COLLIN COUNTY TOLL ROAD AUTHORITY

COLLIN COUNTY OUTER LOOP

PHASE III: FUTURE EAST BOUND FRONTAGE ROAD
FM 2478 TO WEST OF US 75

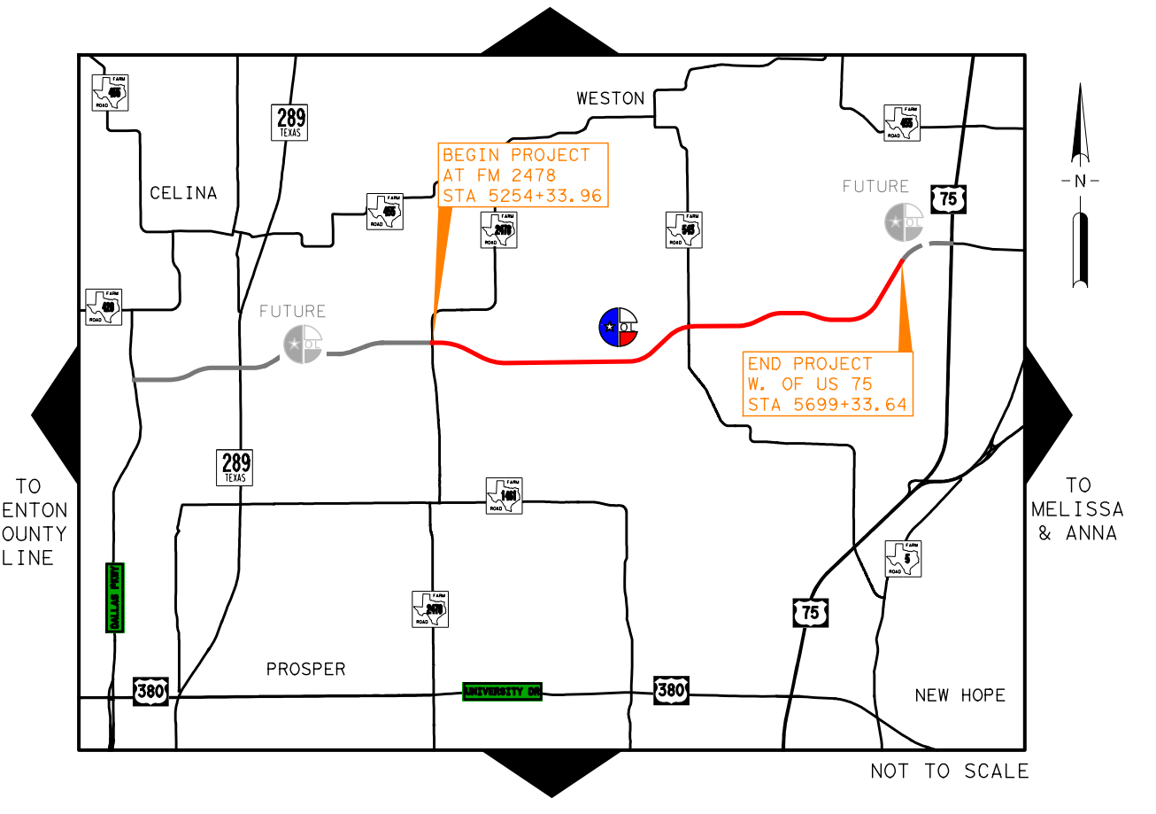
ROADWAY FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY
ROADWAY CONSTRUCTION TYPE:	NEW FACILITY
DESIGN SPEED (MAINLANES):	70 MPH
DESIGN SPEED (OUTER LOOP EBFR):	45 MPH
DESIGN SPEED (RAMPS):	50 MPH
DESIGN SPEED (CR 52,51,53,1117):	40 MPH
NET LENGTH OF PROJECT:	7.97 MILES
SCHEMATIC SCALE:	HORIZ: 1"=100' VERT: 1"=20'
AERIAL PHOTO DATE:	2015

COUNTY: COLLIN
DATE: JULY 2019

DESIGN SCHEMATIC
COLLIN COUNTY OUTER LOOP

ROLL 2 OF 8

LOCATION MAP


TO GRAYSON COUNTY LINE
WESTON
CELINA
289
BEGIN PROJECT AT FM 2478 STA 5254+33.96
FUTURE
75
END PROJECT W. OF US 75 STA 5699+33.64
TO DENTON COUNTY LINE
TO MELISSA & ANNA
PROSPER
380
NEW HOPE
NOT TO SCALE
TO FRISCO & MCKINNEY

LEGEND

- ▨ FUTURE MAINLANES
- 🟨 PROPOSED FRONTAGE ROAD
- ▨ FUTURE IMPROVEMENTS (BY OTHERS)
- 🟩 RAMPS
- 🟦 CURBED GORE
- 🟧 BRIDGE
- 🟦 PROPOSED CROSS STREET (BY OTHERS)
- ▨ 100-YR FEMA FLOODPLAIN
- PARCEL BOUNDARY
- EXISTING RIGHT-OF-WAY
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- FUTURE RIGHT-OF-WAY (BY OTHERS)
- PROPOSED DRAINAGE EASEMENT
- PROPOSED PERMANENT SLOPE EASEMENT
- PROPOSED TEMP CONSTRUCTION EASEMENT
- PROPOSED CENTERLINE OUTER LOOP CORRIDOR
- PROPOSED CENTERLINE ACCES ROAD
- PROPOSED CENTERLINE CROSS STREET/TRANSITION
- PROPOSED RETAINING WALL
- EXISTING CONTOUR (1FOOT)

NOTES:

1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATIC LAYOUTS ARE BASED ON AERIAL SURVEY AND RECORD PLANS ONLY.
2. EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN AND COORDINATION WITH THE CITIES OR COUNTY THAT DRIVEWAY WILL BE A SAFETY ISSUE AND/OR VIOLATES ACCESS MANAGEMENT REQUIREMENTS.
3. FINAL DETERMINATION OF CONTROL OF ACCESS WILL BE DETERMINED BY THE COUNTIES OR MUNICIPALITIES AT A FUTURE DATE.
4. ADJACENT DEVELOPMENTS ARE PRELIMINARY, DESIGNED BY OTHERS AND SUBJECT TO CHANGE.
5. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014 SHALL GOVERN ON THIS PROJECT.
6. BASIS OF BEARINGS: TEXAS STATE PLANE COORDINATE SYSTEM, NAD 83 (1993), NORTH CENTRAL ZONE (4202), ALL DISTANCES AND COORDINATES SHOWN HEREON ARE SCALED FROM 0,0 USING A TXDOT SURFACE ADJUSTMENT FACTOR OF 1.00015271. COORDINATE VALUES DERIVED USING THE WESTERN DATA SYSTEM VRS NETWORK.
7. FOR RETAINING WALL BEGIN/END STATION & OFFSET, REFER TO RETAINING WALL CHART.

EXISTING UTILITY LEGEND

- ELECTRIC LINE - OVERHEAD
- ELECTRIC WIRE - UNDERGROUND
- WATER LINE
- CABLE LINE
- FIBER OPTIC LINE
- SANITARY LINE
- GAS LINE
- STORM DRAIN LINE

SCHEMATIC PREPARED BY:
BGE, INC.
REGISTRATION NUMBER F-1046
FOR INTERIM REVIEW ONLY, NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.
Prepared by or under the Direct Supervision of:

NAME	P.E. NUMBER
MICHAEL H. GARRISON	79285
STONEY D. SKIDMORE	106316

12/11/2019
DATE

HORIZONTAL SCALE
0 50 100 200 300
VERTICAL SCALE
0 10 20 40 60

BGE, Inc.
2595 Dallas Parkway, Suite 101, Frisco, TX 75034
Tel: 972-464-4800 • www.bgeinc.com
TBPE Registration No. F-1046

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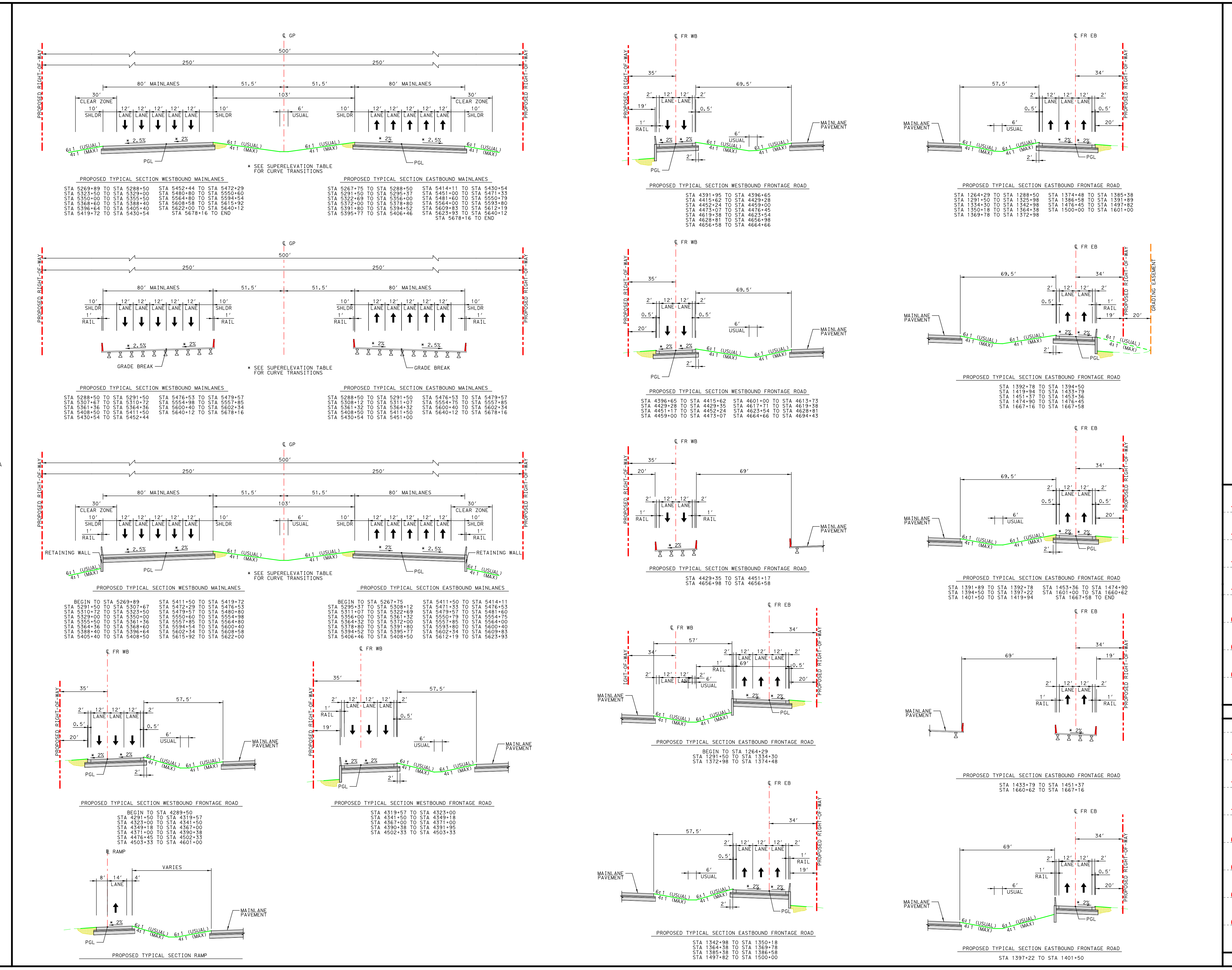

℄ GP
500'
250'
80' MAINLANES
51.5'
103'
30' CLEAR ZONE
10' SHLDR
12' LANE
6' USUAL
1' RAIL
2.5%
2%
6:1 (USUAL)
4:1 (MAX)
PGL
GRADE BREAK
RETAINING WALL
* SEE SUPERELEVATION TABLE FOR CURVE TRANSITIONS
PROPOSED RIGHT-OF-WAY
℄ FR WB
℄ FR EB
℄ RAMP
MAINLANE PAVEMENT
GRADING EASEMENT
VARIES

PROPOSED TYPICAL SECTION WESTBOUND MAINLANES

STA 5269+89 TO STA 5288+50
STA 5323+50 TO STA 5329+00
STA 5350+00 TO STA 5355+50
STA 5368+60 TO STA 5388+40
STA 5396+64 TO STA 5405+40
STA 5419+72 TO STA 5430+54
STA 5452+44 TO STA 5472+29
STA 5480+80 TO STA 5550+60
STA 5564+80 TO STA 5594+54
STA 5609+58 TO STA 5615+92
STA 5622+00 TO STA 5640+12
STA 5678+16 TO END

PROPOSED TYPICAL SECTION EASTBOUND MAINLANES

STA 5267+75 TO STA 5288+50
STA 5291+50 TO STA 5295+37
STA 5322+69 TO STA 5356+00
STA 5372+00 TO STA 5378+80
STA 5391+80 TO STA 5394+52
STA 5395+77 TO STA 5406+46
STA 5414+11 TO STA 5430+54
STA 5451+00 TO STA 5471+33
STA 5481+60 TO STA 5550+79
STA 5564+00 TO STA 5593+80
STA 5609+83 TO STA 5612+19
STA 5623+93 TO STA 5640+12
STA 5678+16 TO END

PROPOSED TYPICAL SECTION WESTBOUND FRONTAGE ROAD

STA 4391+95 TO STA 4396+65
STA 4415+62 TO STA 4429+28
STA 4452+24 TO STA 4459+00
STA 4473+07 TO STA 4476+45
STA 4619+38 TO STA 4623+54
STA 4628+81 TO STA 4656+98
STA 4656+58 TO STA 4664+66

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1264+29 TO STA 1288+50
STA 1291+50 TO STA 1325+98
STA 1334+30 TO STA 1342+98
STA 1350+18 TO STA 1364+38
STA 1369+78 TO STA 1372+98
STA 1374+48 TO STA 1385+38
STA 1386+58 TO STA 1391+89
STA 1476+45 TO STA 1497+82
STA 1500+00 TO STA 1601+00

PROPOSED TYPICAL SECTION WESTBOUND MAINLANES

STA 5288+50 TO STA 5291+50
STA 5307+67 TO STA 5310+72
STA 5361+36 TO STA 5364+36
STA 5408+50 TO STA 5411+50
STA 5430+54 TO STA 5452+44
STA 5476+53 TO STA 5479+57
STA 5554+98 TO STA 5557+85
STA 5600+40 TO STA 5602+34
STA 5640+12 TO STA 5678+16

PROPOSED TYPICAL SECTION EASTBOUND MAINLANES

STA 5288+50 TO STA 5291+50
STA 5308+12 TO STA 5311+07
STA 5361+32 TO STA 5364+32
STA 5408+50 TO STA 5411+50
STA 5430+54 TO STA 5451+00
STA 5476+53 TO STA 5479+57
STA 5554+75 TO STA 5557+85
STA 5600+40 TO STA 5602+34
STA 5640+12 TO STA 5678+16

PROPOSED TYPICAL SECTION WESTBOUND FRONTAGE ROAD

STA 4396+65 TO STA 4415+62
STA 4429+28 TO STA 4429+35
STA 4451+17 TO STA 4452+24
STA 4459+00 TO STA 4473+07
STA 4601+00 TO STA 4613+73
STA 4617+71 TO STA 4619+38
STA 4623+54 TO STA 4628+81
STA 4664+66 TO STA 4694+43

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1392+78 TO STA 1394+50
STA 1419+94 TO STA 1433+79
STA 1451+37 TO STA 1453+36
STA 1474+90 TO STA 1476+45
STA 1667+16 TO STA 1667+58

PROPOSED TYPICAL SECTION WESTBOUND MAINLANES

BEGIN TO STA 5269+89
STA 5291+50 TO STA 5307+67
STA 5310+72 TO STA 5323+50
STA 5329+00 TO STA 5350+00
STA 5355+50 TO STA 5361+36
STA 5364+36 TO STA 5368+60
STA 5388+40 TO STA 5396+64
STA 5405+40 TO STA 5408+50
STA 5411+50 TO STA 5419+72
STA 5472+29 TO STA 5476+53
STA 5479+57 TO STA 5480+80
STA 5550+60 TO STA 5554+98
STA 5557+85 TO STA 5564+80
STA 5594+54 TO STA 5600+40
STA 5602+34 TO STA 5609+58
STA 5615+92 TO STA 5622+00

PROPOSED TYPICAL SECTION EASTBOUND MAINLANES

BEGIN TO STA 5267+75
STA 5295+37 TO STA 5308+12
STA 5311+07 TO STA 5322+69
STA 5356+00 TO STA 5361+32
STA 5364+32 TO STA 5372+00
STA 5378+80 TO STA 5391+80
STA 5394+52 TO STA 5395+77
STA 5406+46 TO STA 5408+50
STA 5411+50 TO STA 5414+11
STA 5471+33 TO STA 5476+53
STA 5479+57 TO STA 5481+60
STA 5550+79 TO STA 5554+75
STA 5557+85 TO STA 5564+00
STA 5593+80 TO STA 5600+40
STA 5602+34 TO STA 5609+83
STA 5612+19 TO STA 5623+93

PROPOSED TYPICAL SECTION WESTBOUND FRONTAGE ROAD

STA 4429+35 TO STA 4451+17
STA 4656+98 TO STA 4656+58

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1391+89 TO STA 1392+78
STA 1394+50 TO STA 1397+22
STA 1401+50 TO STA 1419+94
STA 1453+36 TO STA 1474+90
STA 1601+00 TO STA 1660+62
STA 1667+58 TO END

PROPOSED TYPICAL SECTION WESTBOUND FRONTAGE ROAD

BEGIN TO STA 4289+50
STA 4291+50 TO STA 4319+57
STA 4323+00 TO STA 4341+50
STA 4349+18 TO STA 4367+00
STA 4371+00 TO STA 4390+38
STA 4476+45 TO STA 4502+33
STA 4503+33 TO STA 4601+00

PROPOSED TYPICAL SECTION WESTBOUND FRONTAGE ROAD

STA 4319+57 TO STA 4323+00
STA 4341+50 TO STA 4349+18
STA 4367+00 TO STA 4371+00
STA 4390+38 TO STA 4391+95
STA 4502+33 TO STA 4503+33

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

BEGIN TO STA 1264+29
STA 1291+50 TO STA 1334+30
STA 1372+98 TO STA 1374+48

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1433+79 TO STA 1451+37
STA 1660+62 TO STA 1667+16

PROPOSED TYPICAL SECTION RAMP

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1342+98 TO STA 1350+18
STA 1364+38 TO STA 1369+78
STA 1385+38 TO STA 1386+58
STA 1497+82 TO STA 1500+00

PROPOSED TYPICAL SECTION EASTBOUND FRONTAGE ROAD

STA 1397+22 TO STA 1401+50

MATCHLINE CL GP STA 5344+00
BFJ LAND, LLC TRACT 1
RIDGE RD
LAKE FOREST DR
PVT RD 5151
CR 125
TEMP CONST EASEMENT
RETAINING WALL WB-9
RETAINING WALL WB-10
PROP ROW
PROPOSED CULVERT - S4 3 - 6'x4' MBC ℄ GP STA 5345+81
PROPOSED CULVERT - S5 3 - 6'x6' MBC ℄ GP STA 5368+25
PROPOSED CULVERT - S6 2 - 7'x6' MBC ℄ GP STA 5389+34
BEGIN BRIDGE ℄ GP WB STA 3361+36.00
END BRIDGE ℄ GP WB STA 3364+36.00
BEGIN BRIDGE ℄ GP EB STA 2361+32.00
END BRIDGE ℄ GP EB STA 2364+32.00
℄ FR WB STA 4362+67.64 = ℄ RIDG STA 17+03.50
℄ GP WB STA 3362+85.78 = ℄ RIDG STA 15+85.52
℄ GP STA 5362+84.06 = ℄ RIDG STA 15+00.00
℄ FR EB STA 1362+62.71 = ℄ RIDG STA 12+96.50
℄ GP EB STA 2362+82.34 = ℄ RIDG STA 14+14.48
N 89° 13' 12.85" E
BEGIN BRIDGE ℄ GP WB STA 3408+50.00
END BRIDGE ℄ GP WB STA 3411+50.00
BEGIN BRIDGE ℄ GP EB STA 2408+50.00
END BRIDGE ℄ GP EB STA 2411+50.00
℄ FR WB STA 4410+07.39 = ℄ LKFOR STA 19+08.88
℄ GP WB STA 3410+00.87 = ℄ LKFOR STA 17+90.87
℄ GP STA 5409+99.97 = ℄ LKFOR STA 17+05.36
℄ GP EB STA 2409+99.06 = ℄ LKFOR STA 16+19.86
℄ FR EB STA 1409+96.50 = ℄ LKFOR STA 15+01.85
CR 125 TO BE ABANDONED THROUGH THE BFJ LAND, LLC TRACT 1.
MATCHLINE STA CL GP 5418+00
MATCHLINE CL GP STA 5418+00
MATCHLINE CL GP STA 5445+00
PERMANENT SLOPE EASEMENT
BEGIN BRIDGE ℄ FR WB STA 4429+34.79
BEGIN BRIDGE ℄ CL GP WB STA 3430+64.48
BEGIN BRIDGE ℄ GP EB STA 2432+44.29
BEGIN BRIDGE ℄ FR EB STA 1433+78.89
N 46° 37' 40.96" E
OH-ELEC

	CURVE NO.	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	BACK BEARING	AHEAD BEARING	PI STATION	PC STATION	PT STATION	PI NORTHING	PI EASTING
FRONTAGE ROADS													
CL FR EB	CL FR EB 17	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	N 84° 05' 37.81" E	1353+98.42	1353+31.27	1354+65.48	7158979.18	2518975.67
	CL FR EB 18	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 84° 05' 37.81" E	N 89° 13' 12.85" E	1355+32.63	1354+65.48	1355+99.69	7158993.00	2519109.26
	CL FR EB 21	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	S 85° 39' 12.11" E	1366+84.55	1366+17.40	1367+51.61	7159008.68	2520261.17
	CL FR EB 22	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	S 85° 39' 12.11" E	N 89° 13' 12.85" E	1368+18.76	1367+51.61	1368+85.82	7158998.50	2520395.08
	CL FR EB 25	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	N 84° 05' 37.81" E	1402+03.05	1401+35.90	1402+70.11	7159044.56	2523779.14
	CL FR EB 26	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 84° 05' 37.81" E	N 89° 13' 12.85" E	1403+37.26	1402+70.11	1404+04.32	7159058.38	2523912.73
	CL FR EB 31	6° 41' 02.64" (LT)	3° 49' 10.99"	87.59'	174.99'	1500.00'	N 89° 13' 12.85" E	N 82° 32' 10.21" E	1413+85.88	1412+98.28	1414+73.27	7159072.65	2524961.34
	CL FR EB 32	35° 54' 29.26" (LT)	1° 45' 16.48"	1058.13'	2046.54'	3265.50'	N 82° 32' 10.21" E	N 46° 37' 40.96" E	1425+31.40	1414+73.27	1435+19.81	7159221.48	2526097.36
CL FR WB	CL FR WB 17	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	S 85° 39' 12.11" E	4355+69.06	4355+01.91	4356+36.12	7159412.38	2519134.05
	CL FR WB 18	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	S 85° 39' 12.11" E	N 89° 13' 12.85" E	4357+03.27	4356+36.12	4357+70.33	7159402.20	2519267.96
	CL FR WB 21	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	N 84° 05' 37.81" E	4368+54.52	4367+87.37	4369+21.58	7159417.87	2520419.20
	CL FR WB 22	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 84° 05' 37.81" E	N 89° 13' 12.85" E	4369+88.73	4369+21.58	4370+55.79	7159431.69	2520552.79
	CL FR WB 25	5° 07' 35.04" (RT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	N 89° 13' 12.85" E	S 85° 39' 12.11" E	4403+79.08	4403+11.93	4404+46.13	7159477.83	2523942.90
	CL FR WB 26	5° 07' 35.04" (LT)	3° 49' 10.99"	67.15'	134.21'	1500.00'	S 85° 39' 12.11" E	N 89° 13' 12.85" E	4405+13.28	4404+46.13	4405+80.34	7159467.65	2524076.82
	CL FR WB 29	15° 07' 22.82" (LT)	2° 17' 30.59"	331.86'	659.87'	2500.00'	N 89° 13' 12.85" E	N 74° 05' 50.03" E	4414+31.03	4410+99.17	4417+59.04	7159480.14	2524994.57
	CL FR WB 32	27° 28' 09.07" (LT)	2° 01' 16.94"	692.79'	1358.94'	2834.50'	N 74° 05' 50.03" E	N 46° 37' 40.96" E	4425+42.23	4418+49.44	4432+08.38	7159785.67	2526066.95

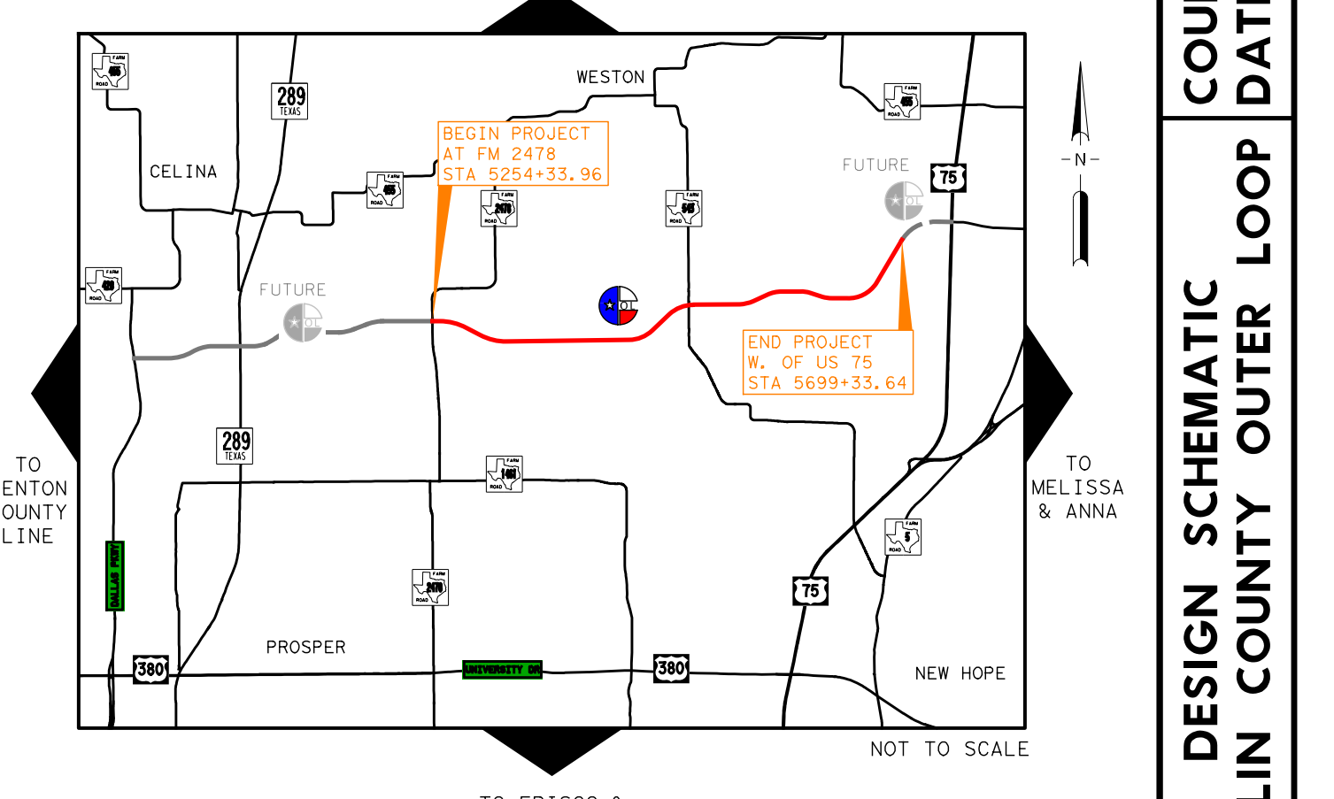
	CURVE NO.	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	BACK BEARING	AHEAD BEARING	PI STATION	PC STATION	PT STATION	PI NORTHING	PI EASTING
RAMPS													
2WBEXT	2WBEXT 3	4° 52' 51.46" (RT)	1° 04' 51.79"	225.89'	451.50'	5300.00'	N 89° 13' 12.85" E	S 85° 53' 55.69" E	16+42.47 R1	14+16.58 R1	18+68.08 R1	7159361.85	2519022.19
	2WBEXT 4	4° 52' 51.46" (LT)	1° 30' 28.02"	161.96'	323.72'	3800.00'	S 85° 53' 55.69" E	N 89° 13' 12.85" E	20+30.04 R1	18+68.08 R1	21+91.80 R1	7159334.12	2519409.04
2EBENT	2EBENT 3	4° 52' 51.45" (LT)	1° 04' 51.79"	225.89'	451.50'	5300.00'	N 89° 13' 12.85" E	N 84° 20' 21.39" E	17+42.47 R1	15+16.58 R1	19+68.08 R1	7159024.56	2518708.79
	2EBENT 4	4° 52' 51.45" (RT)	1° 30' 28.02"	161.96'	323.72'	3800.00'	N 84° 20' 21.39" E	N 89° 13' 12.85" E	21+30.04 R1	19+68.08 R1	22+91.80 R1	7159062.81	2519094.75
3EBENT	3EBENT 1	6° 45' 22.63" (LT)	3° 10' 59.16"	106.25'	212.26'	1800.00'	N 89° 13' 12.85" E	N 82° 27' 50.22" E	1+06.25 R1	0+00.00 R1	2+12.25 R1	7159042.74	2522763.54
	3EBENT 2	6° 45' 22.63" (RT)	3° 10' 59.16"	106.25'	212.26'	1800.00'	N 82° 27' 50.22" E	N 89° 13' 12.85" E	3+18.51 R1	2+12.25 R1	4+24.51 R1	7159070.61	2522974.21
	3EBENT 3	6° 14' 17.12" (LT)	1° 30' 28.02"	207.07'	413.73'	3800.00'	N 89° 13' 12.85" E	N 82° 58' 55.73" E	10+31.58 R1	8+24.51 R1	12+38.24 R1	7159080.32	2523687.46
	3EBENT 4	6° 14' 17.12" (RT)	1° 30' 28.02"	207.07'	413.73'	3800.00'	N 82° 58' 55.73" E	N 89° 13' 12.85" E	14+45.30 R1	12+38.24 R1	16+51.96 R1	7159130.92	2524098.49
3EBEXT	3EBEXT 1	5° 20' 28.60" (RT)	1° 30' 28.02"	177.25'	354.25'	3800.00'	N 89° 13' 12.85" E	S 85° 26' 18.56" E	1+77.25 R1	0+00.00 R1	3+54.25 R1	7159081.58	2520473.56
	3EBEXT 2	5° 20' 28.60" (LT)	1° 30' 28.02"	177.25'	354.25'	3800.00'	S 85° 26' 18.56" E	N 89° 13' 12.85" E	5+31.50 R1	3+54.25 R1	7+08.49 R1	7159053.39	2520826.94
	3EBEXT 3	8° 13' 18.00" (RT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	N 89° 13' 12.85" E	S 82° 33' 29.15" E	15+37.86 R1	14+08.49 R1	16+66.79 R1	7159067.08	2521833.47
	3EBEXT 4	8° 13' 18.00" (LT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	S 82° 33' 29.15" E	N 89° 13' 12.85" E	17+96.15 R1	16+66.79 R1	19+25.08 R1	7159033.57	2522090.03
3WBENT	3WBENT 1	5° 20' 28.60" (LT)	1° 30' 28.02"	177.25'	354.25'	3800.00'	N 89° 13' 12.85" E	N 83° 52' 44.25" E	1+77.25 R1	0+00.00 R1	3+54.25 R1	7159352.34	2520748.32
	3WBENT 2	5° 20' 28.60" (RT)	1° 30' 28.02"	177.25'	354.25'	3800.00'	N 83° 52' 44.25" E	N 89° 13' 12.85" E	5+31.50 R1	3+54.25 R1	7+08.49 R1	7159390.14	2521100.81
	3WBENT 3	8° 13' 18.00" (LT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	N 89° 13' 12.85" E	N 80° 59' 54.85" E	13+37.86 R1	12+08.49 R1	14+66.79 R1	7159401.12	2521907.35
	3WBENT 4	8° 13' 18.00" (RT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	N 80° 59' 54.85" E	N 89° 13' 12.85" E	15+96.15 R1	14+66.79 R1	17+25.08 R1	7159441.60	2522162.90
3WBEXT	3WBEXT 1	6° 45' 22.63" (RT)	3° 10' 59.16"	106.25'	212.26'	1800.00'	N 89° 13' 12.85" E	S 84° 01' 24.52" E	1+06.25 R1	0+00.00 R1	2+12.25 R1	7159451.06	2522857.68
	3WBEXT 2	6° 45' 22.63" (LT)	3° 10' 59.16"	106.25'	212.26'	1800.00'	S 84° 01' 24.52" E	N 89° 13' 12.85" E	3+18.51 R1	2+12.25 R1	4+24.51 R1	7159428.93	2523069.03
	3WBEXT 3	6° 14' 17.12" (RT)	1° 30' 28.02"	207.07'	413.73'	3800.00'	N 89° 13' 12.85" E	S 84° 32' 30.03" E	10+31.58 R1	8+24.51 R1	12+38.24 R1	7159438.64	2523782.28
	3WBEXT 4	6° 14' 17.12" (LT)	1° 30' 28.02"	207.07'	413.73'	3800.00'	S 84° 32' 30.03" E	N 89° 13' 12.85" E	14+45.30 R1	12+38.24 R1	16+51.96 R1	7159399.25	2524194.54
4EBENT	4EBENT 1	32° 00' 37.04" (LT)	2° 05' 00.54"	788.82'	1536.38'	2750.00'	N 82° 06' 55.37" E	N 50° 06' 18.33" E	7+88.82	0+00.00	15+36.38	7159207.48	2525852.78
	4EBENT 2	2° 34' 07.91" (RT)	2° 05' 00.54"	61.66'	123.30'	2750.00'	N 50° 06' 18.33" E	N 52° 40' 26.24" E	15+98.04	15+36.38	16+59.68	7159752.96	2526505.29
4WBENT	4WBENT 1	18° 39' 27.29" (LT)	3° 10' 59.16"	295.69'	586.15'	1800.00'	N 74° 44' 07.19" E	N 56° 04' 39.90" E	2+95.69	0+00.00	5+86.15	7159586.11	2525677.11
	4WBENT 2	4° 23' 06.35" (RT)	3° 10' 59.16"	68.91'	137.76'	1800.00'	N 56° 04' 39.90" E	N 60° 27' 46.24" E	6+55.06	5+86.15	7+23.91	7159789.58	2525979.66
	4WBENT 3	13° 50' 05.29" (LT)	1° 59' 43.17"	348.37'	693.36'	2871.50'	N 60° 27' 46.24" E	N 46° 37' 40.96" E	10+72.28	7+23.91	14+17.27	7159995.30	2526342.72
	4WBENT 4	8° 13' 18.00" (LT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	N 46° 37' 40.96" E	N 38° 24' 22.95" E	16+53.27	15+23.91	17+82.20	7160396.61	2526767.51
	4WBENT 5	8° 13' 18.00" (RT)	3° 10' 59.16"	129.37'	258.29'	1800.00'	N 38° 24' 22.95" E	N 46° 37' 40.96" E	19+11.57	17+82.20	20+40.49	7160599.36	2526928.25

	CURVE NO.	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	BACK BEARING	AHEAD BEARING	PI STATION	PC STATION	PT STATION	PI NORTHING	PI EASTING
CENTERLINE													
CL GP	CL GP 9	42° 35' 31.89" (LT)	1° 52' 42.78"	1188.91'	2267.29'	3050.00'	N 89° 13' 12.85" E	N 46° 37' 40.96" E	5422+82.91	5410+94.00	5433+61.29	7159288.32	2525854.31
MAINLANES													
CL GP EB	CL GP EB 9	42° 35' 31.89" (LT)	1° 49' 38.37"	1222.23'	2330.85'	3135.50'	N 89° 13' 12.85" E	N 46° 37' 40.96" E	2423+16.28	2410+94.04	2434+24.89	7159203.29	2525888.80
CL GP WB	CL GP WB 9	42° 35' 31.89" (LT)	1° 55' 57.83"	1155.58'	2203.73'	2964.50'	N 89° 13' 12.85" E	N 46° 37' 40.96" E	3422+49.54	3410+93.96	3432+97.69	7159373.36	2525819.82

RETAINING WALL CHART

EB-8	CL_GP	5335+72	138' RT	5344+09	138' RT
EB-9	CL_GP	5343+54	240' RT	5346+40	240' RT
EB-10	CL_GP	5344+09	181' RT	5361+32	150' RT
EB-11	CL_GP	5364+32	150' RT	5377+80	181' RT
EB-12	CL_GP	5366+78	240' RT	5368+54	240' RT
EB-13	CL_GP	5377+80	138' RT	5397+06	138' RT
EB-14	CL_GP	5385+28	240' RT	5387+07	240' RT
EB-16	CL_GP	5395+06	193' RT	5408+50	150' RT
EB-17	CL_GP	5411+48	150' RT	5415+61	141' RT
EB-19	CL_GP	5419+86	136' RT	5424+05	136' RT
EB-20	CL_GP	5425+64	187' RT	5428+11	171' RT
WB-9	CL_GP	5338+05	138' LT	5347+77	138' LT
WB-10	CL_GP	5344+74	240' LT	5347+94	240' LT
WB-11	CL_GP	5347+77	181' LT	5361+36	150' LT
WB-12	CL_GP	5364+36	150' LT	5370+01	150' LT
WB-13	CL_GP	5367+99	240' LT	5370+12	240' LT
WB-14	CL_GP	5391+44	240' LT	5393+73	240' LT
WB-15	CL_GP	5391+74	243' LT	5394+65	243' LT
WB-16	CL_GP	5398+06	193' LT	5408+50	150' LT
WB-17	CL_GP	5411+53	150' LT	5428+90	193' LT
WB-19	CL_GP	5429+93	138' LT	5431+02	138' LT

CHAIN NAME	CURVE NAME	BEGIN CROSS SLOPE	BEGIN TRANSITION	BEGIN FULL SUPER	SUPER RATE	END FULL SUPER	END TRANSITION	END CROSS SLOPE
CL GP EB	CL GP EB 9	-2.00%	2407+20	2411+55	5.19%	2432+80	2437+15	-2.00%
CL GP WB	CL GP WB 9	2.00%	3409+15	3411+25	5.34%	3432+30	3434+40	2.00%

COLLIN COUNTY OUTER LOOP
PHASE III: FUTURE EAST BOUND FRONTAGE ROAD
FM 2478 TO WEST OF US 75
ROADWAY FUNCTIONAL CLASSIFICATION: URBAN FREEWAY
ROADWAY CONSTRUCTION TYPE: NEW FACILITY
DESIGN SPEED (MAINLANES): 70 MPH
DESIGN SPEED (OUTER LOOP EBFR): 45 MPH
DESIGN SPEED (RAMPS): 50 MPH
DESIGN SPEED (CR 52,51,53,1117): 40 MPH
NET LENGTH OF PROJECT: 7.97 MILES
SCHEMATIC SCALE: HORIZ: 1"=100' VERT: 1"=20'
AERIAL PHOTO DATE: 2015
LOCATION MAP
LEGEND
COUNTY: COLLIN DATE: JULY 2019
DESIGN SCHEMATIC COLLIN COUNTY OUTER LOOP
ROLL 2 OF 8