



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: 7-28-2020

PROPOSED SAN RAFAEL SUBDIVISION PRECINCT No. 1

ENGINEER: QUINTANILLA, HEADLEY & ASSOCIATES DEVELOPER: TILLMIN WELCH

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 57 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INDUSTRIAL

ESTIMATED NUMBER OF STREETLIGHTS: 12

FILLING STATIONS: 5

LOCATION DESCRIPTION: NORTHWEST CORNER OF TRENTON ROAD & DILLON ROAD.

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

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 6-24-2020 PROPERTY LIES WITHIN FLOOD ZONE: "C" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM AND DETENTION WILL BE PROVIDED BY A PROPOSED DRAIN DITCH.

ROAD R.O.W. DEDICATION: 40.00 FEET ONTO TRENTON ROAD & 20.00 FEET ONTO DILLON ROAD.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 7-17-2020 REVIEWED BY, PLANNING DEPARTMENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 7-17-2020 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: OSSF'S

WATER SERVICE PROVIDER: N.A.W.S.C. EXISTING LINE SIZE: 8" LOCATION: DILLON ROAD.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 7-08-2020: 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 comments and future recommendations by planning, other departments and the approval of the City of Donna.*

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.

*

SAN RAFAEL SUBDIVISION

A 40.00 ACRE TRACT OF LAND BEING ALL OF BLOCK 70, HILL-HALBERT TRACT, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 35, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO TRUSTEE'S DEED AND BILL OF SALE RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2794107, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

REPORTE FINAL DE INGENIERIA PARA LA SUBDIVISION SAN RAFAEL SUBDIVISION POR ALFONSO QUINTANILLA, P.E.

PROVISION DE AGUA: Descripción y Gastos.

LA SUBDIVISION SAN RAFAEL SUBDIVISION HA SIDO PROVISTA DE AGUA POTABLE POR LA COMPANIA DE AGUA DE NORTH ALAMO (N.A.W.S.C.). EL DUEÑO DE LA SUBDIVISION Y LA COMPANIA DE AGUA N.A.W.S.C. SE HA COMPROMETIDO A PROVEER DE AGUA SUFICIENTE A LA SUBDIVISION POR UN PERIODO DE 30 AÑOS. LA COMPANIA DE AGUA N.A.W.S.C. HA PRESENTADO LA DOCUMENTACION DEMOSTRANDO LA DISPONIBILIDAD DE CANTIDAD Y CALIDAD DE AGUA A LARGO PLAZO QUE SERRERA PARA EL FUTURO DESARROLLO DE LA SUBDIVISION. N.A.W.S.C. TIENE UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE CORRE POR EL LADO ESTE DE LA CALLE DILLON ROAD.

EL SISTEMA DE PROVISION DE AGUA PARA LA SUBDIVISION CONSISTE DE UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE SE CONECTA CON LA LINEA EXISTENTE DE AGUA DE 8" DE DIAMETRO EN LADO ESTE DE LA CALLE DILLON ROAD Y CORRE A LO LARGO DEL LADO NORTE DE LA CALLE TRENTO ROAD (MILE 13 1/2 NORTH ROAD) Y TERMINA CON UNA VALVULA DE PUERGA DE 2 PULGADAS, POR EL LADO NORTE DE LA CALLE OPALO DRIVE, POR EL LADO OESTE DE LA CALLE BERILO LANE, POR EL LADO SUR DE LA CALLE ZAFIRO DRIVE, POR EL LADO ESTE DE LA CALLE JASPE LANE, POR EL LADO NORTE DE LA CALLE MOONSTONE DRIVE, Y POR EL LADO OESTE DE LA CALLE DIAMANTE LANE.

DEL CONDUCTO DE AGUA DE 8 PULGADAS SE PRODUCEN VEINTICINCO (25) DOBLE-CONDUCTOS DE AGUA DE 1 PULGADA DE DIAMETRO PARA CADA DOS LOTES. ESTOS CONDUCTOS SE SEPARAN PARA PRODUCIR DOS CONDUCTOS DE AGUA DE 3/4" DE PULGADA DE DIAMETRO PARA CADA LOTE. ADICIONALMENTE HAY SIETE (7) CONDUCTOS INDIVIDUALES DE AGUA DE 3/4" DE PULGADA DE DIAMETRO PARA CADA LOTE.

LOS DOBLE-CONDUCTOS DE AGUA DE 1 PULGADA DE DIAMETRO, EL CONDUCTO DE 3/4" DE PULGADAS DE DIAMETRO, Y LOS MEDIDORES MECANICOS DE AGUA A UN COSTO TOTAL DE US\$ _____ POR LOTE. EL DUEÑO DE LA SUBDIVISION TAMBIEN LE HA PAGADO A LA COMPANIA N.A.W.S.C. US\$ _____ QUE CUBRE EL COSTO DEL MEDIDOR MECANICO DE AGUA PARA CADA LOTE. US\$ _____. ESTE PRECIO INCLUYE EL COSTO DE LA INSTALACION DE CADA MEDIDOR Y LOS GASTOS DE CONEXION. CUANDO EL DUEÑO DE CADA LOTE SOLICITE UN MEDIDOR DE AGUA, LA COMPANIA N.A.W.S.C. LO INSTALARA SIN ALCANZAR GASTO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO CINCO (5) BOCAS DE REGO (FIRE HYDRANT) A UN COSTO DE \$ _____ POR CADA UNO 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.

DRENAJE: Descripción y Gastos.

SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR DE LA SUBDIVISION SAN RAFAEL SUBDIVISION. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL, Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL EVALUADOR (LIC# 05 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# 05 12258) HIZO (6) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES 1, 11, 21, 25, 28, 40, 45 & 57 (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME FRANCO ARENOSO (CLASS B) 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 US\$ _____ 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 US\$ _____. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO TODOS LAS FOSAS SEPTICAS Y AH APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE EL _____ DE _____ DE _____.

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 US\$ _____ O CUAL EQUIVALE A US\$ _____ POR LOTE.
DRENAJE: SE ESTIMA QUE LA FOSA SEPTICA COSTARA \$ 1,650.00 A UN COSTO TOTAL DE \$ 94,050.00 TODA LA SUBDIVISION.

COST ESTIMATE

WATER DISTRIBUTION: \$ _____
DRAINAGE IMPROVEMENTS: \$ _____
PAVING IMPROVEMENTS: \$ _____
SEPTIC TANK (OSSF): \$ _____

FINAL ENGINEERING REPORT FOR SAN RAFAEL SUBDIVISION BY ALFONSO QUINTANILLA, P.E.

WATER SUPPLY: Description and Costs.

SAN RAFAEL SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY THE NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). THE SUBDIVIDER AND N.A.W.S.C. HAVE ENTERED INTO A CONTRACT IN WHICH N.A.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND N.A.W.S.C. HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION. N.A.W.S.C. HAS AN EXISTING 8" DIAMETER WATERLINE RUNNING ALONG THE EAST SIDE OF DILLON ROAD.

WATER SYSTEM FOR SAN RAFAEL SUBDIVISION CONSISTS OF AN 8" DIAMETER WATERLINE THAT TAPS INTO THE EXISTING 8" DIAMETER WATERLINE ON THE EAST SIDE OF DILLON ROAD AND RUNS WEST ALONG THE NORTH SIDE OF TRENTO ROAD (MILE 13 1/2 NORTH ROAD) AND WILL END WITH A 2" FLUSH VALVE AT THE SOUTHWEST CORNER OF THE SUBDIVISION. ANOTHER 8" DIAMETER WATERLINE WILL RUN WEST ALONG THE NORTH SIDE OF OPALO DRIVE, THE WEST SIDE OF BERILO LANE, THE SOUTH SIDE OF ZAFIRO DRIVE, THE EAST SIDE OF JASPE LANE, THE NORTH SIDE OF MOONSTONE DRIVE, AND THE WEST SIDE OF DIAMANTE LANE FOR A COMPLETE LOOP.

FROM THE 8" DIAMETER WATERLINE TWENTY-FIVE (25) 1" DUAL SERVICE LINES RUNNING TO PAIR OF LOTS BEFORE SPLITTING INTO TWO 3/4" DIAMETER SINGLE SERVICE LINES THAT RUN INTO THE WATER METER BOXES FOR EACH LOT. THERE ARE SEVEN (7) 3/4" SINGLE SERVICE LINES THAT RUN TO THE METER BOXES OF THE LOTS.

THE 8" WATERLINE, THE 1" DUAL SERVICE LINES, THE 3/4" SINGLE SERVICE LINES AND THE METER BOXES WILL BE INSTALLED. AT A TOTAL COST OF \$ _____ PER LOT. THE SUBDIVIDER HAS IN ADDITION PAID N.A.W.S.C. THE SUM OF \$ _____ OR \$ _____ PER LOT, WHICH REPRESENTS THE TOTAL COST OF WATER METERS AND ALL MEMBERSHIPS OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO THE N.A.W.S.C. SYSTEM. THE SUBDIVIDER WILL INSTALL FIVE (5) FIRE HYDRANTS AT A UNIT COST OF \$ _____ FOR A TOTAL COST OF \$ _____. THE OTHER WATER FACILITIES WILL BE APPROVED AND ACCEPTED BY N.A.W.S.C. AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES: Description and Costs.

SEWAGE FROM THE SAN RAFAEL 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 SANDY CLAY LOAM, AND CLAY LOAM SOIL FOR THE AREA. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAD (8) TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS 1, 11, 21, 25, 28, 40, 45 & 57. (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 \$ _____ INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ _____. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON _____.

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:

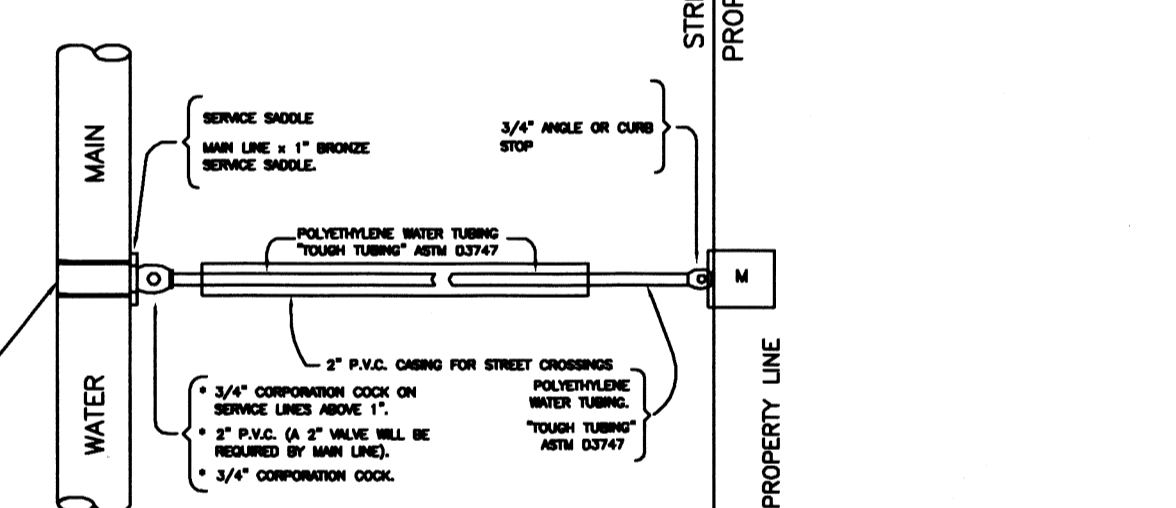
WATER FACILITIES- THESE FACILITIES WILL BE CONSTRUCTED, WITH THE INSTALLATION OF WATER METER BOXES, HAVE COST A GRAND TOTAL OF \$ _____ WHICH EQUALS TO \$ _____ PER LOT.
SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$1,650.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$94,050.00 FOR THE ENTIRE SUBDIVISION.



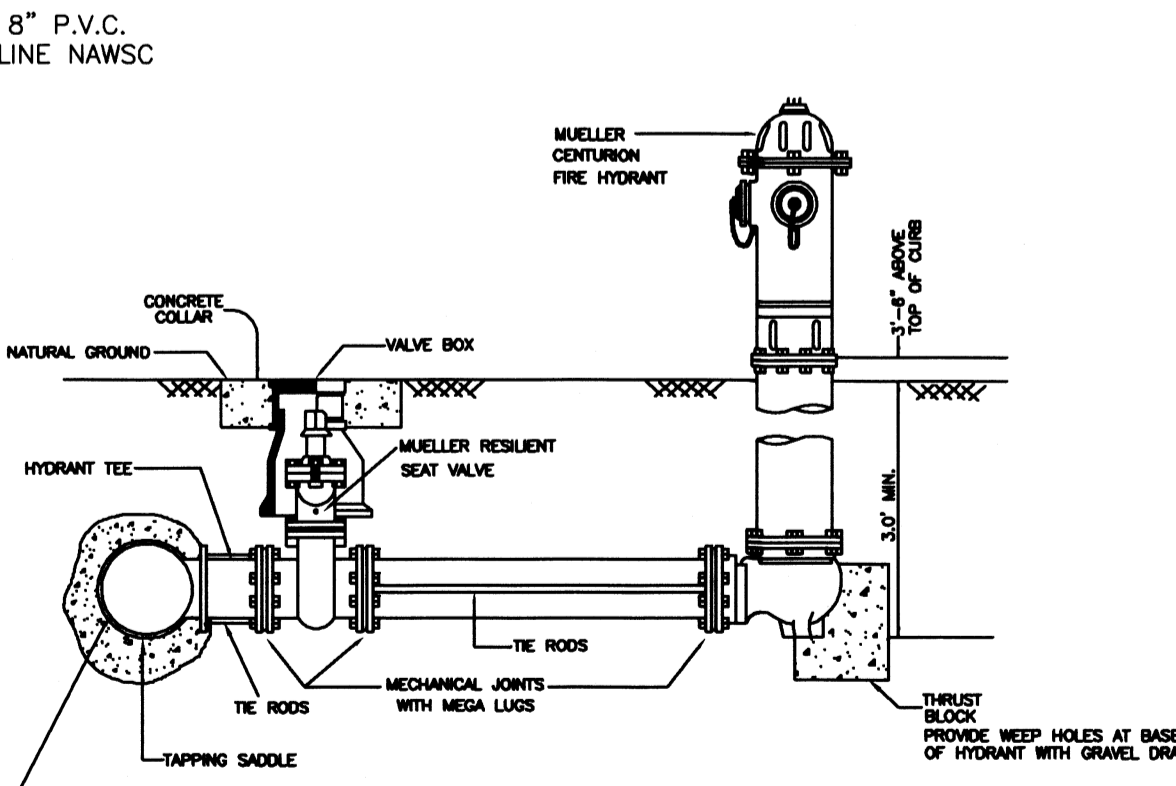
Alfonso Quintanilla, P.E.
7-9-2020
DATE



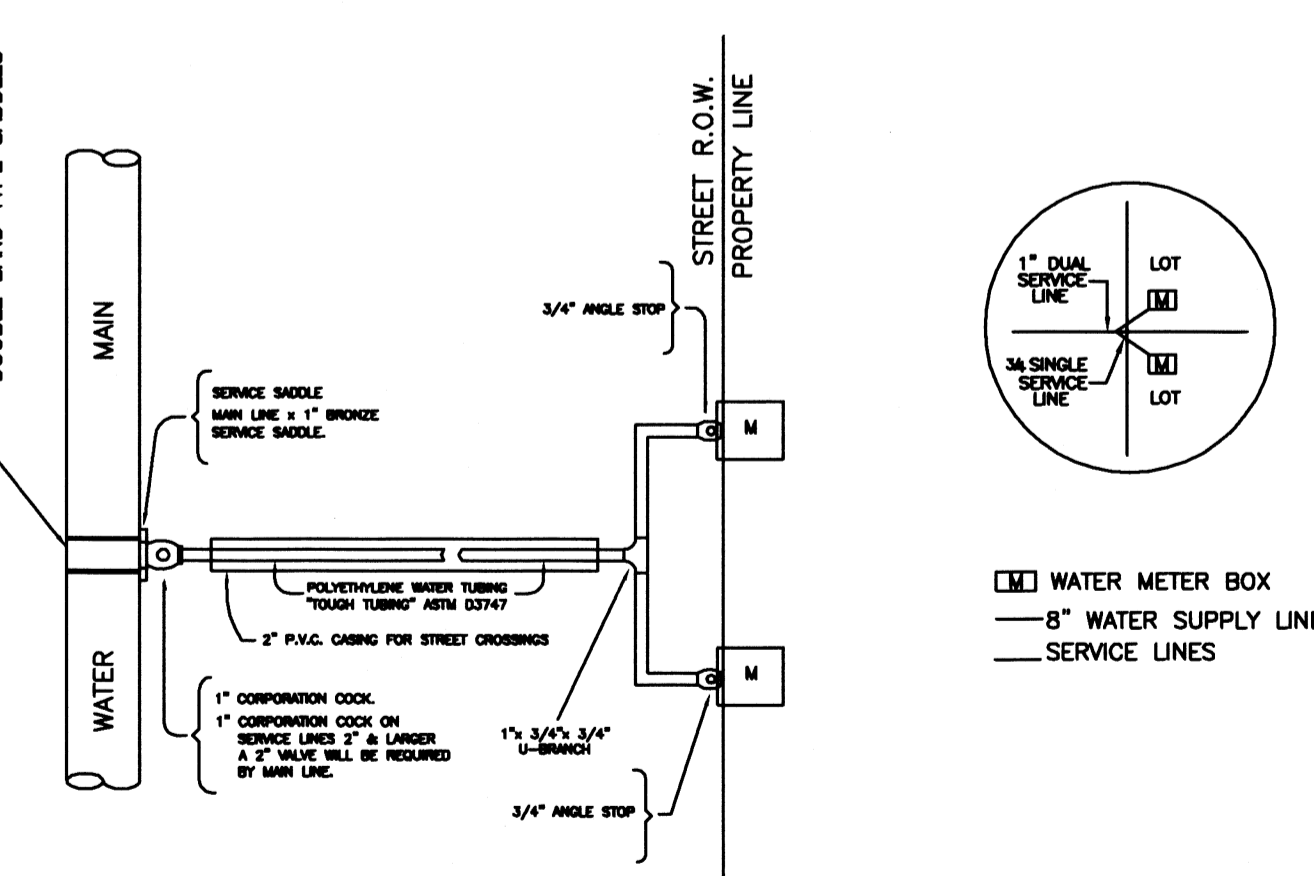
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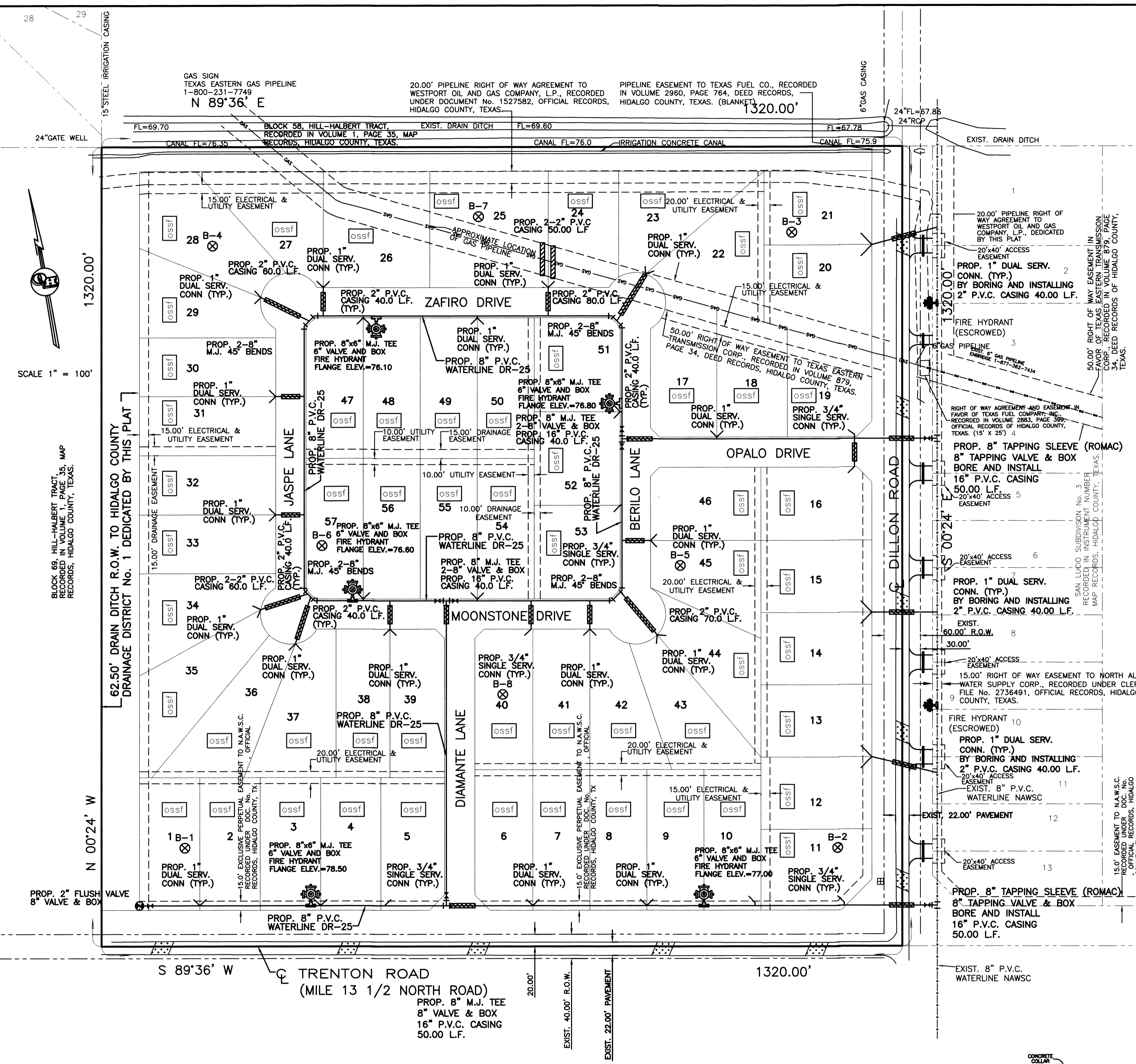
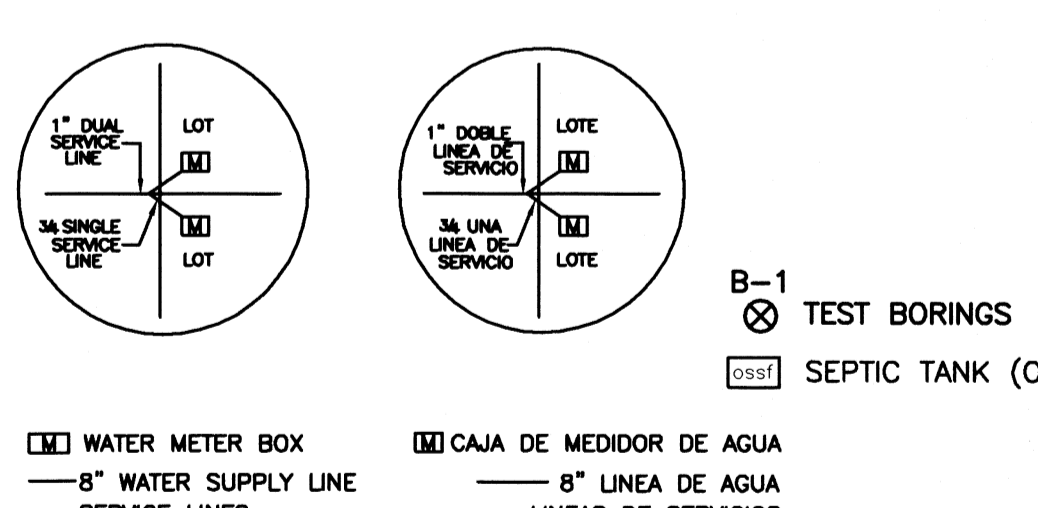
SINGLE WATER SERVICE CONNECTION (NOT TO SCALE)



NAWSC FIRE HYDRANT (NOT TO SCALE)



DUAL WATER SERVICE CONNECTION (NOT TO SCALE)



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

SUBDIVIDER STATEMENT:
1.- I (WE), TILLMAN WELCH, MANAGER OF C AND N FARMS, L.L.C. SUBDIVIDERS OF SAN RAFAEL SUBDIVISION HEREBY CERTIFY SEWER PERMITS, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY & QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

C AND N FARMS, L.L.C.
TILLMAN WELCH, MANAGER
922 BIGHORN DRIVE
EDINBURG TX, 78542

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, the undersigned notary public, on this day personally appeared
TILLMAN WELCH, MANAGER OF C AND N FARMS, L.L.C.
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 purposes and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 20____.

CLARISSA ANNETTE QUINTANILLA
Notary Public
November 04, 2021

CLARISSA ANNETTE QUINTANILLA - NOTARY PUBLIC

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

REVISION NOTES

No.	Sheet	REVISION	Date	Approved

SHEET NO. 2 OF 3 SHEETS

FILENAME	DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
F:\DATA\SUB\CONNA\SAN RAFAEL SUBDIVISION\WATER PLAT	07-18-2020	QCAUTU		

SAN RAFAEL SUBDIVISION

A 40.00 ACRE TRACT OF LAND BEING ALL OF BLOCK 70, HILL-HALBERT TRACT, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 35, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO TRUSTEE'S DEED AND BILL OF SALE RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2794107, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

DRAINAGE REPORT FOR SAN RAFAEL SUBDIVISION

A 40.00 acre tract of land being all of Block 70, Hill-Halbert Tract, Hidalgo County, Texas, according to the map or plat thereof recorded in volume 1, page 35, Hidalgo County, Texas, map records Hidalgo County, Texas, and according to trustee's deed and bill of sale recorded under county clerk's document number 2794107, official records, Hidalgo County, Texas. It is located at the northwest corner of Trenton Road (Mile 13 1/2 North Road) and Dillon Road in the City of Donna ETJ. The proposed subdivision will consist of 57 residential lots.

The tract is Zone "C" (no shading shading), areas of minimal flooding; as per FEMA Flood Insurance Rate Map, Community Plan No. 480334 0425 C, dated on November 16, 1982.

The majority of the soil is Hidalgo (28) and Raymondville (52) and is in soil group "B" & "D". It is sandy clay loam (SC), clay loam (CL), and clay (CH). This soil is well drained. Permeability is moderate. Plasticity index has a range of 11-35. See attached Soil Survey of Hidalgo County, Texas tables.

Presently, the site has very minimal runoff in an easterly direction with an approximate 0.5% slope. The proposed subdivision is 13.70 cubic feet per second based on a 10-year storm.

After development the runoff will be Q = 52.60 cubic feet per second based on a 50-year storm for an increase of Q=38.90 cubic feet per second. Detention will be 131,543.99 cubic feet (3,022 acre feet). It will be accomplished by regrounding the roadside ditch along Trenton Road and Dillon Road and excavating the 62.50' Hidalgo County Drainage District No. 1 Drain Ditch Right of Way that is being dedicated by this plat along the west side of this subdivision. This drain ditch will outfall into an existing Donna Irrigation District Drain Ditch along the north side of this subdivision. The street runoff will be collected by a storm sewer system consisting of 18", 24", 30", and 36" pipes and Type "A" inlets that will discharge into the new drain ditch.

The drainage calculations are attached.

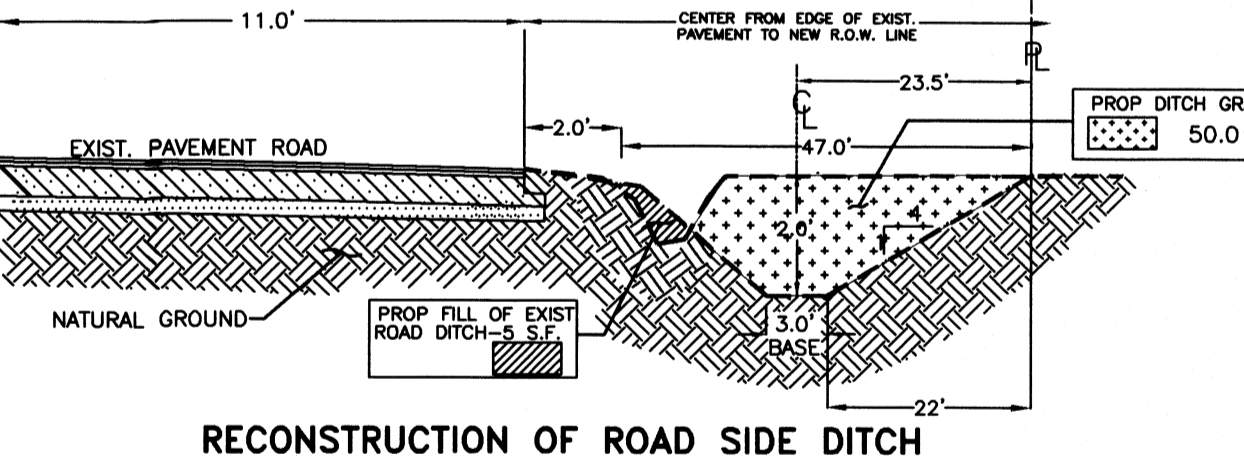
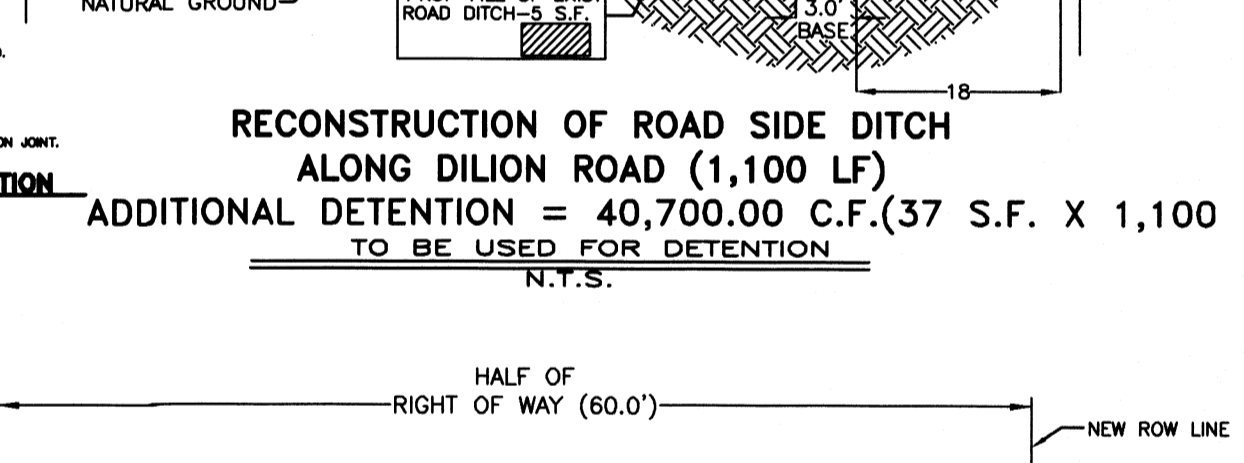
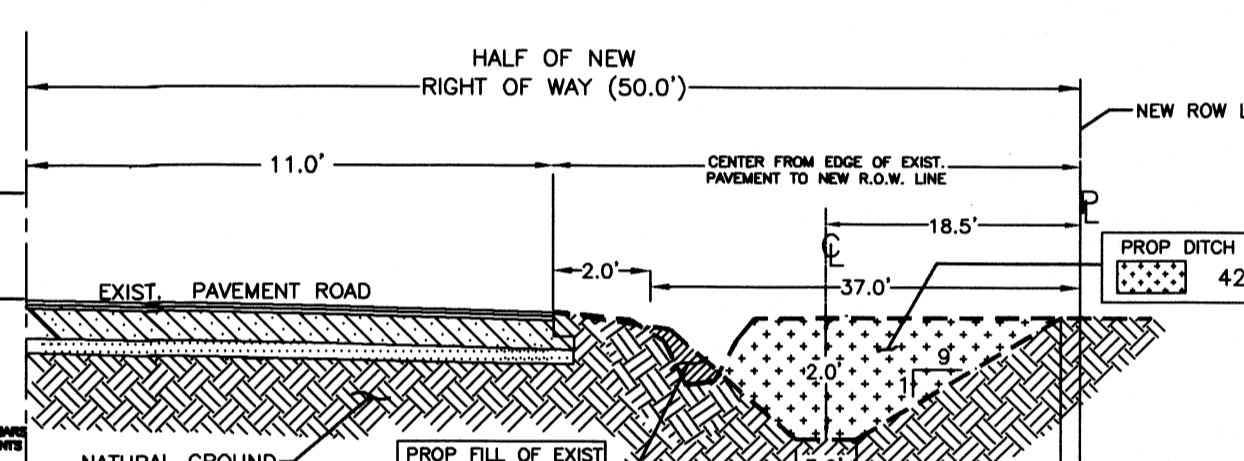
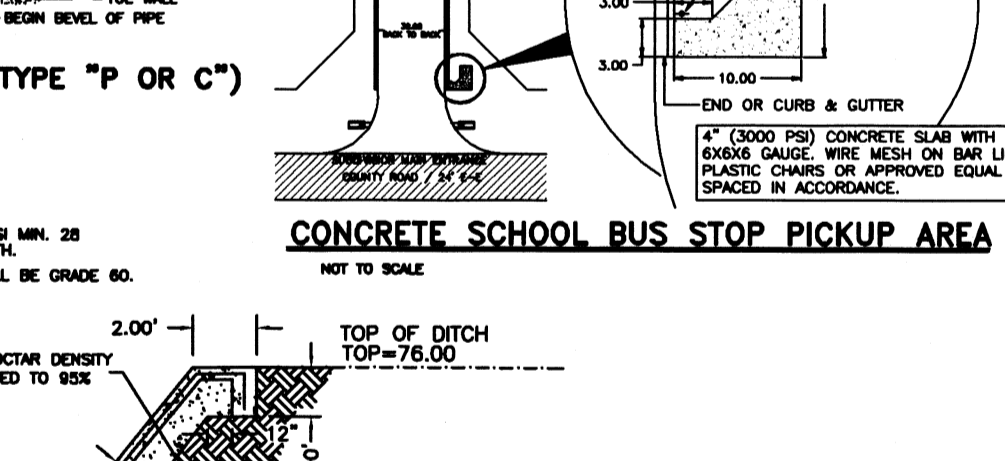
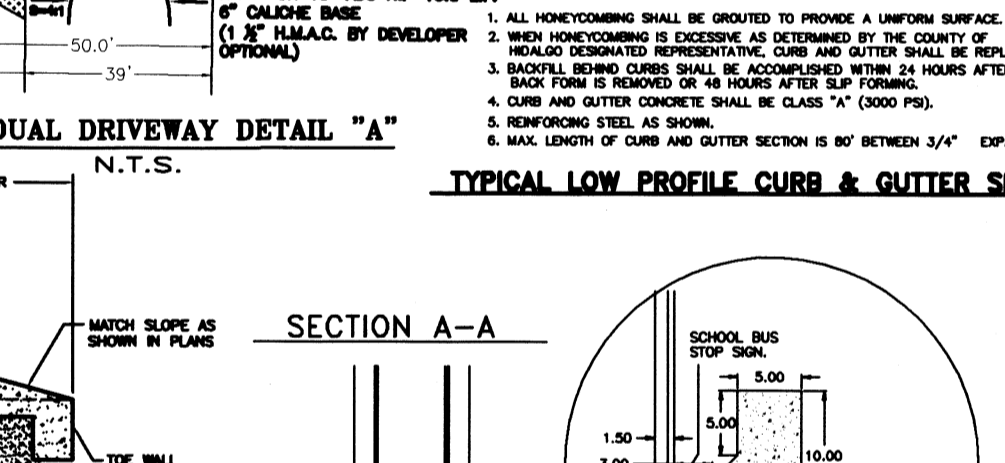
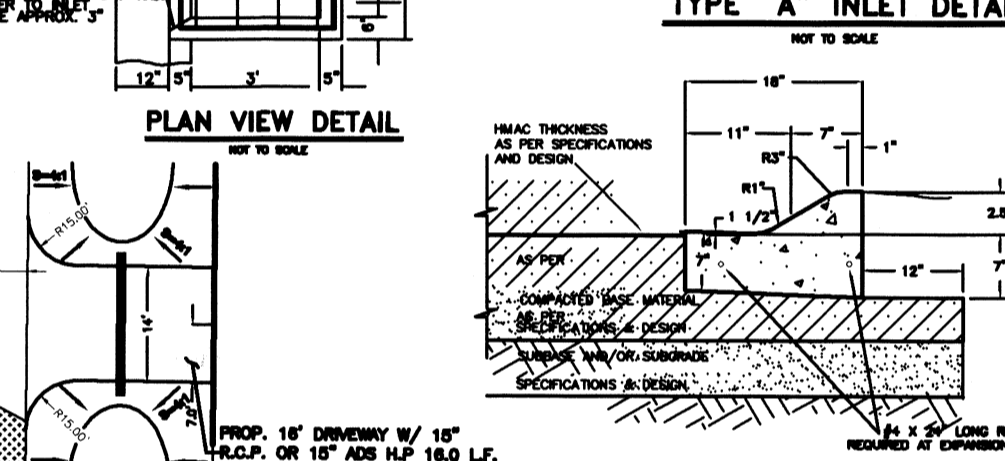
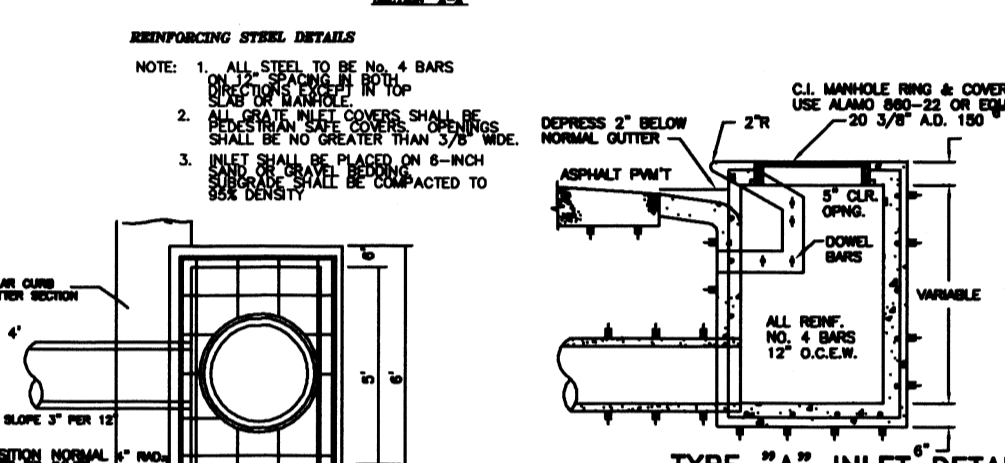
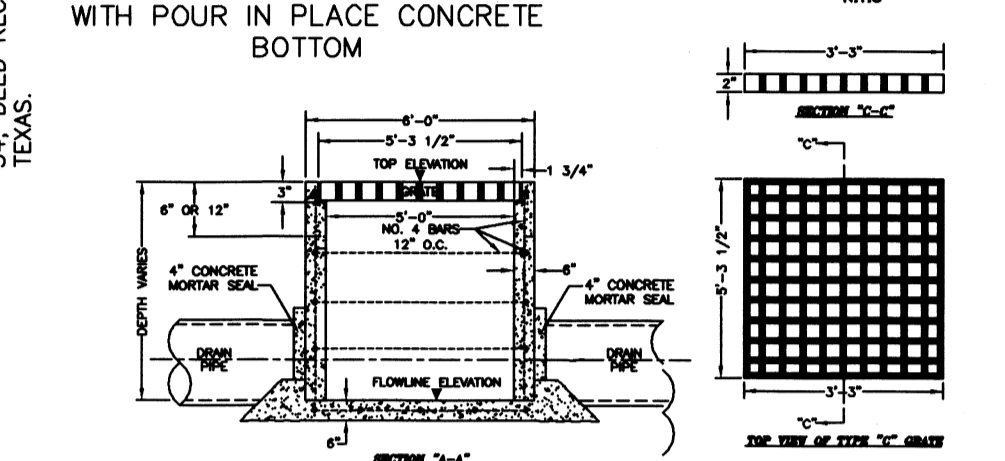
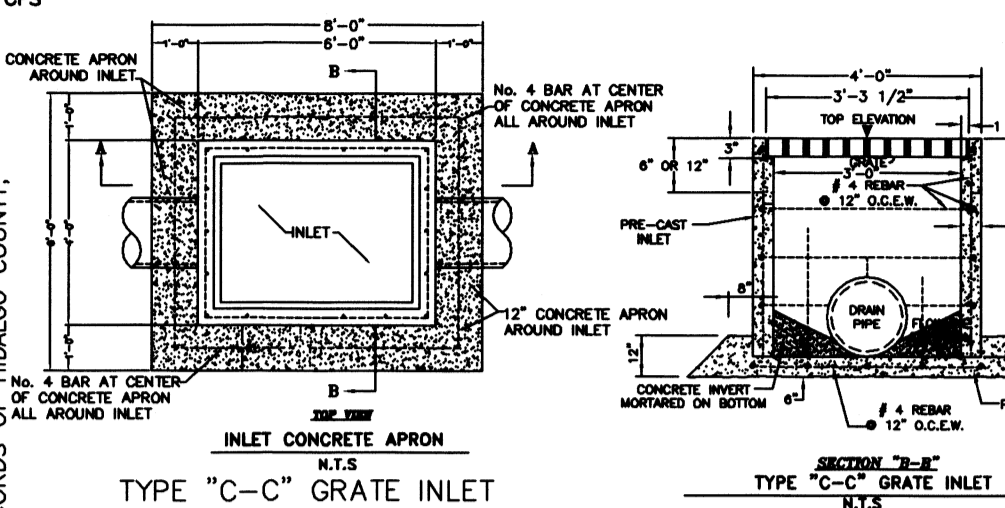
CERTIFICATION:
BY MY SIGNATURE BELOW I CERTIFY THAT THE 100-YEAR FLOODPLAIN FOR ZONE "C", AREAS OF MINIMAL FLOODING AS DESCRIBED IN COMMUNITY PANEL NUMBER 480334 0425 C, DATED ON NOVEMBER 16, 1982 IS CONTAINED WITHIN THE DRAINAGE OF THE SUBDIVISION, AS SHOWN.

ALFONSO QUINTANILLA
P.E. 95534
7-9-2020
DATE



Alfonso Quintanilla
ALFONSO QUINTANILLA
P.E. 95534

7-9-2020
DATE

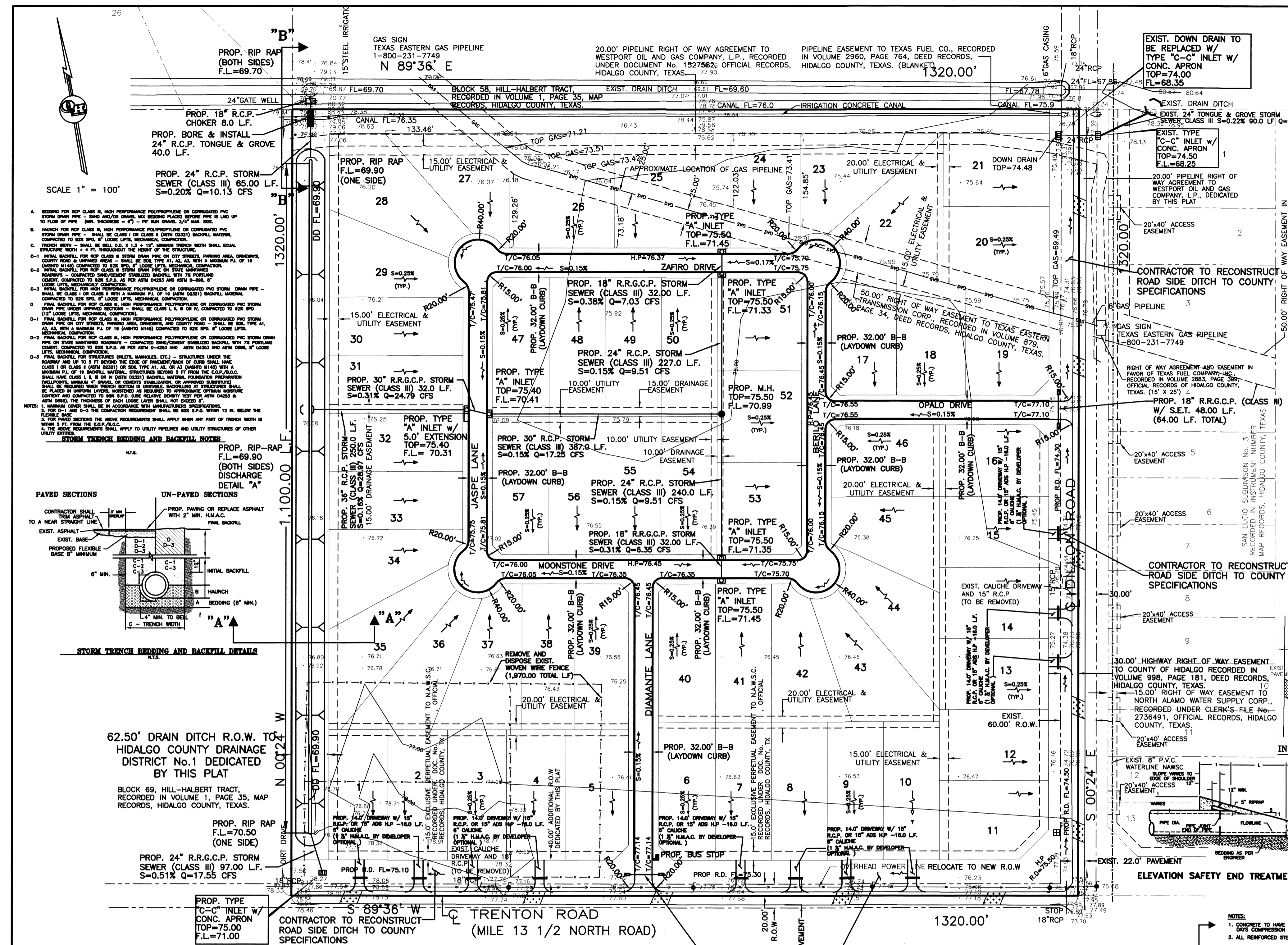


QUINTANILLA, HEADLEY AND ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
124 E. STUBBS ST.
EDINBURG, TEXAS 78539
REGISTRATION NUMBER F-1513
SURVEYING REGISTRATION NUMBER 100411-00
PHONE 956-381-6480
FAX 956-381-0527
ALFONSO@QQA-ENG.COM

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

No.	Sheet	REVISION	Date	Approved

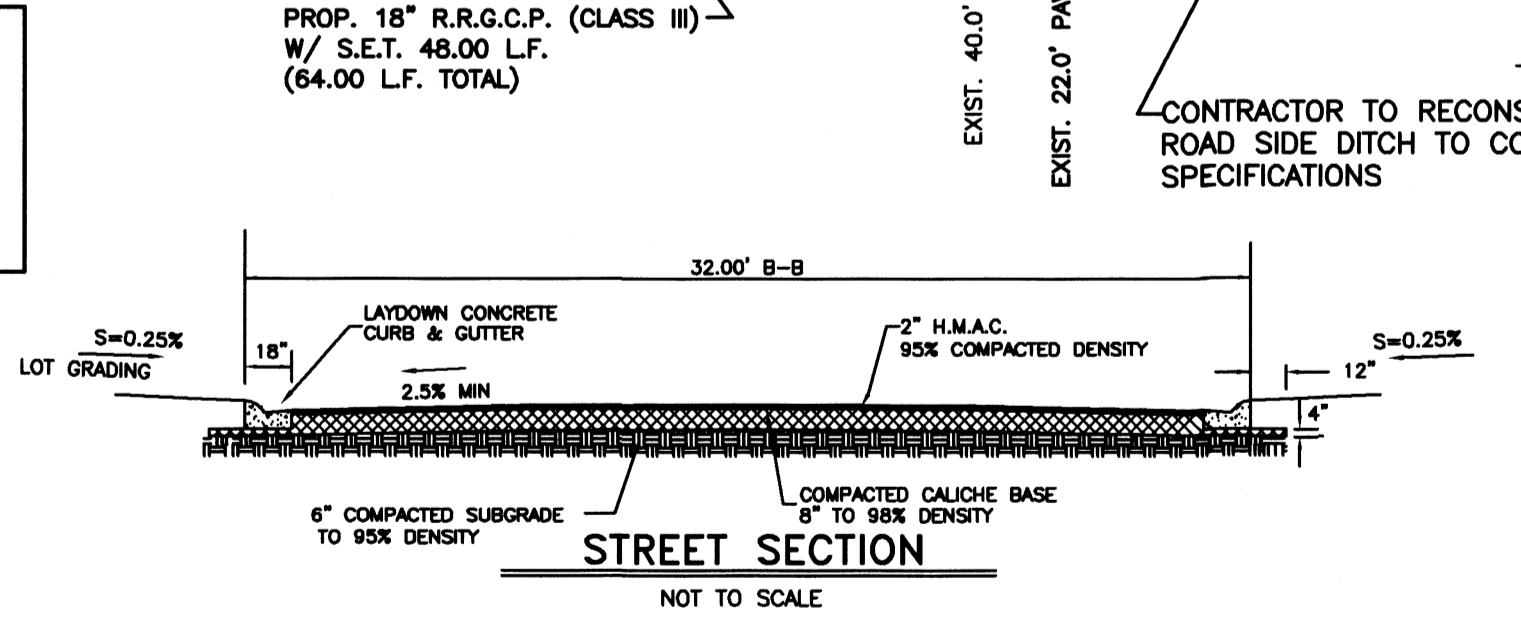
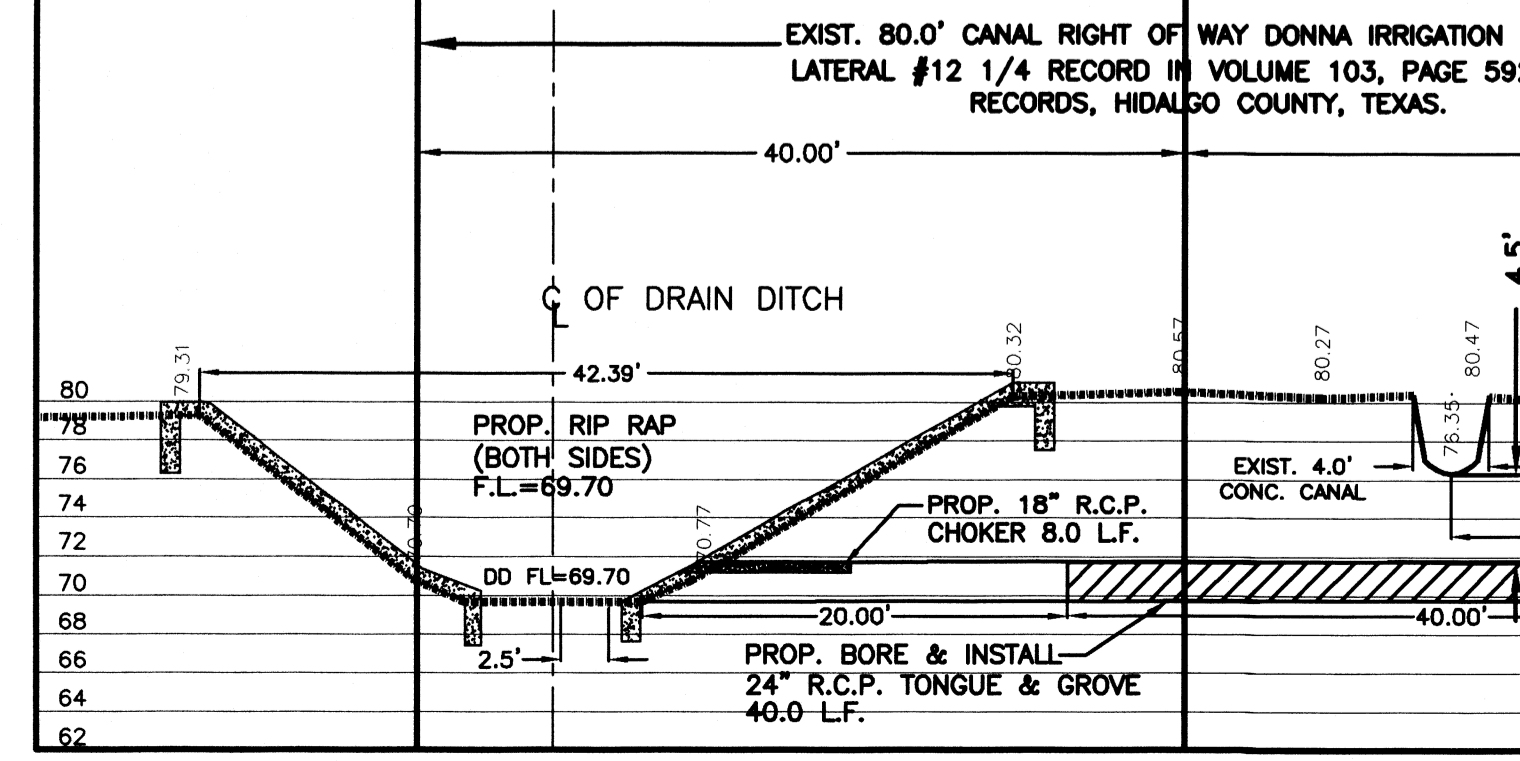
SHEET NO. 3
OF 3 SHEETS
FILENAME: F:\DATA\SUBD\DONNA\SAN RAFAEL SUBDIVISION\PAVING BLDG
DATE PREPARED: 08-29-2020
DATE REVISION: 07-08-2020
PREPARED BY: ALFONSO QUINTANILLA
CHECKED BY: G. CANU
APPROVED BY: _____



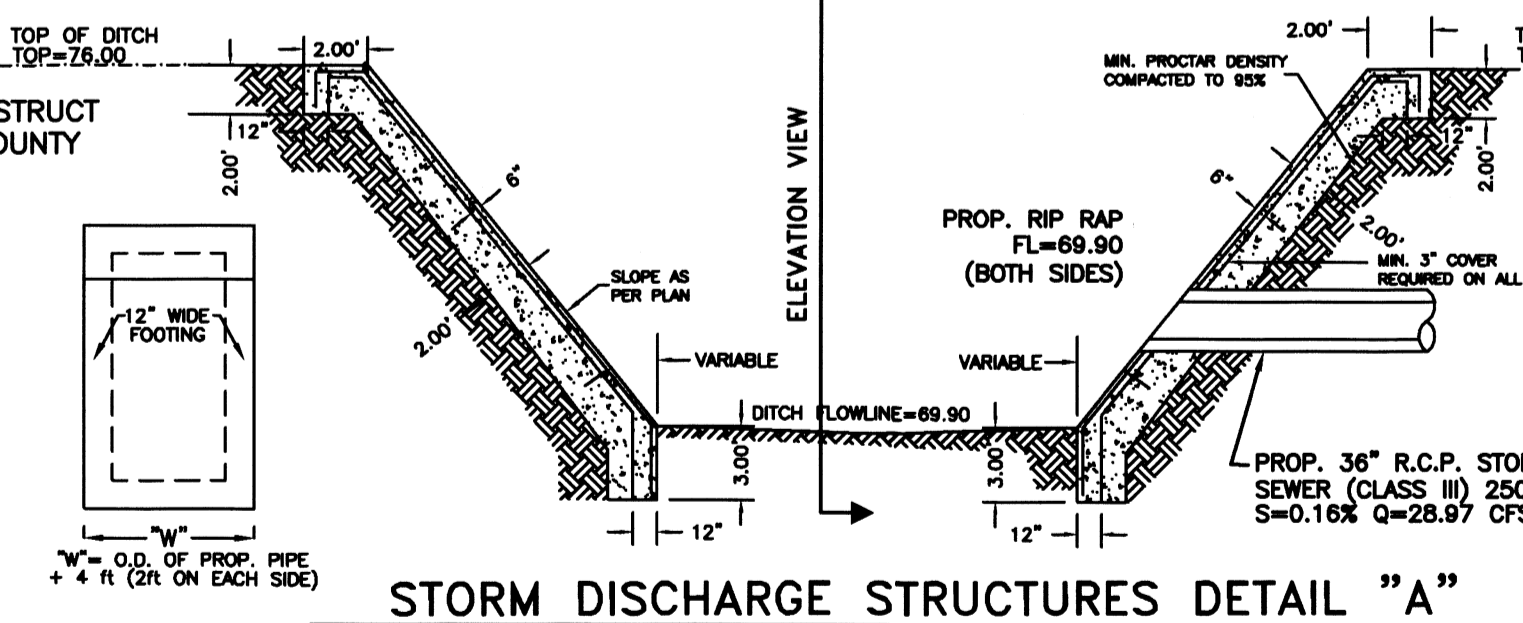
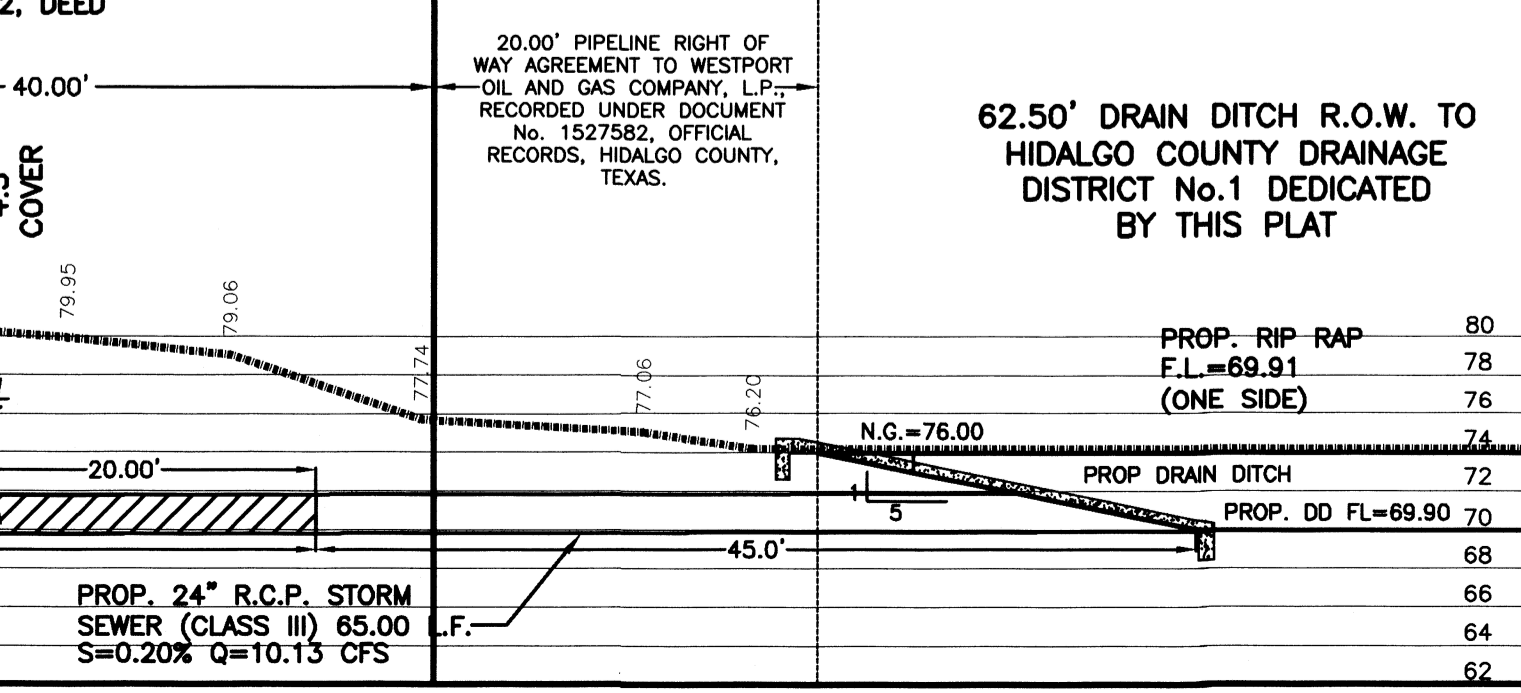
NOTE:
DIRT EXCAVATED FROM DRAIN DITCH SHALL BE SPREAD AT LOCATION DETERMINED BY ENGINEER DURING SUBDIVISION CONSTRUCTION.

LEGEND
TOTAL DETENTION REQUIRED - 131,543.99 C.F.
TOTAL DETENTION PROVIDED - 245,950.00 C.F.
(1,100 L.F. X 137.5 S.F.) + 40,700 C.F. + 54,000 C.F.
TOTAL EXCAVATION NEEDED - 214,500.00 C.F.
(1,100 L.F. X 195.0 S.F.) DRAIN DITCH ONLY

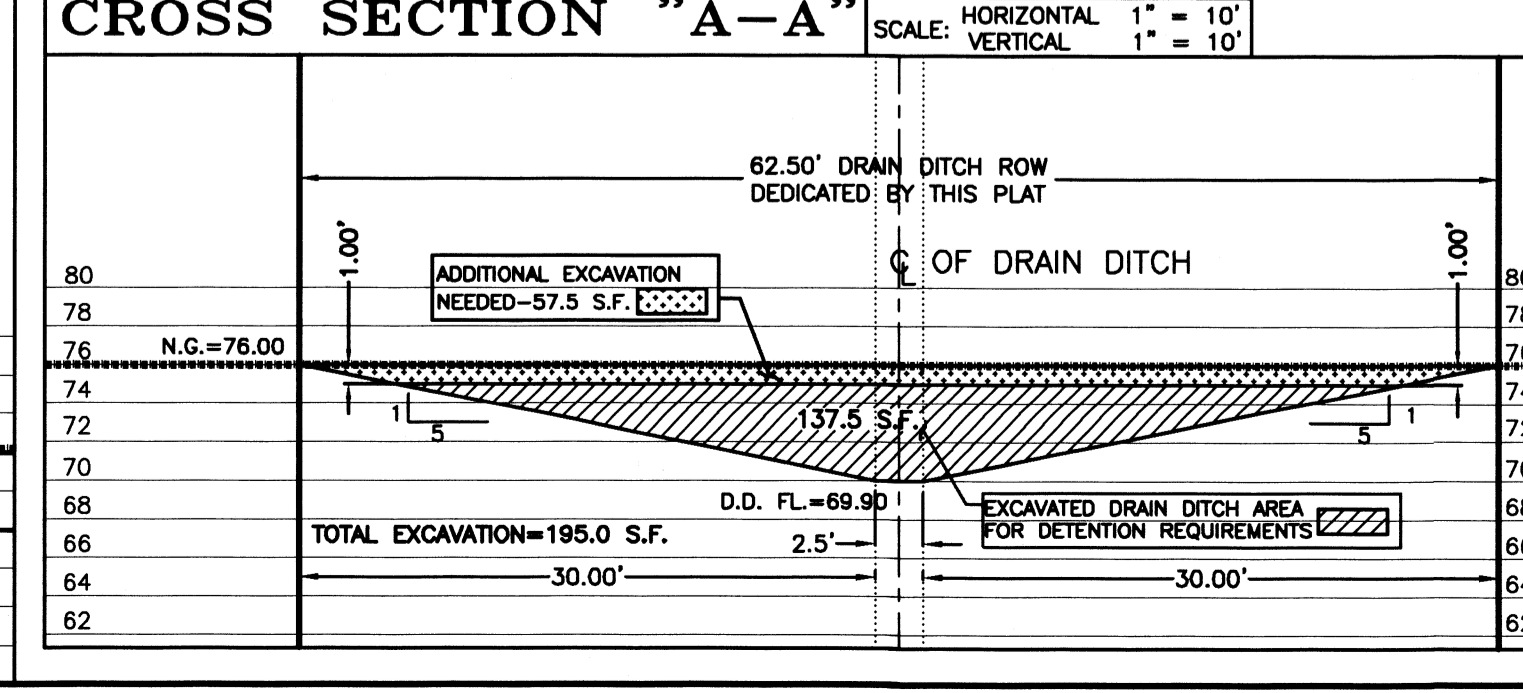
CROSS SECTION "B-B" SCALE: HORIZONTAL 1" = 10' VERTICAL 1" = 10'



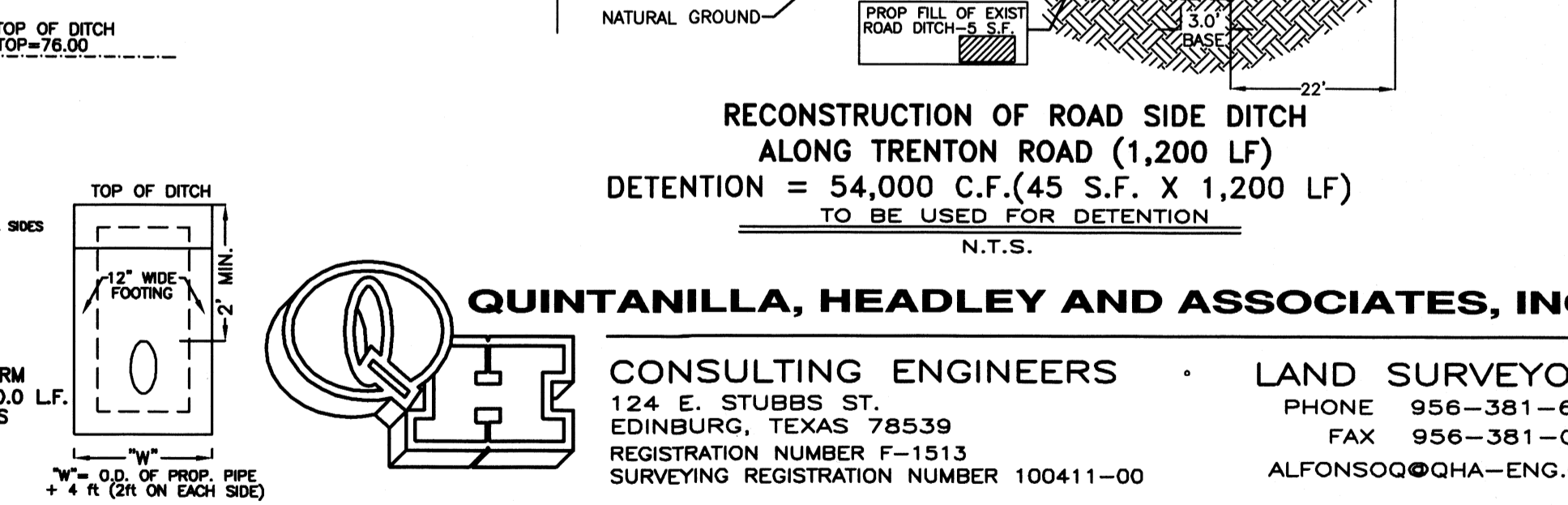
CROSS SECTION "A-A" SCALE: HORIZONTAL 1" = 10' VERTICAL 1" = 10'



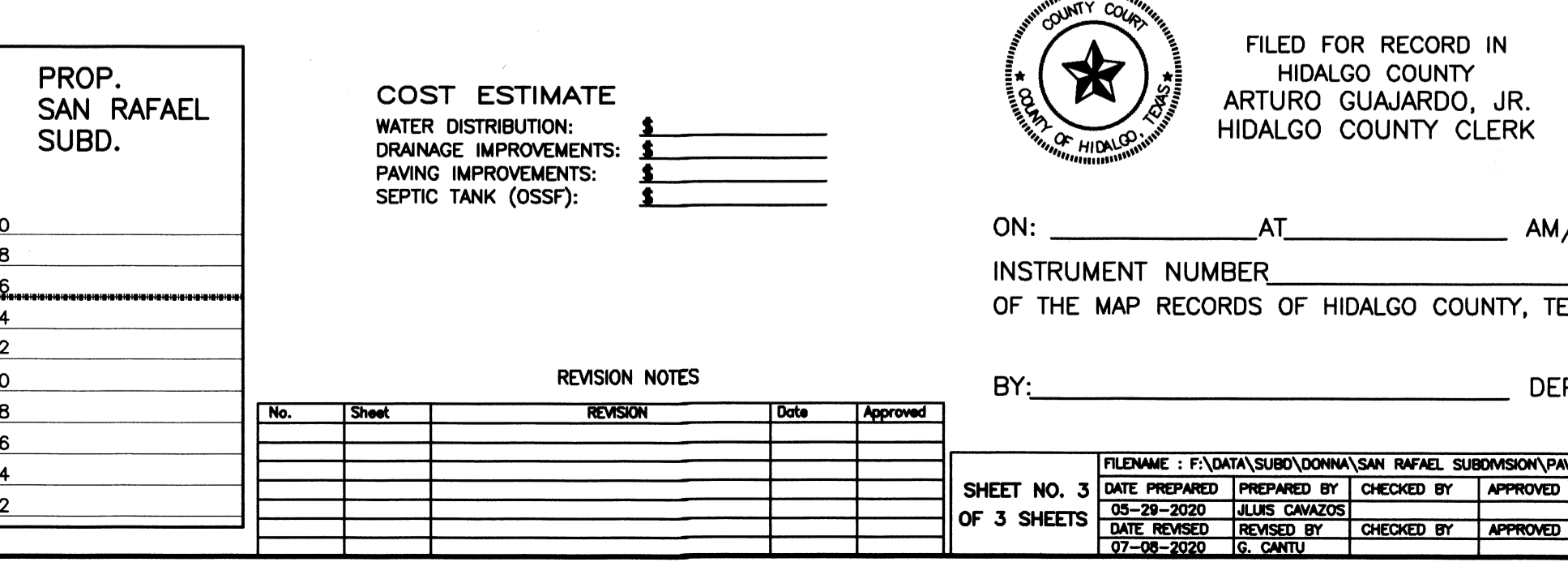
STORM DISCHARGE STRUCTURES DETAIL "A"



TOTAL EXCAVATION=195.0 S.F.
EXCAVATED DRAIN DITCH AREA FOR DETENTION REQUIREMENTS



ELEVATION VIEW



CONTRACTOR TO RECONSTRUCT ROAD SIDE DITCH TO COUNTY SPECIFICATIONS

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