FILE: N:\0024-15-101\CADD\DGN\SCHEMATIC ALTERNATIVES\ALTERNATIVE 1 FOR PUBLIC MEETING PREFERRED NO PROFILES\PM*PREFERRED*US281*SEG*2*ALT*1*ROLLPLOT*200-6.dgn
DATE: 10/18/2018 7:46:13 PM

Texas Department of Transportation © 2018

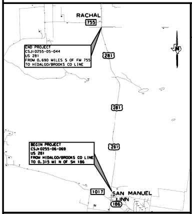
US 281

CSJ: 0255-06-069, ETC.

Date:

ALTERNATIVE 1 - PREFERRED

Scale: 0' 50' 100' 200'


RACHAL
755
END PROJECT
CSJ:0255-05-044
US 281
FROM 0.690 MILES S OF FM 755
TO HIDALGO/BROOKS CO LINE
281
281
281
BEGIN PROJECT
CSJ:0255-06-069
US 281
FROM HIDALGO/BROOKS CO LINE
TO 0.315 MI N OF SH 186
1017
SAN MANUEL
LINN
186
N

● EXISTING CROSSOVER

COLOR LEGEND

🟨	PROPOSED MAINLANES
🟦	FRONTAGE ROADS
🟪	RAMPS
🟩	EXISTING STRUCTURES
🟥	PROPOSED BRIDGE STRUCTURES
━	PROPOSED RETAINING WALL
➡	PROPOSED LANE INDICATOR
━ ▪ ▪ ━	PROPOSED RIGHT-OF-WAY
━	PROPOSED CONTROL OF ACCESS (COA)
— · —	EXISTING RIGHT-OF-WAY
⇨	EXISTING LANE INDICATOR
– – –	ULTIMATE PAVEMENT WIDTH

AVERAGE DAILY TRAFFIC VOLUMES

CSJ 0255-06-069
US 281
From: HIDALGO/BROOKS COUNTY LINE
To: 0.315 MILES NORTH OF SH 186

EXIST	LETTING	DESIGN
2016	2020	2040
12,508	13,540	24,644

CSJ 0255-05-044
US 281
From: 0.690 MILES SOUTH OF FM 755
To: HIDALGO/BROOKS COUNTY LINE IN BROOKS COUNTY

EXIST	LETTING	DESIGN
2016	2020	2035
12,182	13,186	24,003

NOTES:

1.) TRAFFIC NUMBERS FOR 2015 & 2035 WERE OBTAINED FROM TxDOT PLANNIG MAP AND WERE UPDATED TO 2016, 2020 AND 2040 USING AN ESTIMATED 2% INCREASE IN TRAFFIC PER YEAR.

2.) THE " INTERSECTION OF TRAVEL WAYS" FOR THE FRONTAGE ROAD/RAMP GORES IS DEFINED AS THE POINT WHERE THE CENTERLINES OF THE 8" SOLID WHITE GORE STRIPES ARE EXACTLY 8" APART.

Texas Department of Transportation ®
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ENTECH CIVIL ENGINEERS, INC
F-6932

ENTECH
PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.
Engineer: OCTAVIO N. GUERRA, P.E.
P.E. Serial No. 95688
Date: 10/18/2018

TEXAS DEPARTMENT OF TRANSPORTATION
PRELIMINARY DESIGN SCHEMATIC
US 281
HIDALGO/BROOKS COUNTY

LIMITS: From: 0.690 MILES SOUTH OF FM 755
To: 0.315 MILES NORTH OF SH 186

C-S-J-: 0255-06-069, etc.
FED. AID PROJECT NO.:
LENGTH: CSJ 0255-06-069 15.522 MILES
CSJ 0255-05-044 7.220 MILES
Existing Posted Speed: 75 MPH - MAINLANES

OFFICE OF DISTRICT ENGINEER
PHARR DISTRICT

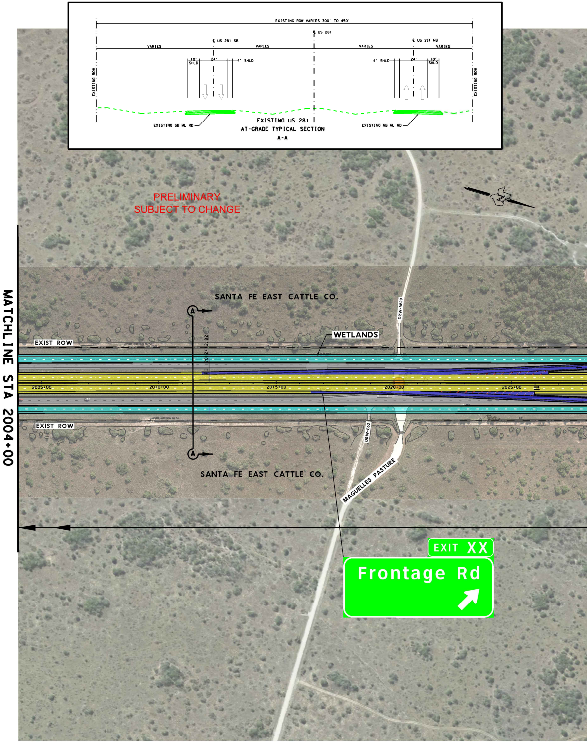
DESIGN SPEED: 75 MPH - Mainlane; 50 MPH Frontage Roads & Ramps
Functional Classification: Rural Freeway
Chapter 3, Section 6 Freeways
Superelevation Rate e_{max} = 6%

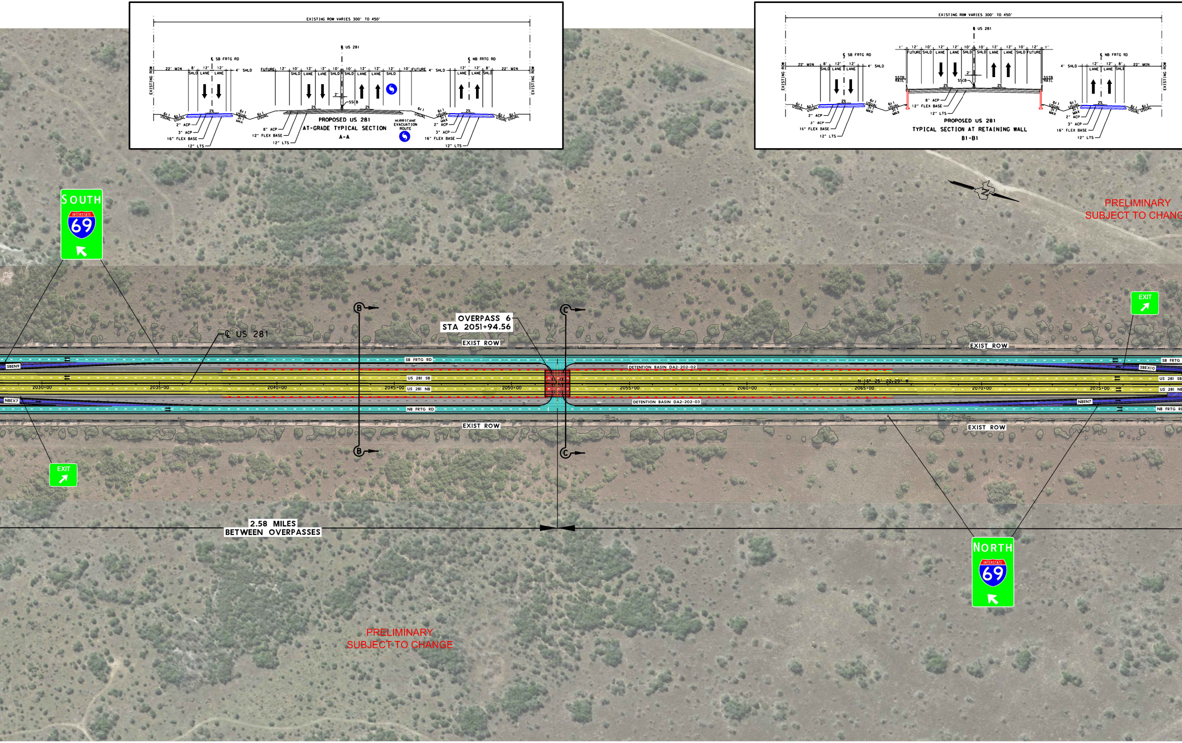
10/18/2018

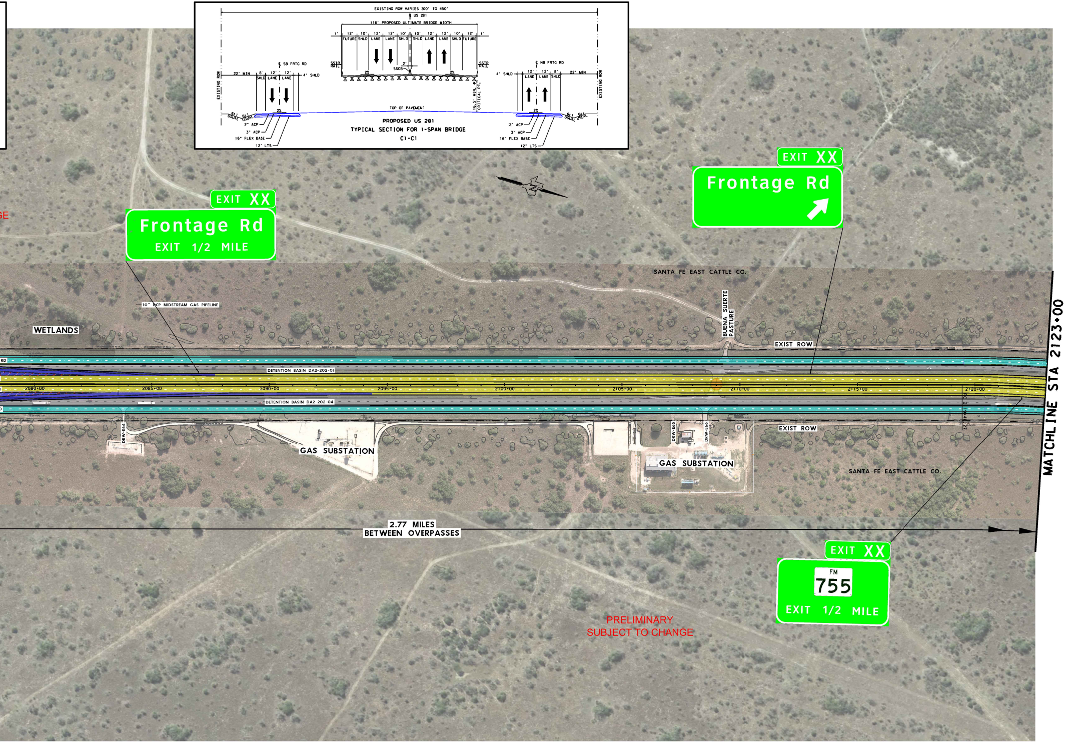
US 281-SEGMENT 2
ALTERNATIVE 1 - PREFERRED

STA. 2004+00 TO 2186+00

ROLL 6 OF 6


EXISTING ROW VARIES 300' TO 450'
℄ US 281
℄ US 281 SB
℄ US 281 NB
VARIES
VARIES
VARIES
VARIES
10' SHLD
24'
4' SHLD
4' SHLD
24'
10' SHLD
EXISTING ROW
EXISTING ROW
EXISTING SB ML RD
EXISTING NB ML RD
EXISTING US 281
AT-GRADE TYPICAL SECTION
A-A
PRELIMINARY
SUBJECT TO CHANGE
MATCHLINE STA 2004+00
SANTA FE EAST CATTLE CO.
A
A
2012+12.92
DRW-W29
WETLANDS
EXIST ROW
EXIST ROW
2005+00
2010+00
2015+00
2020+00
2025+00
DRW-E62
SANTA FE EAST CATTLE CO.
MAGUELLES PASTURE
EXIT XX
Frontage Rd

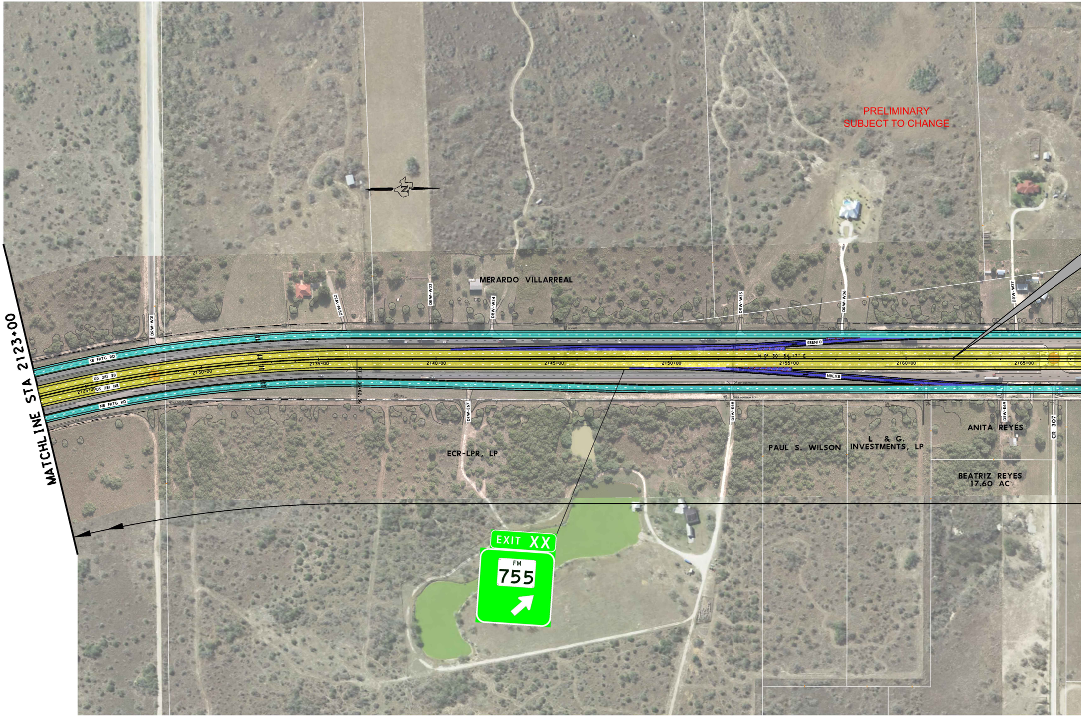

EXISTING ROW VARIES 300' TO 450'
℄ US 281
℄ SB FRTG RD
℄ NB FRTG RD
22' MIN
8'
12'
4' SHLD
SHLD
LANE
FUTURE
10'
2'
SSCB
2%
6:1 USUAL
3:1 MAX
2" ACP
3" ACP
16" FLEX BASE
12" LTS
8" ACP
12" FLEX BASE
EXISTING ROW
PROPOSED US 281
AT-GRADE TYPICAL SECTION
A-A
HURRICANE EVACUATION ROUTE
1'
SSTR RAIL
PROPOSED US 281
TYPICAL SECTION AT RETAINING WALL
B1-B1
PRELIMINARY
SUBJECT TO CHANG
SOUTH
INTERSTATE
69
EXIT
℄ US 281
B
C
OVERPASS 6
STA 2051+94.56
EXIST ROW
SBEN9
NBEX7
SB FRTG RD
US 281 SB
US 281 NB
NB FRTG RD
2030+00
2035+00
2040+00
2045+00
2050+00
2055+00
2060+00
2065+00
2070+00
2075+00
DETENTION BASIN DA2-202-02
DETENTION BASIN DA2-202-03
N 16° 25' 22.29" W
SBEX10
NBEN7
SB FRTG
US 281 SB
US 281 NB
NB FRTG RD
2.58 MILES
BETWEEN OVERPASSES
NORTH
PRELIMINARY
SUBJECT TO CHANGE

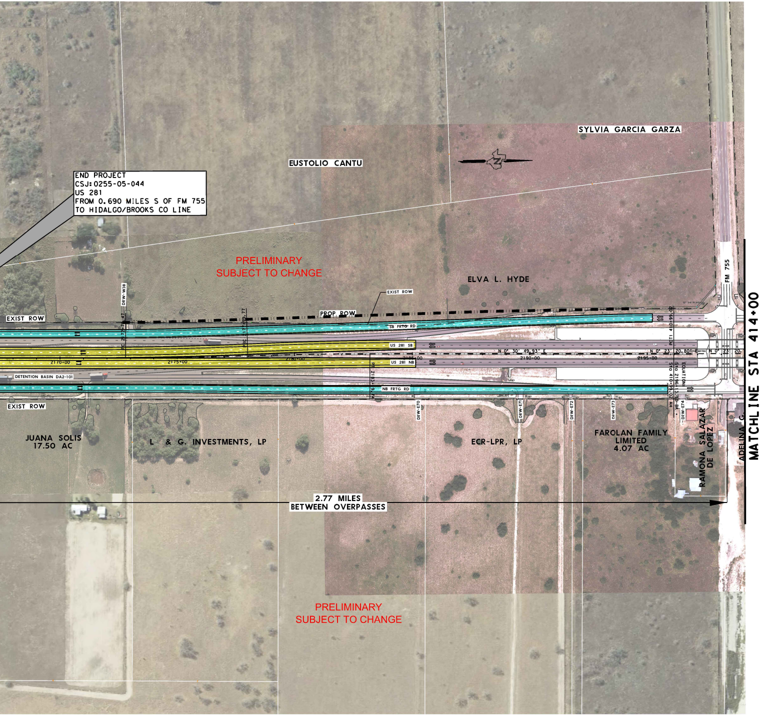


PROPOSED US 281
TYPICAL SECTION FOR 1-SPAN BRIDGE
C1-C1

EXISTING ROW VARIES 300' TO 450'
℄ US 281
116' PROPOSED ULTIMATE BRIDGE WIDTH
1' 12' 10' 12' 12' 10' 10' 12' 12' 10' 12' 1'
FUTURE SHLD LANE LANE SHLD SHLD LANE LANE SHLD FUTURE
SSTR RAIL
SSCB
2'
2%
℄ SB FRTG RD
22' MIN 8' 12' 12' 4' SHLD
SHLD LANE LANE
℄ NB FRTG RD
4' SHLD 12' 12' 8' 22' MIN
LANE LANE SHLD
EXISTING ROW
16.5' MIN. @ CRITICAL PT.
TOP OF PAVEMENT
6:1 USUAL
2" ACP
3" ACP
16" FLEX BASE
12" LTS
EXIT XX
Frontage Rd
EXIT 1/2 MILE
EXIT XX
Frontage Rd
N
SANTA FE EAST CATTLE CO.
10" DCP MIDSTREAM GAS PIPELINE
WETLANDS
BUENA SUERTE PASTURE
EXIST ROW
DETENTION BASIN DA2-202-01
2080+00
2085+00
2090+00
2095+00
2100+00
2105+00
2110+00
2115+00
2120+00
DETENTION BASIN DA2-202-04
DRW-E64
GAS SUBSTATION
DRW-E65
DRW-E66
GAS SUBSTATION
EXIST ROW
SANTA FE EAST CATTLE CO.
MATCHLINE STA 2123+00
2.77 MILES
BETWEEN OVERPASSES
EXIT XX
FM
755
EXIT 1/2 MILE

PRELIMINARY
SUBJECT TO CHANGE


PRELIMINARY
SUBJECT TO CHANGE
MATCHLINE STA 2123+00
MERARDO VILLARREAL
DRW-W31
DRW-W32
DRW-W33
DRW-W34
DRW-W35
DRW-W36
DRW-W37
SB FRTG RD
US 281 SB
US 281 NB
NB FRTG RD
2125+00
2130+00
2135+00
2140+00
2145+00
2150+00
2155+00
2160+00
2165+00
PT 2138+62.36
SBEN10
NBEX8
N 0° 30' 54.17" E
DRW-E67
DRW-E68
DRW-E69
ECR-LPR, LP
PAUL S. WILSON
L & G. INVESTMENTS, LP
ANITA REYES
BEATRIZ REYES
17.60 AC
CR 307
EXIT XX
FM
755


SYLVIA GARCIA GARZA
EUSTOLIO CANTU
END PROJECT
CSJ: 0255-05-044
US 281
FROM 0.690 MILES S OF FM 755
TO HIDALGO/BROOKS CO LINE
PRELIMINARY
SUBJECT TO CHANGE
ELVA L. HYDE
FM 755
EXIST ROW
PROP ROW
SB FRTG RD
US 281 SB
US 281 NB
NB FRTG RD
DRW-W38
2170+00
2175+00
2180+00
2185+00
2190+00
2195+00
N 0° 30' 49.93" E
N 0° 23' 20.80" E
POT1 410+99.02
STO 410+99.02 AH
STO 2196+13.10 BK
EQUATION:
DETENTION BASIN DA2-101
DRW-E70
DRW-E71
DRW-E72
DRW-E73
DRW-E74
JUANA SOLIS
17.50 AC
L & G. INVESTMENTS, LP
ECR-LPR, LP
FAROLAN FAMILY
LIMITED
4.07 AC
RAMONA SALAZAR
DE LOPEZ
ADELINA G.
MATCHLINE STA 414+00
2.77 MILES
BETWEEN OVERPASSES
PRELIMINARY
SUBJECT TO CHANGE

Scale: 0' 50' 100' 200'

ALTERNATIVE 1 - PREFERRED

Date:

CSJ: 0255-06-069, ETC.

US 281

ROLL 6 OF 6