TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT

MOHAMED K. BUR, P.E. DISTRICT ENGINEER

DESIGN SCHEMATIC

FM 1171

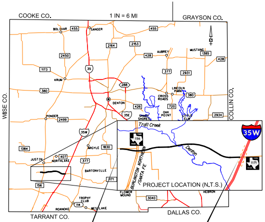
FROM WEST OF FM 156
TO IH 35W

PROJECT LENGTH: 3.386 MILES

CSJ: 1311-01-055

DENTON COUNTY

ROADWAY SECTION	DESIGN SPEED	FUNCTIONAL CLASS
FM 1171 (URBAN)	40 MPH	URBAN PRINCIPAL ARTERIAL
FM 1171 (RURAL)	70 MPH	RURAL PRINCIPAL ARTERIAL
FM 156	45 MPH	RURAL MINOR ARTERIAL
JOHN WILEY RD	30 MPH	LOCAL - URBAN MINOR ARTERIAL
TALLY BLVD	30 MPH	LOCAL - URBAN COLLECTOR STREET
HARMONSON RD	30 MPH	LOCAL - URBAN COLLECTOR STREET
REATTA RD	30 MPH	LOCAL
JUSTIN CEMETERY RD	30 MPH	LOCAL


COOKE CO.
1 IN = 6 MI
GRAYSON CO.
WISE CO.
COLLIN CO.
TARRANT CO.
DALLAS CO.
BOLIVAR
SANGER
AUBREY
KRUM
DENTON
PONDER
CROSS ROADS
LINCOLN PARK
OAK POINT
SHADY SHORES
MUSTANG
JUSTIN
NORTHLAKE
ARGYLE
BARTONVILLE
FLOWER MOUND
TROPHY CLUB
ROANOKE
WESTLAKE
HEBRON
Trail Creek
Denton
BURLINGTON NORTHERN /SANTA FE
35W
156
1171
PROJECT LOCATION (N.T.S.)

BEGIN PROJECT
FM 1171: WEST OF FM 156
STA 14+20.00
CSJ: 1311-01-055

END PROJECT
FM 1171: IH35W
STA 193+00.00
CSJ: 1311-01-055

Texas Department of Transportation

FIRM REGISTRATION NO. F-230
tnp
teague nall & perkins

DATE APPROVED

CHRISTOPHER M. HARTKE
112377
3/1/2022
Christopher Hartke

PRELIMINARY
SUBJECT TO CHANGE

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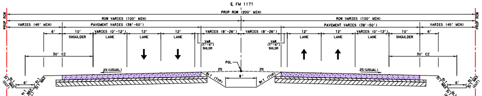
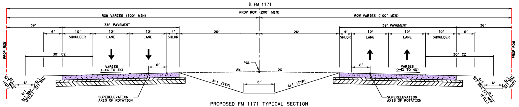
50 0 50 100 200
HORIZONTAL SCALE 1" = 100'
VERTICAL SCALE 1" = 10'
SCALE IN FEET

ROLL 2 of 3

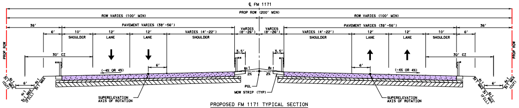
FEBRUARY 2022


℄ FM 1171
PROP ROW (200' MIN)
ROW VARIES (100' MIN)
PAVEMENT VARIES (38'-50')
VARIES (45' MIN)
PROP ROW
10' SHOULDER
VARIES (0'-12') LANE
12' LANE
VARIES (8'-26')
VAR (1'-4') SHLDR
30' CZ
2% (USUAL)
PGL
2%
8'
8:1 (TYP)
6'
4:1 MAX
6:1 MAX (FILL)
3:1 MAX (CUT)

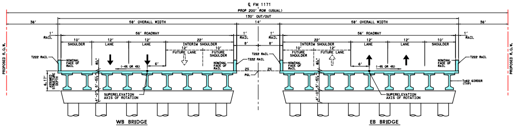
PROPOSED FM 1171 TYPICAL SECTION
STA 61+50.00 TO STA 73+60.00


℄ FM 1171
PROP ROW (200' MIN)
ROW VARIES (100' MIN)
38' PAVEMENT
36'
26'
10' SHOULDER
12' LANE
4' SHLDR
30' CZ
VARIES (-4% TO 4%)
6'
PGL
2%
8:1 (TYP)
8'
SUPERELEVATION AXIS OF ROTATION
PROP ROW

PROPOSED FM 1171 TYPICAL SECTION
STA 73+60.00 TO STA 82+01.25
STA 119+28.75 TO STA 129+00.00

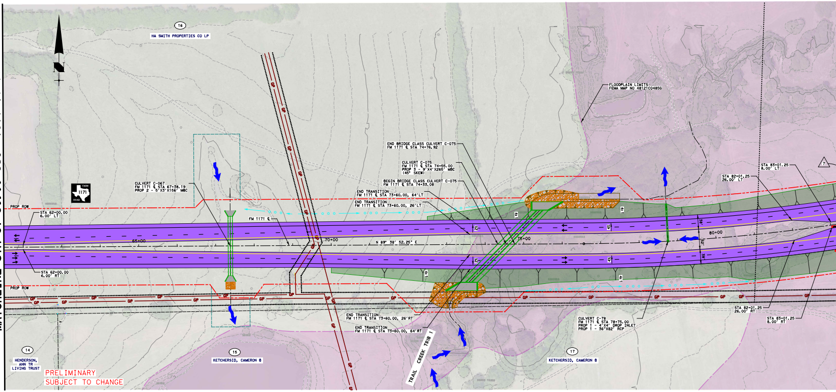

℄ FM 1171
PROP ROW (200' MIN)
ROW VARIES (100' MIN)
PAVEMENT VARIES (38'-56')
36'
10' SHOULDER
12' LANE
VARIES (4'-22') SHOULDER
VARIES (8'-26')
3.5'
30' CZ
(-4% OR 4%)
6'
8:1
2%
PGL
MOW STRIP (TYP)
SUPERELEVATION AXIS OF ROTATION
PROP ROW

PROPOSED FM 1171 TYPICAL SECTION
STA 82+01.25 TO STA 85+95.00
*STA 83+06.00 TO STA 85+75.00
**STA 115+45.00 TO STA 118+14.00
STA 116+25.00 TO STA 119+28.75

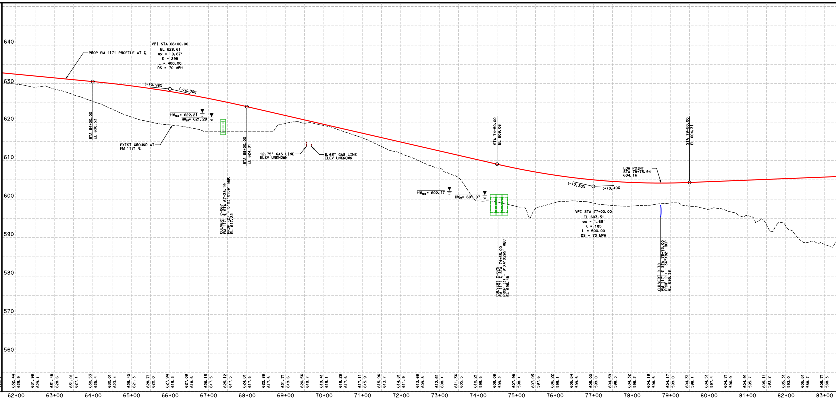

℄ FM 1171
PROP 200' ROW (USUAL)
130' OUT/OUT
58' OVERALL WIDTH
56' ROADWAY
14'
36'
1' RAIL
10' SHOULDER
12' LANE
22' INTERIM SHOULDER
12' FUTURE LANE
10' FUTURE SHOULDER
T222 RAIL
NOMINAL FACE OF RAIL
(-4% OR 4%)
2%
PGL
Tx62 GIRDER (TYP)
ASSUMED STRUCTURE DEPTH
SUPERELEVATION AXIS OF ROTATION
PROPOSED R.O.W.
WB BRIDGE
EB BRIDGE

PROPOSED FM 1171 BRIDGE SECTION
OVER DENTON CREEK
STA 85+95.00 TO STA 115+25.00

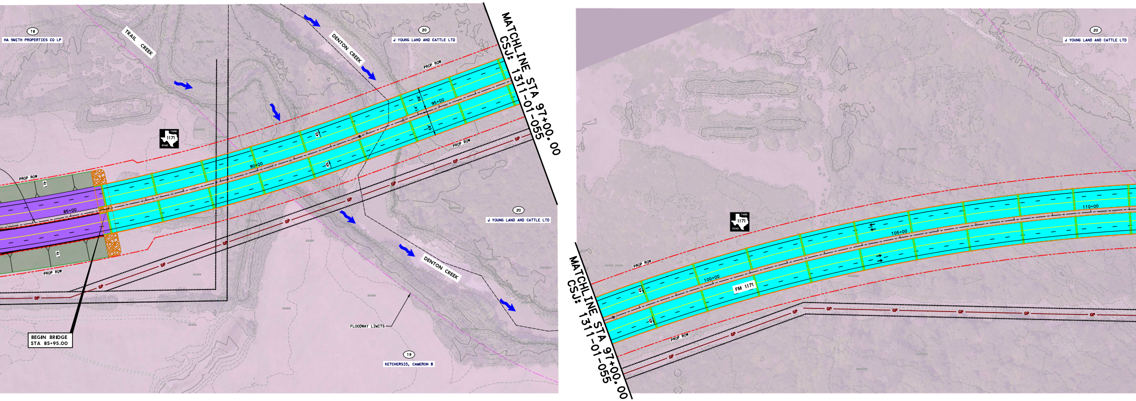
MATCHLINE STA 61+50.00 CSJ: 1311-01-055

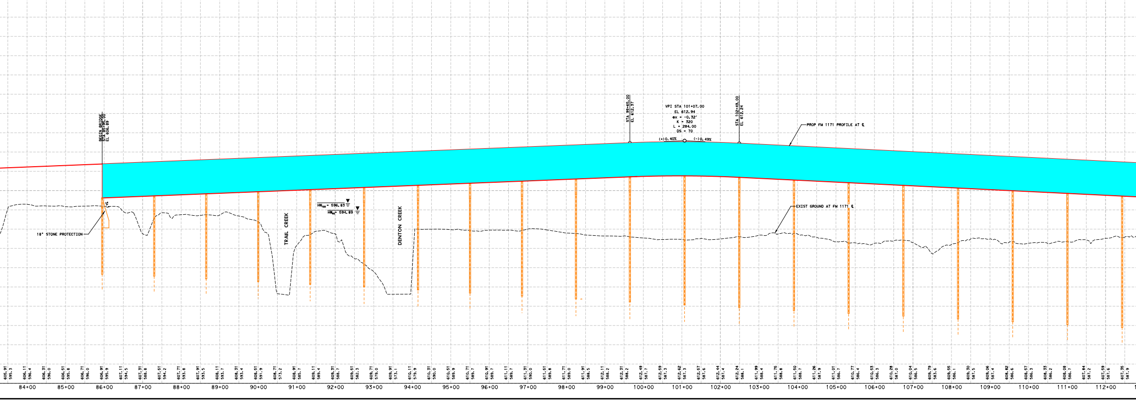

16
HA SMITH PROPERTIES CO LP
FARM 1171 ROAD
PROP ROW
STA 62+00.00
6.00' LT
STA 62+00.00
6.00' RT
PROP ROW
65+00
CULVERT C-067
FM 1171 ℄ STA 67+38.19
PROP 2 - 5'X3'X156' MBC
FM 1171 ℄
GP
70+00
N 89° 38' 52.25" E
END BRIDGE CLASS CULVERT C-075
FM 1171 ℄ STA 74+76.92
CULVERT C-075
FM 1171 ℄ STA 74+55.00
PROP 3 - 9'X4'X265' MBC
(45° SKEW)
BEGIN BRIDGE CLASS CULVERT C-075
FM 1171 ℄ STA 74+33.08
END TRANSITION
FM 1171 ℄ STA 73+60.00, 64'LT
END TRANSITION
FM 1171 ℄ STA 73+60.00, 26'LT
75+00
4:1
FLOODPLAIN LIMITS
FEMA MAP NO 48121C0485G
80+00
38'
52'
38'
STA 82+01.25
26.00' LT
STA 83+01.25
8.00' LT
7
END TRANSITION
FM 1171 ℄ STA 73+60.00, 26'RT
END TRANSITION
FM 1171 ℄ STA 73+60.00, 64'RT
TRAIL CREEK TRIB 1
CULVERT C-78
FM 1171 ℄ STA 78+75.00
PROP 1 - 4'X4' DROP INLET
PROP 1 - 36"X82' RCP
STA 82+01.25
26.00' RT
STA 83+01.25
8.00' RT
14
HENDERSON, ANN TR LIVING TRUST
15
KETCHERSID, CAMERON B
17
KETCHERSID, CAMERON B
PRELIMINARY
SUBJECT TO CHANGE

MATCHLINE STA 61+50.00 CSJ: 1311-01-055



TYPICAL SECTIONS


18
HA SMITH PROPERTIES CO LP
TRAIL CREEK
DENTON CREEK
20
J YOUNG LAND AND CATTLE LTD
PROP ROW
FARM 1171 ROAD
85+00
90+00
95+00
GP
BEGIN BRIDGE
STA 85+95.00
FLOODWAY LIMITS
19
KETCHERSID, CAMERON B
MATCHLINE STA 97+00.00
CSJ: 1311-01-055
100+00
105+00
110+00
FM 1171


BEGIN BRIDGE
STA 85+95.00
EL 606.89
18" STONE PROTECTION
3:1
TRAIL CREEK
HW_{100} = 596.83
HW_{50} = 594.89
DENTON CREEK
STA 99+65.00
EL 612.37
VPI STA 101+07.00
EL 612.94
ex = -0.32'
K = 320
L = 284.00
DS = 70
(+)0.40%
(-)0.49%
STA 102+49.00
EL 612.24
PROP FM 1171 PROFILE AT ℄
EXIST GROUND AT FM 1171 ℄
605.91 595.3
606.11 596.4
606.31 596.0
606.51 595.8
606.71 596.0
606.91 595.9
607.11 594.5
607.31 588.8
607.51 594.2
607.71 593.8
607.91 593.5
608.11 593.7
608.31 593.4
608.51 591.9
608.71 573.2
608.91 585.7
609.11 589.4
609.31 588.7
609.51 582.3
609.71 579.0
609.91 573.1
610.11 579.9
610.31 590.0
610.51 589.9
610.71 589.7
610.91 589.7
611.11 589.7
611.31 590.0
611.51 589.8
611.71 589.0
611.91 588.5
612.11 588.2
612.31 588.2
612.49 587.7
612.59 587.3
612.62 587.3
612.57 587.6
612.44 587.4
612.24 588.1
611.99 588.4
611.76 588.8
611.50 588.7
611.26 587.9
611.01 586.7
610.77 586.4
610.53 586.3
610.28 587.0
610.04 586.5
609.79 583.6
609.55 586.1
609.30 587.5
609.06 587.4
608.82 586.6
608.57 586.3
608.33 586.2
608.08 586.7
607.84 587.2
607.59 587.6
607.35 587.9
84+00
85+00
86+00
87+00
88+00
89+00
90+00
91+00
92+00
93+00
94+00
95+00
96+00
97+00
98+00
99+00
100+00
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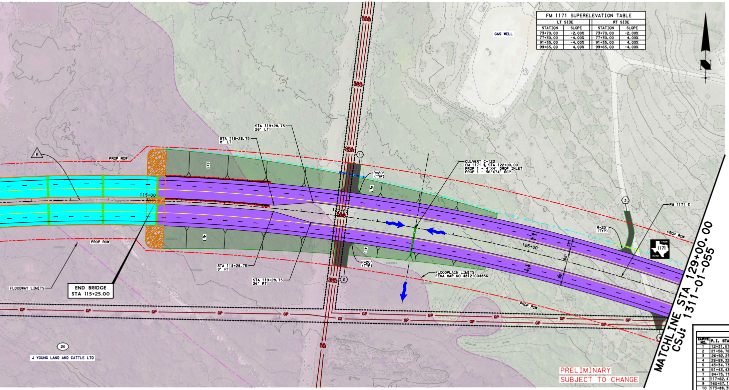
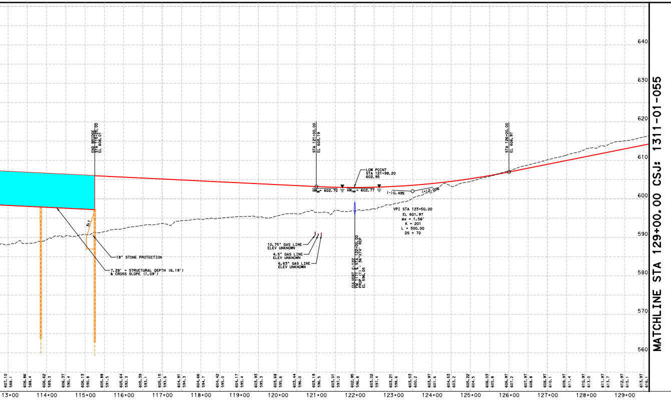
109+00
110+00
111+00
112+00


GAS WELL
STA 119+28.75
26' LT
STA 118+28.75
8' LT
PROP ROW
8
115+00
120+00
125+00
4:1
R=20'
(TYP)
1
2
3
CULVERT C-122
FM 1171 ℄ STA 122+00.00
PROP 1 - 4'X4' DROP INLET
PROP 1 - 36"X74' RCP
FM 1171 ℄
38'
52'
FARM ROAD 1171
STA 118+28.75
8' RT
STA 119+28.75
26' RT
FLOODPLAIN LIMITS
FEMA MAP NO 48121C0485G
FLOODWAY LIMITS
END BRIDGE
STA 115+25.00
GP
20
J YOUNG LAND AND CATTLE LTD
PRELIMINARY
SUBJECT TO CHANGE
MATCHLINE STA 129+00.00
CSJ: 1311-01-055

FM 1171 SUPERELEVATION TABLE			
LT SIDE		RT SIDE	
STATION	SLOPE	STATION	SLOPE
73+70.00	-2.00%	73+70.00	-2.00%
77+30.00	-4.00%	77+30.00	4.00%
91+35.00	-4.00%	91+35.00	4.00%
99+65.00	4.00%	99+65.00	-4.00%



LEGEND			
— — —	EXISTING RIGHT OF WAY	⇨	EXISTING TRAFFIC DIRECTION
- - - -	PROPERTY LINES, ETJ/MUNICIPAL	→	PROPOSED TRAFFIC DIRECTION
— — —	PROPOSED RIGHT OF WAY	(XX)	PARCEL IDENTIFICATION NUMBER
- - - -	DRAINAGE EASEMENT	▨	ROADWAY REMOVAL
▬ ▬ ▬	RETAINING WALL	🟪	PROPOSED ON-SYSTEM ROADWAY
— GP —	GAS	🟦	PROPOSED BRIDGE
•••••••	EXISTING UTILITY EASEMENT	🟩	PROPOSED LOCAL STREETS
— — —	FLOODPLAIN BOUNDARY	⬛	PROPOSED DRIVEWAYS
— — —	FLOODWAY BOUNDARY	🟥	PROPOSED SIDEWALK/SHARED USE PATHS
→ ○ ○	DITCH FLOW LINE	🟧	FM 156 ROADWAY
▬▬▬	MBGF, END SECTION AND RIPRAP	🟩	BRIDGE EMBANKMENT
→	DIRECTION OF WATER FLOW	🟪	FLOODWAY/FLOODPLAIN
═══◁	DRAINAGE STRUCTURES	⬜	PROJECT BY OTHERS
		▨	POTENTIAL DISPLACEMENT

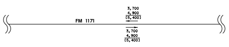
UTILITY DISCLAIMER:
THE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION.

PARCEL #	OWNER'S NAME	BUSINESS NAME
1	Allen, Alicia	
2	Frey, Melissa	
3	HH Holmes Holdings, LLC	
4	Zambrano, Justin	
5	Wade, Donna & George	
6	Justin Assembly of God Church	
7A-7G	B&M Prop J/V	
8	Justin, City of	
9	NHJustin, LLC	
10	NHJustin, LLC	
11	Allsup's Convenience Stores Inc	Allsup's
12	HA Smith Properties Co LP	
13	Henderson, Ann TR Living Trust	
14	Henderson, Ann TR Living Trust	
15	Kethcersid, Cameron B	
16	HA Smith Properties Co LP	
17	Kethcersid, Cameron B	
18	HA Smith Properties Co LP	
19	Kethcersid, Cameron B	
20	J Young Land And Cattle LTD	
21	J Young Land And Cattle LTD	
22	Charis & Associates, LLC	Quail Creek Shooting Range
23	Beall,Concrete Enterprises LTD	Beall Concrete
24	Beall,Concrete Enterprises LTD	Beall Concrete
25	Northlake Corners LLC	
26	Young, Jean	

JOHN WILEY RD/FM 1171 HORIZONTAL ALIGNMENT DATA TABLE											
CURVE NO.	P.I. STA	P.I. STAT - N	P.I. STA - E	PC STA	PT STA	T	L	R	Δ	D	SE
1	12+31.57	7,076,373.93	2,335,764.38	12+02.53	12+60.59	29.04	58.06	1,000.00	03°19'34.94" (RT)	05°43'46.48"	NC
2	21+56.76	7,075,332.86	2,336,678.68	21+27.15	21+86.35	29.61	59.20	1,000.00	03°23'30.35" (LT)	05°43'46.48"	NC
3	26+92.21	7,075,340.78	2,337,214.09	25+77.96	28+05.48	114.25	227.52	1,000.00	13°02'09.63" (RT)	05°43'46.48"	NC
4	28+89.32	7,075,298.96	2,337,407.72	28+05.48	29+72.77	83.84	167.29	1,000.00	09°35'05.92" (LT)	05°43'46.48"	NC
5	43+34.73	7,075,223.92	2,338,838.13	40+08.58	46+55.19	326.15	646.61	2,000.00	18°31'26.26" (LT)	02°51'53.24"	NC
6	51+43.43	7,075,457.32	2,339,621.29	48+70.02	54+13.47	273.41	543.45	2,000.00	15°34'06.88" (RT)	02°51'53.24"	NC
7	84+75.71	7,076,477.82	2,342,956.86	76+56.18	92+78.78	819.52	1622.59	4,680.00	19°51'53.56" (LT)	01°13'27.37"	4.0%
8	117+62.47	7,076,619.34	2,346,056.57	97+26.28	135+67.45	2036.20	3841.17	4,680.00	47°01'34.60" (RT)	01°13'27.37"	4.0%
9	160+57.11	7,074,578.07	2,350,095.97	157+02.17	164+04.75	354.95	702.58	2,000.00	20°07'38.87" (RT)	02°51'53.24"	NC
10	173+88.39	7,073,600.10	2,351,009.96	165+04.75	181+68.87	883.64	1664.12	2,000.00	47°40'24.78" (LT)	02°51'53.24"	NC

TRAFFIC DATA

LEGEND
9,999 - YEAR 2021 ADT
9,999 - YEAR 2041 ADT
[9,999] - YEAR 2051 ADT


FM 1171
3,700
4,900
[5,400]
3,700
4,900
[5,400]

TXDOT TPP APPROVAL GRANTED:
PROVIDED BY OTHON, INC. ON 9/9/2020
TRAFFIC NUMBERS TO BE UPDATED PENDING
LET DATE APPROVAL.

NOTES:

1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATICS ARE BASED ON AERIAL SURVEYS (PERFORMED ON 4/2018 & 9/2021) AND RECORD PLANS.
2. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENTS.
3. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE CENTER OF INSIDE LANE.
4. DIMENSIONS ARE TO THE NOMINAL FACE OF CURB OR FACE OF RAIL UNLESS OTHERWISE NOTED.
5. APPROXIMATE FLOODPLAIN LIMITS ARE BASED ON FEMA FLOOD INSURANCE RATE MAP NUMBERS 48121C0485G AND 48121C0505G.
6. ADA RAMPS AND SIDEWALKS ARE DIAGRAMMATIC ONLY AND WILL BE DESIGNED DURING PS&E. SIDEWALKS ARE SHOWN ON TYPICAL SECTIONS.
7. EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED IN COORDINATION WITH THE LOCAL GOVERNMENT THAT THE DRIVEWAY IS A SAFETY ISSUE AND/OR IS LOCATED WITHIN ACCESS DENIAL LIMITS SHOWN.
8. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
9. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
10. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM DENTON COUNTY APPRAISAL DISTRICT 6-25-2021.
11. DESIGN VEHICLE FOR TURN VARIES IN ACCORDANCE WITH RDM CHAPTER 7, SECTION 7
12. BEARINGS OF LINES SHOWN HEREON REFER TO GRID NORTH OF THE TEXAS COORDINATE SYSTEM OF 1983 (NORTH CENTRAL ZONE; NAD83(2011) EPOCH 2010) AS DERIVED LOCALLY FROM TXDOT5#325 VIRTUAL REFERENCE STATION (VRS) NETWORK VIA REAL TIME KINEMATIC (RTK) METHODS. A SURFACE ADJUSTMENT FACTOR OF 1.000150630 WAS USED TO SCALE GRID DISTANCES TO SURFACE. ALL COORDINATES AND DISTANCES SHOWN ARE SURFACE.
13. THE ELEVATIONS SHOWN ARE NAVD 88 AND WERE DERIVED FROM THE ABOVE RTK OBSERVATIONS. ORTHOMETRIC HEIGHTS WERE CALCULATED BY APPLYING THE GEOID09 MODEL TO THE ELLIPSOID HEIGHTS. NGS SECOND ORDER STATION K945 (ELEV=627.435#32) WAS HELD FIXED VERTICALLY AND NGS SECOND ORDER STATION N945, TXDOT STATIONS R0610035, R061088 AND R0610168 WERE USED AS QUALITY CONTROL CHECKS ON THE VERTICAL ADJUSTMENT.

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT

MOHAMED K. BUR, P.E. DISTRICT ENGINEER

DESIGN SCHEMATIC

FM 1171

FROM WEST OF FM 156
TO IH 35W

PROJECT LENGTH: 3.386 MILES

CSJ: 1311-01-055

DENTON COUNTY

ROADWAY SECTION	DESIGN SPEED	FUNCTIONAL CLASS
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FM 1171 (RURAL)	70 MPH	RURAL PRINCIPAL ARTERIAL
FM 156	45 MPH	RURAL MINOR ARTERIAL
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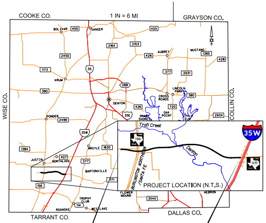
TALLY BLVD	30 MPH	LOCAL - URBAN COLLECTOR STREET
HARMONSON RD	30 MPH	LOCAL - URBAN COLLECTOR STREET
REATTA RD	30 MPH	LOCAL
JUSTIN CEMETERY RD	30 MPH	LOCAL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1 IN = 6 MI
GRAYSON CO.
WISE CO.
COLLIN CO.
TARRANT CO.
DALLAS CO.
BOLIVAR
SANGER
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PONDER
LINCOLN PARK
CROSS ROADS
OAK POINT
SHADY SHORES
ARGYLE
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TROPHY CLUB
ROANOKE
WESTLAKE
HEBRON
Trail Creek
35W
PROJECT LOCATION (N.T.S.)

BEGIN PROJECT
FM 1171: WEST OF FM 156
STA 14+20.00
CSJ: 1311-01-055

END PROJECT
FM 1171: IH35W
STA 193+00.00
CSJ: 1311-01-055

Texas Department of Transportation

FIRM REGISTRATION NO. F-230
tnp
teague nall & perkins

DATE APPROVED

CHRISTOPHER M. HARTKE
112377
3/1/2022
Christopher Hartke

PRELIMINARY
SUBJECT TO CHANGE

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50 0 50 100 200
HORIZONTAL SCALE 1" = 100'
VERTICAL SCALE 1" = 10'
SCALE IN FEET

ROLL 2 of 3

FEBRUARY 2022