



**NOTICE OF A REGULAR MEETING TO BE HELD BY THE
McALLEN PUBLIC UTILITY BOARD OF TRUSTEES**

DATE: Tuesday, June 25, 2024

TIME: 4:00 P.M.

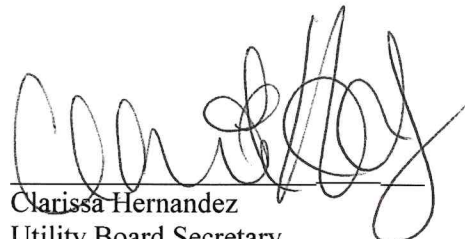
PLACE: McAllen City Hall
Commission Chambers – 3rd Floor
1300 Houston Avenue
McAllen, Texas 78501

SUBJECT MATTER:

See Subsequent Agenda.

CERTIFICATION

I, the Undersigned authority, do hereby certify that the attached agenda of meeting of the McAllen Public Utility Board of Trustees is a true and correct copy and that I posted a true and correct copy of said notice on the bulletin board in the Municipal Building, a place convenient and readily accessible to the general public at all times, and said Notice was posted on the 21st day of June, 2024 at 3:00 P.M. and will remain so posted continuously for at least 72 hours preceding the scheduled time of said meeting in accordance with Chapter 551 of the Texas Government Code.


Clarissa Hernandez
Utility Board Secretary



**BOARD OF TRUSTEES MEETING
TUESDAY, JUNE 25, 2024 – 4:00 PM
MCALLEN CITY HALL - 3RD FLOOR
1300 HOUSTON AVE, MCALLEN, TX 78501**

AGENDA

AT ANY TIME DURING THE COURSE OF THIS MEETING, THE MCALLEN PUBLIC UTILITY BOARD MAY RETIRE TO EXECUTIVE SESSION UNDER TEXAS GOVERNMENT CODE 551.071(2) TO CONFER WITH ITS LEGAL COUNSEL ON ANY SUBJECT MATTER ON THIS AGENDA IN WHICH THE DUTY OF THE ATTORNEY TO THE MCALLEN PUBLIC UTILITY BOARD UNDER THE TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT OF THE STATE BAR OF TEXAS CLEARLY CONFLICTS WITH CHAPTER 551 OF THE TEXAS GOVERNMENT CODE. FURTHER, AT ANY TIME DURING THE COURSE OF THIS MEETING, THE MCALLEN PUBLIC UTILITY BOARD MAY RETIRE TO EXECUTIVE SESSION TO DELIBERATE ON ANY SUBJECT SLATED FOR DISCUSSION AT THIS MEETING, AS MAY BE PERMITTED UNDER ONE OR MORE OF THE EXCEPTIONS TO THE OPEN MEETINGS ACT SET FORTH IN TITLE 5, SUBTITLE A, CHAPTER 551, SUBCHAPTER D OF THE TEXAS GOVERNMENT CODE.

CALL TO ORDER

PLEDGE

INVOCATION

EMPLOYEE OF THE MONTH - MAY - DANIEL LARA - WASTEWATER SYSTEMS/ JUNE - ENRIQUE MONREAL - METER READERS

1. MINUTES:

a) Approval of Minutes for Regular Meeting held June 11, 2024.

2. CONSENT AGENDA: *(All matters listed under Consent Agenda are considered to be routine by the Governing Body and will be enacted by one motion. There will be no separate discussion of these items; however, if discussion is desired, that item(s) will be removed from the Consent Agenda and will be considered separately.)*

a) Approval of AAA Apartments Subdivision.

3. BIDS AND CONTRACTS:

a) Consideration and Approval of the Selection of Consulting Engineering Firm(s) for the Brackish Groundwater Desalination Project (05-24-S50-497)

b) Consideration & Approval of the First Amendment to the Interlocal Cooperation Agreement between the City of Mission and McAllen Public Utility related to Phase 2 of Taylor Roadway Utility Improvements.

c) Consideration and Approval of Interlocal Cooperation Agreement between Hidalgo County Irrigation District No. One and the McAllen Public Utility for the Force Main Crossing at the Main Canal at FM 676 (5-Mile Road)

4. UTILITY LAYOUTS:

- a) Consideration and Approval of MPU Board Participation for Water Public Improvements - La Lomita Paradise
- b) Consideration and Possible Approval of the revised participation to the North Park on 107 Subdivision.

5. TABLED ITEMS:

- a) Consideration and Approval of Buy Board Quote (# 672-22) for the installation of a Groundwater Test Well at our North WTP.

6. FUTURE AGENDA ITEMS

7. EXECUTIVE SESSION, CHAPTER 551, TEXAS GOVERNMENT CODE, SECTION 551.071 CONSULTATION WITH ATTORNEY, SECTION 551.072 LAND TRANSACTION, SECTION 551.074 PERSONNEL MATTERS; SECTION 551.087 ECONOMIC DEVELOPMENT NEGOTIATIONS

- a) Consideration of Economic Development Matters (Section 551.087, T.G.C).
- b) Consultation with City Attorney regarding pending litigation (Section 511.071, T.G.C).

ADJOURNMENT

IF ANY ACCOMMODATION FOR A DISABILITY IS REQUIRED (OR INTERPRETERS FOR THE DEAF), NOTIFY UTILITY ADMINISTRATION (681-1630) FORTY-EIGHT (48) HOURS PRIOR TO THE MEETING DATE. WITH REGARD TO ANY ITEM, THE MCALLEN PUBLIC UTILITY BOARD OF TRUSTEES MAY TAKE VARIOUS ACTIONS; INCLUDING BUT NOT LIMITED TO RESCHEDULING AN ITEM IN ITS ENTIRETY FOR A FUTURE DATE OF TIME. THE MCALLEN PUBLIC UTILITY BOARD MAY ELECT TO GO INTO EXECUTIVE SESSION ON ANY ITEM WHETHER OR NOT SUCH ITEM IS POSTED AS AN EXECUTIVE SESSION ITEM AT ANY TIME DURING THE MEETING WHEN AUTHORIZED BY THE PROVISIONS OF THE OPEN MEETINGS ACT.

THE NEXT REGULARLY SCHEDULED BOARD MEETING WILL BE HELD ON JULY 9, 2024.



	AGENDA ITEM	<u>1.a.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/17/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Approval of Minutes for Regular Meeting held June 11, 2024.

2. Party Making Request:

3. Nature of Request:

4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____

5. Reimbursement:

6. Routing:

Savannah Arredondo

Created/Initiated - 6/17/2024

7. Staff's Recommendation:

8. City Attorney: Approve. IJT

9. MPU General Manager: Approved - MAV

10. Director of Finance for Utilities: Approved - MSC

**STATE OF TEXAS
COUNTY OF HIDALGO
CITY OF MCALLEN**

The McAllen Public Utility Board (MPUB) convened in a Regular Meeting on **Tuesday, June 11, 2024**, at 4:00 pm in the City Commission Chambers at City Hall with the following present:

	Ernest Williams	Vice-Chairman
	Charles Amos	Chairman
	Ricardo Godinez	Trustee
	Albert Cardenas	Trustee
Absent:	Javier Villalobos	Mayor/Ex-Officio
Staff:	Marco Vega, P.E.	General Manager
	Juan J. Rodriguez	Assistant General Manager
	Evaristo Garcia	Assistant City Attorney III
	Clarissa Hernandez	Utility Board Secretary
	Savannah Arredondo	Assistant to the Utility Board Sec.
	David Garza	Director of Wastewater Systems
	Valeria Rios	Treasury Accountant
	Rafael Balderas, E.I.T.	Assistant to the Utility Engineer
	Jim Bob Sides	Video Production Specialist
	Juan Vallejo	Assistant Director of Water Systems
	Rudy Salinas	Senior Buyer for Purchasing & Cont.
	Erika Gomez, P.E.	Assistant to the Utility Engineer
	Marco Ramirez, P.E.	Utility Engineer
	Edward Gonzalez	Director of Water Systems
	Carlos Gonzalez, P.E.	Utility Engineer
	Juan Pedraza	Maintenance Manager
	Mario Vela	Deputy Director Public Works
	Maria Chavero	Director of Treasury Management
	Jesus Cisneros	Water Plant Working Supervisor
	Christina Molano	Water Lab Manager

CALL TO ORDER:

Chairman Amos called the meeting to order at 4:05 p.m.

1. MINUTES:

- a) Approval of the Minutes for the Regular Meeting held May 29, 2024.

Vice Chairman Williams moved to approve the minutes for the regular meeting held on May 29th, 2024. Trustee Cardenas seconded the motion. The motion carried unanimously by those present.

2. BIDS AND CONTRACTS:

- a) Consideration and approval of Buy Board Quote for the installation of a Groundwater Test Well at our North WTP.

Trustee Godinez moved to table the approval of buy board quote for the installation of a groundwater test well. Trustee Cardenas seconded the motion. The motion carried unanimously by those present.

b) Consideration and Authorization to Declare of MPU Vehicles & Property as Surplus.

Mr. Mario Vela, Deputy Director at Public Works, stated Public Works is requesting authorization to declare certain vehicles and equipment as surplus. Many of these proposed items have exceeded their economic life or worn in other ways unusable. All proceeds from sales of these items at auction will go to the respective funds that were used originally for the purchase of these items. Staff recommends approval to declare the described vehicles and equipment as surplus and begin the disposal efforts through various auctioneering services and/or recycling salvage yards.

Vice-Chairman Williams moved to approve the authorization to declare of MPU Vehicles and property as surplus. Trustee Godinez seconded the motion. The motion carried unanimously by those present.

3. UTILITY LAYOUTS:

a) Consideration and Approval of Revised Participation to Georgia Subdivision.

Rafael Balderas, EIT, Assistant Utility Engineer, stated that the subdivision was approved by the board back on November 15, 2022, and approved for participation back on February 28, 2023. The property is located on the west side of 29th street and between Auburn Ave, and Trenton Road, approximately 440 feet north of Trenton Road. It is located within the McAllen City Limits and is being proposed as R-1 residential. The tract consists of 0.50 acres and will be one lot for a single family home. The original request of improvements from the developer was to extend an 8-inch waterline to-and-through the property, with the request of a septic tank to service the property for sewer. Staff recommended approval of the waterline extension, but disapproval of allowing the septic tank as there is an existing sewer line within 100 feet of the property. The developer then revised the sewer layout to extend an 8-inch sewer line to-and-through the property, which would connect to an existing sewer line from the neighbor to the north. The approval of participation amount was based on the project engineer's estimate. After bids were received from contractors, the amount was excessive and beyond the estimate. The project engineer then looked at other options to lower the cost, which included boring a sewer service across 29th St., in lieu of the extension of the main line. The developer then agreed to move forward with these changes to only provide the service. With the off-site sewer connection and the extension of waterline to go to-and-through the property, the single family developer is requesting MPU Board participation. Note that the original participation amount was \$6,636.75. Currently, it would be \$10,500.00. Staff recommends board approval of the revised amount.

Vice-Chairman Williams moved to approve of revised participation to Georgia Subdivision. Trustee Cardenas seconded the motion. The motion carried unanimously by those present.

4. FUTURE AGENDA ITEMS

Mr. Marco Vega, P.E., General Manager informed the board of a Joint Meeting with City Commission on July 24th at 4:00 pm to discuss the ongoing drought and possible stage three triggers.

5. EXECUTIVE SESSION, CHAPTER 551, TEXAS GOVERNMENT CODE, SECTION 551.071 CONSULTATION WITH ATTORNEY, SECTION 551.072 LAND TRANSACTION, SECTION 551.074 PERSONNEL MATTERS; SECTION 551.087 ECONOMIC DEVELOPMENT NEGOTIATIONS

Mr. Evaristo Garcia, Assistant City Attorney III, stated no update for Executive Session.

- a) Consultation with City Attorney regarding pending litigation (Section 551.071, T.G.C)
- b) Consultation with City Attorney regarding legal issues related to water conservation rebate programs. (Section 551.071, T.G.C).
- c) Discussion and Possible Lease, Sale or Purchase of Real Estate Property: Tract 1. (Section 551.072, T.G.C).
- d) Discussion and Possible Lease, Sale or Purchase of Real Estate Property: Tract 2. (Section 551.072, T.G.C).

ADJOURNMENT

There being no other business to come before the Board, the meeting was unanimously adjourned at 4:48 p.m.

Charles Amos, Chairman

Attest:

Clarissa Hernandez
Utility Board Secretary



	AGENDA ITEM	<u>2.a.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/18/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Approval of AAA Apartments Subdivision.
2. Party Making Request:
Marco Ramirez, Utility Engineer P.E.
3. Nature of Request: Request for approval of AAA Apartments Subdivision.
4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____
5. Reimbursement:
6. Routing:
Rafael Balderas Jr. Created/Initiated - 6/18/2024
7. Staff's Recommendation: Staff recommends the approval of AAA Apartments Subdivision.
8. City Attorney: Approve. IJT
9. MPU General Manager: Approved - MAV
10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A. Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

THRU: Carlos Gonzalez, P.E., Utility Engineer
Marco Ramirez, P.E., Utility Engineer

FROM: Patrick R. Gray, E.I.T., GIS Coordinator

DATE: June 11, 2024

SUBJECT: Approval of AAA Apartments Subdivision

This property is located approximately 390LF east of the intersection of Shary Rd. and Auburn Ave on the north. The subdivision is located within the McAllen City Limits and consists of 2.88 acres with two single family homes and one multi-family commercial lot.

The subdivision application was originally filed with the City on May 1, 2024 and received preliminary P&Z approval on May 7, 2024. The information required from the developer's engineer for this agenda was received on June 4, 2024.

Utility plan/availability is described as follows:

- 1. Water:** For water service, the proposed subdivision falls within the Sharyland Water Supply Corporation service area. The developer is proposing a single fire hydrant for fire protection.
- 2. Sewer:** The developer is proposing to connect to the existing 21" sanitary sewer line flowing east on Auburn Ave. The developer is proposing an 8" sanitary sewer line that will service the proposed multi-family lot in the rear and will allow sewer service to the existing single-family home fronting Auburn Ave. The existing home is currently on septic.
3. The property falls within the MPU Alton Reimbursement.

Staff recommends MPUB approval of the subdivision application as proposed subject to the following:

- 1.) Dedication of a utility easement, possibly along the perimeter of the property.**
- 2.) Installation of the proposed public utility infrastructure to be constructed as proposed.**
- 3.) Payment of a Sanitary Sewer Line Reimbursement to MPU in the amount of \$1,629.21**

Staff will be available for further discussion/questions at the MPUB meeting.

Thank you

REIMBURSEMENT WAIVER

STATE OF TEXAS X

COUNTY OF HIDALGO X

THIS CERTIFICATE, issued by the McAllen Public Utility (MPUB), as authorized by such Board of Trustees, hereinafter called the MPUB to Anissa Izel Sanchez hereinafter called the DEVELOPER.

1. The DEVELOPER is the developer of the following described property:

A-A-A Apartments Subdivision and proposes to construct Utility Improvements as shown on a plan
(Subdivision Name)

designed by R. E. Garcia & Associates dated May 10, 2024, hereinafter called the
(Engineering Firm)

IMPROVEMENTS, as approved by the McAllen Public Utility Board on _____
(Approval date)

2. By the execution of this certificate, the Developer hereby waives and disclaims the right to obtain reimbursement from Intervening Developers in accordance with the MPUB's Reimbursement Policy.

ISSUED in triplicate originals this _____ day of _____, 2024.

CITY OF McALLEN BY THE
McALLEN PUBLIC UTILITY

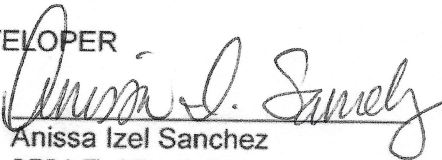
BY: _____
Mark Vega, P.E.
General Manager, McAllen Public Utility
Post Office Box 220
McAllen, Texas 78505-0220
(956) 681-1630

ATTEST:

Board Secretary

DEVELOPER

BY:


Anissa Izel Sanchez
2501 E. Mile 5 Road
Mission, Texas 78573

**SUBDIVISION REIMBURSEMENT WORKSHEET
AAA APARTMENTS SUBDIVISION**

SEWER LINE REIMB. CALCULATIONS			
SEWER:	MPU: ALTON SEWER REIMBURSEMENT		
COST:	\$514.27 x	2.88 AC	\$1,481.10
10% ADMIN FEE <10 YEARS			148.11
WATER LINE REIMBURSEMENT			\$1,629.21

TOTAL REIMBURSEMENT DUE

\$1,629.21

Prepared By: *RS* Date: 6/4/24 Reviewed By: *RS*

Escrows will be adjusted upon execution of Final Reimbursement Certificate

I hereby agree to pay amounts indicated above and any additional costs determined in the Final Reimbursement Certificate as approved by McAllen Public Utility Board.

Signature: *Anissa Izel Sanchez*

Print: Anissa Izel Sanchez

Sharyland

WATER SUPPLY CORPORATION

6/5/2024

RE: AAA Apartments Subdivision– Existing Water Infrastructure
A 2.88 acre tract of land being a portion of Lot 415 John H. Shary Subdivision as recorded in Volume 1, Page 17, Map Records, Hidalgo Count, Texas, also being that certain tract described in general warranty deed recorded in Document #2361, Official Records, Hidalgo County, Texas.

To whom it may concern,

This letter is intended to serve as a utility (water) availability letter for the AAA Apartments Subdivision located at the City of McAllen Texas within the Sharyland Water Supply Corporation CCN. There is an existing 12-inch waterline along the frontage of the property on the south side of Mile 5 Rd. N.



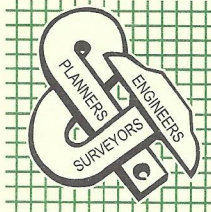
Sincerely,

Isidro Gutierrez

Isidro Gutierrez,

Graduate Engineer / Development Coordinator

R. E. Garcia



Associates

MEMO

DATE: June 4, 2024
TO: Rafael Balderas, McAllen PUB
FROM: Raul E. Garcia, P.E., R.P.L.S.
RE: AAA Apartments Subdivision

The following is a narrative of the water and sanitary sewer systems providing service to the proposed AAA Apartment Subdivision:

WATER - SHARYLAND WATER SUPPLY CORPORATION (SHWSC)

There is an existing 12-inch waterline along the north side of Auburn Ave. (Mile 5 Road - FM 676) Lot 1 is an existing single family residence with an existing 3/4" single water service which will remain serving Lot 1. Lot 2 is a proposed multi-family lot. A proposed 2" SHWSC water service line and meter will be installed to serve Lot 2.

SANITARY SEWER - MCALLEN PUB

There is an existing 21-inch McAllen PUB sanitary line along the south side of Auburn Ave. (Mile 5 Road - FM 676) Lot 1 is an existing single family residence with an existing septic tank system.. A proposed 8" McAllen PUB sanitary sewer main will be installed along the west line of Lot 2 and provide sanitary sewer service to both Lot 1 and Lot 2 of the development..

Respectfully,

Raul E. Garcia, PE, RPLS
Proprietor
R. E. Garcia & Associates



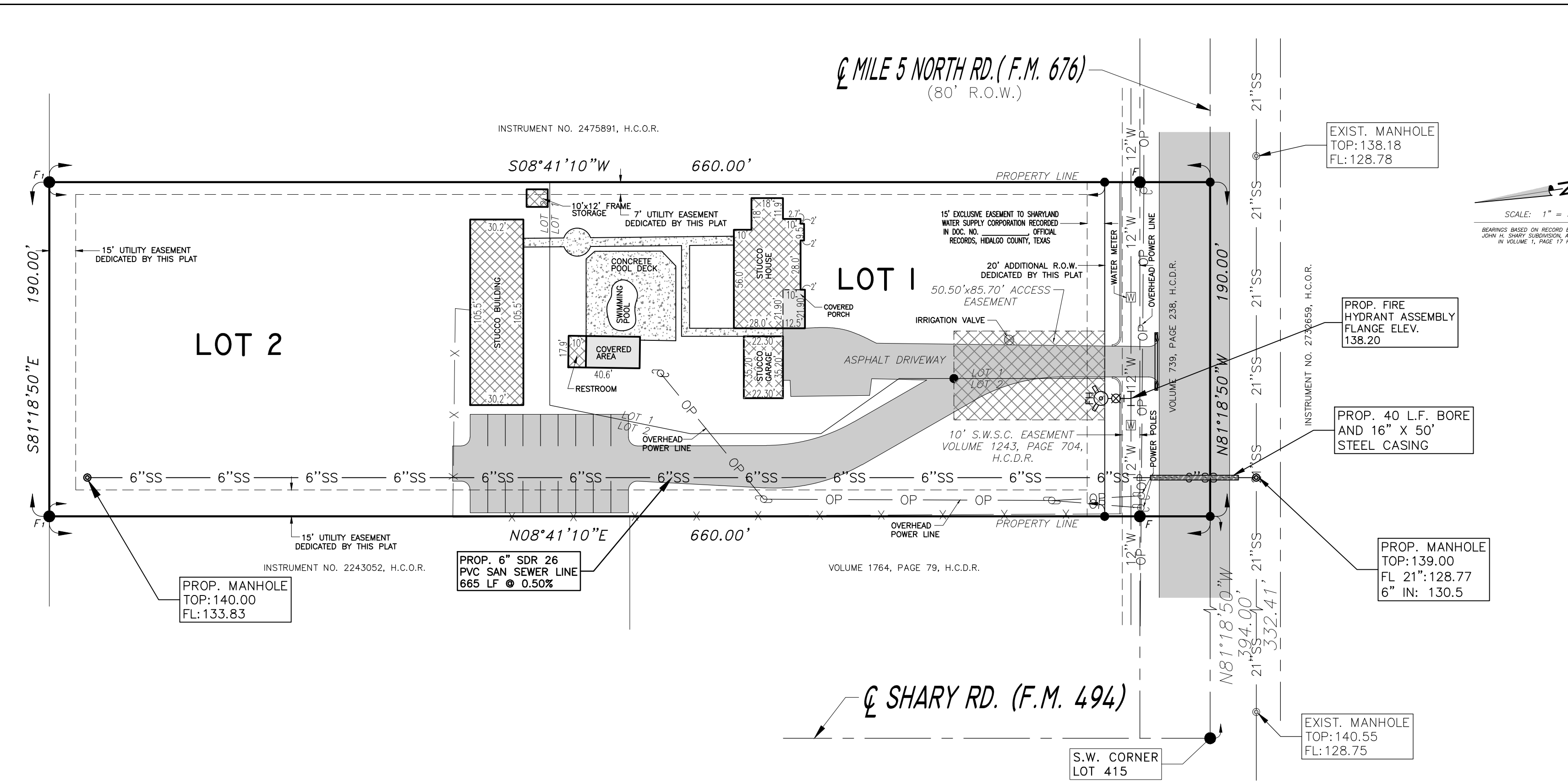
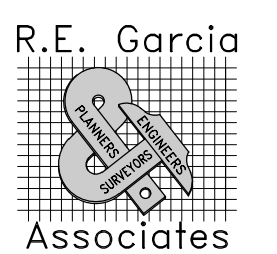
REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

PLAT OF AAA APARTMENTS SUBDIVISION

A 2.88 ACRE TRACT OF LAND BEING A PORTION OF LOT 415, JOHN H. SHARY SUBDIVISION AS RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS, ALSO BEING THAT CERTAIN TRACT DESCRIBED IN GENERAL WARRANTY DEED RECORDED IN DOCUMENT #2361187, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

DATE: JULY 26, 2017 SCALE: 1" = 50'

PREPARED BY: **R. E. GARCIA & ASSOCIATES**
 ENGINEERS, SURVEYORS, PLANNERS
 116 NORTH 12th AVE.
 EDINBURG, TEXAS 78541 (936) 381-1061
 EMAIL: REGAASSOC@AOL.COM



LEGEND:
 F - FOUND 1/2" IRON ROD
 F1 - FOUND 5/8" IRON ROD
 W - WATER METER
 P - POWER POLE
 -OP- - OVERHEAD POWER LINE
 -12"W- - 12" WATER LINE
 -21"SS- - 12" SANITARY SEWER LINE

DRAINAGE STATEMENT FOR AAA APARTMENTS SUBDIVISION

AAA APARTMENTS SUBDIVISION IS A PROPOSED 1 LOT RESIDENTIAL SUBDIVISION, SAME BEING A 2.88 ACRE TRACT OF LAND, MORE OR LESS, BEING A PORTION OF THE EAST 190.00 FEET OF THE WEST 584.00 FEET OF THE SOUTH 660.00 FEET OF LOT 415, JOHN H. SHARY SUBDIVISION, RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS. THE PROPERTY IS LOCATED 394.00 FEET EAST OF SHARY ROAD ON F.M. 676 (MILE 5 NORTH ROAD).

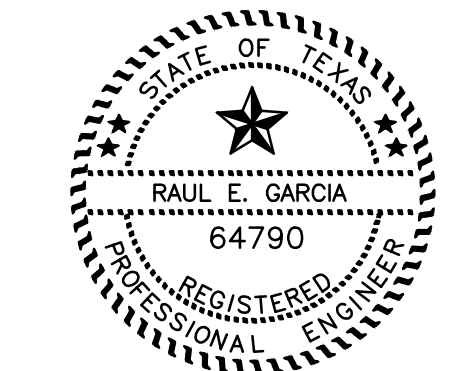
THE SUBDIVISION IS IN ZONE "X" OF THE FLOOD INSURANCE RATE, AREAS DETERMINED TO BE OUTSIDE OF 500-YEAR FLOOD, ACCORDING TO FEMA'S FLOOD INSURANCE RATE MAP COMMUNITY PANELS NO.: 480334 0295 D MAP REVISED: JUNE 6, 2000.

THE SOILS ARE FINE SANDY CLAY LOAM WHICH IS MODERATELY PERVIOUS WITH A RELATIVELY LOW PLASTICITY INDEX. THIS SOIL IS IN HYDROLOGIC GROUP "B", (SEE EXCERPTS FROM "SOIL SURVEY OF HIDALGO COUNTY, TEXAS").

EXISTING RUNOFF IS BY SURFACE FLOW IN A SOUTHERLY DIRECTION AND HAS A RUNOFF OF 4.88 C.F.S. DURING THE 10-YEAR STORM FREQUENCY AS PER THE ATTACHED CALCULATIONS.

THE EXISTING DRAINAGE FOR AAA APARTMENTS SUBDIVISION IS PART OF THE OVERALL IMPROVEMENTS OF AAA APARTMENTS SUBDIVISION. THESE IMPROVEMENTS HAVE ALREADY BEEN CONSTRUCTED AS PER THE APPROVED DRAINAGE REPORT FOR AAA APARTMENTS OVERALL SUBDIVISION (SEE ATTACHED).

BY MY SIGNATURE BELOW, I CERTIFY THAT THE 100 YEAR FLOODPLAIN AS DESCRIBED IN COMMUNITY PANEL NUMBER 408334 0295 D, REVISED JUNE 6, 2000, IS CONTAINED WITHIN THE WIDENING OF THE NORTH MAIN DRAIN ALONG THE NORTH SIDE OF JOHN H. SHARY SUBDIVISION.



REGISTERED PROFESSIONAL ENGINEER #64790

FINAL ENGINEERING REPORT FOR AAA APARTMENTS SUBDIVISION by Raul E. Garcia, P.E. FINAL WATER AND SEWER ENGINEERING REPORT

WATER SUPPLY: DESCRIPTION, COST, AND OPERABILITY DATE:

AAA APARTMENTS SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.). THE SUBDIVISION AND SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAVE ENTERED INTO A CONTRACT IN WHICH SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND SHARYLAND WATER SUPPLY CORPORATION (S.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.

SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAS AN EXISTING 12" DIAMETER WATER LINE RUNNING ALONG THE NORTH SIDE OF THE RIGHT-OF-WAY OF FM 676 (MILE 5 NORTH ROAD). THE WATER SYSTEM FOR AAA APARTMENTS SUBDIVISION CONSISTS OF A SINGLE 5/8" DIAMETER WATER SERVICE LINE THAT TAPS INTO THE EXISTING 12" LINE. THIS 5/8" SERVICE LINE THEN RUNS SOUTH INTO THE LOTS AND ENDING IN A WATER METER.

WATER DISTRIBUTION FOR THE AAA APARTMENTS SUBDIVISION CONSISTS OF A SINGLE 5/8" DIAMETER SERVICE LINE. SAID SERVICE TERMINATE AT THE WATER METER BOXES FOR THE LOT. THE 5/8" SINGLE SERVICE AND THE METER BOX HAVE ALREADY BEEN INSTALLED. AT A TOTAL COST OF \$0,000.00 UPON REQUEST BY THE LOT OWNER, THE SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY THE SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

WASTEWATER SUPPLY: DESCRIPTION, COST AND OPERABILITY DATES:

AAA APARTMENTS SUBDIVISION WILL BE TREATED BY WASTEWATER SERVICE FROM THE CITY OF SHARYLAND, THE SUBDIVIDER AND CITY OF SHARYLAND HAVE ENTERED INTO A CONTRACT IN WHICH THE CITY OF SHARYLAND HAS PROMISED TO TREAT THE SUFFICIENT WASTEWATER FOR AT LEAST 30 YEARS AND THE CITY OF SHARYLAND HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WASTEWATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

THE CITY OF SHARYLAND HAS AN EXISTING 21" DIAMETER SEWER LINE RUNNING ALONG THE SOUTH SIDE OF THE RIGHT-OF-WAY OF F.M. 676 (MILE 5 NORTH ROAD). THE WASTEWATER SYSTEM FOR AAA APARTMENTS SUBDIVISION CONSISTS OF A 6" DIAMETER SEWER LINE WHICH TAPS INTO THE EXISTING 21" LINE WITH A MANHOLE THEN RUNS NORTH ALONG THE WEST PROPERTY LINE.

ENGINEER 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 TO INSTALL UNCONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES - THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$0,000.00.

SEWAGE FACILITIES - SEPTIC SYSTEM IS ESTIMATED TO COST A TOTAL OF \$0,000.00 FOR THE ENTIRE SUBDIVISION.

ENGINEER'S SIGNATURE _____ DATE _____



INFORME FINAL DE INGENIERIA AAA APARTMENTS SUBDIVISION by Raul E. Garcia, P.E. AGUA FINAL E INFORME DE INGENIERIA DE ALCANTARILLADO

SUMINISTRO DE AGUA: Descripción, costo, Y FECHA OPERABILIDAD:

AAA APARTMENTS SUBDIVISION SERA PROPORCIONADO DE AGUA POTABLE POR SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.). EL SUBDIVISTA Y SHARLAND WATER SUPPLY CORPORATION (SWSC) HAN FIRMADO UN CONTRATO EN EL QUE SHARYLAND WATER SUPPLY CORPORATION (SWSC) HA PROMETIDO PROPORCIONAR AGUA SUFICIENTE A LA SUBDIVISION POR AL MENOS 30 AÑOS Y SHARLAND WATER SUPPLY CORPORATION (SWSC) HA PROPORCIONADO DOCUMENTACION PARA ESTABLECER SUFICIENTEMENTE LA CANTIDAD A LARGO PLAZO Y LA CALIDAD DE LOS SUMINISTROS DE AGUA DISPONIBLES PARA SERVIR AL DESARROLLO COMPLETO DE ESTA SUBDIVISION.

LA DISTRIBUCION DE AGUA PARA LA SUBDIVISION DE APARTAMENTOS AAA CONSTA DE UNA UNICA LINEA DE SERVICIO DE DIAMETRO DE 12 "CORRIENDO A LO LARGO DEL LADO NORTE DEL DERECHO DE FUNCION DE FM 676 (MILE 5 NORTH ROAD) EL SISTEMA DE AGUA PARA LA SUBDIVISION DE APARTAMENTOS AAA CONSTA DE UN SOLO 5 / LINEA DE SERVICIO DE AGUA DIAMETRO DE 8 "QUE SE ENCUENTRA EN LA LINEA DE 12" EXISTENTE. ESTA LINEA DE SERVICIO DE 5/8 "LLEVA A SEGUIR EN LOS LOTES Y TERMINAR EN UN MEDIDOR DE AGUA.

LA DISTRIBUCION DE AGUA PARA LA SUBDIVISION DE APARTAMENTOS AAA CONSTA DE UNA UNICA LINEA DE SERVICIO DE DIAMETRO DE 5/8 "DICHOS SERVICIO TERMINA EN LAS CAJAS DE MEDIDORES DE AGUA PARA EL LOTE EL SERVICIO SIMPLE DE 5/8" Y LA CAJA DE MEDIDORES HAN ESTADO INSTALADOS EN UN TOTAL COSTO DE \$ 0,000.00 A SOLICITUD DEL PROPIETARIO, LA SHARLAND WATER SUPPLY CORPORATION (SWSC) INSTALARA DE MANERA SIN CARGO EL MEDIDOR DE AGUA PARA ESO LOTE. TODAS LAS INSTALACIONES DE AGUA HAN SIDO APROBADAS Y ACEPTADAS POR LA SHARLAND WATER SUPPLY CORPORATION Y ESTE SISTEMA DE DISTRIBUCION ES FUNCIONABLE A PARTIR DE LA FECHA DE LA GRABACION DEL PLAT.

SUMINISTRO DE AGUAS RESIDUALES: DESCRIPCION, COSTE Y FECHAS DE OPERABILIDAD:

LA SUBDIVISION DE LOS APARTAMENTOS AAA SERA TRATADA POR EL SERVICIO DE AGUAS RESIDUALES DE LA CIUDAD DE SHARYLAND. EL SUBDIVIDOR Y LA CIUDAD DE SHARYLAND HAN INGRESADO EN UN CONTRATO EN EL QUE LA CIUDAD DE SHARYLAND HA PROMETIDO PARA TRATAR LAS SUFICIENTES AGUAS RESIDUALES POR AL MENOS 30 AÑOS Y LA CIUDAD DE SHARYLAND HAS DOCUMENTACION PROPORCIONADA PARA ESTABLECER SUFICIENTEMENTE LA CANTIDAD A LARGO PLAZO Y LA CALIDAD DE LOS SUMINISTROS DE AGUAS RESIDUALES DISPONIBLES PARA SERVIR AL DESARROLLO COMPLETO DE ESTA SUBDIVISION.

LA CIUDAD DE SHARYLAND TIENE UNA LINEA DE ALCANTARILLA DE DIAMETRO DE 21 "QUE EXISTE A LO LARGO DEL LADO SUR DEL RECINTO DE FM 676 (MILLON 5 NORTE) EL SISTEMA DE AGUAS RESIDUALES PARA LA SUBDIVISION DE APARTAMENTOS AAA CONSTA DE UNA LINEA DE ALCANTARILLA DE DIAMETRO DE 6" QUE TAPAS EN LA LINEA 21 "EXISTENTE CON UN MANHOLE LUEGO CORRIJA AL NORTE A LO LARGO DE LA LINEA OCCIDENTAL DE LA PROPIEDAD.

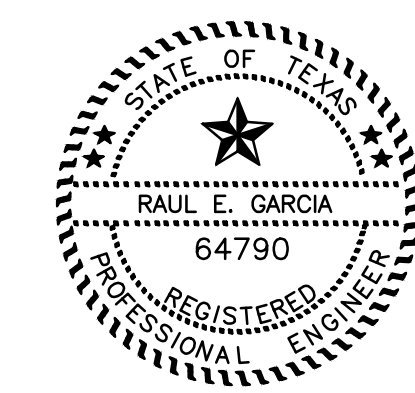
CERTIFICACION DE INGENIERO:

POR MI FIRMA ABAJO, CERTIFICO QUE LAS INSTALACIONES DE SERVICIO DE AGUA Y DE AGUAS RESIDENCIAS DESCRITAS ANTERIORMENTE ESTAN CUMPLIDAS CON EL MODELO DE REGLAS ADOPTADO BAJO LA SECCION 16.343, CODIGO DE AGUA. CERTIFICO QUE LOS COSTOS ESTIMADOS PARA INSTALAR EL AGUA NO CONSTATADA Y LAS INSTALACIONES DE AGUAS RESIDUALES EN EL SITIO, DISCUTIZADAS ANTERIORMENTE, SON LOS SIGUIENTES:

INSTALACIONES DE AGUA - ESTAS INSTALACIONES TOTALMENTE CONSTRUIDAS, CON LA INSTALACION DE MEDIDORES DE AGUA, COSTARA UN GRAN TOTAL DE \$ 0,000.00.

INSTALACIONES DE AGUAS RESIDUALES - SISTEMA SEPTICO ESTIMADO PARA COSTAR UN TOTAL DE \$ 0,000.00 PARA TODA LA SUBDIVISION.

FIRMA DEL INGERIERO _____ FECHA _____



SHEET NO. 2
OF 2 SHEETS

SUBDIVIDER CERTIFICATION

1. - BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, THE 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 STATE AND COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:

1.- I, ANISSA IZEL SANCHEZ, SUBDIVIDER OF AAA APARTMENTS SUBDIVISION, HEREBY CERTIFY SEWER PERMITS HAVE BEEN PAID AND ARE ON FILE FOR THE H.C.H.D.; THAT ANY ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUANTITY & QUALITY 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. AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

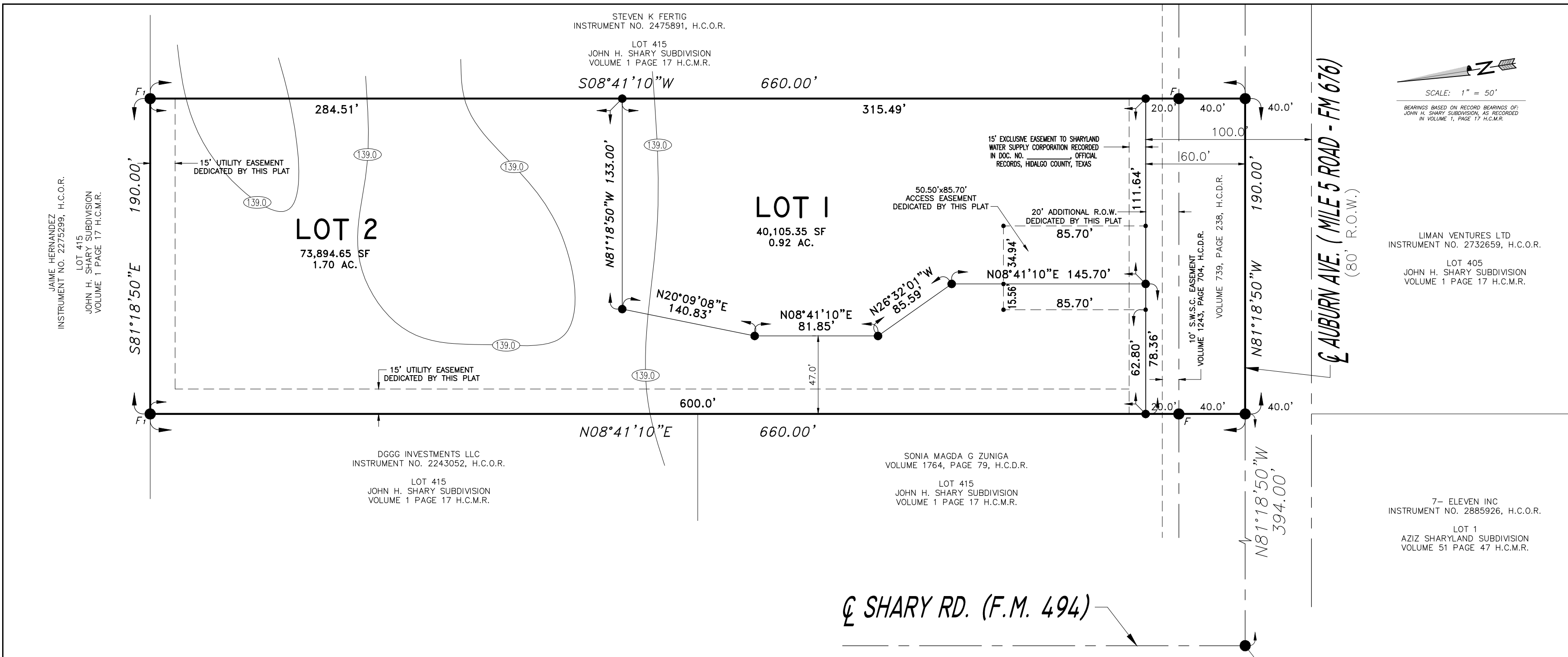
ANISSA IZEL SANCHEZ _____ DATE _____
 2501 E. MILE 5 ROAD
 MISSION, TEXAS 78573

THE STATE OF TEXAS COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY APPEARED ANISSA IZEL SANCHEZ, KNOWN TO ME TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____, 2017.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC IN AND FOR HIDALGO COUNTY, TEXAS _____



REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

PLAT OF AAA APARTMENTS SUBDIVISION

A 2.88 ACRE TRACT OF LAND BEING A PORTION OF LOT 415, JOHN H. SHARY SUBDIVISION AS RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS, ALSO BEING THAT CERTAIN TRACT DESCRIBED IN GENERAL WARRANTY DEED RECORDED IN DOCUMENT #2361187, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

DATE: JULY 26, 2017 SCALE: 1" = 50'

PREPARED BY: **R. E. GARCIA & ASSOCIATES**
 ENGINEERS, SURVEYORS, PLANNERS
 ENGINEER (7-5001) & SURVEYOR (10015300)
 116 NORTH 12th AVE.
 EDINBURG, TEXAS 78541 (956) 381-1061
 EMAIL: REGASSOC@AOL.COM

R.E. Garcia
Associates

LEGEND:
 F - FOUND 1/2" # IRON ROD
 F₁ - FOUND 5/8" # IRON ROD

THE STATE OF TEXAS COUNTY OF HIDALGO OWNER'S CERTIFICATION, DEDICATION, & ATTESTATION

I, **ANISSA IZEL SANCHEZ**, AS OWNER OF THE 2.88 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED **AAA APARTMENTS SUBDIVISION** HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT AND DEDICATE TO PUBLIC USE THE STREET 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 WILL MEET THE MINIMUM STANDARDS;
 (B) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS WILL MEET THE MINIMUM STATE STANDARDS;
 (C) ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS OR SEPTIC TANKS WILL MEET THE MINIMUM STATE STANDARDS;
 (D) GAS CONNECTIONS, IF AVAILABLE, PROVIDED TO THE LOTS WILL MEET THE MINIMUM STATE STANDARDS;

I ATTEST THAT THE MATTERS ASSERTED IN THIS PLAT ARE TRUE AND COMPLETE.

ANISSA IZEL SANCHEZ, DATE _____
 AAA APARTMENTS SUBDIVISION,
 2501 MILE 5 ROAD,
 MISSION, TEXAS 78573

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY APPEARED **ANISSA IZEL SANCHEZ**, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____, 2024.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC IN AND FOR HIDALGO COUNTY, TEXAS

APPROVAL BY HIDALGO COUNTY DRAINAGE DISTRICT NO. 1:
 HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 HEREBY CERTIFIES THAT THE PLAN FOR THIS SUBDIVISION COMPANY 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 OF THE SUBDIVISION AND ITS ENGINEER TO MAKE THESE DETERMINATIONS.

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

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

UNITED IRRIGATION DISTRICT

THIS PLAT IS HEREBY APPROVED BY THE UNITED IRRIGATION DISTRICT. ON THIS THE _____ DAY OF _____, 2024.

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

ATTEST:
 PRESIDENT _____ SECRETARY _____

SHARYLAND WATER SUPPLY CORPORATION:
 I, **CARLOS LIMA**, HEREBY CONDITIONALLY CERTIFY THAT POTABLE WATER SERVICE IS AVAILABLE FOR **AAA APARTMENTS SUBDIVISION** LOCATED AT 4416 N. INSPIRATION MISSION, TEXAS IN HIDALGO COUNTY, TEXAS, SUBJECT TO THE SUBDIVISION'S POTABLE WATER SYSTEM MEETING THE APPROVAL OF THE DEVELOPER'S DESIGN ENGINEER, ALL APPLICABLE RULES AND REGULATIONS OF SHARYLAND WATER SUPPLY CORPORATION, AND LOCAL, STATE AND FEDERAL AGENCIES.
 DEVELOPER AND ITS DESIGN ENGINEER SHALL BEAR FULL RESPONSIBILITY TO ENSURE THAT THE ABOVE REFERENCED POTABLE WATER SYSTEM IS CONSTRUCTED WITHIN THE DESIGNATED SHARYLAND WATER SUPPLY CORPORATION EXCLUSIVE EASEMENT.

CARLOS LIMA DATE _____
 GENERAL MANAGER
 SHARYLAND WATER SUPPLY CORPORATION

COUNTY OF HIDALGO
 CERTIFICATE OF PLAT APPROVAL
 UNDER LOCAL GOVERNMENT CODE §232.028(c)
 WE, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF **AAA APARTMENTS SUBDIVISION** WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON _____, 2024.

HIDALGO COUNTY JUDGE _____ DATE _____
 ATTEST:
 HIDALGO COUNTY CLERK _____ DATE _____

THE STATE OF TEXAS
 COUNTY OF HIDALGO
 CERTIFICATE OF PLAT APPROVAL
 I, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF **AAA APARTMENTS SUBDIVISION** WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON _____, 2024.

ENVIRONMENTAL HEALTH DIVISION MANAGER _____ DATE _____

CITY OF MCALLEN
 CERTIFICATE OF PLAT APPROVAL
 UNDER LOCAL GOVERNMENT CODE §212.009(C) & §212.0115(B)
 I, THE UNDERSIGNED, CERTIFY THAT THIS PLAT OF **AAA APARTMENTS SUBDIVISION** WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MCALLEN ON _____, 2024.

MAYOR, CITY OF MCALLEN _____ DATE _____
 ATTEST:
 SECRETARY, CITY OF MCALLEN _____ DATE _____

CITY OF MCALLEN CERTIFICATE OF PLAT APPROVAL
 UNDER LOCAL GOVERNMENT CODE §212.009(C) & §212.0115(B)
 WE, THE UNDERSIGNED, CERTIFY THAT THIS PLAT OF **AAA APARTMENTS SUBDIVISION** WAS REVIEWED AND APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MCALLEN ON _____, 2024.

CHAIRMAN, PLANNING AND ZONING COMMISSION _____ DATE _____

THE STATE OF TEXAS
 COUNTY OF HIDALGO
 I, RAUL GARCIA, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON, AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OR OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF EDINBURG, TEXAS.

REGISTERED PROFESSIONAL LAND SURVEYOR #4204

THE STATE OF TEXAS
 COUNTY OF HIDALGO
 I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN TO THIS PLAT.

REGISTERED PROFESSIONAL ENGINEER #64790

PLAT NOTES & RESTRICTIONS:

- FLOOD ZONE STATEMENT: FLOOD ZONE DESIGNATION: ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN COMMUNITY-PANEL NO. 480334 0295 D. EFFECTIVE DATE: JUNE 6, 2000
 THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS FOR HIDALGO COUNTY, TEXAS AND THE LOCAL FLOOD PLAN ADMINISTRATOR IDENTIFIES NO OTHER AREA WITHIN THE PROPOSED SUBDIVISION TO BE WITHIN THE 100-YEAR FLOOD PLAIN CONSTRUCTION OF RESIDENTIAL HOUSING WITHIN ANY AREA OF THE SUBDIVISION THAT IS IN THE 100-YEAR FLOOD PLAIN IS PROHIBITED UNLESS THE HOUSING QUALIFIES FOR INSURANCE UNDER THE NATIONAL FLOOD INSURANCE ACT OF 1968 (42 U.S.C. SECTIONS 4001 THROUGH 4127).
- SETBACKS ARE AS FOLLOWS:
 FRONT: AUBURN AVENUE - 60.00 FEET OR GREATER FOR EASEMENTS SIDE: TBD BASED ON EASEMENTS AS MAY BE REQUIRED.
 REAR: 15.00 FEET OR GREATER FOR EASEMENTS
 GARAGE: 18.00 FEET EXCEPT WHERE GREATER SETBACK IS REQUIRED, GREATER SETBACK APPLIES.
 *SETBACKS FOR EXISTING STRUCTURES REMAIN; HOWEVER, NEW ADDITIONS AND/OR NEW CONSTRUCTION SHALL COMPLY WITH SETBACKS AS NOTED.
- GENERAL NOTE FOR SINGLE FAMILY RESIDENCES: NO MORE THAN ONE SINGLE DETACHED DWELLING SHALL BE LOCATED ON LOT 1. THIS RESTRICTION SHALL BE PLACED IN ALL DEEDS AND CONTRACTS FOR DEEDS FOR REAL ESTATE SOLD WITHIN THE SUBDIVISION. (ANY OTHER USE SHALL REQUIRE PLANNING DEPARTMENT, OFFICE OF ENVIRONMENTAL COMPLIANCE, HEALTH DEPARTMENT AND FIRE MARSHALL APPROVAL). APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPYING THE LOT.
- MINIMUM FINISHED FLOOR ELEVATION SHALL BE 24" ABOVE THE CENTER LINE OF STREET OF 18" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME OF APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISHED FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR A DEVELOPMENT PERMIT APPLICATION.
- THE FOLLOWING BENCHMARKS ARE IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS, DATUM BASED ON TEXAS SOUTH 4205 ELEVATION PER NAVD 88 (GEOID 2003)
- IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 AND HIDALGO COUNTY REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO DETAIN A TOTAL OF **12,094 CUBIC-FEET (0.278 ACRE-FEET) (LOT 1 4,255CF & LOT 2 7,839CF)** OF STORM WATER RUNOFF DRAINAGE DETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: THE DEVELOPER SHALL BE RESPONSIBLE TO DETAIN AND ACCOMMODATE MORE THAN THE DETAINED VOLUME SHOWN ABOVE IF IT DETERMINES AT THE DEVELOPMENT PERMIT STATE ABOVE DUE TO THE IMPERVIOUS AREA BEING GREATER THAT PLAT ENGINEER CONSIDERED FOR HIS CALCULATIONS OF THIS SUBDIVISION.
- ALL LOTS SHALL HAVE A POST DEVELOPMENT FINISH GRADE FROM THE REAR OF THE LOT TO THE CURB AND/OR ROADSIDE DITCH AT A 0.5% SLOPE TO ACCOMPLISH POSITIVE DRAINAGE. THIS IS IN ACCORDANCE WITH HIDALGO COUNTY APPENDIX S: COUNTY CONSTRUCTION.
- NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT, EASEMENTS SHALL BE KEPT CLEAR OF BUILDING, 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.
- EACH PURCHASE CONTRACT MADE BETWEEN A SUBDIVIDER AND PURCHASER OF A LOT IN THIS SUBDIVISION SHALL CONTAIN A STATEMENT DESCRIBING HOW AND WHEN WATER, SEWER, ELECTRICITY AND GAS SERVICES WILL BE MADE AVAILABLE TO THE SUBDIVISION.
- ALL PUBLIC UTILITIES EASEMENTS DEDICATED BY THIS PLAT SHALL BE WITH THE SIZE REQUIRED BY EACH UTILITY PROVIDER OCCUPYING AN EASEMENT.
- AS PER LOCAL GOVERNMENT CODE REQUIREMENTS, SANITARY SEWER MUST BE CONNECTED TO A RESIDENCE PRIOR TO THE COUNTY PROCESSING A FINAL CLEARANCE FOR A WATER METER. A SEWER TAP INSPECTION SHALL BE PROVIDED FROM THE ENTITY SERVICE PROVIDER PRIOR TO RECEIVING A CLEARANCE FOR WATER METERS.
- 5 FT. WIDE MINIMUM SIDEWALK REQUIRED ON AUBURN AVENUE (5 MILE ROAD - FM 676).
- NON-APPLICABILITY TO VARIOUS DRIVEWAYS & PARKING LOTS: AN ENTRANCE OR DRIVEWAY DESIGNED OR USED TO PROVIDE PRINCIPAL OR PRIMARY VEHICULAR ACCESS TO ANY APARTMENT BUILDING OR A GROUP OF APARTMENT BUILDINGS DESIGNED FOR MULTI-FAMILY OCCUPANCY AND UNDER ONE OWNERSHIP, SUCH ENTRANCE OR DRIVEWAY SHALL NOT BE USED TO PROVIDE PUBLIC ACCESS TO ADJACENT AREAS.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR DETAINING AND ACCOMMODATING MORE THAN THE DETAINED VOLUME SHOWN ON THIS PLAT IF IT IS DETERMINED, AT THE PERMIT STAGE, THAT THE DETENTION REQUIREMENTS ARE GREATER THAN STATED ON THIS PLAT, DUE TO THE IMPERVIOUS AREA BEING GREATER THAN THE PLAT ENGINEER CONSIDERED IN THE HYDRAULIC CALCULATIONS FOR THIS SUBDIVISION.
- ALL IRRIGATION EASEMENTS ARE EXCLUSIVE TO UNITED IRRIGATION DISTRICT, AND THE DISTRICT ALLOWS NO OTHER UTILITIES OR OUTSIDE USE WITHOUT ITS EXPRESS WRITTEN APPROVAL.
- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CROSS ABOVE OR BELOW GROUND ANY IRRIGATION DISTRICT EASEMENT OR RIGHT-OF-WAY WITH LINES, POLES, OPEN DITCHES OR OTHER USE WITHOUT FIRST OBTAINING A CROSSING PERMIT FROM UNITED IRRIGATION DISTRICT.
- NO PERMANENT STRUCTURE, UTILITY POLE, HOLE, WALL, FENCE, DRIVEWAY, OR ROAD WILL BE ALLOWED TO BE CONSTRUCTED OR EXIST ON ANY DISTRICT EASEMENT OR RIGHT-OF-WAY WITHOUT WRITTEN APPROVAL BY IRRIGATION DISTRICT. ANY UNAUTHORIZED STRUCTURE WITHIN THE EASEMENT BOUNDARY IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE.
- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CONNECT TO ANY DISTRICT FACILITY WITHOUT FIRST OBTAINING A PERMIT FROM IRRIGATION DISTRICT. ANY CONNECTION NOT AUTHORIZED BY THE DISTRICT IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE.
- ALL SHARYLAND WATER SUPPLY CORPORATION EASEMENTS ARE EXCLUSIVE, NO OTHER USE OF EASEMENT IS PERMITTED WITHOUT THE EXPRESS WRITTEN APPROVAL OF SHARYLAND WATER SUPPLY CORPORATION.
- CLEARANCES FOR WATER METERS: ONLY FOR LOTS BEING AS PER LOCAL GOVERNMENT CODE REQUIREMENTS, SANITARY SEWER MUST BE CONNECTED TO A RESIDENCE PRIOR TO THE COUNTY PROCESSING A FINAL CLEARANCE FOR A WATER METER. A SEWER TAP INSPECTION SHALL BE PROVIDED FROM THE ENTITY SERVICE PROVIDER PRIOR TO RECEIVING A CLEARANCE FOR WATER METERS(S).
- OWNERS OF LOTS 1 AND 2 WILL BE FINANCIALLY RESPONSIBLE FOR MOVING THE EXISTING UNITED IRRIGATION DISTRICT IRRIGATION LINE LOCATED WITHIN THE NEW RIGHT-OF-WAY OF AUBURN AVENUE INTO THE UNITED IRRIGATION DISTRICT EASEMENT AT THE TIME OF FUTURE WIDENING OF AUBURN AVENUE.
- 2.6 FT. OPAQUE BUFFER REQUIRED FROM ADJACENT/BETWEEN MULTI-FAMILY RESIDENTIAL AND COMMERCIAL AND INDUSTRIAL ZONES/USES. 8 FT. MASONRY WALL REQUIRED BETWEEN SINGLE FAMILY RESIDENTIAL AND COMMERCIAL, INDUSTRIAL, OR MULTI-FAMILY RESIDENTIAL ZONES/USES.
- COMMON AREAS, ANY PRIVATE DRIVES, ACCESS EASEMENTS, GATE AREAS, ETC. MUST BE MAINTAINED BY THE LOT OWNERS AND NOT THE CITY OF MCALLEN.

METES AND BOUNDS DESCRIPTION

A **2.88 ACRE** TRACT OF LAND BEING A PORTION OF LOT 415, JOHN H. SHARY SUBDIVISION AS RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS, ALSO BEING THAT CERTAIN TRACT DESCRIBED IN GENERAL WARRANTY DEED RECORDED IN DOCUMENT NUMBER 2361187, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS, AND BEING MORE FULLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A POINT ON THE CENTERLINE OF FM 676, (MILE 5 NORTH ROAD) ALSO BEING THE SOUTH LINE OF SAID LOT 415, FOR THE SOUTHWEST CORNER OF HEREIN DESCRIBED TRACT. SAID POINT BEARS **S81°18'50"E 394.00 FEET** FROM THE SOUTHWEST CORNER OF SAID LOT 415.

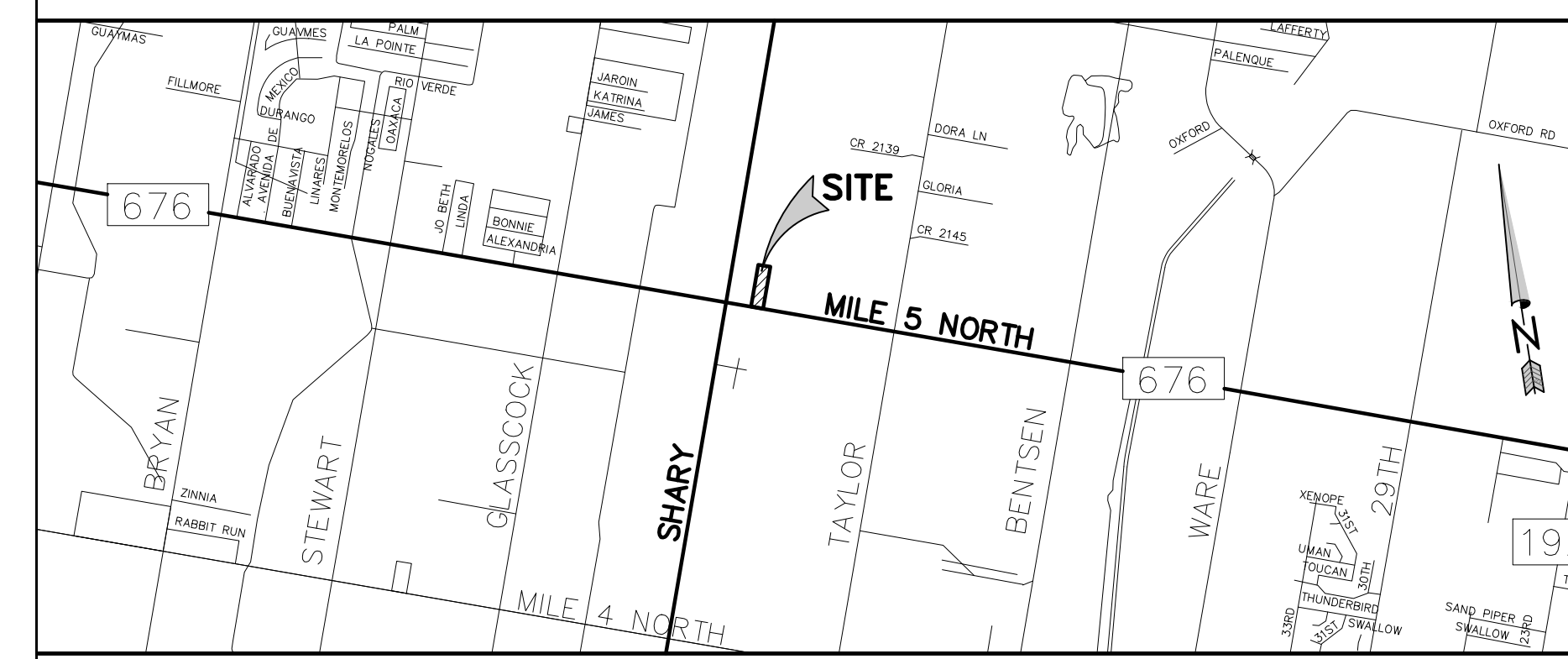
THENCE **N08°41'10"E** PARALLEL TO THE WEST LINE OF SAID LOT 415, PASSBAT 40.00 FEET A FOUND ONE-HALF INCH IRON ROD BEING THE NORTH RIGHT-OF-WAY LINE OF SAID FM 676 (MILE 5 NORTH ROAD), AND CONTINUING FOR A TOTAL DISTANCE OF **660.00 FEET** TO A FOUND FIVE-EIGHTHS INCH IRON ROD FOR THE NORTHWEST CORNER OF HEREIN DESCRIBED TRACT.

THENCE **S81°18'50"E 190.00 FEET** PARALLEL TO THE SOUTH LINE OF SAID LOT 415 TO A FOUND FIVE-EIGHTHS INCH IRON ROD FOR THE NORTHEAST CORNER OF HEREIN DESCRIBED TRACT.

THENCE **S08°41'10"W** PARALLEL TO THE WEST LINE OF SAID LOT 415, PASS AT 620.00 FEET A FOUND ONE-HALF INCH IRON ROD BEING THE NORTH RIGHT-OF-WAY LINE OF SAID FM 676, (MILE 5 NORTH ROAD) AND CONTINUING FOR A TOTAL DISTANCE OF **660.00 FEET** TO A POINT ON SAID CENTERLINE OF FM 676, (MILE 5 NORTH ROAD) ALSO BEING THE SOUTH LINE OF SAID LOT 415 FOR THE SOUTHEAST CORNER OF HEREIN DESCRIBED TRACT.

THENCE **N81°18'50"W 190.00 FEET** ALONG SAID CENTERLINE OF FM 676, (MILE 5 NORTH ROAD) ALSO BEING THE SOUTH LINE OF SAID LOT 415 TO THE POINT OF BEGINNING AND CONTAINING 2.88 ACRES OF LAND, MORE OR LESS.

LOCATION MAP SCALE: 1" = 1000"



LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY:

AAA APARTMENTS SUBDIVISION IS LOCATED IN SOUTH CENTRAL HIDALGO COUNTY IN PRECINCT NO. 3 ON THE NORTH SIDE OF AUBURN AVENUE (MILE 5 RD., F.M. 676) AND 394' EAST OF SHARY RD. (F.M. 494). THE NEAREST MUNICIPALITY IS THE CITY OF MCALLEN, ACCORDING TO THE OFFICIAL MAP LOCATED IN THE OFFICE OF THE SECRETARY OF THE CITY OF MCALLEN (143.920). AAA APARTMENTS SUBDIVISION IS WITHIN THE CITY'S TWO MILE EXTRA TERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE §42.021

INDEX OF SHEETS

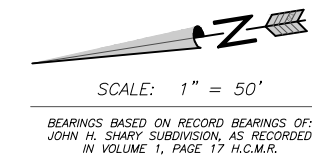
NO.	DESCRIPTION
1	HEADING; OWNER'S DEDICATION, CERTIFICATION AND ATTESTATION; SURVEYOR'S & ENGINEER'S CERTIFICATION; OWNER'S DEDICATION, CERTIFICATION AND ATTESTATION; HIDALGO COUNTY APPROVAL; H.C.D.D. APPROVAL; H.C.I.D. NO. 2 APPROVAL; COUNTY ENVIRONMENTAL HEALTH DIVISION APPROVAL; CITY OF EDINBURG APPROVAL; N.A.W.S.C. CERTIFICATION; HIDALGO COUNTY CLERK'S CERTIFICATION; HIDALGO COUNTY JUDGE CERTIFICATION HEADING; INDEX; LOCATION MAP AND ETJ; DESCRIPTION OF LOCATION WITH RESPECT TO THE ETJ OF A MUNICIPALITY; PRINCIPAL CONTACTS; METES & BOUNDS; PLAT NOTES & RESTRICTIONS; PLAT WITH LOTS, STREETS AND EASEMENT DESIGNATION; REVISION NOTES
3	WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP; ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND WASTE WATER (OSSF) AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH); SAMPLE OF LOG BORE FOR OSSF SYSTEM, TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATE AND STATEMENT, MAP OF TOPOGRAPHY & DRAINAGE WITH ENGINEER'S CERTIFICATION; REVISION NOTES, DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT

PRINCIPAL CONTACTS:

NAME: ANISSA IZEL SANCHEZ	ADDRESS: 2301 F. MILE 5 ROAD	CITY, STATE & ZIP: MISSION, TX, 78573	PHONE // FAX #: (956) 369-4094
OWNER: RAUL E. GARCIA	116 N. 12TH	EDINBURG, TX, 78539	(956) 381-1061 / (956) 381-1280
ENGINEER: RAUL E. GARCIA	116 N. 12TH	EDINBURG, TX, 78539	(956) 381-1061 / (956) 381-1280
SURVEYOR: RAUL E. GARCIA	116 N. 12TH	EDINBURG, TX, 78539	(956) 381-1061 / (956) 381-1280

SHEET NO. 1
OF 2 SHEETS

Q AUBURN AVENUE (MILE 5 RD. F.M. 676)
(80' R.O.W.)



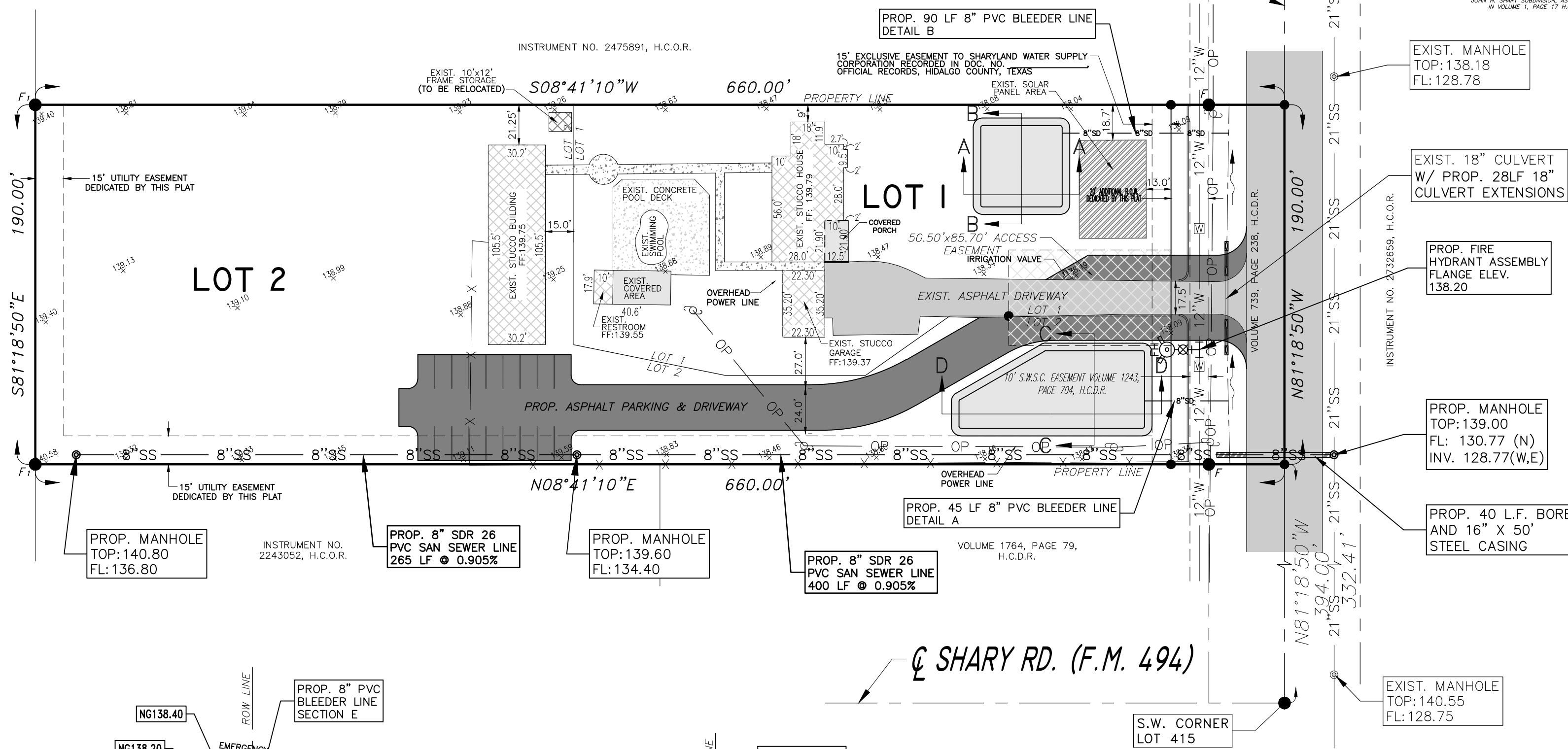
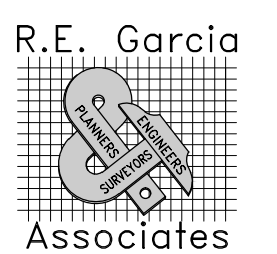
REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

PLAT OF AAA APARTMENTS SUBDIVISION

A 2.88 ACRE TRACT OF LAND BEING A PORTION OF LOT 415, JOHN H. SHARY SUBDIVISION AS RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS, ALSO BEING THAT CERTAIN TRACT DESCRIBED IN GENERAL WARRANTY DEED RECORDED IN DOCUMENT #2361187, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

DATE: JULY 26, 2017 SCALE: 1" = 50'

PREPARED BY: **R. E. GARCIA & ASSOCIATES**
ENGINEERS, SURVEYORS, PLANNERS
116 NORTH 12th AVE.
EDINBURG, TEXAS 78541 (PH) 381-1061
EMAIL: REGAASOCC@AOL.COM



LEGEND:
F - FOUND 1/2" IRON ROD
F1 - FOUND 5/8" IRON ROD
W - WATER METER
P - POWER POLE
-OP- - OVERHEAD POWER LINE

COST ESTIMATE
WATER \$72,790.00
OSSF \$0
PAVING \$0
DRAINAGE \$2,540.00
TOTAL \$75,330.00

VOLUME CALCULATIONS: LOT 1
TOP OF EXCAVATED AREA 2,679.54 SOFT.
BOTTOM OF EXCAVATED AREA 1,848.14 SOFT.
DEPTH 2.0 FEET
VOLUME AVAILABLE 12,679.54 + 1,848.14 x 2.0 = 4,427.68 CF
DETENTION AVAILABLE: 4,427.68 CF
DETENTION REQUIRED: 4,252 CF

VOLUME CALCULATIONS: LOT 2
TOP OF EXCAVATED AREA 4,500.56 SOFT.
BOTTOM OF EXCAVATED AREA 3,420.20 SOFT.
DEPTH 2.0 FEET
VOLUME AVAILABLE 4,500.56 + 3,420.20 x 2.0 = 7,921.26 CF
DETENTION AVAILABLE: 7,921.26 CF
DETENTION REQUIRED: 7,839 CF

DRAINAGE STATEMENT FOR AAA APARTMENTS SUBDIVISION

AAA APARTMENTS SUBDIVISION IS A PROPOSED 2 LOT MIXED USE SUBDIVISION WITHIN A 2.88-ACRE TRACT OF LAND BEING A PORTION OF LOT 415, JOHN H. SHARY SUBDIVISION AS RECORDED IN VOLUME 1, PAGE 17, MAP RECORDS, HIDALGO COUNTY, TEXAS, ALSO BEING THAT CERTAIN TRACT DESCRIBED IN GENERAL WARRANTY DEED RECORDED IN DOCUMENT #2361187, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS, WITHIN THE CITY OF MCALLEN EXTRA-TERRITORIAL JURISDICTION. THE SUBDIVISION IS LOCATED ON THE NORTH SIDE OF FM 676 (MILE 5 NORTH ROAD) APPROXIMATELY 400 FEET EAST OF FM 494 (SHARY ROAD). LOT 1 WILL REMAIN A LARGE LOT RESIDENTIAL LOT WITH AN EXISTING LARGE SINGLE FAMILY RESIDENCE AND LOT 2 WILL BE A MULTI-FAMILY DEVELOPMENT.

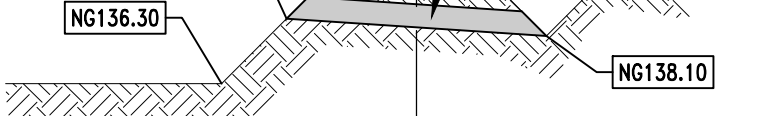
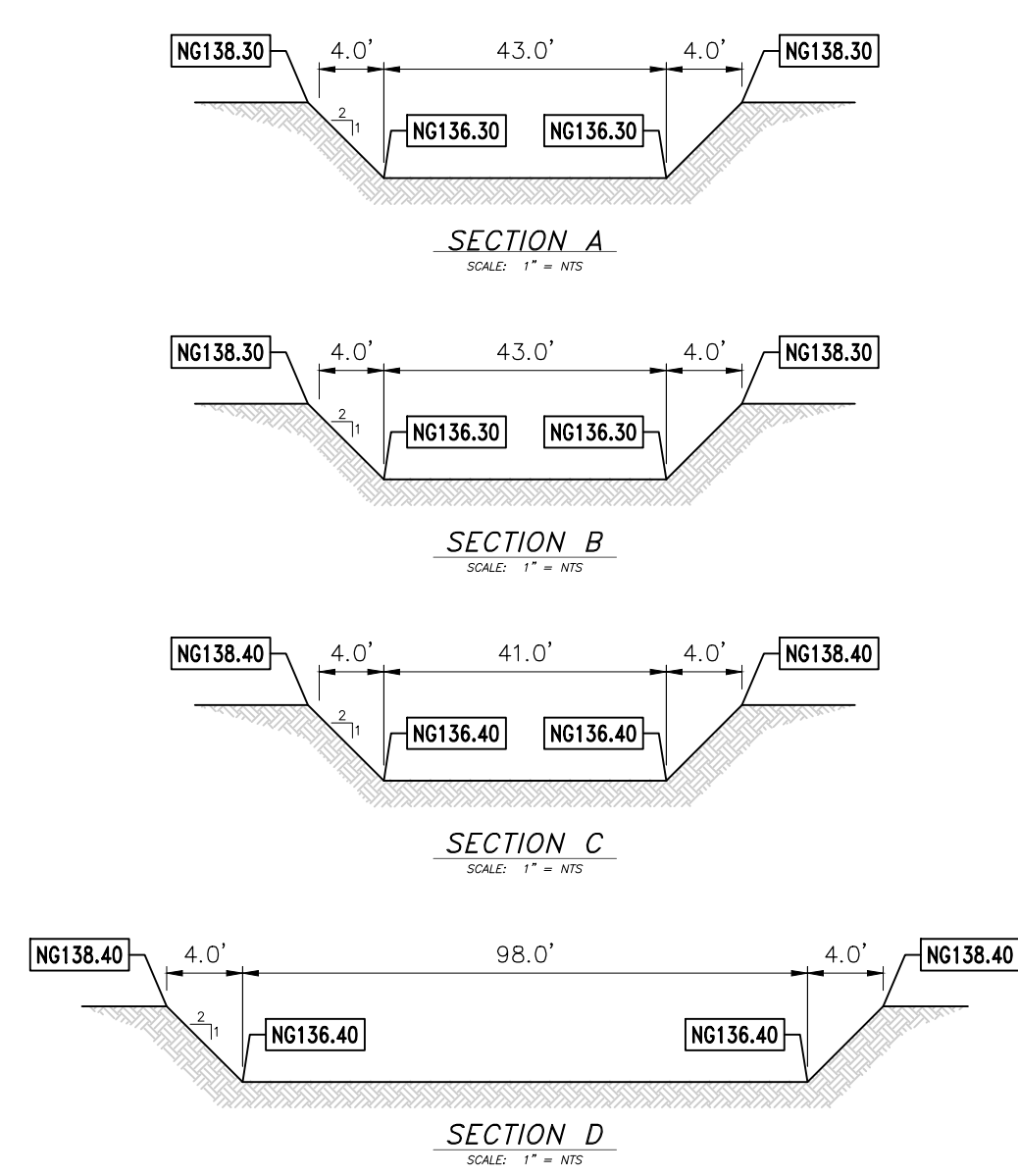
THE SUBDIVISION IS LOCATED WITHIN A ZONE "X" FLOOD HAZARD AREA ACCORDING TO THE FEMA'S FLOOD INSURANCE RATE MAP COMMUNITY PANELS NO.: 480334 0295 D, MAP REVISED: JUNE 6, 2000. ZONE "X" IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE OF 500-YEAR FLOOD".

THE SOIL FOR THIS PROPERTY IS A DARK GRAYISH BROWN SANDY CLAY LOAM WHICH IS MODERATELY PREVIOUS. THIS SOIL IS FOUND TO BE IN THE HYDROLOGIC GROUP "B" AS DETERMINED BY USE OF THE SOIL SURVEY OF HIDALGO COUNTY. (SEE ATTACHMENT). CURRENTLY THE PROPERTY IS A LARGE RESIDENTIAL SITE.

EXISTING RUNOFF SHEET FLOWS OVERLAND IN A SOUTHERLY DIRECTION INTO A ROADSIDE DITCH ON THE NORTH SIDE OF FM 676 (MILE 5 NORTH ROAD). THE FM 676 (MILE 5 NORTH ROAD), ROADSIDE DITCHES FLOW EAST EVENTUALLY DISCHARGING INTO THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 MISSION MCALLEN LATERAL APPROXIMATELY 6,000 FEET EAST OF THE SUBJECT SITE. THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 MISSION MCALLEN LATERAL EVENTUALLY FLOWS INTO THE LAGUNA MADRE. USING THE RATIONAL METHOD, WE HAVE DETERMINED THAT A 10-YEAR RAINFALL EVENT WILL GENERATE APPROXIMATELY 6.97 CFS OF STORM RUNOFF. WE HAVE ALSO USED THE RATIONAL METHOD TO DETERMINE THAT THE IMPROVED SITE WILL GENERATE AN ESTIMATED 16.49 CFS OF RUNOFF DURING THE 50-YR RAINFALL EVENT.

IN ACCORDANCE WITH THE CITY OF MCALLEN'S AND HIDALGO COUNTY DRAINAGE REQUIREMENTS, WE HAVE CALCULATED THAT APPROXIMATELY A TOTAL OF 12,094 CF OR 0.278 AC-FT WILL NEED TO BE DETAINED ON SITE FOR THE COMPLETE DEVELOPMENT OF THE SUBDIVISION. LOT 1 SHALL DETAIN 4,255 CF OR 0.098 AC-FT AND LOT 2 SHALL DETAIN 7,839 CF OR 0.18 AC-FT. STORM WATER WILL BE DETAINED WITHIN A LANDSCAPED DETENTION AREA ADJACENT TO FM 676 (MILE 5 NORTH ROAD). THIS LANDSCAPED DETENTION AREA WILL BE DESIGNED IN A MANNER TO ALLOW FOR BLEEDING CONTROLLED DISCHARGE INTO THE ROADWAY DITCHES ON FM 676 (MILE 5 NORTH ROAD). ALL BLEEDER FACILITIES WILL BE PERMITTED BY TXDOT, ENGINEERED SITE AND DRAINAGE DETENTION PLANS WILL BE REQUIRED AND APPROVED BY THE CITY OF MCALLEN ENGINEERING DEPARTMENT AT THE TIME OF ANY FUTURE BUILDING PERMIT REQUESTS. TABLES, AND CALCULATIONS, ARE ATTACHED.

BY MY SIGNATURE BELOW, I CERTIFY THAT THE 100 YEAR FLOODPLAIN AS DESCRIBED IN COMMUNITY PANEL NUMBER 408334 0295 D, REVISED JUNE 6, 2000, IS CONTAINED WITHIN THE WIDENING OF THE NORTH MAIN DRAIN ALONG THE NORTH SIDE OF JOHN H. SHARY SUBDIVISION.



SUBDIVIDER CERTIFICATION

1. - BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, THE 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 STATE AND COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:

1. - I, ANISSA IZEL SANCHEZ, SUBDIVIDER OF AAA APARTMENTS SUBDIVISION, HEREBY CERTIFY SEWER PERMITS HAVE BEEN PAID AND ARE ON FILE FOR THE H.C.H.D.; THAT ANY ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUANTITY & QUALITY 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. AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

ANISSA IZEL SANCHEZ _____ DATE _____
2501 E. MILE 5 ROAD
MISSION, TEXAS 78573

THE STATE OF TEXAS COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY APPEARED ANISSA IZEL SANCHEZ, KNOWN TO ME TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____, 2017.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC IN AND FOR HIDALGO COUNTY, TEXAS

FINAL ENGINEERING REPORT FOR AAA APARTMENTS SUBDIVISION by Raul E. Garcia, P.E. FINAL WATER AND SEWER ENGINEERING REPORT

WATER SUPPLY: DESCRIPTION, COST, AND OPERABILITY DATE:

AAA APARTMENTS SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.). THE SUBDIVIDER AND SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAVE ENTERED INTO A CONTRACT IN WHICH SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND SHARYLAND WATER SUPPLY CORPORATION (S.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.

SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) HAS AN EXISTING 12" DIAMETER WATER LINE RUNNING ALONG THE NORTH SIDE OF THE RIGHT-OF-WAY OF FM 676 (MILE 5 NORTH ROAD). THE WATER SYSTEM FOR AAA APARTMENTS SUBDIVISION CONSISTS OF A SINGLE 5/8" DIAMETER WATER SERVICE LINE THAT TAPS INTO THE EXISTING 12" LINE. THIS 5/8" SERVICE LINE THEN RUNS SOUTH INTO THE LOTS AND ENDING IN A WATER METER.

WATER DISTRIBUTION FOR THE AAA APARTMENTS SUBDIVISION CONSISTS OF A SINGLE 5/8" DIAMETER SERVICE LINE. SAID SERVICE TERMINATE AT THE WATER METER BOXES FOR THE LOT. THE 5/8" SINGLE SERVICE AND THE METER BOX HAVE ALREADY BEEN INSTALLED. AT A TOTAL COST OF \$0,000.00 UPON REQUEST BY THE LOT OWNER, THE SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY THE SHARYLAND WATER SUPPLY CORPORATION (S.W.S.C.) AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

WASTEWATER SUPPLY: DESCRIPTION, COST AND OPERABILITY DATES:

AAA APARTMENTS SUBDIVISION WILL BE TREATED BY WASTEWATER SERVICE FROM THE CITY OF SHARYLAND. THE SUBDIVIDER AND CITY OF SHARYLAND HAVE ENTERED INTO A CONTRACT IN WHICH THE CITY OF SHARYLAND HAS PROMISED TO TREAT THE SUFFICIENT WASTEWATER FOR AT LEAST 30 YEARS AND THE CITY OF SHARYLAND HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WASTEWATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

THE CITY OF SHARYLAND HAS AN EXISTING 21" DIAMETER SEWER LINE RUNNING ALONG THE SOUTH SIDE OF THE RIGHT-OF-WAY OF F.M. 676 (MILE 5 NORTH ROAD). THE WASTEWATER SYSTEM FOR AAA APARTMENTS SUBDIVISION CONSISTS OF A 6" DIAMETER SEWER LINE WHICH TAPS INTO THE EXISTING 21" LINE WITH A MANHOLE THEN RUNS NORTH ALONG THE WEST PROPERTY LINE.

ENGINEER 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 TO INSTALL UNCONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES - THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$0,000.00.
SEWAGE FACILITIES - SEPTIC SYSTEM IS ESTIMATED TO COST A TOTAL OF \$0,000.00 FOR THE ENTIRE SUBDIVISION.

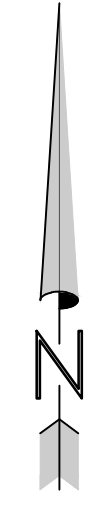
ENGINEER'S SIGNATURE _____ DATE _____



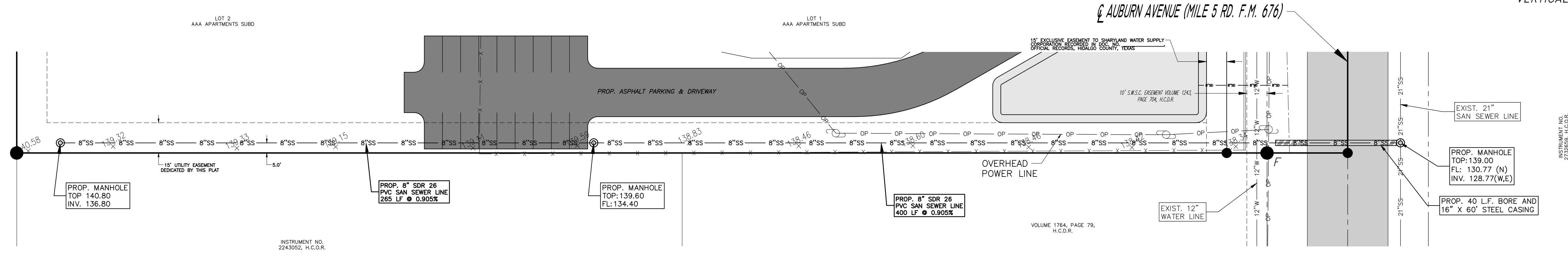
FIRMA DEL INGENIERO _____ FECHA _____



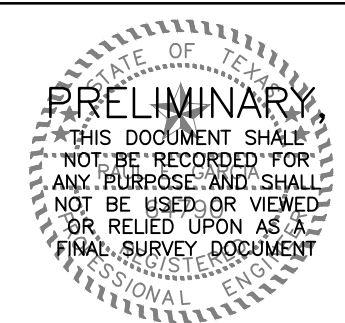
SHEET NO. 2
OF 2 SHEETS



SCALE:
 HORIZONTAL SC: 1" = 30'
 VERTICAL SC: 1" = 4'

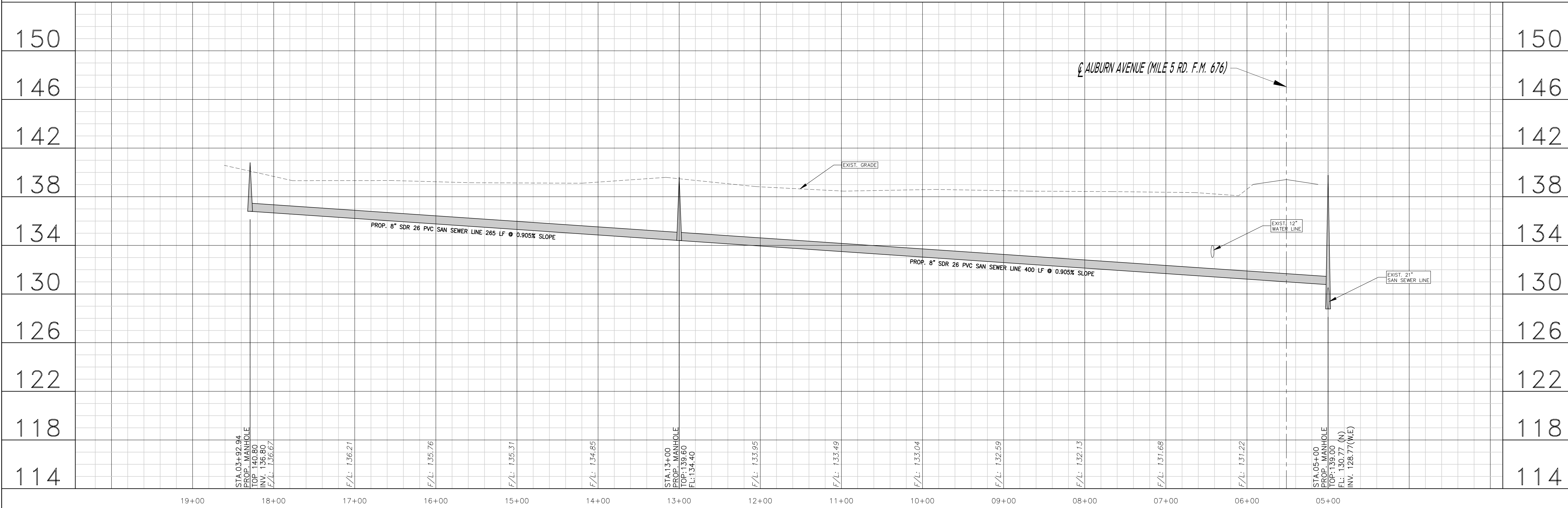


- NOTES:**
- CONTRACTOR SHALL REPAIR ALL FENCES, PAVEMENT, DRIVEWAYS AND SIDEWALKS DAMAGED DURING CONSTRUCTION.
 - ALL CULVERT PIPES SHALL BE PLACED TO MATCH PROPOSED ROAD DITCH ELEVATIONS.



R. E. GARCIA & ASSOCIATES
 ENGINEERS, SURVEYORS, PLANNERS
 ENGINEER (1-5007) & SURVEYOR (00015300)
 1116 NORTH 12th AVE.
 EDINBURG, TEXAS 78541 (956) 381-1061
 EMAIL: REGAASSOC@AOL.COM

R. E. Garcia
 C.E. GARCIA
 C.E. GARCIA
 PLANNERS
 Associates



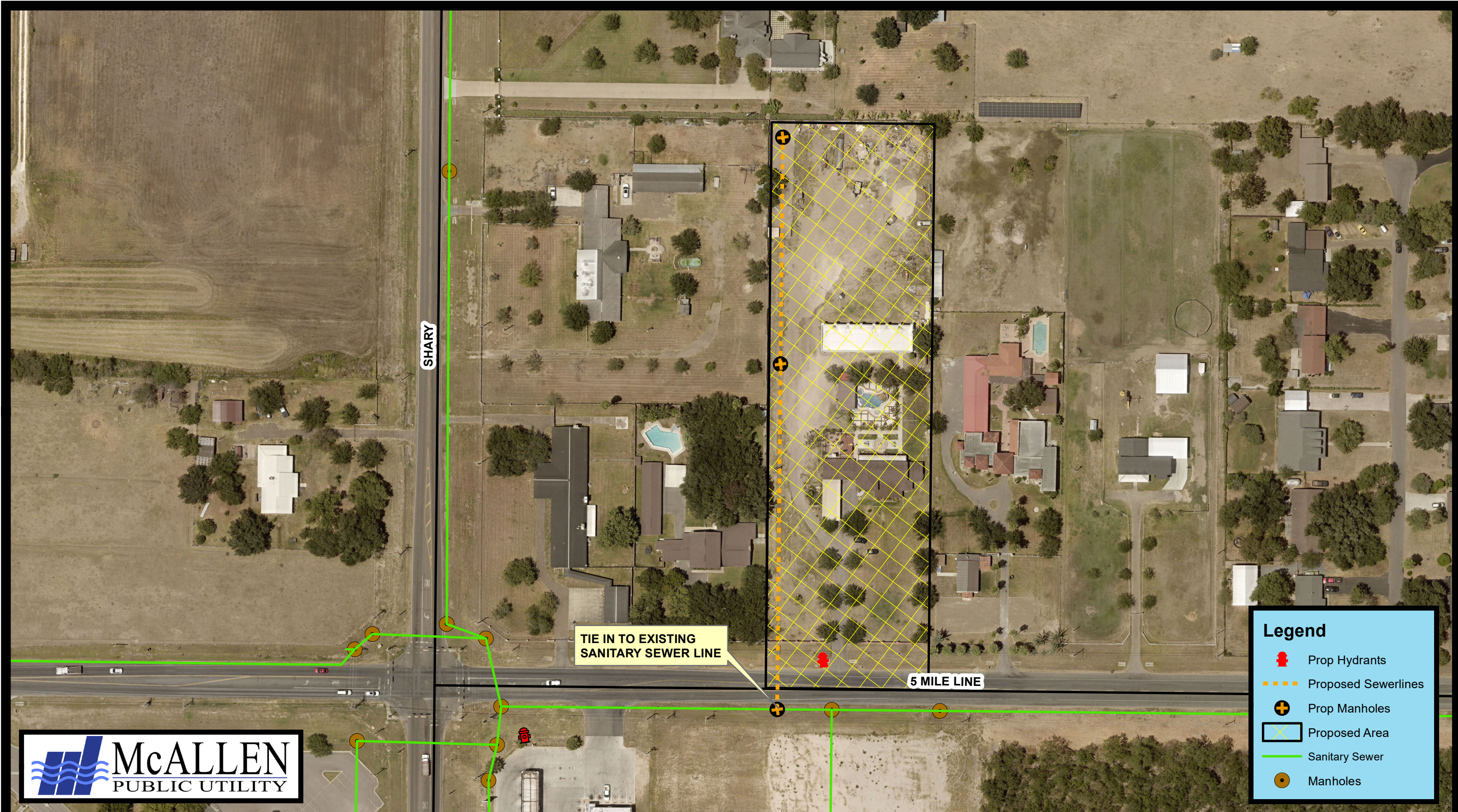
PROJECT :
SEWER PLAN & PROFILE LAYOUT
DI & CROSS BORDER
INDUSTRIAL PARK DEVELOPMENT
 HIDALGO, TEXAS

JOB # 2017-063
 DATE: APRIL 03, 2024
 REVISIONS:
 -
 DRAWN BY: D.E.S.

SHEET NO.
 1 / 1



AAA APARTMENTS SUBDIVISION



Legend

- Prop Hydrants
- Proposed Sewerlines
- Prop Manholes
- Proposed Area
- Sanitary Sewer
- Manholes



AGENDA ITEM 3.a.

PUBLIC UTILITY BOARD

DATE SUBMITTED 06/19/2024

MEETING DATE 6/25/2024

1. Agenda Item: Consideration and Approval of the Selection of Consulting Engineering Firm(s) for the Brackish Groundwater Desalination Project (05-24-S50-497)

2. Party Making Request:
Carlos Gonzalez, Development and Special Projects Engineer

3. Nature of Request: Consideration and Approval of the Selection of Consulting Engineering Firm(s) for the Brackish Groundwater Desalination Project (05-24-S50-497)

4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____

5. Reimbursement:

6. Routing:
Carlos Gonzalez Created/Initiated - 6/19/2024
Gerardo Noriega Final Approval - 6/19/2024

7. Staff's Recommendation: Consideration and Approval of the Selection of Consulting Engineering Firm(s) for the Brackish Groundwater Desalination Project (05-24-S50-497)

8. City Attorney: Approve. IJT

9. MPU General Manager: Approved - MAV

10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

FROM: Carlos Gonzalez, P.E., Utility Engineer

DATE: June 19, 2024

SUBJECT: **Consideration and Approval of the Selection of Engineering Team(s); Brackish Groundwater Desalination SOQ Evaluations (05-24-S50-497)**

On June 6, 2024, Statement of Qualifications were received corresponding to the above-referenced RFQ request. The two (2) submittals received were from Carollo Engineers, Inc. and Enprotec/Hibbs & Todd. The RFQ Solicitation included Evaluation and Scoring Requirements.

A 5 member committee was tasked with evaluating and scoring SOQ's.

The table below provides a summary of scoring results.

	Carollo Engineers, Inc.	Enprotec/Hibbs & Todd
Average Score	95.4	90.8

MPUB may choose to make a selection at this next upcoming Board Meeting or may elect to request for Team Interviews.

Should the Board elect to recommend a selection, staff will commence Scope of Service negotiations. The Scope of Service Negotiations and corresponding fee schedule will be brought back in a future MPUB Meeting and/or workshop for consideration and approval.

Staff will be available for comments or questions.



AGENDA ITEM 3.b.

PUBLIC UTILITY BOARD

DATE SUBMITTED 06/19/2024
MEETING DATE 6/25/2024

1. Agenda Item: Consideration & Approval of the First Amendment to the Interlocal Cooperation Agreement between the City of Mission and McAllen Public Utility related to Phase 2 of Taylor Roadway Utility Improvements.
2. Party Making Request:
Carlos Gonzalez, Development and Special Projects Engineer
3. Nature of Request: Consideration & Approval of the First Amendment to the Interlocal Cooperation Agreement between the City of Mission and McAllen Public Utility related to Phase 2 of Taylor Roadway Utility Improvements.
4. Budgeted: No (Will Propose to Fund FY 24-25)

Bid Amount:	\$1,180,000	Budgeted Amount:	\$0.00
Under Budget:	\$0.00	Over Budget:	\$0.00
		Amount Remaining:	\$0.00
5. Reimbursement:
6. Routing:

Carlos Gonzalez	Created/Initiated - 6/19/2024
Gerardo Noriega	Final Approval - 6/19/2024
7. Staff's Recommendation: Consideration & Approval of the First Amendment to the Interlocal Cooperation Agreement between the City of Mission and McAllen Public Utility related to Phase 2 of Taylor Roadway Utility Improvements subject to releasing funding in FY 24-25
8. City Attorney: Approve. IJT
9. MPU General Manager: Approved - MAV
10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A. Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

FROM: Carlos Gonzalez, P.E., Utility Engineer

DATE: June 19, 2024

SUBJECT: **First Amendment to Interlocal Agreement between Mission and MPU related to the Proposed Taylor Road, Phase II Widening Project**

Staff is requesting Board Consideration of First Amendment to Interlocal Agreement between City of Mission and MPU related to the 2nd Phase of the Taylor Roadway and Utility Improvement Project.

The Scope of work includes continuing the Roadway widening from Business 83 to Daffodil Avenue and includes pavement, sidewalk, storm sewer as well as waterline improvements within ROW.

MPU had previously engaged the Professional Engineering Services of South Texas Infrastructure Group, for the preparation of utility adjustment plans. These plans were completed and included in overall roadway construction set of contract documents. The Scope includes the relocation of approximately 2 miles of waterline along this subject corridor. The Engineer has provided an engineer's estimate of \$1.18 Million Dollars for this adjustment.

City of Mission is expecting to release this project for Bidding towards the end of FY 2024. After receiving Bids, Staff will schedule a follow up Board Item to consider approval of Actual Bid Amount. Staff will be recommending including this amount for funding in FY 24/25.

Staff recommends approval of this interlocal and will be available to address comments and/or questions.

STATE OF TEXAS §

COUNTY OF HIDALGO §

**FIRST AMENDMENT TO THE INTERLOCAL COOPERATION
AGREEMENT BETWEEN THE CITY OF MISSION
AND THE McALLEN PUBLIC UTILITY**

This First Amendment to the Interlocal Cooperation Agreement (“Amendment”) is made on this the ___ day of _____ 2024, by and between the **CITY OF McALLEN, TEXAS THROUGH THE MCALLEN PUBLIC UTILITY BOARD**, hereinafter referred to as “PUB” and the **CITY OF MISSION, TEXAS**, hereinafter referred to as “MISSION”, pursuant to the provisions of the Texas Interlocal Cooperation Act, as follows:

WITNESSETH:

WHEREAS, on or about the 12th day of April, 2022, PUB and MISSION entered into an Interlocal Cooperation Agreement (“Agreement”) to cooperate on the planned and programmed roadway widening improvements on Taylor Road, between U. S. Business 83 and Interstate 2 (U. S. 83) (the "Project"); and

WHEREAS, PUB and MISSION now desire to extend the scope of the Project to include the area of Taylor Road between U.S. Business 83 and Mile 2 Road (Daffodil Avenue) as depicted in the attached Exhibit “A”; and

WHEREAS, PUB and MISSION would like to include the installation of Water and Wastewater Lines by MISSION as an additive alternative in its request for bids for the expanded scope of the Project; and

WHEREAS, PUB and MISSION now desire to amend the Agreement as hereinafter provided;

NOW, THEREFORE, PUB and Mission, in consideration of the mutual covenants expressed herein, agree to the Amendment of the Agreement as follows:

1. Mission agrees to include Water and Wastewater Lines as an additive alternative in its request for bids to construct the Project, which will be expanded in scope as per the attached Exhibit “A”.
2. PUB agrees that they will pay any and all costs to construct the Water and Wastewater Lines as per the expanded scope of the Project as identified in the attached Exhibit “A”, including, but not limited to, costs for materials, labor, and equipment in the amount of \$1,176,287.64 (the "Estimate" attached as Exhibit “B”) which is the total amount estimated by the PUB's Engineer for the cost of the construction and installation of the Water and Wastewater

Lines per the expanded scope of the project. PUB agrees to pay this amount to MISSION on or before execution of an awarded contract. If the cost to construct the Water and Wastewater Lines is less than the Estimate the difference will be refunded within 30 days upon a written request by the PUB to MISSION.

3. Except as modified herein, all other terms and conditions of the original Agreement will remain in full force and effect and PUB and MISSION ratify and confirm the terms and provisions of the Agreement, as amended.

WITNESS THE HANDS OF THE PARTIES effective as of the day year first written above.

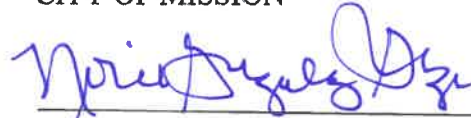
McALLEN PUBLIC UTILITY BOARD

Charles Amos, Chairman

ATTEST:

Marco A. Vega, P.E., MPU General Manager

CITY OF MISSION



Norie Gonzalez Garza, Mayor

ATTEST:



Mike R. Perez, Mission City Manager
Approved as to form for McAllen PUB

By: _____
Isaac J. Tawil, City Attorney

EXHIBIT "A"

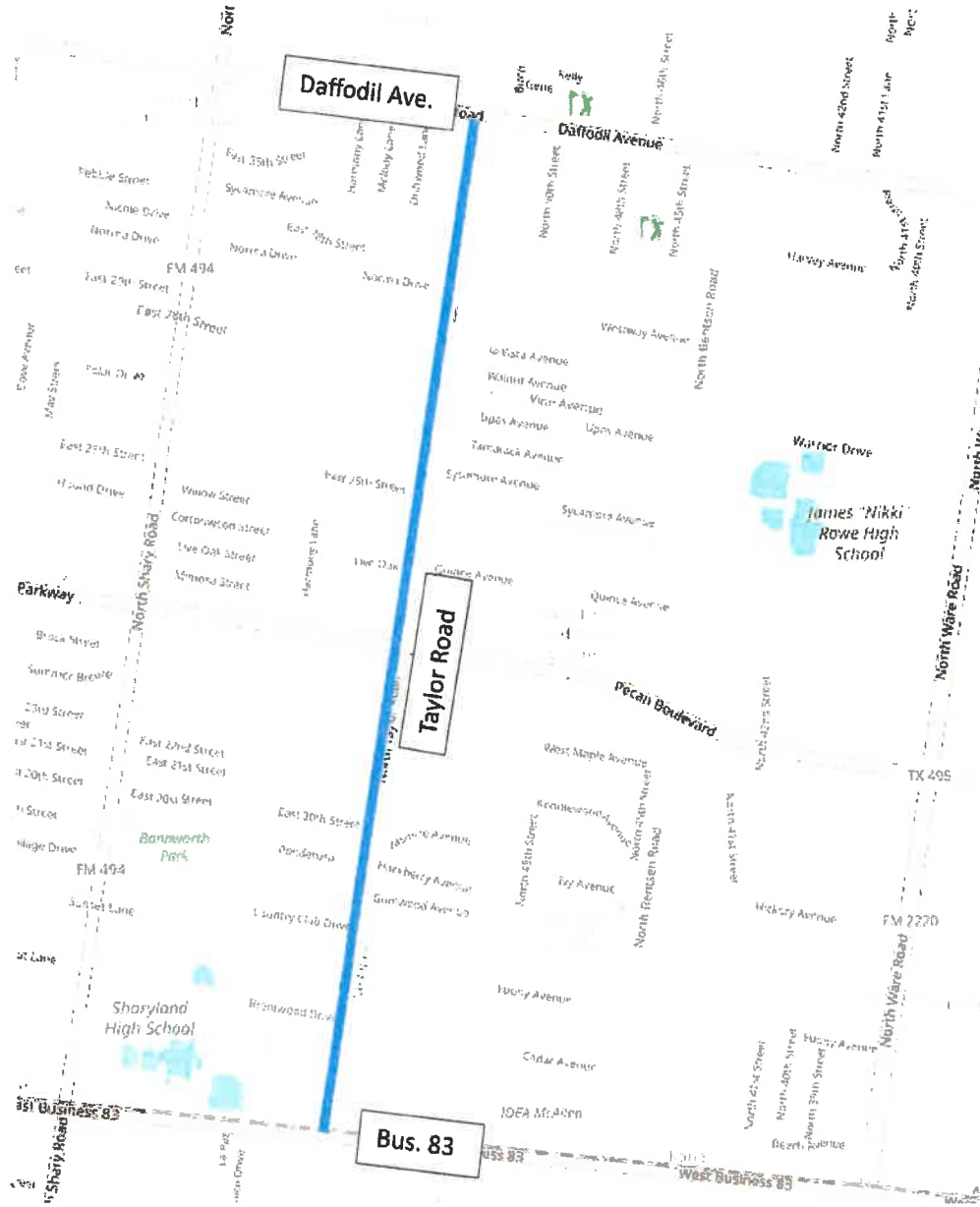


EXHIBIT "B"

City of McAllen
 Project: Taylor Road Phase II
 Water Adjustments and Relocations
 Prepared By: South Texas Infrastructure Group

WATER ADJUSTMENTS AND RELOCATIONS				
DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
8" PVC C-900 DR-18	10526	LF	\$ 43.80	\$ 461,038.80
12" PVC C-900 DR-18	100	LF	\$ 60.17	\$ 6,016.80
FH HYDRANT	17	EA	\$ 7,500.00	\$ 127,500.00
8" GATE VALVE	30	EA	\$ 2,940.00	\$ 88,200.00
8" MJ TEE	12	EA	\$ 1,500.00	\$ 18,000.00
8x12" MJ TEE	1	EA	\$ 2,220.00	\$ 2,220.00
8" 45 DEGREE ELBOW	35	EA	\$ 900.00	\$ 31,500.00
8" 90 DEGREE ELBOW	3	EA	\$ 900.00	\$ 2,700.00
16" STEEL CASING	501	LF	\$ 162.00	\$ 81,162.00
20" STEEL CASING	77	LF	\$ 312.00	\$ 24,024.00
1" WATER SERVICE CONN.(SHORT)	48	EA	\$ 1,140.00	\$ 54,720.00
2" WATER SERVICE CONN.(SHORT)	2	EA	\$ 2,580.00	\$ 5,160.00
CONN. TO EXIST. WL.	13	EA	\$ 6,300.00	\$ 81,900.00
5" RIP RAP	8	CY	\$ 407.87	\$ 3,262.94
SAWCUT & REMOVED EXIST RIPRAP	8	CY	\$ 85.21	\$ 681.70
EXIST. FH HYDRANT TO BE REMOVED & DISPOSED)	17	EA	\$ 600.00	\$ 10,200.00
EXIST. 8" WL TO BE REMOVED & DISPOSED)	9374	LF	\$ 7.80	\$ 73,117.20
EXIST. 4" WL TO BE REMOVED & DISPOSED)	6247	LF	\$ 6.60	\$ 41,230.20
8" SS PVC SDR-35	544	LF	\$ 45.60	\$ 24,806.40
SANITARY SEWER MANHOLE	3	EA	\$ 7,800.00	\$ 23,400.00
EXIST. 8" SS TO BE REMOVED & DISPOSED)	269	LF	\$ 20.40	\$ 5,487.60
CONN. TO EXIST. SS	1	EA	\$ 4,200.00	\$ 4,200.00
EXIST. SS MANHOLE TO BE REMOVED & DISPOSED)	3	EA	\$ 1,920.00	\$ 5,760.00
			TOTAL=	\$ 1,176,287.64
TRAFFIC CONTROL IS NOT INCLUDED ON THIS ESTIMATE				



	AGENDA ITEM	<u>3.c.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/19/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Consideration and Approval of Interlocal Cooperation Agreement between Hidalgo County Irrigation District No. One and the McAllen Public Utility for the Force Main Crossing at the Main Canal at FM 676 (5-Mile Road)

2. Party Making Request:
Carlos Gonzalez, Development and Special Projects Engineer

3. Nature of Request: Consideration and Approval of Interlocal Cooperation Agreement between Hidalgo County Irrigation District No. One and the McAllen Public Utility for the Force Main Crossing at the Main Canal at FM 676 (5-Mile Road)

4. Budgeted: **yes**

Bid Amount:	<u>\$116,392.50</u>	Budgeted Amount:	<u>\$500,000</u>
Under Budget:	<u>\$0.00</u>	Over Budget:	<u>\$0.00</u>
		Amount Remaining:	<u>\$383,607.5</u>

5. Reimbursement:

6. Routing:
Carlos Gonzalez **Created/Initiated - 6/19/2024**
Gerardo Noriega **Final Approval - 6/19/2024**

7. Staff's Recommendation: Approval of Interlocal Cooperation Agreement as summarized in accompanying staff recommendation memo.

8. City Attorney: Approve. IJT

9. MPU General Manager: Approved - MAV

10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A. Vega, P.E., General Manager

J.J. Rodriguez, Asst. General Manager

FROM: Carlos Gonzalez, P.E., Utility Engineer

DATE: June 19, 2024

SUBJECT: Interlocal Agreement between HCID #1 and MPU related to the Temporary Forcemain Crossing Main Canal

Staff is requesting Board Consideration of Interlocal Agreement between MPU and HCID # 1 related to the temporary force main crossing District's Main Canal at 5-Mile Road.

The Scope of work includes all work needed to install a temporary force main bypass that will provide continuous sewer service for the 5 - Mile Sewer Interceptor while TxDOT performs the existing Bridge Demolition work. The Bypass will be extended approximately 520 LF and will consist of interconnecting forcemain at a point along the west side of ditch and crossing both ditch and canal and interconnecting back to existing forcemain along east side of canal.

The interlocal agreement specifies that Foremost Construction will perform this work as part of their Canal lining Project which is currently ongoing. The agreement includes an amount of \$ 116,392.50 that will be owed to District One by MPU.

A copy of agreement which includes a graphical exhibit illustrating concept plan is included. Staff recommends approval of this interlocal and will be available to address comments and/or questions.

**INTERLOCAL COOPERATION AGREEMENT
BETWEEN THE HIDALGO COUNTY IRRIGATION DISTRICT NO. ONE AND THE
MCALLEN PUBLIC UTILITY BOARD FOR THE FORCE MAIN CROSSING AT THE
MAIN CANAL FM 676 (5 MILE)**

STATE OF TEXAS §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF HIDALGO §

THIS AGREEMENT (this “Agreement”) is made on this the _____ day of June, 2024 between the HIDALGO COUNTY IRRIGATION DISTRICT NO. ONE (hereinafter referred to as (“DISTRICT”), and the McAllen Public Utility Board (hereinafter referred to as “MPUB”) as follows:

WITNESSETH:

WHEREAS, MPUB proposes a future sanitary sewer relocation at the DISTRICT’s Main Canal that will require the installation of a temporary force main crossing to accommodate said future roadway improvements by the Texas Department of Transportation, being more particularly described on Exhibit “A” which is attached hereto and incorporated herein for all purposes, (hereinafter referred to as the “Crossing”); and

WHEREAS, DISTRICT is improving the conveyance and operational efficiency of its Main Canal by constructing canal lining improvements known as 21-004 Main Canal Lining Improvements 5 Mile to Ware Rd. (hereinafter referred to as the “Project”); and

WHEREAS, DISTRICT and MPUB acknowledge incorporating the Crossing within the Project as mutually beneficial so as to provide a timely integration of Project components and to take advantage of economies of scale thus maximizing cost savings and construction efficiency to both parties.

NOW THEREFORE, in consideration of the foregoing premises and other good and valuable consideration, the receipt and sufficiency of which being hereby acknowledged, DISTRICT and the MPUB do hereby agree as follows:

**SECTION I
DISTRICT AND CITY**

1. The MPUB shall provide all necessary construction plans and technical specifications associated with the respective Crossing in accordance with DISTRICT specifications.
2. The DISTRICT reserves the right to adjust plans and technical specifications to the Crossing.

3. The DISTRICT agrees to include the scope of the Crossing within the scope of the Project and has procured services as per the DISTRICT's procurement policies.
4. The MPUB has reviewed and approved the cost being more particularly described as Exhibit "B" which is attached hereto and incorporated herein for all purposes.
5. The DISTRICT shall be responsible for constructing and installing the temporary force main upon notification by the MPUB to commence work.
6. The MPUB shall be responsible for all construction-related costs associated solely with the force main crossing and upon complete execution of this Agreement, shall compensate the DISTRICT the approved cost of \$116,392.50 within thirty (30) calendar days.
7. In the event that costs of the force main crossing increase as a result of MPUB-requested changes, MPUB agrees to deliver funds in such amount to DISTRICT at least two (2) business days before such amount is due to DISTRICT's contractor.
8. The DISTRICT shall be responsible for Project management of the Crossing.

SECTION II PROVISIONS AS TO BOTH THE DISTRICT AND MPUB

MPUB understands it shall be responsible for all expenses incurred in the construction of the force main crossing. Ownership of the right of way remains with the DISTRICT. MPUB to the extent allowed by law shall indemnify, protect, defend and hold harmless DISTRICT, its respective directors, officers, employees and agents (the "Indemnified Parties") from and against any and all claims, costs, liabilities, losses, damages, injuries, judgments and expenses (collectively, "Claims") including, without limitation, attorneys' fees, court costs, including those incurred at the trial and appellate levels and in any bankruptcy, reorganization, insolvency or other similar proceedings, and any other legal expenses, arising out of or resulting from any injury or death to any person or injury to any property received or sustained by any person or persons or property, arising out of, occasioned by, or related in any way, directly or indirectly, to the Project or the exercising of any right by DISTRICT as provided herein or any operations of MPUB in any manner permitted under this Agreement including but not limited to Claims by a third-party utilizing FM 676 or any adjoining or adjacent buildings or other properties adjacent to or in the vicinity of the property utilized by the DISTRICT in connection with the Project (the "Property"). MPUB may assert any and all immunity or limitations on damages that are otherwise available to MPUB, and this indemnification does not confer any third-party beneficiary rights on any party other than the Indemnified Parties nor does it constitute a waiver of a claim of immunity or limitation of damages that may be asserted by MPUB. The Indemnified Parties shall give MPUB prompt notice of any Claims coming within the purview of this indemnity. Upon the written request of the Indemnified Parties, MPUB shall assume the defense of any Claims against the Indemnified Parties with counsel reasonably acceptable to the Indemnified Parties and will permit the Indemnified Parties,

at their expense, to participate in the defense thereof. The provisions of this paragraph shall survive the expiration of this Agreement and shall be binding upon MPUB, its successors, and assigns. It is understood and agreed that nothing in this provision requires that funds be assessed or collected or that a sinking fund be created.

SECTION III IN GENERAL

1. This Agreement shall begin with the date first hereinabove mentioned and shall be enforceable so long as the MPUB maintains the force main crossing as an active sewer line.
2. No damages shall be recoverable from DISTRICT because of any failure or defect in or extinction of DISTRICT's rights, interest, or title in the Property.
3. This Agreement and all the covenants and conditions hereof shall inure to and bind each party's successors and assigns, provided, the MPUB shall not assign this Agreement without the express written consent of DISTRICT. Any party hereto may waive any default at any time of any other party without affecting or impairing any right arising from other or subsequent default.
4. Should any party default under any provisions of this Agreement, the non-defaulting party shall notify the defaulting party in writing with an opportunity to cure said default within a reasonable time, but in any event not less than ten (10) days opportunity to cure. In the unlikely event that a dispute occurs which is litigated or arbitrated, or a cause of action in law or equity is filed concerning the operation, construction, interpretation, or enforcement of this Agreement, the losing party shall bear the cost of the attorneys' fees incurred by the prevailing party and any and all costs applicable thereto, including, but not limited to, court costs, deposition fees, expert witness fees, out-of-pocket expenses and travel expenses which are incurred by the prevailing party.
5. The indemnification clause as set out in Section II hereof, shall survive this Agreement and be enforceable as a separate agreement in the event its survival and enforcement become necessary.
6. If any part or parts of this Agreement are found to be invalid or unconstitutional by a court having competent jurisdiction, then such invalidity or unconstitutionality shall not affect the remaining parts hereof and such remaining parts shall remain in full force and effect, and to that extent this Agreement is considered severable.
7. This Agreement may be enforced by specific performance or by any other legal remedy available to the party asserting same.

8. Except to the extent of the rights granted to MPUB by DISTRICT, MPUB shall be responsible for obtaining all necessary permits, licenses, rights of ways and any other agreements required by any property owner having an interest in the Property including, any other restrictions located on such Property.

9. Each party hereto is entering into this Agreement for the purpose of providing for governmental services or functions and will pay for such services out of concurrent revenues available to the paying party as herein provided.

10. It is expressly understood and agreed that, in the execution of this Agreement, neither the MPUB nor DISTRICT waive, nor shall be deemed hereby to waive, any immunity or defense that would otherwise be available to it against claims arising in the exercising of governmental powers and functions.

11. The parties are aware that there are constitutional and statutory limitations on the authority of DISTRICT and MPUB to enter into certain terms and conditions of the Agreement, including, but not limited to, authorizations of the placement of liens on each party's property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers and limitations of legal rights, remedies, requirements and processes; limitations of periods to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorneys' fees or costs; dispute resolution; indemnities; and confidentiality (collectively, the "Limitations"). Any terms and conditions under this Agreement related to the Limitations shall not be binding on DISTRICT or MPUB except to the extent authorized by the laws and Constitution of the State of Texas.

SECTION IV ATTORNEY FEES

The prevailing party in any legal proceeding against the other party to this Agreement brought under or which related to the Agreement, or a breach thereof shall, in addition to its damages, be entitled to recover its costs and reasonable attorneys' fees.

SECTION V VENUE

The parties agree that the exclusive venue of any litigation arising out of a dispute under this Agreement shall be Hidalgo County, Texas.

SECTION VI ENTIRE AGREEMENT

This Agreement shall comprise the entire agreement between the parties hereto concerning the subject of this Agreement.

**SECTION VII
FORCE MAJEURE**

Neither DISTRICT nor MPUB shall be required to perform any term, condition or covenant in this Agreement so long as such performance is delayed or prevented by force majeure, which shall mean acts of God, strikes, lockouts, materials or labor restriction by any governmental authority, civil riot, floods and any other cause not reasonably within the control of DISTRICT or MPUB, and which by the exercise of due diligence DISTRICT or MPUB is unable, wholly or in part, to prevent or overcome. This section shall not apply to the MPUB's obligation outlined in SECTION I, paragraphs 6 and 7 to compensate DISTRICT.

**SECTION VIII
COMMITMENT OF CURRENT REVENUES ONLY**

In the event that, during any term hereof, the governing body of any party does not appropriate sufficient funds to meet the obligations of such party under this Agreement, then any other party hereto may terminate this Agreement upon ninety (90) days written notice to the other parties. Each of the parties hereto agrees, however, to use its best efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of each party hereto pursuant to the provisions of Tex. Loc. Govt. Code Ann. Sec. 271.903.

IN WITNESS WHEREOF DISTRICT and MPUB have caused this Agreement to be signed by its authorized representatives on the date above written.

**HIDALGO COUNTY IRRIGATION
DISTRICT NO. ONE**

By: _____
Robert L. Bell, Jr., President

MCALLEN PUBLIC UTILITY BOARD

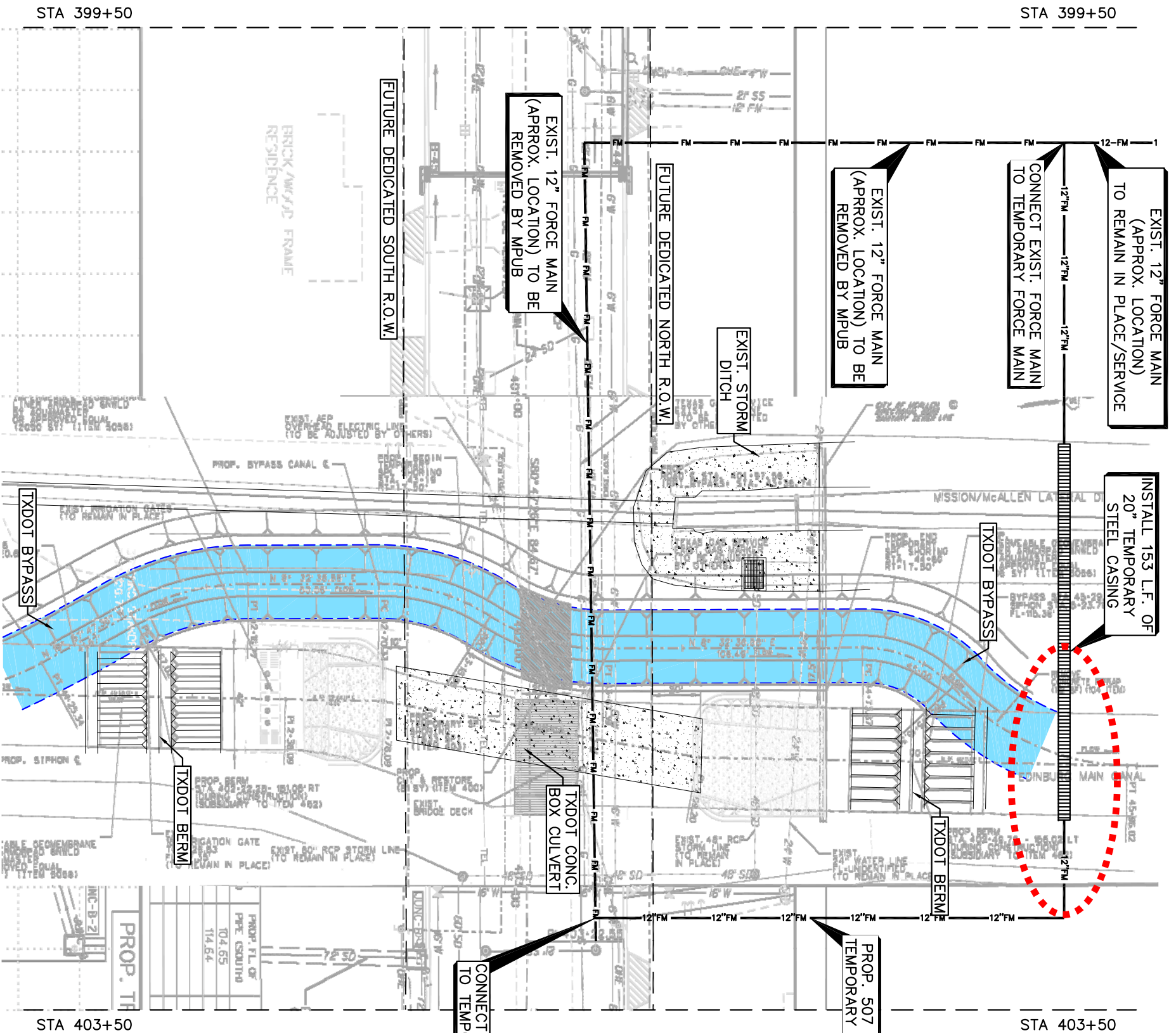
By: _____
Charles Amos, Chairperson

ATTEST:

By: _____
Secretary

APPROVED AS TO FORM:

By: _____
Isaac J. Tawil, City Attorney



CONNECT EXIST. FORCE MAIN TO TEMPORARY FORCE MAIN

TxDOT Bid	Description	Units	Approx. Quantity
-	12" Temporary Sanitary Sewer Force Main	LF	507
7226 6005	Connect Temporary Sanitary Sewer Force Main to Exist. Force Main	EA	2
7016 6089	Install 20" Steel Casing W/ 12" Temporary Sanitary Sewer Force Main	LF	153
7155 6039	Trench Safety System (Sanitary Sewer)	EA	507

LEGEND	
SYMBOL	DESCRIPTION
12"FM	TEMPORARY SANITARY SEWER FORCE MAIN-PROPOSED
12-FM	SANITARY SEWER FORCE MAIN-EXISTING TO REMAIN IN PLACE/SERVICE
FM	SANITARY SEWER FORCE MAIN-EXISTING TO BE REMOVED BY MPUB
---	ROW-PROPOSED



SDI ENGINEERING, LLC
 CIVIL • TRANSPORTATION • PLANNING • STORMWATER
 2105 S. JACKSON RD., EDINBURG, TEXAS (956) 287-1818 PH.
 IPOADAS@SDI-ENGINEERING.COM
 TBPE REG. NO. F-13016

FULL: 1" = 50'
 HALF: 1" = 100'
 TBPE REG. NO. F-13016

DATE: 05/29/24
 SHEET NO.: 9C

FILE NAME:
 DATE: 3/1/21
 SURVEYED BY: IF
 DESIGNED BY: IF
 DRAWN BY: IF
 REVISION BY: IP
 CHECKED BY: IP

CITY OF McALLEN
 MILE 5 (FM 676)

TEMPORARY FORCE MAIN LAYOUT

Bid Proposal

Foremost Paving, Inc.

P.O. Box 29

Weslaco, Texas 78599-0029

Contact: James Eckroat

Phone: 956-316-8900

Fax: 956-686-7824

Quote To: Hidalgo County Irrigation District #1

Edinburg, TX 78539

Phone: 956-383-5552

Fax: 956-383-5593

Attn: Rusty McDaniel

Job Name: Force Main Reroute - Main Canal @ Mil

Bid Date: June 11, 2024

Date of Plans:

Revision Date: June 17, 2024, 10:45 Am

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	18" STEEL CASING, 71# / LF	180.00	LF	175.00	31,500.00
	REROUTE 12" FORCE MAIN	550.00	LF	65.00	35,750.00
	CONNECT TO EXISTING FM	2.00	EA	6,500.00	13,000.00
	12" MJ 90 DEG BEND	3.00	EA	3,200.00	9,600.00
	12" MJ 45 DEG AS NEEDED	4.00	EA	3,700.00	14,800.00
	12" X 10" MJ REDUCERS	2.00	EA	2,000.00	4,000.00
	MOBILIZATION	1.00	LS	2,200.00	2,200.00
GRAND TOTAL					\$110,850.00

NOTES:

5% Administrative Fee \$ 5,542.50

Exclusions:

Any type of review or Engineering

Sales Tax is not included.

Total \$116,392.50

Foremost Paving, Inc. will not enter into a contract agreement, unless the contract terms are mutually agreed upon by both parties.

Work will be invoiced on a monthly basis; payment will be due within 30 days of invoice date.

Pay when paid will not be applicable to this contract.

Foremost Paving, Inc. will not dispose of or mitigate any insitu materials that may be hazardous.

Hazardous materials include, but are not limited to contaminated soils, asbestos cementious pipe, lead, etc.

The remediation or removal of hazardous materials is the responsibility of others.

The Owner / General Contractor shall be responsible for any damages to Foremost Paving, Inc. as a result of encountering hazardous materials, these possible costs include but are not limited to clean up of equipment and standby charges.

Title to, Ownership of legal responsibility and liability for any and all Hazardous Materials shall at all times remain with the Owner or General Contractor.

In the event that additional information is required, please feel free to contact me.

Sincerely,

James Eckroat



AGENDA ITEM 4.a.

PUBLIC UTILITY BOARD

DATE SUBMITTED 06/18/2024

MEETING DATE 6/25/2024

1. Agenda Item: Consideration and Approval of MPU Board Participation for Water Public Improvements - La Lomita Paradise
2. Party Making Request:
Marco Ramirez, Utility Engineer P.E.
3. Nature of Request: The Consideration and Approval of MPU Board Participation for Water Public Improvements - La Lomita Paradise
4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____
5. Reimbursement:
6. Routing:
Patrick Gray Created/Initiated - 6/18/2024
7. Staff's Recommendation: Staff recommends MPU Board Consideration and Approval of Participation for Water Public Improvements - La Lomita Paradise
8. City Attorney: Approve. IJT
9. MPU General Manager: Approved - MAV
10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A. Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

THRU: Marco Ramirez, P.E., Utility Engineer
Carlos Gonzalez, P.E., Utility Engineer

FROM: Patrick R. Gray, E.I.T., GIS Coordinator

DATE: June 25, 2024

SUBJECT: La Lomita Paradise; Consideration & Approval of MPU Participation for Water Public Improvement

With the approval of La Lomita Paradise Subdivision, the developer is requesting MPUB Participation for the Off-Site Water Public Improvements. The improvements for this area include the installation of an 8" waterline that will complete the loop along 6½ Mile Rd. and will abandon an existing 4" waterline from 32nd Lane to La Lomita Rd. The improvements also include the installation of one (1) new fire hydrant in a location where there are no existing hydrants for fire protections. All Improvements will be installed off-site to the west of the proposed subdivision.

The following table provides a summary of the Water Public Improvements:

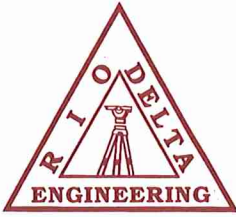
La Lomita Paradise Off Site Water Cost					
LINE	ITEM	QTY	UNIT	PRICE	TOTAL
1	8IN C-900 PVC Waterline	321	LF	\$45.00	\$14,445.00
2	8" Gate Valve	1	EA	\$2,600.00	\$2,600.00
3	Fire Hydrant Assy.	1	EA	\$5,800.00	\$5,800.00
4	Water Tie In	1	EA	\$4,500.00	\$4,500.00
5	Drain and Plug Exist. Water Line	2	EA	\$2,500.00	\$5,000.00
6	Abandon Exist Water Line	1490	LF	\$10.00	\$14,900.00
				SUBTOTAL	\$47,245.00
Proposed MPU Participation Percent:			30%		
Proposed MPU Participation Cost:			\$14,173.50		

In reference to the State Statue on Procurement, it is understood the maximum allowed participation by McAllen Public Utility cannot exceed 30% of the total improvement cost.

Staff is recommending MPUB participation for the full 30% of the Water Public Improvements that total to \$14,173.50.

Staff will be available for further discussion/questions.

Thank you



RIO DELTA ENGINEERING

CIVIL ENGINEERING • PROJECT MANAGEMENT • LAND DEVELOPMENT

TEXAS REGISTERED ENGINEERING FIRM F-7628

TEXAS LICENSED SURVEYING FIRM #10194027

Rio Delta Engineering

SUBDIVISION

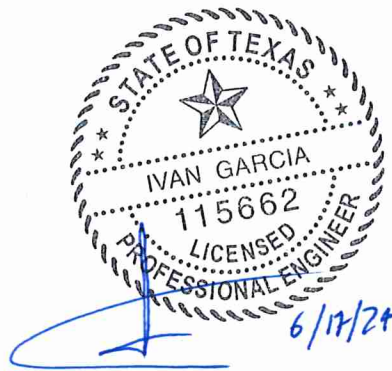
Project Name: LA LOMITA PARADISE SUBDIVISION
OUTSIDE SUBDIVISION IMPROVEMENTS

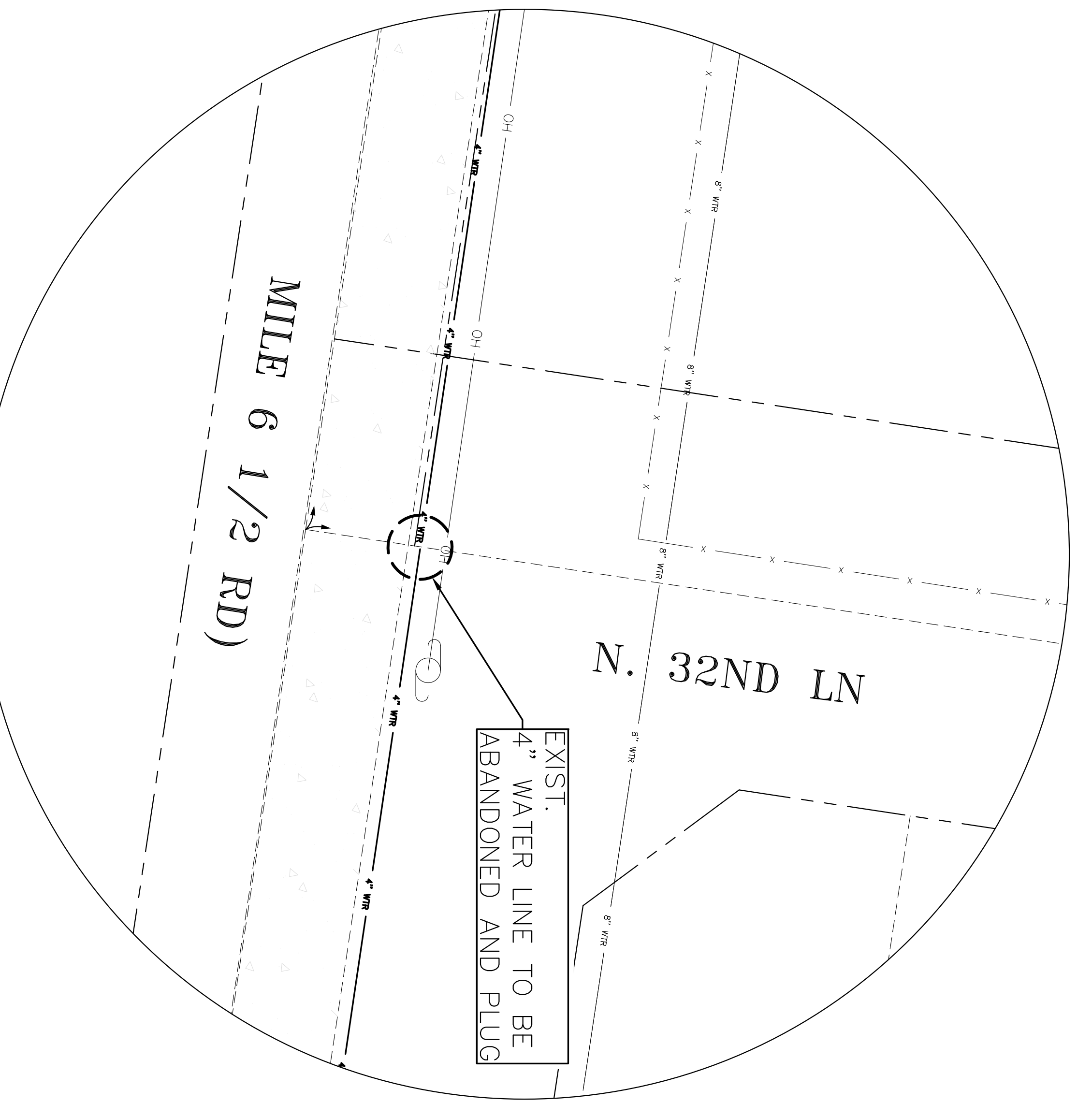
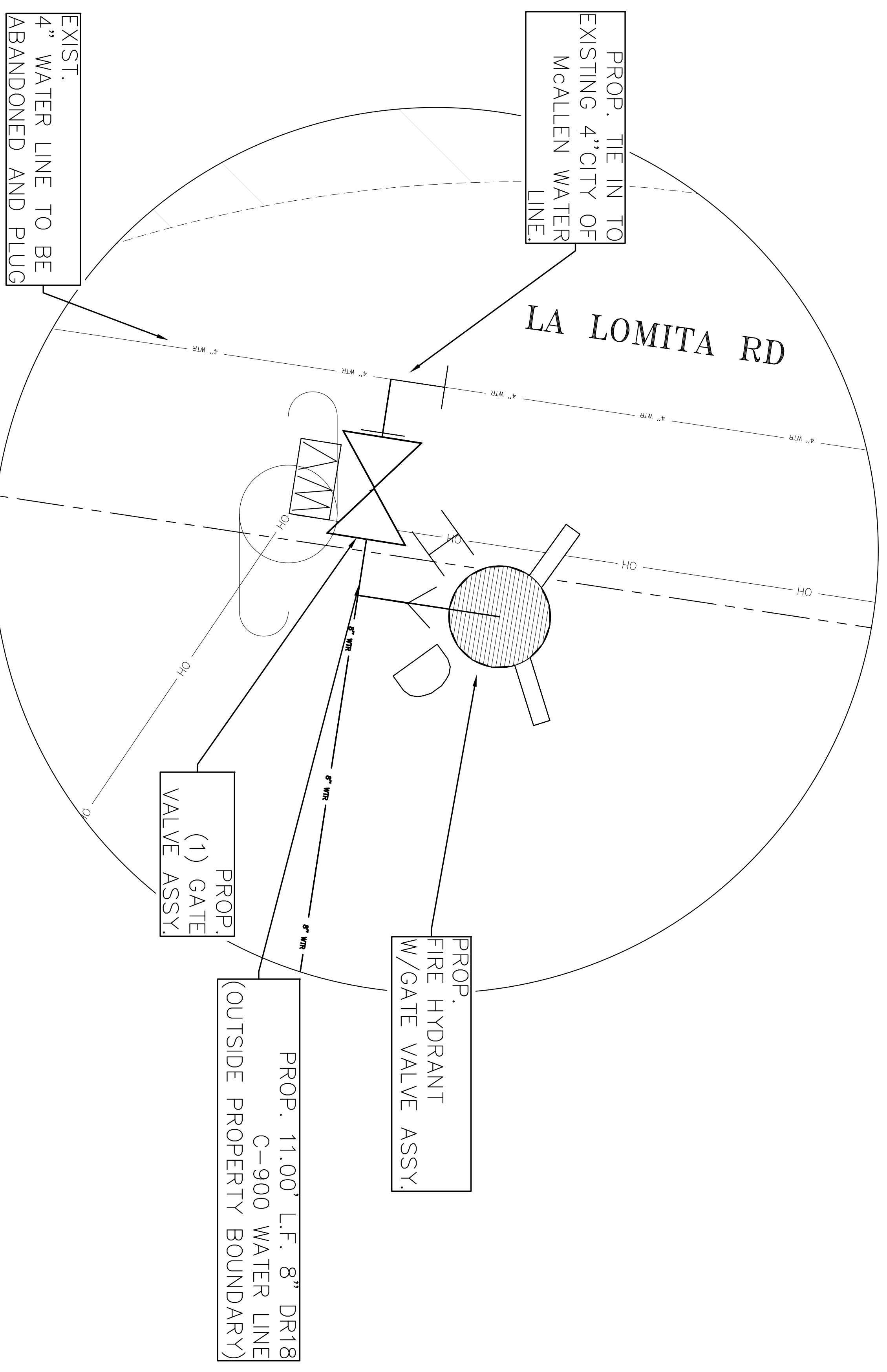
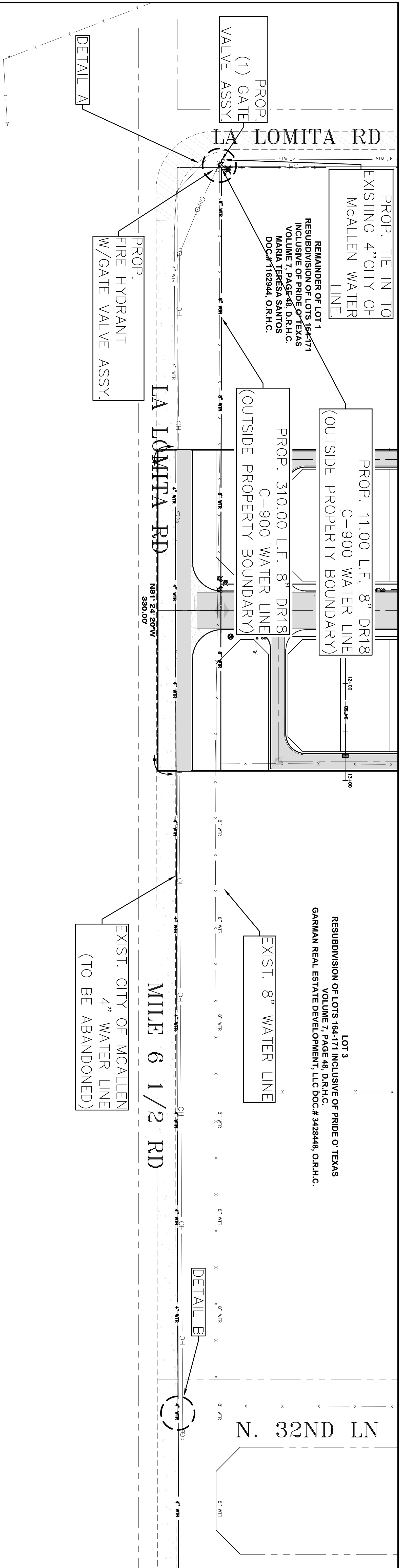
Date: 6/13/2024

COST ESTIMATE
Page 1 of 1

Water Service System - City of McAllen

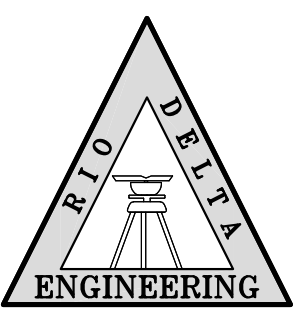
ITEM #	DESCRIPTION	QUANTITY	UNIT COST	AMOUNT
1	8" DR 18 C-900 PVC WATER LINE	321 LF	\$45.00	\$14,445.00
2	8" GATE VALVE ASSY.	1 EA	\$2,600.00	\$2,600.00
3	FIRE HYDRANT W/GATE VALVE ASSY.	1 EA	\$5,800.00	\$5,800.00
4	TIE INTO EXIST WATER LINE	1 EA	\$4,500.00	\$4,500.00
5	DRAIN AND PLUG 4" EXISTING WATER LINE	2 EA	\$2,500.00	\$5,000.00
6	4" EXISTING WATER LINE TO BE ABANDON	1490 LF	\$10.00	\$14,900.00
GRAND TOTAL:				\$47,245.00





DETAIL "A"
NOT TO SCALE

DETAIL "B"
NOT TO SCALE

<p>ENGINEER: IVAN GARCIA P.E., R.P.L.S.</p> <p>DESIGNER: IVAN GARCIA P.E., R.P.L.S.</p> <p>CHECKED: IVAN GARCIA P.E., R.P.L.S.</p> <p>DRAWN: IVAN GARCIA P.E., R.P.L.S.</p> <p>SCALE: 1" = 50'</p> <p>DATE: JUNE 13, 2024</p> <p>PROJECT: SUB 24.014</p> <p>REVISIONS:</p> <p>PAGE NO. 1 OF 1</p>	<p>OUTSIDE PROP. IMPROVEMENTS LA LOMITA PARADISE SUBDIVISION CITY OF MCALEN HIDALGO COUNTY, TEXAS</p>	<p>THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE REVIEW ONLY STATUS. IVAN GARCIA, P.E. 115662 ON 04-15, 2024 IT IS NOT TO BE USED FOR BIDDING OR PERMIT PURPOSES.</p> <p>SCALE FOR: PRELIMINARY</p>	 <p>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</p>
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Memo

TO: Marco A. Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

THRU: Marco Ramirez, P.E., Utility Engineer
Carlos Gonzalez, P.E., Utility Engineer

FROM: Rafael A. Balderas, E.I.T., Asst. to the Utility Engineer

DATE: June 19, 2024

SUBJECT: North Park on 107 Subdivision; Consideration & Possible Approval of MPUB Participation

This subdivision was approved by the MPU Board back on February 15, 2022 and approved for participation on January 23, 2024. The property is located on the south side of State Highway 107 and approximately 800 feet west of the 23rd Street. It is located within the McAllen City Limits and is being proposed as R-3A residential. The tract consists of 18.239 acres and will be 49 lots for multi-family use.

The original proposed improvements were to extend an 8-inch waterline to-and-through the property with a looped system. Also, extension of an on-site 8-inch wastewater line to-and-through, and extension of a 15-inch wastewater line with two options off-site.

There was difficulty with establishing utility easements with the neighbors to the south, that eliminated one of the options of the 15-inch wastewater line. With that, a revision of the master plan was done to allow a 12-inch and 8-inch line off-site for the connection point. An 18-inch wastewater line was then requested to be installed in preparation to follow the new master plan.

The original approved MPUB participation amount was based on 30% of the water and wastewater improvements and all of the cost for the 18-inch wastewater line, as it will not be used for the development.

The developer had received a bid for the 18-inch wastewater line for \$159,500, note the depth is 20+ feet. Since then, the contractor has begun to install the 18-inch line but has run into some difficulty with excavating hard rock, which was seen with the Sprague Road project. A Geotech report was done for the subdivision which indicated the possibility of hard soil. The developer is requesting for the participation amount to change to \$264,500 due to the struggle of broken machinery and time delay. Attached is the pricing of the machinery.

Description	Amount
Original 18-inch Cost	\$159,500
New 18-inch Cost	\$264,500

An MPU reimbursement certificate will be established in a future meeting for this improvement.

Staff recommends approval of the proposed revised participation amount.

I'll be available for further discussion/questions at the MPUB meeting.



NORTH PARK 107 SUBDIVISION

5/13/2024

SANITARY SEWER ON-SITE		QTY	UNIT	PRICE UNIT	TOTAL
1	18" PVC SDR-26	1,450	LF	\$ 110.00	\$ 159,500.00
SUB-TOTAL					\$ 159,500.00

PRICE INCREASE DUE TO HITTING BEDROCK	1	LS	\$ 105,000.00	\$ 105,000.00
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TOTAL:	\$ 264,500.00
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ENRIQUE J. CASTELLANOS / PRESIDENT

12619 N MAYBERRY RD
MISSION TX
78573

Rafael Balderas

From: Khristian Galvan <kgalvan@avigroup.us>
Sent: Thursday, June 6, 2024 10:44 AM
To: Rafael Balderas
Cc: Lucila Duran; mlopez urbancitytx. com; avigroup@mail.com
Subject: North Park Subdivision
Attachments: Adobe Scan Jun 6, 2024.pdf; PastedGraphic-2.tiff

Good Morning,

As per our last email regarding the 18" line at North Park Subdivision, we have gathered the following information :

- The estimated time has been delayed from one month to three months now.
- The diamond teeth wear every three days and they have been replaced five times in total up until now.
- We are using the John Deere 250 with hammer to break the caliche and the John Deere 350 to scoop the debris and deposit in the commercial trash bin.
- A backhoe is being used along with a trench box to work on the 18" line.
- The regeneration on the John Deere machine was broken twice.
- The diamond teeth were lost twice when first excavating.

Marco Lopez, the owner, can also provide other quotes to show you that this type of work is charged a lot more because of depth and difficulty of work.

If you have any other questions please feel free to reach out.

Thank you!

Best regards,

Arlet Castillo
Office Assistant
All Valley Innovations Group, LLC
(956)581-0647
www.avigconstruction.com

CHARGE FOR MACHINERY

EQUIPMENT	EQUIPMENT COST PER HOUR	TOTAL HOURS	TOTAL COST	LOCATION
JOHN DEERE EXCAVATOR	\$55.00	528	\$29,040.00	NORTHPARK
JOHN DEERE EXCAVATOR	\$48.00	528	\$25,344.00	NORTHPARK
BACKHOE	\$30.00	528	\$15,840.00	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
		GRAND TOTAL =	\$105,072.00	

*3 MONTHS TO FINISH

*PRICE INCLUDES WEAR TEAR MACHINERY AND MAINTENANCE OF MACHINERY

CHARGE FOR MACHINERY FEMA COST

EQUIPMENT	EQUIPMENT COST PER HOUR	TOTAL HOURS	TOTAL COST	LOCATION
JOHN DEERE EXCAVATOR	\$162.85	528	\$85,984.80	NORTHPARK
JOHN DEERE EXCAVATOR	\$162.85	528	\$85,984.80	NORTHPARK
BACKHOE	\$58.73	528	\$31,009.44	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
Employee	\$22.00	528	\$11,616.00	NORTHPARK
		GRAND TOTAL =	\$237,827.04	

GEOTECHNICAL ENGINEERING REPORT

**Proposed North Park Subdivision
State Hwy 107
McAllen, Texas**

PSI Project No. 03122572

PREPARED FOR:

URBAN CITY DEVELOPERS

April 25, 2022

BY:

**PROFESSIONAL SERVICE INDUSTRIES, INC.
2020 N. Loop 499, Ste 302
Harlingen, Texas 78550
Office - 956.423.6826**



April 25, 2022

Hakes Brothers

271 Paseo De Dia, Suite 400
Las Cruces, NM 88011

Attn: Mr. Alonzo Ruiz
Land Development Manager, Rio Grande Division

**RE: GEOTECHNICAL ENGINEERING REPORT
PROPOSED NORTH PARK SUBDIVISION
STATE HWY 107
MCALLEN, TEXAS
PSI Project No. 03122572**

Dear Mr. Ruiz,

Professional Service Industries, Inc. (PSI), an Intertek company, is pleased to submit this Geotechnical Engineering Report for the referenced project. This report includes the results of field and laboratory testing along with recommendations for use in preparation of the appropriate design and construction documents for this project.

PSI appreciates the opportunity to provide this Geotechnical Engineering Report and looks forward to continuing participation during the design and construction phases of this project. If there are any questions pertaining to this report, or if PSI may be of further service, please contact our office.

PSI also has great interest in providing materials testing and inspection services during the construction of this project. If you will advise us of the appropriate time to discuss these engineering services, we will be pleased to meet with you at your convenience.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Texas Board of Professional Engineers Certificate of Registration # F003307



Rockford Miller, E.I.T.
Project Manager



Philip L. Johnson, P.E.
Principal Consultant



April 25, 2022



TABLE OF CONTENTS

Page No.

1.0	PROJECT INFORMATION	1
1.1	PROJECT AUTHORIZATION	1
1.2	PROJECT DESCRIPTION	1
1.3	PURPOSE AND SCOPE OF SERVICES	1
2.0	SITE AND SUBSURFACE CONDITIONS	3
2.1	SITE DESCRIPTION	3
2.2	FIELD EXPLORATION	3
2.3	LABORATORY TESTING PROGRAM	4
2.4	SITE GEOLOGY	4
2.5	SUBSURFACE CONDITIONS	4
3.0	GEOTECHNICAL EVALUATION AND RECOMMENDATIONS	7
3.1	GEOTECHNICAL DISCUSSION	7
3.2	POTENTIAL VERTICAL MOVEMENT OF EXPANSIVE SOILS	7
3.3	FOUNDATION DISCUSSION	8
3.4	DESIGN MEASURES TO REDUCE CHANGES IN SOIL MOISTURE	10
3.5	FOUNDATION DESIGN RECOMMENDATIONS	11
3.6	SITE SEISMIC DESIGN RECOMMENDATIONS	12
4.0	CONSTRUCTION CONSIDERATIONS	13
4.1	INITIAL SITE PREPARATION CONSIDERATIONS	13
4.2	MOISTURE SENSITIVE SOILS/WEATHER RELATED CONCERNS	14
4.3	BUILDING FOUNDATION EXCAVATION OBSERVATIONS	14
4.4	DRAINAGE CONSIDERATIONS	15
4.5	EXCAVATIONS AND TRENCHES	15
5.0	REPORT LIMITATIONS	16
APPENDIX	17
	Site Vicinity Map	
	Boring Location Map	
	Boring Logs	
	Symbols Key Sheet	

INDEX OF TABLES

	Page No.
Table 1.1: General Project Description	1
Table 2.1: Site Description	3
Table 2.2: Field Exploration Summary	3
Table 2.3: Field Exploration Description	3
Table 2.4: Laboratory Testing Program	4
Table 2.5: Generalized Soil Profile	5
Table 2.6: Groundwater Levels (Depths)	5
Table 3.1: Reconditioning Method Recommendations	9
Table 3.2: Compaction Recommendations Reconditioning Method	10
Table 3.3: WRI Design Parameters	11
Table 3.4: PTI Design Parameters	12
Table 3.5: Recommended Design Seismic Parameters	12
Table 4.1: Subgrade Preparation for Non-Structural - General Fill	13
Table 4.2: Fill Compaction Recommendations Outside of Foundation Areas	13
Table 4.3: Considerations for Demolition	14

1.0 PROJECT INFORMATION

1.1 Project Authorization

Professional Service Industries, Inc., (PSI), an Intertek company, has completed a field exploration and geotechnical evaluation for the proposed North Park Subdivision project to be constructed on State Highway 107 in McAllen, Texas. Mr. Alonzo Ruiz representing Hakes Brothers authorized PSI's services by signing our geotechnical proposal on March 4, 2022, and with respect to PSI Proposal No. 367850 dated March 4, 2022. PSI's proposal contained a proposed scope of work, fee, and PSI's General Conditions.

1.2 Project Description

Information was provided by Mr. Alonzo Ruiz, Land Development Manager, Rio Grande Division with Hakes Brothers and included a preliminary plan for the proposed North Park Subdivision. The plans were prepared by Trevino Engineering and dated January 2021. PSI has been requested to only provided foundation and foundation pad improvement recommendations. A summary of the proposed project is presented in the following table.

TABLE 1.1: GENERAL PROJECT DESCRIPTION

Project Items	Single-story residential houses
Building Construction Types	Wood framed
Existing Grade Change within Building Pad	± 12 to 18 inches, estimated
Existing Grade Change within Project Site	Unknown

The geotechnical recommendations presented in this report are based on the available project information, structure locations, and the subsurface materials described in this report. If any of the noted information presented above is incorrect, please inform PSI so that the recommendations presented in this report can be amended as necessary. PSI will not be responsible for the implementation of provided recommendations if not notified of changes in the project.

1.3 Purpose and Scope of Services

The purpose of this study is to evaluate the subsurface conditions at the site and develop geotechnical engineering recommendations and guidelines for use in preparing the design and other related construction documents for the proposed project. The scope of services included drilling borings, performing laboratory testing, and preparing this geotechnical engineering report.

This report briefly outlines the available project information, describes the site and subsurface conditions, and presents the recommendations regarding the following:

- A review of surface topographical features, geologic features, and site conditions.
- Boring location plan and boring logs with laboratory test results of subsurface materials encountered including groundwater levels.
- Geotechnical discussion pertaining to subsurface conditions, expansive soils, variation of soil stratum and soil strengths, groundwater and other geotechnical related issues.



- Recommendations for site preparation and excavation, fill compaction, and the use of on-site and imported fill material under house structures.
- Recommendations for the design of foundations for supporting the proposed houses, which will include Wire Reinforcing Institute (WRI) and Post-Tensioning Institute (PTI) design criteria for slab-on-grade foundations designed for a 1 inch potential vertical movement.
- Seismic design site classification per the 2018 International Building Code.

The scope of services for this geotechnical exploration did not include an environmental, mold nor detailed seismic/fault assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.



2.0 SITE AND SUBSURFACE CONDITIONS

2.1 Site Description

The following table provides a generalized description of the existing site conditions based on visual observations during the field activities and other available information.

TABLE 2.1: SITE DESCRIPTION

Site Location	State Hwy 107 McAllen, Texas GPS Coordinates (26.30987°, -98.22881°)
Site History	Undeveloped and vacant land, recently cleared per Google Earth December 6, 2019
Existing Site Ground Cover	Grass and low brush
Existing Site Features	Site has shallow undulations and low mounds of soils (possible fill placed on site or spoils from undulations)
Existing Grade/Elevation Changes	Relatively level
Site Boundaries/Neighboring Development	Residential area to the east, farms to the east and south and State Hwy 107 to the north

2.2 Field Exploration

Field exploration for the project consisted of drilling a total of eight (8) borings. The boring design element, boring labels, and approximate depths are provided in the following table.

TABLE 2.2: FIELD EXPLORATION SUMMARY

Design Element	Boring Label	Approx. Depth of Boring
Residential Houses	B-1 thru B-8	20 feet

The boring locations were selected by PSI personnel and were located in the field by PSI personnel using available landmarks and GPS coordinates with a recreation-grade device. Elevations of the ground surface at the boring locations were not provided to PSI and should be surveyed by others, if required. Therefore, However, the references to elevations of various subsurface strata are based on depths below existing grade at the time of drilling. The approximate boring locations are depicted on the Boring Location Plan provided in the Appendix.

TABLE 2.3: FIELD EXPLORATION DESCRIPTION

Drilling Equipment	Truck-Mounted Drilling Equipment
Drilling Method	Continuous-Flight Auger
Drilling Procedure	Applicable ASTM and PSI Safety Manual
Field Testing & Sampling Procedures	Standard Penetration Testing (ASTM D1586)
Frequency of Groundwater Level Measurements	Initial Reading and After Drilling Reading
Boring Backfill Procedures	Soil Cuttings



Sample Preservation and Transportation Procedure	General accordance with ASTM D4220
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During the field activities, the encountered subsurface conditions were observed, logged, and visually classified (in general accordance with ASTM D2488). Field notes were maintained to summarize soil types and descriptions, water levels, changes in subsurface conditions, and drilling conditions.

2.3 Laboratory Testing Program

PSI supplemented the field exploration with a laboratory testing program to determine additional engineering characteristics of the subsurface soils encountered. The laboratory testing program included:

TABLE 2.4: LABORATORY TESTING PROGRAM

Laboratory Test	Procedure Specification
Moisture Content Tests	ASTM D2216
Atterberg Limits	ASTM D4318
Material Finer than No. 200 Sieve	ASTM D1140

The laboratory testing program was conducted in general accordance with applicable ASTM test methods. The results of the laboratory tests are provided in the Appendix on the Logs of Boring. Portions of samples not altered or consumed by laboratory testing will be retained for 60 days from the date shown this report and will then be discarded.

2.4 Site Geology

As shown on the Geologic Atlas of Texas, McAllen-Brownsville Sheet, reprinted in 1979, the site is located in an area where the **Lissie Formation (Ql)** has been mapped to be at or near the ground surface. The Formation is from the mid-Pleistocene Epoch. This Formation consists sand, silt, clay and small amounts of gravel with interbedded layers of sandy caliche that have been locally cemented.

2.5 Subsurface Conditions

The results of the field and laboratory testing have been used to develop a generalized surface profile of the project site. The following subsurface descriptions highlight the major subsurface stratification features and material characteristics. This soil profile descriptions have been summarized in the following table.



TABLE 2.5: GENERALIZED SOIL PROFILE

Layer	Average Depth of Layer (ft)		USCS Soil Type	Average			
	Top	Bot.		LL	PI	% Pass. #200	N-Value
1	0	6	Loose and soft, interbedded layers of clayey sand and sandy lean clay	25	13	46	4
2	6	20	Very stiff and dense layers of sandy lean clay, sandy silty clay, silty sand and clayey sand	21	6	37	50+

Note: USCS: Unified Soil Classification System (ASTM D2487)
 LL: Liquid Limit (%)
 PI: Plasticity Index
 % Pass. #200: Percent Passing the No. 200 Sieve by Wash (%)
 N: Standard Penetration Test blow count (blows per foot)

The boring logs included in the Appendix should be reviewed for information at the boring locations. The boring logs includes soil descriptions, stratifications, locations of the samples, and field and laboratory test data. The stratifications shown on the boring logs only represent the conditions at the boring location and represent the approximate boundaries between subsurface materials. The actual transitions between strata may be more gradual or more distinct. Variations will occur and should be expected across the site.

2.5.1 GROUNDWATER INFORMATION

Water level measurements were performed during drilling and after completion of drilling. Specific information concerning groundwater is noted on each boring log presented in the Appendix of this report. The groundwater measurements are summarized in the following table.

TABLE 2.6: GROUNDWATER LEVELS (DEPTHS)

Boring Location	Boring Depth (ft)	During Drilling (ft)	After Drilling (ft)
B-1	20	10	9
B-2	20	7.5	4.5
B-3	20	7	6
B-4	20	6	4
B-5	20	11	6
B-6	20	5.5	5
B-7	20	11.5	9
B-8	20	7.5	6



Groundwater levels fluctuate seasonally as a function of rainfall, proximity to creeks, rivers and lakes, the infiltration rate of the soil, seasonal and climatic variations and land usage. In relatively pervious soils, such as sandy soils, the indicated depths are considered to be a relatively reliable indicator of groundwater levels. In relatively impervious soils, however, water levels observed in the borings even after several days may not provide reliable indications of groundwater table elevations. If more detailed water level information is required, observation wells or piezometers could be installed at the site, and water levels could be monitored.

The groundwater levels presented in this report are the levels that were measured at the time of our field activities. The contractor should be prepared to control groundwater, if encountered, during construction.



3.0 GEOTECHNICAL EVALUATION AND RECOMMENDATIONS

3.1 Geotechnical Discussion

Based upon the information obtained from the soil borings and laboratory testing, the clayey soils encountered at this site within the seasonally active zone, estimated to be 8 feet below existing grade, have a **low** potential for expansion. Also, the near surface soils exhibited relatively low shear strength. The Potential Vertical Movement (PVM) and potential for differential settlement should be addressed in the design and construction of this project in order to reduce the potential for foundation movements and foundation distress to an acceptable magnitude.

Due to site conditions, an improved foundation pad should be constructed under soil-supported foundation elements due to the presence of low shear strength foundation soils. PSI recommends excavating native soils to a minimum recommended excavation depth below existing grade and stockpiling on-site. After scarifying, moisture conditioning and compaction of the exposed subgrade, the excavation should be brought to final grade with reconditioned native soils and then select fill materials, all moisture conditioned and compacted up to the bottom of the floor slab. If it is more economical or feasible, importing select fill for the development of the entire improved foundation pad would also be acceptable.

PSI recommends that the residential housing structures be supported on a shallow soil-supported stiffened beam and slab-on-grade type foundation in order to reduce the potential for detrimental settlement.

The following design recommendations have been developed based on the previously described project characteristics and subsurface conditions encountered. If there are changes in the project criteria, PSI should be retained to review the changes to determine if modifications of the recommendations presented in this report will be required. The findings of such a review will be presented in a supplemental report. Once final design plans and specifications are available, a general review by PSI is recommended to verify that the earthwork and foundation recommendations presented in this report have been properly interpreted and implemented within the construction documents.

3.2 Potential Vertical Movement of Expansive Soils

The soils encountered at the soil boring locations exhibit a **low** potential for volumetric changes, due to fluctuations in soil moisture content. PSI has conducted laboratory testing on the soils to estimate the expansive soil potential with soil moisture variations. These soil moisture variations are based on historical climate change data. Determining the soil potential for shrinking and swelling, combined with historical climate variation, aids the engineer in quantifying the soil movement potential of the soils supporting the floor slab and shallow foundations. Various shrink/swell movement procedures, and two soil modeling systems, the Post Tensioning Institute's (PTI) "Design of Post-Tensioned Slabs-on-Ground, 3rd Edition" and the Texas Department of Transportation (TxDOT) test method TEX-124-E, were used to estimate the Potential Vertical Movement (PVM) for this location.

3.2.1 *SHRINK/SWELL MOVEMENT ESTIMATE*

Based on laboratory testing results and our analyses, the potential vertical movement was estimated to be **less than 1 inch**.

It is not possible to accurately quantify actual soil moisture changes and resulting shrink/swell movements. The PVM and referenced structural movement values provided should be considered approximate values



based on industry standard practice and experience. Extreme soil moisture variations could occur due to unusual drought severity, leaking water or sewer lines, poor drainage (possibly due to landscape changes after construction), irrigation line breaks, perched groundwater infiltration, springs, soil desiccation from large trees located adjacent to the building or previously underneath the building, downspouts directing roof discharge under the foundation, etc. Therefore, because of these unknown factors, the shrink/swell potential of soils can often be significantly underestimated using the previously mentioned methods of evaluating PVM.

The unknown factors previously mentioned cannot be determined at the time of the geotechnical study. Therefore, estimated shrink/swell movements are calculated only in consideration of historical climate data related to soil moisture variations. Movements exceeding those estimated should be anticipated and routine maintenance should be provided to address these issues throughout the life of the structure.

3.2.2 DESIGN PVM CONSIDERATIONS

Soil supported foundations should be expected to undergo some vertical movements, including differential movements, due to the action of expansive soils. In this general area, most owners, architects, structural & geotechnical engineers and 2018 International Residential Code consider a value of **4 inches** or less to be within acceptable movement tolerances for soil-supported single family residential house foundations. In this case shrink/swell movements should be less than **1 inch**. PSI used this generally accepted tolerance for movement to develop the recommendations for preparing the foundation pad.

The amount of structural movement associated with a PVM magnitude of **4 inches** may not be considered acceptable per “operational” or “aesthetic” performance criteria, which often occur at less movement than the magnitude of the PVM which is based on “structural” considerations. Cracking in the foundation and walls and sticking doors, which requires periodic maintenance, will likely occur for foundations designed using an allowable **4 inch** PVM. This should be understood by the Owner and Design Team.

PSI recommends that the Owner discuss allowable movement tolerances with the structural engineer, architect, and other members of the Design Team prior to commencement of the final design to make certain that appropriate movement tolerances are developed and used for this project. If other design PVM values are desired, PSI should be contacted to review and revise the recommendations presented in this report as necessary to meet the project requirements.

3.3 Foundation Discussion

Based on information provided to PSI, information obtained during the field operations, results of the laboratory testing, and PSI’s experience with similar projects, recommendations for a shallow soil supported stiffened beam and slab-on-grade type foundation is presented in this report. Should it be determined that a different foundation type is desired, please inform PSI as soon as possible so that a supplement to this report for the desired foundation type can be provided.

3.3.1 IMPROVED FOUNDATION PAD EARTHWORK RECOMMENDATIONS

3.3.1.1 RECONDITIONING METHOD

The following tables provide general recommendations for the construction of a foundation pad utilizing the Reconditioning Method. Due to the loose or soft conditions on the in-situ soils, compaction of the over excavated subgrade could result in excessive pumping or rutting and additional efforts to stabilize the subgrade could be required. Such efforts could include placing a mud mat at the subgrade elevation, the



addition of “bull” rock or other oversized materials, or the addition of lime or cement. PSI can review the conditions during construction and make further recommendations as necessary.

TABLE 3.1: RECONDITIONING METHOD RECOMMENDATIONS

Application	Soil-Supported Foundation
Site Stripping Removal	Upper 6 inches of organics and deleterious material including debris to expose clean subgrade
Foundation Improvement Method	Remove and replace on-site soils and supplement with select fill
Improved Site Condition PVM	Approximately 1 inch
Minimum Over-Excavation	4 feet from existing grade
Horizontal Undercut Extent	Below all slab areas and at least 3 feet beyond the slab perimeter and extending the full width of flatwork that may be sensitive to movement
Proof-Rolling	The exposed subgrade should be proof-rolled with construction equipment weighing at least 20 tons. Soils that are observed to rut or deflect excessively under the moving load should be removed and replaced with properly compacted select fill materials.
Exposed Subgrade Treatment	Proof-roll then scarify, moisture condition, and compact 9 inches natural subgrade
Reconditioned Fill Minimum Thickness	4 feet
Reconditioned Fill	On site or imported materials having: Allowable PI from 12 to 35 Percent Passing No. 200 Sieve > 35% Max Particle Size < 3”
Select Fill Thickness	As required to achieve finished floor elevation
Select Fill Material	Pit Run (On-Site or Imported) Free of organics, trash, or other deleterious material Liquid Limit <40% Plasticity Index 7 to 20 Max Particle Size < 3” Percent Material Passing 200 Sieve > 35%
Vapor Retarder Material	As specified by Architect or Structural Engineer
Maximum Loose Lift Thickness	8 inches
Time Between Subgrade Prep. and Select Fill Placement	Less than 48 hours

3.3.2 COMPACTION AND TESTING RECOMMENDATIONS FOR FOUNDATION PAD AREAS

The following table outlines foundation pad compaction and testing recommendations for the foundation pad.



TABLE 3.2: COMPACTION RECOMMENDATIONS RECONDITIONING METHOD

Location	Material	Test Method for Density Determination	Percent Compaction	Optimum Moisture Content	Testing Frequency
Foundation Pad Areas	Subgrade Soil (Base of excavation)	ASTM D698	≥ 95%	0 to +4%	1 per 5,000 SF
	Reconditioned Fill	ASTM D698	≥ 95%	0 to +4%	1 per 5,000 SF; min. 3 per lift
	Select Fill (Pit Run)	ASTM D698	≥ 95%	-1 to +3%	1 per 5,000 SF; min. 3 per lift

3.4 Design Measures to Reduce Changes in Soil Moisture

The following recommended measures can reduce possible moisture fluctuations of the soils under the floor slab. Movements of the foundation soil can be effectively reduced by providing horizontal and/or vertical moisture barriers around the edge of the slab. Typically, the moisture barriers consist of concrete flatwork or asphalt or concrete pavement placed adjacent to the edge of the building, a clay cap over poly sheeting, and/or a deepened perimeter grade beam or vertical poly trench filled with flowable fill.

Although subgrade modification through implementation of the Reconditioning Method is recommended to reduce potential soil-related foundation movements, the design and construction of a grade-supported foundation should also include the following elements:

- *Roof drainage should be controlled by gutters and carried well away from the structure.*
- *The ground surface adjacent to the building perimeter should be sloped and maintained a minimum of 5% grade away from the building for 10 feet to result in positive surface flow or drainage away from the building perimeter. In areas adjacent to the building controlled by ADA, concrete flatwork slopes should not be less than 2% within 10 feet of the building.*
- *Hose bibs, sprinkler heads, and other external water connections should be placed well away from the foundation perimeter such that surface leakage cannot readily infiltrate into the subsurface or compacted fills placed under the proposed foundations and slabs.*
- *No trees or other vegetation over 6 feet in height shall be planted within 15 feet of the structure unless specifically accounted for in the foundation design.*
- *Utility bedding should not include gravel near the perimeter of the foundation. Compacted clay or flowable fill trench backfill should be used in lieu of permeable bedding materials between 2 feet inside the building to 4 feet beyond the exterior of the building edge to reduce the potential for water to infiltrate within utility bedding and backfill material.*
- *Paved areas around the structure are helpful in maintaining soil moisture equilibrium. It will be very beneficial to have pavement, sidewalks or other flatwork located immediately adjacent to the building to both reduce intrusion of surface water into the more permeable select fill and to reduce soil moisture changes along the exterior portion of the floor due to soil moisture changes from drought, excessive rainfall or irrigation, etc. The use of a minimum 2 foot thick clay cap over poly sheeting/geosynthetic liner (horizontal barrier) is recommended in those areas not covered with asphalt or concrete pavement or flatwork.*



- *Flower beds and planter boxes should be piped or watertight to prevent water infiltration under the building. Experience indicates that landscape irrigation is a common source of foundation movement problems and pavement distress.*
- *Repairing irrigation lines as soon as possible after leakage commences will benefit foundation performance greatly.*
- *Foundation pad and pavement subgrade should be protected and covered within 48 hours to reduce changes in the moisture regime from rainfall events or excessive drying from heat and wind.*

3.5 Foundation Design Recommendations

3.5.1 **STIFFENED BEAM AND SLAB-ON-GROUND FOUNDATION RECOMMENDATIONS**

A stiffened beam and slab-on-grade foundation (Waffle Slab) is generally used to support relatively light structures where soil conditions are relatively uniform and where uplift and settlement can be tolerated. The intent of a stiffened beam and slab-on-grade foundation is to allow the structure and foundation to move with soil movements while providing sufficient stiffness to limit differential movements within the superstructure to an acceptable magnitude. The foundation may be designed using the Design of Slab-On-Ground Foundations published by the Wire Reinforcement Institute, Inc. (August 1981, updated March 1996). Alternately, the foundation may be designed using the 3rd Edition of the Design of Post-Tensioned Slabs-on-Ground published by the Post-Tensioning Institute (PTI DC10.1-08). The following table is applicable for a conventionally reinforced stiffened beam and slab-on-grade foundation with foundation pad prepared in accordance with Section 3.3.

TABLE 3.3: WRI DESIGN PARAMETERS

Effective Plasticity Index	10.0
Soil/Climatic Rating Factor (1–C)	0.00
Allowable Bearing Pressure for Grade Beams	1,200 psf
Bearing Stratum at Bottom of Grade Beams	Select Fill
Penetration of Perimeter Beams Below Final Exterior Grade	At least 24 inches

PSI is providing PTI design values for the Structural Engineer’s consideration and possible use. These design values are estimated from the “Volflo” computer program in consideration of the soil conditions in the building area, an improved foundation pad and local experience. The following table is applicable for a conventionally reinforced or post-tensioned slab-on-grade with foundation pad prepared in accordance with Section 3.3.



TABLE 3.4: PTI DESIGN PARAMETERS

Edge Moisture Variation Distance	
Center Lift, e_m	9.0 feet
Edge Lift, e_m	5.10 feet
Differential Soil Movement	
Center Lift, y_m	-0.90 inches
Edge Lift, y_m	1.35 inches
Allowable Bearing Pressure for Grade Beams	1,200 psf
Bearing Stratum at Bottom of Grade Beams	Select Fill
Penetration of Perimeter Beams Below Final Exterior Grade	At least 24 inches

Utilities that project through slab and grade beam foundations should be designed either with some degree of flexibility or with sleeves to help prevent damage to these lines from vertical movement. Contraction, control or expansion joints should be designed and placed in various portions of the structure to help reduce and control wall cracking from foundation movements. Properly planned placement of these joints will assist in controlling the degree and location of material cracking which normally occurs due to material shrinkage, thermal affects, soil movements and other related structural conditions.

3.6 Site Seismic Design Recommendations

PSI reviewed site seismic information from the Structural Engineers Association of California - U.S. Seismic Design Maps. For the purposes of seismic design, based on the encountered site conditions and local geology, PSI interpreted the subsurface conditions to satisfy the **Site Class D** criteria for use at this site as defined by the International Building Code (IBC). The site class is based on the subsurface conditions encountered at the soil borings, the results of field and laboratory testing, experience with similar projects in this area, and considering the site prepared as recommended herein. The table below provides recommended seismic parameters for the project based on the 2018 edition of the IBC.

TABLE 3.5: RECOMMENDED DESIGN SEISMIC PARAMETERS

Project Centroid Coordinates (WGS84 - Decimal Degree)	26.30987°, -98.22881°
Seismic Parameter	IBC 2018/ASCE 7-16
Site Class	D
Risk Category	III
0.2 sec (S_s)	0.044g
1.0 sec (S_1)	0.013g
Site Coefficient 0.2sec, F_a	1.6
Site Coefficient 1.0 sec, F_v	2.4
0.2 sec (S_{DS})	0.046g
1.0 sec (S_{D1})	0.021g



4.0 CONSTRUCTION CONSIDERATIONS

PSI should be retained to provide observation and testing of construction activities involved in the foundations, earthwork, and related activities of this project. PSI cannot accept any responsibility for any conditions which deviate from those described in this report, nor for the performance of the foundations if not engaged to also provide construction observation and materials testing for this project. The PSI geotechnical engineer of record should be retained to provide continuing geotechnical consulting services and construction document review, even if periodic on-call testing is contracted with PSI Construction Services.

4.1 Initial Site Preparation Considerations

4.1.1 ***SUBGRADE PREPARATION FOR SITE WORK OUTSIDE FOUNDATION PAD AREAS***

Grade adjustments outside of the foundation pad areas can be made using select or general fill materials. The clean excavated onsite soils may also be reused in areas not sensitive to movement.

TABLE 4.1: SUBGRADE PREPARATION FOR NON-STRUCTURAL - GENERAL FILL

Minimum Undercut Depth	6 inches or as needed to remove roots, organic and/or deleterious materials
Exposed Subgrade Treatment	Proof-roll with rubber tired vehicle weighing at least 20 tons. A representative of the Geotechnical Engineer should be present during proof-roll.
Proof-Rolled Pumping and Rutting Areas	Excavate to firmer materials and replace with compacted general or select fill under direction of a representative of the Geotechnical Engineer
General Fill Type	Clean material free of roots, debris and other deleterious material with a maximum particle size of 4 inches
Maximum General Fill Loose Lift Thickness	8 inches

TABLE 4.2: FILL COMPACTION RECOMMENDATIONS OUTSIDE OF FOUNDATION AREAS

Location	Material	Test Method for Density Determination	Percent Compaction	Optimum Moisture Content	Testing Frequency
Outside of Structure	General Fill	ASTM D698	≥ 95%	0 to +4%	1 per 10,000 SF; min. 3 per lift

4.1.2 ***EXISTING SITE CONDITIONS***

The following table outlines construction considerations in consideration of demolition of existing structures, demolition of existing paving, procedures for abandoning old utility lines and removing trees.



TABLE 4.3: CONSIDERATIONS FOR DEMOLITION

Existing Structures	
Foundations of former structures located below new structure	Impact of foundation of former structures should be evaluated on a case by case basis
Foundations for former structures located below new paving	Cut off at least 3 feet below finished paving grade
Existing Pavement	
Former paving located within footing of proposed structures	Remove concrete and/or HMA surface course and base entirely or review impact on case by case basis
Former paving located within footprint of proposed new paving	Remove concrete and/or HMA surface course and evaluate if base can be reused
Abandoned Utilities	
Utilities of former structures located within new foundation pad/footprint of proposed structure	Remove pipe, bedding and backfill and then replace with select fill placed using controlled compaction
Utilities of former structures located outside of foundation pad footprint	Abandon in place using a grout plug
Tree Removal	
Trees located within proposed building footprint; roadways, parking, and sidewalk areas; and 5 feet of building area	Remove root system for full vertical and lateral extent and extend removal for at least 3 feet beyond presence of any root fragment and replace void with compacted general fill or flowable fill

4.2 Moisture Sensitive Soils/Weather Related Concerns

The soils encountered are sensitive to disturbances caused by construction traffic and changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. In addition, soils which become wet may be slow to dry and thus significantly retard the progress of grading and compaction activities. It will, therefore, be advantageous to perform earthwork, foundation, and construction activities during dry weather.

4.3 Building Foundation Excavation Observations

The foundation excavations should be observed by a representative of PSI prior to reinforcing steel or concrete placement to assess that the foundation materials are consistent with the materials discussed in this report. This is especially important to identify the condition and acceptability of the exposed subgrades under the foundation. Soft or loose soil zones encountered at the bottom of the beam excavations should be removed to the level of competent soils as directed by the Geotechnical Engineer. Cavities formed as a result of excavation of soft or loose soil zones should be backfilled with compacted select fill or lean concrete.

After opening, excavations should be observed, and concrete placed as quickly as possible to avoid exposure to wetting and drying. Surface run-off water should be drained away from the excavations and not be allowed to pond. If excavations must be left open an extended period, they should be protected to reduce evaporation or entry of moisture.



4.4 Drainage Considerations

Water should not be allowed to collect in or adjacent to foundation excavations, on foundation surfaces, or on prepared subgrades within the construction area either during or after construction. Proper drainage around grade supported sidewalks and flatwork is also important to reduce potential movements. Excavated areas should be sloped toward one corner to facilitate removal of collected rainwater, groundwater, or surface runoff. Providing rapid, positive drainage away from the building will reduce moisture variations within the underlying soils and will therefore provide a valuable benefit in reducing the magnitude of potential movements.

4.5 Excavations and Trenches

Excavation equipment capabilities and field conditions may vary. Geologic processes are erratic and large variations can occur in small vertical and/or lateral distances. Details regarding “means and methods” to accomplish the work (such as excavation equipment and technique selection) are the sole responsibility of the project contractor. The comments contained in this report are based on small diameter borehole observations. The performance of large excavations may differ.

The Occupational Safety and Health Administration (OSHA) Safety and Health Standards (29 CFR Part 1926, Revised October 1989), require that excavations be constructed in accordance with the current OSHA guidelines. Furthermore, the State of Texas requires that detailed plans and specifications meeting OSHA standards be prepared for trench and excavation retention systems used during construction. PSI understands that these regulations are being strictly enforced, and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and Federal safety regulations.

PSI is providing this information solely as a service to the client. PSI does not assume responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and Federal safety or other regulations. A trench safety plan was outside the scope of this project.



5.0 REPORT LIMITATIONS

The recommendations submitted in this report are based on the available subsurface information obtained by PSI and design details furnished by the client for the proposed project. If there are any revisions to the plans for this project, or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the foundation recommendations are required. If PSI is not notified of such changes, PSI will not be responsible for the impact of those changes on the project.

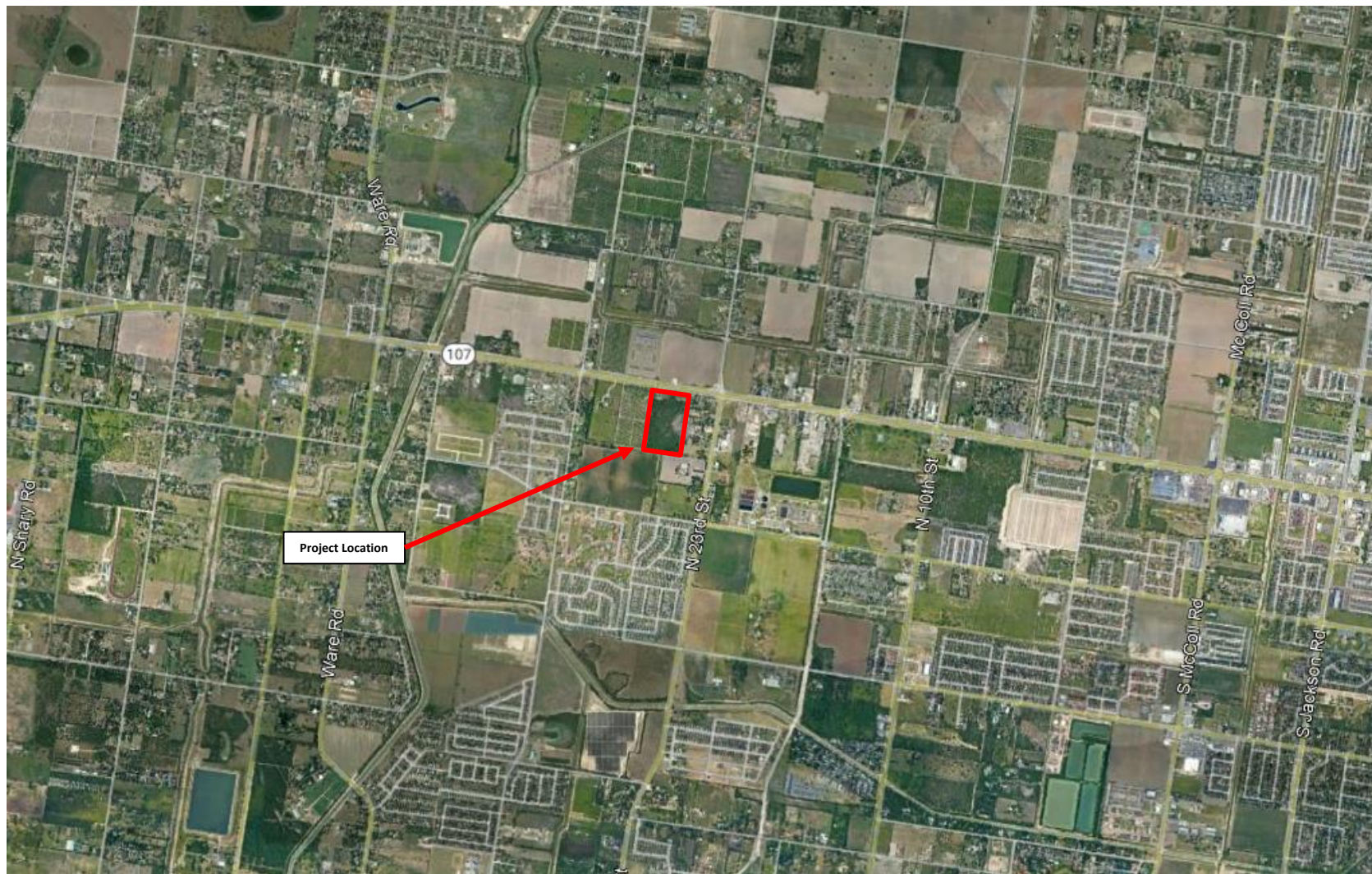
The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional Geotechnical Engineering practices in the local area. No other warranties are implied or expressed. This report may not be copied without the expressed written permission of PSI.

After the plans and specifications are more complete, the Geotechnical Engineer should be retained and provided the opportunity to review the final design plans and specifications to check that the engineering recommendations have been properly incorporated in the design documents. At this time, it may be necessary to submit supplementary recommendations. If PSI is not retained to perform these functions, PSI will not be responsible for the impact of those conditions on the project.

This report has been prepared for the exclusive use of Hakes Brothers for specific application to the proposed North Park Subdivision project to be constructed on State Highway 107 in McAllen, Texas.



APPENDIX



2020 N. Loop 499, Suite 302
Harlingen, Texas 78550
Office - 956.423.6826

Site Vicinity Map
Proposed North Park Subdivision
State Hwy 107
McAllen, Texas
PSI Project No.: 03122572

NOT TO SCALE
Google Earth 2022
PLATE 1





2020 N. Loop 499, Suite 302
 Harlingen, Texas 78550
 Office - 956.423.6826

Boring Location Map

Proposed North Park Subdivision
 State Hwy 107
 McAllen, Texas
 PSI Project No.: 03122572

NOT TO SCALE
 Google Earth 2022
 PLATE 2



Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-1

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													2.0	4.0	6.0		
			Elevation: Ukn										PL	WC	LL		
			Clayey Sand (SC), medium brown, loose to very dense	10	42		5			22	9	13	●	●	●		
				13			4						×				
5				20			4						×				
			- very loose	25			2						×				
		▼		27	44		8			24	14	10	●	●	●		
10		▽															
			- grades to light brown, with calcareous nodules	21			50/4.5in						×				
15																	
				24			50/1in						×				
20																	
25																	
30																	

COMPLETION DEPTH: 20.0 Feet
DATE: 3/16/22-3/16/22

DEPTH TO GROUND WATER
SEEPAGE (ft.): 10
END OF DRILLING (ft.): 9
DELAYED WATER LEVEL (FT): N/A



Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-2

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													2.0	4.0	6.0		
			Elevation: Ukn										PL	WC	LL		
				16			3										
			Sandy Lean Clay (CL), medium brown, soft	23	51		3			31	12	20	■	×	■		
5		▼		23			4										
			Clayey Sand (SC), light brown, very dense, with calcareous nodules	22	35		73			22	14	8	■	×	■		
10				22			50/3in										
15				22			50/2in										
20				16			50/1in										
25																	
30																	

COMPLETION DEPTH: 20.0 Feet

DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER

SEEPAGE (ft.): 7.5

END OF DRILLING (ft.): 4.5

DELAYED WATER LEVEL (FT): N/A

Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-3

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL	SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	○ HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
														2.0	4.0	6.0		
				Elevation: Ukn										PL	WC	LL		
15				Clayey Sand (SC), medium brown, loose	15	42		5			23	12	11	20	40	60		
19				- very loose	19			2										
21					21	48		5										
18				Silty Sand (SM), medium brown, medium dense to very dense, with traces of gravel	18	23		20			16	12	4					
20				- grades to light brown, with calcareous nodules	20	27		62										
19					19			50/2.5in										
27					27	45		50/4in										

COMPLETION DEPTH: 20.0 Feet
DATE: 3/16/22-3/16/22

DEPTH TO GROUND WATER
SEEPAGE (ft.): 7
END OF DRILLING (ft.): 6
DELAYED WATER LEVEL (FT): N/A



Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-4

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													2.0	4.0	6.0		
			Elevation: Ukn										PL	WC	LL		
			Clayey Sand (SC), medium brown, loose to very dense	22			5										
			- very loose from 2 to 6 ft	25	44		WH			24	11	12					
5				23			2										
			- grades to light brown, with calcareous nodules	27	46		12			25	13	12					
				23			50/5in										
10																	
			Sandy Silty Clay (CL-ML), medium brown, medium dense to very dense	20	58		50/5in			20	15	5					
15																	
				30			50/2in										
20																	
25																	
30																	

COMPLETION DEPTH: 20.0 Feet

DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER

SEEPAGE (ft.): 6

END OF DRILLING (ft.): 4

DELAYED WATER LEVEL (FT): N/A

Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-5

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													2.0	4.0	6.0		
Elevation: Ukn													PL	WC	LL		
			Clayey Sand (SC), medium brown, loose to very loose	12		45	5			22	12	10	20	40	60		
				18			3										
5				22			2										
			Sandy Lean Clay (CL), light brown, soft to hard, with calcareous nodules	20		52	4			32	14	18					
				21			7										
10																	
				23			50/5in										
15																	
20							50/0in										
25																	
30																	

COMPLETION DEPTH: 20.0 Feet
DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER
SEEPAGE (ft.): 11
END OF DRILLING (ft.): 6
DELAYED WATER LEVEL (FT): N/A

Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-6

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													2.0	4.0	6.0		
			Elevation: Ukn										PL	WC	LL		
			Clayey Sand (SC), medium brown, loose to very loose	16			6						+	x	+		
			Clayey Sand (SC), medium brown, loose to very loose	18	34		2			22	13	9	+	x	+		
5		▼	Sandy Lean Clay (CL), medium brown, soft to stiff, with traces of gravel	22	52		3						x				
			Sandy Lean Clay (CL), medium brown, soft to stiff, with traces of gravel	20			16						x				
10			Clayey Sand (SC), light brown, very dense, with calcareous nodules	21	43		50/5.5in			24	17	7	+	x	+		
15			Clayey Sand (SC), light brown, very dense, with calcareous nodules	21			50/3in						x				
20			Clayey Sand (SC), light brown, very dense, with calcareous nodules	23			50/5.5in						x				

COMPLETION DEPTH: 20.0 Feet

DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER

SEEPAGE (ft.): 5.5

END OF DRILLING (ft.): 5

DELAYED WATER LEVEL (FT): N/A

Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-7

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	○ HAND PEN (TSF) ● UNC CMP (TSF) 2.0 4.0 6.0			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
													PL	WC	LL		
			Elevation: Ukn														
			Clayey Sand (SC), medium brown, loose to very loose	15		45	6			23	12	11	●	●			
				16			3							○			
5				20			3							○			
			Sandy Lean Clay (CL), light brown, firm to hard, with calcareous nodules	21		51	6			27	14	13	●	●			
				22			9							○			
10				23			50/5.5in							○			
15				22			50/1in							○			
20																	
25																	
30																	

COMPLETION DEPTH: 20.0 Feet

DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER

SEEPAGE (ft.): 11.5

END OF DRILLING (ft.): 9

DELAYED WATER LEVEL (FT): N/A

Proposed North Park Subdivision

State Hwy 107

Project No. 03122572

BORING B-8

LOCATION: See Boring Location Plan

DEPTH, FT.	SYMBOL	SAMPLES	WATER	SOIL DESCRIPTION	MOISTURE CONTENT	% RETAINED #4	% PASSING #200	SPT (N) & TCP (T) VALUES	% REC	%RQD	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	HAND PEN (TSF) ● UNC CMP (TSF)			UNCONF. COMP. (TSF)	UNIT DRY WT. (LB/CU FT)
														○	●	●		
				Elevation: Ukn										PL	WC	LL		
				Clayey Sand (SC), medium brown, very loose to dense	14			2						20	40	60		
10					10			WH										
20					20			2										
20					20			41										
21				Silty Sand (SM), light brown, very dense, with calcareous nodules	21	30		77			21	15	6					
32					32			50/5in										
39				- traces of gravel	39	36		50/3in										

COMPLETION DEPTH: 20.0 Feet

DATE: 3/16/22-3/16/22



DEPTH TO GROUND WATER


























SEEPAGE (ft.): 7.5

END OF DRILLING (ft.): 6

DELAYED WATER LEVEL (FT): N/A

Symbol Key Sheet

Material Symbols

	"FILL"		Clay (CH)		Sandy Clay (CL)		Silty Clay (CL)		Lean Clay (CL)
	Asphalt		Clayey Sand (SC)		Sand (SP)		Silty Sand (SM)		Gravelly Sand (SP)
	Base		Clayey Silt (ML)		Sandy Silt (ML)		Silt (ML)		Gravelly Silt (ML)
	Concrete		Clayey Gravel (GC)		Sandy Gravel (GP)		Silty Gravel (GM)		Gravel (GP or GW)
	Conglomerate		Limestone		Marl		Sandstone		Shale

Strength of Cohesive Soils

Consistency	Undrained Shear Strength, KSF
Very Soft	less than 0.25
Soft	0.25 to 0.50
Firm	0.50 to 1.00
Stiff	1.00 to 2.00
Very Stiff	2.00 to 4.00
Hard	greater than 4.00

Soil Plasticity

Degree of Plasticity	Plasticity Index (PI)
None	0 to 5
Low	5 to 10
Moderate	10 to 20
Plastic	20 to 40
Highly Plastic	more than 40

Density of Granular Soils

Descriptive Term	SPT Blow Count (blows/ft)
Very Loose	less than 4
Loose	4 to 10
Medium Dense	10 to 30
Dense	30 to 50
Very Dense	more than 50

Standard Penetration Test (ASTM D 1586) Driving Record

Note: Driving is limited to 50 blows per interval, or 25 blows for 0.25 inch advancement, whichever controls. This is done to avoid damaging sampling tools.








Blows Per Foot	Description
25	Sampler was seated 6 inches, then 25 blows were required to advance the sampler 12 inches.
75/8"	Sampler was seated 6 inches, 25 blows were required for the second 6 inch increment and the 50 blow limit was reached at 2 inches of the last increment.
Ref/2"	Sampler could only be driven 2 inches of the 6 inch seating penetration before the 50 blow limit was reached.

WH Weight of Hammer, upon placement of hammer on anvil, sampler experience no resistance for 12 inches

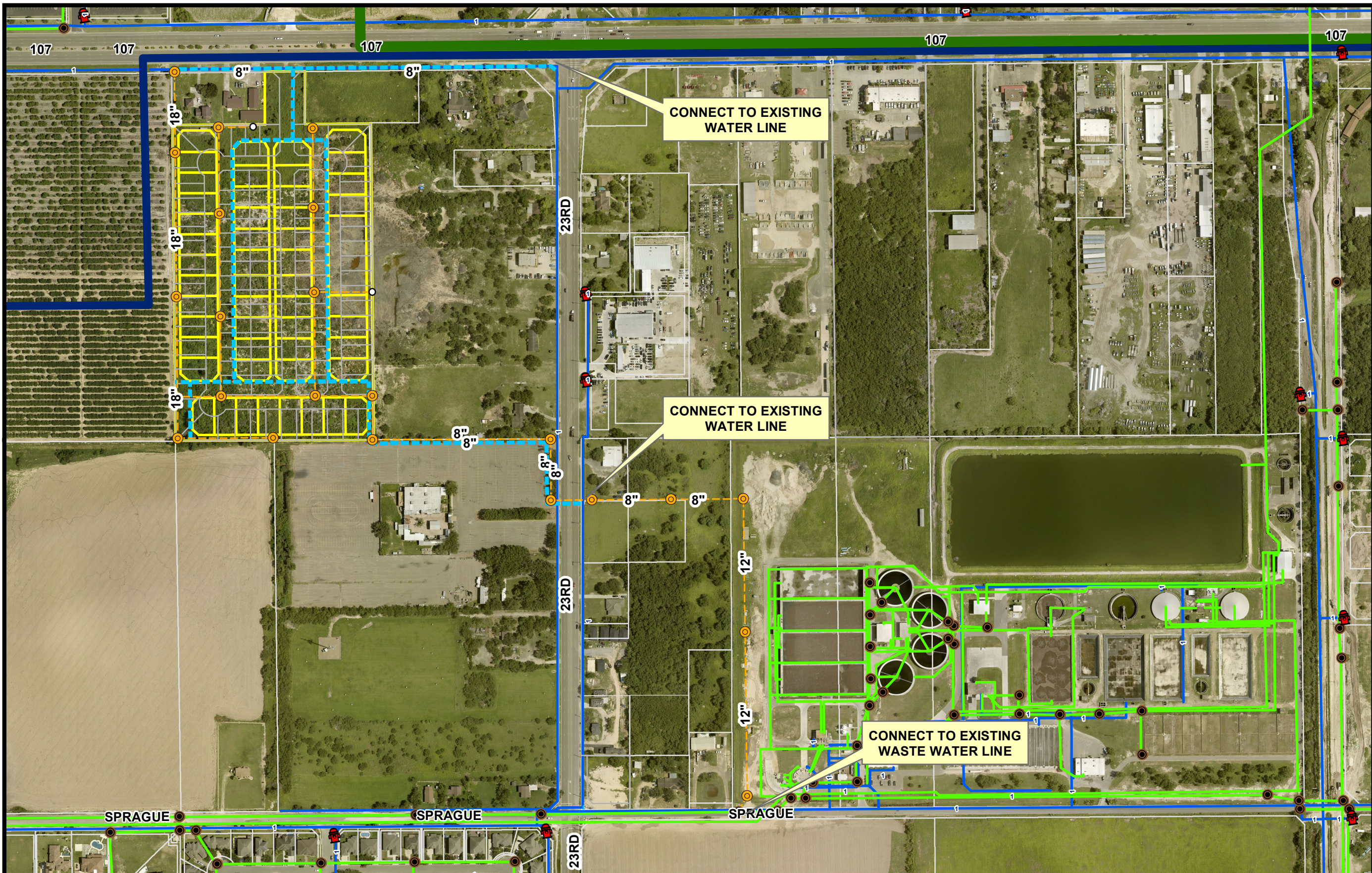
Terms Characterizing Structure

Soil Terms	Description
Blocky	Contains cracks or failure planes resulting in rough cubes of material.
Calcareous	Contains appreciable quantities of calcium carbonate.
Fissured	Contains shrinkage cracks, which are frequently filled with fine sand or silt. The fissures are usually near vertical in orientation.
Interbedded	Composed of alternating layers of different soil types.
Laminated	Composed of thin layers of varying color and texture.
Nodules	Secondary inclusions that appear as small lumps about 0.1 to 0.3 inch in diameter.
Partings	Inclusion of different material less than 1/8 inch thick extending through the sample.
Pockets	Inclusion of different material that is smaller than the diameter of the sample.
Seams	Inclusion of different material between 1/8 and 3 inches thick, and extends through the sample.
Slickensided	Has inclined planes of weakness that are slick and glossy in appearance. Slickensides are commonly thought to be randomly oriented.
Streaks or Stains	Stains of limited extent that appear as short stripes, spots or blotches.
Rock Terms	Description
Bedding Plane	A surface parallel to the surface of deposition, generally marked by changes in color or grain size.
Fracture	A natural break in rock along which no displacement has occurred.
Joint	A natural break along which no displacement has occurred, and which generally intersects primary surfaces.
% Recovery	The ratio of total length of recovery to the total length of core run, expressed as a percentage.
RQD - Rock Quality Designation	The ratio of total recovered length of fragments longer than 4 inches to the total run length, expressed as a percentage.
Weathering	The process by which rock is broken down and decomposed.

Sampler Symbols














	Flight Auger		Core Barrel		Disturbed Shelby Tube (3")		No Recovery		Grab Sample		Undisturbed Shelby Tube (3")		SPT Sample
---	--------------	---	-------------	--	----------------------------	---	-------------	---	-------------	--	------------------------------	---	------------

NORTH PARK ON 107



1 inch = 333 feet

Legend

-  Existing Manhole
-  Proposed Clean-Out
-  Proposed Manholes
-  Proposed Fire Hydrant
-  Existing Fire Hydrants
-  Existing Wastewater Line
-  Proposed Wastewater Line
-  Proposed Water Line
-  Sewer CCN
-  Water CCN
-  Lots
-  Existing Waterline
-  Proposed Area



	AGENDA ITEM	<u>5.a.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/19/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Consideration and Approval of Buy Board Quote (# 672-22) for the installation of a Groundwater Test Well at our North WTP.

2. Party Making Request:
Carlos Gonzalez, Development and Special Projects Engineer

3. Nature of Request: Consideration and Approval of Buy Board Quote for the installation of a Groundwater Test Well at our North WTP.

4. Budgeted: yes

Bid Amount:	<u>\$889,515</u>	Budgeted Amount:	<u>\$1,400,000</u>
Under Budget:	<u>\$0.00</u>	Over Budget:	<u>\$0.00</u>
		Amount Remaining:	<u>\$510,485</u>

5. Reimbursement:

6. Routing:
Savannah Arredondo Created/Initiated - 6/19/2024
Gerardo Noriega Final Approval - 6/19/2024

7. Staff's Recommendation: Consideration and Approval of Buy Board Quote for the installation of a Groundwater Test Well at our North WTP.

8. City Attorney: Approve. IJT

9. MPU General Manager: Approved - MAV

10. Director of Finance for Utilities: Approved - MSC

Memo

TO: Marco A Vega, P.E., General Manager
J.J. Rodriguez, Asst. General Manager

FROM: Carlos Gonzalez, P.E., Utility Engineer

DATE: June 19, 2024

SUBJECT: **Consideration and Approval of Buy Board Contract Proposal for the installation of a Test Well at North Water Treatment Plant (Buy Board Contract # 672-22)**

In 2017, an alternate source study was completed as part of a Bureau of Reclamation partially funded grant. The study identified the construction of a brackish groundwater desalination facility at our north water treatment plant as a top ranked project. The primary objective of project was to increase and diversify our water supply portfolio.

MPU has published a "Request for Qualifications" for the selection of a Design Team(s) to commence planning and design efforts for this project. We anticipate reviewing responses to RFQ in the next few weeks and bringing recommendations to MPUB for consideration in late June or early July.

In order to advance this project, staff has secured a Buy Board quote for the installation of an initial Test Well. This well is crucial in determining the zone most likely to produce the most water and corresponding water quality. This information will be used to refine assumptions on the number of wells that will be needed to produce certain volume as well as to provide a sound basis for design of treatment facilities needed.

The Buy Board quote was provided by Weisinger Incorporated out of Wilis, TX for an amount of \$889,515.00. The quote attached also has an add on fee of 2.5% for Bonding as well as a contingency of \$77,250 that may be used for testing multiple zones. Our current FY budget has a line item of \$1.4 Million allocated for this project.

Staff will be available for further discussion/questions at the MPUB meeting.



PO Box 909 • Willis, TX 77378
936-756-7721 • 281-353-8484 • 936-756-7723 fax
www.weisingerinc.com

QUOTATION

To: City of McAllen
4201 N. Bentsen Rd
McAllen, TX 78504
Attn: Carlos Gonzalez
cagonzalez@mcallen.net

Date: June 12, 2024

Re: Test Well Proposal

Table with 3 columns and 4 rows containing project details and descriptions.

Anticipated Start Date: 08/01/24
Days to Completion (from Notice to Proceed): 60
The foregoing prices are subject to Federal, State and Local Sales and Use Taxes. This Quotation will automatically expire if purchaser does not deliver a written acceptance to Contractor by 30 days.

Weisinger Incorporated

(Contractor)

Handwritten signature of Cristian Rivera

Cristian Rivera

ACCEPTANCE:

The undersigned accepts the above proposal at the prices shown, subject to any necessary revision in the list of estimated quantities, and hereby authorizes and instructs Contractor to proceed with the described work. The undersigned understands and agrees that the Terms and Conditions shown on the reverse are hereby incorporated as part of this contract.

Purchaser _____

Signature box

By _____ Date _____

	Description	Price
5	Well Construction: The well shall be installed by the rotary-hydraulic process. All temporary casings and screen shall be installed to such depth as the formations encountered may justify.. The size and lengths of casing and screen shall be as follows:	
a	<p>Temporary Casing and Screens: The casing and screens shall be installed in one piece. The casing shall be installed from above ground surface to a depth of up to approx 1450 feet below present ground surface. It shall be 6-inch O.D.carbon steel line pipe. Opposite the water bearing formations shall be installed 20-40 feet of 6-inch screen consisting of 304 stainless steel screen wrapped on 6-inch O.D. carbon steel line pipe. The bottom of the screen shall be sealed by a carbon steel back pressure valve.</p>	
b	<p>Gravel Filter: From the immediate area surrounding the screen shall be filled with clean, graded and well rounded gravel of such size and quality as will create a gravel filter around the well screen.. The gravel selected by Contractor shall be one of, or a mixture of well gravel types mined in Brady, Texas. No other filter gravels will be acceptable.</p>	
c	<p>Development and Testing: After the installation of the screen and placement of the gravel has been completed, the well shall be developed via airlifting for a maximum of 12-hours. Once this development is completed a test pump will be installed and a pump test will be performed. The pump tests will consist of a continuous rate 24-hour test. Water quality sampling will be performed by a laboratory and analysis provided for TCEQ requirements.</p>	
6	Material Warranty: N/A	
7	<p>Patents: The Contractor warrants that he does not infringe on the patent rights of any person or persons or corporations whomsoever in the construction of the well contemplated herein, and hereby agrees, as a part consideration hereof, to defend and save the Purchaser harmless from any and all damages, costs and expenses by reason of claims or suits for infringement, resulting from the purchase or use of the same of any part or parts thereof.</p>	
8	<p>Purchaser agrees to provide, free of cost to the Contractor, ingress and egress to well site including an all-weather road to the well site and a sufficient clear and level space at the well site for drilling rig and equipment. A 150 ft x 150 ft all-weather stabilized and level drilling pad shall be provided by the Purchaser. Purchaser to furnish water for drilling and construction of the water well within 50 feet of the well site (minimum of 75 GPM at 40 PSI).</p> <p>All drilling mud and drill cuttings will be contained in above ground steel mud pits and disposed of off-site. All water produced during development and test pumping will be piped a maximum of 50 feet from the water well by Weisinger and discharged to surface drainage for disposal by Purchaser.</p> <p>Purchaser agrees to do these things promptly as required, so as not to delay the Contractor.</p>	

	Description	Price
9	Payments: In consideration of the things to be done by the Contractor, the Purchaser agrees to pay the Contractor as follows:	
a	Lump sum for mobilization of one (1) drilling rig and associated equipment to the project location. (Tandem truck and trailer - 288 HRs @ \$410/HR = \$118,080) (Field superintendant - 40 Hrs @ \$260/HR = \$10,400) (Conductor casing & misc materials = \$68,320)	\$ 196,800.00
b	Lump sum to drill one (1) test hole (9 7/8-inch minimum diameter) to a depth of 1500 feet, perform electric log. Collect sand formation samples and perform sand sieve analysis. (Drilling Rig - (40 HRs @ \$1315/HR = \$52,600) + (128 HRs @ \$1770/HR = \$226,560) = \$279,160) (Overnight crew charge - 7 days @ \$275/day = \$1,925.00) (Field superintendant - (40 HRs @ \$260/HR = \$10,400) + (128 HRs @ \$365/HR = \$46,720.00) = \$57,120) (Geophysical Logging & Misc Materials = \$45,990.00)	\$ 384,195.00
c	Lump sum for installion of two (2) temporary test wells zones, development, pump tests and water quality analysis. (Drilling Rig - ((40 HRs @ \$1315/HR = \$52,600) + (72 HRs @ \$1770/HR = \$127,440)	\$ 180,040.00
d	Lump sum for demoblization and site clean up. (Tandem truck and trailer - 288 HRs @ \$410/HR = \$118,080) (Field superintendant - 40 Hrs @ \$260/HR = \$10,400)	\$ 128,480.00
	Total Amount	\$ 889,515.00
	The following shall apply for standby time, additional test holes, variations in material settings, etc.:	
a	Add or deduct per foot of 9 7/8" (minimum diameter) test hole	\$ 100.00
b	Add or deduct for temporary test well zones	\$ 75,000.00
c	Add to provide payment, performance and maintenance bonds if required.	2.5% of total contract amount
	NOTE: Payment terms based on net 30 days from the date of Weisinger invoice. We offer a discount of 2% for net 10 day payment terms from the date of Weisinger invoice.	
11	Weisinger Incorporated does not guarantee water quality, turbidity, or color of the water produced from the well. The amounts herein are for drilling under normal working conditions and normal drilling conditions and procedures. Customer is responsible for any landscaping replacement, tree replacement, asphalt and paving repair, or any other site restoration necessary. The site required for construction will be approximately 200 ft. x 200 ft. around the centerline of the well. Customer is responsible for providing an area adjacent to site for disposal of water discharged during development and testing. Not included within this quotation is any specialty coatings outside of the manufacturer's standard shop painting, standby generators, paving, discharge piping, well collection line, electrical/controls, or SWPPP. Pricing for any of the above exclusions can be provided upon request. This quotation is subject to Federal, State and Local Sales and Use Taxes.	



BuyBoard # 672-22



	AGENDA ITEM	<u>7.a.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/17/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Consideration of Economic Development Matters (Section 551.087, T.G.C).

2. Party Making Request:

3. Nature of Request:

4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____

5. Reimbursement:

6. Routing:
Savannah Arredondo Created/Initiated - 6/17/2024

7. Staff's Recommendation:

8. City Attorney: None. IJT

9. MPU General Manager: N/A - MAV

10. Director of Finance for Utilities: N/A - MSC



	AGENDA ITEM	<u>7.b.</u>
PUBLIC UTILITY BOARD	DATE SUBMITTED	06/17/2024
	MEETING DATE	6/25/2024

1. Agenda Item: Consultation with City Attorney regarding pending litigation (Section 511.071, T.G.C).

2. Party Making Request:

3. Nature of Request:

4. Budgeted:

Bid Amount:	_____	Budgeted Amount:	_____
Under Budget:	_____	Over Budget:	_____
		Amount Remaining:	_____

5. Reimbursement:

6. Routing:
Savannah Arredondo Created/Initiated - 6/17/2024

7. Staff's Recommendation:

8. City Attorney: None. IJT

9. MPU General Manager: N/A - MAV

10. Director of Finance for Utilities: N/A - MSC