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TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT

WILLIAM HALE, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC
URBAN MINOR ARTERIAL

FM 156
DENTON COUNTY

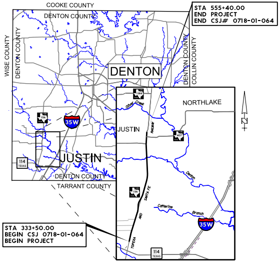
WIDEN 2-LANE RURAL TO 4-LANE DIVIDED URBAN CROSS SECTION
FROM: SH 114
TO: NORTH OF JUSTIN CITY LIMIT (NORTH OF FM 407)
PROJECT LENGTH: 4.203 MILES (22,190.00 FT)

CSJ #: 0718-01-064

TABLE OF CONTENTS: 2 ROLLS

ROADWAY SECTION	DESIGN SPEED	FUNCTION CLASS
FM 156: 333+50 - 455+00	45 MPH, L.S.	URBAN MINOR ARTERIAL
FM 156: 455+00 - 555+40.00	40 MPH, L.S.	URBAN MINOR ARTERIAL
DOC MITCHELL RD	30 MPH	URBAN COLLECTOR
MATANY RD	30 MPH	RURAL LOCAL
GAFFIELD RD	30 MPH	RURAL LOCAL
G CARDINAS RD	30 MPH	RURAL LOCAL
SAM REYNOLDS RD	30 MPH	RURAL LOCAL
CATHERINE BRANCH CIR	30 MPH	LOCAL STREET
INDUSTRIAL RD	30 MPH	RURAL LOCAL
HARMONSON RD	30 MPH	LOCAL STREET
JOHN WILEY RD	30 MPH	PRIMARY ARTERIAL
BISHOP PARK	30 MPH	LOCAL STREET
HARDEMAN BLVD	30 MPH	COMMERCIAL COLLECTOR
S SNYDER AVE	30 MPH	LOCAL STREET
S SEALY AVE	30 MPH	LOCAL STREET
BARRETT DR	30 MPH	LOCAL STREET
W FM 407(1ST ST)	30 MPH	MINOR ARTERIAL/COMMERCIAL COLLECTOR
DOWNE RD	15 MPH	LOCAL STREET
2ND ST	20 MPH	LOCAL STREET
3RD ST	20 MPH	LOCAL STREET
4TH ST (E & W)	20 MPH	LOCAL STREET
E FM 407	15 MPH	MINOR ARTERIAL
W 5TH ST	20 MPH	LOCAL STREET
6TH ST	20 MPH	LOCAL STREET
7TH ST	20 MPH	RESIDENTIAL COLLECTOR
8TH ST	20 MPH	LOCAL STREET
12TH ST	30 MPH	COMMERCIAL COLLECTOR

PROJECT LOCATION


COOKE COUNTY
DENTON COUNTY
WISE COUNTY
DENTON COUNTY
DENTON COUNTY
COLLIN COUNTY
DENTON
35W
156
114
JUSTIN
DENTON COUNTY
TARRANT COUNTY
NORTHLAKE
JUSTIN
407
156
SANTA FE
Catherine Branch
Denton
35W
114
N

STA 555+40.00
END PROJECT
END CSJ# 0718-01-064

STA 333+50.00
BEGIN CSJ 0718-01-064
BEGIN PROJECT

PREPARED BY TEAGUE NALL AND PERKINS, INC.
FIRM REGISTRATION NUMBER 230

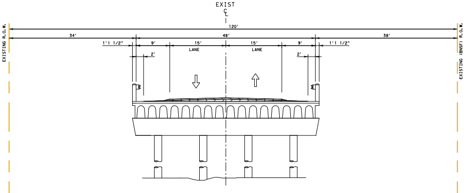
DANIEL P. McCULLOUGH
98291

DATE APPROVED

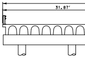
ROLL 2 of 2

AUGUST 2012

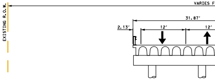
50 0 100 200 300
HORIZONTAL
SCALE IN FEET


EXIST
℄
120'
34'
48'
38'
1'1 1/2"
9'
15'
15'
9'
1'1 1/2"
2'
2'
LANE
LANE
EXISTING R.O.W.
EXISTING (BNSF) R.O.W.

FM 156
EXISTING BRIDGE TYPICAL SECTION
STA 488+33.79 TO STA 489+73.79

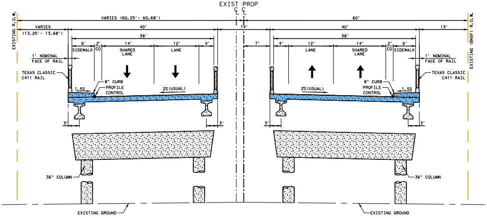


STAGE
OF EXI

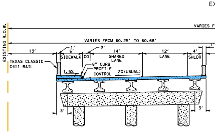

VARIES F
EXISTING R.O.W.
31.87'
2.13'
12'
12'

TRAFFIC ON EXISTIN

STAGE 1

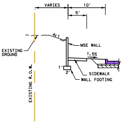

EXIST PROP
℄ ℄
EXISTING R.O.W.
VARIES (60.25' - 60.68')
60'
VARIES
(13.25' - 13.68')
40'
14'
40'
13'
38'
38'
6'
2'
14'
12'
4'
7'
4'
12'
14'
2'
6'
SIDEWALK
CO
SHARED LANE
LANE
LANE
SHARED LANE
CO
SIDEWALK
1' NOMINAL FACE OF RAIL
1' NOMINAL FACE OF RAIL
TEXAS CLASSIC C411 RAIL
TEXAS CLASSIC C411 RAIL
8" CURB
PROFILE CONTROL
1.5%
2% (USUAL)
2% (USUAL)
8" CURB
PROFILE CONTROL
1.5%
3'
3'
3'
3'
36" COLUMN
36" COLUMN
EXISTING GROUND
EXISTING GROUND
EXISTING (BNSF) R.O.W.

FM 156
PROPOSED BRIDGE TYPICAL SECTION
STA 488+21.29 TO STA 489+86.29


EX
EXISTING R.O.W.
VARIES F
VARIES FROM 60.25' TO 60.68'
13'
1'
6'
2'
14'
12'
4'
1'
SIDEWALK
CO
SHARED LANE
LANE
SHLDR
TEXAS CLASSIC C411 RAIL
8" CURB
PROFILE CONTROL
1.5%
2% (USUAL)
3'
3'

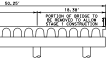
CONSTRUCTION OF SOUTHBOUND BRIDGE

STAGE 2

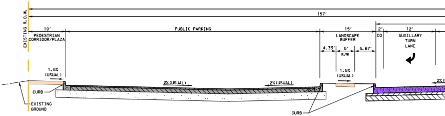

VARIES
10'
5'
4:1
MSE WALL
EXISTING GROUND
1.5%
1'
2'
SIDEWALK
WALL FOOTING
EXISTING R.O.W.

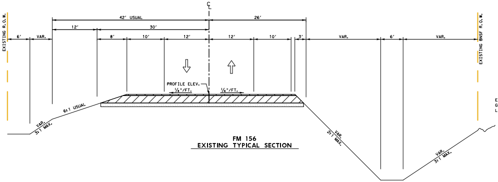
FM 156
TYPICAL SECTION

RETAINING WALL - CUT SECTION
(SEE PLAN FOR LOCATIONS)

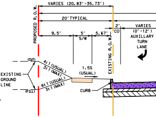

50.25'
18.38'
PORTION OF BRIDGE TO BE REMOVED TO ALLOW STAGE 1 CONSTRUCTION

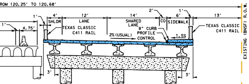
1 DEMOLITION
STING BRIDGE


EXISTING R.O.W.
157'
10'
PEDESTRIAN CORRIDOR/PLAZA
PUBLIC PARKING
15'
LANDSCAPE BUFFER
4.33'
5'
5.67'
S/W
2'
CO
12'
AUXILLARY TURN LANE
1.5% (USUAL)
2% (USUAL)
2% (USUAL)
1.5% (USUAL)
CURB
EXISTING GROUND
CURB


EXISTING R.O.W.
42' USUAL
26'
12'
30'
6'
VAR.
8'
10'
12'
12'
10'
3'
VAR.
6'
VAR.
EXISTING BNSF R.O.W.
PROFILE ELEV.
1/4"/FT.
1/4"/FT.
6:1 USUAL
VAR. 3:1 MAX.
2:1 MAX.
VAR.
VAR. 3:1 MAX.

FM 156
EXISTING TYPICAL SECTION

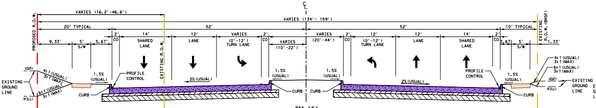

VARIES (20.83'-35.73')
PROPOSED R.O.W.
20' TYPICAL
2'
VARIES (0'-12') AUXILLARY TURN LANE
9.5'
5'
S/W
5.67'
CO
EXISTING R.O.W.
(CUT)
4:1 (USUAL) 3:1 (MAX)
1.5% (USUAL)
EXISTING GROUND LINE
6:1 (USUAL) 3:1 (MAX)
(FILL)
CURB


ROM 120.25' TO 120.68'
1'
4'
SHLDR
12'
LANE
14'
SHARED LANE
2'
CO
1'
6'
SIDEWALK
13'
1'
4.75'
TEXAS CLASSIC C411 RAIL
2% (USUAL)
8" CURB
PROFILE CONTROL
1.5%
TEXAS CLASSIC C411 RAIL
EXISTING (BNSF) R.O.W.
3'
3'

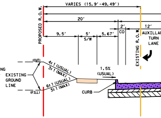
G BRIDGE

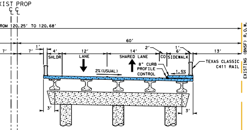
CONSTRUCTION OF NORTHBOUND BRIDGE

CONSTRUCTION


PROPOSED R.O.W.
VARIES (16.2'-46.6')
VARIES (134'- 159')
20' TYPICAL
52'
52'
10' TYPICAL
EXISTING (BNSF) R.O.W.
9.33'
5'
S/W
5.67'
2'
CO
14'
SHARED LANE
EXISTING R.O.W.
12'
LANE
VARIES (0'-12') TURN LANE
2'
CO
VARIES (10'-22')
VARIES (20'-44')
2'
CO
12'
(0'-12') TURN LANE
12'
LANE
14'
SHARED LANE
2'
CO
3.67'
5'
S/W
1.33'
(CUT)
4:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE
6:1 (USUAL) 3:1 (MAX)
(FILL)
1.5% (USUAL)
PROFILE CONTROL
CURB
2% (USUAL)
1.5% (USUAL)
1.5% (USUAL)
CURB
CURB
2% (USUAL)
PROFILE CONTROL
1.5% (USUAL)
CURB
4:1 (USUAL) 3:1 (MAX)
6:1 (USUAL) 3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE

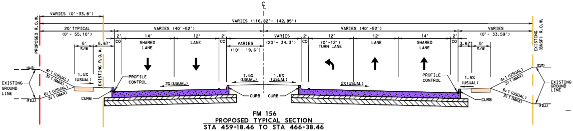
FM 156
PROPOSED TYPICAL SECTION
STA 438+00.00 TO STA 459+18.46
STA 542+26.64 TO STA 545+50.00


VARIES (15.9'-49.49')
PROPOSED R.O.W.
20'
2'
12'
AUXILLARY TURN LANE
9.5'
5'
S/W
5.67'
CO
EXISTING R.O.W.
(CUT)
4:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE
1.5% (USUAL)
6:1 (USUAL) 3:1 (MAX)
(FILL)
CURB

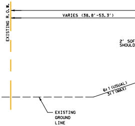

XIST PROP
ROM 120.25' TO 120.68'
60'
7'
7'
1'
4'
SHLDR
12'
LANE
14'
SHARED LANE
2'
CO
1'
6'
SIDEWALK
13'
2% (USUAL)
8" CURB
PROFILE CONTROL
1.5%
TEXAS CLASSIC C411 RAIL
EXISTING (BNSF) R.O.W.
3'
3'

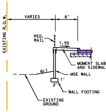
TWO-WAY TRAFFIC ON NEWLY CONSTRUCTED NORTHBOUND BRIDGE

CONSTRUCTION


VARIES (0'-33.8')
VARIES (116.82'- 142.85')
PROPOSED R.O.W.
20' TYPICAL (0'- 55.10')
VARIES (40'-52')
VARIES (40'-52')
VARIES (0'- 33.59')
EXISTING (BNSF) R.O.W.
5'
S/W
5.67'
EXISTING R.O.W.
2'
CO
14'
SHARED LANE
12'
LANE
2'
CO
VARIES (10'- 19.6')
VARIES (20'- 34.3')
2'
CO
12'
(0'-12') TURN LANE
12'
LANE
14'
SHARED LANE
2'
CO
3.67'
5'
S/W
(CUT)
4:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE
6:1 (USUAL) 3:1 (MAX)
(FILL)
1.5% (USUAL)
CURB
PROFILE CONTROL
2% (USUAL)
1.5% (USUAL)
1.5% (USUAL)
CURB
CURB
2% (USUAL)
PROFILE CONTROL
1.5% (USUAL)
CURB
4:1 (USUAL) 3:1 (MAX)
6:1 (USUAL) 3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE

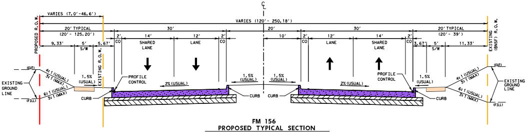
FM 156
PROPOSED TYPICAL SECTION
STA 459+18.46 TO STA 466+38.46


EXISTING R.O.W.
VARIES (38.8'-53.3')
2' SOF SHOULD
6:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE

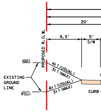

EXISTING R.O.W.
VARIES
6'
PED. RAIL
1.5%
MOMENT SLAB AND SIDEWALK
MSE WALL
6:1
1'
2'
WALL FOOTING
EXISTING GROUND

FM 156
TYPICAL SECTION

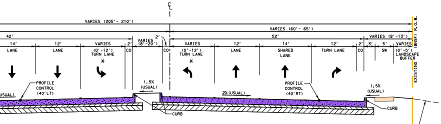
RETAINING WALL
(AT TRAIL CREEK BRIDGE)
482+15.00 TO 494+60.01 WEST SIDE
484+83.00 TO 496+06.00 EAST SIDE


VARIES (7.0'-46.6')
VARIES (120'- 250.18')
PROPOSED R.O.W.
20' TYPICAL (20'- 125.20')
30'
20'
30'
20' TYPICAL (20'- 39')
EXISTING (BNSF) R.O.W.
9.33'
5'
S/W
5.67'
EXISTING R.O.W.
2'
CO
14'
SHARED LANE
12'
LANE
2'
CO
10'
2'
CO
12'
LANE
14'
SHARED LANE
2'
CO
3.67'
5'
S/W
11.33'
(CUT)
4:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE
6:1 (USUAL) 3:1 (MAX)
(FILL)
1.5% (USUAL)
CURB
PROFILE CONTROL
2% (USUAL)
1.5% (USUAL)
1.5% (USUAL)
CURB
CURB
2% (USUAL)
PROFILE CONTROL
1.5% (USUAL)
CURB
4:1 (USUAL) 3:1 (MAX)
6:1 (USUAL) 3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE

FM 156
PROPOSED TYPICAL SECTION
STA 466+38.46 TO STA 477+80.00
STA 482+00.00 TO STA 488+21.29
STA 489+86.29 TO STA 494+40.00
STA 501+90.00 TO STA 507+25.00


PROPOSED R.O.W.
20'
9.5'
5'
S/W
(CUT)
4:1 (USUAL) 3:1 (MAX)
EXISTING GROUND LINE
6:1 (USUAL) 3:1 (MAX)
(FILL)
CURB

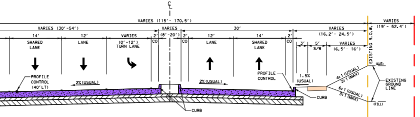
N


CL
VARIES (205'- 210')
VARIES (60'- 65')
42'
52'
VARIES (8'-13')
14'
12'
VARIES
2'
VARIES (8'-20')
2'
VARIES
12'
14'
12'
2'
3'
5'
VARIES
LANE
LANE
(0'-12') TURN LANE *
CO
CO
(0'-12') TURN LANE *
LANE
SHARED LANE
TURN LANE
CO
SW
(0'-5') LANDSCAPE BUFFER
EXISTING (BNSF) R.O.W.
USUAL)
PROFILE CONTROL (40'LT)
1.5% (USUAL)
2% (USUAL)
PROFILE CONTROL (40'RT)
1.5% (USUAL)
CURB
CURB

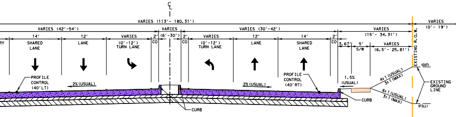
FM 156
PROPOSED TYPICAL SECTION
STA 514+95.00 TO STA 529+84.90

* LEFT TURN LANES DO NOT OCCUR SIMULTANEOUSLY.

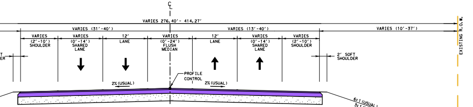
EXISTING GROUND


CL
VARIES (115'- 170.5')
VARIES (19'- 52.4')
VARIES (30'-54')
VARIES (8'-20')
30'
VARIES (16.2'- 24.5')
14'
12'
VARIES
2'
2'
12'
14'
2'
SHARED LANE
LANE
(0'-12') TURN LANE
CO
CO
LANE
SHARED LANE
CO
3'
5'
S/W
VARIES (6.5'- 16')
EXISTING R.O.W.
PROFILE CONTROL (40'LT)
2% (USUAL)
2% (USUAL)
PROFILE CONTROL
1.5% (USUAL)
4:1 (USUAL)
3:1 (MAX)
6:1 (USUAL)
3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE
CURB
CURB

FM 156
PROPOSED TYPICAL SECTION
STA 529+84.90 TO STA 531+24.90
STA 540+86.64 TO STA 542+26.64

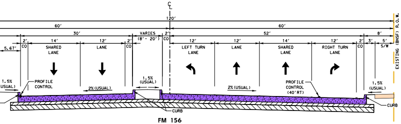

CL
VARIES (113'- 180.31')
VARIES (0'- 19')
VARIES (42'-54')
VARIES (6'-30')
VARIES (30'-42')
VARIES (15'- 34.31')
RY
14'
12'
VARIES
2'
2'
VARIES
12'
14'
2'
SHARED LANE
LANE
(0'-12') TURN LANE
CO
CO
(0'-12') TURN LANE
LANE
SHARED LANE
CO
3.67'
5'
S/W
VARIES (6.5'- 25.81')
EXISTING R.O.W.
PROFILE CONTROL (40'LT)
2% (USUAL)
2% (USUAL)
PROFILE CONTROL (40'RT)
1.5% (USUAL)
4:1 (USUAL)
3:1 (MAX)
6:1 (USUAL)
3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE
CURB
CURB

FM 156
PROPOSED TYPICAL SECTION
STA 531+24.90 TO STA 540+86.64


CL
VARIES 276.40'- 414.27'
VARIES (31'-40')
VARIES (13'-40')
VARIES (10'-37')
VARIES (2'-10') SHOULDER
VARIES (0'-14') SHARED LANE
12' LANE
VARIES (0'-24') FLUSH MEDIAN
12' LANE
VARIES (0'-14') SHARED LANE
VARIES (2'-10') SHOULDER
T
ER
2' SOFT SHOULDER
EXISTING R.O.W.
2% (USUAL)
PROFILE CONTROL
2% (USUAL)
6:1 (USUAL)
3:1 (MAX)

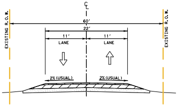
FM 156
PROPOSED TYPICAL SECTION
STA 545+50.00 TO STA 555+40.00

EXISTING GROUND LINE


CL
120'
60'
60'
30'
VARIES (8'- 20')
2'
52'
8'
5.67'
2'
14'
12'
2'
CO
12'
12'
14'
12'
2'
3'
5'
CO
SHARED LANE
LANE
CO
LEFT TURN LANE
LANE
SHARED LANE
RIGHT TURN LANE
CO
S/W
EXISTING (BNSF) R.O.W.
1.5% USUAL)
PROFILE CONTROL
2% (USUAL)
1.5% (USUAL)
2% (USUAL)
PROFILE CONTROL (40'RT)
1.5% (USUAL)
CURB
CURB

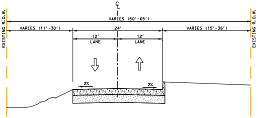
FM 156
PROPOSED TYPICAL SECTION
WITH TURN LANES

STA 477+80.00 TO STA 482+00.00
STA 494+40.00 TO STA 501+90.00
STA 507+25.00 TO STA 514+95.00


CL
EXISTING R.O.W.
EXISTING R.O.W.
60'
22'
11'
11'
LANE
LANE
2% (USUAL)
2% (USUAL)

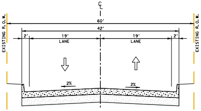
EXISTING TYPICAL SECTION

HARMONSON RD.


CL
EXISTING R.O.W.
EXISTING R.O.W.
VARIES (50'-65')
VARIES (11'-30')
24'
VARIES (15'-36')
12'
12'
LANE
LANE
2%
2%

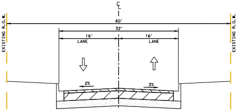
EXISTING TYPICAL SECTION

JOHN WILEY RD.


CL
EXISTING R.O.W.
EXISTING R.O.W.
60'
42'
2'
19'
19'
2'
LANE
LANE
2%
2%

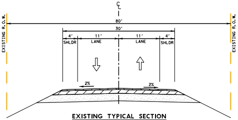
EXISTING TYPICAL SECTION

HARDEMAN BLVD.


CL
EXISTING R.O.W.
EXISTING R.O.W.
60'
32'
16'
16'
LANE
LANE
2%
2%

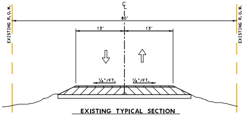
EXISTING TYPICAL SECTION

SNYDER AVE.
SEALY AVE
BARRETT DR.


CL
EXISTING R.O.W.
EXISTING R.O.W.
80'
30'
4'
11'
11'
4'
SHLDR
LANE
LANE
SHLDR
2%
2%

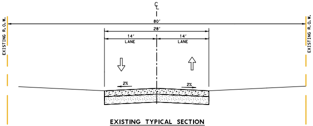
EXISTING TYPICAL SECTION

W. FM 407 / 1ST ST.
E. FM 407 / 5TH ST.


CL
EXISTING R.O.W.
EXISTING R.O.W.
80'
13'
13'
1/4"/FT.
1/4"/FT.

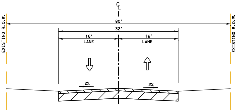
EXISTING TYPICAL SECTION

DOWNE RD.
E. 4TH ST.


CL
EXISTING R.O.W.
EXISTING R.O.W.
80'
28'
14'
14'
LANE
LANE
2%
2%

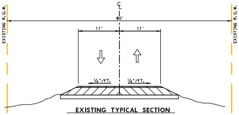
EXISTING TYPICAL SECTION

12TH ST.


CL
EXISTING R.O.W.
EXISTING R.O.W.
80'
32'
16'
16'
LANE
LANE
2%
2%

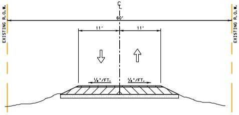
EXISTING TYPICAL SECTION

2ND ST.
3RD ST.
W. 4TH ST.
W. 5TH ST.


CL
EXISTING R.O.W.
EXISTING R.O.W.
80'
11'
11'
1/4"/FT.
1/4"/FT.

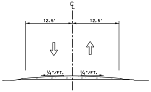
EXISTING TYPICAL SECTION

W. 6TH ST.
W. 7TH ST.


EXISTING R.O.W.
60'
11'
11'
¼"/FT.
¼"/FT.

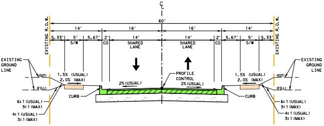
EXISTING TYPICAL SECTION

W. 8TH ST.


12.5'
12.5'
¼"/FT.
¼"/FT.

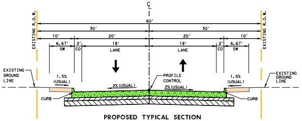
EXISTING TYPICAL SECTION

BISHOP PARK


EXISTING R.O.W.
60'
14'
16'
16'
14'
5.33'
5'
5.67'
2'
14'
14'
2'
5.67'
5'
5.33'
S/W
CO
SHARED LANE
SHARED LANE
CO
S/W
EXISTING GROUND LINE
1.5% (USUAL)
2.0% (MAX)
PROFILE CONTROL
2% (USUAL)
2% (USUAL)
(CUT)
(FILL)
CURB
6:1 (USUAL)
3:1 (MAX)
4:1 (USUAL)
3:1 (MAX)

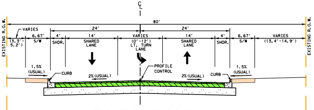
PROPOSED TYPICAL SECTION

JOHN WILEY RD.


EXISTING R.O.W.
60'
30'
30'
10'
20'
20'
10'
6.67'
2'
18'
18'
2'
6.67'
SW
CO
LANE
LANE
CO
SW
EXISTING GROUND LINE
1.5% (USUAL)
PROFILE CONTROL
2% (USUAL)
2% (USUAL)
CURB

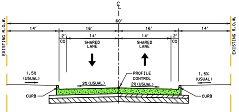
PROPOSED TYPICAL SECTION

HARDEMAN BLVD.


EXISTING R.O.W.
80'
VARIES
24'
VARIES
24'
VARIES
6.67'
4'
14'
(0'-12')
14'
4'
6.67'
(3.3'-5.2')
S/W
SHDR.
SHARED LANE
LT. TURN LANE
SHARED LANE
SHDR.
S/W
(13.4'-14.9')
1.5% (USUAL)
CURB
PROFILE CONTROL
2% (USUAL)
2% (USUAL)

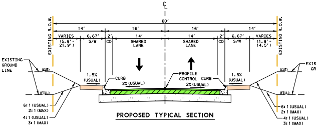
PROPOSED TYPICAL SECTION

W. FM 407 / 1ST ST.


EXISTING R.O.W.
60'
14'
16'
16'
14'
2'
14'
14'
2'
CO
SHARED LANE
SHARED LANE
CO
1.5% (USUAL)
PROFILE CONTROL
2% (USUAL)
2% (USUAL)
CURB

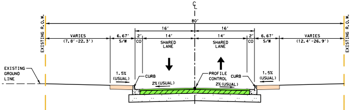
PROPOSED TYPICAL SECTION

HARMONSON RD.


EXISTING R.O.W.
60'
14'
16'
16'
14'
VARIES
6.67'
2'
14'
14'
2'
6.67'
VARIES
(5.8'-21.9')
S/W
CO
SHARED LANE
SHARED LANE
CO
S/W
(1.8'-14.5')
EXISTING GROUND LINE
(CUT)
(FILL)
1.5% (USUAL)
CURB
PROFILE CONTROL
2% (USUAL)
2% (USUAL)
6:1 (USUAL)
2:1 (MAX)
4:1 (USUAL)
3:1 (MAX)

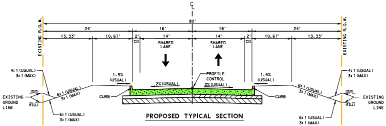
PROPOSED TYPICAL SECTION

BARRETT DR.
SNYDER RD.
SEALY AVE.
W. 8TH ST.


EXISTING R.O.W.
80'
16'
16'
VARIES
6.67'
2'
14'
14'
2'
6.67'
VARIES
(7.8'-22.3')
S/W
CO
SHARED LANE
SHARED LANE
CO
S/W
(12.4'-26.9')
EXISTING GROUND LINE
1.5% (USUAL)
CURB
PROFILE CONTROL
2% (USUAL)
2% (USUAL)

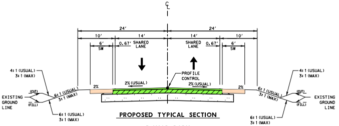
PROPOSED TYPICAL SECTION

W. 2ND ST.
W. 3RD ST.
W. 4TH ST.
W. 5TH ST.
W. 6TH ST.
W. 7TH ST.


EXISTING R.O.W.
80'
24'
16'
16'
24'
13.33'
10.67'
2'
14'
14'
2'
10.67'
13.33'
CO
SHARED LANE
SHARED LANE
CO
4:1 (USUAL)
3:1 (MAX)
1.5% (USUAL)
PROFILE CONTROL
2% (USUAL)
2% (USUAL)
6:1 (USUAL)
3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE
CURB

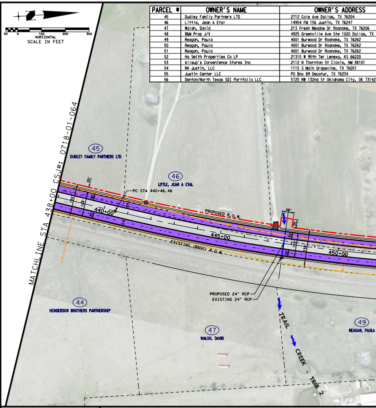
PROPOSED TYPICAL SECTION

DOWNE RD.
E. 4TH ST.
E FM 407 / 5TH ST.
W. 12TH STREET


24'
24'
10'
14'
14'
10'
6'
0.67'
0.67'
6'
SW
SHARED LANE
SHARED LANE
SW
4:1 (USUAL)
3:1 (MAX)
2%
2% (USUAL)
PROFILE CONTROL
2% (USUAL)
2%
6:1 (USUAL)
3:1 (MAX)
(CUT)
(FILL)
EXISTING GROUND LINE

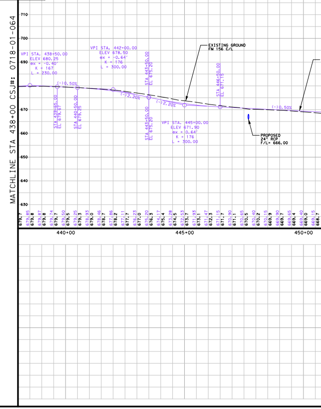
PROPOSED TYPICAL SECTION

BISHOP PARK


0
50
100
200
300
HORIZONTAL
SCALE IN FEET
MATCHLINE STA 438+00 CSJ#: 0718-01-064
45
DUDLEY FAMILY PARTNERS LTD
46
LITTLE, JEAN A ETAL
PC STA 440+46.46
PROPOSED R.O.W.
440+00
445+00
450+00
EXISTING (BNSF) R.O.W.
PROPOSED 24" RCP
EXISTING 24" RCP
44
HENDERSON BROTHERS PARTNERSHIP
47
WALSH, DAVID
49
REAGAN, PAULA
TRAIL
CREEK - TRIB 2

PARCEL #	OWNER'S NAME	OWNER'S ADDRESS
45	Dudley Family Partners LTD	2712 Cole Ave Dallas, TX 76204
46	Little, Jean A Etal	14954 FM 156 Justin, TX 76247
47	Walsh, David	213 Fresh Meadow Dr Roanoke, TX 76206
48	B&M Prop J/V	4925 Greenville Ave Ste 1020 Dallas, TX
49	Reagan, Paula	4001 Burwood Dr Roanoke, TX 76262
50	Reagan, Paula	4001 Burwood Dr Roanoke, TX 76262
51	Reagan, Paula	4001 Burwood Dr Roanoke, TX 76262
52	Ha Smith Properties Co LP	21315 W 95th Ter Lenexa, KS 66220
53	Allsup's Convenience Stores Inc	2112 N Thornton St Clovis, NM 88101
54	NH Justin, LLC	1115 S Main Grapevine, TX 76051
55	Justin Center LLC	PO Box 89 Decatur, TX 76234
56	Denton/North Texas SDI Portfolio LLC	5725 NW 132nd St Oklahoma City, OK 73142

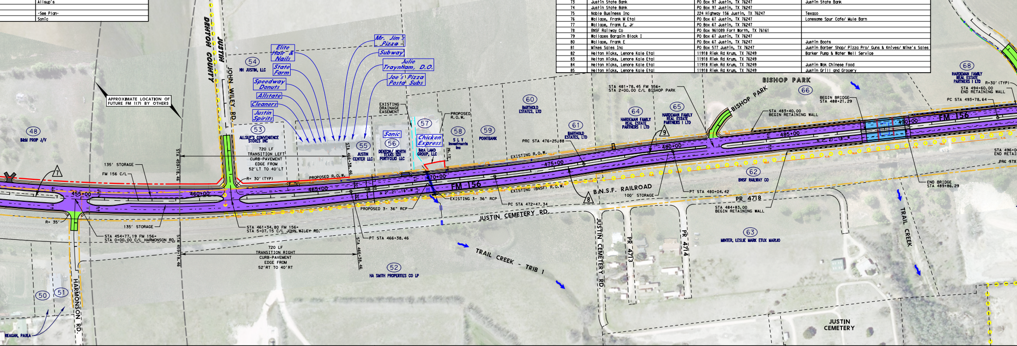
FM 156

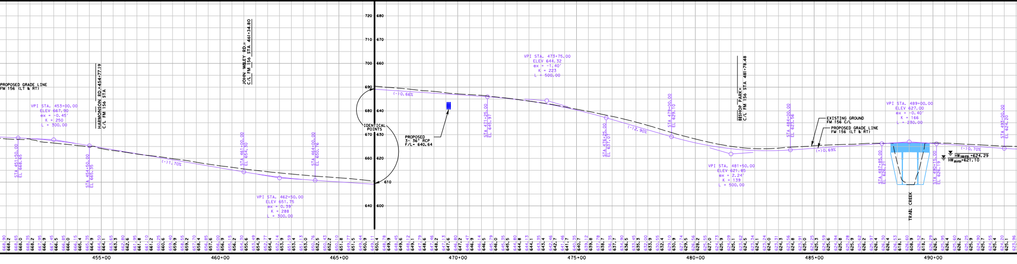


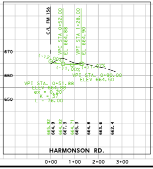
	BUSINESS NAME
75206	
	Allsup's
	-See Plan-
	Sonic

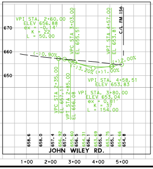
PARCEL #	OWNER'S NAME	OWNER'S ADDRESS	BUSINESS NAME
57	B&A Land Group, LLC	1180 Central Way Lantana, TX 76226	Chicken Express
58	S L Y Investments Inc	5898 Saddle Ct Justin, TX 76247	Barthold Estates, LTD
59	Pointbank	PO Box 278 Pilot Point, TX 76258	PointBank
60	Barthold Estates, LTD	537 Kiowa Dr E Lake Kiowa, TX 76240	
61	Barthold Estates, LTD	537 Kiowa Dr E Lake Kiowa, TX 76240	
62	BNSF Railway Co	PO Box 961089 Fort Worth, TX 76161	
63	Minter, Leslie Mark Etus Marijo	619 Chicago St Lakefield, MN 56150	
64	Hardeman Family Real Estate Partners I LTD	PO Box 23 Justin, TX 76247	Premier Bank Texas

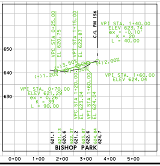
PARCEL #	OWNER'S NAME	OWNER'S ADDRESS	BUSINESS NAME
65	Hardeman Family Real Estate Partners I LTD	PO Box 23 Justin, TX 76247	
66	Justin, City of	PO Box 129 Justin, TX 76247	BISHOP PARK
67	Justin, City of	PO Box 129 Justin, TX 76247	
68	Hardeman Family Real Estate Partners I LTD	PO Box 23 Justin, TX 76247	
69	Barthold Estates, LTD	537 Kiowa Dr E Lake Kiowa, TX 76240	
70	Talcorp 3E LP	PO Box 6 Justin, TX 76247	Justin Seed
71	Talcorp 3E LP	PO Box 6 Justin, TX 76247	Justin Seed
72	Downe, Lawrence R	192 County Road 314 Gainesville, TX 76240	
73	Justin State Bank	PO Box 97 Justin, TX 76247	Justin State Bank
74	Justin State Bank	PO Box 97 Justin, TX 76247	
75	Noble Business Inc	224 Highway 156 Justin, TX 76247	Texaco
76	Wallace, Frank M Etal	PO Box 67 Justin, TX 76247	Lonesome Spur Cafe/ Mule Barn
77	Wallace, Frank E, Jr	PO Box 67 Justin, TX 76247	
78	BNSF Railway Co	PO Box 961089 Fort Worth, TX 76161	
79	Wallaces Bargain Block I	PO Box 67 Justin, TX 76247	
80	Wallace, Frank E	PO Box 67 Justin, TX 76247	Justin Boots
81	Mikes Sales Inc	PO Box 577 Justin, TX 76247	Justin Barber Shop/ Pizza Pro/ Guns & Knives/ Mike's Sales
82	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	Barker Pump & Water Well Service
83	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	
84	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	Justin Wok Chinese Food
85	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	Justin Grill and Grocery

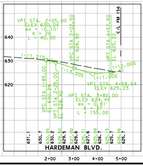

DENTON COUNTY
JUSTIN
JOHN WILEY RD.
HARMONSON RD.
HARDEMAN BLVD.
APPROXIMATE LOCATION OF FUTURE FM 1171 BY OTHERS
48
B&M PROP J/V
50
51
REAGAN, PAULA
52
HA SMITH PROPERTIES CO LP
53
ALLSUP'S CONVENIENCE STORES INC
54
NH JUSTIN, LLC
55
JUSTIN CENTER LLC
56
DENTON/ NORTH TEXAS SDI PORTFOLIO LLC
57
B&A LAND GROUP, LLC
58
S L Y Investments Inc
59
POINTBANK
60
BARTHOLD ESTATES, LTD
61
BARTHOLD ESTATES, LTD
62
BNSF RAILWAY CO
63
MINTER, LESLIE MARK ETUX MARIJO
64
HARDEMAN FAMILY REAL ESTATE PARTNERS I LTD
65
HARDEMAN FAMILY REAL ESTATE PARTNERS I LTD
66
68
HARDEMAN FAMILY REAL ESTATE PARTNERS I LTD
Elite Hair & Nails
State Farm
Speedway Donuts
Allstate
Cleaners
Justin Spirits
Mr. Jim's Pizza
Subway
Julie Traynham, D.O.
Joe's Pizza Pasta Subs
Sonic
Chicken Express
7
8
9
135' STORAGE
FM 156 C/L
135' STORAGE
R= 35'
455+00
460+00
465+00
470+00
475+00
480+00
485+00
490+00
FM 156
STA 454+77.19 FM 156=
STA 0+00.00 C/L HARMONSON RD.
STA 459+18.46
720 LF TRANSITION LEFT CURB-PAVEMENT EDGE FROM 52'LT TO 40'LT
720 LF TRANSITION RIGHT CURB-PAVEMENT EDGE FROM 52'RT TO 40'RT
R= 30' (TYP)
STA 461+34.80 FM 156=
STA 5+07.15 C/L JOHN WILEY RD.
PROPOSED R.O.W.
STA 466+38.46
PT STA 466+38.46
PROPOSED 3- 36" RCP
EXISTING 3- 36" RCP
EXISTING DRAINAGE EASEMENT
PROPOSED R.O.W.
26.13'
N 2°-21'-18" W
EXISTING R.O.W.
EXISTING (BNSF) R.O.W.
PC STA 472+47.34
PRC STA 476+25.88
JUSTIN CEMETERY RD.
TRAIL CREEK - TRIB 1
B.N.S.F. RAILROAD
100' STORAGE
PT STA 480+04.42
JUSTIN CEMETERY RD.
PR 4713
PR 4714
PR 4718
STA 481+78.45 FM 156=
STA 2+00.00 C/L BISHOP PARK
BISHOP PARK
BISHOP PARK
STA 483+40.00 BEGIN RETAINING WALL
STA 484+83.00 BEGIN RETAINING WALL
BEGIN BRIDGE STA 488+21.29
END BRIDGE STA 489+86.29
TRAIL CREEK
STA 494+60.00 END RETAINING WALL
PC STA 493+78.64
R=30' (TYP)
STA 496+0 END RETAI
PRC STA
JUSTIN CEMETERY

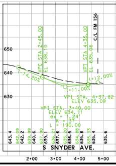

PROPOSED GRADE LINE FM 156 (LT & RT)
VPI STA. 453+00.00 ELEV 667.90 ex = -0.45' K = 250 L = 300.00
HARMONSON RD.=454+77.19 STA C/L FM 156
JOHN WILEY RD.= C/L FM 156 STA 461+34.80
STA 451+50.00 EL 668.65
STA 454+50.00 EL 665.35
(-)1.70%
STA 461+00.00 EL 654.30
STA 464+00.00 EL 650.76
VPI STA. 462+50.00 ELEV 651.75 ex = 0.39' K = 288 L = 300.00
IDENTICAL POINTS
720 680
710 670
700 660
690
680 640
670 630
660 620
610
640 600
(-)0.66%
PROPOSED 3- 36" RCP F/L= 640.64
STA 471+25.00 EL 645.97
VPI STA. 473+75.00 ELEV 644.32 ex = -1.40' K = 223 L = 500.00
STA 476+25.00 EL 637.07
(-)2.90%
STA 479+00.00 EL 629.10
VPI STA. 481+50.00 ELEV 621.85 ex = 2.24' K = 139 L = 500.00
BISHOP PARK= C/L FM 156 STA 481+78.48
STA 484+00.00 EL 623.56
EXISTING GROUND FM 156 C/L
PROPOSED GRADE LINE FM 156 (LT & RT)
(+)0.69%
VPI STA. 489+00.00 ELEV 627.00 ex = -0.40' K = 166 L = 230.00
STA 487+85.00 EL 626.21
STA 490+15.00 EL 626.19
$HW_{100(FD)}$=624.29
$HW_{25(FD)}$=621.10
(-)0.70%
STA 493+00.00 EL 624.20
TRAIL CREEK
455+00
460+00
465+00
470+00
475+00
480+00
485+00
490+00

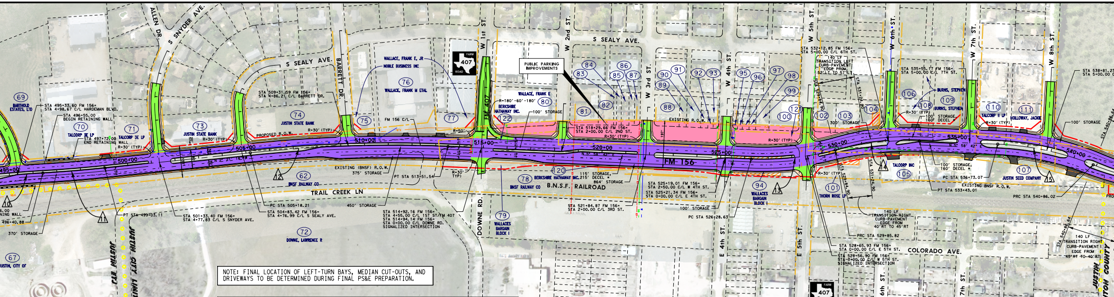

C/L FM 156
VPC STA 0+52.00 EL 664.88
VPT STA 1+28.00 EL 664.90
(-)2.00%
(-)1.00%
(+)1.47%
VPI STA. 0+90.00 ELEV 664.50
VPI STA. 0+51.88 ELEV 664.88 ex = 0.20' K = 37 L = 76.00
670
660
650
HARMONSON RD.
0+00
1+00
2+00
3+00


VPI STA. 2+60.00 ELEV 656.88 ex = -0.14' K = 22 L = 50.00
VPC STA 3+03.00 EL 655.51
VPT STA 4+57.00 EL 653.81
C/L FM 156
(-)0.90%
(-)3.20%
(+)1.00%
(+)2.00%
VPC STA 2+35.00 EL 657.11
VPT STA 2+85.00 EL 656.08
VPI STA. 4+58.51 ELEV 653.83
VPI STA. 3+80.00 ELEV 653.04 ex = 0.81' K = 37 L = 154.00
670
660
650
JOHN WILEY RD.
1+00
2+00
3+00
4+00
5+00


VPC STA 0+25.00 EL 620.75
VPT STA 1+15.00 EL 622.87
C/L FM 156
VPI STA. 1+40.00 ELEV 623.74 ex = -0.10' K = 20 L = 40.00
(+)3.50%
(+)1.20%
(+)2.00%
VPI STA. 1+60.00 ELEV 624.04
VPI STA. 0+70.00 ELEV 621.29 ex = 0.26' K = 39 L = 90.00
VPC STA 1+20.00 EL 623.04
VPT STA 1+60.00 EL 624.04
650
640
630
BISHOP PARK
0+00
1+00
2+00
3+00
4+00
5+00

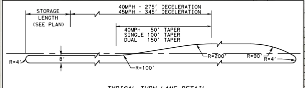

VPI STA. 2+05.00 ELEV 630.04 ex = -0.10' K = 20 L = 40.00
VPC STA 3+02.50 EL 626.92
VPT STA 4+57.50 EL 625.22
C/L FM 156
(-)1.21%
(-)3.20%
(+)1.00%
(+)2.00%
VPC STA 1+85.00 EL 630.29
VPT STA 2+25.00 EL 629.40
VPI STA. 4+58.64 ELEV 625.23
VPI STA. 3+80.00 ELEV 624.44 ex = 0.81' K = 37 L = 155.00
640
630
620
HARDEMAN BLVD.
2+00
3+00
4+00
5+00


VPC STA 2+45.00 EL 638.10
VPT STA 4+35.00 EL 635.06
C/L FM 156
(-)4.20%
(+)1.00%
(+)2.00%
VPI STA. 4+37.82 ELEV 635.09
VPI STA. 3+40.00 ELEV 634.11 ex = 1.24' K = 37 L = 190.00
650
640
630
S SNYDER AVE.
2+00
3+00
4+00
5+00


FM 156
FM 407
S SEALY AVE.
S SNYDER AVE.
ALLEN DR.
BARRETT DR.
W 1st ST.
W 2nd ST.
W 3rd ST.
W 4th ST.
W 5th ST.
W 6th ST.
W 7th ST.
W 8th ST.
E 4th ST.
E 5th ST.
E 6th ST.
E 7th ST.
DOWNE RD.
TRAIL CREEK LN
COLORADO AVE.
TOPEKA AVE.
B.N.S.F. RAILROAD
JUSTIN ETJ
JUSTIN CITY LIMIT
JUSTIN
DENTON COUNTY
PUBLIC PARKING IMPROVEMENTS
EXISTING (BNSF) R.O.W.
PROPOSED R.O.W.
EXISTING R.O.W.
STA 495+33.60 FM 156=
STA 4+98.67 C/L HARDEMAN BLVD.
STA 496+55.00
BEGIN RETAINING WALL
STA 497+72.00
END RETAINING WALL
STA 501+33.40 FM 156=
STA 4+77.83 C/L S SNYDER AVE.
STA 504+83.42 FM 156=
STA 4+76.99 C/L S SEALY AVE.
STA 509+31.59 FM 156=
STA 4+86.21 C/L BARRETT DR.
STA 514+92.16 FM 156=
STA 4+55.00 C/L 1ST ST/FM 407
STA 514+94.14 FM 156=
STA 0+00.00 C/L DOWNE RD.
SIGNALIZED INTERSECTION
STA 518+29.66 FM 156=
STA 2+00.00 C/L 2ND ST.
STA 521+84.87 FM 156=
STA 2+00.00 C/L 3RD ST.
STA 525+19.01 FM 156=
STA 2+50.00 C/L W 4TH ST.
STA 525+21.34 FM 156=
STA 0+00.00 C/L E 4TH ST.
STA 528+65.93 FM 156=
STA 0+00.00 C/L E 5TH ST.
STA 528+56.90 FM 156=
STA 3+00.00 C/L W 5TH ST.
SIGNALIZED INTERSECTION
STA 532+12.85 FM 156=
STA 5+00.00 C/L 6TH ST.
STA 535+55.17 FM 156=
STA 5+00.00 C/L 7TH ST.
STA 538+81.23
STA 5+00.00 C
PT STA 499+03.11
PC STA 505+18.21
PT STA 513+51.54
PC STA 526+28.63
PRC STA 529+85.82
PT STA 533+43.01
PC STA 536+73.07
PRC STA 540+86.02
140 LF TRANSITION LEFT CURB-PAVEMENT EDGE FROM 62'LT TO 57'LT
140 LF TRANSITION RIGHT CURB-PAVEMENT EDGE FROM 40'RT TO 45'RT
140 LF TRANSITION RIGHT CURB-PAVEMENT EDGE FROM 45'RT TO 40'RT
370' STORAGE
375' STORAGE
450' STORAGE
100' STORAGE
300' STORAGE
115' STORAGE, 215' DECEL *, 864' STORAGE
100' STORAGE, 160' DECEL *
R=30' (TYP)
R=50'
R=180'-60'-180'
500+00
505+00
510+00
515+00
520+00
525+00
530+00
535+00
540+00
67 JUSTIN, CITY OF
69 BARTHOLD ESTATES, LTD
70 TALCORP 3E LP
71 TALCORP 3E LP
72 DOWNE, LAWRENCE R
73 JUSTIN STATE BANK
74 JUSTIN STATE BANK
75
76 WALLACE, FRANK M ETAL
77
78 BNSF RAILWAY CO
79 WALLACES BARGAIN BLOCK I
80 WALLACE, FRANK E
81
82
83
84
85
86
87
88
89
90
91
92
93
94 WALLACES BARGAIN BLOCK I
95
96
97
98
99
100
101 THORN ROSE LP
102
103
104
105 TALCORP INC
106
107 JUSTIN SEED COMPANY
108 BURNS, STEPHEN
109 BURNS, STEPHEN
110 TALCORP II LP
111 HOLLOWAY, JACKIE
120
121
122 BERKSHIRE HATHAWAY INC.
62 BNSF RAILWAY CO.
WALLACE, FRANK E, JR
NOBLE BUSINESS INC
407 FARM ROAD

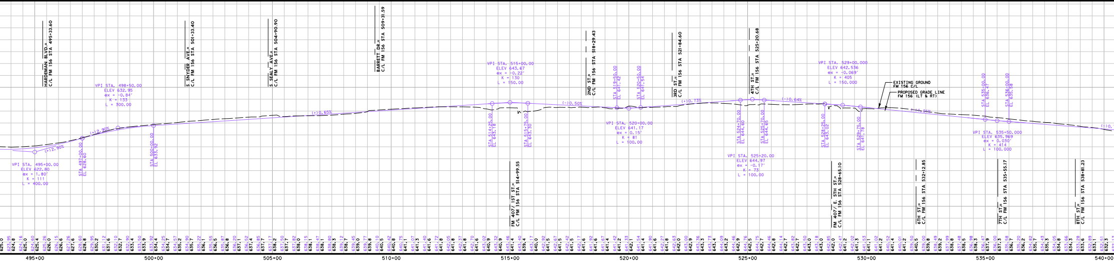
NOTE: FINAL LOCATION OF LEFT-TURN BAYS, MEDIAN CUT-OUTS, AND DRIVEWAYS TO BE DETERMINED DURING FINAL PS&E PREPARATION.

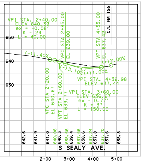
FM 156 CURVE DATA					
CURVE NO.	Δ	D	R	T	L
7	19° 34′ 00.0000″ (LT)	0° 45′ 17.5864″	7,590.0000	1,308.7470	2,592.0059
8	3° 47′ 07.3939″ (LT)	1° 00′ 00.0000″	5,729.5780	189.3382	378.5387
9	3° 47′ 07.3939″ (RT)	1° 00′ 00.0000″	5,729.5780	189.3382	378.5387
10	2° 37′ 20.4423″ (RT)	1° 00′ 00.0000″	5,729.5780	131.1401	262.2345
11	2° 37′ 20.4423″ (LT)	1° 00′ 00.0000″	5,729.5780	131.1401	262.2345
12	8° 20′ 00.0000″ (RT)	1° 00′ 00.0000″	5,729.5780	417.4027	832.5990
13	16° 57′ 59.1927″ (LT)	4° 45′ 00.0005″	1,206.2269	179.9107	357.1883
14	16° 57′ 59.1927″ (RT)	4° 45′ 00.0005″	1,206.2269	179.9107	357.1883
15	19° 36′ 55.1053″ (RT)	4° 45′ 00.0005″	1,206.2269	208.5175	412.9538
16	19° 36′ 55.1053″ (LT)	4° 45′ 00.0005″	1,206.2269	208.5175	412.9538
17	0° 45′ 20.4612″ (LT)	1° 00′ 00.0000″	5,729.5780	37.7847	75.5684
18	0° 45′ 20.4612″ (RT)	1° 00′ 00.0000″	5,729.5780	37.7847	75.5684
19	0° 14′ 04.8550″ (LT)	1° 00′ 00.0000″	5,729.5780	11.7341	23.4682


STORAGE LENGTH (SEE PLAN)
40MPH - 275′ DECELERATION
45MPH - 345′ DECELERATION
40MPH 50′ TAPER
SINGLE 100′ TAPER
DUAL 150′ TAPER
8′
R=4′
R=100′
R=200′
R=90′
R=4′

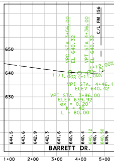
TYPICAL TURN LANE DETAIL

* DECELERATION LENGTH MODIFIED BY TxDOT R.D.M. TABLE 3-3A.

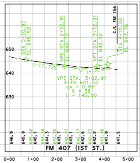

HARDEMAN BLVD.= C/L FM 156 STA 495+33.60
S SNYDER AVE.= C/L FM 156 STA 501+33.40
S SEALY AVE.= C/L FM 156 STA 504+90.90
BARRETT DR.= C/L FM 156 STA 509+31.59
FM 407/ 1ST ST= C/L FM 156 STA 514+99.55
2ND ST.= C/L FM 156 STA 518+29.43
3RD ST.= C/L FM 156 STA 521+84.60
4TH ST.= C/L FM 156 STA 525+20.68
FM 407/ E. 5TH ST.= C/L FM 156 STA 528+65.10
6TH ST.= C/L FM 156 STA 532+12.85
7TH ST.= C/L FM 156 STA 535+55.17
8TH ST.= C/L FM 156 STA 538+81.23
VPI STA. 495+00.00 ELEV 622.80 ex = 1.80′ K = 111 L = 400.00
VPI STA. 498+50.00 ELEV 632.95 ex = -0.84′ K = 133 L = 300.00
VPI STA. 515+00.00 ELEV 643.67 ex = -0.22′ K = 130 L = 150.00
VPI STA. 520+00.00 ELEV 641.17 ex = 0.15′ K = 81 L = 100.00
VPI STA. 525+20.00 ELEV 644.97 ex = -0.17′ K = 73 L = 100.00
VPI STA. 529+00.000 ELEV 642.536 ex = -0.069′ K = 405 L = 150.000
VPI STA. 535+50.000 ELEV 635.969 ex = 0.030′ K = 414 L = 100.000
(-)2.90%
(+)2.90%
(+)0.65%
(-)0.50%
(+)0.73%
(-)0.64%
(-)1.03%
EXISTING GROUND FM 156 C/L
PROPOSED GRADE LINE FM 156 (LT & RT)
495+00
500+00
505+00
510+00
515+00
520+00
525+00
530+00
535+00
540+00


VPI STA. 2+40.00 ELEV 640.39 ex = -0.08′ K = 24 L = 40.00
VPI STA. 3+60.00 ELEV 636.67 ex = 0.77′ K = 37 L = 150.00
VPI STA. 4+36.98 ELEV 637.48
C/L FM 156
650
640
630
2+00
3+00
4+00
5+00

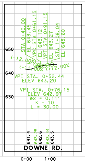
S SEALY AVE.


VPI STA. 3+96.00 ELEV 639.92 ex = 0.20′ K = 40 L = 80.00
VPI STA. 4+46.18 ELEV 640.42
C/L FM 156
650
640
630
1+00
2+00
3+00
4+00
5+00

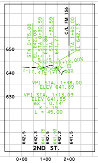
BARRETT DR.


VPI STA. 3+02.91 ELEV 641.52 ex = 0.65′ K = 38 L = 140.00
C/L FM 156
650
640
630
0+00
1+00
2+00
3+00
4+00
5+00

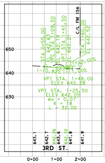
FM 407 (1ST ST.)


VPI STA. 0+52.44 ELEV 643.20
VPI STA. 0+76.15 ELEV 642.97 ex = 0.11′ K = 10 L = 30.00
C/L FM 156
650
640
630
0+00
1+00

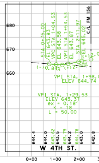
DOWNE RD.


VPI STA. 1+48.00 ELEV 641.89
VPI STA. 1+13.09 ELEV 641.55 ex = 0.14′ K = 19 L = 45.00
C/L FM 156
650
640
630
0+00
1+00
2+00

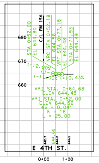
2ND ST.


VPI STA. 1+48.00 ELEV 642.28
VPI STA. 1+25.50 ELEV 642.05 ex = 0.07′ K = 18 L = 32.00
C/L FM 156
650
640
630
0+00
1+00
2+00

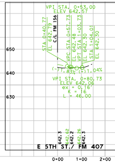
3RD ST.


VPI STA. 1+98.00 ELEV 644.74
VPI STA. 1+29.53 ELEV 643.37 ex = 0.18′ K = 18 L = 50.00
C/L FM 156
680
670
660
0+00
1+00
2+00
3+00

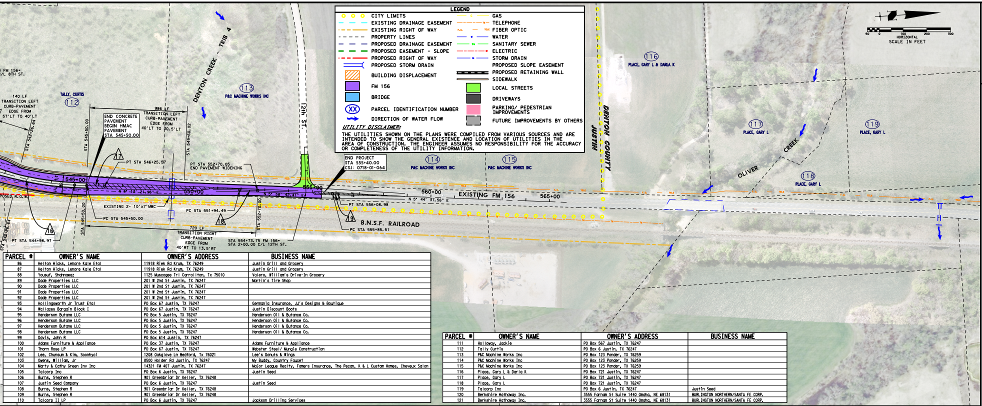
W 4TH ST.


VPI STA. 0+64.68 ELEV 644.43
VPI STA. 0+52.00 ELEV 644.56 ex = 0.04′ K = 18 L = 25.00
C/L FM 156
680
670
660
0+00
1+00

E 4TH ST.


VPI STA. 0+53.00 ELEV 642.57
VPI STA. 0+80.73 ELEV 642.08 ex = 0.16′ K = 16 L = 46.00
C/L FM 156
650
640
630
0+00
1+00
2+00

E 5TH ST./ FM 407


FM 156=
C/L 8TH ST.
140 LF
TRANSITION LEFT
CURB-PAVEMENT
EDGE FROM
57'LT TO 40'LT
TALLY, CURTIS
112
END CONCRETE
PAVEMENT
BEGIN HMAC
PAVEMENT
STA 545+50.00
986 LF
TRANSITION LEFT
CURB-PAVEMENT
EDGE FROM
40'LT TO 30.5'LT
DENTON CREEK - TRIB 4
113
P&C MACHINE WORKS INC
12th ST.
STA 542+26.64
STA 545+50.00
STA 549+60.02
PT STA 546+25.57
PT STA 552+70.05
END PAVEMENT WIDENING
17
545+00
550+00
555+00
N 6° 13' 21.96" E
N 5° 58' 42.41" E
EXISTING 2- 10'x7'MBC
PC STA 551+94.49
PC STA 545+50.00
PT STA 544+98.97
16
18
19
STA 552+70.00
720 LF
TRANSITION RIGHT
CURB-PAVEMENT
EDGE FROM
40'RT TO 13.5'RT
STA 554+73.75 FM 156=
STA 2+00.00 C/L 12TH ST.
PT STA 556+08.98
PC STA 555+85.51
B.N.S.F. RAILROAD
END PROJECT
STA 555+40.00
CSJ: 0718-01-064
114
P&C MACHINE WORKS INC
115
P&C MACHINE WORKS INC
560+00
EXISTING FM 156
565+00
N 5° 44' 37.56" E
JUSTIN
DENTON COUNTY
116
PLACE, GARY L & DARLA K
117
PLACE, GARY L
118
PLACE, GARY L
119
PLACE, GARY L
OLIVER
CREEK
PROPOSED R.O.W.
50 0 100 200 300
HORIZONTAL
SCALE IN FEET

LEGEND

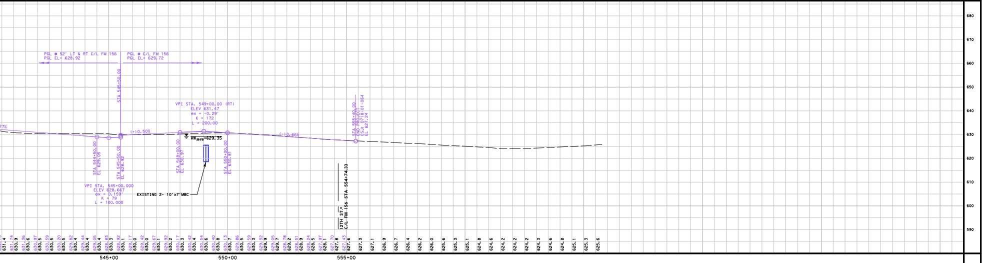
○ ○ ○	CITY LIMITS	— G —	GAS
— — —	EXISTING DRAINAGE EASEMENT	— — TE —	TELEPHONE
— — —	EXISTING RIGHT OF WAY	F.O. — TELE	FIBER OPTIC
- - - - -	PROPERTY LINES	— W —	WATER
— — —	PROPOSED DRAINAGE EASEMENT	— SS —	SANITARY SEWER
— — —	PROPOSED EASEMENT - SLOPE	— — EL	ELECTRIC
— — —	PROPOSED RIGHT OF WAY	— SD —	STORM DRAIN
═══	PROPOSED STORM DRAIN		PROPOSED SLOPE EASEMENT
▨	BUILDING DISPLACEMENT	▬ ▬ ▬	PROPOSED RETAINING WALL
		═══	SIDEWALK
🟪	FM 156	🟩	LOCAL STREETS
🟦	BRIDGE	⬛	DRIVEWAYS
(XX)	PARCEL IDENTIFICATION NUMBER	🟥	PARKING/ PEDESTRIAN IMPROVEMENTS
→	DIRECTION OF WATER FLOW	▒	FUTURE IMPROVEMENTS BY OTHERS

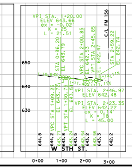
UTILITY DISCLAIMER:

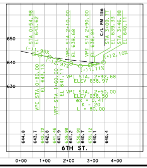
THE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION.

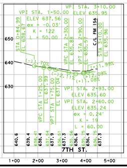
PARCEL #	OWNER'S NAME	OWNER'S ADDRESS	BUSINESS NAME
86	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	Justin Grill and Grocery
87	Helton Hicks, Lenore Kale Etal	11918 Riek Rd Krum, TX 76249	Justin Grill and Grocery
88	Yousuf, Shahnawaz	1125 Muscogee Trl Carrollton, Tx 75010	Valero, William's Drive-In Grocery
89	Dade Properties LLC	201 W 2nd St Justin, TX 76247	Martin's Tire Shop
90	Dade Properties LLC	201 W 2nd St Justin, TX 76247	
91	Dade Properties LLC	201 W 2nd St Justin, TX 76247	
92	Dade Properties LLC	201 W 2nd St Justin, TX 76247	
93	Hollingsworth Jr Trust Etal	PO Box 67 Justin, TX 76247	Germania Insurance, JJ's Designs & Boutique
94	Wallaces Bargain Block I	PO Box 67 Justin, TX 76247	Justin Discount Boots
95	Henderson Butane LLC	PO Box 5 Justin, TX 76247	Henderson Oil & Butance Co.
96	Henderson Butane LLC	PO Box 5 Justin, TX 76247	Henderson Oil & Butance Co.
97	Henderson Butane LLC	PO Box 5 Justin, TX 76247	Henderson Oil & Butance Co.
98	Henderson Butane LLC	PO Box 5 Justin, TX 76247	Henderson Oil & Butance Co.
99	Davis, John R	PO Box 614 Justin, TX 76247	
100	Adams Furniture & Appliance	PO Box 37 Justin, TX 76247	Adams Furniture & Appliance
101	Thorn Rose LP	PO Box 67 Justin, TX 76247	Webster Steel/ Mungle Construction
102	Lee, Chunsum & Kim, Soonhyoi	1208 Oakglove Ln Bedford, Tx 76021	Lee's Donuts & Wings
103	Owens, William, Jr	8500 Holder Rd Justin, TX 76247	My Buddy, Country Faucet
104	Marty & Cathy Green Inv Inc	14321 FM 407 Justin, TX 76247	Major League Realty, Famers Insurance, The Pecan, K & L Custom Homes, Cheveux Salon
105	Talcorp Inc	PO Box 6 Justin, TX 76247	Justin Seed
106	Burns, Stephen R	901 Greenbriar Dr Keller, TX 76248	
107	Justin Seed Company	PO Box 6 Justin, TX 76247	Justin Seed
108	Burns, Stephen R	901 Greenbriar Dr Keller, TX 76248	
109	Burns, Stephen R	901 Greenbriar Dr Keller, TX 76248	
110	Talcorp II LP	PO Box 6 Justin, TX 76247	Jackson Drilling Services

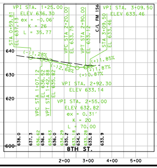
PARCEL #	OWNER'S NAME	OWNER'S ADDRESS	BUSINESS NAME
111	Holloway, Jackie	PO Box 567 Justin, TX 76247	
112	Tally Curtis	PO Box 6 Justin, TX 76247	
113	P&C Machine Works Inc	PO Box 123 Ponder, TX 76259	
114	P&C Machine Works Inc	PO Box 123 Ponder, TX 76259	
115	P&C Machine Works Inc	PO Box 123 Ponder, TX 76259	
116	Place, Gary L & Darla K	PO Box 721 Justin, TX 76247	
117	Place, Gary L	PO Box 721 Justin, TX 76247	
118	Place, Gary L	PO Box 721 Justin, TX 76247	
119	Talcorp Inc	PO Box 6 Justin, TX 76247	Justin Seed
120	Berkshire Hathaway Inc.	3555 Farnam St Suite 1440 Omaha, NE 68131	BURLINGTON NORTHERN/SANTA FE CORP.
121	Berkshire Hathaway Inc.	3555 Farnam St Suite 1440 Omaha, NE 68131	BURLINGTON NORTHERN/SANTA FE CORP.

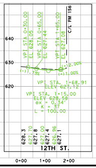

PGL @ 52' LT & RT C/L FM 156
PGL EL= 628.92
PGL @ C/L FM 156
PGL EL= 629.72
STA 545+50.00
VPI STA. 549+00.00 (RT)
ELEV 631.47
ex = -0.29'
K = 172
L = 200.00
(+)0.50%
(-)0.66%
HW = 629.35
STA 544+50.00 EL 629.05
STA 545+50.00 EL 628.92
STA 548+00.00 EL 630.97
STA 550+00.00 EL 630.81
VPI STA. 545+00.000
ELEV 628.667
ex = 0.159'
K = 79
L = 100.000
EXISTING 2- 10'x7'MBC
STA 555+40.00
END PROJECT
CSJ: 0718-01-064
EL 627.24
12TH ST.=
C/L FM 156 STA 554+74.33
545+00
550+00
555+00
590
600
610
620
630
640
650
660
670
680


VPI STA. 1+20.00
ELEV 643.66
ex = -0.02
K = 75
L = 21.51
VPI STA. 2+46.97
ELEV 642.48
VPI STA. 2+23.35
ELEV 642.22
ex = 0.14'
K = 18
L = 45.00
C/L FM 156
W 5TH ST.
650
640
630
0+00
1+00
2+00
3+00


VPI STA. 2+92.68
ELEV 638.97
VPI STA. 2+50.00
ELEV 638.50
ex = 0.41'
K = 20
L = 80.00
C/L FM 156
(+)2.10%
6TH ST.
650
640
630
0+00
1+00
2+00
3+00
4+00


VPI STA. 1+50.00
ELEV 637.56
ex = -0.03'
K = 122
L = 50.00
VPI STA. 3+10.00
ELEV 635.95
VPI STA. 2+93.00
ELEV 635.60
VPI STA. 2+60.00
ELEV 635.24
ex = 0.24'
K = 19
L = 60.00
C/L FM 156
7TH ST.
650
640
630
1+00
2+00
3+00
4+00
5+00

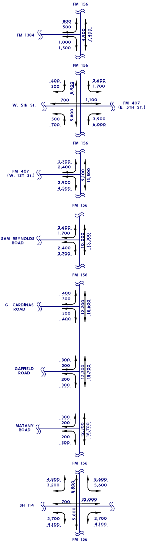

VPI STA. 1+25.00
ELEV 636.30
ex = -0.06'
K = 26
L = 35.77
VPI STA. 3+09.50
ELEV 633.46
VPI STA. 2+92.30
ELEV 633.14
VPI STA. 2+55.00
ELEV 632.82
ex = 0.31'
K = 20
L = 70.00
C/L FM 156
8TH ST.
640
630
620
600
2+00
3+00
4+00
5+00


VPI STA. 1+68.91
ELEV 627.12
VPI STA. 1+15.00
ELEV 628.58
ex = 0.34'
K = 37
L = 100.00
C/L FM 156
(+)2.00%
12TH ST.
640
630
620
0+00
1+00
2+00

TRAFFIC DATA

JUNE 22, 2011

INFORMATION PROVIDED BY
TRANSPORTATION PLANNING
AND PROGRAMMING DIVISION

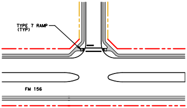

FM 156
FM 1384
800
500
1,000
1,500
4,900
7,400
FM 156
W. 5th St.
FM 407
(E. 5TH ST.)
400
300
8,900
2,600
1,700
700
1,100
500
700
5,800
3,900
6,000
FM 156
FM 407
(W. 1ST St.)
3,700
2,400
2,900
4,500
9,100
13,800
FM 156
SAM REYNOLDS ROAD
2,600
1,700
2,400
3,700
10,000
15,300
FM 156
G. CARDINAS ROAD
400
300
300
400
12,200
18,600
GAFFIELD ROAD
300
200
200
300
12,300
18,700
MATANY ROAD
300
200
200
300
12,300
18,700
FM 156
SH 114
4,800
3,200
8,500
8,600
5,600
700
32,000
2,700
4,100
5,600
2,700
4,100
FM 156

LEGEND
1,000 - 2015 ADT 1,000 - 2035 ADT

STRAIGHT-LINE SCHEMATICS

2015 AND 2035

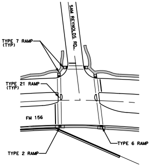
ANTICIPATED
AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS
AT THE SPECIFIED INTERSECTIONS ALONG
FM 156 FROM SH 114 TO FM 1384.


TYPE 7 RAMP (TYP)
FM 156

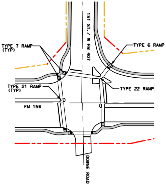
TYPICAL TEE INTERSECTION RAMP CONFIGURATION
(TO BE USED AT THE FOLLOWING LOCATIONS)

DOC MITCHELL RD.
MATANY RD.
GAFFIELD RD.
G CARDINAS RD.
CARTHERINE BRANCH CIR.
INDUSTRIAL RD.
HARMONSON RD.
JOHN WILEY RD.
BISHOP PARK
HARDEMAN BLVD.

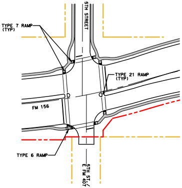
S SNYDER AVE.
S SEALY AVE.
BARRETT DR.
2nd ST.
3rd St.
4th ST.
6th ST.
7th ST.
8th ST.


SAM REYNOLDS RD.
TYPE 7 RAMP (TYP)
TYPE 21 RAMP (TYP)
FM 156
TYPE 6 RAMP
TYPE 2 RAMP

SAM REYNOLDS RD. RAMP CONFIGURATION


1ST ST. / W FM 407
TYPE 7 RAMP (TYP)
TYPE 6 RAMP
TYPE 21 RAMP (TYP)
TYPE 22 RAMP
FM 156
DOWNE ROAD

1st ST./ W FM 407 RAMP CONFIGURATION


5TH STREET
TYPE 7 RAMP (TYP)
TYPE 21 RAMP (TYP)
FM 156
TYPE 6 RAMP
5TH ST./ E FM 407

5th ST./ E FM 407 RAMP CONFIGURATION

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TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT

WILLIAM HALE, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC
URBAN MINOR ARTERIAL

FM 156
DENTON COUNTY

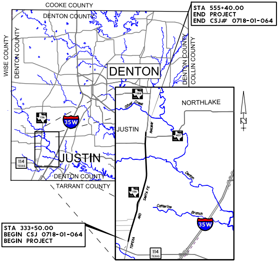
WIDEN 2-LANE RURAL TO 4-LANE DIVIDED URBAN CROSS SECTION
FROM: SH 114
TO: NORTH OF JUSTIN CITY LIMIT (NORTH OF FM 407)
PROJECT LENGTH: 4.203 MILES (22,190.00 FT)

CSJ #: 0718-01-064

TABLE OF CONTENTS: 2 ROLLS

ROADWAY SECTION	DESIGN SPEED	FUNCTION CLASS
FM 156: 333+50 - 455+00	45 MPH, L.S.	URBAN MINOR ARTERIAL
FM 156: 455+00 - 555+40.00	40 MPH, L.S.	URBAN MINOR ARTERIAL
DOC MITCHELL RD	30 MPH	URBAN COLLECTOR
MATANY RD	30 MPH	RURAL LOCAL
GAFFIELD RD	30 MPH	RURAL LOCAL
G CARDINAS RD	30 MPH	RURAL LOCAL
SAM REYNOLDS RD	30 MPH	RURAL LOCAL
CATHERINE BRANCH CIR	30 MPH	LOCAL STREET
INDUSTRIAL RD	30 MPH	RURAL LOCAL
HARMONSON RD	30 MPH	LOCAL STREET
JOHN WILEY RD	30 MPH	PRIMARY ARTERIAL
BISHOP PARK	30 MPH	LOCAL STREET
HARDEMAN BLVD	30 MPH	COMMERCIAL COLLECTOR
S SNYDER AVE	30 MPH	LOCAL STREET
S SEALY AVE	30 MPH	LOCAL STREET
BARRETT DR	30 MPH	LOCAL STREET
W FM 407(1ST ST)	30 MPH	MINOR ARTERIAL/COMMERCIAL COLLECTOR
DOWNE RD	15 MPH	LOCAL STREET
2ND ST	20 MPH	LOCAL STREET
3RD ST	20 MPH	LOCAL STREET
4TH ST (E & W)	20 MPH	LOCAL STREET
E FM 407	15 MPH	MINOR ARTERIAL
W 5TH ST	20 MPH	LOCAL STREET
6TH ST	20 MPH	LOCAL STREET
7TH ST	20 MPH	RESIDENTIAL COLLECTOR
8TH ST	20 MPH	LOCAL STREET
12TH ST	30 MPH	COMMERCIAL COLLECTOR

PROJECT LOCATION


COOKE COUNTY
DENTON COUNTY
WISE COUNTY
DENTON COUNTY
DENTON COUNTY
COLLIN COUNTY
DENTON
NORTHLAKE
JUSTIN
JUSTIN
DENTON COUNTY
TARRANT COUNTY
156
407
114
35W
Oliver Creek
RAILWAY
SANTA FE
AND
TOPEKA
Denton
Catherine
Branch

STA 555+40.00
END PROJECT
END CSJ# 0718-01-064

STA 333+50.00
BEGIN CSJ 0718-01-064
BEGIN PROJECT

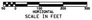
PREPARED BY TEAGUE NALL AND PERKINS, INC.
FIRM REGISTRATION NUMBER 230

DATE APPROVED

DANIEL P. McCULLOUGH
98291

ROLL 2 of 2

AUGUST 2012


50
0
100
200
300
HORIZONTAL
SCALE IN FEET