

CITY OF WESLACO
A REGULAR MEETING OF THE
PLANNING & ZONING
COMMISSION
OCTOBER 6, 2021, 5:30 P.M.
PCE CONFERENCE ROOM
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
SEPTEMBER 1, 2021**

On Wednesday, September 1, 2021, 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:

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

Also, present were Jessie Valderas, Fire Inspector; Alberto Aldana, City Engineer; Rolando Gonzalez, Chief Building Official; and citizens.

I. CALL TO ORDER:

Vice-Chairman Berry called the meeting to order and welcomed everyone in the audience.

A. Roll Call/Establish a Quorum

Mrs. de la Fuente called the roll call noting that, Commissioner Forward, Bullion and Chairman Hernandez was absent at time of roll call, a quorum was established.

II. PUBLIC COMMENTS

There were no comments received.

III. APPROVAL OF MINUTES

A. August 11, 2021 Regular Meeting

Commissioner Summers made a motion to approve the minutes of August 11, 2021, seconded by Commissioner Treviño. Motion carried.

IV. Discussion and Consideration

A. Discussion and consideration for the Preliminary Plat for Weslaco Industrial Park – being a 146.09c.00-acre tract of land out of farm tract 1056, 1057and 1058, Block 116, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the Northeast corner of intersection Mile 9 & FM 1015. Possible Action.

Mrs. de la Fuente stated that this item is a twenty (20) 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 City of Weslaco services through a 10” sewer line. The property is within a Flood Zone “X”.

Commissioner Summers made the motion to approve the Preliminary plat with the noted changes, seconded by Commissioner Torres. Motion carried

B. Discussion and consideration for the Preliminary Plat for White Rose Subdivision– being a 4.644-acre tract of land out of Farm Tract 31, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 2000ft North of Intersection Frontage Road & Bridge Ave. Possible Action.

Mrs. de la Fuente 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 18” waterline and sewer by City of Weslaco services through an 8” 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, seconded by Commissioner Torres. Motion carried

C. Discussion and consideration for the Final Plat for Petra Garza Subdivision–being a 1.00-acre tract of land out of Farm Tract 131, Block 162, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the NW Corner of the intersection of N Border Ave and Valley Trace Drive. Possible Action

Mrs. de la Fuente 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 Company through a 12” waterline and sewer by City of Weslaco services through an 8” sewer line. The property is within a Flood Zone “X”.

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

D. Discussion and consideration for the for the Voluntary Annexation of Texas Road Subdivision – being West Tract E660’-N330’FT 109 & E660’-S660’FT 110 15.0 AC GR 13.63 AC net, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located 660’ south of Mile 10 North along East Side of F.M. 88. Possible Action.

Mrs. de la Fuente stated that this item is a twenty-five (25) lot subdivision and is outside the City of Weslaco city limits. This subdivision is being serviced with water by the City of Weslaco through an 8” waterline and sewer by OSSF. The property is within a Flood Zone “X”.

Commissioner Summers made the motion to approve the voluntary annexation, seconded by Commissioner Torres. Motion carried

E. Discussion and consideration for a six-month extension of the Final Plat for Airport Heights being 27.080-acre Tract of land of Farm Tract 21 & 22, Block 135, West and Adams Tract Subdivision, Hidalgo County, and Texas located approximately on the North corner of Airport and Business 83. Possible Action.

Mrs. de la Fuente stated that this item is a proposed fifty-two (52) lot subdivision and is inside the City of Weslaco city limits. Final Plat approval is set to expire on September 15, 2021. Staff recommended approval.

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

F. Discussion and consideration for a six-month extension of the Final Plat for Verona Subdivision– being 20 acres out of Farm Tract 1038, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 1800 ft. North of mile 8 on FM 1015. Possible Action.

Mrs. de la Fuente stated that this item is a proposed fifty (50) lot subdivision and is inside the City of Weslaco city limits. Final Plat approval is set to expire on September 15, 2021. Staff recommended approval.

Commissioner Summers made the motion to approve the six-month extension, seconded by Commissioner Treviño. Motion carried

V. ADJOURNMENT

There being no further business to come before the Planning and Zoning Commission, Vice-Chairman Berry adjourned the meeting at 5:55 p.m.

Planning and Zoning Commission

Absent

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, Planning Secretary

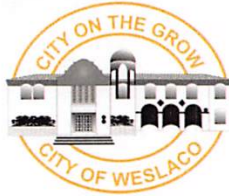


Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): IV. A.
From: Rebekah de la Fuente, Planning Director, on behalf of City of Weslaco.	
Subject/Agenda Item: Discussion and consideration to revoke Conditional Use Permit for a Mixed Beverage Permit, Mixed Beverage late hours permit and Beverage cartage Permit at 2307 W Interstate 2. Suite A, also being lot 4, Town center Subdivision Lots 2-9, Weslaco Original Townsite, Weslaco, Hidalgo County, Texas. Possible Action.	
Discussion/Overview: The applicant is requesting to revoke the Conditional Use Permit for the Mixed Beverage Permit, Mixed Beverage late hours permit and Beverage cartage Permit. Notice of the application and the public hearing for the Planning and Zoning Commission and the City Commission. Notice appeared in The Monitor on September 20, 2021. Six (6) property owners within 200 feet of the applicant's property were notified by letter on September 24, 2021.	
Staff recommendation for Commission's Action: Staff recommends approval to revoke the C.U.P.	
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.	

City of Weslaco

"The City on the Grow"



David Suarez, Mayor
Leo Muñoz, Mayor Pro-Tem, District 1
Greg Kerr, Commissioner, District 2
Jose "J.P." Rodriguez, Commissioner, District 3
Adrian Farias, Commissioner, District 4
Letty Lopez, Commissioner, District 5
Josh Pedraza, Commissioner, District 6

Mike R. Perez, City Manager

PLANNING DEPARTMENT

September 24, 2021

Legal Notice

Dear Occupant:

The Weslaco Planning and Zoning Commission will hold a public hearing on Wednesday, October 6, 2021 for the Planning and Zoning Commission and on or before October 20, 2021 at 5:30 p.m. at the City Hall Legislative Chambers located at 255 South Kansas Avenue to consider the following request:

REVOCATION OF CONDITIONAL USE PERMIT:

The City of Weslaco is requesting

To revoke a Conditional Use Permit for a On Premise Mixed Beverage Permit, Mixed Beverage late hours permit and Beverage cartage Permit at 2307 W Interstate 2. Suite A, also being Lot 4, Town Center Subdivision Lots 2-9, Weslaco, 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.

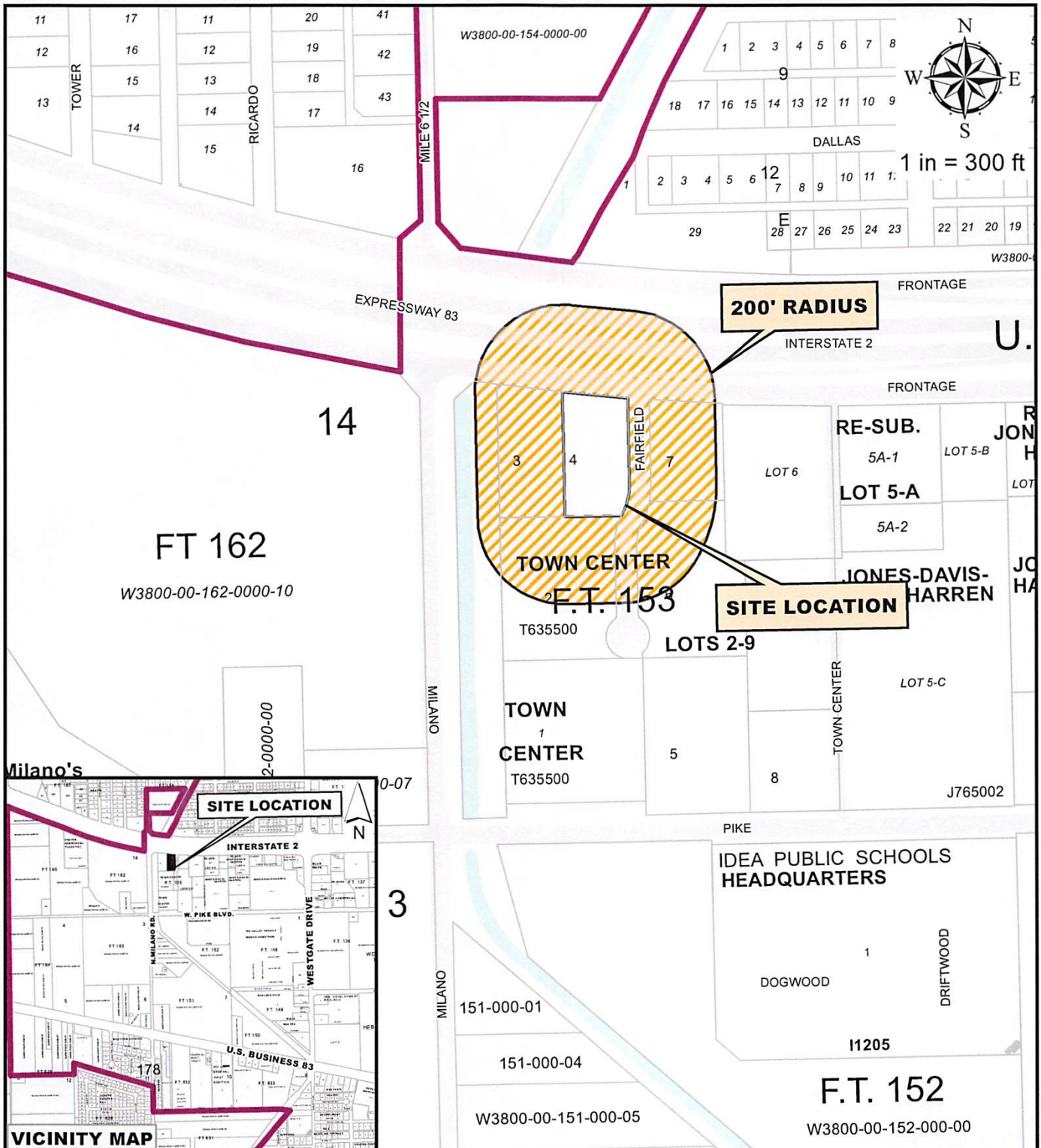
Sincerely,

Rebekah de la Fuente, CFM
Planning Director

Engineering

CITY OF WESLACO

Engineering



Raul H. Ugalde
2307 West Interstate 2, Ste. A
TOWN CENTER LOTS 2-9
LOT 15, BLOCK 179

Revocation of Conditional Use Permit

Existing zoning: B-2 Secondary & Highway District
Existing land use: Vacant
CUP: Wine and Beer Retailer



City of Weslaco Code Enforcement Dept.

MAY 21, 2020

CREATIVE HOTEL GROUP LLC 6301 S PADRE ISLAND DR CORPUS CHRISTI TX 78412-4013	T6355-00-000-0002-00 TOWN CENTER LOT 2 1005 FAIRFIELD BLVD	L: 433332 B: 1066688
JDH DEVELOPERS LTD 2300 W PIKE BLVD STE 300 WESLACO TX 78596-4128	T6355-00-000-0003-00 TOWN CENTER LOT 3 2309 EXPRWY 83	L: 606135 B: 0
MAYAN CAPITAL MARKETING LLC 610 MACO DR HARLINGEN TX 78550-8450	T6355-00-000-0004-00 TOWN CENTER LOT 4 2307 EXPRWY 83	L: 644905 B: 482262
KRISHNA VALLEY LLC 7118 CRESTA BULIVAR SAN ANTONIO TX 78256-2128	T6355-00-000-0006-00 TOWN CENTER LOT 6 1004 FAIRFIELD BLVD	L: 476718 B: 0
EGD PROPERTIES LLC 1100 TANGLEWOOD LN WESLACO TX 78596-3444	T6355-00-000-0007-00 TOWN CENTER LOT 7 2303	L: 593777 B: 540334
HIDALGO & CAMERON COUNTIES PO BOX 237 MERCEDES TX 78570-0237	W3800-00-153-0000-00 WEST TRACT 2.87AC BNG W120' FT 1 53 2.87AC NET 2300 W PIKE BLVD	L: 37505 B: 0

Sr. Mostacho Calls for Service					
Number	DateTime	Day	Hour	Value	Responding Agency
202000036350	11/16/20 2:31 AM	Monday	2	SUBJECT WITH GUN	WPD
202000036351	11/16/20 3:13 AM	Monday	3	PROPERTY DAMAGE	WPD
202000037409	11/27/20 3:02 AM	Friday	3	FIGHT IN PROGRESS	WPD
202100000112	1/2/21 2:17 AM	Saturday	2	FIELD CONTACT/INTERVIEW	WPD
202100001700	1/17/21 3:18 AM	Sunday	3	HIT AND RUN	WPD
202100003188	1/30/21 3:18 AM	Saturday	3	FIELD CONTACT/INTERVIEW	WPD
202100004058	2/8/21 1:33 AM	Monday	1	FIELD CONTACT/INTERVIEW	WPD
202100004485	2/13/21 2:36 AM	Saturday	2	NEEDING ADVICE	WPD
202100004717	2/16/21 8:19 AM	Tuesday	8	TRAFFIC STOP	WPD
202100005305	2/22/21 12:37 PM	Monday	12	THEFT	WPD
202100005881	2/27/21 11:59 PM	Saturday	23	FIELD CONTACT/INTERVIEW	WPD
202100007407	3/16/21 2:16 AM	Tuesday	2	OVERDOSE	WPD, WFD, WEMS
202100007409	3/16/21 2:16 AM	Tuesday	2	INTOXICATED SUBJECT	WPD
202100007555	3/17/21 11:12 PM	Wednesday	23	SUSPICIOUS SUBJECT	WPD
202100007664	3/19/21 2:24 AM	Friday	2	FIGHT IN PROGRESS	WPD
202100007873	3/21/21 11:05 AM	Sunday	11	FIELD CONTACT/INTERVIEW	WPD
202100007932	3/22/21 1:28 AM	Monday	1	ASSAULT	WPD
202100007936	3/22/21 1:28 AM	Monday	1	WANTED SUBJECTS (ALL WARRANTS)	WPD
202100008190	3/25/21 1:11 AM	Thursday	1	INTOXICATED SUBJECT	WPD
202100010129	4/15/21 2:33 AM	Thursday	2	ASSAULT	WPD
202100010232	4/16/21 2:15 AM	Friday	2	THEFT	WPD
202100011578	4/26/21 1:29 AM	Monday	1	UNWANTED SUBJECT	WPD
202100012459	5/3/21 1:52 AM	Monday	1	FIGHT IN PROGRESS	WPD
202100012886	5/6/21 1:12 PM	Thursday	13	BAR CHECK	WPD
202100013259	5/9/21 1:59 AM	Sunday	1	VERBAL DISPUTE	WPD
202100013846	5/13/21 2:04 AM	Thursday	2	FIELD CONTACT/INTERVIEW	WPD
202100014112	5/15/21 2:02 AM	Saturday	2	CRIMINAL MISCHIEF	WPD
202100015187	5/24/21 12:42 AM	Monday	0	LOUD MUSIC	WPD
202100015191	5/24/21 1:10 AM	Monday	1	CRIMINAL MISCHIEF	WPD
202100017126	6/7/21 2:22 AM	Monday	2	LOUD MUSIC	WPD
202100017463	6/10/21 12:34 AM	Thursday	0	UNWANTED SUBJECT	WPD
202100019346	6/25/21 2:23 AM	Friday	2	UNWANTED SUBJECT	WPD
202100022629	7/23/21 2:17 AM	Friday	2	DISORDERLY CONDUCT	WPD
202100022945	7/25/21 12:10 AM	Sunday	0	TRAFFIC STOP	WPD
202100023252	7/27/21 8:00 PM	Tuesday	20	VERBAL DISPUTE	WPD
202100024397	8/9/21 12:39 AM	Monday	0	LOUD MUSIC	WPD
202100024406	8/9/21 2:23 AM	Monday	2	FIGHT IN PROGRESS	WPD, WFD, WEMS
202100024407	8/9/21 2:23 AM	Monday	2	INTOXICATED SUBJECT	WPD
202100024776	8/13/21 1:01 AM	Friday	1	LOST/FOUND PROPERTY	WPD
202100024782	8/13/21 2:40 AM	Friday	2	FIELD CONTACT/INTERVIEW	WPD
202100024936	8/15/21 12:36 AM	Sunday	0	INTOXICATED SUBJECT	WPD
202100024946	8/15/21 12:36 AM	Sunday	0	INTOXICATED SUBJECT	WPD
202100025041	8/16/21 1:39 AM	Monday	1	FIELD CONTACT/INTERVIEW	WPD
202100025294	8/19/21 2:05 AM	Thursday	2	FIELD CONTACT/INTERVIEW	WPD
202100025592	8/23/21 1:15 AM	Monday	1	THEFT	WPD
202100025911	8/27/21 12:36 AM	Friday	0	FIELD CONTACT/INTERVIEW	WPD
202100026007	8/28/21 1:55 AM	Saturday	1	FIELD CONTACT/INTERVIEW	WPD
202100026784	9/5/21 11:25 PM	Sunday	23	SHOTS FIRED	WPD



Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.A.
From: Rebekah de la Fuente, Planning Director, on behalf of Alfonso Quintanilla.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Pastor Estates No. 2 Subdivision—being a 2.734 acre tract of land being all of lot 4 Pastor Estates No. 2, Weslaco, Hidalgo County, Texas Located approximately on Mile 4 ½ West Road 3,690 ft North of Mile 10 North Road. Possible Action.	
Discussion/Overview: The proposed two (2) lot subdivision is located outside the City of Weslaco. This subdivision is being serviced with water by the North Alamo Water Supply Company through an 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

PIAT-000122-2021

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: Replat of Lot 4, Pastor Estates No. 2

Location: Mile 4 1/2 West Road 3,690 feet north of Mile 10 North Road

Legal Description: Lot 4, Pastor Estates No. 2, an addition to the City of Weslaco, 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: N/A

Existing Land Use: Residential Proposed Land Use: Residential

Number of Lots Proposed: 2 Gross Acreage: 2.734

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: Arnulfo Alaniz Telephone: _____

Address: P.O. Box 549 Fax: _____

City: Elsa State: TX Zip: 78543 E-mail: _____

ENGINEER INFORMATION

Name: Quintanilla, Headley & Associates, Inc. Telephone: (956) 381-6480

Address: 124 E. Stubbs St. Fax: _____

City: Edinburg State: TX Zip: 78539 E-mail: alfonsoq@qha-eng.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
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Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District No. 1 _____	☒ YES ☐ NO Irrigation District No. 9 _____
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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 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:  _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature: _____ Date: _____

Authorized Agent Printed Name: _____

THIS PAGE FOR STAFF USE ONLY

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

P & Z Commission Approval on Preliminary Plat: _____

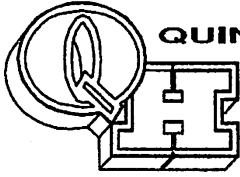
P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



QUINTANILLA, HEADLEY AND ASSOCIATES, INC.

Consulting Engineers ★ Land Surveyors

Alfonso Quintanilla, P.E. # 95534 R.P.L.S #4856 Eulalio Ramirez, P.E. # 77062
Engineering Firm Registration No. F-1513
Surveying Firm Registration No. 100411-00
Municipal & County Projects ★ Subdivisions ★ Surveys

**DRAINAGE REPORT
FOR
REPLAT OF LOT 4, PASTOR ESTATES No.2**

This 2.734 acre tract is a Replat of Lot 4, Pastor Estates No.2, Hidalgo County, Texas, according to the map or plat thereof recorded in Volume 43, Page 109, map records, Hidalgo County, Texas, and according to warranty deed with vendor's lien recorded under County Clerk's Document Number 1295320, official records, Hidalgo County, Texas. This subdivision is located on the east side of Mile 4 1/2 West Road about half mile north of Mile 10 North Road. The proposed subdivision consists of 2 residential lots.

The tract is Zone "X" as per FEMA Flood Insurance Rate Map; Community Panel No. 480334 0450 C, and dated June 6, 2000 and revised LOMR dated May 30, 2002.

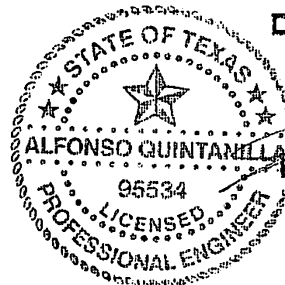
This soil is sandy clay loam. This soil is well drained. Permeability is moderate. Plasticity Index has a range of 11-23. See attached Soil Survey of Hidalgo County, Texas tables.

Presently, the site has very minimal runoff on a westerly direction. The existing runoff for the proposed subdivision is $Q = 1.19$ cubic feet per second based on a 10-year storm. The runoff along Mile 4 1/2 West Road flows northerly and outfalls into an existing H.C.D.D. No.1 drain ditch located 736.0 feet north.

After development the runoff will be $Q = 4.36$ cubic feet per second for an increase of $Q = 3.17$ cubic feet per second. Detention will be 6,829.87 cubic feet (0.16 acre feet) and will be accomplished on an existing 20.00 foot drainage swale along the east side of the lot.

Drainage calculations are attached.

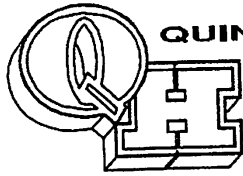
Alfonso Quintanilla, P.E.
April 15, 2014



- ☐ REJECTED
- ☒ APPROVED FOR SUBMITTAL
TO H.C. PLANNING DEPT.
- ☐ DISCHARGE PERMIT REQUIRED
- ☐ DISTRICT FACILITY
- ☐ CITY FACILITY
- ☐ OTHER

H.C.D.D. NO. 1

04/16/14
DATE



QUINTANILLA, HEADLEY AND ASSOCIATES, INC.

Consulting Engineers ★ Land Surveyors
Alfonso Quintanilla, P.E. # 95534 R.P.L.S #4856 Eulalio Ramirez, P.E. # 77062
Engineering Firm Registration No. F-1513
Surveying Firm Registration No. 100411-00
Municipal & County Projects ★ Subdivisions ★ Surveys

**DRAINAGE REPORT
FOR
REPLAT OF LOT 4, PASTOR ESTATES No.2**

This 2.734 acre tract is a Replat of Lot 4, Pastor Estates No.2, Hidalgo County, Texas, according to the map or plat thereof recorded in Volume 43, Page 109, map records, Hidalgo County, Texas, and according to warranty deed with vendor's lien recorded under County Clerk's Document Number 1295320, official records, Hidalgo County, Texas. This subdivision is located on the east side of Mile 4 1/2 West Road about half mile north of Mile 10 North Road. The proposed subdivision consists of 2 residential lots.

The tract is Zone "X" as per FEMA Flood Insurance Rate Map; Community Panel No. 480334 0450 C, and dated June 6, 2000 and revised LOMR dated May 30, 2002.

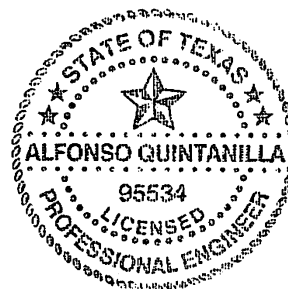
This soil is sandy clay loam. This soil is well drained. Permeability is moderate. Plasticity Index has a range of 11-23. See attached Soil Survey of Hidalgo County, Texas tables.

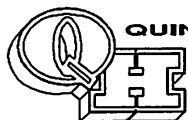
Presently, the site has very minimal runoff on a westerly direction. The existing runoff for the proposed subdivision is $Q = 1.19$ cubic feet per second based on a 10-year storm. The runoff along Mile 4 1/2 West Road flows northerly and outfalls into an existing H.C.D.D. No.1 drain ditch located 736.0 feet north.

After development the runoff will be $Q = 4.36$ cubic feet per second for an increase of $Q = 3.17$ cubic feet per second. Detention will be 6,829.87 cubic feet (0.16 acre feet) and will be accomplished on an existing 20.00 foot drainage swale along the east side of the lot.

Drainage calculations are attached.

Alfonso Quintanilla, P.E.
April 15, 2014





QUINTANILLA, HEADLEY AND ASSOCIATES, INC.

Consulting Engineers ★ Land Surveyors
Alfonso Quintanilla, P.E. # 95534 R.P.L.S. #4856 Eulalio Ramirez, P.E. # 77062
Engineering Firm Registration No. F-1513
Surveying Firm Registration No. 100411-00
124 E. Stubbs St. Edinburg, Texas 78539
Phone: (956) 381-6480 Fax (956) 381-0527

Replat of Lot 4, Pastor Estates No.2

EXISTING:

Area = 2.73 acres
V = 0.15
D = 630.00 Ft
c = 0.15

$t = D / V(3600)$
t = 1.17 Hrs = 70.00 min

From Rainfall Intensity Curve: i = 2.90

Q = ciA
Q = 1.19 cfs

FUTURE:

Area = 2.73 Acres
V = 0.30
D = 630.00 Ft
c = 0.35

$t = D / V(3600)$
t = 0.58 Hrs = 35.00 min

From Rainfall Intensity Curve: i = 4.56

Q = ciA
Q = 4.36 cfs

t (hr)	i (in/hr)	Qfut (cfs)	Vfut (cf)	Qext (cfs)	Vext (cf)	Vfut - Vext (cf)
0.25	7.29	6.97	6269.04	1.19	1068.58	5200.45
0.50	5.01	4.79	8616.70	1.19	2137.16	6479.54
0.75	3.89	3.72	10035.62	1.19	3205.74	6829.87
1.00	3.22	3.08	11076.16	1.19	4274.32	6801.83
1.25	2.76	2.64	11867.31	1.19	5342.91	6524.40
1.50	2.43	2.32	12538.07	1.19	6411.49	6126.58
2.00	2.00	1.91	13759.20	1.19	8548.65	5210.55
3.00	1.43	1.37	14756.74	1.19	12822.97	1933.77

PEAK VOLUME = 6829.87 cf
Peak Volume = 0.16 Ac-ft

Appendix 1.0 HIDALGO COUNTY RAINFALL INTENSITY TABLES

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

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

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

REPLAT OF LOT 4,
PASTOR ESTATES No. 2

Appendix I.0 (cont.)
HIDALGO COUNTY RAINFALL INTENSITY TABLES (cont.)

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

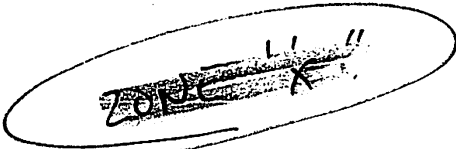
$$\text{formula } I = b/(c+d)^e$$

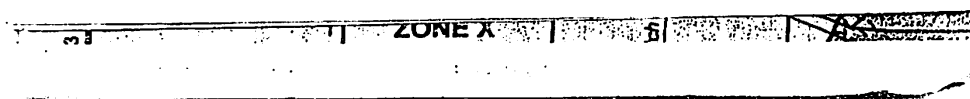
TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
115	1.342	1.731	2.043	2.380	2.674	2.898
120	1.299	1.677	1.981	2.309	2.596	2.815
125	1.259	1.628	1.924	2.242	2.523	2.737
130	1.221	1.581	1.870	2.180	2.455	2.665
135	1.186	1.537	1.819	2.122	2.391	2.596
140	1.153	1.496	1.771	2.067	2.331	2.532
145	1.122	1.457	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

NATIONAL FLOOD INSURANCE PROGRAM	PANEL 0450 C
	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
	 REVISED TO REFLECT LOMR DATED MAY 30 2002
	Federal Emergency Management Agency



[illegible]

SOIL MAP

HIDALGO COUNTY, TE



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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 Pct	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-----										
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	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-----										
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:*										
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	90-100	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	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.

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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]

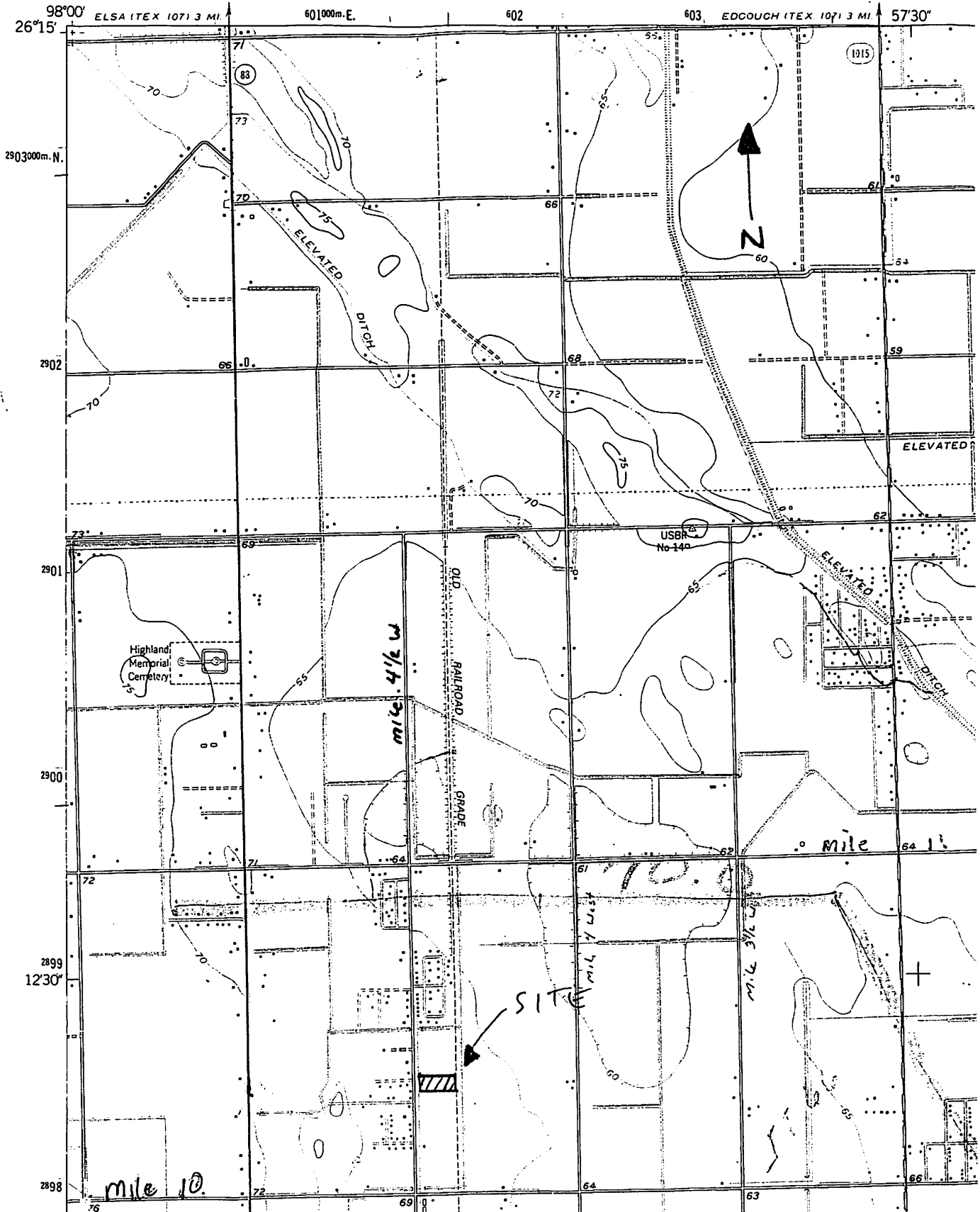
Map symbol and soil name	Hydro-logic group	Flooding			High water table			Cemented pan		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness	Uncoated steel	Concrete
1.* Arents					<u>Ft</u>			<u>In</u>			
2----- Benito	D	Occasional	Long-----	Sep-May	4.0-6.0	Apparent	Sep-May	---	---	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-----	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.

WEST

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

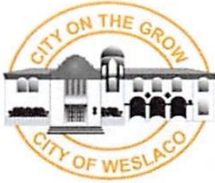
QUAD MAP





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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.B.
From: Rebekah de la Fuente, Planning Director, on behalf of Melden & Hunt, Inc.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Sugarcane Estates Subdivision– being a 5.963 acre tract of Farm Tract 141, The Wes and Adams Tracts Subdivision, Weslaco, Hidalgo County, Texas Located approximately on Mireles Road &W Sugarcane Drive. Possible Action.	
Discussion/Overview: The proposed thirty-three (33) 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 a 12” sewer line. The property is within a Flood Zone “X”. Applicant is requesting a variance for lot size and required right of way width.	
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 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

Plat-000118-2021

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: SUGARCANE ESTATES

Location: Mireles Street & W. Sugarcane Dr.

Legal Description: Resubdivision of 5.963 acres being a part or portion out of Farm Tract 141, West & Adams
Tracts 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: R-2

Existing Land Use: Open Proposed Land Use: Single Family Residential

Number of Lots Proposed: 33 Gross Acreage: 5.963

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: Ammo Construction, LLC Telephone: c/o (956) 381-0981

Address: 317 S. Main Street Fax: c/o (956) 381-1839

City: McAllen State: TX Zip: 78541 E-mail: c/o mario@meldenandhunt.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

UTILITY PROVISIONS

Will proposed subdivision connect to:

- ☒ YES ☐ NO Water Provision: City of Weslaco
- ☒ YES ☐ NO Wastewater Provision: City of Weslaco
- ☒ YES ☐ NO Electric Company: MVEC

☒ YES ☐ NO Phone Utility <u>Frontier Comm.</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 <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
- 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)

- X 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
- X \$350.00 (one time fee for preliminary and final plat)
- X One 11" X 17" reduced copy of plat
- X Plat Layout
- X Existing & Proposed Easements
- X Existing & Proposed ROW
- X Existing & Proposed Drainage Easements

- ☒ Contours
- ☒ Flood Zones
- ☒ Adjoiners
- ☒ Existing & Proposed street names
- ☒ Utility Layout
- ☒ Existing & Proposed Utilities
- ☒ Proposed Fire Hydrants
- ☒ Adjoiners
- ☒ Pend. Street names
- ☒ Drainage plans and calculations with engineer's seal
- ☒ Elevations
- ☒ Flood directional arrows
- ☒ Detention areas
- ☒ Pend. Street names
- ☐ N/A 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
- ☒ 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:  Digitally signed by Mario A. Reyna
DN: CN = Mario A. Reyna email = mario@melderandhunt.com C = US O
= Melder and Hunt Inc OU = PE
Date: 2021.09.27 16:08:14 -0600 Date: 9/27/21

Authorized Agent Printed Name: Mario A. Reyna, 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

VAR-000119-2021

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: Sugarcane Estates

Location: Mireles Street & W. Sugar Cane Dr

Legal Description: Resubdivision of 5.963 acres being a part or portion o/o Farm Tract 141 West & Adams Tract 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:

☐ 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:

Lot area will be 5,000 than the required 6,000

☐ 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 40' Road ☒ YES ☐ NO

Describe in detail the reason for the variance request:

Proposing a 40' Road instead of a 50' Road

OWNER INFORMATION

Owner's Name: Ammo Construction, LLC Telephone: c/o 381-0981

Address: 317 S. Main Street Fax: c/o 381-1839

City: McAllen State: TX Zip: 78501 E-mail: c/o mario@meldenandhunt.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: _____

Mario A. Reyna, P.E. is the authorized agent

Authorized Agent Signature: _____ Date: 8/4/21

Authorized Agent Printed Name: Mario A. Reyna



Rio Grande Valley Emergency Communication District

Sheriff J. E. "Eddie" Guerra, Hidalgo County Sheriff..... President
Mayor Gilbert Gonzales, Raymondville Vice President
Mayor David Suarez, Weslaco.....Secretary
Mayor Pro-Tem Joaquin "J.J." Zamora, McAllen..... Treasurer

September 30, 2021

RGV9-1-1 BOARD OF MANAGERS

Arturo Galvan Jr.
Mayor Pro Tem, Alton

Richard Molina
Mayor, Edinburg

Alonzo "AL" Perez Jr
Mayor, Elsa

Yvette Cabrera
Mayor, Granjeno

Oscar D. Montoya
Mayor, Mercedes

Rodrigo "Rigo" Lopez
Mayor, Penitas

Alma D. Salinas
Mayor, Sullivan City

Lydia Flores, Administrative Assistant
Melden & Hunt, Inc
115 McIntyre St
Edinburg, TX 78578541

The RGVECD 9-1-1 Dept. acknowledges the
notification on the following **PROPOSED NAMES:**

**STEVIA DR
TRUVIA LN**

to be part of **SUGARCANE ESTATES** in the Weslaco community.

A query was done on the state 9-1-1 database and found no conflict for
the proposed names to be used.

ACKNOWLEDGED ON: September 30, 2021
RESEARCHED BY: Savannah Arredondo
TITLE: Customer Service Representative II

STAFF:

EXECUTIVE DIRECTOR
Manuel "Manny" Cruz

DIRECTOR OF PUBLIC SAFETY
Randall Snyder

RGV9-1-1 DISTRICT OFFICE: 1912 Joe Stephens Ave. *Weslaco, TX 78599 TEL: (956) 682-3481 Ext. 174

ADMINISTRATIVE AGENT: LRGVDC MAIN OFFICE * 301 W. Railroad ST.* Weslaco, TX * 78596 * TEL: (956) 682-3481
TTY FOR HEARING IMPAIRED: 1-800-735-2989 WEBSITE: www.lrgvdc911.org

FIRM NAME: MELDEN & HUNT, INC.
TBPELS FIRM #F1435
TITLE: SUGARCANE ESTATES SUBDIVISION
PREPARED BY: MARIO A. REYNA, P.E
DATE: July 29, 2021

Mari *7-29-21*



INDEX

- 1. Drainage Statement**
- 2. Drainage Calculations**
- 3. Location Map**
- 4. Subdivision Plat**
- 5. Paving & Drainage Layout**
- 6. USGS Topographical Map**
- 7. Rainfall Intensity Table**
- 8. USDA Soils Map**
- 9. USDA Soils Legend & Description**
- 10. FEMA FIRM with site location**



TBPELS Firm # F-1435
TBPELS # 10096900

MELDEN & HUNT INC.

CONSULTANTS • ENGINEERS • SURVEYORS

FRED L. KURTH • ALLAN F. BOOE • KELLEY A. HELLER-VELA • ROBERTO N. TAMEZ • MARIO A. REYNA • RUBEN JAMES DE JESUS

Drainage Statement
SUGARCANE ESTATES SUBDIVISION
Project #20220.00 Date: June 29, 2021

SUGARCANE ESTATES SUBDIVISION A tract of land containing 5.963 acres situated in the City of Weslaco, County of Hidalgo, Texas, being a part or portion out of Farm Tract 141, The West and Adams Tracts Subdivision, according to the plat thereof recorded in Volume 2, Pages 34-37, Hidalgo County Map Records, said 5.963 acres were conveyed to Ammo Construction, LLC by virtue of a Warranty Deed recorded under Document Number 3196641, Hidalgo County Official Records. This subdivision lies in Zone "X" (Unshaded), which is defined as areas determined to be outside 500-year floodplain. Community Panel No. 480334 0450 C; Map Revised: June 6, 2000. The property is located on the northeast corner of Mireles Street & W. Sugar Cane Drive. The property is currently open with a proposed use of 33 residential lots and 2 detention ponds, currently inside the City of Weslaco, Texas.

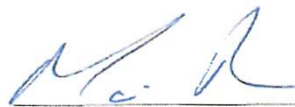
The soils in this area are (25) Hidalgo fine sandy loam and (28) Hidalgo sandy clay & (48) Racombes sandy clay, which are in Hydrologic Group "B". These soils are moderately pervious and have a relatively low plasticity index. (See excerpts from "Soil Survey of Hidalgo County, Texas").

Existing runoff is in a northeasterly direction, with a runoff of 4.38 c.f.s. during the 10-year storm frequency as per the attached calculations. Proposed runoff after development is 15.35 c.f.s., during the 50-year storm frequency, per the attached calculation, which is an increase of 10.97 c.f.s.

The proposed drainage for this subdivision shall consist of surface runoff from the lots into the proposed streets and collected by type "A" inlets located at key points within the subdivision. The pipe size diameters shall range from 24" to 36". The proposed storm system shall discharge into a proposed detention pond on the southeast corner of site, which will then discharge into and existing City of Weslaco storm sewer network.

In accordance with the City of Weslaco drainage policy, the peak rate of runoff in this subdivision will not be increased during the 50-year rainfall event due to the building of this subdivision. Therefore, as per attached calculations the required 36,032 cubic feet of detention will be provided within the proposed detention pond.

☐ REJECTED	
☒ APPROVED FOR SUBMITTAL	
☐ TO H.C. PLANNING DEPT.	
☒ TO CITY	
☒ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☒ CITY FACILITY	
☐ OTHER	
<i>Hector Garcia</i>	<i>8/11/21</i>
H.C.D.D. NO. 1	DATE



Mario A. Reyna, P.E. #117368



Date:

DRAINAGE REPORT

PROJECT NAME: **SUGARCANE ESTATES SUBDIVISION**
PROJECT NUMBER: **20220.00**
DATE: **July 29, 2021**

I. Existing Condition-10 year

Ex. Area: **259,748.28** sf
5.96 ac
Imp. Area: **-** sf
% Imp. : 0.00
Slope : **0.15** %
tc : 49.28 min
Rainfall Intensity (10yr) 3.671 in/hr
c factor 0.200
Q peak existing condition: 4.38 cfs

Int. Coeff. "k" **0.213** Table 3-2
K_p 3.28
Length **800** ft
Velocity 0.270582 ft/sec

II. Future Condition-50 year

Future area: 259,748.28 sf
5.96 ac
Estimated Imp. Area: **133,829** sf
% Imp. : 0.52
Slope : 15.00%
tc : **45.00** min
Rainfall Intensity (50yr) 4.976 in/hr
c factor 0.517
Q future cond. = Aci = i * = 15.35 * 0.52
3.08421361 i

time min.	time hour	i in/hr	Q _{in} cfs	V _{in} cf	Q _{out} cfs	V _{out} cf	REQ'D V cf
5	0.08	13.57	41.85	12556	4.38	6567	5988
10	0.17	10.83	33.39	20032	4.38	7224	12808
15	0.25	9.10	28.07	25265	4.38	7881	17384
20	0.33	7.91	24.39	29268	4.38	8538	20730
25	0.42	7.03	21.67	32500	4.38	9194	23306
30	0.50	6.34	19.56	35214	4.38	9851	25363
35	0.58	5.80	17.88	37546	4.38	10508	27038
40	0.67	5.35	16.50	39601	4.38	11165	28437
60	1.00	4.14	12.78	46012	4.38	13792	32220
90	1.50	3.16	9.76	52696	4.38	17732	34964
100	1.67	2.94	9.08	54480	4.38	19045	35434
125	2.08	2.52	7.78	58361	4.38	22329	36032
150	2.00	2.22	6.85	61623	4.38	25613	36010
180	3.00	1.95	6.02	64987	4.38	29553	35434
195	3.25	1.84	5.68	66469	4.38	31524	34946

Storage Required: 36,032 cf
Storage Required: 0.827 Ac.-Ft.
w/ release rate of: 4.38 cfs
Storage / Ac. Development: 0.139 Ac.Ft. per Ac.



H.C.D.D. No. 1 "c" values for Rational Method	
Type of Drainage Area	Runoff Coefficient "c"
Residential	
Single Family (Lots less than 1/4 acre)	0.35
Single Family (Lots 1/4 to 1/2 acre)	0.3
Single Family (Lots greater than 1/2 acre)	0.25
Multi-Family (Less than 20 DU / AC)	0.45
Multi-Family (Greater than 20 DU / AC)	0.55
Business Districts:	0.7
Industrial	
Light areas	0.5
Heavy areas	0.6
Railroad yard areas	0.2
Parks, cemeteries	0.1
Unimproved Areas	
Bare Surface	0.3
Grassland	0.25
Cultivated	0.2
Woodlands	0.15
Streets	
Asphalt	0.7
Concrete	0.75
Drives and walks	0.75

$$C_w = (C_1 A_1 + C_2 A_2 + C_3 A_3 + \dots + C_n A_n) / A_{total}$$

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)

Weighted "c" value				
Type of Drainage Area	"c" value:	Square Footage	Acreage	partial "c"
Residential				
Single Family (Lots less than 1/4 acre)	0.5	180773	4.150	2.075
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)	0.45	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	45193	1.037	0.311
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	32607	0.749	0.674
Concrete	0.9	0	0.000	0.000
Drives and walks	0.9	1175	0.027	0.024
Total:		259,748	5.963	3.084
Weighted "c":			0.517	

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

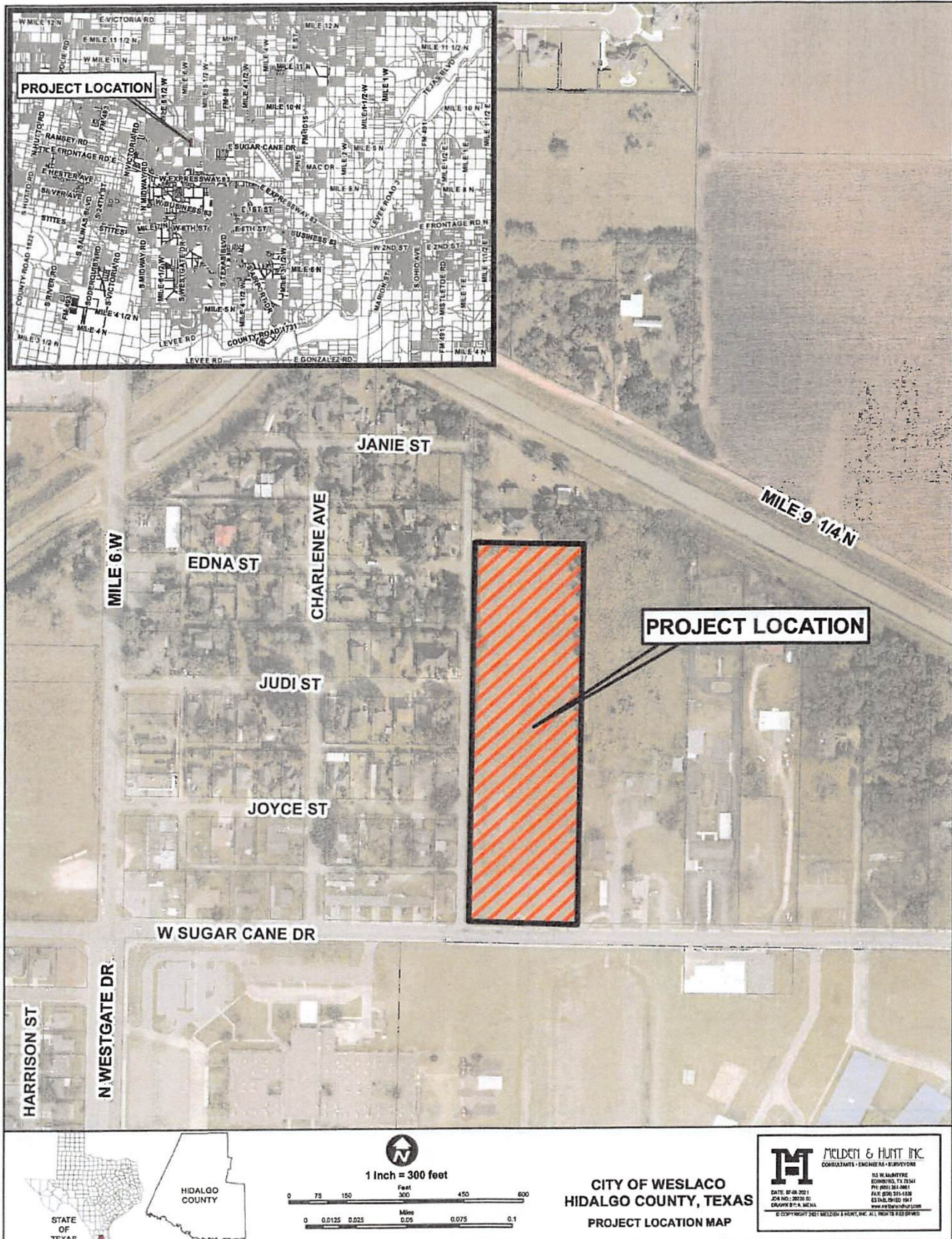
C_W = Weighted Runoff Coefficient (Composite Coefficient)

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"

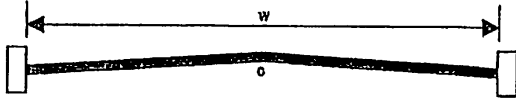
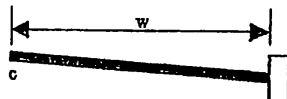
TIME	5 yr.	10 yr.	25 yr.	50 yr.	TIME	5 yr.	10 yr.	25 yr.	50 yr.
1	12.626	14.283	16.353	17.386	36	3.866	4.486	5.189	5.701
2	11.721	13.281	15.215	16.210	37	3.799	4.410	5.103	5.608
3	10.950	12.426	14.244	15.204	38	3.735	4.337	5.019	5.519
4	10.286	11.687	13.405	14.333	39	3.673	4.267	4.939	5.433
5	9.706	11.042	12.671	13.570	40	3.614	4.199	4.861	5.350
6	9.194	10.472	12.023	12.895	41	3.557	4.134	4.786	5.270
7	8.740	9.966	11.447	12.294	42	3.501	4.071	4.714	5.193
8	8.334	9.512	10.930	11.755	43	3.448	4.010	4.644	5.118
9	7.968	9.103	10.464	11.268	44	3.396	3.951	4.577	5.046
10	7.636	8.732	10.042	10.825	45	3.346	3.895	4.511	4.976
11	7.334	8.394	9.656	10.421	46	3.298	3.840	4.448	4.908
12	7.058	8.084	9.303	10.051	47	3.251	3.786	4.387	4.843
13	6.804	7.799	8.978	9.710	48	3.206	3.735	4.328	4.779
14	6.569	7.536	8.678	9.395	49	3.162	3.685	4.270	4.717
15	6.353	7.293	8.400	9.102	50	3.120	3.636	4.215	4.658
16	6.151	7.067	8.142	8.831	51	3.078	3.589	4.161	4.600
17	5.964	6.856	7.902	8.577	52	3.038	3.543	4.108	4.543
18	5.789	6.659	7.677	8.340	53	2.999	3.499	4.057	4.488
19	5.625	6.475	7.466	8.117	54	2.962	3.456	4.007	4.435
20	5.472	6.302	7.268	7.908	55	2.925	3.414	3.959	4.383
21	5.327	6.139	7.082	7.711	56	2.889	3.373	3.912	4.333
22	5.191	5.985	6.906	7.525	57	2.854	3.333	3.867	4.284
23	5.062	5.840	6.740	7.349	58	2.821	3.295	3.822	4.236
24	4.941	5.703	6.583	7.183	59	2.788	3.257	3.779	4.189
25	4.825	5.572	6.434	7.025	60	2.756	3.220	3.737	4.144
26	4.716	5.449	6.293	6.875	61	2.724	3.185	3.696	4.099
27	4.612	5.331	6.158	6.732	62	2.694	3.150	3.656	4.056
28	4.513	5.220	6.030	6.596	63	2.664	3.116	3.617	4.014
29	4.419	5.113	5.908	6.467	64	2.635	3.083	3.578	3.973
30	4.329	5.011	5.792	6.343	65	2.607	3.050	3.541	3.933
31	4.244	4.914	5.680	6.224	66	2.579	3.019	3.505	3.894
32	4.161	4.821	5.574	6.111	67	2.552	2.988	3.469	3.855
33	4.083	4.732	5.472	6.002	68	2.526	2.958	3.435	3.818
34	4.008	4.646	5.374	5.897	69	2.500	2.928	3.401	3.781
35	3.935	4.564	5.280	5.797	70	2.475	2.899	3.368	3.745

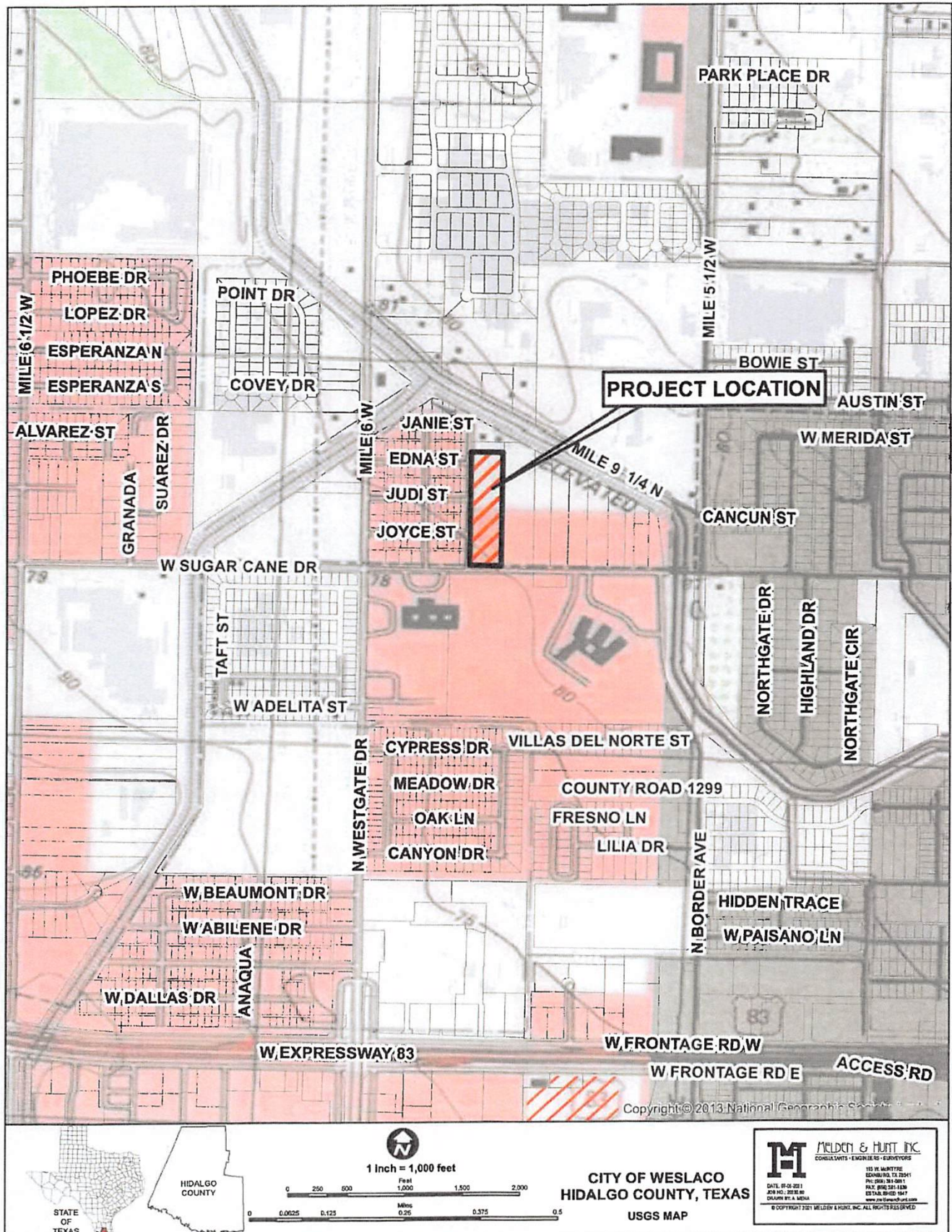
HIDALGO COUNTY RAINFALL INTENSITY TABLES (cont.)

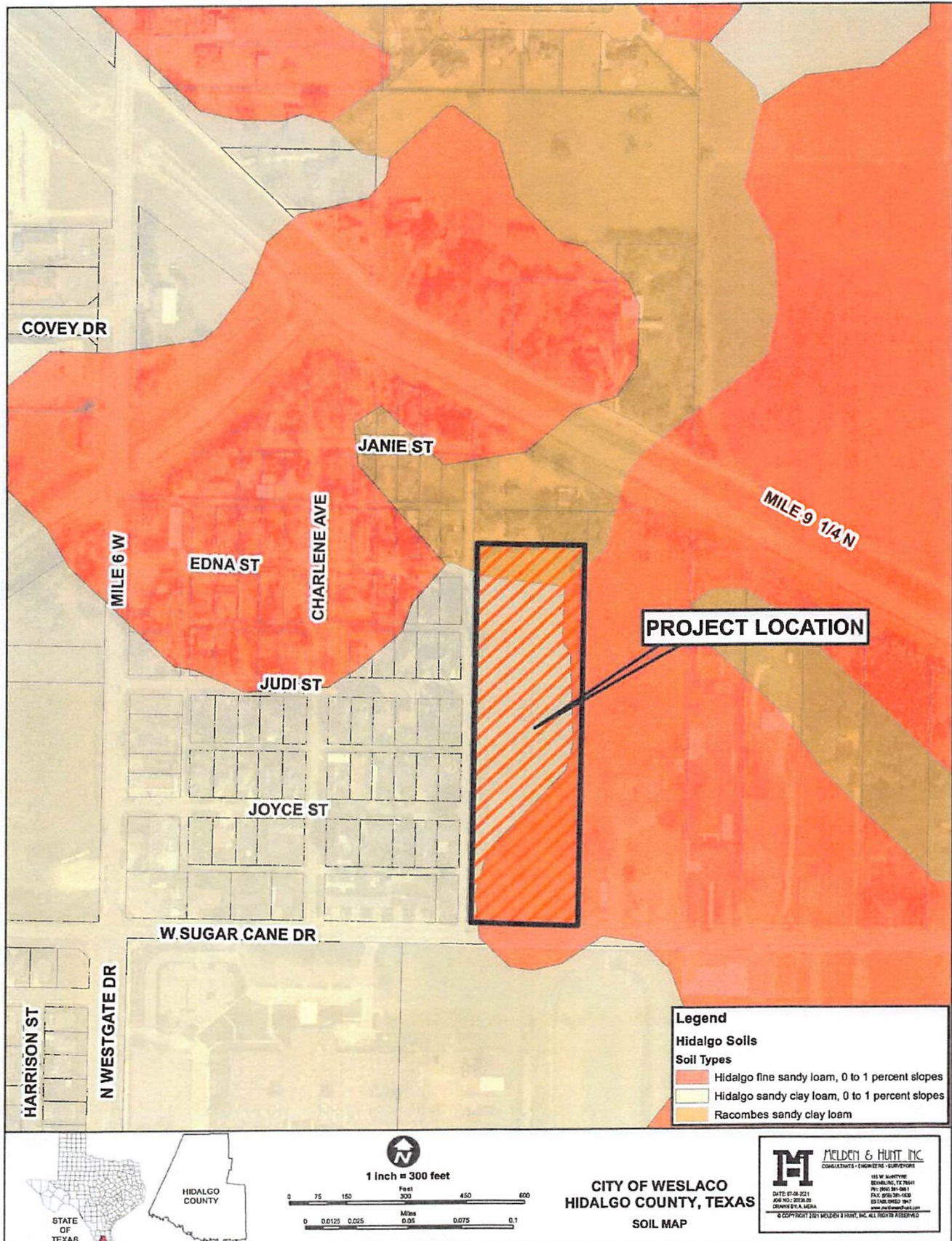
based on Weather Bureau (NWS) Technical Paper No. 40 "Rainfall Frequency Atlas of the United States"

TIME	5 yr.	10 yr.	25 yr.	50 yr.	TIME	5 yr.	10 yr.	25 yr.	50 yr.
71	2.451	2.871	3.335	3.710	106	1.838	2.166	2.523	2.829
72	2.427	2.844	3.303	3.676	107	1.825	2.152	2.506	2.811
73	2.403	2.817	3.272	3.642	108	1.813	2.137	2.489	2.793
74	2.380	2.790	3.242	3.610	109	1.800	2.123	2.473	2.775
75	2.358	2.765	3.212	3.577	110	1.788	2.109	2.457	2.757
76	2.336	2.739	3.183	3.546	110	1.788	2.109	2.457	2.757
77	2.314	2.715	3.155	3.515	112	1.765	2.082	2.426	2.723
78	2.293	2.690	3.127	3.485	113	1.753	2.069	2.410	2.707
79	2.272	2.667	3.099	3.455	114	1.742	2.056	2.395	2.690
80	2.252	2.643	3.073	3.426	115	1.731	2.043	2.380	2.674
81	2.232	2.620	3.046	3.398	116	1.720	2.030	2.366	2.658
82	2.213	2.598	3.020	3.370	117	1.709	2.018	2.351	2.642
83	2.193	2.576	2.995	3.342	118	1.698	2.006	2.337	2.626
84	2.175	2.555	2.970	3.315	119	1.688	1.993	2.323	2.611
85	2.156	2.533	2.946	3.289	120	1.677	1.981	2.309	2.596
86	2.138	2.513	2.922	3.263	125	1.628	1.924	2.242	2.523
87	2.121	2.492	2.899	3.238	130	1.581	1.870	2.180	2.455
88	2.103	2.472	2.876	3.213	135	1.537	1.819	2.122	2.391
89	2.086	2.453	2.853	3.188	140	1.496	1.771	2.067	2.331
90	2.069	2.434	2.831	3.164	145	1.457	1.727	2.015	2.274
91	2.053	2.415	2.809	3.140	150	1.421	1.684	1.966	2.220
92	2.037	2.396	2.788	3.117	155	1.386	1.644	1.919	2.169
93	2.021	2.378	2.767	3.094	160	1.354	1.606	1.876	2.121
94	2.005	2.360	2.746	3.072	165	1.323	1.570	1.834	2.075
95	1.990	2.342	2.726	3.050	170	1.293	1.536	1.794	2.032
96	1.975	2.325	2.706	3.028	175	1.265	1.504	1.757	1.990
97	1.960	2.308	2.686	3.007	180	1.239	1.473	1.721	1.951
98	1.946	2.291	2.667	2.986	185	1.213	1.443	1.686	1.913
99	1.931	2.275	2.648	2.965	190	1.189	1.415	1.654	1.877
100	1.917	2.258	2.629	2.944	195	1.166	1.388	1.622	1.842
101	1.904	2.242	2.610	2.924	200	1.144	1.362	1.592	1.809
102	1.890	2.227	2.592	2.905	210	1.102	1.313	1.536	1.747
103	1.876	2.211	2.574	2.885	220	1.063	1.268	1.484	1.690
104	1.863	2.196	2.557	2.866	230	1.028	1.227	1.436	1.637
105	1.850	2.181	2.540	2.847	240	0.995	1.189	1.392	1.587

Appendix 3.0
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







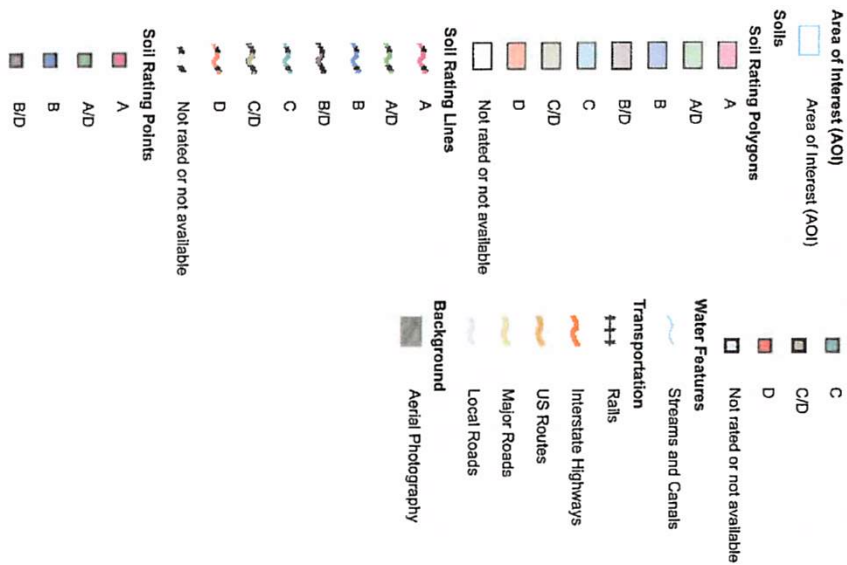
Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

7/8/2021
Page 1 of 4

Hydrologic Soil Group—Hidalgo County, Texas

MAP LEGEND



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 19, Jun 11, 2020

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—Hidalgo County, Texas

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	2.0	35.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	B	3.2	57.0%
48	Racombes sandy clay loam, 0 to 1 percent slopes	B	0.4	7.5%
Totals for Area of Interest			5.6	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.

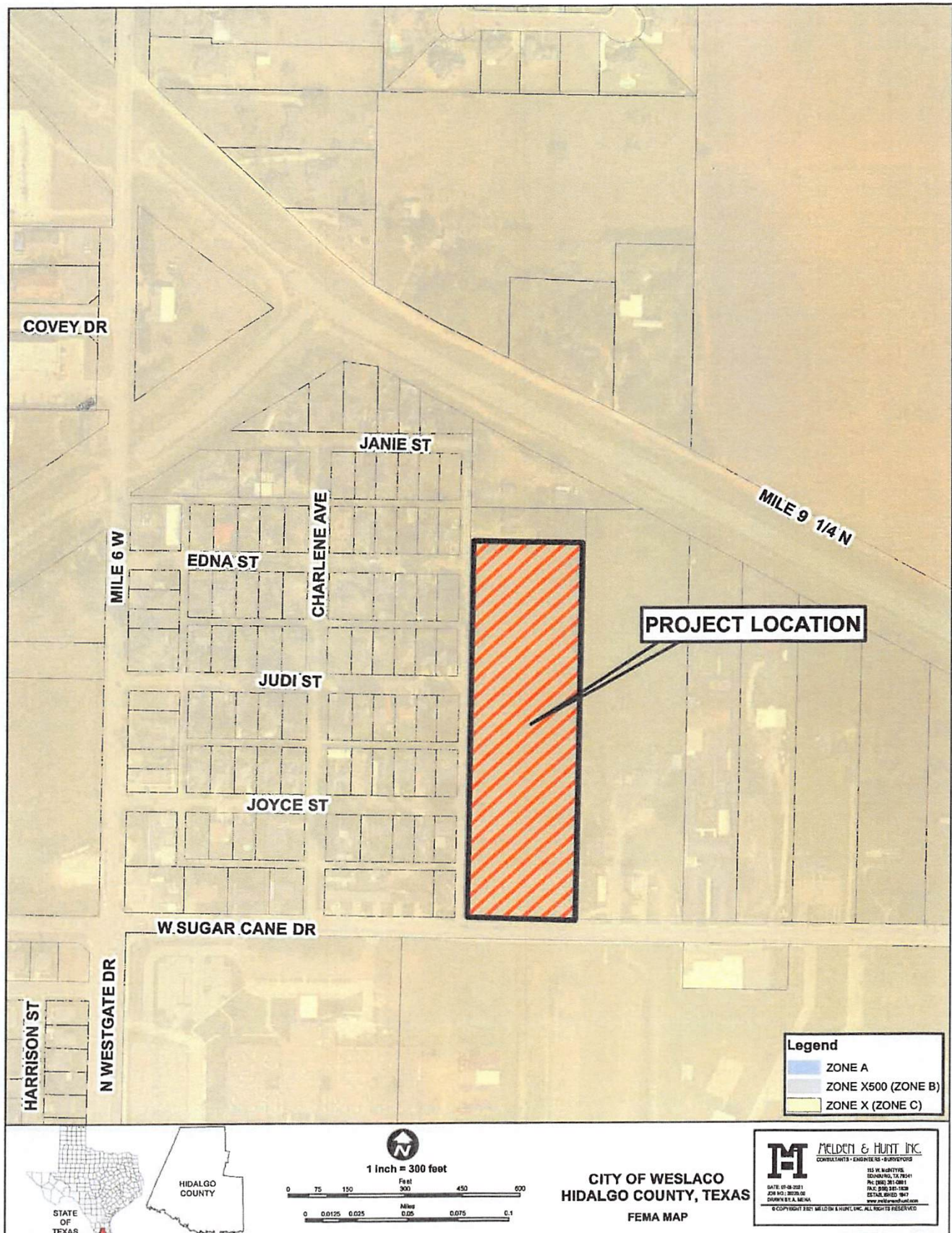
The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. 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.

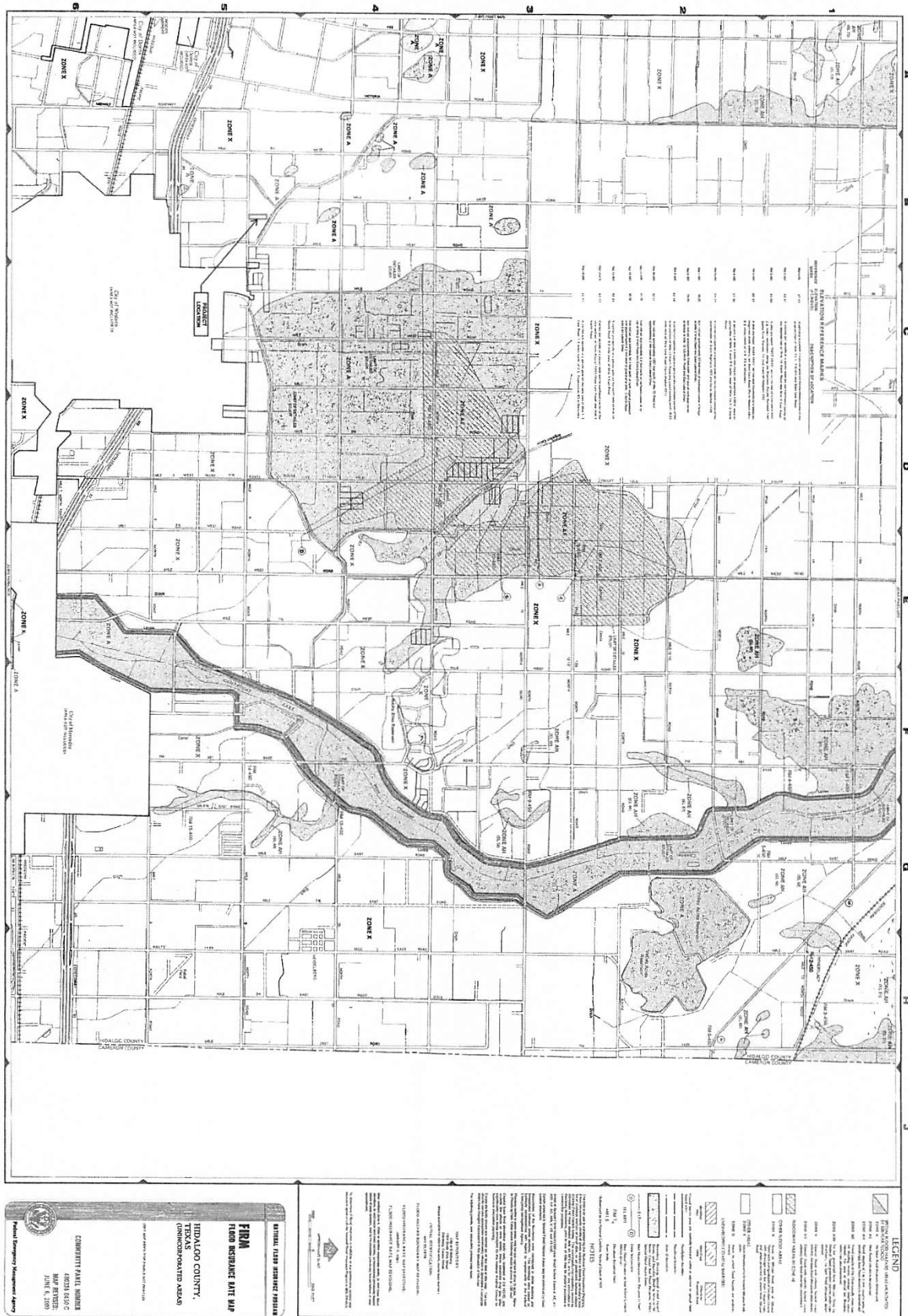
Component Percent Cutoff: None Specified

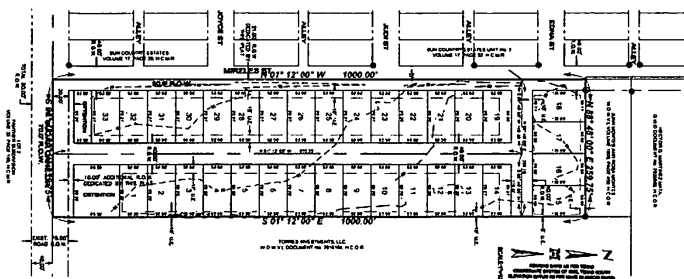
Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

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.







PLAT OF
SUGARCANE ESTATES
SUBDIVISION

BENG, RESUBDIVISION OF 5.903 ACRES SITUATED IN THE CITY OF
WESLACO, COUNTY OF HIDALGO, TEXAS, BEING A PART OR PORTION OUT
OF FARM TRACT 141, THE WEST AND ADAMS TRACTS SUBDIVISION,
ACCORDING TO THE PLAN THEREOF RECORDED IN VOLUME 2, PAGES 34-35
HIDALGO COUNTY MAP RECORDS

WELLS AND BOUNDS DESCRIPTION

[illegible]

GENERAL PLAY NOTES & RESTRICTIONS

- [illegible]

THIS MAT IS APPROVED BY HEDLUND AND CAMERON COURTEOUSLY REGARDING THE

[illegible]

CONTRACT, WORKMANSHIP
MEASURES & CANCELLATION CONTRACTS ARE

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OKAWAY BY: <u>CHIEF</u>	DATE: <u>06.10.71</u>
SUPERVISOR: <u>CHIEF</u>	DATE: _____
PAUL OKOR: _____	DATE: _____

[illegible][illegible]

ADAMS CONSTRUCTION, LLC
MCKINNEY TEXAS
317 S. WILSON ST
MCKINNEY, TEXAS 75069

BEFORE ME, THE UNDERSIGNED

CAUTION: UNDER NO CIRCUMSTANCES

NOT A PUBLIC INFORMATION CONNECTION

1. The linear response to

STATE OF TEXAS

1. PERIOD WITHIN THE
2. ESTIMATING THE

DATE SUBMITTED NO
FALL 1971

APPROVED THIS THE

100

CONTACT WITH THE
CONTACT WAS NOT

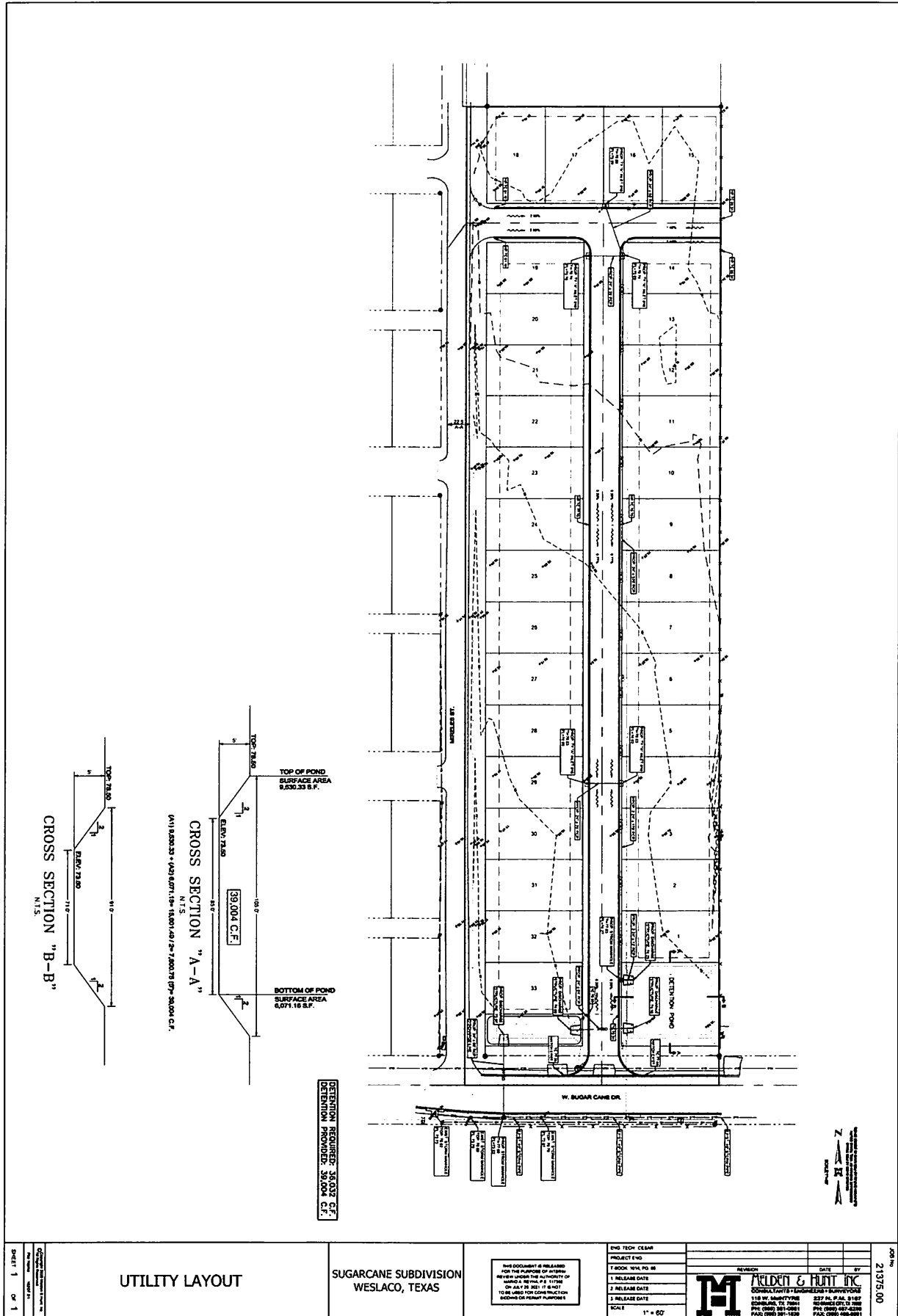
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1. **Introduction**



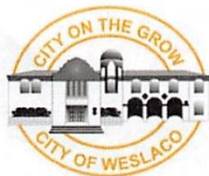
FILED FOR RECORD IN
HIDALGO COUNTY
ARTURO GUJARDO, JR.
HIDALGO COUNTY CLERK





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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.C.
From: Rebekah de la Fuente, Planning Director, on behalf of Melden & Hunt, Inc.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Texas Heights Subdivision– being a 18.067 being a part or portion out of Farm Tracts 108 &109, The West and Adams Tracts, Weslaco, Hidalgo County, Texas Located approximately on Texas Blvd & Northcross Avenue. Possible Action.	
Discussion/Overview: The proposed seventy-nine (79) 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 “X”. Applicant is requesting a variance for front setbacks and lot size.	
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 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. _____

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: TEXAS HEIGHTS SUBDIVISION

Location: TEXAS BLVD & NORTHCROSS AVENUE

Legal Description: 18.067 ACRES SITUATED IN THE COUNTY OF HIDALGO BEING A PART OR PORTION
OUT OF FARM TRACTS 108 & 109 THE WEST ADAMS TRACTS

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: AG

Existing Land Use: VACANT/ AG Proposed Land Use: RESIDENTIAL

Number of Lots Proposed: 79 Gross Acreage: 18.067

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: RODOLDO LTD Telephone: C/O 381-0981

Address: 420 MALONE STREET Fax: _____

City: HOUSTON State: TX Zip: 77007 E-mail: C/O mario@meldenandhunt.com

ENGINEER INFORMATION

Name: MARIO A. REYNA Telephone: (956) 381-0981

Address: 115 W MCINTYRE STREET Fax: _____

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: CITY OF WESLACO

☒ YES ☐ NO Wastewater Provision: _____

☒ YES ☐ NO Electric Company: MAGIC VALLEY/AEP BOTH SERVICE AREA

☒ 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: _____

Owner Signature: _____ Date: _____

MARIO A. REYNA _____ is the authorized agent

Authorized Agent Signature:  _____ Date: 9-24-21

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: _____

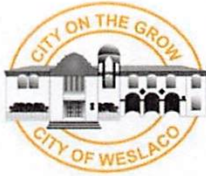
P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR SUBDIVISION VARIANCE

VAR-000117-2021

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: TEXAS HEIGHTS SUBDIVISION

Location: TEXAS BLVD & NORTHCROSS AVENUE

Legal Description: 18.067 ACRES SITUATED IN THE COUNTY OF HIDALGO BEING A PART OR PORTION OUT OF FARM TRACTS 108 & 109 THE WEST ADAMS TRACTS

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:

variance will be required for all front setbacks that are less than 25'
except in cul-da-sacs where the required set back is 20'

☐ 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:

Lot area will be 4,714.91 than the required 6,000 sq ft.

☐ 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: RODOLDO LTD Telephone: C/O 381-0981
Address: 420 MALONE STREET Fax: _____
City: HOUSTON State: TX Zip: 77007 E-mail: C/O mario@meldenandhunt.com

AUTHORIZATION AND ACKNOWLEDGEMENTS

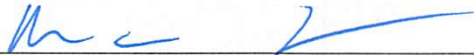
I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

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.

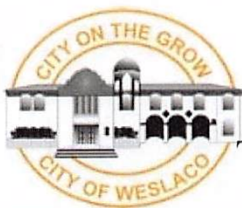
Owner Printed Name: _____

Owner Signature: _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature:  Date: 9-24-21

Authorized Agent Printed Name: MARIO A. REYNA, P.E.



**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: Rhodes Weslaco Subdivision

Location: Texas Blvd & Northcross Avenue

Applicant: Melden & Hunt, Inc ☐ Owner ☒ Agent

Address: 115 W McIntyre Street Phone Number: (956) 381-0981

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			
210	Single Family Residential	40.0	n/a	180	138	185	1,786

Comments: _____

Prepared by: Kelley Heller-Vela Date: 10-1-21

Address: 115 W McIntyre Street Phone Number: (956) 381-0981

(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#: _____

ITripGen Web-based App



Help Kelley H

Query Filter

Data Plot and Equation

DATA SOURCE: Trip Gen Manual 10th Ed + Supplement

SEARCH BY LAND USE CODE: 210

LAND USE GROUP: (200-299) Residential

LAND USE: 210 - Single-Family Detached Housing

LAND USE SUBCATEGORY: All Sites

INDEPENDENT VARIABLE (Y): Dwelling Units

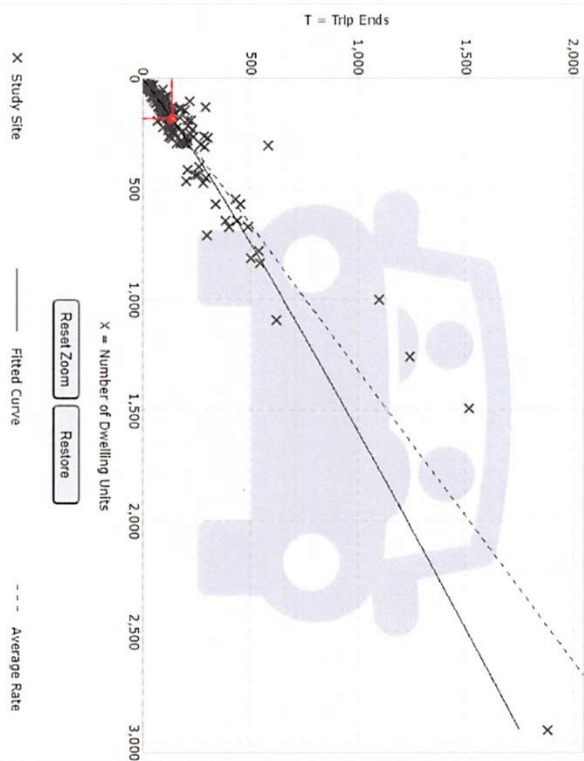
TIME PERIOD: Weekday, AM Peak Hour of Generator

SETTING/LOCATION: General Urban/Suburban

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 180

Calculate



DATA STATISTICS

Land Use:	Single-Family Detached Housing (210)
Independent Variable:	Dwelling Units
Time Period:	Weekday, AM Peak Hour of Generator
Setting/Location:	General Urban/Suburban
Trip Type:	Vehicle
Number of Studies:	157
Avg. Num. of Dwelling Units:	231
Average Rate:	0.76
Range of Rates:	0.36 - 2.27
Standard Deviation:	0.26
Fitted Curve Equation:	$Ln(T) = 0.91 Ln(X) + 0.20$
R ² :	0.89
Directional Distribution:	26% entering, 74% exiting
Calculated Trip Ends:	Average Rate: 137 (Total), 36 (Entry), 101 (Exit)
Fitted Curve:	138 (Total), 36 (Entry), 102 (Exit)

ITETriGen Web-based App



Query Filter

Data Plot and Equation

DATA STATISTICS

DATA SOURCE:
Trip Gen Manual, 10th Ed + Supplement

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE:
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

INDEPENDENT VARIABLE (IV):
Dwelling Units

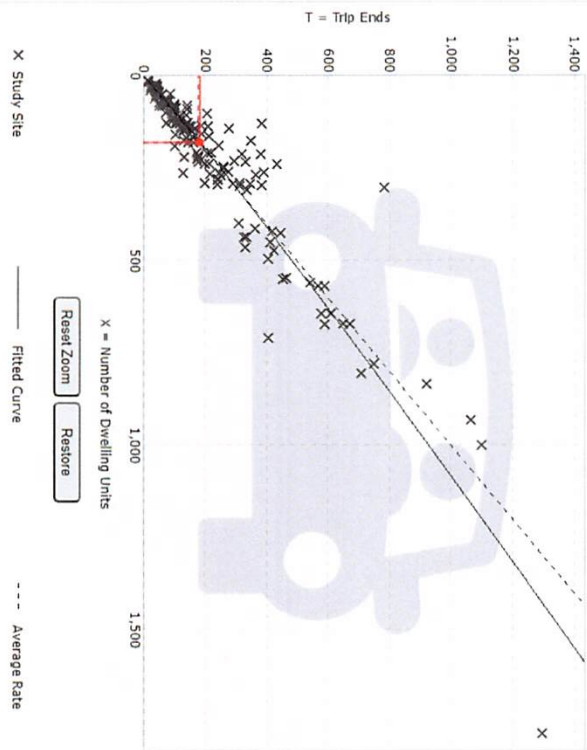
TIME PERIOD:
Weekday, PM Peak Hour of Generator

SETTING/LOCATION:
General Urban/Suburban

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
180

Calculate



Land Use:	Single-Family Detached Housing (210)
Independent Variable:	Dwelling Units
Time Period:	Weekday, PM Peak Hour of Generator
Setting/Location:	General Urban/Suburban
Trip Type:	Vehicle
Number of Studies:	165
Avg. Num. of Dwelling Units:	217
Average Rate:	1.00
Range of Rates:	0.49 - 2.98
Standard Deviation:	0.31
Fitted Curve Equation:	$\ln(T) = 0.94 \ln(X) - 0.34$
R ² :	0.92
Directional Distribution:	64% entering, 36% exiting
Calculated Trip Ends:	Average Rate: 180 (Total), 115 (Entry), 65 (Exit)
Fitted Curve:	185 (Total), 118 (Entry), 67 (Exit)

ITETripGen Web-based App



Help Kelly

Query Filter

Data Plot and Equation

DATA STATISTICS

DATA SOURCE: Trip Gen Manual, 10th Ed + Supplement

SEARCH BY LAND USE CODE: 210

LAND USE GROUP: (200-299) Residential

LAND USE: 210 - Single-Family Detached Housing

LAND USE SUBCATEGORY: All Sites

INDEPENDENT VARIABLE (IV): Dwelling Units

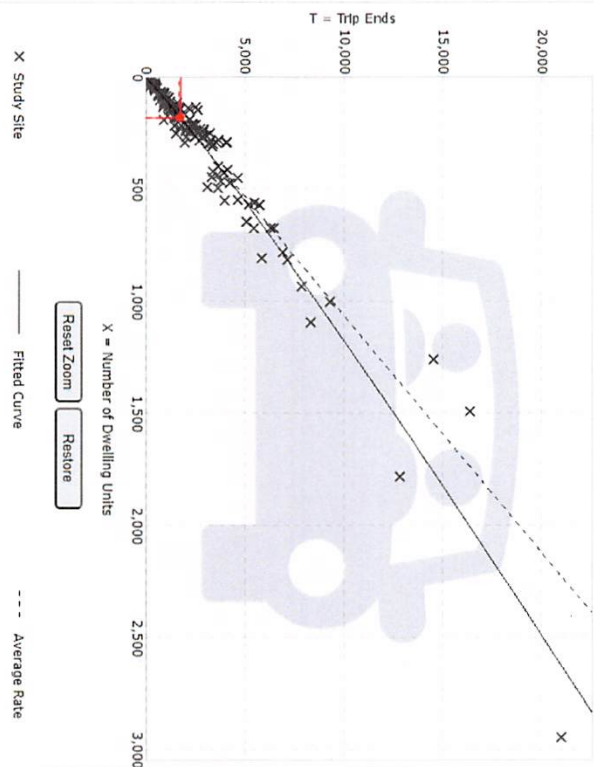
TIME PERIOD: Weekday

SETTING/LOCATION: General Urban/Suburban

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 180

Calculate



Land Use: Single-Family Detached Housing (210) [Click for more details](#)

Independent Variable: Dwelling Units

Time Period: Weekday

Setting/Location: General Urban/Suburban

Trip Type: Vehicle

Number of Studies: 139

Avg. Num. of Dwelling Units: 264

Average Rate: 9.44

Range of Rates: 4.81 - 19.39

Standard Deviation: 2.10

Fitted Curve Equation: $Ln(T) = 0.92 Ln(X) + 2.71$

R²: 0.95

Directional Distribution: 50% entering, 50% exiting

Calculated Trip Ends: Average Rate: 1699 (Total), 849 (Entry), 850 (Exit)

Fitted Curve: 1786 (Total), 893 (Entry), 893 (Exit)

FIRM NAME: MELDEN & HUNT, INC.
TBPELS FIRM #F1435
TITLE: TEXAS HEIGHTS SUBDIVISION PHASE I
PREPARED BY: MARIO A. REYNA, P.E
DATE: August 24, 2021



M - R
8-24-21

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- 1. Drainage Statement**
- 2. Drainage Calculations**
- 3. Location Map**
- 4. Subdivision Plat**
- 5. Paving & Drainage Layout**
- 6. USGS Topographical Map**
- 7. Rainfall Intensity Table**
- 8. USDA Soils Map**
- 9. USDA Soils Legend & Description**
- 10. FEMA FIRM with site location**



TBPELS Firm # F-1435
TBPELS # 10096900

MELDEN & HUNT INC.

CONSULTANTS • ENGINEERS • SURVEYORS

FRED L. KURTH • ALLAN F. BOOE • KELLEY A. HELLER-VELA • ROBERTO N. TAMEZ • MARIO A. REYNA • RUBEN JAMES DE JESUS

Drainage Statement
TEXAS HEIGHTS SUBDIVISION PHASE I
Project #21074.00 Date: August 24, 2021

TEXAS HEIGHTS SUBDIVISION PHASE I A tract of land containing 18.067 acres situated in the County of Hidalgo, Texas, being a part or portion out of Farm Tracts 108 and 109, The West and Adams Tracts, according to the plat thereof recorded in Volume 2, Pages 34-37, Hidalgo County Map Records, which said 18.067 acres were conveyed to Rodolodo, Ltd. by virtue of a Special Warranty Deed recorded under Document Number 2170504, Hidalgo County Official Records. This subdivision lies mostly in Flood Zone "A" and partially in Zone "X". Flood Aone "A" are areas where no Base Flood elevations determined. Zone "X" are areas determined to be outside 500-year floodplain. Community-panel number: 480334 0450 C, Map Revised: May 30, 2002. The property is located 2,500 feet south of the intersection of Mile 10 & Texas Blvd.. The property is currently open with a proposed use of 79 residential lots and a private detention pond, currently inside the City of Weslaco, Texas.

The soils in this area (25) Hidalgo fine sandy loam and (28) Hidalgo sandy clay, which are in Hydrologic Group "B". These soils are moderately pervious and have a relatively low plasticity index. (See excerpts from "Soil Survey of Hidalgo County, Texas").

Existing runoff is in a northeasterly direction, with a runoff of 19.96 cfs during the 10-year storm frequency as per the attached calculations. Proposed runoff after development is 45.03 cfs, during the 50-year storm frequency, per the attached calculation, which is an increase of 25.07 cfs.

The proposed drainage for this subdivision shall consist of surface runoff from the lots into the proposed streets and collected by type "A" inlets located at key points within the subdivision. The pipe size diameters shall range from 24" to 48". The proposed storm system shall discharge into a proposed detention pond on the north side of the site, which will then discharge via a 24" pipe into a H.C.C.I.D. #9 drain ditch which will be widened with an increase of 205,920 cubic feet of capacity.

In accordance with the City of Weslaco drainage policy, and in accordance with the Approved Texas Heights Master Drainage Report for this development (see attached) the peak rate of runoff in this subdivision will not be increased during the 50-year rainfall event due to the building of this subdivision. Therefore, as per attached calculations the required 106,700 c.f. of detention will be provided within the proposed detention pond with a design capacity of 276,382 c.f.


Mario A. Reyna, P.E. #117368



DRAINAGE REPORT

PROJECT NAME: **TEXAS HEIGHTS SUBDIVISION PHASE I**

PROJECT NUMBER: **21074**

of Lots: **79**

DATE: **August 24, 2021**

I. Existing Condition-10 year

Ex. Area: **787,020** sf
18.067 ac
Imp. Area: **56,100** sf
% Imp. : 0.07
Slope : **0.15** %
tc : 25.38 min
Rainfall Intensity (10yr)
c factor
Q peak existing condition:

Int. Coeff. "k" **0.491** Table 3-2
Kp 3.28
Length **950** ft
Velocity 0.623736 ft/sec

5.524 in/hr
0.200
19.96 cfs

II. Future Condition-50 year

Future area: 787,020 sf
18.067 ac
Estimated Imp. Area: **683,323** sf
% Imp. : 0.87
Slope : 15.00%
tc : **48.99** min
Rainfall Intensity (50yr)
c factor
Q future cond. = $Aci = i *$ =

4.718 in/hr
0.528
45.03 * 0.53
9.54 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	129.51	38852	19.96	3514	35338
10	0.17	10.83	103.31	61986	19.96	6508	55478
15	0.25	9.10	86.87	78180	19.96	9503	68678
25	0.42	7.03	67.04	100567	19.96	15491	85076
35	0.58	5.80	55.32	116182	19.96	21480	94703
45	0.75	4.98	47.49	128222	19.96	27468	100754
55	0.92	3.96	37.78	124686	19.96	33457	91229
65	1.08	3.54	33.79	131798	19.96	39445	92353
75	1.25	3.21	30.65	137945	19.96	45434	92511
85	1.42	2.95	28.12	143391	19.96	51422	91969
95	1.58	2.73	26.02	148292	19.96	57411	90882
105	1.75	2.54	24.24	152719	19.96	63399	89320
115	1.92	2.67	25.52	176087	19.96	69388	106700
125	2.08	2.52	24.08	180591	19.96	75376	105215
135	2.25	2.39	22.82	184834	19.96	81364	103470
145	2.42	2.27	21.70	188811	19.96	87353	101458
155	2.58	2.17	20.70	192513	19.96	93341	99172



M-8-24-21

165	2.75	2.08	19.80	196052	19.96	99330	96722
175	2.92	1.99	18.99	199416	19.96	105318	94098
185	3.08	1.91	18.26	202654	19.96	111307	91347
195	3.25	1.84	17.58	205681	19.96	117295	88385
205	3.42	1.78	16.97	208715	19.96	123284	85432
215	3.58	1.72	16.40	211510	19.96	129272	82238
225	3.75	1.66	15.87	214261	19.96	135261	79000
235	3.92	1.61	15.37	216787	19.96	141249	75537
245	4.08	1.56	14.93	219418	19.96	147238	72180
255	4.25	1.52	14.50	221803	19.96	153226	68576
265	4.42	1.48	14.10	224128	19.96	159215	64913
275	4.58	1.44	13.72	226444	19.96	165203	61241
285	4.75	1.40	13.38	228803	19.96	171192	57611
295	4.92	1.37	13.05	230919	19.96	177180	53739
305	5.08	1.33	12.73	232983	19.96	183169	49815
315	5.25	1.30	12.44	235030	19.96	189157	45873
325	5.42	1.27	12.16	237095	19.96	195146	41949
335	5.58	1.25	11.89	239019	19.96	201134	37885
345	5.75	1.22	11.64	241017	19.96	207123	33895
355	5.92	1.19	11.36	241905	19.96	213111	28794
365	6.08	1.17	11.17	244539	19.96	219100	25439
375	6.25	1.15	10.98	246944	19.96	225088	21856
385	6.42	1.13	10.78	249120	19.96	231077	18043
395	6.58	1.10	10.50	248805	19.96	237065	11740
405	6.75	1.08	10.31	250465	19.96	243054	7412
415	6.92	1.07	10.17	253323	19.96	249042	4281
425	7.08	1.05	9.99	254803	19.96	255031	-227
435	7.25	1.03	9.82	256315	19.96	261019	-4704
445	7.42	1.01	9.66	257875	19.96	267007	-9132
455	7.58	1.00	9.51	259501	19.96	272996	-13495
465	7.75	0.98	9.35	260944	19.96	278984	-18040
475	7.92	0.97	9.26	263836	19.96	284973	-21137
485	8.08	0.95	9.07	263836	19.96	290961	-27125
495	8.25	0.94	8.97	266442	19.96	296950	-30508
505	8.42	0.92	8.78	266041	19.96	302938	-36898
515	8.58	0.91	8.68	268360	19.96	308927	-40567
525	8.75	0.90	8.59	270565	19.96	314915	-44351
535	8.92	0.88	8.40	269591	19.96	320904	-51313
545	9.08	0.87	8.30	271509	19.96	326892	-55383
555	9.25	0.86	8.21	273313	19.96	332881	-59568
565	9.42	0.85	8.11	275002	19.96	338869	-63867
575	9.58	0.84	8.02	276577	19.96	344858	-68281
585	9.75	0.83	7.92	278037	19.96	350846	-72809

Storage Required: 106,700 cf
Storage Required: 2.449 Ac.-Ft.
w/ release rate of: 19.96 cfs
Storage / Ac. Development: 34.364 Ac.Ft. per Ac.
Storage / Lot: 1,351 cf per lot



Mario A. Reyna
10-6-21

TABLE I
TIME OF CONCENTRATION DETERMINATION
TEXAS HEIGHTS SUBDIVISION PHASE I

COMPUTATION POINT	DESCRIPTION OF RUNOFF MEDIUM	OVERLAND FLOW				CHANNEL, PIPE, STREET, ETC. FLOW					
		C	LENGTH (FT.)	GRADE (%)	TIME (MIN)	WIDTH/ID (FT)	GRADE (%)	LENGTH (FT)	VELOCITY (FPS)	TIME (MIN)	TOTAL TIME (MIN)
Existing	Overland	0.200	950								25.4
D.A.#1	Overland & Gutter	0.528	250		27.8			300	0.4	12.5	40.3
D.A.#1-D.A.#2	Pipe Flow	0.528						35	3.0	0.2	40.5
D.A.#2	Overland & Gutter	0.528	150		16.7			300	0.4	12.5	29.2
D.A.#2-D.A.#4	Pipe Flow	0.528						600	3.0	3.3	43.8
D.A.#3	Overland & Gutter	0.528	203		22.6			300	0.4	12.5	35.1
D.A.#3-D.A.#4	Pipe Flow	0.528						35	3.0	0.2	35.3
D.A.#4	Overland & Gutter	0.528	117		13.0			300	0.4	12.5	25.5
D.A.#4-MH#1	Pipe Flow	0.528						68	3.0	0.4	44.2
D.A.#5	Overland & Gutter	0.528	130		14.4			300	0.4	12.5	26.9
D.A.#5-D.A.#6	Pipe Flow	0.528						70	3.0	0.4	27.3
D.A.#6	Overland & Gutter	0.528	130		14.4			300	0.4	12.5	26.9
D.A.#6-D.A.#7	Pipe Flow	0.528						35	3.0	0.2	27.5
D.A.#7	Overland & Gutter	0.528	135		15.0			300	0.4	12.5	27.5
D.A.#7-MH#1	Pipe Flow	0.528						140	3.0	0.8	28.3
MH#1	Overland & Gutter	0.528	0		0.0			300	0.4	12.5	12.5
MH#1-D.A.#8	Pipe Flow	0.528						195	3.0	1.1	45.3
D.A.#9	Overland & Gutter	0.528	195		21.7			300	0.4	12.5	34.2
D.A.#9-D.A.#8	Pipe Flow	0.528						35	3.0	0.2	34.4
D.A.#8	Overland & Gutter	0.528	120		13.3			300	0.4	12.5	25.8
D.A.#8-D.A.#10	Pipe Flow	0.528						460	3.0	2.6	47.8
D.A.#10	Overland & Gutter	0.528	130		14.4			300	0.4	12.5	26.9
D.A.#10-D.A.#11	Pipe Flow	0.528						35	3.0	0.2	48.0
D.A.#11	Overland & Gutter	0.528	120		13.3			300	0.4	12.5	25.8
D.A.#11-OUTFALL	Pipe Flow	0.528						175	3.0	1.0	49.0

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
TEXAS HEIGHTS SUBDIVISION PHASE I

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)	DESIGN (ft./ft.)	MIN. SLOPE (ft./ft.)	*INLET OPENING INFEET
Existing	18.067	0.200	25.4	10	5.524	19.96				Extension Required
D.A.#1	1.298	0.528	40.3	50	5.327	3.65				
D.A.#1-D.A.#2	1.298	0.528	40.5	50	5.312	3.64	24	0.026%	0.174%	3.4
D.A.#2	1.235	0.528	29.2	50	6.445	4.20				
D.A.#2-D.A.#4	2.533	0.528	43.8	50	5.060	6.77	24	0.090%	0.174%	3.9
D.A.#3	0.936	0.528	35.1	50	5.792	2.86				
D.A.#3-D.A.#4	0.936	0.528	35.3	50	5.773	2.85	24	0.016%	0.174%	2.6
D.A.#4	0.857	0.528	25.5	50	6.949	3.15				
D.A.#4-MH#1	4.326	0.528	44.2	50	5.033	11.50	30	0.079%	0.129%	2.9
D.A.#5	2.820	0.528	26.9	50	6.740	10.04				
D.A.#5-D.A.#6	2.820	0.528	27.3	50	6.686	9.96	24	0.194%	0.174%	9.2
D.A.#6	1.523	0.528	26.9	50	6.740	5.42				
D.A.#6-D.A.#7	4.343	0.528	27.5	50	6.660	15.28	30	0.139%	0.129%	5.0
D.A.#7	1.823	0.528	27.5	50	6.663	6.42				
D.A.#7-MH#1	6.166	0.528	28.3	50	6.556	21.35	36	0.103%	0.101%	5.9
MH#1	6.166	0.528	12.5	50	9.877	32.17				
MH#1-D.A.#8	10.492	0.528	45.3	50	4.958	27.48	42	0.075%	0.082%	N/A
D.A.#9	2.546	0.528	34.2	50	5.880	7.91				
D.A.#9-D.A.#8	2.546	0.528	34.4	50	5.861	7.88	24	0.122%	0.174%	7.3
D.A.#8	1.239	0.528	25.8	50	6.900	4.52				
D.A.#8-D.A.#10	14.277	0.528	47.8	50	4.790	36.13	48	0.063%	0.069%	4.1
D.A.#10	0.999	0.528	26.9	50	6.740	3.56				
D.A.#10-D.A.#11	15.276	0.528	48.0	50	4.778	38.55	48	0.072%	0.069%	3.3
D.A.#11	0.711	0.528	25.8	50	6.900	2.59				
D.A.#11-OUTFALL	15.987	0.528	49.0	50	4.718	39.84	48	0.077%	0.069%	2.4

FORMULA FOR INTENSITY $I = \frac{b}{e}$
USING THE RATIONAL METHOD, AS PER
"TXDOT BRIDGE HYDRAULIC MANUAL" $(T_c + d)$

Weighted "c" value				
Type of Drainage Area	"c" value:	Square Footage	Acreage	partial "c"
Residential				
Single Family (Lots less than 1/4 acre)	0.5	575938	13.222	6.611
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		0.000	0.000
Multi-Family (Less than 20 DU / AC)	0.45		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	103,697	2.381	0.714
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	88185	2.024	1.822
Concrete	0.9	0	0.000	0.000
Drives and walks	0.9	19200	0.441	0.397
Total:		787,020	18.067	9.544
Weighted "c":			0.528	

$$C_w = (C_1 A_1 + C_2 A_2 + C_3 A_3 + \dots + C_n A_n) / A_{total}$$

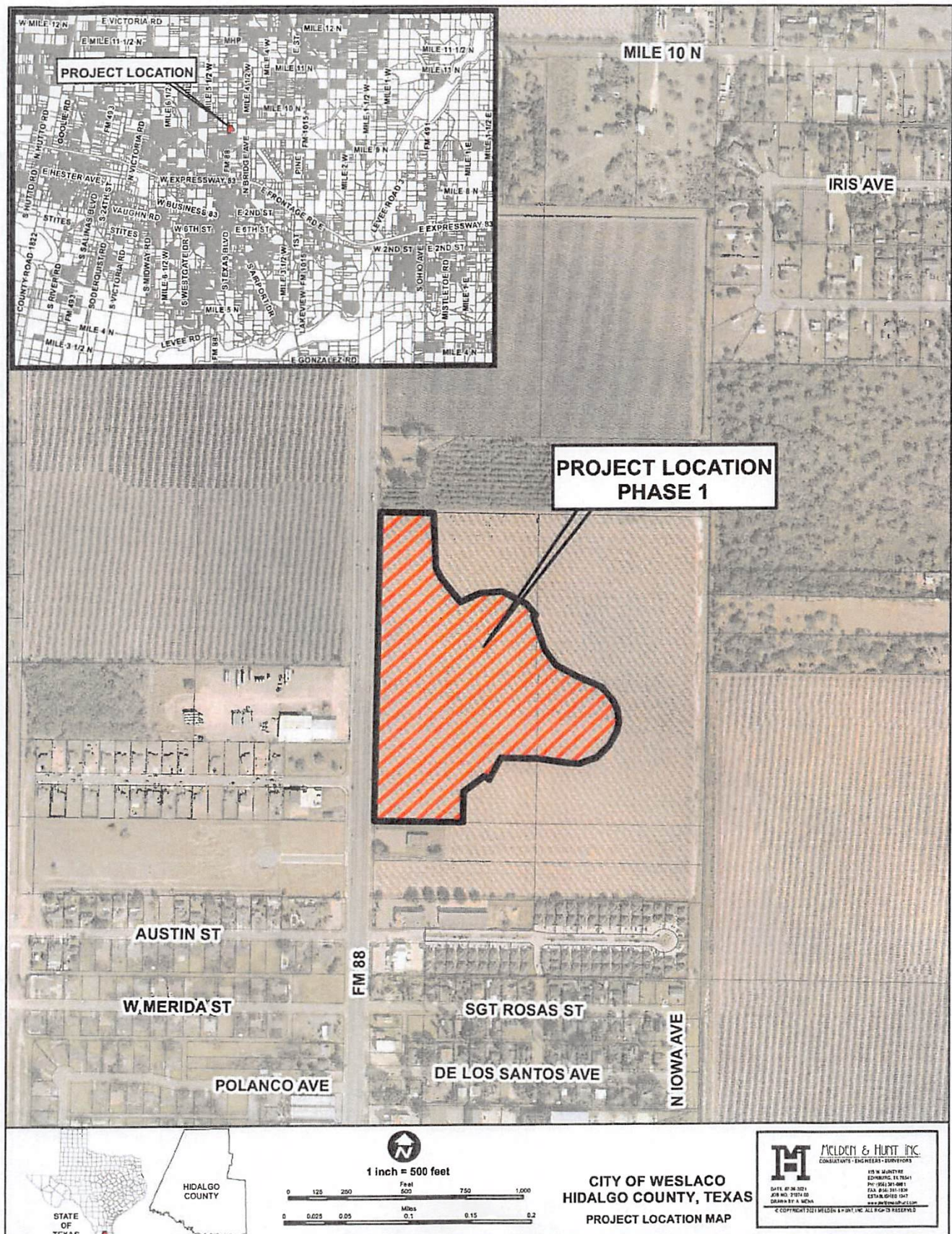
C_w = Weighted Runoff Coefficient (Composite Coefficient)

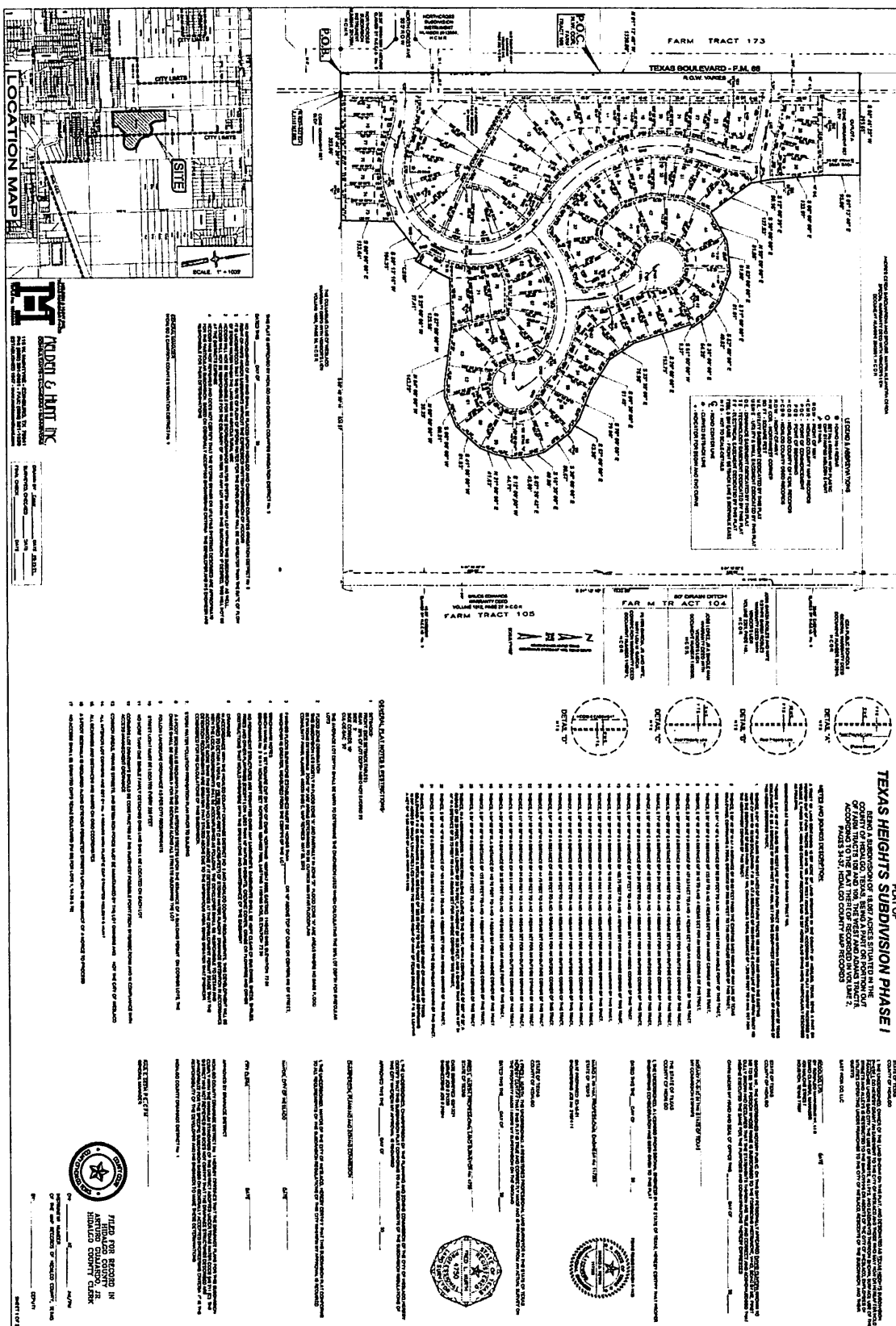
C_n = Runoff Coefficient n-th term

A_n = Area of n-th term

A_{total} = Total Area (acres)

A_{total} = Total Area (acres)





[illegible]

FRONT-TRACK LINE DATE TABLE

Case	First Release Date			Second Release Date			Third Release Date			Fourth Release Date		
	Year	Month	Day	Year	Month	Day	Year	Month	Day	Year	Month	Day
1	1998	10	15	1999	10	15	2000	10	15	2001	10	15
2	1998	11	15	1999	11	15	2000	11	15	2001	11	15
3	1998	12	15	1999	12	15	2000	12	15	2001	12	15
4	1999	1	15	1999	1	15	2000	1	15	2001	1	15
5	1999	2	15	1999	2	15	2000	2	15	2001	2	15
6	1999	3	15	1999	3	15	2000	3	15	2001	3	15
7	1999	4	15	1999	4	15	2000	4	15	2001	4	15
8	1999	5	15	1999	5	15	2000	5	15	2001	5	15
9	1999	6	15	1999	6	15	2000	6	15	2001	6	15
10	1999	7	15	1999	7	15	2000	7	15	2001	7	15
11	1999	8	15	1999	8	15	2000	8	15	2001	8	15
12	1999	9	15	1999	9	15	2000	9	15	2001	9	15
13	1999	10	15	1999	10	15	2000	10	15	2001	10	15
14	1999	11	15	1999	11	15	2000	11	15	2001	11	15
15	1999	12	15	1999	12	15	2000	12	15	2001	12	15
16	2000	1	15	2000	1	15	2001	1	15	2002	1	15
17	2000	2	15	2000	2	15	2001	2	15	2002	2	15
18	2000	3	15	2000	3	15	2001	3	15	2002	3	15
19	2000	4	15	2000	4	15	2001	4	15	2002	4	15
20	2000	5	15	2000	5	15	2001	5	15	2002	5	15
21	2000	6	15	2000	6	15	2001	6	15	2002	6	15
22	2000	7	15	2000	7	15	2001	7	15	2002	7	15
23	2000	8	15	2000	8	15	2001	8	15	2002	8	15
24	2000	9	15	2000	9	15	2001	9	15	2002	9	15
25	2000	10	15	2000	10	15	2001	10	15	2002	10	15
26	2000	11	15	2000	11	15	2001	11	15	2002	11	15
27	2000	12	15	2000	12	15	2001	12	15	2002	12	15
28	2001	1	15	2001	1	15	2002	1	15	2003	1	15
29	2001	2	15	2001	2	15	2002	2	15	2003	2	15
30	2001	3	15	2001	3	15	2002	3	15	2003	3	15
31	2001	4	15	2001	4	15	2002	4	15	2003	4	15
32	2001	5	15	2001	5	15	2002	5	15	2003	5	15
33	2001	6	15	2001	6	15	2002	6	15	2003	6	15
34	2001	7	15	2001	7	15	2002	7	15	2003	7	15

IDENTIFYING CURVE DATE TABLE

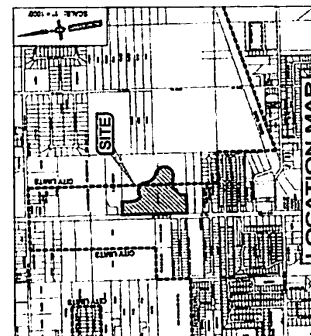
[illegible]

NOT LISTED TABLE

Left-Hand Notes		Right-Hand Notes	
Scale	Length	Scale	Duration
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
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F	12	F	12
G	12	G	12
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C	12	C	12
D	12	D	12
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F	12	F	12
G	12	G	12
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C	12	C	12
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E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
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B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
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G	12	G	12
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B	12	B	12
C	12	C	12
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G	12	G	12
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B	12	B	12
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C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B	12	B	12
C	12	C	12
D	12	D	12
E	12	E	12
F	12	F	12
G	12	G	12
A	12	A	12
B			

PLAT OF

BEING A SUBDIVISION OF 18.087 ACRES SITUATED IN THE COUNTY OF HIDALGO, TEXAS, BEING A PART OR PORTION OUT OF FARM TRACTS 108 AND 102, THE WEST AND ADAMS TRACTS, ACCORDING TO THE PLAN THEREOF RECORDED IN VOLUME 2, PAGE 5 34-37, HIDALGO COUNTY MAP RECORDS.

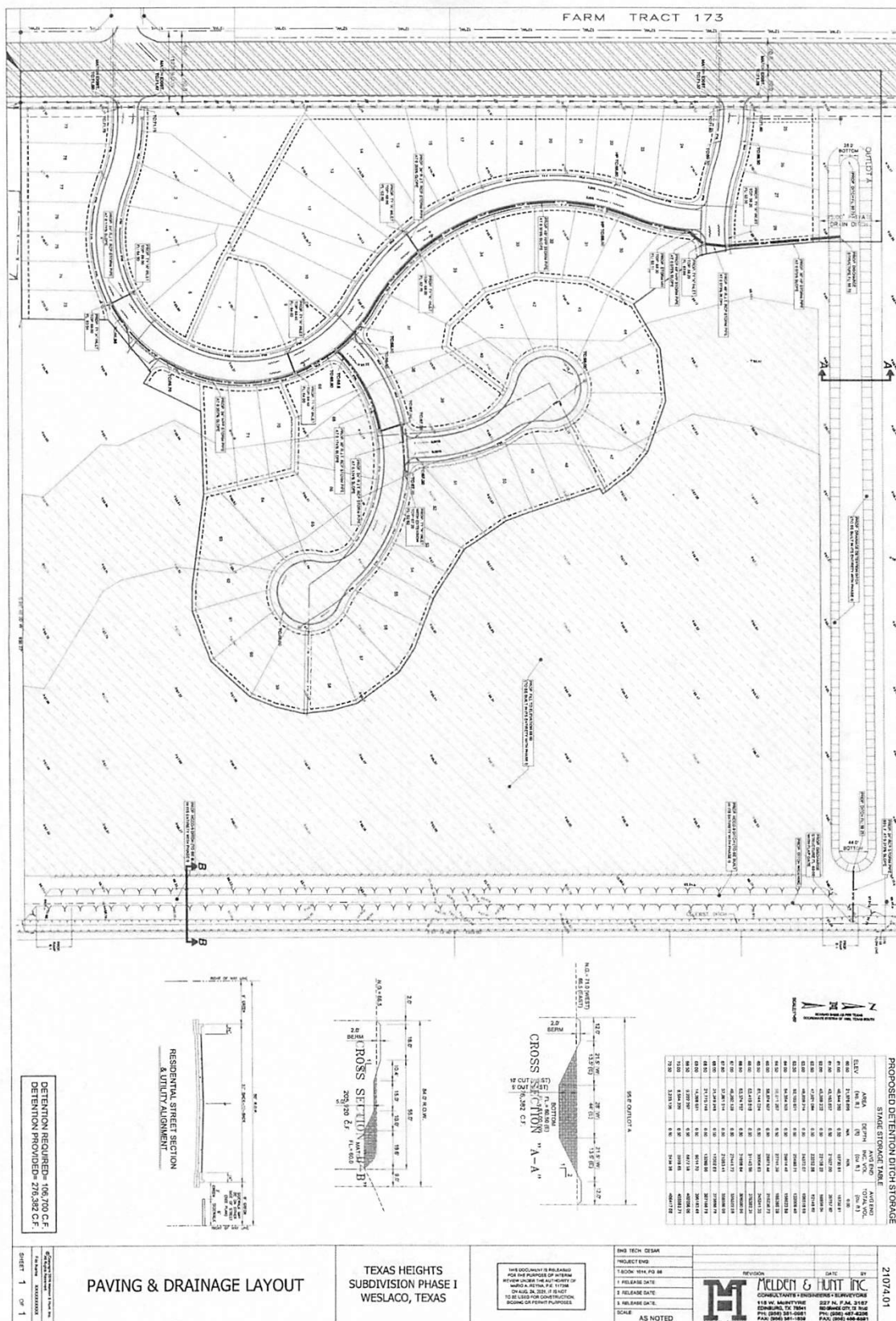


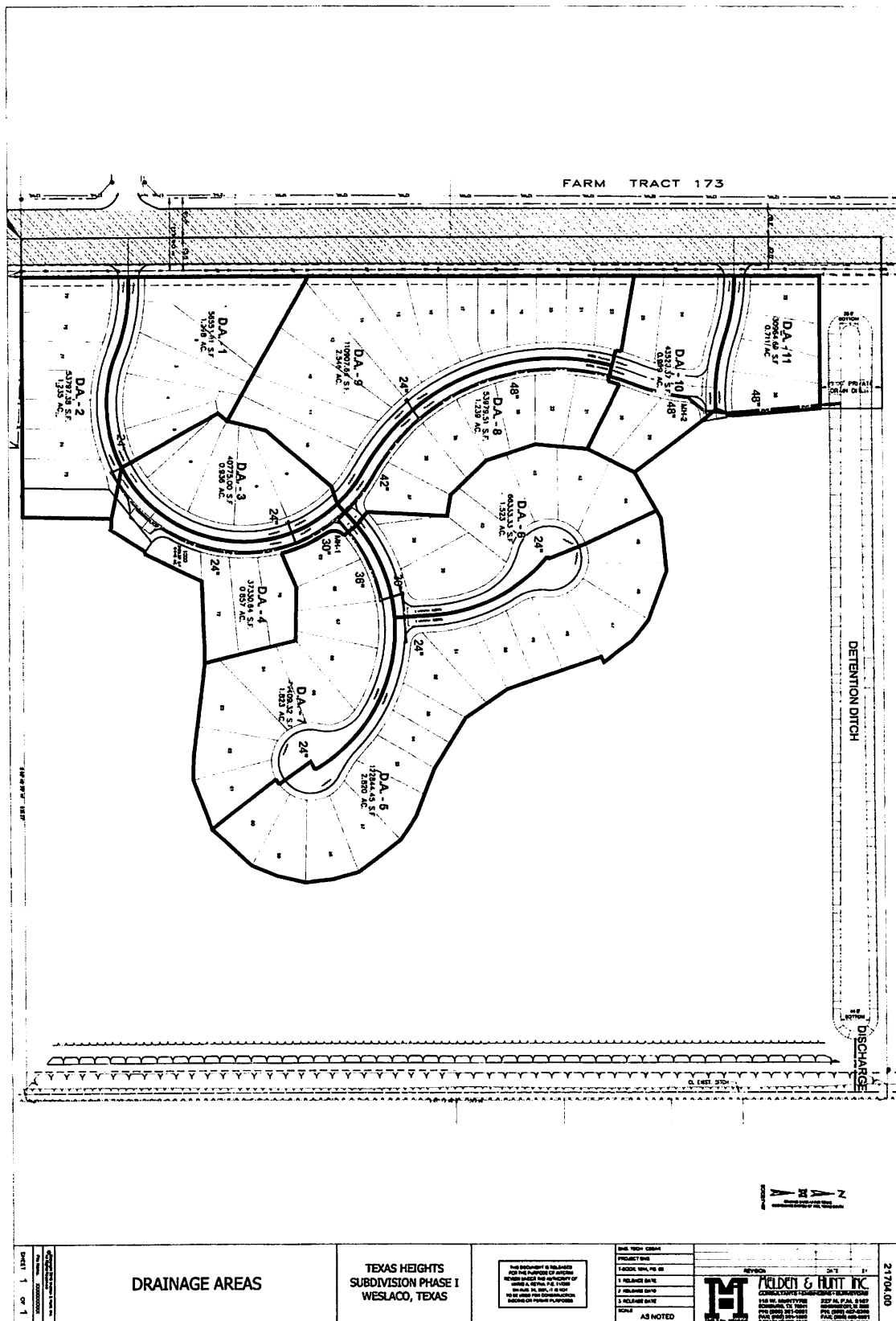
FILED FOR RECORD IN
HIDALGO COUNTY
ARTURO GUAJARDO, JR.
HIDALGO COUNTY CLERK

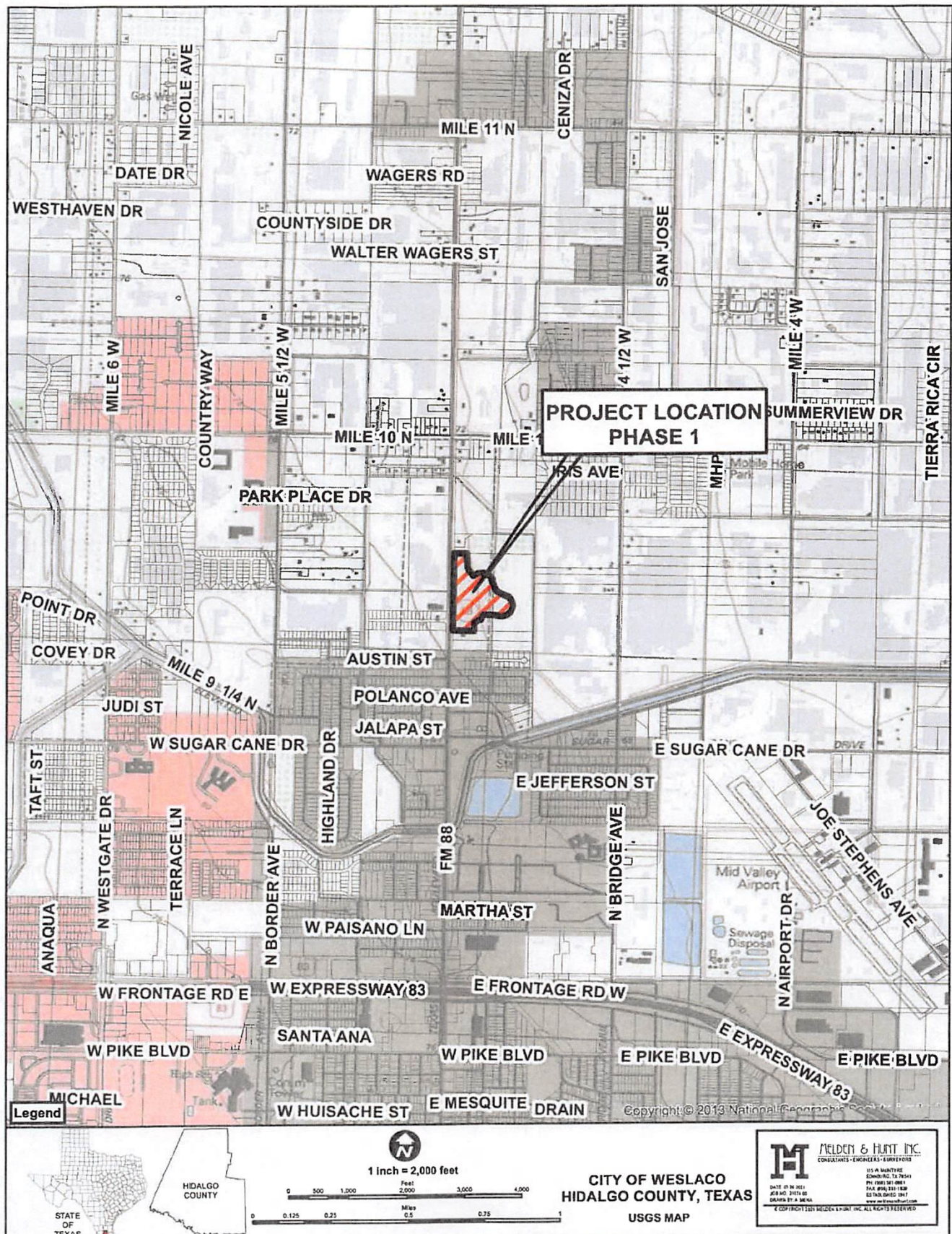


DATE 11/11/78 BY SP-5 J. J. [redacted]
 TITLE ASSISTANT ATTORNEY GENERAL
 OFFICE OF THE ATTORNEY GENERAL, STATE OF MISSISSIPPI

MELDEN & HUNT, INC.
22501A YORK • TEL: 608-263-0365 • FAX: 608-263-0366







Appendix 1.0 **HIDALGO COUNTY RAINFALL INTENSITY TABLES**

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

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

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	25yr	50yr	100yr
c=	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"

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

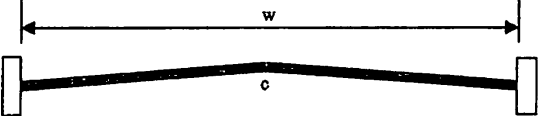
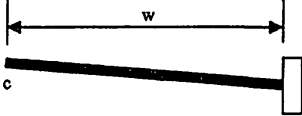
TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
115	1.342	1.731	2.043	2.380	2.674	2.898
120	1.299	1.677	1.981	2.309	2.596	2.815
125	1.259	1.628	1.924	2.242	2.523	2.737
130	1.221	1.581	1.870	2.180	2.455	2.665
135	1.186	1.537	1.819	2.122	2.391	2.596
140	1.153	1.496	1.771	2.067	2.331	2.532
145	1.122	1.457	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

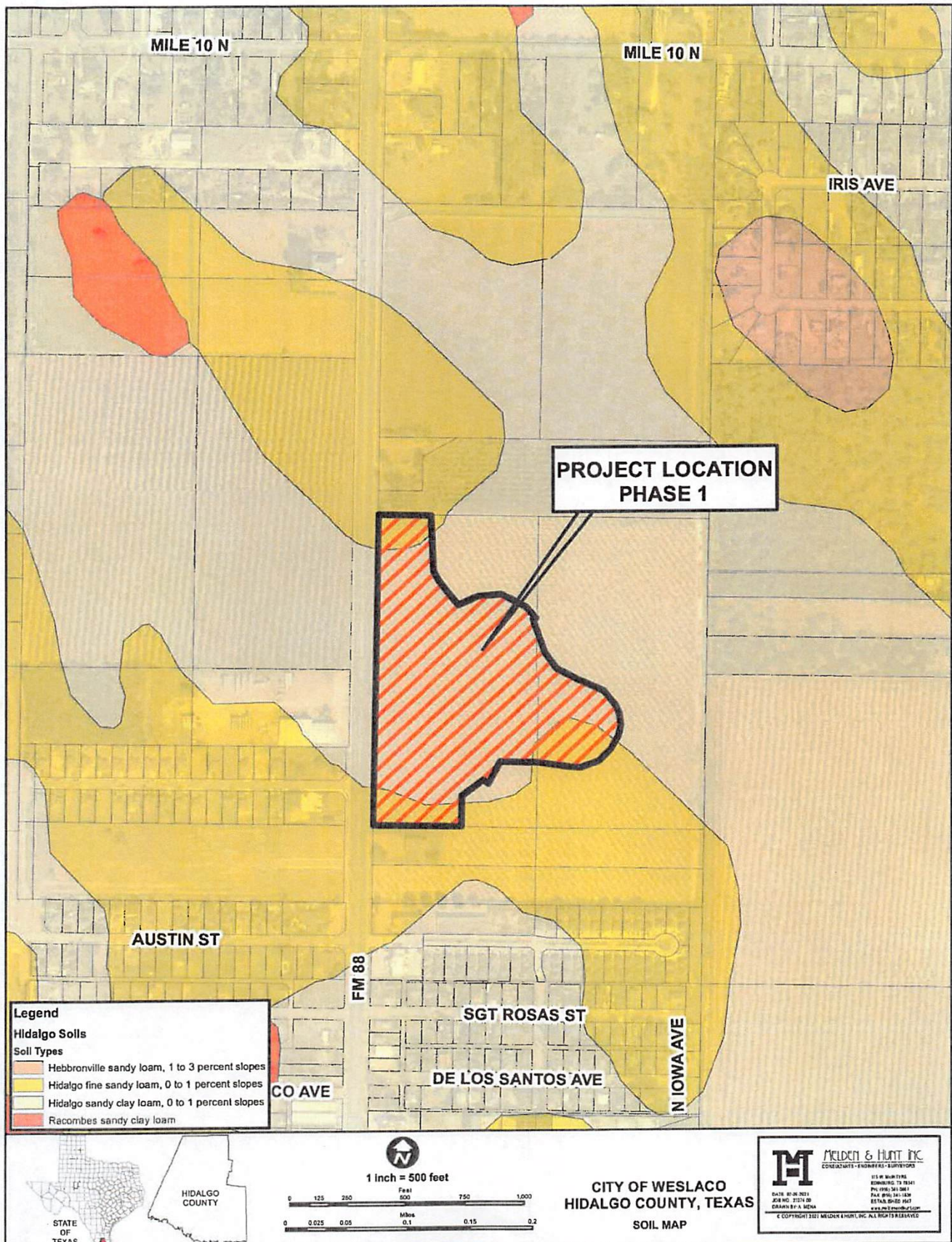
TIME	2 yr.	5 yr.	10 yr.	25 yr.	50 yr.	100 yr.
290	0.647	0.860	1.031	1.209	1.384	1.514
295	0.639	0.849	1.018	1.193	1.367	1.496
300	0.630	0.838	1.005	1.178	1.350	1.478
305	0.622	0.828	0.992	1.164	1.334	1.460
310	0.614	0.817	0.980	1.150	1.319	1.444
315	0.606	0.807	0.969	1.136	1.303	1.427
320	0.598	0.797	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	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.

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





Hydrologic Soil Group—Hidalgo County, Texas
(Property 1)

MAP LEGEND

Area of Interest (AOI)	C
Area of Interest (AOI)	C/D
Soils	D
Soil Rating Polygons	Not rated or not available
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	

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 19, Jun 11, 2020

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—Hidalgo County, Texas

Property1

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	3.0	16.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	B	15.0	83.5%
Totals for Area of Interest			18.0	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.

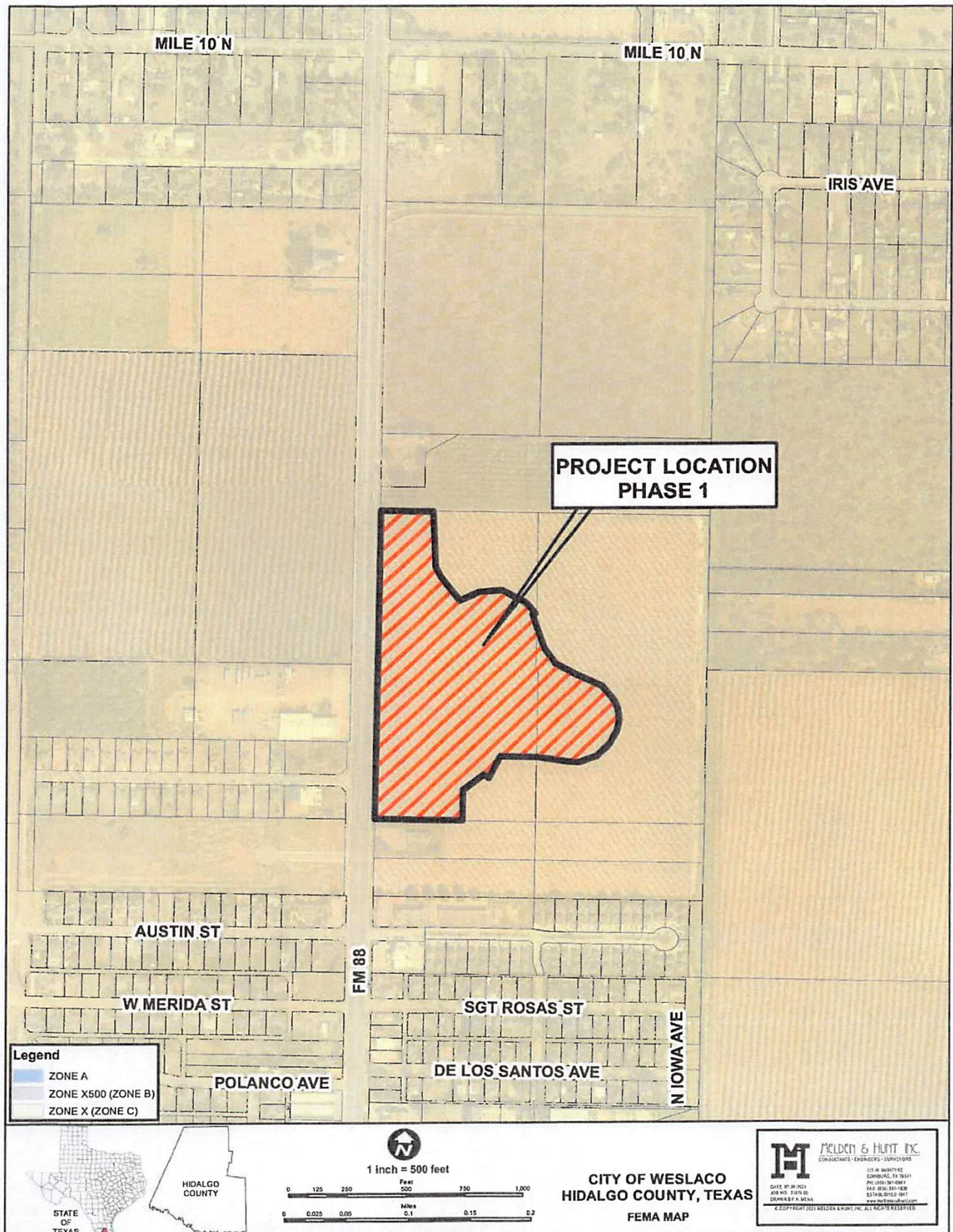
The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. 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.







Planning & Zoning Commission Standardized Agenda Request Form

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.D.
From: Rebekah de la Fuente, Planning Director, on behalf of Jose Reyes.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for Pleasant View Village Subdivision—being a 8.55 out of Farm Tract 709, Block 136, The West and Adams Tracts, Weslaco, Hidalgo County, Texas Located approximately on 1,300 ft South of Business 83 & Pleasantview Dr.to the East. Possible Action.	
Discussion/Overview: The proposed thirty (30) 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 “X”. Applicant is requesting a variance for off-site drainage. Staff is pending letters of support from Irrigation District and 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 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

PIAT-000120-2021

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: Pleasant View Village Subdivision

Location: 1,300 feet south of Business 83 and Pleasantview Dr., to the east

Legal Description: 8.55 acres of land, in being out of part of Llano Grande Grant, situated in Hidalgo County, out of Farm Tract 709, block 136 of the West and Adams Tract Subdivision as per map records in volume 2 pages 36 of Hidalgo County Map Records.

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-2 Duplex and Apts

Existing Land Use: Multi Family Proposed Land Use: Multi Family

Number of Lots Proposed: 30 Gross Acreage: 8.55

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: Roberto Salvia & Marcos Luis Gutierrez Telephone: (956) 221-4400

Address: 3710 E. Canton Road Fax: _____

City: Edinburg State: Texas Zip: 78539 E-mail: _____

ENGINEER INFORMATION

Name: José G. Reyes, P.E. Telephone: (956) 968-2194

Address: 611 Bill Summers Intl Blvd Fax: (956) 968-8300

City: Weslaco State: Texas Zip: 78596 E-mail: jreyes@siglerwinstongreenwood.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: City of Weslaco

☒ 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

_____ 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: SWG Engineering, LLC Date: September 27, 2021

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: _____

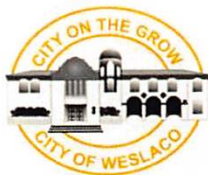
P & Z Commission Approval on Final Plat: _____

City Commission Approval on Final Plat: _____

Preconstruction Meeting Date: _____

Date Recorded: _____ Instrument No. _____

General Comments: _____



APPLICATION FOR SUBDIVISION VARIANCE

VAR-000121-2021

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: Pleasant View Village Subdivision

Location: 1,300 feet south of Business 83 and Pleasantview Dr., to the east

Legal Description: 8.55 acres of land, in being out of part of Llano Grande Grant, situated in Hidalgo County, out of Farm Tract 709, block 136 of the West and Adams Tract Subdivision as per map records in volume 2 pages 36 of Hidalgo County Map Records.

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:

Proposing to used HCCID#9 ditch on the east side of the subdivision as a 50 year frequency flood detention pond.

☐ 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: Roberto Salvia & Marcos Luis Gutierrez Telephone: (956) 221-4400
Address: 3710 E. Canton Road Fax: _____
City: Edinburg State: Texas Zip: 78539 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: SWG Engineering, LLC Date: September 27, 2021

Authorized Agent Printed Name: [Signature] P.E.



**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: Pleasant View Subdivision
 Location: 807 Pleasantview Dr
 Applicant: SWG Engineering, LLC. ☐ Owner ☒ Agent
 Address: 611 Bill SUMmers Int'l Blvd. Weslaco, TX 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	8.55	n/a	28	16	18	34

Comments: _____
 Prepared by: SWG Engineering, LLC. Date: _____
 Address: 611 Bill SUMmers Int'l Blvd. Weslaco, TX Phone Number: (956)968-2194

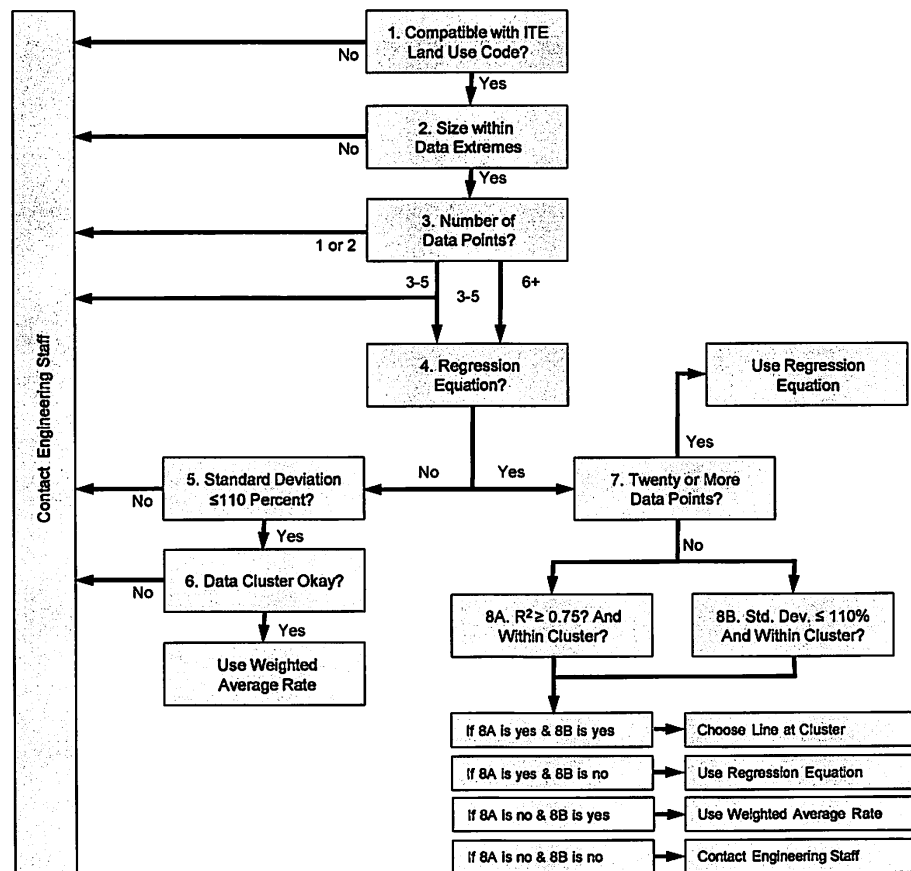
(For Official Use Only, Do Not Write In This Box)

_____ 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)

SWG Engineering

Hidalgo County Drainage District No. 1

Drainage Report

Weslaco – Pleasant View Subdivision

Hidalgo County, Texas

Prepared By:

SWG Engineering, LLC

611 Bill Summers Intl. Blvd.

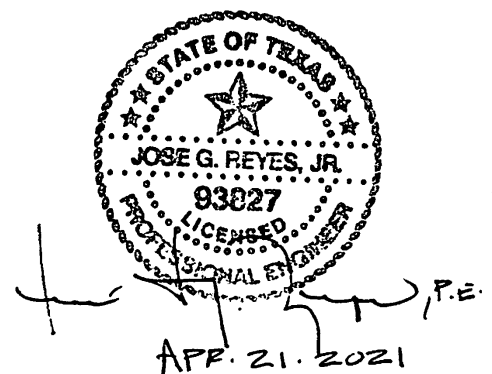
Weslaco, Texas 78596

Tel: 956-968-2194

Fax: 956-968-8300

sergio@siglerwinstongreenwood.com

4/21/2021



COVER SHEET	1
INDEX	2
PROJECT LOCATION	3
FLOOD PLAIN	3
SOIL CONDITIONS	3
EXISTING CONDITIONS	3
PROPOSED CONDITIONS	3
"C" Values	5
ATTACHMENTS	6

DRAINAGE REPORT
For
PLEASANTVIEW SUBDIVISION

I. Project Location

This Project involves the development of an 8.55 acre tract of land for residential use. The site is located within Weslaco City limits, approximately 1,300 ft. south of the intersection of Business 83 and Pleasantview Dr, to the east. The proposed subdivision is comprised of 30 lots for a total of a 8.55 acre tract out and part of Llano Grande Grant, situated in Hidalgo County, out of Farm Tract 709, Block 136 of the West Adams Tract Subdivision as per map recorded in Volume 2 Pages 36 of Hidalgo County Map Records.

II. Flood Plain

The area is determined by FEMA Flood Insurance Rate Map, Community Panel No. 480334 0450 C, 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". Map has been revised by Letter of Map Revision (LOMR) dated May 30, 2002 (Attached).

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 sandy clay loam (0 to 1 slopes), Willacy fine sandy loam (0 to 1 slopes), and Willacy fine sandy loam (1 to 3 slopes). The predominant soil is Willacy fine sandy loam, is listed in Hydrological Group B. See attached Soil Survey of Hidalgo County, Texas.

IV. Existing conditions

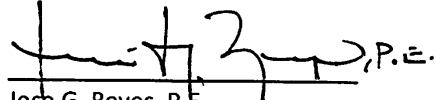
The subject property is currently vacant. Existing runoff is by surface flow in the southerly direction. The site topography is irregular with elevations ranging from 0 to 1 feet in some areas. In accordance with the drainage policies of the County of Hidalgo, the Rational Method, 10-year frequency storm event was utilized to determine the existing storm water runoff for this site. The total contribution 10-year existing storm water runoff from this site is approximately **5.94 cfs**, as per attached calculations.

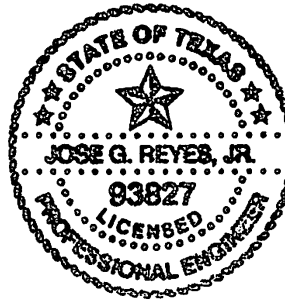
V. Proposed conditions

The proposed conditions for this subject tract will consist of 30 apartment units. Development in the form of impervious pavement and buildings will increase the ultimate runoff. In accordance with Hidalgo County, The Rational Method, 50 year frequency storm event was utilized to determine the proposed runoff from this site. The total contribution 50-year developed runoff from this site is approximately **23.26cfs**. The peak rate of the rate of runoff will increase by a total of **17.32 cfs** during the 50-year frequency storm event due to the improvements in this subdivision. The total impermeable area is approximately 234743.73 sf and the total permeable area is 120424.24 sf. A weighted coefficient of

C=0.48 was calculated. Therefore, as per attached calculations, 45,124 (1.04 Ac.-Ft.) of post-development runoff will be required to be detained in the proposed detention pond. Future runoff shall be captured by proposed curb and gutter and shall be directed into the HCCID #9 canal (34), on the southside of property, via proposed 24" R.C.P.

The drainage calculations are attached.


Jose G. Reyes, P.E.
April 21, 2021



Weslaco – Pike District 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

ATTACHMENTS

Last Updated: 4/21/2021

Detention Calculator			
10-yr release e= 0.8599 b= 116.24 d= 14.33	50 yr Storm Title: SWG# 21-112 8.55 Ac Mitigation Area City of Weslaco, TX	Required Volume: Req'd Volume 1.04 ac.ft	

EXISTING DATA

Total Area	8.55 acre		
Overland Flow Length - "L"	500.00 LF		
Existing Time of Concentration - "Tov" (grass)	45.31	% composition?	100%
Existing Time of Concentration - "Tov" (pavmt)	0.00	% composition?	0%
Total Existing Time of Concentration - "Tov"	45.31 minutes		
Existing Runoff Coefficient - "C"	0.20		
Intensity of Rainfall - "I"	3.46 in/hr		
Existing - "Q"	5.94 cfs		

e= 0.8613
b= 170.66
d= 16.71

PROPOSED IMPROVEMENTS

Total Area	8.55 acre		
Overland Flow Length - "L"	500.00 LF		
Proposed Time of Concentration - "Tov" (grass)	30.81	% composition?	68%
Proposed Time of Concentration - "Tov" (pavmt)	3.58	% composition?	32%
Total Proposed Time of Concentration - "Tov"	34.39 minutes		
Proposed Runoff Coefficient - "C"	0.48		
Intensity of Rainfall - "I"	5.76 in/hr		
Proposed - "Q"	23.45 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
34.39	0.57	5.76	23.45	48399	5.94	12266	36134	0.83
44.39	0.74	4.94	20.11	53559	5.94	14049	39510	0.91
54.39	0.91	4.34	17.65	57593	5.94	15832	41761	0.96
64.39	1.07	3.87	15.76	60875	5.94	17615	43260	0.99
74.39	1.24	3.50	14.25	63627	5.94	19398	44229	1.02
84.39	1.41	3.20	13.03	65987	5.94	21182	44805	1.03
94.39	1.57	2.95	12.01	68047	5.94	22965	45083	1.03
104.39	1.74	2.74	11.16	69872	5.94	24748	45124	1.04
114.39	1.91	2.56	10.42	71508	5.94	26531	44977	1.03
124.39	2.07	2.40	9.78	72989	5.94	28314	44674	1.03
134.39	2.24	2.27	9.22	74340	5.94	30098	44243	1.02
144.39	2.41	2.14	8.72	75583	5.94	31881	43702	1.00
154.39	2.57	2.04	8.28	76732	5.94	33664	43068	0.99
164.39	2.74	1.94	7.89	77801	5.94	35447	42354	0.97
174.39	2.91	1.85	7.53	78801	5.94	37230	41570	0.95
184.39	3.07	1.77	7.21	79738	5.94	39014	40725	0.93
194.39	3.24	1.70	6.91	80621	5.94	40797	39825	0.91
204.39	3.41	1.63	6.64	81456	5.94	42580	38876	0.89

High Point



APR. 21. 2021

Convert acre to sf below:	
acre:	sf:
5.48	238708.8
8.529642	371551.2

Existing Runoff Coef. Calculation:

		Weighted C
Total Area =	8.6 acres	<u>0.20</u>
Impermeable Area =	0% 0.0 acres	0.9
Pavement Area =	0% 0.0 acres	0.95
Permeable Area =	100% 8.6 acres	0.2

Future Runoff Coef. Calculation:

		Weighted C
Total Area =	8.6 acres	<u>0.48</u>
Impermeable Area =	32% 2.74 acres	0.85
Permeable Area =	34% 2.91 acres	0.2
Residential Area =	34% 2.91 acres	0.4

Elevations:

High =	77 ft
Low =	76.5 ft

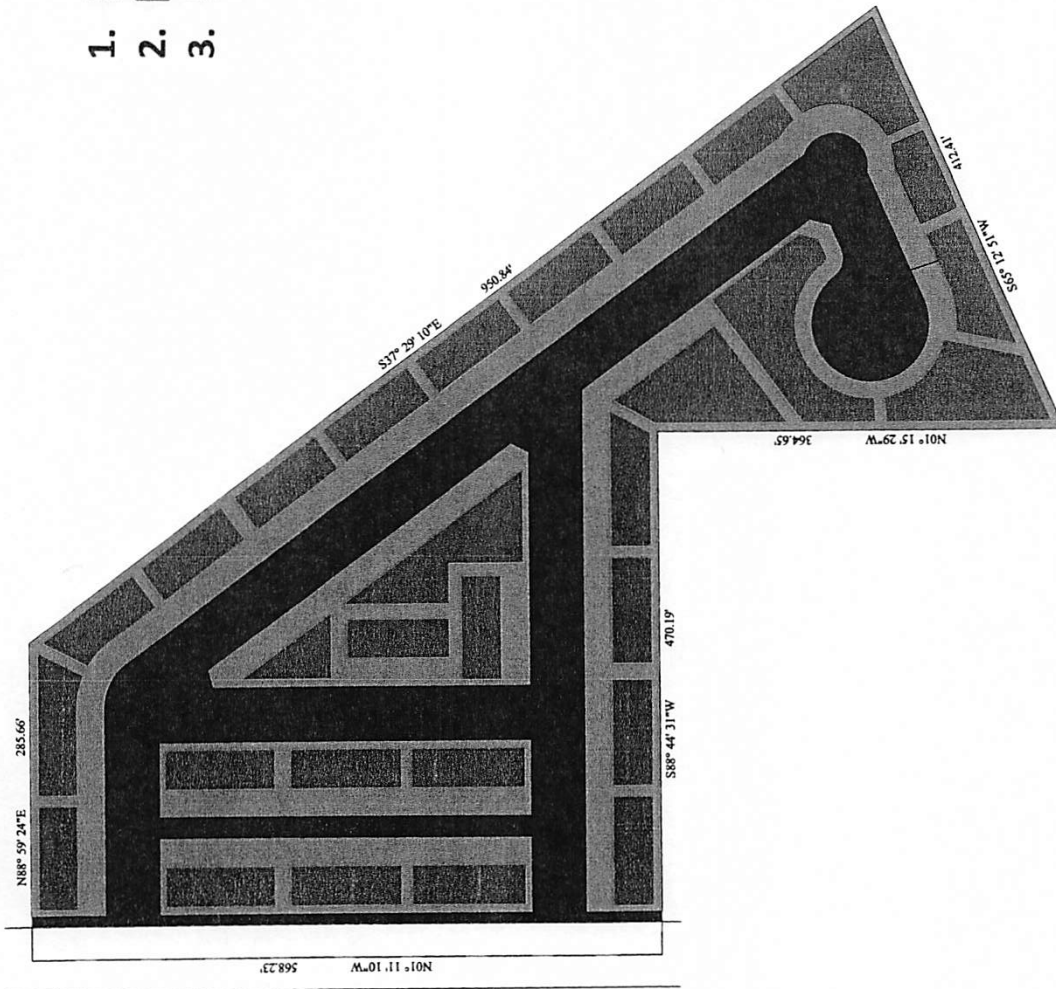
Average Slope (Adjusted) = 0.00150

K= 0.828 *std coefficient*

N grass= 0.4 *unitless*

N pavement= 0.02 *unitless*

- LEGEND**
- 1.  RESIDENTIAL 34%
 - 2.  PAVEMENT 32%
 - 3.  GRASS 34%

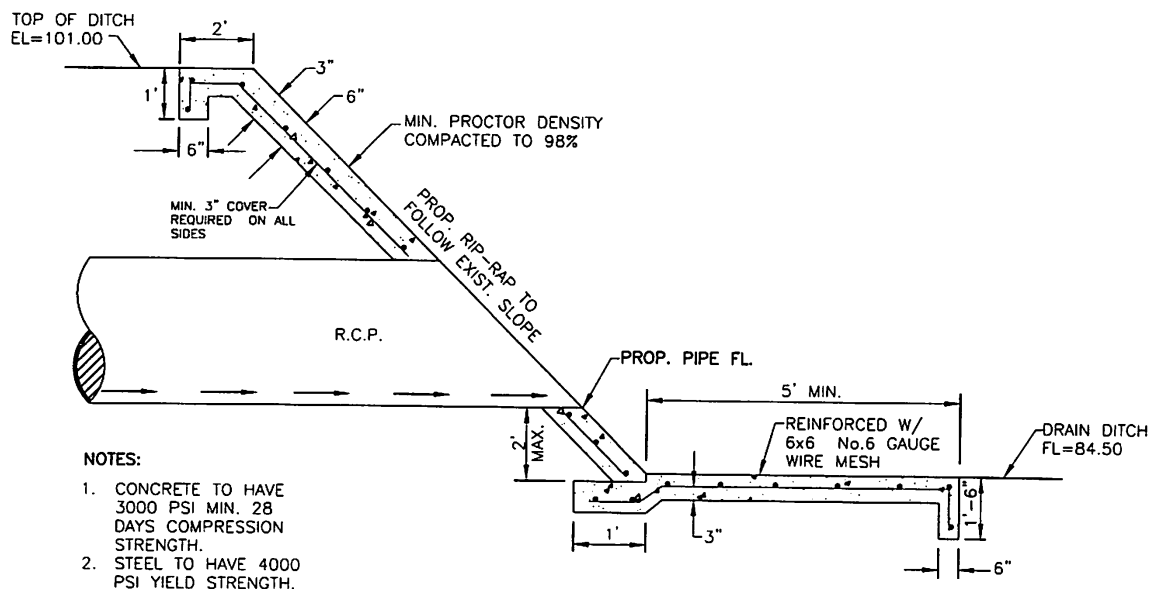


LAND USE MAP

Weslaco, Texas

PLEASANT VIEW VILLAGE SUBDIVISION

PROPOSED DRAINAGE REPORT



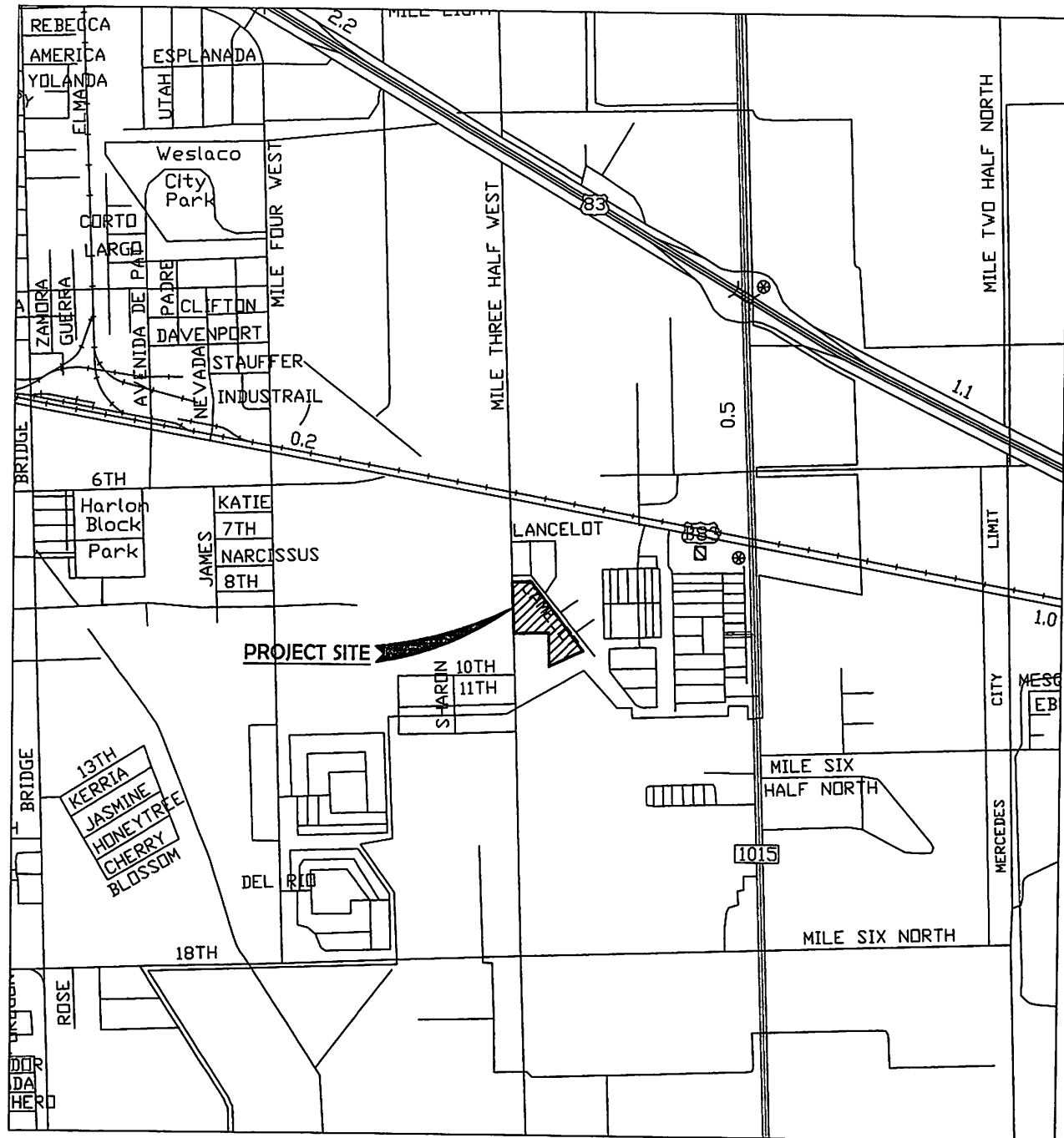
STORM DISCHARGE STRUCTURE

NTS

Weslaco, Texas
PLEASANT VIEW VILLAGE
PROPOSED DRAINAGE REPORT



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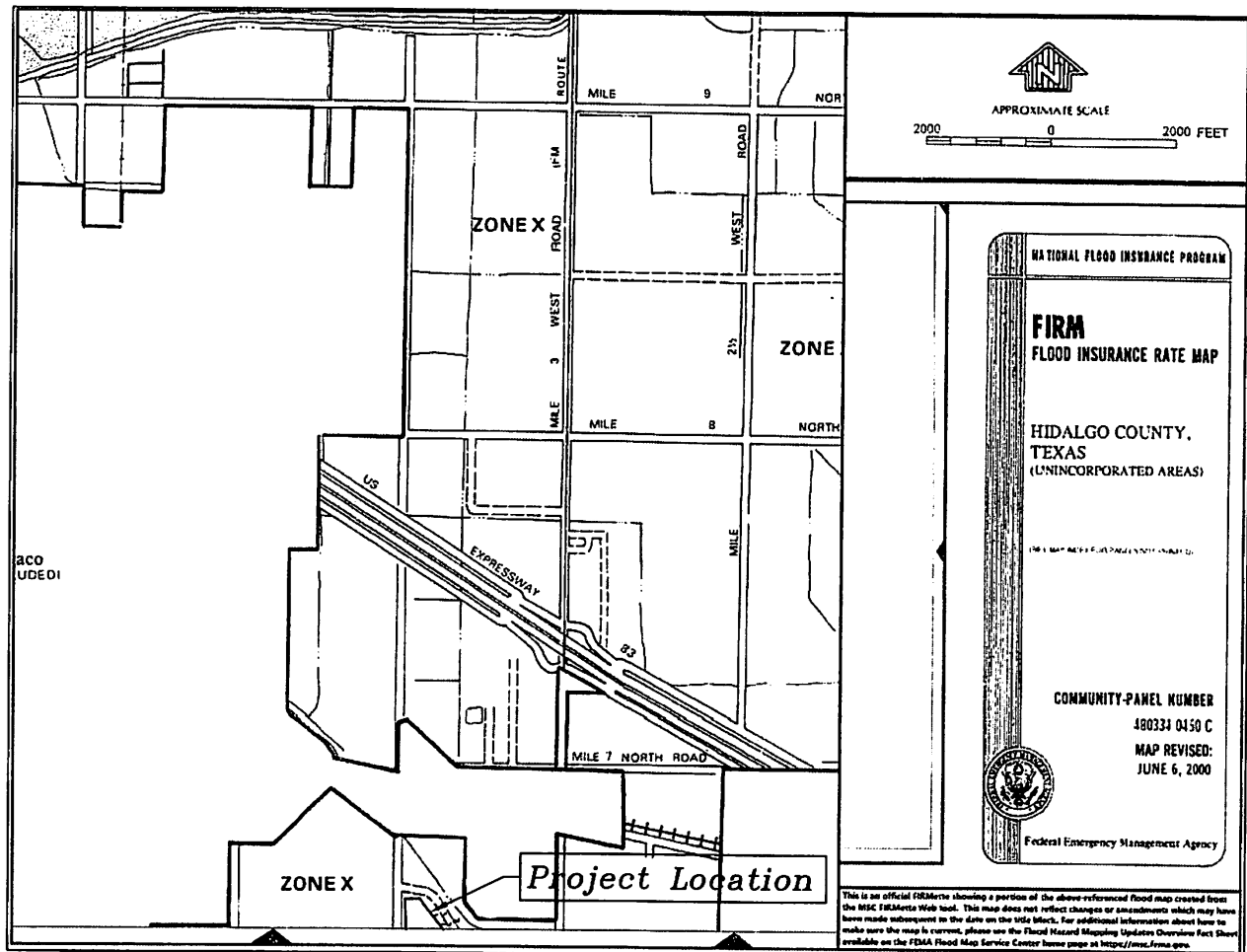


LOCATION MAP

Weslaco, Texas
PLEASANT VIEW VILLAGE SUBDIVISION
PROPOSED DRAINAGE REPORT



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FEMA FLOOD MAP (FIRM PANEL)

Weslaco, Texas
PLEASANT VIEW VILLAGE SUBDIVISION
PROPOSED DRAINAGE REPORT

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& ASSOCIATES
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Federal Emergency Management Agency

Washington, D.C. 20472

MAY 30 2002

CERTIFIED MAIL,
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:

Case Number: 02-06-715P

The Honorable Jose E. Pulido
County Judge, Hidalgo County
100 E. Cano St.
Edinburg, TX 78539

Community Name: Hidalgo County, Texas
(Unincorporated Areas)
Community Number: 480334
Panel Affected: 480334 0450 C
Effective Date of
This Revision: **MAY 30 2002**
102-I-A-C

Dear Judge Pulido:

The Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) for Hidalgo County, Texas (Unincorporated Areas) have been revised by this Letter of Map Revision (LOMR) to reflect revised hydrologic and hydraulic analyses for a portion of East Lateral Drain. The subject area is located along East Lateral Drain from approximately 2,650 feet downstream of Mile 2 West Road to approximately 25,500 feet upstream of Mile 2 West Road. This revision was initiated by [REDACTED] Floodplain Administrator, Hidalgo County, in a letter dated January 14, 2002.

We received hydrologic and hydraulic analyses, floodplain mapping, an annotated FIRM representing the revised conditions, and all applicable forms/certifications, prepared by [REDACTED] Chief Engineer, of J.F. Thompson, Inc., in support of this revision.

We received all of the data required to perform a technical review of the LOMR request as of April 29, 2002.

Because this revision was initiated to improve upon data shown on the effective FIRM, fees were not required for the review of this LOMR.

Based on our review of the submitted data, we are issuing this LOMR to reflect revised hydrologic and hydraulic analyses for a portion of East Lateral Drain. This LOMR revises the 1% annual chance (100-year) water surface elevations (WSELs), the 1% and 0.2% (500-year) annual chance floodplains, and floodway along East Lateral Drain, as shown on the enclosed annotated portions of the FIRM panel. There are no increases in the 1% annual chance WSELs and a maximum decrease of 6.41 feet occurs approximately 18,925 feet upstream of Mile 2 West Road. There are no increases in the 1% annual chance floodplain and a maximum decrease of 11,390 feet occurs approximately 18,060 feet upstream of Mile 2 West Road. The revised 1% annual chance floodplain is designated as Zone AE with Base (1% annual chance) Flood Elevations (BFEs) determined without a designated floodway, and replaces the effective

2

1% annual chance floodplain designated as Zone AE with BFEs and a designated floodway. In addition, the area which is designated as a detailed studied Zone AE for the effective FIRM and FIS have been extended to include the area from approximately 19,500 feet upstream of Mile 2 West Road to approximately 25,500 feet upstream of Mile 2 West Road. The maps accompanying this LOMR reflect the removal of the designated floodway and the extension of detailed studied area for FIRM number 480334, panel 0450 C, along East Lateral Drain.

We have enclosed a copy of the public notification of the revised BFEs, which will be published in *The Monitor* on or about June 20, 2002, and June 27, 2002. In addition, we will publish a notice of changes in the *Federal Register*. However, we will not print and distribute this LOMR to users, such as insurance agents or lenders. Your community will serve as a repository for the new data. Therefore, we encourage you to supplement the notification to appear in *The Monitor* by preparing a news release for publication in your community newspaper that describes the revision and explains how your community will provide data and help interpret the National Flood Insurance Program (NFIP) maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

Within 90 days of the second publication in *The Monitor*, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. This revision is effective as of the date of this letter. However, until the 90-day period elapses, the revised BFEs presented in this LOMR may be changed.

We based this determination on the 1% annual chance discharges computed in the revised hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and, therefore, could establish greater flood hazards in this area.

This LOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the Special Flood Hazard Area. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Use the map panel listed above and revised by this letter for flood insurance policies and renewals issued in your community.

3

We have enclosed an updated version of a document titled *List of Current Flood Insurance Study Data*, which includes this letter, to help your community maintain all information for floodplain management and flood insurance. If any of the items in this document are not filed in your community's map repository, please contact the Federal Emergency Management Agency (FEMA) Map Assistance Center at the telephone number listed below for information on how to obtain those items.

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR ~~Part~~ 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management ordinances that meet or exceed minimum NFIP criteria. These criteria, including adoption of the FIS and FIRM, and modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State or local requirements to which the regulations apply.

If you have any questions regarding this LOMR, please contact the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



Lloyd A. Hake, Project Engineer
Hazards Study Branch
Federal Insurance and
Mitigation Administration

For: Matthew B. Miller, P.E., Chief
Hazards Study Branch
Federal Insurance and
Mitigation Administration

Enclosures

cc: Floodplain Administrator, Hidalgo County
Chief Engineer, J.F. Thompson, Inc.
Community Map Repository, Hidalgo County

LIST OF CURRENT FLOOD INSURANCE STUDY DATA

This list is provided to document all information currently effective for your community for insurance and floodplain management.

Date: MAY 30 2002

Community: Hidalgo County, Texas (Unincorporated Areas)

Community Number: 480334

Page Number: 1 of 2

CURRENT EFFECTIVE FLOOD INSURANCE STUDY DATE:

FLOOD INSURANCE RATE MAP

Map Index
480334IND0

Effective Date
June 6, 2000

Panel Numbers
0025 B, 0050 B, 0075 B, 0100 B,
0125 B, 0150 B, 0175 B, 0200 B,
0225 B, 0250 B, 0275 B, 0375 B,
0475 B, 0500 B, and 0525 B

Effective Date
January 2, 1981

0400 C and 0425 C

November 16, 1982

0290 D, 0295 D, 0300 D, 0325 D,
0350 C, and 0450 C

June 6, 2000

LETTERS OF MAP REVISION

Panel Numbers
0325 D

Effective Date
May 17, 2001

0350 C

May 17, 2001

0375 B

September 21, 1998

0400 C

January 31, 2001

0450 C

MAY 30 2002

Page 2 of 2

LETTERS OF MAP AMENDMENT AND MAP REVISION BASED ON FILL

<u>Panel Numbers</u>	<u>Effective Date</u>
0200 B	November 13, 1996
0275 B	February 21, 2001
0290 D	October 25, 2000 December 20, 2000 January 17, 2001 February 21, 2001 March 7, 2001 January 11, 2002 April 12, 2002
0295 D	December 20, 2000 January 17, 2001 March 7, 2001 September 19, 2001
0325 D	May 15, 2001 May 17, 2001 August 3, 2001 March 15, 2002 April 17, 2002
0350 C	April 18, 2001
0400 C	April 15, 1998
0425 C	November 2, 1998 March 23, 1999 December 14, 1999 December 20, 1999 April 12, 2000
0450 C	August 9, 2000

BEST AVAILABLE DATA LETTERS

None

105b

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE HIDALGO COUNTY, TEXAS (UNINCORPORATED AREAS), UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On June 6, 2000, the Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in the unincorporated areas of Hidalgo County, Texas, through issuance of a Flood Insurance Rate Map (FIRM). The Federal Insurance and Mitigation Administration has determined that modification of the elevations of the flood having a 1% chance of being equaled or exceeded in any given year (base or 100-year flood) for certain locations in this community is appropriate. The modified Base Flood Elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

A hydraulic analysis was performed to incorporate revised hydrologic and hydraulic analyses and has resulted in the removal of the floodway delineation, a reduction in SFHA, and lower BFEs for East Lateral Drain. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding source cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Approximately 2,650 feet downstream of Mile 2 West Road	60	59
Approximately 25,500 feet upstream of Mile 2 West Road	None	64

*National Geodetic Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Federal Insurance and Mitigation Administration must develop criteria for floodplain management. For the community to participate in the National Flood Insurance Program (NFIP) the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Federal Insurance and Mitigation Administration reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical

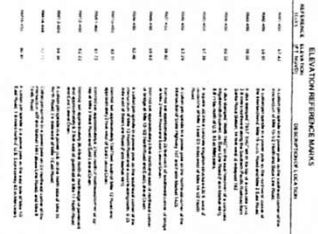
2

data. All interested parties are on notice that until the 90-day period elapses, the Federal Insurance and Mitigation Administration 's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Jose E. Pulido
County Judge, Hidalgo County
100 E. Cano St.
Edinburg, TX 78539

**REGION VI
TEXAS
HIDALGO
COUNTY
02-06-715P**

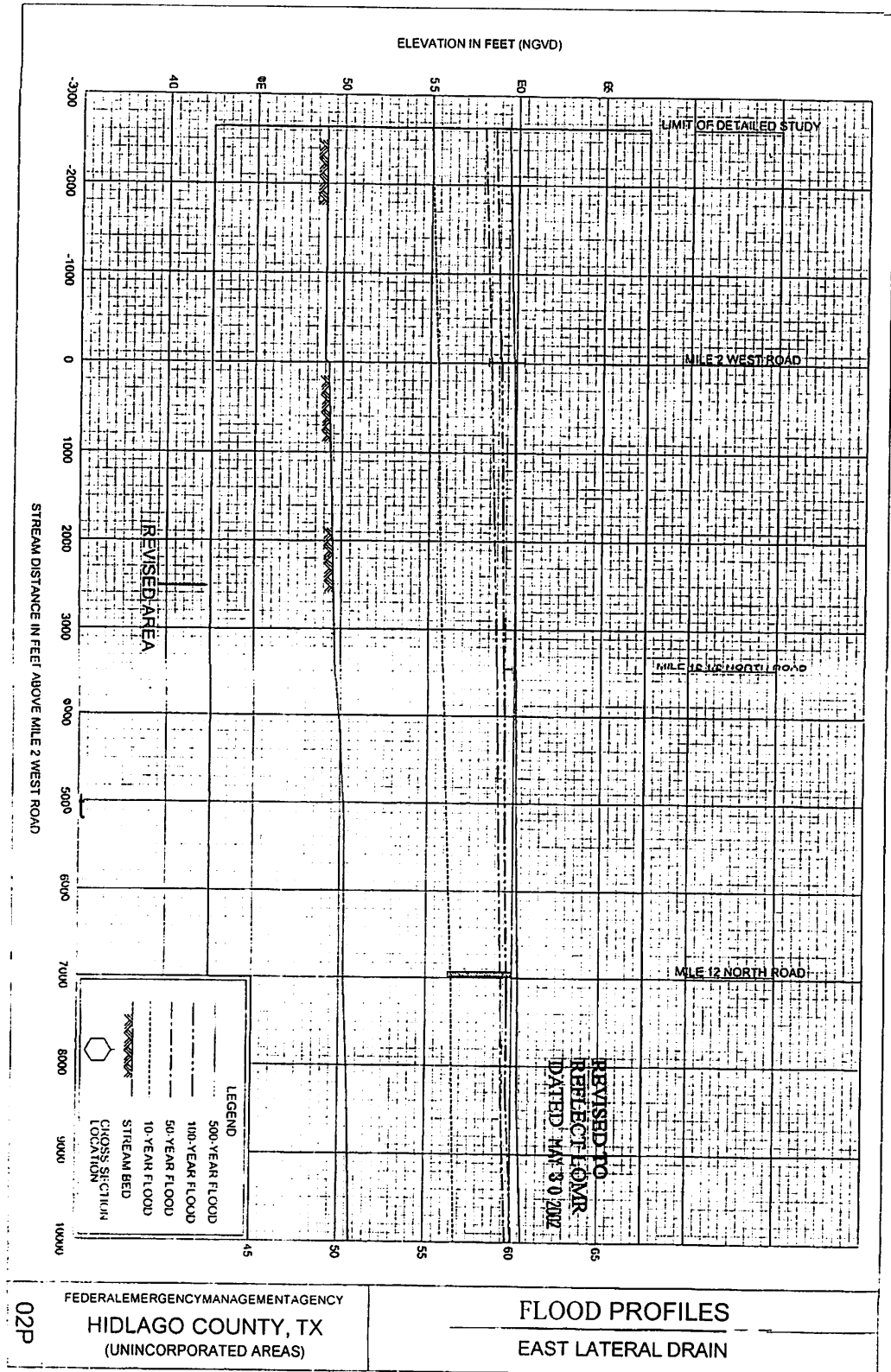
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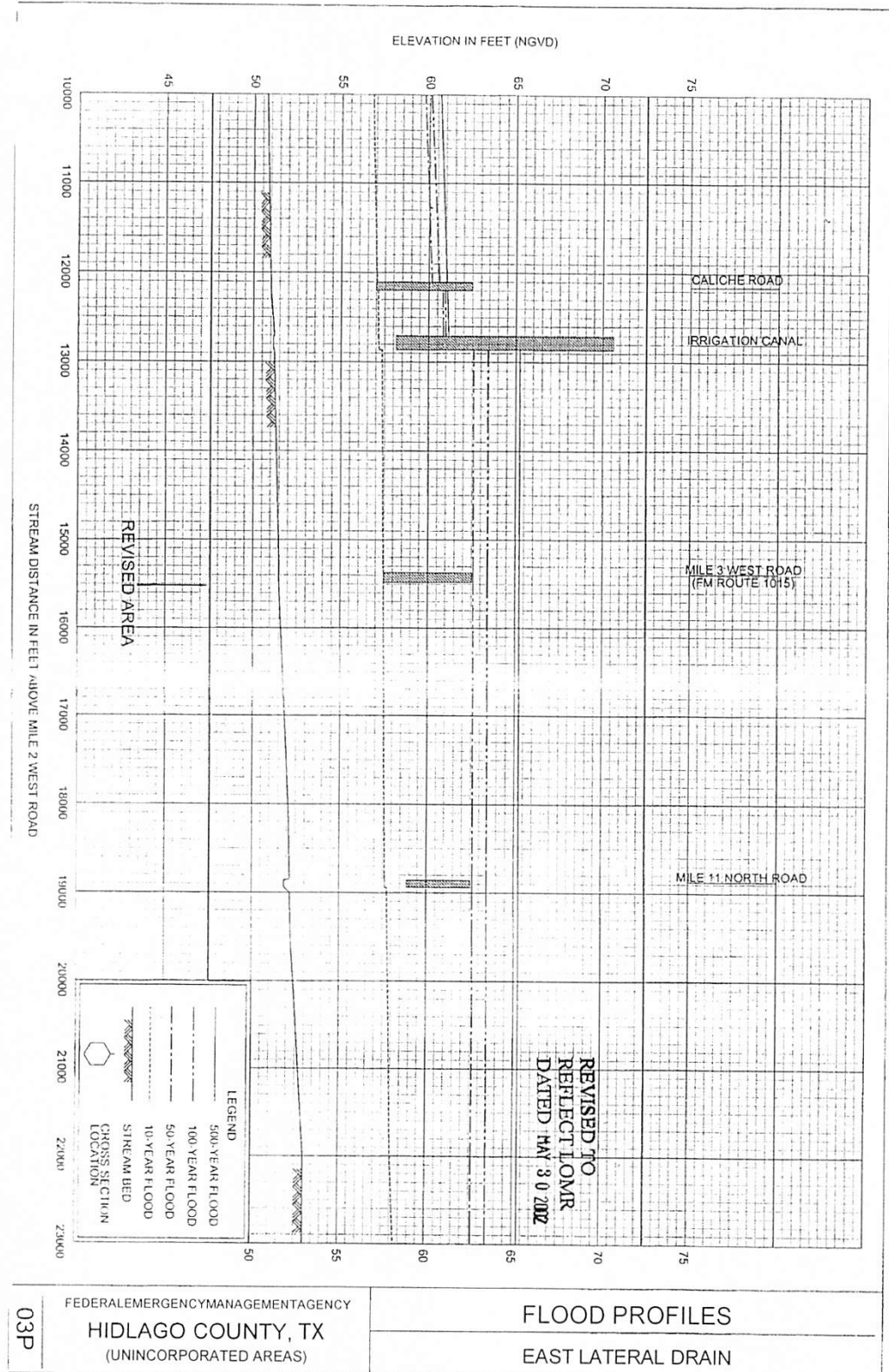
REVISED AREA

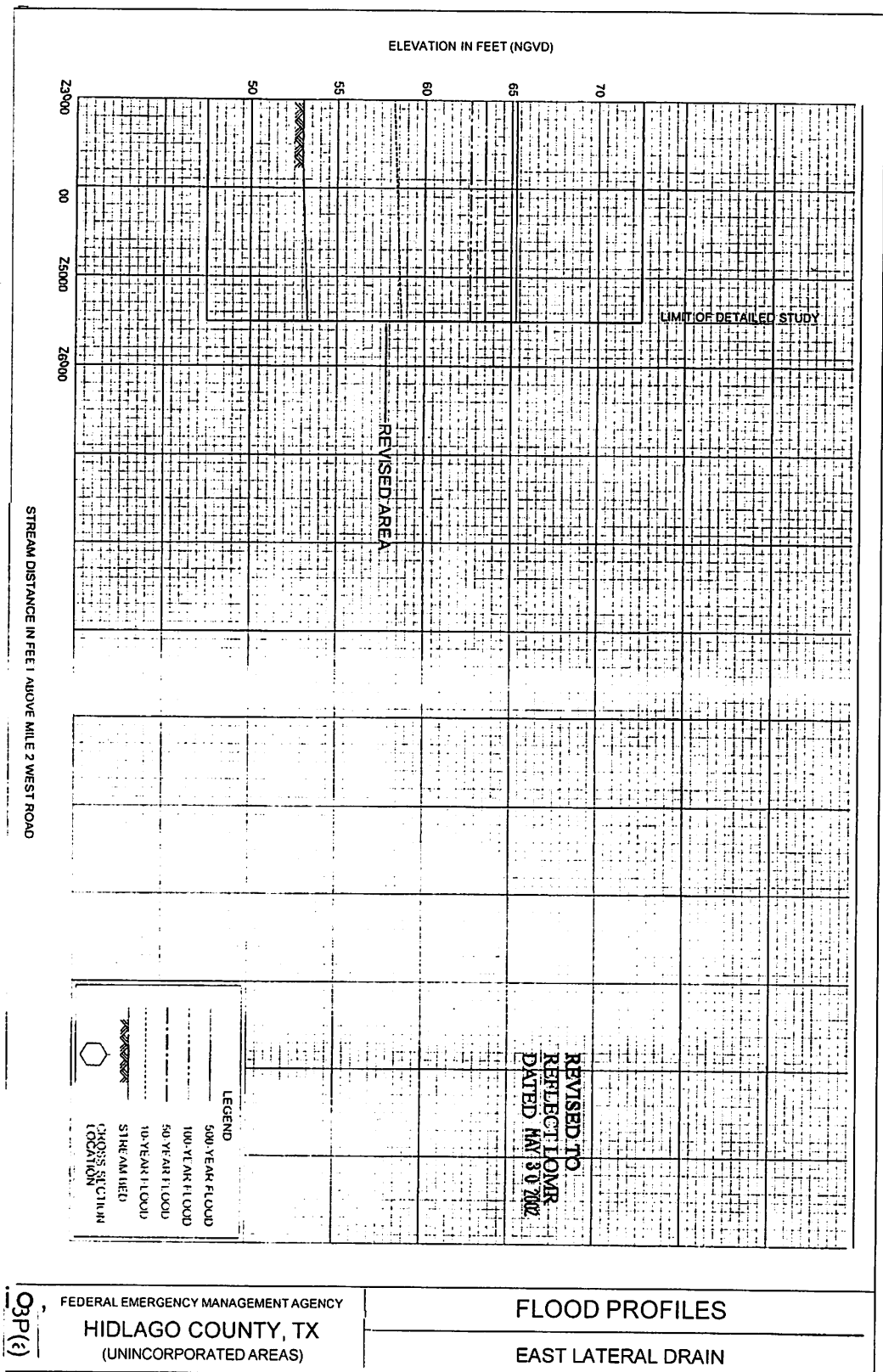
Table 1. Summary of Discharges

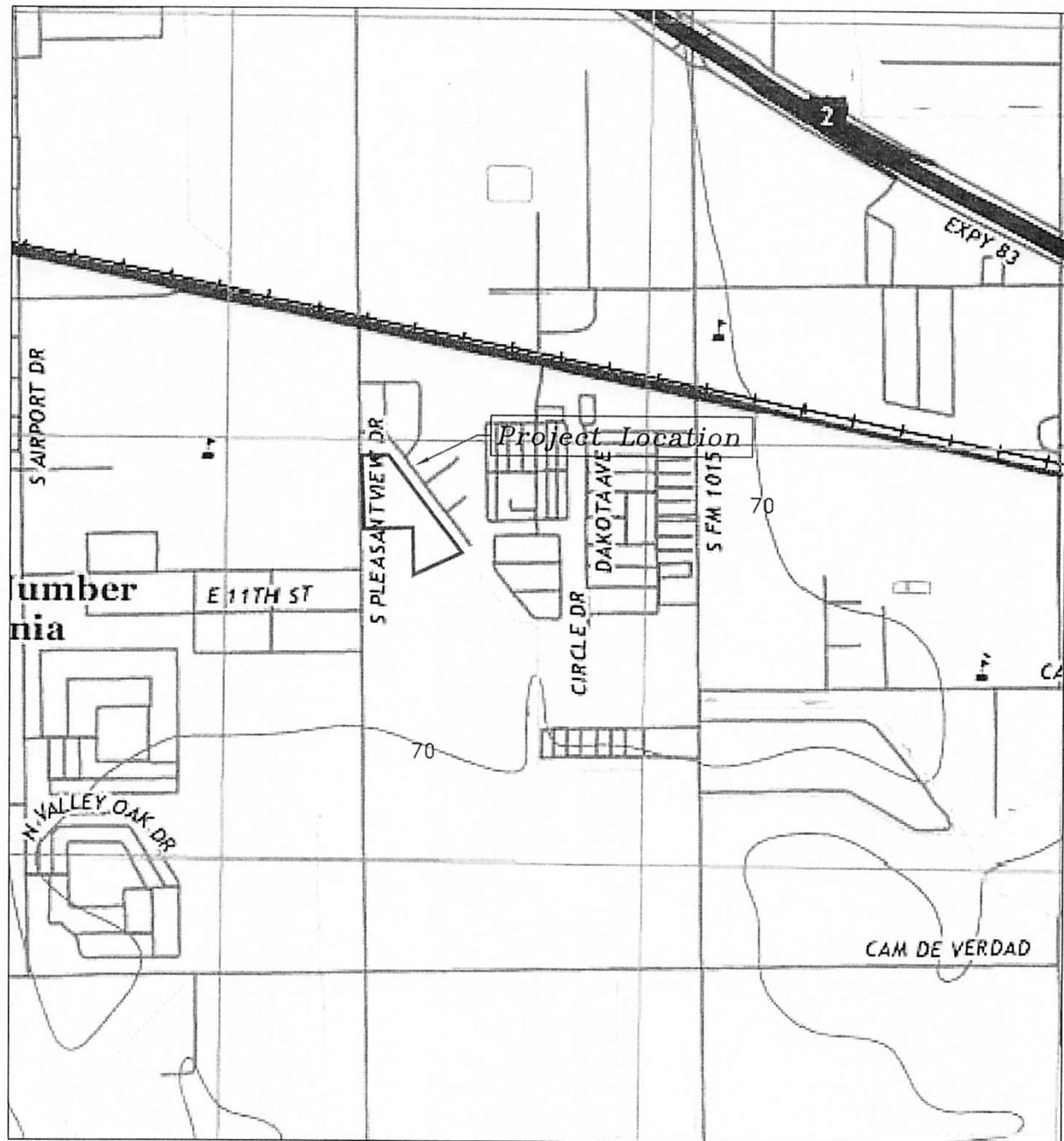
Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (cfs)		
		10-Year	50-Year	100-Year
East Lateral Drain				
At outfall to IBWC floodway	30.53	413	975	1360
At Mile 2 West Road	24.94	322	1128	1476
At elevated canal crossing	13.96	195	606	720
At Mile 11 North Road	7.36	152	576	847
North Main Drain				
At downstream Junction of North and South Main Drains	318.10	653	2,565	4,001
At Doolittle Road	288.78	554	2,258	3,818
At Ingle Road	277.30	555	2,215	3,804
At Seminary Road	264.72	527	2,355	4,178
At FM 1925	208.28	484	1,985	3,435
At upstream junction of North and South Main Drains	105.61	158	1,051	1,858
West Main Drain				
At junction of West Main Canal and Mission-McAllen Lateral	92.88	1,081	3,336	4,809
At confluence of United Irrigation Canal	28.22	148	727	1,128
At Brushliner Road	18.40	85	468	731

**REVISED TO
REFLECT LOMR
DATED MAY 30 2002**





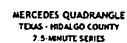




USGS TOPO MAP

Weslaco, Texas
PLEASANT VIEW VILLAGE SUBDIVISION
PROPOSED DRAINAGE REPORT

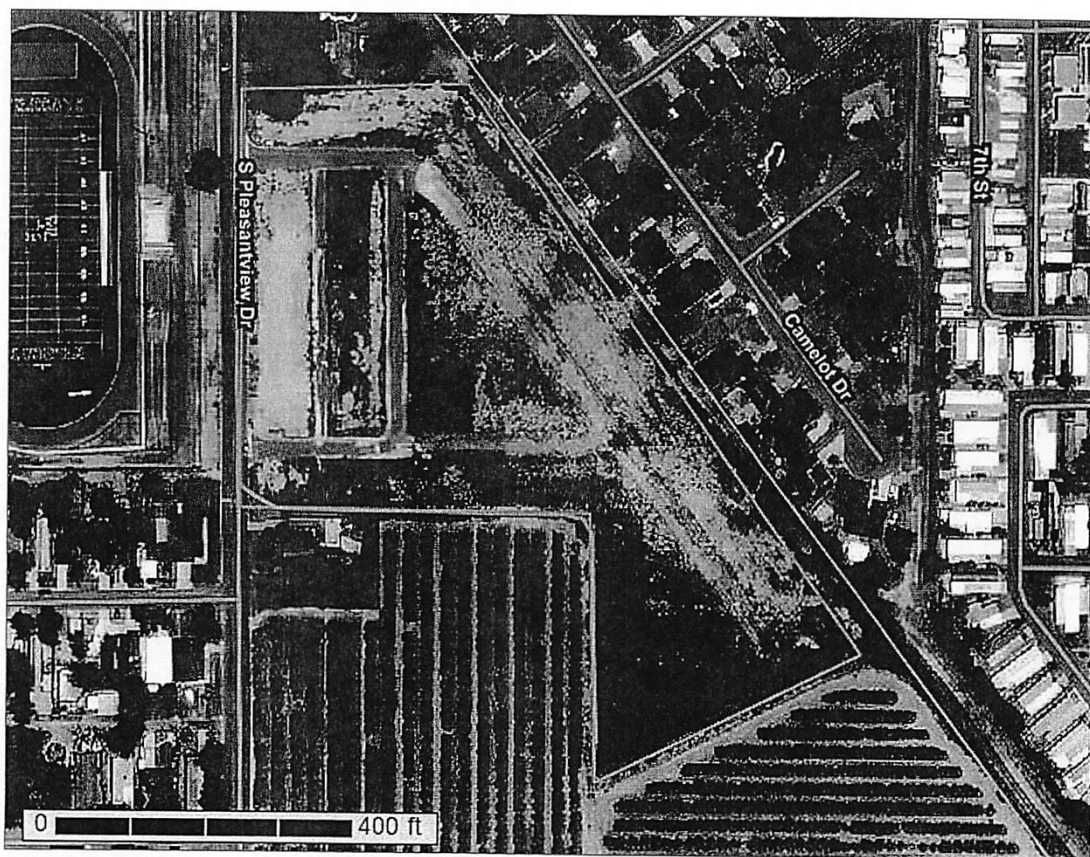
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A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Hidalgo County, Texas



March 31, 2021

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

Custom Soil Resource Report

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



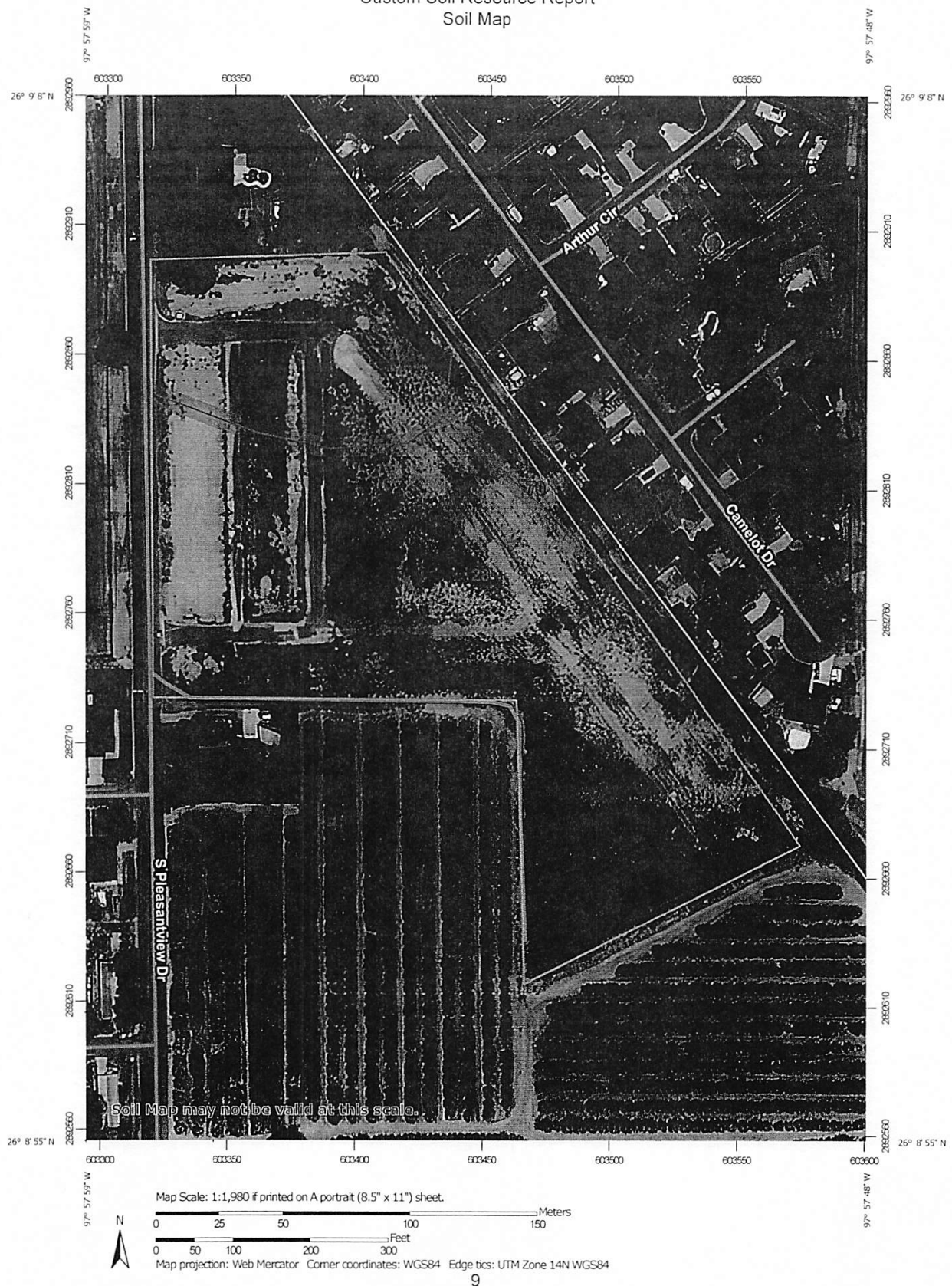
Custom Soil Resource Report

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



MAP LEGEND

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.

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.

Area of Interest (AOI)		Soils		Special Point Features		Water Features		Streams and Canals		Transportation		Background																																																													
	Area of Interest (AOI)		Soil Map Unit Polygons		Soil Map Unit Lines		Soil Map Unit Points		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		Streams and Canals		Transportation		Rails		Interstate Highways		US Routes		Major Roads		Local Roads		Aerial Photography

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	6.4	75.6%
70	Willacy fine sandy loam, 0 to 1 percent slopes	0.2	2.6%
71	Willacy fine sandy loam, 1 to 3 percent slopes	1.9	21.8%
Totals for Area of Interest		8.5	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

Custom Soil Resource Report

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: 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

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

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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

70—Willacy fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dbmp
Elevation: 30 to 750 feet
Mean annual precipitation: 26 to 34 inches
Mean annual air temperature: 72 to 73 degrees F
Frost-free period: 270 to 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Willacy

Setting

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

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Typical profile

H1 - 0 to 14 inches: fine sandy loam
H2 - 14 to 72 inches: sandy 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: 10 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 2c
Hydrologic Soil Group: B
Ecological site: R083DY023TX - Sandy Loam
Hydric soil rating: No

Minor Components

Unnamed

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

71—Willacy fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: dbmq
Elevation: 30 to 750 feet
Mean annual precipitation: 26 to 34 inches
Mean annual air temperature: 72 to 73 degrees F
Frost-free period: 270 to 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

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Description of Willacy

Setting

Landform: Delta plains
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy alluvium

Typical profile

H1 - 0 to 14 inches: fine sandy loam
H2 - 14 to 72 inches: sandy clay loam

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: 10 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: R083DY023TX - Sandy Loam
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 15 percent
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 <u>In</u>	USDA texture	Classification		Percentage passing sieve number--				Liquid limit <u>Pct</u>	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
1.* Arents										
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 SC, CL	A-2-4, A-4 A-2-4, 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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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-----										
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	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-----										
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:*										
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	90-100	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	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.

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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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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		
	<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.

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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>P_{ct}</u>	Plas- ticity index
			Unified	AASHTO	4	10	40	200		
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----- Sarita	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----- Urban land.	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
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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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	Hardness	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-----	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.

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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----- Nataamoras	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----- Olimito	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----- 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 soi 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>			
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.

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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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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----- Hebronville	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----- Matamoras	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.

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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.	Peres slowly----	Slow intake, peres slowly.	Peres slowly----	Peres slowly.
53----- Raymondville	Slight-----	Severe: excess salt.	Peres slowly, excess salt.	Wetness, droughty, excess salt.	Wetness, peres slowly.	Excess salt, droughty, peres slowly.
54:* Raymondville-----	Slight-----	Moderate: hard to pack.	Peres slowly----	Slow intake, peres slowly.	Peres slowly----	Peres 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, peres slowly, floods.	Ponding, peres slowly, floods.	Ponding, peres slowly.	Wetness, peres slowly.
59----- Rio	Slight-----	Severe: ponding, excess salt.	Ponding, peres slowly, floods.	Ponding, droughty, peres slowly.	Ponding, peres slowly.	Wetness, excess salt, droughty.
60----- Rio	Slight-----	Severe: ponding.	Ponding, peres slowly, floods.	Ponding, peres slowly, floods.	Ponding, peres slowly.	Wetness, peres slowly.
61----- Rio	Slight-----	Severe: ponding, excess salt.	Ponding, peres slowly, floods.	Ponding, droughty, peres slowly.	Ponding, peres 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.	Percs slowly---	Slow intake, percs slowly, excess salt.	Percs slowly---	Percs slowly.
65----- Runn	Moderate: seepage.	Moderate: hard to pack, wetness, excess salt.	Percs slowly, excess salt.	Slow intake, percs slowly, excess salt.	Wetness, percs slowly.	Excess salt, erodes easily, percs 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, percs slowly, floods.	Ponding, slow intake, percs slowly.	Ponding, percs slowly.	Wetness, percs 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: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.E.
From: Rebekah de la Fuente, Planning Director, on behalf of Urban Infrastructure.	
Subject/Agenda Item: Discussion and consideration for the Preliminary Plat for North Park Place Ph II– being 10.589 acres out of Farm Tract 183 and Farm Tract 184, Block 161, West & Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 800 ft E from the intersection of Mile 10 N and N mile 5 ½ Possible Action.	
Discussion/Overview: The proposed thirty-six (36) lot subdivision is inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco through a 6" waterline and sewer by City of Weslaco services through an 8" sewer line. The property is within a Flood Zone "X". Applicant is requesting a variance for off-site drainage. Staff is pending letters of support from Irrigation District and 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 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

PLAT-000124 2021

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: North Park Place Phase II

Location: 830 ft S and 750 ft E from the intersection of Mile 10 N and N Mile 5 ½

Legal Description: 10.589-Acres out of Farm Tract 183 & Farm Tract 184, Block 161, West & Adams Tract Subdivision, City of Weslaco, Hidalgo Co, Texas Vol. 2,

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: R-1 Proposed Land Use: Single Family Residential

Number of Lots Proposed: 36 Gross Acreage: 10.589

Title Report Submitted: ☐ YES ☒ NO

OWNER INFORMATION

Owner's Name: C&G Construction, LLC Telephone: 956-530-7630

Address: 7400 N. 10th St, Ste. L Fax: NA

City: Mcallen State: TX Zip: 78504 E-mail: info.cgconstruction19@gmail.com

ENGINEER INFORMATION

Name: Urban Infrastructure Group, Inc Telephone: 956-405-3337

Address: 260 S Texas Blvd, Ste. 403 Fax: 956-464-4710

City: Weslaco State: TX Zip: 78596 E-mail: cgonzalez@uigtexas.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: N.A.W.S.C.

☒ YES ☐ NO Wastewater Provision: City of Weslaco

☒ YES ☐ NO Electric Company: AEP

☒ 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>No. 1</u>	☒ YES ☐ NO Irrigation District <u>HCID#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

- _____ Scaled 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: _____ Date: 9/16/21

Authorized Agent Printed Name: Craig Gonzalez, 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

VAR-000125-2021

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: North Park Place Phase II

Location: 830 ft S and 750 ft E from the intersection of Mile 10 N and N Mile 5 ½ W

Legal Description: 10.589-Acres out of Farm Tract 183 & Farm Tract 184, Block 161, West & Adams Tract Subdivision, City of Weslaco, Hidalgo Co, Texas Vol. 2, Pg.34-37

VARIANCE TYPE:

☐ Streetlights ☐ YES ☒ NO

Describe in detail the reason for the variance request:
North Park Place Phase II

☐ 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:

Request to provide off-site detention in adjacent H.C.C.I.D.#9 drainage ditch by widening ditch.

☐ 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: North Park Place Ph II Joint Venture Telephone: 956-530-7630

Address: 7400 N. 10th St Fax: NA

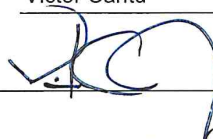
City: Mcallen State: TX Zip: 78504 E-mail: info.cgconstruction19@gmail.com

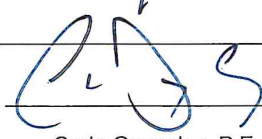
AUTHORIZATION AND ACKNOWLEDGEMENTS

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: Victor Cantu

Owner Signature:  Date: 9/30/2021

_____ is the authorized agent
Authorized Agent Signature:  Date: 9/30/21

Authorized Agent Printed Name: Craig Gonzalez, P.E.

DRAINAGE REPORT

N PARK PLACE II
SUBDIVISION

HIDALGO COUNTY, TEXAS

PREPARED FOR:

Victor Cantu
North Park Place Phase II Joint Venture, LLC
7400 N. 10th Street, Ste. L
McAllen, Texas 78504

PREPARED BY:



**URBAN
INFRASTRUCTURE
GROUP, INC.**

FIRM TBPE FIRM NO. F-13094
(956) 405-3337
260 S Texas Blvd., Ste. 403
WESLACO, TEXAS 78596



Revised 8-26-21

UIG JOB No. 127800

North Park Place Phase II Drainage Report

Table of Contents

Introduction	1
Floodplain Information	1
Soil Survey	1
Hydrology	1
Detention	2

Attachment A – Location Map, Quad Map

Attachment B –FEMA Panels No. 4803340450C

Attachment C –Web Soil Survey

Attachment D – Storm run-off Peak Flow Calculations

Attachment E – Preliminary Plat & Drainage Area Map

**North Park Place Phase 2
Drainage Report**

Urban Infrastructure Group, Inc.

INTRODUCTION

The North Park Place Phase II Subdivision is a proposed thirty-six (36) lot subdivision. The Subdivision will have 36 residential lots. The property is 10.589-acres out of Farm Tracts 183 and 184, Block 161, West & Adams Tract Subdivision as described in Volume 2, Page 34-37, Official records, Hidalgo County, Texas. The property is located within the City of Weslaco city limits approximately 830 feet south and 750 feet East from the intersection of Mile 10 N and N Mile 5 ½ W. A location map is provided in **Attachment A**.

FLOODPLAIN INFORMATION

The property does not contain Federal Emergency Management Agency (FEMA) Special Flood Hazard Areas (SFHA). The N Park Place II Subdivision is located within FEMA Community Panel No. 480334 0450 C, map revised June 6, 2000. A FEMA map showing the property is provided in **Attachment B**. The attached map from Panel No. 480334 0450 C shows that the property is located within a FEMA Zone X (no shading).

SOIL SURVEY

According to the Soil Survey Report prepared for Hidalgo County by the U.S.D.A. Soil Conservation Service, the project site is 78.5% 28 Hidalgo sand clay loam, 0 to 1 percent slopes. The site hydrologic soil group is identified as group B. 28 soil has the 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. The frequency of flooding is none and the frequency of ponding is none. 28 soil is comprised as 85% Hidalgo and similar soils and 15% minor components. 21.5% 25 Hidalgo fine sand loam, 0 to 1 percent slopes. The site hydrologic soil group is identified as group B. 25 soil has the 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. The frequency of flooding is none and the frequency of ponding is none. 25 soil is comprised as 85% Hidalgo and similar soils and 15% minor components. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data (see attached Soil Survey) in **Attachment C**.

North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.

HYDROLOGY

Phase 2 of the North Park Place subdivision will add 36 lots to the existing 40 lots developed in Phase 1. Phase 2 lies on the east side of Phase 1. Storm run-off generally flows from the west to the east on the tract. The existing 10.589-acre tract is undeveloped land, however, some drainage improvements were previously made as part of the Phase 1 development. There are existing inlets that connect to storm sewer piping that flows to the drainage ditch located east of the Phase 2 tract. The proposed land will be designated as residential. Hydrology calculations are presented for each lot. The Rational Method was used to calculate the existing and post-development storm run-off peak flowrates for the 10-year and 50-year frequency storm events. Runoff coefficients, "C" values, were determined based on the Texas Department of Transportation (TxDOT) *Hydraulic Design Manual*, dated July 2016. The composite "C" value for the existing conditions is 0.18, and the composite "C" value for the post-development conditions is assumed to be 0.42; that is an increase of 0.23. The calculated existing peak 10-year flow rate is approximately 3.59 cfs, and the post-development peak 50-year flow rate is approximately 35.27 cfs. The calculated "C" values and peak flow rates are found in **Attachment D**.

DETENTION

The required detention volume to contain the 50-year frequency storm event with the assumed improvements while releasing at the existing 10-year frequency storm event is approximately 50,035 cf or 1.15 acre-foot. Stormwater runoff will be detained offsite within the existing Hidalgo & Cameron Counties Irrigation District #9 drainage ditch running north and south between N Mile 5 W and Texas Blvd, see Drainage Exhibit in **Attachment E**. The proposed widening will be in accordance with Hidalgo County Drainage District#1 requirements. The ditch will be widened to provide a detention volume of 50,781 CF for the fully developed stage.



Craig A. Gonzalez, P.E.
Firm No. F-13094



☐ REJECTED	
☒ APPROVED FOR SUBMITTAL	
☐ TO H.C. PLANNING DEPT.	
☒ TO CITY	
☒ DISCHARGE PERMIT REQUIRED	
☐ DISTRICT FACILITY	
☒ CITY FACILITY	
☐ OTHER	
 H.C.D.D. NO. 1	
DATE 9/17/21	

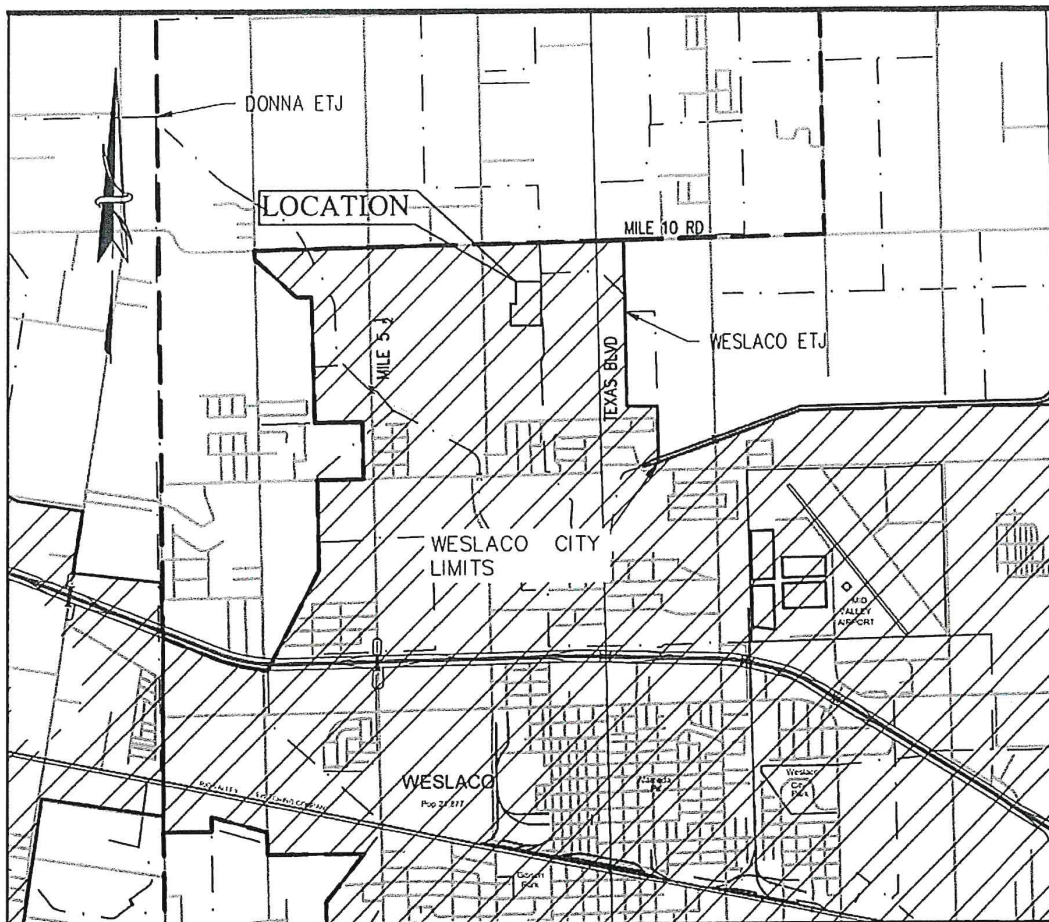
**North Park Place Phase 2
Drainage Report**

Urban Infrastructure Group, Inc.

Attachment A

**North Park Place Phase 2
Drainage Report**

Urban Infrastructure Group, Inc.



**LOCATION MAP
SCALE: 1"=2000'**

Urban Infrastructure Group, Inc.



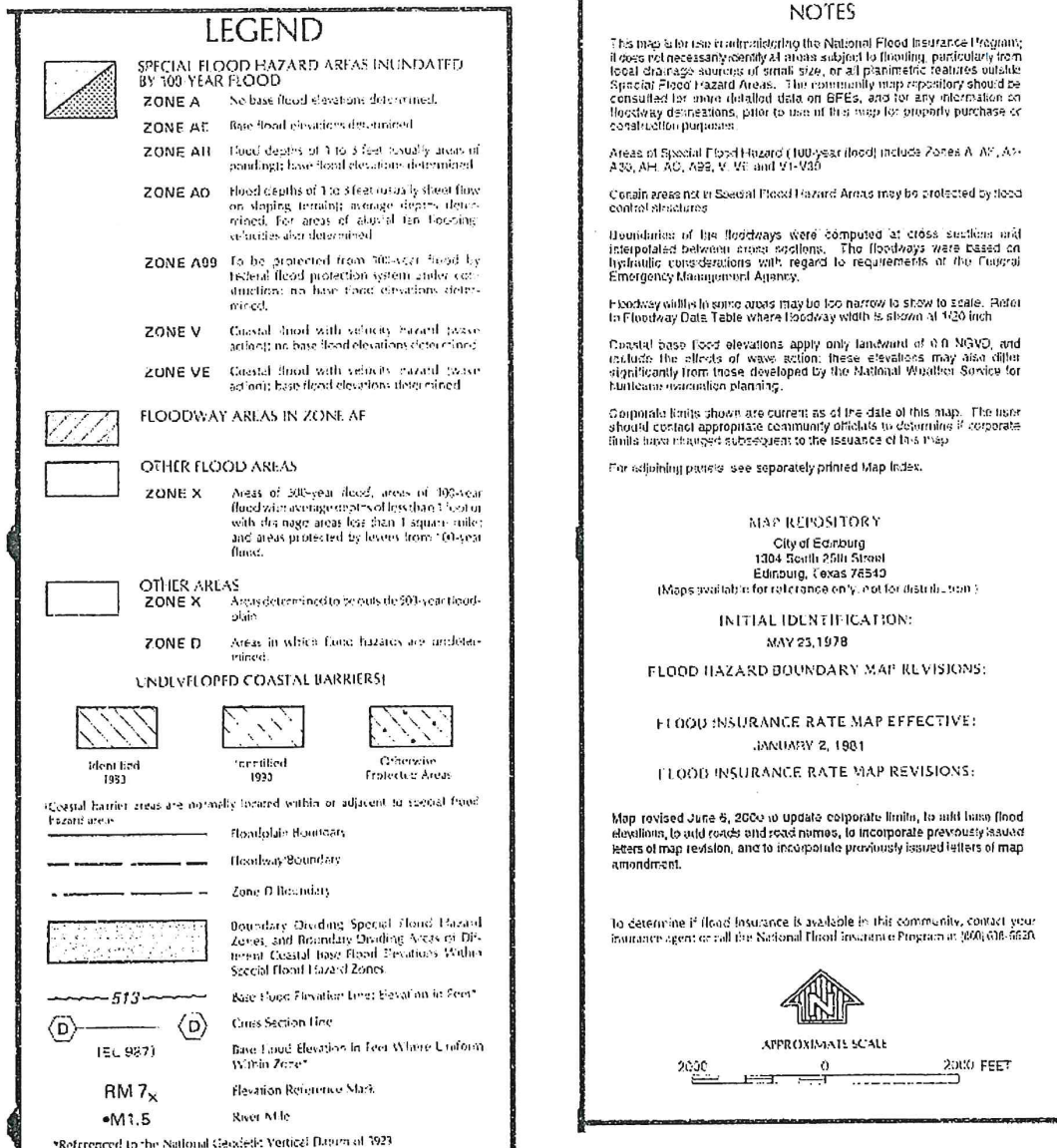
Urban Infrastructure Group, Inc.



North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.

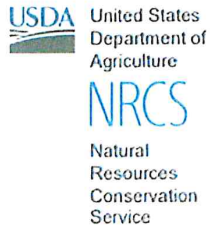
Attachment B



North Park Place Phase 2
Drainage Report

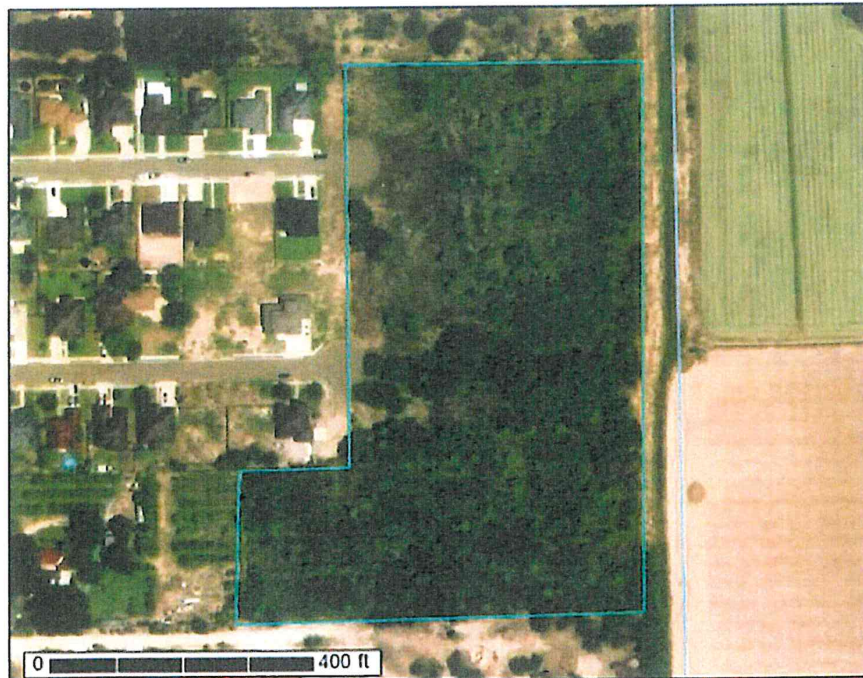
Urban Infrastructure Group, Inc.

Attachment C



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

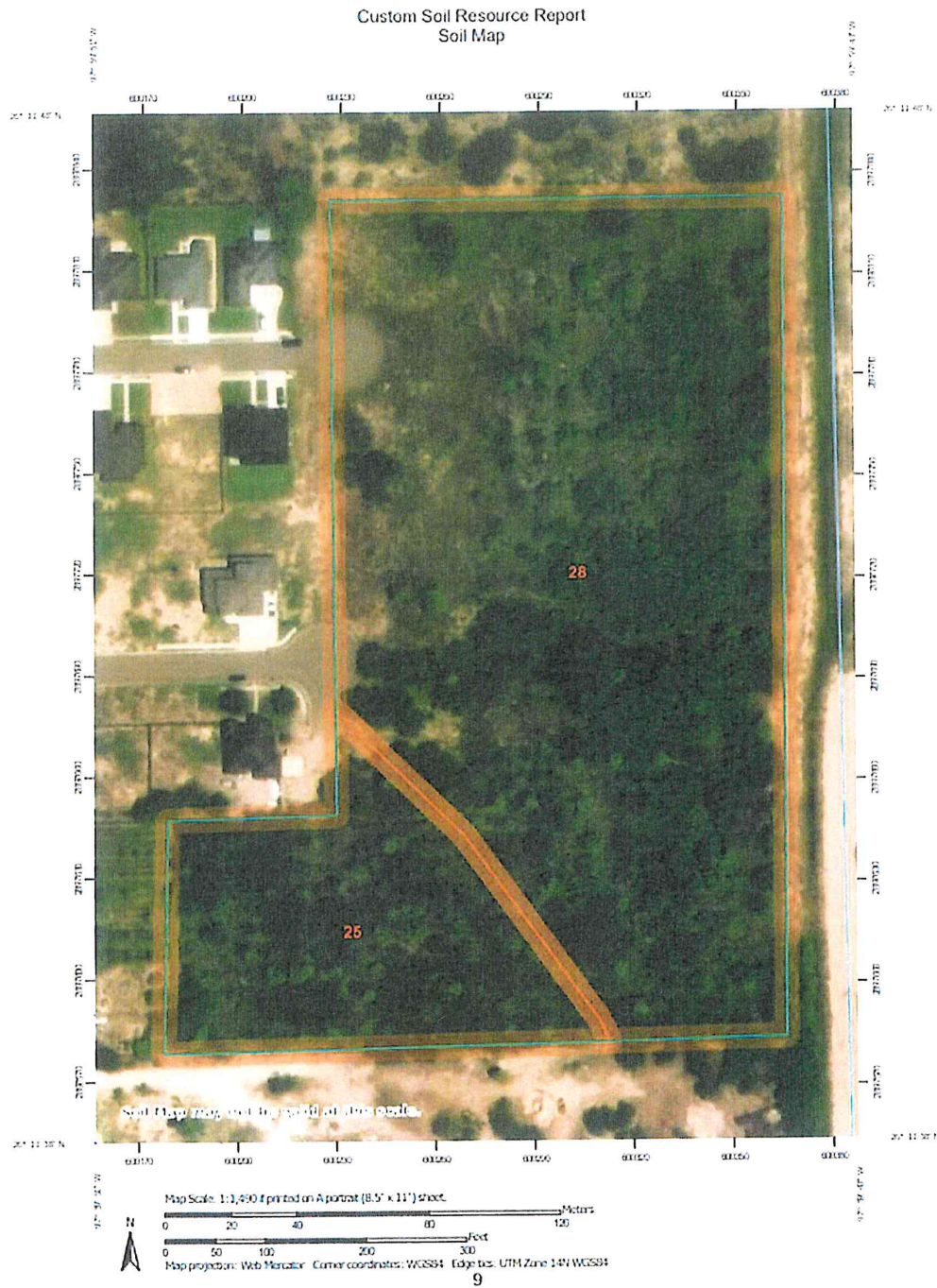
Custom Soil Resource
Report for
**Hidalgo County,
Texas**



October 1, 2020

North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.



North Park Place Phase 2 Drainage Report

Urban Infrastructure Group, Inc.

MAP LEGEND		MAP INFORMATION
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	Spill 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	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 18, Sep 12, 2019 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.

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	2.0	21.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	7.3	78.5%
Totals for Area of Interest		9.3	100.0%

North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.

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

**North Park Place Phase 2
Drainage Report**

Urban Infrastructure Group, Inc.

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

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

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

North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.

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
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

North Park Place Phase 2
Drainage Report

Urban Infrastructure Group, Inc.

Attachment D

Rational Method

Pre-Developed Conditions

10-YEAR
Average Land Slope, $S = 0.0037$
Velocity, $V = 0.14$
Flow Segment, $L = 950$
Time of Concentration, $T_c = 113.10$
Area, $A = 9.64$
Coefficient, $C = 0.18$
Rainfall Intensity, $I = 2.07$
 $Q = 3.59$

Post-Developed Conditions

50-YEAR
Average Land Slope, $S = 0.00345$
Velocity, $V = 0.84$
Flow Segment, $L = 830$
Time of Concentration, $T_c = 16.46$
Area, $A = 9.64$
Weighted Coefficient, $C = 0.42$
Rainfall Intensity, $I = 8.71$
 $Q = 35.27$

Increased Runoff **31.68**

HIDALGO COUNTY RAINFALL INTENSITY-DURATION-FREQUENCY COEFFICIENTS

HIDALGO COUNTY RAINFALL INTENSITY DURATION FREQUENCY
COEFFICIENTS

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
Harrison	b	74	80	87	98	99	103
Hartley							
Haskell	d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
Hays	tensity (in/hr)*	1.36	1.75	2.07	2.41	2.71	2.93
Hemphill	Coefficient	2-year	5-year	10-year	25-year	50-year	100-year
Henderson							
Hidalgo	e (mm)	0.831	0.795	0.778	0.771	0.749	0.740
Hill	b	1880	2032	2210	2489	2515	2616
Hockley	d (mins)	9.6	9.2	9.2	9.2	9.2	9.6
	Intensity (mm/hr)*	34.54	44.51	52.53	61.18	68.72	74.46

* for time of Concentration = 113.10 mins



URBAN INFRASTRUCTURE GROUP, INC
Firm # 13094

RUNOFF DETENTION POND STORAGE

PROJECT NAME: North Park Place Ph2

PROJECT NO: 127800

DATE : 08-26-21

Duration		Intensity 50-year	Q _{in}	Vol _{in}	Q _{out}	Vol _{out}	Storage
(min)	(hr)	(in/hr)	(cfs)	(ft ³)	(cfs)	(ft ³)	(ft ³)
100	1.67	2.94	11.92	71,540.68	3.59	21,528.58	50,012
101	1.68	2.92	11.84	71,764.42	3.59	21,743.87	50,021
102	1.70	2.91	11.76	71,986.25	3.59	21,959.15	50,027
103	1.72	2.89	11.68	72,206.19	3.59	22,174.44	50,032
104	1.73	2.87	11.61	72,424.28	3.59	22,389.72	50,035
105	1.75	2.85	11.53	72,640.57	3.59	22,605.01	50,036
106	1.77	2.83	11.46	72,855.07	3.59	22,820.30	50,035
107	1.78	2.81	11.38	73,067.83	3.59	23,035.58	50,032
108	1.80	2.79	11.31	73,278.88	3.59	23,250.87	50,028
109	1.82	2.78	11.24	73,488.24	3.59	23,466.15	50,022
110	1.83	2.76	11.17	73,695.95	3.59	23,681.44	50,015
111	1.85	2.74	11.10	73,902.03	3.59	23,896.73	50,005

Design of Detention Pond

Note: Rational Formula

Pre-Developed Data

Area (ac)= 9.64

C = 0.1800

t_c (min)= 113.10

I (in/hr) = 2.07

Q (cfs) = 3.59

Post-Developed Data

Area(ac) = 9.64

C = 0.4200

Storage

Required Storage (ft³) 50,036

Proposed Storage (ft³) 51,753



**North Park Place Phase 2
Drainage Report**

Urban Infrastructure Group, Inc.

Coefficient

Type of Area- Pre	Coefficient	AC	SQ FT	Weighted C
Hidalgo Sand Clay Loam, 0 to 1 %	0.19	7.5674	329,636	0.1492
Hidalgo Fine Sad Loa, 0 to 1%	0.17	2.0726	90,282	0.0366
Total	NA	9.64	419,918	NA

Weighted Coefficient 0.1857

Type of Area- Post	Coefficient	AC	SQ FT	Weighted C
Sandy Soil Average, 2-7%	0.17	5.64	245,678	0.0995
Asphalt	0.6	1.00	43,560	0.0622
Roof	0.85	2.00	87,120	0.1763
Sidewalk	0.8	1.00	43,560	0.0830
Total	NA	9.64	419,918	NA

Weighted Coefficient 0.4210

Increase of 0.2353



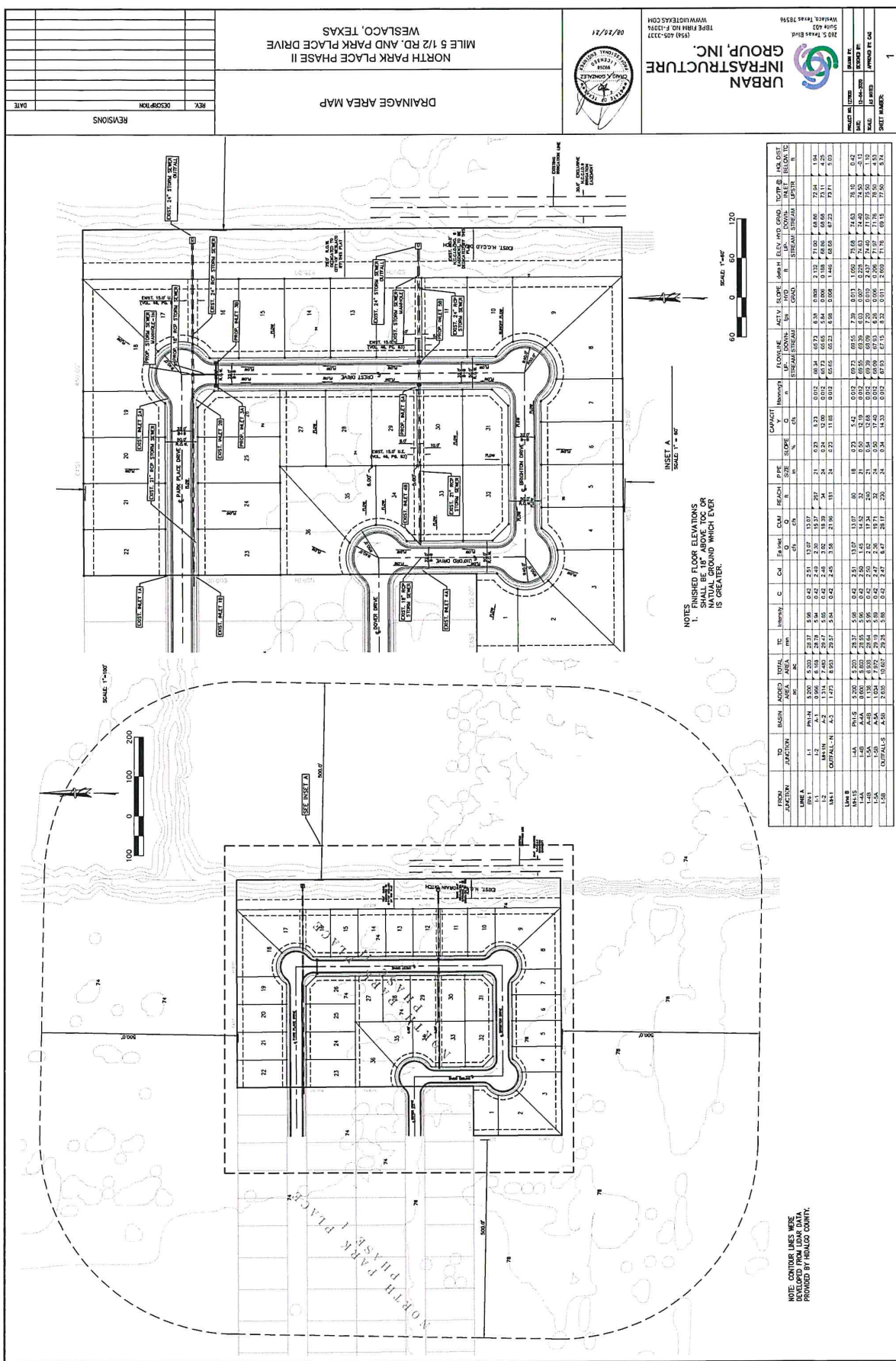
North Park Place Phase 2
Drainage Report

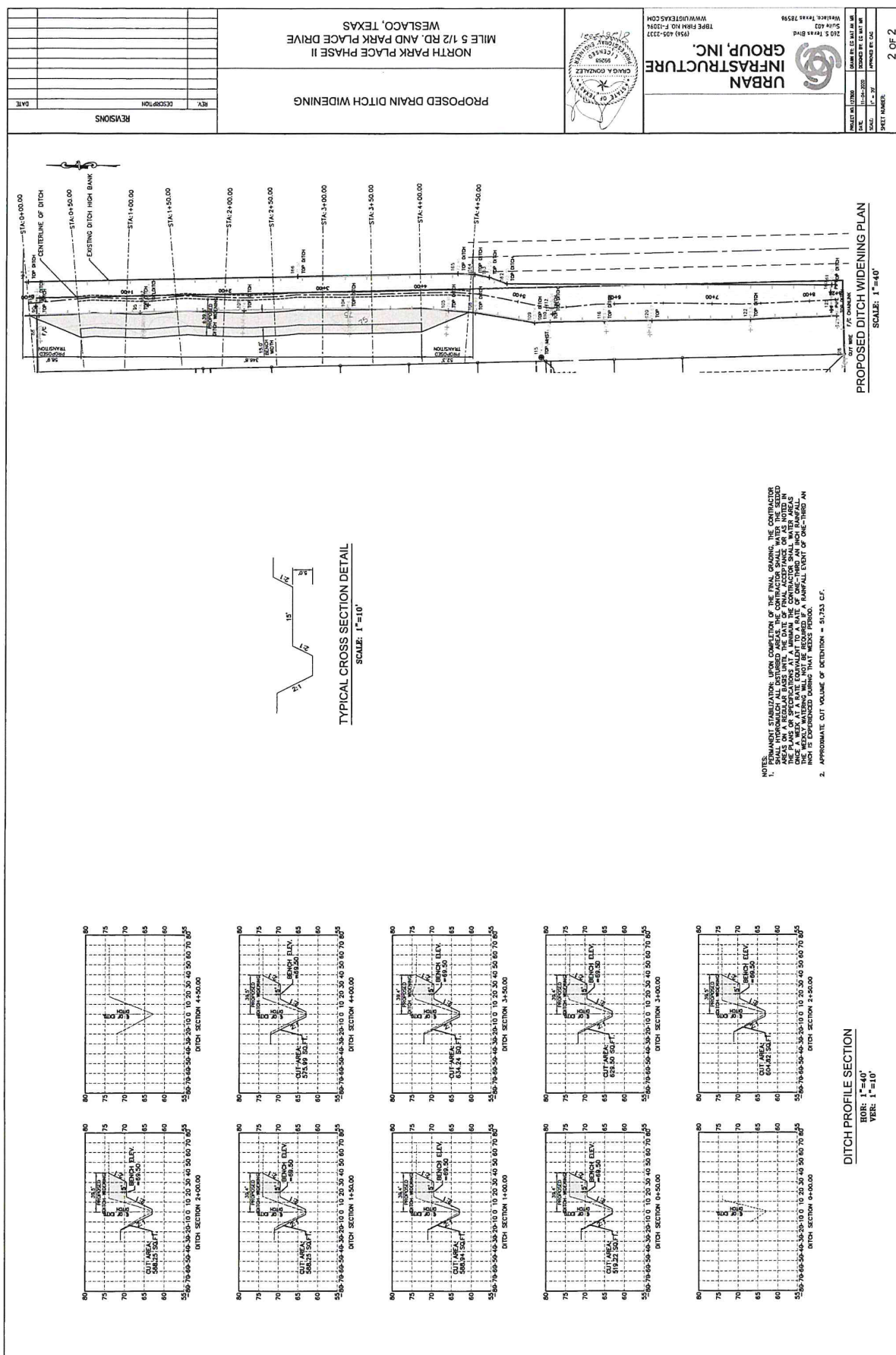
Urban Infrastructure Group, Inc.

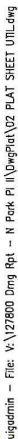
Attachment E

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut and Fill	1.000	1.000	19367.40 Sq. Ft.	51753.13 Cu. Ft.	0.04 Cu. Ft.	51753.09 Cu. Ft.<Cut>
Totals			19367.40 Sq. Ft.	51753.13 Cu. Ft.	0.04 Cu. Ft.	51753.09 Cu. Ft.<Cut>









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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V. F.
From: Rebekah de la Fuente, Planning Director, on behalf of SWG Engineering LLC.	
Subject/Agenda Item: Discussion and reconsideration for the Final Plat for Verona Subdivision– being a 20 acres out of Farm Tract 1038, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 1800 ft. North of mile 8 on FM 1015. Possible Action.	
Discussion/Overview: The developer originally proposed a fifty (50) lot subdivision and is now proposing a fifty-two (52) lot subdivision. The Developer has added two (2) additional lots along Vani Drive. Appropriate updates have been made to construction plans and site 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 revised 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.	



HIDALGO COUNTY DRAINAGE DISTRICT No. 1

RAUL E. SESIN, PE, CFM

District General Manager
Hidalgo County Floodplain Administrator

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Board Member

July 9, 2020

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

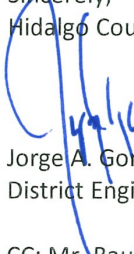
RE: VERONA SUBDIVISION

Dear Ms. De La Fuente,

This letter is in response to a request from the Engineer of record for Verona Subdivision, Jose G. Reyes, PE. Our office is in the process of reviewing the proposed drainage report for the above-mentioned development and sees no objections to the engineer's plan to the widening of the existing HCCID#9 ditch west of the property. Although, as part of our subdivision requirement we ask that if development is adjacent to a ditch, Right-of-way dedication be required either 75' from the center of the existing ditch or 75' from the property line whichever is greater. It is my understanding that the City of Weslaco and HCCID No. 9 have an interlocal, where HCCID No. 9 systems in the City are maintained by the City of Weslaco, where I believe is the case at this site. With that stated, our office has no objection to the widening of the ditch to account for runoff volume.

If you have any questions or need additional information, please feel free to give me a call at (956) 292-7080.

Sincerely,
Hidalgo County Drainage District No. 1


Jorge A. Gonzalez, PE, SIT, CFM
District Engineer III

CC: Mr. Raul E. Sesin, PE CFM – Hidalgo County Drainage District General Manager

City of Weslaco

"The City on the Grow"



David Suarez, Mayor
Letty Lopez, Mayor Pro-Tem, District 5
Leo Muñoz, Commissioner, District 1
Greg Kerr, Commissioner, District 2
Jose "J.P." Rodriguez, Commissioner, District 3
Adrian Farias, Commissioner, District 4
Josh Pedraza, Commissioner, District 6

Mike R. Perez, City Manager

To: Mr. Jose G. Reyes P.E.
SWG Engineering, LLC

Date: April 29th, 2020

Subject: Verona Subdivision

Dear Mr. Reyes,

This is to advise you that as per our review, the drainage calculations for the subject subdivision are approved. However, as per our drainage policy, the subdivision must provide on-site detention of the fifty-year frequency flood. This was previously conveyed to you on our review comments dated January 3, 2020. Please be reminded that you have the option of pursuing a variance for this requirement.

If you have any questions or require further clarification, please, do not hesitate to call me at (956) 969-1533 or email me at aaldana@weslacotx.gov.

Sincerely,

A handwritten signature in blue ink that reads 'Aldana'.

Albert J. Aldana P.E.
City Engineer

c: Mrs. Rebekah De La Fuente, Planning Director
Mr. Peter Hermida, E.I.T., Engineering

General Office

(956) 565-2411
(956) 565-0521 Fax

E-Mail
hccid9general@hccid9.org



RANDALL WINSTON P.E.
General Manager

JUDY BEALL
Tax Assessor-Collector

P O Box 237 Mercedes, Texas 78570

April 10th, 2020

Mr. Joe Reyes, P.E.
SWG Engineering LLC
611 Intl. Blvd
Weslaco, Texas 788596

RE: Verona Subdivision being 20.00 Acres out of FT 1038
West and Adams Tract
Drainage and Detention Requirements

Good morning Mr. Reyes:

I have received your proposed cross sections and calculations dated 3/20/2020 for the Proposed Verona Subdivision to include the 50 year detention volume in the lower portion of the drain ditch as shown on your provided cross sections.

HCCID #9 does not object to storing the mandated 50 year detention within the ditch on the proposed excavated lower level as shown on the cross sections. HCCID #9 and the City of Weslaco have an inter-local in place. As this section of the Ditch is within the City Limits of Weslaco the maintenance of it will be by their personnel. Please verify final design of Detention with Mr. Albert Aldana, P.E., City Engineer with the City of Weslaco. Lastly, please reflect the additional ditch ROW to be dedicated to the City of Weslaco on the plat.

If you have any questions, please feel free to call.

Sincerely,


Randall Winston
General Manager

HCCID #9
Mercedes, Texas
956-565-2411



Lower Rio Grande Valley Development Council

Mayor David Suarez, Weslaco President
Mayor Jim Darling, McAllen..... 1st Vice-President
Judge Aurelio "Keter" Guerra, Willacy County 2nd Vice President
Mayor Ambrosio "Amos" Hernandez, Pharr Secretary
Mayor Chris Boswell, Harlingen Treasurer
Hon. Norma G. Garcia, Member-at-Large..... Immediate Past President

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Commissioner Jesse Zuniga
Member-at-Large

Christina Patiño Houle
Grassroots Organizations

INTERIM-EXECUTIVE DIR
Kenneth N Jones, Jr

June 5, 2020

Jose Reyes
SWG Engineering, LLC
611 S International Blvd
Weslaco, TX 78596

The LRGVDC E-Comms/9-1-1 Department acknowledges the notification on the following **PROPOSED NAMES:**

**MARIA JOSE DR
VANI DR
DANIELA T DR
MARCELA DR
PETRI DR
LORE DR**

to be part of **VERONA SUBDIVISION** in the Weslaco community.

A query was done on the state 9-1-1 database and found no conflict for the proposed name to be used.

**ACKNOWLEDGED ON: June 5, 2020
RESEARCHED BY: Jose Hernandez
TITLE: Program Specialist**



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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.G.
From: Rebekah de la Fuente, Planning Director, on behalf of SAMES.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for Mid-Valley International Industrial Park – being a 146.09c.00 acre tract of land out of acre tract of land out of farm tract 1056, 1057 and 1058, Block 116, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located on the Northeast corner of intersection Mile 9 & FM 1015. Possible Action.	
Discussion/Overview: The proposed twenty-two (22) 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 City of Weslaco services through a 10" 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 approval 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

PIAT-000107-2021

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: Weslaco Industrial Park

Location: Located on the Northeast corner of intersection Mile 9 & FM 1015

Legal Description: West and Adams Tract Subdivision 146.09 Acre tract of land out of Farm tract 1056, 1057, and 1058 BLK 116

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: Agriculture

Existing Land Use: Agriculture Proposed Land Use: Commercial & Industrial

Number of Lots Proposed: 20 Gross Acreage: 146.09

Title Report Submitted: ☒ YES ☐ NO

OWNER INFORMATION

Owner's Name: The Economic Development Corporation of Weslaco Telephone: 956-969-0838

Address: 275 S. Kansas Ave. Suite A Fax: _____

City: Weslaco State: TX Zip: 78596 E-mail: SValdez@weslacoedc.com

ENGINEER INFORMATION

Name: SAMES, Inc. Telephone: 956-702-8880

Address: 200 S. 10th St. Suite 1500 Fax: _____

City: McAllen State: TX Zip: 78501 E-mail: nlopez@samengineering-surveying.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

☒ YES ☐ NO Wastewater Provision: City of Weslaco

☒ YES ☐ NO Electric Company: Magic Valley Corporation

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

Proposed subdivision is in the following districts:

☒ YES ☐ NO Drainage District <u>HCDD1</u>	☒ YES ☐ NO Irrigation District <u>HCCID9</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
- X ☐ Utility Layout -
- ☐ Existing & Proposed Utilities
- ☐ Proposed Fire Hydrants
- ☐ Adjoiners
- ☐ Street names
- X ☐ Drainage plans and calculations with engineer's seal -
- ☐ Elevations
- ☐ Flood directional arrows
- ☐ Detention areas
- ☐ Street names
- X ☐ Proof of ownership of the property -
- N/A ☐ If septic tank system required, submit soil evaluation report
- ☐ Water Rights associated with the property
- X ☐ Tax Receipt for all taxing entities showing that taxes are paid in full -
- X ☐ Number of fire hydrants proposed for subdivision
- X ☐ 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 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: _____ Date: _____

_____ is the authorized agent

Authorized Agent Signature: Alex Mendez Date: 8/9/21

Authorized Agent Printed Name: Alex Mendez

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: _____

PROPOSED MID-VALLEY INTERNATIONAL INDUSTRIAL PARK SUBDIVISION

Weslaco, Texas

DRAINAGE REPORT

Prepared For:

**Hidalgo County Drainage District #1
902 N. Doolittle
Edinburg, Texas 78541**

Prepared By:



Jmaldonado
08/09/21

Reg. No. F-10602

SAM Engineering & Surveying

200 S. 10St, Ste. 1500

McAllen, TX 78501

Tel 956.702.8880; Fax 956.702.8883

August 2021

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SAM Engineering and Surveying



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

DRAINAGE REPORT

Mid-Valley International Industrial Park Subdivision Weslaco, Texas

1. PROJECT DESCRIPTION

A. Site Summary

The proposed Weslaco Industrial Park Subdivision is a 146.1 gross acre industrial subdivision out of Farm Tract 1056, Farm Tract 1057, and Farm Tract 1058, Adams Tract Subdivision, an addition to Hidalgo County, Texas, as per map or plat thereof recorded in Volume 2, Page 34-37, Map Records of Hidalgo County, Texas. The proposed subdivision is located at the Northeast corner of F.M. 1015 and Mile 9 Rd N and will be voluntarily annexed to be within the City Limits of Weslaco, Texas.

B. Flood plain

The subject property is located in Flood Zone "X" (Unshaded), defined as Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood according to FEMA's Flood Rate Insurance Rate Map, Community-Panel Number 480334 0450 C, map revised June 6, 2000. See attached FEMA FIRM map with project location and community panel for reference.

C. Soil Conditions

According to the Soil Survey Report prepared for Hidalgo County by the U.S.D.A Soil Conservation Services, the site consists of mostly (28) Hidalgo sandy clay loam, 0-1 percent slopes (approximately 57.7% of site), (25) Hidalgo fine sandy loam, 0-1 percent slopes (approximately 19.5% of site), and (52) Raymondville clay loam, 0-1 percent (approximately 22.9% of site). Soil map units (28) Hidalgo sandy clay loam and (25) Hidalgo fine sandy loam are classified as part of Hydrologic Group 'B', while soil map unit (52) Raymondville clay loam is classified as being part of Hydrologic Group 'C'.

***SAM* Engineering and Surveying**



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

2. SITE HYDROLOGY ANALYSIS

A. Calculation Methods

Hydrology analysis was conducted using Hydrologic Engineering Center software, HEC-HMS. This software will simulate the overall hydrologic process over the project watershed area and produce and anticipated watershed volume for a 10, 50, and 100-year frequency storm event. Various design parameters control the software output and include such information such as watershed characteristics and soil type properties, and frequency storm data. The characteristics of the project sub-basins identified to contribute a total watershed of approximately 146-acres were inputted into the HEC-HMS model and are more specifically detailed as follows:

The Soil Conservation Service (SCS) Curve Number method was selected and utilized to calculate incremental precipitation losses during a storm event. A composite curve number (CN) was determined for each sub-basin representative of its contributing soil groups. The CN is based on soil type, land use, and vegetation cover of the watershed. The CN values determined may also be adjusted for antecedent moisture conditions: dry conditions, CN(I); average conditions/calculated, CN(II); and wet conditions CN (III). In consideration of the project area and in accordance with the TxDOT Hydraulic Design Manual, CN values were adjusted for dry antecedent moisture conditions with the following equation:

$$CN(I) = \frac{4.2CN(II)}{10 - 0.058CN(II)}$$

The calculation of initial abstraction accounts for the interception of rainfall by vegetation, infiltration during storm and surface storage. Initial abstraction was estimated with the following formula:

$$Ia = 0.2S$$

$$\text{Where } S \text{ is determined by } S = z\left(\frac{100}{CN} - 1\right)$$

SAM Engineering and Surveying



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

Determination of the percentage of impervious coverage for each sub-basin was considered separately as required by the software inputs and was determined by evaluation of existing land use designation. Input specifics established for each sub-basin can be found in Table 1 below:

Table 1: Loss Method Table

LOSS METHOD TABLE				
Subbasin Identification	Existing		Proposed	
	Curve Number	Impervious Cover (%)	Curve Number	Impervious Cover (%)
Subbasin 5A	76	3	88	72
Subbasin 6A	75	0	88	72

The determination of the watershed runoff of each sub-basin is calculated within the software by the selection of transform method, specifically a unit hydrograph method – the SCS Unit Hydrograph Transform method.

The watershed was modeled in HEC-HMS with a unit hydrograph PRF value of 484 (Standard) for all sub-basins, however for each sub-basin the corresponding Lag Time was calculated using the below formula:

$$T_{lag} = \frac{L^{0.8}(S + 1)^{0.7}}{1900(\%Slope)^{0.5}}$$

Where:

- T_{lag} = Lag Time (hr)
- L = Length of longest drainage path (ft)
- S = (1000/CN)-10
- CN = Curve Number
- % Slope = Average Watershed Slope (%)

SAM Engineering and Surveying



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

The meteorological method utilized was the Precipitation – Frequency Storm method which models synthetic storm events from input variables such as intensity and duration for specific exceedance probability storms. As required by HCDD1, NOAA Atlas 14 was utilized for the most updated storm precipitation frequency estimates. See Table 2 below for precipitation frequency estimates obtained for a 10 and 50-year storm events. This information was input into the meteorological model, stated in inches to represent anticipated rainfall depth at various time intervals during a storm duration.

Table 2: Rainfall Depth Estimates (Inches)

RAINFALL DEPTH ESTIMATES			
YEAR STORM			
Duration	10 YR	50 YR	100 YR
15 min	1.59	2.17	2.42
60 min	2.95	4.03	4.51
2 hr	3.63	5.14	5.85
3 hr	4.03	5.84	6.72
6 hr	4.73	7.05	8.22
12 hr	5.47	8.25	9.68
24 hr	6.24	9.48	11.1

The combination of meteorological characteristics and watershed land surface conditions simulated in HEC-HMS, provided numerical results to quantify expected watershed runoff. According to the HEC-HMS output tables and the quality control reviews completed during the development of this report, SAM Engineering and Surveying determines the watershed for the project will produce peak flows as shown below in Table 3.

SAM Engineering and Surveying



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

Table 3: Storm Event Peak Flow

STORM EVENT PEAK FLOW						
	Existing			Proposed		
	10 YR (cfs)	50 YR (cfs)	100 YR (cfs)	10 YR (cfs)	50 YR (cfs)	100 YR (cfs)
Subbasin 5A	70.9	122.2	147.2	349.7	486.1	545.9
Subbasin 6A	54.6	94.8	114.2	264.3	366.6	411.1

B. Existing Conditions

The subject project site is currently vacant and developed for agricultural use. Existing runoff is by overland flow and shallow concentrated flow in the easterly direction at a slope of approximately 0.25% to an existing drainage ditch #17, segment 0346 owned by Hidalgo and Cameron Counties Irrigation District #9 and maintained by Hidalgo County Drainage District #1. In accordance with City of Weslaco and H.C.D.D. No. 1 drainage policies, the existing 10-year pre-development storm water runoff was determined using the above-mentioned methodology. The total contributing 10-year pre-developed storm water runoff from this site is approximately 125.5 cfs (43.2 ac-ft).

C. Proposed Conditions

The proposed development will include 2 commercial (B-2) lots, 10 industrial (I) lots, and internal public access roadways. A summary of pre-developed and post-developed hydrologic conditions utilizing the HEC-HMS software is included in this report. Improvements in the form of roofs and impervious will increase the curve number from 75-76 to 88. A storm sewer system comprised of curb and gutter, storm drain inlets, and storm sewer piping will capture and convey post-development storm water runoff to a system of proposed regional linear detention areas. Ultimately, storm water runoff will discharge to drainage ditch #17, segment 0346 (owned by H.C.C.I.D. No. 9 and maintained by H.C.D.D. No. 1) located within the property at a rate not to exceed the existing pre-development 10-year storm runoff rate.

SAM Engineering and Surveying



Engineering Firm Reg # 10602 Surveying Firm Reg # 101416-00
200 South 10th Street, Suite 1500, McAllen, Texas 78501
Phone: (956) 702-8880 Fax: (956) 702-8883

In accordance with the City of Weslaco and H.C.D.D. No.1, the 50-year frequency storm event was utilized to determine the peak rate of post-development runoff for this site. As per the attached calculations, the anticipated post-development peak runoff rate is **852.7 cfs (109.1 ac-ft)**, for an increase of **727.2 cfs (65.9 ac-ft)**.

Therefore, it has been determined that a total of **2,870,600 cubic-feet (65.9 Ac.-ft.)** of storm water runoff will be required to be detained for the proposed development. To accomplish this, a portion, approximately **1,912,937 cubic-feet (43.92 ac-ft)**, of the total required volume will be detained within multiple linear detention ditches and one (1) detention pond within the proposed development. In addition to providing on-site detention areas, the increased peak storm water runoff rate will be mitigated by excavating approximately **909,097 cubic-feet (20.87 ac.-ft.)** of the existing drainage ditch #17, segment 0346 from an existing ditch cross section of 65 ft. to 150 ft. (refer to Drainage Layout, Section C, F & G).

3. CONCLUSION

Adverse impacts were reviewed per the City of Weslaco and County of Hidalgo drainage policies. The proposed on-site detention facility will help detain flows on site to existing conditions; therefore, there will be no adverse drainage impact on the watershed downstream.

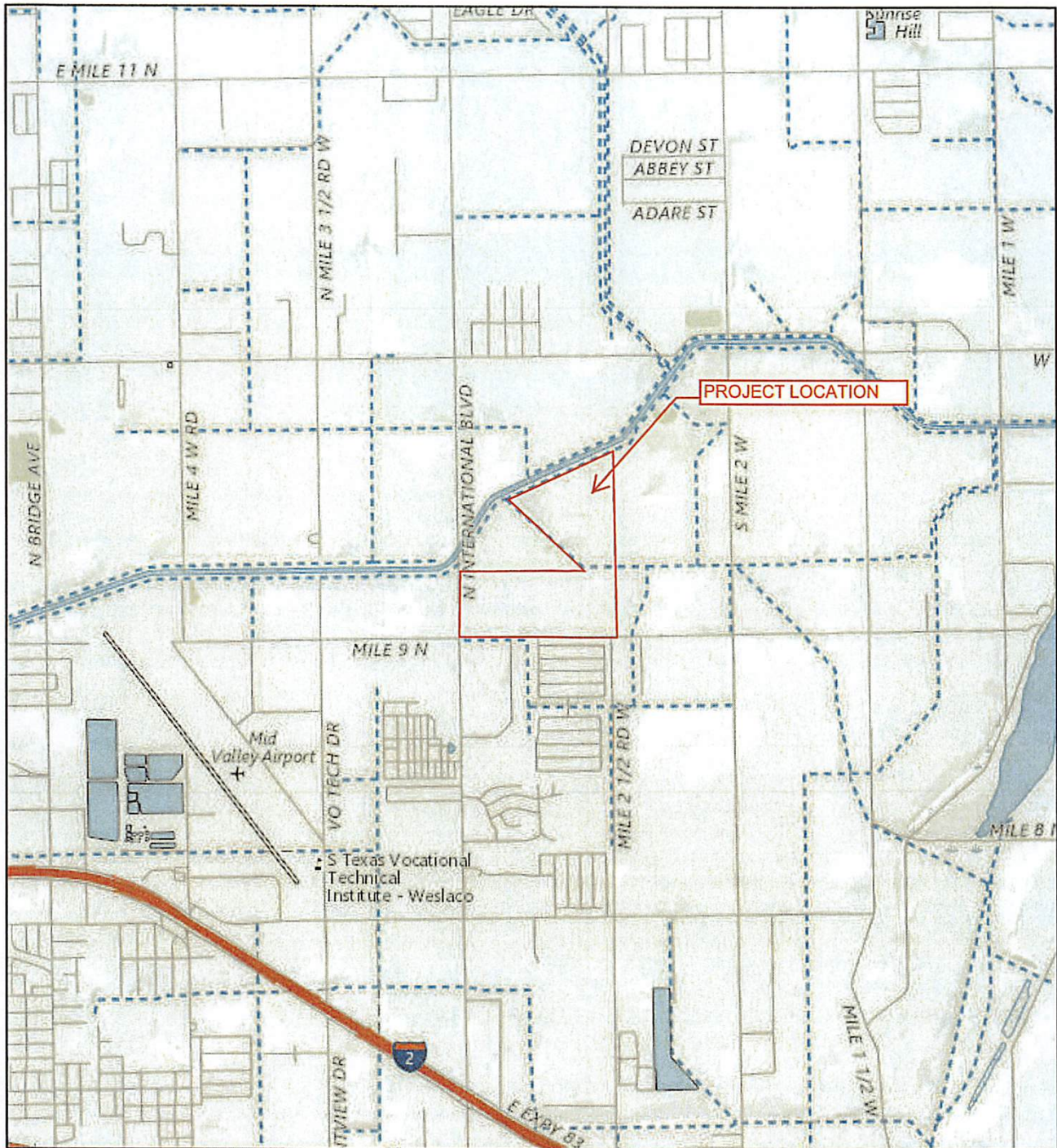
Jessica M. Maldonado, PE, PMP
SAMES, Inc.

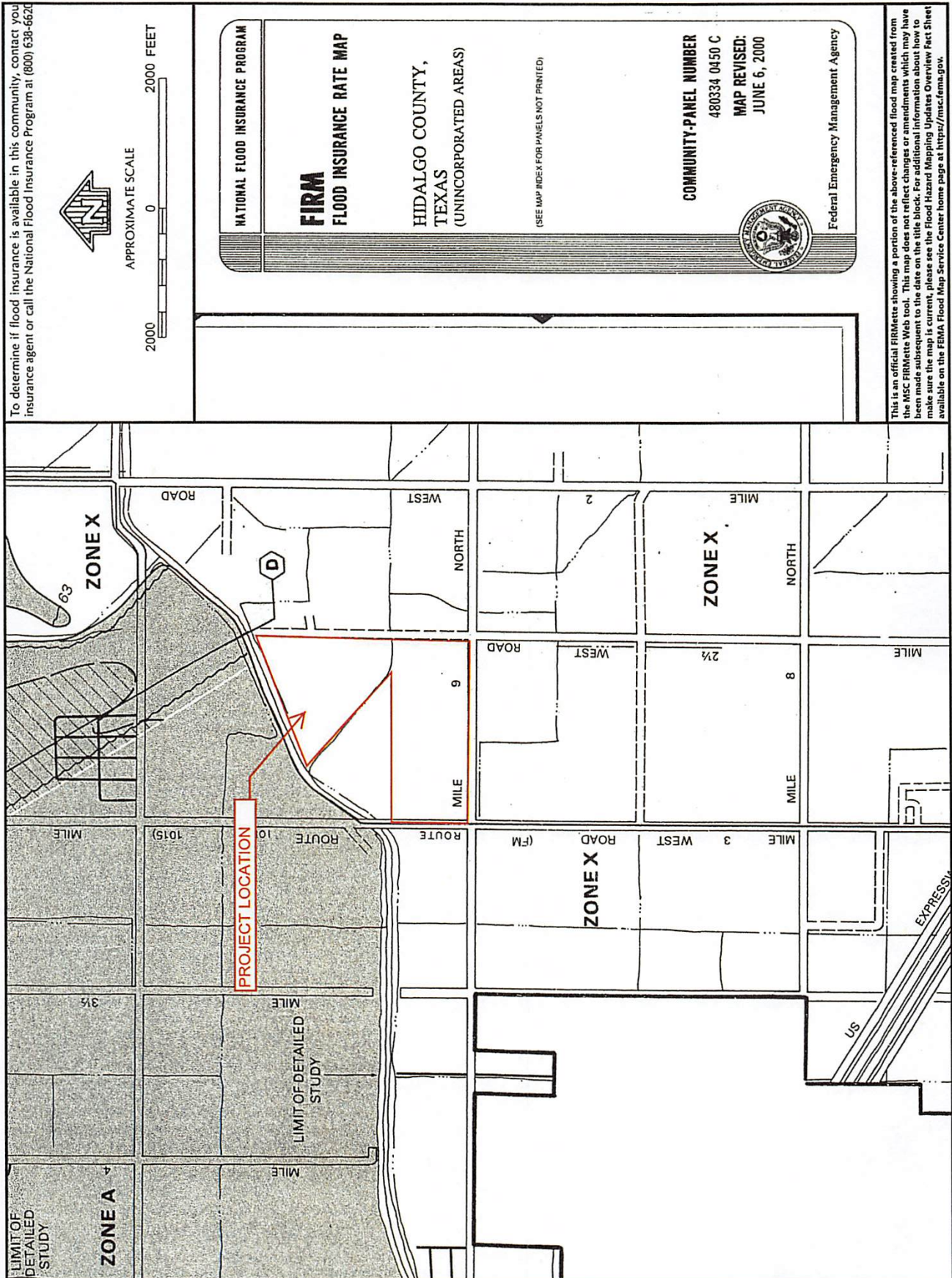


08/09/21

Maps

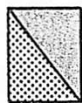
Weslaco Industrial Park - Location Map





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.

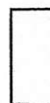
ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

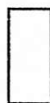


OTHER FLOOD AREAS



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

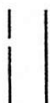


Identified 1990



Otherwise Protected Areas

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



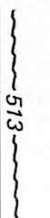
Floodplain Boundary



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.

513

Base Flood Elevation Line: Elevation in Feet*

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.



APPROXIMATE SCALE



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

This is an official FIRMMap showing a portion of the above-referenced flood map created from the MSC FIRMMap Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

Drainage Calculations

Project: MV INT. INDUSTRIAL PARK Simulation Run: EXIST 10YR
Subbasin: Subbasin-SA (Phase I)

Start of Run: 29Jun2021, 00:00 Basin Model: EXIST CONDITIONS
End of Run: 02Jul2021, 00:00 Meteorologic Model: 10YR
Compute Time: 09Aug2021, 15:13:12 Control Specifications: Control 1

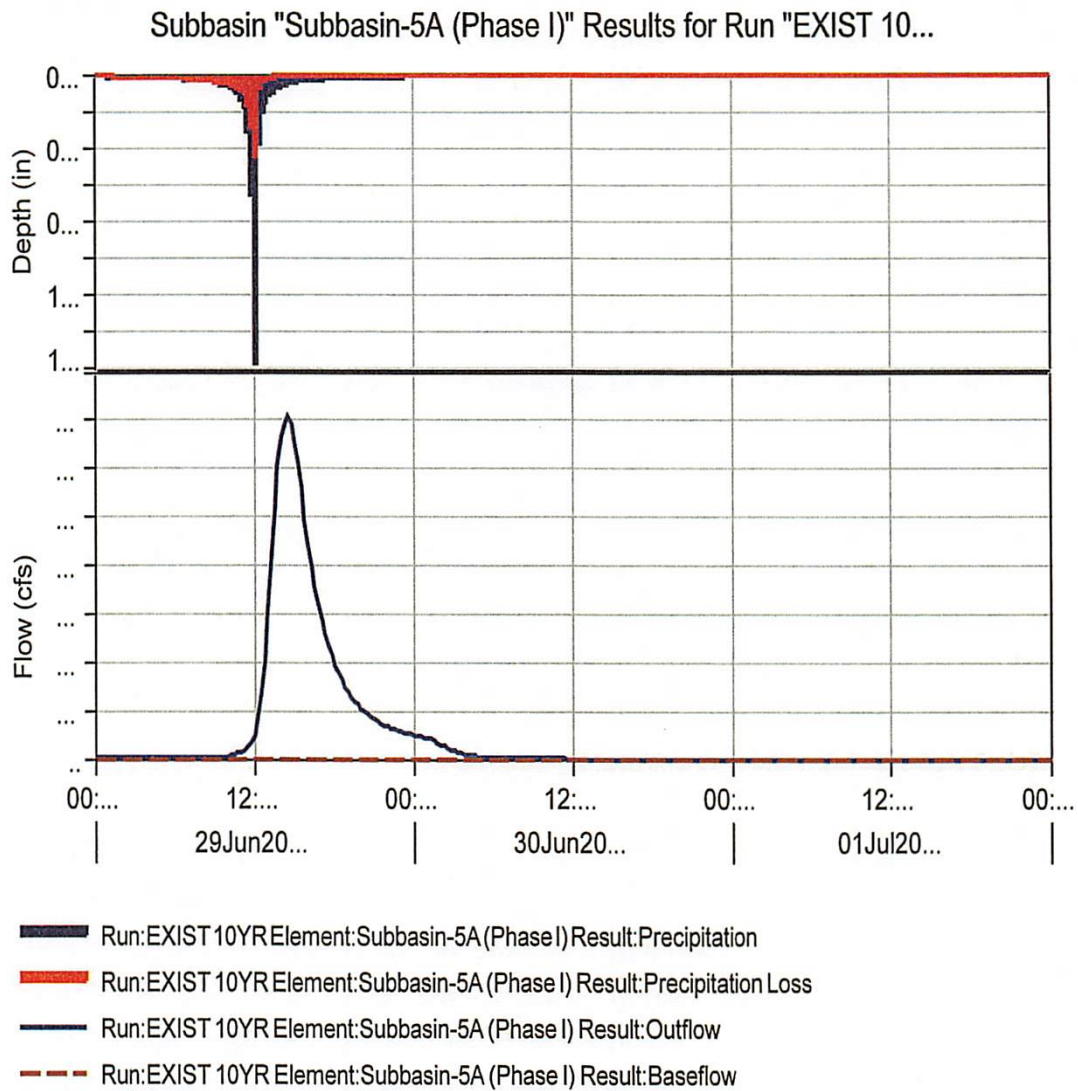
Volume Units: ☐ IN ☒ ACRE-FT

Computed Results

Peak Discharge:	70.9 (CFS)	Date/Time of Peak Discharge:	29Jun2021, 14:30
Precipitation Volume:	45.5 (ACRE-FT)	Direct Runoff Volume:	26.7 (ACRE-FT)
Loss Volume:	18.8 (ACRE-FT)	Baseflow Volume:	0.0 (ACRE-FT)
Excess Volume:	26.7 (ACRE-FT)	Discharge Volume:	26.7 (ACRE-FT)



Jessica M
08/09/21



Project: MV INT. INDUSTRIAL PARK Simulation Run: EXIST 10YR
Subbasin: Subbasin-6A (PHASE II)

Start of Run: 29Jun2021, 00:00 Basin Model: EXIST CONDITIONS
End of Run: 02Jul2021, 00:00 Meteorologic Model: 10YR
Compute Time: 09Aug2021, 15:13:12 Control Specifications: Control 1

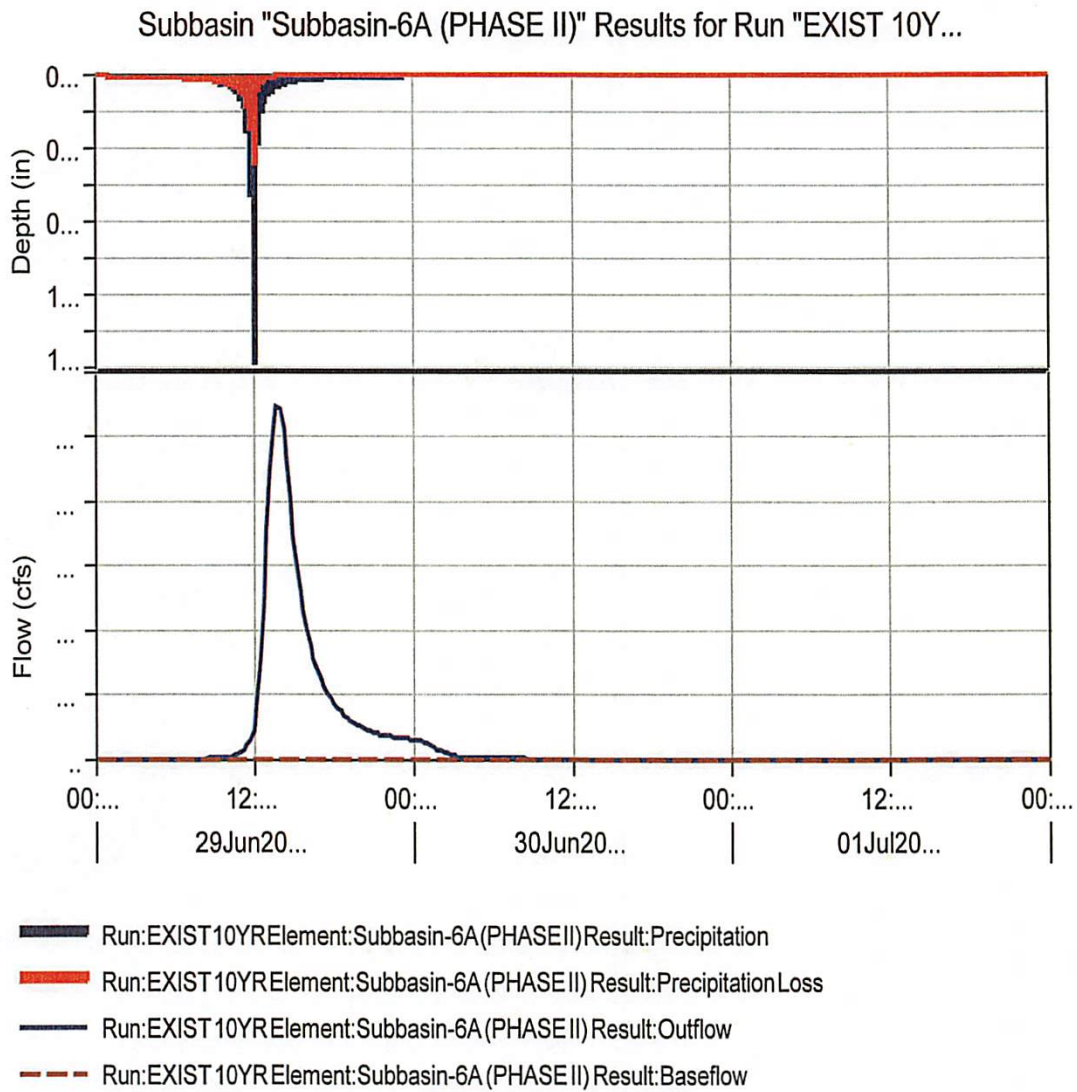
Volume Units: ☐ IN ☒ ACRE-FT

Computed Results

Peak Discharge:	54.6 (CFS)	Date/Time of Peak Discharge:	29Jun2021, 13:45
Precipitation Volume:	29.6 (ACRE-FT)	Direct Runoff Volume:	16.5 (ACRE-FT)
Loss Volume:	13.1 (ACRE-FT)	Baseflow Volume:	0.0 (ACRE-FT)
Excess Volume:	16.5 (ACRE-FT)	Discharge Volume:	16.5 (ACRE-FT)



Jemiam
08/09/21



Project: MV INT. INDUSTRIAL PARK Simulation Run: PROP 50YR
Subbasin: Subbasin-5A (PHASE I)

Start of Run: 29Jun2021, 00:00 Basin Model: PROPOSED CONDITIONS
End of Run: 02Jul2021, 00:00 Meteorologic Model: 50YR
Compute Time: 09Aug2021, 15:13:30 Control Specifications: Control 1

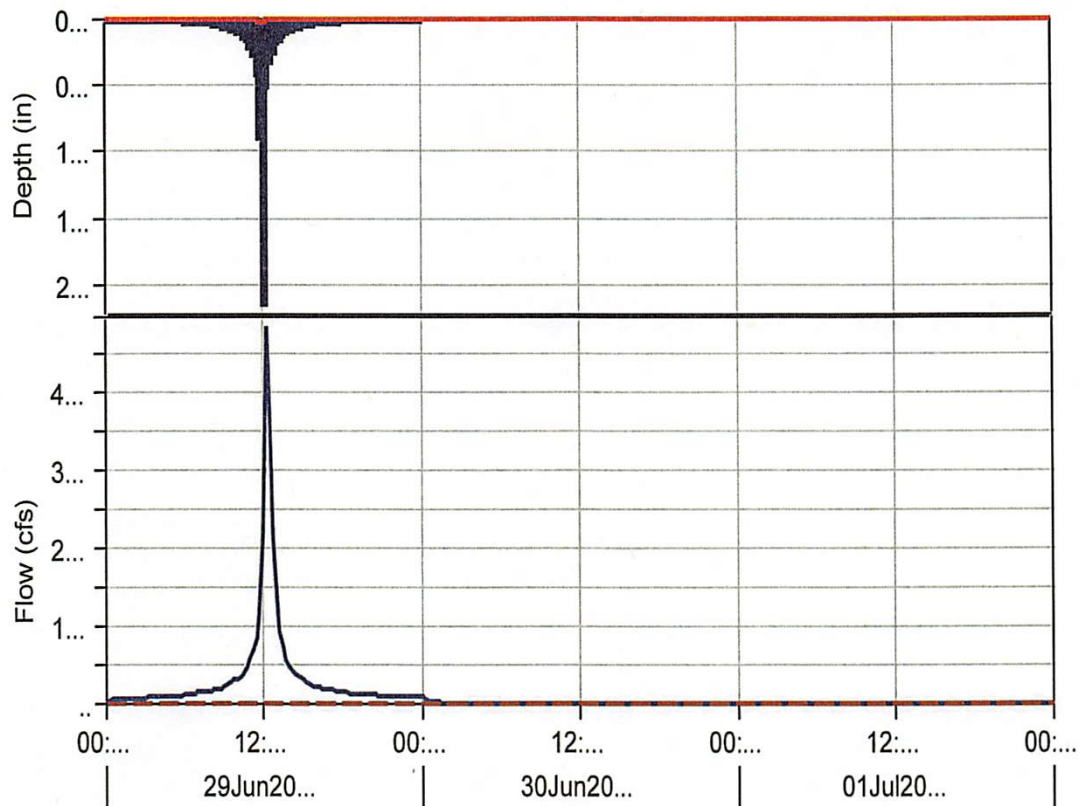
Volume Units: ☐ IN ☒ ACRE-FT

Computed Results

Peak Discharge:	486.1 (CFS)	Date/Time of Peak Discharge:	29Jun2021, 12:15
Precipitation Volume:	69.1 (ACRE-FT)	Direct Runoff Volume:	66.1 (ACRE-FT)
Loss Volume:	3.0 (ACRE-FT)	Baseflow Volume:	0.0 (ACRE-FT)
Excess Volume:	66.1 (ACRE-FT)	Discharge Volume:	66.1 (ACRE-FT)



Subbasin "Subbasin-5A (PHASE I)" Results for Run "PROP 50...



- Run:PROP50YRElement:Subbasin-5A(PHASE I) Result:Precipitation
- Run:PROP50YRElement:Subbasin-5A(PHASE I) Result:Precipitation Loss
- Run:PROP50YRElement:Subbasin-5A(PHASE I) Result:Outflow
- Run:PROP50YRElement:Subbasin-5A(PHASE I) Result:Baseflow

Project: MV INT. INDUSTRIAL PARK Simulation Run: PROP 50YR
Subbasin: Subbasin-6A (PHASE II)

Start of Run: 29Jun2021, 00:00 Basin Model: PROPOSED CONDITIONS
End of Run: 02Jul2021, 00:00 Meteorologic Model: 50YR
Compute Time: 09Aug2021, 15:13:30 Control Specifications: Control 1

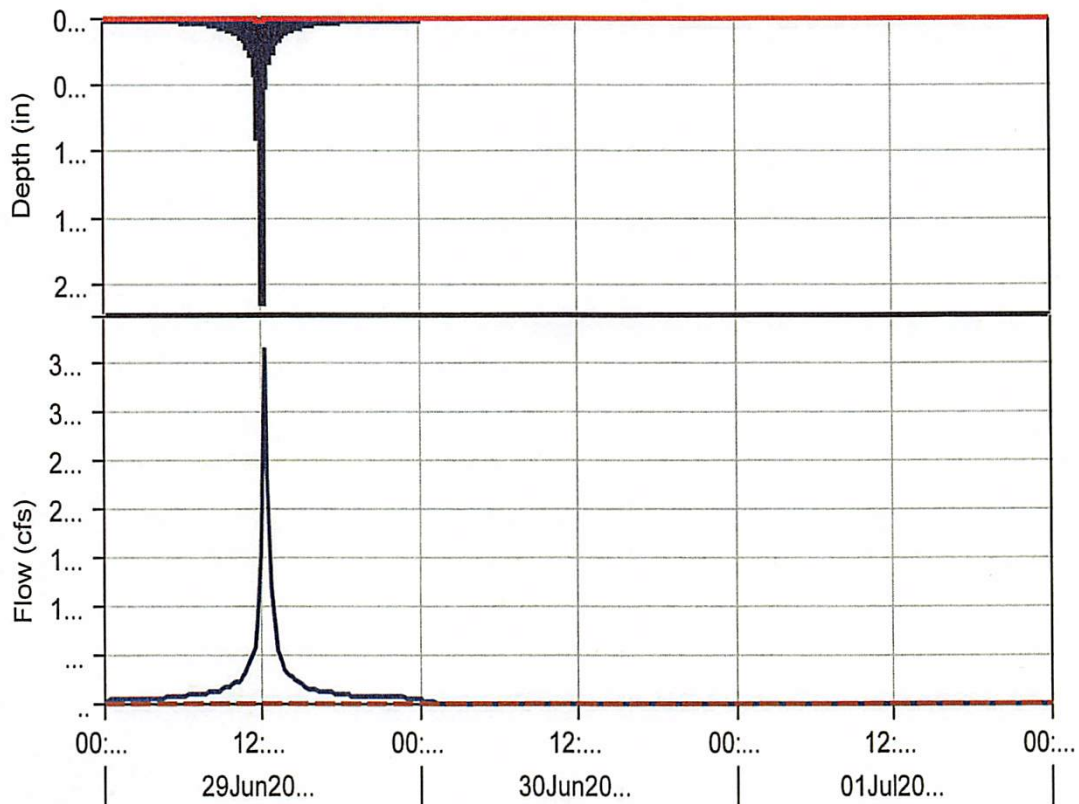
Volume Units: ☐ IN ☒ ACRE-FT

Computed Results

Peak Discharge:	366.6 (CFS)	Date/Time of Peak Discharge:	29Jun2021, 12:15
Precipitation Volume:	44.9 (ACRE-FT)	Direct Runoff Volume:	43.0 (ACRE-FT)
Loss Volume:	1.9 (ACRE-FT)	Baseflow Volume:	0.0 (ACRE-FT)
Excess Volume:	43.0 (ACRE-FT)	Discharge Volume:	43.0 (ACRE-FT)

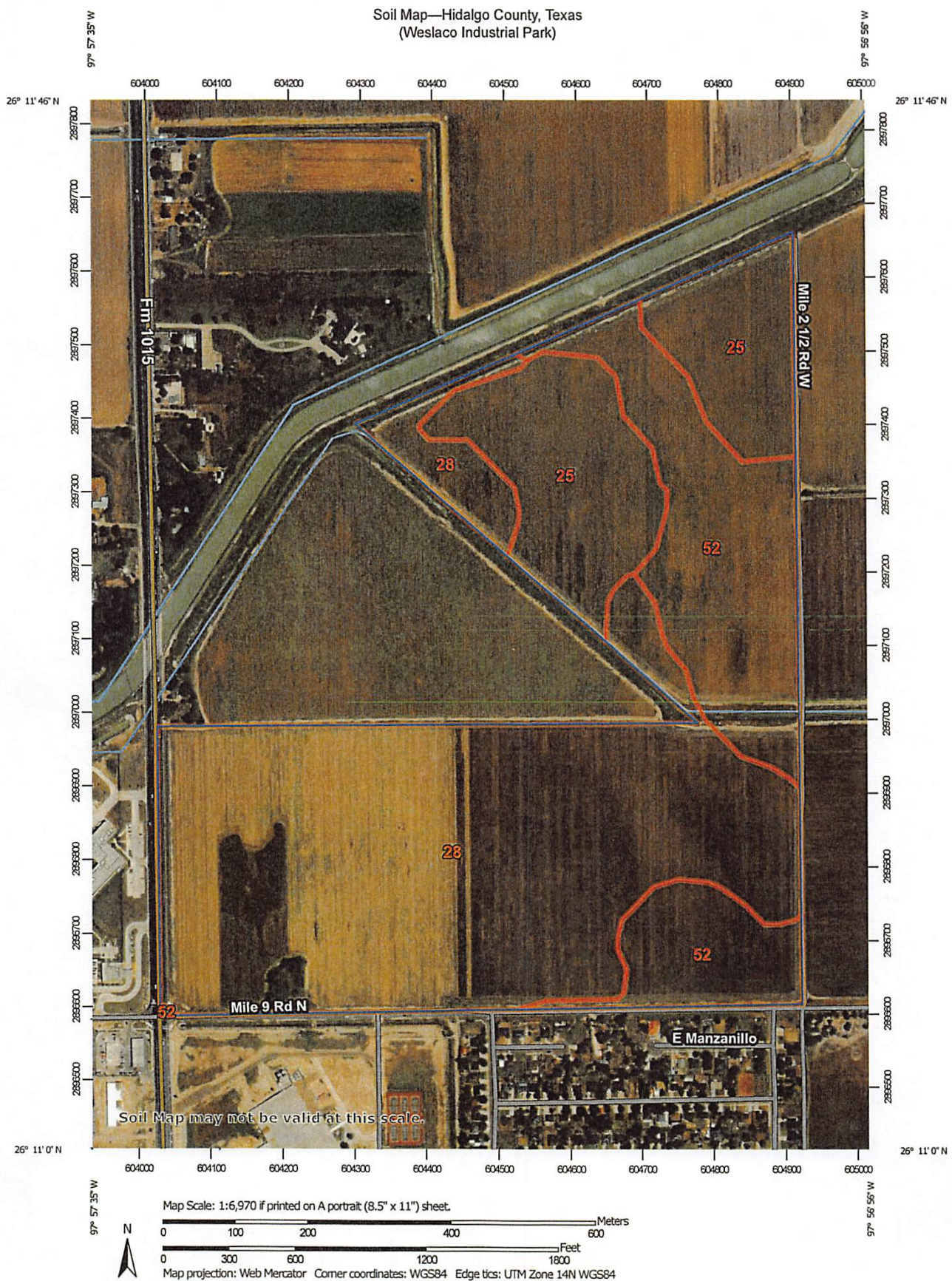


Subbasin "Subbasin-6A (PHASE II)" Results for Run "PROP 50..."



- Run:PROP50YRElement:Subbasin-6A(PHASEII)Result:Precipitation
- Run:PROP50YRElement:Subbasin-6A(PHASEII)Result:Precipitation Loss
- Run:PROP50YRElement:Subbasin-6A(PHASEII)Result:Outflow
- Run:PROP50YRElement:Subbasin-6A(PHASEII)Result:Baseflow

Soil Properties



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/25/2021
Page 1 of 3

Soil Map—Hidalgo County, Texas
(Westlaco Industrial Park)

MAP LEGEND

	Area of Interest (AOI)		Spoil Area
	Area of Interest (AOI)		Stony Spot
	Soils		Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
	Special Point Features		Water Features
	Blowout		Streams and Canals
	Borrow Pit		Transportation
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow		Background
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

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 19, Jun 11, 2020

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.

Soil Map—Hidalgo County, Texas

Weslaco Industrial Park

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	28.0	19.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	83.1	57.7%
52	Raymondville clay loam, 0 to 1 percent slopes	32.9	22.9%
Totals for Area of Interest		144.0	100.0%



Component Text Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The component descriptions in this report, 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 associated 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 (components) for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Component Nontechnical Descriptions" report gives a brief, general description of the soil components that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Component Text Descriptions

Hidalgo County, Texas

Map Unit: 25—Hidalgo fine sandy loam, 0 to 1 percent slopes

Description Category: ES

Hidalgo: 85 percent

Gray Sandy Loam 25-35" PZ - Deep, calcareous fine sandy loam or sandy clay loam. Originally a grassland of trichloris, cottontop, sprangletop, windmillgrass, vine-mesquite, and bristlegrass; with scattered shrubs like guajillo, spiny hackberry, ephedra, texas ebony, and yaupon. Forbs include legumes and orange zexmenia.

Description Category: GENSOIL

Hidalgo: 85 percent

Component Text Descriptions—Hidalgo County, Texas

The Hidalgo component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces on relict delta plains. The parent material consists of calcareous loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R083DY019TX Gray Sandy Loam ecological site. Nonirrigated land capability classification is 2s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 4 within 30 inches of the soil surface.

Description Category: PHG

Hidalgo: 85 percent

8C - LOAMY UPLAND - Moderately deep to very deep uplands with loamy surfaces and friable loamy subsoils; slopes 0 to 8 percent; medium natural fertility; medium to high water holding capacity with good plant-soil-moisture relationship; medium to high production potential.

Description Category: GENSOIL

Willacy: 10 percent

Generated brief soil descriptions are created for major soil components. The Willacy soil is a minor component.

Description Category: GENSOIL

Brennan: 5 percent

Generated brief soil descriptions are created for major soil components. The Brennan soil is a minor component.

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

Description Category: ES

Hidalgo: 85 percent

Gray Sandy Loam 20-25" PZ - Deep, calcareous fine sandy loam or sandy clay loam. Originally a grassland of trichloris, cottontop, sprangletop, windmillgrass, vine-mesquite, and bristlegrass; with scattered shrubs like guajillo, spiny hackberry, ephedra, texas ebony, and yaupon. Forbs include legumes and orange zexmenia.

Description Category: GENSOIL

Hidalgo: 85 percent

Component Text Descriptions—Hidalgo County, Texas

The Hidalgo component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces on relict delta plains. The parent material consists of calcareous loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R083DY019TX Gray Sandy Loam ecological site. Nonirrigated land capability classification is 2c. Irrigated land capability classification is 1. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 4 within 30 inches of the soil surface.

Description Category: PHG

Hidalgo: 85 percent

8C - LOAMY UPLAND - Moderately deep to very deep uplands with loamy surfaces and friable loamy subsoils; slopes 0 to 8 percent; medium natural fertility; medium to high water holding capacity with good plant-soil-moisture relationship; medium to high production potential.

Description Category: GENSOIL

Raymondville: 7 percent

Generated brief soil descriptions are created for major soil components. The Raymondville soil is a minor component.

Description Category: GENSOIL

Racombes: 6 percent

Generated brief soil descriptions are created for major soil components. The Racombes soil is a minor component.

Description Category: GENSOIL

Willacy: 2 percent

Generated brief soil descriptions are created for major soil components. The Willacy soil is a minor component.

Map Unit: 52—Raymondville clay loam, 0 to 1 percent slopes

Description Category: GENSOIL

Raymondville: 85 percent

Component Text Descriptions—Hidalgo County, Texas

The Raymondville component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on delta plains on relict delta plains. The parent material consists of calcareous clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R083DY025TX Clay Loam ecological site. Nonirrigated land capability classification is 2s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Description Category: GENSOIL

Unnamed: 15 percent

Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Data Source Information

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 19, Jun 11, 2020



Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (K_{sat}), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Physical Soil Properties—Hidalgo County, Texas

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Physical Soil Properties—Hidalgo County, Texas

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

Physical Soil Properties—Hidalgo County, Texas

Report—Physical Soil Properties

Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Physical Soil Properties—Hidalgo County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
25—Hidalgo fine sandy loam, 0 to 1 percent slopes														
Hidalgo	0-17	53-63- 75	5-19- 35	5-18- 20	1.35-1.45 -1.65	14.00-28.00-42. 00	0.10-0.13-0. 15	0.3- 1.4- 1.7	0.5- 1.0- 1.5	.24	.24	5	3	86
	17-28	25-48- 70	10-25- 50	23-27- 35	1.20-1.40 -1.50	4.00-9.00-14.00	0.10-0.13-0. 18	1.2- 2.1- 5.0	0.3- 0.6- 1.0	.28	.28			
	28-38	25-35- 70	10-35- 50	23-30- 35	1.20-1.40 -1.60	4.00-9.00-14.00	0.10-0.13-0. 18	1.2- 2.3- 5.9	0.1- 0.3- 0.5	.32	.32			
	38-80	25-30- 70	10-40- 50	23-30- 35	1.40-1.50 -1.80	4.00-9.00-14.00	0.10-0.13-0. 18	1.0- 2.2- 5.0	0.1- 0.2- 0.3	.32	.32			
Willacy	—	—	—	—	—	—	—	—	—					
Brennan	—	—	—	—	—	—	—	—	—					

Physical Soil Properties—Hidalgo County, Texas

Physical Soil Properties—Hidalgo County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
28—Hidalgo sandy clay loam, 0 to 1 percent slopes														
Hidalgo	0-17	45-55- 70	5-18- 28	20-27- 30	1.35-1.50 -1.65	4.00-9.00-14.00	0.10-0.13-0.18	1.5- 2.7- 5.0	1.0- 1.5- 2.0	.17	.17	5	5	56
	17-28	25-48- 70	10-25- 50	23-27- 35	1.20-1.40 -1.50	4.00-9.00-14.00	0.10-0.13-0.18	1.2- 2.1- 5.0	0.3- 0.6- 1.0	.28	.28			
	28-38	25-35- 70	10-35- 50	23-30- 35	1.20-1.40 -1.60	4.00-9.00-14.00	0.10-0.13-0.18	1.2- 2.3- 5.9	0.1- 0.3- 0.5	.32	.32			
	38-80	25-30- 70	10-40- 50	23-30- 35	1.40-1.50 -1.80	4.00-9.00-14.00	0.10-0.13-0.18	1.0- 2.2- 5.0	0.1- 0.2- 0.3	.32	.32			
Raymondville	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Racombes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Willacy	—	—	—	—	—	—	—	—	—	—	—	—	—	—
52—Raymondville clay loam, 0 to 1 percent slopes														
Raymondville	0-15	-31-	-33-	32-37- 42	1.20-1.33 -1.45	1.40-2.70-4.00	0.12-0.15-0.18	6.0- 7.5- 8.9	1.0- 2.0- 3.0	.28	.28	5	4	86
	15-43	-30-	-32-	35-38- 50	1.25-1.35 -1.45	0.42-1.00-1.40	0.12-0.15-0.18	6.0- 7.5- 8.9	0.5- 0.8- 1.0	.28	.28			
	43-65	-30-	-30-	35-40- 45	1.25-1.35 -1.45	0.42-1.00-1.40	0.12-0.15-0.18	6.0- 7.5- 8.9	0.1- 0.3- 0.5	.28	.28			
Unnamed	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Physical Soil Properties—Hidalgo County, Texas

Data Source Information

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 19, Jun 11, 2020

 **Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

8/6/2021
Page 6 of 6

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic soil group is a group of soils having similar runoff potential under similar storm and cover conditions. The criteria for determining Hydrologic soil group is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Listing HSGs by soil map unit component and not by soil series is a new concept for the engineers. Past engineering references contained lists of HSGs by soil series. Soil series are continually being defined and redefined, and the list of soil series names changes so frequently as to make the task of maintaining a single national list virtually impossible. Therefore, the criteria is now used to calculate the HSG using the component soil properties and no such national series lists will be maintained. All such references are obsolete and their use should be discontinued. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

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.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Percentage of rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

References:

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Report—Engineering Properties

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007 (<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties—Hidalgo County, Texas														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
25—Hidalgo fine sandy loam, 0 to 1 percent slopes			In											
	85 B		0-17	Fine sandy loam	CL, SM, SC-SM, SC	A-4, A-2-4	0-0-0	0-0-0	100-100-100	94-96-100	84-94-100	35-47-56	15-23-25	1-7-8
			17-28	Sandy clay loam, clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	100-100-100	94-98-100	85-96-100	50-60-75	30-35-44	11-17-22
			28-38	Clay loam, sandy clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	95-97-100	91-94-100	81-93-100	54-68-81	30-38-44	11-17-22
28—Hidalgo sandy clay loam, 0 to 1 percent slopes			38-80	Clay loam, sandy clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	96-97-100	91-95-100	82-94-100	57-72-84	30-38-44	11-17-22
	85 B		0-17	Sandy clay loam	CL, SC	A-6	0-0-0	0-0-0	100-100-100	95-98-100	86-96-100	44-54-63	25-30-39	11-15-18
			17-28	Sandy clay loam, clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	100-100-100	94-98-100	85-96-100	50-60-75	30-35-44	11-17-22
			28-38	Clay loam, sandy clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	95-97-100	91-94-100	81-93-100	54-68-81	30-38-44	11-17-22
			38-80	Sandy clay loam, clay loam	CL, SC	A-6, A-7-6	0-0-0	0-0-0	96-97-100	91-95-100	82-94-100	57-72-84	30-38-44	11-17-22

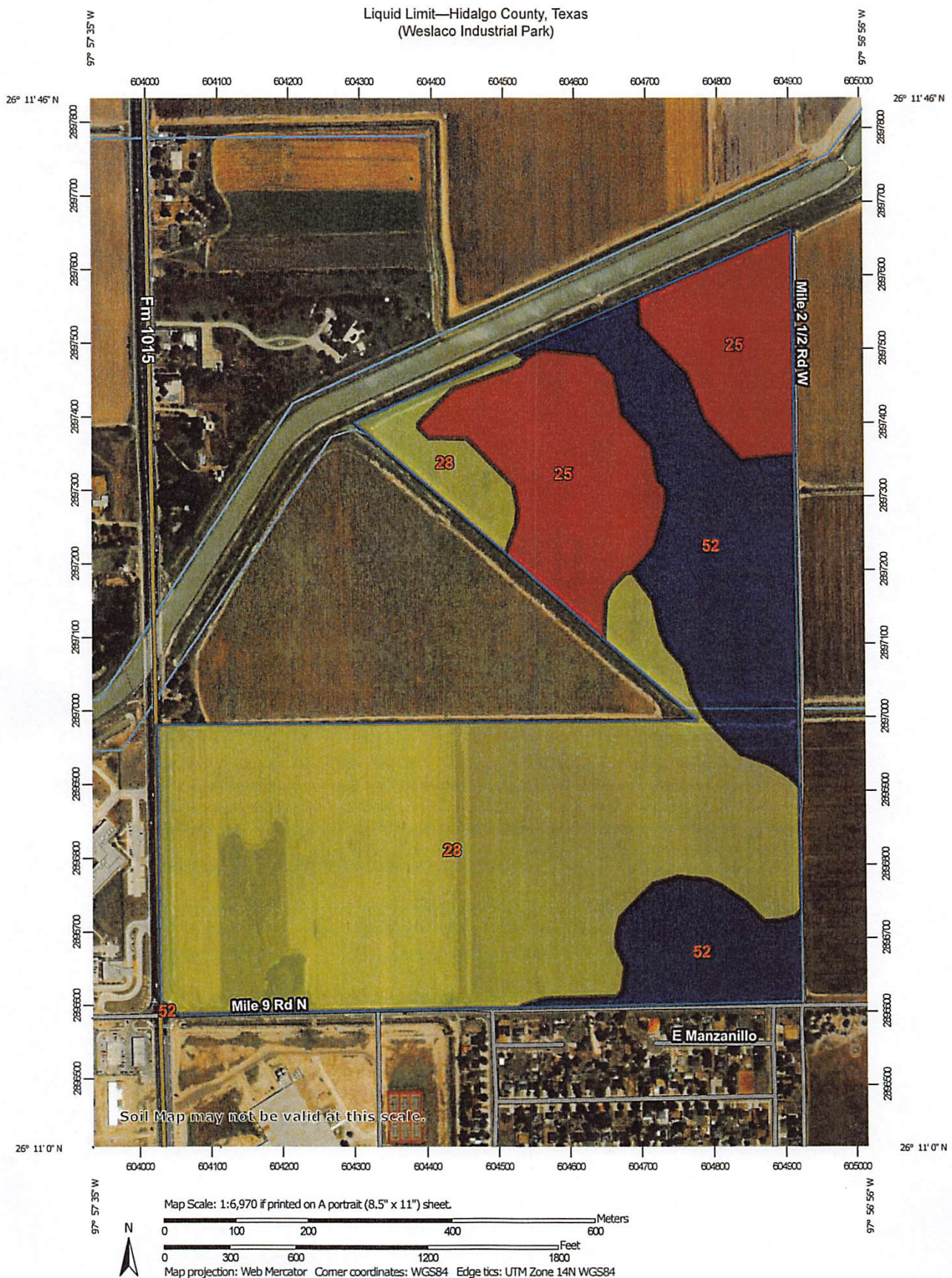
Weslaco Industrial Park

Engineering Properties—Hidalgo County, Texas

Engineering Properties—Hidalgo County, Texas														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	
52—Raymondville clay loam, 0 to 1 percent slopes														
Raymondville	85 C		0-15	Clay loam	CL	A-6, A-7-6	0-0-0	0-0-0	100-100-100	100-100-100	95-98-100	51-68-85	37-44-50	18-24-30
			15-43	Clay, clay loam	CH, CL	A-6, A-7-6	0-0-0	0-0-0	100-100-100	95-98-100	95-98-100	75-85-95	38-47-55	19-27-35
			43-65	Clay, clay loam	CH, CL	A-7-6	0-0-0	0-0-0	100-100-100	85-93-100	80-90-100	75-85-95	40-47-53	20-25-30

Data Source Information

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 19, Jun 11, 2020



Liquid Limit—Hidalgo County, Texas
(Westlaco Industrial Park)

MAP LEGEND

Area of Interest (AOI)	Background
Area of Interest (AOI)	Aerial Photography
Soils	
Soil Rating Polygons	
<= 34.4	
> 34.4 and <= 35.9	
> 35.9 and <= 45.8	
Not rated or not available	
Soil Rating Lines	
<= 34.4	
> 34.4 and <= 35.9	
> 35.9 and <= 45.8	
Not rated or not available	
Soil Rating Points	
<= 34.4	
> 34.4 and <= 35.9	
> 35.9 and <= 45.8	
Not rated or not available	
Water Features	
Streams and Canals	
Transportation	
Rails	
Interstate Highways	
US Routes	
Major Roads	
Local Roads	

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 19, Jun 11, 2020

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.

Liquid Limit

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	34.4	28.0	19.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	35.9	83.1	57.7%
52	Raymondville clay loam, 0 to 1 percent slopes	45.8	32.9	22.9%
Totals for Area of Interest			144.0	100.0%

Description

Liquid limit (LL) is one of the standard Atterberg limits used to indicate the plasticity characteristics of a soil. It is the water content, on a percent by weight basis, of the soil (passing #40 sieve) at which the soil changes from a plastic to a liquid state. Generally, the amount of clay- and silt-size particles, the organic matter content, and the type of minerals determine the liquid limit. Soils that have a high liquid limit have the capacity to hold a lot of water while maintaining a plastic or semisolid state.

Liquid limit is used in classifying soils in the Unified and AASHTO classification systems.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: percent

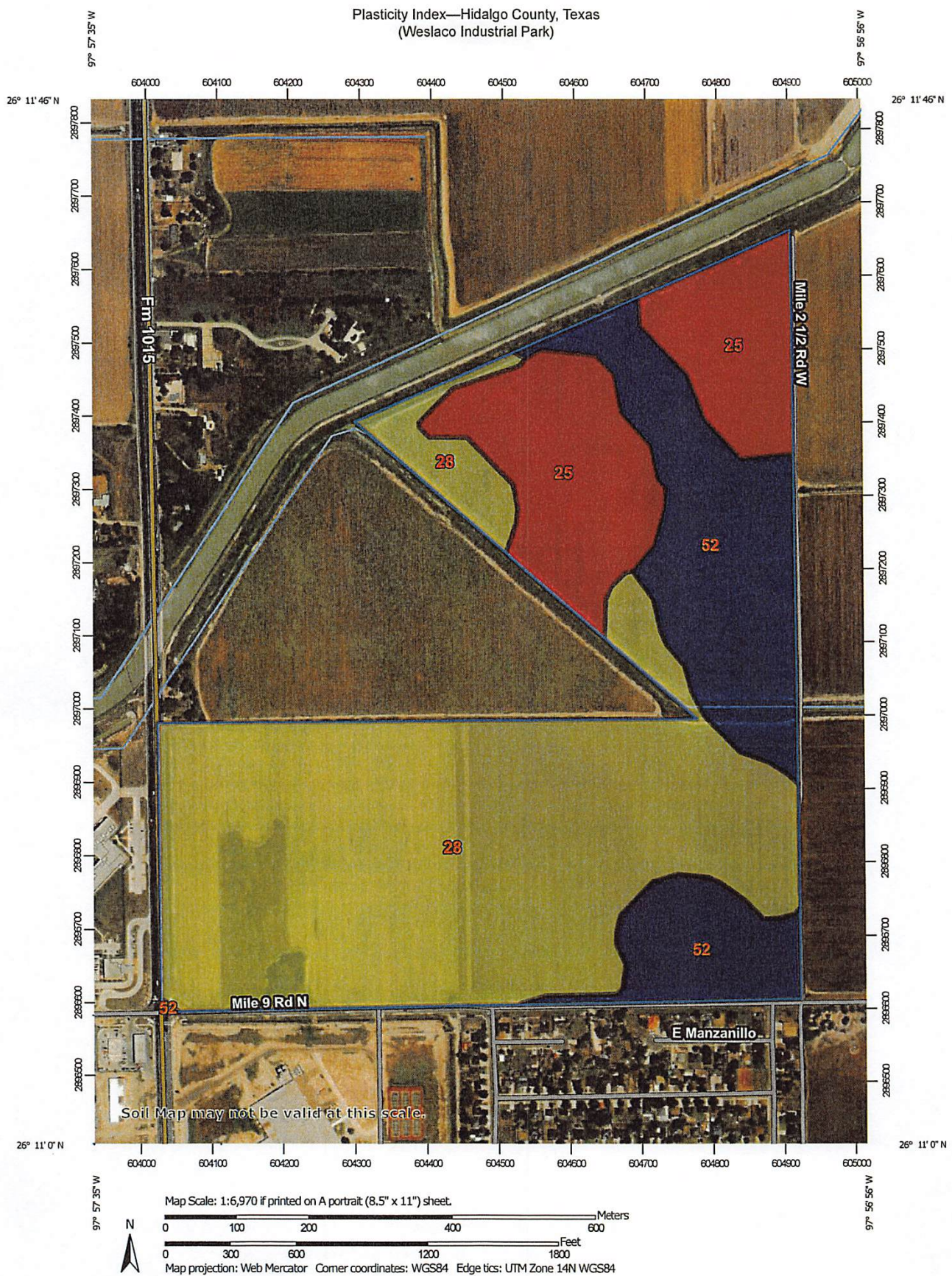
Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): All Layers (Weighted Average)



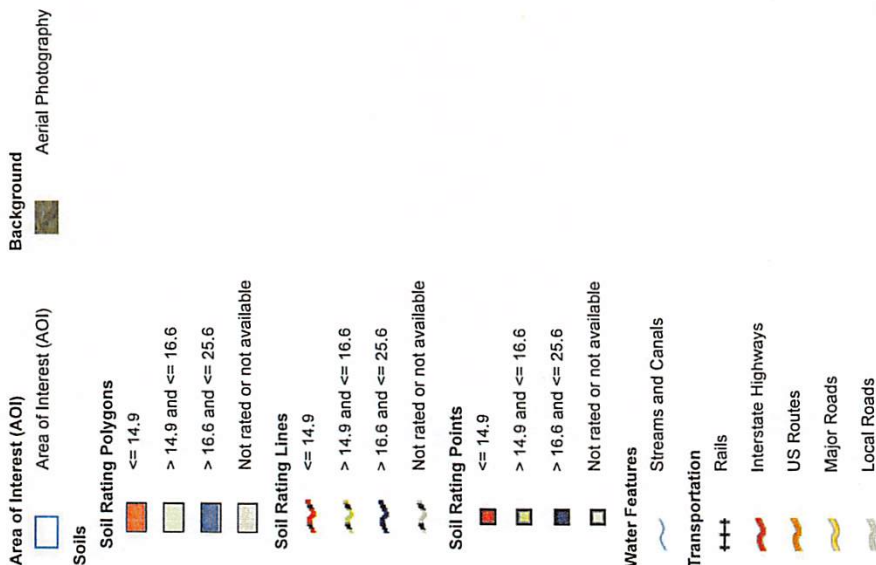
Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

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Plasticity Index—Hidalgo County, Texas
(Weslaco Industrial Park)

MAP LEGEND



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 19, Jun 11, 2020

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.

Plasticity Index

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	14.9	28.0	19.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	16.6	83.1	57.7%
52	Raymondville clay loam, 0 to 1 percent slopes	25.6	32.9	22.9%
Totals for Area of Interest			144.0	100.0%

Description

Plasticity index (PI) is one of the standard Atterberg limits used to indicate the plasticity characteristics of a soil. It is defined as the numerical difference between the liquid limit and plastic limit of the soil. It is the range of water content in which a soil exhibits the characteristics of a plastic solid.

The plastic limit is the water content that corresponds to an arbitrary limit between the plastic and semisolid states of a soil. The liquid limit is the water content, on a percent by weight basis, of the soil (passing #40 sieve) at which the soil changes from a plastic to a liquid state.

Soils that have a high plasticity index have a wide range of moisture content in which the soil performs as a plastic material. Highly and moderately plastic clays have large PI values. Plasticity index is used in classifying soils in the Unified and AASHTO classification systems.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): All Layers (Weighted Average)

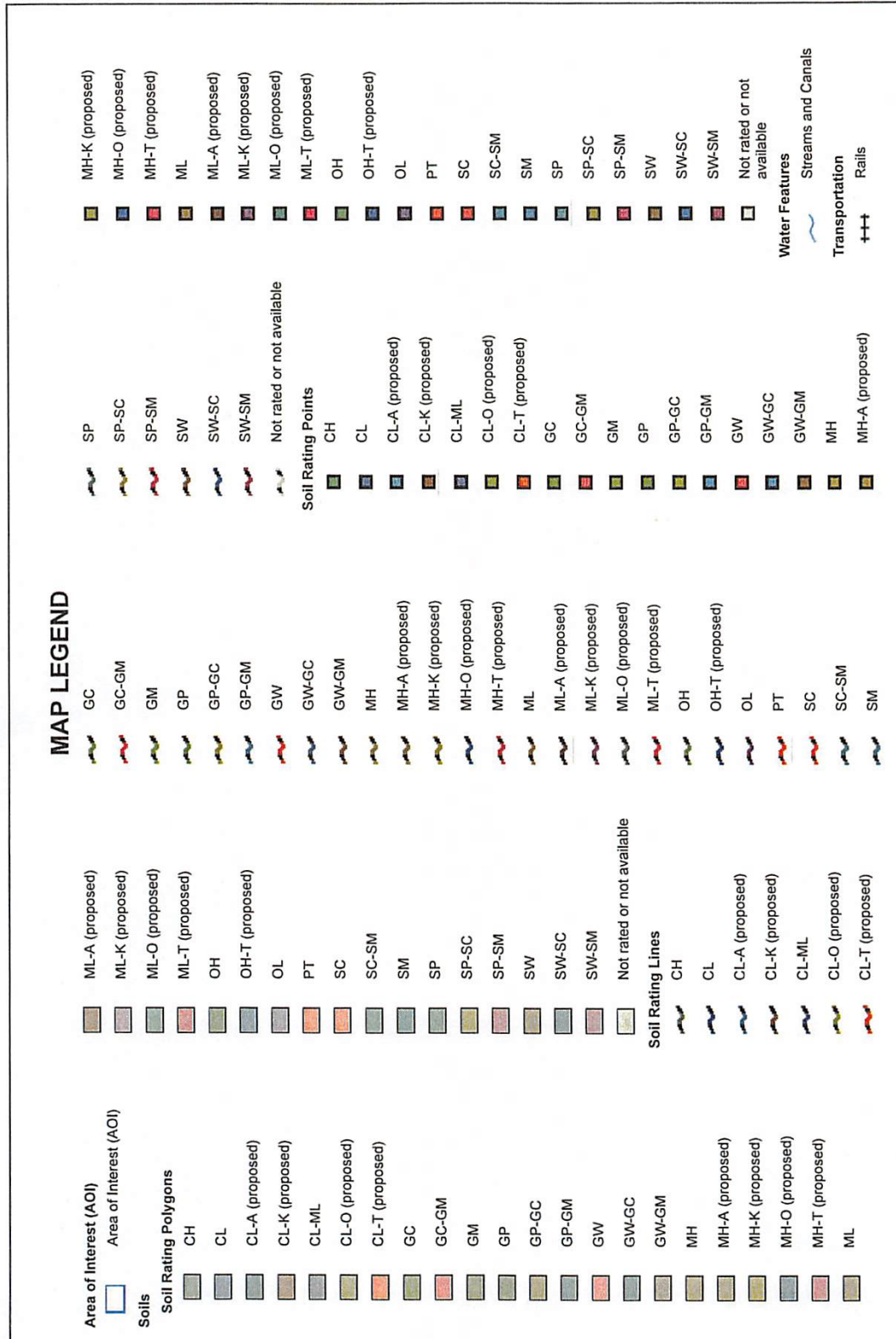


Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

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Unified Soil Classification (Surface)—Hidalgo County, Texas
(Weslaco Industrial Park - Unified Soil Classification (Surface))



Unified Soil Classification (Surface)—Hidalgo County, Texas
(Weslaco Industrial Park - Unified Soil Classification (Surface))

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 19, Jun 11, 2020

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.

Unified Soil Classification (Surface)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
25	Hidalgo fine sandy loam, 0 to 1 percent slopes	SC-SM	28.0	19.5%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	CL	83.1	57.7%
52	Raymondville clay loam, 0 to 1 percent slopes	CL	32.9	22.9%
Totals for Area of Interest			144.0	100.0%

Description

The Unified soil classification system classifies mineral and organic mineral soils for engineering purposes on the basis of particle-size characteristics, liquid limit, and plasticity index. It identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter; and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified system.

The various groupings of this classification correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

For each soil horizon in the database one or more Unified soil classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

Rating Options

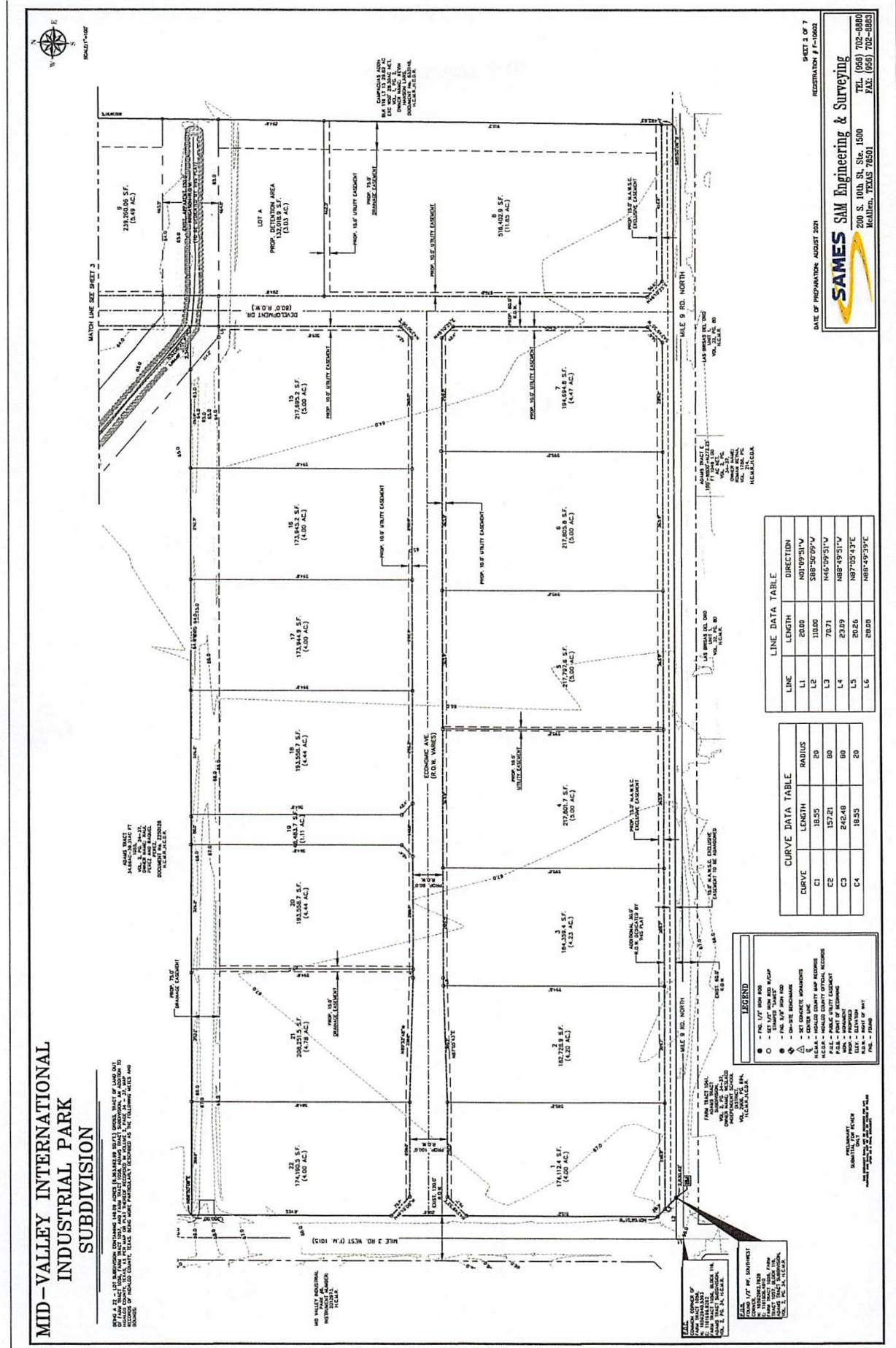
Aggregation Method: Dominant Condition

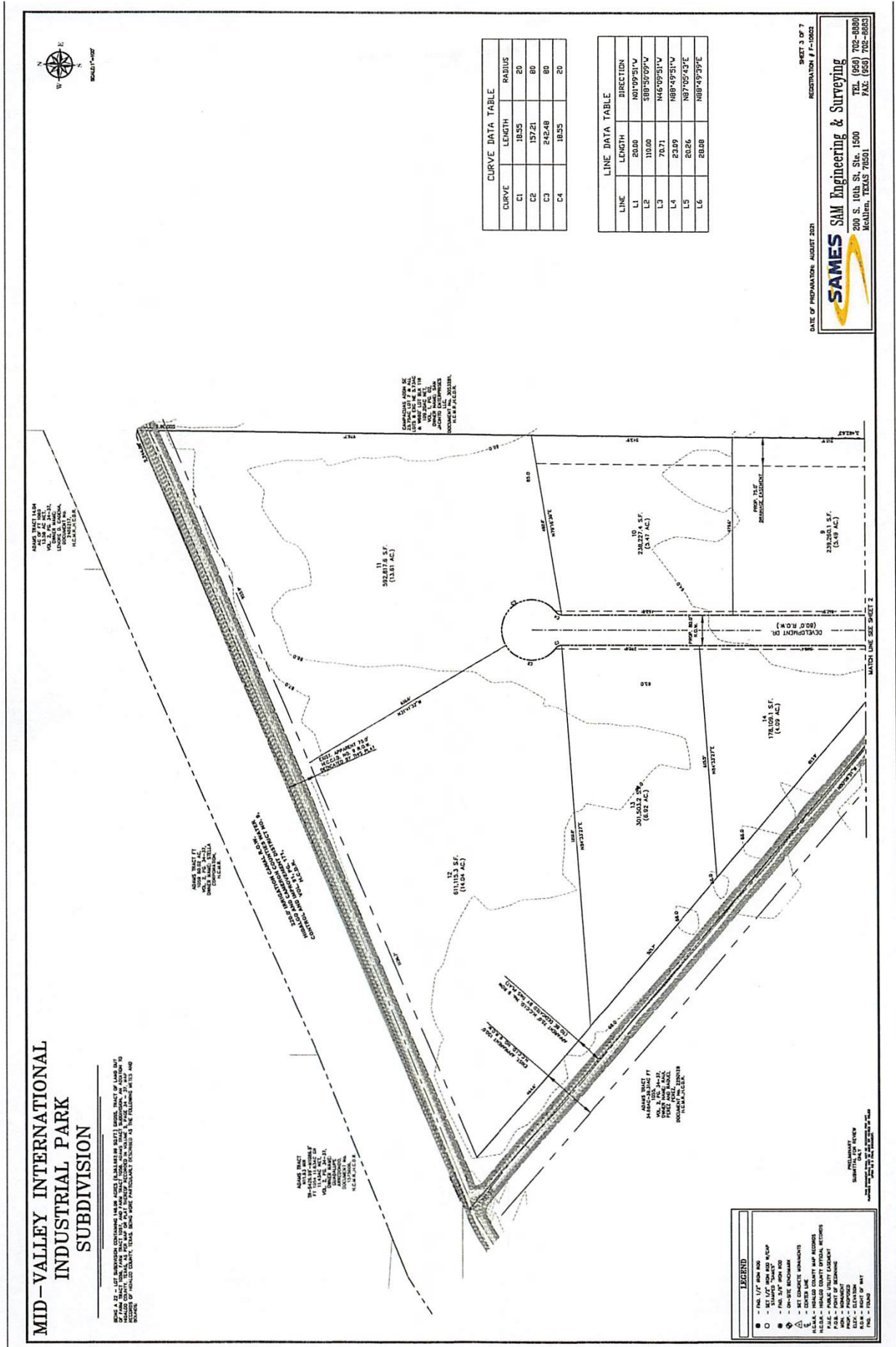
Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Exhibits





CAMPAGNIA ADDN
BLK 118 LT 13 29.82 AC
ESC M07 28.50AC NET.
VOL. 1, PG. 2
OWNER NAME: KEVIN
HANSON LARK
DOCUMENT NO. 633146.
H.C.M.R./H.C.D.R.

ADAMS TRACT
34.88AC-39.31AC FT
1022
VOL. 2, PG. 34-37,
DINER NAME: BAUL
PUENZ AND RAQUEL
PUENZ.
DOCUMENT No. 2250129

ADAMS TRACT SUPERVISOR,
VOL. 2, PG. 34-37
OWNER NAME: WESLEY
INDEPENDENT SCHOOL DISTRICT
VOL. 2008, PG. 894,
H.C.M.R. H.C.D.R.

[illegible]

NO.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS:

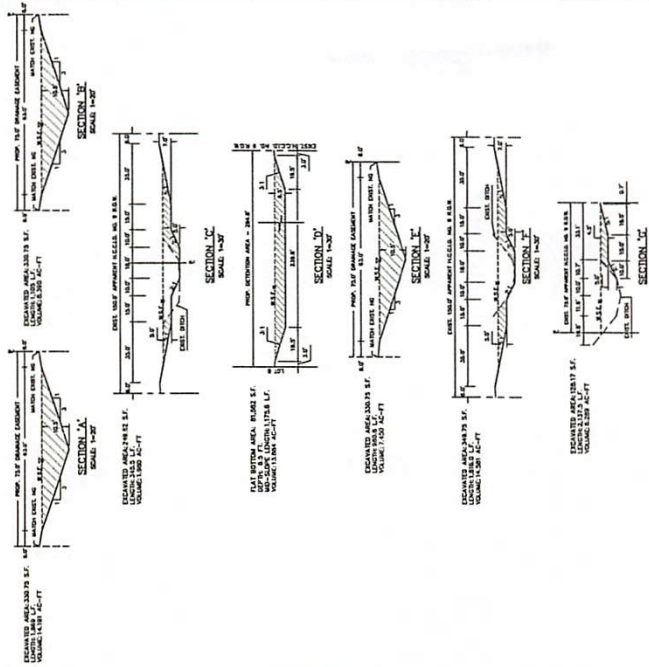
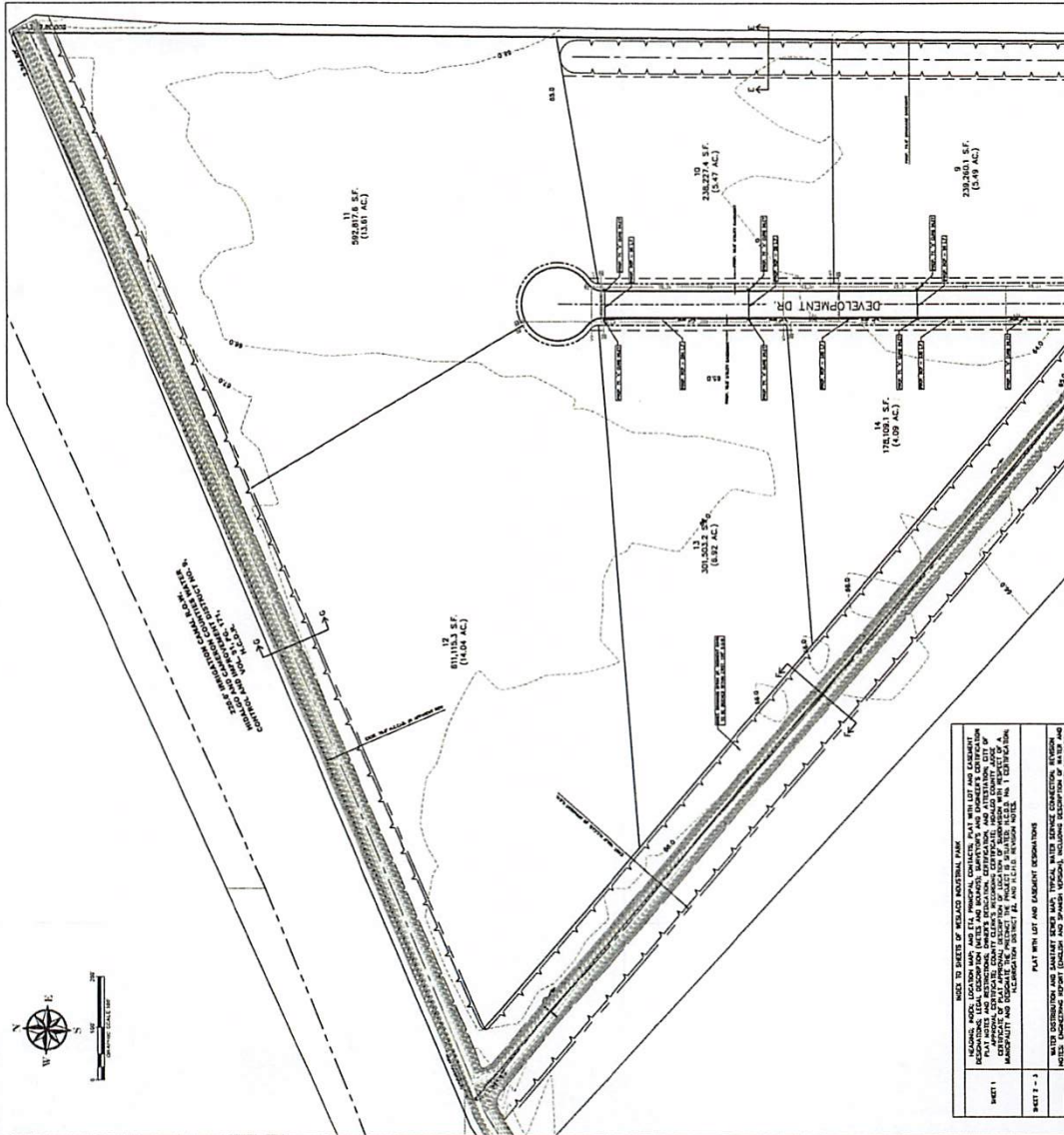
10

SHEET 6 OF 7
REVISED & TYPED 4-5-1982

.....

SAMES SAM Engineering & Surveying
200 S. 10TH ST. SUITE 1500.
McALLEN, TEXAS 78501
TEL (956) 702-8880
FAX: (96) 702-8883

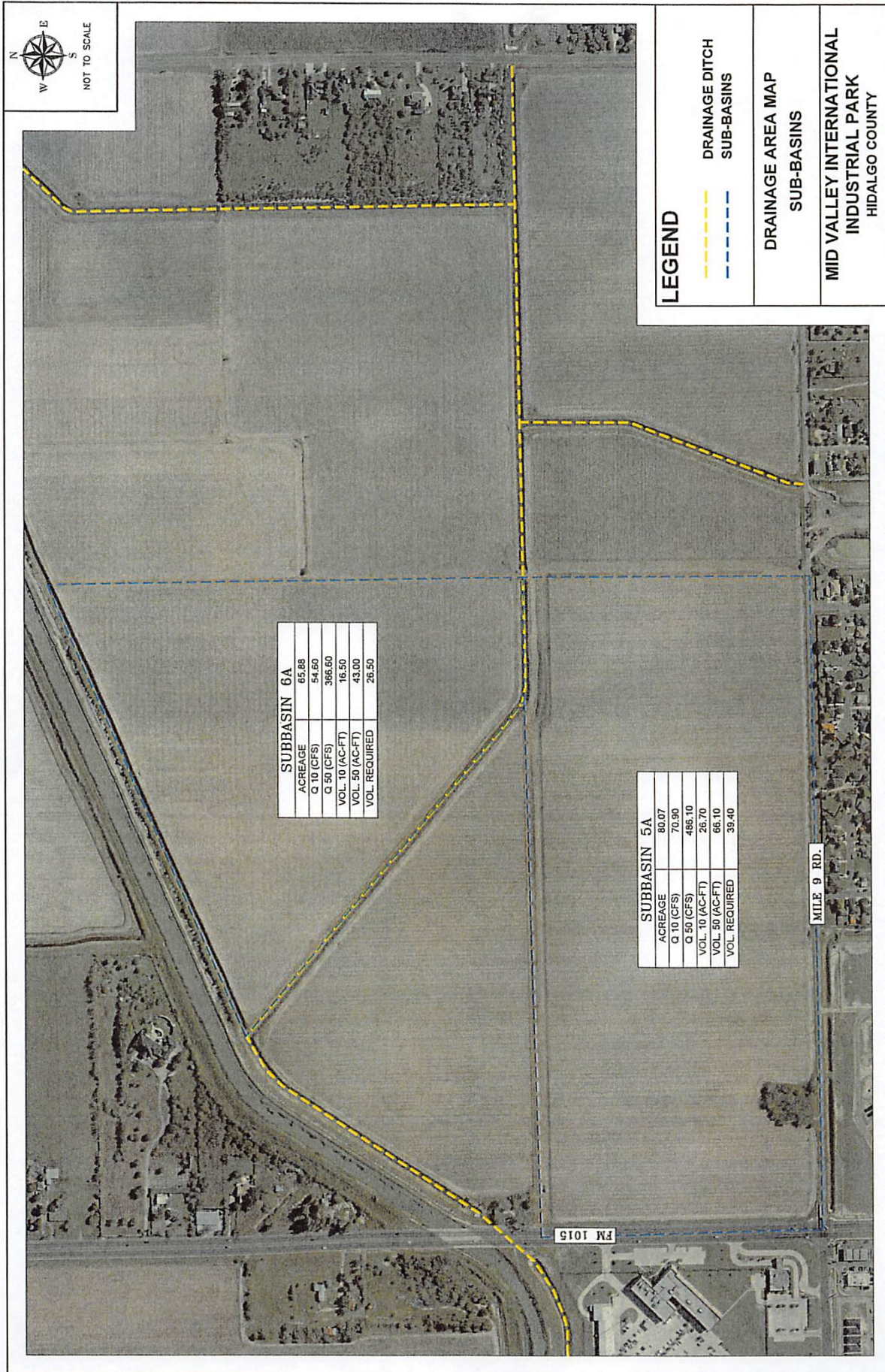
MID-VALLEY INTERNATIONAL INDUSTRIAL PARK PAVING & DRAINAGE LAYOUT

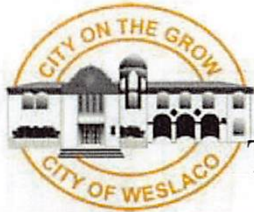


SECTION 1
PAVING & DRAINAGE LAYOUT
SECTION 1
PAVING & DRAINAGE LAYOUT
SECTION 2
PAVING & DRAINAGE LAYOUT
SECTION 3
PAVING & DRAINAGE LAYOUT
SECTION 4
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SECTION 8
PAVING & DRAINAGE LAYOUT
SECTION 9
PAVING & DRAINAGE LAYOUT
SECTION 10
PAVING & DRAINAGE LAYOUT

SAMES SAM Engineering & Surveying
200 S. 10TH ST. SUITE 1500
MCKINNEY, TEXAS 75069
TEL: (940) 702-8880
FAX: (940) 702-8885

DATE OF PREPARATION: AUGUST 2021
SHEET 7 OF 7
REGISTRATION # F-10822





**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: Weslaco Industrial Park Subdivision
 Location: MILE 3 RD. WEST (F.M. 1015)
 Applicant: SAM Engineering & Surveying ☐ Owner ☒ Agent
 Address: 200 S. 10th Street, Ste 1500, McAllen, TX Phone Number: (956) 702-8880

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			
Various	Industrial & Various	-	-	-	665	707	7,202

Comments: See Attached
 Prepared by: _____ Date: _____
 Address: _____ Phone Number: _____

(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#: _____

Weslaco Industrial Park Subdivision

Trip Generation Calculation

Lot	Land Use:	AM Peak	Average Rate: PM Peak	Weekday	Est. GFA (1000 SF)	AM	Trips PM	Weekday
1	Mixed Use ¹	-	-	-	-	224	243	3,157
2	130 Industrial Park	0.40	0.40	3.37	41.95	17	17	141
3	130 Industrial Park	0.40	0.40	3.37	42.32	17	17	143
4	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	169
5	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	168
6	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	169
7	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	168
8	130 Industrial Park	0.40	0.40	3.37	60.00	24	24	202
9	130 Industrial Park	0.40	0.40	3.37	30.31	12	12	102
10	130 Industrial Park	0.40	0.40	3.37	54.93	22	22	185
11	130 Industrial Park	0.40	0.40	3.37	58.61	23	23	198
12	130 Industrial Park	0.40	0.40	3.37	80.45	32	32	271
13	130 Industrial Park	0.40	0.40	3.37	149.18	60	60	503
14	130 Industrial Park	0.40	0.40	3.37	49.98	20	20	168
15	130 Industrial Park	0.40	0.40	3.37	39.93	16	16	135
16	130 Industrial Park	0.40	0.40	3.37	39.93	16	16	135
17	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	168
18	130 Industrial Park	0.40	0.40	3.37	50.00	20	20	168
19	130 Industrial Park	0.40	0.40	3.37	47.81	19	19	161
20	Mixed Use ²	-	-	-	-	43	66	691
Total					995.39	665	707	7,202

Lot	Land Use:	AM Peak	Average Rate: PM Peak	Weekday	Est. GFA (1000 SF)	AM	Trips PM	Weekday
1a	934 Fast-Food Restaurant with Drive-Through Window	40.19	32.67	470.95	5.10	205	167	2,402
1b	820 Shopping Center	0.94	3.81	37.75	20.00	19	76	755
Total					Total	224	243	3,157

Lot	Land Use:	AM Peak	Average Rate: PM Peak	Weekday	Est. GFA (1000 SF)	AM	Trips PM	Weekday
2a	843 Automobile Parts Sales	2.59	4.91	55.34	9.85	26	48	545
2b	710 General Office Building	1.16	1.15	9.74	15.00	17	17	146
Total					Total	43	66	691

Land Use: 130 Industrial Park

Description

An industrial park contains a number of industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities—some with a large number of small businesses and others with one or two dominant industries. General light industrial (Land Use 110) and manufacturing (Land Use 140) are related uses.

Additional Data

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, Georgia, New Jersey, New York, Ontario (CAN), and Pennsylvania.

Source Numbers

106, 162, 184, 251, 277, 422, 706, 747, 753, 937

Industrial Park (130)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

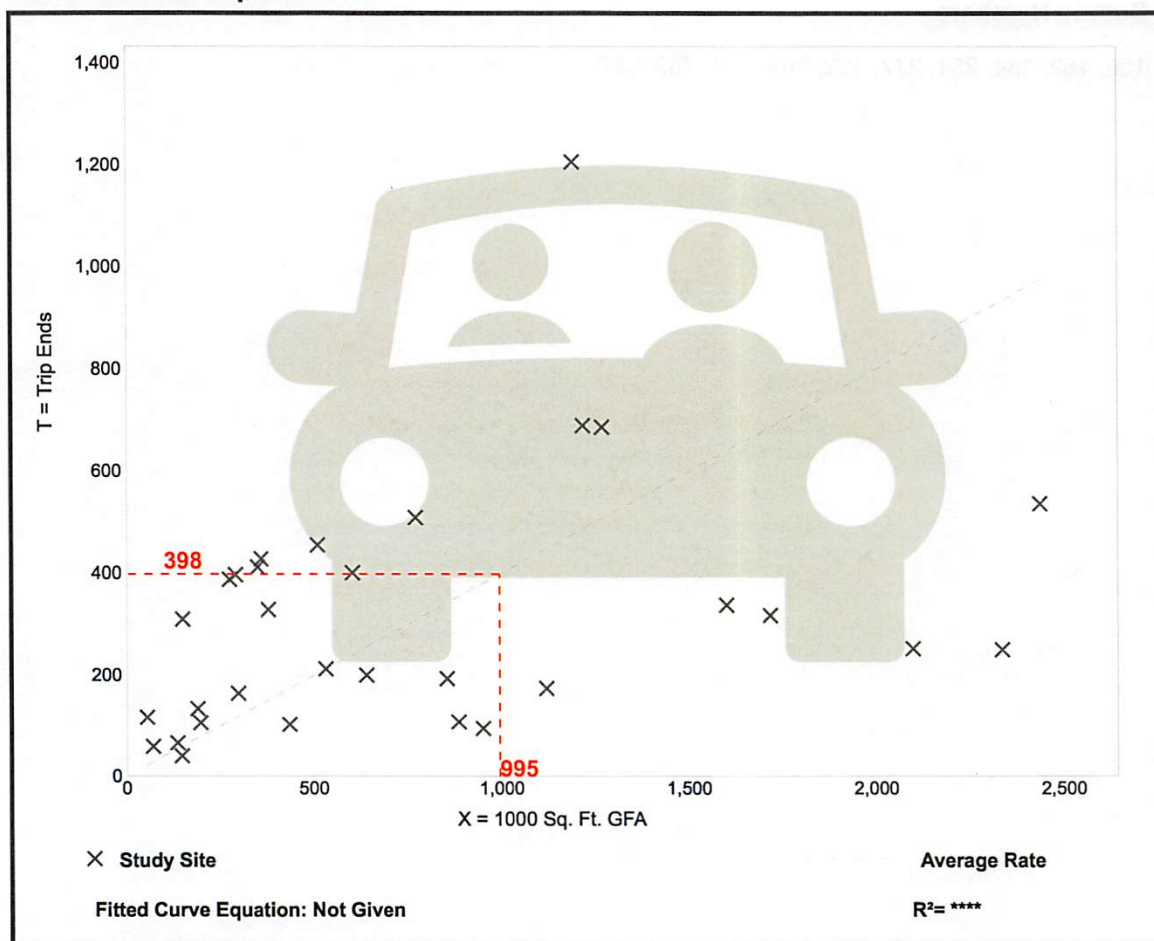
Avg. 1000 Sq. Ft. GFA: 776

Directional Distribution: 81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.13	0.37

Data Plot and Equation



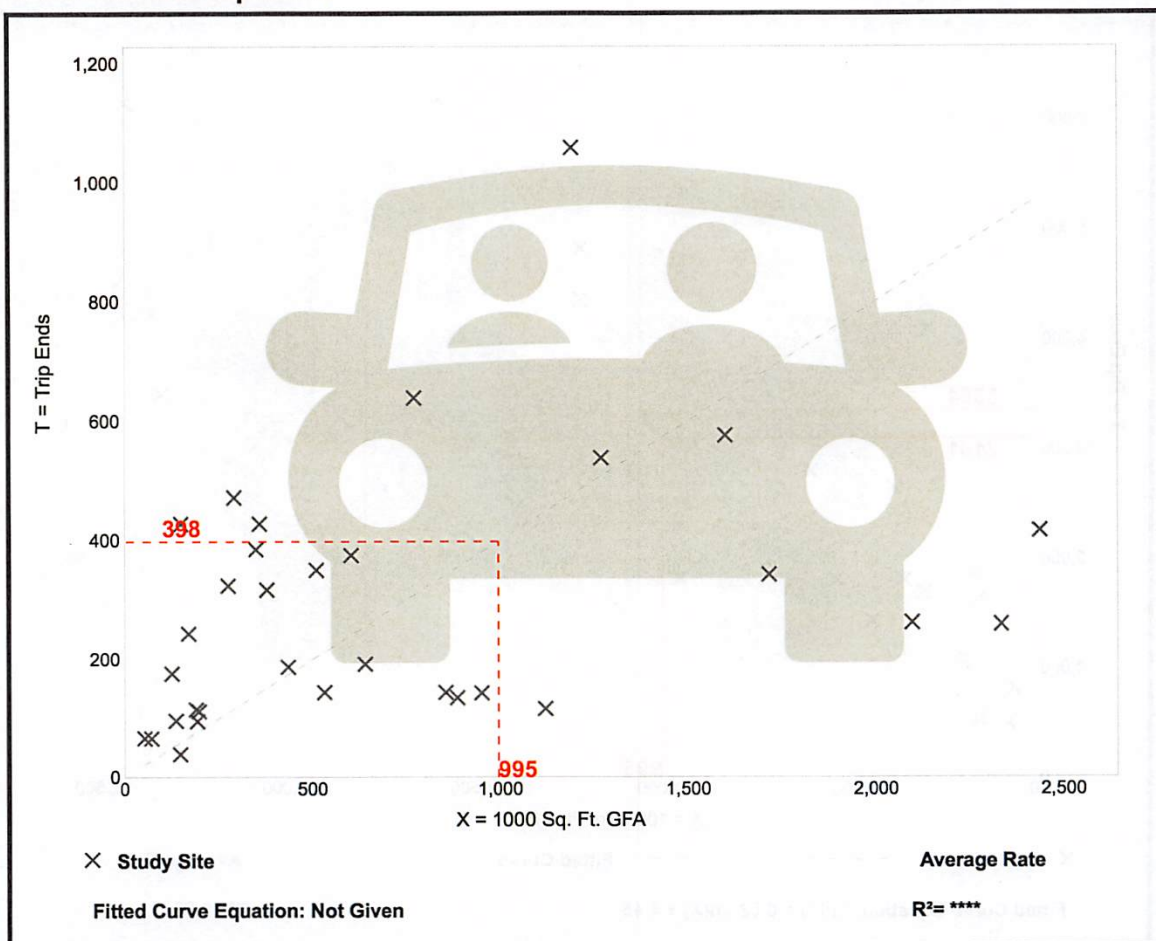
Industrial Park (130)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 32
 Avg. 1000 Sq. Ft. GFA: 720
 Directional Distribution: 21% entering, 79% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.85	0.41

Data Plot and Equation



Industrial Park (130)

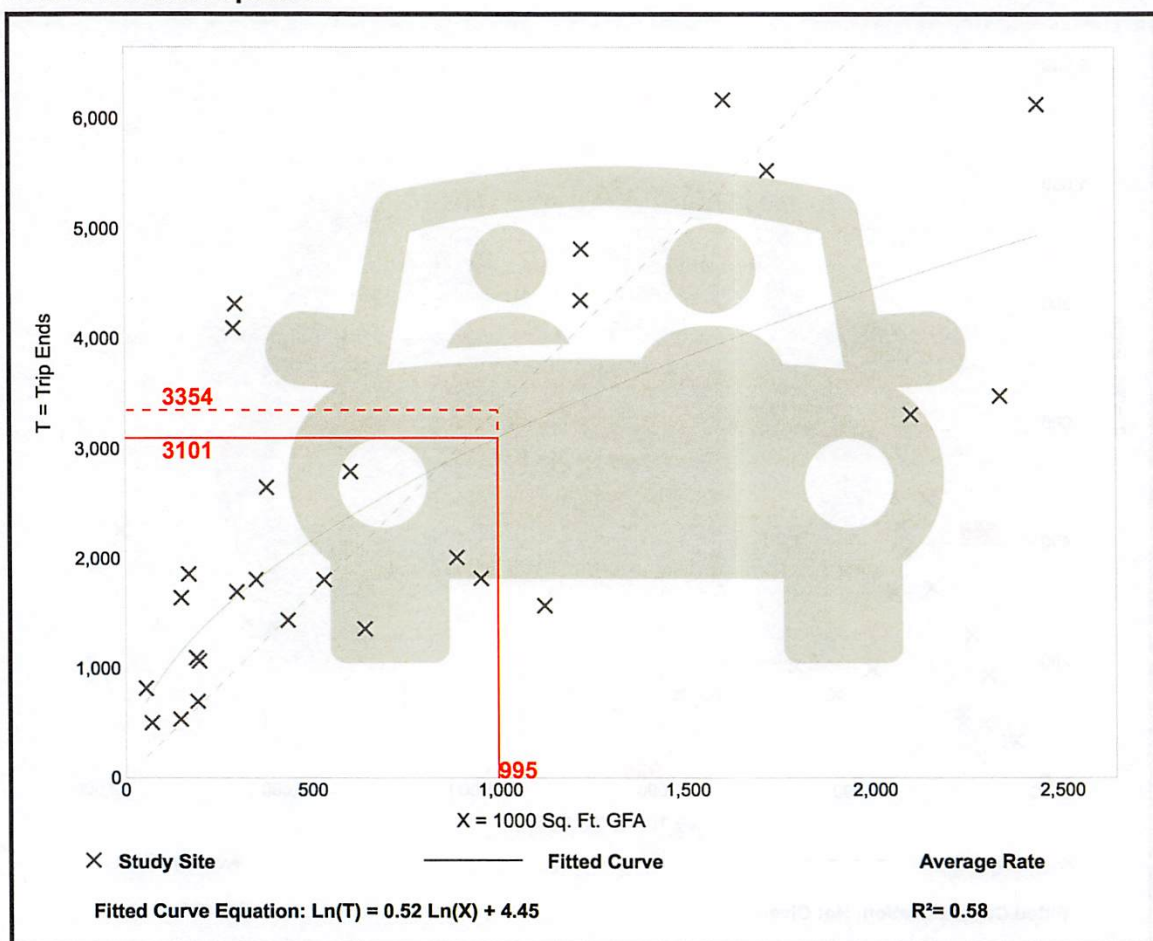
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 762
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.37	1.41 - 14.98	2.60

Data Plot and Equation



Land Use: 710

General Office Building

Description

A general office building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers, and tenant services, such as a bank or savings and loan institution, a restaurant, or cafeteria and service retail facilities. A general office building with a gross floor area of 5,000 square feet or less is classified as a small office building (Land Use 712). Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), office park (Land Use 750), research and development center (Land Use 760), and business park (Land Use 770) are additional related uses.

If information is known about individual buildings, it is suggested that the general office building category be used rather than office parks when estimating trip generation for one or more office buildings in a single development. The office park category is more general and should be used when a breakdown of individual or different uses is not known. If the general office building category is used and if additional buildings, such as banks, restaurants, or retail stores are included in the development, the development should be treated as a multiuse project. On the other hand, if the office park category is used, internal trips are already reflected in the data and do not need to be considered.

When the buildings are interrelated (defined by shared parking facilities or the ability to easily walk between buildings) or house one tenant, it is suggested that the total area or employment of all the buildings be used for calculating the trip generation. When the individual buildings are isolated and not related to one another, it is suggested that trip generation be calculated for each building separately and then summed.

Additional Data

The average building occupancy varied considerably within the studies for which occupancy data were provided. The reported occupied gross floor area was 88 for general urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 16 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:30 and 8:30 a.m. and 4:30 and 5:30 p.m., respectively.

For the three general urban/suburban sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 8:45 and 9:45 a.m. and 12:45 and 1:45 p.m., respectively. For the three dense multi-use urban sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 8:30 and 9:30 a.m. and 4:45 and 5:45 p.m., respectively. For the four center city core sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 9:00 and 10:00 a.m. and 12:45 and 1:45 p.m., respectively.

The average numbers of person trips per vehicle trip at the eight center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 2.76 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 2.90 during Weekday, AM Peak Hour of Generator
- 2.91 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 3.02 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 18 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.47 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.47 during Weekday, AM Peak Hour of Generator
- 1.46 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.53 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 23 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.30 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.34 during Weekday, AM Peak Hour of Generator
- 1.32 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.41 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New York, Pennsylvania, Texas, Utah, Virginia, and Washington.

Source Numbers

161, 175, 183, 184, 185, 207, 212, 217, 247, 253, 257, 260, 262, 273, 279, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 418, 419, 423, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 940, 944, 946, 964, 965, 972

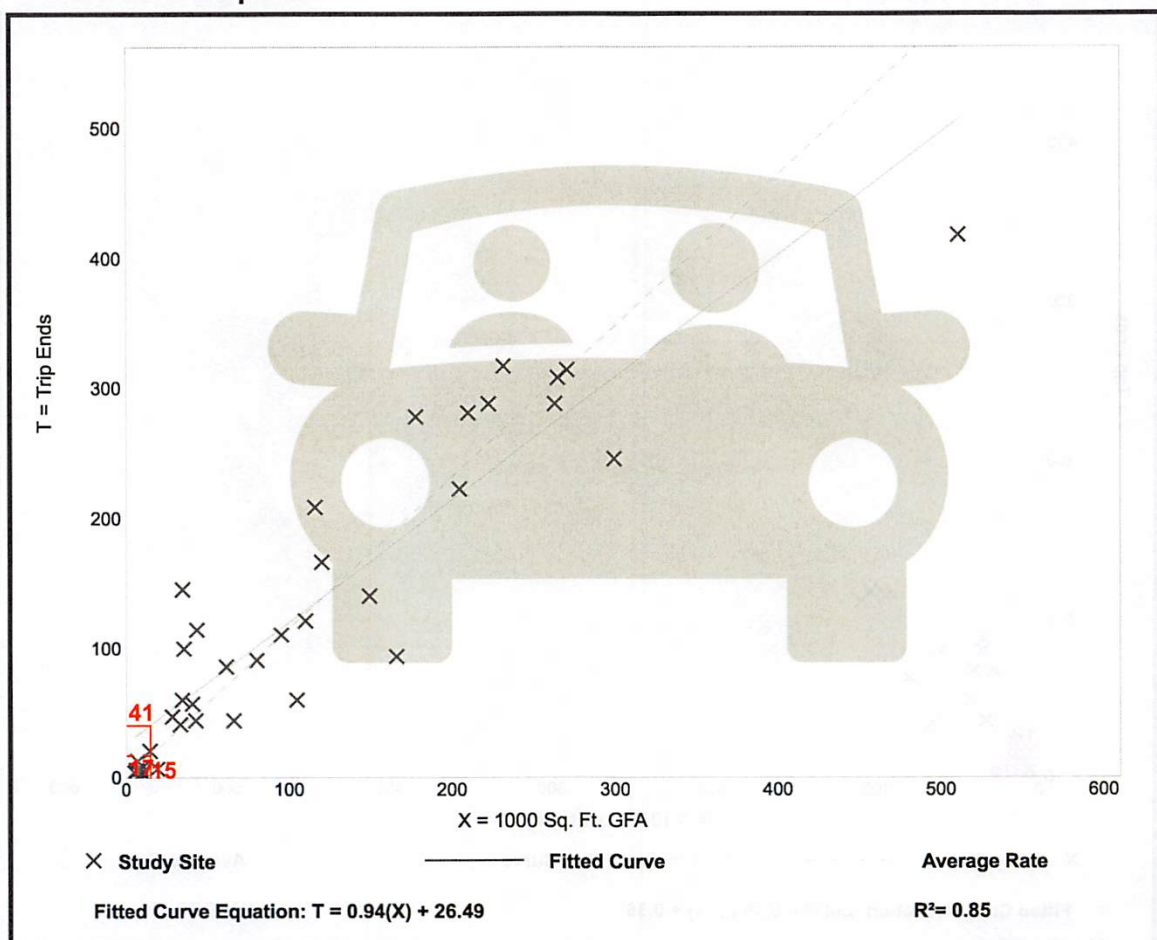
General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 35
 Avg. 1000 Sq. Ft. GFA: 117
 Directional Distribution: 86% entering, 14% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.16	0.37 - 4.23	0.47

Data Plot and Equation



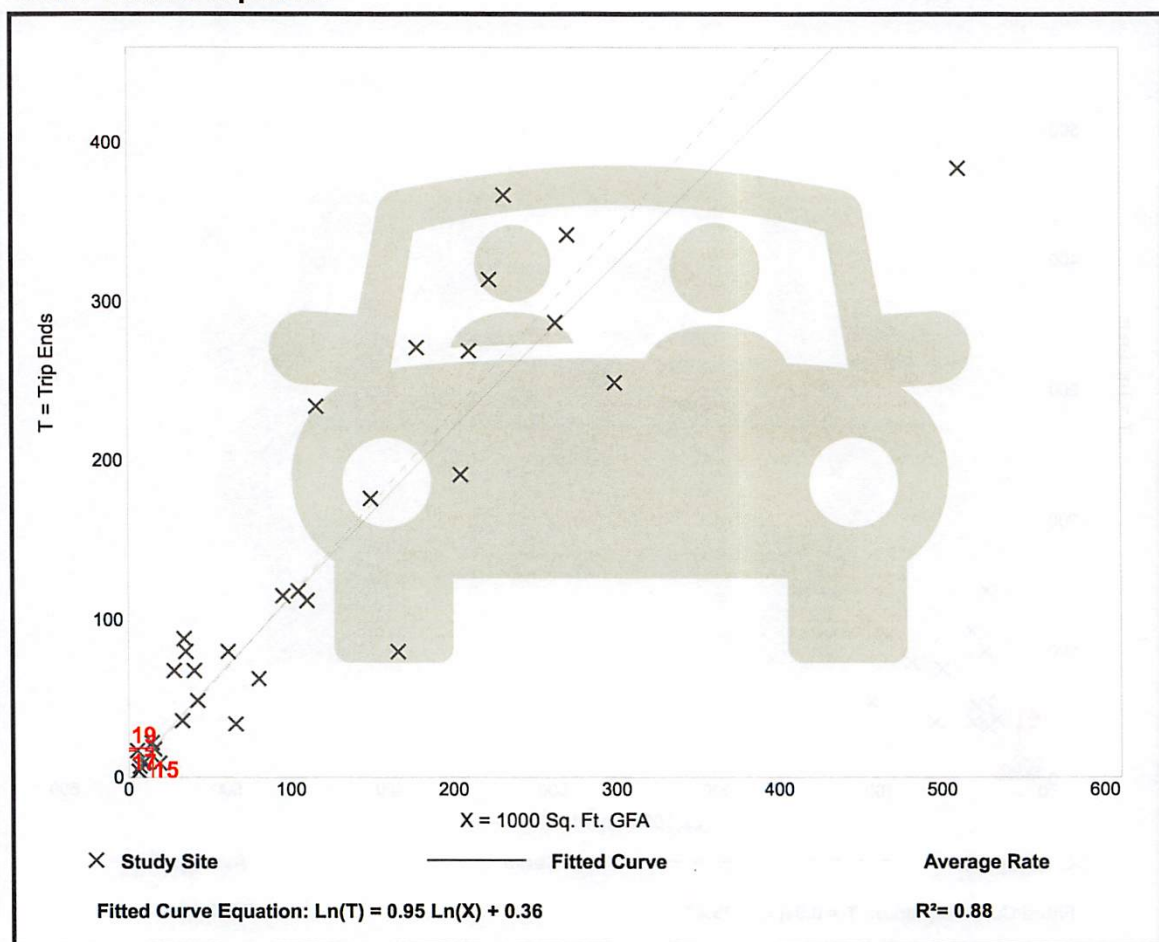
General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 32
 Avg. 1000 Sq. Ft. GFA: 114
 Directional Distribution: 16% entering, 84% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.15	0.47 - 3.23	0.42

Data Plot and Equation



General Office Building (710)

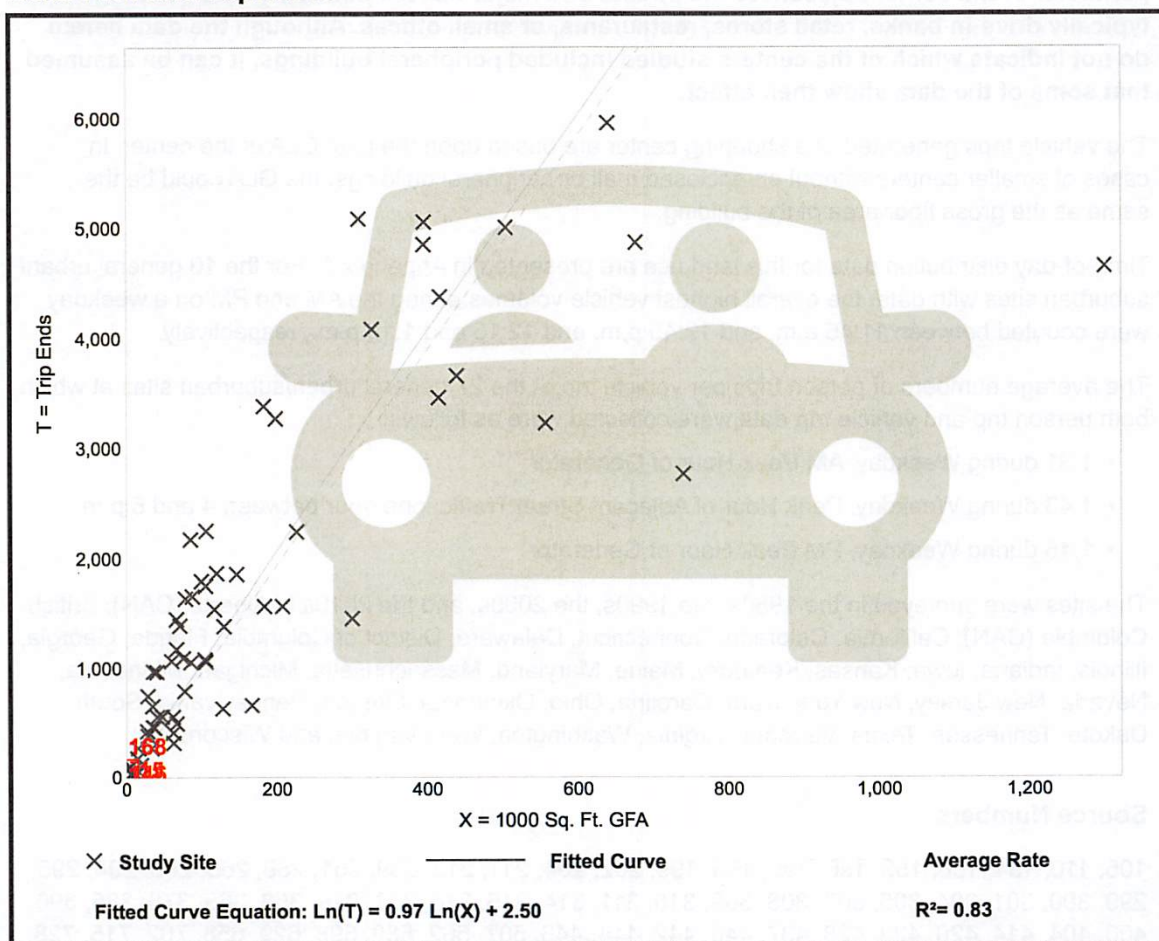
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 66
Avg. 1000 Sq. Ft. GFA: 171
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.74	2.71 - 27.56	5.15

Data Plot and Equation



Land Use: 820 Shopping Center

Description

A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Factory outlet center (Land Use 823) is a related use.

Additional Data

Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses).

Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.

The vehicle trips generated at a shopping center are based upon the total GLA of the center. In cases of smaller centers without an enclosed mall or peripheral buildings, the GLA could be the same as the gross floor area of the building.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:15 and 1:15 p.m., respectively.

The average numbers of person trips per vehicle trip at the 27 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.31 during Weekday, AM Peak Hour of Generator
- 1.43 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.46 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

Source Numbers

105, 110, 154, 156, 159, 186, 190, 198, 199, 202, 204, 211, 213, 239, 251, 259, 260, 269, 294, 295, 299, 300, 301, 304, 305, 307, 308, 309, 310, 311, 314, 315, 316, 317, 319, 358, 365, 376, 385, 390, 400, 404, 414, 420, 423, 428, 437, 440, 442, 444, 446, 507, 562, 580, 598, 629, 658, 702, 715, 728, 868, 870, 871, 880, 899, 908, 912, 915, 926, 936, 944, 946, 960, 961, 962, 973, 974, 978

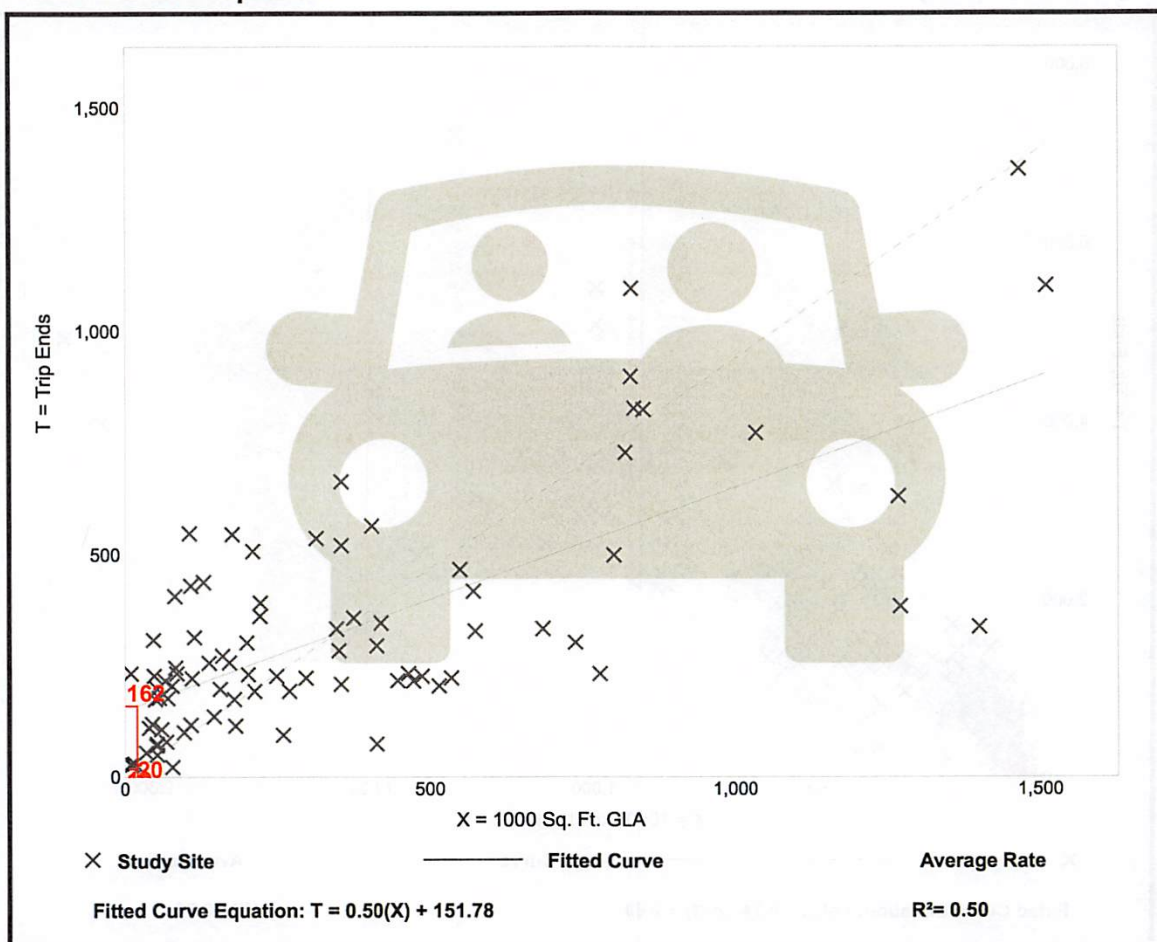
Shopping Center (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 84
 Avg. 1000 Sq. Ft. GLA: 351
 Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.94	0.18 - 23.74	0.87

Data Plot and Equation



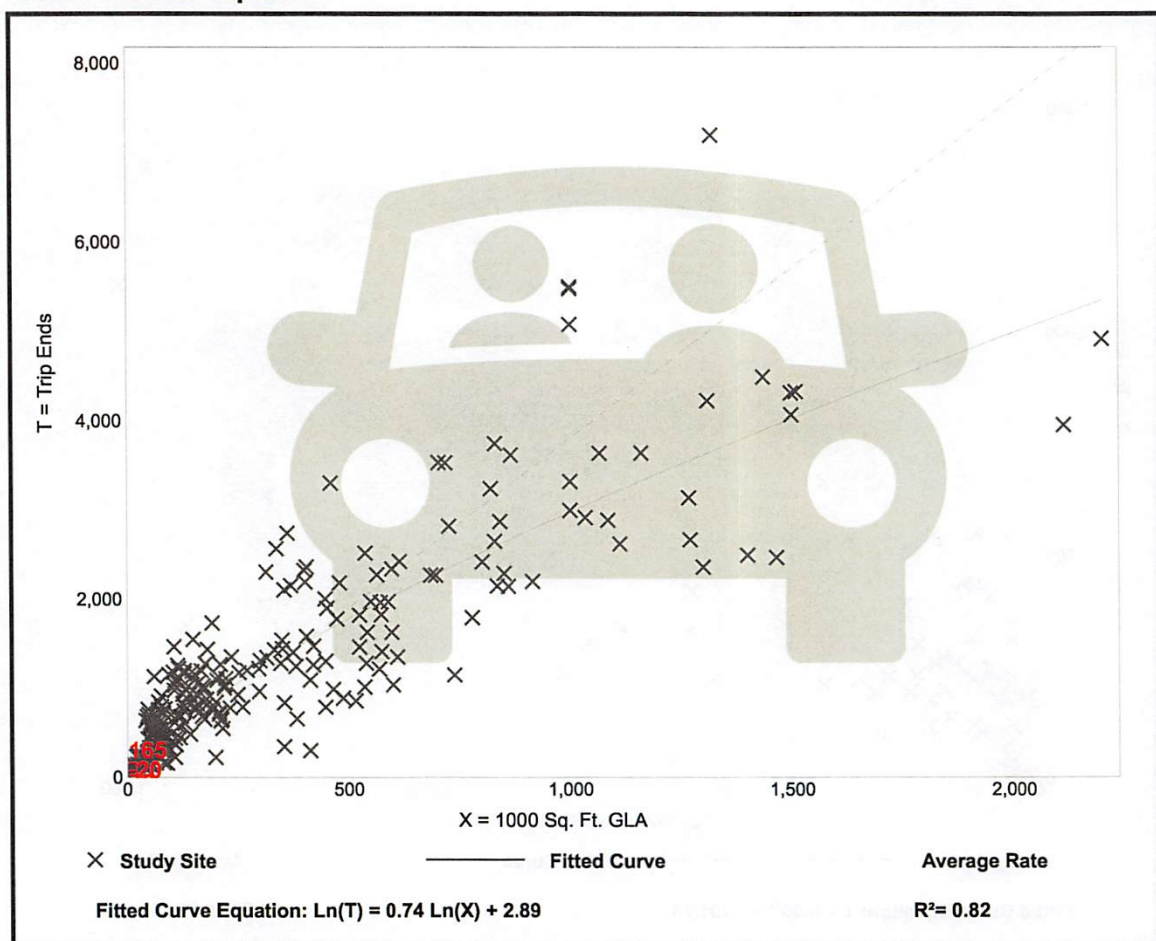
Shopping Center (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 261
 Avg. 1000 Sq. Ft. GLA: 327
 Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.81	0.74 - 18.69	2.04

Data Plot and Equation



Shopping Center (820)

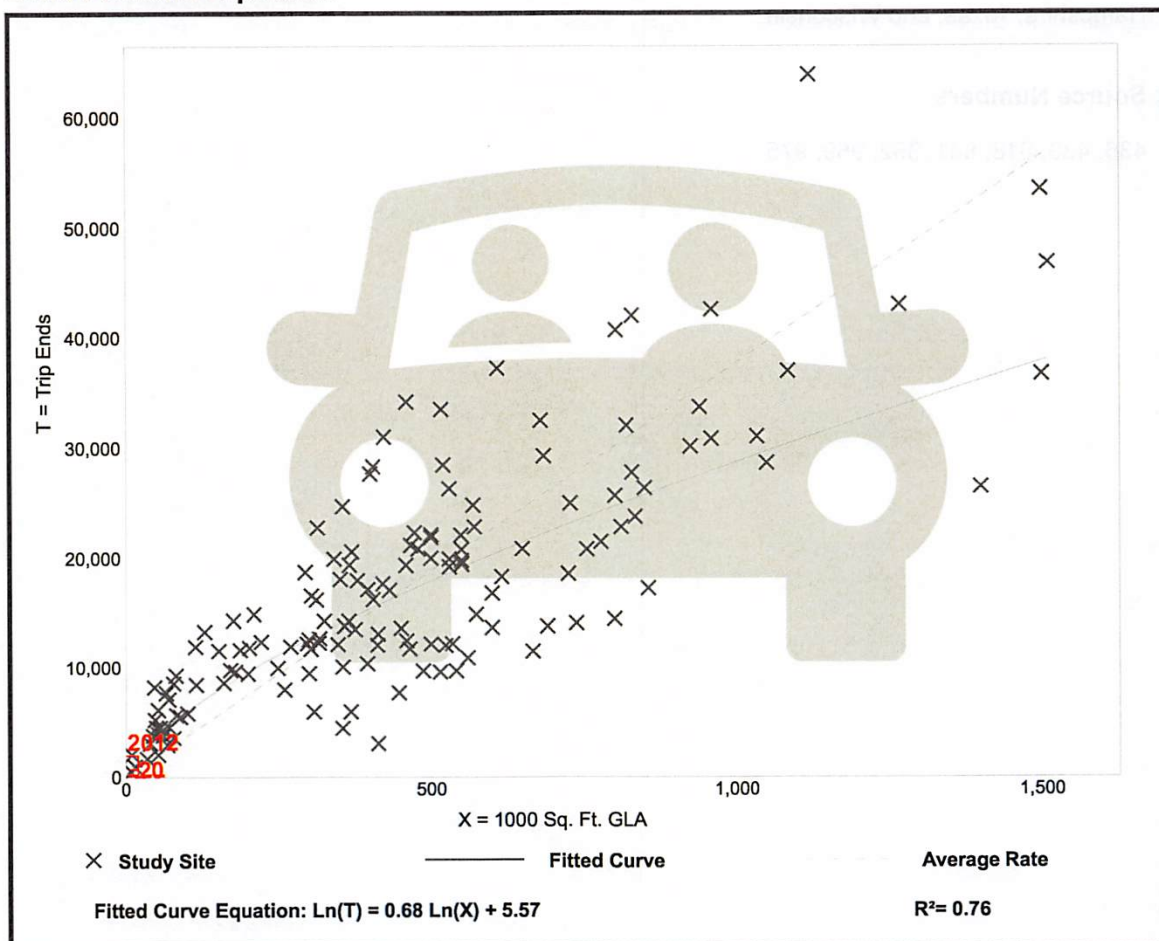
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 147
Avg. 1000 Sq. Ft. GLA: 453
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
37.75	7.42 - 207.98	16.41

Data Plot and Equation



Land Use: 843

Automobile Parts Sales

Description

An automobile parts sales facility specializes in the sale of automobile parts for maintenance and repair. Items sold at these facilities include spark plugs, oil, batteries, and a wide range of automobile parts. These facilities are not equipped for on-site vehicle repair. Tire store (Land Use 848), tire superstore (Land Use 849), and automobile parts and service center (Land Use 943) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the seven general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:15 a.m. and 12:15 p.m. and 12:45 and 1:45 p.m., respectively.

The sites were surveyed in the 1990s, the 2000s, and the 2010s in Alberta (CAN), Florida, New Hampshire, Texas, and Wisconsin.

Source Numbers

436, 439, 618, 881, 882, 959, 975

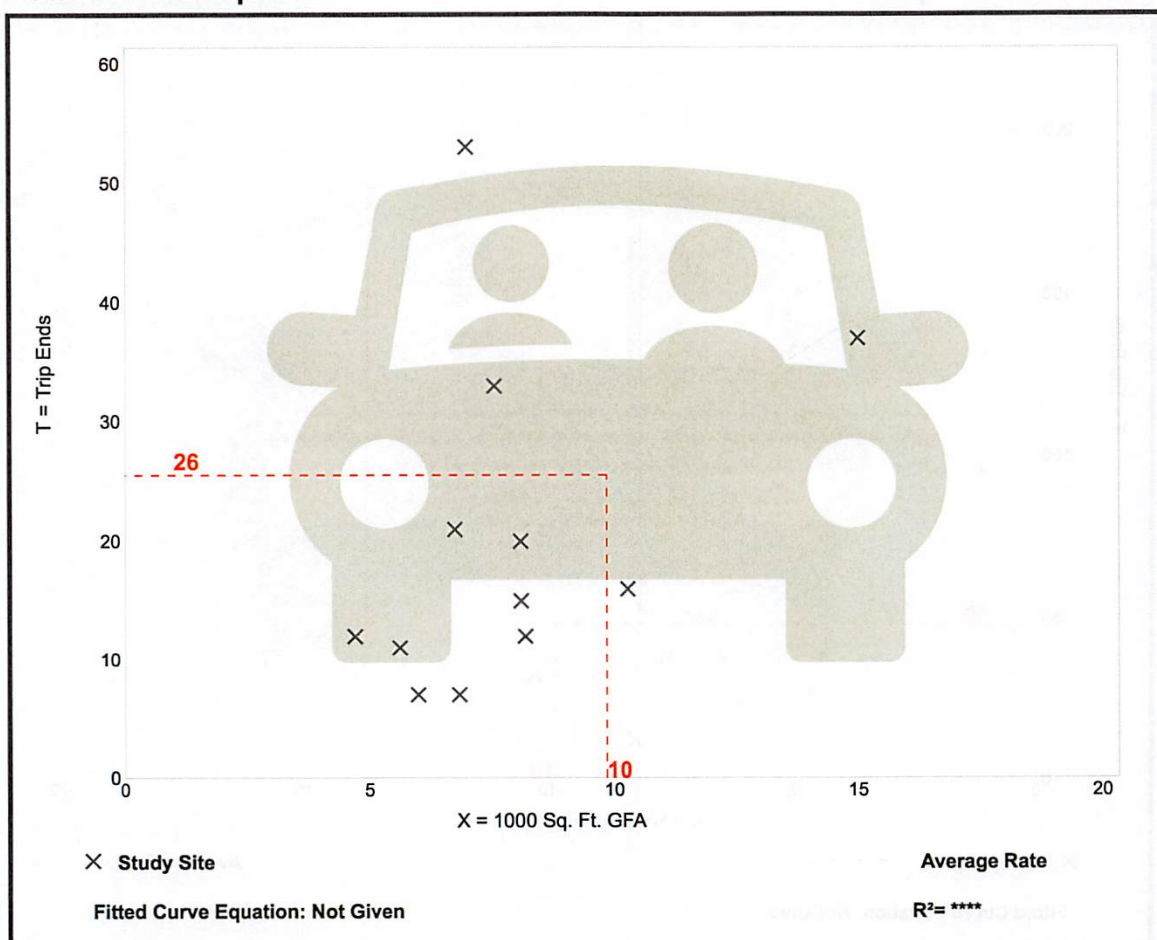
Automobile Parts Sales (843)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 12
 Avg. 1000 Sq. Ft. GFA: 8
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.59	1.02 - 7.58	1.73

Data Plot and Equation



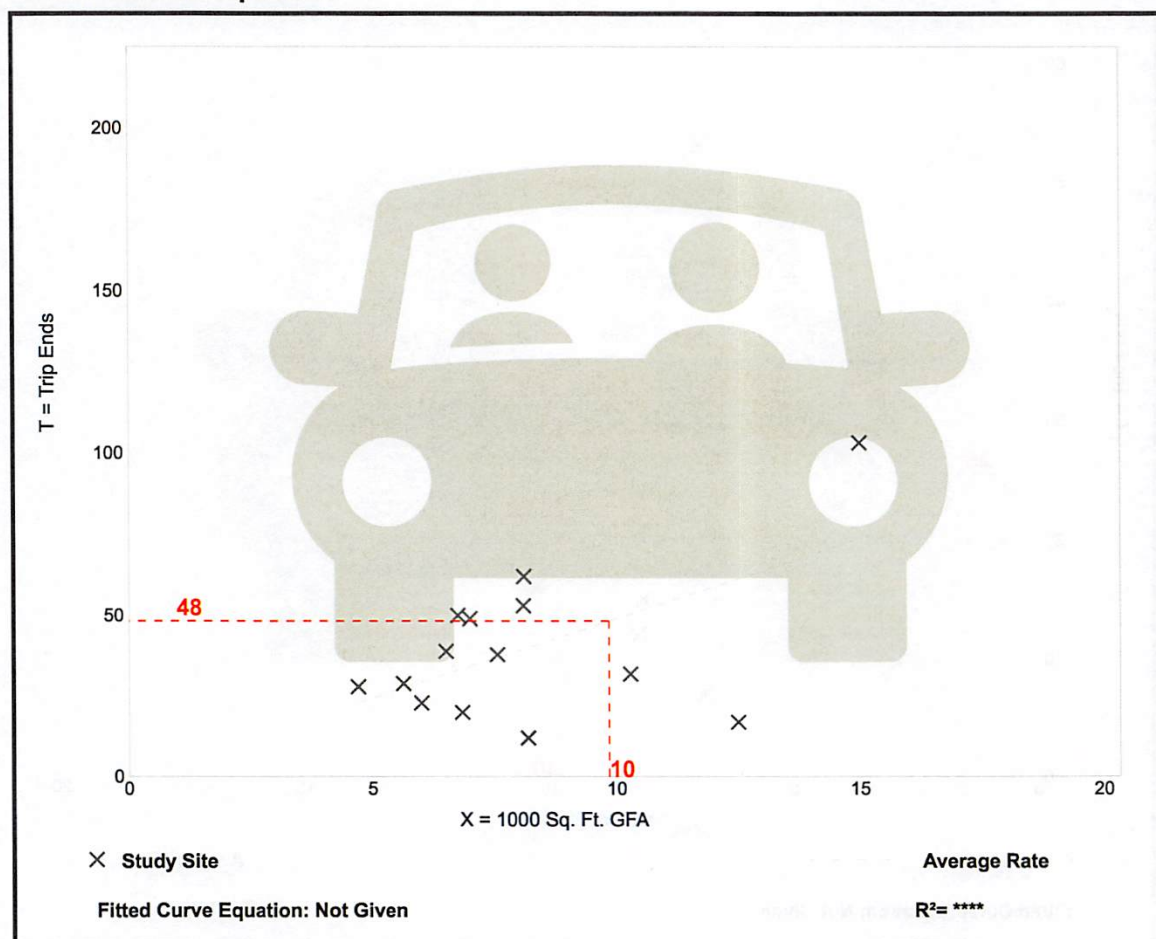
Automobile Parts Sales (843)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 14
 Avg. 1000 Sq. Ft. GFA: 8
 Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.91	1.36 - 7.65	2.29

Data Plot and Equation



Automobile Parts Sales (843)

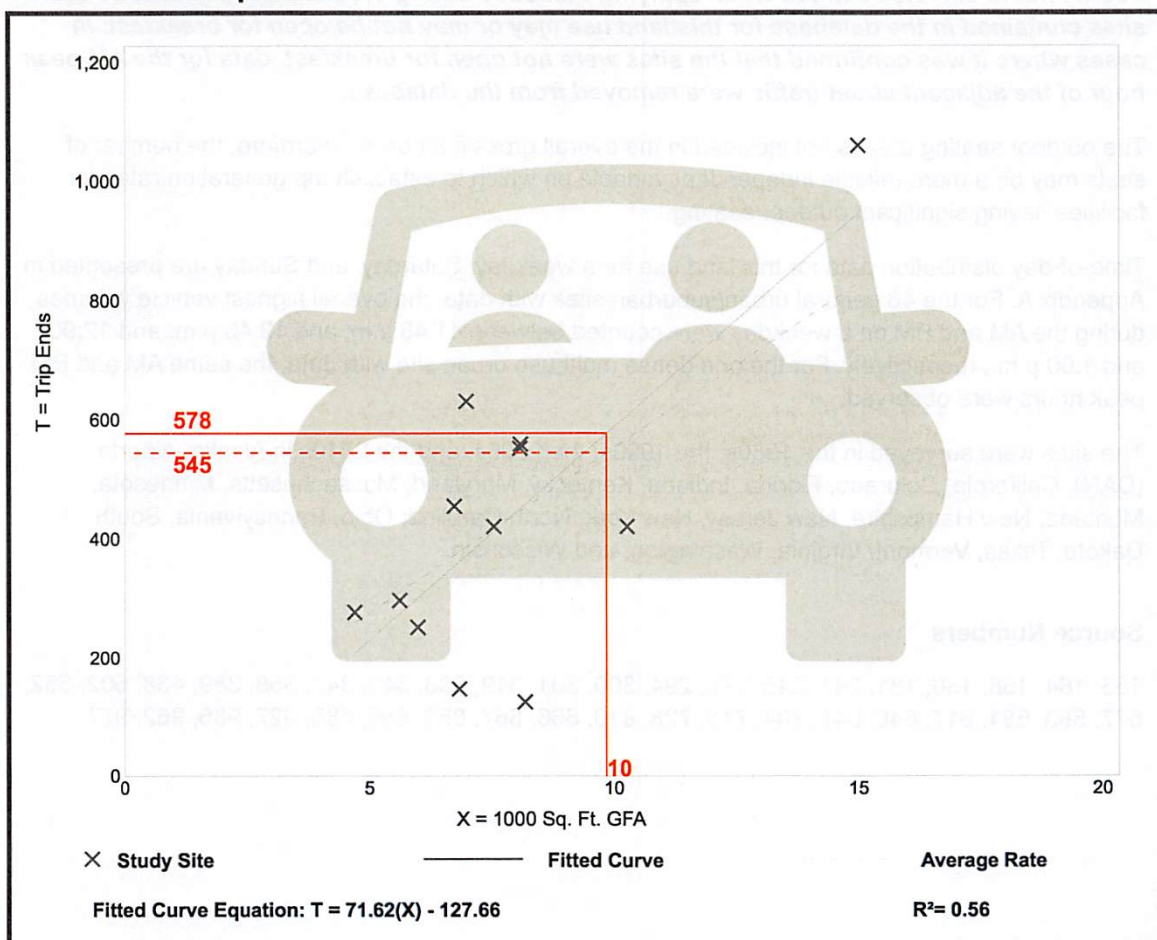
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
55.34	15.38 - 90.41	21.57

Data Plot and Equation



Land Use: 934

Fast-Food Restaurant with Drive-Through Window

Description

This category includes fast-food restaurants with drive-through windows. This type of restaurant is characterized by a large drive-through clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Non-drive-through patrons generally order at a cash register and pay before they eat. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 46 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively. For the one dense multi-use urban site with data, the same AM and PM peak hours were observed.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977

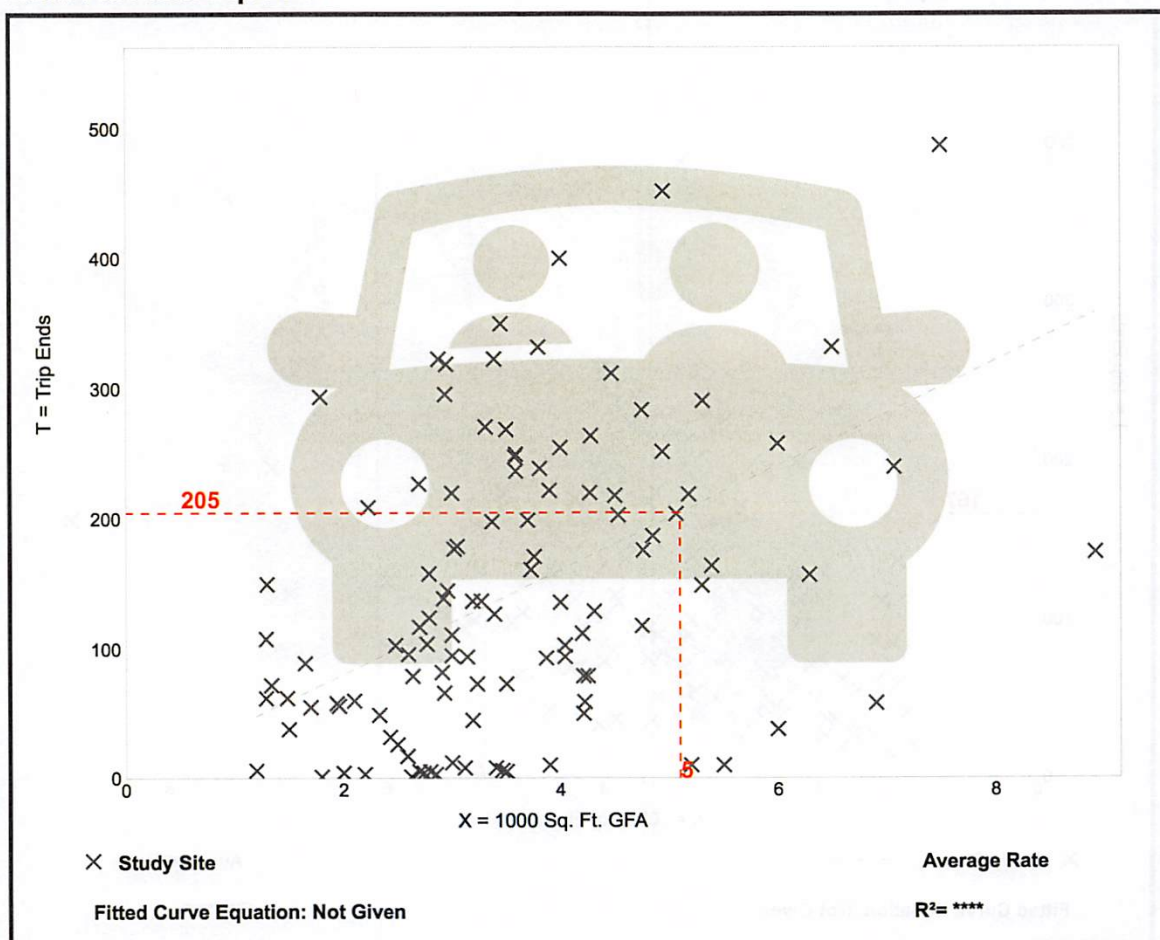
Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 111
 Avg. 1000 Sq. Ft. GFA: 4
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
40.19	0.38 - 164.25	28.78

Data Plot and Equation



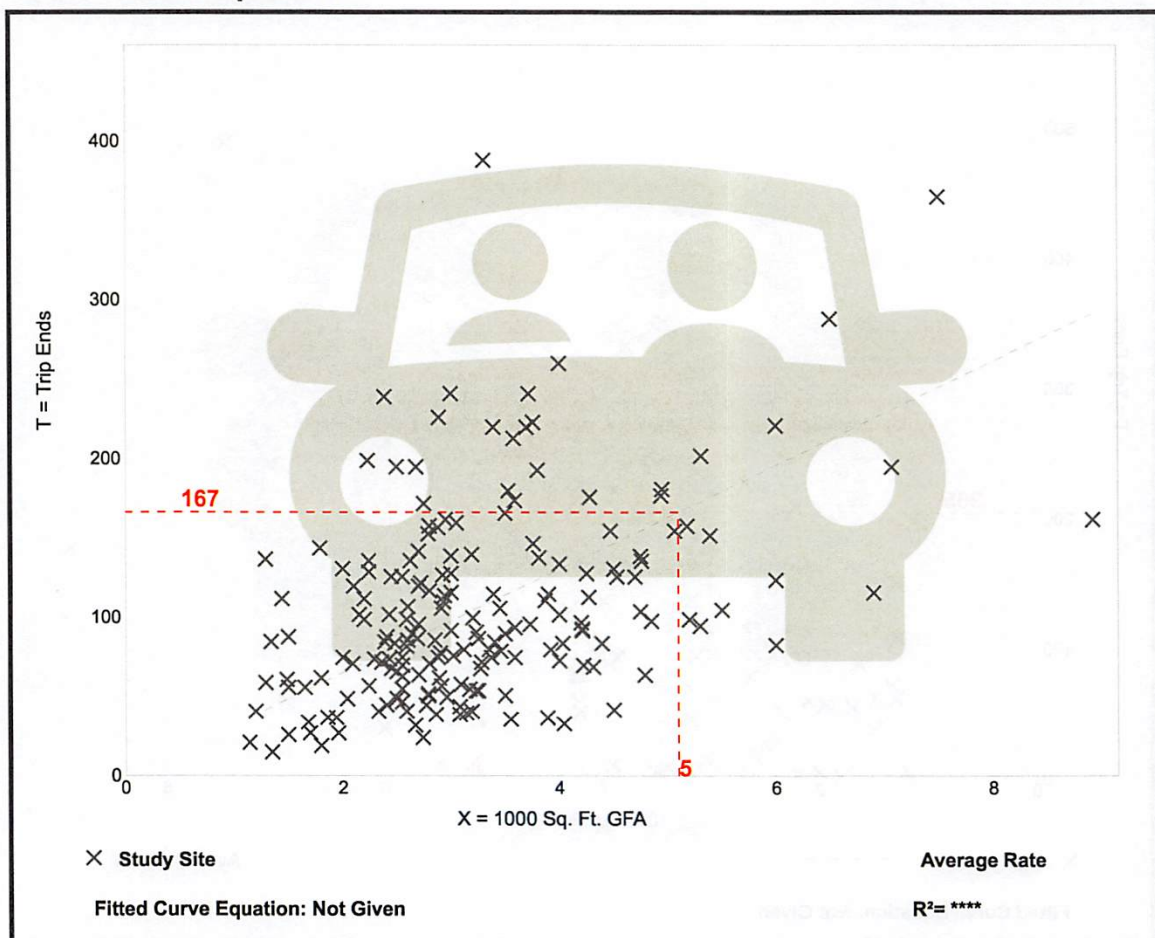
Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 185
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.67	8.17 - 117.22	17.87

Data Plot and Equation



Fast-Food Restaurant with Drive-Through Window (934)

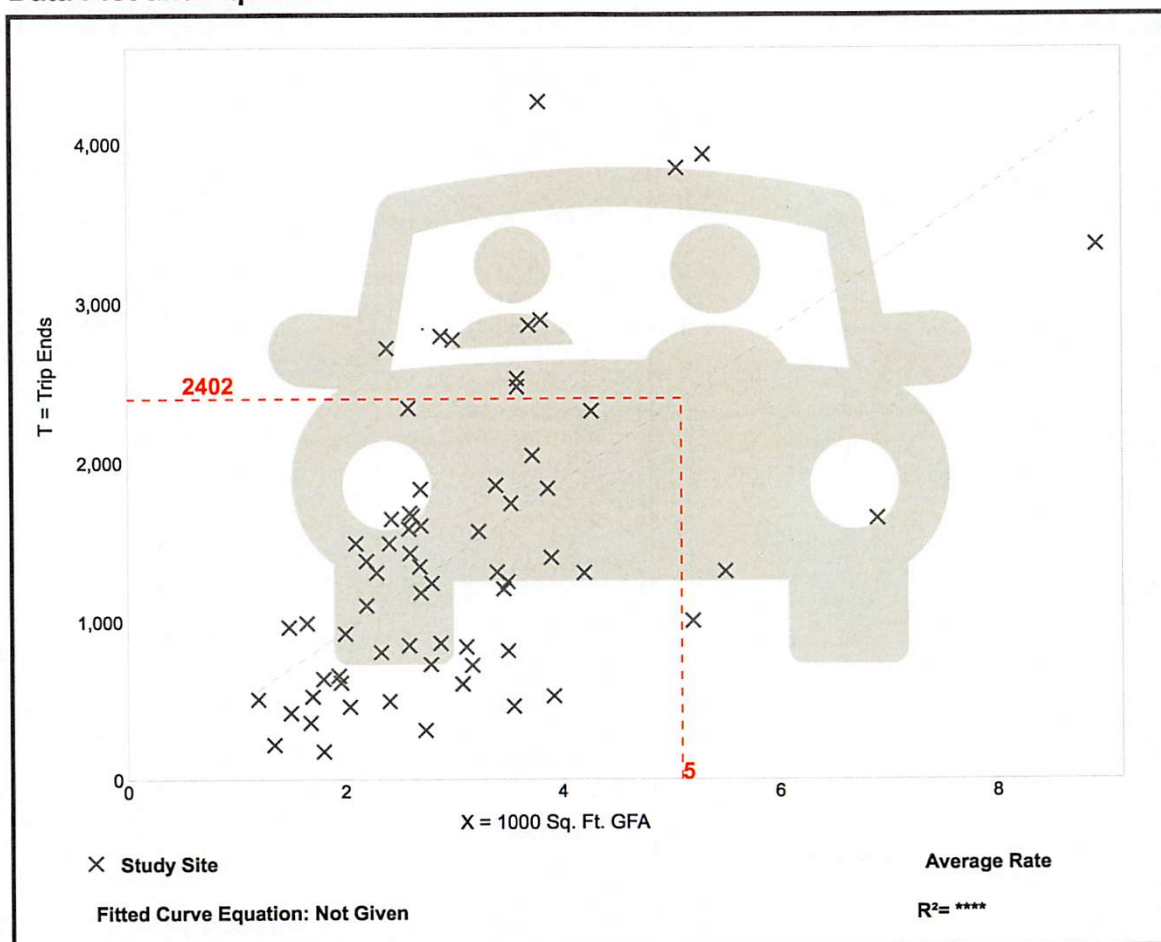
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 67
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
470.95	98.89 - 1137.66	244.44

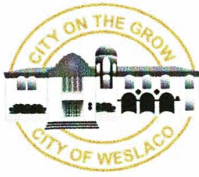
Data Plot and Equation





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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.H
From: Rebekah de la Fuente, Planning Director, on behalf of Juan Alonzo.	
Subject/Agenda Item: Discussion and consideration for the Final Plat for White Rose Subdivision– being a 4.644 acre tract of land out of Farm Tract 31, West Tract Subdivision, Weslaco, Hidalgo County, Texas Located approximately 2000ft North of Intersection Frontage Road & Bridge Ave. Possible Action.	
Discussion/Overview: The proposed two (2) lot subdivision is located inside the City of Weslaco. This subdivision is being serviced with water by the City of Weslaco Company through an 18” waterline and sewer by City of Weslaco services through an 8” 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 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. _____

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: White Rose Subdivision

Location: Approximately 2000 feet North of Intersection of Frontage Road and Bridge Ave.

Legal Description: 4.644 acre tract out of Farm Tract 31, West Tract Subdivision as recorded in Vol 2 page 34, HCMR.

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: Commercial

Existing Land Use: Commercial Proposed Land Use: Commercial/Multi Family

Number of Lots Proposed: 2 Gross Acreage: 4.644ac

Title Report Submitted: ☐ YES ☐ NO

OWNER INFORMATION

Owner's Name: Raul Guerra Telephone: 956-429-8434

Address: 621 Tierra Prometida Fax: _____

City: Weslaco State: TEXAS Zip: 78599 E-mail: _____

ENGINEER INFORMATION

Name: Juan Alonzo, P.E. Telephone: 956-294-1241

Address: 50 N. Vermont Ave. Suite C Fax: _____

City: Mercedes State: Tx Zip: 78570 E-mail: jalonzo@altexeng.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: City of Weslaco

☐ 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>HCCD1</u>	☒ YES ☐ NO Irrigation District <u>HCCID9</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 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

AUTHORIZATION AND ACKNOWLEDGEMENTS

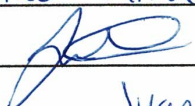
I certify that I am the actual owner of the property described above and this application is being submitted with my consent (include corporate name if applicable); and the following person listed below is my authorized agent to act on my behalf.

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: RAUL GUERRA

Owner Signature:  Date: 06-16-2021

Juan Alonzo Altex Engineering is the authorized agent

Authorized Agent Signature:  Date: 08-05-21

Authorized Agent Printed Name: Juan Alonzo Jr

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____ Date Paid _____

Preliminary Subdivision Review Date: _____

General Comments: _____

DRAINAGE REPORT

FOR

WHITE ROSE SUBDIVISION

4.644 Acre Tract out of Farm Tract 31, West Tract Subdivision
map or plat thereof recorded in Vol.2, Page 34-37, H.C.D.R.

Prepared for:

Raul Guerra

Prepared by:



ALTEX ENGINEERING

DESIGN ♦ PLANNING ♦ MANAGEMENT
TBPE FIRM REGISTRATION NO. F-19737
50 N. VERMONT AVE., SUITE C
MERCEDES, TEXAS 78570
PH: (956)294-1241
JALONZO@ALTEXENG.COM

Project No. 21.137

JUNE 2021



[Signature]
6-7-21

TABLE OF CONTENTS

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B. FLOOD PLAIN.....	1
C. SOIL CONDITIONS.....	1
D. EXISTING CONDITIONS	2
E. PROPOSED CONDITIONS.....	2

EXHIBITS

EXHIBIT "A" - LOCATION MAP

EXHIBIT "B" - FIRM ZONE DESIGNATION MAP

EXHIBIT "C" - SOILS SURVEY MAP

EXHIBIT "D" - RUNOFF COEFFICIENTS

EXHIBIT "E" - DRAINAGE CALCULATIONS

EXHIBIT "F" - SITE PLAN

EXHIBIT "G" - SUBDIVISION PLAT w/DRAINAGE LAYOUT

EXHIBIT "H" - AERIAL of USGS MAP

DRAINAGE REPORT FOR WHITE ROSE SUBDIVISION

A. PROJECT LOCATION

White Rose Subdivision is located on a 4.644-Acre tract of land out of Farm Tract 31, of the West Adams Subdivision, Hidalgo County, Texas. The tract is located approximately 1,980 feet north of the intersection of Mile 4 ½ W Road and W Frontage Road within the City Limits of Weslaco.

B. FLOOD PLAIN

The subject tract predominantly lies in "Zone B-Shaded" areas to be between limits of 100-year flood and 500 year flood plain, 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, in accordance with F.E.M.A.-F.I.R.M. Community Panel No. 480349 0005 B, Map Revised: March 4, 1980 (Refer to Exhibit B).

C. SOIL CONDITIONS

A review of the Soil Survey of Hidalgo County (Refer to exhibit C) indicates the subject tract lies in an area of soil consisting of Hidalgo Fine Sandy Loam (25,B,SM-SC) and Hidalgo Clay Sandy Loam (28,B,SC,CL) (that have moderately well drained properties.

(25)Hidalgo fine sandy loam, 0 to 1 percent slopes (25, B, SM-SC):

The Hidalgo fine sandy loam, 0 to 1 percent slopes, is well drained. Permeability is moderate, and the available water capacity is medium. Surface runoff is slow.

(28)Hidalgo sandy clay loam, 0 to 1 percent slopes (28, B, SC, CL):

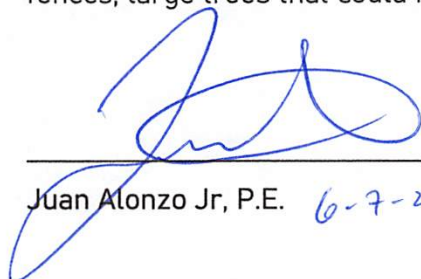
The Hidalgo sandy clay loam, 0 to 1 percent slopes, is well drained. Permeability is moderate, and the available water capacity is high. Surface runoff is slow.

D. EXISTING CONDITIONS

The subject tract is predominantly undeveloped with only a single story commercial building of approximately 1100 sqft and natural grasses present. The existing terrain has a level grade. Existing runoff from the site is by form of sheet flow that gently runs towards the eastern portion of the property. For the existing 10-year storm, the water runoff of this site is 5.22 cfs.

E. PROPOSED CONDITIONS

The proposed conditions for this subdivision will be for development in (two) 2 lots for multi-family use and commercial use. The total contributing 50-year developed storm water discharge of the site will be 31.74cfs (Refer to Exhibit E), an increase of 26.52 cfs from the existing conditions. The total increased flow of this subdivision to the existing drainage district facilities is a total of 36,310 cf (0.834 Ac-ft) (See Exhibit E). A system of detention ponds and swales with a capacity to detain 36,627 cf (0.841Ac-ft) will be constructed along several sections of the lot boundaries that would detain the runoff created by the developed lots. Water from the drainage swales will convey in an easterly flow that will eventually outfall into the existing pond maintained by the city of Weslaco. Additionally, lot owners must maintain their portion of drainage swale. The drainage swale easement must be kept clear of any buildings, fences, large trees that could impede the flow of storm water.

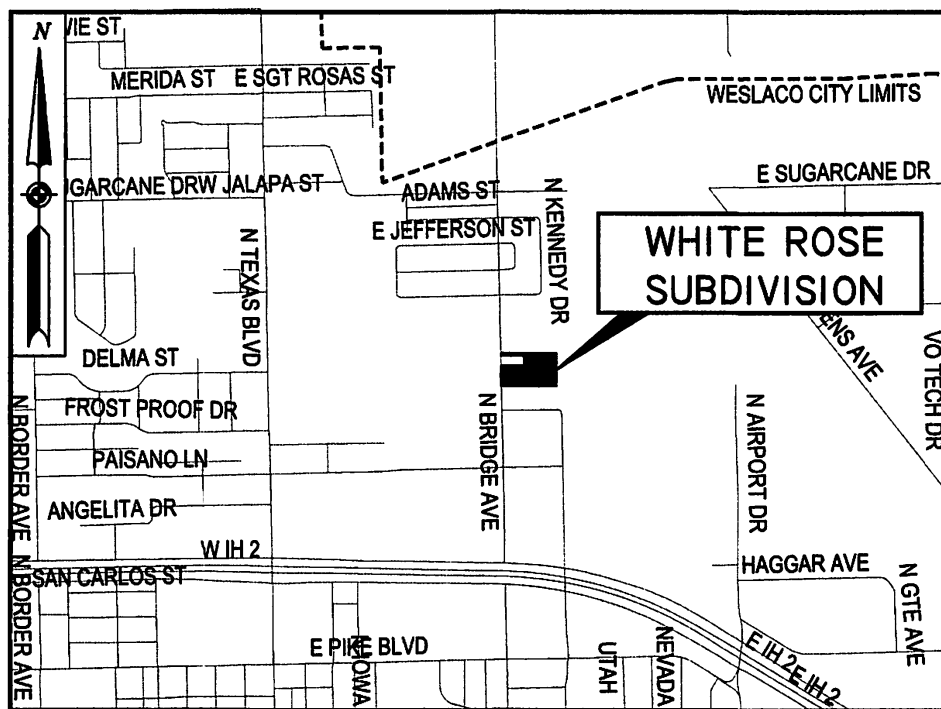


Juan Alonzo Jr, P.E. 6-7-21



EXHIBIT A

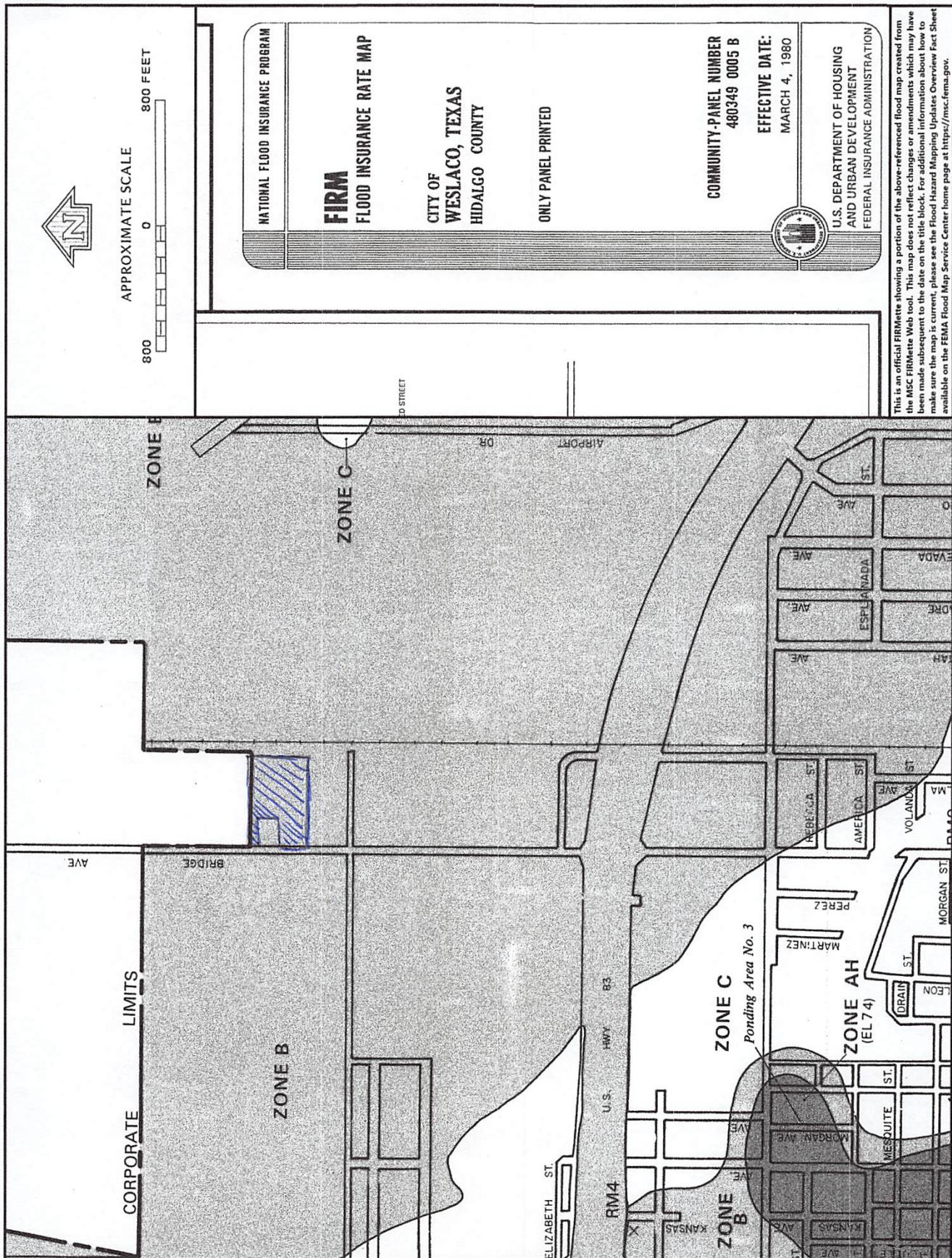
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LOCATION MAP
N.T.S.

EXHIBIT B

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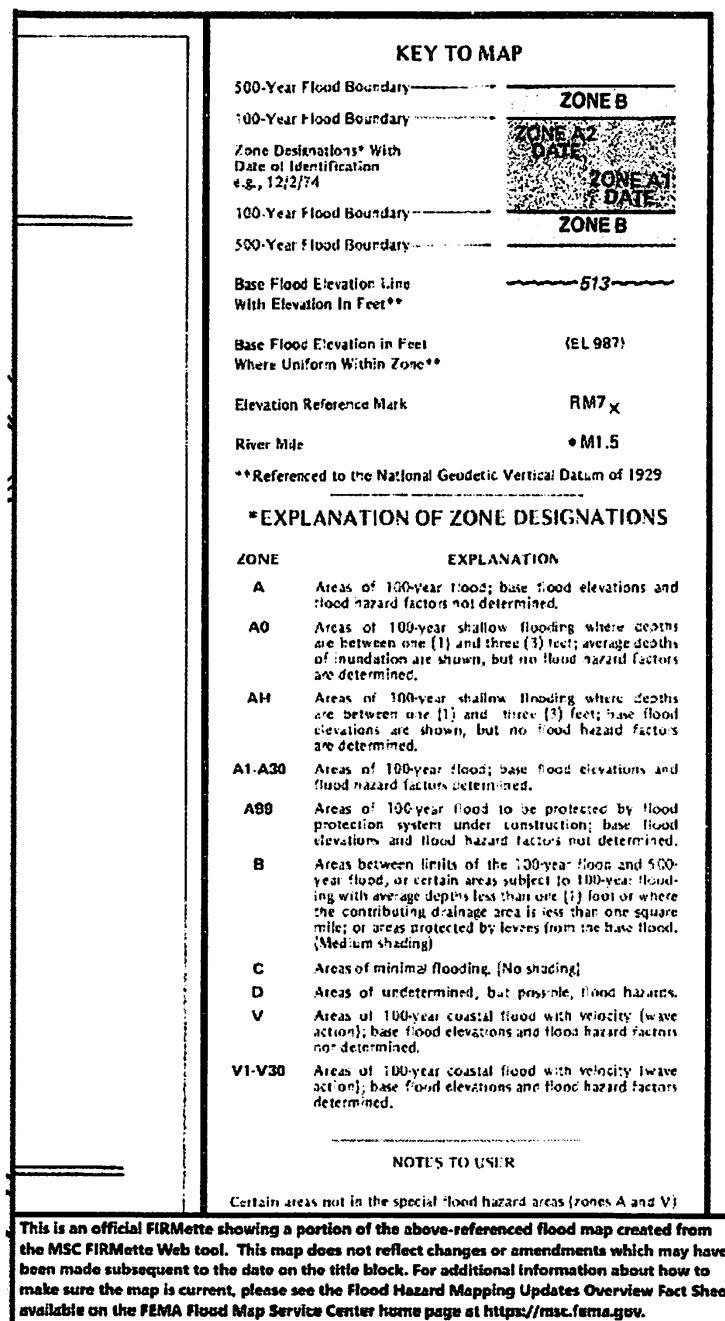
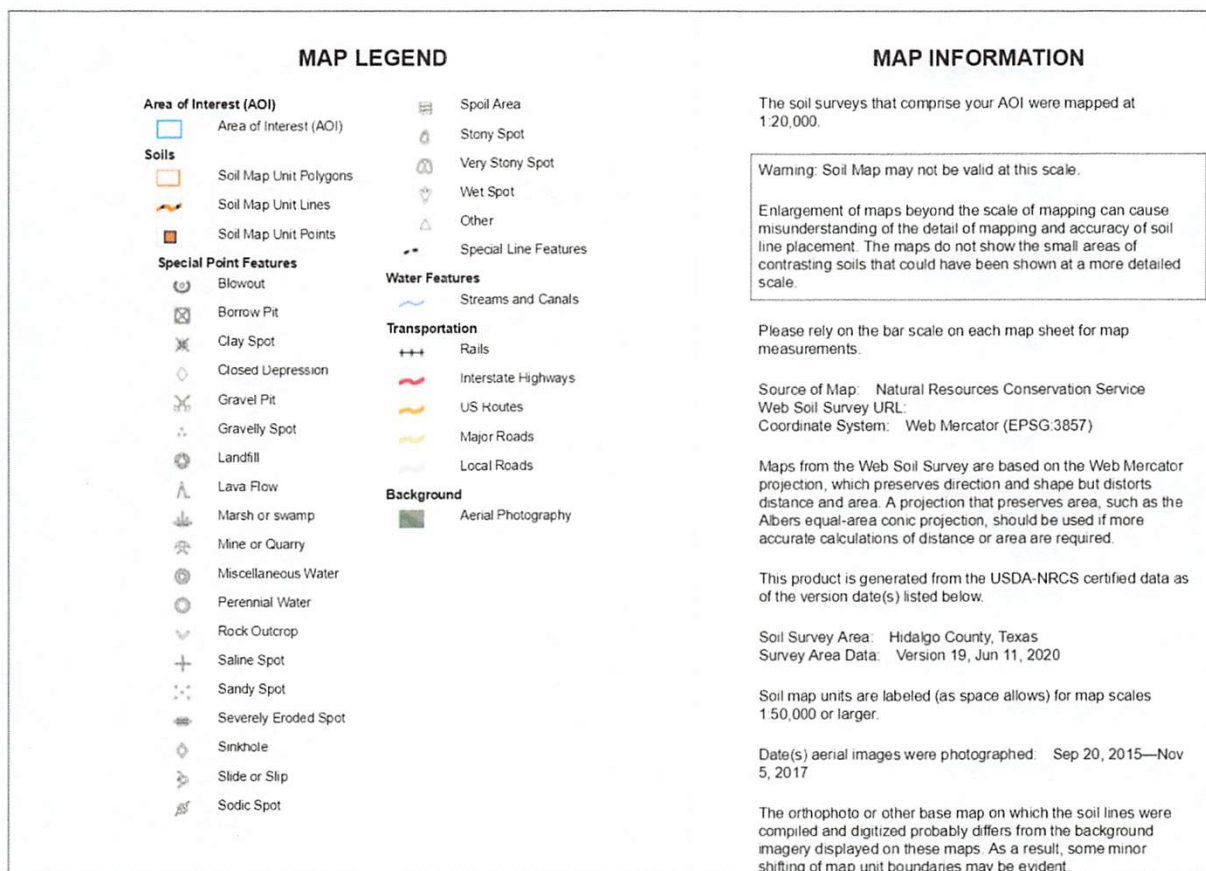


EXHIBIT C

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Custom Soil Resource Report



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	1.6	35.9%
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	2.8	64.1%
Totals for Area of Interest		4.4	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

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

Custom Soil Resource Report

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

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

Custom Soil Resource Report

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
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

EXHIBIT D

Runoff Coefficients "c"	
Agricultural and, unimproved Areas	0.3
Parks and Improved Open Areas	0.4
Residential (>1acre lots)	0.40
Residential (1/2 acre lots)	0.55
Residential (1/4 acre lots)	0.6
Residential (1/8 acre lots)	0.65
Multi-Family (Low density MF-1)	0.65
Multi-Family (Medium and Medium-High Density MF-2 and MF-3)	0.85
Commercial, Industrial, and Business	0.85
Asphalt	0.9

EXHIBIT E

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Runoff Coefficient Determination Pre Developed

1) Accepted Runoff Coefficients

1 acre = 43560 SF

a) Building/Roofs	c = 0.90			
b) Asphalt	c = 0.90			
c) Detention Pond /swale	c = 0.30			
d) Concrete	c = 0.90			
e) Unimproved area (grass)	c = 0.23			
Total Area =	4.4977 ac	195919.00 SF	0.24	Cumulative Areas
Area 1	0.0269 ac	1172.00 SF	0.90	Building/Roofs
Area 2	0.0452 ac	1968.00 SF	0.75	Asphalt
Area 3	0.0899 ac	3916.00 SF	0.50	Flex base
Area 4	0.0016 ac	68.00 SF	0.90	Concrete
Area 5	4.3341 ac	188795.00 SF	0.23	Unimproved area (grass)

Weighted Runoff Coefficient

$$C = (C1A1 + C2A2 + C3A3 + C4A4 + \dots) / A_{total} = 0.24$$

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

2. Select or Enter a County

3. Enter a Time of Conc.

Select Units

Pre-Developed

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)

3.06 4.14 4.84 5.78 6.73 7.71

(Spreadsheet Release Date: August 31, 2015; data table reshuffle by Asquith July 14, 2016)

TIME OF CONCENTRATION CALCULATOR
PRE DEVELOPED CONDITIONS

SHEET FLOW (LIMITED TO 100 FEET)

$$t_{sh} = \frac{0.007(n_{ol}L_{sh})^{0.8}}{(P_2)^{0.5}S_{sh}^{0.4}}$$

n_{ol} see table below

Table 4-6: Overland Flow Roughness		
Surface description		n_{ol}
Smooth surfaces (concrete, asphalt, gravel, or bare soil)		0.011
Fallow (no residue)		0.05
Cultivated soils:	Residue %	0.06
	Residue cover > 20%	0.17
Grass:	Short grass prairie	0.15
	Dense grasses	0.24
	Bermuda	0.41
Range (natural):		0.13
Woods:	Light underbrush	0.4
	Dense underbrush	0.8

DRAINAGE AREA 1

Lsh 100 Length of Segment (100ft Maximum)
P2 3.3 2 yr 24 hr Rainfall Depth
Ssh 0.008 Sheet flow slope

Tsh 0.2320 Sheet Flow Time (hr)

SHALLOW CONCENTRATED FLOW (UNPAVED)

$$t_{sc} = \frac{L_{sc}}{3600KS_{sc}^{0.5}}$$

Lsc 542.8 Length of Segment
K 20.32 Paved
16.13 Unpaved
Ssc 0.0022 Slope (ft/ft)
Tsc 0.19929 Shallow Concentrated Flow (hr)

Total Time 0.431 25.88 use 26 min

DRAINAGE AREA 1		
C	0.24	Existing Coefficient for Runoff
I	4.84	(in/hr) intensity
A	4.498	Net area of project (Ac)
Q	5.22	cfs

Runoff Coefficient Determination Post Developed - Area 1 (Commercial-Retail Plaza)

1) Accepted Runoff Coefficients

1 acre = 43560 SF

a) Building/Roofs	c = 0.90			
b) Asphalt	c = 0.90			
c) Detention Pond /swale	c = 0.30			
d) Concrete	c = 0.90			
e) Unimproved area (grass)	c = 0.23			
Total Area =	0.9772 ac	42568.00 SF	0.89	Cumulative Areas
Area 1	0.1796 ac	7823.00 SF	0.90	Building/Roofs
Area 2	0.0000 ac	0.00 SF	0.75	Asphalt
Area 3	0.0000 ac	0.00 SF	0.50	Flex base
Area 4	0.4974 ac	21667.00 SF	0.90	Concrete
Area 5	0.3002 ac	13078.00 SF	0.23	Unimproved area (grass)

Weighted Runoff Coefficient

C= (C1A1+C2A2+C3A3+C4A4+...)/Atotal=

0.69

Use: 0.7

Runoff Coefficient Determination Post Developed - Area 2 (Multi-Family Apartments)

1) Accepted Runoff Coefficients

1 acre = 43560 SF

a) Building/Roofs	c = 0.90			
b) Asphalt	c = 0.90			
c) Detention Pond /swale	c = 0.30			
d) Concrete	c = 0.90			
e) Unimproved area (grass)	c = 0.23			
Runoff Description				
			Coeff.	
Total Area =	3.5205 ac	153351.00 SF	0.65	Cumulative Areas
Area 1	0.7230 ac	31493.00 SF	0.90	Building/Roofs
Area 2	0.0000 ac	0.00 SF	0.75	Asphalt
Area 3	0.0000 ac	0.00 SF	0.50	Flex base
Area 4	1.4986 ac	65278.00 SF	0.90	Concrete
Area 5	1.2989 ac	56580.00 SF	0.23	Unimproved area (grass)

Weighted Runoff Coefficient

C= (C1A1+C2A2+C3A3+C4A4+...)/Atotal=

0.65

Use: 0.7

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"

Post-Developed

1. Select English or SI Units

2. Select or Enter a County

3. Enter a Time of Conc.

Select Units

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)

4.83	6.44	7.47	8.80	10.08	11.38
------	------	------	------	-------	-------

(Spreadsheet Release Date: August 31, 2015; data table reshuffle by Asquith July 14, 2016)

Existing Conditions (10 yr)

Q=CIA

C	I (in/hr)	A (acres)	Q (cfs)
0.24	4.84	4.498	5.22

Area 1 (Commercial - Retail Plaza)

Developed Conditions(50 yr)

Q=CIA

C	I (in/hr)	A (acres)	Q (cfs)
0.7*	10.08	0.977	6.89

Area 2 (Multi-Family Apartments)

Developed Conditions(50 yr)

Q=CIA

C	I (in/hr)	A (acres)	Q (cfs)
0.7*	10.08	3.521	24.84

* Refer to Site Plan on Exhibit F

Prop. Runoff C = 0.7
Area = 4.498 ac
Post Dev. Tc = 10 min

Exist Runoff C = 0.24
Exist. Intensity = 4.8

Total Q= 31.74 cfs

Detention Calculations						
Duration (minutes)	I50year (in./hr.)	Q in (c.f.s.)	Vol. in (c.f.)	Qout (c.f.s.)	Vol. out (c.f.)	Storage (c.f.)
5	12.05	37.93	11,379	5.22	2,349	9,030
10	10.08	31.73	19,037	5.22	3,132	15,905
15	8.69	27.37	24,633	5.22	3,915	20,718
20	7.66	24.13	28,952	5.22	4,698	24,254
25	6.86	21.61	32,421	5.22	5,481	26,940
30	6.23	19.61	35,291	5.22	6,264	29,027
35	5.70	17.96	37,720	5.22	7,047	30,673
40	5.27	16.59	39,814	5.22	7,830	31,984
45	4.90	15.42	41,647	5.22	8,613	33,034
50	4.58	14.42	43,271	5.22	9,396	33,875
55	4.30	13.55	44,725	5.22	10,179	34,546
60	4.06	12.79	46,039	5.22	10,962	35,077
65	3.85	12.11	47,236	5.22	11,745	35,491
70	3.65	11.51	48,333	5.22	12,528	35,805
75	3.48	10.97	49,344	5.22	13,311	36,033
80	3.33	10.48	50,281	5.22	14,094	36,187
85	3.19	10.03	51,154	5.22	14,877	36,277
90	3.06	9.62	51,970	5.22	15,660	36,310

95	2.94	9.25	52,735	5.22	16,443	36,292
100	2.83	8.91	53,456	5.22	17,226	36,230
105	2.73	8.59	54,138	5.22	18,009	36,129
110	2.64	8.30	54,783	5.22	18,792	35,991
115	2.55	8.03	55,395	5.22	19,575	35,820

Detention Pond Dimensions

Flow Line Width W1 (ft)	Cross Sect.		Volume Width W2 (ft)	Slope Length L2 (ft)	Top (outer) V2 (cf)	Volume V (cf)
	Depth H (ft)	S				
26.0	3.0	1.0	32.0	349.0	30363.0	30363.0
1.0	2.0	1.0	5.0	544.0	3264.0	3264.0
8.0	2.0	1.0	12.0	150.0	3000.0	3000.0
TOTAL						36627.0

A
B
C

Detention Provided = 36627 cf > 36310 cf = Detention Required

Therefore, the proposed detention pond is O. K.

TRIP GENERATION WORKSHEET
FOR
WHITE ROSE SUBDIVISION
4.644 ACRE TRACT
OUT OF FARM TRACT 31
WEST TRACT SUBDIVISION
WESLACO, HIDALGO COUNTY, TEXAS

Prepared for:

RAUL GUERRA

Prepared by:



ALTEX ENGINEERING

DESIGN ♦ PLANNING ♦ MANAGEMENT
TBPE FIRM REGISTRATION NO. F-19737
601 N. VERMONT AVE., SUITE 207
MERCEDES, TEXAS 78570
PH: (956)792-9305
JALONZO@ALTEXENG.COM

Project No. 21.137

JUNE 2021



TRIP GENERATION REPORT
FOR
WHITE ROSE SUBDIVISION
(WESLACO, TEXAS)

White Rose Subdivision is located on a 4.644-Acre tract of land out of Farm Tract 31, of the West Adams Subdivision, Hidalgo County, Texas. The tract is located approximately 1,980 feet north of the intersection of Mile 4 ½ W Road and W Frontage Road within the City Limits of Weslaco. The lot is predominantly undeveloped with natural grasses and a small commercial building.

The report is based on the Trip Generation, 8th Edition Book (Institute of Traffic Engineers).

Apartment (220)

1a. - On a weekday, A.M. Peak hour Generator

Directional Distribution: 29% Entering, 71% Exiting

Equation: $\ln(T) = 0.54(x) + 2.45$ where T = avg vehicle trip ends; X = Number of Dwelling Units

$X = 54$ Dwelling Units (Apartment Units)

$$(T) = 0.54(54) + 2.45 \quad T = 32$$

$$\text{Tenter} = 32(0.29) = 10 \text{ trips/hour}$$

$$\text{Texiting} = 32(0.71) = 23 \text{ trips/hour}$$

1b. - On a weekday, P.M. Peak hour Generator

Directional Distribution: 61% Entering, 39% Exiting

Equation: $\ln(T) = 0.60(x) + 14.91$ where T = avg vehicle trip ends; X = Number of Dwelling Units

$X = 54$ Dwelling Units (Apartment Units)

$$(T) = 0.60(54) + 14.91 \quad T = 48$$

$$\text{Tenter} = 48(0.61) = 30 \text{ trips/hour}$$

$$\text{Texiting} = 48(0.39) = 19 \text{ trips/hour}$$

Threshold requirements for a Traffic Impact Analysis Report:

AM/PM PHT* < 100 TPH, TIA not Required

AM/PM PHT* > 100 TPH, TIA Required

PHT* = Peak Hour Trips

Trip Generation 8th Edition A.M. Peak hr. Generator Data Plot & Equation

Apartment (220)

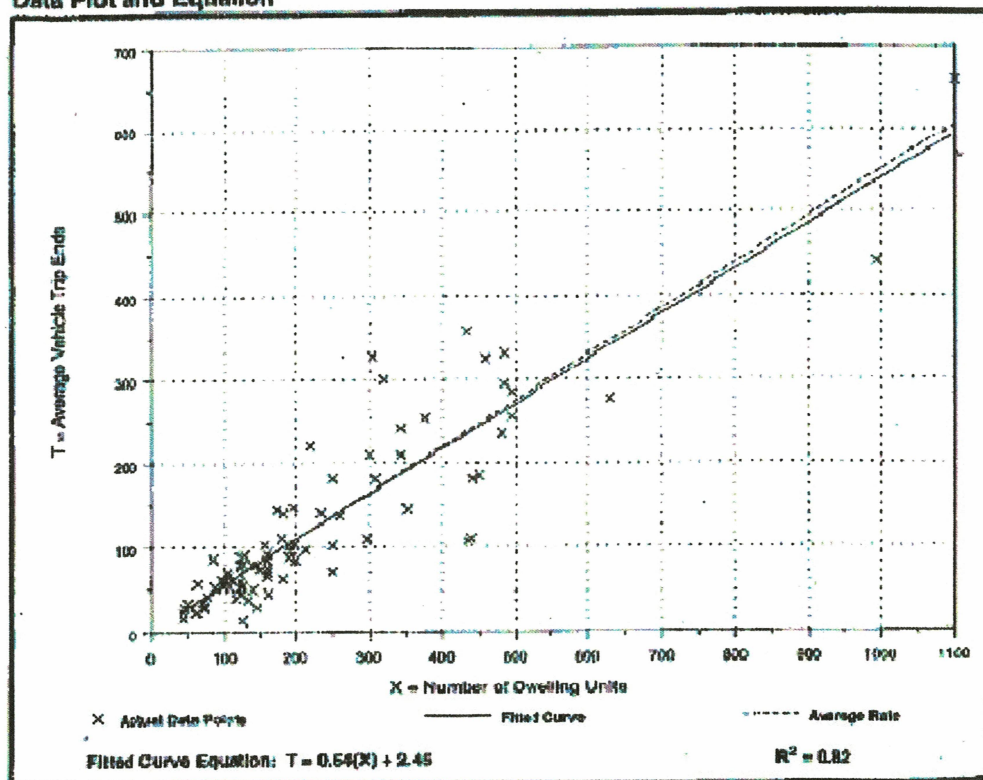
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 83
Avg. Number of Dwelling Units: 230
Directional Distribution: 29% entering, 71% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.55	0.10 - 1.08	0.76

Data Plot and Equation



PEAK HOUR TRIP RATES FOR COMMON LAND USES

Land Use	Critical Peak Hour	Peak Hour Trip Rate	%Entering %Exiting	ITE Code
Apartments, High Rise	PM	0.35 Per Unit	61/39	222
Apartments, Low Rise	PM	0.58 Per Unit	65/35	221
Automobile Care Center	PM	3.38 Per 1,000 Sq. Ft.	50/50	942
Automobile Parts Sales and Service Center	PM	4.46 Per 1,000 Sq. Ft.	42/58	943
Automobile Sales (New)	PM	2.59 Per 1,000 Sq. Ft.	39/61	841
Bank with ATMs and Drive-Through	PM	27.41 Per Lane	51/49	912
Business Park	AM	1.43 Per 1,000 Sq. Ft.	84/16	770
Car Wash, Self Service	SAT	20.60 Per Wash Stall	50/50	947
Church	SUN	11.76 Per 1,000 Sq. Ft.	50/50	560
Convenience Store	AM	67.03 Per 1,000 Sq. Ft.	50/50	851
Convenience Store with Gas Pumps	PM	59.69 Per 1,000 Sq. Ft.	50/50	853
Day Care Center	PM	12.46 Per 1,000 Sq. Ft.	47/53	565
Discount Store	PM	5.00 Per 1,000 Sq. Ft.	50/50	815
Drinking Place	PM	15.49 Per 1,000 Sq. Ft.	66/34	925
Golf Course	PM	0.30 Per Acre	34/66	430
Hospital	PM	1.14 Per 1,000 Sq. Ft.	42/58	610
Hotel	PM	0.59 Per Room	53/47	310
Industrial Park	PM	0.86 Per 1,000 Sq. Ft.	21/79	130
Industrial, Heavy	AM	0.51 Per 1,000 Sq. Ft.	N/A	120
Industrial, Light	PM	0.97 Per 1,000 Sq. Ft.	12/88	110
Manufacturing	PM	0.73 Per 1,000 Sq. Ft.	36/64	140
Mobile Home Park	PM	0.59 Per Unit	62/38	240
Motel	AM	0.64 Per Room	36/64	320
Movie Theater with Matinee	PM	102.87 Per Screen	58/42	444
Office Building, General	AM	1.55 Per 1,000 Sq. Ft.	88/12	710
Office Building, Medical-Dental	PM	3.46 Per 1,000 Sq. Ft.	27/73	720
Office Building, Single Tenant	AM	1.80 Per 1,000 Sq. Ft.	89/11	715
Office Park	AM	1.71 Per 1,000 Sq. Ft.	89/11	750
Pharmacy, without Drive-through	PM	8.42 Per 1,000 Sq. Ft.	50/50	880
Pharmacy, with Drive-through	PM	10.35 Per 1,000 Sq. Ft.	50/50	881
Quick Lubrication Vehicle Shop	PM	5.19 Per Bay	55/45	941
Recreational Community Center	PM	1.45 Per 1,000 Sq. Ft.	29/71	495
Residential, Multi-Use, Retail Mixed Development (PUD)	PM	0.62 Per Unit	65/35	270
Residential, Single Family	PM	1.01 Per Unit	63/37	210
Restaurant, Fast-Food (with Drive-Through)	AM	49.36 Per 1,000 Sq. Ft.	51/49	934
Restaurant, High Turnover	PM	18.49 Per 1,000 Sq. Ft.	63/37	932
School, Elementary	AM	0.45 Per Student	55/45	520
School, High	AM	0.42 Per Student	69/31	530
School, Middle/Junior High	AM	0.54 Per Student	55/45	522
Service Station, with Convenience Market (with Car Wash)	PM	13.94 Per Fueling Position	50/50	946
Service Station, with Convenience Market (without Car Wash)	PM	13.38 Per 1,000 Sq. Ft.	50/50	945
Shopping Center	SAT	4.89 Per 1,000 Sq. Ft.	48/52	820
Specialty Retail Center	PM	2.71 Per 1,000 Sq. Ft.	44/56	814
Supermarket	PM	11.85 Per 1,000 Sq. Ft.	51/49	850
Video Rental	PM	13.60 Per 1,000 Sq. Ft.	46/54	896
Warehousing, General	PM	0.32 Per 1,000 Sq. Ft.	25/75	150
Warehousing, Mini	PM	0.26 Per 1,000 Sq. Ft.	51/49	151

These are some of the values from the 8th Edition ITE Manual – Refer to ITE for additional trip rates



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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V. I.
From: Rebekah de la Fuente, Planning Director, on behalf of alfredo Treviño.	
Subject/Agenda Item: Discussion and consideration for the Voluntary Annexation of Adams Tract Subdivision – being 1.166 AC out of North 210.10 FT of the East 242.00 FT. of Farm Tract 1009, Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located on the Southwest corner of intersection FM 1015 and Mile 6 North. Possible Action.	
Discussion/Overview: The one (1) lot subdivision is outside the City of Weslaco city limits. This subdivision is being serviced with water by the City of Weslaco through a 12" waterline and sewer the City of Weslaco through an 8" sanitary sewer line. Te location is the existing Nana's Taqueria.	
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 Voluntary annexation.	
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-000112-2021

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: Adams Tract Subdivision

Location: Hidalgo County, Texas

Legal Description: Plat of a 1.166 Acre Tract, Out of the North 2010.10 Ft. of the East 242.00 ft of Farm tract 1009

- ☒ 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

Owner's Name: Alfredo Trevino Telephone: 956-520-9728

Address: 1907 Tomatillo Dr Fax: _____

City: Weslaco State: Tx Zip: 78596 E-mail: alfredotrevino@gmail.com

ENGINEER INFORMATION

Name: William R. Shea Telephone: (956) 968-2194

Address: 611 S International Blvd Fax: _____

City: Weslaco State: Tx Zip: 78596 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: Alfredo Trevino
Owner Signature: [Signature] Date: 8/30/2021

_____ is the authorized agent

Authorized Agent Signature: _____ Date: _____

Authorized Agent Printed Name: _____

THIS PAGE FOR STAFF USE ONLY

Date Received: _____ Received By: _____

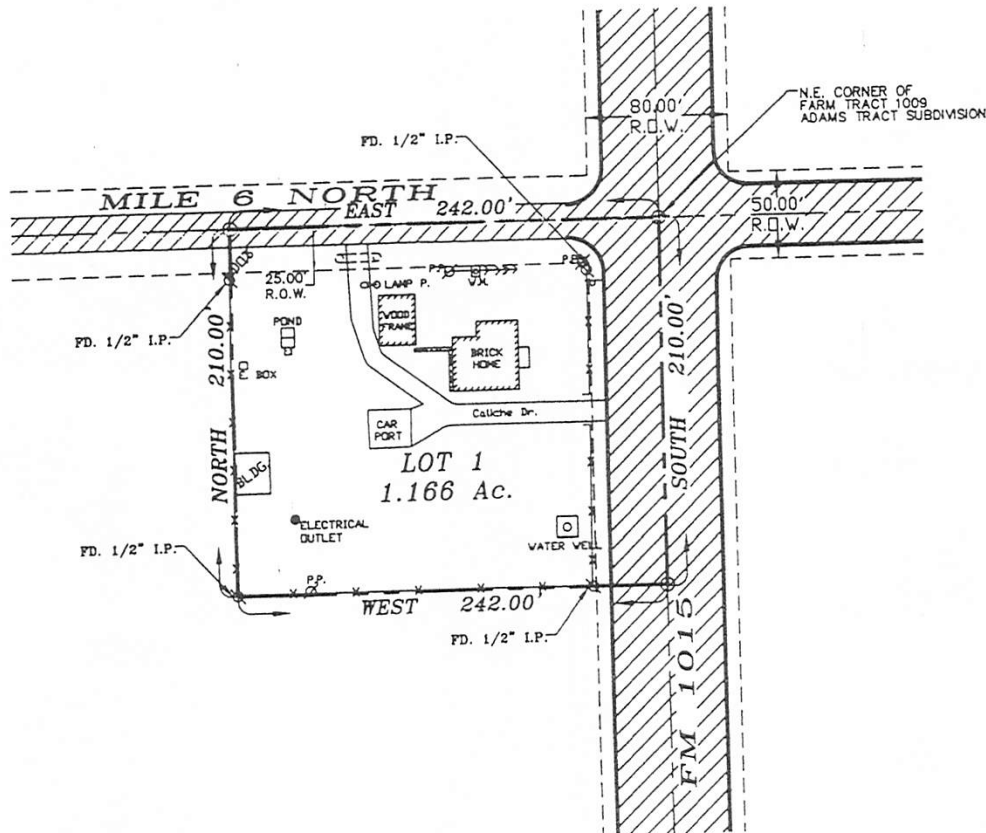
Staff Review Date: _____

P & Z Commission Approval: _____

City Commission Approval on First Reading: _____

City Commission Approval on Final Reading: _____

SCALE 1"=100'



LEGEND

Property Line.....
Fd. Iron Pin.....
Wire Fence

PLAT OF A 1.166 ACRE TRACT,
OUT OF THE NORTH 210.10
FT. OF THE EAST 242.00 FT.
OF FARM TRACT 1009,
ADAMS TRACT SUBDIVISION
HIDALGO COUNTY, TEXAS

This survey is being provided solely for the use of the current parties and that no license has been created, express or implied, to copy the survey except as is necessary in conjunction with the original transaction which shall take place within a six (6) months time period.

This is to certify that the foregoing plat is, to the best of my knowledge, a true and complete representation of properties as surveyed under my direction.

Signed William R. Shea
Date 07/26/04



Sigler,
Winston,
Greenwood,
& Associates, Inc.
SWG
CONSULTING ENGINEERS
WESLACO-McALLEN
TEXAS

S-4795

7-26-04

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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V. J.
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 2 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, 2021.	
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: [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

September 10, 2021

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.

Respectfully submitted,

Ivan Garcia P.E. R.P.L.S
Agent



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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V. K.
From: Rebekah de la Fuente, Planning Director, on behalf of Tejas Building and Development Co.	
Subject/Agenda Item: Discussion and consideration for a six-month extension of the Final Plat for Tejas Cuatro Phase III Subdivision – being a 21.21 acre tract of land out of Farm Tract 172, West and Adams Tract Subdivision, , Weslaco, Hidalgo County, Texas located approximately 2000 ft North of the intersection of W. Sugar Cane Dr. along Mile 5 ½ West. Possible Action.	
Discussion/Overview: The proposed sixty-four (64) lot subdivision is outside the City of Weslaco city limits. Six-month extension of Final Plat approval is set to expire on September 17, 2021, a final walk thru was conducted April 14, 2021.	
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): Application for Subdivision platting, Staff's comments, Drainage Report, Subdivision plat and Utility layout.	
Responsibilities upon Commission's Action: Planning staff will advise applicant.	



ALTEX ENGINEERING

DESIGN ♦ PLANNING ♦ MANAGEMENT
TBPE FIRM REGISTRATION NO. F-19737

August 30, 2021

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

Re: **Extension Request**
Tejas Cuatro Phase III Subd
Weslaco, Texas

Ms. de la Fuente,

This letter is to formally request a Six (6) month extension on the Tejas Cuatro Phase III Subdivision located along Mile 5 ½ W Road in Weslaco. The construction of the subdivision improvements is ongoing and should be nearing completion in the next coming weeks.

Please do not hesitate to call us at (956)294-1241 if you have any questions, comments, or concerns.

Respectfully,

Juan Alonzo Jr. P.E.



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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V.L.
From: Rebekah de la Fuente, Planning Director, on behalf of Mario Reyna.	
Subject/Agenda Item: Discussion and consideration for the six-month extension of the Final Plat for Freedom Storage–being a 2.409 acre being a part or portion out Farm Tract 710, Block 136, West and Adams Tract Subdivision, Weslaco, Hidalgo County, Texas located approximately 863' east of Pleasantview Dr. south of business 83. Possible Action.	
Discussion/Overview: The proposed two (2) lot subdivision is inside the City of Weslaco. Final Plat approval is set to expire on October 20, 2021.	
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: [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

FRED L. KURTH • ALLAN F. BOOE • KELLEY A. HELLER-VELA • ROBERTO N. TAMEZ • MARIO A. REYNA • RUBEN JAMES DE JESUS

September 21, 2021

Ms. Rebekah De La Fuente, Planning Director
City of Weslaco
255 S. Kansas Ave.
Weslaco, TX 78596-6158

RE: Freedom Storage Subdivision – Request for extension

Dear Ms. De La Fuente:

On behalf of the owner, 3BU Family Limited Partnership, we are respectfully request a six-month extension on the above referenced plat. According to our records, the final plat is set to expire October 20th.

Your consideration to this request is appreciated. If you have any questions and/or require additional information, please feel free to call us.

Respectfully,

Mario A. Reyna, P.E.
Vice-President

Cc: 3BU Family Limited Partnership, Owner



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

Date of Meeting: October 6, 2021	Agenda Item No. (to be assigned by PCE): V. M.
From: Rebekah de la Fuente, Planning Director, on behalf of Manuel Alejandro Villa.	
Subject/Agenda Item: Discussion and consideration for a six-month extension of the Final Plat for Villa Event Center Subdivision being a 3.11 acre tract of land of Farm Tract 31, West and Adams Subdivision, Hidalgo County, and Texas located on the Northeast corner of Bridge and Dolores Huerta. Possible Action.	
Discussion/Overview: The proposed one (1) lot subdivision is inside the City of Weslaco city limits. Final Plat approval expired on August 18, 2021.	
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: [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.	



Ruben Alfaro
ACHC Engineering
1616 N. Jackson Rd. Suite A
Pharr, TX 78577
September 23, 2021

Rebekah De La Fuente
Planning and Code Enforcement Director
City of Weslaco
255 S. Kansas Ave.
Weslaco, TX 78596

Dear Rebekah De La Fuente:

By means of this letter we are requesting an extension to the approval for the Villa Event Center Subdivision which expired on August 18, 2021. We are expecting to finalize and deliver everything for recording next month the latest. If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Ruben Alfaro". The signature is stylized with a large, looping initial "R" and a cursive-style "A".

Ruben Alfaro
Project Manager