

CITY OF WESLACO

A REGULAR MEETING OF THE PLANNING & ZONING COMMISSION

SEPTEMBER 7, 2022, 5:30P.M.

LEGISLATIVE CHAMBERS

255 S. KANSAS AVENUE

David Hernandez, Chairman

Lonnie Berry, Vice-Chairman

Miles Bullion, PZ Commissioner

Randy Summers, PZ Commissioner

Adrian Torres, PZ Commissioner

Jose Treviño, PZ Commissioner

Jim Forward, PZ Commissioner

**CITY OF WESLACO
PLANNING & ZONING COMMISSION
REGULAR MEETING
AUGUST 3, 2022**

On Wednesday, August 3, 2022, at 5:30 pm., the Planning and Zoning Commission of the City of Weslaco, Texas, convened in regular session in person

The following commissioners were present:

David Hernandez	Chairman
Lonnie Berry	Vice-Chairman
Randy Summers	Commissioner
Adrian Torres	Commissioner
Jose Treviño	Commissioner
Rebekah de la Fuente	Planning Director
Kayla Arevalo	Secretary

Also, present were Johanna Maldonado, City Planner; Jessie Valderas, Fire Inspector; Joe Pedraza, Asst. Planning Director; Jeremy Anciso, Water & Sewer Superintendent Assistant and citizens.

I. CALL TO ORDER:

Chairman Hernandez called the meeting to order and welcomed everyone in the audience.

A. Roll Call/Establish a Quorum

Mrs. Maldonado called the roll call noting that, Commissioner Summers, Commissioner Bullion and Commissioner Forward were absent at the time of roll, a quorum was established.

II. PUBLIC COMMENTS

There were no comments received.

III. APPROVAL OF MINUTES

A. July 6, 2022, Regular Meeting

Commissioner Berry made a motion to approve the minutes of July 6, 2022, seconded by Commissioner Torres. Motion carried.

IV. PUBLIC HEARING

A. Discussion and consideration to approve rezone 510 W 4th. Also being Lot 3, Block 8A, Canal Subdivision, Hidalgo County, Texas from R-1 One-family dwelling district to R-2 Duplex and Apartment District.

Mrs. Maldonado stated that notice appeared in the Monitor on July 18, 2022, there were Seventeen (17) property owners notified within the 200-foot radius, two letters against the item were received. Staff recommended approval based on 2040 land use map.

Commissioner Berry made a motion to close the Public Hearing, seconded by Commissioner Treviño. Motion carried.

Commissioner Berry made a motion to approve the rezone request, seconded by Commissioner Treviño. Motion carried.

V. DISCUSSION AND CONSIDERATION

A. Discussion and consideration for the Preliminary Plat for Rock Ridge – being 15.092 acres out of Farm Tract 631 & 633, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 500 ft west of Bus. 83 and Westgate on the south side of Bus. 83. Possible Action.

Mrs. Maldonado stated that this item is a two (2) lot subdivision and is located inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8” waterline and sewer by the City of Weslaco through a 12” sewer line. The property is within a Flood Zone “X”. Staff recommended approval of the Preliminary Plat.

Commissioner Berry made the motion to approve the Preliminary plat, with the stipulation that Plat note Seven (7) be removed and 20ft utility easement along the east side of the property to be updated to utility and access easement, seconded by Commissioner Summers. Motion carried

B. Discussion and consideration for the Preliminary Plat for Mi Linda Phase I being a 23.05-acre out of farm tracts 648 & 649, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 340 ft south of mile 6 ½ north along the west side of Milano Road. Possible Action.

Mrs. Maldonado stated that this item is a fifty-four (54) lot subdivision and is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8” waterline and sewer by the City of Weslaco through an 8” sewer line. The property is within a Flood Zone “B”. Applicant is requesting a variance for off-site drainage and is pending the letters of support from Irrigation and Drainage District. Staff recommended approval of the Preliminary Plat and compliance with the ordinance on the variance.

Commissioner Summers made the motion to approve the Preliminary plat the variance request contingent on the letters of support from both the Irrigation and Drainage District and that entry gates show they accommodate the Right of way, seconded by Commissioner Berry. Motion carried

C. Discussion and consideration for the Preliminary Plat for Mi Linda Phase II being a 14.19-acre out of farm tracts 648 & 649, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 340 ft south of mile 6 ½ north along the west side of Milano Road. Possible Action.

Mrs. Maldonado stated that this item is a sixty-eight (68) lot subdivision and is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8” waterline and sewer by the City of Weslaco through an 8” sewer line. The property is within a Flood Zone “B”. Applicant is requesting a variance for off-site drainage and is pending the letters of support from Irrigation and Drainage District. Staff recommended approval of the Preliminary Plat and compliance with the ordinance on the variance.

Commissioner Berry made the motion to approve the Preliminary plat and variance request contingent on the letters of support from both the Irrigation and Drainage District and a plat note 15 be updated to lot 55, seconded by Commissioner Summers. Motion carried

D. Discussion and consideration for the Preliminary Plat for Pike Terrace - being a 36.092-acre out of farm tract 163, block 178, The West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the southwest Corner of pike Blvd. and Milanos Rd. Possible Action.

Mrs. Maldonado stated that this item is a one hundred and five (105) lot subdivision and is located inside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by the City of Weslaco through a 12" sewer line. The property is within a Flood Zone "B". Staff recommended approval of the Preliminary Plat.

Commissioner Summers made the motion to approve the Preliminary plat with the condition that a plat note be added there be no lot access to Milanos, and Pike and lots 18 & 19 only have access to Woodpecker and lots 4&5 only have access to Oriole and that the TIA be submitted by time of final plat approval seconded by Commissioner Berry. Motion carried

E. Discussion and consideration for the Preliminary Plat for The Coves – being 18.48 acres out of Farm Tract 1030, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located on the Southside of mile 8 N. Rd. approximately 710' east of International Blvd. Possible Action

Mrs. Maldonado stated that this item is a sixty-four (64) lot subdivision and is inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "X". Applicant is requesting a variance for off-site drainage and is pending the letters of support from Irrigation and Drainage District. Staff recommended approval of the Preliminary Plat and compliance with the ordinance on the variance.

Commissioner Summers made the motion to approve the Preliminary plat and variance request contingent on the letters of support from both the Irrigation and Drainage District, seconded by Commissioner Treviño. Motion carried

F. Discussion and consideration for the Preliminary and/or Final Plat for The Woods Subdivision– being a 0.75 gross acre out of Farm Tract 1076, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 600 ft west of FM 1015 along the North side of Hernandez St. Possible Action.

Mrs. Maldonado stated that this item is a one (1) lot subdivision and is outside the City of Weslaco. This subdivision is being serviced with water by the North Alamo Water Supply Company through a 4" waterline and sewer by OSSF. The property is within a Flood Zone "X". Applicant is requesting a variance for OSSF. Staff recommended approval of the Preliminary and Final Plat and compliance with the ordinance on the variance.

Commissioner Berry made the motion to approve the Preliminary and Final plat and variance request, seconded by Commissioner Treviño. Motion carried

G. Discussion and consideration for the Final Plat for Plaza de Paz being a 3.00-acre out of Lot 13, Block 137, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located at 1406 W. Pike Blvd. Possible Action.

Mrs. Maldonado stated that this item is a one (1) lot subdivision and is located inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through a 6" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Staff recommended approval of the Final Plat.

Commissioner Summers made the motion to approve the Final plat, seconded by Commissioner Torres. Motion carried

H. Discussion and consideration for the Final for Moreland Heights– being 12.83-acre out of lot 4, Davis Business Park, Weslaco, Hidalgo County, Texas Located on the south side of Moreland Drive 585 f east of FM 1015. Possible Action.

Mrs. Maldonado stated that this item is a Thirty-two (32) lot subdivision and is located inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Staff recommended approval of the Final Plat.

Commissioner Berry made the motion to approve the Final plat, seconded by Commissioner Torres. Motion carried

I. Discussion and consideration for the Final Plat for Milanos Estates Ph II being a 27.65-acre out of Farm tract 720& 721, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 240 feet North from the intersection of Mile 5 ½ West Road and Mile 6 ½ West Road. Possible Action.

Mrs. Maldonado stated that this item is a one hundred twenty-seven (127) lot subdivision and is located outside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Applicant is requesting a variance for front setback of 20 ft. and rear setbacks 10 ft. and off-site drainage. Applicants has submitted his letter of support from the irrigation district but has not obtained the letter of support from the drainage district. Staff recommended denial of the Final Plat and compliance with the ordinance on the variance.

Commissioner Berry made the motion to denial the Final plat, seconded by Commissioner Summers. Motion carried

J. Discussion and consideration for the Final Plat for Pablo Pena Jr No. 2 – being 5.57 acres out of Farm Tract 145, block 179, The West and Adams Tracts, Weslaco, Hidalgo County, Texas Located on the Northwest corner of n Westgate dr. & Canyon Rd. Possible Action.

Mrs. Maldonado stated that this item is a seven (7) lot subdivision is located inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Staff recommended approval of the Final Plat.

Commissioner Berry made the motion to approve the Final plat with the two outer entrances, seconded by Commissioner Summers. Motion carried

K. Discussion and consideration for the Voluntary Annexation of Mi Linda Subdivision Ph I & II – being a 37.24-acre tract of land out of Farm Tract 648 & 649, West Tract Subdivision, Hidalgo County, Texas located approximately 340 ft south of mile 6 ½ north along the west side of Milano Road. Possible Action

Mrs. Maldonado stated that the proposed development is located outside the City of Weslaco city limits. This subdivision is being serviced with water by north Alamo Water Supply Co. and sewer by the City of Weslaco. The proposed development will be one-family residential lots and apartments & duplexes. The development is contiguous to the existing city limits line.

Commissioner Torres made the motion to approve the Voluntary Annexation request, seconded by Commissioner Berry. Motion carried

VI. ADJOURNMENT

There being no further business to come before the Planning and Zoning Commission, Chairman Hernandez adjourned the meeting at 6:11 p.m.

Planning and Zoning Commission

David Hernandez, Chairman

Lonnie Berry, Vice-Chairman

Randy Summers, Commissioner

Absent
Miles Bullion, Commissioner

Jose Treviño, Commissioner

Adrian Torres, Commissioner

Absent
Jim Forward, Commissioner

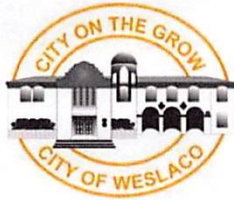
ATTEST:

Kayla A. Arevalo, Secretary



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): IV.A.
From: Rebekah de la Fuente, Planning Director, on behalf of Javier Hinojosa	
Subject/Agenda Item: Discussion and consideration to approve rezone 2625 Mile 6 ½ West Road. Also being 23.05 acre tract of land out of Farm Tract 648 and 649, West and Adams Tract Subdivision, Hidalgo County, Texas from R-1 One-family dwelling district to R-2 Duplex and Apartment District.	
Discussion/Overview: The applicant is requesting to rezone property from R-1 One Family Dwelling District to R-2 Duplex and Apartment District Notice of the application and the Public Hearing for the Planning and Zoning Commission appeared in The Monitor on August 22, 2022. Nineteen (19) property owners within 200 feet of the applicant's property were notified by letter on August 26, 2022.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval	
Additional Action Prompted: ☒ Mayor's Signature ☒ Public Hearing ☐ Budget Amendment ☐ Resolution ☒ Ordinance – First Reading ☒ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Request letter.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



APPLICATION FOR REZONING

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. RZNE-000285-2022

PROPOSED PROJECT

Legal Description of Property to be rezoned:

Lot 23.05 Acres out of Farm Tracts 648 and 649 Block _____

Subdivision Name West and Adams Tract

Street Address 2625 Mile 6 1/2 West Road

Existing Zoning n.a. Existing Land Use Agriculture

Proposed Zoning R-2 (Duplexes and Apartments) Proposed Land Use Duplexes

_____ \$305.00 non-refundable filing fee.

_____ Detailed dimensioned site plan/map must be submitted with this request.

_____ Survey and metes and bounds if the legal description is a portion of a lot.

_____ City and school tax receipts attached.

_____ I have received a copy of "The Intent of Zoning Application Instructions".

APPLICANT

Name Javier Hinojosa, P.E. Phone (956) 668-1588

Address 416 E. Dove Ave. Fax: _____

City McAllen State Tx. Zip Code 78504 E-Mail: javier@javierhinojosaeng.com

OWNER

Name Reyna Development, LTD (Ezequiel Reyna, Jr.) Phone (956) 497-3962

Address 702 W. Expressway 83, Ste. 100 Fax: _____

City Weslaco State Tx. Zip Code 78596 E-Mail: dominicareyna@gmail.com

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); or I am authorized by the actual owner to submit this application and have attached written evidence of such authorization.

Signature _____ Date 7/20/22

Owner

Signature _____ Date _____

Applicant

Signature _____ Date _____

Authorized Agent

City of Weslaco Code Enforcement Dept.

AUG 15, 2022

MORADO JACOB N & BIANCA B 1408 S MULBERRY DR WESLACO TX 78596	M3920-00-003-0029-00 MID POINT MANOR ESTATES LOTS 29 & 1408 S MULBERRY DR	L: 80294 B: 180622
PEREZ OSBALDO 1404 MULBERRY DR WESLACO TX 78596	M3920-00-003-0031-00 MID POINT MANOR ESTATES LOT 31 BLK 1404 S MULBERRY DR	L: 36600 B: 173864
PICHARDO ARMANDO & JESSICA M 1402 S MULBERRY DR WESLACO TX 78596	M3920-00-003-0032-00 MID POINT MANOR ESTATES LOT 32 BLK 1402 S MULBERRY DR	L: 36600 B: 162713
WESTWIND DEVELOPMENT GP RGV PO BOX 112 WESLACO TX 78599	M3920-00-003-0033-00 MID POINT MANOR ESTATES LOT 33 BLK 1314 S MULBERRY DR	L: 25654 B: 0
WESTWIND DEVELOPMENT GP RGV PO BOX 112 WESLACO TX 78599	M3920-00-003-0034-00 MID POINT MANOR ESTATES LOT 34 BLK 1312 S MULBERRY DR	L: 25637 B: 0
OVERWAY DANIEL SCOTT 1310 MULBERRY DR WESLACO TX 78596	M3920-00-003-0035-00 MID POINT MANOR ESTATES LOT 35 BLK 1310 S MULBERRY DR	L: 36600 B: 127133
MARTINEZ NAPOLEON & MONICA 1709 BIG PINE KEY A WESLACO TX 78596	M3920-00-003-0036-00 MID POINT MANOR ESTATES LOT 36 BLK 1308 S MULBERRY DR	L: 36600 B: 130774
AGUILAR SUSANA 1306 MULBERRY DR WESLACO TX 78596	M3920-00-003-0037-00 MID POINT MANOR ESTATES LOT 37 BLK 1306 S MULBERRY DR	L: 36600 B: 127133
CARDENAS JESSE ANTHONY & 1304 S MULBERRY DR WESLACO TX 78596	M3920-00-003-0038-00 MID POINT MANOR ESTATES LOT 38 BLK 1304 S MULBERRY DR	L: 37729 B: 164133
SOTO MARIA GUADALUPE 1302 MULBERRY DR WESLACO TX 78596	M3920-00-003-0039-00 MID POINT MANOR ESTATES LOT 39 BLK 1302 S MULBERRY DR	L: 36862 B: 0
ORTA VANESSA NICOLE 1216 MULBERRY DR WESLACO TX 78596	M3920-00-003-0040-00 MID POINT MANOR ESTATES LOT 40 BLK 1216 S MULBERRY DR	L: 36600 B: 148268
GLOBAL VENTURES INVESTMENTS 19318 WATER BRIDGE DR CYPRESS, TX 77433	M3920-00-003-0041-00 MID POINT MANOR ESTATES LOT 41 BLK 1214 S MULBERRY DR	L: 36600 B: 160369

City of Weslaco Code Enforcement Dept.

AUG 15, 2022

NUNEZ JAVIER 1212 MULBERRY DR WESLACO TX 78596	M3920-00-003-0042-00 MID POINT MANOR ESTATES LOT 42 BLK 1212 S MULBERRY DR	L: 36600 B: 92066
SIFUENTES MARISOL 1210 MULBERRY DR WESLACO TX 78596	M3920-00-003-0043-00 MID POINT MANOR ESTATES LOT 43 BLK 1210 S MULBERRY DR	L: 36600 B: 155048
VASQUEZ JOSE PASCUAL CAZARES 1208 MULBERRY DR WESLACO TX 78596	M3920-00-003-0044-00 MID POINT MANOR ESTATES LOT 44 BLK 1208 S MULBERRY DR	L: 37186 B: 158966
GONZALEZ BEATRIZ 6004 CASCADE DR EDINBURG TX 78541	M3920-00-003-0045-00 MID POINT MANOR ESTATES LOT 45 BLK 1206 S MULBERRY DR	L: 36631 B: 119026
GARCIA ELIZABETH ZETINA 1430 SPEAR ST WESLACO TX 78596	M4038-00-000-0041-00 MIDWAY MOBILE HOME LOT 41	L: 29161 B: 0
HERNANDEZ NESTOR D & CINTHYA D 708 PALOS VERDES WESLACO TX 78599	M4038-00-000-0042-00 MIDWAY MOBILE HOME LOT 42	L: 46841 B: 0
ZAVALA FRANCISCO JR & MEIHDA J 5203 GARCIA LN SAN JUAN TX 78589	M4038-00-000-0043-00 MIDWAY MOBILE HOME LOT 43	L: 37848 B: 0

City of Weslaco

"The City on the Grow"



David Suarez, Mayor
Josh Pedraza, Mayor Pro-Tem, District 1
Leo Muñoz, Commissioner, At-Large
Greg Kerr, Commissioner, At-Large
Letty Lopez, Commissioner, District 2
Jose "JP" Rodriguez, Commissioner, District 3
Adrian Farias, Commissioner, District 4

Martin Garza, Interim City Manager

PLANNING DEPARTMENT

August 26, 2022

Legal Notice

Dear Occupant:

The Weslaco Planning and Zoning Commission will hold a public hearing on Wednesday, September 7, 2022, and the City Commission will hold a public hearing on September 20, 2022, at 5:30 p.m. at the City Hall Legislative Chambers located at 255 South Kansas Avenue

Members of the public who wish to participate in Public Hearing on an agenda item must send their name, address and phone number via email to karevalo@weslacotx.gov by 12:00 pm on September 7, 2022. A staff member will contact you with instructions via phone call to address your public comment.

REZONE REQUEST:

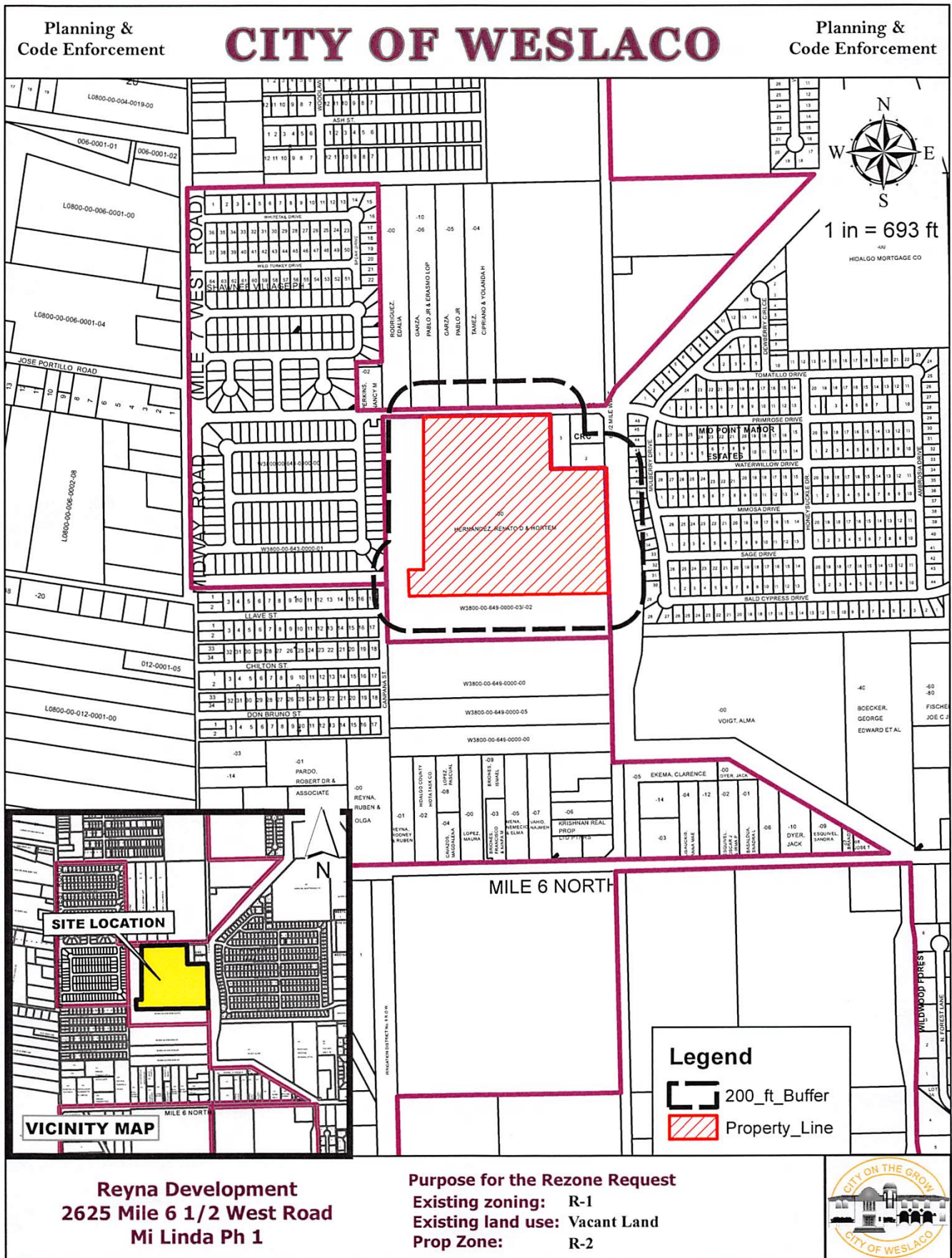
Javier Hinojosa is requesting to rezone 2625 Mile 6 ½ West Road. Also being 23.05 acre tract of land out of Farm Tract 648 and 649, West and Adams Tract Subdivision, Hidalgo County, Texas from R-1 One-family dwelling district to R-2 Duplex and Apartment District

The public is hereby invited to attend and express their support or opposition to the request. You may also file a written notice supporting or protesting this action. For more information please call the Planning Department at (956) 447-3403.

Si desea información en español, por favor llame al departamento de Planeación de la ciudad de Weslaco, (956) 447-3403.

Sincerely,

Rebekah de la Fuente, CFM
Planning Director



METES AND BOUNDS DESCRIPTION:

BEING A 23.05 ACRES OF LAND MORE OR LESS OUT OF FARM TRACTS 648 AND 649, WEST TRACT SUBDIVISION, AS RECORDED IN VOLUME 2, PAGE 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS; SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF FARM TRACT 648 AND ALSO BEING THE NORTHEAST CORNER OF FARM TRACT 649, THENCE S 01°11'56" E, WITH AND ALONG THE EAST LINE OF FARM TRACT 649, AND ALSO BEING THE CENTERLINE OF MILE 6 1/2 WEST ROAD A DISTANCE OF 65.00 FEET FOR THE SOUTHEAST CORNER OF THIS DESCRIPTION AND THE POINT OF BEGINNING;

THENCE, S 88°48'04" W, PARALLEL TO THE NORTH LINE OF SAID FARM TRACT 649, A DISTANCE OF 20.00 FEET PASSING THE APPARENT WEST RIGHT-OF-WAY LINE OF MILE 6 1/2 WEST ROAD AND A TOTAL DISTANCE OF 1160.00 FEET FOR THE SOUTHWEST CORNER;

THENCE, N 01°11'56" W, PARALLEL TO THE WEST LINE OF SAID FARM TRACT 649, A DISTANCE OF 65.00 FEET PASSING THE NORTH LINE OF SAID FARM TRACT 649, THE SOUTH LINE OF SAID FARM TRACT 648, A DISTANCE OF 150.00 FEET TO A POINT FOR AN EXTERIOR CORNER;

THENCE, N 88°48'04" E, PARALLEL TO THE SOUTH LINE OF SAID FARM TRACT 648, A DISTANCE OF 110.00 FEET FOR AN INTERIOR CORNER;

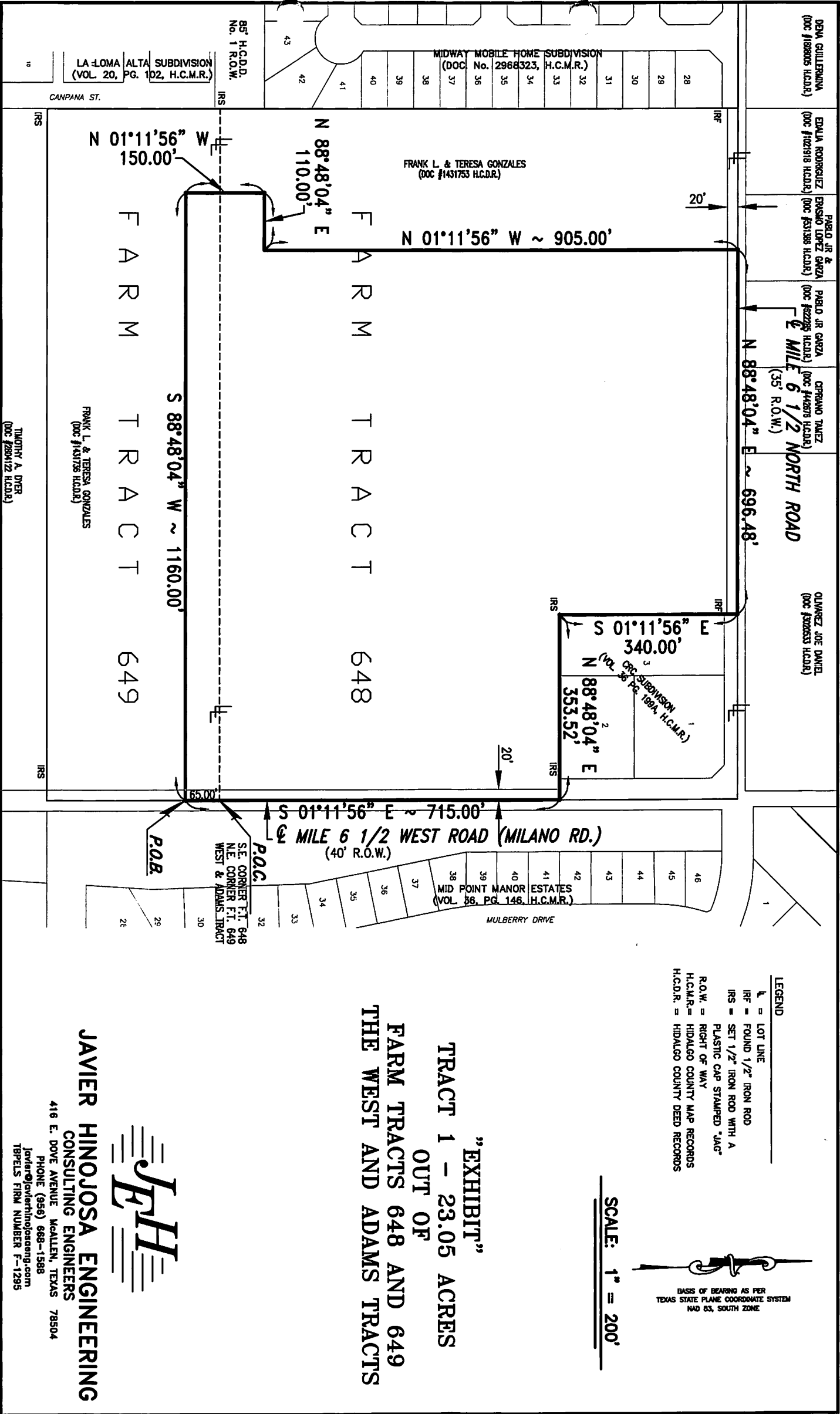
THENCE, N 01°11'56" W, PARALLEL TO THE WEST LINE OF SAID FARM TRACT 649, AT 885.00 FEET PASS THE SOUTH RIGHT-OF-WAY LINE OF SAID MILE 6 1/2 WEST ROAD AND A TOTAL DISTANCE OF 905.00 FEET TO A POINT ON THE NORTH LINE OF SAID FARM TRACT 648 FOR THE NORTHWEST CORNER;

THENCE, N 88°48'04" E, WITH AND ALONG THE NORTH LINE OF SAID FARM TRACT 648, AND ALSO BEING THE CENTERLINE OF MILE 6 ½ NORTH ROAD A DISTANCE OF 696.48 FEET (698.00 RECORD) TO A POINT FOR THE NORTHEAST CORNER;

THENCE, S 01°11'56" E, WITH AND ALONG THE WEST LINE OF CRC SUBDIVISION AS RECORDED IN VOLUME 36, PAGE 199A MAP RECORDS, A DISTANCE OF 25.00 FEET PASSING A FOUND ½ INCH IRON ROD AT THE SOUTH RIGHT -OF-WAY LINE OF MILE 6 ½ NORTH ROAD AND A TOTAL DISTANCE OF 340.00 FEET TO A SET ½ IRON ROD WITH CAP (JAG) FOR CORNER;

THENCE, N 88°48'04" E, WITH AND ALONG THE SOUTH LINE OF SAID CRC SUBDIVISION A DISTANCE OF 312.52 FEET PASSING A SET OF ½" IRON ROD WITH A CAP (JAG) AT THE WEST RIGHT-OF-WAY LINE OF MILE 6 ½ WEST ROAD, AND A TOTAL DISTANCE OF 353.52 FEET TO A POINT FOR CORNER;

THENCE, S 01°11' 56" E, WITH AND ALONG THE EAST LINE OF FARM TRACT 648, AND ALSO BEING THE CENTERLINE OF MILE 6 ½ WEST ROAD A DISTANCE OF 650.00 FEET TO A POINT FOR THE SOUTHEAST CORNER OF SAID FARM TRACT 648 AND NORTHEAST CORNER OF SAID FARM TRACT 649 AND A TOTAL DISTANCE OF 715.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 23.05 ACRES OF LAND, MORE OR LESS.





Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): IV. B.
From: Rebekah de la Fuente, Planning Director, on behalf of Aaron Garcia.	
Subject/Agenda Item: Discussion and consideration to approve Conditional Use Permit to obtain a On Premise Mixed Beverage Restaurant Permit, and Late Hours Permit to Host Live Music at 509 S. Texas Blvd., also being Lot 39 & 40, Weslaco Original Townsite Subdivision, Hidalgo County, Texas	
Discussion/Overview: The applicant is requesting to obtain a Conditional Use Permit to obtain a On Premise Mixed Beverage Restaurant Permit, and Late Hours Permit to Host Live Music. Notice of the application and the public hearing for the Planning and Zoning Commission and the City Commission. Notice appeared in The Monitor on August 22, 2022. Eighteen (18) property owners within 200 feet of the applicant's property were notified by letter on August 26, 2022.	
Staff recommendation for Commission's Action: Staff recommends approval.	
Additional Action Prompted: ☒ Mayor's Signature ☒ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Conditional Use Permit with attachments.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



APPLICATION FOR CONDITIONAL USE PERMIT

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm. Deadline to submit request is 30 days prior to the meeting.
The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. USE-000291-2022



PROPOSED PROJECT

Legal Description of Property for which Conditional Use Permit is requested:

Lot 39-40 Block 42

Subdivision Name Weslaco Original Townsite

Street Address 509 S. Texas BLVD Weslaco, Tx. 78596

Existing Zoning _____ Existing Land Use Empty

Purpose for the Conditional Use Permit Request Bar & Grill (alcohol will be served)

What, if anything, is planned to minimize the impact on the surrounding land uses: _____

☐ \$300.00 non-refundable filing fee.

☐ Detailed dimensioned site plan/map must be submitted with this request.

☐ Survey and metes and bounds if the legal description is a portion of a lot.

☐ City and school tax receipts attached.

☐ I have received a copy of "CUP Application Instructions"

APPLICANT

Name Aaron Garcia Phone (956) 463-2784

Address 1001 Chrysolite Dr. Fax: _____

City Weslaco State Tx Zip Code 78596 E-Mail: Aaron.Rooftop509@gmail.com

OWNER

Name Aaron Garcia Phone (956) 463-2784

Address " " Fax: _____

City " " State " " Zip Code " " E-Mail: " "

To the best of your knowledge are there any deed restrictions, restrictive covenants, etc., which would prevent the utilization of the property in the manner indicated?

Yes ☐ No ☒

I certify that I am the actual owner of the property described above and this application is being submitted with my consent or I am authorized by the actual owner to submit this application and have attached written evidence of such authorization.

Signature  Date 8/17/22
Owner

Signature _____ Date _____
Applicant

Signature _____ Date _____
Authorized Agent

Accepted	CITY OF WESLACO 956-968-3181	Payment Received By _____	Date Paid _____
Notice of F 200' of Pr	***** REPRINT RECEIPT***** REC#: 02927945 8/17/2022 3:58 PM OPER: NV TERM: 041 REF#: PAID BY:	in	Date _____
P & Z Noti	ACCT #: XXXX-XXXX-XXXX-5422 AUTH #: 290225 TRAN #: 000000000199 TYPE: PURCHASE	Public Hearing Published in Newspaper	Date _____
City Comm in Newspa	TRAN: 800.0000 ENERGY PAYMENT	ing Published	Date _____
Presented Approved	TENDERED: 305.00 CREDIT CARD APPLIED: 305.00-	Tabled	Date _____
Presented Approved	CHANGE: 0.00	Tabled	Date _____

City of Weslaco

"The City on the Grow"



David Suarez, Mayor
Josh Pedraza, Mayor Pro-Tem, District 1
Leo Muñoz, Commissioner, At-Large
Greg Kerr, Commissioner, At-Large
Letty Lopez, Commissioner, District 2
Jose "JP" Rodriguez, Commissioner, District 3
Adrian Farias, Commissioner, District 4

Martin Garza, Interim City Manager

PLANNING DEPARTMENT

August 26, 2022

Legal Notice

Dear Occupant:

The Weslaco Planning and Zoning Commission will hold a public hearing on Wednesday, September 7, 2022, and the City Commission will hold a public hearing on September 20, 2022, at 5:30 p.m. at the City Hall Legislative Chambers located at 255 South Kansas Avenue

Members of the public who wish to participate in Public Hearing on an agenda item must send their name, address and phone number via email to karevalo@weslacotx.gov by 12:00 pm on September 7, 2022. A staff member will contact you with instructions via phone call to address your public comment.

CONDITIONAL USE PERMIT REQUEST:

Aaron Garcia is requesting a Conditional Use Permit to obtain a On Premise Mixed Beverage Restaurant Permit, and Late Hours Permit to Host Live Music at 509 S. Texas Blvd., also being Lot 39 & 40, Weslaco Original Townsite Subdivision, Hidalgo County, Texas

The public is hereby invited to attend and express their support or opposition to the request. You may also file a written notice supporting or protesting this action. For more information please call the Planning Department at (956) 447-3403.

Si desea información en español, por favor llame al departamento de Planeación de la ciudad de Weslaco, (956) 447-3403.

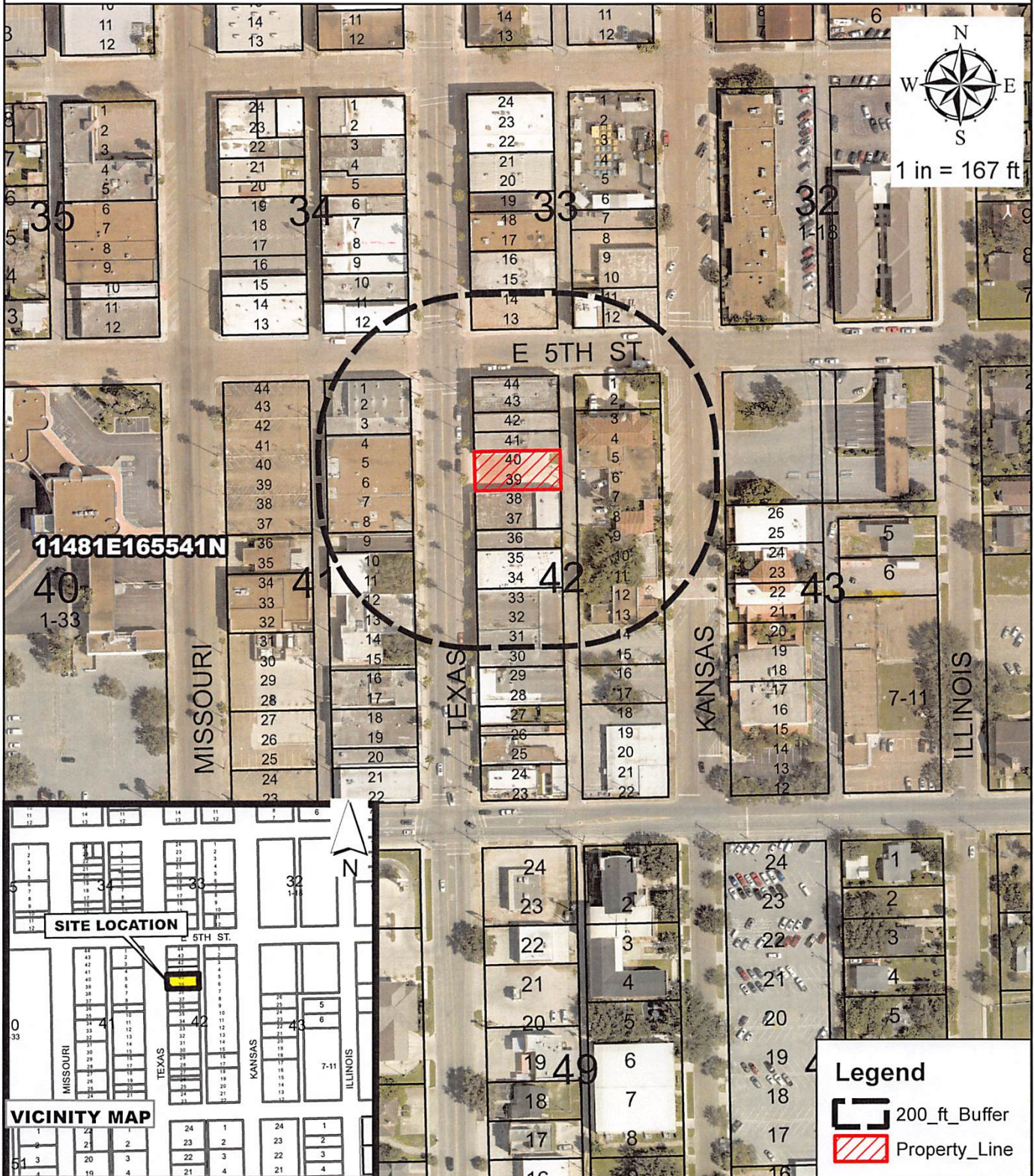
Sincerely,

Rebekah de la Fuente, CFM
Planning Director

Planning &
Code Enforcement

CITY OF WESLACO

Planning &
Code Enforcement



Aaron Garcia
509 S. Texas Blvd
Weslaco Original Townsite

Purpose a Conditional Use Permit

Existing zoning: B-3

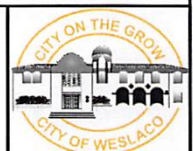
Existing land use: Vacant Land

CUP Request:

On Premise Mixed Beverage Restaurant
Permit, and Late Hours Permit Live Music

Legend

-  200_ft_Buffer
-  Property_Line



City of Weslaco Code Enforcement Dept.

AUG 22, 2022

CITY OF WESLACO 255 S KANSAS AVE WESLACO TX 78596	W2300-00-033-0011-00 WESLACO ORIGINAL TOWNSITE BLK 33 12 500 S KANSAS AVE	L: 21300 B: 113883
CITY OF WESLACO 255 S KANSAS AVE WESLACO TX 78596	W2300-00-033-0011-01 WESLACO ORIGINAL TOWNSITE BLK 33 111 E 5TH ST	L: 11700 B: 67005
AGD LP PO BOX 8097 WESLACO TX 78599	W2300-00-033-0013-00 WESLACO ORIGINAL TOWNSITE BLK 33 447 S TEXAS BLVD	L: 36300 B: 0
RUDY'S PLAZA & PROPERTIES LLC 1201 VALLEY VIEW DR WESLACO TX 78596	W2300-00-034-0011-00 WESLACO ORIGINAL TOWNSITE BLK 34 116 W 5TH ST	L: 29040 B: 175032
WESLACO BI-CULTURAL MUSEUM PO BOX 8062 WESLACO TX 78599	W2300-00-041-0001-00 WESLACO ORIGINAL TOWNSITE BLK 41 500 S TEXAS BLVD	L: 50820 B: 290469
START SAVING LLC 3512 N 23RD ST STE B MCALLEN TX 78501	W2300-00-041-0004-00 WESLACO ORIGINAL TOWNSITE LOTS 4 4 BLK 41 516 S TEXAS BLVD	L: 150700 B: 568315
BRISENO NOEMI 4020 N TEXAS BLVD WESLACO TX 78599	W2300-00-041-0009-05 WESLACO ORIGINAL TOWNSITE LOT 9 512 S TEXAS BLVD	L: 19800 B: 73348
ACOSTA LELIA SOBERANES DE 2002 S WESTGATE DR WESLACO TX 78596	W2300-00-041-0010-00 WESLACO ORIGINAL TOWNSITE BLK 41 522 S TEXAS BLVD	L: 90750 B: 186056
CITY OF WESLACO 255 S KANSAS AVE WESLACO TX 78596	W2300-00-042-0001-00 WESLACO ORIGINAL TOWNSITE LOTS 1 & 500 S KANSAS AVE	L: 29700 B: 250000
CITY OF WESLACO 255 S KANSAS AVE WESLACO TX 78596	W2300-00-042-0003-00 WESLACO ORIGINAL TOWNSITE LOTS 3 115 E 5TH ST	L: 155513 B: 1000000
WELTON MAURICE 5301 N 17TH ST APT 16 MCALLEN TX 78504	W2300-00-042-0030-00 WESLACO ORIGINAL TOWNSITE BLK 42 529 S TEXAS BLVD	L: 66000 B: 289261
SOUTH TEXAS EDUCATIONAL TECH 1222 W SUGAR CANE DR WESLACO TX 78599	W2300-00-042-0034-00 WESLACO ORIGINAL TOWNSITE LOTS 34 521 S TEXAS BLVD	L: 36300 B: 190327

City of Weslaco Code Enforcement Dept.

AUG 22, 2022

AVENDANO GUADALUPE 513 S TEXAS BLVD WESLACO TX 78596	W2300-00-042-0036-00 WESLACO ORIGINAL TOWNSITE BLK 42 517 S TEXAS BLVD	L: 19800 B: 79913
AVENDANO GUADALUPE 513 S TEXAS BLVD WESLACO TX 78596	W2300-00-042-0037-00 WESLACO ORIGINAL TOWNSITE BLK 42 513 S TEXAS BLVD	L: 36300 B: 147291
ESPARZA OSCAR JR & SANDRA P 113 VERACRUZ PHARR TX 78577	W2300-00-042-0039-00 WESLACO ORIGINAL TOWNSITE BLK 42 509 S TEXAS BLVD	L: 36300 B: 14520
TARPON INVESTMENTS LLC 2101 NORTHGATE CIR WESLACO TX 78599	W2300-00-042-0041-00 WESLACO ORIGINAL TOWNSITE BLK 42 507 S TEXAS BLVD	L: 19800 B: 56637
TEJAS BUILDING & DEV CO INC 2623 N TEXAS BLVD WESLACO TX 78599	W2300-00-042-0043-00 WESLACO ORIGINAL TOWNSITE BLK 42	L: 32670 B: 53004
FUENTES DAVID L & YVONNE M 3619 S BORDER AVE WESLACO TX 78596	W2300-00-042-0042-01 WESLACO ORIGINAL TOWNSITE BLK 42	L: 19800 B: 56637



TEXAS ALCOHOLIC
BEVERAGE COMMISSION
Texas Helping Businesses & Protecting Communities

Document reference ID : 146057

Licensing Application Summary

You must review your application and confirm that the information displayed here is correct. Select **Review and Confirm** to continue and make the payment. If the information is not correct, select **Next** to return to the application, edit the data as needed and finalize the submission. If you need to store the application packet for your records, select **Download**.

Application ID: 146057
Applicant Name: Rooftop 509 LLC
License Type applied for: Mixed Beverage Permit (MB)

Entity Information

Business Structure: Limited liability company
FEIN/SSN Number: 882733404
Member Managed or Manager Managed: Member Managed
Historically Underutilized Business: No
Veteran-owned business: No
Fraternal Owned: No
Secretary of State Filing Number: 804594133
Date Filed: 6/2/2022
Filing State: TX

Primary Business Entity Contact Information

Legal First Name: Aaron
Legal Middle Name: Garcia
Email Address: aaron.rooftop509@gmail.com
Phone Number: 956-463-2784

Initial Application Information

Authority Type: I am a principal or authorized user with binding authority

Prefix: Mr

Legal First Name: Aaron

Legal Last Name: Garcia

Email Address: aaron.rooftop509@gmail.com

Phone Number: 956-463-2784

Principal Parties

Principal Parent Entity	Principal Party	Role	%Ownership
Rooftop 509 LLC	Aaron Garcia	Member	50
Rooftop 509 LLC	Sandra Garcia	Member	50

Basic Business information

Business/Trade Name: Rooftop 509

What is your primary business at this location? Bar

Location's Phone Numbers

Business Phone Number 956-463-2784

Alternate Phone Number 956-579-4178

Location Address

Address: 509 S Texas BLVD , Weslaco , TX, United States, Hidalgo 78596

Is your location within city limits? Yes

Mailing Address Information

Address: 1001 Chrysolite Dr , Weslaco, TX, United States, Hidalgo 78596

Measurement Information

Measuring from the public entrance of your location along street lines and directly across intersections, will your location be within 1,000 feet of the nearest property line of a public or private school? No

Is a residential address or established neighborhood association located within 300 feet of any property line of your premises? No

Sixty Day Sign Requirements

Posted the 60 day sign: No

Refuting reason: I have not posted a sign, as I was not aware of the process. However, upon completing this application I will do so and indicate to the surrounding businesses and the public about my intent to seek a license and permit for the sale and consumption of alcoholic beverages. I will then upload a photo.

Projected Sales Information

Sales Year: 2023
Alcohol Sale: \$100,000.00
Food Sales: \$50,000.00
Total Sales: \$150,000.00

Property Ownership

Do you, the applicant, own the land, building, and/or warehouse at this proposed licensed location? Yes

Are you operating under? None

Location Diagram

Posted the 60 day sign: Yes



TEXAS ALCOHOLIC
BEVERAGE COMMISSION
Texas Helping Businesses & Protecting Communities

CERTIFICATE OF CITY SECRETARY FOR: (MB, BG & BE)

Section 11.37 & 61.37

Not later than the 30th day after the date a prospective applicant for a license or permit requests certification, the city secretary or clerk shall certify whether the location or address given in the request is in a wet area and whether the sale of alcoholic beverages for which the license or permit is sought is prohibited by ordinance.

I hereby certify on this _____ day of _____, _____, that the location for which the license/permit is sought is inside the boundaries of this city or town, in a "wet" area for such license/permit, and not prohibited by charter or ordinance in reference to the sale of such alcoholic beverages.

MB Mixed Beverage Permit

MB/FB Mixed Beverage Restaurant Permit with Food and Beverage Certificate
(MB must also hold a Food and Beverage Certificate)

BG/FB Wine and Beer Retailer's Permit with Food and Beverage Certificate
(BG must also hold a Food and Beverage Certificate)

BG Wine and Beer Retailer's Permit - **Election for given location was held for:**
legal sale of beer/wine (17%) on-premise **AFTER** Sept. 1, 1999
legal sale of beer/wine (14%) on-premise **BEFORE** Sept. 1, 1999

BE Beer Retail Dealer's On-Premise License

BE/FB Retail Dealer's On-Premise License with **required** Food and Beverage Certificate

OR

I hereby refuse on this _____ day of _____, 20_____ to certify this location.

SIGN HERE

City Secretary/Clerk

City

_____, TEXAS

SEAL



TEXAS ALCOHOLIC
BEVERAGE COMMISSION
Texas Helping Businesses & Protecting Communities

CERTIFICATE OF COUNTY CLERK FOR: (MB, BG & BE)

Section 11.37 & 61.37

Not later than the 30th day after the date a prospective applicant for a license or permit requests certification, the city secretary or clerk shall certify whether the location or address given in the request is in a wet area and whether the sale of alcoholic beverages for which the license or permit is sought is prohibited by ordinance.

I hereby certify on this _____ day of _____, _____, that the location for which the license/permit is sought is in a "wet" and is not prohibited by any valid order of the Commissioner's Court.

☐ **MB** Mixed Beverage Permit

☐ **MB/FB** Mixed Beverage Restaurant Permit with Required Food and Beverage Certificate

☐ **BG/FB** Wine and Beer Retailer's Permit with Required Food and Beverage Certificate

☐ **BG** Wine and Beer Retailer's Permit - **Election for given location was held for:**

legal sale of beer/wine (17%) on-premise **AFTER** Sept. 1, 1999

legal sale of beer/wine (14%) on-premise **BEFORE** Sept. 1, 1999

☐ **BE** Beer Retail Dealer's On-Premise License

☐ **BE/FB** Retail Dealer's On-Premise License with required Food and Beverage Certificate

OR

I hereby refuse on this _____ day of _____, 20_____ to certify this location.

SIGN HERE

County Clerk

County

SEAL





TEXAS ALCOHOLIC
BEVERAGE COMMISSION
Texas Helping Businesses & Protecting Communities

COMPTROLLER OF PUBLIC ACCOUNTS CERTIFICATES

I hereby certify on this _____ day of _____, _____, the applicant holds or has applied for and satisfies all legal requirements for the issuance of a Sales Tax Permit under the Limited Sales, Excise and Use Tax Act or the applicant as of this date is not required to hold a Sales Tax Permit.

Sales Tax Permit Number _____

Outlet Number _____

Print Name of Comptroller Employee _____

Print Title of Comptroller Employee _____

SIGN HERE

Comptroller Representative

City

, TEXAS

SEAL



TEXAS ALCOHOLIC
BEVERAGE COMMISSION
Texas Helping Businesses & Protecting Communities

PUBLISHER'S AFFIDAVIT

Name of newspaper	
City, County	
Dates notice published in daily/weekly newspaper (MM/DD/YYYY)	
<i>Publisher or designee certifies attached notice was published in newspaper stated on dates shown</i>	
Signature of publisher or designee	
Sworn to and subscribed before me on this date	
Signature of Notary Public	
S E A L	
ATTACH PRINTED COPY OF THE NOTICE	



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.A.
From: Rebekah de la Fuente, Planning Director, on behalf of Melden & Hunt.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Sayyed Commercial Development being a 2.960-acre out of farm tracts 1065, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the Southeast corner of Mile 11 North & FM 1015. Possible Action.	
Discussion/Overview: The proposed one (1) lot subdivision is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Applicant is requesting a variance for a 0 side setback.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of Preliminary Plat and compliance with the ordinance on the variance.	
Additional Action Prompted: ☒ Mayor's Signature ☐ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☒ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: SAYYED COMMERCIAL DEVELOPMENT

Location: southeast corner of Mile 11 North & FM 1015

Legal Description: A resubdivision of 2.960 acres out of Farm Tract 1065 The West & Adams Tracts S/D

Is subdivision inside city limits? ☐ YES ☒ NO

If subdivision is in the ETJ, indicate? ☐ 3.5 Mile ☒ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: N/A

Existing Land Use: Open Proposed Land Use: Residential

Number of Lots Proposed: 1 Gross Acreage: 3.960

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: Maher Al Sayyed & Malek Al-Sayyed Telephone: c/o (956) 381-0981

Address: 2402 Lake Austin Blvd. Fax: c/o (956) 381-1839

City: Austin State: TX Zip: 78703 E-mail: malsayyed@yahoo.com

ENGINEER INFORMATION

Name: Melden & Hunt, Inc. Telephone: (956) 381-0981

Address: 115 W. McIntyre Street Fax: (956) 381-1839

City: Edinburg State: TX Zip: 78541 E-mail: mario@meldenandhunt.com

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: NAWSC

☒ YES ☐ NO Wastewater Provision: NAWSC

☒ YES ☐ NO Electric Company: MVEC

☒ YES ☐ NO Phone Utility <u>VERIZON</u>	☐ YES ☒ NO Gas Utility	☒ YES ☐ NO Cable Utility
--	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>HCDD#1</u>	☒ YES ☐ NO Irrigation District _____
---	---

Has the property been assessed as flat rate irrigable property: ☐ YES ☒ NO

Have Water Rights been conveyed to City/Water Supplier? ☒ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If YES, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

- ☒ Two (2) sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mbhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- ☒ \$355.00 Planning Review fee
- ☒ One 11" X 17" reduced copy of plat
- ☒ Plat Layout
 - ☒ Existing & Proposed Easements
 - ☒ Existing & Proposed ROW
 - ☒ Existing & Proposed Drainage Easements
 - ☒ Contours
 - ☒ Flood Zones
 - ☒ Adjoiners
 - ☒ N/A Existing street names
- ☒ Drainage plans and calculations with engineer's seal
 - ☒ Elevations
 - ☒ Flood directional arrows
 - ☒ Detention areas
 - ☒ N/A Street names
- ☒ Proof of ownership of the property
- ☒ N/A If septic tank system required, submit soil evaluation report
- ☒ Water Rights associated with the property
- ☒ Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

- Twelve (12) sets of preliminary plat **folded and stapled** (24 x 36) and forward a copy in PDF format to mbhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- \$350.00 (one time fee for preliminary and final plat)
- One 11" X 17" reduced copy of plat
- Plat Layout
 - Existing & Proposed Easements
 - Existing & Proposed ROW
 - Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- _____ Contours
- _____ Flood Zones
- _____ Adjoiners
- _____ Existing & Proposed street names
- _____ Utility Layout
- _____ Existing & Proposed Utilities
- _____ Proposed Fire Hydrants
- _____ Adjoiners
- _____ Street names
- _____ Drainage plans and calculations with engineer's seal
- _____ Elevations
- _____ Flood directional arrows
- _____ Detention areas
- _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full
- _____ Number of fire hydrants proposed for subdivision
- _____ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- _____ **Twelve (12) sets of plans FOLDED & STAPLED (24 x 36) & PDF copy with all corrections**
- _____ Plats to be sealed by Professional Engineer
- _____ Approved Drainage Report
- _____ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____ Notice of Intent
- _____ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____ Electronic file of final plat and as-builds
- _____ Reproducible plat to be recorded with all required signatures
- _____ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____ 2% inspection fee
- _____ Park Fees
- _____ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____ Tax certificates
- _____ Memo from engineering inspector releasing subdivision
- _____ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____ 30 Year Water and 30 Year Sewer Service Agreements
- _____ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____ Sealed engineering cost estimates
- _____ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: _____ Date: _____

MARIO A. REYNA, PRESIDENT OF MELDEN & HUNT, INC. _____ is the authorized agent

Authorized Agent Signature: Mario A. Reyna Date: 8.15.22

Authorized Agent Printed Name: MARIO A. REYNA

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR SUBDIVISION VARIANCE

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

GENERAL INFORMATION

Name of Subdivision: Sayped Commercial Development

Location: South east corner of Mill 11 + FM 1015

Legal Description: A resubdivision of 2.960 acres out of farm tract 1015 The West + Adams Tracts S/D

VARIANCE TYPE:

☐ Streetlights ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sanitary Sewer ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Fire Hydrants ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☒ Setbacks ☐ YES ☐ NO

Describe in detail the reason for the variance request: side 0.0'
Reason being in case they want to extend to
Adjoint commercial site.

☐ Drainage ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Minimum Lot Size ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sidewalks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Easement Requirements ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Other _____ ☐ YES ☐ NO

Describe in detail the reason for the variance request:

OWNER INFORMATION

Owner's Name: _____ Telephone: _____

Address: _____ Fax: _____

City: _____ State: _____ Zip: _____ E-mail: _____

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature:  Date: 8.25.22

Authorized Agent Printed Name: Mario A. Reyna

FIRM NAME: MELDEN & HUNT, INC. – #F1435
TITLE: SAYYED COMMERCIAL DEVELOPMENT
PREPARED BY: MARIO A. REYNA, P.E.
DATE: May 23, 2022



5-25-22

INDEX

- 1. Drainage Statement**
- 2. Drainage Calculations**
- 3. Weighted C Calculation**
- 4. Runoff Coefficients**
- 5. Location Map**
- 6. Subdivision Plat**
- 7. Drainage Layout Plan**
- 8. USGS Topographical Map**
- 9. Rainfall Intensity Table**
- 10. Street Velocities & Capacities Flowing Curb Full Table**
- 11. USDA Soils Map**
- 12. USDA Soils Legend & Description**
- 13. FEMA FIRM with site location**



TBPELS Firm # F-1435
TBPELS # 10096900

MELDEN & HUNT INC.

CONSULTANTS • ENGINEERS • SURVEYORS

MARIO A. REYNA • ALLAN F. BOOE • KELLEY A. HELLER-VELA • ROBERTO N. TAMEZ • RUBEN JAMES DE JESUS • MICHAEL HERNANDEZ

DRAINAGE STATEMENT
SAYYED COMMERCIAL DEVELOPMENT

Revised Date: May 23, 2022

SAYYED COMMERCIAL DEVELOPMENT is a 2.960-acres tract being out of Farm Tracts 1065, West and Adams Tracts Subdivision, County of Hidalgo, Texas as recorded in Volume 2, Pages 34-37, Hidalgo County Map Records. The property is located along the southeast intersection of F.M. 1015 and Mile 11 North Road. This subdivision falls outside the city limits of the City of Weslaco and within the 2 Mile ETJ. The property is currently open with a proposed 1-commercial lot use. This property is located in Zone "X" shaded & AE Zone in FEMA's Flood Insurance Rate Map, Community Panel No. 480334 0450 C, Map Date: June 6, 2000. Revised to reflect LOMR Date May 30, 2002. Zone "X" shaded is defined as "areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood". Zone "AE" has been redefined to Zone "X" as per LOMR F Case No. 20-06-3073A.

The soils are (25) Hidalgo Fine Sandy Loan and (28) Hidalgo Sandy Clay Loam. Soil Group "B" 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 an easterly direction and has a runoff of 4.16 c.f.s. during the 10-year storm frequency as per the attached calculations. Proposed runoff after development is 21.53 c.f.s. during the 50-year storm frequency per the attached calculation which is an increase of 17.37 c.f.s.

The proposed drainage for **SAYYED COMMERCIAL DEVELOPMENT** consists of surface runoff from the lot into the proposed parking area. The runoff shall flow to low points draining into proposed Type "A" & Type CC inlets, which will drain East into an existing storm sewer system discharging into the Hidalgo & Cameron Counties Irrigation District No. 9 ditch. This existing Hidalgo & Cameron Counties Irrigation District No. 9 ditch flow north ultimately discharges into the Mercedes Later then East, ultimately draining into the I.B.W.C. FLOODWAY.

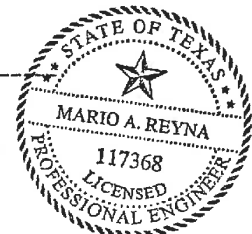
In accordance with the Hidalgo County drainage policy, the peak rate of runoff in the subdivision will not be increased during the 50-year rainfall event due to the improvements in this subdivision. Detention for Al Sayyed Commercial Development has been provided with the Vaquero Estates Phase 5 development.

☐ REJECTED	
☒ APPROVED FOR SUBMITTAL	
☒ TO H.C. PLANNING DEPT.	
☐ TO CITY	
☐ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☐ CITY FACILITY	
☐ OTHER _____	
<u>Alexis Izagano</u> H.C.D.D. NO. 1	<u>6/10/22</u> DATE

By: Mario A. Reyna

Mario A Reyna, P.E.

Date



DRAINAGE REPORT

PROJECT NAME: **SAYYED COMMERCIAL DEVELOPMENT**

PROJECT NUMBER: **22-57**

of Lots: **1**

DATE: **May 23, 2022**

I. Existing Condition-10 year

Ex. Area: **172,509.00 sf**
3.96 ac

Int. Coeff. "k" **0.213** Table 3-2
Kp **3.28**
Length **450 ft**
Velocity **0.270582 ft/sec**

Slope : **0.15 %**
tc : **27.72 min**
Rainfall Intensity (10yr)
c factor
Q peak existing condition:

5.251 in/hr
0.200
4.16 cfs

II. Future Condition-50 year

Future area: **172,509.00 sf**
3.96 ac

Slope : **0.15 %**
tc : **18.75 min**

Rainfall Intensity (50yr)
c factor

8.171 in/hr
0.665

Q future cond. = $Aci = i *$

21.53 * 0.67

2.63474518 i

time min.	time hour	i in/hr	Qin cfs	Vin cf	Qout cfs	Vout cf	REQ'D V cf
5	0.08	13.57	35.75	10726	4.16	2963	7763
10	0.17	10.83	28.52	17113	4.16	3587	13526
15	0.25	9.10	23.98	21583	4.16	4211	17373
25	0.42	7.03	18.51	27764	4.16	5458	22305
35	0.58	5.80	15.27	32075	4.16	6706	25369
45	0.75	4.98	13.11	35398	4.16	7954	27445
55	0.92	3.96	10.43	34422	4.16	9201	25221
65	1.08	3.54	9.33	36386	4.16	10449	25937
75	1.25	3.21	8.46	38083	4.16	11696	26386
85	1.42	2.95	7.76	39586	4.16	12944	26642
95	1.58	2.73	7.18	40939	4.16	14192	26748
105	1.75	2.54	6.69	42161	4.16	15439	26722
115	1.92	2.67	7.05	48613	4.16	16687	31926
125	2.08	2.52	6.65	49856	4.16	17935	31921
135	2.25	2.39	6.30	51027	4.16	19182	31845
145	2.42	2.27	5.99	52125	4.16	20430	31695
155	2.58	2.17	5.71	53147	4.16	21677	31470
165	2.75	2.08	5.47	54124	4.16	22925	31199
175	2.92	1.99	5.24	55053	4.16	24173	30880
185	3.08	1.91	5.04	55947	4.16	25420	30527
195	3.25	1.84	4.85	56782	4.16	26668	30115
205	3.42	1.78	4.68	57620	4.16	27916	29705
215	3.58	1.72	4.53	58392	4.16	29163	29229
225	3.75	1.66	4.38	59151	4.16	30411	28741
235	3.92	1.61	4.24	59849	4.16	31658	28190

245	4.08	1.56	4.12	60575	4.16	32906	27669
255	4.25	1.52	4.00	61233	4.16	34154	27080
265	4.42	1.48	3.89	61875	4.16	35401	26474
275	4.58	1.44	3.79	62515	4.16	36649	25866
285	4.75	1.40	3.69	63166	4.16	37897	25269
295	4.92	1.37	3.60	63750	4.16	39144	24606
305	5.08	1.33	3.51	64320	4.16	40392	23928
315	5.25	1.30	3.43	64885	4.16	41639	23246
325	5.42	1.27	3.36	65455	4.16	42887	22568
335	5.58	1.25	3.28	65986	4.16	44135	21852
345	5.75	1.22	3.21	66538	4.16	45382	21156
355	5.92	1.19	3.14	66783	4.16	46630	20153
365	6.08	1.17	3.08	67510	4.16	47877	19633
375	6.25	1.15	3.03	68174	4.16	49125	19049
385	6.42	1.13	2.98	68775	4.16	50373	18402
395	6.58	1.10	2.90	68688	4.16	51620	17067
405	6.75	1.08	2.85	69146	4.16	52868	16278
415	6.92	1.07	2.81	69935	4.16	54116	15820
425	7.08	1.05	2.76	70344	4.16	55363	14981
435	7.25	1.03	2.71	70761	4.16	56611	14150
445	7.42	1.01	2.67	71192	4.16	57858	13333
455	7.58	1.00	2.62	71641	4.16	59106	12535
465	7.75	0.98	2.58	72039	4.16	60354	11686
475	7.92	0.97	2.56	72838	4.16	61601	11236
485	8.08	0.95	2.50	72838	4.16	62849	9989
495	8.25	0.94	2.48	73557	4.16	64097	9460
505	8.42	0.92	2.42	73446	4.16	65344	8102
515	8.58	0.91	2.40	74086	4.16	66592	7495
525	8.75	0.90	2.37	74695	4.16	67839	6856
535	8.92	0.88	2.32	74426	4.16	69087	5339
545	9.08	0.87	2.29	74956	4.16	70335	4621
555	9.25	0.86	2.27	75454	4.16	71582	3872
565	9.42	0.85	2.24	75920	4.16	72830	3090
575	9.58	0.84	2.21	76355	4.16	74078	2277
585	9.75	0.83	2.19	76758	4.16	75325	1433

Storage Required: 31,926 cf
Storage Required: 0.733 Ac.-Ft.
w/ release rate of: 4.16 cfs
Storage / Ac. Development: 0.185 Ac.Ft. per Ac.
Storage / Lot: 31925.69 cf per lot



TABLE 3-2: Intercept Coefficients	
Land Cover/ Flow Regime	"k"
Forest with heavy ground litter; hay meadow (overland flow)	0.076
Trash fallow or minimum tillage cultivation; contour or strip cropped; woodland (overland flow)	0.152
Short grass pasture (overland flow)	0.213
Cultivated straight row (overland flow)	0.274
Nearly bare and untilled (overland flow); alluvial fans in western mountain regions	0.305
Grassed waterway (shallow concentrated flow)	0.457
Unpaved (shallow concentrated flow)	0.491
Paved area (shallow concentrated flow); small upland gullies	0.619

Weighted "c" value				
Type of Drainage Area	"c" value:	Square Footage	Acreage	partial "c"
Residential				
Single Family (Lots less than 1/4 acre)	0.35		0.000	0.000
Single Family (Lots 1/4 to 1/2 acre)	0.3	0.00	0.000	0.000
Single Family (Lots greater than 1/2 acre)	0.25	0	0.000	0.000
Multi-Family (Less than 20 DU / AC)	0.5	0	0.000	0.000
Multi-Family (Greater than 20 DU / AC)	0.55	0	0.000	0.000
Business Districts:	0.75	110,444	2.535	1.902
Industrial				
Light areas	0.75	0	0.000	0.000
Heavy areas	0.75	0	0.000	0.000
Railroad yard areas	0.2	0	0.000	0.000
Roof/Building areas	0.75	0	0.000	0.000
Parks, cemeteries	0.1	0	0.000	0.000
Unimproved Areas				
Bare Surface	0.3	39,870	0.915	0.275
Grassland	0.25	0	0.000	0.000
Cultivated	0.2	0	0.000	0.000
Woodlands	0.15	0	0.000	0.000
Streets				
Asphalt	0.9	22195	0.510	0.459
Concrete	0.9	0	0.000	0.000
Drives and walks	0.9	0	0.000	0.000
Total:		172,509	3.960	2.635
Weighted "c":			0.665	

$$C_W = (C_1A_1 + C_2A_2 + C_3A_3 + \dots + C_nA_n) / A_{\text{total}}$$

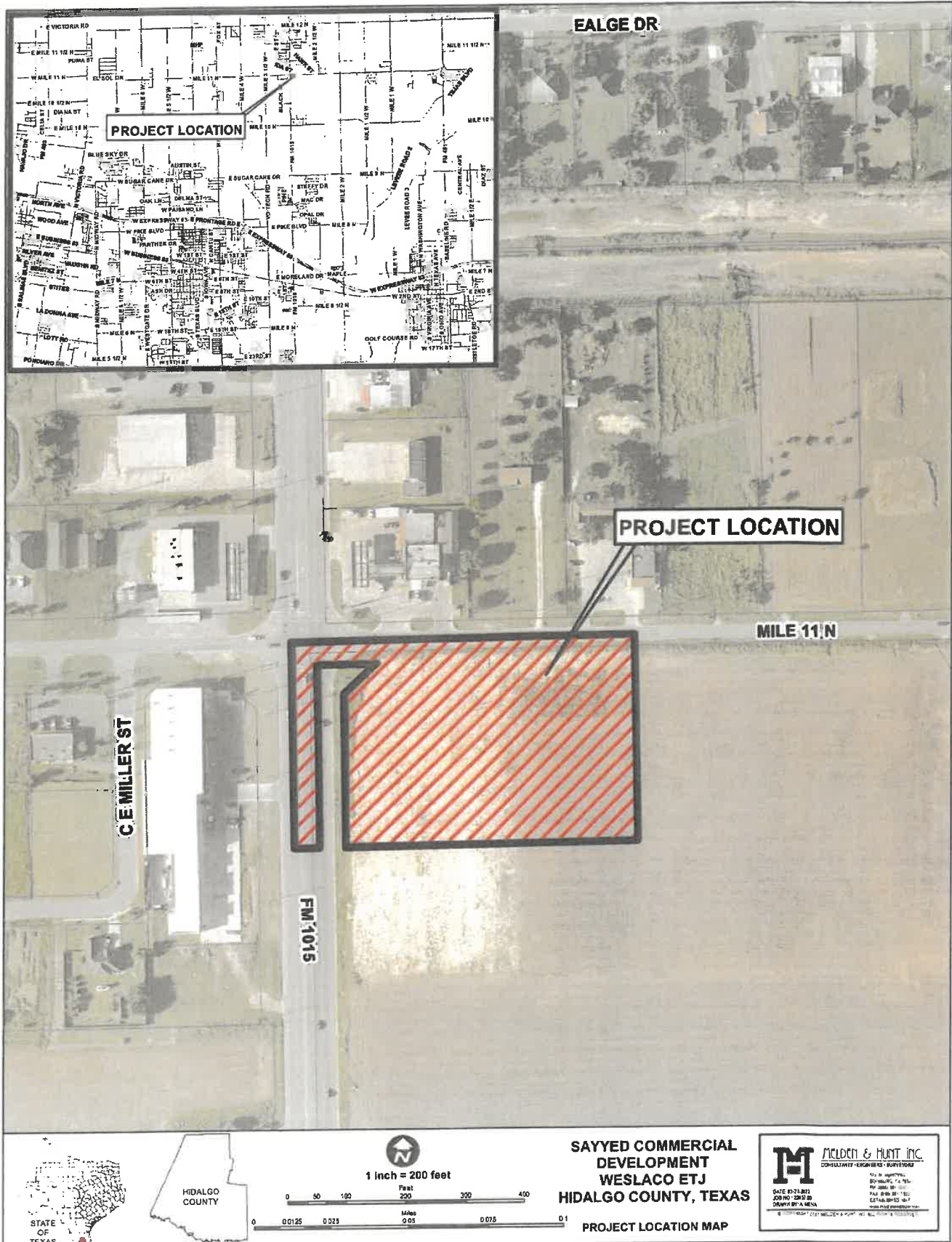
C_W = Weighted Runoff Coefficient (Composite Coefficient)

C_n = Runoff Coefficient n-th term

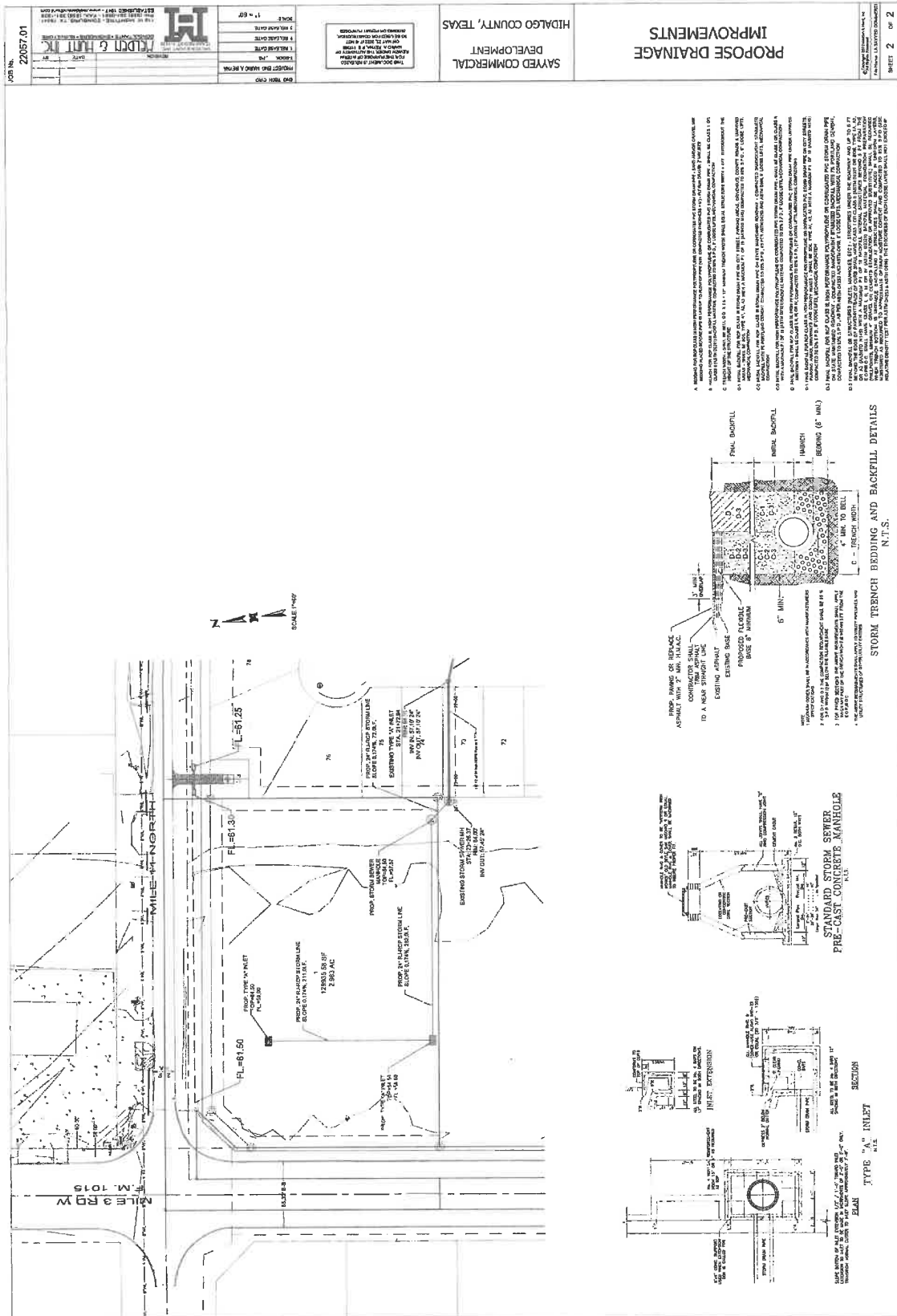
A_n = Area of n-th term

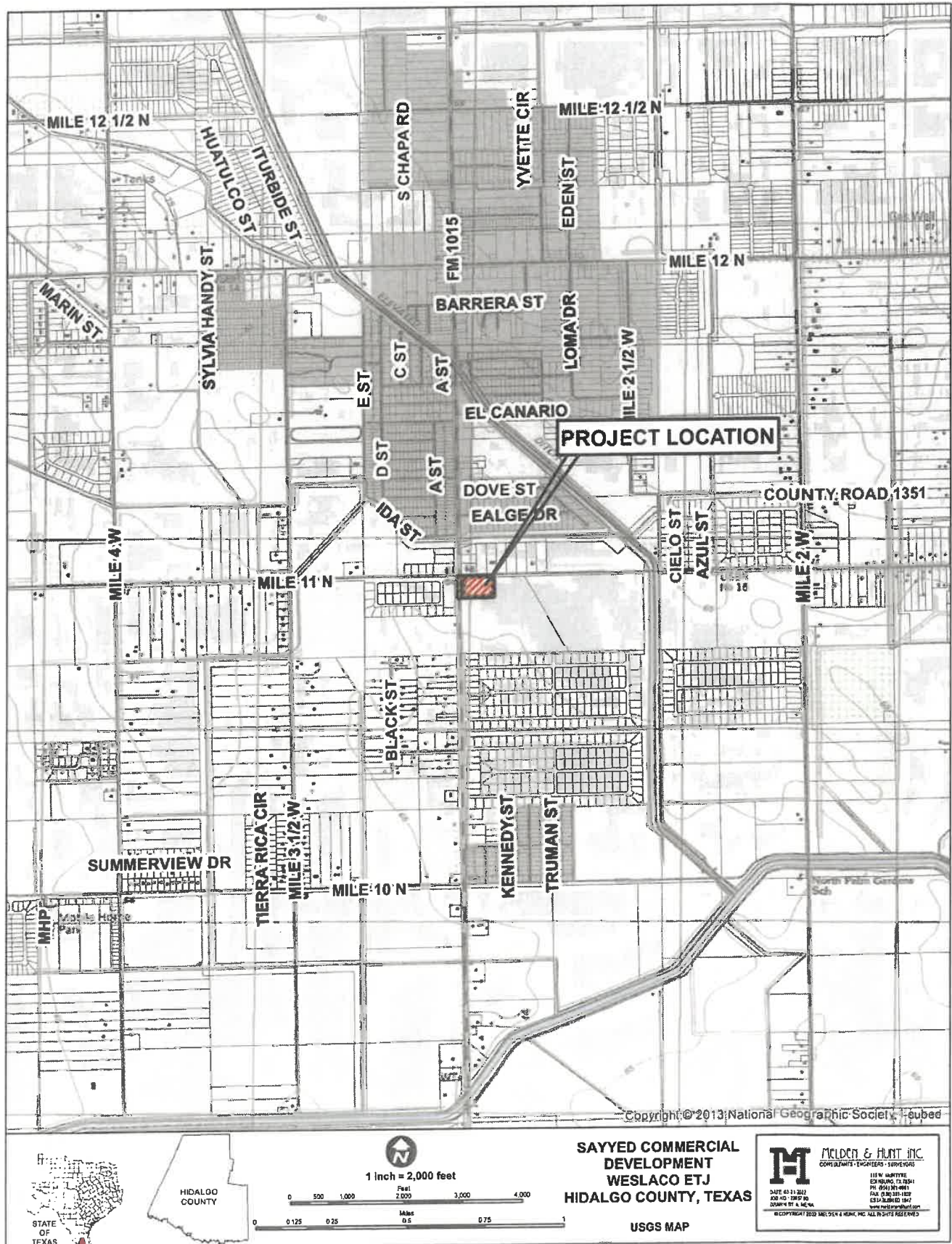
A_{total} = Total Area (acres)

A_{total} = Total Area (acres)

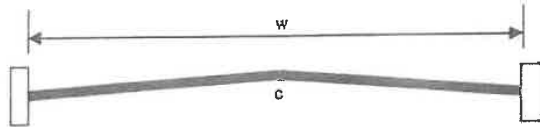
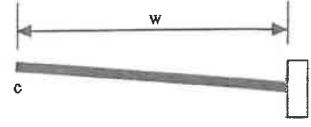


1. LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 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2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227





Street Velocities and Capacities Flowing Curb Full
Manning's n = 0.018

										
	Local Street		Local Street		Collector Street		Secondary Street (half-section)		Primary Street (half-section)	
	w = 30'		w = 40'		w = 44'		w = 24'			
Slope %	c = 4" wp = 31.16 A = 12.45 r = 0.40		c = 4" wp = 41.17 A = 16.67 r = 0.405		c = 5" wp = 45.17 A = 16.50 r = 0.365		c = 6" wp = 24.66 A = 7.92 r = 0.32		c = 9" wp = 28.52 A = 8.12 r = 0.28	
	V ft/sec	Q cfs	V ft/sec	Q cfs	V ft/sec	Q cfs	V ft/sec	Q cfs	V ft/sec	Q cfs
0.10	1.42	17.68	1.43	23.81	1.33	22.01	1.22	9.66	1.12	9.09
0.15	1.74	21.66	1.74	29.17	1.63	26.96	1.50	11.88	1.37	11.12
0.20	2.00	24.90	2.02	33.68	1.89	31.13	1.73	13.70	1.58	12.83
0.25	2.24	27.89	2.26	37.66	2.11	34.80	1.93	15.29	1.77	14.37
0.30	2.46	30.63	2.47	41.25	2.31	38.13	2.12	16.79	1.94	15.75
0.35	2.65	32.99	2.67	44.56	2.50	41.18	2.29	18.14	2.09	16.97
0.40	2.84	35.36	2.86	47.64	2.67	44.02	2.44	19.32	2.24	18.19
0.45	3.01	37.47	3.03	50.53	2.83	46.69	2.59	20.51	2.37	19.24
0.50	3.17	39.47	3.19	53.26	2.98	49.22	2.73	21.62	2.50	20.30
0.55	3.32	41.33	3.35	55.86	3.13	51.62	2.87	22.73	2.62	21.27
0.60	3.47	43.20	3.50	58.34	3.27	53.92	2.99	23.68	2.74	22.25
0.65	3.61	44.94	3.64	60.72	3.40	56.12	3.12	24.71	2.86	23.14
0.70	3.75	46.62	3.78	63.02	3.53	58.24	3.23	25.58	2.96	24.04
0.75	3.88	48.31	3.91	66.23	3.65	60.28	3.35	26.53	3.06	24.85
0.80	4.01	49.92	4.04	67.37	3.77	62.26	3.46	27.40	3.16	25.66
0.85	4.13	51.42	4.17	69.44	3.89	64.17	3.56	28.20	3.26	26.47
0.90	4.25	52.91	4.29	71.45	4.00	66.03	3.67	29.07	3.35	27.20
0.95	4.37	54.41	4.40	73.41	4.11	67.84	3.77	29.86	3.44	27.93
1.00	4.48	55.78	4.52	75.31	4.22	69.61	3.86	30.57	3.53	28.66
1.50	5.49	68.35	5.53	92.25	5.17	85.25	4.73	37.46	4.33	35.16
2.00	6.34	78.93	6.39	106.52	5.97	98.44	5.46	43.24	5.00	40.60
2.50	7.09	88.27	7.14	119.09	6.67	110.06	6.11	48.39	5.59	45.39
3.00	7.76	96.61	7.83	130.46	7.31	120.56	6.69	52.98	6.12	49.59
3.50	8.39	104.46	8.45	140.91	7.89	130.22	7.23	57.26	6.61	53.67
4.00	8.97	111.68	9.04	150.64	8.44	139.21	7.73	61.22	7.07	57.41
4.50	9.51	118.40	9.58	159.78	8.95	147.66	8.20	64.94	7.50	60.90
5.00	10.02	124.75	10.10	168.42	9.43	155.65	8.64	68.43	7.90	64.15
5.50	10.51	130.85	10.60	176.64	9.89	163.24	9.06	71.76	8.29	67.31
6.00	10.98	136.70	11.07	184.49	10.33	170.50	9.46	74.92	8.65	70.24
6.50	11.43	143.30	11.52	192.03	10.76	177.46	9.85	78.01	9.01	73.16
7.00	11.86	147.66	11.95	199.28	11.16	184.16	10.22	80.94	9.35	75.92
7.50	12.28	152.89	12.37	206.27	11.55	190.63	10.58	83.79	9.68	78.60
8.00	12.68	157.85	12.78	213.04	11.93	196.88	10.93	86.57	9.99	81.12
8.50	13.07	162.72	13.17	219.59	12.30	202.94	11.26	89.18	10.30	83.64
9.00	13.45	167.45	13.55	225.96	12.66	208.82	11.59	91.79	10.60	86.07
9.50	13.82	172.06	13.93	232.15	13.00	214.54	11.91	94.33	10.89	88.43
10.00	14.18	176.54	14.29	238.18	13.34	220.12	12.22	96.78	11.17	90.70

Appendix 1.0 **HIDALGO COUNTY RAINFALL INTENSITY TABLES**

based on Weather Bureau (NWS) Technical Paper No. 40 "Rainfall Frequency Atlas of the United States"

$$\text{formula } I = b/(t_c + d)^e$$

TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.	TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
1	10.404	12.626	14.283	16.353	17.386	17.952	36	3.095	3.866	4.486	5.189	5.701	6.098
2	9.653	11.721	13.281	15.215	16.210	16.793	37	3.040	3.799	4.410	5.103	5.608	6.001
3	9.012	10.950	12.426	14.244	15.204	15.797	38	2.986	3.735	4.337	5.019	5.519	5.908
4	8.458	10.286	11.687	13.405	14.333	14.929	39	2.935	3.673	4.267	4.939	5.433	5.817
5	7.974	9.706	11.042	12.671	13.570	14.165	40	2.886	3.614	4.199	4.861	5.350	5.730
6	7.546	9.194	10.472	12.023	12.895	13.487	41	2.838	3.557	4.134	4.786	5.270	5.646
7	7.167	8.740	9.966	11.447	12.294	12.881	42	2.793	3.501	4.071	4.714	5.193	5.565
8	6.827	8.334	9.512	10.930	11.755	12.336	43	2.748	3.448	4.010	4.644	5.118	5.487
9	6.520	7.968	9.103	10.464	11.268	11.841	44	2.706	3.396	3.951	4.577	5.046	5.411
10	6.243	7.636	8.732	10.042	10.825	11.391	45	2.665	3.346	3.895	4.511	4.976	5.337
11	5.990	7.334	8.394	9.656	10.421	10.979	46	2.625	3.298	3.840	4.448	4.908	5.266
12	5.758	7.058	8.084	9.303	10.051	10.601	47	2.586	3.251	3.786	4.387	4.843	5.197
13	5.546	6.804	7.799	8.978	9.710	10.252	48	2.549	3.206	3.735	4.328	4.779	5.130
14	5.350	6.569	7.536	8.678	9.395	9.928	49	2.513	3.162	3.685	4.270	4.717	5.065
15	5.169	6.353	7.293	8.400	9.102	9.628	50	2.477	3.120	3.636	4.215	4.658	5.002
16	5.000	6.151	7.067	8.142	8.831	9.348	51	2.443	3.078	3.589	4.161	4.600	4.941
17	4.843	5.964	6.856	7.902	8.577	9.087	52	2.410	3.038	3.543	4.108	4.543	4.881
18	4.697	5.789	6.659	7.677	8.340	8.842	53	2.378	2.999	3.499	4.057	4.488	4.824
19	4.560	5.625	6.475	7.466	8.117	8.612	54	2.347	2.962	3.456	4.007	4.435	4.767
20	4.432	5.472	6.302	7.268	7.908	8.396	55	2.317	2.925	3.414	3.959	4.383	4.713
21	4.311	5.327	6.139	7.082	7.711	8.192	56	2.288	2.889	3.373	3.912	4.333	4.659
22	4.198	5.191	5.985	6.906	7.525	8.000	57	2.259	2.854	3.333	3.867	4.284	4.608
23	4.090	5.062	5.840	6.740	7.349	7.817	58	2.231	2.821	3.295	3.822	4.236	4.557
24	3.989	4.941	5.703	6.583	7.183	7.644	59	2.204	2.788	3.257	3.779	4.189	4.508
25	3.893	4.825	5.572	6.434	7.025	7.480	60	2.178	2.756	3.220	3.737	4.144	4.460
26	3.802	4.716	5.449	6.293	6.875	7.324	65	2.056	2.607	3.050	3.541	3.933	4.237
27	3.715	4.612	5.331	6.158	6.732	7.176	70	1.948	2.475	2.899	3.368	3.745	4.038
28	3.633	4.513	5.220	6.030	6.596	7.034	75	1.852	2.358	2.765	3.212	3.577	3.860
29	3.554	4.419	5.113	5.908	6.467	6.899	80	1.765	2.252	2.643	3.073	3.426	3.699
30	3.480	4.329	5.011	5.792	6.343	6.769	85	1.688	2.156	2.533	2.946	3.289	3.554
31	3.408	4.244	4.914	5.680	6.224	6.646	90	1.617	2.069	2.434	2.831	3.164	3.421
32	3.340	4.161	4.821	5.574	6.111	6.527	95	1.552	1.990	2.342	2.726	3.050	3.299
33	3.275	4.083	4.732	5.472	6.002	6.413	100	1.493	1.917	2.258	2.629	2.944	3.187
34	3.212	4.008	4.646	5.374	5.897	6.304	105	1.439	1.850	2.181	2.540	2.847	3.083
35	3.152	3.935	4.564	5.280	5.797	6.199	110	1.389	1.788	2.109	2.457	2.757	2.988

where:	2yr	5yr	10yr	25yr	50yr	100yr
e=	0.831	0.795	0.778	0.771	0.749	0.740
b=	74	80	87	98	99	103
d=	9.6	9.2	9.2	9.2	9.2	9.6

Prepared By Melden & Hunt, Inc.

Appendix 1.0 (cont.)
HIDALGO COUNTY RAINFALL INTENSITY TABLES (cont.)

based on Weather Bureau (NWS) Technical Paper No. 40 "Rainfall Frequency Atlas of the United States"

$$\text{formula } I = b/(t_c + d)^e$$

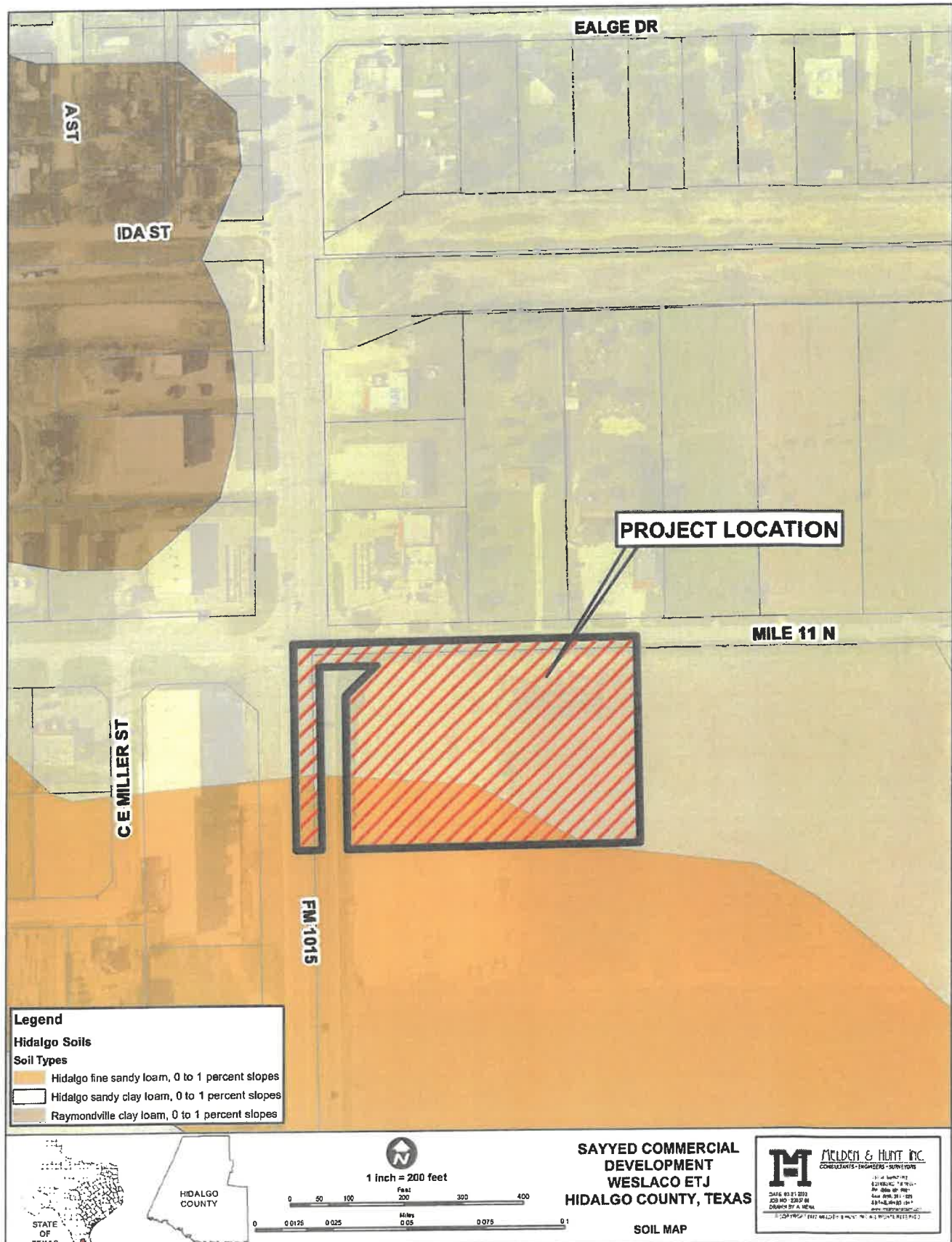
TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
115	1.342	1.731	2.043	2.380	2.674	2.898
120	1.299	1.677	1.981	2.309	2.596	2.815
125	1.259	1.628	1.924	2.242	2.523	2.737
130	1.221	1.581	1.870	2.180	2.455	2.665
135	1.186	1.537	1.819	2.122	2.391	2.596
140	1.153	1.496	1.771	2.067	2.331	2.532
145	1.122	1.457	1.727	2.015	2.274	2.471
150	1.093	1.421	1.684	1.966	2.220	2.413
155	1.065	1.386	1.644	1.919	2.169	2.359
160	1.039	1.354	1.606	1.876	2.121	2.307
165	1.014	1.323	1.570	1.834	2.075	2.258
170	0.991	1.293	1.536	1.794	2.032	2.211
175	0.968	1.265	1.504	1.757	1.990	2.167
180	0.947	1.239	1.473	1.721	1.951	2.124
185	0.927	1.213	1.443	1.686	1.913	2.084
190	0.907	1.189	1.415	1.654	1.877	2.045
195	0.889	1.166	1.388	1.622	1.842	2.008
200	0.871	1.144	1.362	1.592	1.809	1.972
205	0.854	1.122	1.337	1.564	1.778	1.938
210	0.838	1.102	1.313	1.536	1.747	1.906
215	0.823	1.082	1.290	1.510	1.718	1.874
220	0.808	1.063	1.268	1.484	1.690	1.844
225	0.793	1.045	1.247	1.460	1.663	1.815
230	0.780	1.028	1.227	1.436	1.637	1.787
235	0.766	1.011	1.207	1.413	1.611	1.759
240	0.754	0.995	1.189	1.392	1.587	1.733
245	0.741	0.979	1.170	1.370	1.564	1.708
250	0.729	0.964	1.153	1.350	1.541	1.684
255	0.718	0.950	1.136	1.330	1.519	1.660
260	0.707	0.936	1.119	1.311	1.498	1.637
265	0.696	0.922	1.103	1.293	1.477	1.615
270	0.686	0.909	1.088	1.275	1.458	1.594
275	0.676	0.896	1.073	1.257	1.438	1.573
280	0.666	0.884	1.059	1.241	1.420	1.553
285	0.657	0.872	1.045	1.224	1.402	1.533

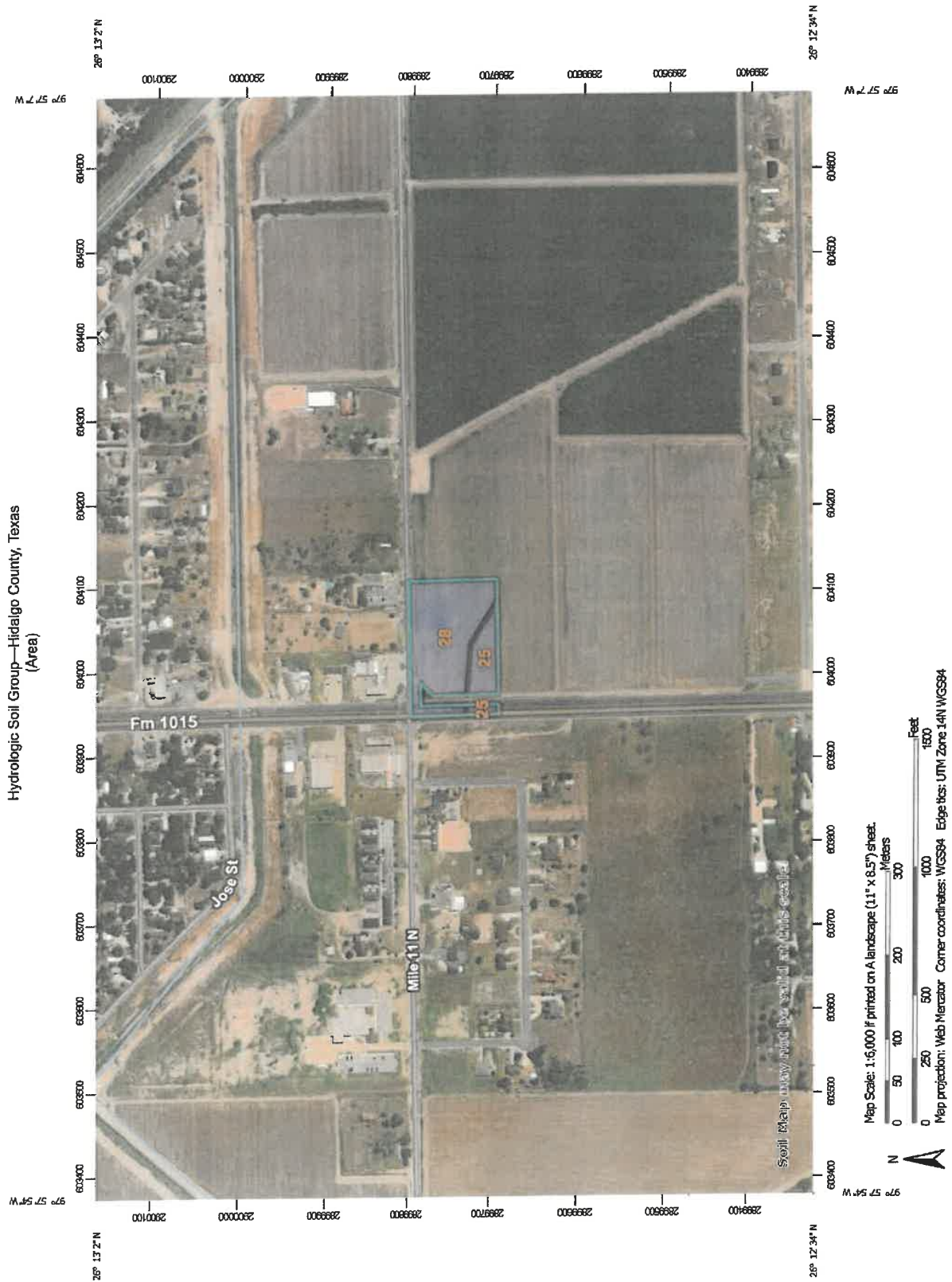
TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
290	0.647	0.860	1.031	1.209	1.384	1.514
295	0.639	0.849	1.018	1.193	1.367	1.496
300	0.630	0.838	1.005	1.178	1.350	1.478
305	0.622	0.828	0.992	1.164	1.334	1.460
310	0.614	0.817	0.980	1.150	1.319	1.444
315	0.606	0.807	0.969	1.136	1.303	1.427
320	0.598	0.797	0.957	1.123	1.288	1.411
325	0.591	0.788	0.946	1.110	1.274	1.395
330	0.583	0.779	0.935	1.097	1.260	1.380
335	0.576	0.770	0.924	1.085	1.246	1.365
340	0.570	0.761	0.914	1.073	1.233	1.351
345	0.563	0.752	0.904	1.061	1.220	1.337
350	0.556	0.744	0.894	1.050	1.207	1.323
355	0.550	0.736	0.885	1.039	1.195	1.309
360	0.544	0.728	0.875	1.028	1.182	1.296
365	0.538	0.720	0.866	1.017	1.171	1.284
370	0.532	0.713	0.857	1.007	1.159	1.271
375	0.526	0.705	0.849	0.997	1.148	1.259
380	0.521	0.698	0.840	0.987	1.137	1.247
385	0.515	0.691	0.832	0.977	1.126	1.235
390	0.510	0.684	0.824	0.968	1.115	1.224
395	0.504	0.677	0.816	0.958	1.105	1.212
400	0.499	0.671	0.808	0.949	1.095	1.201
405	0.494	0.664	0.800	0.940	1.085	1.191
410	0.489	0.658	0.793	0.932	1.075	1.180
415	0.485	0.652	0.786	0.923	1.066	1.170
420	0.480	0.646	0.779	0.915	1.056	1.160
425	0.475	0.640	0.772	0.907	1.047	1.150
430	0.471	0.634	0.765	0.899	1.038	1.140
435	0.466	0.628	0.758	0.891	1.029	1.131
440	0.462	0.623	0.751	0.883	1.021	1.121
445	0.458	0.617	0.745	0.876	1.012	1.112
450	0.454	0.612	0.739	0.869	1.004	1.103
455	0.450	0.607	0.733	0.861	0.996	1.094
460	0.446	0.602	0.726	0.854	0.988	1.086

where:	2yr	5yr	10yr
e=	0.831	0.795	0.778
b=	74	80	87
d=	9.6	9.2	9.2

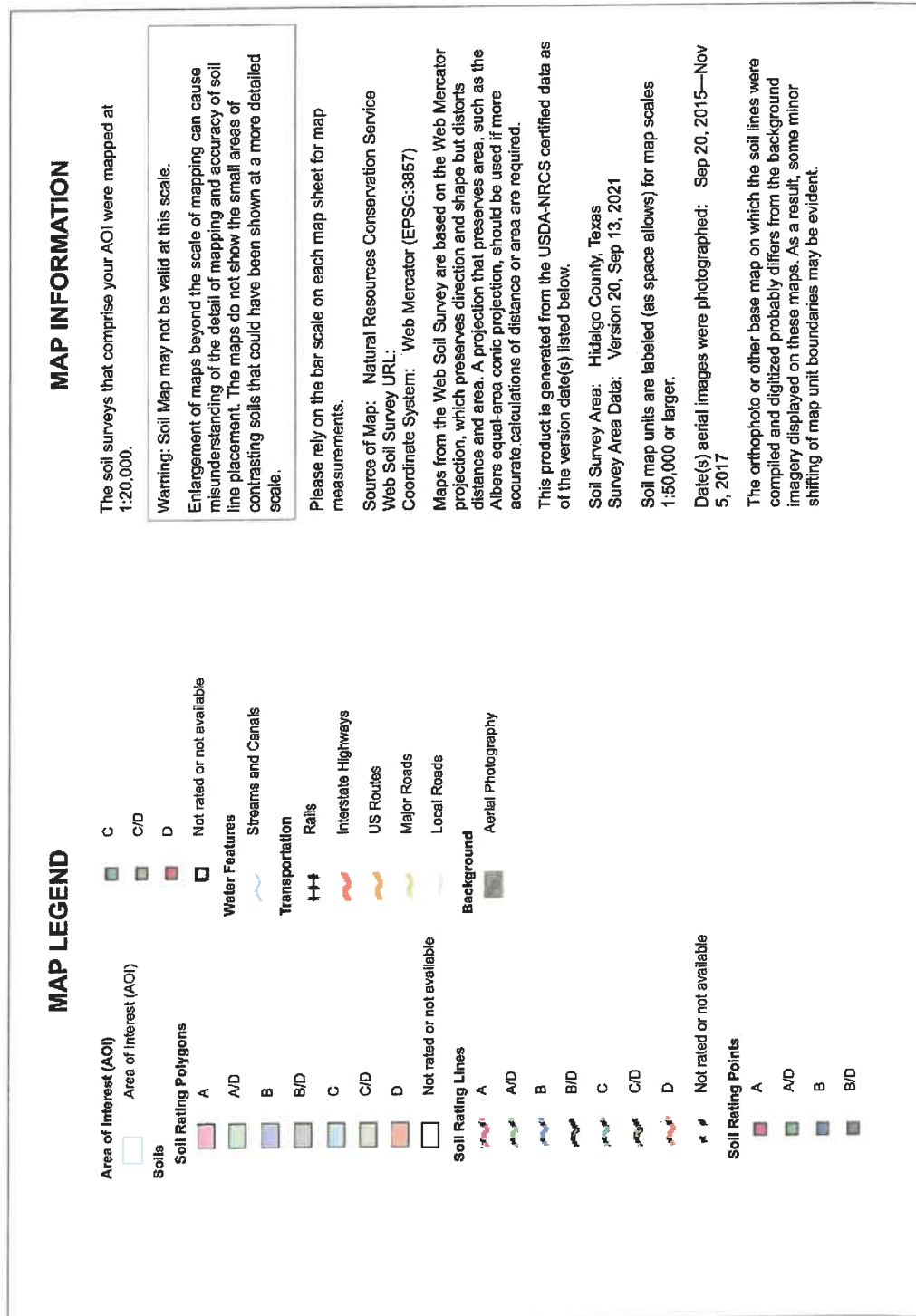
25yr	50yr	100yr
0.771	0.749	0.740
98	99	103
9.2	9.2	9.6

Prepared By Melden & Hunt, Inc.





Hydrologic Soil Group—Hidalgo County, Texas
(Area)



Hydrologic Soil Group—Hidalgo County, Texas

Area

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	B	0.9	21.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	B	3.1	78.5%
Totals for Area of Interest			4.0	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

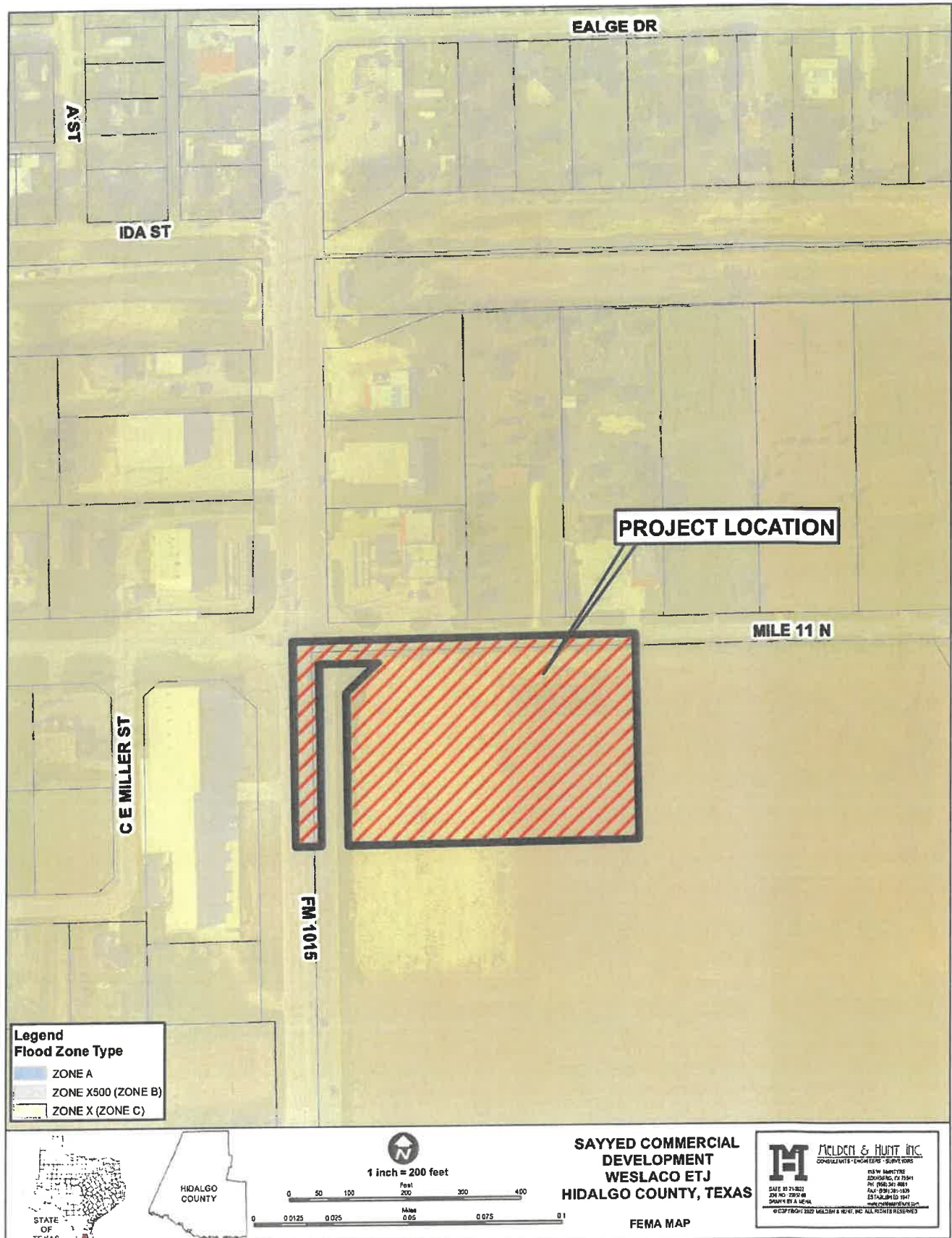
The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.



Page 1 of 3		Date: September 02, 2020		Case No.: 20-06-3073A		LOMR-F		
		Federal Emergency Management Agency Washington, D.C. 20472						
LETTER OF MAP REVISION BASED ON FILL DETERMINATION DOCUMENT (REMOVAL)								
COMMUNITY AND MAP PANEL INFORMATION				LEGAL PROPERTY DESCRIPTION				
COMMUNITY	HIDALGO COUNTY, TEXAS (Unincorporated Areas)			A portion of Farm Tracts 1065, 1066, 1071 and 1072, The West and Adams Tracts, as described in the Correction Assumption Warranty Deed recorded as Document No. 2775398, in the Office of the County Clerk, Hidalgo County, Texas The portion of property is more particularly described by the following metes and bounds:				
	COMMUNITY NO.: 480334							
AFFECTED MAP PANEL	NUMBER: 4803340450C							
	DATE: 6/6/2000							
FLOODING SOURCE: EAST LATERAL				APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 26.212463, -97.955059 SOURCE OF LAT & LONG: LOMA LOGIC DATUM: NAD 83				
DETERMINATION								
LOT	BLOCK/ SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NGVD 29)	LOWEST ADJACENT GRADE ELEVATION (NGVD 29)	LOWEST LOT ELEVATION (NGVD 29)
--	--	--	Mile 11 North	Portion of Property	X (shaded)	--	--	64.0 feet
Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).								
ADDITIONAL CONSIDERATIONS (Please refer to the appropriate section on Attachment 1 for the additional considerations listed below.)								
LEGAL PROPERTY DESCRIPTION FILL RECOMMENDATION PORTIONS REMAIN IN THE SFHA				REVISED BY LETTER OF MAP REVISION STATE LOCAL CONSIDERATIONS				
This document provides the Federal Emergency Management Agency's determination regarding a request for a Letter of Map Revision based on Fill for the property described above. Using the information submitted and the effective National Flood Insurance Program (NFIP) map, we have determined that the described portion(s) of the property(ies) is/are not located in the SFHA, an area inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood). This document revises the effective NFIP map to remove the subject property from the SFHA located on the effective NFIP map; therefore, the Federal mandatory flood insurance requirement does not apply. However, the lender has the option to continue the flood insurance requirement to protect its financial risk on the loan. A Preferred Risk Policy (PRP) is available for buildings located outside the SFHA. Information about the PRP and how one can apply is enclosed. This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Engineering Library, 3601 Eisenhower Ave Ste 500, Alexandria, VA 22304-6426.								
 Luis V. Rodriguez, P.E., Director Engineering and Modeling Division Federal Insurance and Mitigation Administration								

Page 2 of 3	Date: September 02, 2020	Case No.: 20-06-3073A	LOMR-F
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Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION BASED ON FILL DETERMINATION DOCUMENT (REMOVAL)

ATTACHMENT 1 (ADDITIONAL CONSIDERATIONS)

LEGAL PROPERTY DESCRIPTION (CONTINUED)

COMMENCING at a Nail set [N:16603554.540 E:1164323.367] at the Northeast corner of said Farm Tract 1072; THENCE, S 01° 11' 52" W along the East line of said Farm Tract 1072, at a distance of 30.00 feet pass the existing South right-of-way line of Mile 11 North, continuing a total distance of 60.00 feet; THENCE, S 88° 48' 08" W a distance of 286.64 feet to a No. 4 rebar set for the Northeast corner and POINT OF BEGINNING; THENCE, S 01° 11' 52" E, at a distance of 1,260.00 feet pass the South line of said Farm Tract 1072 and the North line of said Farm Tract 1071, continuing a total distance of 1,287.00 feet to a No. 4 rebar set on a North line of Vaquero Estates Phase IV, according to the plat thereof recorded in Instrument Number 2759584, Hidalgo County Map Records, for the Southeast corner of this tract; THENCE, S 88° 48' 08" W along the North line of said Vaquero Estates Phase IV, at a distance of 38.35 feet pass a No. 4 rebar found on the existing West right-of-way line of Spur Street, continuing a total distance of 875.36 feet to a No. 4 rebar set for the Southernmost Southwest corner of this tract; THENCE, N 33° 29' 12" W at a distance of 31.94 feet pass the North line of said Tract 1071 and the South line of said Tract 1065, continuing a total distance of 64.95 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 41° 45' 49" W a distance of 153.24 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 56° 00' 26" W a distance of 70.04 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 67° 05' 09" W a distance of 158.36 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 85° 01' 04" W a distance of 241.98 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 73° 41' 06" W a distance of 239.09 feet to a No. 4 rebar set for an angle point of this tract; THENCE, S 74° 52' 26" W a distance of 64.82 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 85° 26' 29" W a distance of 96.73 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 69° 32' 35" W 118.79 feet to a No. 4 rebar set for an angle point of this tract; THENCE, S 88° 48' 08" W a distance of 58.25 feet to a No. 4 rebar set for an angle point of this tract; THENCE, S 72° 54' 28" W a distance of 84.78 feet to a No. 4 rebar set for an angle point of this tract; THENCE, S 72° 54' 28" W a distance of 91.81 feet to a No. 4 rebar set for angle point of this tract; THENCE, S 78° 26' 24" W a distance of 89.52 feet to a No. 4 rebar set for angle point of this tract; THENCE, N 58° 02' 50" W a distance of 182.19 feet to a No. 4 rebar set for an angle point of this tract; THENCE, N 88° 03' 36" W a distance of 30.28 feet to a No. 4 rebar set for an angle point of this tract; THENCE, S 62° 18' 57" W a distance of 35.80 feet to a No. 4 rebar set for the Northernmost Southwest corner of this tract; THENCE, N 01° 11' 52" W a distance of 761.19 feet to a No. 4 rebar set for the Southernmost Northwest corner of this tract; THENCE, N 43° 48' 08" E a distance of 42.75 feet to a No. 4 rebar set for the Northernmost Northwest corner of this tract; THENCE, N 88° 48' 08" E, at a distance of 909.77 pass the East line of said Farm Tract 1065 and the West line of Farm Tract 1072, continuing a total distance of 2,453.12 feet to the POINT OF BEGINNING

FILL RECOMMENDATION (This Additional Consideration applies to the preceding 1 Property.)

The minimum NFIP criteria for removal of the subject area based on fill have been met for this request and the community in which the property is located has certified that the area and any subsequent structure(s) built on the filled area are reasonably safe from flooding. FEMA's Technical Bulletin 10-01 provides guidance for the construction of buildings on land elevated above the base flood elevation through the placement of fill. A copy of Technical Bulletin 10-01 can be obtained by calling the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or from our web site at <http://www.fema.gov/mit/tb1001.pdf>. Although the minimum NFIP standards no longer apply to this area, some communities may have floodplain management regulations that are more restrictive and may continue to enforce some or all of their requirements in areas outside the Special Flood Hazard Area.

This attachment provides additional information regarding this request. If you have any questions about this attachment, please contact the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Engineering Library, 3601 Eisenhower Ave Ste 500, Alexandria, VA 22304-6426.



Luis V. Rodriguez, P.E., Director
Engineering and Modeling Division
Federal Insurance and Mitigation Administration

Page 3 of 3	Date: September 02, 2020	Case No.: 20-06-3073A	LOMR-F
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Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION BASED ON FILL DETERMINATION DOCUMENT (REMOVAL)

ATTACHMENT 1 (ADDITIONAL CONSIDERATIONS)

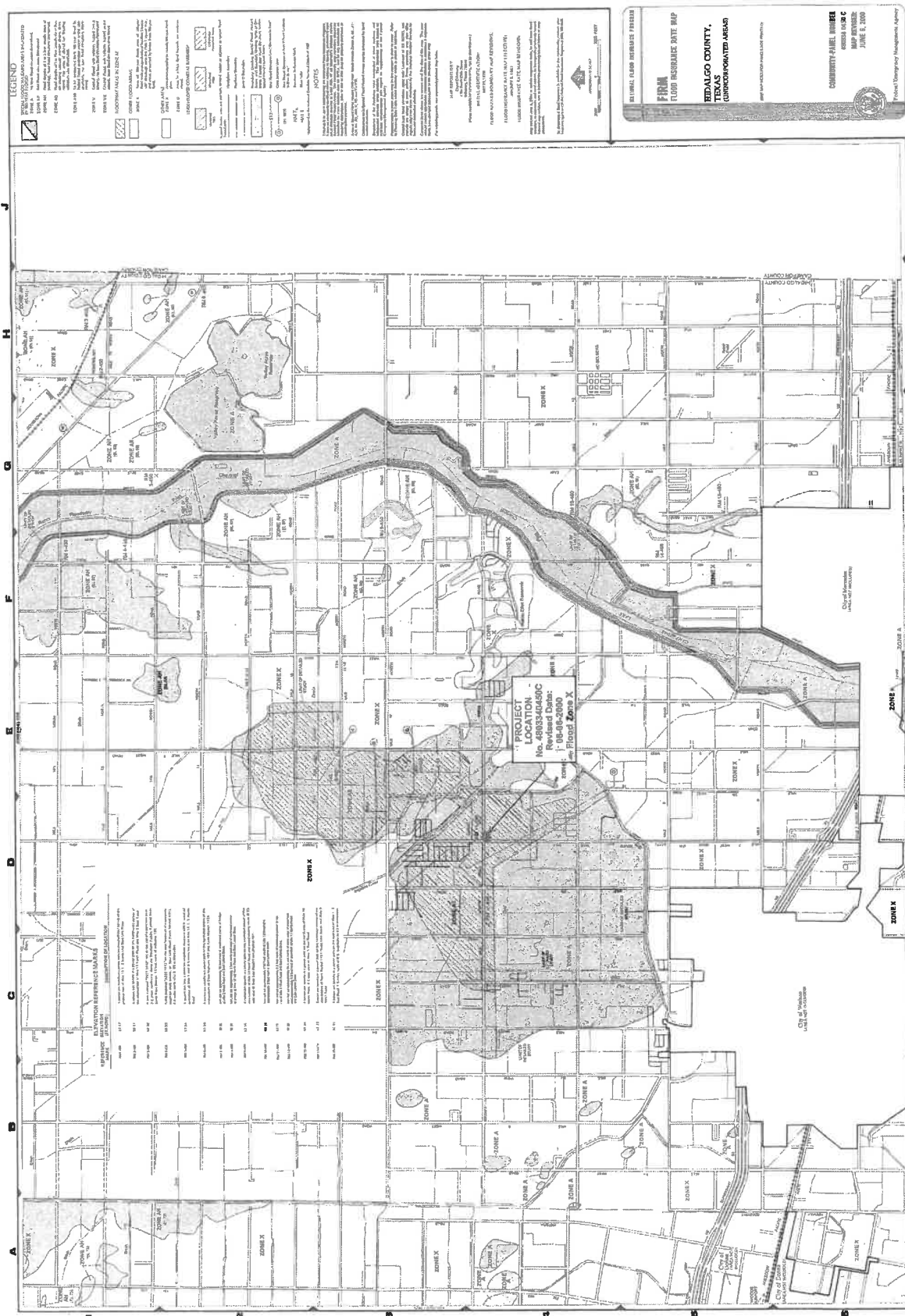
PORTIONS OF THE PROPERTY REMAIN IN THE SFHA (This Additional Consideration applies to the preceding 1 Property.)
Portions of this property, but not the subject of the Determination/Comment document, may remain in the Special Flood Hazard Area. Therefore, any future construction or substantial improvement on the property remains subject to Federal, State/Commonwealth, and local regulations for floodplain management.

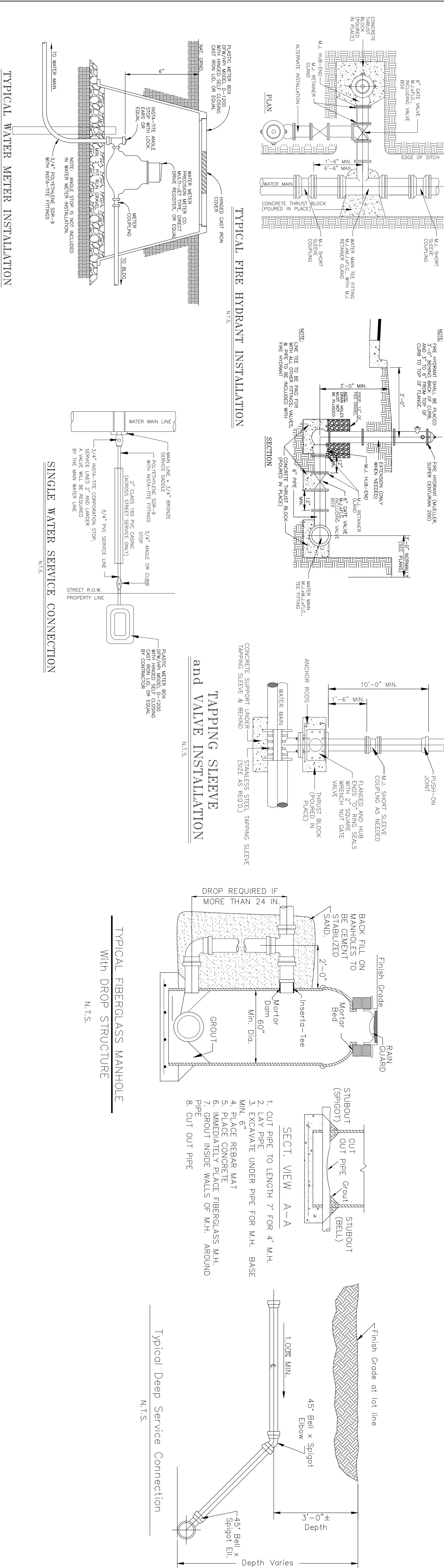
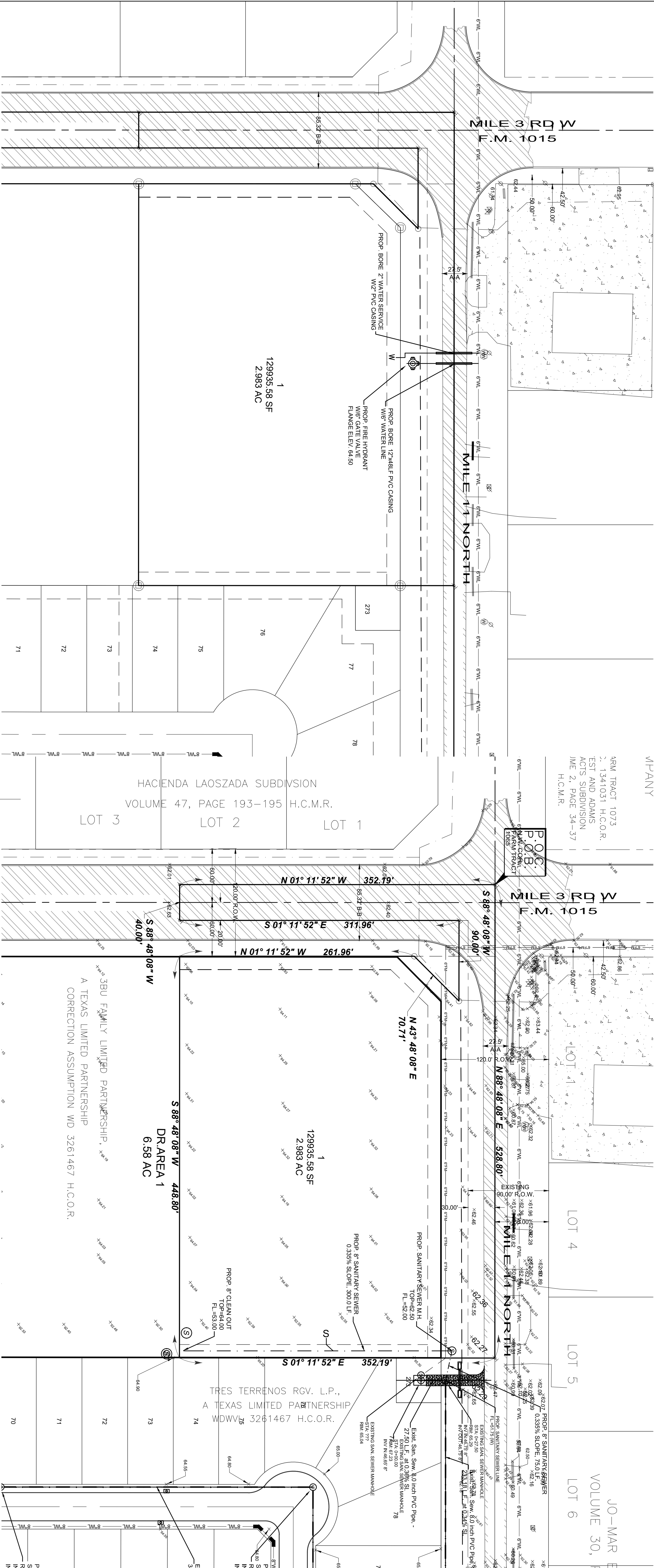
REVISED BY LETTER OF MAP REVISION (This Additional Consideration applies to the preceding 1 Property.)
The effective National Flood Insurance Program map for the subject property, has since been revised by a Letter of Map Revision (LOMR) dated 5/30/2002. The 5/30/2002 LOMR has been used in making the determination/comment for the subject property.

STATE AND LOCAL CONSIDERATIONS (This Additional Consideration applies to all properties in the LOMR-F DETERMINATION DOCUMENT (REMOVAL))
Please note that this document does not override or supersede any State or local procedural or substantive provisions which may apply to floodplain management requirements associated with amendments to State or local floodplain zoning ordinances, maps, or State or local procedures adopted under the National Flood Insurance Program.

This attachment provides additional information regarding this request. If you have any questions about this attachment, please contact the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Engineering Library, 3601 Eisenhower Ave Ste 500, Alexandria, VA 22304-6426.

Luis V. Rodriguez, P.E., Director
Engineering and Modeling Division
Federal Insurance and Mitigation Administration





JOB No.
22057.01

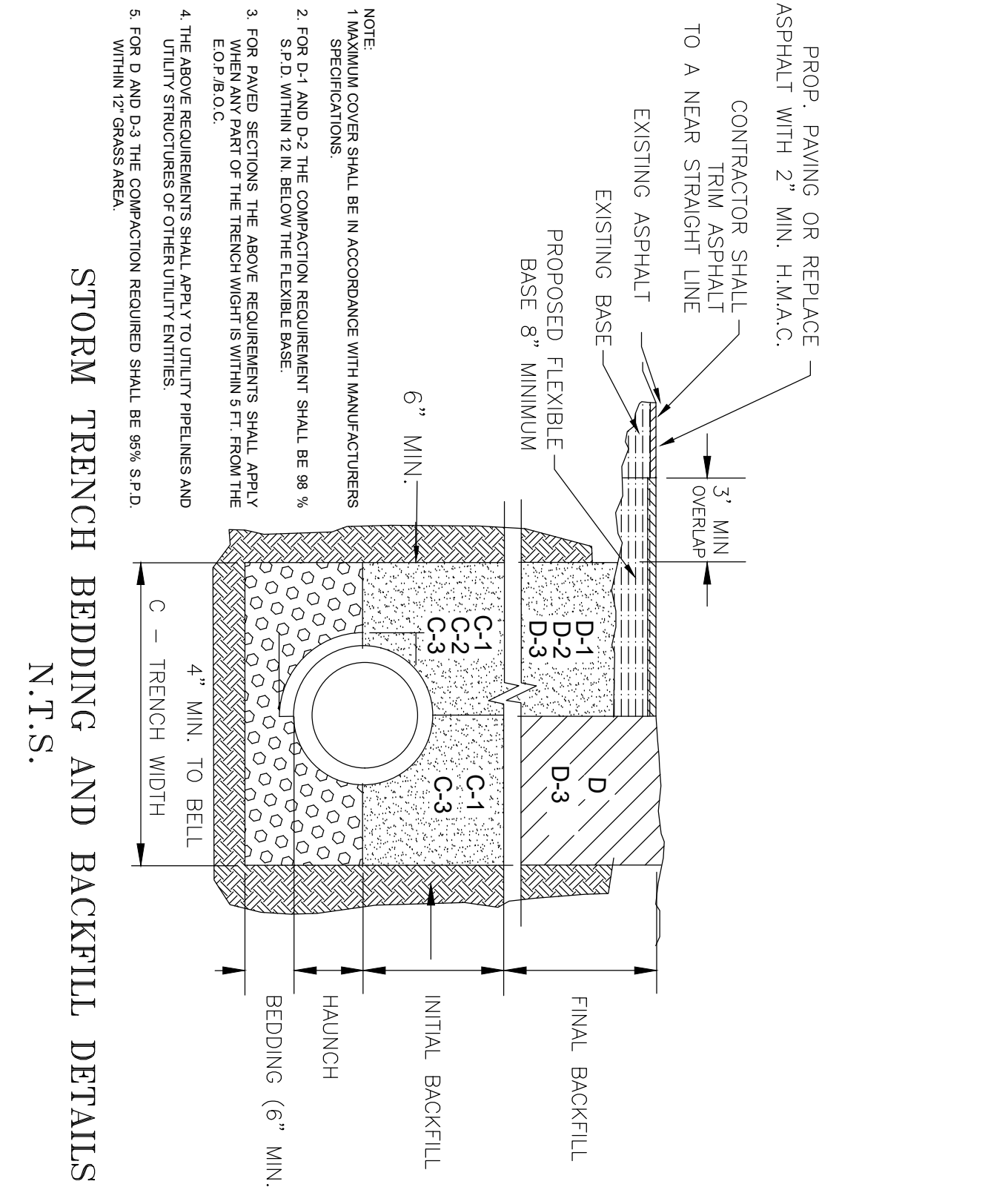
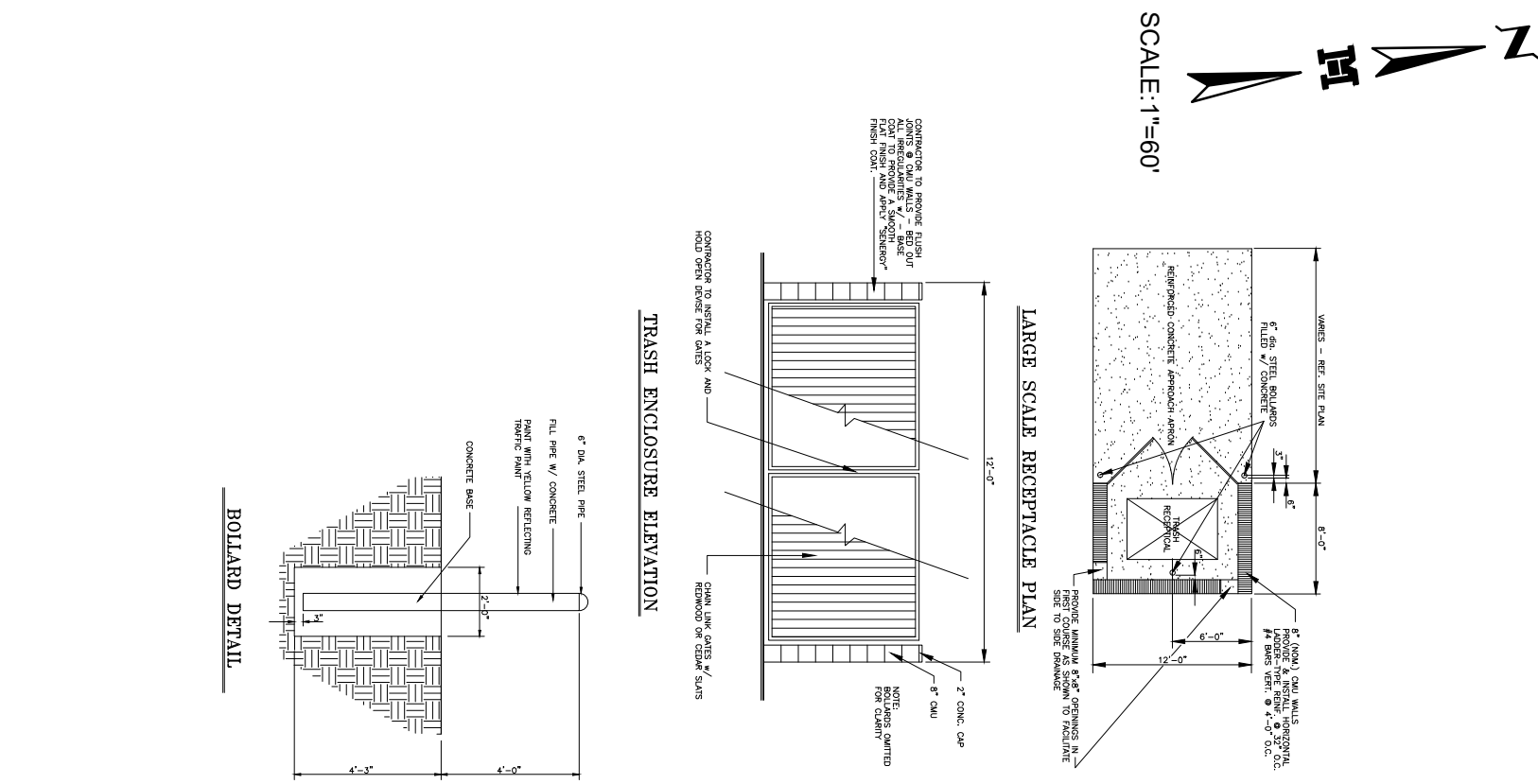
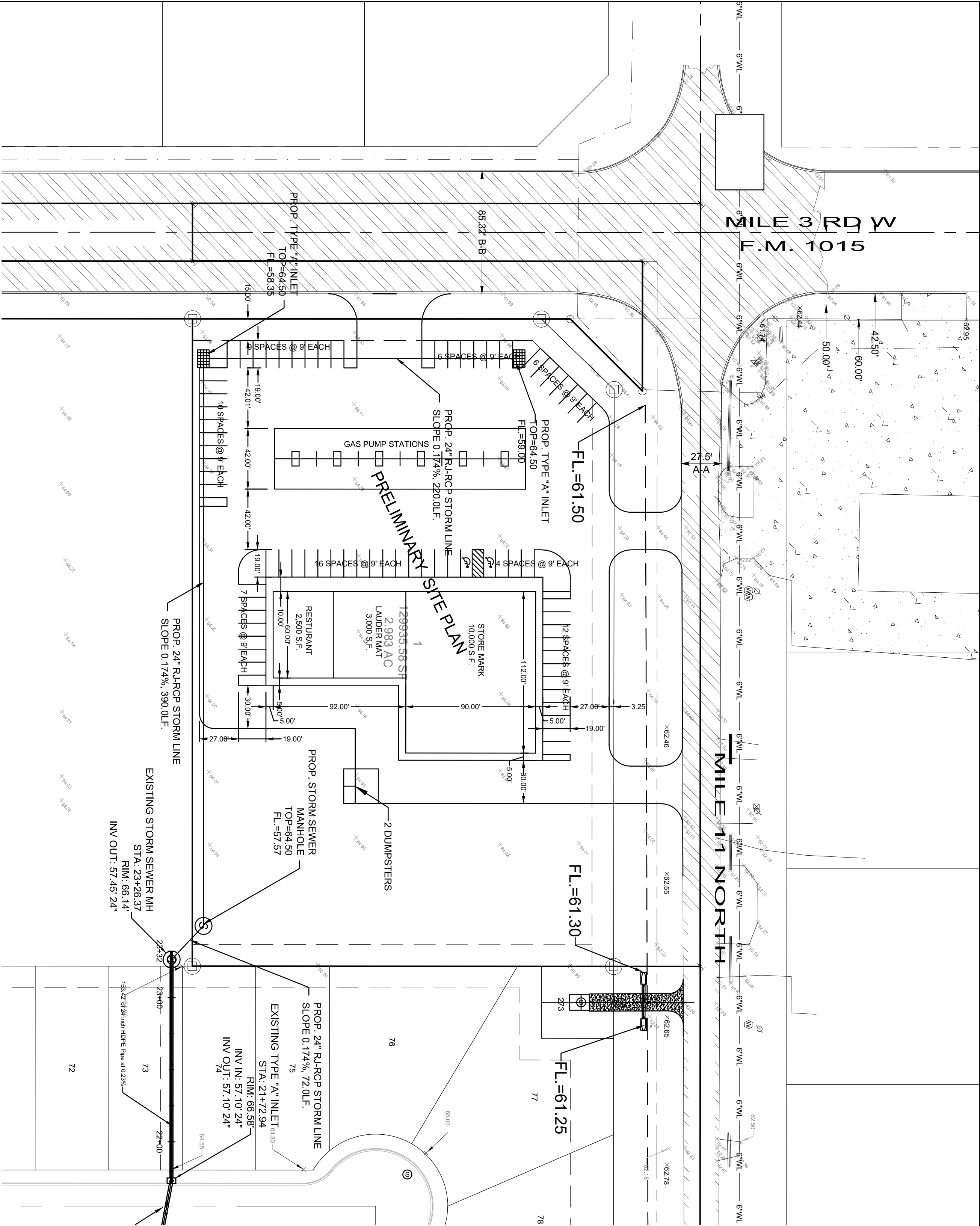
REVISION		DATE		BY	
MELDEN & HUNT, INC.		TEXAS REGIST. E-1495			
MELDEN & HUNT, INC.		CONSULTANTS • ENGINEERS • SURVEYORS			
115 W. McINTYRE - EDINBURG, TX. 78541		PH: (956) 381-0861 • FAX: (956) 381-1838		ESTABLISHED 1947 - www.meldenandhunt.com	

ENG. TECH: CIRIO
PROJECT ENG: MARIO A. REYNA
1-BOOK: , PG.
1. RELEASE DATE:
2. RELEASE DATE:
3. RELEASE DATE:
SCALE: 1" = 60'

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF MARIO A. REYNA, P.E. 117368 ON AUGUST 16, 2022 IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

SAYYED COMMERCIAL
DEVELOPMENT
HIDALGO COUNTY, TEXAS

PROPOSED WATER & SANITARY SEWER IMPROVEMENTS



- NOTE:**
1. MANHOLE COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 98% S.P.D. WITHIN 12\"/>
- NOTE:**
1. MANHOLE COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 98% S.P.D. WITHIN 12\"/>

ENG. TECH: CIRO
PROJECT ENG: MARIO A. REYNA
1-BOOK: , PG.
1. RELEASE DATE:
2. RELEASE DATE:
3. RELEASE DATE:
SCALE: 1" = 60'

REVISION
MELDEN & HUNT, INC.
TEXAS REGIST. E-1435
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX. 78841
PH: (361) 381-0861 • FAX: (361) 381-1838
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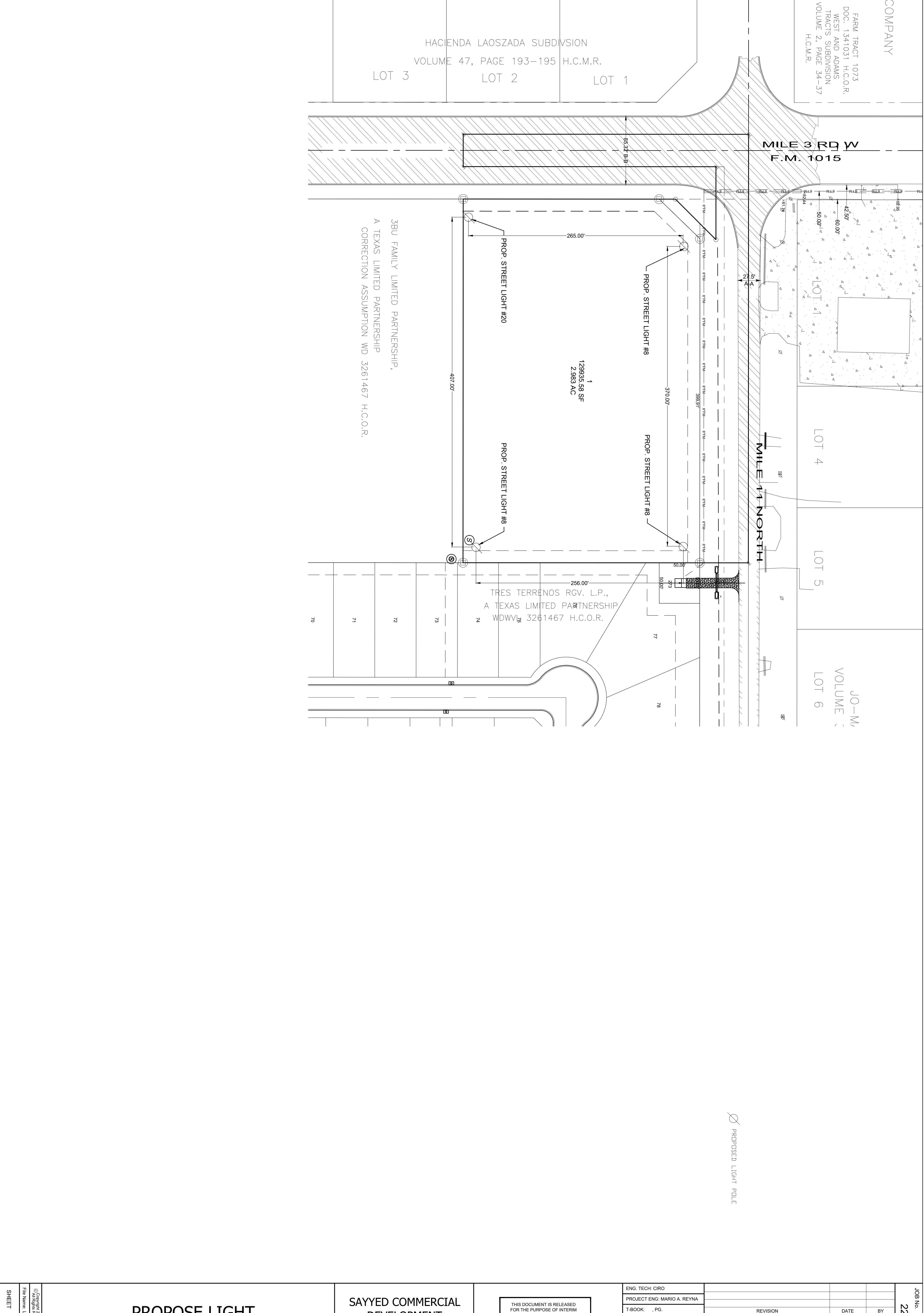
DATE
BY
JOB No. 22057.01

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF MARIO A. REYNA, P.E. 117368 ON AUGUST 16, 2022 IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

SAYYED COMMERCIAL DEVELOPMENT
HIDALGO COUNTY, TEXAS

PROPOSE DRAINAGE IMPROVEMENTS

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File Name: LA SAYYED COMMERCIAL.dwg
SHEET 2 OF 3



Ø PROPOSED LIGHT POLE

PROPOSE LIGHT IMPROVEMENTS	SAYYED COMMERCIAL DEVELOPMENT HIDALGO COUNTY, TEXAS	THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF MARIO A. REYNA, P.E. 117388 ON AUGUST 16, 2022 IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.	ENG. TECH: CIRO	MELDEN & HUNT INC. CONSULTANTS • ENGINEERS • SURVEYORS 115 W. McINTYRE • EDINBURG, TX. 78541 PH: (956) 381-0981 • FAX: (956) 381-1839 ESTABLISHED 1947 - www.meldenandhunt.com	DATE	BY
			PROJECT ENG: MARIO A. REYNA		REVISION	
			T-BOOK: , PG.		MELDEN & HUNT, INC. TEXAS REGIST. E-1435	
			1. RELEASE DATE:			
			2. RELEASE DATE:			
3. RELEASE DATE:						
SCALE:	1" = 100'					

JOB No. 22057.01

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File Name: LA SAYYED COMMERCIAL
SHEET 3 OF 3



**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.B.
From: Rebekah de la Fuente, Planning Director, on behalf of Willie Arratia.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Sienna Subdivision being a 31.06-acre out of farm tracts 216, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located on West side of mile 6 ½ West, 1015' South of Mile 10 North. Possible Action.	
Discussion/Overview: The proposed fifty-two (52) lot subdivision is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by OSSF. The property is within a Flood Zone "X". Applicant is requesting a variance for OSSF and Off-site Drainage and is pending letters of support from drainage and irrigation.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of Preliminary Plat and compliance with the ordinance on the variance.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000296-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: SIENNA SUBDIVISION

Location: WEST SIDE OF HIGH 6 1/2 WEST, 1050 FEET SOUTH OF HIGH 10 NORTH

Legal Description: A 31.06 ACRE TRACT OF LAND OUT OF FARM TRACT 218, WEST TRACT, SUBDIVISION, HIDALGO COUNTY, TEXAS

Is subdivision inside city limits? ☐ YES ☒ NO

If subdivision is in the ETJ, indicate? ☒ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: R1

Existing Land Use: VACANT Proposed Land Use: RESIDENTIAL

Number of Lots Proposed: 52 Gross Acreage: 31.06

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: ALBERT HANKS Telephone: (956) 630-0216

Address: 502 E. EXPRESSWAY 83 SUITE G Fax: _____

City: Weslaco State: TX Zip: 78596 E-mail: _____

ENGINEER INFORMATION

Name: WILLIE APPARITA Telephone: (956) 784-0218

Address: 526 N. 5th St. Fax: _____

City: Dallas State: TX Zip: 75337 E-mail: namengineering@yahoo.com

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

- ☒ YES ☐ NO Water Provision: NAWSC.
- ☐ YES ☐ NO Wastewater Provision: OSSF
- ☒ YES ☐ NO Electric Company: MAGIC UTILITY

☐ YES ☒ NO Phone Utility _____	☐ YES ☒ NO Gas Utility _____	☐ YES ☒ NO Cable Utility _____
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>#1</u>	☒ YES ☐ NO Irrigation District <u>#9</u>
---	---

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If **YES**, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

- _____ Two (2) sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- _____ \$350.00 Planning Review fee
- _____ One 11" X 17" reduced copy of plat
- _____ Plat Layout
 - _____ Existing & Proposed Easements
 - _____ Existing & Proposed ROW
 - _____ Existing & Proposed Drainage Easements
 - _____ Contours
 - _____ Flood Zones
 - _____ Adjoiners
 - _____ Existing street names
- _____ Drainage plans and calculations with engineer's seal
 - _____ Elevations
 - _____ Flood directional arrows
 - _____ Detention areas
 - _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

- _____ Twelve (12) sets of preliminary plat **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- _____ \$350.00 (one time fee for preliminary and final plat)
- _____ One 11" X 17" reduced copy of plat
- _____ Plat Layout
 - _____ Existing & Proposed Easements
 - _____ Existing & Proposed ROW
 - _____ Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- _____ Contours
- _____ Flood Zones
- _____ Adjoiners
- _____ Existing & Proposed street names
- _____ Utility Layout
- _____ Existing & Proposed Utilities
- _____ Proposed Fire Hydrants
- _____ Adjoiners
- _____ Street names
- _____ Drainage plans and calculations with engineer's seal
- _____ Elevations
- _____ Flood directional arrows
- _____ Detention areas
- _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full
- _____ Number of fire hydrants proposed for subdivision
- _____ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- _____ **Twelve (12) sets of plans FOLDED & STAPLED (24 x 36) & PDF copy with all corrections**
- _____ Plats to be sealed by Professional Engineer
- _____ Approved Drainage Report
- _____ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____ Notice of Intent
- _____ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____ Electronic file of final plat and as-builds
- _____ Reproducible plat to be recorded with all required signatures
- _____ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____ 2% inspection fee
- _____ Park Fees
- _____ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____ Tax certificates
- _____ Memo from engineering inspector releasing subdivision
- _____ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____ 30 Year Water and 30 Year Sewer Service Agreements
- _____ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____ Sealed engineering cost estimates
- _____ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: DII Investments, LP

Owner Signature: [Signature] Date: 8/19/22

_____ is the authorized agent

Authorized Agent Signature: [Signature] Date: 8/19/22

Authorized Agent Printed Name: Albert Hanks

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR VARIANCE

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. VAR-000297-2022

GENERAL INFORMATION

Name of Subdivision: SIENNA SUBDIVISION

Location: WEST SIDE OF MILE 6 1/2 WEST, 1050 FEET SOUTH OF MILE 10 NORTH

Legal Description: A 31.00 ACRE TRACT OF LAND OUT OF FARM TRACT 216, WEST TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS.

VARIANCE TYPE:

☐ Streetlights ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☒ Sanitary Sewer ☐ YES ☒ NO

Describe in detail the reason for the variance request:

TO USE OSSF, THERE IS NO SANITARY SEWER AVAILABLE AT TIME.

☐ Fire Hydrants ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Setbacks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Drainage ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Minimum Lot Size ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sidewalks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Easement Requirements ☐ YES ☐ NO

Describe in detail the reason for the variance request:

OWNER INFORMATION

Owner's Name: _____ Telephone: _____

Address: _____ Fax: _____

City: _____ State: _____ Zip: _____ E-mail: _____

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: DII Investments, LP

Owner Signature: [Signature] Date: 8/19/22

_____ is the authorized agent

Authorized Agent Signature: [Signature] Date: 8/19/22

Authorized Agent Printed Name: Albert Hambs



APPLICATION FOR VARIANCE

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

GENERAL INFORMATION

Name of Subdivision: SIENNA SUBDIVISION

Location: WEST SIDE OF MILE 6 1/2 WEST, 1050 FEET SOUTH OF MILE 10 NORTH

Legal Description: A 31.06 ACRE TRACT OF LAND OUT OF FARM TRACT 216, WEST TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS

VARIANCE TYPE:

☐ Streetlights ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sanitary Sewer ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Fire Hydrants ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Setbacks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☒ Drainage ☐ YES ☒ NO

Describe in detail the reason for the variance request:

TO ALLOW DETENTION ON EXISTING DRAIN DITCH LOCATED ON THE WEST SIDE OF THIS TRACT

☐ Minimum Lot Size ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sidewalks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Easement Requirements ☐ YES ☐ NO

Describe in detail the reason for the variance request:

OWNER INFORMATION

Owner's Name: _____ Telephone: _____

Address: _____ Fax: _____

City: _____ State: _____ Zip: _____ E-mail: _____

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: DII Investments, LP

Owner Signature: [Signature] Date: 8/19/22

_____ is the authorized agent

Authorized Agent Signature: [Signature] Date: 8/19/22

Authorized Agent Printed Name: Albert Hanker

NAIN ENGINEERING, L.L.C.
CONSULTING ENGINEER
526 N. 5TH STREET, DONNA, TEXAS. 78537 PH. (956) 784-0218
FIRM No. F-9050

DRAINAGE REPORT
For
SIENNA SUBDIVISION

Prepared by : Guillermo A. Arratia, P.E.



Guillermo A. Arratia, P.E.
7/20/22

INDEX OF SHEETS

- 1. Cover Sheet**
 - 2. Index of Sheets**
 - 3. Drainage Report**
 - 4. Drainage Calculations – Exhibit "A"**
 - 5. Rainfall Intensity Table**
 - 6. Runoff Coefficient Table**
 - 7. Location Map – Exhibit "B"**
 - 8-9 FEMA Map Location "Exhibit "C"**
 - 10-11 Soil Map – Exhibit "D"**
-

NAIN ENGINEERING, L.L.C.
CONSULTING ENGINEER
526 N. 5TH STREET, DONNA, TEXAS. 78537 PH. (956) 784-0218
FIRM No. F-9050

DRAINAGE REPORT
For
SIENNA SUBDIVISION

I. PROJECT LOCATION

A 31.02 acre Tract of land out of Farm Tract 216, West Tract Subdivision, according to the map recorded in volume 2, pages 34-37, map records, Hidalgo County, Texas, and is located on the west side of Mile 6 ½ North Road, 1.050.78 feet south of Mile 10 North Road, and is located in the County of Hidalgo and lies within the 3.5 mile ETJ of the city of Weslaco. (Refer to Exhibit B).

II. FLOOD PLAIN

The subject tract lies in Zone "X", Areas determined to be outside 500-year flood plain . F.E.M.A.-F.I.R.M. Map No. 480334 0450 C, Map Revised June 6, 2000. Map Revised to Reflect LOMR: Effective: October 5, 2018. (Refer to Exhibit C).

III. SOIL CONDITIONS

A review of the Soil Survey of Hidalgo County indicates the subject tract lies in an area of predominantly Hidalgo (28) sandy clay loam soil that has a pour low shrink-swell potential and is listed in Hydrological Group B. (Refer to Exhibit D)

IV. EXISTING CONDITIONS

The subject tract is currently undeveloped. The existing terrain has a grade of approximately (0.1%). Existing runoff (9.41 cfs) from the site is by form of sheet flow runs towards the west side of this tract.

V. PROPOSED CONDITIONS

The proposed conditions for this subject tract is for 52 lots for residential use. The storm runoff after development will be increase 12.89 cfs for a total 22.3 cfs, I have calculated that 98,350 cf of storm runoff for a 50 year design frequency, and will be out falling into a proposed storm sewer system pipes ranging from 18" to 42" RCP with curb inlets and out falling into Drain Ditch located on the west side of this subdivision and owned by H.CC.I.D No.9. and will be dedicated to H.C.D.D. No. 1. Detention of 98,359 CF will be accomplished by excavating this volume on the existing Drain Ditch.



Guillermo A. Arratia
7/20/22

DRAINAGE CALCULATIONS EXHIBIT "A"
SIENNA SUBDIVISION

AREA= 30.06 Ac. TxDOT Intensity Constants for $I=b/(T_c+d)^e$

Existing Conditions

Length= 2255 ft.
Slope= 0.1 %
Cexist.= 0.2
Time of Concentration= 166 min.
Texist. = 166 min.
Iexist.= 1.57 in/hr
Qexist.= 9.41 cfs.

10 year storm

b= 87
e= 0.778
d= 9.2

Proposed Conditions

Length= 2255 ft.
Slope= 0.15 %
Cfut.= 0.3
Time of Concentration= 129 min.
Tfut.= 129 min.
Ifut.= 2.47 in/hr
Qfut.= 22.3 cfs.
Qin= 9.02 i

50 year storm

b= 99
e= 0.749
d= 9.2

tp (Min.)	I50 (in/hr)	Qin (cfs)	Vin (cubic ft.)	Qout (cfs)	Vout (cubic ft.)	Ev (cubic ft.)
10	10.83	97.62	58574	9.41	39153	19,421
20	7.91	71.31	85577	9.41	41976	43,601
30	6.34	57.20	102955	9.41	44799	58,156
40	5.35	48.25	115791	9.41	47622	68,169
50	4.66	42.00	126008	9.41	50445	75,563
60	4.14	37.37	134527	9.41	53268	81,259
70	3.75	33.78	141857	9.41	56091	85,766
80	3.43	30.90	148308	9.41	58913	89,394
90	3.16	28.53	154082	9.41	61736	92,346
110	2.76	24.87	164119	9.41	67382	96,737
120	2.60	23.41	168555	9.41	70205	98,350

Storage Requires= 98,350 cubic feet = 2.26 ac-ft



Guillermo A. Arratia
7/20/22

Chapter 5 — Hydrology

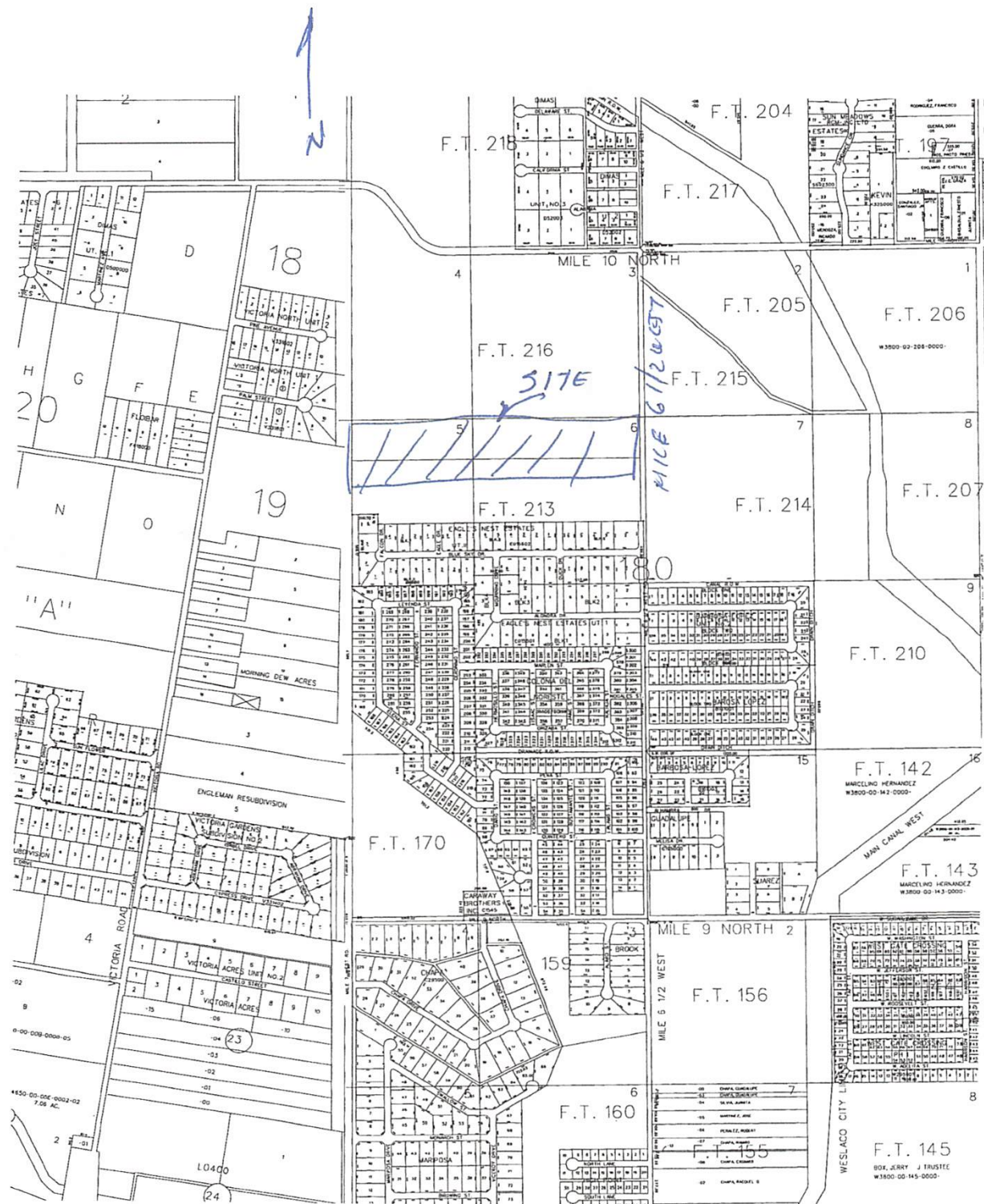
Section 6 — The Rational Method

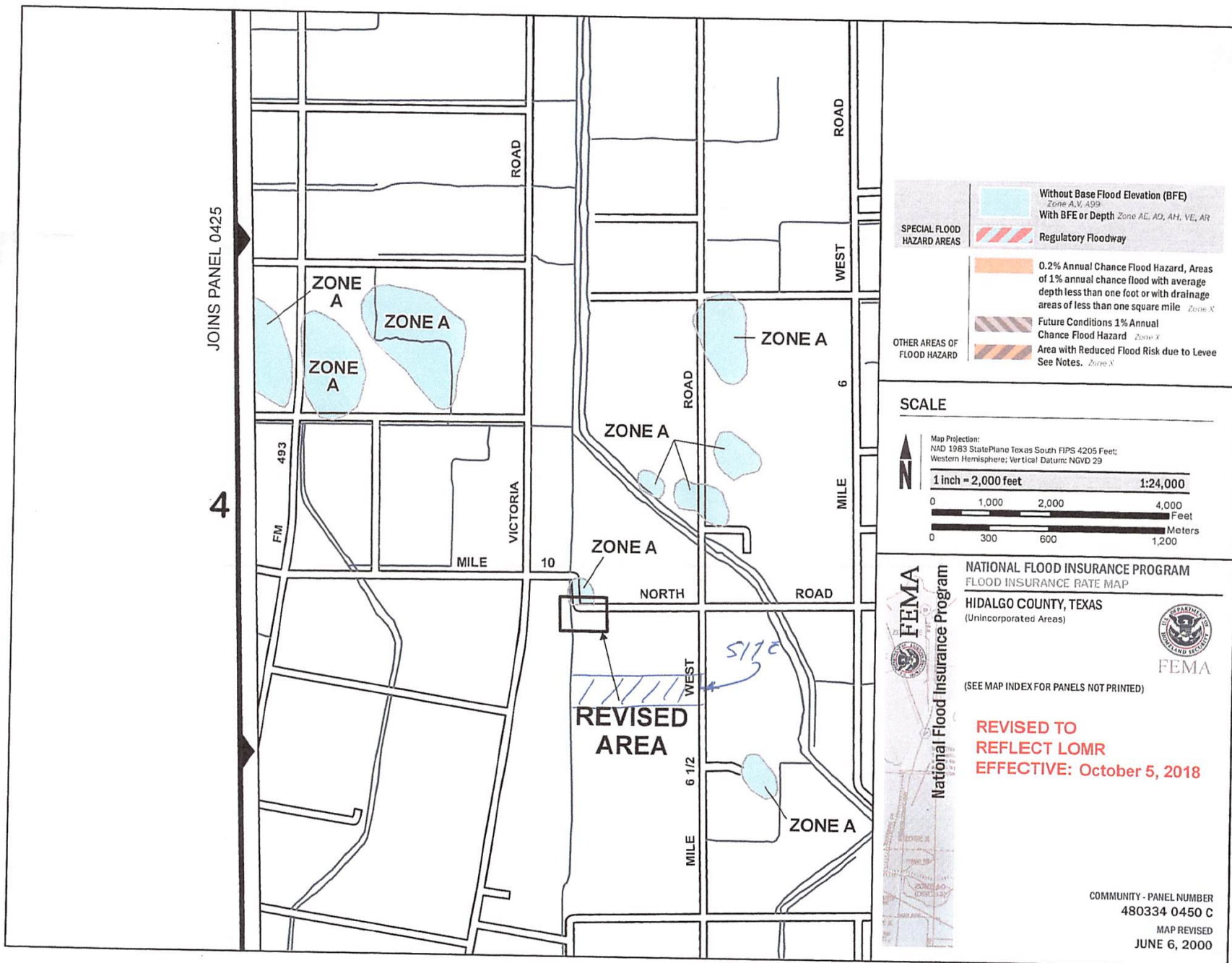
Runoff Coefficients for Urban Watersheds	
Type of Drainage Area	Runoff Coefficient
Business:	
♦ downtown areas	0.70-0.95
♦ neighborhood areas	0.30-0.70
Residential:	
♦ single-family areas	0.30-0.50
♦ multi-units, detached	0.40-0.60
♦ multi-units, attached	0.60-0.75
♦ suburban	0.35-0.40
♦ apartment dwelling areas	0.30-0.70
Industrial:	
♦ light areas	0.30-0.80
♦ heavy areas	0.60-0.90
Parks, cemeteries	0.10-0.25
Playgrounds	0.30-0.40
Railroad yards	0.30-0.40
Unimproved areas:	
♦ sand or sandy loam soil, 0-3%	0.15-0.20
♦ sand or sandy loam soil, 3-5%	0.20-0.25
♦ black or loessial soil, 0-3%	0.18-0.25
♦ black or loessial soil, 3-5%	0.25-0.30
♦ black or loessial soil, >5%	0.70-0.80
♦ deep sand area	0.05-0.15
♦ steep grassed slopes	0.70
Lawns:	
♦ sandy soil, flat 2%	0.05-0.10
♦ sandy soil, average 2-7%	0.10-0.15
♦ sandy soil, steep 7%	0.15-0.20
♦ heavy soil, flat 2%	0.13-0.17
♦ heavy soil, average 2-7%	0.18-0.22
♦ heavy soil, steep 7%	0.25-0.35
Streets:	
♦ asphaltic	0.85-0.95
♦ concrete	0.90-0.95
♦ brick	0.70-0.85
Drives and walks	0.75-0.95
Roofs	0.75-0.95

TABLE 6. CONSTANTS FOR USE IN FORMULA $I = b/(t_c + d)^e$ (Continued)

COUNTY	2 year				5 year				10 year				25 year				50 year				100 year			
	e	b	d	a	e	b	d	a	e	b	d	a	e	b	d	a	e	b	d	a	e	b	d	a
Hempflit	0.845	56	10.6	0.851	76	10.7	0.842	87	0.843	103	10.7	0.840	115	10.7	0.837	132	10.6	0.834	150	10.6	0.831	168	10.6	0.828
Henderson	0.800	60	8.7	0.796	77	9.0	0.770	79	0.773	93	9.0	0.752	93	9.0	0.749	102	8.7	0.746	120	8.7	0.743	138	8.7	0.740
Hidalgo	0.831	74	9.6	0.795	80	9.2	0.778	87	0.773	98	9.2	0.759	99	9.2	0.756	103	9.6	0.753	111	9.6	0.750	119	9.6	0.747
Hill	0.799	57	8.2	0.790	72	8.8	0.777	78	0.773	91	8.8	0.754	98	8.8	0.751	105	8.2	0.748	113	8.2	0.745	121	8.2	0.742
Hockley	0.832	46	9.9	0.832	60	10.0	0.807	64	0.812	78	10.0	0.810	87	10.0	0.807	101	9.9	0.804	115	9.9	0.801	129	9.9	0.798
Hood	0.782	48	7.7	0.773	63	8.3	0.773	75	0.782	90	8.3	0.773	98	8.3	0.770	105	7.7	0.767	113	7.7	0.764	121	7.7	0.761
Hopkins	0.788	54	8.3	0.783	70	9.1	0.775	77	0.782	88	9.1	0.775	93	9.1	0.772	100	8.3	0.769	108	8.3	0.766	116	8.3	0.763
Houston	0.797	63	8.2	0.780	73	8.3	0.767	78	0.783	86	8.3	0.770	93	8.3	0.767	94	8.2	0.764	102	8.2	0.761	110	8.2	0.758
Howard	0.805	42	9.2	0.800	56	10.1	0.802	65	0.796	76	10.1	0.791	86	10.1	0.788	95	9.2	0.785	104	9.2	0.782	113	9.2	0.779
Hudspeth	0.800	27	9.4	0.840	44	11.4	0.827	50	0.819	60	11.4	0.814	78	11.4	0.809	87	9.4	0.806	96	9.4	0.803	105	9.4	0.800
Hunt	0.793	55	8.4	0.785	69	9.2	0.783	80	0.776	93	9.2	0.764	99	9.2	0.761	104	8.4	0.758	112	8.4	0.755	120	8.4	0.752
Hutchinson	0.850	56	10.4	0.844	70	11.0	0.837	80	0.851	100	11.0	0.837	121	11.0	0.833	132	10.4	0.830	143	10.4	0.827	154	10.4	0.824
Irion	0.780	37	8.1	0.789	55	9.6	0.778	61	0.783	77	9.6	0.769	81	9.6	0.766	84	8.1	0.763	90	8.1	0.760	96	8.1	0.757
Jack	0.789	48	8.5	0.779	63	8.5	0.765	75	0.782	88	8.5	0.775	98	8.5	0.772	109	8.5	0.769	119	8.5	0.766	129	8.5	0.763
Jackson	0.809	68	8.8	0.769	73	8.5	0.757	80	0.765	89	8.5	0.757	95	8.5	0.754	97	8.8	0.751	104	8.8	0.748	111	8.8	0.745
Jasper	0.782	66	8.1	0.743	65	7.4	0.736	73	0.749	78	7.4	0.741	84	7.4	0.738	87	8.1	0.735	93	8.1	0.732	99	8.1	0.729
Jeff Davis	0.821	35	9.6	0.855	63	10.8	0.853	69	0.802	65	10.8	0.818	77	10.8	0.815	83	9.6	0.812	90	9.6	0.809	97	9.6	0.806
Jefferson	0.799	74	9.2	0.733	66	7.5	0.727	74	0.730	85	7.5	0.710	87	7.5	0.707	84	9.2	0.704	91	9.2	0.701	98	9.2	0.698
Jim Hogg	0.831	73	9.4	0.813	82	9.4	0.786	87	0.780	98	9.4	0.766	99	9.4	0.763	104	9.4	0.760	111	9.4	0.757	118	9.4	0.754
Jim Wells	0.825	71	9.4	0.797	79	8.9	0.765	80	0.788	94	8.9	0.778	98	8.9	0.775	102	9.4	0.772	106	9.4	0.769	110	9.4	0.766
Johnson	0.789	52	8.1	0.779	67	8.6	0.773	77	0.776	90	8.6	0.771	99	8.6	0.768	102	8.1	0.765	106	8.1	0.762	110	8.1	0.759
Jones	0.780	41	8.5	0.771	55	9.0	0.764	73	0.780	82	9.0	0.771	92	9.0	0.768	95	8.5	0.765	100	8.5	0.762	105	8.5	0.759
Karnes	0.800	60	8.8	0.791	75	8.9	0.766	77	0.787	91	8.9	0.778	95	8.9	0.775	98	8.8	0.772	101	8.8	0.769	104	8.8	0.766
Kaufman	0.797	57	8.6	0.780	72	9.0	0.776	80	0.777	93	9.0	0.768	98	9.0	0.765	101	8.6	0.762	104	8.6	0.759	107	8.6	0.756
Kendall	0.791	53	8.6	0.771	64	8.3	0.773	74	0.764	84	8.3	0.762	94	8.3	0.759	104	8.6	0.756	108	8.6	0.753	112	8.6	0.750
Kenedy	0.826	73	9.2	0.793	79	8.7	0.771	84	0.783	94	8.7	0.775	96	8.7	0.772	99	9.2	0.769	101	9.2	0.766	103	9.2	0.763
Kent	0.801	43	9.0	0.801	60	10.0	0.796	70	0.805	85	10.0	0.798	93	10.0	0.795	94	9.0	0.792	97	9.0	0.789	100	9.0	0.786
Kerr	0.789	49	8.4	0.765	58	8.0	0.764	59	0.763	80	8.0	0.758	91	8.0	0.755	94	8.4	0.752	97	8.4	0.749	100	8.4	0.746
Kimbble	0.775	42	8.2	0.758	53	7.6	0.763	56	0.757	75	7.6	0.752	88	7.6	0.749	82	8.2	0.746	85	8.2	0.743	88	8.2	0.740
King	0.804	45	9.4	0.794	59	9.6	0.804	74	0.802	87	9.6	0.811	103	9.6	0.808	104	9.4	0.805	107	9.4	0.802	110	9.4	0.799
Kinney	0.812	53	8.8	0.780	62	8.0	0.773	70	0.777	82	8.0	0.770	97	8.0	0.767	98	8.8	0.764	100	8.8	0.761	102	8.8	0.758
Kieberg	0.826	72	9.4	0.794	79	8.3	0.764	81	0.761	93	8.3	0.759	96	8.3	0.756	99	9.4	0.753	101	9.4	0.750	103	9.4	0.747
Knox	0.800	46	9.4	0.788	58	9.3	0.801	76	0.798	88	9.3	0.798	94	9.3	0.795	98	9.4	0.792	100	9.4	0.789	102	9.4	0.786
Lamar	0.783	53	8.2	0.777	66	8.9	0.770	74	0.769	87	8.9	0.759	93	8.9	0.756	98	8.2	0.753	101	8.2	0.750	104	8.2	0.747
Lamb	0.837	47	10.1	0.828	60	9.6	0.800	63	0.821	80	9.6	0.818	88	9.6	0.815	93	10.1	0.812	96	10.1	0.809	99	10.1	0.806

EXIST "B"





AS - SHEET NUMBER 104

EXHIBIT "D"



Soil survey

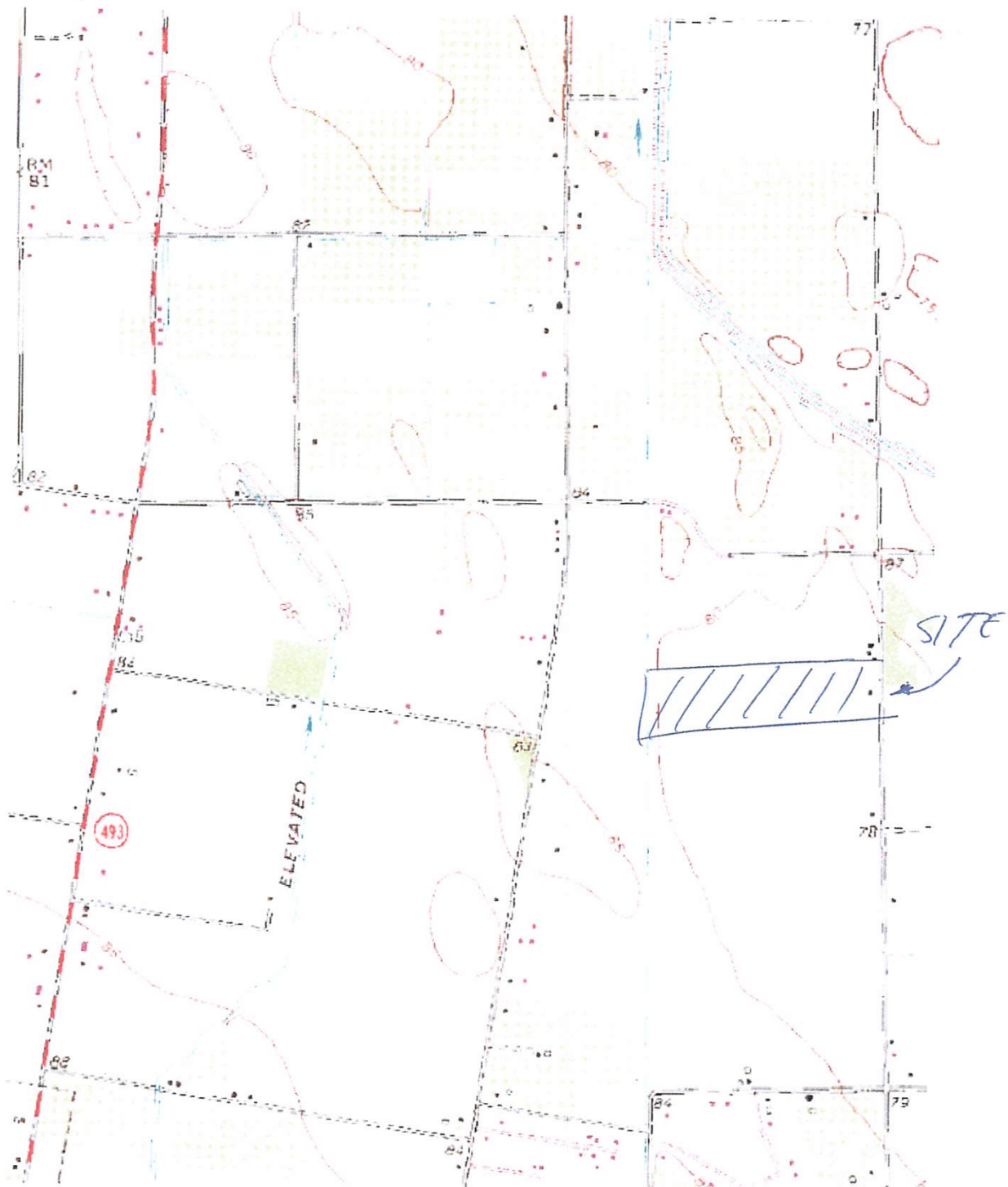
TABLE 18.--SOIL AND WATER FEATURES

"Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text. The symbol > means more than. Absence of an entry indicates that the feature is not a concern]

Map symbol and soil name	Hydro-logic group	Flooding			High water table			Cemented pan		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hard-ness	Uncoated steel	Concrete
					<u>Ft</u>			<u>In</u>			
1.* Arents											
2----- Benito	D	Occasional	Long-----	Sep-May	4.0-6.0	Apparent	Sep-May	---	---	High-----	Low.
3, 4----- Brennan	B	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
5, 6----- Camargo	B	Rare-----	Brief-----	Sep-May	>6.0	---	---	---	---	Moderate	Low.
7----- Cameron	D	None-----	---	---	5.0-6.0	Apparent	Sep-May	---	---	High-----	Low.
8----- Comitas	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
9, 10, 11----- Delfina	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low.
12----- Delmita	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low.
13:* Delmita	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low.
14----- Randado	C	None-----	---	---	>6.0	---	---	8-20	Thin	Moderate	Low.
14----- Palfurrias	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
15** Grulla	D	Frequent-----	Very long	Sep-May	+2-6.0	Apparent	Sep-May	---	---	High-----	Low.
16, 17, 18----- Hargill	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
19----- Harlingen	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
20----- Harlingen	D	None-----	---	---	5.0-6.0	---	---	---	---	High-----	Moderate.
21:* Harlingen	D	None to rare	---	---	>6.0	---	---	---	---	High-----	Low.
Urban land.											
22, 23, 24----- Hebbronville	B	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
25, 26, 27, 28, 29----- Hidalgo	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
30----- Hidalgo	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low.
31:* Hidalgo	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
Urban land.											
32:* Jimenez	C	None-----	---	---	>6.0	---	---	7-20	Thin	High-----	Low.

See footnotes at end of table.

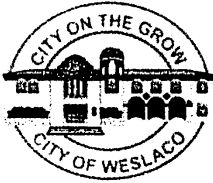
USGS MAP





Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.C.
From: Rebekah de la Fuente, Planning Director, on behalf of Jose Torres.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Mi Fortuna Estates being a 4.52-acre out of farm tract 790, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the Southeast corner of Mile 11 North & FM 1015. Possible Action.	
Discussion/Overview: The proposed eight (8) lot subdivision is located inside the City of Weslaco. This subdivision is being serviced with water by City of Weslaco through a 12" waterline and sewer by the City of Weslaco through a 10" sewer line. The property is within a Flood Zone "B".	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of Preliminary Plat	
Additional Action Prompted: ☒ Mayor's Signature ☐ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000298-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: Mi Fortuna Estates

Location: 3402 S. Westgate Drive, Weslaco, Texas 78596

Legal Description: WEST TRACT E266'-N818.03' FT 790 5.01AC

Is subdivision inside city limits? ☒ YES ☐ NO

If subdivision is in the ETJ, indicate? ^{N/A} ☐ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: R-1/R-2

Existing Land Use: Single-Family Home Proposed Land Use: 6 lots R-1 (Lots 3-8) & 2 Lots R-2 (Lots 1-2)

Number of Lots Proposed: 8 Gross Acreage: 4.52 AC

Title Report Submitted: ☒ YES ☐ NO

OWNER INFORMATION

Owner's Name: Julio and Marysol Garcia Telephone: 956-756-0944

Address: 3402 S. Westgate Drive Fax: N/A

City: Weslaco State: TX Zip: 78596 E-mail: marysolgarcia_66@yahoo.com

ENGINEER INFORMATION

Name: Jose F. Torres Telephone: 956-537-4037

Address: 512 W. Rosemary Ave. Fax: N/A

City: Pharr State: TX Zip: 78577 E-mail: btijoet@gmail.com

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: _____

☒ YES ☐ NO Wastewater Provision: _____

☒ YES ☐ NO Electric Company: _____

☒ YES ☐ NO Phone Utility _____	☒ YES ☐ NO Gas Utility _____	☒ YES ☐ NO Cable Utility _____
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District _____	☒ YES ☐ NO Irrigation District _____
---	---

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☒ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If YES, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

_____ Two (2) sets of plats folded and stapled (24 x 36) and forward a copy in PDF format to rdelafuente@weslacotx.gov

_____ \$355.00 Planning Review fee

_____ One 11" X 17" reduced copy of plat

_____ Plat Layout

_____ Existing & Proposed Easements

_____ Existing & Proposed ROW

_____ Existing & Proposed Drainage Easements

_____ Contours

_____ Flood Zones

_____ Adjoiners

_____ Existing street names

_____ Drainage plans and calculations with engineer's seal

_____ Elevations

_____ Flood directional arrows

_____ Detention areas

_____ Street names

_____ Proof of ownership of the property

_____ If septic tank system required, submit soil evaluation report

_____ Water Rights associated with the property

_____ Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

_____ Twelve (12) sets of preliminary plat folded and stapled (24 x 36) and forward a copy in PDF format to rdelafuente@weslacotx.gov

_____ \$355.00 (one time fee for preliminary and final plat)

_____ One 11" X 17" reduced copy of plat

_____ Plat Layout

_____ Existing & Proposed Easements

_____ Existing & Proposed ROW

_____ Existing & Proposed Drainage Easements

_____ Contours

- _____ Flood Zones
- _____ Adjoiners
- _____ Existing & Proposed street names
- _____ Utility Layout
- _____ Existing & Proposed Utilities
- _____ Proposed Fire Hydrants
- _____ Adjoiners
- _____ Street names
- _____ Drainage plans and calculations with engineer's seal
- _____ Elevations
- _____ Flood directional arrows
- _____ Detention areas
- _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full
- _____ Number of fire hydrants proposed for subdivision
- _____ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- ✓ **Twelve (12) sets of plans FOLDED & STAPLED (24 x 36) & PDF copy with all corrections**
- ✓ **Plats to be sealed by Professional Engineer**
- ✓ **Approved Drainage Report**
- ✓ **Traffic Impact Analysis (If required)**

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____ Notice of Intent
- _____ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____ Electronic file of final plat and as-builds
- _____ Reproducible plat to be recorded with all required signatures
- _____ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____ 2% inspection fee
- _____ Park Fees
- _____ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____ Tax certificates
- _____ Memo from engineering inspector releasing subdivision
- _____ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____ 30 Year Water and 30 Year Sewer Service Agreements
- _____ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____ Sealed engineering cost estimates
- _____ Letter of Credit/Performance Bond/Escrow

**** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.**

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: Julio and Marysol Garcia

Owner Signature: Marysol Garcia Julio Garcia Date: 08/15/22

Cynthia Torres is the authorized agent

Authorized Agent Signature: Cynthia Torres Date: 08/15/22

Authorized Agent Printed Name: Cynthia Torres

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

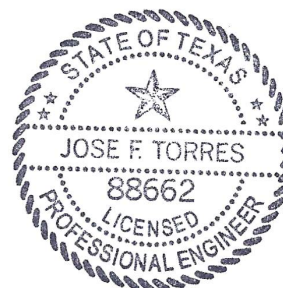
General Comments: _____

**DRAINAGE STATEMENT
FOR
MI FORTUNA ESTATES SUBDIVISION
WESLACO, TEXAS**

Prepared by

BTI, Inc.
F-14716

512 W. Rosemary Ave.
Pharr, Texas 78577
Tel: 956-537-4037
Email: btijoet@gmail.com



Jose F. Torres
6/3/2022

May 12, 2022

INDEX

Drainage Report Narrative: Pages 2.-5.
Hydrograph (5/12/2022)

- A. Plat reduction and On-Site Drainage Schematic Design for Mi Fortuna Estate Subdivision
- B. USGS Map, Hidalgo County Soils Survey Map
- C. Copy of FIRM – Hidalgo County, CPN 480334 0525 B
- D. Ditch Drain Widening Details for Mi Fortuna Estates Subdivision (Exhibit “A”)
- E. Copy of Mi Fortuna Estates Subdivision U & D sheet
- F. Hydrograph Data for the 10 yr. & 50 yr. storm for the Pre and Post Development

NOTE:

This report is over a Lot on West Track Subdivision – for a total 5.00 Gross Acres.

DRAINAGE REPORT NARRATIVE

The Proposed **MI FORTUNA ESTATES SUBDIVISION** is an 8 – Lot Development consisting of 6 Residential Lots with Lot 1 and 2 are to be designated as R-2 on the plat consisting of 5.00 Gross Acres (or 4.50 Net Acres) – less 40.0-foot S. Westgate Drive ROW. The development site is located at the south-west corner of Westgate Drive and Mile 5 N. Road within the City of Weslaco. It is described as Lot West Track Subdivision (5.00 Gross Acres) out of Volume 02, Pages 34-37, Map Records of Hidalgo County, Texas. Most of the tract is currently vacant and open with no development having a previous history of being used for open land purposes – the proposed new use is 8 residential lots complete with approximately 4.50 Acres consisting of a 40' B-B existing city roadway. This tract of land has 818.03 feet of frontage along the west side of S. Westgate Drive and has a gross east/west depth of 266.00 feet. Also, this tract of land has 266.00 feet of frontage along the north side of Mile 5 N Road. The property runoff eventually will head into the existing Weslaco Drain Ditch consist of 50 feet R.O.W. and is located north-east of the proposed development property and runs west to east adjacent to the Mile 5 N. Road.

The subject property is in Zone “B” in accordance with the FIRM Community Panel No. 480334 0525 B, dated LOMR 5/23/1978 – Effective Date February 02, 1981. Zone “B” shaded areas are defined by the National Flood Insurance Program as “Areas between limits of 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths of less than one (1) foot or where the contributing drainage area is less than one (1) square mile; and areas protected by levees from the base flood. (Medium Shading)

A review of Sheet 86 of the Soils Survey of Hidalgo County, Texas reveals that the underlying conditions of the subject property consist of a Hidalgo sandy clay loam

(28), (39) and (52) with the slopes between 0 and 1 percent. These kinds of soils are well drained and surface runoff is slow. For this soil type, permeabilities are moderate and the available water capacity is high.

The 4.50 Net Acre tract of land is bound by S. Westgate Drive on the east side, West Track Subdivision on the west, the Mile 5 N. Road along the north side and West Track Subdivision on the south. Cross section elevations of the subject property reveal that drainage is via overland sheet flow in a south-easterly direction (left to right) at a slope of 0.13% over an average drainage run 340.0 feet. There are formal existing drainage infrastructure improvements created by the City of Weslaco during the S. Westgate Drive improvement.

Using the Rational Method over a 50-year storm event (see attached hydrograph), is computed that the pre-development runoff is 3.19 CFS (10-Year Storm Event) while the post-development runoff is 7.26 CFS (50-Year Storm Event) – an increase of 4.07 CFS (See Exhibit B Sheets). Storage for newly created storm waters shall be provided by creating a ditch along the east side of Lots 1 through 4 adjacent and parallel to the S. Westgate Drive ROW.

In accordance with the drainage policies of the City of Weslaco and the County of Hidalgo, this subdivision shall be required to provide for new storage of drainage waters CREATED by the post-development of this 4.50 Net acre property. Using the Rational Method (For Reference: TxDOT Intensity-Frequency-Duration Coefficients for Texas Counties HDM (2018) for a 50-Year storm event, and existing drainage coefficient of 0.20 and a future computed drainage coefficient of 0.35 (assuming 1,600 Sq. Ft. of impervious lot improvements and the paved driveways) – For Reference: FHWA, Urban Drainage Design Manual HEC-22 (2009 3rd Edition), an average drainage run of 840.0 feet and an average slope of 0.13%, it was computed that the improved condition would produce an additional volume of 12,858.0 Cubic Feet, or 0.2951 Acre-Feet. The developer shall create a detention ditch on the east side of Lots 1 through 4 of the proposed Mi Fortuna Estates Subdivision to provide a minimum volume of 12,858.0 Cu. Ft. for Mi Fortuna Estates Subdivision using an approved ditch cross section profile as shown on Exhibit "A". The proposed drainage pond area would be classified as common property and the maintenance of the pond area shall be provided by each property owner. The drainage pond area shall consist of 18' x 335'. Access to the property Lots over the drainage pond shall be provided by each property owner with 18" RCP pipes with a minimum length of 16 feet on the driveway.

The purpose of the calculations that follow illustrate how the creation of the proposed detention drain ditch will provide for additional storage of a minimum of 12,858.0 Cu. Ft. for the proposed Mi Fortuna Estates Subdivision. It is proposed and reflected below that the proposed Detention Drain Ditch will be widened using a minimum ditch widening length of 335.0 feet using a 2:1 side slope all around the ditch and a 3.5 feet depth. The proposed ditch widening shall begin approximately 50 north on Lot 1

and finished 50' into Lot 4 for the storage volume earthwork. The proposed Detention Drain Ditch widening shall provide a minimum 12898.0 Cu. Ft. of storage.

**PROPOSED DETENTION DRAIN DITCH WIDENING CALCULATIONS FOR MI
FORTUNA ESTATE SUBDIVISION ARE LISTED BELOW**

Q (10) Exist = 3.19 cfs
Tc= 48.2 min. C = 0.20 A = 4.83 acres
I (10) = 3.30 in/hr

Q (50) Dev = 7.27 cfs
Tc= 52.1 min. C = 0.35 A = 4.83 acres
I (50) = 4.30 in/hr

Cross Section Area of Widening: 38.5 Sq. Ft. (7x3.5+4x3.5)

Length of Widening: 335.0 Ft.

(See Exhibit "A")

Storage to Detention Drain Ditch: 335 Ft. x 38.5 Sq. Ft. = 12,898 Cu. Ft. > 12,858 Cu. Ft. Req. - O.K.

Note: Any surplus dirt resulting from dirt excavation (widening) of the existing Proposed Detention Drain Ditch shall be used on the lands of the proposed residential lots.

CITY OF WESLACO 24" EXISTING STORM SEWER PIPE AND OUTFALL:

The max amount of flow in the existing 24" storm sewer line (Q10 post-development flow) is approximately 5.32 CFS.

In addition to providing storage in the Proposed Detention Drain Ditch, the subdivider shall provide a drainage analysis of the existing roadway storm sewer adjacent to the subdivision in accordance with storm sewer and drainage requirements of the City of Weslaco. All internal drainage shall be routed from the Mi Fortuna Estates Subdivision to the Weslaco Drain Ditch via the existing 24" x 860 feet storm sewer line to a 30" x 40 feet existing storm sewer that drains into the outfall – an existing storm sewer design that will transfer the flow into the Weslaco Drain Ditch. For the additional drainage runoff created from the existing roadways and adjacent properties from outside the Mi Fortuna Estates Subdivision should be routed to the Weslaco Drain Ditch in accordance with the Hidalgo County Drainage District No. 1, and the City of Weslaco drainage requirements and shall be the sole responsibility of these government entities for the maintenance of the appurtenances that convey the runoff into the Weslaco Drain Ditch outfall.

The newly proposed 12" pvc-pipe drain syphon and concrete rip-rap (will connect entrance and rip-rap at Weslaco Drain Ditch to the City of Weslaco standards) will be located near the center of the south inlet on S. Westgate Drive on West Track Subdivision and west of the existing concrete rip-rap of the existing 24" storm drainage line from the West Track Subdivision.

The existing outfall structures is located along an acquired 50-foot easement located along the Mile 5 North Road on the north side of the proposed development on the West Track Subdivision with pipes draining into the Weslaco Drain Ditch.

All internal roadway waters shall be routed to the Weslaco Drain Ditch via the existing 24" and 30" storm sewer line. Drainage waters falling and collected adjacent to the existing roadways of this subdivision shall be routed via existing curb & gutter improvements and curb inlet(s) into the existing 24" and 30" storm sewer lines with an outfall at the Weslaco Drain Ditch. The existing roadway consist of 40' B-B roadway. The subdivision design includes two existing 5' curb inlets (spacing in accordance with the City of Weslaco standards) and 24" and 30" storm sewer lines connecting all inlets and/or manholes.

All residential improvements shall be constructed at a finished floor elevation of not less than 24 inches as measured from the top of curb at the center of each lot. All improvements shall be graded in positive flow direction away from the house foundation.

S. Westgate Drive is an existing asphalt roadway improvement along the entire frontage of the Mi Fortuna Estates Subdivision (i.e. 5.0 Gross Acres) a pavement section which matches the paved section of Mile 5 N. Road north of this site. However, the developer shall grade and provide for a bar ditch and culverts at all entrances on the south side of S. Westgate Drive. The bar ditches shall be regraded and deepened on both sides to facilitate drainage flows on both sides of S. Westgate Drive in accordance with the current existing condition. Four concrete culverts crossing with concrete safety end treatments shall be provided at the sole entrance to the proposed Mi Fortuna Estates Subdivision from S. Westgate Drive.

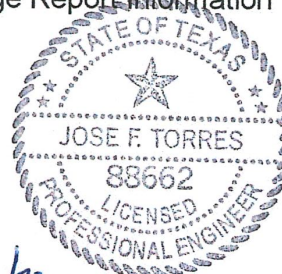
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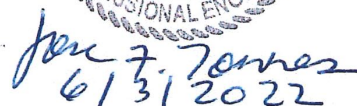
Jose F. Torres, P.E.
Plat Engineer

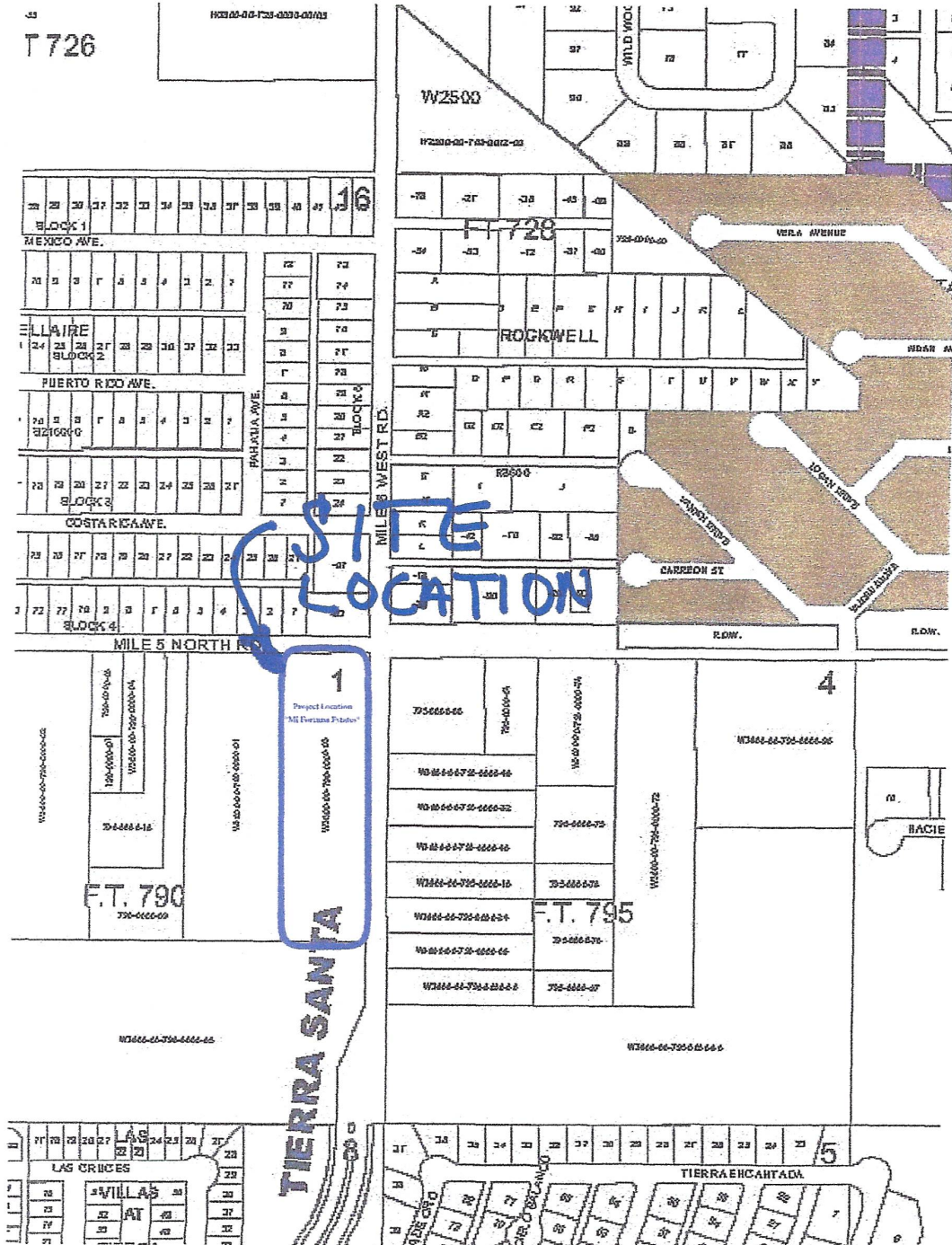
Attachment: Hydrograph and Other Required Drainage Report Information

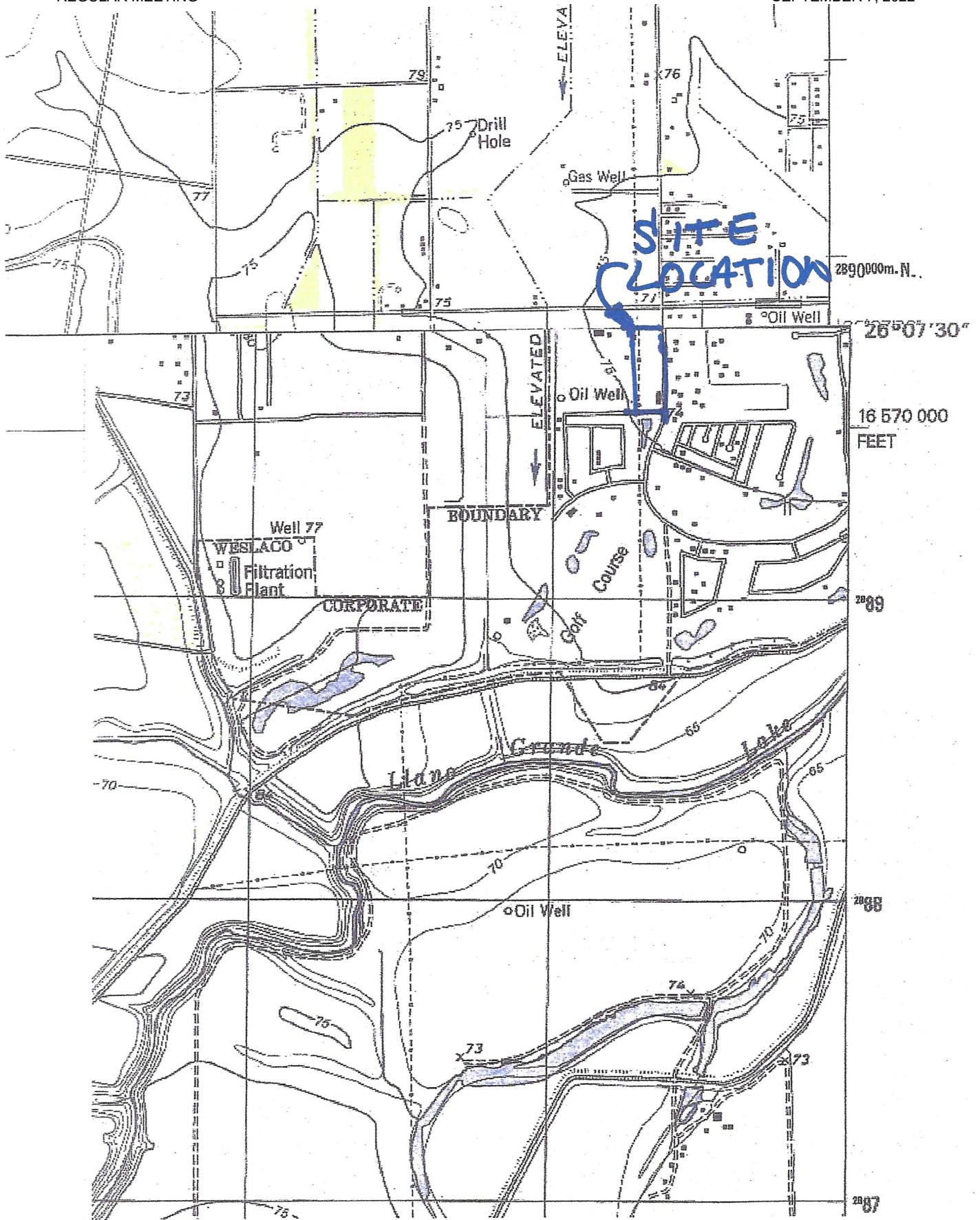
☐ REJECTED	
☒ APPROVED FOR SUBMITTAL	
☐ TO H.C. PLANNING DEPT.	
☒ TO CITY	
☒ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☒ CITY FACILITY	
☐ OTHER	
	6-24-22
H.C.D.D. NO. 1	DATE

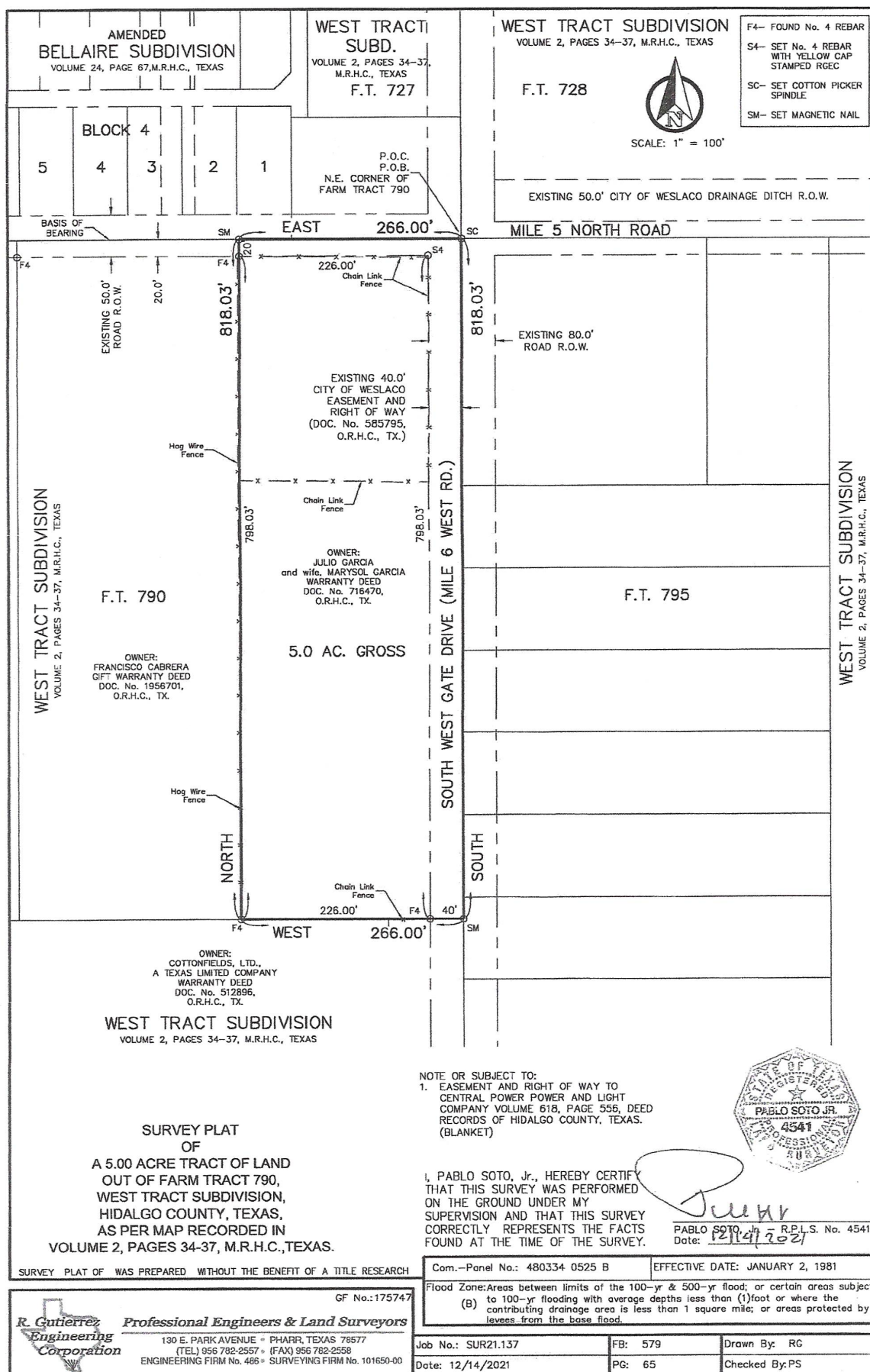
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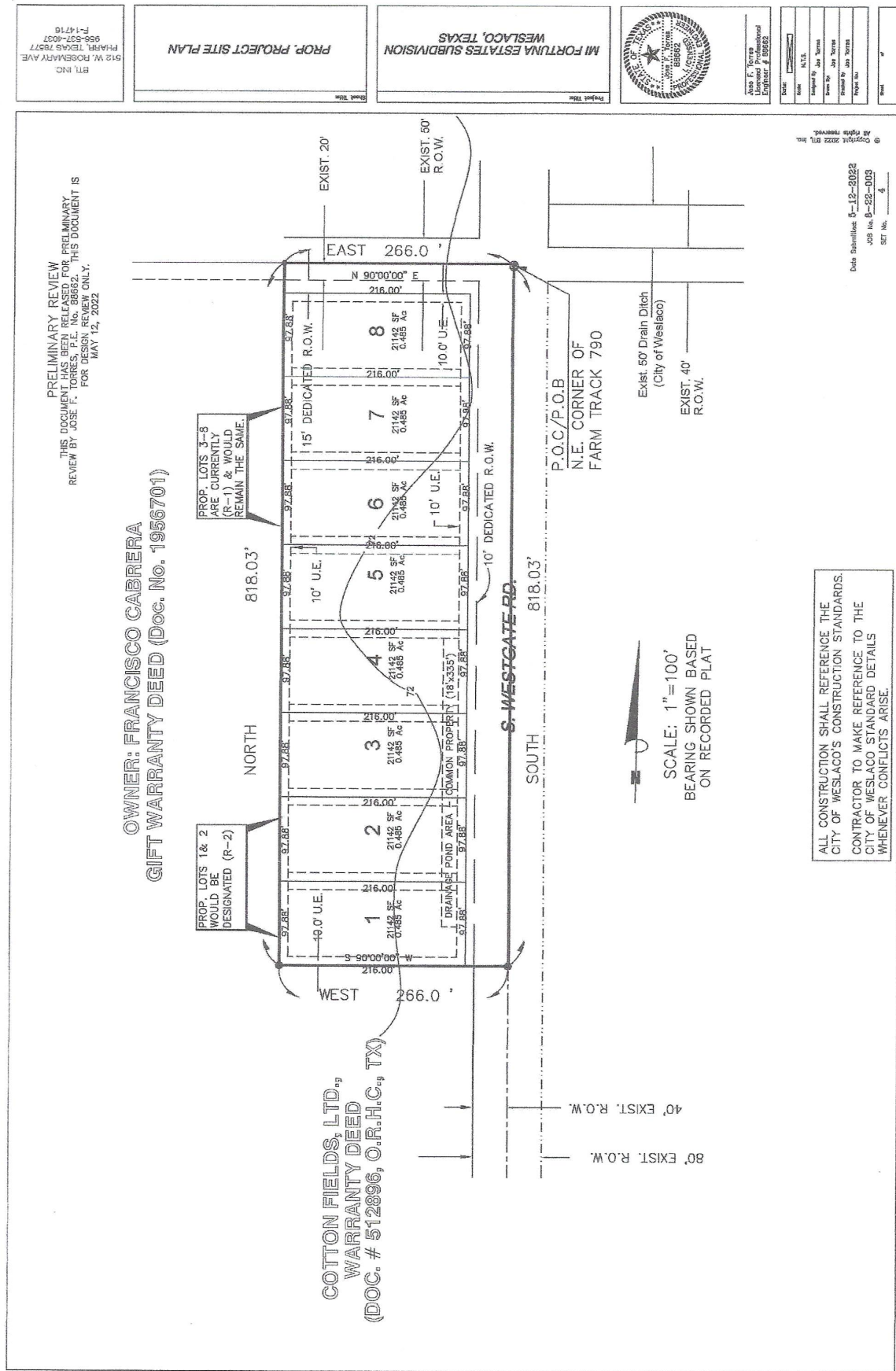



6/31/2022









BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (Q10) (Pre and Post Development CFS)
Subdivide and Tap into Waterline and Sewer Connections

Project: PJT-21-01

By: Jose F. Torres, P.E.

Date: 5/12/2022

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (Tc + d)^e$ (See attachment A)

10 year storm
 $b = 70.9342$
 $e = 0.7562$
 $d = 9.5$

where Tc , is calculated with an average overland flow velocity (0-2% slopes):

- a) existing unimproved conditions: $vel = 0.25$ ft/sec
- b) proposed residential conditions: $vel = 0.30$ ft/sec
- c) proposed pipe flow: $vel = 2$ ft/sec

- 3) Accepted Runoff Coefficients

- a) Single Family Residence $c = 0.35$
- b) unimproved sandy clay loam soil, $c = 0.20$ ref. TxDOT Hydraulic Manual

- 4) Total Area = 4.83 ac net

II. Existing Conditions

$Tc = 723 \text{ ft} / (0.25 \text{ ft/sec} \times 60 \text{ sec}) = 48.2 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 3.30 \text{ in/hr}$
 $Q = CIA = (0.20)(3.30 \text{ in/hr})(4.83 \text{ ac}) = 3.19 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 4.83 ac.
 $Tc = 261 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 677 \text{ ft} / (0.30 \times 60) = 52.1 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 3.14 \text{ in/hr}$
 $Q = CIA = (0.35)(3.14 \text{ in/hr})(4.83 \text{ ac}) = 5.32 \text{ cfs}$

TOTAL = 5.32 cfs



Jose F. Torres
5/12/2022

BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (Q50)(Pre and Post Development CFS)
Subdivide and Tap into Waterline and Sewer Connections

Project: PJT-21-01

By: Jose F. Torres, P.E.

Date: 5/12/2022

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (Tc + d)^e$ (See Attachment A)

50 year storm
b = 84.2575
e = 0.7257
d = 8.3

where Tc, is calculated with an average overland flow velocity (0-2% slopes):
a) existing unimproved conditions: vel = 0.25 ft/sec
b) proposed residential conditions: vel = 0.30 ft/sec
c) proposed pipe flow: vel = 2 ft/sec

- 3) Accepted Runoff Coefficients

a) Single Family Residence c = 0.35
b) unimproved sandy clay loam soil, c = 0.20 ref. TxDOT Hydraulic Manual

- 4) Total Area = 4.83 ac net

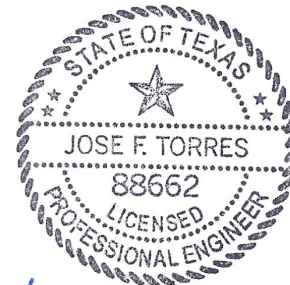
II. Existing Conditions

$Tc = 723 \text{ ft} / (0.25 \text{ ft/sec} \times 60 \text{ sec}) = 48.2 \text{ min.}$
 $I (50 \text{ yr}) = b / (Tc + d)^e = 4.51 \text{ in/hr}$
 $Q = CIA = (0.20)(4.51 \text{ in/hr})(4.83 \text{ ac}) = 4.36 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 4.83 ac.
 $Tc = 261 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 677 \text{ ft} / (0.30 \times 60) = 52.0 \text{ min.}$
 $I (50 \text{ yr}) = b / (Tc + d)^e = 4.30 \text{ in/hr}$
 $Q = CIA = (0.35)(4.30 \text{ in/hr})(4.83 \text{ ac}) = 7.27 \text{ cfs}$

TOTAL = 7.27 cfs

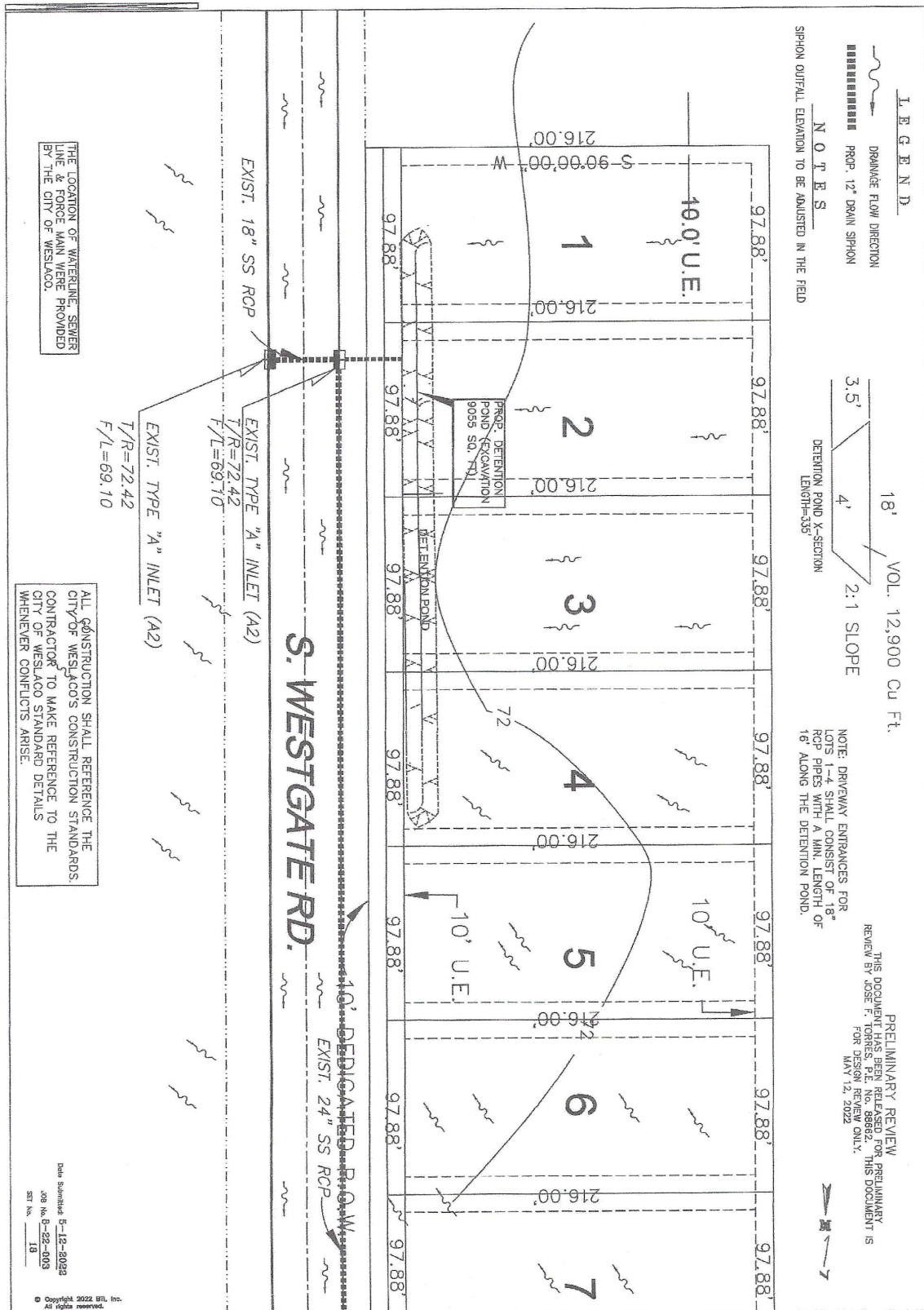


Jose F. Torres
5/12/2022

Q(10) PRE-DEVELOPMENT DRAINAGE FLOW

Jose F. Torres
6/3/2022

MIN	HRS	I (IN/HR)	Q(in)	Vol (in)	Q(out)	Vol (out)	Req. Vol.
			CFS	CF	CFS	CF	CF
5	0.08	12.88	21.78	6533.219	3.19	957	5576.22
10	0.17	10.22	17.28	10365.15	3.19	1914	8451.15
15	0.25	8.58	14.50	13047.8	3.19	2871	10176.80
25	0.42	6.62	11.19	16781.8	3.19	4785	11996.80
35	0.58	5.47	9.25	19418.03	3.19	6699	12719.03
45	0.75	4.70	7.95	21471.53	3.19	8613	12858.53
55	0.92	4.15	7.02	23164.36	3.19	10527	12637.36
65	1.08	3.73	6.31	24611.82	3.19	12441	12170.82
75	1.25	3.40	5.75	25881.27	3.19	14355	11526.27
85	1.42	3.13	5.30	27015.45	3.19	16269	10746.45
95	1.58	2.91	4.92	28043.18	3.19	18183	9860.18



Date: _____ Scale: N.T.S. Prepared By: T. W. Hays Drawn By: Jeff Turner Check By: Jeff Turner Project No.: 100-1049		Project Title: MI FORTUNA ESTATES SUBDIVISION WESLACO, TEXAS	Sheet Title: DETENTION POND DETAIL	BTL, INC. 512 W. ROSEMARY AVE. PHARR, TEXAS 78877 956-537-4037 F-14716
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IDF Report

IDF filename: McAllenTX (3).idf

05-03-2022

Hydrology Studio v 3.0.0.19

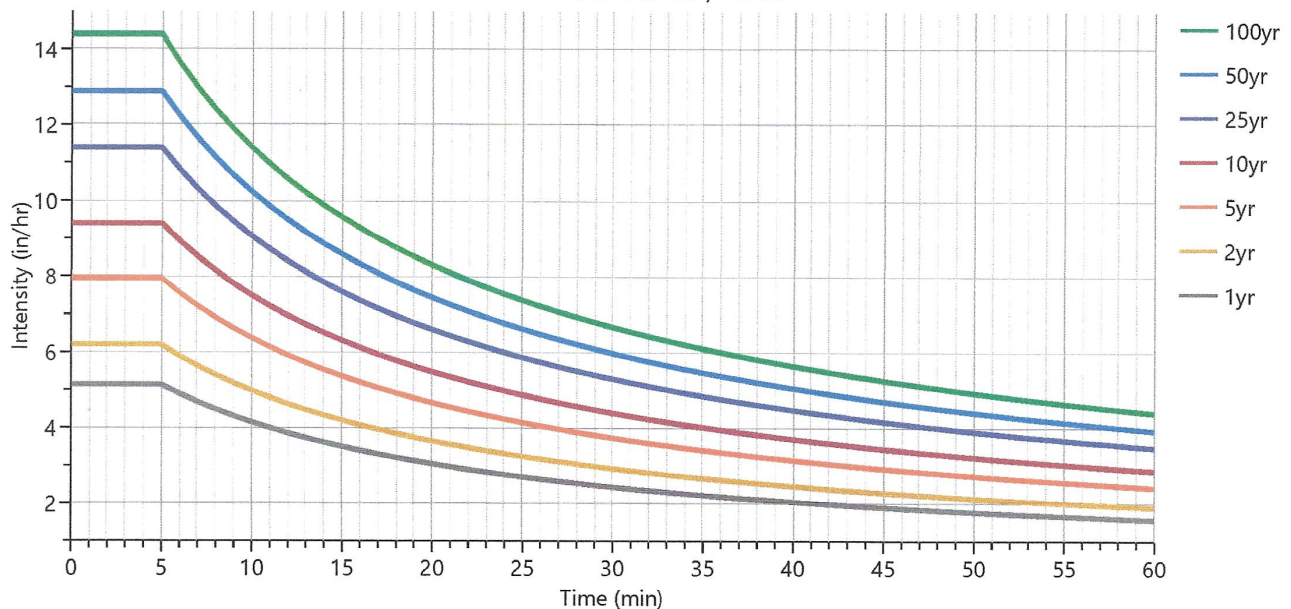
Equation Coefficients	Intensity = $B / (Tc + D)^E$ (in/hr)								
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
B	50.7472	53.2332	0.0000	64.6382	70.9342	76.1807	84.2575	89.2157	
D	11.7000	10.6000	0.0000	10.1000	9.5000	8.5000	8.3000	7.9000	
E	0.8135	0.7829	0.0000	0.7720	0.7562	0.7301	0.7257	0.7135	

Minimum Tc = 5 minutes

Tc (min)	Intensity Values (in/hr)								
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
Cf	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
5	5.14	6.20	0	7.95	9.39	11.39	12.88	14.39	
10	4.15	4.98	0	6.37	7.50	9.05	10.22	11.39	
15	3.51	4.20	0	5.37	6.31	7.60	8.58	9.56	
20	3.05	3.66	0	4.67	5.49	6.60	7.45	8.30	
25	2.71	3.25	0	4.14	4.87	5.87	6.62	7.38	
30	2.44	2.93	0	3.74	4.40	5.30	5.98	6.67	
35	2.23	2.68	0	3.42	4.02	4.85	5.47	6.11	
40	2.05	2.47	0	3.15	3.71	4.48	5.05	5.64	
45	1.90	2.29	0	2.93	3.45	4.17	4.70	5.26	
50	1.77	2.14	0	2.74	3.23	3.90	4.41	4.93	
55	1.67	2.01	0	2.57	3.04	3.68	4.15	4.65	
60	1.57	1.90	0	2.43	2.87	3.48	3.93	4.40	

Cf = Correction Factor applied to Rational Method runoff coefficient.

McAllen Texas, USA



Chapter 4 — Hydrology

Section 12 — Rational Method

Table 4-10: Runoff Coefficients for Urban Watersheds

Type of drainage area	Runoff coefficient
Business:	
Downtown areas	0.70-0.95
Neighborhood areas	0.30-0.70
Residential:	
Single-family areas	0.30-0.50
Multi-units, detached	0.40-0.60
Multi-units, attached	0.60-0.75
Suburban	0.35-0.40
Apartment dwelling areas	0.30-0.70
Industrial:	
Light areas	0.30-0.80
Heavy areas	0.60-0.90
Parks, cemeteries	0.10-0.25
Playgrounds	0.30-0.40
Railroad yards	0.30-0.40
Unimproved areas:	
Sand or sandy loam soil, 0-3%	0.15-0.20
Sand or sandy loam soil, 3-5%	0.20-0.25
Black or loessial soil, 0-3%	0.18-0.25
Black or loessial soil, 3-5%	0.25-0.30
Black or loessial soil, > 5%	0.70-0.80
Deep sand area	0.05-0.15
Steep grassed slopes	0.70
Lawns:	
Sandy soil, flat 2%	0.05-0.10
Sandy soil, average 2-7%	0.10-0.15
Sandy soil, steep 7%	0.15-0.20
Heavy soil, flat 2%	0.13-0.17
Heavy soil, average 2-7%	0.18-0.22

BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (DA A1-Q10)(Pre and Post Development)
Subdivide Property and Tap into Waterline and Sewer Connections
Project: PJT-21-01
By: Jose F. Torres, P.E.
Date: 2/12/2021

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (Tc + d)^e$ (See attachment A)

10 year storm
 $b = 70.9342$
 $e = 0.7562$
 $d = 9.5$

where Tc , is calculated with an average overland flow velocity (0-2% slopes):

- a) existing unimproved conditions: $vel = 0.25$ ft/sec
- b) proposed residential conditions: $vel = 0.30$ ft/sec
- c) proposed pipe flow: $vel = 2$ ft/sec

- 3) Accepted Runoff Coefficients

- a) Single Family Residence $c = 0.35$
- b) unimproved sandy clay loam soil, $c = 0.20$ ref. TxDOT Hydraulic Manual

- 4) Total Area = 2.40 ac net

II. Existing Conditions

$Tc = 375 \text{ ft} / (0.25 \text{ ft/sec} \times 60 \text{ sec}) = 25.0 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 4.87 \text{ in/hr}$
 $Q = CIA = (0.20)(4.87 \text{ in/hr})(2.40 \text{ ac}) = 2.34 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 2.40 ac.
 $Tc = 241 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 275 \text{ ft} / (0.30 \times 60) = 28.7 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 4.52 \text{ in/hr}$
 $Q = CIA = (0.35)(4.52 \text{ in/hr})(2.40 \text{ ac}) = 3.79 \text{ cfs}$

TOTAL = 3.79 cfs

BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (DA A2-Q10)(Pre and Post Development)
Subdivide Property and Tap into Waterline and Sewer Connections

Project: PJT-21-01

By: Jose F. Torres, P.E.

Date: 2/12/2021

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (Tc + d)^e$ (See attachment A)

10 year storm

$b = 70.9342$
 $e = 0.7562$
 $d = 9.5$

where Tc , is calculated with an average overland flow velocity (0-2% slopes):

- a) existing unimproved conditions: $vel = 0.25$ ft/sec
- b) proposed residential conditions: $vel = 0.30$ ft/sec
- c) proposed pipe flow: $vel = 2$ ft/sec

- 3) Accepted Runoff Coefficients

- a) Single Family Residence $c = 0.35$
- b) unimproved sandy clay loam soil, $c = 0.20$ ref. TxDOT Hydraulic Manual

- 4) Total Area = 0.13 ac net

II. Existing Conditions

$Tc = 125 \text{ ft} / (0.25 \text{ ft/sec} \times 60 \text{ sec}) = 6.9 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 8.54 \text{ in/hr}$
 $Q = CIA = (0.57)(8.54 \text{ in/hr})(0.129 \text{ ac}) = 0.63 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 0.13 ac.
 $Tc = 125 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 0 \text{ ft} / (0.30 \times 60) = 6.9 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 8.54 \text{ in/hr}$
 $Q = CIA = (0.57)(8.54 \text{ in/hr})(0.129 \text{ ac}) = 0.63 \text{ cfs}$

TOTAL = 0.63 cfs

BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (DA B1-Q10)(Pre and Post Development)
Subdivide Property and Tap into Waterline and Sewer Connections
Project: PJT-21-01
By: Jose F. Torres, P.E.
Date: 2/12/2021

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (Tc + d)^e$ (See attachment A)

10 year storm
 $b = 70.9342$
 $e = 0.7562$
 $d = 9.5$

where Tc , is calculated with an average overland flow velocity (0-2% slopes):
a) existing unimproved conditions: $vel = 0.25$ ft/sec
b) proposed residential conditions: $vel = 0.30$ ft/sec
c) proposed pipe flow: $vel = 2$ ft/sec

- 3) Accepted Runoff Coefficients

a) Single Family Residence $c = 0.35$
b) unimproved sandy clay loam soil, $c = 0.20$ ref. TxDOT Hydraulic Manual

- 4) Total Area = 2.40 ac net

II. Existing Conditions

$Tc = 455 \text{ ft} / (0.25 \text{ ft/sec} \times 60 \text{ sec}) = 30.3 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 4.37 \text{ in/hr}$
 $Q = CIA = (0.20)(4.37 \text{ in/hr})(2.40 \text{ ac}) = 2.10 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 2.40 ac.
 $Tc = 241 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 383 \text{ ft} / (0.30 \times 60) = 34.7 \text{ min.}$
 $I (10 \text{ yr}) = b / (Tc + d)^e = 4.04 \text{ in/hr}$
 $Q = CIA = (0.35)(4.04 \text{ in/hr})(2.40 \text{ ac}) = 3.40 \text{ cfs}$

TOTAL = 3.40 cfs

BTI, Inc.

EXHIBIT B

Drainage Calculations

PAGE 1 OF 1

Description: Proposed Mi Fortuna Estates Subdivision (DA B2-Q10)(Pre and Post Development)
Subdivide Property and Tap into Waterline and Sewer Connections
Project: PJT-21-01
By: Jose F. Torres, P.E.
Date: 2/12/2021

I. General Information

- 1) Governing Equation: $Q = CIA$ (Rational Method), TxDOT IDF Curves for Hidalgo County & Manning's Equation (normal depth calculations)
- 2) TxDOT Intensity Constants for Hidalgo County, $I = b / (T_c + d)^e$ (See attachment A)

10 year storm
 $b = 70.9342$
 $e = 0.7562$
 $d = 9.5$

where T_c is calculated with an average overland flow velocity (0-2% slopes):
a) existing unimproved conditions: $vel = 0.25$ ft/sec
b) proposed residential conditions: $vel = 0.30$ ft/sec
c) proposed pipe flow: $vel = 2$ ft/sec

- 3) Accepted Runoff Coefficients

a) Single Family Residence $c = 0.35$
b) unimproved sandy clay loam soil, $c = 0.20$ ref. TxDOT Hydraulic Manual

- 4) Total Area = 0.70 ac net

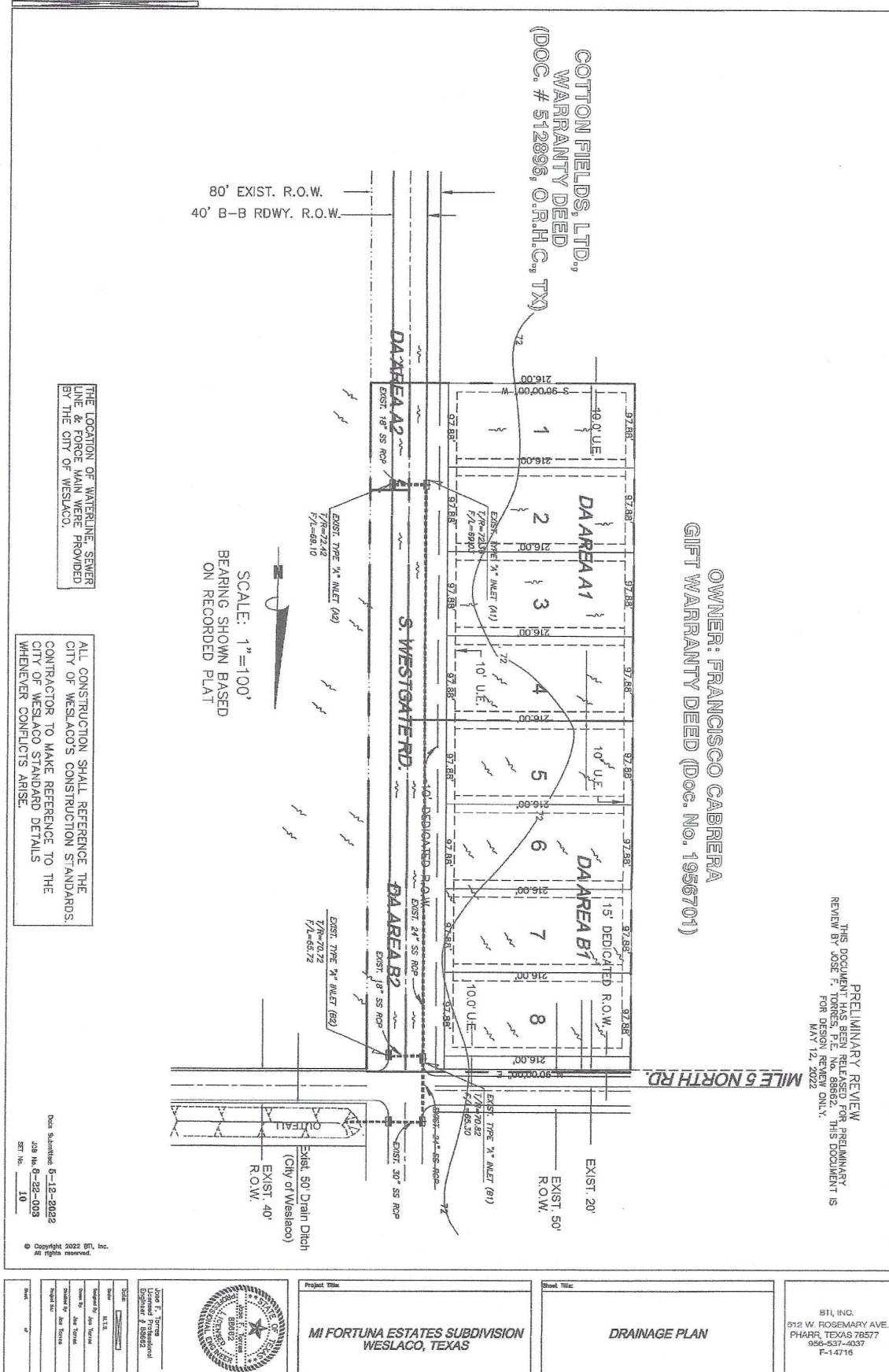
II. Existing Conditions

$T_c = 660 \text{ ft} / (0.3 \text{ ft/sec} \times 60 \text{ sec}) = 36.7 \text{ min.}$
 $I (10 \text{ yr}) = b / (T_c + d)^e = 3.91 \text{ in/hr}$
 $Q = CIA = (0.57)(3.91 \text{ in/hr})(0.697 \text{ ac}) = 1.56 \text{ cfs}$

III. Developed Conditions (Outfall to Exist Drainage Ditch - City of Weslaco)

Drainage area = 0.70 ac.
 $T_c = 660 \text{ ft} / (0.30 \text{ ft/sec} \times 60 \text{ sec}) + 0 / (0.30 \times 60) = 36.7 \text{ min.}$
 $I (10 \text{ yr}) = b / (T_c + d)^e = 3.91 \text{ in/hr}$
 $Q = CIA = (0.57)(3.91 \text{ in/hr})(0.697 \text{ ac}) = 1.56 \text{ cfs}$

TOTAL = 1.56 cfs



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Line No.	Line Size (in)	Line Q (cfs)	Downstream Invert Elev (ft)	Downstream Depth (ft)	Downstream Area (sqft)	Downstream HGL Elev (ft)	Downstream Vel (ft/s)	Downstream Vel Head (ft)	Downstream EGL Elev (ft)	Length (ft)
1	30	9.38	63.78	2.5	4.91	66.28	1.91	0.06	66.34	12
2	30	9.38	64	2.32	4.75	66.32	1.98	0.06	66.38	42
3	24	9.38	64.2	2	3.14	66.37	2.99	0.14	66.51	90.35
4	24	4.42	65.47	1.51	2.54	66.98	1.74	0.05	67.02	665
5	18	0.63	69.09	1.01	1.27	70.1	0.5	0	70.1	42
6	18	1.56	65.47	1.5	1.77	67	0.88	0.01	67.01	42

Upstream Invert Elev (ft)	Upstream Depth (ft)	Upstream Area (sqft)	Upstream HGL Elev (ft)	Upstream Vel (ft/s)	Upstream Vel Head (ft)	Upstream EGL Elev (ft)	Pipe n Value	Pipe Energy Loss (ft)	Junction EGL Elev (ft)	Junction Energy Loss (ft)
63.91	2.37	4.81	66.28	1.95	0.06	66.34	0.011	0.005	66.3	0.01
64.17	2.16	4.5	66.33	2.08	0.07	66.39	0.011	0.016	66.38	0.06
65.47	1.08	1.74	66.55	5.39	0.45	67.01	0.011	0.501	66.55	0
69.09	0.74	1.07	69.83	4.15	0.27	70.1	0.011	3.078	69.83	0
69.2	0.9	1.11	70.1	0.57	0.01	70.1	0.011	0.002	70.1	0
65.72	1.28	1.61	67	0.97	0.01	67.02	0.011	0.007	67.01	0.01

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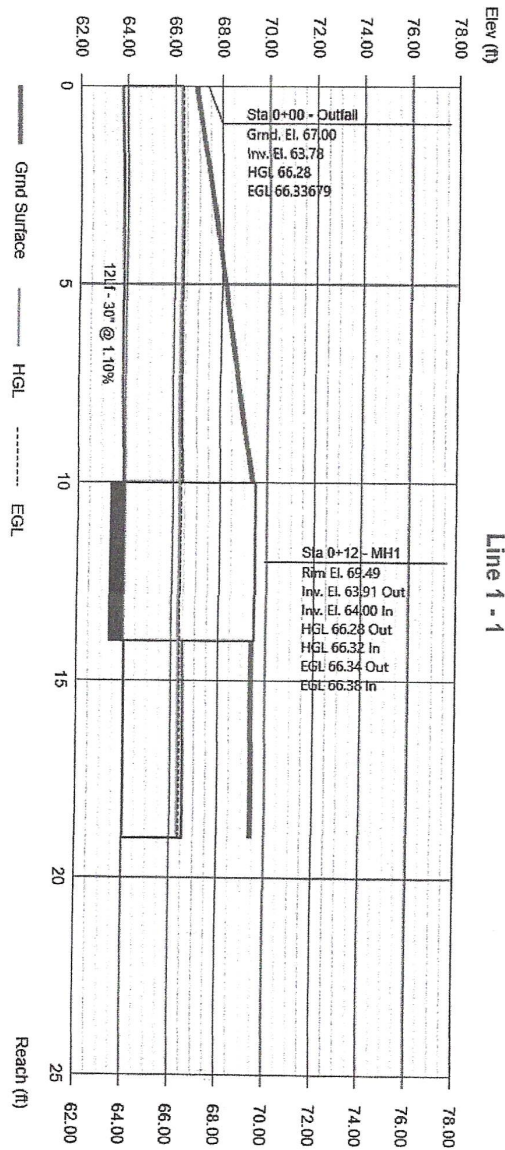


Project Title:
**MI FORTUNA ESTATES SUBDIVISION
WESLACO, TEXAS**

Sheet Title:
EXISTING DRAINAGE ANALYSIS CALC.

BTL INC.
512 W. ROSEMARY AVE
PHARR, TEXAS 78577
956-537-4037
F-14716

Drawn By: J. Torres
Checked By: J. Torres
Reviewed By: J. Torres
Date: 8/1/22



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Drawn By	Jay Torres
Checked By	Jay Torres
Project No.	

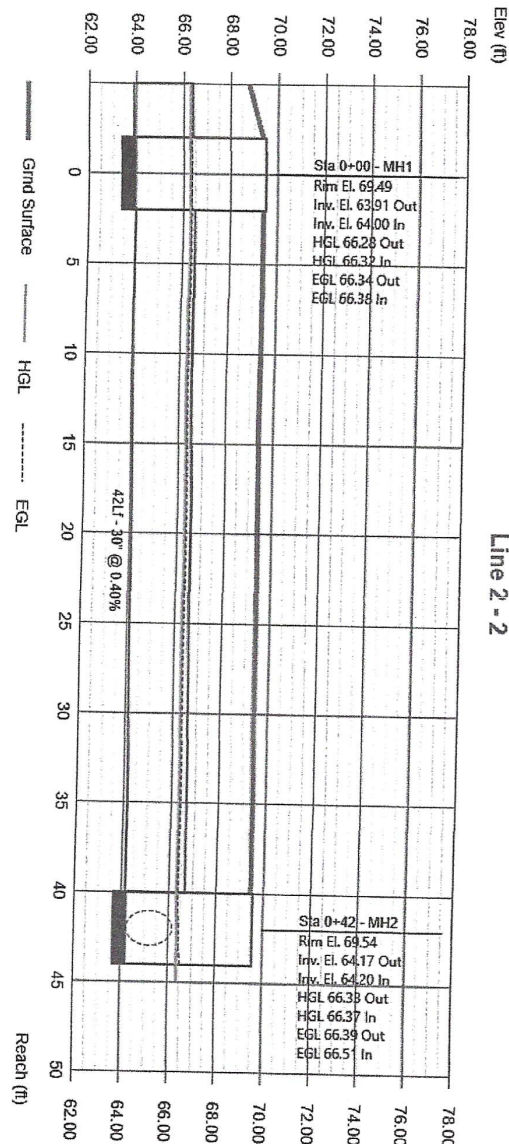
Jose F. Torres
Professional Engineer
No. 88662



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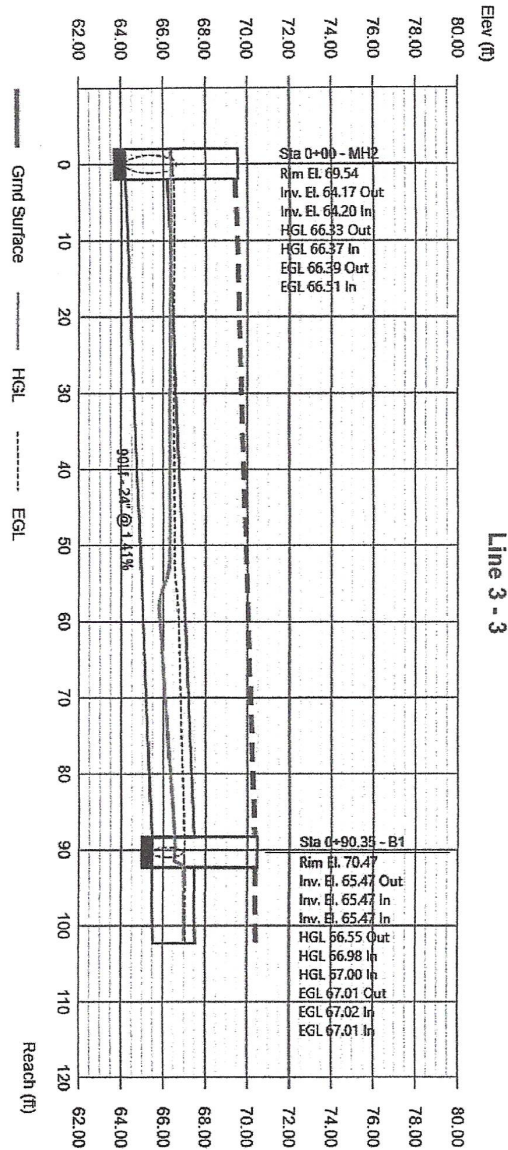


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Sheet Title:
EXISTING STORM SEWER PROFILE

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Scale:
N.T.S.
Author: J. Martinez
Check: J. Martinez
Drawn: J. Martinez
Title: Engineer



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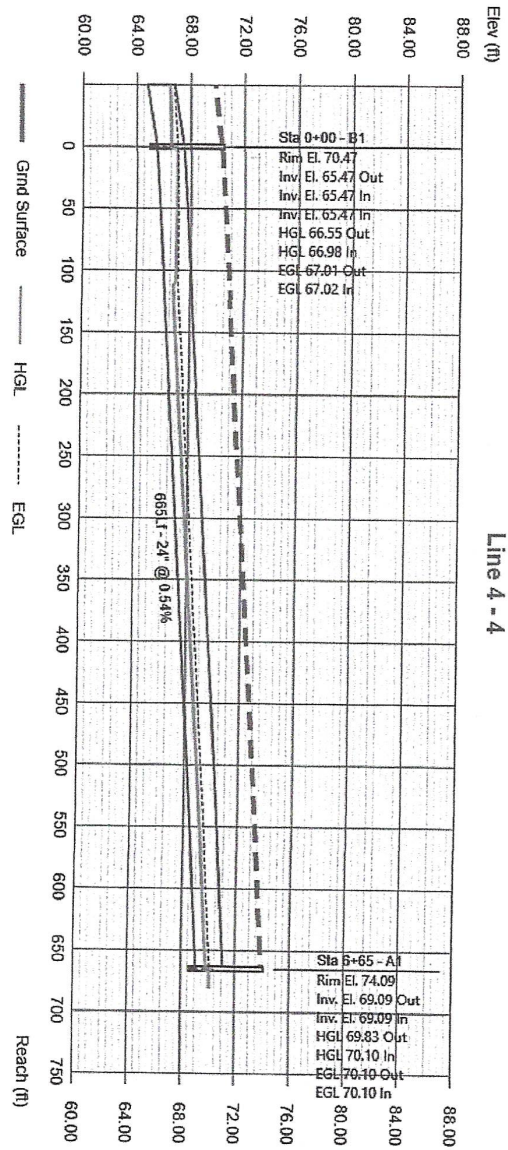


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Sheet Title:
EXISTING STORM SEWER PROFILE

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512 W. ROSEMARY AVE.
PHARR, TEXAS 78577
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BY: J.F.T.
CHECKED BY: J.F.T.
DESIGNED BY: J.F.T.
PROJECT NO.: 21-0001



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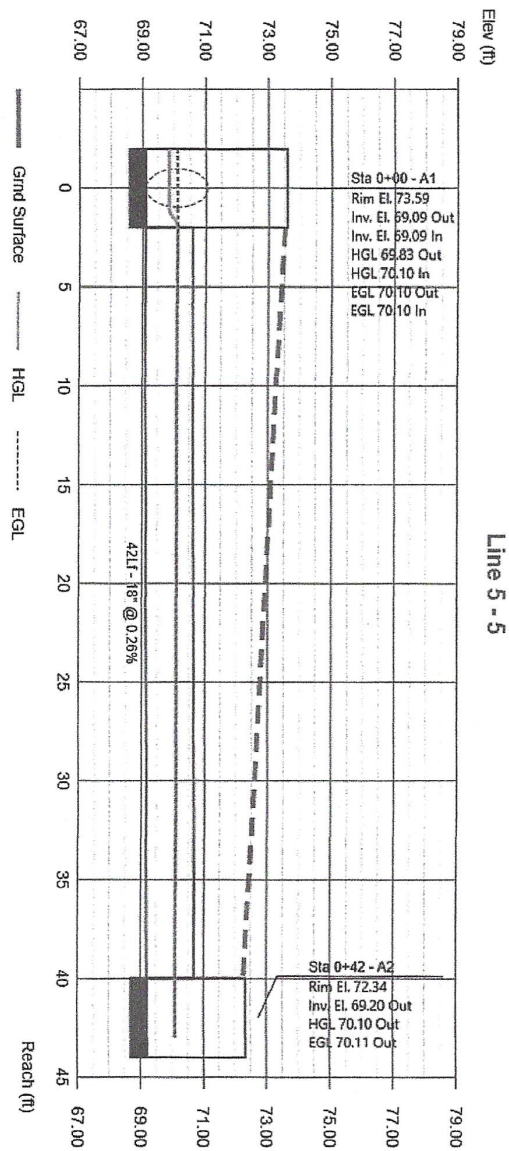


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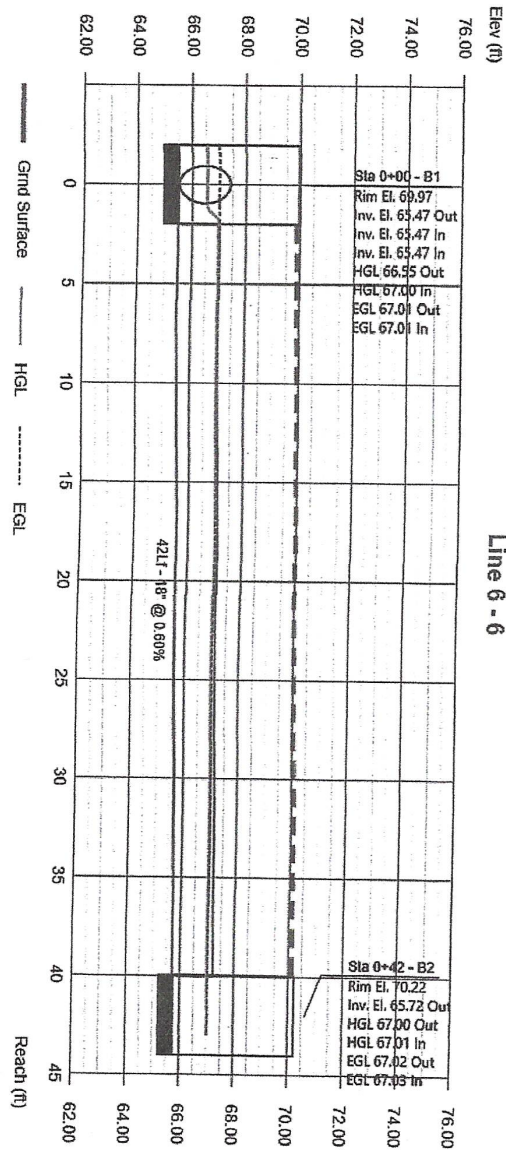
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BY: _____
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DESIGNED BY: _____
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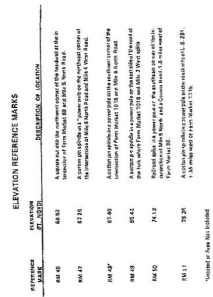
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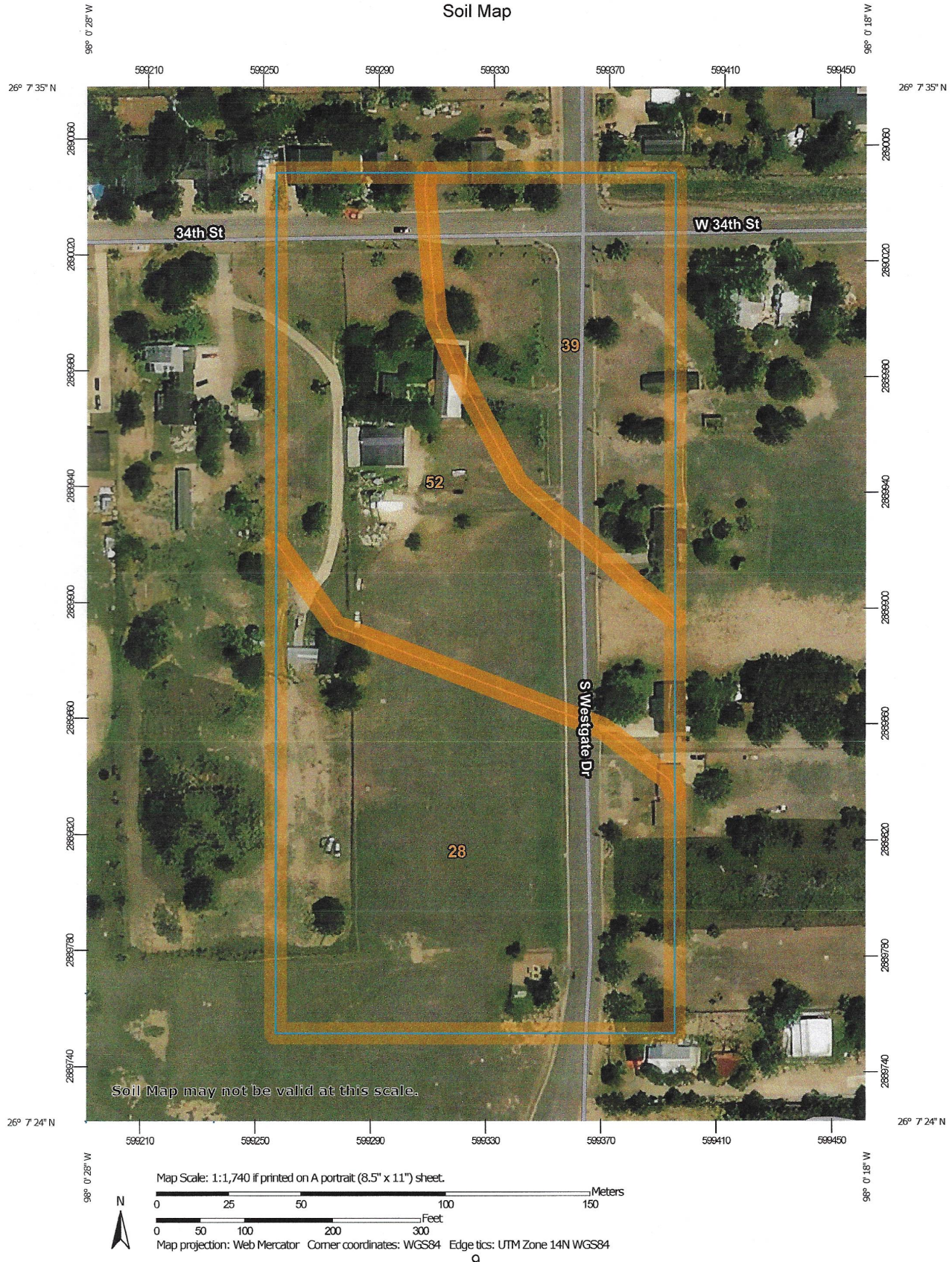
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Custom Soil Resource Report
Soil Map



160

Soil survey

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth <u>In</u>	USDA texture	Classification		Percentage passing sieve number--				Liquid limit <u>Pct</u>	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
45,* 46,* 47.* Pits										
48, 49----- Racombe	0-13 13-49 49-72	Sandy clay loam Sandy clay loam, clay loam. Sandy clay loam, clay loam.	CL, SC CL, SC CL, SC	A-4, A-6 A-6, A-7 A-6	100 100 90-100	100 95-100 80-100	95-100 90-100 80-95	45-65 45-65 40-65	27-35 34-43 30-40	8-15 15-22 11-20
50----- Ramadero	0-21 21-65	Sandy clay loam Sandy clay loam, clay loam.	CL, SC CL, SC	A-6, A-4 A-6, A-7	100 100	100 95-100	95-100 90-100	45-65 45-65	27-39 32-42	9-18 13-21
51:*										
Randado-----	0-9 9-16 16-60	Fine sandy loam Fine sandy loam, sandy clay loam. Cemented-----	SM, SM-SC SC, SM-SC, GC ---	A-2-4 A-2-4, A-2-6, A-4, A-6 ---	75-100 65-100 ---	70-100 60-100 ---	70-100 60-100 ---	20-35 25-50 ---	<25 25-34 ---	NP-7 7-14 ---
Cuevitas-----	0-8 8-60	Fine sandy loam Cemented-----	SM, SM-SC, SC ---	A-2-4 ---	80-100 ---	80-100 ---	80-100 ---	20-35 ---	<28 ---	NP-9 ---
52, 53----- Raymondville	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
54:*										
Raymondville----	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
Urban land.										
55, 56----- Reynosa	0-15 15-48 48-65	Silty clay loam Silty clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
57:*										
Reynosa-----	0-15 15-48 48-65	Silty clay loam Silty clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
Urban land.										
58, 59----- Rio	0-12 12-38 38-63	Fine sandy loam Clay loam, clay Clay loam, sandy clay, sandy clay loam.	SC, SM-SC CL, CH CL	A-2-4, A-4 A-7-6 A-7-6	95-100 95-100 95-100	95-100 95-100 95-100	95-100 95-100 85-95	30-48 75-95 55-80	<30 43-57 41-50	5-10 21-32 20-27

See footnote at end of table.

Hidalgo County, Texas

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TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth In	USDA texture	Classification		Percentage passing sieve number--				Liquid limit Pct	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
32:*										
Jimenez-----	0-8	Very gravelly loam.	GC, GM-GC	A-1, A-2-4, A-2-6	30-58	15-40	15-35	15-30	22-35	5-15
	8-10	Cemented-----	---	---	---	---	---	---	---	---
	10-60	Variable-----	---	---	---	---	---	---	---	---
Quemado-----	0-6	Very gravelly sandy loam.	GM, GC, GM-GC	A-1, A-2	30-50	20-50	15-35	15-30	<25	NP-10
	6-12	Very gravelly sandy loam, very gravelly loam, very gravelly sandy clay loam.	GM, GC, GM-GC	A-1, A-2	30-50	20-50	15-35	15-30	18-28	2-10
	12-18	Cemented-----	---	---	---	---	---	---	---	---
	18-60	Variable-----	---	---	---	---	---	---	---	---
33-----										
Laredo	0-14	Silty clay loam	CL	A-6, A-7-6, A-4	100	100	90-100	85-100	28-44	9-22
	14-65	Silty clay loam, silt loam, very fine sandy loam.	CL	A-6, A-7-6, A-4	100	95-100	90-100	70-95	28-43	9-21
34-----										
Matamoros	0-65	Silty clay, stratified silt loam to clay.	CH	A-7-6	100	100	100	95-100	51-65	30-41
35, 36, 37-----										
McAllen	0-14	Fine sandy loam	CL, SC, CL-ML, SM-SC	A-4, A-6	100	100	95-100	36-55	21-30	4-11
	14-72	Sandy clay loam, clay loam, fine sandy loam.	CL, SC	A-6	95-100	90-100	85-100	45-70	28-40	11-20
38-----										
McAllen	0-14	Sandy clay loam	CL, SC,	A-6	100	100	95-100	36-55	29-40	11-20
	14-72	Sandy clay loam, clay loam, fine sandy loam.	CL, SC	A-6	95-100	90-100	85-100	45-70	28-40	11-20
39, 40, 41-----										
Mercedes	0-19	Clay-----	CH	A-7-6	85-100	80-100	80-100	75-95	55-76	32-49
	19-57	Clay-----	CH, CL-CH	A-7-6	85-100	80-100	80-100	75-95	50-76	32-49
	57-65	Clay-----	CH, CL	A-7-6	85-100	80-100	80-100	75-95	48-76	32-49
42-----										
Nueces	0-29	Fine sand-----	SP-SM, SM, SM-SC	A-2-4, A-3	100	95-100	90-100	8-35	<25	NP-6
	29-72	Sandy clay loam, sandy loam.	SC	A-2-6, A-6	90-100	90-100	80-100	20-50	25-40	11-20
43:*										
Nueces-----	0-29	Fine sand-----	SP-SM, SM, SM-SC	A-2-4, A-3	100	95-100	90-100	8-35	<25	NP-6
	29-72	Sandy clay loam, sandy loam.	SC	A-2-6, A-6	90-100	90-100	80-100	20-50	25-40	11-20
Sarita-----										
	0-48	Fine sand-----	SM-SC, SP-SM, SM	A-2-4, A-3	100	100	65-100	9-35	<25	NP-7
	48-80	Sandy clay loam, fine sandy loam.	SC	A-2-6, A-6	100	100	80-100	30-50	28-40	11-22
44-----										
Olmito	0-47	Silty clay-----	CH	A-7-6	100	100	100	90-100	51-70	28-44
	47-65	Silty clay, silty clay loam.	CH	A-7-6	95-100	90-100	85-100	85-100	51-70	28-44

See footnote at end of table.

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Soil survey

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth In	USDA texture	Classification		Percentage passing sieve number--				Liquid limit Pet	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
13:*										
Randado-----	0-9	Fine sandy loam	SM, SM-SC	A-2-4	75-100	70-100	70-100	20-35	<25	NP-7
	9-16	Fine sandy loam, sandy clay loam.	SC, SM-SC, GC	A-2-4, A-2-6, A-4, A-6	65-100	60-100	60-100	25-50	25-34	7-14
	16-60	Cemented-----	---	---	---	---	---	---	---	---
14-----	0-80	Fine sand-----	SP-SM, SM	A-2-4, A-3	100	100	75-100	5-25	<25	NP-3
Falfurrias										
15-----	0-7	Clay-----	CL, CH	A-7-6	100	100	100	90-100	41-55	20-30
Grulla	7-65	Silty clay, clay	CH	A-7-6	100	100	100	90-100	52-66	28-39
16, 17, 18-----	0-18	Fine sandy loam	SC, SM-SC, SM	A-2-4	100	95-100	95-100	17-35	<30	NP-8
Hargill	18-63	Sandy clay loam	SC, CL	A-6	100	95-100	95-100	40-55	30-40	11-20
	63-80	Sandy clay loam	SC	A-2-4, A-2-6, A-4, A-6	85-100	80-100	75-100	34-50	28-39	9-18
19, 20-----	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
Harlingen	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
21:*										
Harlingen-----	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
Urban land.										
22, 23, 24-----	0-17	Sandy loam-----	SM	A-2-4	100	100	75-100	13-24	<25	NP-4
Hebbronville	17-58	Fine sandy loam, loam.	SM, SM-SC	A-2-4	100	100	90-100	20-30	<30	NP-7
	58-65	Fine sandy loam, loam.	SM-SC, SC	A-2-4, A-4, A-2-6, A-6	95-100	90-100	90-100	20-40	20-30	4-13
25, 26, 27-----	0-17	Fine sandy loam	SC, SM-SC	A-4, A-6	100	95-100	90-100	36-50	20-30	4-11
Hidalgo	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
28, 29, 30-----	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-55	29-40	11-20
Hidalgo	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
31:*										
Hidalgo-----	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-50	29-40	11-20
	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
Urban land.										

See footnote at end of table.



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Hidalgo County, Texas



February 27, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

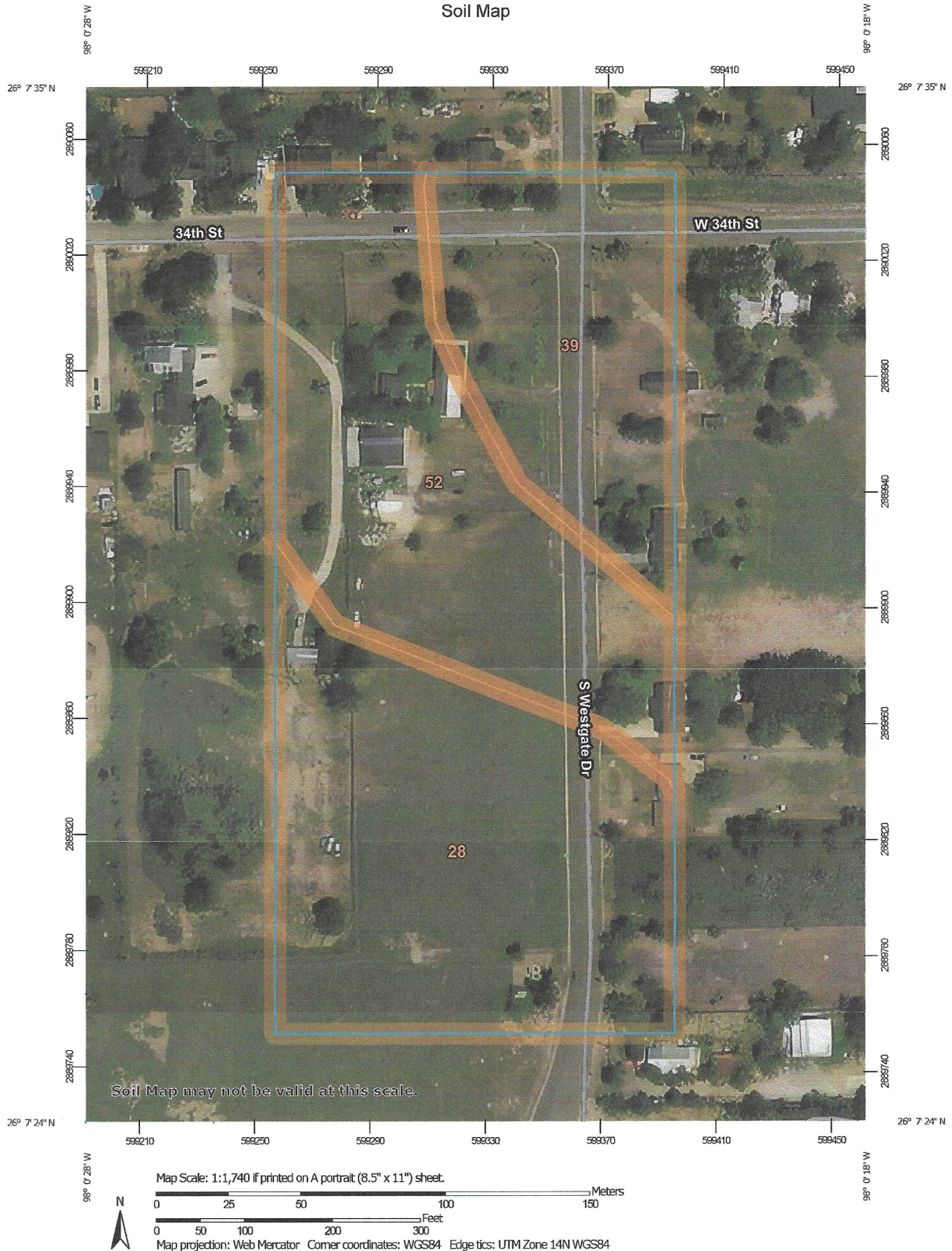
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

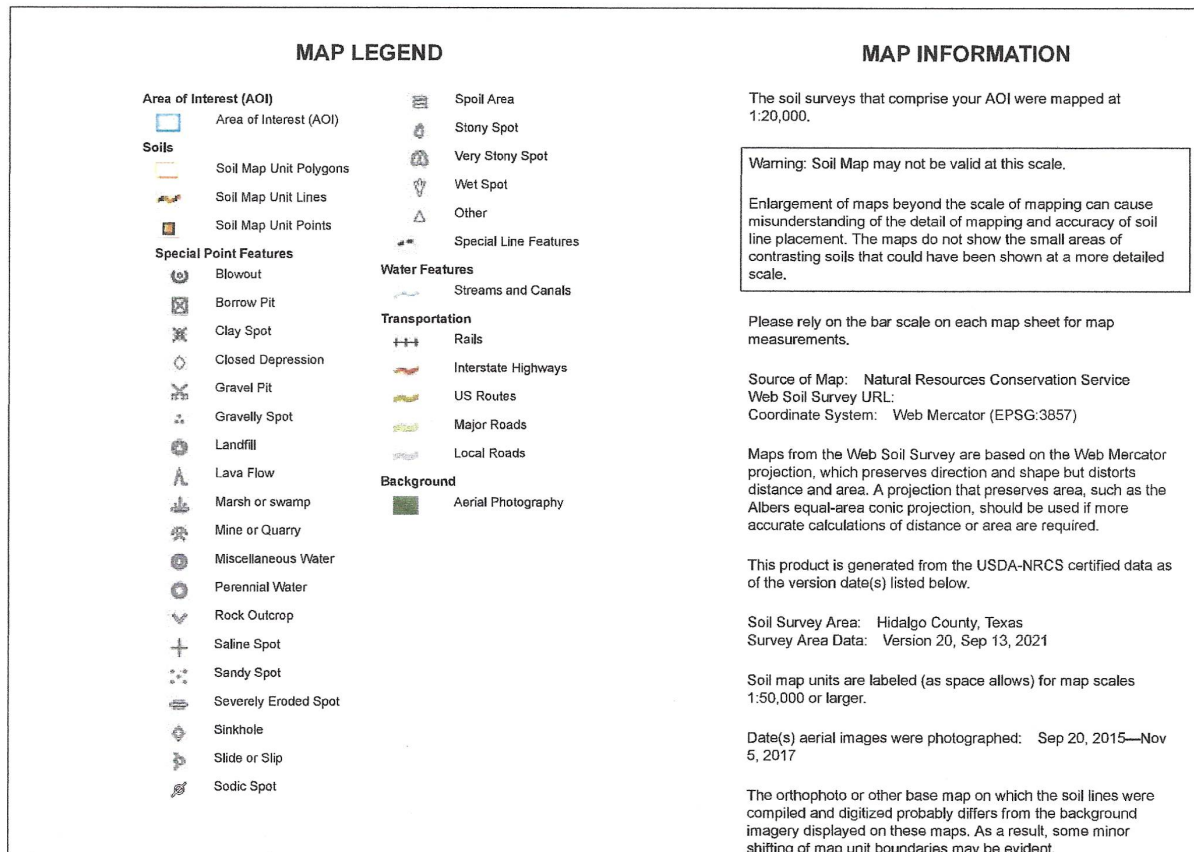
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	4.2	41.3%
39	Mercedes clay, 0 to 1 percent slopes	2.4	23.2%
52	Raymondville clay loam, 0 to 1 percent slopes	3.6	35.5%
Totals for Area of Interest		10.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

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landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Hidalgo County, Texas

28—Hidalgo sandy clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2sxl
Elevation: 20 to 500 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 72 to 74 degrees F
Frost-free period: 300 to 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hidalgo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hidalgo

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Typical profile

Ap - 0 to 17 inches: sandy clay loam
Bk1 - 17 to 28 inches: sandy clay loam
Bk2 - 28 to 38 inches: clay loam
Ck - 38 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 2c
Hydrologic Soil Group: B
Ecological site: R083DY019TX - Gray Sandy Loam
Hydric soil rating: No

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Minor Components

Raymondville

Percent of map unit: 7 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Racombes

Percent of map unit: 6 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Willacy

Percent of map unit: 2 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

39—Mercedes clay, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dblk
Elevation: 10 to 150 feet
Mean annual precipitation: 24 to 34 inches
Mean annual air temperature: 73 to 75 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Mercedes and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mercedes

Setting

Landform: Delta plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous clayey alluvium

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Typical profile

H1 - 0 to 19 inches: clay
H2 - 19 to 57 inches: clay
H3 - 57 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 10 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 12.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: R083DY015TX - Saline Clay
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 15 percent
Hydric soil rating: No

52—Raymondville clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dbm1
Elevation: 20 to 200 feet
Mean annual precipitation: 23 to 33 inches
Mean annual air temperature: 72 to 73 degrees F
Frost-free period: 300 to 340 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Raymondville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Custom Soil Resource Report

Description of Raymondville

Setting

Landform: Delta plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous clayey alluvium

Typical profile

H1 - 0 to 15 inches: clay loam
H2 - 15 to 43 inches: clay loam
H3 - 43 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 8.0
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 15 percent
Hydric soil rating: No



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.D.
From: Rebekah de la Fuente, Planning Director, on behalf of David Salians.	
Subject/Agenda Item: Discussion and consideration for the Voluntary Annexation of Gilberto Estates Subdivision—being a 4.56-acre tract of land out of Farm Tract 101, West and Adams Tract Subdivision, Hidalgo County, Texas located northwest corner of mile 10 N Rd & Mile 4 ½ West Rd. Possible Action	
Discussion/Overview: The proposed development is currently located outside the City of Weslaco city limits. This subdivision is being serviced with water and sewer by OSSF. The proposed development will be one-family residential lots. The development is contiguous to the existing city limits line.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval.	
Additional Action Prompted: ☒ Mayor's Signature ☐ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Request letter.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



APPLICATION FOR VOLUNTARY ANNEXATION

ANNX-000237-2022

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

GENERAL INFORMATION

Name of Subdivision: GILBERTO ESTATES SUBD.

Location: 4WC MILE 10 N. ROAD : MILE 4 1/2 WEST ROAD

Legal Description: 4.56 AC. GROSS O/O F.T. 101, WEST AND ADAMS TRACT SUBD., H.C.T.

- ☒ Petition for annexation signed and notarized by property owners.
- ☒ Detailed dimensioned site plan/map must be submitted with this request.
- ☒ Survey and metes and bounds.
- ☒ City and school tax receipts attached.

OWNER INFORMATION

DBA ZURIEL INVESTMENTS, LLC

Owner's Name: JERRY GONZALEZ Telephone: 956-373-1533

Address: 718 COUNTRYSIDE DR. Fax: _____

City: WESLACO State: TX Zip: 78599 E-mail: jgonzalez@TEXASNATIONAL.COM

ENGINEER INFORMATION

Name: DR. D OMBRE SALINAS Telephone: 956-682-9081

Address: 2221 DAFFODIL AVE. Fax: 956-686-1489

City: MEALLEN State: TX Zip: 78501 E-mail: dsalinas@salinasengineering.com

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: _____ Date: 5-12-22

_____ is the authorized agent

Authorized Agent Signature: _____ Date: 5/11/22

Authorized Agent Printed Name: David Omar Salinas

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____

Staff Review Date: _____

P & Z Commission Approval: _____

City Commission Approval on First Reading: _____

City Commission Approval on Final Reading: _____



**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.E.
From: Rebekah de la Fuente, Planning Director, on behalf of David Salinas.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Gilberto Estates being a 4.56-acre out of farm tract 101, West & Adams Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the Northeast corner of Mile 4 ½ W & Mile 10 N. Possible Action.	
Discussion/Overview: The proposed Six (6) lot subdivision is currently located ioutside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through a 6" waterline and sewer by OSSF. The property is within a Flood Zone "X".	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of Preliminary Plat	
Additional Action Prompted: ☒ Mayor's Signature ☐ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000299-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: FINAL PLAT OF GILBERTO ESTATES

Location: IMMEDIATE NE CORNER OF MILE 4 1/2 W. + MILE 10 N.

Legal Description: A 4.56 ACRE TRACT 90 F.T. 101, WEST
+ ADAMS TRACT SUBDIVISION, H.C.T.

Is subdivision inside city limits? ☒ YES ☐ NO

If subdivision is in the ETJ, indicate? ☐ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: OPEN

Existing Land Use: RESIDENTIAL Proposed Land Use: RESIDENTIAL

Number of Lots Proposed: 6 Gross Acreage: 4.56

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: JEFFRY GONZALEZ Telephone: 956-373-1533

Address: 718 COUNTRYSIDE DR. Fax: _____

City: WESLACO State: TX Zip: 78599 E-mail: JGONZALEZ@TEXASNATIONAL.COM

ENGINEER INFORMATION

Name: DAVID SALINAS, SEA Telephone: 956-682-9081

Address: 2221 DAFFODIL AVE Fax: _____

City: MCALLEN State: TX Zip: 78501 E-mail: DSALINAS@FALWASENGINEERING.COM

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

☐ YES ☐ NO Water Provision: _____

☐ YES ☐ NO Wastewater Provision: _____

☐ YES ☐ NO Electric Company: _____

☐ YES ☐ NO Phone Utility _____

☐ YES ☐ NO Gas Utility

☐ YES ☐ NO Cable Utility

Proposed subdivision is in the following districts:

☐ YES ☐ NO Drainage District #1

☐ YES ☐ NO Irrigation District #9

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If **YES**, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

Two (2) sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$355.00 Planning Review fee

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

Contours

Flood Zones

Adjoiners

Existing street names

Drainage plans and calculations with engineer's seal

Elevations

Flood directional arrows

Detention areas

Street names

Proof of ownership of the property

If septic tank system required, submit soil evaluation report

Water Rights associated with the property

Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

Twelve (12) sets of preliminary plat **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$350.00 (one time fee for preliminary and final plat) - \$355

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- ☐ Contours
- ☐ Flood Zones
- ☐ Adjoiners
- ☐ Existing & Proposed street names
- ☒ Utility Layout
- ☐ Existing & Proposed Utilities
- ☐ Proposed Fire Hydrants
- ☐ Adjoiners
- ☐ Street names
- ☒ Drainage plans and calculations with engineer's seal
- ☐ Elevations
- ☐ Flood directional arrows
- ☐ Detention areas
- ☐ Street names
- ☒ Proof of ownership of the property
- ☒ If septic tank system required, submit soil evaluation report
- ☒ N/A Water Rights associated with the property
- ☒ Tax Receipt for all taxing entities showing that taxes are paid in full
- ☒ Number of fire hydrants proposed for subdivision
- ☒ Trip Generation Worksheet - SUBMITTED 6-16-22

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- ☐ Twelve (12) sets of plans **FOLDED & STAPLED** (24 x 36) & PDF copy **with all corrections**
- ☐ Plats to be sealed by Professional Engineer
- ☐ Approved Drainage Report
- ☐ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- ☐ One set of 8 1/2 x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- ☐ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- ☐ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- ☐ Notice of Intent
- ☐ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- ☐ Electronic file of final plat and as-builds
- ☐ Reproducible plat to be recorded with all required signatures
- ☐ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- ☐ 2% inspection fee
- ☐ Park Fees
- ☐ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- ☐ Tax certificates
- ☐ Memo from engineering inspector releasing subdivision
- ☐ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- ☐ 30 Year Water and 30 Year Sewer Service Agreements
- ☐ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- ☐ Sealed engineering cost estimates
- ☐ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: P.O.A. SUBMITTED ON 5-16-22 Date: _____

DAVID SALINAS FOR SALINAS ENGINEERING is the authorized agent

Authorized Agent Signature: _____ Date: 8-29-22

Authorized Agent Printed Name: DAVID SALINAS

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____

DRAINAGE REPORT

FINAL PLAT OF
GILBERTO ESTATES

CITY OF WESLACO
HIDALGO COUNTY, TEXAS

PREPARED BY:

David Omar Salinas, P.E., R.P.L.S.
Salinas Engineering & Associates
(TBE F-6675)
2221 Daffodil Ave.
McAllen, Texas, 78501
(956) 682-9081
(956) 686-1489 Facsimile
(956) 648-8899 Cell
dsalinas@salinasengineering.com



JUNE 16, 2022

INDEX

Drainage Report Narrative: Page 2.-3.

- A. Hydrograph: Dated 06/17/2022 Attached
- B. Plat reduction of Gilberto Estates, Weslaco, H.C.T.
- C. Copy of FIRM – CPN 480334 0005 C, dated 11/2/82
- D. Copy of Plat reduction and other drainage report exhibits

DRAINAGE REPORT NARRATIVE

Proposed Gilberto Estates Subdivision is a 6 - lot 3.42 Acre residential subdivision out of Lot 101, West and Adams Tract Subdivision Hidalgo County, Texas. Said site is located within the limits of the City of Weslaco at the NWC of Mile 10 North and Mile 4 ½ West Roads having double frontage with 684.8 feet east/west and 290.40 feet north/south. Proposed use is single family residential use. This one lot plat is located in Zone “X” (unshaded) as per the FIRM Community Panel No. 480334 0450 C, Revised to Reflect LOMR dated 05/30/02. Zone “X” areas (unshaded) are defined as “determined to be outside the 500-year floodplain. The site is currently vacant and both roadways are improved with paved sections and adjoining bar ditches. North of adjacent to the site is a recorded plat having residential uses and to the west other residential homes.

Soils of this proposed plat consist of a Hidalgo sandy clay loam complex (Map Unit No. 28) with slopes between 0 and 1 percent – these soils are well drained with slow surface runoff with moderate permeabilities. This soil is in capability subclass IIc non-irrigated and in class I irrigated, Group B, and is in the Gray Sandy Loam range can be seen in Sheet 105 of the Soil Survey of Hidalgo County, Texas.

Waters entering the roadside bar ditches flow east and south along Mile 10 North and Mile 4 ½ West Roads, respectively. There is an existing metal grate inlet located just north of the intersection of both bar ditches. Waters flowing within said bar ditches flow into the grate inlet where waters are diverted via a storm line east under Mile 4 ½ West Road into a Hidalgo & Cameron Co. Irrigation Ditch No. 9 – called 7J1. This ditch although owned by the irrigation district is maintained by the HCDD No. 1. This ditch that runs parallel to and north of Mile 10 North Roads. Upon entering said ditch waters from this grate inlet flow east away from Mile 4 ½ West Road.

Waters within this property essentially flow via sheet flow in a due easterly direction via sheet flow over the un-developed lands. Waters may enter Mile 4 ½ West. Waters flow easterly at an average slope of 0.30%. over an average drainage run of 330.0 feet. There are no improvements on this land so waters will flow un-impaired upon reaching a saturated condition.

In accordance with the drainage policies of the City of Weslaco, this subdivision shall be required to retain on-site the total volume of water CREATED by the post-development of this 1.98 net acre property. Using the Modified Rational Method (*For Reference: TxDOT Intensity-Frequency-Duration Coefficients for Texas Counties HDM (2004)*) over a 10-year storm event, and, existing drainage coefficient of 0.20 and a future computed drainage coefficient of 0.40 – *For Reference: FHWA, Urban Drainage Design Manual HEC -22 (2001)*, an average drainage run of 330.0 feet and an average slope of 0.30%, it was computed that the improved condition would produce an additional total volume of 13,297.83 Cubic Feet, or, 0.30 Acre-Feet. Runoff

shall increase from 2.70 CFS to 4.33 CFS – an increase of 1.63 CFS – on a 50-year storm event post development on this site.

The developer shall provide for on-site non-discharging detention such that a minimum volume of 13,297.83 Cu. Ft. of total on-site storage is provided. Each lot shall provide for on-site detention volume in the amount of not less than 2,216.31 Cu. Ft. Drainage swales shall be constructed in direct line of the direction of overland flow and an easement shall be provided on the plat for each swale. Maintenance of all swales shall lie with the respective lot owner.

A site and grading (drainage) plan is recommend to the City of Weslaco as part of the building permit to insure compliance with this report. All finished floor construction shall be at an elevation of not less than 68.0 or as approved by the City of Weslaco.

Date: June 17, 2022

Attachment: Hydrograph and Other Required Drainage Report Information
xc: n:\subdivisionplats\gilbertoestates.sub\drainagereport.061722

6/17/2022
jag

Detention Calculations
Gilberto Estates Subdivision

Runoff Calculations

Area: 3.42 acres

Length of Basin: 330.00 ft

Avg. Basin Slope (Hr.): 0.30 %

Undeveloped t_c: 43.96 min.

Developed t_c: 34.19 min.

0

FAA-0 RM-1

43.96 14.37

34.19 4.946

Proposed

LAND CHARACTER

1.37 acres

2.05 acres

0.3 Developed

0.20 Undeveloped

0.40 C (composite, developed)

Existing

LAND CHARACTER

0.00 acres

3.42 acres

0 Developed

0.20 Undeveloped

0.20 C (composite, developed)

Accumulated Runoff Calculations:

50 year storm

LIMIT OUTFLOW:

2.70

2004

Undeveloped Calculations

County: HIDALGO COUNTY, TEXAS

2-year

e

b

d

i₂ (in/hr)

Q₂= 1.85

5-year

e

b

d

i₅ (in/hr)

Q₅= 2.32

10-year

e

b

d

i₁₀ (in/hr)

Q₁₀= 2.70

25-year

e

b

d

i₂₅ (in/hr)

Q₂₅= 3.13

50-year

e

b

d

i₅₀ (in/hr)

Q₅₀= 3.45

100-year

e

b

d

i₁₀₀ (in/hr)

Q₁₀₀= 3.70

post dev FAA

tc 34.19/168

i 5.88

Q 8.04

Alt IDF

0

RM

Pre

330

Length

Sp

0.30

K

3.28

k

0.213

V

0.382661

Tc

14.37/304

Post

330

Length

Sp

0.30

K

3.28

k

0.619

V

1.11205

Tc

4.94581

Detention_Drainage 2021.061622 Subdivision



**City of Weslaco
Engineering Division**
255 S. Kansas ♦ Weslaco, TX 78570 ♦ (956)

TRIP GENERATION WORKSHEET

Complete parts A and B as an aid to determine if your project requires a Traffic Impact Analysis (TIA).

A. Subdivision Information

Subdivision Name: GILBERTO ESTATES
 Location: IMMEDIATE N.E. CORNER OF MI. 10 + MI. 4 1/2
 Applicant: DAVID SALINAS SALINAS ENG + ARCH. ☐ Owner ☒ Agent
 Address: 2221 DAFFODIL MALL Phone Number: 956-682-9081
78501

B. Trip Generation Calculation

The texts needed to complete this table are available at the Planning Department. See back of sheet for more information.

ITE Code	Anticipated Land Use	Project Size			AM Peak Hour Trips	PM Peak Hour Trips	Weekday Trips
		Acres	GFA	# of Units			
	<u>SINGLE FAMILY RESIDENTIAL</u>	<u>4.56</u>	<u>—</u>	<u>6</u>	<u>16.25</u>	<u>11.04</u>	<u>—</u>

Comments: _____
 Prepared by: DAVID SALINAS 6/15/22 Date:
 Address: 2221 DAFFODIL AVE Phone Number: 682 9081
WESLACO TX 78501

(For Official Use Only, Do Not Write In This Box)

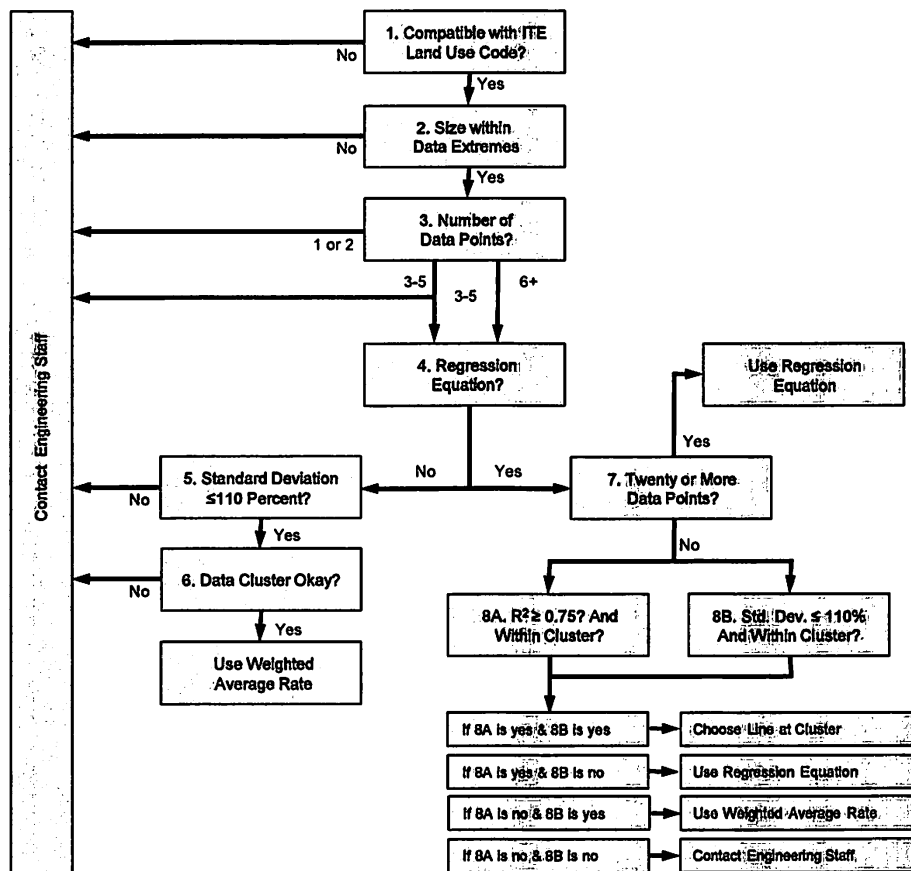
_____ A traffic impact analysis is required. The agent preparing the study must meet with City staff to discuss the scope and requirements of the study before beginning the study.
 _____ A traffic impact analysis is not required. The traffic generated by the proposed development does not exceed the threshold requirements.

Comments: _____

Reviewed by: _____ Date: _____ STID#: _____



Recommended Procedure for Selecting Between Trip Generation Average Rates and Equations



From ITE Trip Generation Handbook

City of Weslaco
Engineering Division
255 S. Kansas Ave
Weslaco, TX 78596
(956)
(956) 973-3128 (fax)

Onsite Sewage Facility Site Evaluation

Applicant Information

Name: Jerry Gonzalez
Address: Mile 10 North & Mile 4 1/2 West
City: Weslaco State: TX Zipcode: _____

Property Location:

Subdivision: Gilbert Estates
Lot: _____ Block: _____
Street Address: Mile 10 North & Mile 4 1/2
City: Weslaco Zipcode: 78596

Site Evaluator Information

Name: Luz Gomez
Company: Gomez Backhoe Service
City: Mission State: TX Zipcode: 78574

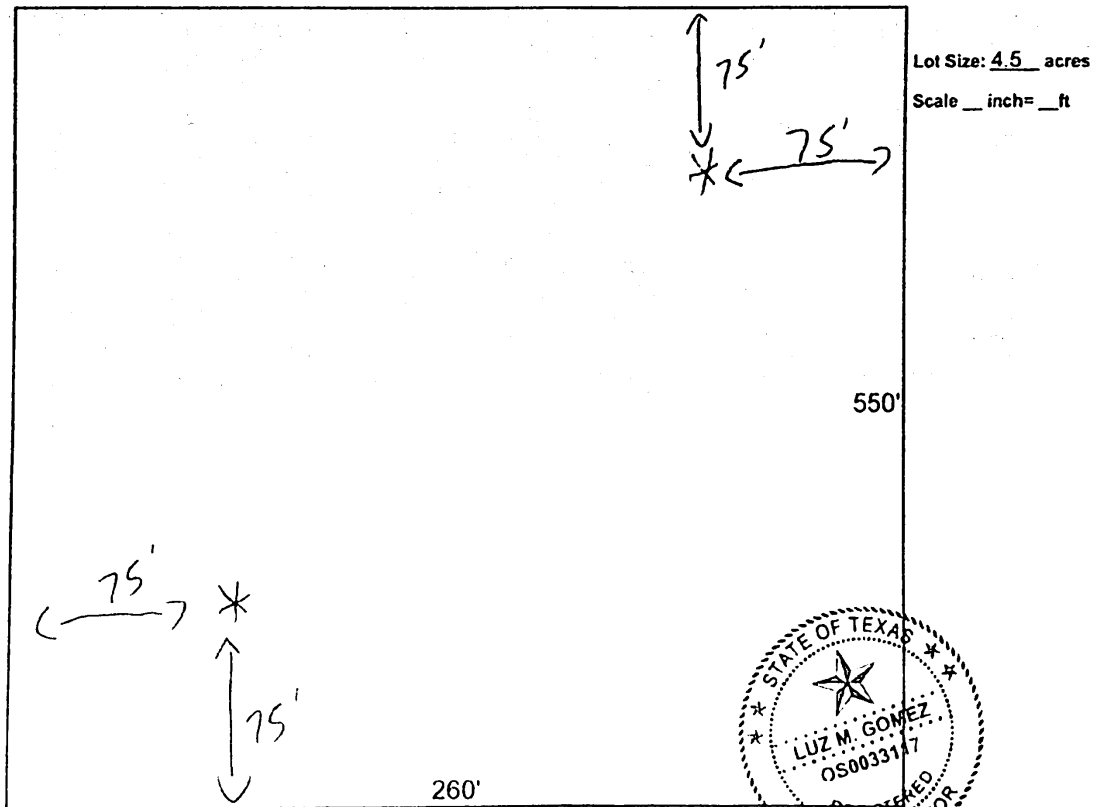
Installer Information:

Name: Sergio Rodriguez
Company: Ro-cha Septic
City: Mission State: TX Zipcode: 78574

Schematic of Lot or Tract

Show:

Compass North, adjacent streets, property dimensions, location of buildings, easements, swimming pools, water lines, and other surface improvements where known (drainage, patios, sidewalks).
Location of existing or proposed water wells within 150 ft of property.
Indicate slope or provide contour lines from structure to the farthest location of the proposed soil absorption or irrigated area.
Location of soil boring or dug pits.
Location of natural, constructed, or proposed drainage ways (streams, ponds, lakes, rivers, high tide of salt water bodies) water impoundment areas, cut or fill bank, sharp slopes and breaks.



Presence of 100 year flood zone
Presence of adjacent ponds, streams, water impoundments
Existing or proposed water well in nearby area
Organized sewage service available to lot or tract

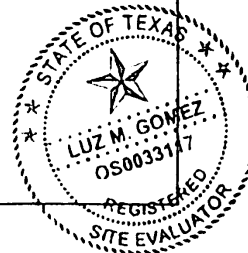
Yes ___ No ☒
Yes ___ No ☒
Yes ___ No ☒
Yes ___ No ☒

Site Evaluator

Name: Luz Gomez

Signature: *Luz Gomez*

License No.: OS 0033117



On-Site Sewage Facility
Soil Evaluation Report Information

Date Soil Survey Performed: 6/15/2022 County: Hidalgo

Subdivision: Gilbert Estates Lot: Block:

Name of Site Evaluator: Luz Gomez Registration Number: OS 0033117

Requirements:

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area.
For subsurface disposal, soil evaluation must be performed to a depth of at least two feet below the proposed excavation depth.
For surface disposal, the surface horizon must be evaluated.
Describe each soil horizon and identify any restrictive features on the form. Indicated depths where features appear.

Soil Boring 1

Depth (Feet)	Texture Class	Soil Texture	Structure (For Class III blocky, platy or massive)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1	↓	↓	N/A	None	None	None
2						
3						
4						
5						
6	III	Silty Clay Loam				

Soil Boring 2

Depth (Feet)	Texture Class	Soil Texture	Structure (For Class III blocky, platy or massive)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1	↓	↓	N/A	None	None	None
2						
3						
4						
5						
6	III	Silty Clay Loam				

I certify that the findings of this report are based on my field observations and are accurate to the best of my ability

Signature of Site Evaluator

6/15/2022

Date:



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V. F.
From: Rebekah de la Fuente, Planning Director, on behalf of Dustin Moore.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for Rock Ridge – being 15.092 acres out of Farm Tract 631 & 633, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 500 ft west of Bus. 83 and Westgate on the south side of Bus. 83. Possible Action. Developer did not update utility easement to a utility and access easement.	
Discussion/Overview: The proposed one (2) lot subdivision is inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through a 12" sewer line. The property is within a Flood Zone "X".	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends denial of Final Plat.	
Additional Action Prompted: ☒ Mayor's Signature ☐ Public Hearing ☐ Budget Amendment ☐ Resolution ☐ Ordinance – First Reading ☐ Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments, (if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000272-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: ROCK RIDGE ESTATES

Location: 500' WEST OF BUS 83 + INTERSTATE ON S SIDE OF BUS 83

Legal Description: 15.092 AC. OUT OF FT 631 + 633 WEST ADD
ADAMS SUBDIVISION

Is subdivision inside city limits? ☒ YES ☐ NO

If subdivision is in the ETJ, indicate? ☐ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: _____

Existing Land Use: MF Proposed Land Use: MF

Number of Lots Proposed: 2 Gross Acreage: 15.092

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: FOUR RIGHT INVES. PARTNERS Telephone: 956-561-9587

Address: 3255 WILSHIRE BLVD Fax: _____

City: LOS ANGELES State: CA Zip: 90010 E-mail: _____

ENGINEER INFORMATION

Name: DUSTIN MOORE Telephone: 956-245-4651

Address: 14792 PALIS DR Fax: _____

City: LA FERIA State: TX Zip: 76559 E-mail: D.MOORE1420SUBDIVISION@gmail.com

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: WESLACO

☒ YES ☐ NO Wastewater Provision: WESLACO

☒ YES ☐ NO Electric Company: AT&T

☐ YES ☒ NO Phone Utility _____	☐ YES ☒ NO Gas Utility _____	☒ YES ☐ NO Cable Utility _____
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>HCD 1</u>	☒ YES ☐ NO Irrigation District <u>HCD #9</u>
--	---

Has the property been assessed as flat rate irrigable property: ☐ YES ☒ NO

Have Water Rights been conveyed to City/Water Supplier? ☒ YES ☒ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If YES, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

- _____ Two (2) sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- _____ \$355.00 Planning Review fee
- _____ One 11" X 17" reduced copy of plat
- _____ Plat Layout
 - _____ Existing & Proposed Easements
 - _____ Existing & Proposed ROW
 - _____ Existing & Proposed Drainage Easements
 - _____ Contours
 - _____ Flood Zones
 - _____ Adjoiners
 - _____ Existing street names
- _____ Drainage plans and calculations with engineer's seal
 - _____ Elevations
 - _____ Flood directional arrows
 - _____ Detention areas
 - _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

- ☒ Twelve (12) sets of preliminary plat **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- ☒ \$350.00 (one time fee for preliminary and final plat)
- ☒ One 11" X 17" reduced copy of plat
- ☒ Plat Layout
 - ☒ Existing & Proposed Easements
 - ☒ Existing & Proposed ROW
 - ☒ Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- ☒ Contours
- ☒ Flood Zones
- ☒ Adjoiners
- ☒ Existing & Proposed street names
- ☒ Utility Layout
- ☒ Existing & Proposed Utilities
- ☒ Proposed Fire Hydrants
- ☒ Adjoiners
- ☒ Street names
- ☒ Drainage plans and calculations with engineer's seal
- ☒ Elevations
- ☒ Flood directional arrows
- ☒ Detention areas
- ☒ Street names
- ☒ Proof of ownership of the property
- ☒ If septic tank system required, submit soil evaluation report
- ☐ Water Rights associated with the property
- ☐ Tax Receipt for all taxing entities showing that taxes are paid in full
- ☐ Number of fire hydrants proposed for subdivision
- ☐ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- ☐ Twelve (12) sets of plans **FOLDED & STAPLED** (24 x 36) & PDF copy **with all corrections**
- ☐ Plats to be sealed by Professional Engineer
- ☐ Approved Drainage Report
- ☐ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- ☐ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- ☐ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- ☐ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- ☐ Notice of Intent
- ☐ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- ☐ Electronic file of final plat and as-builds
- ☐ Reproducible plat to be recorded with all required signatures
- ☐ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- ☐ 2% inspection fee
- ☐ Park Fees
- ☐ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- ☐ Tax certificates
- ☐ Memo from engineering inspector releasing subdivision
- ☐ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- ☐ 30 Year Water and 30 Year Sewer Service Agreements
- ☐ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- ☐ Sealed engineering cost estimates
- ☐ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature: *[Signature]* Date: 22 July 22

Authorized Agent Printed Name: Dustin Moore

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____

DRAINAGE STATEMENT
FOR
ROCK RIDGE ESTATES

APRIL 2022
(REV* 18MAY22)



Prepared by:

Moore Land Surveying, LLC

14216 Palis Drive,
La Feria, TX 78559

(956)245-0988

TBPLS Firm No. 10194186
TBPE Firm No. 19190

DRAINAGE STATEMENT ROCK RIDGE ESTATES

REV* 18 MAY 2022

ROCK RIDGE ESTATES is a 15.092 ac. tract of land inside the city limits of the City of Weslaco. The property is located 425' west of the intersection of US Business 83 and Westgate Drive. The property is being developed into three (3) lots, one being 0.67 Ac. and two approximately 7.00 Ac. lots. The property is currently undeveloped and is in heavy brush. The proposed use of the property shall be for Apartment Units. The time of concentration was calculated using the "C" value for unimproved areas. The subdivision lies in Zone "X-Shaded" as per the National Flood Insurance Rate Map of Community No. 480334 panel number 0450, suffix "C", revised January 2, 1981, per the National Flood Insurance Rate Map of Community No. 480334 panel number 0450 suffix "C", revised June 6, 2000 (revised by the following LOMR's: 02-06-715p-480334 dated 5/30/2002; 15-06-2601p-480334 dated 12/24/2015; and 18-06-0700p-480334 dated 10/05/2018) Zone "X-Shaded" is an "area inside the 500-year flood plain". The plat will call for any new structure's finished floor elevation to be at elevation 82.50 ft. or 30" above natural ground whichever is higher in order to ensure the finished floor elevation is above the 100-year flood plain in order to mitigate flood damage.

The soils are 17% Sandy Loam (25), 1% Sandy Loam (26), and 82% Sandy Clay Loam (28) which are in hydrologic soil group "B" with moderate infiltration. (See excerpts from "Soil Survey of Hidalgo County, Texas")

Existing runoff of the land is by surface flow in a southwesterly direction into the City of Weslaco storm drains inside the property, where it flows through a 30" storm drain 2238' north and west to the HCDD No. 1 Drain north of Tesoro Drive, ultimately out-falling into the Arroyo Colorado, then Laguna Madre.

The proposed drainage for ROCK RIDGE ESTATES shall consist of allowing runoff to continue to surface flow in a southwesterly direction into the City of Weslaco storm drains inside the property, where it flows through an 30" storm drain 2238' north and west to the HCDD No. 1 Drain north of Tesoro Drive, ultimately out-falling into the Arroyo Colorado, then Laguna Madre. Per the City of Weslaco Drainage Policy, detention large enough to detain the post development 50-year event runoff for each lot site plan while discharging the pre-developed 10-year event for each lot is required to be installed at the time the permitting and site development before each lot is completed in order to have no negative impact on the Weslaco Storm sewer system. Until the site is changed from existing conditions no detention will be installed. For this site the pre-developed run-off is 6.23 CFS with an 80 min. pre-developed Tc, and 34 min. post-developed Tc. Based on the Modified Rational Method the largest detention volume produced was for a 5 min duration and produced 7,246 CF released at the 10-year existing conditions, had 166,009 CF inflow at 50-year proposed conditions, and resulted in a required final total storage volume of 158,763 CF. Run-off and detention were calculated assuming each lot would be apartment dwellings.



By: *[Signature]* *12/24/22*
Dustin Moore, PE Date

☐ REJECTED	
☒ APPROVED FOR SUBMITTAL	
☐ TO H.C. PLANNING DEPT.	
☒ TO CITY	
☒ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☒ CITY FACILITY	
☐ OTHER _____	
<u><i>[Signature]</i></u> <u><i>6-6-22</i></u> H.C.D.D. NO. 1 DATE	

INDEX TO EXHIBITS

HYDRAULIC CALCULATIONS:	4
TIME OF CONCENTRATION CALCULATIONS:	5
RATIONAL METHOD “C” VALUES:	6
PROPOSED LAYOUT AND WEIGHTED “C” VALUE:	7
RAINFALL INTENSITY – DURATION CURVES:	8
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FIRM MAP:	11
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NRCS SOIL SURVEY MAP:	13

ROCK RIDGE ESTATES
Drainage Calculations
REV* 18MAY22

Pre-developed Conditions

Area = 15.09 AC
"C" = 0.15 (10) YR
Tc = 80 MIN
Q10pre = 2.75 (10)=IN/HR
6.23 CFS

Developed Conditions

C FACTOR	STORM	Detention...50 year storm					STORAGE REQ'D
	DURATION T (HR)	DRAINAGE AREA A (AC)	INFLOW RATE Q1=CIA (CFS)	RELEASE VOL. Vo=(.5*(T+Tc Dev))*Q10 Pre*60 (CF)	INFLOW VOL. V1=(.5*(T+Tc Dev))*Q1*60 (CF)	V1-Vo (CF)	
0.70	0.08	13.50	142.62	7,246	166,009	158,763	
0.70	0.17	11.00	116.21	8,255	154,092	145,837	
0.70	0.25	9.00	95.08	9,151	139,767	130,616	
0.70	0.33	8.00	84.52	10,048	136,408	126,360	
0.70	0.50	6.50	68.67	11,953	131,844	119,891	
0.70	0.67	5.25	55.46	13,858	123,461	109,603	
0.70	0.83	4.75	50.18	15,651	126,155	110,504	
0.70	1.00	4.25	44.90	17,556	126,614	109,059	
0.70	1.50	3.25	34.33	23,159	127,724	104,565	
0.70	2.00	2.75	29.05	28,762	134,221	105,459	
0.70	3.00	1.90	20.07	39,967	128,865	88,897	
0.70	4.00	1.50	15.85	51,173	130,259	79,086	
Detention required =		158,763 CF	3,645 AC-FT				

***Run-off and detention were calculated assuming each lot would be apartment dwellings.



[Handwritten Signature]
mms27

TABLE 1
TIME OF CONCENTRATION DETERMINATION
WESLACO, TX

			OVERLAND FLOW			CHANNEL, PIPE, STREET, ETC. FLOW					
COMPUTATION POINT	DESCRIPTION OF RUN-OFF MEDIUM	C	LENGTH (FT)	GRADE (%)	TIME (MIN)	WIDTH/DIA (FT)	GRADE (%)	LENGTH (FT)	VELOCITY (FPS)	TIME (MIN)	TOTAL TIME (MIN)
WESLACO APARTMENTS-PRE DEVELOPED											
GRATE INLET IN MIDDLE OF THE PROPERTY	UNIMPROVED	0.30	890	0.45	56						56
STORM DRAIN							0.15	1763	1.75	17	17
73											
WESLACO APARTMENTS - POST DEVELOPED											
GRATE INLET IN MIDDLE OF THE PROPERTY	LAWN	0.30	80	0.50	16						16
GUTTER							0.20	150	1	3	3
STORM DRAIN							0.15	1650	1.75	16	16
											34

TIME OF CONCENTRATION

A) FOR OVERLAND FLOW: TIME= $\frac{1.8*(1.1 - C)*SQRT(L)}{CUBEROOT(S)}$

B) FOR STORM SEWERS, STREETS, CHANNELS, ETC. USE MANNING'S EQUATION.

C) $T_c = \frac{L}{V \times 60} = MIN$ $L=LENGTH$
 $V=VELOCITY$

RATIONAL METHOD RUNOFF COEFFICIENTS

Description of Area Runoff Coefficients

Business:

Downtown areas	0.70 to 0.95
Neighborhood areas	0.50 to 0.70

Residential:

Single-family areas	0.35 to 0.50
Multi units, detached	0.40 to 0.60
Multi units, attached	0.60 to 0.75

Residential (1/2 acre lots or more)	0.30 to 0.45
-------------------------------------	--------------

Apartment dwelling areas	0.50 to 0.70	0.70
--------------------------	--------------	------

Industrial:

Light areas	0.50 to 0.80
Heavy areas	0.60 to 0.90

Parks, cemeteries	0.10 to 0.25
-------------------	--------------

Playgrounds	0.20 to 0.35
-------------	--------------

Railroad yard areas	0.20 to 0.40
---------------------	--------------

Unimproved areas	0.10 to 0.30	0.15
------------------	--------------	------

Character of surface Runoff Coefficients

Streets:

Asphaltic	0.70 to 0.95
Concrete	0.80 to 0.95

Drives and Walks	0.75 to 0.85
------------------	--------------

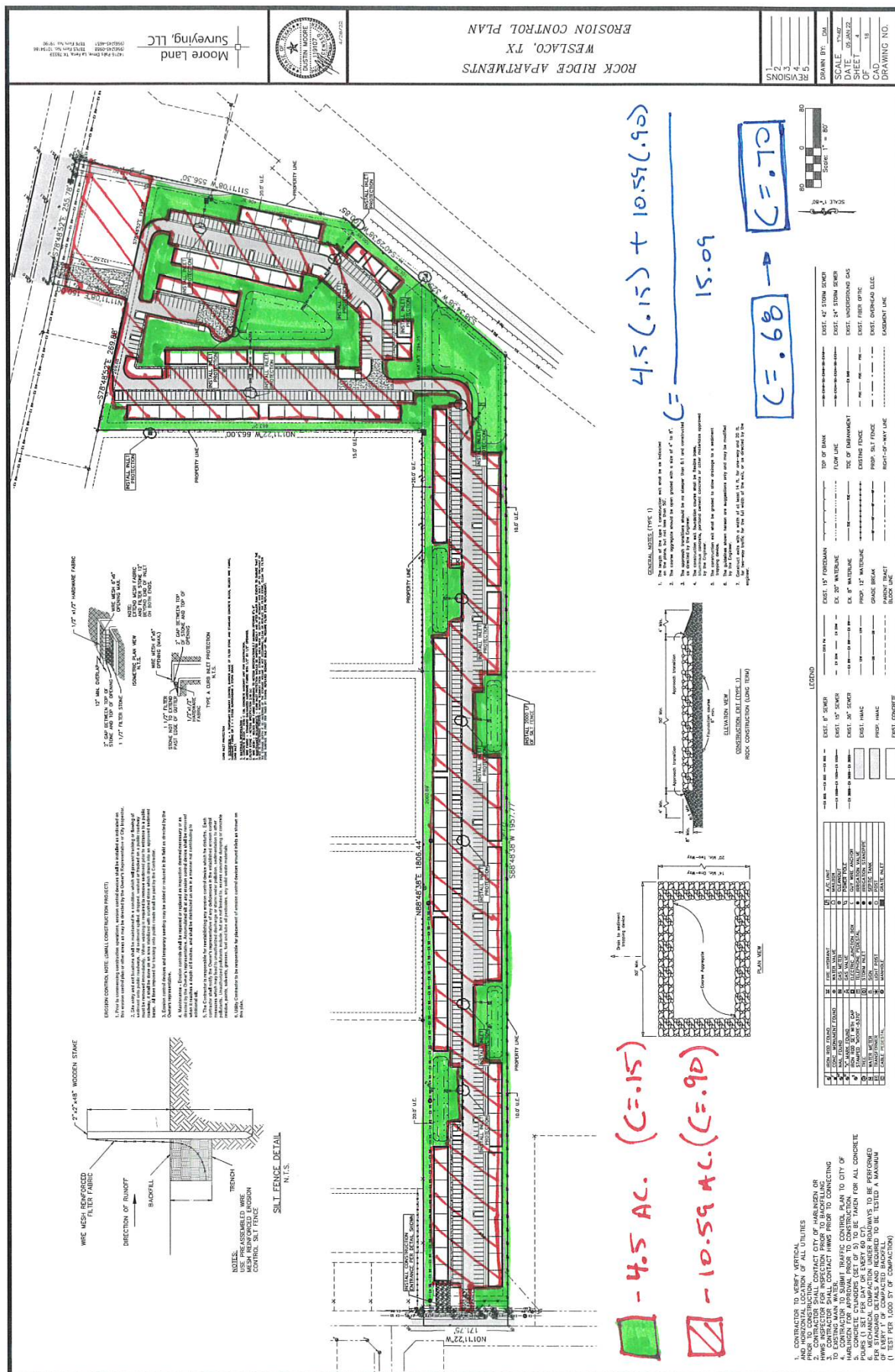
Roofs	0.75 to 0.95
-------	--------------

Lawns, Sandy Soil:

Flat, 2%	0.05 to 0.10
Average, 2 to 7%	0.10 to 0.15
Steep, 7%	0.15 to 0.20

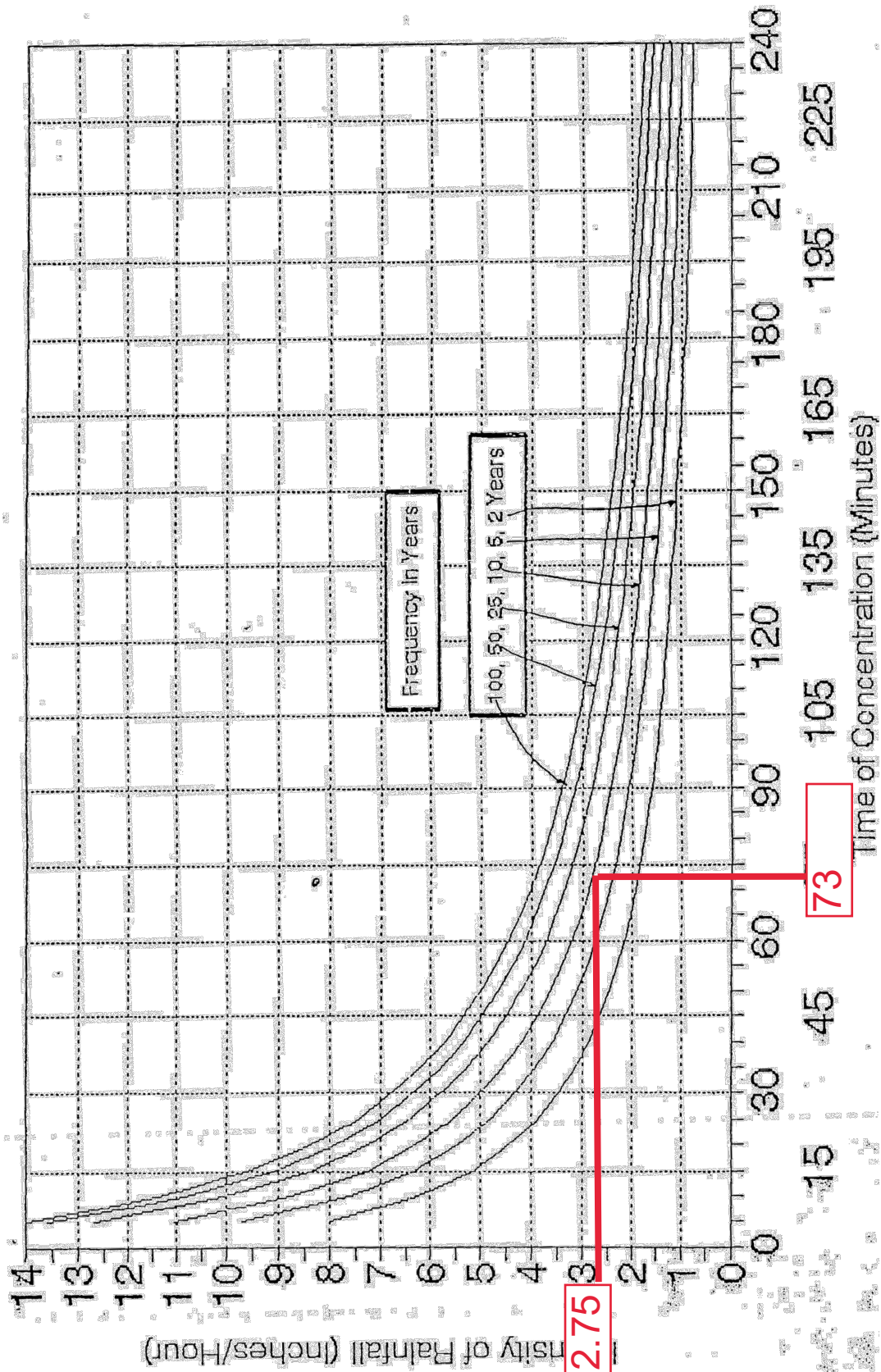
Lawns, Heavy Soil:

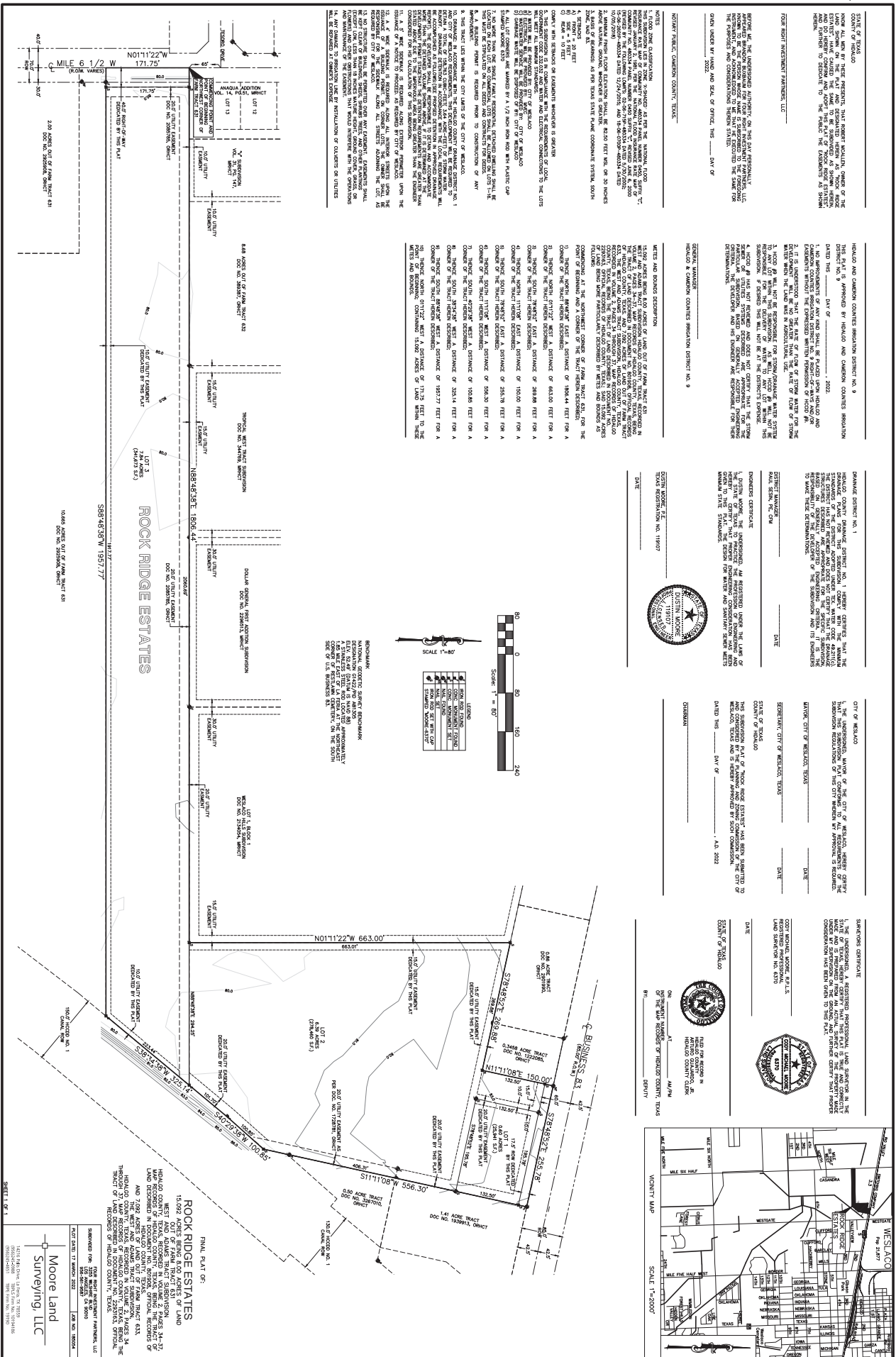
Flat, 2%	0.15 to 0.20
Average, 2 to 7%	0.20 to 0.25
Steep, 7%	0.25 to 0.35

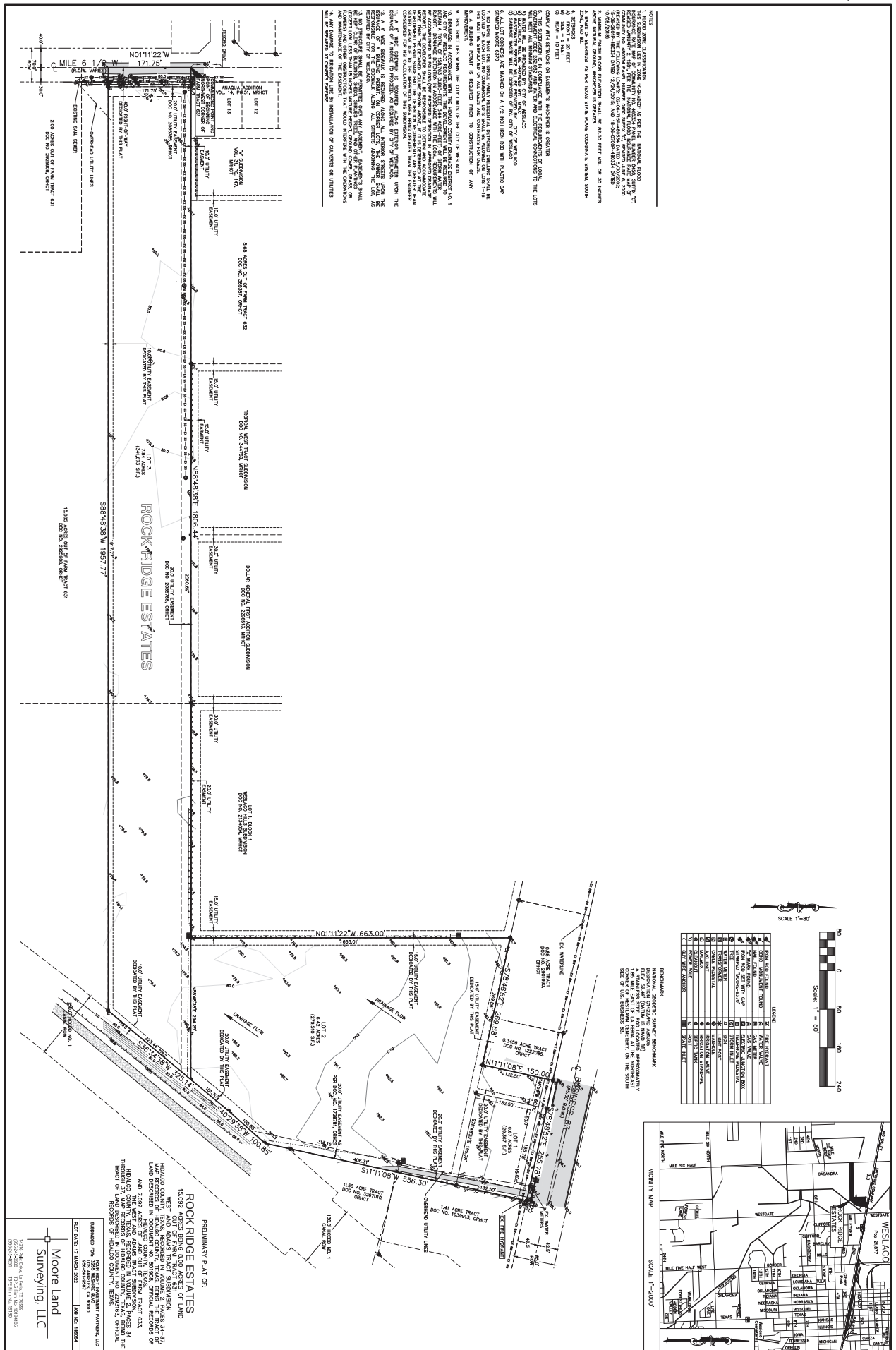


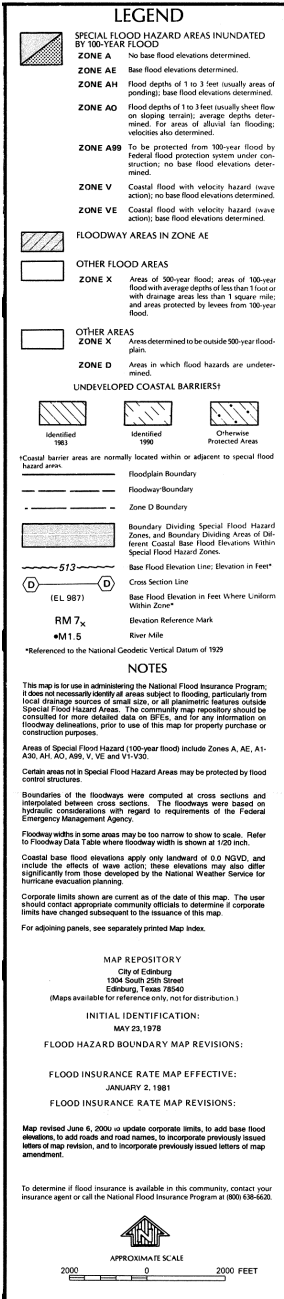
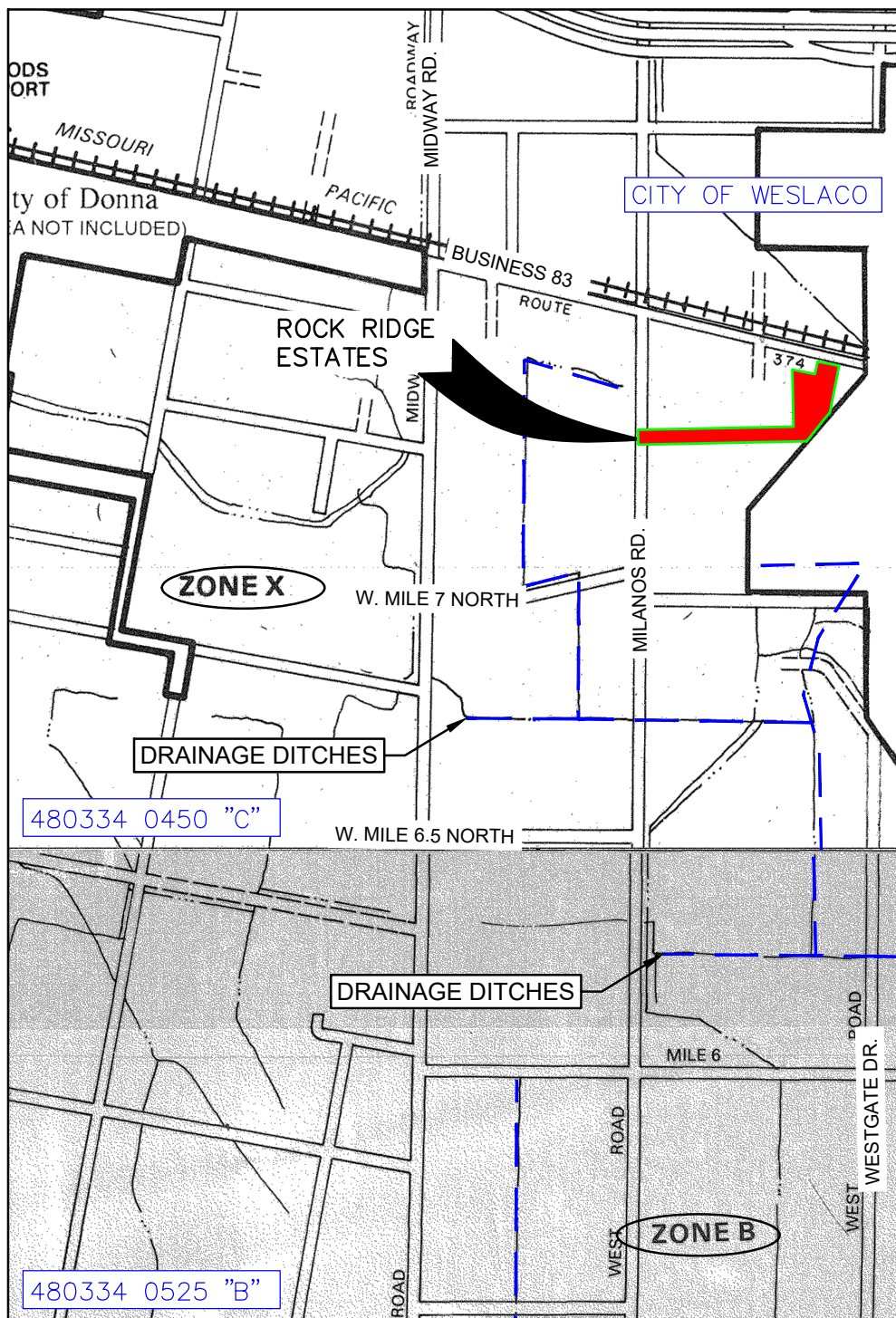
Rainfall Intensity for Hidalgo County

Based on NWS Tech Paper No. 40









NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

HIDALGO COUNTY, TEXAS
(UNINCORPORATED AREAS)

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER

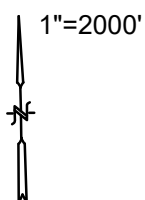
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MAP REVISED:

JUNE 6, 2000

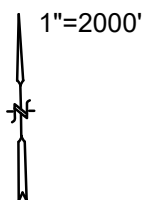
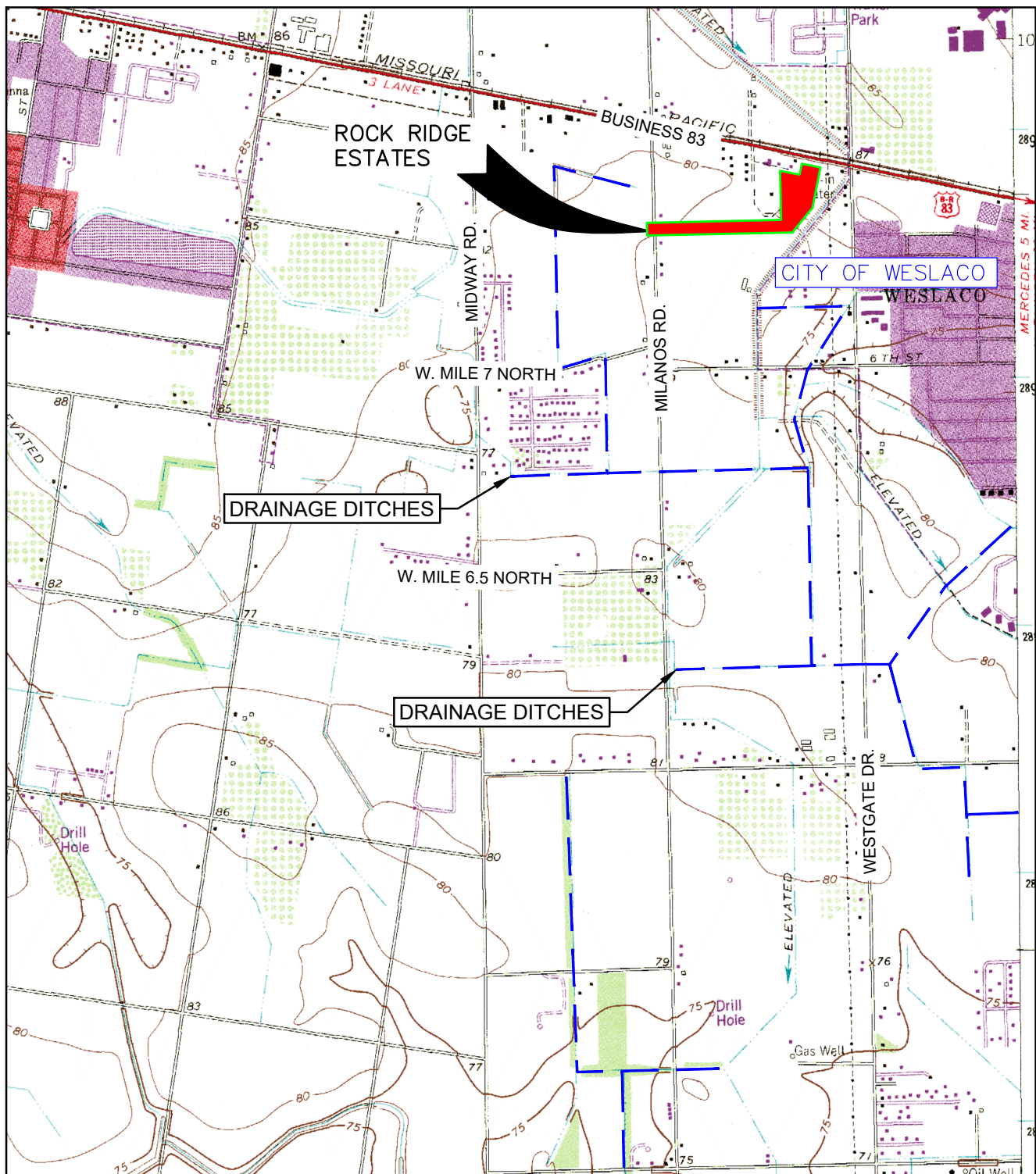


Federal Emergency Management Agency



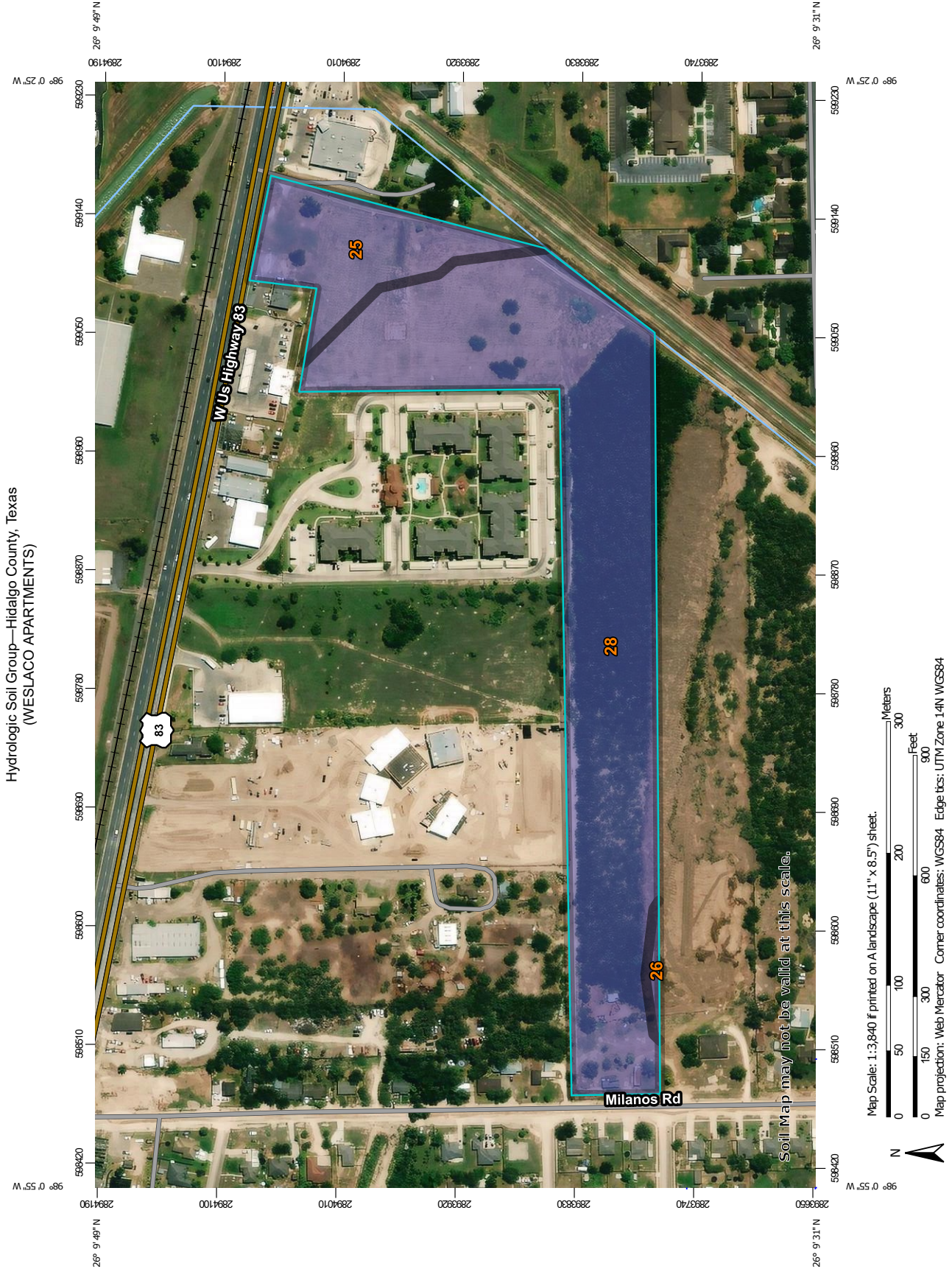
Moore Land
Surveying, LLC

14216 Palis Drive, La Feria, TX 78559
(956)245-0988 TBPLS Firm No. 10194186
(956)245-4651 TBPE Firm No. 19190



Moore Land Surveying, LLC

14216 Palis Drive, La Feria, TX 78559
(956)245-0988 TBPLS Firm No. 10194186
(956)245-4651 TBPE Firm No. 19190



MAP LEGEND

MAP INFORMATION

Area of Interest (AOI)
Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D

- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

Warning: Soil Map may not be valid at this scale.
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.
Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)
Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 20, Sep 13, 2021
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
Date(s) aerial images were photographed: Sep 20, 2015—Nov 5, 2017
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	B	2.9	16.9%
26	Hidalgo fine sandy loam, 1 to 3 percent slopes	B	0.2	1.0%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	B	14.2	82.1%
Totals for Area of Interest			17.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

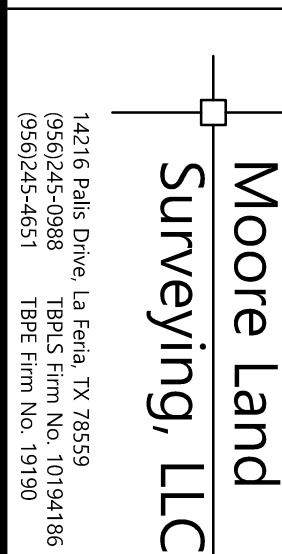
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

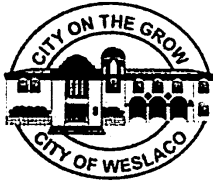
Tie-break Rule: Higher





**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.G.
From: Rebekah de la Fuente, Planning Director, on behalf of Javier Hinojosa.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for Mi Linda Phase I being a 23.05-acre out of farm tracts 648 & 649, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 340 ft south of mile 6 ½ north along the west side of Milano Road. Possible Action.	
Discussion/Overview: The proposed fifty-four (54) lot subdivision is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Applicant is requesting a variance for off-site drainage. Staff has received letter of support from the drainage district	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends denial of Final Plat and compliance with the ordinance on the variance.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments, (if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000268-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: Mi Linda Subdivision Phase I

Location: 340 feet south of Mile 6 1/2 North along the west side of S. Milano Road

Legal Description: 23.05 Acres of land more or less out of Farm Tracts 648 and 649, West Tract

Subdivision as recorded in Volume 2, Pages 34-37, Map Records of Hidalgo County, Texas

Is subdivision inside city limits? ☐ YES ☒ NO

If subdivision is in the ETJ, indicate? ☒ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: Open

Existing Land Use: Agriculture Proposed Land Use: R-2 (Duplexes & Apartments)

Number of Lots Proposed: 54 Gross Acreage: 23.05 Ac.

Title Report Submitted: ☒ YES ☐ NO

OWNER INFORMATION

Owner's Name: Reyna Family Development, LTD. Telephone: (956) 497-3962

Address: 702 W. Expressway 83 Fax: _____

City: Weslaco State: TX Zip: 78596 E-mail: dominicareyna@gmail.com

ENGINEER INFORMATION

Name: Javier Hinojosa Engineering Telephone: (956) 668-1588

Address: 416 E. Dove Ave. Fax: _____

City: McAllen State: TX Zip: 78552 E-mail: javier@javierhinojosaeng.com

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: North Alamo Water Supply Corp.

☒ YES ☐ NO Wastewater Provision: City of Weslaco

☒ YES ☐ NO Electric Company: Magic Valley Electric Co-op

☒ YES ☐ NO Phone Utility <u>AT&T</u>	☐ YES ☒ NO Gas Utility	☒ YES ☐ NO Cable Utility
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>H.C.D.D. #1</u>	☒ YES ☐ NO Irrigation District <u>H.C.C.I.D. #9</u>
--	--

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If **YES**, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

Two (2) sets of plats folded and stapled (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$355.00 Planning Review fee

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

Contours

Flood Zones

Adjoiners

Existing street names

Drainage plans and calculations with engineer's seal

Elevations

Flood directional arrows

Detention areas

Street names

Proof of ownership of the property

If septic tank system required, submit soil evaluation report

Water Rights associated with the property

Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

Twelve (12) sets of preliminary plat folded and stapled (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$350.00 (one time fee for preliminary and final plat)

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- _____Contours
- _____Flood Zones
- _____Adjoiners
- _____Existing & Proposed street names
- _____Utility Layout
- _____Existing & Proposed Utilities
- _____Proposed Fire Hydrants
- _____Adjoiners
- _____Street names
- _____Drainage plans and calculations with engineer's seal
- _____Elevations
- _____Flood directional arrows
- _____Detention areas
- _____Street names
- _____Proof of ownership of the property
- _____If septic tank system required, submit soil evaluation report
- _____Water Rights associated with the property
- _____Tax Receipt for all taxing entities showing that taxes are paid in full
- _____Number of fire hydrants proposed for subdivision
- _____Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- _____Twelve (12) sets of plans **FOLDED & STAPLED** (24 x 36) & PDF copy with all corrections
- _____Plats to be sealed by Professional Engineer
- _____Approved Drainage Report
- _____Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____Notice of Intent
- _____SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____Electronic file of final plat and as-builds
- _____Reproducible plat to be recorded with all required signatures
- _____3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____2% inspection fee
- _____Park Fees
- _____Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____Tax certificates
- _____Memo from engineering inspector releasing subdivision
- _____Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____30 Year Water and 30 Year Sewer Service Agreements
- _____Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____Sealed engineering cost estimates
- _____Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: Ezequiel Reyna, Jr.

X Owner Signature: [Signature] Date: 07/20/22

[Signature] is the authorized agent

Authorized Agent Signature: [Signature] Date: 7/20/22

Authorized Agent Printed Name: Jaime Hernandez, P.E.

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid _____

P & Z Commission Approval on Preliminary Plat: _____

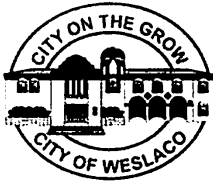
P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR SUBDIVISION VARIANCE

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. VAR-000270-2022

GENERAL INFORMATION

Name of Subdivision: Mi Linda Subdivision Phase I and II

Location: 340' south of Mile 6 1/2 North along the west side of Milanos Road

Legal Description: 37.24 acres of land more or less out of Farm Tracts 648 and 649, West Tract Subdivision as recorded in Volume 3, Pages 34-37, Map Records of Hidalgo County, Texas.

VARIANCE TYPE:

☐ Streetlights ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sanitary Sewer ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Fire Hydrants ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Setbacks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☒ Drainage ☐ YES ☐ NO

Describe in detail the reason for the variance request:

Detention to be placed within a 150' Drain Ditch R.O.W. dedicated to the City of Weslaco straddling the lot line of Farm Tracts 648 and 649. Outfall to flow east and south through H.C.C.I.D. #9 existing canal system.

☐ Minimum Lot Size ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sidewalks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Easement Requirements ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Other _____ ☐ YES ☐ NO

Describe in detail the reason for the variance request:

OWNER INFORMATION

Owner's Name: Reyna Family Development, Ezequiel Reyna Telephone: (956) 477-3962

Address: 702 W. Expressway 83 Fax: _____

City: Weslaco State: TX Zip: 78596 E-mail: dominicareyna@gmail.com

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: Ezequiel Reyna Jr

Owner Signature: _____ Date: 7/22/2022

_____ is the authorized agent

Authorized Agent Signature: [Signature] Date: 7/22/22

Authorized Agent Printed Name: Javier Hinojosa, P.E.



HIDALGO COUNTY DRAINAGE DISTRICT No. 1

Raul E. Sesin, PE, CFM
District General Manager
Hidalgo County Floodplain Administrator

BOARD OF DIRECTORS

DAVID L. FUENTES
Board Member

EDUARDO "EDDIE" CANTU
Board Member

RICHARD F. CORTEZ
Chairman of the Board

EVERARDO "EVER" VILLARREAL
Board Member

ELLIE TORRES
Board Member

August 30, 2022

City of Weslaco
Attn: Rebekah De La Fuente, Planning & Code Enforcement Director
255 S. Kansas Ave.
Weslaco, Texas 78596

RE: Mi Linda Subdivision Phase I and Phase II

Dear Ms. De La Fuente:

This letter is in response to a request from Javier Hinojosa, PE, the Engineer of record for Mi Linda Subdivision Phase I and Phase II Development. Our office has received and approved the proposed drainage statement for the above-mentioned developments and has no objections to the Engineer's plan to discharge water as identified in approved drainage report date August 30, 2022.

If you should have any questions or require additional information, please feel free to contact me at (956) 292-7080.

Sincerely,
HIDALGO COUNTY DRAINAGE DISTRICT No. 1

A handwritten signature in black ink, appearing to read "Yvette Barrera".

Yvette Barrera, PE, CFM
Assistant General Manager

Xc:
Raul Sesin, PE, CFM, General Manager
Alexis Lozano, EIT
Isaac Gonzalez, EIT
Gilberto Aguirre, EIT

Proposed
Mi Linda Subdivision Phase I and II
Weslaco, Texas

DRAINAGE REPORT

Prepared For:

City of Weslaco
255 S. Kansas Ave.
Weslaco, Texas 78596

Prepared By:

JAVIER HINOJOSA ENGINEERING
CONSULTING ENGINEERS

TBPELS FIRM NO. F-1295
416 E. Dove Avenue
McAllen, Texas 78504
(956) 668-1588
e-mail: javier@javierhinojosa.eng.com

June 16, 2022

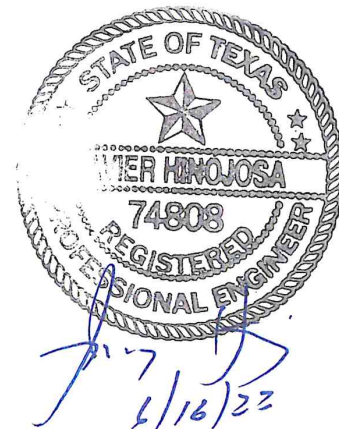


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Drainage Statement Mi Linda Subdivision Phase I and II Weslaco, Texas

Introduction

Mi Linda Subdivision is a 37.23-acre tract of land out of Farm Tracts 648 and 649, The West and Adams Tract Subdivision as recorded in Volume 2, Page 34-37, Hidalgo County Map Records. This subdivision is located along the south side of Mile 6 ½ North and the west side of S. Milano Road (Mile 6 ½ West) and is within the E.T.J. of Weslaco, Texas. The developer plans to voluntarily ask to be annexed by the City of Weslaco.

Flood Plain

The vast majority of the subject tract of land is located within Zone "B" on a Flood Insurance Rate Map, Community Panel No. 480334 0525B, effective date January 2, 1981. Zone "B" is defined as "areas between the limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood (medium shading)". The most northern fringe of the subdivision is located in Zone "X" on a Flood Insurance Rate Map, Community Panel No. 480334 0450C, map revised June 6, 2000. Zone "X" is defined as "areas of 500-year flood; areas of 100-year flood with average depths less than one foot or with drainage areas less than one square mile; and areas protected by levees from the 100-year flood." The minimum finish floor elevation shall be 18" above the top of curb as measured at the center of the lot or elevation 77.0, whichever is higher.

Soil Conditions

According to the soil survey report prepared for Hidalgo County by the USDA Natural Resources Conservation Service; the soils in this subdivision are found to be Hidalgo Fine Sandy Loam (25 and 26), Hidalgo Sandy Clay Loam (28), and Raymondville Clay Loam (52). Soils group 25, 26, and 28 are in hydrologic group "B" and are moderately pervious with a relatively low plasticity index. Soils group 52 is in hydrologic group "D" and are not very pervious with a relatively high plasticity index. Soils group "B" make up 88.5% of this subdivision.

Pre-developed Conditions

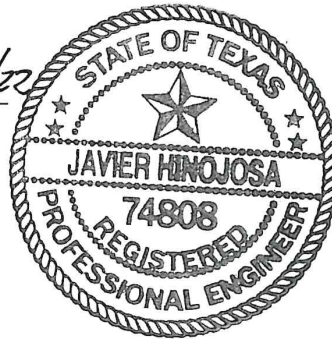
The current land use for this property has been used for agricultural purposes and has an existing runoff generally in a northeasterly direction. Based on an existing 10-year storm, a total storm runoff of 16.87 cubic feet per second is being generated by this subdivision.

Proposed Conditions

Mi Linda Subdivision is a proposed mixed-use subdivision with 54 multi-family lots (4-plexes) (Phase I) and 68 single-family lots (Phase II). Drainage shall be accomplished within this development with the placement of curb inlets to intercept drainage runoff generated by this subdivision. Pipe sizes shall range from a 24" to 30" throughout this development and shall discharge into a Hidalgo and Cameron County Irrigation District No. 9 drain ditch (maintained

by Hidalgo County Drainage District No. 1) that will be dedicated to the City of Weslaco by this development. Detention shall be accomplished by widening this drainage ditch. An existing 18" pipe crosses the street to a grate inlet between the HCCID No. 9 elevated canal and Mid Point Manor Estates, thence flows south via a 30" pipe into a HCCID No. 9 drainage ditch that flows east adjacent to the south side of Mid Point Manor Estates. The overall discharge continues through HCCID No. 9 drainage ditches to the east and south to the Main Floodway. This development will increase runoff to a maximum of 158.01 cubic feet per second based on the 50-year storm frequency for an increase Q of 141.14 cubic feet per second. Required detention for this subdivision is 313,189 cubic feet (7.190 Ac.Ft.) (NOTE: Required detention for a 100-year storm = 355,761 cubic feet (8.167 Ac.Ft.)). The existing drain ditch expansion will increase detention by 507,362 cubic feet (11.647 Ac.Ft.) at an average water depth of 6.55 feet.

 6/14/22
Javier Hinojosa, P.E.



DRAINAGE ANALYSIS

PROJECT NAME: **Mi Linda Subdivision Phase I & II**

DATE: June 16, 2022

I. Existing Condition-10 year

Ex. Area:	1,621,883 sf	Int. Coeff. "k	0.213 Table 3-2
	37.233 ac	K μ	3.28
Imp. Area:	- sf	Length	1320
% Imp. :	0.00	Velocity	0.220929 ft/sec
Slope :	0.1 %		
tc :	99.58 min		
Rainfall Intensity (10yr)			2.265 in/hr
c factor			0.200
Q peak existing condition:			16.87 cfs

II. Future Condition-50 year

Future area: 1,621,883.00 sf
37.23 ac

Estimated Imp. Area: 900,590 sf

% Imp. : 55.53 %

Slope : 0.25%

tc : 18.94 min

Rainfall Intensity (50yr) 8.130 in/hr

c factor 0.522

Q future cond. = $Aci = i * = 158.01 * 0.52$
19.435788 i

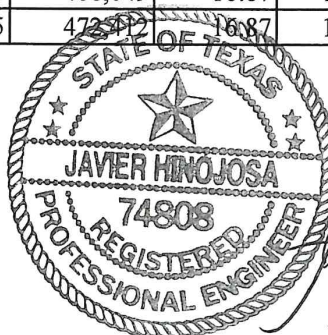
time min.	time hour	iso in/hr	Q50 in cfs	Vin cf	Q10 out cfs	Vout cf	REQ'D V cf
210	3.50	1.747	33.96	427,876	16.87	115,849	312,028
220	3.67	1.690	32.84	433,521	16.87	120,909	312,613
230	3.83	1.637	31.81	438,959	16.87	125,969	312,990
240	4.00	1.587	30.85	444,207	16.87	131,029	313,178
250	4.17	1.541	29.95	449,279	16.87	136,089	313,189
260	4.33	1.498	29.11	454,188	16.87	141,150	313,038
270	4.50	1.458	28.33	458,946	16.87	146,210	312,736
280	4.67	1.420	27.59	463,563	16.87	151,270	312,293
290	4.83	1.384	26.90	468,049	16.87	156,330	311,719
300	5.00	1.350	26.25	472,512	16.87	161,391	311,021

MAX.

Storage Required: 313,189 cf

Storage Required: 7.190 Ac.-Ft.

w/ release rate of: 16.87 cfs



Handwritten signature and date: 6/16/22

TABLE I
TIME OF CONCENTRATION DETERMINATION
Mi Linda Subdivision

COMPUTATION POINT	DESCRIPTION OF RUNOFF MEDIUM	OVERLAND FLOW				CHANNEL, PIPE, STREET, ETC. FLOW					
		C	LENGTH (FT.)	GRADE (%)	TIME (MIN)	WIDTH/DA. (FT)	GRADE (%)	LENGTH (FT)	VELOCITY (FPS)	TIME (MIN)	TOTAL TIME (MIN)
Existing	Overland	0.200	1320		99.58						99.58
D.A. #1	Overland & Gutter	0.522	120		5.00			180	1.0	3.00	8.00
D.A. #1-D.A.#2	Pipe Flow	0.522						32	3.0	0.18	8.18
D.A. #2	Overland & Gutter	0.522	120		5.00			180	1.0	3.00	8.00
D.A.#2-D.A.#4	Pipe Flow	0.522						368	3.0	2.04	10.22
D.A.#3	Overland & Gutter	0.522	120		5.00			230	1.0	3.83	8.83
D.A.#3-D.A.#4	Pipe Flow	0.522						32	3.0	0.18	9.01
D.A.#4	Overland & Gutter	0.522	120		5.00			230	1.0	3.83	8.83
D.A.#4-D.A.#6	Pipe Flow	0.522						380	3.0	2.11	12.33
D.A.#5	Overland & Gutter	0.522	150		6.25			250	1.0	4.17	10.42
D.A.#5-D.A.#6	Pipe Flow	0.522						32	3.0	0.18	12.51
D.A.#6	Overland & Gutter	0.522	120		5.00			320	1.0	5.33	10.33
D.A.#6-OUTFALL A	Pipe Flow	0.522						35	3.0	0.19	12.71
D.A.#7	Overland & Gutter	0.522	115		4.79			530	1.0	8.83	13.63
D.A.#7-D.A.#8	Pipe Flow	0.522						32	3.0	0.18	13.80
D.A.#8	Overland & Gutter	0.522	115		4.79			530	1.0	8.83	13.63
D.A.#8-OUTFALL B	Pipe Flow	0.522						160	3.0	0.89	14.69
D.A.#9	Overland & Gutter	0.522	115		4.79			258	1.0	4.30	9.09
D.A.#9-D.A.#10	Pipe Flow	0.522						32	3.0	0.18	9.27

FORMULA FOR TIME OF CONCENTRATION
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$T_c = \frac{L}{(V \times 60)}$$

TABLE IA FLOWRATE DETERMINATION Mi Linda Subdivision									
COMPUTATION POINT	TOTAL DRAINAGE AREA CONTRIBUTING TO POINT (acres)	C	TIME (SEE TABLE 1) (minutes)	RETURN FREQUENCY (years)	INTENSITY (in./hr.)	FLOWRATE (c.f.s.)	PIPE SIZE (inches)	MIN. SLOPE (FT./FT.)	
Existing	37.233	0.200	99.58	10	2.265	16.87			
D.A. #1	1.017	0.522	8.00	10	9.512	5.05			
D.A. #1-D.A.#2	1.017	0.522	8.18	10	9.436	5.01	24	0.049%	
D.A. #2	1.017	0.522	8.00	10	9.512	5.05			
D.A.#2-D.A.#4	2.034	0.522	10.22	10	8.654	9.19	24	0.165%	
D.A.#3	0.915	0.522	8.83	10	9.168	4.38			
D.A.#3-D.A.#4	0.915	0.522	9.01	10	9.099	4.35	24	0.037%	
D.A.#4	0.915	0.522	8.83	10	9.168	7.16			
D.A.#4-D.A.#6	3.864	0.522	12.33	10	7.987	16.11	30	0.154%	
D.A.#5	1.481	0.522	10.42	10	8.587	7.16			
D.A.#5-D.A.#6	1.481	0.522	12.51	10	7.936	6.13	24	0.074%	
D.A.#6	0.975	0.522	10.33	10	8.616	7.16			
D.A.#6-OUTFALL A	6.320	0.522	12.71	10	7.881	26.00	30	0.402%	
D.A.#7	2.288	0.522	13.63	10	7.633	7.16			
D.A.#7-D.A.#8	2.288	0.522	13.80	10	7.587	9.06	24	0.161%	
D.A.#8	1.976	0.522	13.63	10	7.633	7.16			
D.A.#8-OUTFALL B	4.264	0.522	14.69	10	7.366	16.40	24	0.526%	
D.A.#9	1.400	0.522	9.09	10	9.067	7.16			
D.A.#9-D.A.#10	1.400	0.522	9.27	10	8.999	6.58	24	0.085%	

FORMULA FOR INTENSITY
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$I = \frac{b}{(T_c + d)^e}$$

TABLE I
TIME OF CONCENTRATION DETERMINATION
Mi Linda Subdivision

COMPUTATION POINT	DESCRIPTION OF RUNOFF MEDIUM	OVERLAND FLOW				CHANNEL, PIPE, STREET, ETC. FLOW					
		C	LENGTH (FT.)	GRADE (%)	TIME (MIN)	WIDTH (FT)	GRADE (%)	LENGTH (FT)	VELOCITY (FPS)	TIME (MIN)	TOTAL TIME (MIN)
D.A.#10	Overland & Gutter	0.522	115		4.79			258	1.0	4.30	9.09
D.A.#10-OUTFALL C	Pipe Flow	0.522						160	3.0	0.89	10.16
D.A.#11	Overland & Gutter	0.522	198		8.25			225	1.0	3.75	12.00
D.A.#11-D.A.#12	Pipe Flow	0.522						32	3.0	0.18	12.18
D.A.#12	Overland & Gutter	0.522	150		6.25			80	1.0	1.33	7.58
D.A.#12-D.A.#14	Pipe Flow	0.522						300	3.0	1.67	9.25
D.A.#13	Overland & Gutter	0.522	150		6.25			240	1.0	4.00	10.25
D.A.#13-D.A.#14	Pipe Flow	0.522						50	3.0	0.28	12.46
D.A.#14	Overland & Gutter	0.522	150		6.25			240	1.0	4.00	10.25
D.A.#14-D.A.#15	Pipe Flow	0.522						80	3.0	0.44	12.90
D.A.#15	Overland & Gutter	0.522	200		8.33			40	1.0	0.67	9.00
D.A.#15-OUTFALL D	Pipe Flow	0.522						175	3.0	0.97	13.87
D.A.#16	Overland & Gutter	0.522	175		7.29			155	1.0	2.58	9.88
D.A.#16-M.H.#17	Pipe Flow	0.522						37	3.0	0.21	10.08
D.A.#17	Overland & Gutter	0.522	200		8.33			375	1.0	6.25	14.58
D.A.#17-M.H.#17	Pipe Flow	0.522						30	3.0	0.17	14.75
M.H.#17-D.A.#18	Pipe Flow	0.522						45	3.0	0.25	15.00
D.A.#18	Overland & Gutter	0.522	90		3.75			155	1.0	2.58	6.33
D.A.#18-D.A.#20	Pipe Flow	0.522						450	3.0	2.50	17.50

FORMULA FOR TIME OF CONCENTRATION
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$T_c = \frac{L}{(V \times 60)}$$

TABLE 1A
FLOWRATE DETERMINATION
Mi Linda Subdivision

COMPUTATION POINT	TOTAL DRAINAGE AREA CONTRIBUTING TO POINT (acres)	C	TIME (SEE TABLE 1) (minutes)	RETURN FREQUENCY (years)	INTENSITY (in./hr.)	FLOWRATE (c.f.s.)	PIPE SIZE (inches)	MIN. SLOPE (FT./FT.)
D.A.#10	1.400	0.522	9.09	10	9.067	6.63		
D.A.#10-OUTFALL C	2.800	0.522	10.16	10	8.676	12.68	24	0.315%
D.A.#11	1.292	0.522	12.00	10	8.084	5.45		
D.A.#11-D.A.#12	1.292	0.522	12.18	10	8.032	5.42	24	0.057%
D.A.#12	0.698	0.522	7.58	10	9.695	3.53		
D.A.#12-D.A.#14	1.990	0.522	9.25	10	9.007	9.36	24	0.171%
D.A.#13	0.944	0.522	10.25	10	8.644	7.16		
D.A.#13-D.A.#14	0.944	0.522	12.46	10	7.951	3.92	24	0.030%
D.A.#14	1.099	0.522	10.25	10	8.644	7.16		
D.A.#14-D.A.#15	4.033	0.522	12.90	10	7.827	16.48	30	0.162%
D.A.#15	1.465	0.522	9.00	10	9.103	7.16		
D.A.#15-OUTFALL D	5.498	0.522	13.87	10	7.569	21.72	30	0.281%
D.A.#16	1.218	0.522	9.88	10	8.776	5.58		
D.A.#16-M.H.#17	1.218	0.522	10.08	10	8.704	5.53	24	0.060%
D.A.#17	1.639	0.522	14.58	10	7.392	6.32		
D.A.#17-M.H.#17	1.639	0.522	14.75	10	7.352	6.29	24	0.077%
M.H.#17-D.A.#18	2.857	0.522	15.00	10	7.293	10.88	24	0.232%
D.A.#18	0.683	0.522	6.33	10	10.297	3.67		
D.A.#18-D.A.#20	3.540	0.522	17.50	10	6.756	12.48	24	0.305%

FORMULA FOR INTENSITY
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$I = \frac{b}{(Tc + d)^{0.6}}$$

TABLE I

[illegible]

FORMULA FOR TIME OF CONCENTRATION
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$T_c = \frac{L}{(V \times 60)}$$

[illegible]

FORMULA FOR INTENSITY
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL"

$$I = \frac{b}{(\tau_c + d)^e}$$

TABLE 3-2: Intercept Coefficients	
Land Cover/ Flow Regime	"k"
Forest with heavy ground litter; hay meadow (overland flow)	0.076
Trash fallow or minimum tillage cultivation; contour or strip cropped; woodland (overland flow)	0.152
Short grass pasture (overland flow)	0.213
Cultivated straight row (overland flow)	0.274
Nearly bare and untilled (overland flow); alluvial fans in western mountain regions	0.305
Grassed waterway (shallow concentrated flow)	0.457
Unpaved (shallow concentrated flow)	0.491
Paved area (shallow concentrated flow); small upland gullies	0.619

Weighted "c" value (POST DEVELOPMENT CONDITIONS)				
Type of Drainage Area	"c" value:	Square Footage	Acreage	partial "c"
Residential				
Single Family (Lots less than 1/4 acre)	0.35	0	0.000	0.000
Single Family (Lots 1/4 to 1/2 acre)	0.3	0	0.000	0.000
Single Family (Lots greater than 1/2 acre)	0.25	0	0.000	0.000
Multi-Family (Less than 20 DU / AC)	0.45	0	0.000	0.000
Multi-Family (Greater than 20 DU / AC)	0.55	0	0.000	0.000
Business Districts:	0.7	0	0.000	0.000
Industrial				
Light areas	0.5	0	0.000	0.000
Heavy areas	0.6	0	0.000	0.000
Railroad yard areas	0.2	0	0.000	0.000
Parks, cemeteries	0.1	0	0.000	0.000
Unimproved Areas				
Bare Surface	0.3	0	0.000	0.000
Grassland	0.25	536793	12.323	3.081
Cultivated	0.2	0	0.000	0.000
Woodlands	0.15	0	0.000	0.000
Detention/Ditch	0.25	184500	4.236	1.059
Streets				
Asphalt	0.7	185190	4.251	2.976
Concrete	0.75	0	0.000	0.000
Driveways	0.75	47600	1.093	0.820
Parking	0.75	195500	4.488	3.366
Sidewalks	0.75	30300	0.696	0.522
Buildings	0.75	442000	10.147	7.610
Total:		1,621,883	37.233	19.433
Weighted "c":			0.522	

$$C_w = (C_1A_1 + C_2A_2 + C_3A_3 + \dots + C_nA_n) / A_{total}$$

C_w = Weighted Runoff Coefficient (Composite Coefficient)

C_n = Runoff Coefficient n-th term

A_n = Area of n-th term

A_{total} = Total Area (acres)

A_{total} = Total Area (acres)

HIDALGO COUNTY RAINFALL INTENSITY TABLES

based on Weather Bureau (NWS) Technical Paper No. 40 "Rainfall Frequency Atlas of the United States"

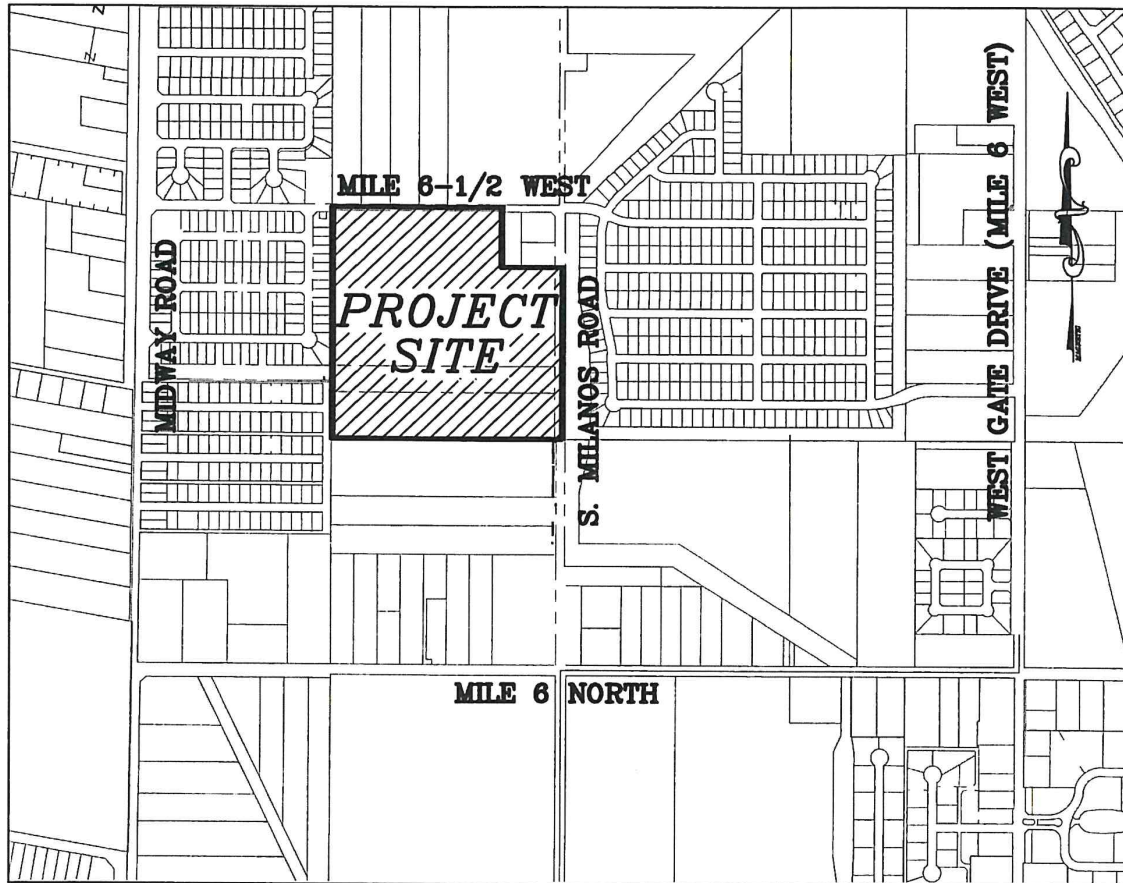
$$\text{formula } I = b/(t_c + d)^e$$

TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
1	10.404	12.626	14.283	16.353	17.386	17.952
2	9.653	11.721	13.281	15.215	16.210	16.793
3	9.012	10.950	12.426	14.244	15.204	15.797
4	8.458	10.286	11.687	13.405	14.333	14.929
5	7.974	9.706	11.042	12.671	13.570	14.165
6	7.546	9.194	10.472	12.023	12.895	13.487
7	7.167	8.740	9.966	11.447	12.294	12.881
8	6.827	8.334	9.512	10.930	11.755	12.336
9	6.520	7.968	9.103	10.464	11.268	11.841
10	6.243	7.636	8.732	10.042	10.825	11.391
11	5.990	7.334	8.394	9.656	10.421	10.979
12	5.758	7.058	8.084	9.303	10.051	10.601
13	5.546	6.804	7.799	8.978	9.710	10.252
14	5.350	6.569	7.536	8.678	9.395	9.928
15	5.169	6.353	7.293	8.400	9.102	9.628
16	5.000	6.151	7.067	8.142	8.831	9.348
17	4.843	5.964	6.856	7.902	8.577	9.087
18	4.697	5.789	6.659	7.677	8.340	8.842
19	4.560	5.625	6.475	7.466	8.117	8.612
20	4.432	5.472	6.302	7.268	7.908	8.396
21	4.311	5.327	6.139	7.082	7.711	8.192
22	4.198	5.191	5.985	6.906	7.525	8.000
23	4.090	5.062	5.840	6.740	7.349	7.817
24	3.989	4.941	5.703	6.583	7.183	7.644
25	3.893	4.825	5.572	6.434	7.025	7.480
26	3.802	4.716	5.449	6.293	6.875	7.324
27	3.715	4.612	5.331	6.158	6.732	7.176
28	3.633	4.513	5.220	6.030	6.596	7.034
29	3.554	4.419	5.113	5.908	6.467	6.899
30	3.480	4.329	5.011	5.792	6.343	6.769
31	3.408	4.244	4.914	5.680	6.224	6.646
32	3.340	4.161	4.821	5.574	6.111	6.527
33	3.275	4.083	4.732	5.472	6.002	6.413
34	3.212	4.008	4.646	5.374	5.897	6.304
35	3.152	3.935	4.564	5.280	5.797	6.199

TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
36	3.095	3.866	4.486	5.189	5.701	6.098
37	3.040	3.799	4.410	5.103	5.608	6.001
38	2.986	3.735	4.337	5.019	5.519	5.908
39	2.935	3.673	4.267	4.939	5.433	5.817
40	2.886	3.614	4.199	4.861	5.350	5.730
41	2.838	3.557	4.134	4.786	5.270	5.646
42	2.793	3.501	4.071	4.714	5.193	5.565
43	2.748	3.448	4.010	4.644	5.118	5.487
44	2.706	3.396	3.951	4.577	5.046	5.411
45	2.665	3.346	3.895	4.511	4.976	5.337
46	2.625	3.298	3.840	4.448	4.908	5.266
47	2.586	3.251	3.786	4.387	4.843	5.197
48	2.549	3.206	3.735	4.328	4.779	5.130
49	2.513	3.162	3.685	4.270	4.717	5.065
50	2.477	3.120	3.636	4.215	4.658	5.002
51	2.443	3.078	3.589	4.161	4.600	4.941
52	2.410	3.038	3.543	4.108	4.543	4.881
53	2.378	2.999	3.499	4.057	4.488	4.824
54	2.347	2.962	3.456	4.007	4.435	4.767
55	2.317	2.925	3.414	3.959	4.383	4.713
56	2.288	2.889	3.373	3.912	4.333	4.659
57	2.259	2.854	3.333	3.867	4.284	4.608
58	2.231	2.821	3.295	3.822	4.236	4.557
59	2.204	2.788	3.257	3.779	4.189	4.508
60	2.178	2.756	3.220	3.737	4.144	4.460
65	2.056	2.607	3.050	3.541	3.933	4.237
70	1.948	2.475	2.899	3.368	3.745	4.038
75	1.852	2.358	2.765	3.212	3.577	3.860
80	1.765	2.252	2.643	3.073	3.426	3.699
85	1.688	2.156	2.533	2.946	3.289	3.554
90	1.617	2.069	2.434	2.831	3.164	3.421
95	1.552	1.990	2.342	2.726	3.050	3.299
100	1.493	1.917	2.258	2.629	2.944	3.187
105	1.439	1.850	2.181	2.540	2.847	3.083
110	1.389	1.788	2.109	2.457	2.757	2.988

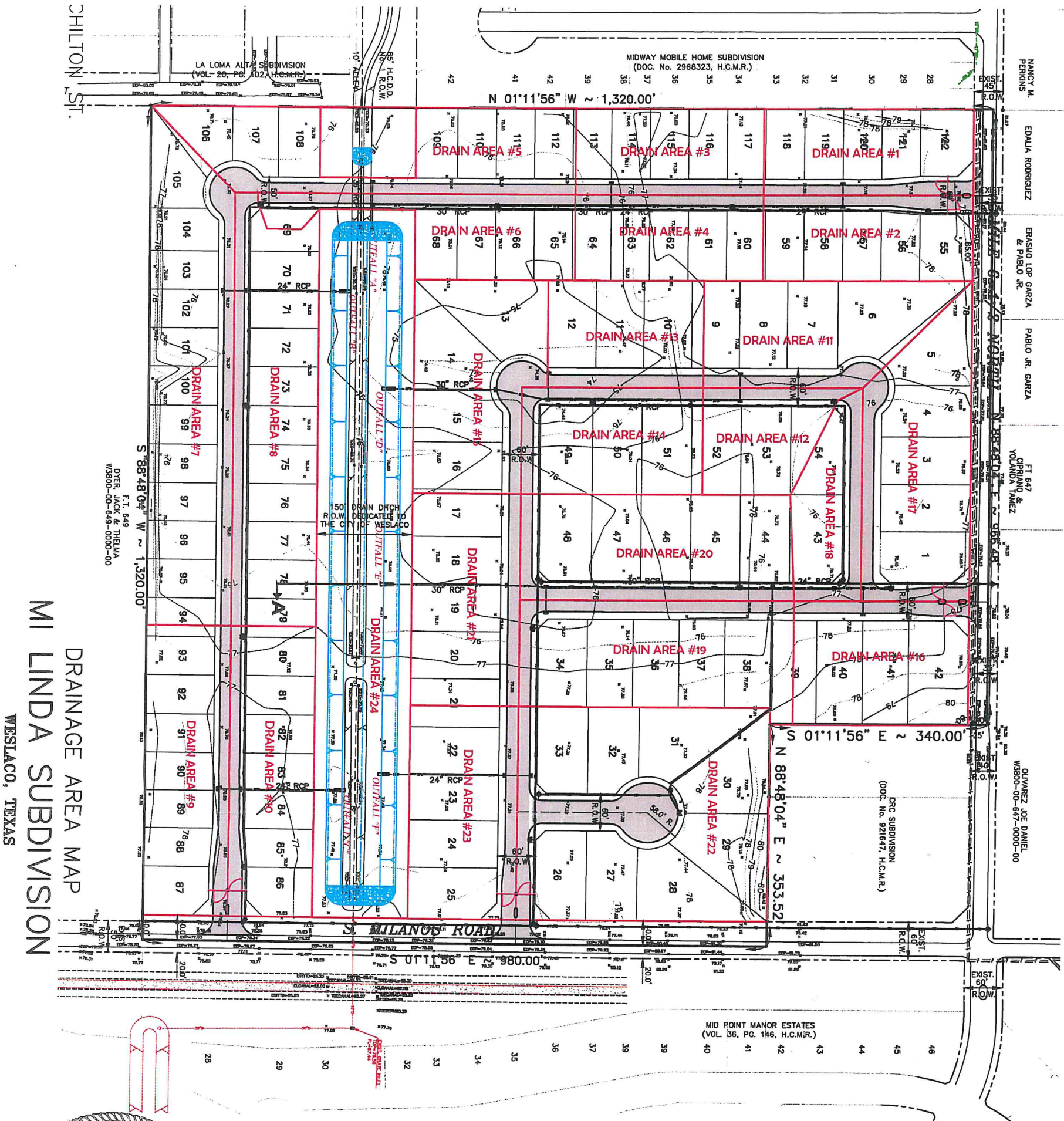
where:	2yr	5yr	10yr
e=	0.831	0.795	0.778
b=	74	80	87
d=	9.6	9.2	9.2

	25yr	50yr	100yr
	0.771	0.749	0.740
	98	99	103
	9.2	9.2	9.6

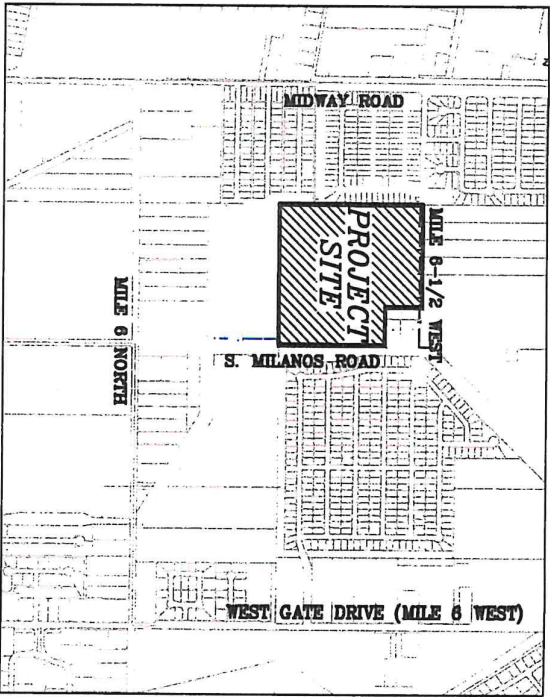


LOCATION MAP

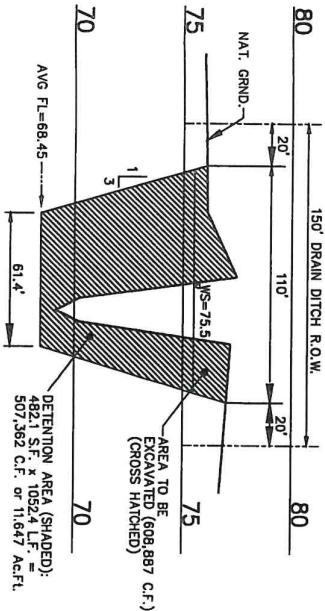
SCALE: 1" = 1,000'



DRAINAGE AREA MAP
MI LINDA SUBDIVISION
WESTLACO, TEXAS

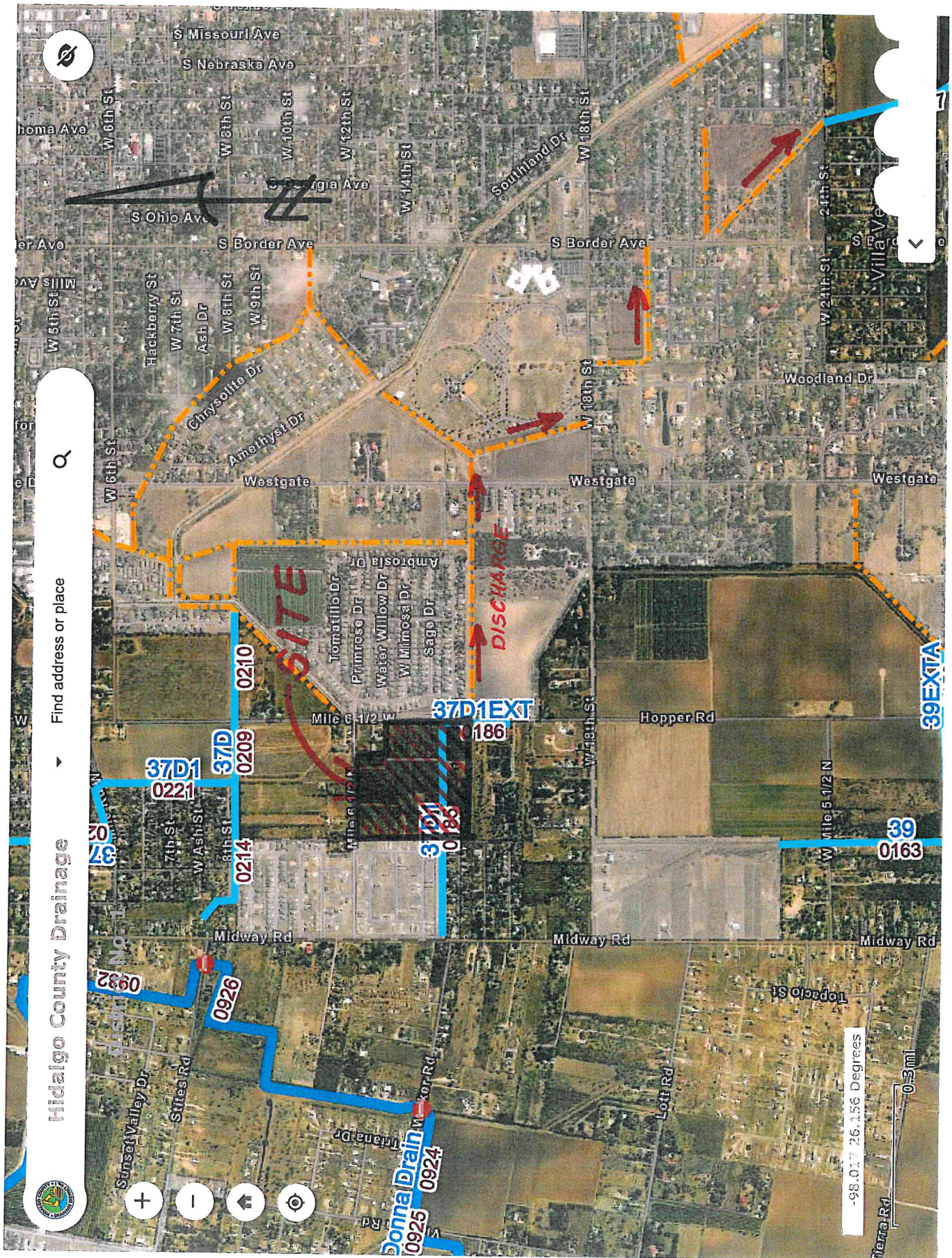


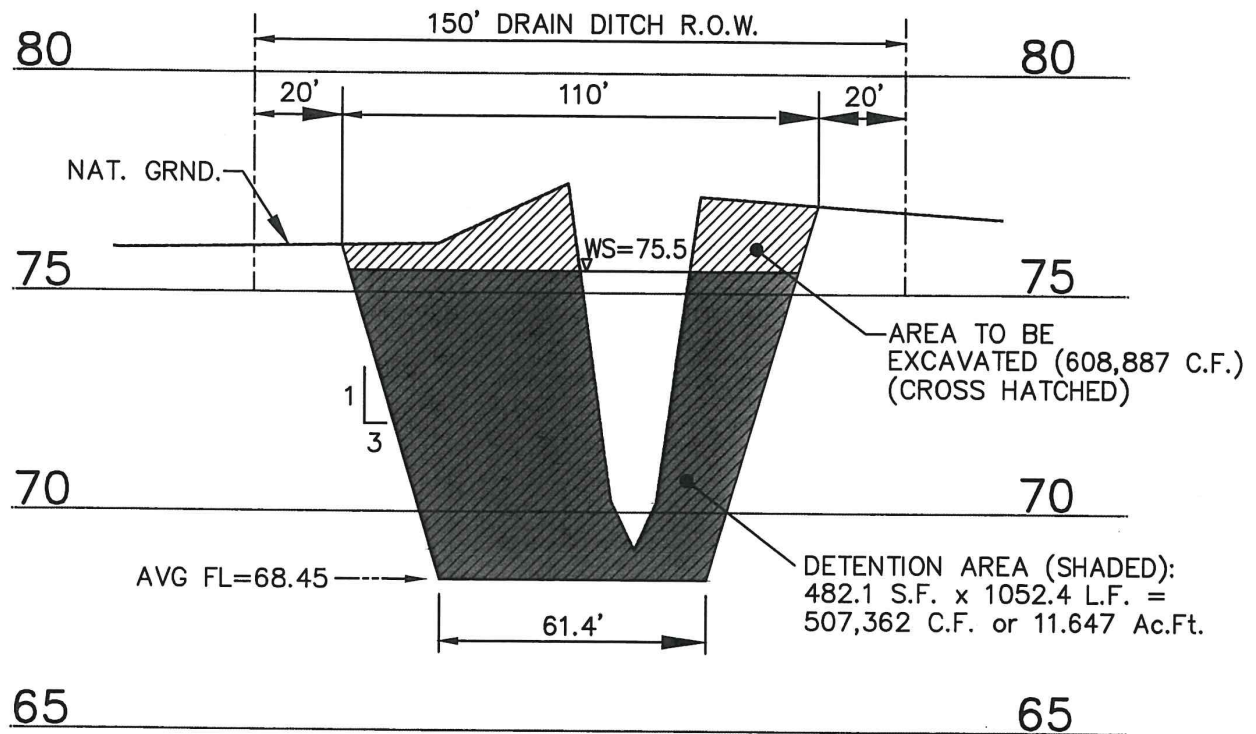
LOCATION MAP
SCALE: 1" = 1,000'



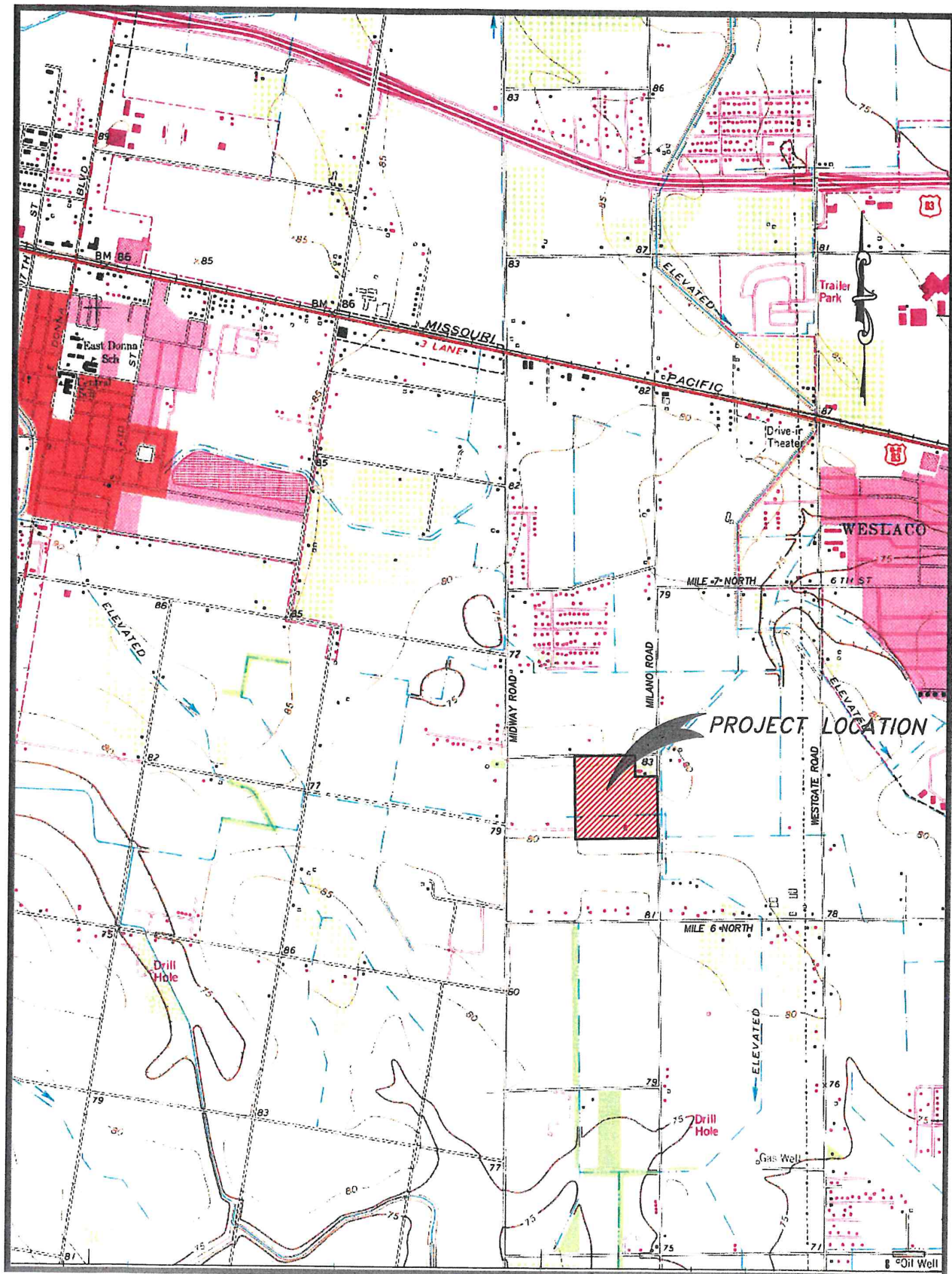
DITCH CROSS SECTION "A"

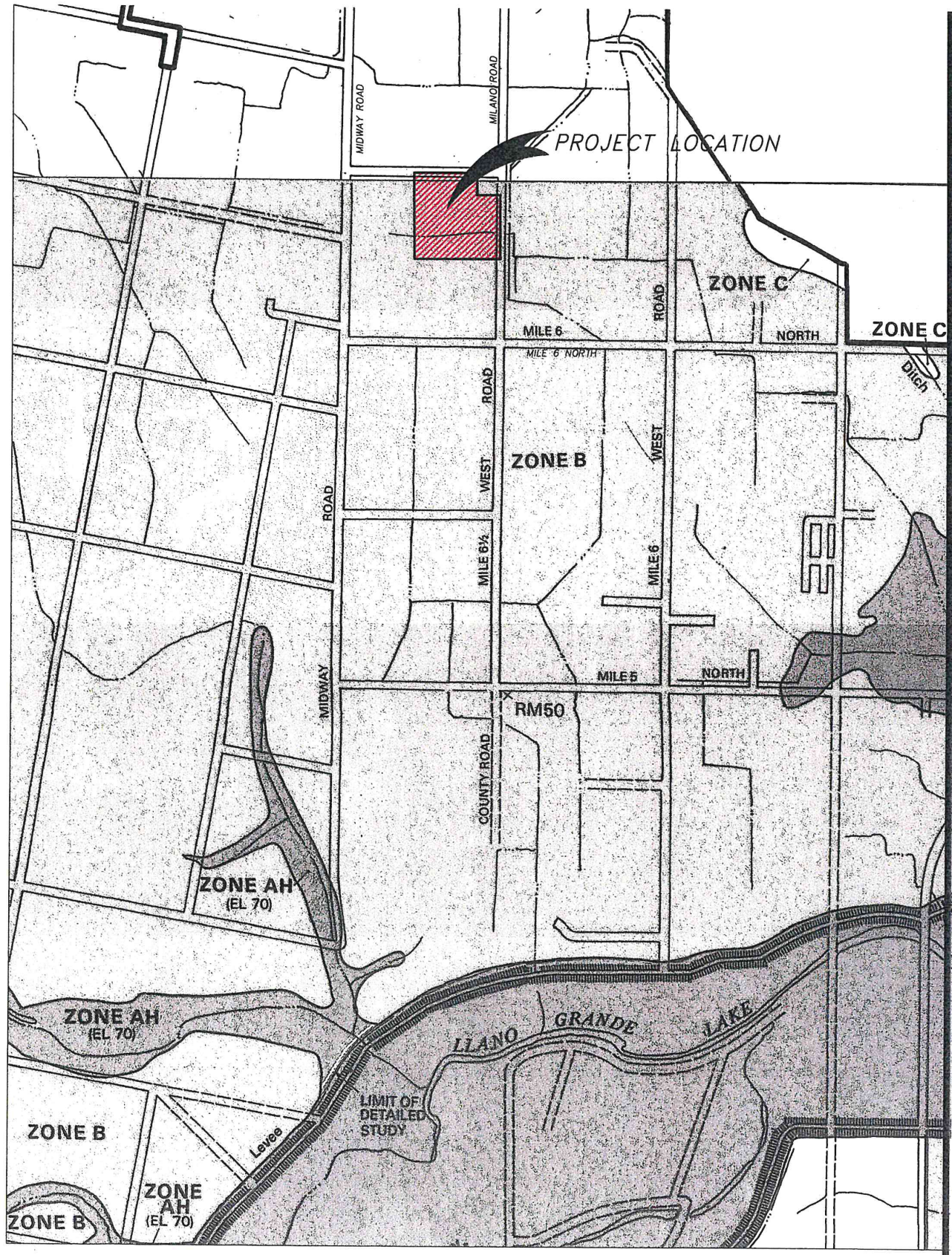






DITCH CROSS SECTION "A"

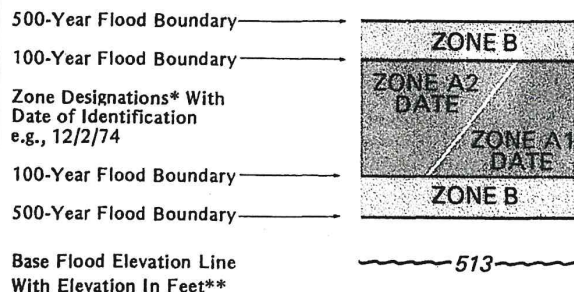




NATIONAL FLOOD INSURANCE PROGRAM	
	FIRM FLOOD INSURANCE RATE MAP
	HIDALGO COUNTY, TEXAS (UNINCORPORATED AREAS)
	PANEL 525 OF 525
	COMMUNITY-PANEL NUMBER 480334 0525 B EFFECTIVE DATE: JANUARY 2, 1981
federal emergency management agency federal insurance administration	

NATIONAL FLOOD INSURANCE PROGRAM	
	FIRM FLOOD INSURANCE RATE MAP
	HIDALGO COUNTY, TEXAS (UNINCORPORATED AREAS)
	(SEE MAP INDEX FOR PANELS NOT PRINTED)
	COMMUNITY-PANEL NUMBER 480334 0450 C MAP REVISED: JUNE 6, 2000
Federal Emergency Management Agency	

KEY TO MAP



Base Flood Elevation in Feet (EL 987)

Elevation Reference Mark RM 7_x

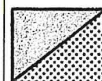
River Mile • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

LEGEND



SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A No base flood elevations determined.
- ZONE AE Base flood elevations determined.
- ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding; velocities also determined.
- ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

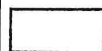


FLOODWAY AREAS IN ZONE AE



OTHER FLOOD AREAS

- ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.



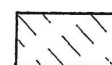
OTHER AREAS

- ZONE X Areas determined to be outside 500-year floodplain.
- ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS†



Identified
1983



Identified
1990



Otherwise
Protected Areas

†Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

— Floodplain Boundary

- - - Floodway Boundary

- - - Zone D Boundary



Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

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Base Flood Elevation Line; Elevation in Feet*



Cross Section Line

(EL 987)

Base Flood Elevation in Feet Where Uniform Within Zone*

RM 7_x

Elevation Reference Mark

• M1.5

River Mile

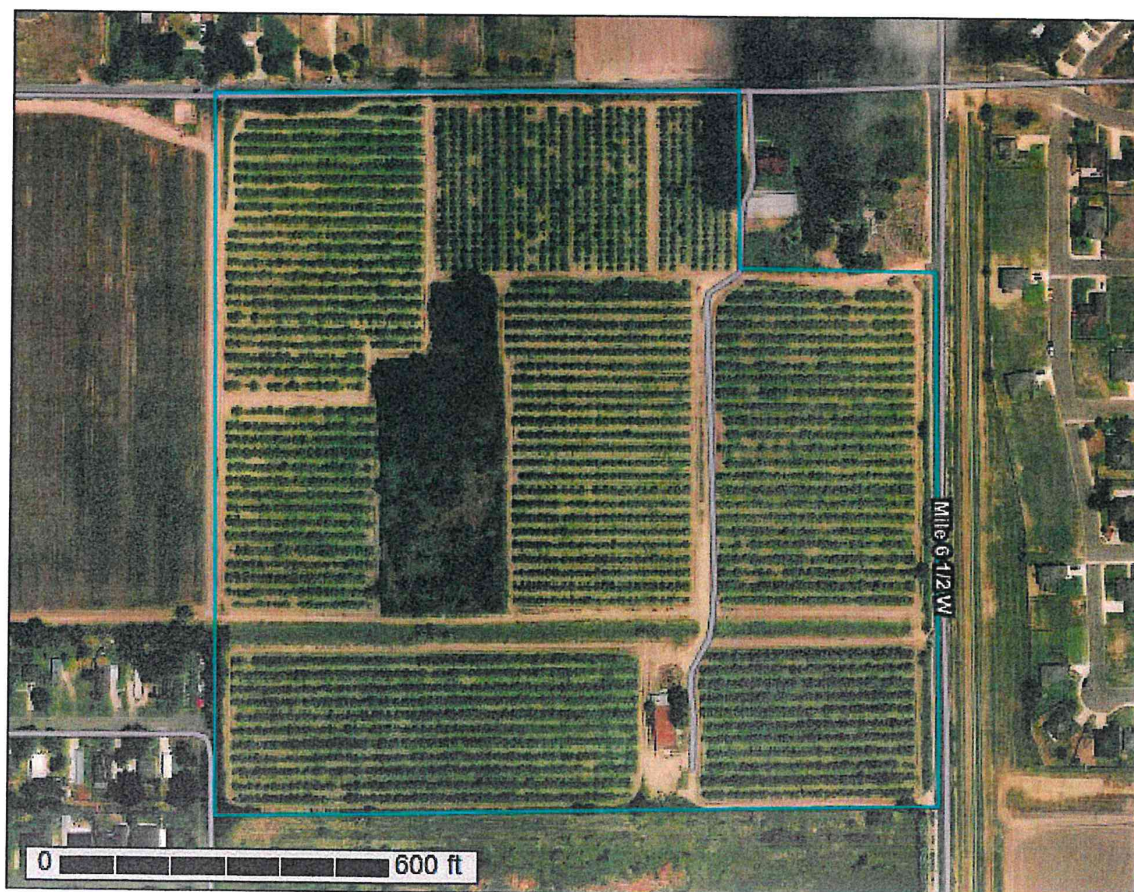
*Referenced to the National Geodetic Vertical Datum of 1929



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

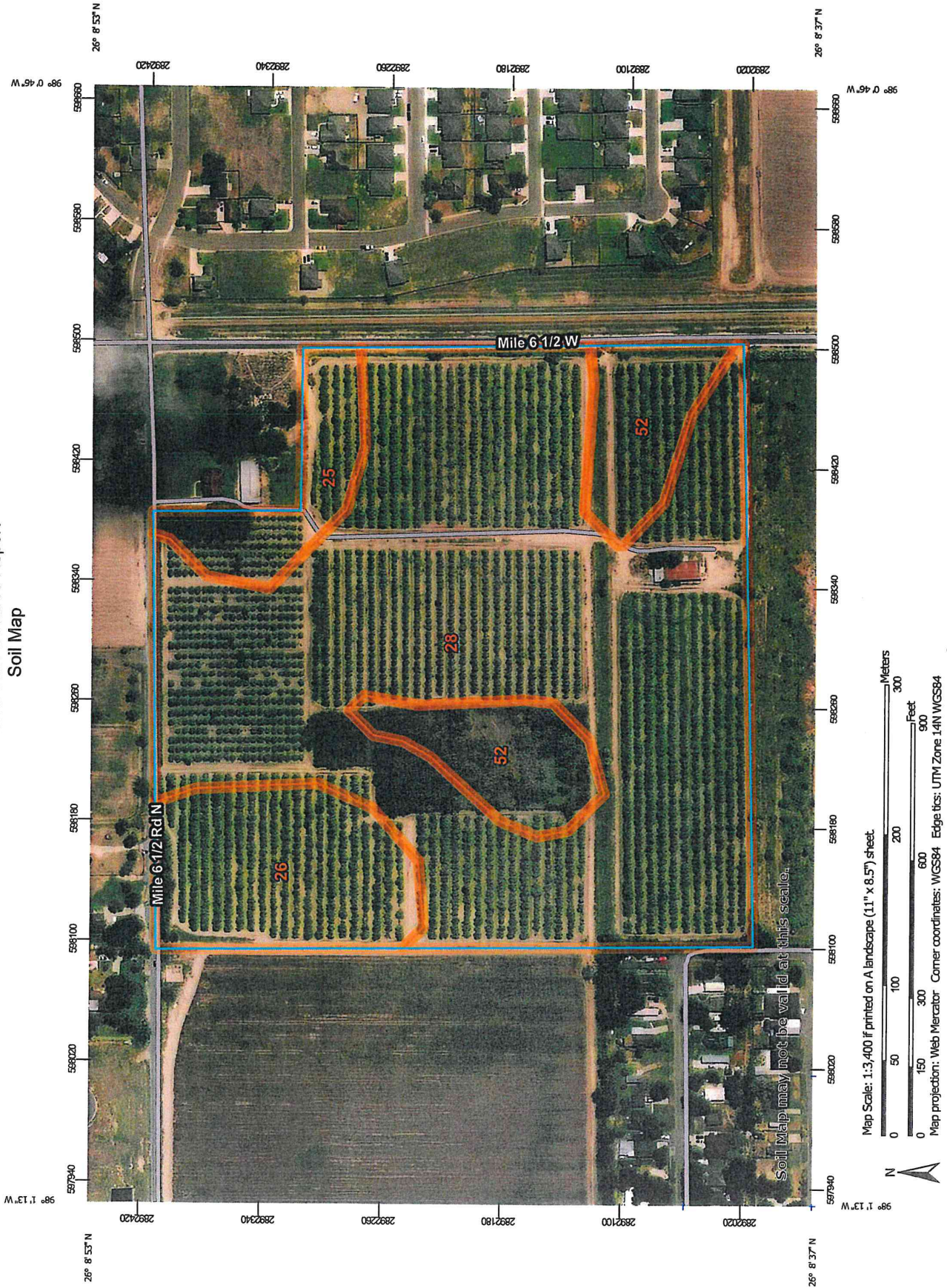
Custom Soil Resource Report for Hidalgo County, Texas

Mi Linda Subdivision



April 15, 2022

Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot

- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 20, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 20, 2015—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	2.1	5.8%
26	Hidalgo fine sandy loam, 1 to 3 percent slopes	4.4	11.9%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	26.0	70.8%
52	Raymondville clay loam, 0 to 1 percent slopes	4.2	11.5%
Totals for Area of Interest		36.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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TABLE 16. -- ENGINEERING INDEX PROPERTIES--CONTINUED

Map symbol and soil name	Depth	USDA texture	Classification		Percentage passing sieve number				Liquid limit	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
13:*	In								Pct	
Randado----	0-9	Fine sandy loam	SM, SM-SC	A-2-4	75-100	70-100	70-100	20-35	<25	NP-7
	9-16	Fine sandy loam, sand clay loam.	SC, SM-SC, GC	A-2-4 A-2-6 A-4, A-6	65-100	60-100	60-100	25-50	25-34	7-14
	16-60	Cemented-----	---	---	---	---	---	---	---	---
14----- Falfurrias	0-80	Fine sand-----	SP-SM, SM	A-2-4, A-3	100	100	75-100	5-25	<25	NP-3
15----- Grulla	0-7	Clay-----	CL, CH	A-7-6	100	100	100	90-100	41-55	20-30
	7-65	Silty clay, clay	CH	A-7-6	100	100	100	90-100	52-66	28-39
16, 17, 18--- Hargill	0-18	Fine sandy loam	SC, SM-SC, SM	A-2-4	100	95-100	95-100	17-35	<30	NP-8
	18-63	Sand clay loam	SC, CL	A-6	100	95-100	95-100	40-55	30-40	11-20
	63-80	Sand clay loam	SC	A-2-4 A-2-6 A-4, A-6	85-100	80-100	75-100	34-50	28-39	9-18
19, 20----- Harlingen	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
21:*\br/>Harlingen---	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
Urban land.										
22, 23, 24--- Hebbronville	0-17	Sandy loam-----	SM	A-2-4	100	100	75-100	13-24	<25	NP-4
	17-58	Fine sandy loam, loam.	SM, SM-SC	A-2-4	100	100	90-100	20-30	<30	NP-7
	58-65	Fine sandy loam, loam.	SM-SC, SC	A-2-4 A-4 A-2-6 A-6	95-100	95-100	90-100	20-40	20-30	4-13
25, 26, 27--- Hidalgo	0-17	Fine sandy loam,	SC, SM-SC	A-4, A-6	100	95-100	90-100	36-50	20-30	4-11
	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
28, 29, 30--- Hidalgo	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-55	29-40	11-20
	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	40-44	11-23
31* Hidalgo-----	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-50	29-40	11-20
	17-28	Sandy clay loam clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23

SOILS LEGEND

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TABLE 16. -- ENGINEERING INDEX PROPERTIES--CONTINUED

Map symbol and soil name	Depth	USDA texture	Classification		Percentage passing sieve number				Liquid limit	Plast. index
			Unified	AASHTO	4	10	40	200		
45,* 46,* 47.- Pits	In								Pct	
48, 49----- Ramadero	0-13 13-49 49-72	Sandy clay loam Sandy clay loam, clay loam. Sandy clay loam, clay loam.	CL, SC CL, SC CL, SC	A-4, A-6 A-6, A-7 A-6	100 100 90-100	100 95-100 80-100	95-100 90-100 80-95	45-65 45-65 40-65	27-35 34-43 30-40	8-15 15-22 22-20
50----- Ramadero	0-21 21-65	Sandy clay loam Sandy clay loam, clay loam.	CL, SC CL, SC	A-6, A-4 A-6, A-7	100 100	100 95-100	95-100 90-100	45-65 46-65	27-39 32-42	9-18 13-21
51*----- Ramadero	0-9 9-16 16-60	Fine sandy loam Fine sandy loam, sandy caly loam. Cemented-----	SM, SM-SC SC, SM-SC, GC ---	A-2-4 A-2-4, A-2-6, A-4, A-6 ---	75-100 65-100 ---	70-100 60-100 ---	70-100 60-100 ---	20-35 25-50 ---	<25 25-34 ---	NP-7 7-14 ---
Cuevitas-----	0-8 8-60	Fine sandy loam Cemented-----	SM, SM-SC, SC- ---	A-2-4 ---	80-100 ---	80-100 ---	80-100 ---	20-35 ---	<28 ---	NP-9 ---
52, 53----- Raymondville	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
54:*----- Raymondville	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
55,56----- Reynosa	0-15 15-48 48-65	Silty clay loam Sandy clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
57:*----- Reynosa	0-15 15-48 48-65	Silty clay loam Silty clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
Urban land.										
58, 59----- Rio	0-12 12-38 38-63	Fine sandy loam Clay loam, clay Clay loam, snady clay sandy clay loam.	SC, SM-SC CL, CH CL	A-2-4, A-4 A-7-6 A-7-6	95-100 95-100 95-100	95-100 95-100 95-100	95-100 95-100 85-95	30-48 75-95 55-80	<30 43-57 41-50	5-10 21-32 20-27

SOILS LEGEND

TABLE 18. -- SOIL AND WATER FEATURES
("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text.
The symbol > means more than. Absence of an entry indicates that the feature is not a concern)

Map symbol and soil name	Hydrologic group	Flooding			High water table			Cemented pan		Risk of corrol	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness	Uncoated steel	Conc. steel
					Ft			In			
1.* Arents											
2----- Benito	D	Occasional	Long-----	Sep-May	4.0-6.0	Apparent	Sep-May	---	---	High-----	Low.
3,4----- Brennan	B	None-----	---	---	M	---	---	---	---	Moderate	Low
5,6----- Camargo	B	Rare-----	Brief-----	Sep-May	>6.0	---	---	---	---	Moderate	Low
7----- Cameron	D	None-----	---	---	5.0-6.0	Apparent	Sep-May	---	---	High-----	Low
8----- Comitas	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low
9, 10, 11----- Delfina	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low
12----- Delmita	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low
13:* Delmita-----	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low
Randado-----	C	None-----	---	---	>6.0	---	---	8-20	Thin	Low-----	Low
14----- Falfurrias	A	None-----	---	---	>6.0	---	---	---	---	High-----	Low
15**----- Grulla	D	Frequent-----	Very long	Sep-May	+2-6.0	Apparent	Sep-May	---	---	High-----	Low
16, 17, 18----- Hargill	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low
19----- Harlingen	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low
20----- Harlingen	D	None-----	---	---	5.0-6.0	---	---	---	---	High-----	Moderate
21:* Harlingen-----	D	None to rare	---	---	>6.0	---	---	---	---	High-----	Low
Urban land.											
22, 23, 24----- Hebbronville	B	None-----	---	---	>6.0	---	---	---	---	Low-----	Low
25, 26, 27, 28 29 Hidalgo	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low
30----- Hidalgo	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low
31:* Hidalgo-----	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low

HYDROLOGIC LEGEND

TABLE 18. -- SOIL AND WATER FEATURES
("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text.
The symbol > means more than. Absence of an entry indicates that the feature is not a concern)

Map symbol and soil name	Hydrologic group	Flooding			High water table			Cemented pan		Risk of corrol	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness	Uncoated steel	Conc.
					Ft			In			
Urban land.											
32:* Jimenez-----	C	None-----	---	---	>6.0	---	---	7-20	---	High-----	Low
32:* Quemado-----	C	None-----	---	---	>6.0	---	---	10-20	Thin	Moderate	Low.
33----- Benito	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
34----- Matanoros	C	Occasional	Long-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
35, 36, 37, 38- McAllen	C	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
39, 40, 41----- Mercedes	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
42----- Nueces	C	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
43:* Nueces-----	C	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
Sarita	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
44, 44----- Olmito	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
45,* 46,* 47.* Pits											
48----- Racombes	B	Rare-----	---	---	>6.0	---	---	---	---	High-----	Low.
49----- Racombes	B	Rare-----	---	---	1.5-4.5	Apparent	Sep-May	---	---	High-----	Low.
50----- Racombes	B	Common---	Brief-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
51:* Randado-----	C	None-----	---	---	>6.0	---	---	8-20	Thin	Moderate	Low.
Cuevitas-----	D	None-----	---	---	>6.0	---	---	8-14	Thin	Moderate	Low.
52----- Raymondville	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
53----- Raymondville	D	None-----	---	---	2.5-4.5	Apparent	Sep-May	---	---	High-----	Low.
54:* Raymondville---	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
55----- Reynosa	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.

HYDROLOGIC LEGEND

DRAINAGE ANALYSIS

PROJECT NAME: **Mi Linda Subdivision**

DATE: June 16, 2022

I. Existing Condition-10 year

Ex. Area:	1,621,883 sf	Int. Coeff. "k	0.213 Table 3-2
	37.233 ac	K μ	3.28
Imp. Area:	- sf	Length	1320
% Imp. :	0.00	Velocity	0.220929 ft/sec
Slope :	0.1 %		
tc :	99.58 min		
Rainfall Intensity (10yr)			2.265 in/hr
c factor			0.200
Q peak existing condition:			16.87 cfs

II. Future Condition-100 year

Future area:	1,621,883.00 sf		
	37.23 ac		
Estimated Imp. Area:	900,590 sf		
% Imp. :	55.53 %		
Slope :	0.25%		
tc :	18.94 min		
Rainfall Intensity (100yr)			8.626 in/hr
c factor			0.522
Q future cond. = Aci = i *	=	167.65 *	0.52
		19.435788 i	

time min.	time hour	i100 in/hr	Q100 in cfs	Vin cf	Q10 out cfs	Vout cf	REQ'D V cf
210	3.50	1.906	37.04	466,662	16.87	115,849	350,813
220	3.67	1.844	35.84	473,036	16.87	120,909	352,127
230	3.83	1.787	34.72	479,179	16.87	125,969	353,210
240	4.00	1.733	33.69	485,111	16.87	131,029	354,081
250	4.17	1.684	32.72	490,846	16.87	136,089	354,756
260	4.33	1.637	31.82	496,399	16.87	141,150	355,250
270	4.50	1.594	30.97	501,784	16.87	146,210	355,574
280	4.67	1.553	30.18	507,011	16.87	151,270	355,741
290	4.83	1.514	29.43	512,092	16.87	156,330	355,761
300	5.00	1.478	28.72	517,034	16.87	161,391	355,644

MAX.

Storage Required: 355,761 cf
Storage Required: 8.167 Ac.-Ft.
w/ release rate of: 16.87 cfs



**City of Weslaco
Engineering Division**

255 S. Kansas ♦ Weslaco, TX 78570 ♦ (956)

TRIP GENERATION WORKSHEET

Complete parts A and B as an aid to determine if your project requires a Traffic Impact Analysis (TIA).

A. Subdivision Information

Subdivision Name: Mi Linda Subdivision Phase 1 and Phase 2
 Location: 340' south of Mile 6 1/2 North along the west side of S. Milano Road.
 Applicant: Javier Hinojosa, P.E. ☐ Owner ☒ Agent
 Address: 416 E. Dove Ave, McAllen, Tx. 78504 Phone Number: (956) 668-1588

B. Trip Generation Calculation

The texts needed to complete this table are available at the Planning Department. See back of sheet for more information.

Ph.	ITE Code	Anticipated Land Use	Project Size			AM Peak Hour Trips	PM Peak Hour Trips	Weekday Trips
			Acres	GFA	# of Units			
1	220	Multi-Family Housing	23.05	N.A.	216	117	144	1592
2	210	Single-Family Detached	14.10	N.A.	68	57	74	

Comments: This subdivision will be developed in two phases
 Prepared by: Javier Hinojosa Engineering Date: _____
 Address: 416 E. Dove Ave, McAllen, Tx. 78504 Phone Number: (956) 668-1588

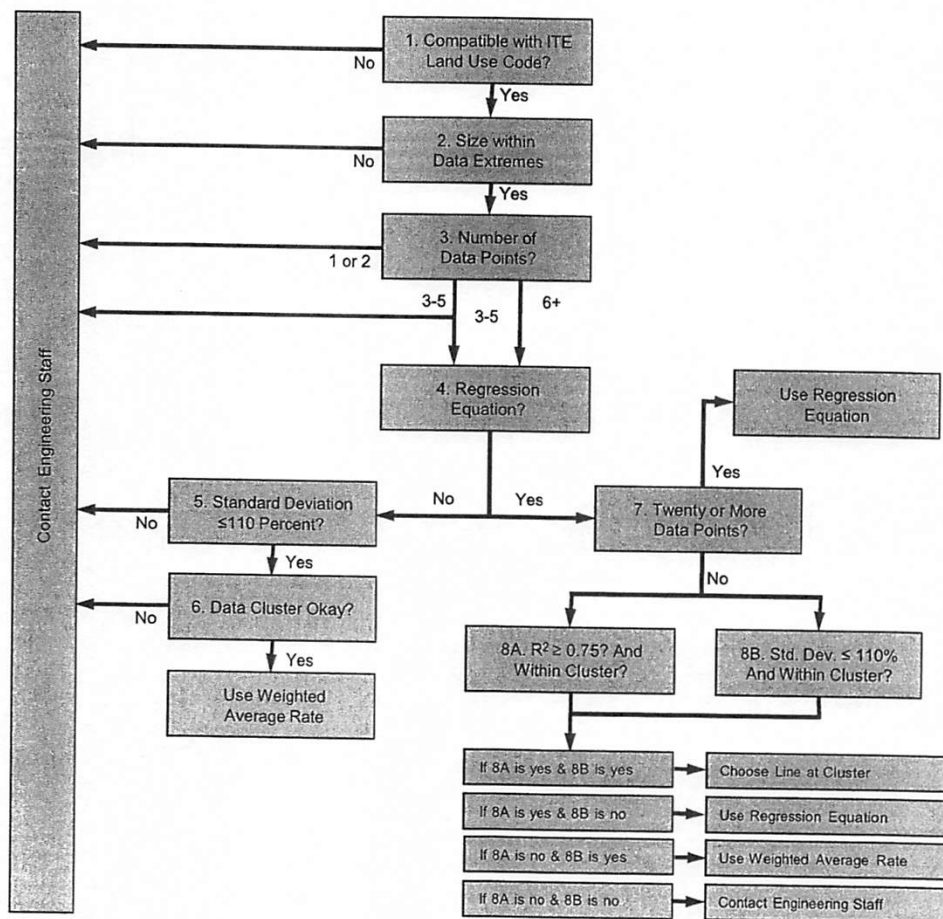
(For Official Use Only, Do Not Write In This Box)

_____ A traffic impact analysis is required. The agent preparing the study must meet with City staff to discuss the scope and requirements of the study before beginning the study.
 _____ A traffic impact analysis is not required. The traffic generated by the proposed development does not exceed the threshold requirements.

Comments: _____

Reviewed by: _____ Date: _____ STID#: _____

Recommended Procedure for Selecting Between Trip Generation Average Rates and Equations



From ITE Trip Generation Handbook

City of Weslaco
Engineering Division
255 S. Kansas Ave
Weslaco, TX 78596
(956)
(956) 973-3128 (fax)

Subdivision Name: Mi Linda Subdivision Ph. 1

Location: 340 feet South of Mile 6 ½ North along the west side of S. Milano Road

Applicant: Javier Hinojosa, P.E. (Agent)

Address: 416 E. Dove Ave., McAllen, Texas 78504 Ph. (956) 668-1588

Number of Lots: 54 Number of Dwellings: 216

ITE Code: 220 Multifamily Housing (Low-Rise)

TRIP GENERATION CALCULATIONS:

Weekday, Peak Hour of Adjacent Street Traffic between 7 and 9 am

Avg. Rate: 0.46

$$0.46 \times 216 \text{ Dwellings} = 99.4 \text{ trips}$$

$$\begin{aligned} \text{Fitted Curve: } \ln(T) &= 0.95 \ln(x) - 0.51 \\ &= 0.95 \ln(216) - 0.51 \end{aligned}$$

$$\ln(T) = 4.5965$$

$$T = e^{4.5965}$$

$$= 99.1 \text{ trips}$$

use 99 trips

Weekday, Peak Hour of Adjacent Street Traffic between 4 and 6 pm

Avg. Rate: 0.56

$$0.56 \times 216 \text{ Lots} = 121.0 \text{ trips}$$

$$\begin{aligned} \text{Fitted Curve: } \ln(T) &= 0.89 \ln(x) - 0.02 \\ &= 0.89 \ln(216) - 0.02 \end{aligned}$$

$$\ln(T) = 4.7640$$

$$T = e^{4.7640}$$

$$= 117.2 \text{ trips}$$

use 121 trips



Weekday, AM Peak Hour of Generator

Avg. Rate: 0.56

$$0.56 \times 216 \text{ Lots} = 121.0 \text{ trips}$$

Fitted Curve: $\ln(T) = 0.94 \ln(x) - 0.29$
 $= 0.94 \ln(216) - 0.29$
 $\ln(T) = 4.7628$
 $T = e^{4.7628}$
 $= 117.1 \text{ trips}$

use 121 trips

Weekday, PM Peak Hour of Generator

Avg. Rate: 0.67

$$0.67 \times 216 \text{ Lots} = 144.7 \text{ trips}$$

Fitted Curve: $T = 0.66(x) + 1.41$
 $= 0.66(216) + 1.41$
 $= 144.0 \text{ trips}$

use 145 trips

Weekday Trips

Avg. Rate: 7.32

$$7.32 \times 216 \text{ Lots} = 937.0 \text{ trips}$$

Fitted Curve: $T = 7.56(x) - 40.86$
 $= 7.56(216) - 40.86$
 $= 1592.1 \text{ trips}$

use 1592 trips

Subdivision Name: Mi Linda Subdivision Ph. 2

Location: 1055 feet south of Mile 6 ½ North along the west side of S. Milano Road

Applicant: Javier Hinojosa, P.E. (Agent)

Address: 416 E. Dove Ave., McAllen, Texas 78504 Ph. (956) 668-1588

Number of Lots: 68 Number of Dwellings: 68

ITE Code: 210 Single-Family Detached Housing

TRIP GENERATION CALCULATIONS:

Weekday, Peak Hour of Adjacent Street Traffic between 7 and 9 am

Avg. Rate: 0.74

$$0.74 \times 68 \text{ Dwellings} = 50.3 \text{ trips}$$

$$\begin{aligned} \text{Fitted Curve: } T &= 0.71(x) + 4.80 \\ &= 0.71(68) + 4.8 \\ &= 53.1 \text{ trips} \end{aligned}$$

use 53 trips

Weekday, Peak Hour of Adjacent Street Traffic between 4 and 6 pm

Avg. Rate: 0.99

$$0.99 \times 68 \text{ Dwellings} = 67.3 \text{ trips}$$

$$\begin{aligned} \text{Fitted Curve: } \ln(T) &= 0.96 \ln(x) + 0.20 \\ &= 0.96 \ln(68) + 0.20 \\ \ln(T) &= 4.2507 \\ T &= e^{4.2507} \\ &= 70.2 \text{ trips} \end{aligned}$$

use 70 trips

Weekday, AM Peak Hour of Generator

Avg. Rate: 0.76

$$0.76 \times 68 \text{ Dwellings} = 51.7 \text{ trips}$$

$$\begin{aligned}\text{Fitted Curve: } \ln(T) &= 0.91 \ln(x) + 0.20 \\ &= 0.91 \ln(68) + 0.20 \\ \ln(T) &= 4.0398 \\ T &= e^{4.0398} \\ &= 56.8 \text{ trips}\end{aligned}$$

use 57 trips

Weekday, PM Peak Hour of Generator

Avg. Rate: 1.00

$$1.00 \times 68 \text{ Dwellings} = 68.0 \text{ trips}$$

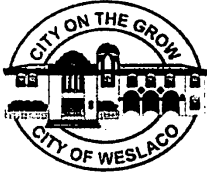
$$\begin{aligned}\text{Fitted Curve: } \ln(T) &= 0.94 \ln(x) + 0.34 \\ &= 0.94 \ln(68) + 0.34 \\ \ln(T) &= 4.3063 \\ T &= e^{4.3063} \\ &= 74.2 \text{ trips}\end{aligned}$$

use 74 trips



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.H.
From: Rebekah de la Fuente, Planning Director, on behalf of Javier Hinojosa.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for Mi Linda Phase II being a 14.19-acre out of farm tracts 648 & 649, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 340 ft south of mile 6 ½ north along the west side of Milano Road. Possible Action	
Discussion/Overview: The proposed sixty-eight (68) lot subdivision is located outside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "B". Applicant is requesting a variance for off-site drainage. Staff has received letter of support from the drainage district.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends denial of Final Plat and compliance with the ordinance on the variance.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-003269-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: Mi Linda Subdivision Phase II

Location: 1055 feet south of Mile 6 1/2 North along the west side of S. Milano Road

Legal Description: 14.19 Acres of land more or less out of Farm Tracts 648 and 649, West Tract

Subdivision as recorded in Volume 2, Pages 34-37, Map Records of Hidalgo County, Texas

Is subdivision inside city limits? ☐ YES ☒ NO

If subdivision is in the ETJ, indicate? ☒ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: Open

Existing Land Use: Agriculture Proposed Land Use: R-1 One Family Dwelling District

Number of Lots Proposed: 68 Gross Acreage: 14.19 Ac.

Title Report Submitted: ☒ YES ☐ NO

OWNER INFORMATION

Owner's Name: Reyna Family Development, LTD. Telephone: (956) 497-3962

Address: 702 W. Expressway 83 Fax: _____

City: Weslaco State: TX Zip: 78596 E-mail: dominicareyna@gmail.com

ENGINEER INFORMATION

Name: Javier Hinojosa Engineering Telephone: (956) 668-1588

Address: 416 E. Dove Ave. Fax: _____

City: McAllen State: TX Zip: 78552 E-mail: javier@javierhinojosaeng.com

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: North Alamo Water Supply Corp.

☒ YES ☐ NO Wastewater Provision: City of Weslaco

☒ YES ☐ NO Electric Company: Magic Valley Electric Co-op

☒ YES ☐ NO Phone Utility <u>AT&T</u>	☐ YES ☒ NO Gas Utility	☒ YES ☐ NO Cable Utility
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>H.C.D.D. #1</u>	☒ YES ☐ NO Irrigation District <u>H.C.C.I.D. #9</u>
--	--

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If YES, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

Two (2) sets of plats folded and stapled (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$355.00 Planning Review fee

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

Contours

Flood Zones

Adjoiners

Existing street names

Drainage plans and calculations with engineer's seal

Elevations

Flood directional arrows

Detention areas

Street names

Proof of ownership of the property

If septic tank system required, submit soil evaluation report

Water Rights associated with the property

Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

Twelve (12) sets of preliminary plat folded and stapled (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

\$350.00 (one time fee for preliminary and final plat)

One 11" X 17" reduced copy of plat

Plat Layout

Existing & Proposed Easements

Existing & Proposed ROW

Existing & Proposed Drainage Easements

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

- _____ Contours
- _____ Flood Zones
- _____ Adjoiners
- _____ Existing & Proposed street names
- _____ Utility Layout
- _____ Existing & Proposed Utilities
- _____ Proposed Fire Hydrants
- _____ Adjoiners
- _____ Street names
- _____ Drainage plans and calculations with engineer's seal
- _____ Elevations
- _____ Flood directional arrows
- _____ Detention areas
- _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full
- _____ Number of fire hydrants proposed for subdivision
- _____ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- _____ Twelve (12) sets of plans **FOLDED & STAPLED** (24 x 36) & PDF copy with all corrections
- _____ Plats to be sealed by Professional Engineer
- _____ Approved Drainage Report
- _____ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____ Notice of Intent
- _____ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____ Electronic file of final plat and as-builds
- _____ Reproducible plat to be recorded with all required signatures
- _____ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____ 2% inspection fee
- _____ Park Fees
- _____ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____ Tax certificates
- _____ Memo from engineering inspector releasing subdivision
- _____ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____ 30 Year Water and 30 Year Sewer Service Agreements
- _____ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____ Sealed engineering cost estimates
- _____ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: Ezequiel Reyna, Jr.

Owner Signature: [Signature] Date: 07/20/22

[Signature] is the authorized agent

Authorized Agent Signature: [Signature] Date: 7/20/22

Authorized Agent Printed Name: Javier Hinojosa, P.E.

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



HIDALGO COUNTY DRAINAGE DISTRICT No. 1

Raul E. Sesin, PE, CFM
District General Manager
Hidalgo County Floodplain Administrator

BOARD OF DIRECTORS

DAVID L. FUENTES
Board Member

EDUARDO "EDDIE" CANTU
Board Member

RICHARD F. CORTEZ
Chairman of the Board

EVERARDO "EVER" VILLARREAL
Board Member

ELLIE TORRES
Board Member

August 30, 2022

City of Weslaco
Attn: Rebekah De La Fuente, Planning & Code Enforcement Director
255 S. Kansas Ave.
Weslaco, Texas 78596

RE: Mi Linda Subdivision Phase I and Phase II

Dear Ms. De La Fuente:

This letter is in response to a request from Javier Hinojosa, PE, the Engineer of record for Mi Linda Subdivision Phase I and Phase II Development. Our office has received and approved the proposed drainage statement for the above-mentioned developments and has no objections to the Engineer's plan to discharge water as identified in approved drainage report date August 30, 2022.

If you should have any questions or require additional information, please feel free to contact me at (956) 292-7080.

Sincerely,
HIDALGO COUNTY DRAINAGE DISTRICT No. 1

A handwritten signature in black ink, appearing to read "Yvette Barrera".

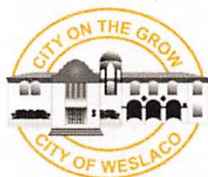
Yvette Barrera, PE, CFM
Assistant General Manager

Xc:
Raul Sesin, PE, CFM, General Manager
Alexis Lozano, EIT
Isaac Gonzalez, EIT
Gilberto Aguirre, EIT



**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.I.
From: Rebekah de la Fuente, Planning Director, on behalf of SWG Engineering	
Subject/Agenda Item: Discussion and consideration for the Final Plat for Pike Terrace - being a 36.092-acre out of farm tract 163, block 178, The West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the southeast Corner of w. pike Blvd. and Milanos Rd. Possible Action.	
Discussion/Overview: The proposed one hundred and five (105) lot subdivision is located inside the City of Weslaco. This subdivision is being serviced with water by North Alamo Water Supply Company through an 8" waterline and sewer by the City of Weslaco through a 12" sewer line. The property is within a Flood Zone "B". Applicant was required at the last meeting to submit a TIA prior to final plat approval.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends denial of Final Plat.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. PIAT-000273-2022

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: Pike Terrace Subdivision

Location: Southeast Corner of W. Pike Blvd. (Mile 8 North) and Milanos Rd. (Mile 6 1/2 West Rd)

Legal Description: A Tract of land containing 36.092 Acres situated in the City of Weslaco, Hidalgo County, Texas being a part or portion of Farm Tract 163, Block 178, The West and Adams Tract.

Is subdivision inside city limits? ☒ YES ☐ NO

If subdivision is in the ETJ, indicate? ☐ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: R-1

Existing Land Use: Vacant Proposed Land Use: R-2 Duplex & Apts

Number of Lots Proposed: 105 Gross Acreage: 36.092

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: Shavi Mahtani Telephone: (956) 661-8888

Address: 100 E. Nolana Fax: _____

City: McAllen State: Tx Zip: 78501 E-mail: shavi@aurielinvestments.com

ENGINEER INFORMATION

Name: SWG Engineering LLC Telephone: (956)968-2194

Address: 611 Bill Summers Intl. Blvd. Fax: (956) 968-8300

City: Weslaco State: Tx Zip: 78596 E-mail: jreyes@siglerwinstongreenwood.com

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: NAWSC
☒ YES ☐ NO Wastewater Provision: City of Weslaco
☒ YES ☐ NO Electric Company: AEP

☒ YES ☐ NO Phone Utility _____	☒ YES ☐ NO Gas Utility _____	☒ YES ☐ NO Cable Utility _____
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>HCDD#1</u>	☒ YES ☐ NO Irrigation District <u>HCCID#9</u>
---	--

Has the property been assessed as flat rate irrigable property: ☐ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☐ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If **YES**, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

- _____ **Two (2)** sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov
- _____ **\$355.00** Planning Review fee
- _____ One 11" X 17" reduced copy of plat
- _____ Plat Layout
 - _____ Existing & Proposed Easements
 - _____ Existing & Proposed ROW
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- ☒ **\$350.00** (one time fee for preliminary and final plat)
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 - _____ Existing & Proposed Easements
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- _____ Letter of Credit/Performance Bond/Escrow

** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: _____

Owner Signature: _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature: SWG Engineering LLC Date: July 27, 2022

Authorized Agent Printed Name: [Signature], P.E.

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid: _____

P & Z Commission Approval on Preliminary Plat: _____

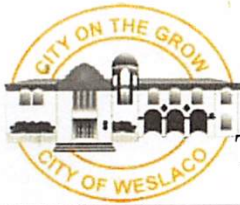
P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



**City of Weslaco
Engineering Division**

255 S. Kansas ♦ Weslaco, TX 78570 ♦ (956)

TRIP GENERATION WORKSHEET

Complete parts A and B as an aid to determine if your project requires a Traffic Impact Analysis (TIA).

A. Subdivision Information

Subdivision Name: Pike Terrace Subdivision
 Location: West Pike Blvd. (Mile 8 North Rd.) and Milanos Road
 Applicant: SWG Engineering LLC ☐ Owner ☒ Agent
 Address: 611 Bill Summers Intl. Blvd. Weslaco, TX 78596 Phone Number: (956)968-2194

B. Trip Generation Calculation

The texts needed to complete this table are available at the Planning Department. See back of sheet for more information.

ITE Code	Anticipated Land Use	Project Size			AM Peak Hour Trips	PM Peak Hour Trips	Weekday Trips
		Acres	GFA	# of Units			
220	Multi-Family	36.092		105	280	298	578

Comments: _____
 Prepared by: SWG Engineering LLC Date: _____
 Address: 611 Bill Summer Intl. Blvd. Weslaco, TX 78596 Phone Number: (956)789-2194

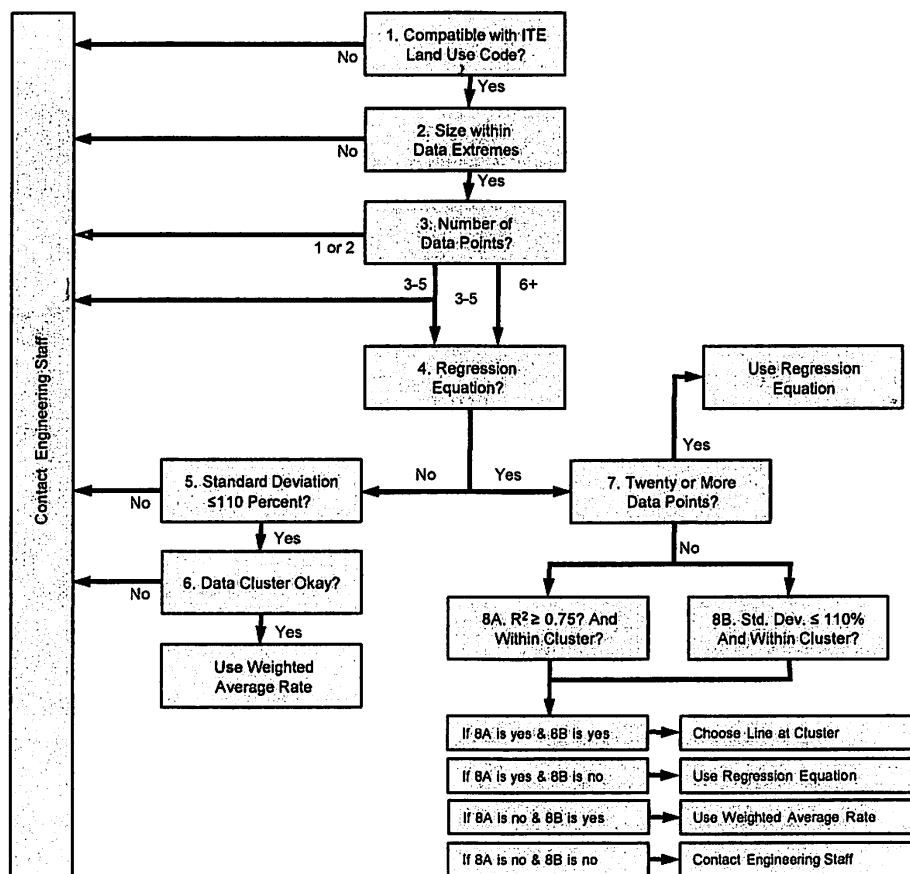
(For Official Use Only, Do Not Write In This Box)

- _____ A traffic impact analysis is required. The agent preparing the study must meet with City staff to discuss the scope and requirements of the study before beginning the study.
- _____ A traffic impact analysis is not required. The traffic generated by the proposed development does not exceed the threshold requirements.

Comments: _____

Reviewed by: _____ Date: _____ STID#: _____

Recommended Procedure for Selecting Between Trip Generation Average Rates and Equations



From ITE Trip Generation Handbook

City of Weslaco
Engineering Division
255 S. Kansas Ave
Weslaco, TX 78596
(956)
(956) 973-3128 (fax)

Rebekah M. De La Fuente

PIKE Terrace.

From: Steve Valdez <SValdez@weslacoedc.com>
Sent: Tuesday, July 26, 2022 8:50 AM
To: Martin Garza; Molly Vallejo; Norma Cantu
Cc: Rebekah M. De La Fuente
Subject: Oversized Piping

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open/download any attachments unless you recognize the sender and know the content is safe.

Mr. Garza,

The EDC Board approved at yesterday's meeting to pay for the increased cost for "upsizing" the pipes for the subdivision along Milano Rd. Please let me know who we should write the check out to and when.

As part of our back up documentation, we would like to see the invoice that would have paid for the entire purchase of 12 inch sewer pipes.

Thank you,

Steve,



EDC
WESLACO
STEVEN M. VALDEZ
EXECUTIVE DIRECTOR

☎ O: (956) 969-0838 / C: (956) 279-9368
✉ svaldez@weslacoedc.com
🌐 www.weslacoedc.com
📍 275 S. Kansas Avenue, Suite A
Weslaco, TX 78596



SWG Engineering

Hidalgo County Drainage District No. 1

Drainage Report

Weslaco – Pike Terrace Subdivision

Hidalgo County, Texas

Prepared By:

SWG Engineering, LLC

611 Bill Summers Intl. Blvd.

Weslaco, Texas 78596

Tel: 956-968-2194

Fax: 956-968-8300

jreyes@siglerwinstongreenwood.com

6/22/2022



Handwritten signature in blue ink over the seal.
P.E.
Jun. 22. 2022

COVER SHEET	1
INDEX	2
PROJECT LOCATION	3
FLOOD PLAIN	3
SOIL CONDITIONS	3
EXISTING CONDITIONS	3
PROPOSED CONDITIONS	3
LOCATION MAP	4
HYDRAULIC CALCULATIONS	5
"C" VALUES FOR RATIONAL METHOD	6
RAINFALL INTENSITY FOR HIDALGO COUNTY	7
FLOOD PLAIN ATTACHMENTS	8
SOIL CONDITION ATTACHMENT	9

**DRAINAGE REPORT
For
PIKE TERRACE SUBDIVISION**

I. Project Location

This project involves the development of a 36.092 acre tract of land for residential use. The site is located in the city of Weslaco, Hidalgo County and lies on the southwest intersection of W Pike Blvd. (Mile 8 North Rd.) and N Milano Rd. (Mile 6 1/2 West Rd.) The proposed subdivision is comprised of 105 lots for a total of a 34.03 acre tract out of West tract, Hidalgo County, Texas.

II. Flood Plain

The area is considered to be under an unincorporated area determined by FEMA Flood Insurance Rate Map, Community Panel No. 480334 0450 C, and Map Revised June 6, 2000. The project area is under Zone "X", which is described as "Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile and areas protected by levees from 100-year flood".

III. Soil Conditions

According to the Soil Survey Report prepared for Hidalgo County by the U.S.D.A. Soil Conservation Service, the area is composed of three types of soil: Hidalgo fine sandy loam (0 to 1 percent slopes), Hidalgo fine sandy loam (1 to 3 percent slopes), and Hidalgo sandy clay loam (0 to 1 percent slopes). The predominant soil type being Hidalgo clay loam, is listed in Hydrological Group B. See attached Soil Survey of Hidalgo County, Texas.

IV. Existing Conditions

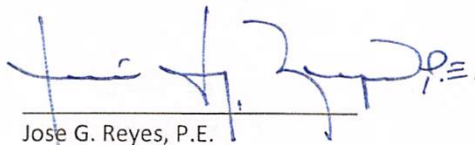
Existing runoff is by surface flow in a southwestern direction and has a runoff of **23.44 cfs** during the **10-yr** storm frequency as per attached calculations. The total impermeable area is approximately 0 square feet and the total permeable area is **1,482,347 sf²**. Due to no existing development, an existing weighted runoff coefficient of **C = 0.2** was calculated.

V. Proposed Conditions

Subject tract of land will be developed into 105 lots that will serve as a multi-family subdivision. One of the lots will be dedicated for a detention pond. Proposed runoff after development is **111.32 cfs**, during the **50-year** storm frequency, which is an increase of **87.88 cfs**. The proposed drainage for Pike terrace Subdivision consists of surface runoff from future development into the street and green areas. The total impermeable area is approximately **1,408,295 sf²** and the total permeable area is **74,052 ft²**. A weighted runoff coefficient of **C = 0.59** was calculated. For a **50-year storm frequency**, a peak detention

volume is approximately 246,207 ft³ or 5.65 Acre-ft. Please refer to attached drainage calculations. At time of improvements the storm water runoff from the improved area shall be discharged in a southwestern direction where it will be discharged into a proposed detention pond on the southeast corner of subdivision. The runoff shall be directed into an existing manhole along Milano's Rd. (Mile 6 ½ West Rd.), via 24" RCP, connected to an existing storm system, that will carry the storm water via 42" RCP to drain ditch 37D1, owned by HCCID#9. The detention pond is designed in order to detain a volume of 253,095 ft³ or 5.81 Acre-ft, which will be able to hold a 50 year frequency.

The drainage calculations are attached.


Jose G. Reyes, P.E.
June 22, 2022



Weslaco – Pike Terrace Subdivision

Hidalgo County Drainage District No. 1 "C" Values for Rational Method

Type of Drainage Area	Runoff Coefficient
Residential Districts:	
Single Family (Lots less than ¼ acre)	0.30 – 0.50
Multi - Family (Less than 20 DU/AC)	0.40 – 0.60
Multi - Family (Greater than 20 DU/AC)	0.60 – 0.75
Business District:	
Downtown areas	0.70 – 0.95
Neighborhood areas	0.30 – 0.70
Industrial Districts:	
Light Areas	0.30 – 0.80
Heavy Areas	0.60 – 0.90
Railroad Yard Areas:	0.30 – 0.40
Park:	0.10 – 0.25
Unimproved Areas:	
Sand or sandy loam soil, 0-3%	0.15 – 0.20
Sand or sandy loam soil, 3-5%	0.20 – 0.25
Black or loessial soil, 0-3%	0.18 – 0.25
Black or loessial soil, 3-5%	0.25 – 0.30
Black or loessial soil, >5%	0.70 – 0.80
Deep sand area	0.05 – 0.15
Steep grassed slopes	0.70
Street:	
Asphalt	0.85 – 0.95
Concrete	0.90 – 0.95
Drives & Walks:	
Concrete	0.75 – 0.95

Last Updated: 6/22/2022

Detention Calculator

10-yr release
e= 0.8599
b= 116.24
d= 14.33

50 yr Storm
Title: SWGH# 22-122
34.03 Ac Mitigation Area
City of Weslaco, TX

Required Volume:
Req'd Volume 5.65 ac.ft

EXISTING DATA

Total Area 34.03 acre
Overland Flow Length - "L" 1100.00 LF
Existing Time of Concentration - "Tov" (grass) 45.55 % composition? 100%
Existing Time of Concentration - "Tov" (pavmt) 0.00 % composition? 0%
Total Existing Time of Concentration - "Tov" 45.55 minutes
Existing Runoff Coefficient - "C" 0.20
Intensity of Rainfall - "I" 3.44 in/hr
Existing - "Q" 23.44 cfs

e= 0.8613
b= 170.66
d= 16.71

PROPOSED IMPROVEMENTS

Total Area 34.03 acre
Overland Flow Length - "L" 1100.00 LF
Proposed Time of Concentration - "Tov" (grass) 33.71 % composition? 74%
Proposed Time of Concentration - "Tov" (pavmt) 2.92 % composition? 26%
Total Proposed Time of Concentration - "Tov" 36.63 minutes
Proposed Runoff Coefficient - "C" 0.59
Intensity of Rainfall - "I" 5.55 in/hr
Proposed - "Q" 111.32 cfs

Time		I	Q in	V in	Q out	V out	Req'd V	Req'd V
min	hr	in/hr	ft ³ /s	ft ³	ft ³ /s	ft ³	ft ³	ac-ft
36.63	0.61	5.55	111.32	244683	23.44	51519	193164	4.43
46.63	0.78	4.79	96.01	268629	23.44	58551	210078	4.82
56.63	0.94	4.22	84.62	287540	23.44	65583	221957	5.10
66.63	1.11	3.78	75.80	303044	23.44	72614	230430	5.29
76.63	1.28	3.43	68.75	316115	23.44	79646	236470	5.43
86.63	1.44	3.14	62.98	327374	23.44	86678	240697	5.53
96.63	1.61	2.90	58.16	337238	23.44	93709	243529	5.59
106.63	1.78	2.70	54.08	346000	23.44	100741	245259	5.63
116.63	1.94	2.52	50.57	353871	23.44	107773	246099	5.65
126.63	2.11	2.37	47.51	361011	23.44	114804	246207	5.65
136.63	2.28	2.24	44.83	367539	23.44	121836	245704	5.64
146.63	2.44	2.12	42.46	373550	23.44	128868	244683	5.62
156.63	2.61	2.01	40.34	379118	23.44	135899	243218	5.58
166.63	2.78	1.92	38.44	384301	23.44	142931	241371	5.54
176.63	2.94	1.83	36.72	389151	23.44	149963	239188	5.49
186.63	3.11	1.75	35.16	393705	23.44	156994	236711	5.43
196.63	3.28	1.68	33.73	397999	23.44	164026	233973	5.37
206.63	3.44	1.62	32.43	402059	23.44	171058	231002	5.30

High Point



JUN. 22. 2022

Convert acre to sf below:	
acre:	sf:
1	43560
2.3E-05	1

Existing Runoff Coef. Calculation:

		Weighted C
Total Area =	34.03 acres	<u>0.20</u>
Impermeable Area =	0% 0.0 acres	0.9
Pavement Area =	0% 0.0 acres	0.95
Permeable Area =	100% 34.03 acres	0.2

Future Runoff Coef. Calculation:

		Weighted C
Total Area =	34.03 acres	<u>0.59</u>
Impermeable Area =	26% 8.85 acres	0.9
Permeable Area =	5% 1.70 acres	0.2
Multi-Family Area =	69% 23.48 acres	0.5

Elevations:

High =	88.68 ft
Low =	81.5 ft

Average Slope (Adjusted) = 0.00703

K= 0.828 *std coefficient*

N grass= 0.4 *unitless*

N pavement= 0.02 *unitless*

Rainfall Intensity-Duration-Frequency Coefficients for Texas

Based on United States Geological Survey (USGS) Scientific Investigations Report 2004-5041

"Atlas of Depth-Duration Frequency of Precipitation Annual Maxima for Texas"

1. Select English or SI Units

English

2. Select or Enter a County

Hidalgo

3. Enter a Time of Conc.

Select Units

36.33 min

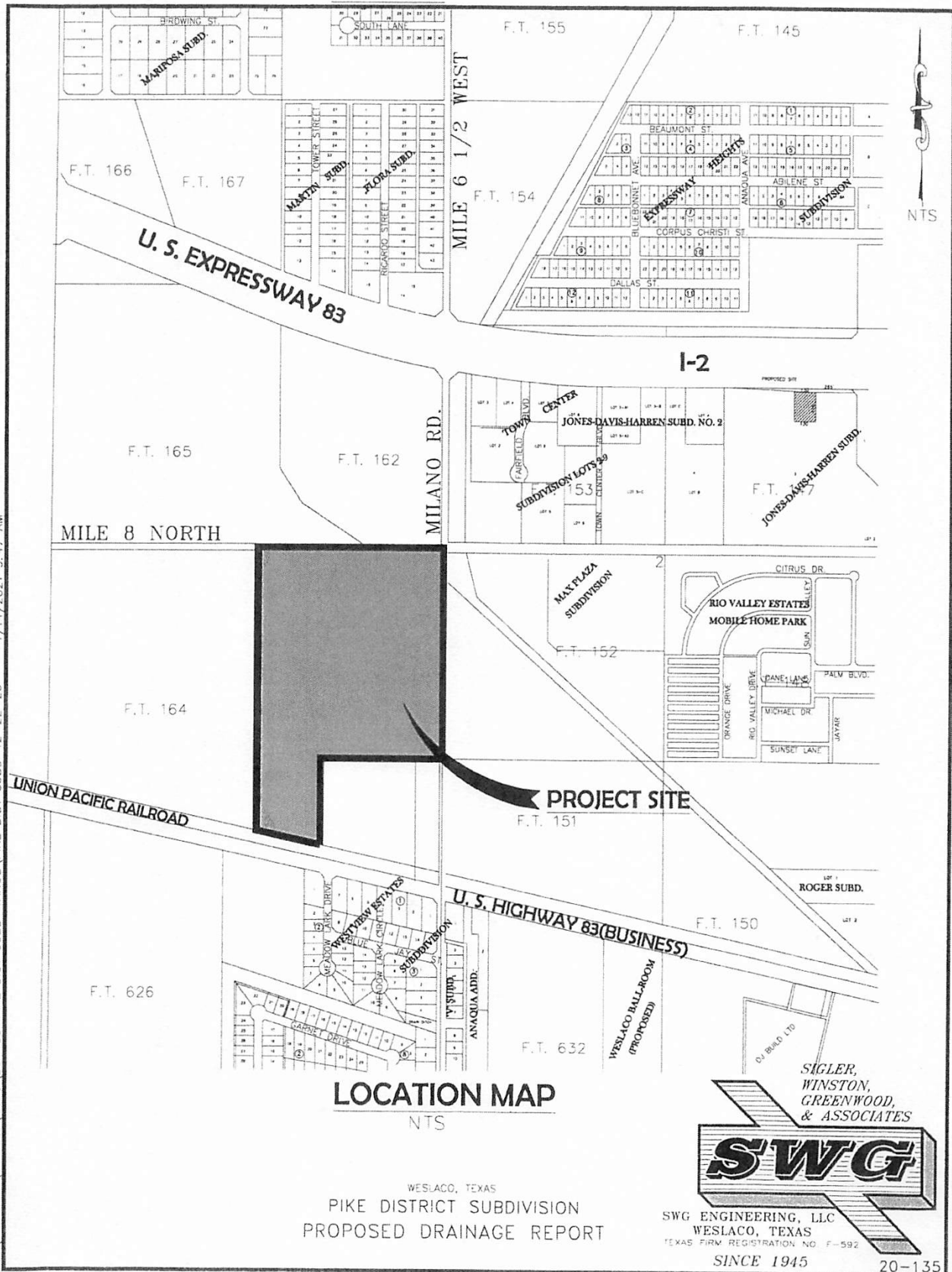
Coefficient	50% (2-year)	20% (5-year)	10% (10-year)	4% (25-year)	2% (50-year)	1% (100-year)
e	0.8645	0.8647	0.8599	0.8572	0.8613	0.8619
b (in.)	72.40	100.21	116.24	140.47	170.66	201.07
d (min)	12.92	13.90	14.33	15.32	16.71	18.00

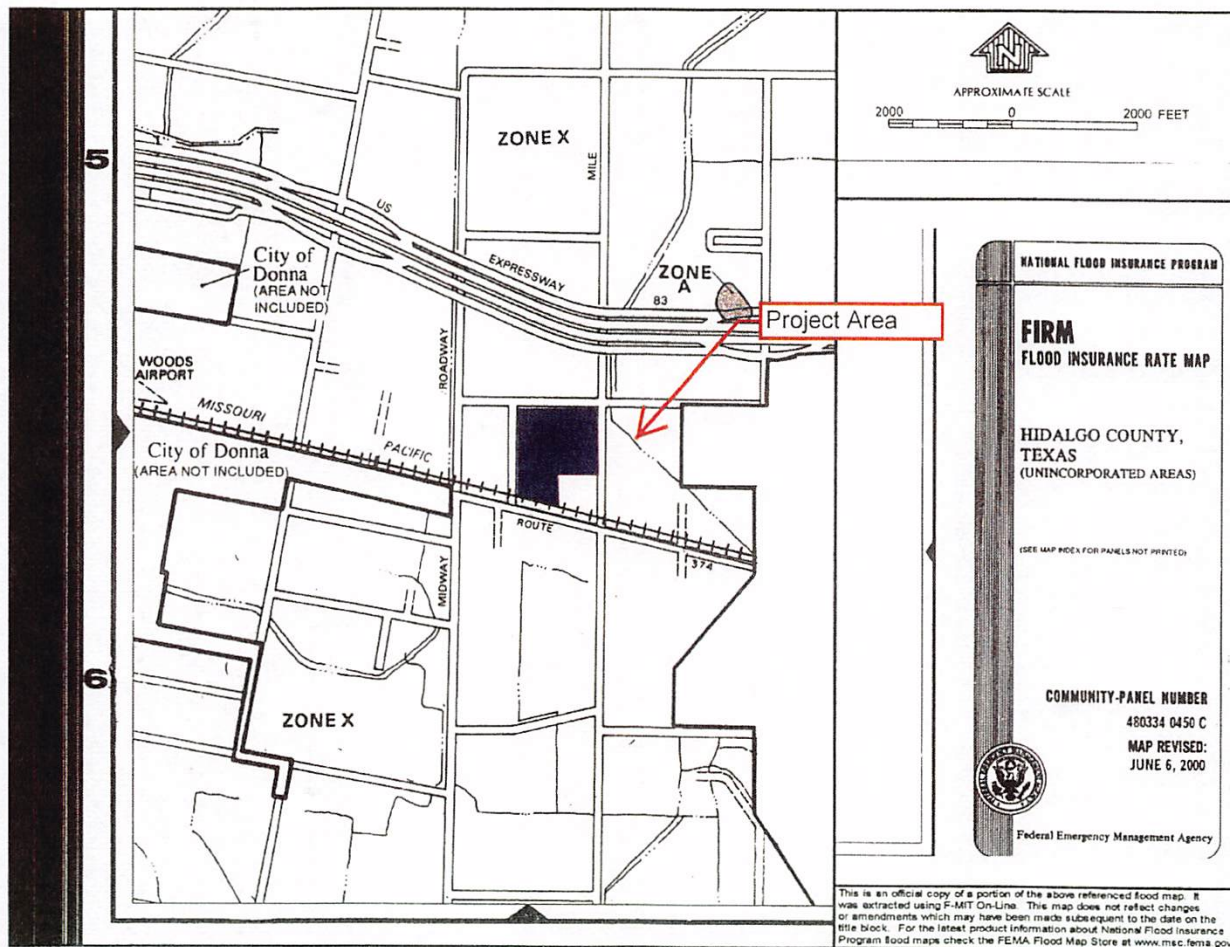
Intensity (in./hr) 2.49 3.39 3.98 4.78 5.58 6.43

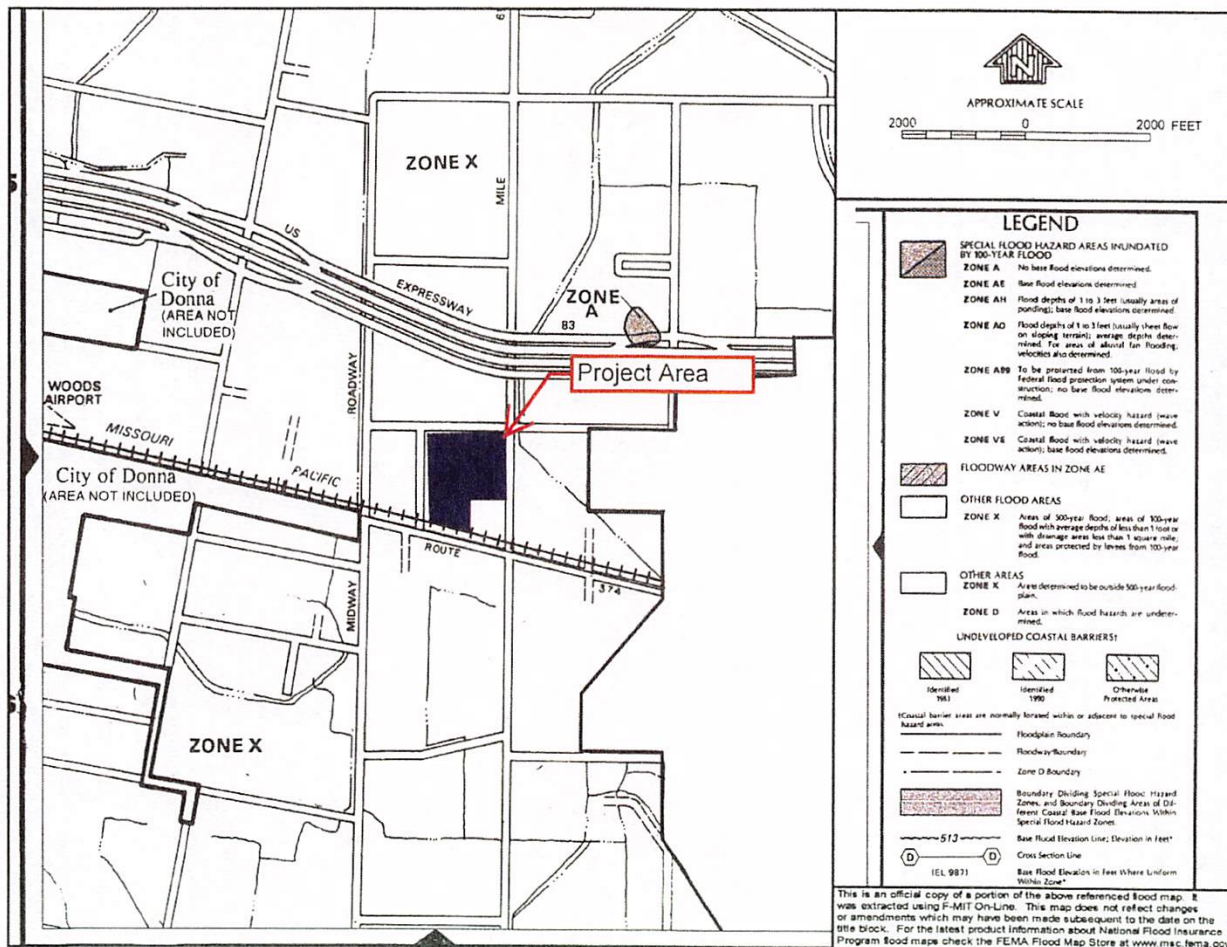
(Spreadsheet Release Date: August 31, 2015; data table reshuffle by Asquith July 14, 2016)

Attachments

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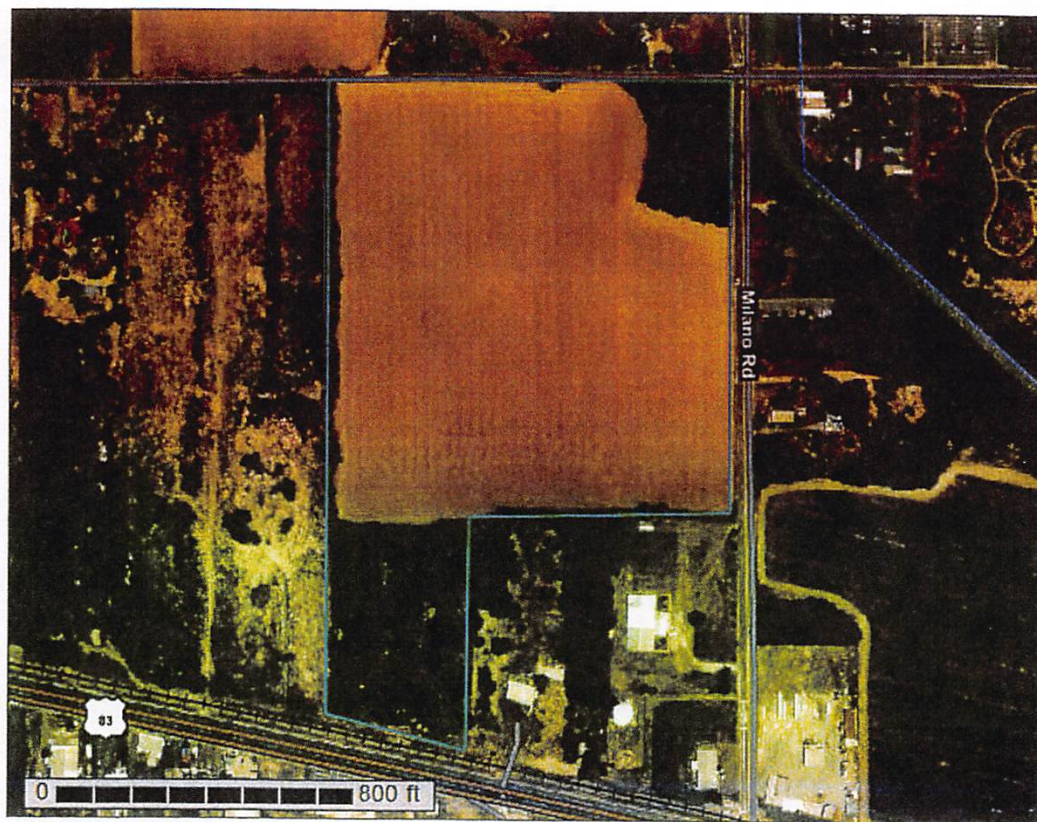




A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Hidalgo County, Texas

Pike District Subdivision



December 28, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

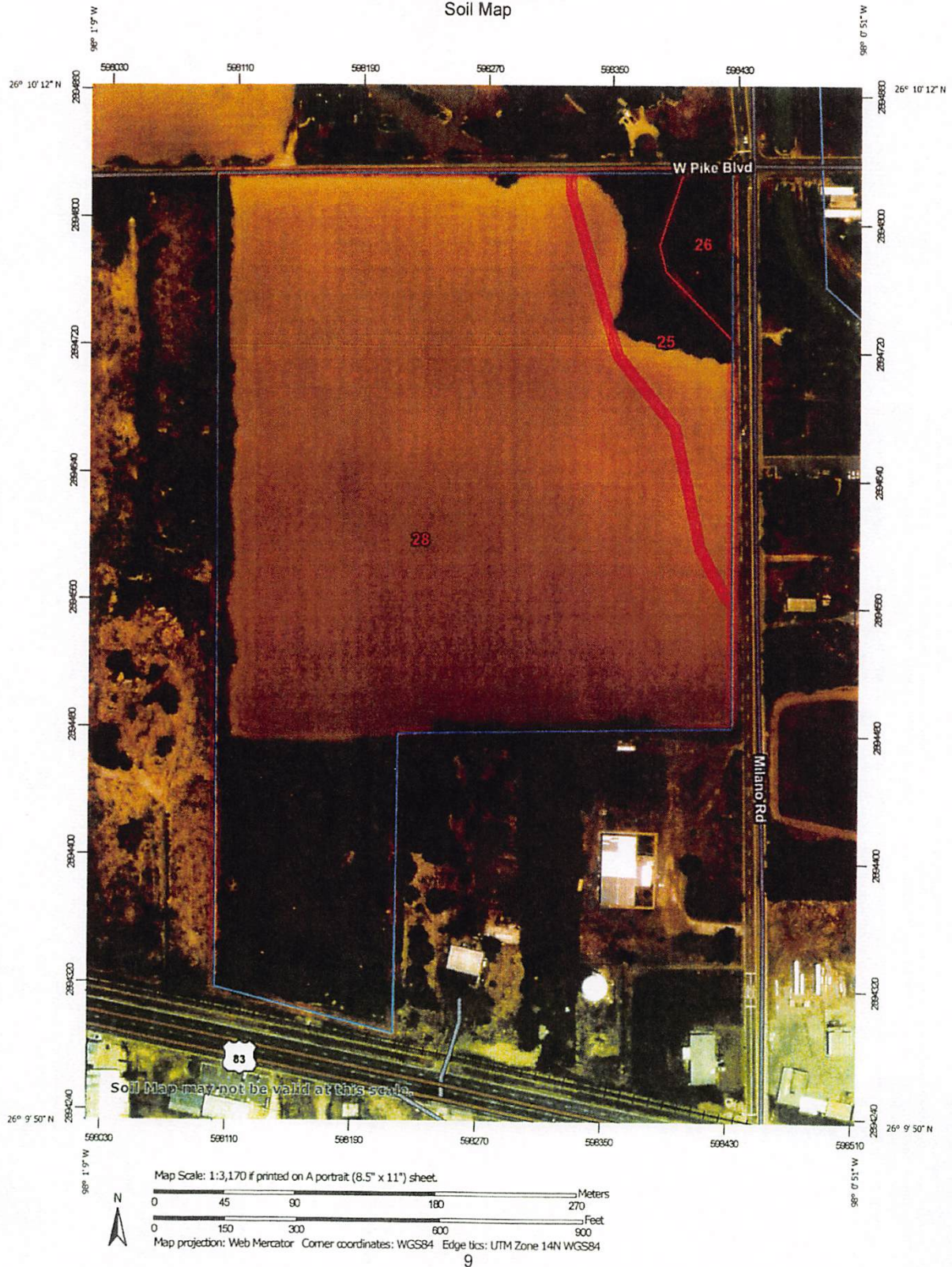
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

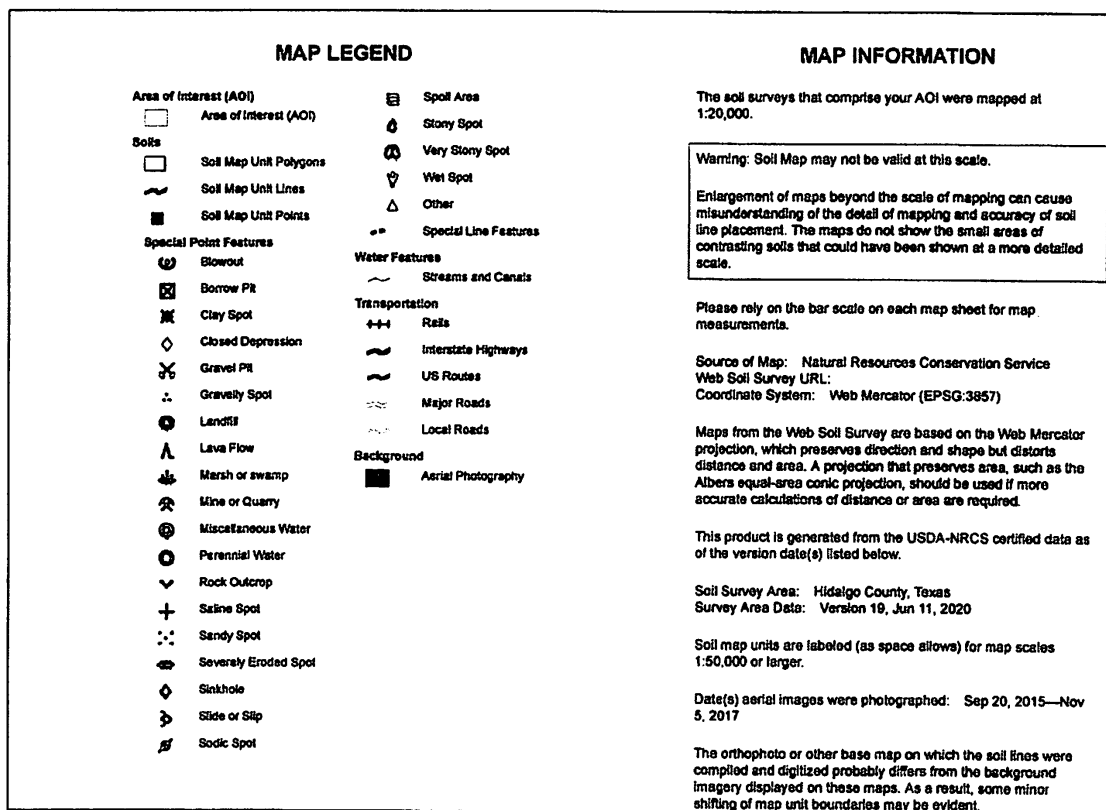
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	2.9	8.8%
26	Hidalgo fine sandy loam, 1 to 3 percent slopes	0.8	2.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	29.8	88.7%
Totals for Area of Interest		33.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

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landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Hidalgo County, Texas

25—Hidalgo fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2sxn
Elevation: 20 to 500 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 72 to 74 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Hidalgo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hidalgo

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Typical profile

Ap - 0 to 17 inches: fine sandy loam
Bk1 - 17 to 28 inches: sandy clay loam
Bk2 - 28 to 38 inches: clay loam
Ck - 38 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: B
Ecological site: R083DY019TX - Gray Sandy Loam
Hydric soil rating: No

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Minor Components

Willacy

Percent of map unit: 10 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Brennan

Percent of map unit: 5 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083EY023TX - Sandy Loam
Hydric soil rating: No

26—Hidalgo fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2sxvp
Elevation: 20 to 500 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 72 to 74 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Hidalgo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hidalgo

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Typical profile

Ap - 0 to 17 inches: fine sandy loam
Bk1 - 17 to 28 inches: sandy clay loam
Bk2 - 28 to 38 inches: clay loam
Ck - 38 to 80 inches: clay loam

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Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: R083DY019TX - Gray Sandy Loam
Hydric soil rating: No

Minor Components

Willacy

Percent of map unit: 10 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Brennan

Percent of map unit: 5 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R083EY023TX - Sandy Loam
Hydric soil rating: No

28—Hidalgo sandy clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2sxxv
Elevation: 20 to 500 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 72 to 74 degrees F
Frost-free period: 300 to 365 days
Farmland classification: All areas are prime farmland

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Map Unit Composition

Hidalgo and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hidalgo

Setting

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium

Typical profile

Ap - 0 to 17 inches: sandy clay loam

Bk1 - 17 to 28 inches: sandy clay loam

Bk2 - 28 to 38 inches: clay loam

Ck - 38 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Negligible

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability classification (nonirrigated): 2c

Hydrologic Soil Group: B

Ecological site: R083DY019TX - Gray Sandy Loam

Hydric soil rating: No

Minor Components

Raymondville

Percent of map unit: 7 percent

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R083DY025TX - Clay Loam

Hydric soil rating: No

Racombes

Percent of map unit: 6 percent

Landform: Terraces

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Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Willacy

Percent of map unit: 2 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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TABLE 16.--ENGINEERING INDEX PROPERTIES
[Absence of an entry indicates that data were not estimated]

Map symbol and soil name	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	4	10	40	200		
	<u>In</u>								<u>Pct</u>	
1.* Arenta										
2----- Benito	0-7 7-65	Clay----- Clay-----	CH CH	A-7-6 A-7-6	100 100	100 100	100 100	95-100 95-100	75-94 75-94	48-64 48-64
3, 4----- Brennan	0-13 13-65	Fine sandy loam Sandy clay loam, loam.	SM, SM-SC, SC, CL	A-2-4, A-4 A-2-6, A-4, A-6	100 95-100	98-100 90-100	70-100 60-100	20-45 30-59	<30 22-39	NP-9 8-22
5----- Camargo	0-8 8-65	Silt loam----- Stratified silty clay loam to very fine sandy loam.	CL, CL-ML CL	A-6, A-4 A-6, A-7-6	100 100	100 100	95-100 95-100	70-100 70-100	20-35 30-45	4-16 11-25
6----- Camargo	0-8 8-65	Silty clay loam Stratified silty clay loam to very fine sandy loam.	CL CL	A-6, A-7-6 A-6, A-7-6	100 100	100 100	95-100 95-100	70-100 70-100	30-45 30-45	11-25 11-25
7----- Cameron	0-30 30-65	Silty clay----- Silt loam, loam	CH, CL CL	A-7-6 A-4, A-6	100 100	100 95-100	100 90-100	90-100 70-95	48-68 25-35	25-41 8-15
8----- Comitas	0-28 28-80	Loamy fine sand Fine sandy loam, sandy clay loam.	SM, SM-SC SM, SC, SM-SC	A-2-4 A-2-4, A-2-6, A-4, A-6	95-100 95-100	95-100 90-100	85-100 80-100	15-25 23-50	<25 <34	NP-4 NP-14
9----- Delfina	0-13 13-34 34-72	Loamy fine sand Sandy clay loam, clay loam. Sandy clay loam, fine sandy loam.	SM, SM-SC SC, CL SC	A-2-4, A-4 A-6, A-7-6 A-6, A-7-6	100 100 90-100	100 95-100 75-98	85-100 90-100 70-97	20-45 40-55 36-50	<25 31-48 30-46	NP-7 18-35 16-31
10, 11----- Delfina	0-13 13-34 34-72	Fine sandy loam Sandy clay loam, clay loam. Sandy clay loam, fine sandy loam.	SM-SC, SC, SM SC, CL SC	A-2-4, A-4 A-6, A-7-6 A-6, A-7-6	100 100 90-100	100 95-100 75-98	90-100 90-100 70-97	25-50 40-55 36-50	19-30 31-48 30-46	3-10 18-35 16-31
12----- Delmita	0-13 13-34 34-60	Loamy fine sand Sandy clay loam, fine sandy loam. Indurated-----	SM, SM-SC, SP-SM SC ---	A-2-4 A-2-4, A-2-6, A-4, A-6 ---	100 100 ---	95-100 100 ---	85-100 90-100 ---	11-25 30-50 ---	<25 27-39 ---	NP-7 8-18 ---
13.* Delmita-----	0-13 13-34 34-60	Fine sandy loam Sandy clay loam, fine sandy loam. Indurated-----	SM, SM-SC SC ---	A-2-4 A-2-4, A-2-6, A-4, A-6 ---	100 100 ---	100 100 ---	90-100 90-100 ---	20-35 30-50 ---	<27 27-39 ---	NP-7 8-18 ---

See footnote at end of table.

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Soil survey

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth <u>In</u>	USDA texture	Classification		Percentage passing sieve number--				Liquid limit <u>Pct</u>	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
13:*										
Randado-----	0-9	Fine sandy loam	SM, SM-SC	A-2-4	75-100	70-100	70-100	20-35	<25	NP-7
	9-16	Fine sandy loam, sandy clay loam.	SC, SM-SC, GC	A-2-4, A-2-6, A-4, A-6	65-100	60-100	60-100	25-50	25-34	7-14
	16-60	Cemented-----	---	---	---	---	---	---	---	---
14-----	0-80	Fine sand-----	SP-SM, SM	A-2-4, A-3	100	100	75-100	5-25	<25	NP-3
Falfurrias										
15-----	0-7	Clay-----	CL, CH	A-7-6	100	100	100	90-100	41-55	20-30
Grulla	7-65	Silty clay, clay	CH	A-7-6	100	100	100	90-100	52-66	28-39
16, 17, 18-----	0-18	Fine sandy loam	SC, SM-SC, SM	A-2-4	100	95-100	95-100	17-35	<30	NP-8
Hargill	18-63	Sandy clay loam	SC, CL	A-6	100	95-100	95-100	40-55	30-40	11-20
	63-80	Sandy clay loam	SC	A-2-4, A-2-6, A-4, A-6	85-100	80-100	75-100	34-50	28-39	9-18
19, 20-----	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
Harlingen	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
21:*										
Harlingen-----	0-8	Clay-----	CH	A-7-6	100	100	100	90-100	51-85	32-60
	8-35	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
	35-72	Clay-----	CH	A-7-6	100	100	100	95-100	65-85	50-65
Urban land.										
22, 23, 24-----	0-17	Sandy loam-----	SM	A-2-4	100	100	75-100	13-24	<25	NP-4
Hebbronville	17-58	Fine sandy loam, loam.	SM, SM-SC	A-2-4	100	100	90-100	20-30	<30	NP-7
	58-65	Fine sandy loam, loam.	SM-SC, SC	A-2-4, A-4, A-2-6, A-6	95-100	90-100	90-100	20-40	20-30	4-13
25, 26, 27-----	0-17	Fine sandy loam	SC, SM-SC	A-4, A-6	100	95-100	90-100	36-50	20-30	4-11
Hidalgo	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
28, 29, 30-----	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-55	29-40	11-20
Hidalgo	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
31:*										
Hidalgo-----	0-17	Sandy clay loam	SC, CL	A-6	100	95-100	90-100	36-50	29-40	11-20
	17-28	Sandy clay loam, clay loam.	SC, CL	A-6	100	95-100	90-100	36-80	30-40	11-20
	28-80	Clay loam, sandy clay loam.	CL, SC	A-6, A-7-6	90-100	80-100	75-99	44-80	30-44	11-23
Urban land.										

See footnote at end of table.

Hidalgo County, Texas

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TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth <u>In</u>	USDA texture	Classification		Percentage passing sieve number--				Liquid limit <u>Pct</u>	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
32:*										
Jimenez-----	0-8	Very gravelly loam.	GC, GM-GC	A-1, A-2-4, A-2-6	30-58	15-40	15-35	15-30	22-35	5-15
	8-10	Cemented-----	---	---	---	---	---	---	---	---
	10-60	Variable-----	---	---	---	---	---	---	---	---
Quemado-----	0-6	Very gravelly sandy loam.	GM, GC, GM-GC	A-1, A-2	30-50	20-50	15-35	15-30	<25	NP-10
	6-12	Very gravelly sandy loam, very gravelly loam, very gravelly sandy clay loam.	GM, GC, GM-GC	A-1, A-2	30-50	20-50	15-35	15-30	18-28	2-10
	12-18	Cemented-----	---	---	---	---	---	---	---	---
	18-60	Variable-----	---	---	---	---	---	---	---	---
33-----										
Laredo	0-14	Silty clay loam	CL	A-6, A-7-6, A-4	100	100	90-100	85-100	28-44	9-22
	14-65	Silty clay loam, silt loam, very fine sandy loam.	CL	A-6, A-7-6, A-4	100	95-100	90-100	70-95	28-43	9-21
34-----										
Matamoros	0-65	Silty clay, stratified silt loam to clay.	CH	A-7-6	100	100	100	95-100	51-65	30-41
35, 36, 37-----										
McAllen	0-14	Fine sandy loam	CL, SC, CL-ML, SM-SC	A-4, A-6	100	100	95-100	36-55	21-30	4-11
	14-72	Sandy clay loam, clay loam, fine sandy loam.	CL, SC	A-6	95-100	90-100	85-100	45-70	28-40	11-20
38-----										
McAllen	0-14	Sandy clay loam	CL, SC,	A-6	100	100	95-100	36-55	29-40	11-20
	14-72	Sandy clay loam, clay loam, fine sandy loam.	CL, SC	A-6	95-100	90-100	85-100	45-70	28-40	11-20
39, 40, 41-----										
Mercedes	0-19	Clay-----	CH	A-7-6	85-100	80-100	80-100	75-95	55-76	32-49
	19-57	Clay-----	CH, CL-CH	A-7-6	85-100	80-100	80-100	75-95	50-76	32-49
	57-65	Clay-----	CH, CL	A-7-6	85-100	80-100	80-100	75-95	48-76	32-49
42-----										
Nueces	0-29	Fine sand-----	SP-SM, SM, SM-SC	A-2-4, A-3	100	95-100	90-100	8-35	<25	NP-6
	29-72	Sandy clay loam, sandy loam.	SC	A-2-6, A-6	90-100	90-100	80-100	20-50	25-40	11-20
43:*										
Nueces	0-29	Fine sand-----	SP-SM, SM, SM-SC	A-2-4, A-3	100	95-100	90-100	8-35	<25	NP-6
	29-72	Sandy clay loam, sandy loam.	SC	A-2-6, A-6	90-100	90-100	80-100	20-50	25-40	11-20
Sarita-----										
	0-48	Fine sand-----	SM-SC, SP-SM, SM	A-2-4, A-3	100	100	65-100	9-35	<25	NP-7
	48-80	Sandy clay loam, fine sandy loam.	SC	A-2-6, A-6	100	100	80-100	30-50	28-40	11-22
44-----										
Olmito	0-47	Silty clay-----	CH	A-7-6	100	100	100	90-100	51-70	28-44
	47-65	Silty clay, silty clay loam.	CH	A-7-6	95-100	90-100	85-100	85-100	51-70	28-44

See footnote at end of table.

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TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	4	10	40	200		
	<u>In</u>								<u>Pct</u>	
45,* 46,* 47.* Pits										
48, 49----- Racombe	0-13 13-49 49-72	Sandy clay loam Sandy clay loam, clay loam. Sandy clay loam, clay loam.	CL, SC CL, SC CL, SC	A-4, A-6 A-6, A-7 A-6	100 100 90-100	100 95-100 80-100	95-100 90-100 80-95	45-65 45-65 40-65	27-35 34-43 30-40	8-15 15-22 11-20
50----- Ramadero	0-21 21-65	Sandy clay loam Sandy clay loam, clay loam.	CL, SC CL, SC	A-6, A-4 A-6, A-7	100 100	100 95-100	95-100 90-100	45-65 45-65	27-39 32-42	9-18 13-21
51: * Randado-----	0-9 9-16 16-60	Fine sandy loam Fine sandy loam, sandy clay loam. Cemented-----	SM, SM-SC SC, SM-SC, GC ---	A-2-4 A-2-4, A-2-6, A-4, A-6 ---	75-100 65-100 ---	70-100 60-100 ---	70-100 60-100 ---	20-35 25-50 ---	<25 25-34 ---	NP-7 7-14 ---
Cuevitas-----	0-8 8-60	Fine sandy loam Cemented-----	SM, SM-SC, SC ---	A-2-4 ---	80-100 ---	80-100 ---	80-100 ---	20-35 ---	<28 ---	NP-9 ---
52, 53----- Raymondville	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
54: * Raymondville----	0-15 15-43 43-65	Clay loam----- Clay, clay loam Clay, clay loam	CL CL, CH CL, CH	A-6, A-7-6 A-6, A-7-6 A-7-6	100 100 100	100 95-100 85-100	95-100 95-100 80-100	51-85 75-95 75-95	37-50 38-55 40-53	18-30 19-35 20-30
Urban land.										
55, 56----- Reynosa	0-15 15-48 48-65	Silty clay loam Silty clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
57: * Reynosa-----	0-15 15-48 48-65	Silty clay loam Silty clay loam, silt loam. Stratified silty clay loam to silt loam.	CL, CL-ML CL CL, CL-ML	A-6, A-4, A-7-6 A-6, A-4, A-7-6 A-6, A-4, A-7-6	100 100 100	100 100 100	95-100 95-100 90-100	80-100 80-100 70-100	25-45 28-44 20-49	7-25 9-23 4-29
Urban land.										
58, 59----- Rio	0-12 12-38 38-63	Fine sandy loam Clay loam, clay Clay loam, sandy clay, sandy clay loam.	SC, SM-SC CL, CH CL	A-2-4, A-4 A-7-6 A-7-6	95-100 95-100 95-100	95-100 95-100 95-100	95-100 95-100 85-95	30-48 75-95 55-80	<30 43-57 41-50	5-10 21-32 20-27

See footnote at end of table.

Hidalgo County, Texas

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TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	4	10	40	200		
	<u>In</u>								<u>Pot</u>	
60, 61----- Rio	0-12 12-38 38-63	Clay loam----- Clay loam, clay Clay loam, sandy clay, sandy clay loam.	CL CL, CH CL	A-6, A-7 A-7-6 A-7-6	95-100 95-100 95-100	95-100 95-100 95-100	95-100 95-100 85-95	70-80 75-95 55-80	35-45 43-57 41-50	15-22 21-32 20-27
62----- Rio Grande	0-8 8-65	Silt loam----- Stratified silt loam to loamy very fine sand.	CL, CL-ML CL, CL-ML	A-4, A-6 A-4, A-6	100 100	100 100	95-100 95-100	70-95 70-100	20-30 20-33	4-12 4-12
63----- Rio Grande	0-8 8-65	Silty clay loam Stratified silt loam to loamy very fine sand.	CL CL, CL-ML	A-6, A-7 A-4, A-6	100 100	100 100	95-100 95-100	80-100 70-100	30-43 20-33	11-18 4-12
64, 65----- Runn	0-55 55-65	Silty clay----- Silty clay, silty clay loam, silt loam.	CH, CL CH, CL CL-ML	A-7-6 A-6 A-7-6, A-4	100 100	100 95-100	95-100 90-100	85-98 70-98	43-62 21-62	21-36 4-36
66----- Serita	0-48 48-80	Fine sand----- Sandy clay loam, fine sandy loam.	SM-SC, SP-SM, SM SC	A-2-4, A-3 A-2-6, A-6	100 100	100 100	65-100 80-100	9-35 30-50	<25 28-40	NP-7 11-22
67----- Tiocano	0-65	Clay-----	CH	A-7-6	100	100	95-100	85-100	56-76	33-49
68.* Urban land										
69.* Ustorthents										
70, 71----- Willacy	0-14 14-80	Fine sandy loam Sandy clay loam, fine sandy loam.	SC, SM-SC SC, CL	A-2-4, A-4 A-4, A-6	100 95-100	100 90-100	95-100 90-100	30-45 36-65	20-30 28-40	5-10 9-20
72.* Willacy-----	0-14 14-80	Fine sandy loam Sandy clay loam, fine sandy loam.	SC, SM-SC SC, CL	A-2-4, A-4 A-4, A-6	100 95-100	100 90-100	95-100 90-100	30-45 36-65	20-30 28-40	5-10 9-20
Urban land.										
73----- Zalla	0-9 9-65	Loamy fine sand Loamy fine sand, fine sand, sand.	SP-SM, SM SM-SC SP-SM, SM, SM-SC	A-2-4 A-2-4	95-100 95-100	95-100 95-100	70-85 70-85	10-25 10-25	<25 <25	NP-7 NP-7
74----- Zalla	0-9 9-65	Silt loam----- Loamy fine sand, fine sand, sand.	CL, CL-ML, ML SP-SM, SM, SM-SC	A-4, A-6 A-2-4	100 95-100	100 95-100	90-100 70-85	70-80 10-25	<30 <25	NP-11 NP-7

* See description of the map unit for composition and behavior characteristics of the map unit.

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Soil survey

TABLE 18.--SOIL AND WATER FEATURES

["Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text. The symbol > means more than. Absence of an entry indicates that the feature is not a concern]

Map symbol and soil name	Hydro-logic group	Flooding			High water table			Cemented pan		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hard-ness	Uncoated steel	Concrete
1.* Arents					<u>Ft</u>			<u>In</u>			
2----- Benito	D	Occasional	Long-----	Sep-May	4.0-6.0	Apparent	Sep-May	---	---	High-----	Low.
3, 4----- Brennan	B	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
5, 6----- Camargo	B	Rare-----	Brief-----	Sep-May	>6.0	---	---	---	---	Moderate	Low.
7----- Cameron	D	None-----	---	---	5.0-6.0	Apparent	Sep-May	---	---	High-----	Low.
8----- Comitas	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
9, 10, 11----- Delfina	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low.
12----- Delmita	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low.
13.* Delmita-----	C	None-----	---	---	>6.0	---	---	20-40	Thin	Moderate	Low.
----- Randado-----	C	None-----	---	---	>6.0	---	---	8-20	Thin	Moderate	Low.
14----- Falfurrias	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
15** Grulla	D	Frequent-----	Very long	Sep-May	+2-6.0	Apparent	Sep-May	---	---	High-----	Low.
16, 17, 18----- Hargill	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
19----- Harlingen	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
20----- Harlingen	D	None-----	---	---	5.0-6.0	---	---	---	---	High-----	Moderate.
21.* Harlingen----- Urban land.	D	None to rare	---	---	>6.0	---	---	---	---	High-----	Low.
22, 23, 24----- Hebbronville	B	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
25, 26, 27, 28, 29----- Hidalgo	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
30----- Hidalgo	B	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low.
31.* Hidalgo----- Urban land.	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
32.* Jimenez-----	C	None-----	---	---	>6.0	---	---	7-20	Thin	High-----	Low.

See footnotes at end of table.

Hidalgo County, Texas

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TABLE 18.--SOIL AND WATER FEATURES--Continued

Map symbol and soil name	Hydro-logic group	Flooding			High water table			Cemented pan		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness	Uncoated steel	Concrete
					<u>Ft</u>			<u>In</u>			
32:* Quemado-----	C	None-----	---	---	>6.0	---	---	10-20	Thin	Moderate	Low.
33----- Laredo	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
34----- Matamoros	C	Occasional	Long-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
35, 36, 37, 38---- McAllen	C	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
39, 40, 41----- Mercedes	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
42----- Nueces	C	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
43:* Nueces-----	C	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
Sarita-----	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
44, 44----- Olmito	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
45,* 46,* 47.* Pits											
48----- Racombe	B	Rare-----	---	---	>6.0	---	---	---	---	High-----	Low.
49----- Racombe	B	Rare-----	---	---	1.5-4.5	Apparent	Sep-May	---	---	High-----	Low.
50----- Ramadero	B	Common-----	Brief-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
51:* Randado-----	C	None-----	---	---	>6.0	---	---	8-20	Thin	Moderate	Low.
Cuevitas-----	D	None-----	---	---	>6.0	---	---	8-14	Thin	Moderate	Low.
52----- Raymondville	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
53----- Raymondville	D	None-----	---	---	2.5-4.5	Apparent	Sep-May	---	---	High-----	Low.
54:* Raymondville-----	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
Urban land.											
55----- Reynosa	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
56----- Reynosa	B	None-----	---	---	1.5-4.5	Apparent	Sep-May	---	---	High-----	Low.
57:* Reynosa-----	B	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
Urban land.											
58**----- Rio	D	Frequent-----	Long-----	Sep-May	+2-6.0	Apparent	Sep-May	---	---	High-----	Low.
59**----- Rio	D	Frequent-----	Long-----	Sep-May	+2-4.5	Apparent	Sep-May	---	---	High-----	Low.

See footnotes at end of table.

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TABLE 18.--SOIL AND WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Flooding			High water table			Cemented pan		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hard- ness	Uncoated steel	Concrete
60**----- Rio	D	Frequent----	Long-----	Sep-May	+2-6.0	Apparent	Sep-May	---	---	High-----	Low.
61**----- Rio	D	Frequent----	Long-----	Sep-May	+2-4.5	Apparent	Sep-May	---	---	High-----	Low.
62, 63----- Rio Grande	B	Rare-----	Brief-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
64----- Runn	D	None-----	---	---	>6.0	---	---	---	---	High-----	Low.
65----- Runn	D	None-----	---	---	2.5-5.0	Apparent	Sep-May	---	---	High-----	Low.
66----- Sarita	A	None-----	---	---	>6.0	---	---	---	---	Low-----	Low.
67**----- Tiocano	D	Frequent----	Long-----	Sep-May	+3-6.0	Perched	Sep-May	---	---	High-----	Low.
68.* Urban land											
69.* Ustorthents											
70, 71----- Willacy	B	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
72:* Willacy----- Urban land.	B	None-----	---	---	>6.0	---	---	---	---	Moderate	Low.
73----- Zalla	A	Occasional	Brief-----	Sep-May	>6.0	---	---	---	---	High-----	Low.
74----- Zalla	A	Rare-----	Brief-----	Sep-May	>6.0	---	---	---	---	High-----	Low.

* See description of the map unit for composition and behavior characteristics of the map unit.
 ** In the "High water table--Depth" column, a plus sign preceding the range in depth indicates that the water table is above the surface of the soil. The first numeral in the range indicates how high the water rises above the surface. The second numeral indicates the depth below the surface.

Hidalgo County, Texas

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TABLE 15.--WATER MANAGEMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not evaluated]

Map symbol and soil name	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
1: # Arents						
2----- Benito	Moderate: seepage.	Moderate: hard to pack, excess salt.	Peres slowly, excess salt.	Slow intake, peres slowly, excess salt.	Peres slowly---	Excess salt, peres slowly.
3, 4----- Brennan	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
5, 6----- Camargo	Moderate: seepage.	Moderate: piping.	Floods-----	Erodes easily	Erodes easily	Erodes easily.
7----- Cameron	Severe: seepage.	Moderate: piping.	Favorable-----	Slow intake---	Favorable-----	Favorable.
8----- Comitas	Severe: seepage.	Moderate: seepage, piping.	Cutbanks cave	Droughty, fast intake.	Too sandy, soil blowing.	Droughty.
9----- Delfina	Moderate: seepage.	Moderate: wetness.	Favorable-----	Wetness, droughty, fast intake.	Soil blowing---	Favorable.
10, 11----- Delfina	Moderate: seepage.	Moderate: wetness.	Favorable-----	Wetness-----	Favorable-----	Favorable.
12----- Delmita	Severe: seepage.	Moderate: thin layer.	Cemented pan---	Soil blowing, cemented pan.	Cemented pan, soil blowing.	Cemented pan.
13: # Delmita-----	Severe: seepage.	Moderate: thin layer.	Cemented pan---	Soil blowing, cemented pan.	Cemented pan, soil blowing.	Cemented pan.
Randado-----	Severe: cemented pan, seepage.	Severe: thin layer.	Cemented pan---	Cemented pan---	Cemented pan---	Cemented pan.
14----- Falfurrias	Severe: seepage.	Severe: seepage, piping.	Cutbanks cave	Droughty, fast intake.	Too sandy-----	Droughty.
15----- Grulla	Slight-----	Severe: hard to pack, ponding.	Ponding, peres slowly, floods.	Ponding, slow intake, peres slowly.	Ponding, peres slowly.	Wetness, peres slowly.
16, 17----- Hargill	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
18----- Hargill	Moderate: seepage, slope.	Moderate: piping.	Slope-----	Slope-----	Favorable-----	Favorable.
19----- Harlingen	Slight-----	Severe: hard to pack.	Peres slowly---	Slow intake, peres slowly.	Peres slowly---	Excess salt, peres slowly.
20----- Harlingen	Slight-----	Moderate: hard to pack, excess salt.	Peres slowly, excess salt.	Droughty, slow intake, peres slowly.	Peres slowly---	Excess salt, droughty, peres slowly.
21: # Harlingen-----	Slight-----	Severe: hard to pack.	Peres slowly---	Slow intake, peres slowly.	Peres slowly---	Excess salt, peres slowly.
Urban land.						

See footnote at end of table.

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Soil survey

TABLE 15.--WATER MANAGEMENT--Continued

Map symbol and soil name	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
22, 23, 24----- Hebbronville	Severe: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Soil blowing---	Favorable.
25, 26----- Hidalgo	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
27----- Hidalgo	Moderate: seepage, slope.	Moderate: piping.	Slope-----	Slope-----	Favorable-----	Favorable.
28, 29----- Hidalgo	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
30----- Hidalgo	Moderate: seepage.	Moderate: piping, wetness, excess salt.	Excess salt----	Wetness, excess salt.	Wetness-----	Excess salt, droughty.
31: * Hidalgo----- Urban land.	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
32: * Jimenez-----	Severe: cemented pan.	Severe: thin layer.	Cemented pan---	Droughty, cemented pan, slope.	Large stones, cemented pan.	Large stones, droughty.
Quemado-----	Severe: cemented pan.	Severe: seepage.	Cemented pan---	Droughty, cemented pan, slope.	Large stones, cemented pan.	Large stones, droughty, cemented pan.
33----- Laredo	Severe: seepage.	Moderate: piping.	Favorable-----	Erodes easily	Erodes easily	Erodes easily.
34----- Matamoros	Slight-----	Moderate: hard to pack.	Peres slowly, floods.	Slow intake, peres slowly, floods.	Peres slowly---	Peres slowly.
35, 36, 37, 38--- McAllen	Moderate: seepage.	Moderate: piping.	Favorable-----	Favorable-----	Favorable-----	Favorable.
39----- Mercedes	Slight-----	Severe: hard to pack.	Peres slowly---	Slow intake, peres slowly.	Peres slowly---	Peres slowly.
40----- Mercedes	Slight-----	Severe: hard to pack.	Peres slowly---	Slow intake, peres slowly, excess salt.	Peres slowly---	Excess salt, droughty, peres slowly.
41----- Mercedes	Slight-----	Severe: hard to pack.	Peres slowly---	Slow intake, peres slowly.	Peres slowly---	Peres slowly.
42----- Nueces	Moderate: seepage.	Severe: seepage, piping.	Cutbanks cave	Droughty, fast intake.	Too sandy, soil blowing.	Droughty.
43: * Nueces-----	Moderate: seepage.	Severe: seepage, piping.	Cutbanks cave	Droughty, fast intake.	Too sandy, soil blowing.	Droughty.
Sarita-----	Severe: seepage.	Severe: seepage, seepage.	Cutbanks cave	Droughty, fast intake.	Too sandy-----	Droughty.
44----- Olmito	Slight-----	Moderate: hard to pack.	Peres slowly---	Slow intake, peres slowly.	Peres slowly---	Peres slowly.

See footnote at end of table.

Hidalgo County, Texas

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TABLE 15.--WATER MANAGEMENT--Continued

Map symbol and soil name	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
45,* 46,* 47.* Pits						
48----- Racombes	Moderate: seepage.	Slight-----	Favorable-----	Favorable-----	Favorable-----	Favorable.
49----- Racombes	Moderate: seepage.	Severe: wetness, excess salt.	Excess salt----	Wetness, droughty, excess salt.	Wetness-----	Excess salt, droughty.
50----- Ramadero	Moderate: seepage.	Moderate: piping.	Floods-----	Floods-----	Favorable-----	Favorable.
51:* Randado-----	Severe: cemented pan, seepage.	Severe: thin layer.	Cemented pan---	Cemented pan---	Cemented pan---	Cemented pan.
Cuevitas-----	Severe: cemented pan, seepage.	Severe: thin layer.	Cemented pan---	Cemented pan---	Cemented pan---	Cemented pan.
52----- Raymondville	Slight-----	Moderate: hard to pack.	Percs slowly---	Slow intake, percs slowly.	Percs slowly---	Percs slowly.
53----- Raymondville	Slight-----	Severe: excess salt.	Percs slowly, excess salt.	Wetness, droughty, excess salt.	Wetness, percs slowly.	Excess salt, droughty, percs slowly.
54:* Raymondville-----	Slight-----	Moderate: hard to pack.	Percs slowly---	Slow intake, percs slowly.	Percs slowly---	Percs slowly.
Urban land.						
55----- Reynosa	Severe: seepage.	Moderate: thin layer, piping.	Favorable-----	Erodes easily	Erodes easily	Erodes easily.
56----- Reynosa	Severe: seepage.	Moderate: piping, wetness, excess salt.	Excess salt----	Wetness, excess salt, erodes easily.	Erodes easily, wetness.	Excess salt, erodes easily, droughty.
57:* Reynosa-----	Severe: seepage.	Moderate: thin layer, piping.	Favorable-----	Erodes easily	Erodes easily	Erodes easily.
Urban land.						
58----- Rio	Slight-----	Severe: ponding.	Ponding, percs slowly, floods.	Ponding, percs slowly, floods.	Ponding, percs slowly.	Wetness, percs slowly.
59----- Rio	Slight-----	Severe: ponding, excess salt.	Ponding, percs slowly, floods.	Ponding, droughty, percs slowly.	Ponding, percs slowly.	Wetness, excess salt, droughty.
60----- Rio	Slight-----	Severe: ponding.	Ponding, percs slowly, floods.	Ponding, percs slowly, floods.	Ponding, percs slowly.	Wetness, percs slowly.
61----- Rio	Slight-----	Severe: ponding, excess salt.	Ponding, percs slowly, floods.	Ponding, droughty, percs slowly.	Ponding, percs slowly.	Wetness, excess salt, droughty.
62, 63----- Rio Grande	Severe: seepage.	Severe: piping.	Floods-----	Erodes easily, floods.	Erodes easily	Erodes easily.

See footnote at end of table.

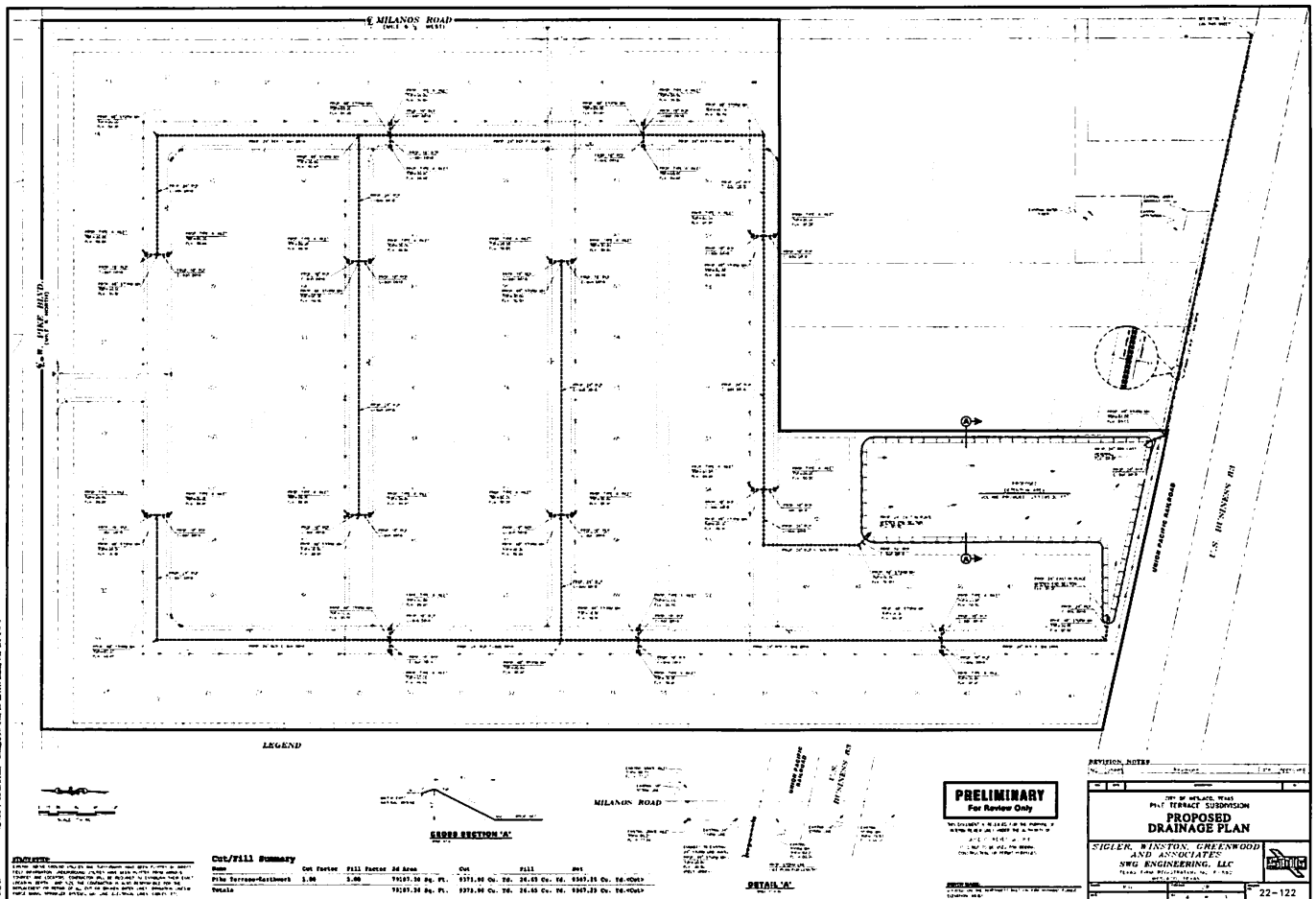
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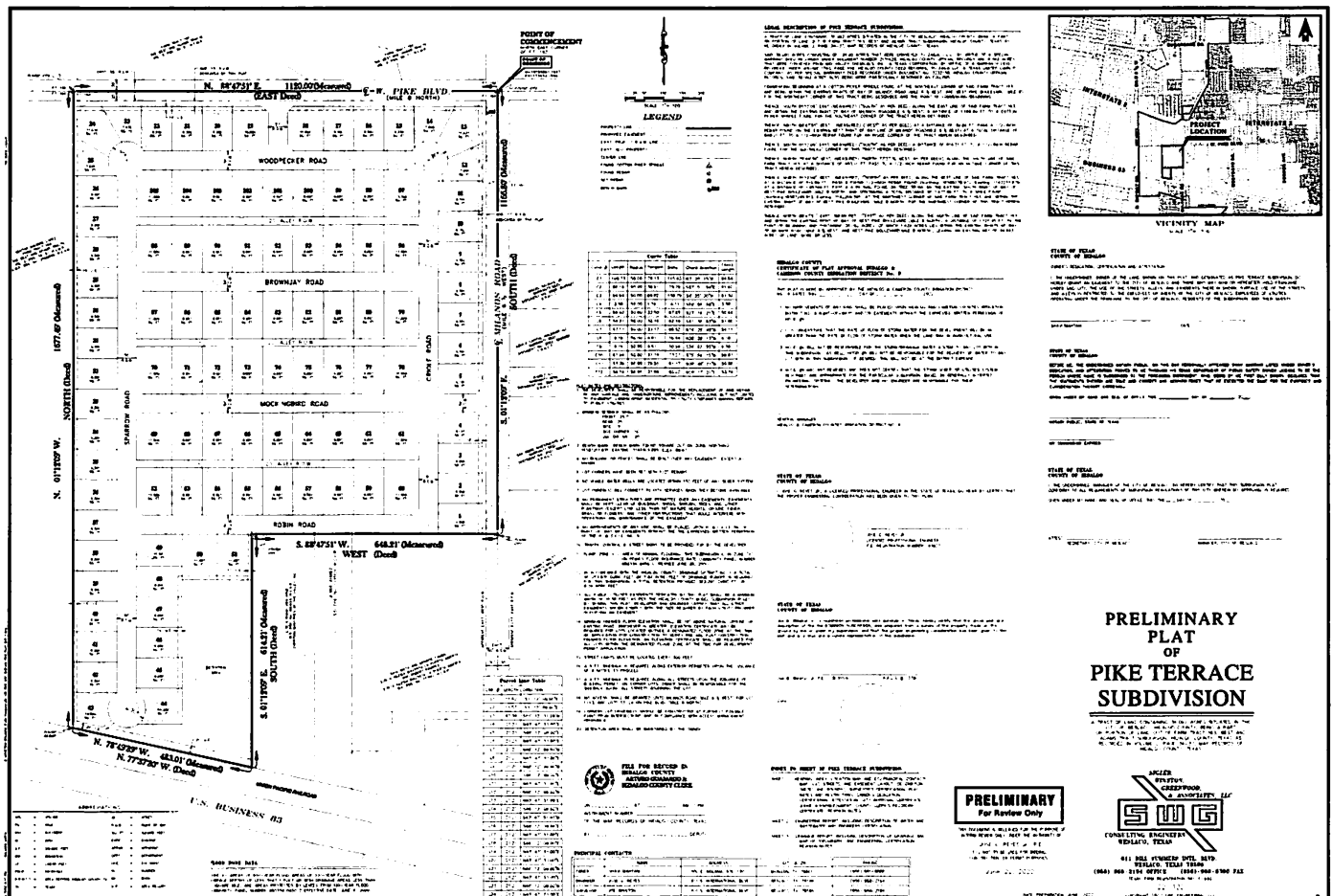
Soil survey

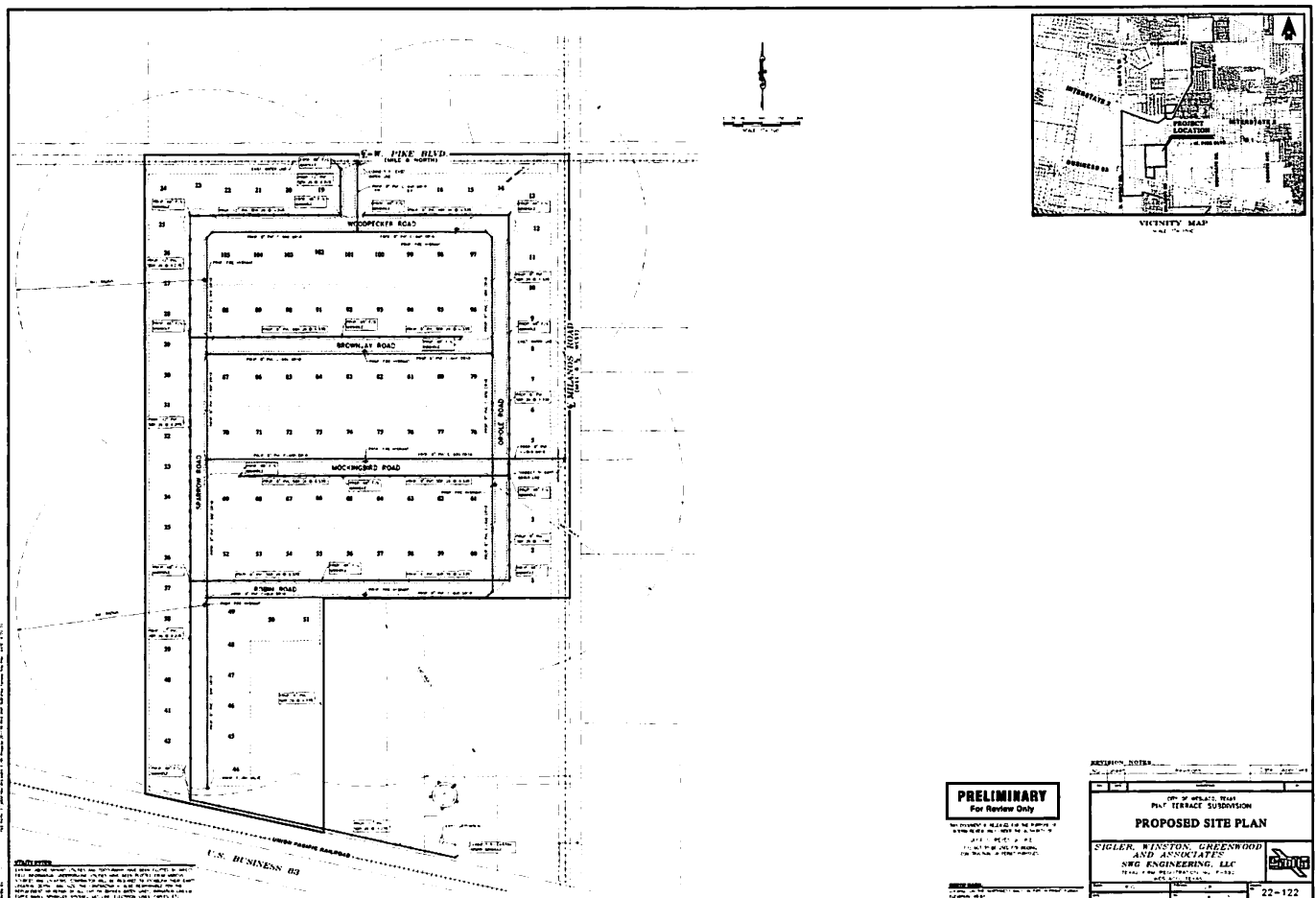
TABLE 15.--WATER MANAGEMENT--Continued

Map symbol and soil name	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
64----- Runn	Moderate: seepage.	Moderate: hard to pack.	Peres slowly---	Slow intake, peres slowly, excess salt.	Peres slowly---	Peres slowly.
65----- Runn	Moderate: seepage.	Moderate: hard to pack, wetness, excess salt.	Peres slowly, excess salt.	Slow intake, peres slowly, excess salt.	Wetness, peres slowly.	Excess salt, erodes easily, peres slowly.
66----- Sarita	Severe: seepage.	Severe: seepage, seepage.	Cutbanks cave	Droughty, fast intake.	Too sandy-----	Droughty.
67----- Tiocano	Slight-----	Severe: hard to pack, ponding.	Ponding, peres slowly, floods.	Ponding, slow intake, peres slowly.	Ponding, peres slowly.	Wetness, peres slowly.
68.* Urban land						
69.* Ustorthents						
70, 71----- Willacy	Moderate: seepage.	Slight-----	Favorable-----	Favorable-----	Favorable-----	Favorable.
72.* Willacy----- Urban land.	Moderate: seepage.	Slight-----	Favorable-----	Favorable-----	Favorable-----	Favorable.
73, 74----- Zalla	Severe: seepage.	Severe: seepage, piping.	Floods-----	Droughty, fast intake.	Too sandy-----	Droughty.

* See description of the map unit for composition and behavior characteristics of the map unit.









**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V. J.
From: Rebekah de la Fuente, Planning Director, on behalf of Carlos Garza.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for The Coves – being 18.48 acres out of Farm Tract 1030, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located on the Southside of mile 8 N. Rd. approximately 710' East of International blvd. Possible Action.	
Discussion/Overview: The proposed sixty-four (64) lot subdivision is inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through an 8" waterline and sewer by the City of Weslaco through an 8" sewer line. The property is within a Flood Zone "X". Applicant is requesting a variance for off-site drainage. Staff has received the letters of support from the drainage and irrigation districts.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of Final Plat and compliance with the ordinance on the variance.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



SUBDIVISION PLATTING APPLICATION

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

This form shall be completed by the Property Owner or Applicant and submitted to the Planning Department along with the required number of copies of the respective plat, review fee and all other required information listed below and in the Subdivision Ordinance. The submittal of an application does not constitute acceptance for processing until the staff reviews and determines the application is complete.

STAFF USE ONLY

☐ Single Lot Variance ☐ Minor Plat ☐ Planned Unit Development ☐ Standard Subdivision

GENERAL INFORMATION

Name of Subdivision: The Coves

Location: South side of Mi 8 N (E. Pike Blvd), approx 710' east of FM 1015

Legal Description: 18.48 acres, more or less, out of Farm Tract 1030, West And Adams Tract Subdivision, according to the Map or Plat recorded in Vol. 2, Pages 34-37, H.C.M.R.

Is subdivision inside city limits? ☒ YES ☐ NO

If subdivision is in the ETJ, indicate? ☐ 3.5 Mile ☐ 5 Mile

If no submit letter of Annexation (Contiguous or Consensual)

Existing Zoning: R2

Existing Land Use: VACANT Proposed Land Use: multifamily

Number of Lots Proposed: 64 Gross Acreage: 18.48

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: Miguel Brito Telephone: 956-540-5557

Address: 2015 N. Shary Rd- Ste 2 Fax: _____

City: Mission State: TX Zip: 78572 E-mail: info@britoconstruction.com

ENGINEER INFORMATION

Name: AEC Engineering, LL. Telephone: 956-380-6558

Address: PO BOX 480 Fax: 956-380-6110

City: Edinburg State: TX Zip: 78540 E-mail: carlos@aecengineering.net

255 S. KANSAS AVE ■ WESLACO, TEXAS 78596-6285 ■ 956-447-3401 ■ (Fax) 956-973-3128 ■ WWW.WESLACOTX.GOV

UTILITY PROVISIONS

Will proposed subdivision connect to:

☒ YES ☐ NO Water Provision: _____

☒ YES ☐ NO Wastewater Provision: _____

☒ YES ☐ NO Electric Company: _____

☒ YES ☐ NO Phone Utility _____	☐ YES ☒ NO Gas Utility	☒ YES ☐ NO Cable Utility
---	---	---

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>1</u>	☒ YES ☐ NO Irrigation District <u>9</u>
--	--

Has the property been assessed as flat rate irrigable property: ☒ YES ☐ NO

Have Water Rights been conveyed to City/Water Supplier? ☐ YES ☒ NO

(Attach written proof of such assessment or that it has never been assessed as such a property) If YES, attach an estimate from the irrigation district of the proportional water rights for the subdivision as calculated under Texas Water Code § 49.505.

SUBMITTALS REQUIRED FOR MINOR PLAT REVIEW

_____ Two (2) sets of plats **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

_____ \$355.00 Planning Review fee

_____ One 11" X 17" reduced copy of plat

_____ Plat Layout

_____ Existing & Proposed Easements

_____ Existing & Proposed ROW

_____ Existing & Proposed Drainage Easements

_____ Contours

_____ Flood Zones

_____ Adjoiners

_____ Existing street names

_____ Drainage plans and calculations with engineer's seal

_____ Elevations

_____ Flood directional arrows

_____ Detention areas

_____ Street names

_____ Proof of ownership of the property

_____ If septic tank system required, submit soil evaluation report

_____ Water Rights associated with the property

_____ Tax Receipt for all taxing entities showing that taxes are paid in full

SUBMITTALS REQUIRED FOR PRELIMINARY (P & Z)

_____ Twelve (12) sets of preliminary plat **folded and stapled** (24 x 36) and forward a copy in PDF format to mhinojosa@weslacotx.gov & rdelafuente@weslacotx.gov

_____ \$350.00 (one time fee for preliminary and final plat)

_____ One 11" X 17" reduced copy of plat

_____ Plat Layout

_____ Existing & Proposed Easements

_____ Existing & Proposed ROW

_____ Existing & Proposed Drainage Easements

- _____ Contours
- _____ Flood Zones
- _____ Adjoiners
- _____ Existing & Proposed street names
- _____ Utility Layout
 - _____ Existing & Proposed Utilities
 - _____ Proposed Fire Hydrants
 - _____ Adjoiners
 - _____ Street names
- _____ Drainage plans and calculations with engineer's seal
 - _____ Elevations
 - _____ Flood directional arrows
 - _____ Detention areas
 - _____ Street names
- _____ Proof of ownership of the property
- _____ If septic tank system required, submit soil evaluation report
- _____ Water Rights associated with the property
- _____ Tax Receipt for all taxing entities showing that taxes are paid in full
- _____ Number of fire hydrants proposed for subdivision
- _____ Trip Generation Worksheet

SUBMITTALS REQUIRED FOR FINAL (P & Z) **Will not apply to Single Lot Variance**

- _____ **Twelve (12) sets of plans FOLDED & STAPLED (24 x 36) & PDF copy with all corrections**
- _____ Plats to be sealed by Professional Engineer
- _____ Approved Drainage Report
- _____ Traffic Impact Analysis (If required)

SUBMITTALS REQUIRED FOR FINAL (City Commission)

- _____ One set of 8 ½ x 11 of plat and utilities with all corrections done

SUBMITTALS REQUIRED FOR PRE-CONSTRUCTION MEETING

- _____ Seven (7) full sets of construction plans 24 x 36 and one (1) 11 x 17 with plan & profile.
- _____ Engineering cost estimates for 3% geotechnical testing fees and 2% inspection fees
- _____ Notice of Intent
- _____ SW3P

SUBMITTALS REQUIRED FOR RECORDING OR HIDALGO COUNTY PLANNING

- _____ Electronic file of final plat and as-builds
- _____ Reproducible plat to be recorded with all required signatures
- _____ 3% geotechnical testing fees or negotiated Material Testing fee by City, whichever is higher
- _____ 2% inspection fee
- _____ Park Fees
- _____ Checks or Receipts: HCCID #9; HCDD #1; County Clerk
- _____ Tax certificates
- _____ Memo from engineering inspector releasing subdivision
- _____ Water Rights associated with the property dedicated and assigned to City of Weslaco or payment of fees sufficient to meet the needs necessitated and attributable to development
- _____ 30 Year Water and 30 Year Sewer Service Agreements
- _____ Park dedication/Fees in lieu of

SUBMITTALS REQUIRED FOR RECORDING BY SECURITY

- _____ Sealed engineering cost estimates
- _____ Letter of Credit/Performance Bond/Escrow

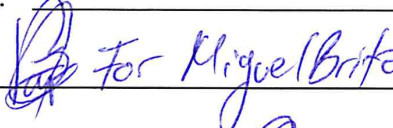
** Any revisions requested would require resubmission of plats and reduced copy reflecting changes.

AUTHORIZATION AND ACKNOWLEDGEMENTS

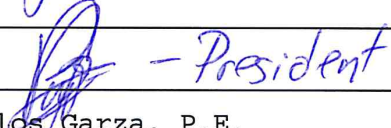
I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: Miguel Brito

Owner Signature:  Date: 07-28-22

_____ is the authorized agent

Authorized Agent Signature:  - President Date: 07-28-22

Authorized Agent Printed Name: Carlos Garza, P.E.

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid _____

P & Z Commission Approval on Preliminary Plat: _____

P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR SUBDIVISION VARIANCE

The Planning & Zoning Commission meets every 1st Wednesday of each month at 5:30 pm.

The City Commission meets every 1st and 3rd Tuesday of each month at 5:30 pm

FILE NO. _____

GENERAL INFORMATION

Name of Subdivision: THE COVES

Location: SOUTH SIDE OF MILE 8, APPROX. 710' E. OF FM 1015

Legal Description: 18.48 ACRES OUT OF FARM TRACT 1030, WEST AND ADAMS TRACT SUBD. (VOL. 2, PG 34-37, HCUR)

VARIANCE TYPE:

☐ Streetlights ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sanitary Sewer ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Setbacks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Drainage ☒ YES ☐ NO

Describe in detail the reason for the variance request:

77' DEDICATED AT THE SOUTH SIDE OF PROP. SUBD. FOR STORM RUNOFF DISCHARGE. (OFF-SIDE DETENTION)

☐ Minimum Lot Size ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Sidewalks ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Easement Requirements ☐ YES ☐ NO

Describe in detail the reason for the variance request:

☐ Other _____ ☐ YES ☐ NO

Describe in detail the reason for the variance request:

OWNER INFORMATION

Owner's Name: RANCHO BRITO LLC Telephone: (956) 540-5557
Address: 2015 N. SHARY RD. SUITE 2 Fax: _____
City: MISSION State: TX Zip: 78572 E-mail: britoconstruction.com

Application fees

\$50.00 Application fee per variance, plus a \$5.00 processing fee

AUTHORIZATION AND ACKNOWLEDGEMENTS

I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

I certify that the above information is correct and complete to the best of my knowledge. I understand that I must comply with all applicable local, state, and federal regulations.

Owner Printed Name: MIGUEL BRITO

Owner Signature: FOR MIGUEL BRITO *de Zenea* Date: 7/28/22

_____ is the authorized agent

Authorized Agent Signature: *de Zenea* Date: 7/28/22

Authorized Agent Printed Name: JORGE G. de ZENEA



HIDALGO COUNTY DRAINAGE DISTRICT No. 1

Raul E. Sesin, PE, CFM
District General Manager
Hidalgo County Floodplain Administrator

BOARD OF DIRECTORS

DAVID L. FUENTES
Board Member

EDUARDO "EDDIE" CANTU
Board Member

RICHARD F. CORTEZ
Chairman of the Board

EVERARDO "EVER" VILLARREAL
Board Member

ELLIE TORRES
Board Member

August 23, 2022

Rebekah De La Fuente
Planning & Code Enforcement Director
255 S. Kansas Ave.
Weslaco, Texas 78596

RE: AEC Engineering, LLC – The Coves Subdivision

This letter is in response to a request from the Engineer of record for The Coves Subdivision, Carlos Garza, PE. HCDD1 has received and approved the drainage statement for the above-mentioned development located in the city limits of the City of Weslaco that proposes to widen the existing 18B ditch adjacent to the south of the property to account for detention.

If you should have any questions or require additional information, please feel free to give me a call at (956) 292-7080.

Sincerely,
Hidalgo County Drainage District No. 1

A handwritten signature in black ink, appearing to read "Yvette Barrera", is written over a horizontal line.

Yvette Barrera, PE, CFM
Assistant General Manager

CC: Raul E. Sesin, PE, CFM – District General Manager, HCDD1
Omar Anzaldua, PE, CFM – Assistant General Manager, HCDD1
Isaac Gonzalez, EIT
Alexis Lozano, EIT
Gilberto Aguirre, EIT
Esther Mireles

Hidalgo and Cameron Counties Irrigation District No. 9

General Office

(956) 565-2411
(956) 565-0521 Fax

E-Mail
hccid9@hotmail.com



P O Box 237 Mercedes, Texas 78570

Randy Winston
General Manager

Judy Beall
Tax Assessor-Collector

Date: 08/24/2022

CARLOS GARZA P.E.
AEC ENGINEERING LLC
PO BOX 480
EDINBURG, TX 78540

RE: **THE COVES** Subd. Drainage and Detention

Good Morning Mr. Garza:

I have received your revised cross section and calculations dated 08/22/2022 for **THE COVES** Subdivision modified to include the 50-year detention volume in the proposed drain ditch as shown on your provided cross sections.

HCCID #9 does not object to storing the mandated 50-year detention with the proposed ditch as shown on the cross sections. This Subdivision will require the following:

1. The Proposed Ditch widening, and Detention Area will require outlet controls going into existing ditch
2. Discharge Permit will be required.
3. Discharges to have 18" chokes

The maintenance of this section is within of the City Limits of Weslaco and will be done by their personnel. Please verify final designs with Albert J. Aldana P.E., City Engineer with the City of Weslaco.

Randall Winston
General Manager

HCCID #9
Mercedes, Texas
956-565-2411



**Drainage Statement for:
THE COVES**

A 18.48-acre (16.85 acres net) tract of land out of Farm Tract 1030, West And Adams Tract Subdivision, according to the Map or Plat recorded in Volume 2, Pages 34-37, H.C.M.R., situated in the City of Weslaco, County of Hidalgo, Texas.

August 12, 2022

Project Location and Description

The proposed 18.48-acre (16.85 acres net) is situated in the City of Weslaco, Hidalgo County, Texas; and is coming out of Farm Tract 1030, West And Adams Tract Subdivision, according to the map or plat thereof recorded in Volume 2, Pages 34-37, Map Records of Hidalgo County, Texas. This development is located on the south side of Mile 8 North Road (E. Pike Blvd.), approximately 710 feet east of International Blvd. (F.M. 1015), in the City of Weslaco, Texas.

Floodplain (FEMA Information)

This tract of land is currently vacant, and its future use is residential. The proposed development is situated in Flood Zone X (no shading), as per FEMA FIRM Panel 480334 0450 C, map revised June 6, 2000. Zone X (no shading) is defined as areas determined to be outside of the 500-year floodplain.

Soils Information

According to the USDA NRCS Soils Survey of Hidalgo County, Texas, the soils in this site are classified as 28 (61.5%) and 52 (38.5%). Map Unit Names: "Hidalgo Sandy Clay Loam" and "Raymondville Clay Loam" which belong to Hydrologic Groups B and C, respectively. Group B soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. Group C soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Drainage Pattern Determination

The topography in this site indicates that runoff flows relatively in a northerly direction. Post development runoff shall be discharged into an existing H.C.C.I.D. No. 9 drain ditch located at the south side of this development. Said drain ditch will be widened within an area 77 feet deep by 610 feet wide that will be dedicated to H.C.C.I.D. No. 9 by this development. Side slopes for excavated area shall not exceed 2:1 (see detail). The excavation will add a total runoff storage capacity of 301,990 cubic feet, of which 92,381 (2.12 ac-ft) are required to be detained for this development as per engineered calculations.

Runoff will be conveyed via twelve (12) proposed type CC inlets, two (2) manholes, approximately 678 linear feet of 24" RCP, 246 linear feet of 30" RCP, 1,250 linear feet of 36" RCP, and 270 linear feet of 48" RCP. There will be two points of discharge at the excavated area (see plans). H.C. C.I.D. No. 9 drain ditch connects with a series of ditches south of this site, and ultimately discharge into the South Mercedes Lateral.

As indicated on the **Drainage Pattern Determination** paragraph, the amount of storm runoff required for this proposed 18.48-acre tract of land (16.45 acres net), is **92,381** cubic feet. The excavation/widening of the existing H.C.C.I.D. No. 9 drain ditch will add a total runoff storage capacity of 301,990 cubic feet. The difference between the detention required by this development and what will be provided (206,609 cubic feet) represents an additional 68.42% of the storage capacity.

Necessary Detention Quantification

As per City of Weslaco drainage policy, the site will retain the difference in volume between pre-development and post-development conditions, based on a 50-year storm event with a pre-development release rate as indicated below.

As per attached Engineered Calculations, this residential subdivision shall detain 92,381 c.f. cumulatively for the 18.48-acre (16.45-acre net) tract of land and is further broken down below:

Pre-Development Quantifications

Site is currently Nearly bare and untilled soils

Q = 14.29 cfs
I = 4.24 in/hr
Tc = 39.37 min

Post Development Quantifications

This development will be a 52-lot multifamily residential subdivision

Q = 51.41 cfs
I = 6.10 in/hr
Tc = 32.07 min.

The pre-development flow rate averages 14.29 cfs while the post develop flow rate averages 51.41 cfs; creating an incremental average flow rate of 37.12 cfs. The incremental flow rate will be handled by storm sewer improvements as previously described. Site drainage and detention improvements for the proposed development will conform to current **City of Weslaco** and **Hidalgo County Drainage District No. 1** ordinances and or policies and approved by the **City of Weslaco** at the time of issuance of building permit.

The information provided on this Drainage Report is information prepared under the direction and supervision of Carlos Garza, P.E., P.G.

Prepared by: AEC Engineering, LLC
Authorized by: Carlos Garza, P.E., P.G.
Contact: 956-380-6558
carlos@aecenineering.net



☐ REJECTED	
☐ APPROVED FOR SUBMITTAL	
☐ TO H.C. PLANNING DEPT.	
☒ TO CITY	
☒ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☐ CITY FACILITY	
☐ OTHER <u>HCCID9</u>	
<u>8-22-22</u>	
H.C.D.D. NO. 1	DATE

AEC ENGINEERING, LLC.
DRAINAGE REPORT/STATEMENT

PROJECT NAME: **The Coves**
PROJECT NUMBER: **1281.004**
DATE: **August 12, 2022**
PREPARED BY: **Carlos Garza**
PHONE NUMBER: **(956) 380-6558**

COUNTY: **Hidalgo**
CITY: **Weslaco**
Number of Lots: **64 + Common Areas**
Analysis Method: **Rational Method**

I. Pre Development (Existing) Conditions

Storm Frequency: **10-year**
Existing Area: **733,830.00 ft²**
Existing Area: **16.85 ac**

Existing Surface Conditions: **Unpaved**
Intercept Coefficient "k": **0.491 ft/sec**
Ku=3.28 (constant)
Hydraulic Length (L): **1,203.00 ft**
Runoff Velocity "v": **0.51 ft/sec**

Existing Slope : **0.10 %**
Time of Concentration: **39.37 min**
Rainfall Intensity: **4.24 in/hr** based on frequency of **10-year**
Type of Drainage Area: **Unimproved Areas**
Runoff Coeff (c factor): **0.20**
Q peak existing condition: **14.29 cfs**

$$v = K_u k S_p^{0.5}$$

II. Post Development (Future) Conditions

Storm Frequency: **50-year**
Future development area: **733,830.00 ft²**
Future development area: **16.85 ac**

Proposed Slope (s) : **1.00 %**
Time of Concentration: **32.07 min**
Rainfall Intensity (i)= **6.10 in/hr** based on frequency of **50-year**
Type of Drainage Area: **Muilti units, detached**
Runoff Coeff (c factor): **0.50**
Q future conditon (ciA)= **51.41 cfs**

Time (min)	Time (sec)	I (in/hr)	Post Development		Pre Development		Required Storage Volume ft ³
			Flow (Q) ft ³ /sec	Volume (V) ft ³	Flow (Q) ft ³ /sec	Volume (V) ft ³	
32.07	1,924.02	6.10	51.41	98,909	14.29	27,496	71,413
42.07	2,524.02	5.19	43.70	110,290	14.29	31,784	78,506
52.07	3,124.02	4.54	38.24	119,452	14.29	36,071	83,381
62.07	3,724.02	4.05	34.14	127,149	14.29	40,358	86,790
72.07	4,324.02	3.67	30.94	133,806	14.29	44,646	89,160
82.07	4,924.02	3.37	28.37	139,688	14.29	48,933	90,754
92.07	5,524.02	3.12	26.24	144,968	14.29	53,220	91,748
102.07	6,124.02	2.90	24.46	149,769	14.29	57,508	92,261
112.07	6,724.02	2.72	22.93	154,177	14.29	61,795	92,381
122.07	7,324.02	2.57	21.61	158,257	14.29	66,083	92,175
132.07	7,924.02	2.43	20.45	162,061	14.29	70,370	91,691
142.07	8,524.02	2.31	19.43	165,626	14.29	74,657	90,969
152.07	9,124.02	2.20	18.52	168,985	14.29	78,945	90,040
162.07	9,724.02	2.10	17.70	172,162	14.29	83,232	88,930
172.07	10,324.02	2.01	16.97	175,179	14.29	87,519	87,659

Storage Required:
w/ release rate of:
Storage Required for Development:
Storage Required per Lot:

92,381 ft³
14.29 ft³/sec
2.12 Ac.Ft.
0.04 Ac.Ft.



* Calculations based on Rational Method as presented in "Design Hydrology and Sedimentology for Small Catchments" by C.T. Hann, B.J. Barfield and J.C. Hayes (Academic Press, 1994)

Table 3.24 (pg 84-85 Design Hydrology and Sedimentology for Small Catchments)
Values of Runoff Coefficient (C) for Rational Formula
(Used in $Q=ciA$)

Land Use	C
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi units, detached	0.40 - 0.60
Multi units, attached	0.60 - 0.75
Suburban	0.25 - 0.40
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemeteries	0.10 - 0.25
Playgrounds	0.20 - 0.35
Railroad yard areas	0.20 - 0.40
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, avg., 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, avg., 2-7%	0.18 - 0.22
Heavy soil, steep, 7%	0.25 - 0.35
Agricultural land:	
<i>Bare packed soil</i>	
*Smooth	0.30 - 0.60
*Rough	0.20 - 0.50
<i>Cultivated rows</i>	
*Heavy soil, no crop	0.30 - 0.60
*Heavy soil, with crop	0.20 - 0.50
*Sandy soil, no crop	0.20 - 0.40
*Sandy soil, with crop	0.10 - 0.25
<i>Pasture</i>	
*Heavy soil	0.15 - 0.45
*Sandy soil	0.05 - 0.25
Woodlands	0.05 - 0.25
Streets:	
Asphaltic	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Unimproved areas	0.10 - 0.30
Drives and walks	0.75 - 0.85
Roofs	0.75 - 0.95

	Development Area	Calculated C Factor
Enter the Pre-Development C factor:	Unimproved Areas	0.20
Enter the Post-Development C factor:	Muilti units, detached	0.50

THE COVES

**DRAINAGE REPORT FOR A 18.48-ACRE (16.85 ACRES NET) TRACT OF LAND OUT
OF FARM TRACT 1030, WEST AND ADAMS TRACT SUBDIVISION, ACCORDING
TO THE MAP OR PLAT RECORDED IN VOLUME 2, PAGES 34-37, H.C.M.R.**

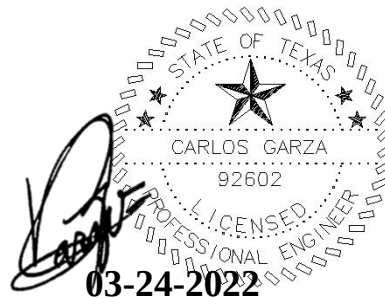
**Located on the south side of Mile 8 North Road (E. Pike Blvd.), approximately
710 feet east of International Blvd. (F.M. 1015), in the City of Weslaco, Texas.**

Prepared By



On: March 24, 2022

PROJECT # 1281.004



Carlos Garza, P.E., P.G., SIT, CAPM, CFM, CESSWI

**Texas Registered Engineering Firm: F-9688
Texas Board of Professional Geoscientists # 50190
Texas Asbestos Consulting Agency # 100517**

**P.O. Box 480
Edinburg, Texas 78540
Phone: (956) 380-6558
www.aecengineering.net**

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- I. Drainage Statement and Report with Hydraulic Calculations
- II. Project Location Map
- III. Flood Insurance Rate Map (FIRM) and Legend
- IV. USGS Map with Project Location
- V. Soil Survey Resource Report
- VI. Set of Plans (Half and Full Size Folded)

SECTION I
Drainage Statement and Report
with Hydraulic Calculations



Drainage Statement for:

THE COVES

A 18.48-acre (16.85 acres net) tract of land out of Farm Tract 1030, West And Adams Tract Subdivision, according to the Map or Plat recorded in Volume 2, Pages 34-37, H.C.M.R., situated in the City of Weslaco, County of Hidalgo, Texas.

March 24, 2022

Project Location and Description

The proposed 18.48-acre (16.85 acres net) is situated in the City of Weslaco, Hidalgo County, Texas; and is coming out of Farm Tract 1030, West And Adams Tract Subdivision, according to the map or plat thereof recorded in Volume 2, Pages 34-37, Map Records of Hidalgo County, Texas. This development is located on the south side of Mile 8 North Road (E. Pike Blvd.), approximately 710 feet east of International Blvd. (F.M. 1015), in the City of Weslaco, Texas.

Floodplain (FEMA Information)

This tract of land is currently vacant, and its future use is residential. The proposed development is situated in Flood Zone X (no shading), as per FEMA FIRM Panel 480334 0450 C, map revised June 6, 2000. Zone X (no shading) is defined as areas determined to be outside of the 500-year floodplain.

Soils Information

According to the USDA NRCS Soils Survey of Hidalgo County, Texas, the soils in this site are classified as 28 (61.5%) and 52 (38.5%). Map Unit Names: "Hidalgo Sandy Clay Loam" and "Raymondville Clay Loam" which belong to Hydrologic Groups B and C, respectively. Group B soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. Group C soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Drainage Pattern Determination

The topography in this site indicates that runoff flows relatively in a northerly direction. Post development runoff shall be discharged into an existing H.C.C.I.D. No. 9 drain ditch located at the south side of this development. Said drain ditch will be widened within an area 77 feet deep by 610 feet wide that will be dedicated to H.C.C.I.D. No. 9 by this development. Side slopes for excavated area shall not exceed 3:1 (see detail). The excavation will add an additional runoff storage capacity of 301,990 cubic feet, of which 166,549 (3.82 ac-ft) are required to be detained for this development as per engineered calculations.

Runoff will be conveyed via ten (10) proposed type CC inlets, approximately 716 linear feet of 24" RCP, 268 linear feet of 30" RCP, 984 linear feet of 36" RCP, and 295 linear feet of 48" RCP. There will be two points of discharge at the excavated area (see plans). H.C. C.I.D. No. 9 drain ditch connects with a series of ditches south of this site, and ultimately discharge into the South Mercedes Lateral.

As indicated on the **Drainage Pattern Determination** paragraph, the amount of storm runoff required for this proposed 18.48-acre tract of land (16.45 acres net), is **166,549** cubic feet. The excavation/widening of the existing H.C.C.I.D. No. 9 drain ditch will add a runoff storage capacity of 301,990 cubic feet, which represents an additional 81% of the storage capacity required.

Necessary Detention Quantification

As per City of Weslaco drainage policy, the site will retain the difference in volume between pre-development and post-development conditions, based on a 50-year storm event with a pre-development release rate as indicated below.

As per attached Engineered Calculations, this residential subdivision shall detain 166,549 c.f. cumulatively for the 18.48-acre (16.45-acre net) tract of land and is further broken down below:

Pre-Development Quantifications

Site is currently Nearly bare and untilled soils

Q = 7.15 cfs
I = 4.24 in/hr
Tc = 39.37 min

Post Development Quantifications

Upon site development, will be a 27-lot residential subdivision

Q = 63.14 cfs
I = 6.25 in/hr
Tc = 30.81

The pre-development flow rate averages 7.15 cfs while the post develop flow rate averages 63.14 cfs; creating an incremental average flow rate of 55.99 cfs. The incremental flow rate will be handled by storm sewer improvements as previously described. Site drainage and detention improvements for the proposed development will conform to current **City of Weslaco** and Hidalgo County Drainage District No. 1 ordinances and or policies and approved by the **City of Weslaco** at the time of issuance of building permit.

The information provided on this Drainage Report is information prepared under the direction and supervision of Carlos Garza, P.E., P.G.

Prepared by: AEC Engineering, LLC
Authorized by: Carlos Garza, P.E., P.G.
Contact: 956-380-6558
carlos@aecenineering.net



AEC ENGINEERING, LLC. DRAINAGE REPORT/STATEMENT

PROJECT NAME: The Coves
PROJECT NUMBER: 1281.004
DATE: March 24, 2022
PREPARED BY: Carlos Garza
PHONE NUMBER: (956) 380-6558

COUNTY: Hidalgo
CITY: Weslaco
Number of Lots: 60 + Common Areas
Analysis Method: Rational Method

I. Pre Development (Existing) Conditions

Storm Frequency: 10-year
Existing Area: 733,830.00 ft²
Existing Area: 16.85 ac

Existing Surface Conditions: Unpaved
Intercept Coefficient "k": 0.491 ft/sec
Ku=3.28 (constant)
Hydraulic Length (L): 1,203.00 ft
Ruoff Velocity "v": 0.51 ft/sec

Existing Slope : 0.10 %

Time of Concentration: 39.37 min
Rainfall Intensity: 4.24 in/hr based on frequency of 10-year
Type of Drainage Area: Unimproved Areas
Runoff Coeff (c factor): 0.10
Q peak existing condition: 7.15 cfs

$$v = K_u k S_p^{0.5}$$

II. Post Development (Future) Conditions

Storm Frequency: 50-year
Future development area: 733,830.00 ft²
Future development area: 16.85 ac

Proposed Slope (s) : 1.00 %
Time of Concentration: 30.81 min
Rainfall Intensity (i)= 6.25 in/hr based on frequency of 50-year
Type of Drainage Area: Muulti units, detached
Runoff Coeff (c factor): 0.60
Q future conditon (ciA)= 63.14 cfs

Time (min)	Time (sec)	I (in/hr)	Post Development		Pre Development		Required Storage Volume ft ³
			Flow (Q) ft ³ /sec	Volume (V) ft ³	Flow (Q) ft ³ /sec	Volume (V) ft ³	
30.81	1,848.47	6.25	63.14	116,708	7.15	13,208	103,499
40.81	2,448.47	5.29	53.42	130,801	7.15	15,352	115,448
50.81	3,048.47	4.61	46.60	142,069	7.15	17,496	124,573
60.81	3,648.47	4.11	41.52	151,492	7.15	19,639	131,853
70.81	4,248.47	3.72	37.57	159,617	7.15	21,783	137,834
80.81	4,848.47	3.40	34.40	166,780	7.15	23,927	142,853
90.81	5,448.47	3.14	31.79	173,198	7.15	26,070	147,128
100.81	6,048.47	2.93	29.60	179,025	7.15	28,214	150,811
110.81	6,648.47	2.74	27.73	184,369	7.15	30,358	154,011
120.81	7,248.47	2.58	26.12	189,312	7.15	32,501	156,810
130.81	7,848.47	2.44	24.71	193,915	7.15	34,645	159,270
140.81	8,448.47	2.32	23.46	198,227	7.15	36,789	161,438
150.81	9,048.47	2.21	22.36	202,287	7.15	38,932	163,354
160.81	9,648.47	2.11	21.36	206,125	7.15	41,076	165,049
170.81	10,248.47	2.02	20.47	209,768	7.15	43,220	166,549

Storage Required:
w/ release rate of:
Storage Required for Development:
Storage Required per Lot:

166,549 ft³
7.15 ft³/sec
3.82 Ac.Ft.
0.06 Ac.Ft.

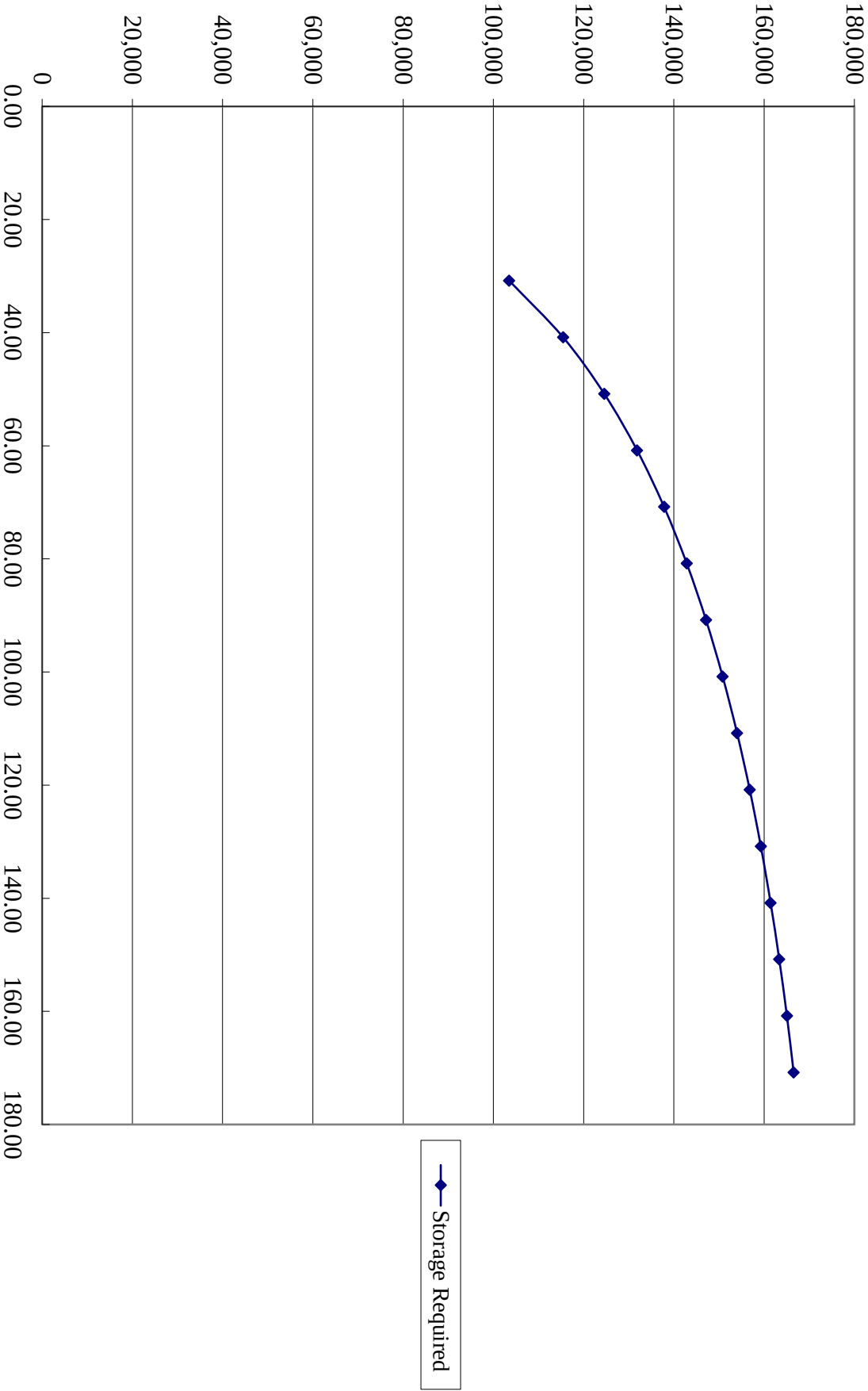


Table 3.24 (pg 84-85 Design Hydrology and Sedimentology for Small Catchments)
Values of Runoff Coefficient (C) for Rational Formula
(Used in $Q=ciA$)

Land Use	C
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi units, detached	0.40 - 0.60
Munti units, attached	0.60 - 0.75
Suburban	0.25 - 0.40
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemeteries	0.10 - 0.25
Playgrounds	0.20 - 0.35
Railroad yard areas	0.20 - 0.40
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, avg., 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, avg., 2-7%	0.18 - 0.22
Heavy soil, steep, 7%	0.25 - 0.35
Agricultural land:	
<i>Bare packed soil</i>	
*Smooth	0.30 - 0.60
*Rough	0.20 - 0.50
<i>Cultivated rows</i>	
*Heavy soil, no crop	0.30 - 0.60
*Heavy soil, with crop	0.20 - 0.50
*Sandy soil, no crop	0.20 - 0.40
*Sandy soil, with crop	0.10 - 0.25
<i>Pasture</i>	
*Heavy soil	0.15 - 0.45
*Sandy soil	0.05 - 0.25
Woodlands	0.05 - 0.25
Streets:	
Asphaltic	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Unimproved areas	0.10 - 0.30
Drives and walks	0.75 - 0.85
Roofs	0.75 - 0.95

	Development Area	Calculated C Factor
Enter the Pre-Development C factor:	Unimproved Areas	0.10
Enter the Post-Development C factor:	Muilti units, detached	0.60

Storage Volume Required as Varied by Time of Concentration



Pre-Development Conditions						
Name of Segment	Ku constant	Intercept coeff k	Avg Slope %	Velocity fps	Segment Length ft	Tc min
1	3.28	0.491	0.1000	0.51	1,203.00	39.37
Total Results					1,203.00	39.37

$$v = K_u k S_p^{0.5}$$

$$t_c = \frac{L}{v}$$

Land Cover / Flow Regime	k
Forrest w/ heavy ground litter; hay meadow (overland flow)	0.076
Trash fallow or minimum tillage cultivation; contour or strip cropped; woodland (overland flow)	0.152
Short grass pasture (overland flow)	0.213
Cultivated straight row (overland flow)	0.274
Nearly bare and untilled (overland flow); alluvial fans in western mountain regions	0.305
Grassed waterway (shallow concentrated flow)	0.457
Unpaved (shallow concentrated flow)	0.491
Paved Area (shallow concentrated flow); small upland gullies	0.619

Post-Development Conditions

Name of Segment	Ku constant	Intercept coeff k	Avg Slope %	Velocity fps	Segment Length ft	Tc min
1	3.28	0.491	0.500	1.14	86.00	1.26
2	3.28	0.619	1.000	2.03	216.50	1.78
3	3.28	0.619	0.174	0.85	246.00	4.84
4	3.28	0.619	0.129	0.73	246.00	5.62
5	3.28	0.619	0.101	0.65	246.00	6.35
6	3.28	0.619	0.101	0.65	246.00	6.35
7	3.28	0.619	0.069	0.53	147.20	4.60
Total Results					548.50	30.81

Rainfall Intensity-Duration-Frequency Coefficients for Texas Counties- Pre Development

1. Select your county. 2. Enter the time of concentration

County	Coefficient	2-year	5-year	10-year	25-year	50-year	100-year
Hidalgo	e (in)	0.831	0.795	0.778	0.771	0.749	0.740
	b	74	80	87	98	99	103
	d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
	Intensity (in/hr)*	2.92	3.65	4.24	4.91	5.40	5.78
Harrison							
Hartley							
Haskell							
Hays							
Hemphill							
Henderson							
Hidalgo							

Coefficient	2-year	5-year	10-year	25-year	50-year	100-year
e (mm)	0.831	0.795	0.778	0.771	0.749	0.740
b	1880	2032	2210	2489	2515	2616
d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
Intensity (mm/hr)*	74.09	92.74	107.74	124.70	137.21	146.94

* for time of Concentration = **39.37** mins

Hidalgo

Rainfall Intensity-Duration-Frequency Coefficients for Texas Counties- Post Development

1. Select your county. 2. Enter the time of concentration

County	Coefficient	2-year	5-year	10-year	25-year	50-year	100-year
Hidalgo	e (in)	0.831	0.795	0.778	0.771	0.749	0.740
	b	74	80	87	98	99	103
	d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
	Intensity (in/hr)*	3.42	4.26	4.93	5.70	6.25	6.67
Cameron							
Camp							
Carson							
Cass							
Castro							
Chambers							
Cherokee							

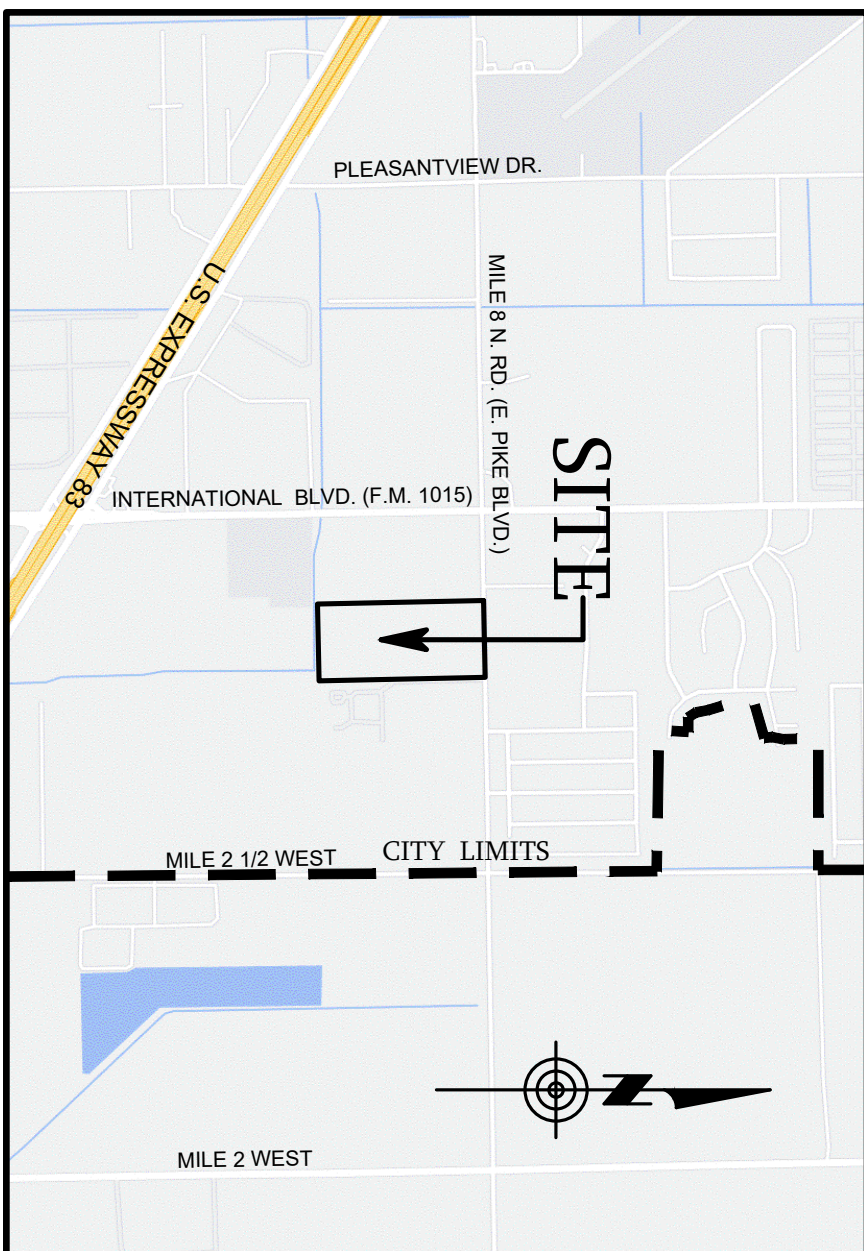
Coefficient	2-year	5-year	10-year	25-year	50-year	100-year
e (mm)	0.831	0.795	0.778	0.771	0.749	0.740
b	1880	2032	2210	2489	2515	2616
d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
Intensity (mm/hr)*	86.91	108.20	125.28	144.81	158.66	169.39

* for time of Concentration = **30.81** mins

SECTION II

Project Location Map

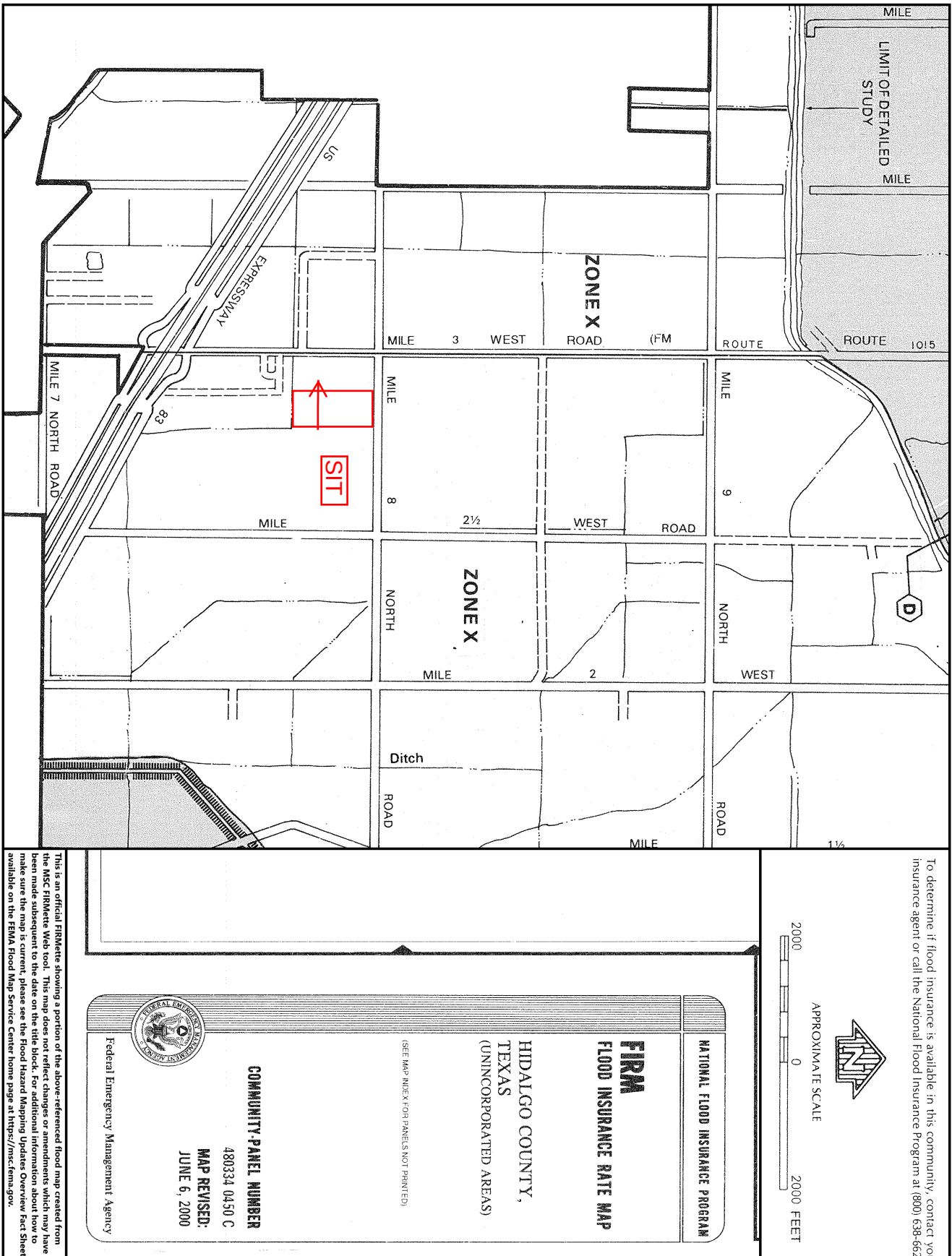
LOCATION MAP N.T.S.

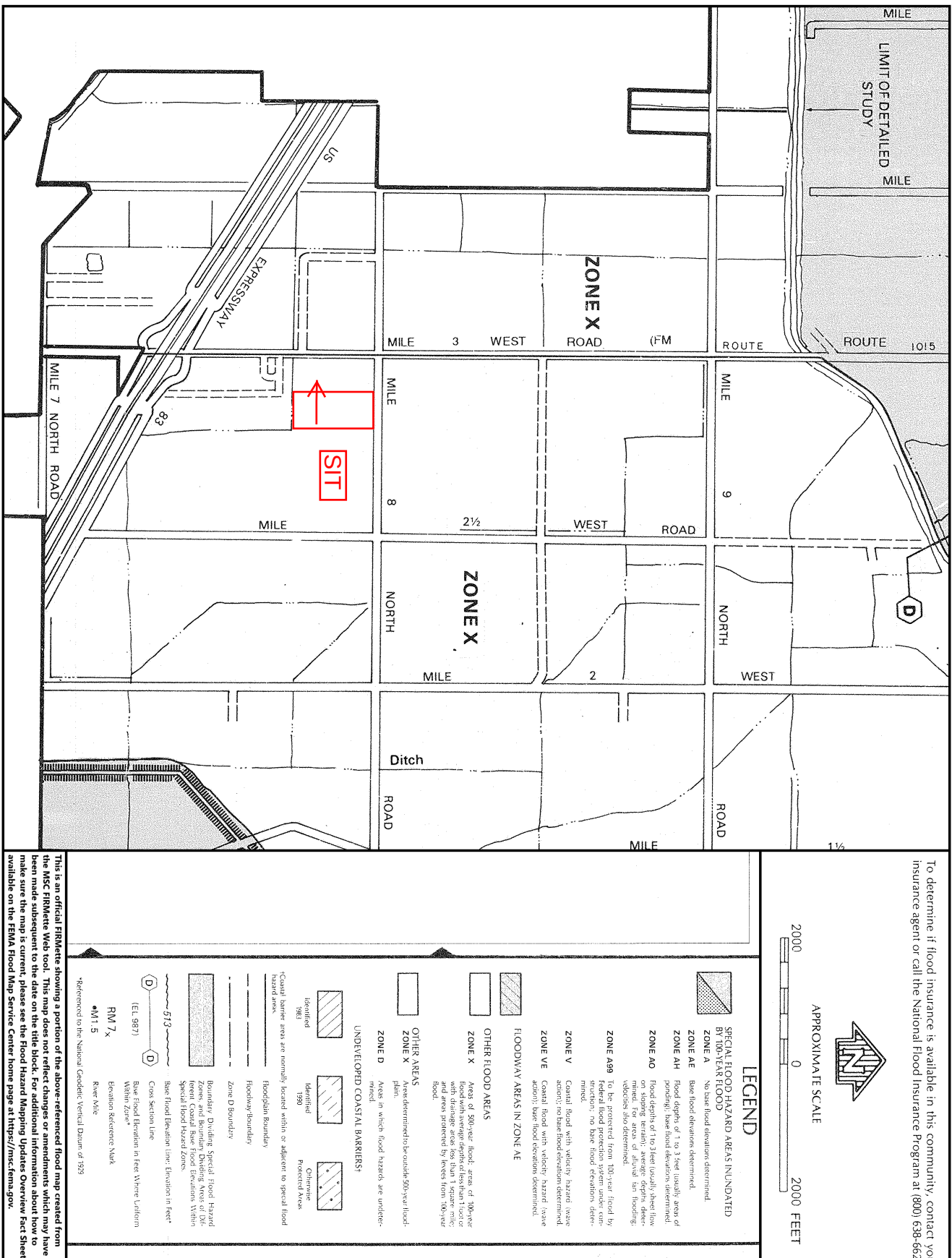


THE COVES

BEING A RESUBDIVISION OF 18.48 ACRES OF LAND, MORE OR LESS, SITUATED IN THE CITY OF WESLACO, HIDALGO COUNTY, TEXAS, OUT OF FARM TRACT 1030, WEST AND ADAMS TRACT SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS

SECTION III
Flood Insurance Rate Map (FIRM)
and Legend

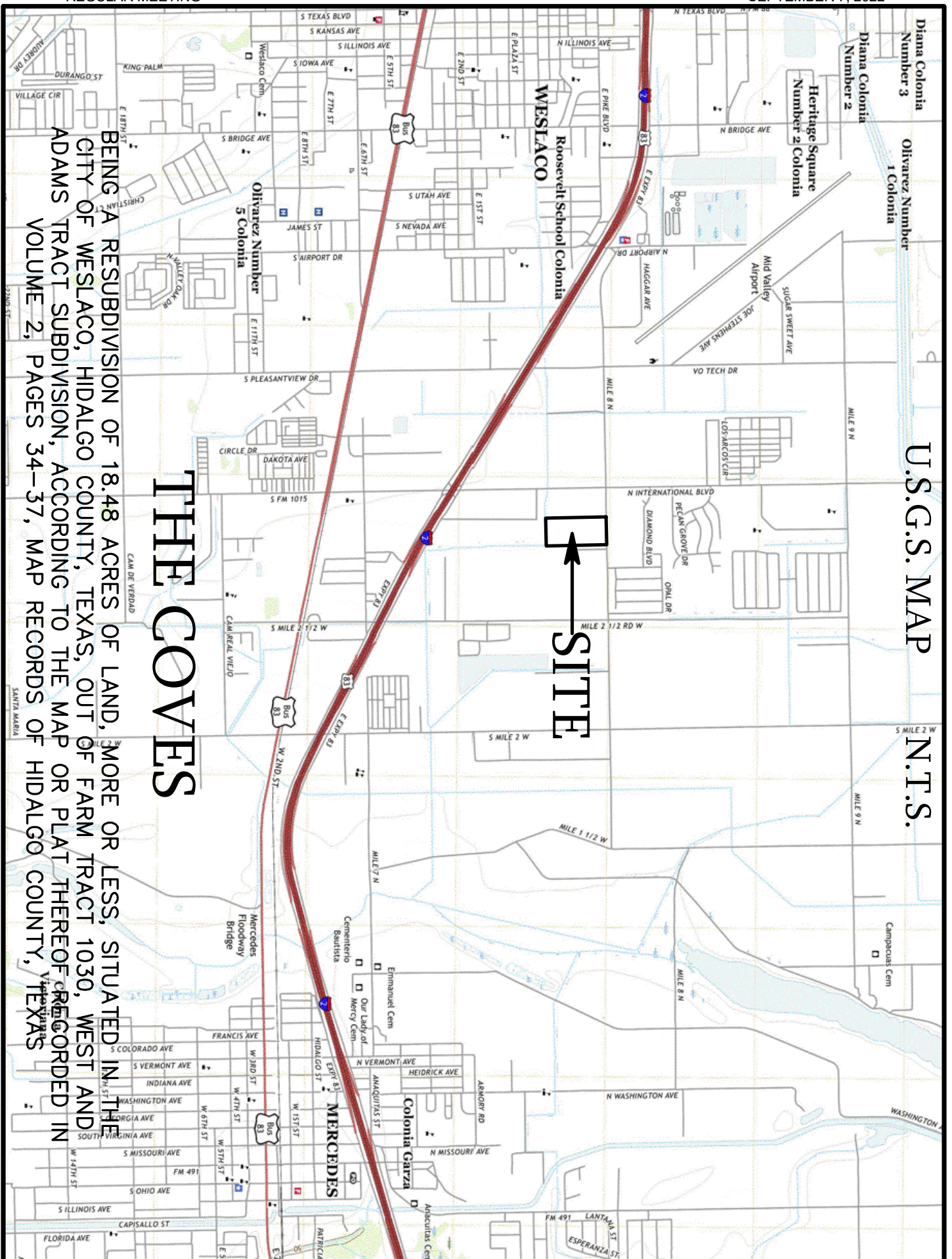




To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6622.

SECTION IV

USGS Map with Project Location



THE COVES



 SITE

U.S.G.S. MAP N.T.S.

BEING A RESUBDIVISION OF 18.48 ACRES OF LAND, MORE OR LESS, SITUATED IN THE CITY OF WESLACO, HIDALGO COUNTY, TEXAS, OUT OF FARM TRACT 1030, WEST AND ADAMS TRACT SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS

SECTION V

Soil Survey Resource Report



United States
Department of
Agriculture

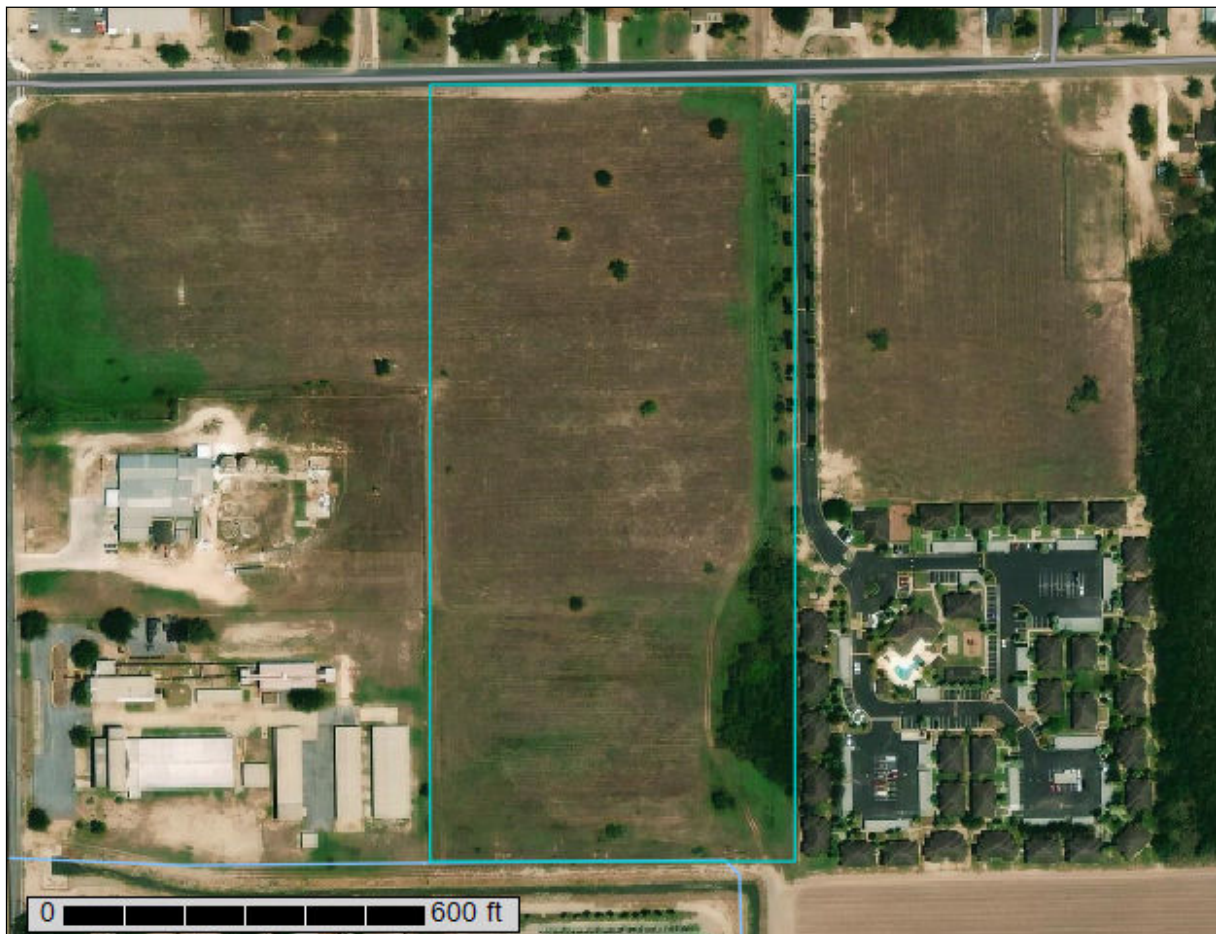
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Hidalgo County, Texas

The Coves



March 24, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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52—Raymondville clay loam, 0 to 1 percent slopes.....	11

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

Area of Interest (AOI)

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 20, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 20, 2015—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	11.0	61.5%
52	Raymondville clay loam, 0 to 1 percent slopes	6.8	38.5%
Totals for Area of Interest		17.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

Hidalgo County, Texas

28—Hidalgo sandy clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2sxxl
Elevation: 20 to 500 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 72 to 74 degrees F
Frost-free period: 300 to 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hidalgo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hidalgo

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Typical profile

Ap - 0 to 17 inches: sandy clay loam
Bk1 - 17 to 28 inches: sandy clay loam
Bk2 - 28 to 38 inches: clay loam
Ck - 38 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 2c
Hydrologic Soil Group: B
Ecological site: R083DY019TX - Gray Sandy Loam
Hydric soil rating: No

Custom Soil Resource Report

Minor Components

Raymondville

Percent of map unit: 7 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Racombes

Percent of map unit: 6 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Willacy

Percent of map unit: 2 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

52—Raymondville clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dbm1
Elevation: 20 to 200 feet
Mean annual precipitation: 23 to 33 inches
Mean annual air temperature: 72 to 73 degrees F
Frost-free period: 300 to 340 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Raymondville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Raymondville

Setting

Landform: Delta plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous clayey alluvium

Custom Soil Resource Report

Typical profile

H1 - 0 to 15 inches: clay loam
H2 - 15 to 43 inches: clay loam
H3 - 43 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 8.0
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

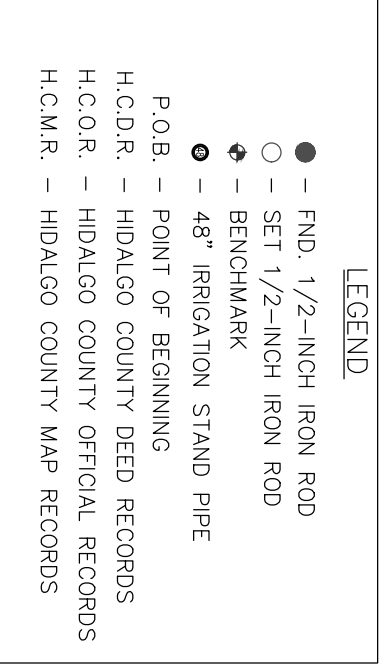
Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Ecological site: R083DY025TX - Clay Loam
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 15 percent
Hydric soil rating: No

SECTION VI
Set of Plans
(Half and Full Size Folded)



RANCHO BRITO
 MIGUEL BRITO
 22015 N. SHARY ROAD, SUITE 2
 MISSION, TX 78572

ROEL HERNANDEZ
Notary Public
STATE OF TEXAS
Comm. Exp. 10-27-2025

CARLOS GARZA, P.E. - AEC ENGINEERING, L.L.C.
 P.O. BOX 480
 EDINBURG, TEXAS 78540
 TEL: 956-380-6558 FAX: 956-380-6110
 TEL: 956-380-6558 FAX: 956-380-6110

Plot Scale: 1"=60' JOB # 1281.004
Date: March 24, 2022
Drawn by: J.d'Z.

P.O. Box 480 Office: (956) 380-6558
Edinburg, Texas 78540 Fax: (956) 380-6110
www.oecengineering.net

PRINCIPAL CONTACTS:			
CITY:	MESLACO	255 KANSAS AVE., MESLACO, TX 76596	PHONE: (956) 966-3181
OWNER:	MIGUEL BRITO	2015 N. SHARY RD., SUITE 2, MISSION, TX 78572	PHONE: (956) 540-5557
ENGINEER:	CARLOS GARZA, P.E.	P.O. BOX 480, EMBURG, TX 75540	PHONE: (956) 360-6558
DESIGNER:	JOSÉ MARIO GONZÁLEZ, P.E.	24593 F.W. RD. MONTE ALTO, TX 76558	PHONE: (956) 360-5154
CONTRACTOR:	JOSEPH J. GONZALEZ, P.E.	24593 F.W. RD. MONTE ALTO, TX 76558	PHONE: (956) 360-5156
GENERAL CONTRACTOR:	JOSEPH J. GONZALEZ, P.E.	24593 F.W. RD. MONTE ALTO, TX 76558	PHONE: (956) 360-5156

FILE FOR RECORD IN
HIDALGO COUNTY
ARTURO GUARDADO JR.
HIDALGO COUNTY CLERK

DN: _____ AT _____ AM/PM
INSTRUMENT NUMBER _____

EVAL NOTES AND RESTRICTIONS

1. FLOOD ZONE DESIGNATION: ZONE "X" (NO SHADING), ZONE "X" (NO SHADING) AS AREAS DETERMINED TO BE OUTSIDE OF THE 500-YEAR FLOODPLAIN. COMMUNITY-PANEL NUMBER: 480334 0450 C, MAP REVISED: 01/6/2000
2. LOTS MINIMUM BUILDING SETBACKS LINES AS PER CITY OF WESLACO SITE PLAN APPROVAL.
3. MINIMUM FINISHED FLOOR ELEVATION: 68.70.
4. THE EXISTING BENCHMARK IS IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS: TOP-OF-UD OR EXISTING CURB INLET LOCATED ON THE SOUTH SIDE OF MILE 8 NORTH ROAD (INDICATED HEREIN).
NORthing: 16692860.5920
EASTing: 1162928.6240
ELEVATION: 69.16
5. IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 AND THE CITY OF WESLACO REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO PROVIDE FOR THE PROPER DRAINAGE OF THE LOT. DRAINAGE DESIGN (AGE-15%) STORM WATER DETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS SHALL BE ACCOMPLISHED AS INDICATED ON DRAINAGE REPORT.
6. NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT. EASEMENTS PLANNING (EXCEPT LOW, LESS THAN 18 INCHES MAJORE HEIGHT, GROUND COVER, GRASS, OR FLOWERS) AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH THE OPERATION AND MAINTENANCE OF THE EASEMENT.
7. THERE ARE NO VISIBLE WATER WELLS WITHIN 150 FEET FROM THE BOUNDARIES ON THIS SUBDIVISION.
8. A 3-FOOT WIDE CONCRETE SIDEWALK SHALL BE CONSTRUCTED ALONG MILE 8 APPROVAL STREET.
9. A 4-FOOT WIDE CONCRETE SIDEWALK EXTENDING ALONG ALL INTERIOR STREETS SHALL BE CONSTRUCTED TO BE CONSTRUCTED AS PER SUBDIVISION PLAT.
10. NO ACCESS/DRIVEWAY SHALL BE PERMITTED FROM LOTS 1-5 ONTO MILE 8 NORTH ROAD.
11. 20 FEET REAR SET ON ALL LOT CORNERS IN THIS SUBDIVISION.

PLATS AND BOUNDARY DESCRIPTION

1. RESURVEYED OF 18.48 ACRES OF LAND, MORE OR LESS, SITUATED IN THE COUNTY OF MESQUITE, HIDALGO COUNTY TEXAS, OUT OF FARM TRACT 1030, WEST AND NORTH RANGES, T.16S., R.17E., S.19N., BEING A PORTION OF PLAT 1030, RECORDED IN VOLUME 28, PAGE 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS, SAID 18.48 ACRES BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A COTTON PICKER SPINDLE FOUND WITHIN THE RIGHT-OF-WAY OF MILE 8 NORTH ROAD, LEAVING A LINE OF SAID ROAD FOR THE NORTHEAST CORNER AND POINT OF BEGINNING OF THIS HEREIN DESCRIBED TRACT;

1. THENCE, S. 01°11'08" E., ALONG THE EAST LINE OF SAID FARM TRACT 1030, BEING ALSO THE WEST LINE OF "ESTIMADA DEL VALLE SUBDIVISION" (RECORDED IN VOLUME 38, PAGE 47, H.C.M.) AT A DISTANCE OF 30.00 FEET PASS A 1 1/2" IRON ROD FOUND FOR THE SOUTH RIGHT-OF-WAY LINE OF MILE 8 NORTH ROAD TO A POINT OF BEGINNING OF THIS HEREIN DESCRIBED TRACT;

2. THENCE, S. 17°21'00" E., ALONG THE SOUTH RIGHT-OF-WAY LINE OF MILE 8 NORTH ROAD, LEAVING A 1 1/2" IRON ROD FOUND IN LINE; AND CONTINUING A TOTAL DISTANCE OF 1,320.00 FEET TO THE SOUTHEAST CORNER OF THIS HEREIN DESCRIBED TRACT;

3. THENCE, S. 88°45'52" W., ALONG THE SOUTH LINE OF SAID FARM TRACT 1030, A DISTANCE OF 610.00 FEET TO THE SOUTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT;

4. THENCE, N. 01°11'08" W., ALONG A LINE PARALLEL TO THE EAST LINE OF SAID FARM TRACT 1030, AT A DISTANCE OF 801.90 FEET PASS A 1 1/2-INCH IRON ROD FOUND IN LINE, TO A DISTANCE OF 280.00 FEET PASS THE SOUTH RIGHT-OF-WAY LINE OF MILE 8 NORTH ROAD, LEAVING A 1 1/2-INCH IRON ROD FOUND IN LINE, TO A DISTANCE OF 1,320.00 FEET TO THE NORTHEAST CORNER OF THIS HEREIN DESCRIBED TRACT;

5. THENCE, N. 88°45'52" E., ALONG THE NORTH LINE OF SAID FARM TRACT 1030 LOCATED WITHIN THE RIGHT-OF-WAY OF SAID MILE 8 NORTH ROAD, A DISTANCE OF 610.00 FEET TO THE POINT OF BEGINNING, AND CONTAINING 18.48 ACRES OF GROUND, LEAVING A LINE OF 18.06 ACRES OF LAND, MORE OR LESS, AS

STATE OF TEXAS
COUNTY OF HIDALGO
CITY OF WESLACO

CERTIFICATE OF PLAT APPROVAL UNDER LOCAL GOVERNMENT CODE § 212.009(c) AND § 12.015(b)

THE UNDERSIGNED, CERTIFY THAT THIS PLAT OF "WESLACO HILLS SUBDIVISION" WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF WESLACO

N _____ 20 _____

AYOR OF THE CITY OF WESLACO

DATE

TEST: _____

SECRETARY OF THE CITY OF WESLACO _____

DATE

CERTIFICATE OF PLAT APPROVAL UNDER LOCAL GOVERNMENT CODE § 212.009(c) AND § 120.015(f)

E, THE UNDERSIGNED, CERTIFY THAT THIS PLAT OF "WESTLACO HILLS SUBDIVISION" WAS PREPARED AND APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF WESTLACO

_____ 20 _____

DATE _____

STATE OF TEXAS
COUNTY OF HIDALGO
CERTIFICATE OF PLAT APPROVAL
REGISTRATION DISTRICT No. 9

ATED THIS _____ DAY OF _____ 20____

NO UNRECOVERED COST OF ANY KIND SHALL BE CHARGED UPON HUNTER AND GARDNER COUNITED DEVELOPMENT DISTRICT NO. 9 RIGHTS-OF-WAY AND/OR EASEMENTS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE H.C.D.D. NO. 9.

IT IS UNDERSTOOD THAT THE RATE OF FLOW OF STORM WATER FROM THE LAND WAS IN EXCESS OF THAT WHICH COULD BE ACCOMMODATED BY THE EXISTING DRAINAGE SYSTEM.

H.C.D.D. NO. 9 WILL NOT BE RESPONSIBLE FOR THE STORM/DRAINAGE WATER SYSTEM TO ANY LOT WITHIN THIS SUBDIVISION, AS WELL, H.C.D.D. NO. 9 WILL NOT BE RESPONSIBLE FOR THE STORM/DRAINAGE WATER SYSTEM TO ANY LOT WITHIN THIS SUBDIVISION, IF DESIRED. THIS WILL NOT BE THE DISTRICT'S EXPENSE.

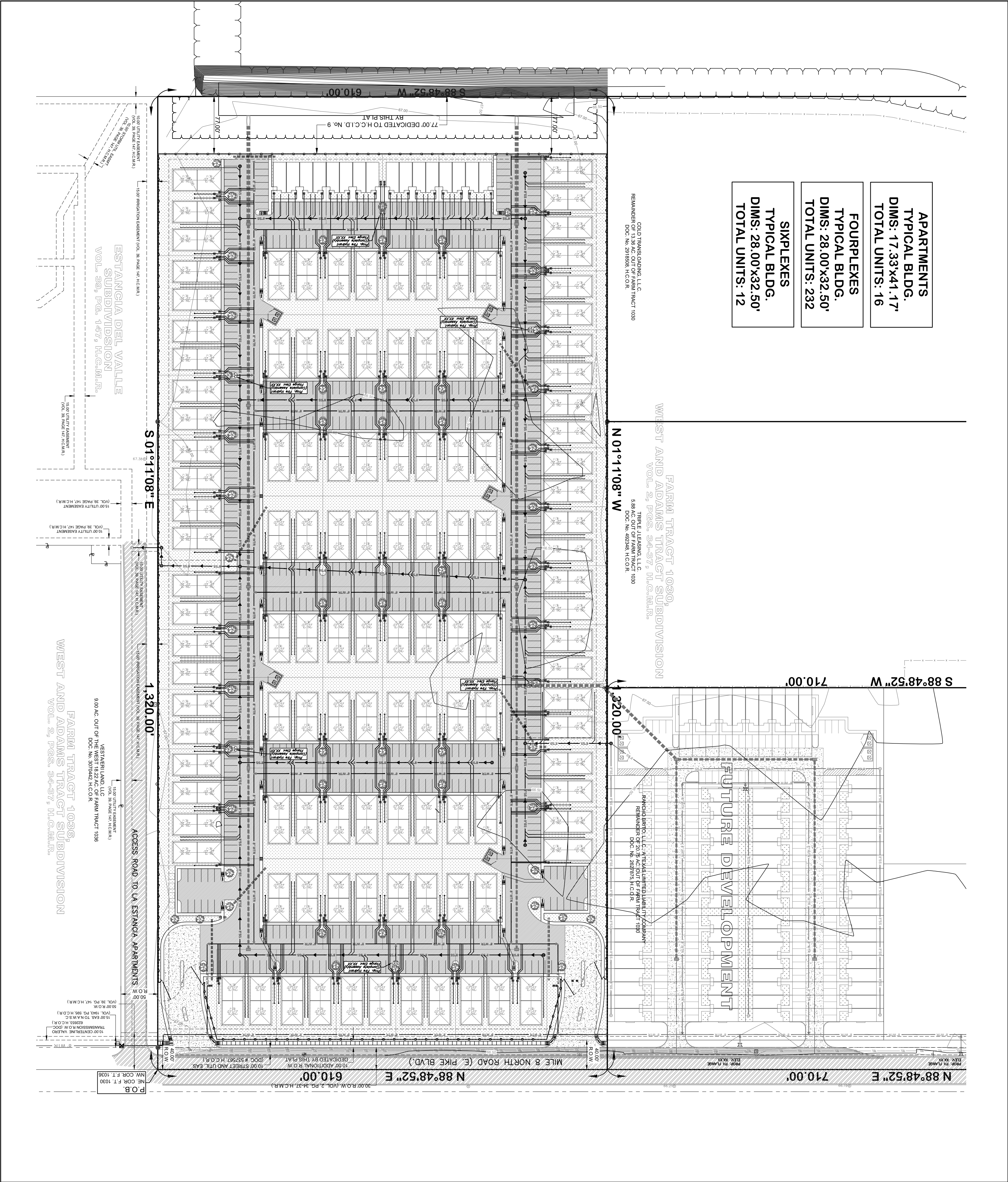
GENERALLY ACCEPTED ENGINEERING CRITERIA. THE DESIGN CRITERIA FOR THE SYSTEMS DESCRIBED ARE APPROPRIATE FOR THE APPLICATIONS DESCRIBED.

IDALGO & CAMERON COUNTIES IRRIGATION DISTRICT NO. 9

APPROVED BY DRAINAGE DISTRICT:

IDEALCO COUNTY DRAINAGE DISTRICT NO. 1 HEREBY CERTIFIES THAT THE DRAINAGE PLANS FOR THIS SUBDIVISION COMPLY WITH THE MINIMUM STANDARDS OF THE DISTRICT ADOPTED UNDER TEXAS WATER CODES 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.

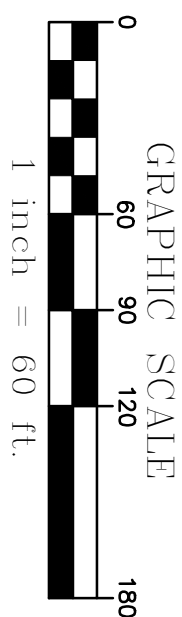
_____ PAUL E. SESIN, P.E., C.F.M. DATE



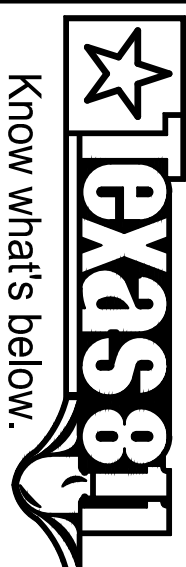
PROJECT INFORMATION:

THE COVES

WESLACO, TEXAS
BEARING BASIS: NAD83 Texas State Planes,
Central Zone, US Foot



CALL BEFORE YOU DIG!



Know what's below.
Call before you dig.

811

THE LONE STAR NOTIFICATION COMPANY
AT 1-800-669-8344

SHEET HIGHLIGHTS/RESTRICTIONS

REV	DATE	DESCRIPTION



THE SEAL PLACING ON THIS
DRAWING WAS AUTHORIZED
BY CARLOS GARZA, P.E.
ON: 03-24-2022

FOR REVIEW
WITHOUT PROPER NOTIFICATION TO THE
OFFENSE UNDER THE TEXAS
ENGINEERING PRACTICE LAW

AEC ENGINEERING, LLC.
*Agricultural * Environmental * Civil*

A TEXAS REGISTERED ENGINEERING FIRM F-9688

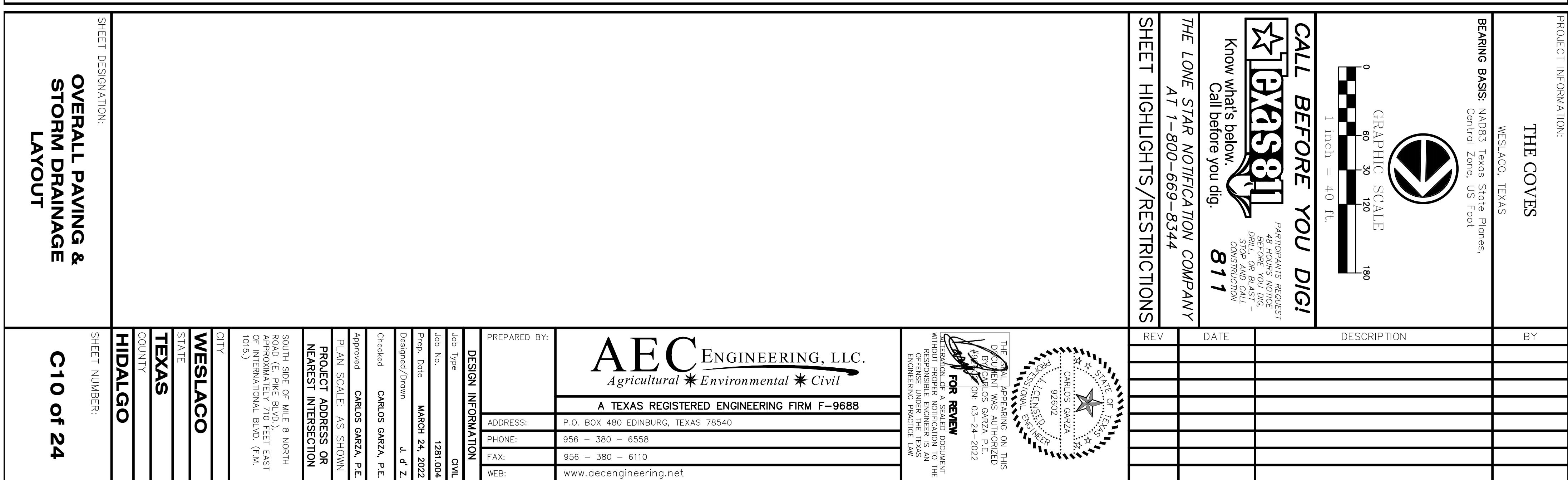
P.O. BOX 480 EDINBURG, TEXAS 78540

PHONE: 956 - 380 - 6558

FAX: 956 - 380 - 6110

WEB: www.aecengineering.net

PREPARED BY:	
DESIGN INFORMATION	
Job Type	CIVIL
Job No.	1281004
Prep. Date	MARCH 24, 2022
Designed/Drawn	J. D. Z.
Checked	CARLOS GARZA, P.E.
Approved	CARLOS GARZA, P.E.
PLAN SCALE: AS SHOWN	
PROJECT ADDRESS OR NEAREST INTERSECTION	
SOUTH SIDE OF MILE 8 NORTH ROAD (E. PIKE BLVD.) APPROXIMATELY 710 FEET EAST OF INTERNATIONAL BLVD. (FM 1015)	
CITY	WESLACO
STATE	TEXAS
COUNTY	HIDALGO
SHEET DESIGNATION:	OVERALL WATER DISTRIBUTION SYSTEM & SANITARY SEWER COLLECTION SYSTEM
SHEET NUMBER:	C6 of 24



THE COVES

WESTACO, TEXAS

BEARING BASIS: NAD83 Texas State Planes,
Central Zone, US Foot



GRAPHIC SCALE



1 inch = 40 ft.

CALL BEFORE YOU DIG!



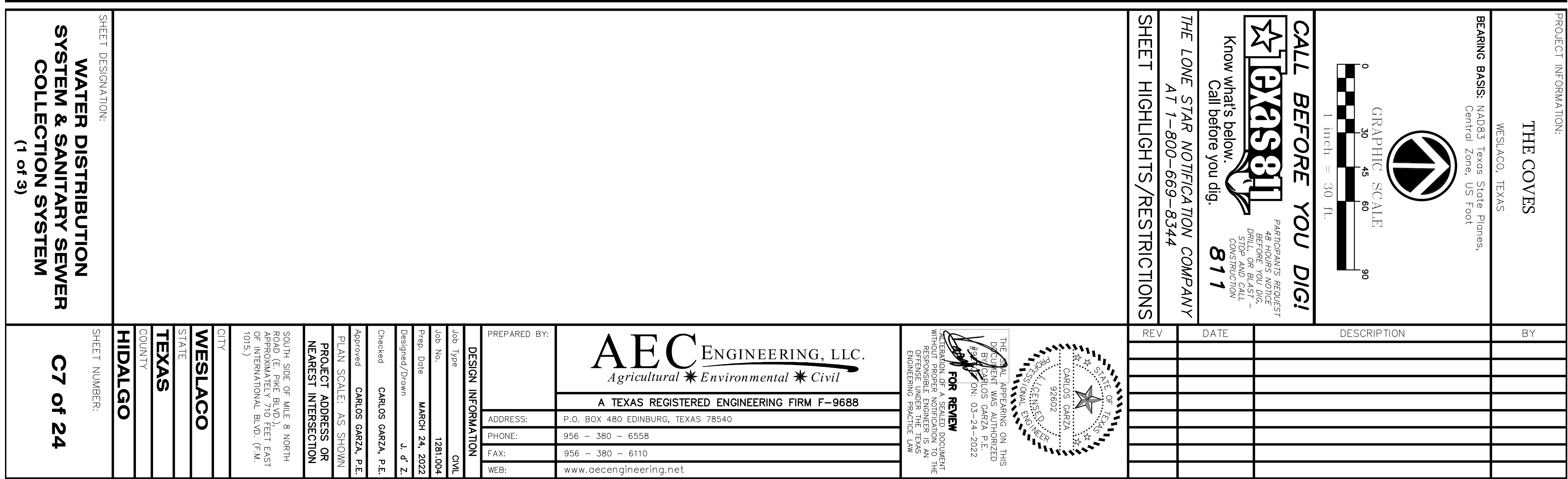
Know what's below.
Call before you dig.

811

PARTICIPANTS REQUEST
FOR INFORMATION AND
BEFORE ANY DIG-
GING OR BLAST-
ING AND CALL
811

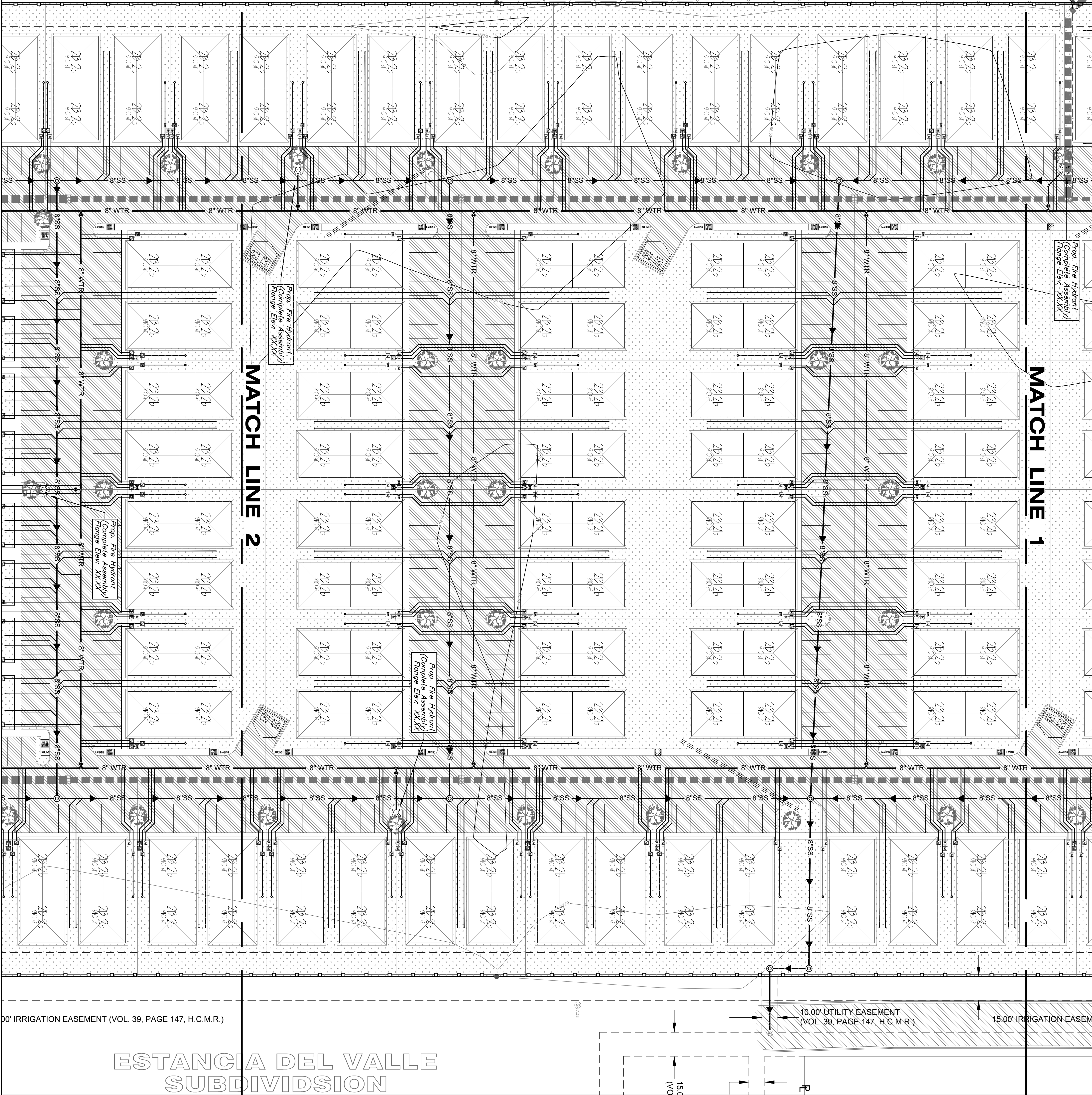
THE LONE STAR NOTIFICATION COMPANY
AT 1-800-669-8344

SHEET HIGHLIGHTS/RESTRICTIONS



COLD TRANSLOADING, L.L.C.
REMAINDER OF 13.36 AC. OUT OF FARM TRACT 1030
DOC. No. 2918508, H.C.O.R.

TRIPLE J LEASING, L.L.C.
5.88 AC. OUT OF FARM TRACT 1030
DOC. No. 492348, H.C.O.R.



PROJECT INFORMATION:

THE COVES

WESLACO, TEXAS

BEARING BASIS: NAD83 Texas State Planes,
Central Zone, US Foot



GRAPHIC SCALE

CALL BEFORE YOU DIG!

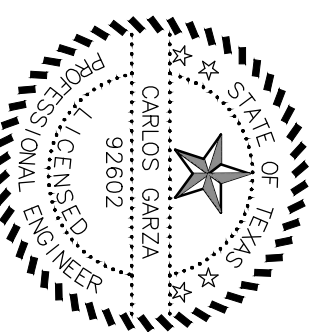


KNOW what's below.
Call before you dig.

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THE LONE STAR NOTIFICATION COMPANY
AT 1-800-669-8344

SHEET HIGHLIGHTS/RESTRICTIONS

[illegible]

THE FINAL, APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CARLOS GARZA P.E. #123456789 ON: 03-24-2022

FOR REVIEW

CALCULATION OF A SCALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

AEC ENGINEERING, LLC.
Agricultural * Environmental * Civil

A TEXAS REGISTERED ENGINEERING FIRM F-9688

PREPARED BY:	 AEC ENGINEERING <i>Agricultural * Environmental</i>
ADDRESS:	P.O. BOX 480 EDINBURG, TEXAS 78540
PHONE:	956 - 380 - 6558
FAX:	956 - 380 - 6110
WEB:	www.aecengineering.net

Checked	CARLOS GARZA, P.E.
Approved	CARLOS GARZA, P.E.
PLAN SCALE: AS SHOWN	
PROJECT ADDRESS OR NEAREST INTERSECTION	

SOUTH SIDE OF MILE 8 NORTH ROAD (E. PIKE BLVD.), APPROXIMATELY 710 FEET EAST OF INTERNATIONAL BLVD. (F.M. 1015.)

CITY
WESLACO

TEXAS

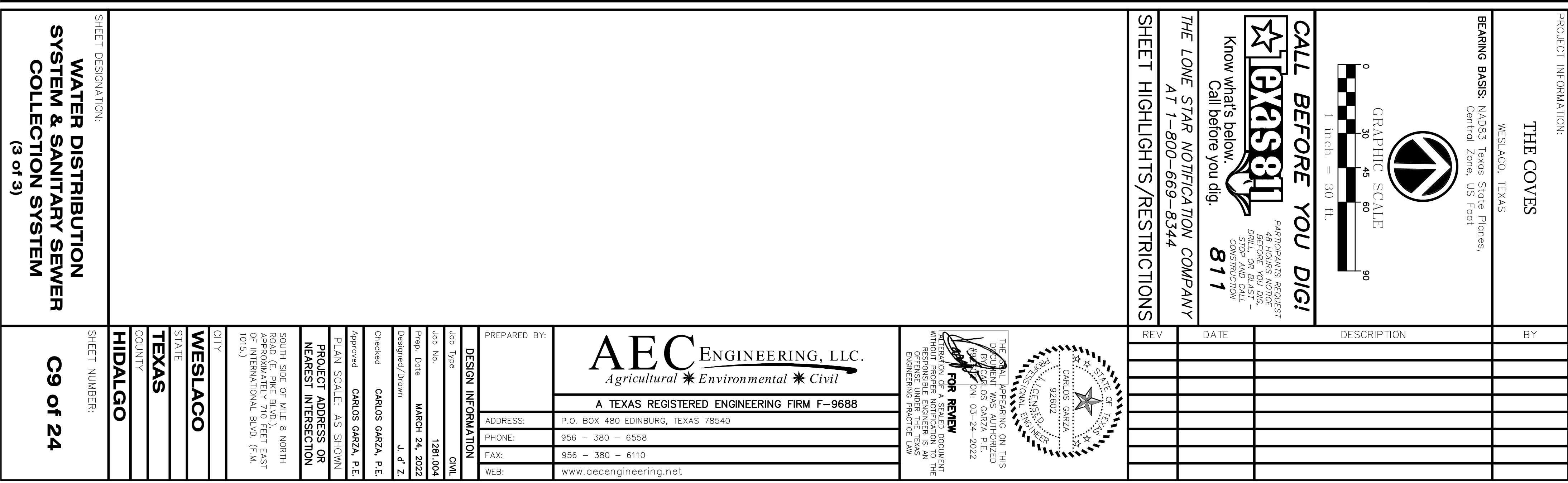
HIDALGO

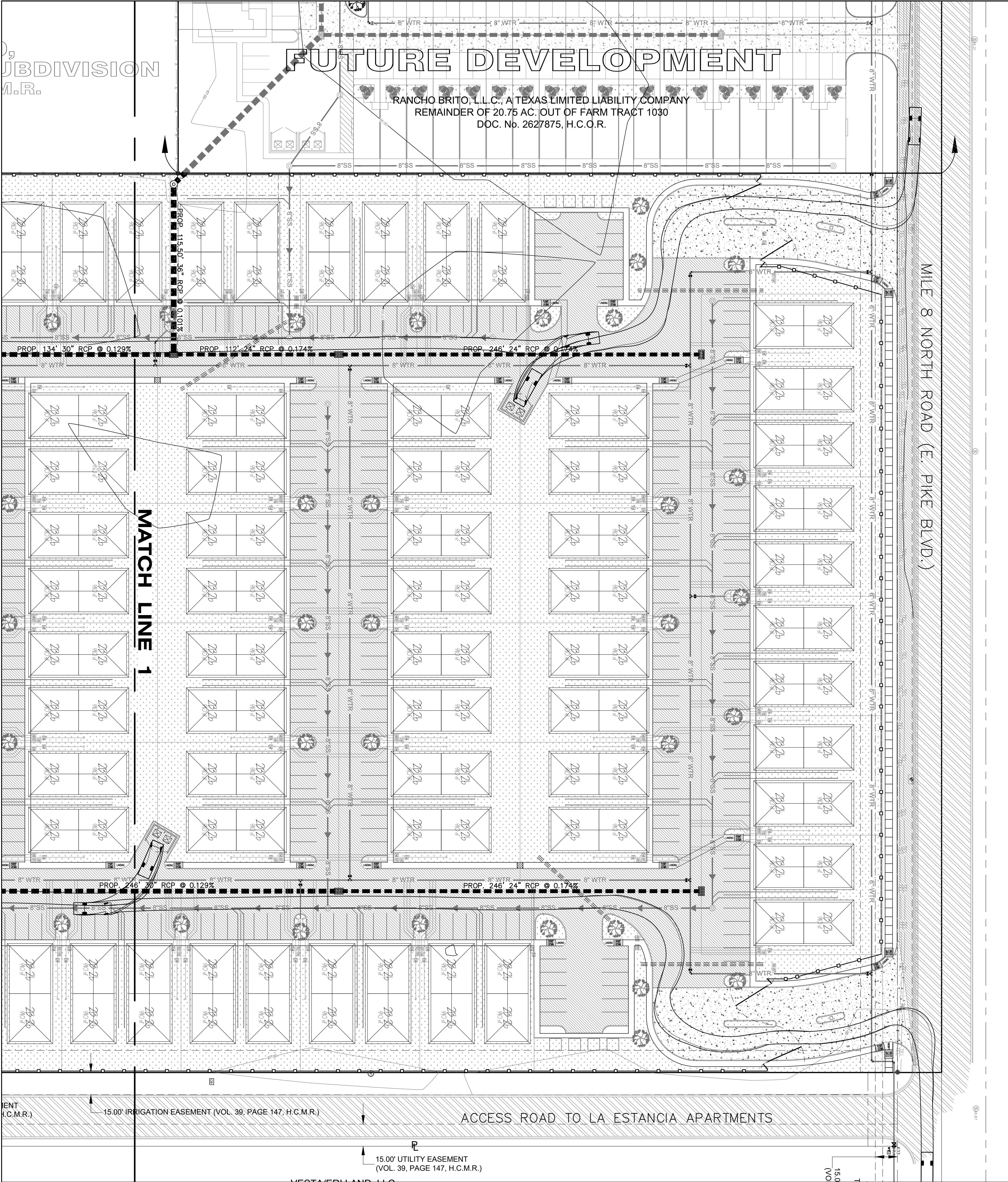
SHEET DESIGNATION:

WATER DISTRIBUTION SYSTEM & SANITARY SEWER COLLECTION SYSTEM

(2 of 3)

C8 of 24





PROJECT INFORMATION:

THE COVES

WESLACO, TEXAS

BEARING BASIS: NAD83 Texas State Planes, Central Zone, US Foot

GRAPHIC SCALE

0 30 45 60 90

1 inch = 30 ft.

CALL BEFORE YOU DIG!

PARTICIPANTS REQUEST 48 HOURS NOTICE, DRILL OR BLAST, STOP AND CALL, CONSTRUCTION

Know what's below. Call before you dig. 811

THE LONE STAR NOTIFICATION COMPANY AT 1-800-669-8344

SHEET HIGHLIGHTS/RESTRICTIONS

REV	DATE	DESCRIPTION

PREPARED BY:

DESIGN INFORMATION

Job Type

Job No.

Proj. Date

Designed/Drawn

Checked

Approved

12810034

CIVIL

MARCH 24, 2022

J. D'Z.

CARLOS GARCIA, P.E.

CARLOS GARCIA, P.E.

CARLOS GARCIA, P.E.

ADDRESS:

PHONE:

FAX:

WEB:

P.O. BOX 480 EDINBURG, TEXAS 78540

956 - 380 - 6558

956 - 380 - 6110

www.aecengineering.net

THE LONE STAR NOTIFICATION COMPANY

FOR REVIEW

WITHOUT PROPER NOTIFICATION TO THE OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

THE LONE STAR NOTIFICATION COMPANY

FOR REVIEW

WITHOUT PROPER NOTIFICATION TO THE OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

THE LONE STAR NOTIFICATION COMPANY

FOR REVIEW

WITHOUT PROPER NOTIFICATION TO THE OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

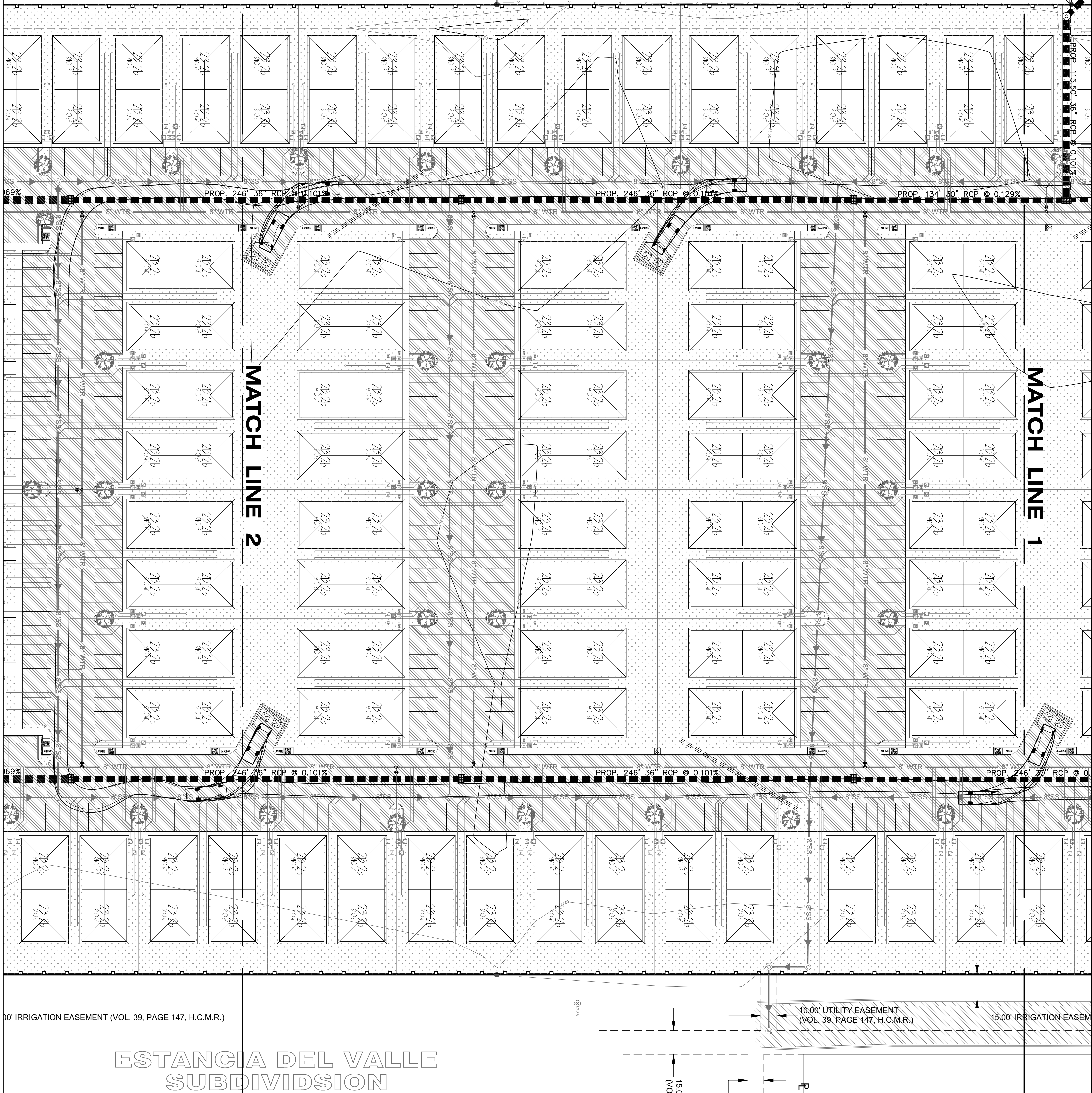
PAVING AND STORM DRAINAGE LAYOUT

(1 of 3)

C11 of 24

COLD TRANSLOADING, L.L.C.
REMAINDER OF 13.36 AC. OUT OF FARM TRACT 1030
DOC. No. 2918508, H.C.O.R.

TRIPLE J LEASING, L.L.C.
5.88 AC. OUT OF FARM TRACT 1030
DOC. No. 492348, H.C.O.R.



PROJECT INFORMATION:

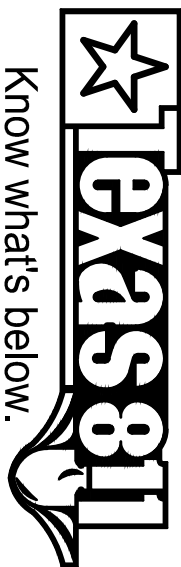
THE COVES

WESLACO, TEXAS

BEARING BASIS: NAD83 Texas State Planes,
Central Zone, US Foot



CALL BEFORE YOU DIG!



Know what's below.
Call before you dig.

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THE LONE STAR NOTIFICATION COMPANY
AT 1-800-669-8344

SHEET HIGHLIGHTS/RESTRICTIONS

[illegible]

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CARLOS GARZA P.E. #13456 ON: 03-24-2022

FOR REVIEW

REGISTRATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW



AEC ENGINEERING, LLC.
Agricultural * Environmental * Civil

A TEXAS REGISTERED ENGINEERING FIRM F-9688

PREPARED BY:	 AEC ENGINEERING <i>Agricultural * Environmental</i>
	A TEXAS REGISTERED ENGINEER
ADDRESS:	P.O. BOX 480 EDINBURG, TEXAS 78540
PHONE:	956 - 380 - 6558
FAX:	956 - 380 - 6110
WEB:	www.aecengineering.net

Approved	CARLOS GARZA, P.E.
PLAN SCALE: AS SHOWN	
PROJECT ADDRESS OR NEAREST INTERSECTION	

ROAD (E. PIKE BLVD.),
APPROXIMATELY 710 FEET EAST
OF INTERNATIONAL BLVD. (F.M.
1015.)

WESLACO
STATE

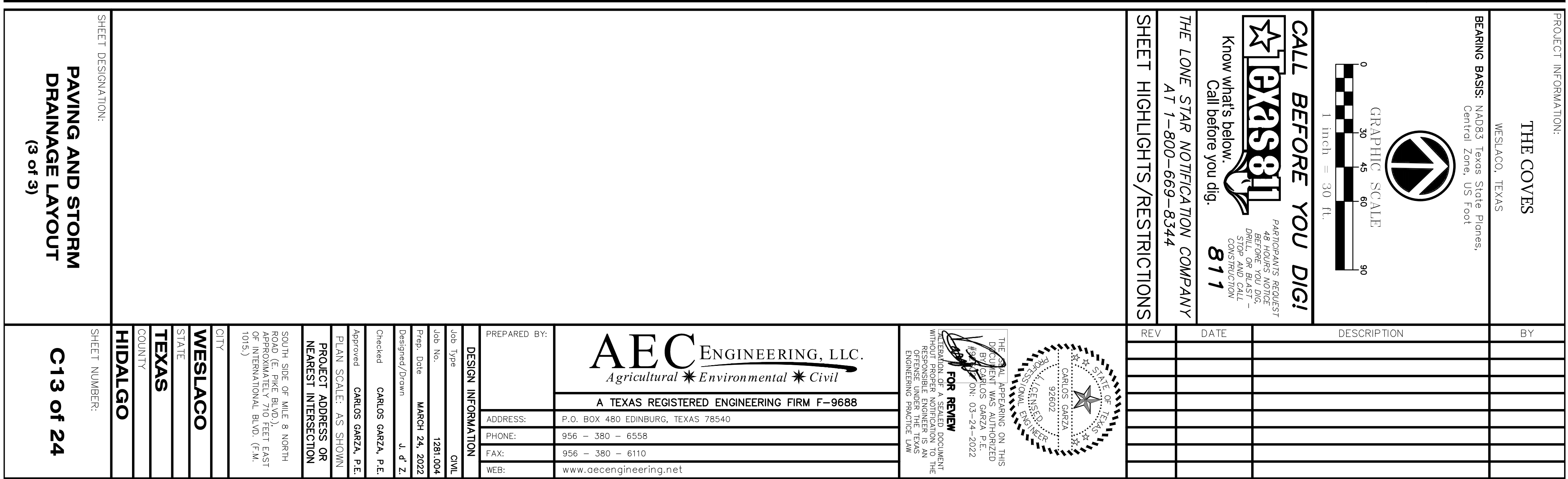
TEXAS

HIDALGO

SHEET DESIGNATION:

PAYING AND STORM DRAINAGE LAYOUT (2 of 3)

C12 of 24





**Planning & Zoning Commission
Standardized Agenda Request Form**

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.K.
From: Rebekah de la Fuente, Planning Director, on behalf of Melden & Hunt, Inc.	
Subject/Agenda Item: Discussion and consideration for six-month extension of the Final Plat for South Point Subdivision– being a resubdivision of 12.889 acres being all of lot 2 VBMH Subdivision, and out of Farm Tract 133, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located on between N Westgate Dr. and Border Ave. East Expressway 83. Possible action.	
Discussion/Overview: The proposed seven (7) lot subdivision is located inside the City of Weslaco. Six-month extension of Final Plat approval is set to expire on August 17, 2022.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of the six-month extension.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



TBPELS Firm # F-1435
TBPELS # 10096900

MELDEN & HUNT INC.

CONSULTANTS • ENGINEERS • SURVEYORS

MARIO A. REYNA • ALLAN F. BOOE • KELLEY A. HELLER-VELA • ROBERTO N. TAMEZ • RUBEN JAMES DE JESUS • MICHAEL HERNANDEZ

July 25, 2022

Rebekah De La Fuente, Planning Director
CITY OF WESLACO PLANNING DEPT.
255 South Kansas Ave.
Weslaco, TX 78596

Re: South Point – REQUEST FOR EXTENSION

Dear Ms. De La Fuente:

On behalf of the owner, Domain Development we are requesting a six-month extension on the above referenced subdivision plat. According to our records, the last approval was in June 2022. The owners are requesting an additional six-month time frame.

Your consideration on this request at your next board meeting is appreciated. If you have any questions and/or require additional information, please do not hesitate to contact me.

Respectfully,

Mario A. Reyna, P.E.
President

Cc: Domain Development



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: September 7, 2022	Agenda Item No. (to be assigned by PCE): V.L.
From: Rebekah de la Fuente, Planning Director, on behalf of Ivan Garcia P.E.	
Subject/Agenda Item: Discussion and consideration for the six-month extension of the Final Plat for Milanos Estates 1 Subdivision– being a 26.43 acres being out of and forming a portion of Farm Tract 720 and 721, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located on the Northeast corner of Mile 5 ½ West and Mile 6 ½ Road. Possible Action.	
Discussion/Overview: The proposed eighty-two (82) lot subdivision is outside the City of Weslaco. Final Plat approval is set to expire on September 15, 2022. This is the third 6-month extension for the development.	
If item requires Publication Notice, provide date and periodical of publication; indicate if comments received from letters mailed to property owners: N/A	
Staff recommendation for Commission's Action: Staff recommends approval of the six month extension.	
Additional Action Prompted: [X] Mayor's Signature [] Public Hearing [] Budget Amendment [] Resolution [] Ordinance – First Reading [] Ordinance – Final Reading	
Advisory Review, (if any): (name of board/committee, date of action, recommendation): N/A	
If item previously considered, provide date and action by Commission: N/A	
Attachments,(if any): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



RIO DELTA ENGINEERING
CIVIL ENGINEERING • PROJECT MANAGEMENT • LAND DEVELOPMENT
TEXAS REGISTERED ENGINEERING FIRM F-7628
TEXAS LICENSED SURVEYING FIRM #10194027

August 24, 2022

Rebekah de la Fuente, CFM
Planning & Code Enforcement Director
City of Weslaco
255 S. Kansas Avenue
Weslaco, TX 78596

Re: Milanos Estates Phase I Subdivision, request for 6 months extension

Dear Ms. De La Fuente,

As agents for the subdivision to be named "Milanos Estates Phase I Subdivision", we are requesting a 6-month extension to complete this subdivision due to construction and material delays specifically with the off-site sanitary sewer line extension from Mile 5 Road going north to and thru the subdivision. We found several unforeseen conditions such as very high-water table and unstable soil conditions that have slowed down drastically our construction operation and schedule. We foresee completing the construction of the remaining subdivision within the next 6 months.

Respectfully submitted,

Ivan Garcia P.E. R.P.L.S
Agent