Texas Department of Transportation

DALLAS DISTRICT

WILLIAM L. HALE, P.E. DISTRICT ENGINEER

DESIGN SCHEMATIC

SH 114

FROM: 1.236 MI E OF INTERNATIONAL PKY

TO: SH 183

NET LENGTH OF PROJECT = 11.63 MI

CSJ: 0353-04-056 FROM 1.236 MI E OF INTERNATIONAL PKY TO SPUR 348
CSJ: 0353-04-084 U-TURN AT SH 161
CSJ: 0353-06-025 FROM SPUR 348 TO 0.087 MILES EAST OF ROCHELLE
CSJ: 0353-06-050 FROM 0.087 MI E OF ROCHELLE TO 0.203 MI W OF TOM BRANIFF
CSJ: 0353-06-054: FROM 0.203 MI W OF TOM BRANIFF TO SH 183
CSJ: 0581-02-121 FROM TEXAS PLAZA TO LP 12/IH-35E SPLIT

Dallas County

HIGHWAY CLASSIFICATION

URBAN FREEWAY

MAY 2009

Design Speeds

MAINLANES - 70 MPH
RAMPS - 50 MPH
DIRECT CONNECTORS - 50 MPH
FRONTAGE ROADS - 45 MPH
CROSS STREETS - 45 MPH
MANAGED HOV LANES - 70 MPH (MAINLANES), 50 MPH (RAMPS)
U-TURN (LOOP 12) - 20 MPH

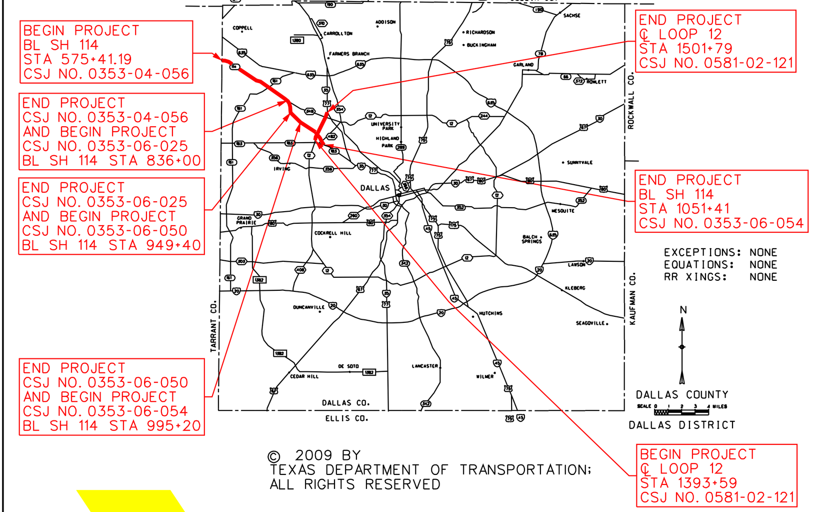
Average Daily Traffic 2008 (2028)

SH 121 TO SH 161:	149,400 (224,200)
SH 161 TO SH 348:	154,000 (231,000)
SPUR 348 TO LOOP 12:	147,300 (221,000)
LOOP 12 TO SH 183:	116,700 (175,000)

HIGHWAY VOLUMES INCLUDE MAIN AND MANAGED HOV LANES ONLY

SOURCE: NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

ROLLS 1-10: SH 114 PLAN AND PROFILE
ROLLS 11-12: LOOP 12 PLAN AND PROFILE
ROLLS 13-23: SH 114 AND LOOP 12 PROFILES



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DART

CITY OF IRVING

PREPARED BY BRIDGEFARMER & ASSOCIATES, INC.
UNDER THE SUPERVISION OF

STERLING C. FORSYTHE, III	SHAHRIAR AZAD	WEIYIH TEE
P.E. NO. 57339	P.E. NO. 91682	P.E. NO. 98478
DATE: 05/11/09	DATE: 05/11/09	DATE: 05/11/09

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264
12801 NORTH CENTRAL EXPRESSWAY,
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Roll: 12 of 23

DATE SUBMITTED

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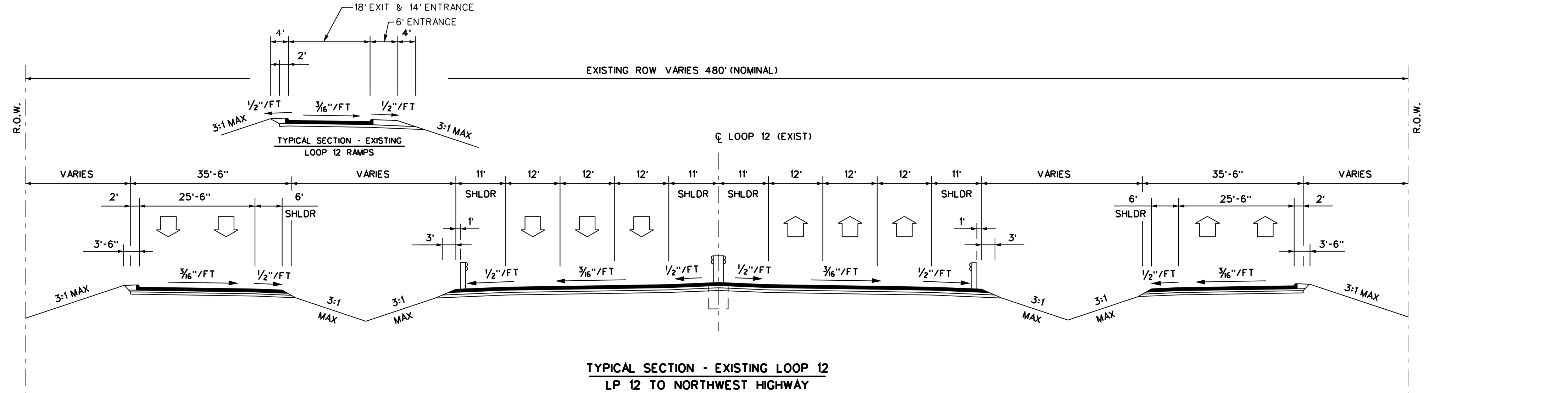
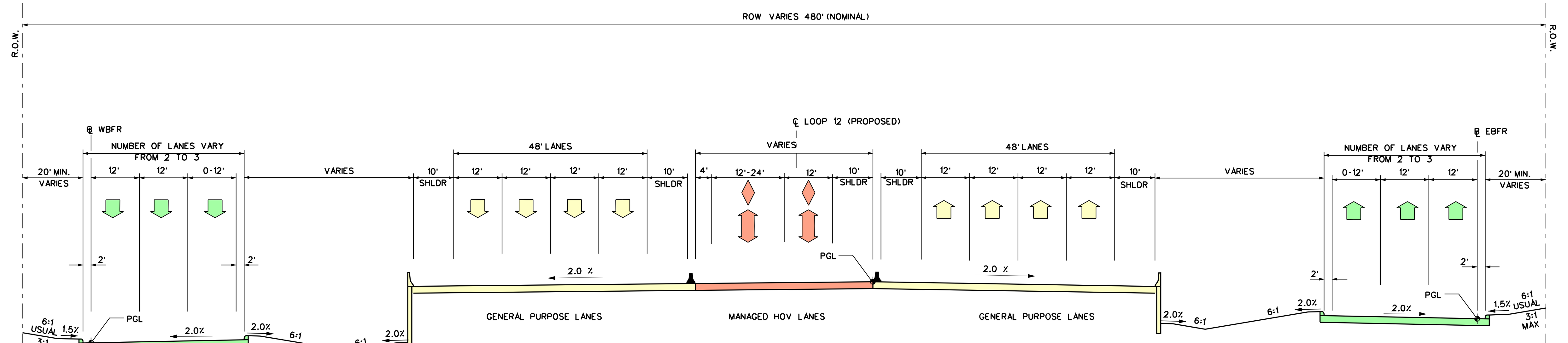
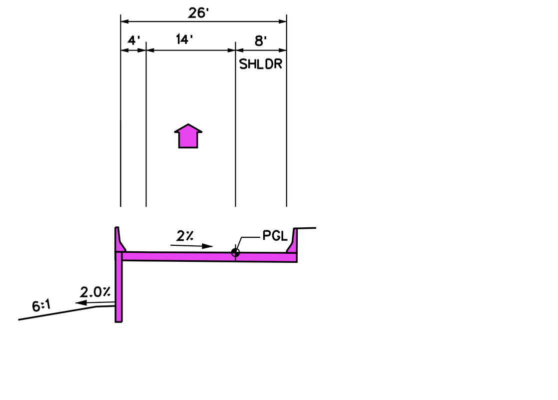
DATE REVISED



TYPICAL SECTION - EXISTING LOOP 12
LP 12 TO NORTHWEST HIGHWAY

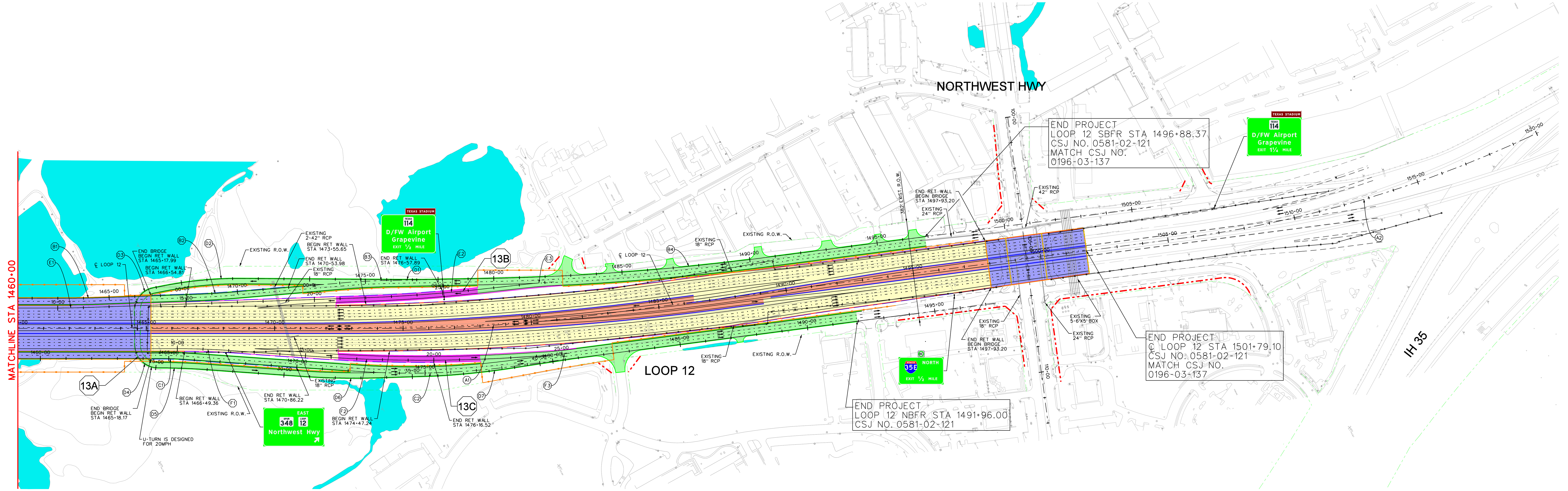


TYPICAL SECTION - PROPOSED LOOP 12
LP 12 TO NORTHWEST HIGHWAY



TYPICAL SECTION - PROPOSED ONE LANE RAMP

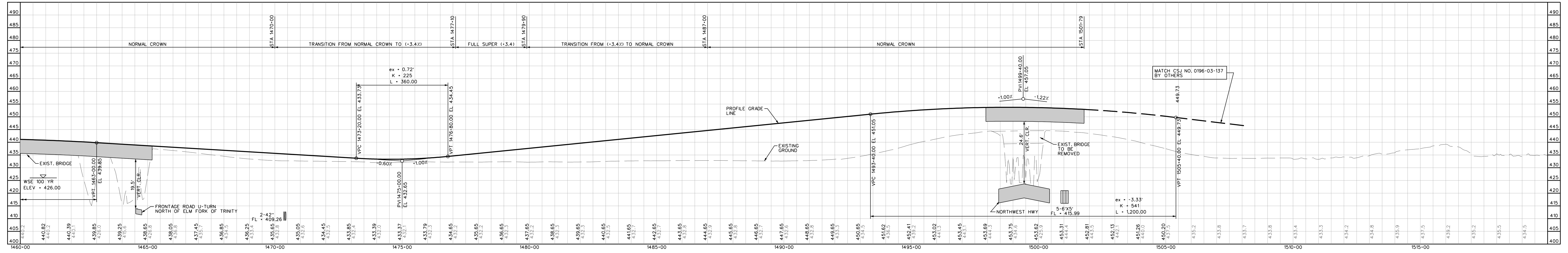
CURVE DATA										
STREET NAME	CURVE NO.	CURVE NAME	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	PI STATION	PC STATION	PT STATION
	MAINLANE									
LOOP 12	A1	CL12-3	7° 26'21.88" LT	1° 00'00.05"	372.49	743.93	5,729.58	1478+49.66	1474+77.16	1482+21.09
	A2	CL12-4	18° 06'19.83" LT	1° 13'08.70"	748.84	1,485.18	4,700.00	1512+86.07	1505+37.22	1520+22.40
	FRONTAGE ROAD									
SB FRONTAGE ROAD	B1	FRSB12-9	1° 59'59.42" LT	1° 55'40.27"	51.87	103.73	2,972.00	1464+08.90	1463+57.02	1464+60.76
	B2	FRSB12-10	2° 50'13.30" LT	1° 54'35.49"	74.29	148.55	3,000.00	1469+04.52	1468+30.23	1469+78.78
	B3	FRSB12-11	3° 47'31.49" RT	1° 54'35.49"	99.31	198.55	3,000.00	1475+06.35	1474+07.04	1476+05.59
	B4	FRSB12-12	6° 23'40.38" LT	0° 34'22.65"	558.61	1,116.06	10,000.00	1485+05.49	1479+46.88	1490+62.94
NB FRONTAGE ROAD	C1	FRNB12-6	3° 59'58.30" RT	3° 49'10.99"	52.37	104.71	1,500.00	1465+16.82	1464+64.45	1465+69.15
	C2	FRNB12-7	11° 27'54.01" LT	1° 54'35.49"	301.16	600.31	3,000.00	1475+35.90	1472+34.75	1478+35.05
	LOOP ROAD (NOTE: U-TURN IS DESIGNED FOR 20MPH)									
FRONTAGE ROAD U-TURN NORTH OF ELM FORK OF TRINITY	D1	S_N_U-1	1° 27'16.74" RT	0° 57'17.75"	76.17	152.33	6,000.00	10+76.17	10+00.00	11+52.33
	D2	S_N_U-2	11° 24'35.85" LT	3° 49'10.99"	149.85	298.71	1,500.00	19+15.39	17+65.53	20+64.25
	D3	S_N_U-3	79° 19'32.31" LT	63° 39'43.12"	74.62	124.60	90.00	21+85.69	21+11.07	22+35.67
	D4	S_N_U-4	89° 38'51.58" LT	63° 39'43.12"	89.45	140.82	90.00	24+56.96	23+67.51	25+08.33
	D5	S_N_U-5	3° 58'22.14" RT	2° 17'30.60"	86.71	173.35	2,500.00	25+95.04	25+08.33	26+81.67
	D6	S_N_U-6	5° 46'52.61" LT	1° 54'35.49"	151.48	302.71	3,000.00	32+17.29	30+65.81	33+68.51
	D7	S_N_U-7	5° 41'46.14" LT	1° 53'22.30"	150.85	301.46	3,032.28	37+38.35	35+87.50	38+88.96
	CROSS STREET									
NORTHWEST HWY	NO CURVE									
	RAMP									
SB ENTRANCE FROM NORTHWEST HWY	E1	NWHSB12-1	1° 59'59.41" LT	1° 54'35.49"	52.36	104.71	3,000.00	10+52.36	10+00.00	11+04.71
	E2	NWHSB12-2	4° 15'37.75" LT	0° 57'17.75"	223.18	446.16	6,000.00	24+14.79	21+91.61	26+37.76
	E3	NWHSB12-3	3° 34'21.19" RT	3° 47'03.83"	47.22	94.4	1,514.00	28+88.55	28+41.33	29+35.73
NB EXIT TO NORTHWEST HWY	F1	NB12NWH-1	3° 59'58.51" RT	1° 58'32.58"	101.26	202.44	2,900.00	11+01.26	10+00.00	12+02.44
	F2	NB12NWH-2	7° 27'54.23" LT	0° 57'09.74"	392.34	783.56	6,014.00	19+29.71	15+37.37	23+20.93
	F3	NB12NWH-3	4° 00'00.00" LT	3° 47'03.83"	52.87	105.70	1,514.00	24+76.83	24+23.96	25+29.66



LEGEND

- MAIN LANES (DESIGN SPEED=70 MPH)
- FRONTAGE ROADS & CROSS STREETS (DESIGN SPEED=45 MPH)
- MANAGED HOV LANES (DESIGN SPEED=70 MPH) UNLESS NOTED OTHERWISE
- MANAGED HOV WISHBONE RAMPS & DIRECT CONNECTORS (DESIGN SPEED=50 MPH) UNLESS NOTED OTHERWISE
- ENTRANCE & EXIT RAMPS (DESIGN SPEED=50 MPH) UNLESS NOTED OTHERWISE
- BRIDGE
- SIDEWALK (WHERE EXISTING SIDEWALK EXISTS)
- RR TRACKS
- EXISTING R.O.W.
- PROPOSED R.O.W. CSJ: 0581-02-077
- PROPOSED R.O.W.
- PROPOSED CONTROL OF ACCESS
- EXISTING CONTROL OF ACCESS
- RETAINING WALL

SCALE: 1" = 200' HOR. 1" = 20' VERT.



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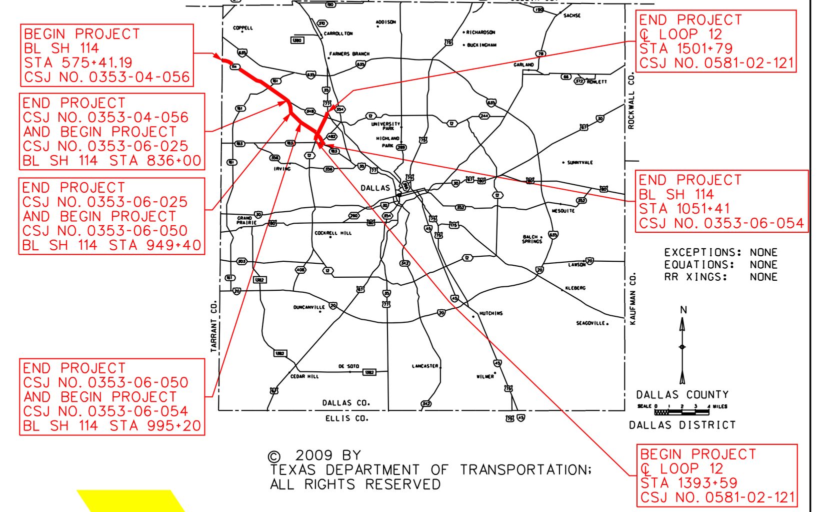

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