DESIGN SCHEMATIC PROFILES SHEET NO.10

INTERCHANGE AT SH 121 AND US 75
COLLIN COUNTY, TEXAS
CSJ: 0364-04-040

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
WILLIAM HALE, P.E. - DISTRICT ENGINEER

NORTH TEXAS TOLLWAY AUTHORITY
JORGE FIGUEREDO - EXECUTIVE DIRECTOR

JUNE, 2008

SURVEY CONTROL POINTS

POINT NAME	NORTHING	EASTING	ELEVATION	STATION AND OFFSET (FEET)
ARS 75-01	7169051.7753	2534951.8059	651.210	75 @ STA 618+00.00, 148.20 RT
ARS 121-01	7169051.3460	2552907.6457	675.380	121 @ STA 1121+00.00, 148.20 RT
ARS 121-02	7169051.3460	2552907.6457	675.380	121 @ STA 1121+00.00, 3148.60 RT
ARS 121-06	7167173.5364	2537389.2578	660.21	121 @ STA 1121+00.00, 95.86 RT
ARS 121-10	7169765.5705	2541806.2638	676.820	121 @ STA 1121+00.00, 1616.15 LT

LEGEND

	EXISTING	PROPOSED
MAIN LANE		
RAMP		
FRONTAGE ROAD		
CROSS STREETS		
RIGHT-OF-WAY/PROPERTY LINES		
CONTROL-OF-ACCESS		
MAINLINE/FRONTAGE/RAMP TRAFFIC LANE DIRECTIONAL INDICATOR		
RETAINING WALLS	NOT SHOWN	
BRIDGES		
DIRECT CONNECTOR		

FUNCTIONAL CLASSIFICATION
URBAN FREEWAY

PROJECT LENGTH
SH 121 = 3.8 MILES
US 75 = 1.0 MILES
TOTAL = 5.9 MILES

DESIGN SPEEDS		TYPICAL SECTIONS	
MAIN LANES:	70 MPH BASED ON URBAN ALTERNATE FREEWAY	(A) 12' CROP	
FRONTAGE ROAD:	40 MPH	(B) 4' HMAC (TY B)	
DIRECT CONNECT RAMPS:	50 MPH BASED ON MID RANGE	(C) 12' FB SIGR W/12' CROP	
ON/OFF RAMPS:	50 MPH BASED ON MID RANGE	(D) 12' FB SIGR	
LOOP RAMPS:	25 MPH	(E) 14' CROP	
CROSS STREETS:	45 MPH (30 MPH WHERE NOTED)	(F) 10' CROP	

PROPOSED ALIGNMENTS
MAIN LANES
FRONTAGE ROADS
ON/OFF RAMPS
DIRECT CONNECT RAMPS
CROSS STREETS

SCALE
PLAN: HORIZ 1" = 100'
PROFILE: HORIZ 1" = 100' VERT 1" = 10'

NOTES:
1. HORIZONTAL AND VERTICAL CONTROL BASED ON NAD 83 COORDINATES.
2. GANTRY LOCATIONS BASED ON TOLL TRAFFIC AND REVENUE STUDY BY N. ALI STANGL INC. (NAS).
3. ALL STATIONS ARE REFERENCED TO SH 121 BASELINE UNLESS NOTED OTHERWISE.
4. COMPLETE REMOVAL OF EXISTING PAVEMENT AND STRUCTURES IS ESTIMATED WITHIN CONSTRUCTION LIMITS, EXCEPT WHERE SHOWN OTHERWISE.

INDEX OF ROLLS
ROLL 1 AND 2 = PLAN AND PROFILE SH 121 MAIN LANES
ROLL 3 AND 4 = PLAN AND PROFILE US 75 MAIN LANES
ROLL 4 AND 5 = PLAN AND PROFILE US 75 MAIN LANES
ROLL 6 AND 7 = PROFILE SH 121 FRONTAGE ROADS
ROLL 8 AND 9 = PROFILES US 75 FRONTAGE ROADS
ROLL 10 AND 11 = PROFILES

Texas Department of Transportation

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NORTH TEXAS TOLLWAY AUTHORITY

DESIGN
SCHEMATIC PROFILES
PROPOSED DIRECT CONNECTORS
COLLIN COUNTY, TEXAS

JACOBS
BRIDGEFARMER
SECTION 4

PRELIMINARY - FOR INFORMATION ONLY
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SEAL
DATE
NAME
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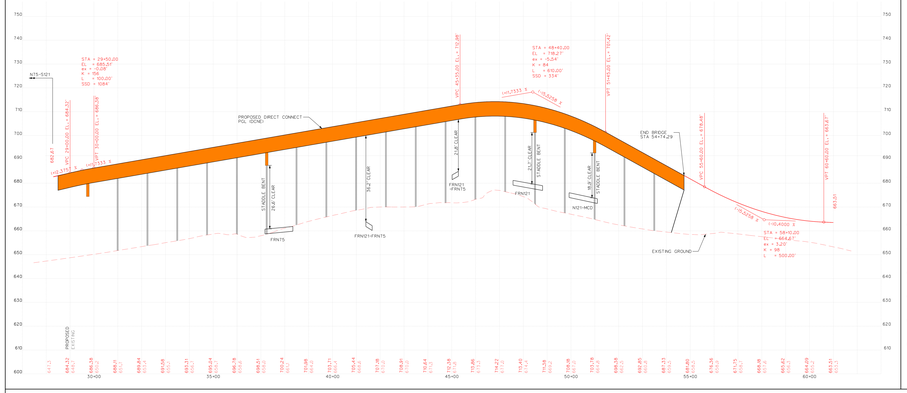
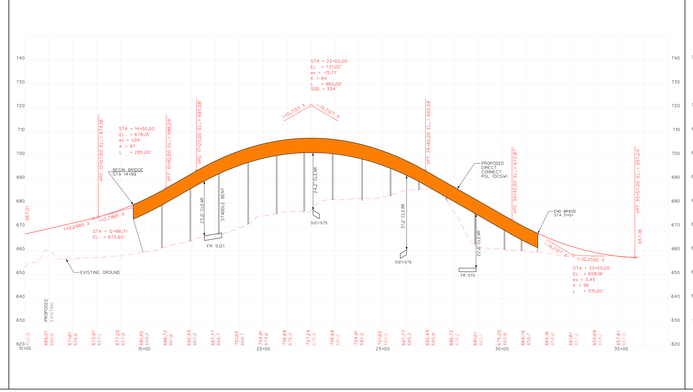
CONTRACT 02292-SH 121-04-PS PM ROLL 10 OF 11

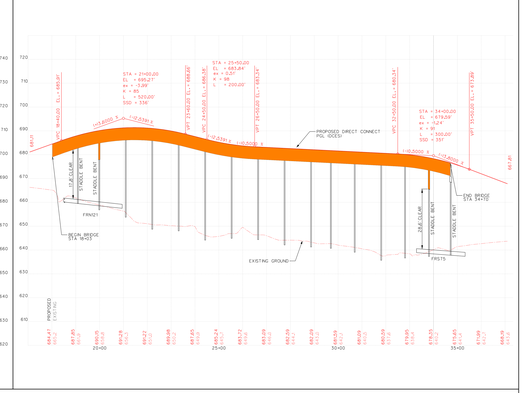
DIRECT CONNECT N75-N121



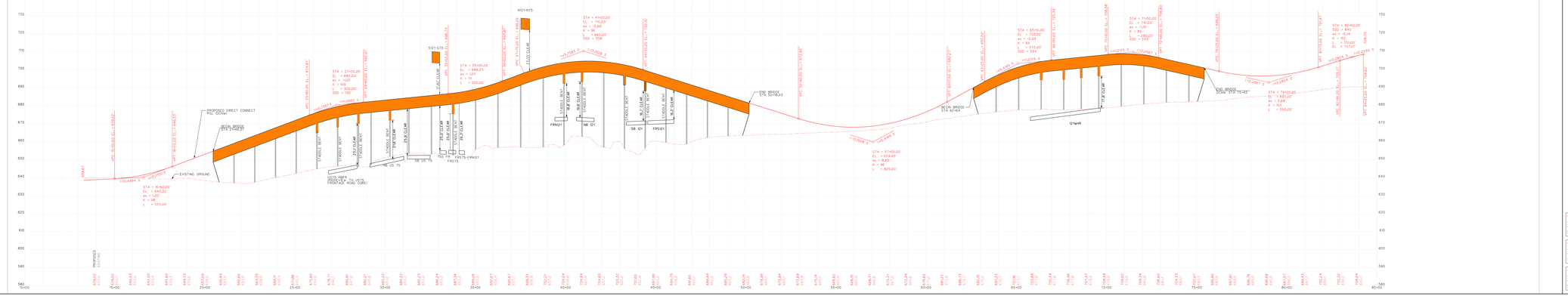
DIRECT CONNECT S75-S121



DIRECT CONNECT N121-S75



DIRECT CONNECT N75-S121



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