
**STORM TRENCH BEDDING AND BACKFILL NOTES**

N.T.S.

**THE ITEM FOR CEMENT STABILIZED BACKFILL SHOW ON BID SHEET IS AS PER C-2 AND D-2 STORM TRENCH BEDDING AND BACKFILL NOTES SHOWN ABOVE.**



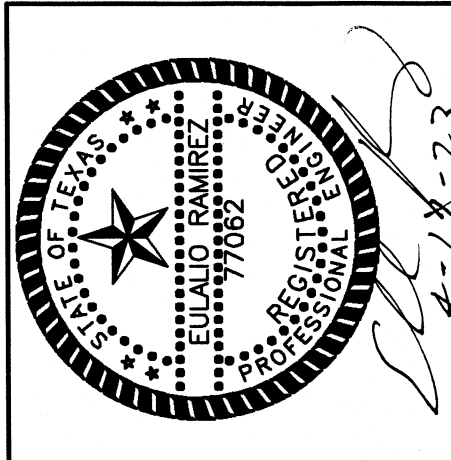
**QUINTANILLA, HEADLEY AND ASSOCIATES, INC.**  
CONSULTING ENGINEERS • LAND SURVEYORS  
124 E. STUBBS ST. PHONE 956-381-6480  
EDINBURG, TEXAS 78539 FAX 956-381-0527  
ENGINEERING REGISTRATION NUMBER F-1315 ALFONSO@QHA-ENG.COM  
SURVEYING REGISTRATION NUMBER 100411-00



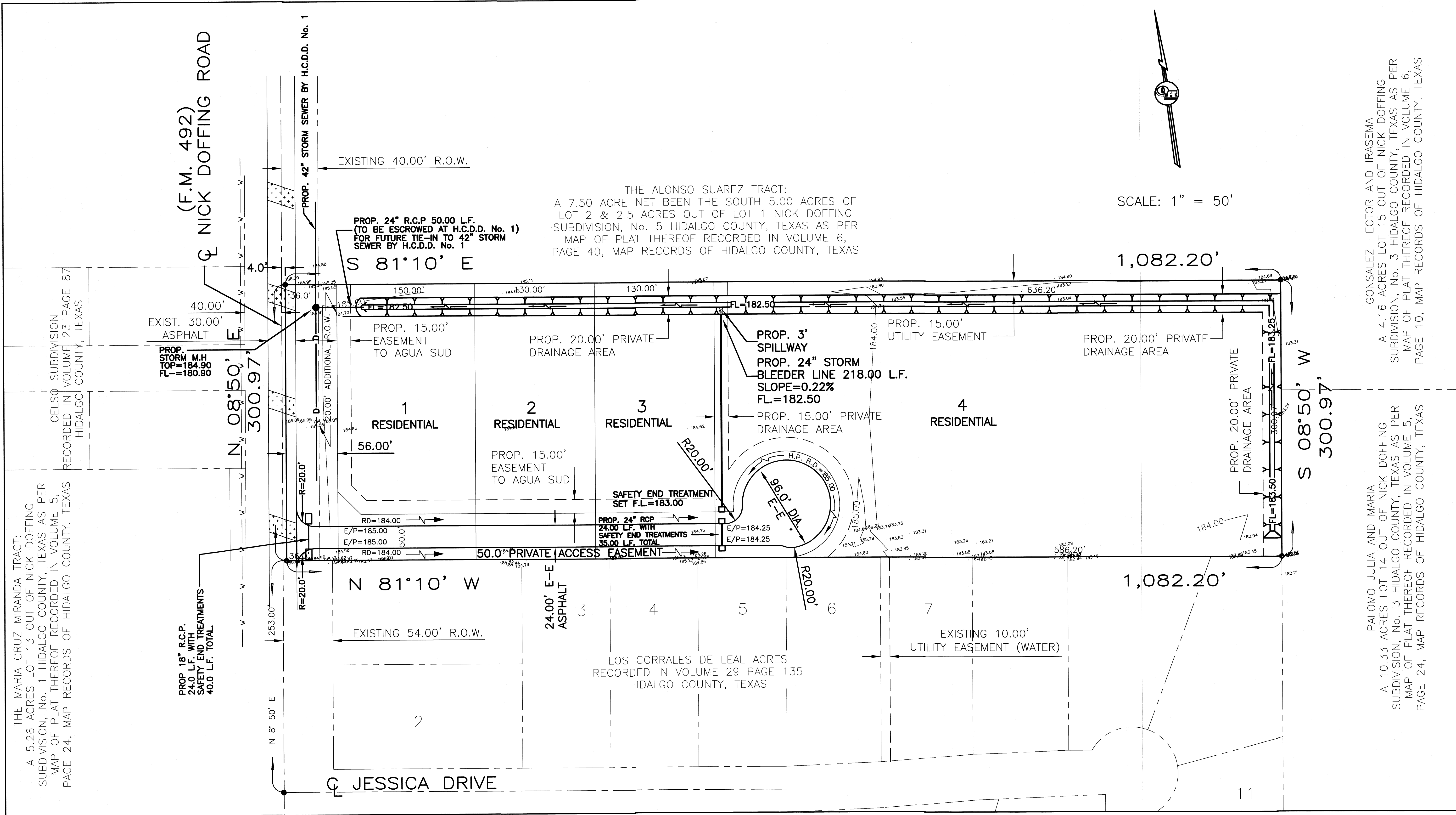
**ELEVATION SAFETY END TREATMENT (TYPE "P OR C")**



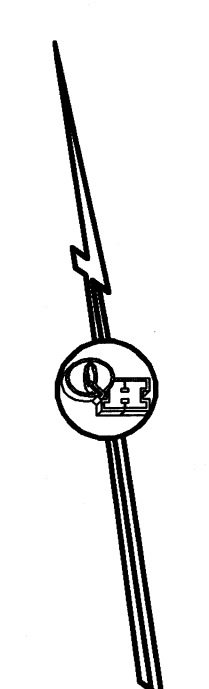
**G.E.O. SUBDIVISION  
 PAVING AND DRAINAGE  
 LAYOUT**



**QUINTANILLA, HEADLEY AND ASSOCIATES, INC.**  
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 LAND SURVEYORS  
 124 E. STUBBS ST.  
 EDINBURG, TEXAS 78539  
 PHONE 956-381-6480  
 FAX 956-381-0527  
 ALFONSO@QHA-ENG.COM  
 ENGINEERING REGISTRATION NUMBER F-1513  
 SURVEYING REGISTRATION NUMBER 100411-00

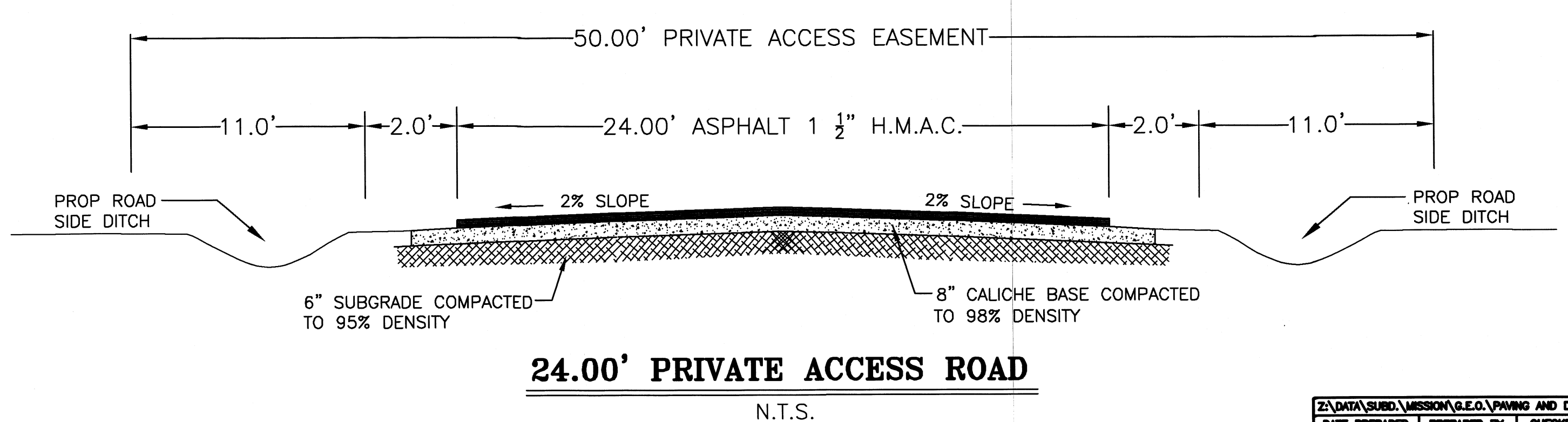
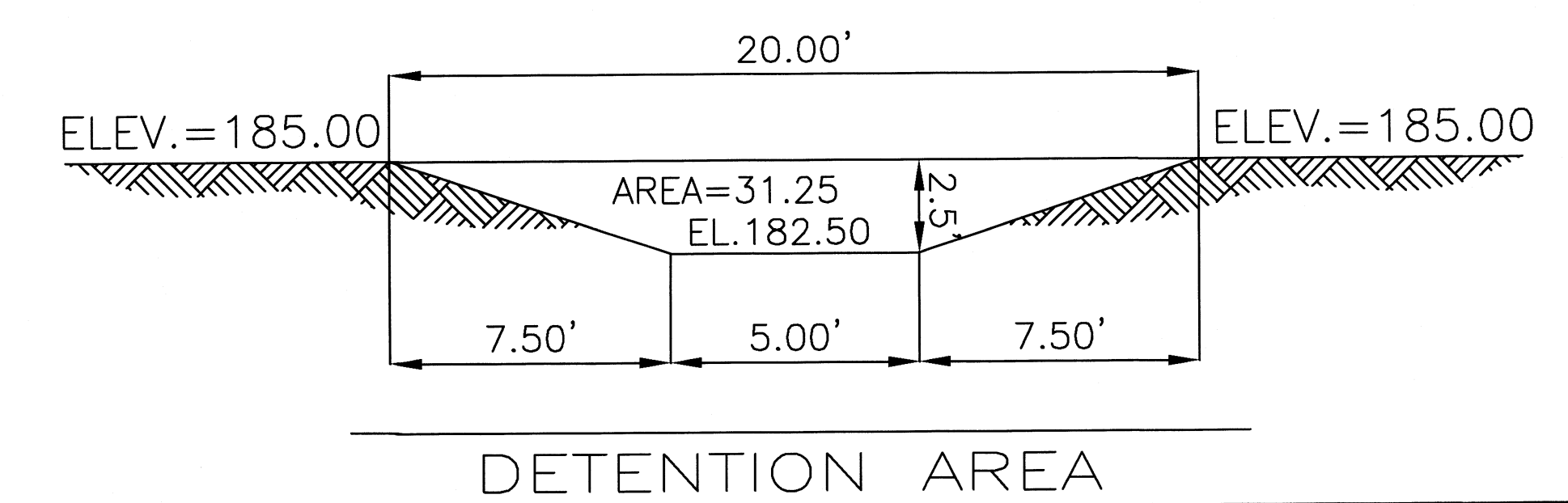


SCALE: 1" = 50'



- LEGEND**
- = FIRE HYDRANT
  - = GUY WIRE
  - = POWER POLE
  - = MAILBOX
  - = WATER METER
  - = WATER VALVE
  - = SIGN
  - = SERVICE POLE
  - = TEL BOX
  - = ELECT BOX
  - = GAS METER
  - = GAS MARKER
  - = GAS VALVE
  - = TRANSMISSION POLE
  - = TRAFFIC CONTROL BOX
  - = GAS SERVICE

**LEGEND**  
**TOTAL DETENTION REQUIRED - 32,783.30 C.F.**  
**TOTAL DETENTION EXCAVATED - 39,062.50 C.F.**  
 (31.25 S.F. \* 1,250.00 L.F.)



2:\DATA\SUBD\MISSI0N\G.E.O.\PAVING AND DRAINAGE LAYOUT			
DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
6-1-2022	JULIUS CVZS		
DATE REVISION	REVISION	CHECKED BY	APPROVED BY
07-28-2022	G.C.W.U.		