



HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM
Director of Planning

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

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 5-31-2022

PROPOSED HIGHLAND MANOR PHASE 2 SUBDIVISION PRECINCT No. 1.

ENGINEER: RIO DELTA ENGINEERING DEVELOPER: DASC INVESTMENTS, LLC.

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 19 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INDUSTRIAL

NUMBER OF STREETLIGHTS: 5

FILLING STATIONS: 3

LOCATION DESCRIPTION: EAST OF MILE 5 ½ WEST ROAD APPROXIMATELY 393 FEET NORTH OF MILE 11 NORTH ROAD.

SUBDIVISION LIES WITHIN THE: ETJ OF WESLACO

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 05-03-2021 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.

ROAD R.O.W. DEDICATION: 25.00 FEET ONTO MILE 5 ½ NORTH ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 4-21-2022 BY, DANNY GUZMAN, PCT. 1 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 5-09-2022 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: OSSF'S HAVE BEEN ESCROWED.

WATER SERVICE PROVIDER: NAWSC EXISTING LINE SIZE: 8" LOCATION: MILE 5 ½ WEST ROAD

H.C.E.O.C. FINAL APPROVAL DATE: 06-03-2021 BY ENVIRONMENTAL COMPLIANCE COORDINATOR

LARGE CONSTRUCTION

The applicant has submitted the required NOI as per Part II, Section E of the TPDES General Permit for Construction Activities (TXR150000) along with a copy of the Erosion Control Plan for the proposed project.

REQUEST FOR FINAL APPROVAL WITH: **CASH DEPOSIT:** Amount: 28,500.00 For: (19) OSSF'S

PRELIMINARY APPROVAL FROM THE
HIDALGO COUNTY COMMISSIONERS COURT ON: JUNE 25, 2021

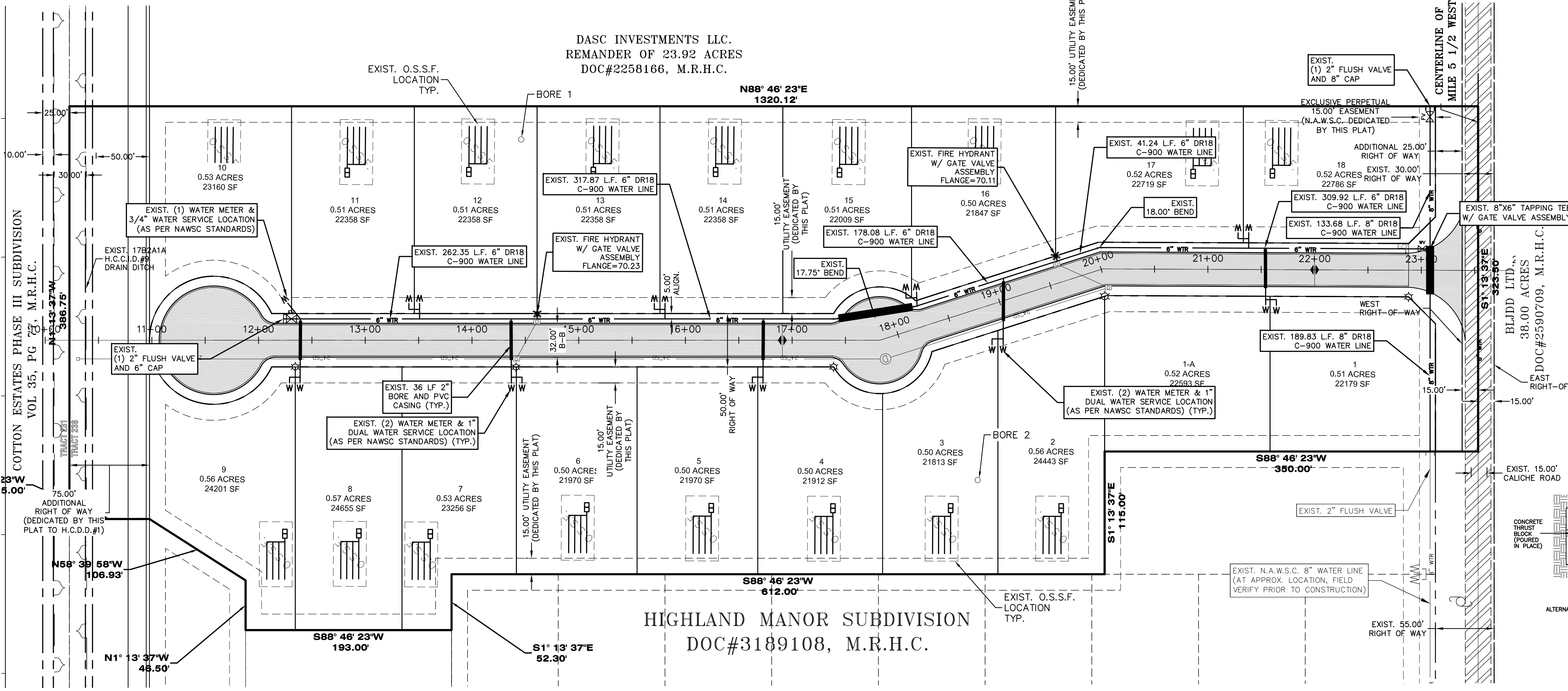
STAFF RECOMMENDS: **Preliminary Approval** subject to comments and future recommendations by planning, other departments and the approval of the City of WESLACO.

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.

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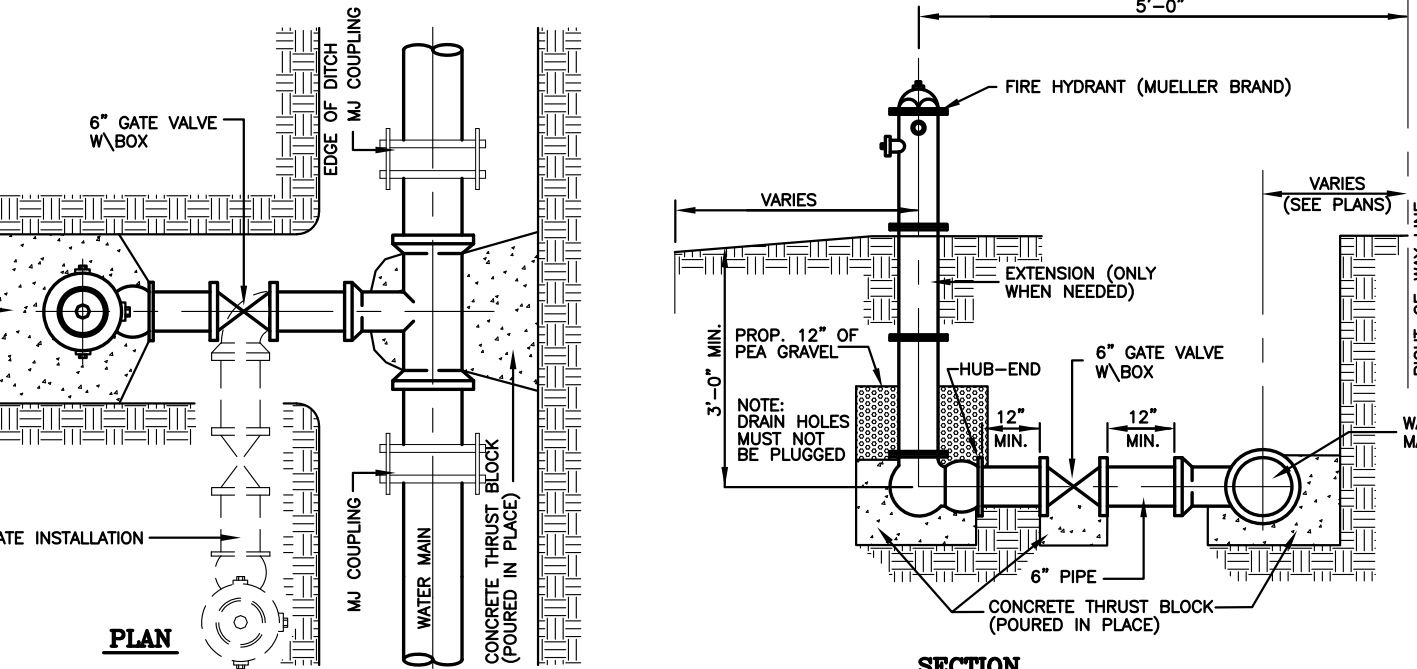
A:\BID SUBDIVISIONS\2020\SUB 20_046 - HIGHLAND MANOR PHASE 2 SUBDIVISION\20_046-SHT 3 UTILITY LAYOUT.DWG RODE 5/2/2022 5:01 PM



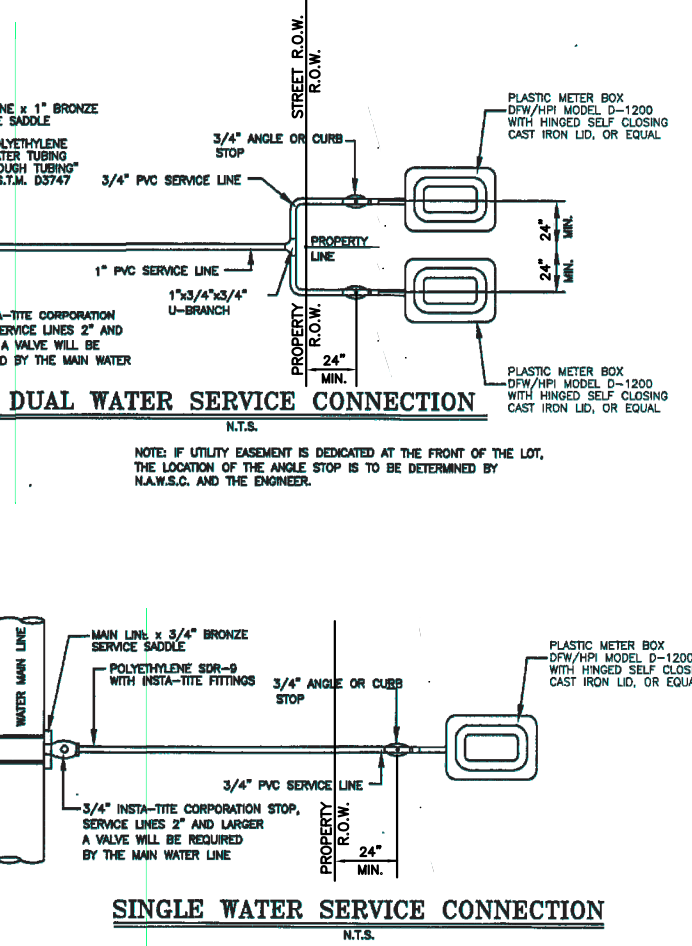
SCALE: 1" = 60'
 BEARING OF BASIS
 TEXAS STATE PLANE
 COORDINATES NAD 83
 TEXAS SOUTH ZONE (4205)
 WESTERN DATA SYSTEMS NETWORK

ABBREVIATION LEGEND	
R.O.W.	RIGHT-OF-WAY
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
S.W.C.	SOUTHWEST CORNER
F.T.	FARM TRACT
F.M.	FARM-TO-MARKET
U.E.	UTILITY EASEMENT
C.L.	CENTERLINE
L.T.	LOT LINE

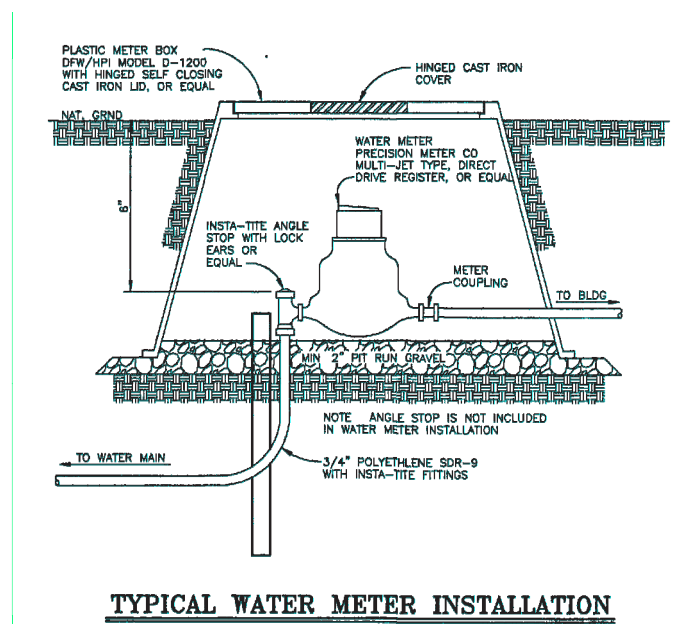
LEGEND	
○	SET 1/2 INCH IRON ROD
●	FOUND 1/2 INCH IRON ROD
▲	FOUND COTTON PICKER SPINDLE
△	CALCULATED POINT
○	POWER POLE
(XXXX)	MAP RECORD
XXXX	NATURAL GROUND
○	CAPPED IRON ROD SET



TYPICAL FIRE HYDRANT INSTALLATION



DUAL WATER SERVICE CONNECTION



TYPICAL WATER METER INSTALLATION



SINGLE WATER SERVICE CONNECTION

GENERAL NOTES:
 1) ALL WATERLINE IMPROVEMENTS AS PER NORTH ALAMO WATER SUPPLY CORPORATION CONSTRUCTION STANDARDS.

ENGINEERING REPORT FOR HIGHLAND MANOR PHASE 2 SUBDIVISION
 BY IVAN GARCIA, P.E., R.P.L.S.

BEING A 11.79 ACRES TRACT OF LAND OUT OF FARM TRACTS 238, THE WEST AND ADAMS TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS, AS PER MAP RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS, AND SAID 11.79 ACRES TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

PROPOSED USE:
 ALL LOTS ARE VACANT AND WILL BE USED FOR SINGLE FAMILY HOMES.

WATER SUPPLY AND DISTRIBUTION:
 THIS SUBDIVISION WILL BE PROVIDED WATER SERVICE BY NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). THE SUBDIVIDER AND N.A.W.S.C. HAVE ENTERED INTO A CONTRACT WHEREBY N.A.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS. 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 WATER LINE RUNNING ALONG THE WEST SIDE OF MILE 5 1/2 WEST ROAD RIGHT-OF-WAY. THE WATER SYSTEM FOR HIGHLAND MANOR PHASE 2 SUBDIVISION CONSISTS OF (1) 1" DIAMETER DUAL SERVICE, AND (1) 3/4" DIAMETER SINGLE SERVICE LINE THAT CONNECT INTO A PROPOSED INTERIOR 6" LINE FOR ALL LOTS. SERVICES TERMINATE AT THE WATER METER BOX FOR ALL LOTS AND 3 FIRE HYDRANTS HAVE BEEN INSTALLED ON THE PROPOSED 6" WATER ON THE NORTH SIDE OF THE INTERIOR STREET. THE (9) 1" DUAL SERVICES AND THE METER BOXES HAVE ALREADY BEEN INSTALLED. IN ADDITION, THE SUBDIVIDER HAS INSTALLED 2 FIRE HYDRANTS AT A UNIT COST OF \$ 5,000.00. THE COST FOR THE CONSTRUCTION OF THE WATER SYSTEM TO THIS SUBDIVISION IS ESTIMATED TO BE \$ 20,780.00. THE OWNER OF THIS DEVELOPMENT HAS PAID WATER TAP FEES, WHICH INCLUDE THE WATER METER INSTALLATION AND INSPECTION FEES, TO N.A.W.S.C. A TOTAL OF \$ 1,500.00. AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOT IN THE SUBDIVISION TO N.A.W.S.C.

SEWAGE FACILITIES DESCRIPTION, COST AND OPERABILITY DATES:
 SEWAGE FROM HIGHLAND MANOR PHASE 2 SUBDIVISION WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENTS SEPTIC TANK AND A DRAIN FIELD ON ALL LOTS. THE UNDERSIGNED PROFESSIONAL ENGINEER 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. BOTH LOTS HAVE ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

SOIL EVALUATION REPORT:
 THE LOTS IN THE PROPOSED SUBDIVISION ARE AT LEAST 1/2 ACRE IN SIZE. ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF FLOES OF HIDALGO FINE SANDY LOAM (28), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLECTABLE. PERMEABILITY IS MODERATELY HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. ADDITIONALLY, IT CONSISTS OF 29.0% OF HIDALGO SANDY CLAY LOAM (28), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLECTABLE. PERMEABILITY IS MODERATELY TO HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS.

THE ESTIMATED COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 1,500.00. FOR A TOTAL OF \$ 28,500.00 FOR ALL LOTS, INCLUDING THE COSTS FOR THE REQUIRED PERMIT AND LICENSE. NO OSSF'S HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL. WITH THE FILING OF THIS FINAL PLAT, THE SUBDIVIDER IS PROVIDING ADEQUATE FINANCIAL GUARANTEES OF PERFORMANCE IN THE FORM OF A (CASHIERS CHECK OR PERSONAL CHECK) REPRESENTING A CASH DEPOSIT TO BE HELD BY THE COUNTY OF HIDALGO IN THE AMOUNT OF \$ 28,500.00, WHICH IS THE ESTIMATED TOTAL COST TO INSTALL A SEPTIC TANK SYSTEM ON ALL LOTS. THE SUBDIVIDER WILL INCLUDE THE COST OF A SEPTIC TANK SYSTEM IN THE SALE PRICE OF THE LOT.

AT ANY TIME AFTER THE LOT IS SOLD, THE PURCHASER MAY INITIATE INSTALLATION OF AN OSSF SYSTEM BY WRITING OR CALLING THE SUBDIVIDER. SUBDIVIDER SHALL BE RESPONSIBLE TO FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AN APPLICATION FOR A PERMIT TO INSTALL AN OSSF. THE OSSF SYSTEM SHALL BE INSTALLED ON THE LOT PRIOR TO THE COUNTY ISSUING A FINAL LIGHT AND WATER CLEARANCE.

ENGINEER CERTIFICATION:
 I CERTIFY THAT THE WATER AND SANITARY SEWER SYSTEM FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL SUBDIVISION RULES ADOPTED UNDER SECTION 16.343, WATER CODE.

I CERTIFY THAT THE COSTS FOR THE CONSTRUCTED WATER AND SANITARY SEWER FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES:
 THESE FACILITIES WILL HAVE A TOTAL COST OF \$ 20,780.00. THE OWNER OF THIS DEVELOPMENT WILL PAY WATER TAP FEES, WHICH INCLUDE THE WATER METER INSTALLATION AND INSPECTION FEES, TO N.A.W.S.C. A TOTAL OF \$ 1,500.00. AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING EACH ONE OF THE LOTS IN THE SUBDIVISION TO N.A.W.S.C.

SANITARY SEWER FACILITIES:
 THE COST FOR THE CONSTRUCTION OF THE SEPTIC SYSTEM PER LOT WILL BE \$ 1,500.00. SEWAGE FACILITIES - SEPTIC SYSTEM IS ESTIMATED FOR A TOTAL OF \$ 28,500.00 FOR THE ENTIRE SUBDIVISION.

REPORT DE INGENIERIA DE HIGHLAND MANOR PHASE 2 SUBDIVISION
 POR: IVAN GARCIA, P.E., R.P.L.S.

ABASTECIMIENTO DE AGUA POTABLE, DESCRIPCION, COSTO, Y FECHA DE OPERABILIDAD

LA SUBDIVISION HIGHLAND MANOR PHASE 2 SUBDIVISION RECIBIRA SU PROVISION DE AGUA DE NORTH ALAMO WATER SUPPLY CORPORATION, LA COMPANIA DE AGUA (N.A.W.S.C.). EL DUEÑO DE LA SUBDIVISION Y N.A.W.S.C. HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA SU PROVISION DE AGUA POR LOS PROXIMOS 30 ANOS. N.A.W.S.C. HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

N.A.W.S.C. TIENE UN CONDUCTO DE AGUA DE 8" PULGADAS DE DIAMETRO QUE PASA POR EL LAZO OESTE DEL DRENAJE DE VA (RIGHT-OF-WAY) DE LA CARRETERA MILE 5 1/2 WEST. EL SISTEMA REQUERIDO PARA HIGHLAND MANOR PHASE 2 SUBDIVISION CONSISTE EN (9) OCHO SERVICIOS DE AGUA DOBLE DE 1" DE DIAMETRO Y (1) UN SERVICIO DE AGUA INDIVIDUAL DE 3/4" DE DIAMETRO LA CUAL ESTA CONECTADA A LA LINEA DE 6" DE DIAMETRO PARA TODOS LOS LOTES. Y TERMINA EN LOS MEDIDORES DE AGUA. EL COSTO DE INSTALACION DEL SISTEMA DE DISTRIBUCION DE AGUA POTABLE DE HIGHLAND MANOR PHASE 2 SUBDIVISION SE ESTIMA DE \$ 20,780.00. A UN COSTO TOTAL. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO 3 HORNETES DE AGUA (FIRE HYDRANT) A UN COSTO DE \$ 5,000.00. EL DUEÑO DE LA SUBDIVISION VA PAGAR LOS CARGOS POR CONEXION DE AGUA. LOS CUALES INCLUYEN LA INSTALACION DEL MEDIDOR DE AGUA Y LAS TARRIFAS DE INSPECCION DE N.A.W.S.C. POR UN TOTAL DE \$ 1,500.00. AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOT IN THE SUBDIVISION TO N.A.W.S.C.

DESCRIPCION, COSTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION:
 SE INSTALARAN FOSAS SEPTICAS PARA HIGHLAND MANOR PHASE 2 SUBDIVISION. LAS FOSAS SEPTICAS CONSISTEN DE UN TANQUE SEPTICO DE MODELO DOBLE Y DE UN CAMPO DE DRENAJE PARA TODOS LOS LOTES. EL INGENIERO 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.

EL LOTE EN LA SUBDIVISION MIDE MINIMO MEDIO ACRE. DE ACUERDO CON EL INFORME DE LA ENCUESTA DE SUELOS, PREPARADO PARA EL CONDADO DE HIDALGO POR LA U.S.D.A. SERVICIO DE CONSERVACION DE SUELOS. EL SITIO CONSTA DE 71.0% DE HIDALGO MARGA ARENOSA FINA (28), CON 0 A 1% DE PENDIENTE. ESTOS SUELOS SE CONSIDERAN BIEN DRENAJADOS EN LOS QUE LA ESCORRIENTA SUPERFICIAL ES DESPRECIABLE, LA PERMEABILIDAD ES MODERADAMENTE ALTA-ALTA Y LA CAPACIDAD DE AGUA ES MODERADA. EL SITIO TAMBIEN CONSISTE DE 29.0% DE HIDALGO MARGA ARENOSA CLAY LOAM (28), CON 0 A 1% DE PENDIENTE. ESTOS SUELOS SE CONSIDERAN BIEN DRENAJADOS EN LOS QUE LA ESCORRIENTA SUPERFICIAL ES DESPRECIABLE, LA PERMEABILIDAD ES MODERADAMENTE ALTA-ALTA Y LA CAPACIDAD DE AGUA ES MODERADA.

EL COSTO ESTIMADO PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS ES DE \$ 1,500.00 DOLARES, POR UN TOTAL DE \$ 28,500.00. PARA TODOS LOS LOTES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS NO SE HA INSTALADO LAS FOSAS SEPTICAS EN EL PROCESO DE LA APROBACION FINAL. AL SOMETER ESTE PLAT PARA APROBACION FINAL, EL DUEÑO HA PROPORCIONADO GARANTIAS FINANCIERAS ADECUADAS EN FORMA DE UN CHEQUE AL PORTADOR O CHEQUE REPRESENTANDO UN DEPOSITO EN EFECTIVO QUE SERA RETENIDO POR EL CONDADO DE HIDALGO EN CAJAPOR LA CANTIDAD DE \$ 28,500.00. LA CUAL ES EL COSTO ESTIMADO PARA INSTALAR EL SISTEMA DE FOSA SEPTICA PARA TODOS LOS LOTES. EL DUEÑO INCLUIRA EL COSTO DEL SISTEMA DE FOSA SEPTICA EN EL COSTO DE VENTA DE LOTE.

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:

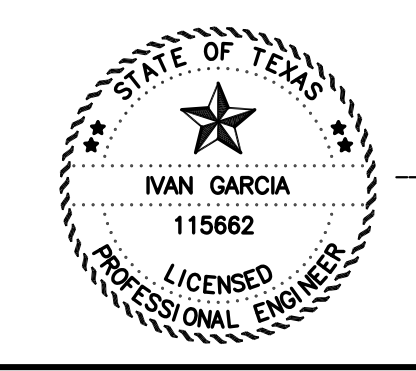
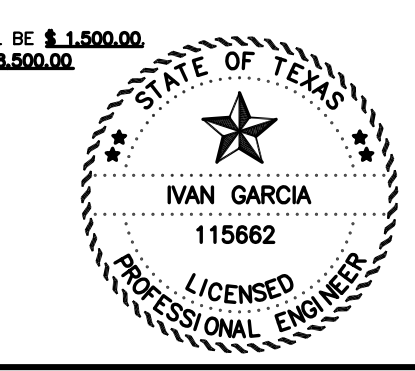
AGUA:
 EL SISTEMA/SERVICIO DE AGUA TENDRA UN COSTO DE \$ 20,780.00. EL DUEÑO DE LA SUBDIVISION VA PAGAR LOS CARGOS POR CONEXION DE AGUA, LOS CUALES INCLUYEN LA INSTALACION DEL MEDIDOR DE AGUA Y LAS TARRIFAS DE INSPECCION DE N.A.W.S.C. POR UN TOTAL DE \$ 1,500.00. AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING EACH ONE OF THE LOTS IN THE SUBDIVISION TO N.A.W.S.C.

DRENAJE:
 EL COSTO ESTIMADO PARA LA INSTALACION DE DOS SISTEMAS INDIVIDUALES DE FOSAS SEPTICAS PARA LOS LOTES SON \$ 28,500.00 DOLARES O \$ 1,500.00 POR LOTE, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA.

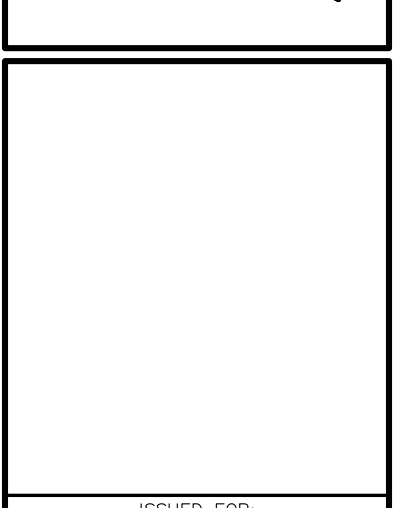
I, IVAN GARCIA, HEREBY ACKNOWLEDGE THAT THE ABOVE TRANSLATION FROM ENGLISH TO SPANISH, IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

IVAN GARCIA, P.E., R.P.L.S. DATE

IVAN GARCIA, P.E., R.P.L.S. DATE



RIO DELTA ENGINEERING
 FIRM REGISTRATION No. F-7628
 SURVEY FIRM No. 10194027
 921 S. 10TH AVENUE EDINBURG, TEXAS 78539
 (TEL) 956-380-5152 (FAX) 956-380-5083



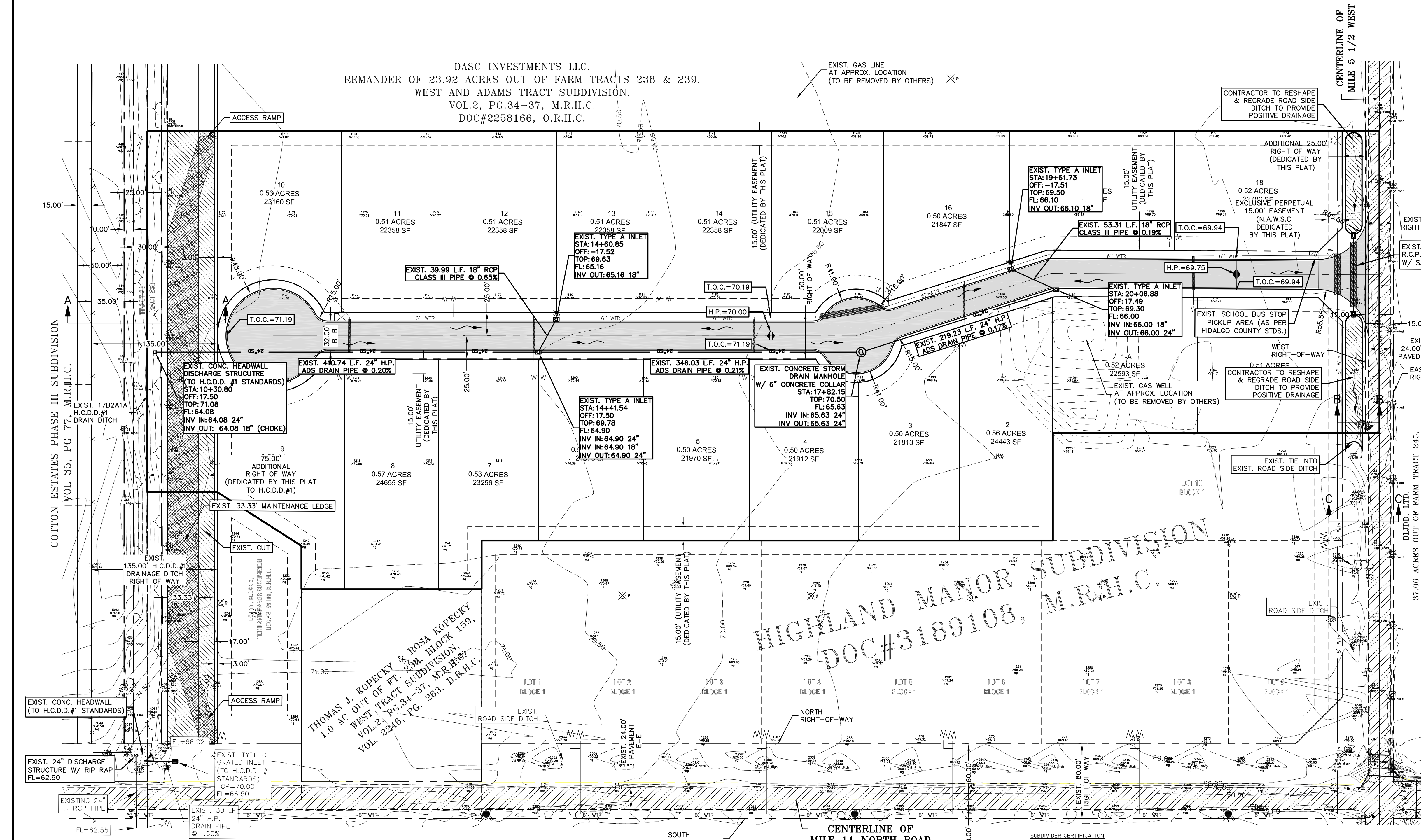
ISSUED FOR: **FINAL**

UTILITY LAYOUT
HIGHLAND MANOR PHASE 2 SUBDIVISION
WESLACO, TEXAS
HIDALGO COUNTY

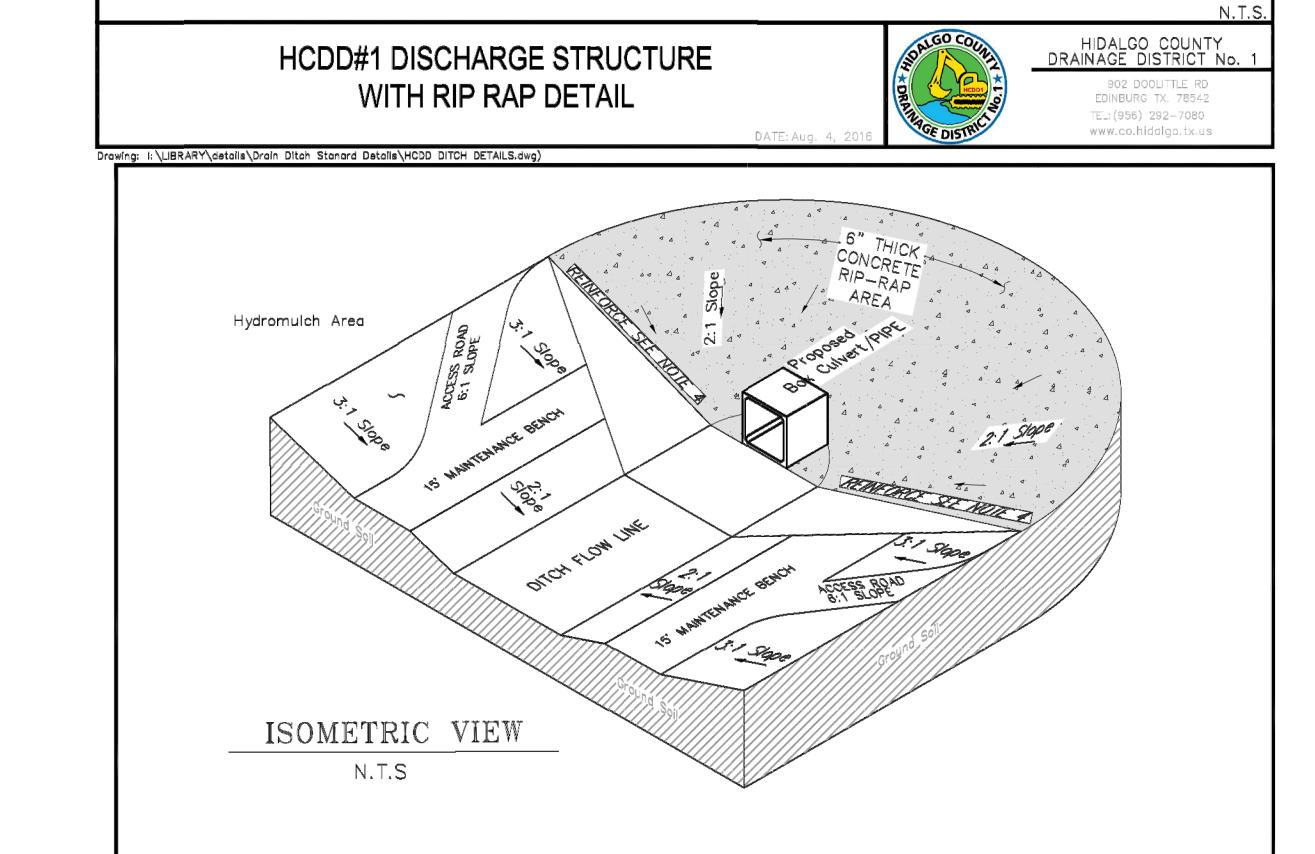
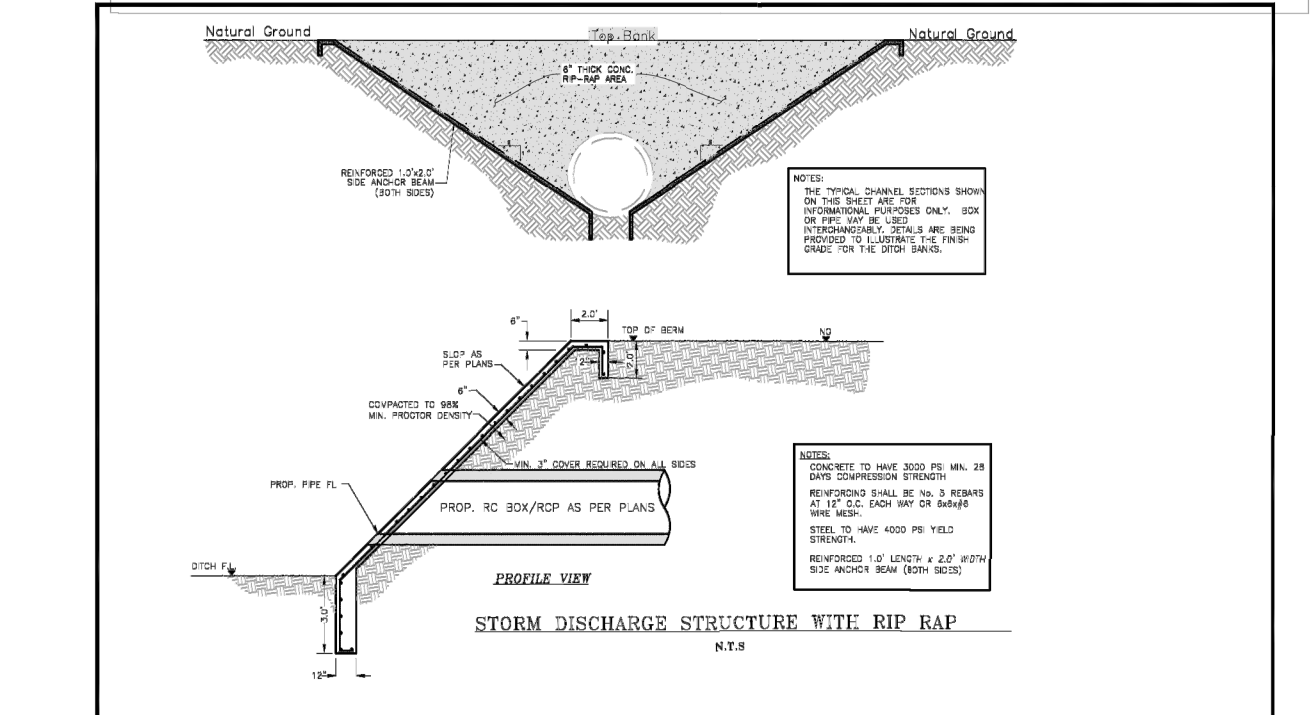
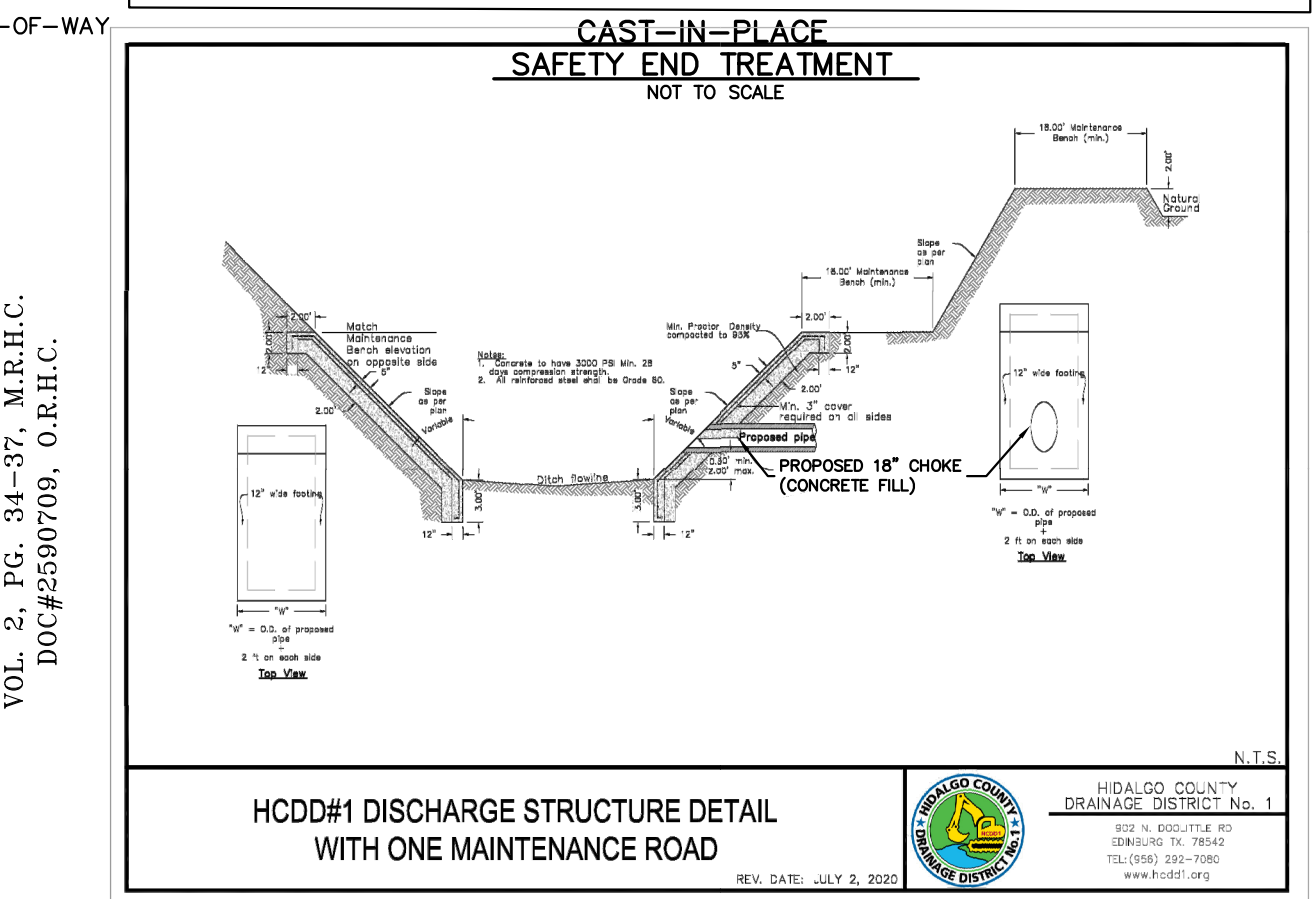
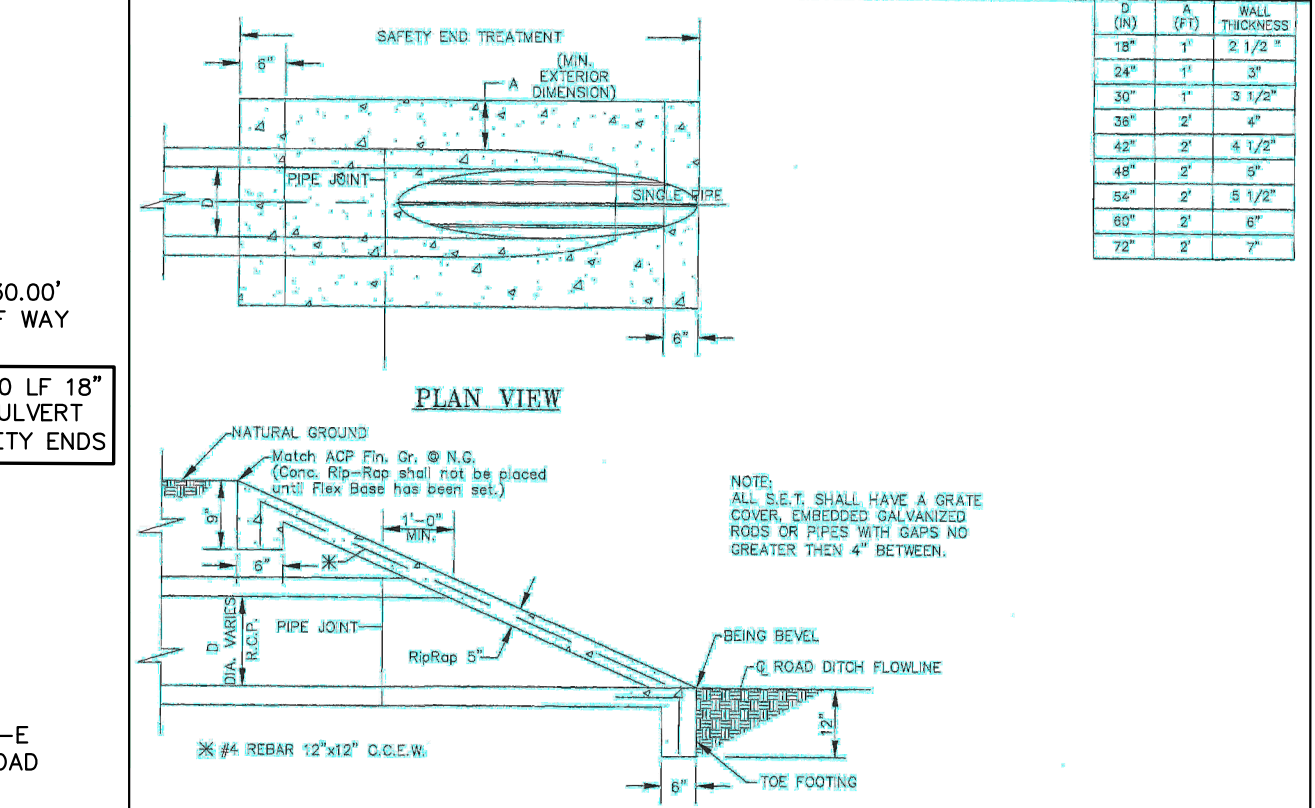
ENGINEER: IVAN GARCIA P.E., R.P.L.S.
 SURVEYOR: IVAN GARCIA P.E., R.P.L.S.
 CHECKED: IVAN GARCIA P.E., R.P.L.S.

DATE: MAY 4, 2022
 PROJECT: SUB 20 046
 REVISIONS:
 PAGE NO. **2-OF-4**

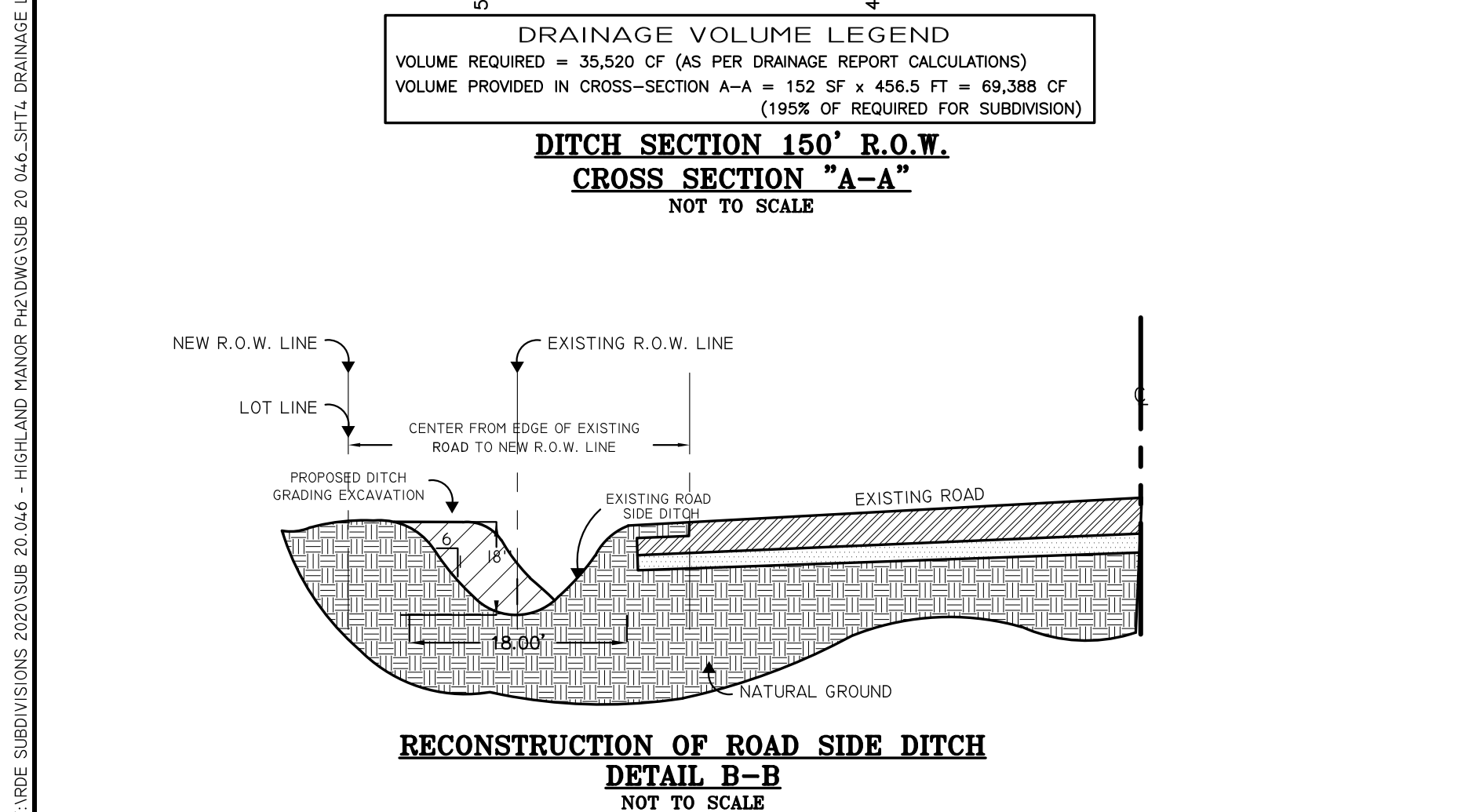
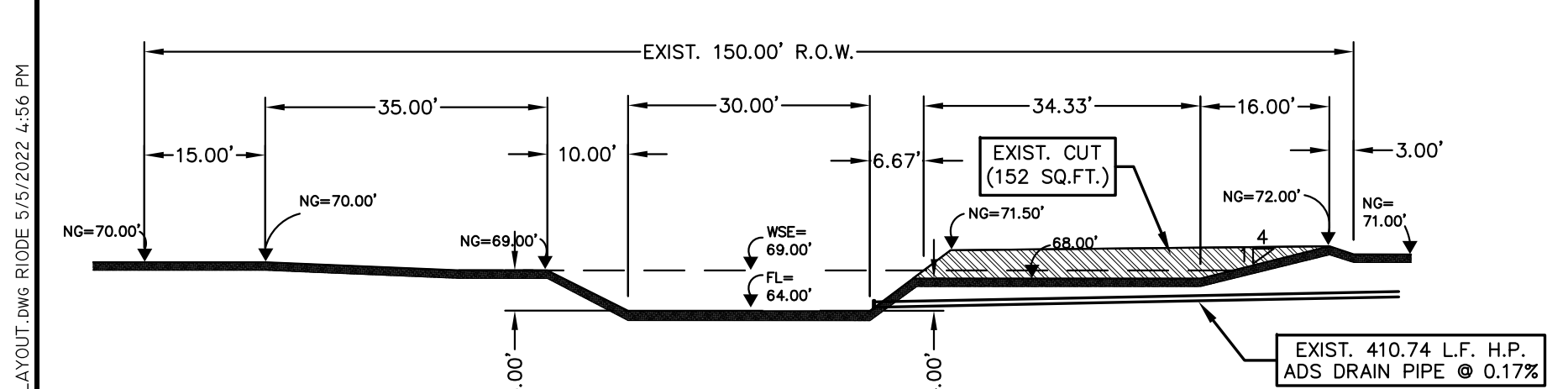
INDEX TO SHEETS OF HIGHLAND MANOR PHASE 2 SUBDIVISION	
SHEET 1:	HEADING, INDEX, LOCATION MAP, PRINCIPAL CONTACTS, MAP, LOT, STREETS, AND EASEMENT LAYOUT; DESCRIPTION (METES AND BOUNDS); ENGINEER'S AND SURVEYOR'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY APPROVAL CERTIFICATE; COUNTY CLERK'S RECORDING CERTIFICATE; REVISION NOTES; H.C.C.I.D.#9, H.C.D.D. No. 1, HIDALGO COUNTY HEALTH DEPARTMENT CERTIFICATE.
SHEET 2:	ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTEWATER/OSSF AND ENGINEER'S CERTIFICATION, DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE.
SHEET 3:	MAP OF TOPOGRAPHY AND DRAINAGE; DRAINAGE, REVISION NOTES, CONSTRUCTION DETAILS, TYPICAL DETAILS.
SHEET 4:	TYPICAL DETAILS



ABBREVIATION LEGEND		LEGEND	
R.O.W.	RIGHT-OF-WAY	○	SET 1/2 INCH IRON ROD
P.O.B.	POINT OF BEGINNING	●	FOUND 1/2 INCH IRON ROD
S.W.C.	SOUTHWEST CORNER	▲	FOUND COTTON PICKER SPINDLE
F.T.	FARM TRACT	○	CALCULATED POINT
U.E.	UTILITY EASEMENT	○	POWER POLE
F.L.	FARM-TO-MARKET CENTER LINE	○	MAP RECORD
	LOT LINE	○	UTILITY EASEMENT CENTER LINE
		○	NATURAL GROUND
		○	CAPPED IRON ROD SET



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SHEET 3:	MAP OF TOPOGRAPHY AND DRAINAGE; DRAINAGE REVISION NOTES, CONSTRUCTION DETAILS, TYPICAL DETAILS.
SHEET 4:	TYPICAL DETAILS.



DRAINAGE REPORT

HIGHLAND MANOR PHASE 2 SUBDIVISION IS A PROPOSED 18 LOT RESIDENTIAL SUBDIVISION, SAME BEING A 11.79 ACRES TRACT OF LAND OUT OF FARM TRACT 238, THE WEST AND ADAMS TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS, AS PER MAP RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS. THESE LOTS WILL BE USED FOR SINGLE-FAMILY HOMES.

THE SUBDIVISION IS IN ZONE "X" OF THE FLOOD INSURANCE RATE, AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN ACCORDING TO THE FEMA'S FLOOD INSURANCE RATE MAP COMMUNITY PANELS NO. 48034-0450 D DATED, JUNE 6, 2006.

ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 80% OF HIDALGO FINE SANDY LOAM (S), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINER AND SURFACE RUNOFF IS NEGLIGIBLE, PERMEABILITY IS MODERATELY HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. ADDITIONALLY, IT CONSISTS OF 19.5% OF HIDALGO SANDY CLAY LOAM (S), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINER AND SURFACE RUNOFF IS NEGLIGIBLE, PERMEABILITY MODERATELY IS HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. THESE SOILS ARE CLASSIFIED AS GROUP (B). PLEASE SEE THE ATTACHED TABLES FOR THE ENGINEERING, PHYSICAL AND CHEMICAL PROPERTIES OF THESE SOILS.

EXISTING RUNOFF SHEET FLOWS OVERLAND IN AN EASTERLY DIRECTION AND OVERFLOWS TO THE EXISTING ROAD SIDE DITCH ON THE WEST RIGHT OF WAY OF MILE 5 1/2 WEST IN FRONT OF THIS SUBDIVISION. TO FOLLOW THE DRAINAGE PATTERNS OF THE AREA IN AN EASTERLY DIRECTION WITH OUTFALL TO THE 70' DRAIN DITCH, THEN CONVEYED TO THE EAST LATERAL DRAIN, THEN CONVEYED TO THE MAIN FLOOD WATER CHANNEL, AND FINAL OUTFALL TO THE LAGUNA MADRE.

USING THE RATIONAL METHOD, WE HAVE DETERMINED THAT A 10-YR RAINFALL EVENT WILL GENERATE APPROXIMATELY 7.38 CFS OF STORM RUNOFF. WE HAVE ALSO USED THE RATIONAL METHOD TO DETERMINE THAT THE IMPROVED SITE WILL GENERATE AN ESTIMATED 16.31 CFS OF RUNOFF 30-YR RAINFALL EVENTS RESPECTIVELY. THE IMPROVED SITE WILL HAVE AN APPROXIMATE INCREASE OF 8.93 CFS OF STORM RUNOFF.

IN ACCORDANCE WITH THE COUNTY'S DRAINAGE REQUIREMENTS, WE HAVE CALCULATED THAT APPROXIMATELY A TOTAL OF 35,520 CF OR 0.815 AC-FIT WILL NEED TO BE DETAINED FOR THE COMPLETE DEVELOPMENT OF THE SUBDIVISION FOR A 50-YR RAINFALL EVENT. LINEAR DETENTION WILL BE PROVIDED BY IMPROVING THE EXISTING 1782A1A DRAIN DITCH (WHICH BELONGS TO HIDALGO AND CAMERON COUNTIES IRRIGATION DISTRICT 9, AND MAINTAINED BY HIDALGO COUNTY DRAINAGE DISTRICT 1). STORM WATERS WILL BE COLLECTED BY AN ON-SITE COLLECTION SYSTEM AND ROUTED TO THE EXISTING 1782A1A DRAIN DITCH, THEN CONVEYED TO THE EAST LATERAL DRAIN, THEN CONVEYED TO THE MAIN FLOOD WATER CHANNEL, AND FINAL OUTFALL TO THE LAGUNA MADRE. TABLES AND CALCULATIONS ARE ATTACHED.

SUBDIVIDER CERTIFICATION

I-, 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:

I-, **DAVID GARCIA**, SUBDIVIDER OF HIGHLAND MANOR PHASE 2 SUBDIVISION, HEREBY CERTIFY SEWER PERMITS ARE REQUIRED PRIOR TO BUILDING ON ANY LOT 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 TO HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

DAVID GARCIA - MANAGING MEMBER
 DASC INVESTMENTS, LLC.
 OWNER

STATE OF TEXAS
 COUNTY OF HIDALGO:

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____, KNOWN TO ME BY THE PERSON (S) WHOSE NAME (S) IS (ARE) SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____ 20____.

NOTARY PUBLIC
 MY COMMISSION EXPIRES _____

MILE 5 1/2 ROAD CROSS-SECTION "C-C"
 NOT TO SCALE

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RIO DELTA ENGINEERING
 FIRM REGISTRATION NO. F-7628
 SURVEY FIRM NO. 10194027
 921 S. 10TH AVENUE EDINBURG, TEXAS 78539
 (TEL) 956-380-5152 (FAX) 956-380-5083

DRAINAGE LAYOUT
 HIGHLAND MANOR PHASE 2 SUBDIVISION
 WESLACO, TEXAS
 HIDALGO COUNTY

ISSUED FOR:
FINAL

ENGINEER:
IVAN GARCIA P.E. R.P.L.S.

SURVEYOR:
IVAN GARCIA P.E. R.P.L.S.

CHECKED:
IVAN GARCIA P.E. R.P.L.S.

DRAWN:
EDWIN PENA

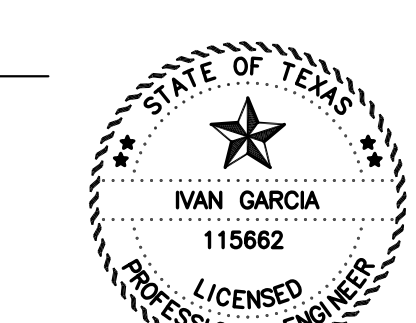
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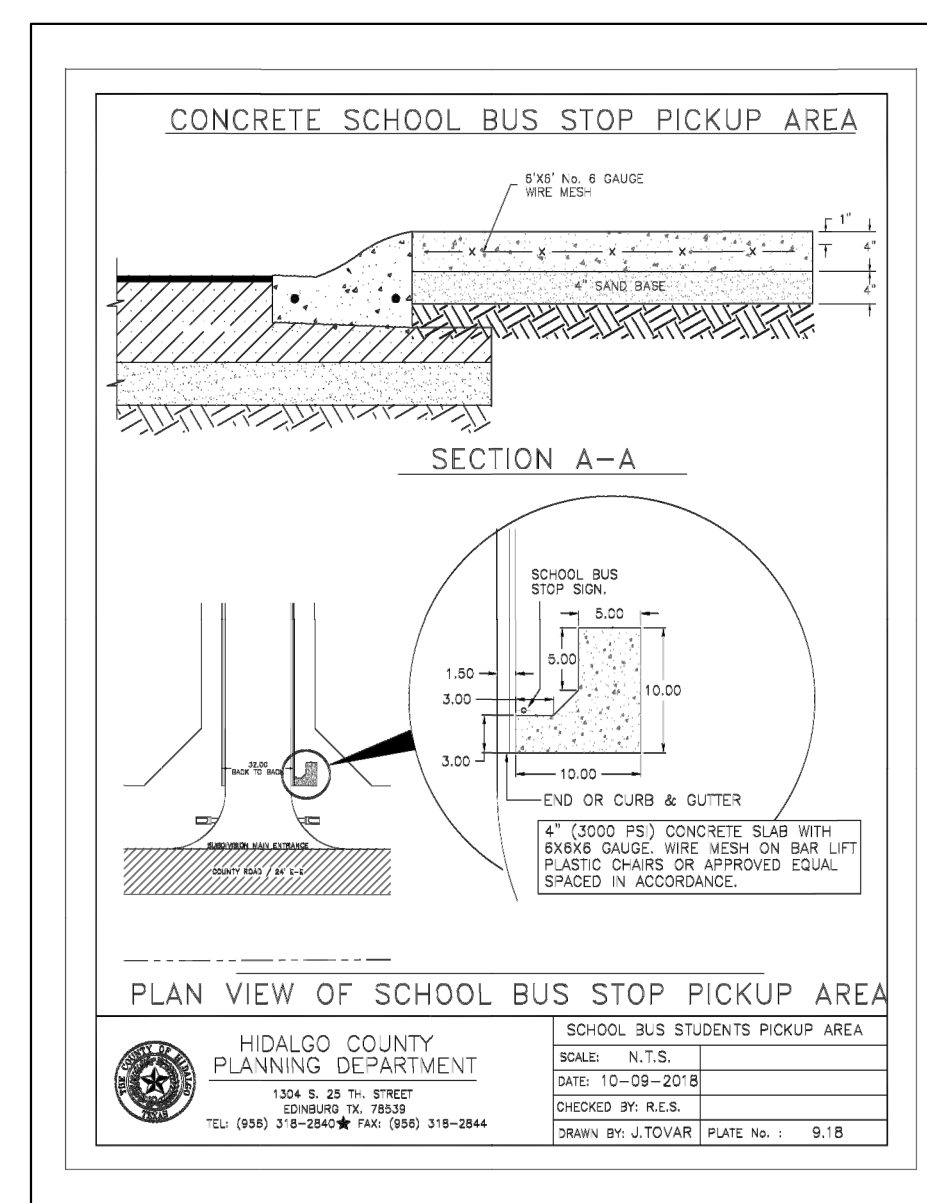
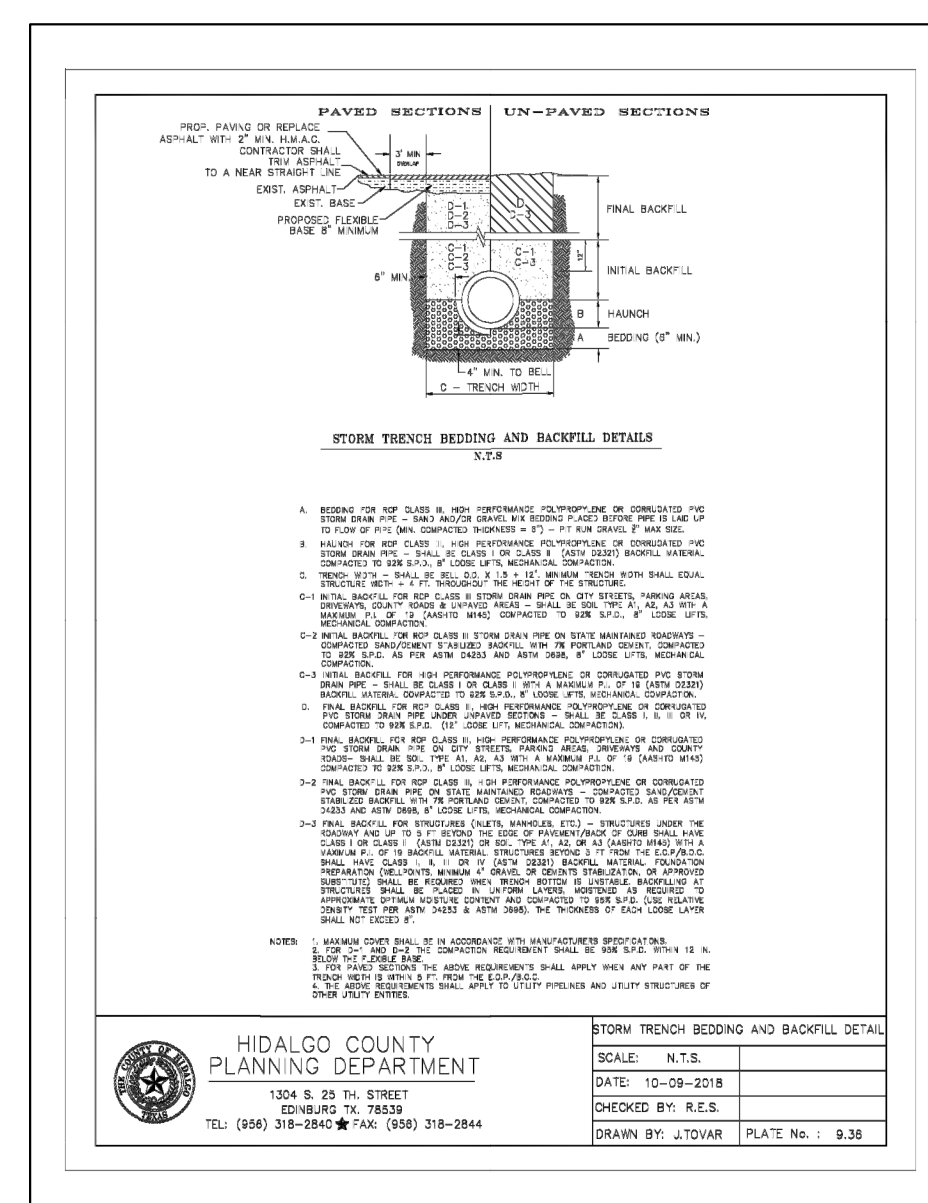
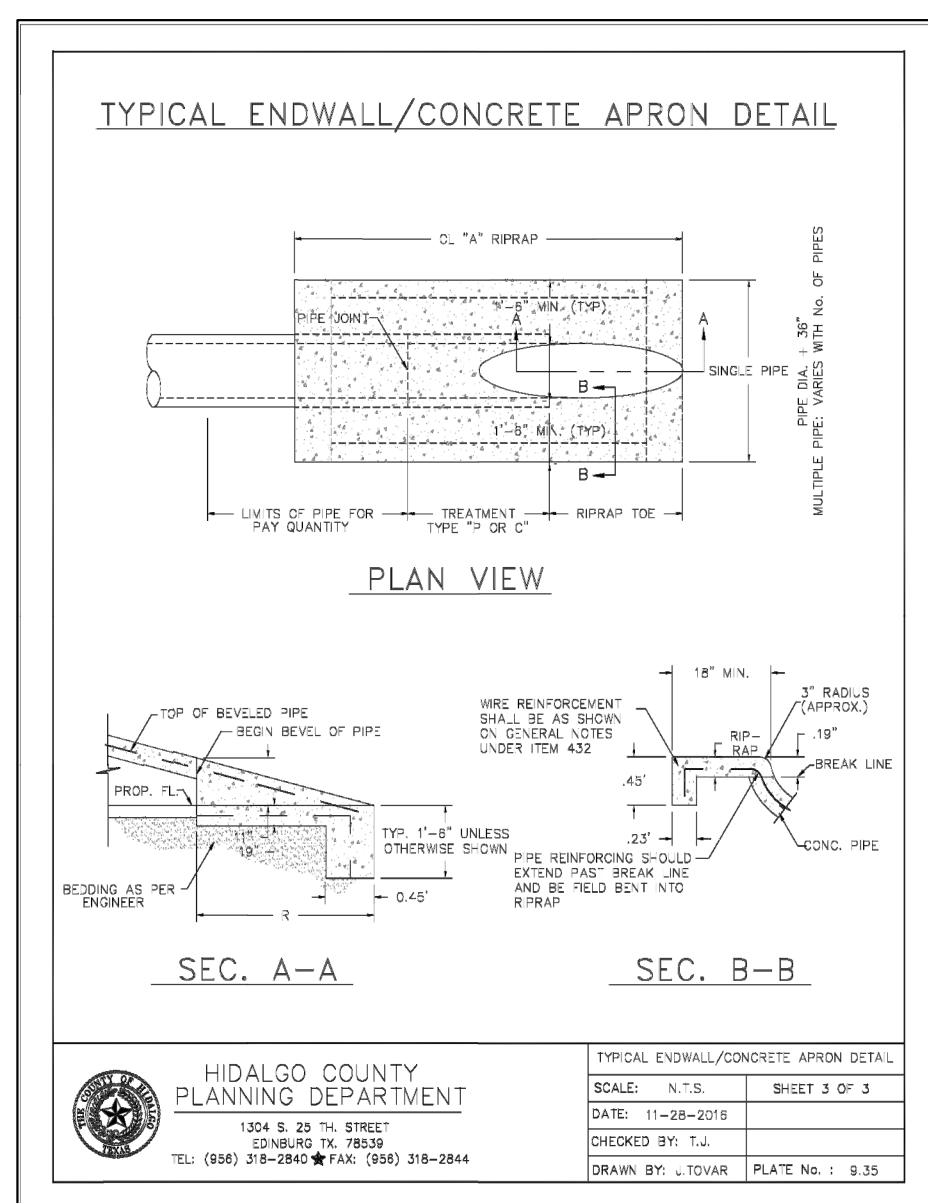
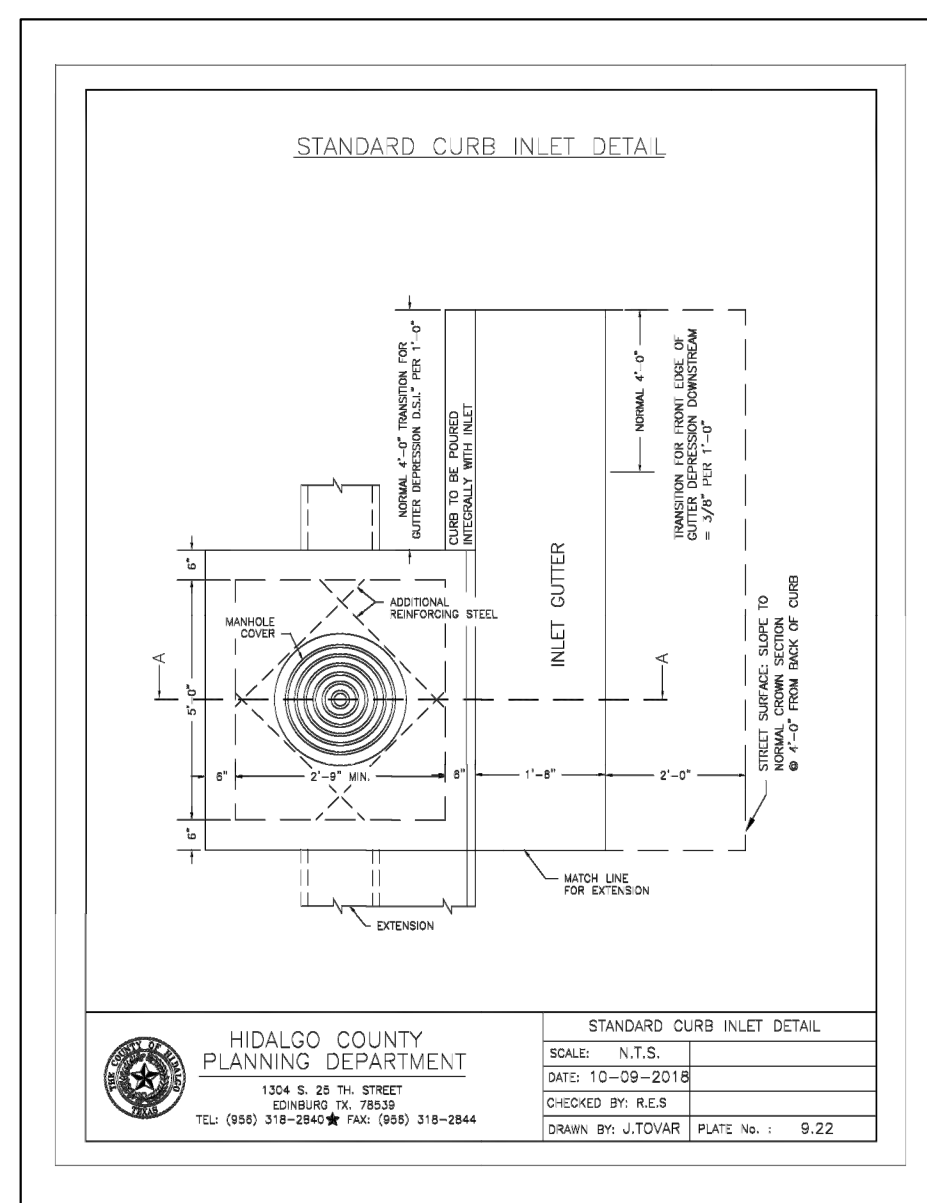
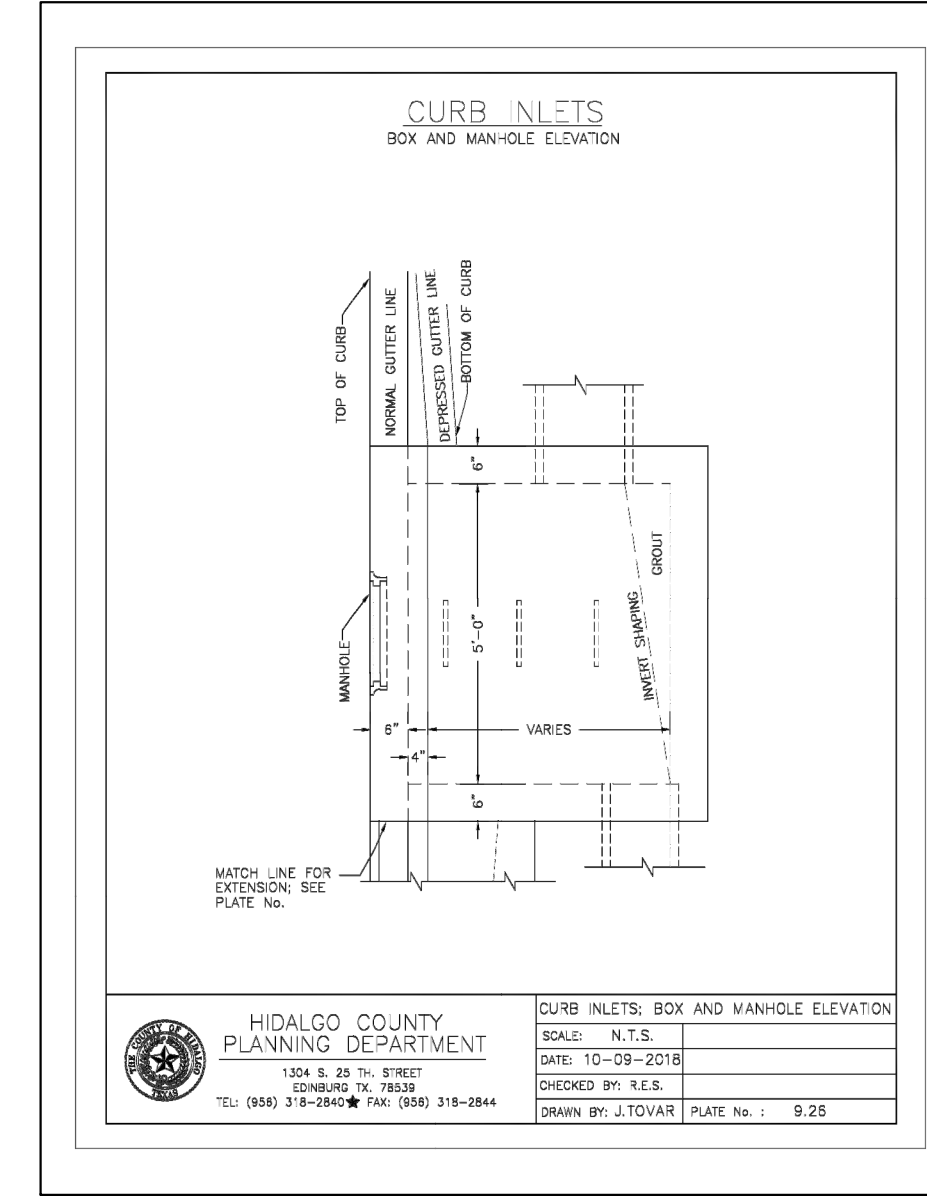
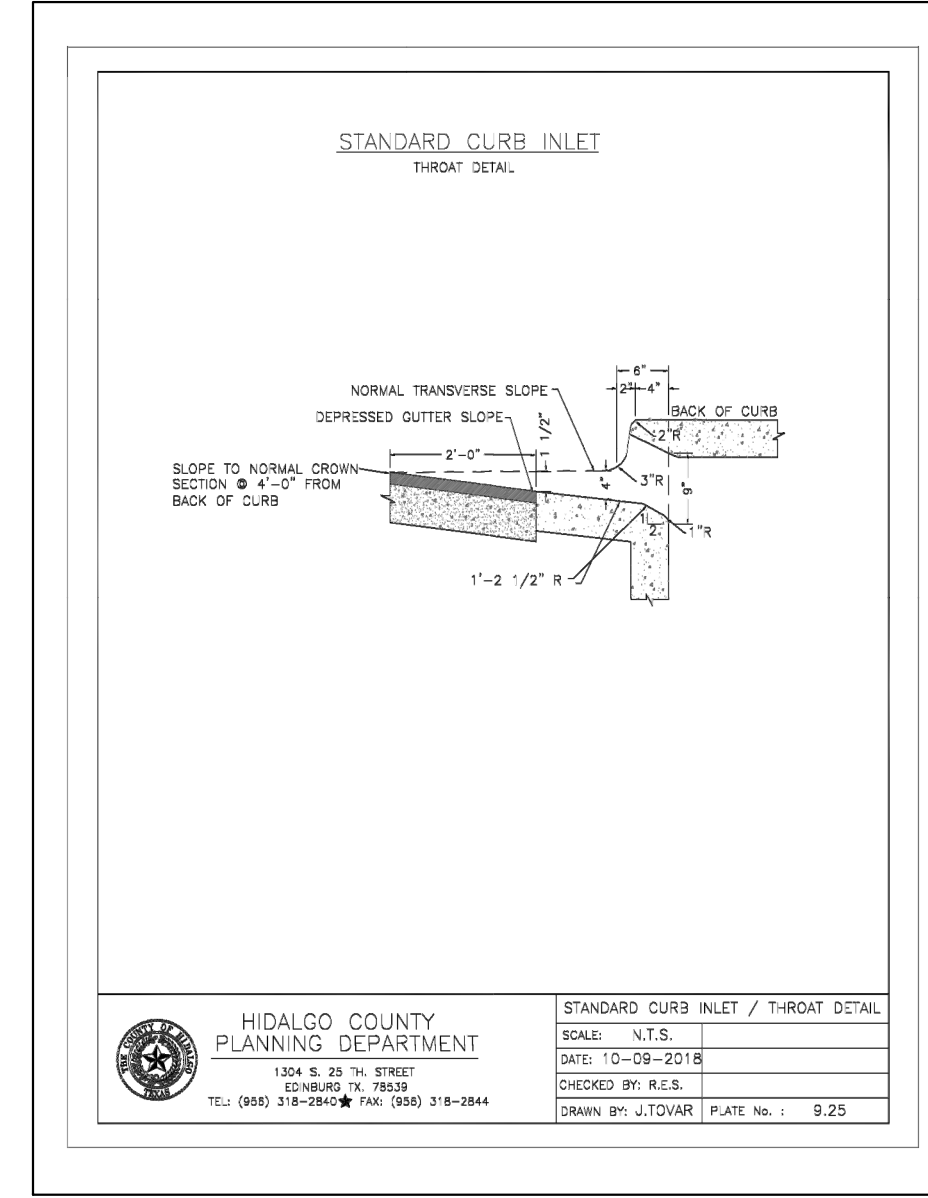
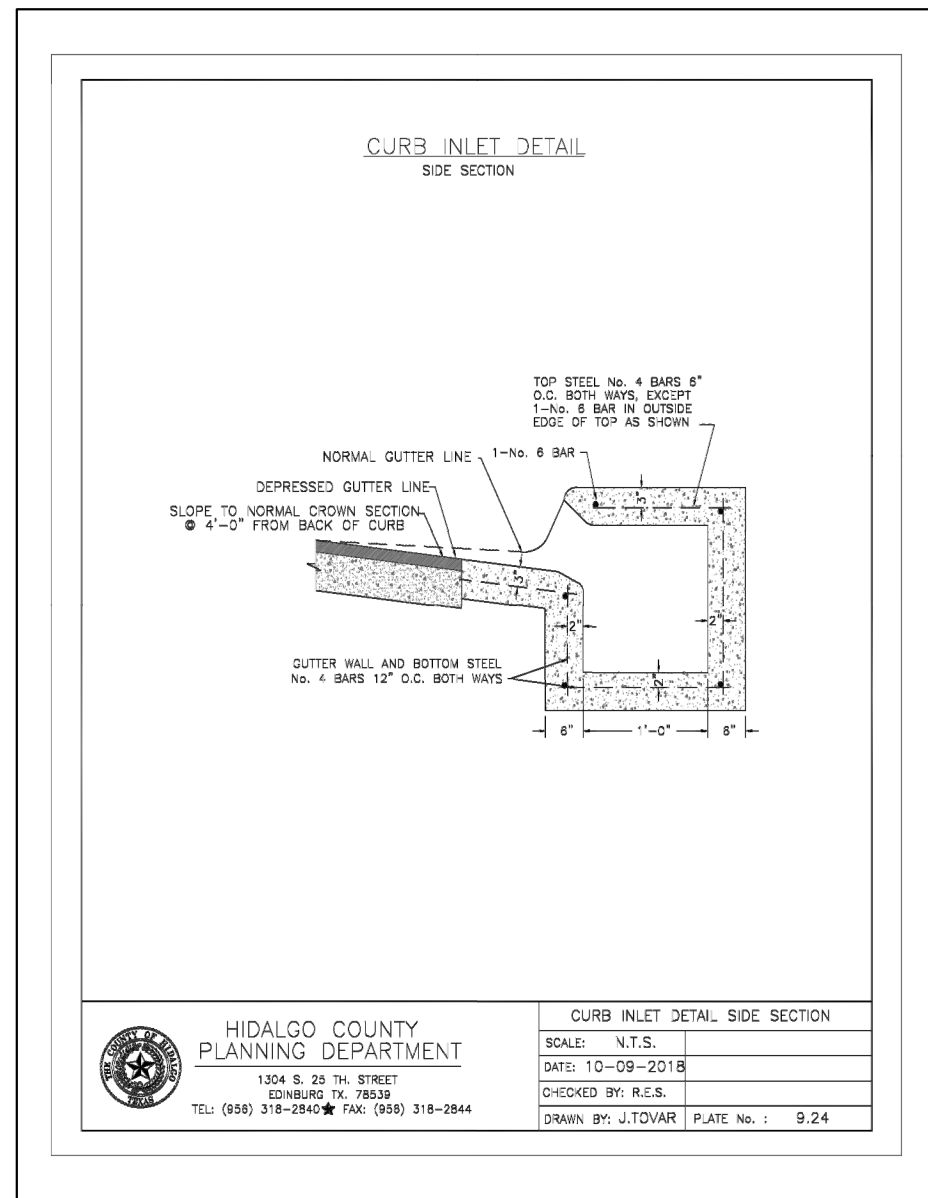
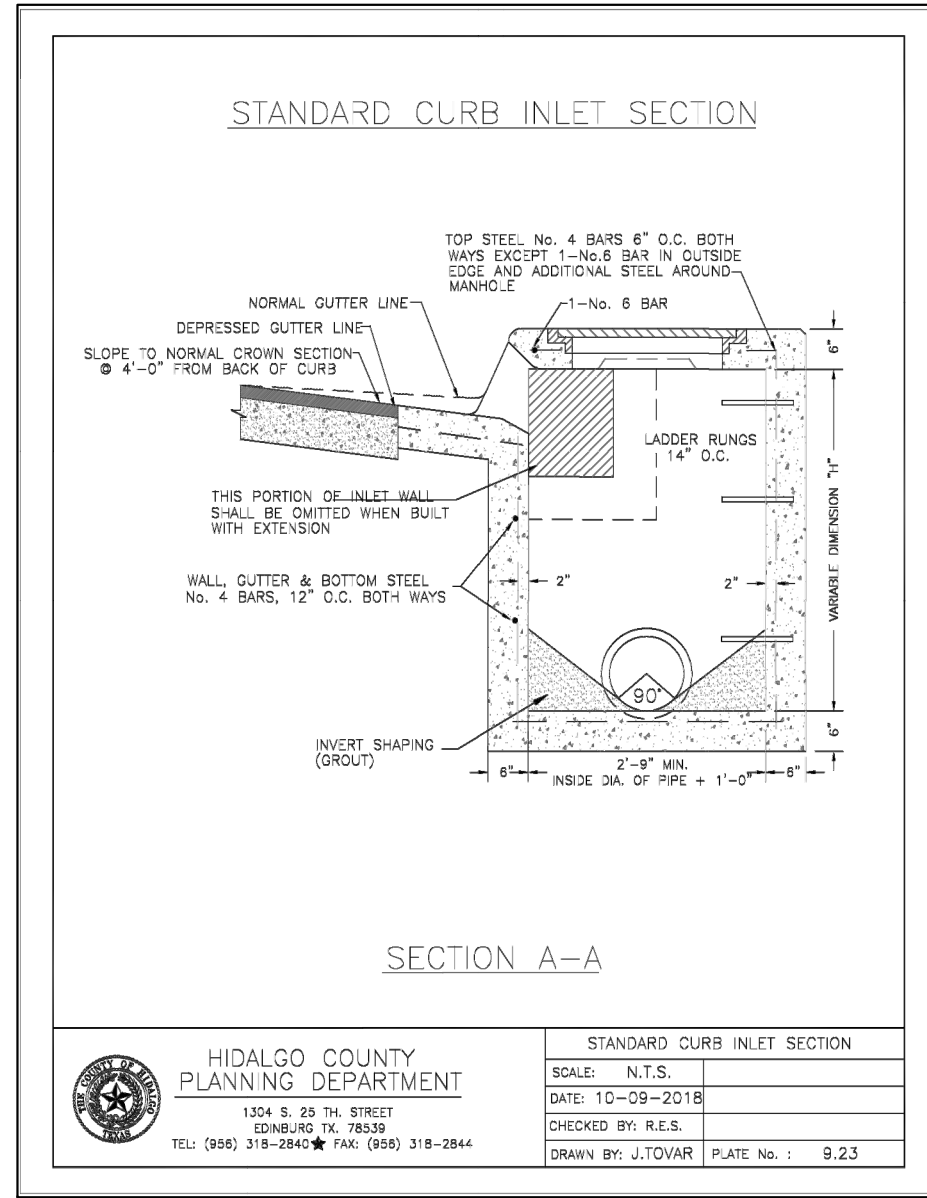
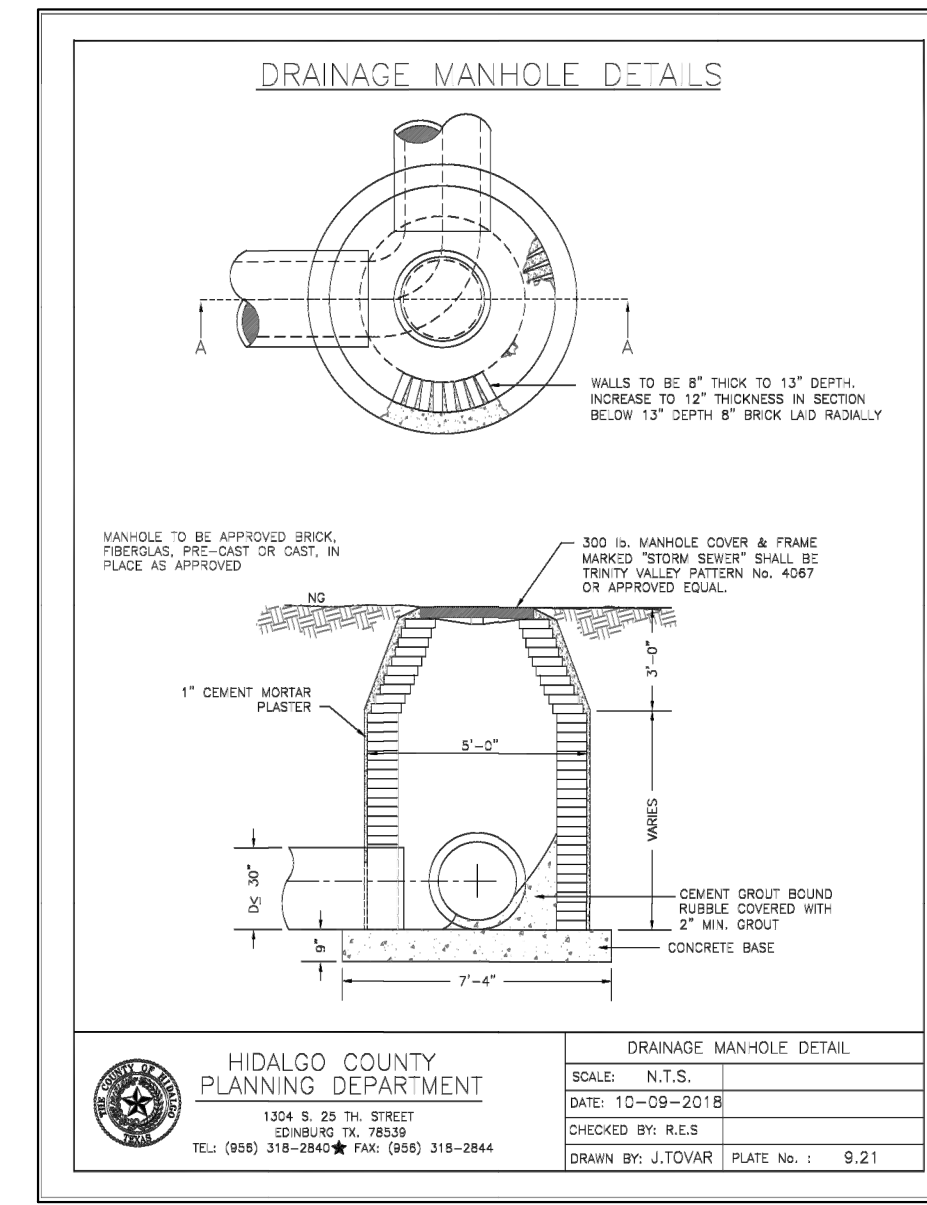
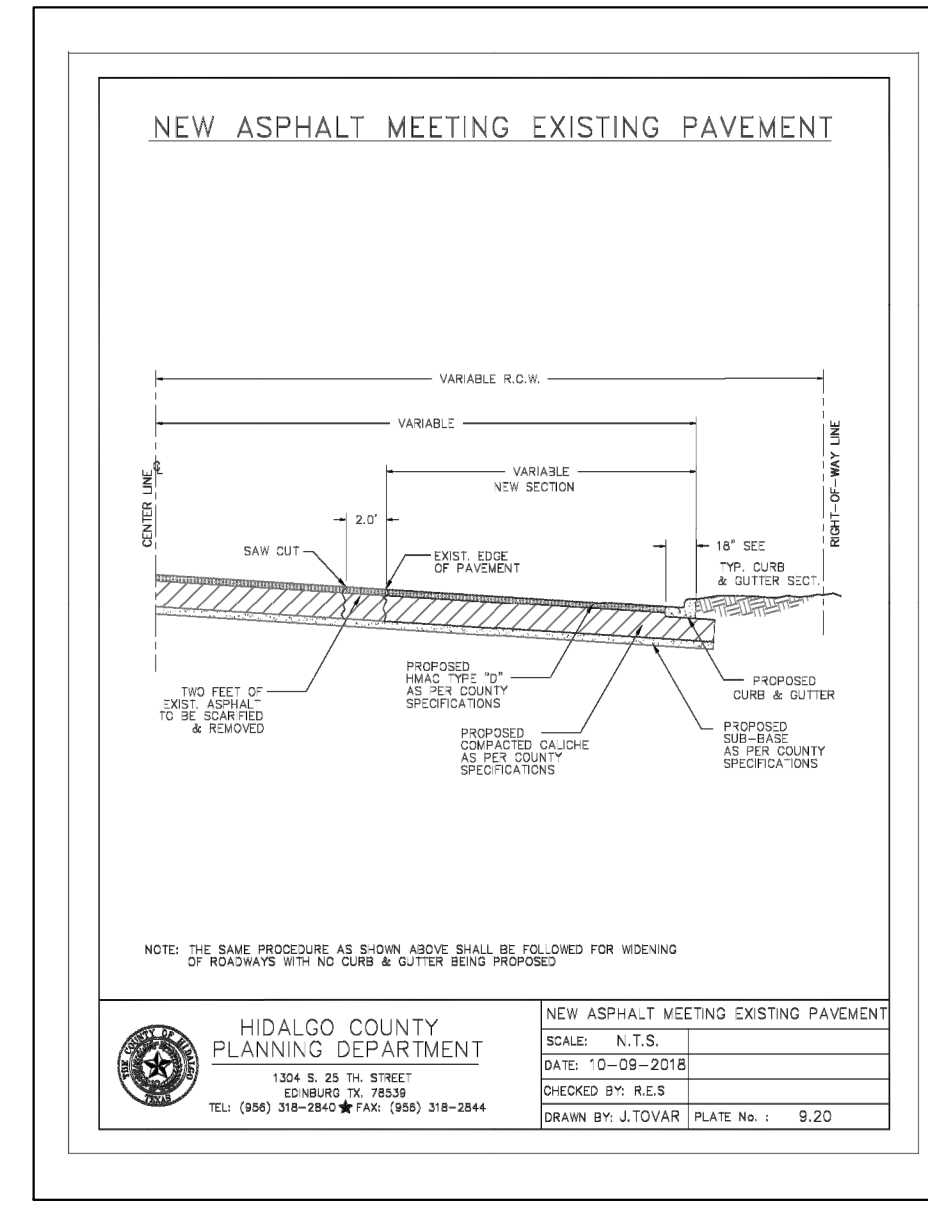
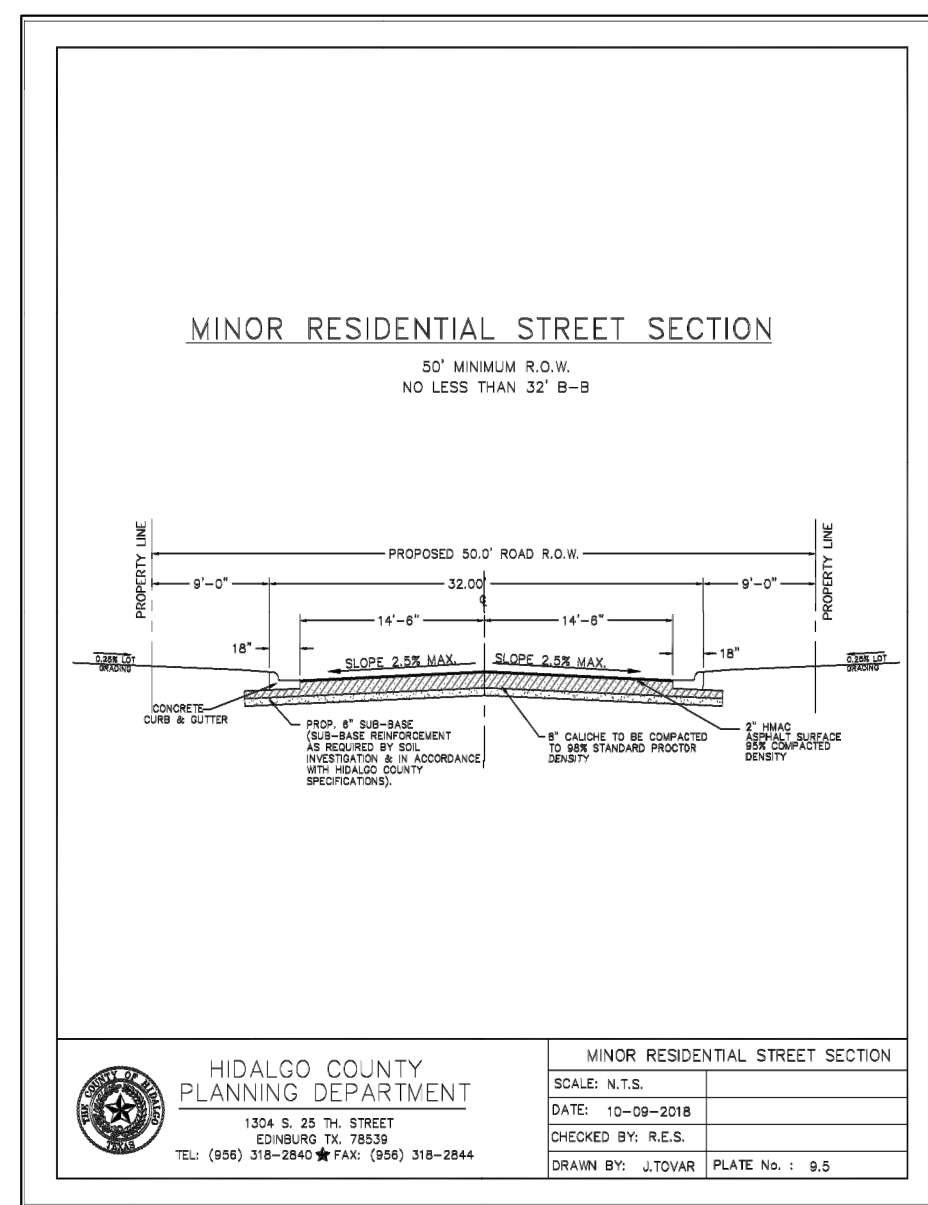
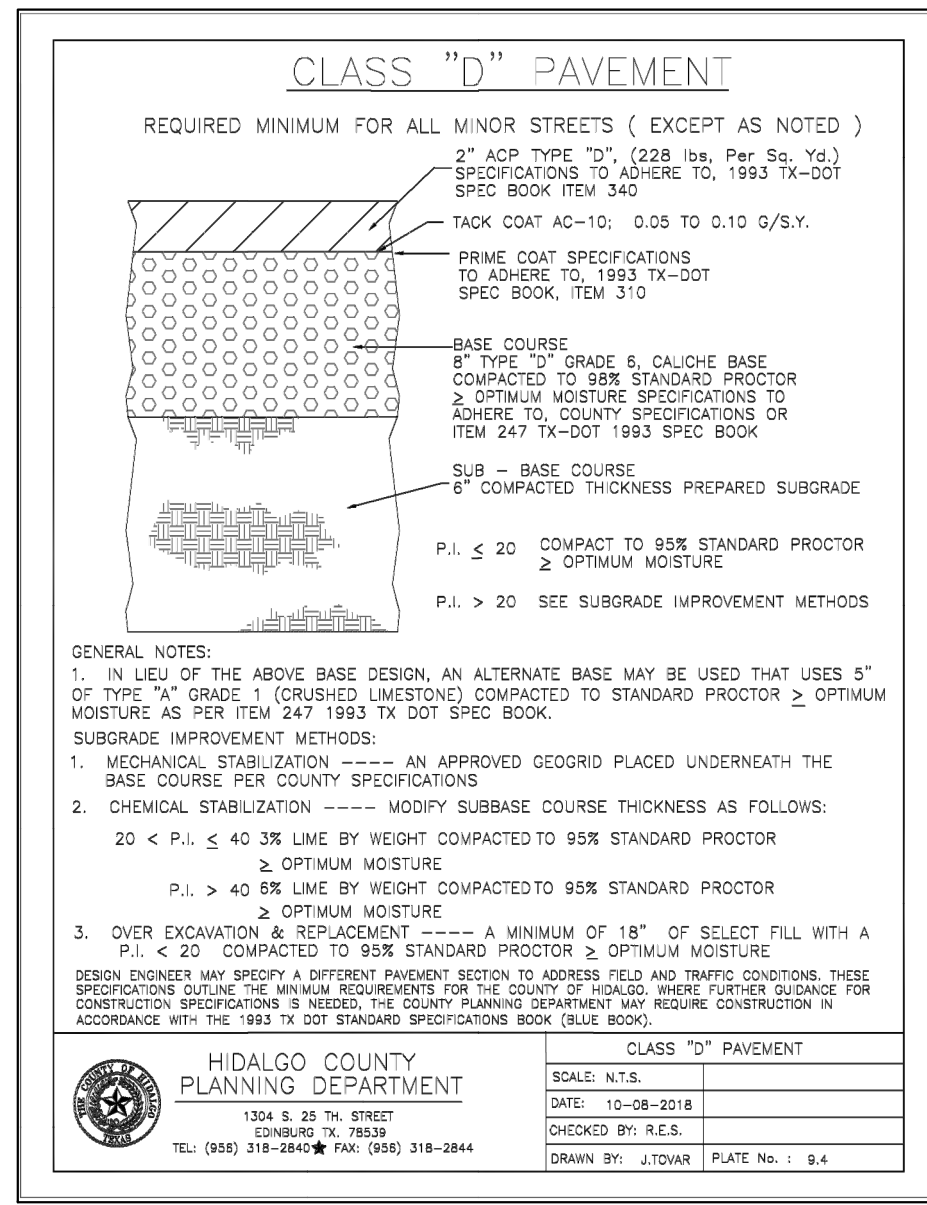
DATE:
MAY 4, 2022

PROJECT:
SUB 20 046

REVISIONS:

PAGE NO.
3-OF-4





INDEX TO SHEETS OF HIGHLAND MANOR PHASE 2 SUBDIVISION	
SHEET 1: HEADING, INDEX, LOCATION MAP, PRINCIPAL CONTACTS, MAP, LOT, STREETS, AND EASEMENT LAYOUT; DESCRIPTION (METES AND BOUNDS); ENGINEER'S AND SURVEYOR'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY APPROVAL CERTIFICATE; COUNTY CLERK'S RECORDING CERTIFICATE; REVISION NOTES, H.C.C.I.D.#9, H.C.D.D. No. 1, HIDALGO COUNTY HEALTH DEPARTMENT CERTIFICATE.	ENGINEER: IVAN GARCIA P.E. R.P.L.S. SURVEYOR: IVAN GARCIA P.E. R.P.L.S. CHECKED: IVAN GARCIA P.E. R.P.L.S. DRAWN: DANIEL RODRIGUEZ E.I.T. SCALE: N.T.S. DATE: MAY 4, 2022
SHEET 2: ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTEWATER/OSSF AND ENGINEER'S CERTIFICATION, DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE.	PROJECT: SUB 20 046 REVISIONS:
SHEET 3: MAP OF TOPOGRAPHY AND DRAINAGE; DRAINAGE, REVISION NOTES, CONSTRUCTION DETAILS, TYPICAL DETAILS.	PAGE No. 4-OF-4

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SURVEY FIRM No. 10194027
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ISSUED FOR:
FINAL

TYPICAL DETAILS
HIGHLAND MANOR PHASE 2 SUBDIVISION
WESLACO, TEXAS
HIDALGO COUNTY