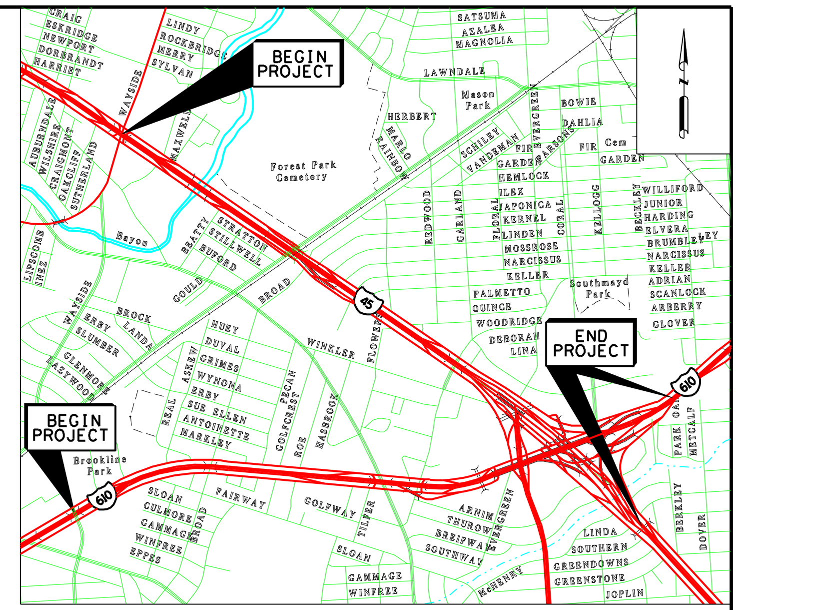


VICINITY MAP
N.T.S.

DESIGN SPEED:

IH 45(S) (URBAN FREEWAY)	-70 MPH
IH 610 (URBAN FREEWAY)	-70 MPH
FRONTAGE ROAD	-45 MPH
RAMP	-45 MPH
DIRECT CONNECTOR	-50 MPH

Texas Department of Transportation

SCHEMATIC LAYOUT
HARRIS COUNTY
IH 45(S) AT IH 610
FROM: IH 45 @ WAYSIDE
TO: IH 610 @ WAYSIDE

HOUSTON DISTRICT

DATE: - -
ORIGINAL APPROVED: - -
REVISED: - -
REVISION(S) APPROVED: - -

PLAN LEGEND

SYMBOLOGY	LINE WT	COLOR	CODE
IH 45(S) / IH 610(S) CENTERLINE	2	BLACK	0
MAIN LANES	2	BLACK	0
BRIDGES			
FRONTAGE ROADS/TURNAROUNDS	2	BLUE	168
RAMPS	2	RED	3
DIRECT CONNECTOR	2	ORANGE	6
EXISTING RDWY TO BE REMOVED	0	BLACK	0
EXISTING RDWY TO REMAIN	2	GREEN	2
EMBANKMENT	3	RED	3
CONTROL OF ACCESS	3	RED	3
PROP ROW	4	BLACK	0
EXISTING ROW	0	BLACK	0
ACCESS ROAD	1	BLUE	1
PLANIMETRIC	2	GREEN	2
EXISTING LANE DIRECTIONAL INDICATOR	0	BLACK	0
PROPOSED LANE DIRECTIONAL INDICATOR:			
MAIN LANES	2	BLACK	0
FRONTAGE ROADS/TURNAROUNDS	2	BLUE	168
RAMPS	2	RED	3
DIRECT CONNECTOR	2	RED	139
MANAGED LANES	2	MAGENTA	5
DEPRESSED	3	RED	3
FUTURE	1	BLUE	1
RETAINING WALL	2	RED	3
STRIPING	0	ORANGE	6

PROFILE LEGEND

PROP. PGL
EXISTING GROUND @ PGL
100 YR. W.S.E.

UTILITY LEGEND

SYMBOLOGY	LINE WT	COLOR	CODE
EXISTING WATERLINE (C.O.H.)	0	BLUE	1
EXISTING WASTEWATER LINE (C.O.H.)	0	GREEN	2
EXISTING BURIED ELECTRIC LINE	0	RED	3
EXISTING OVERHEAD ELECTRIC LINE	0	RED	3
EXISTING BURIED GAS LINE	0	RED	3
EXISTING BURIED OIL (PIPELINE)	0	ORANGE	70
EXISTING BURIED TELEPHONE LINE	0	ORANGE	6
EXISTING BURIED CABLE	0	ORANGE	6
EXISTING FIBER OPTIC CABLE	0	ORANGE	6
EXISTING OVERHEAD CABLE	0	ORANGE	6
PROPOSED CASING EXTENSION (TYP.)	4	ORANGE	6

NOTE:

1. UTILITIES SHOWN HEREON ARE INTENDED FOR PLANNING PURPOSES ONLY. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. EXACTNESS OF UTILITY LOCATIONS SHALL BE PHYSICALLY VERIFIED BY FIELD SURVEY.
2. POTENTIAL CONFLICTS TO EXISTING UTILITIES ARE INDICATED ON SEPARATE TABLES. THESE IMPACTS ARE NOT BASED ON VERTICAL DATA.
3. WHERE PROPOSED, LATERAL EXTENSIONS OF ENCASINGS ARE BASED ON AVAILABLE EXISTING INFORMATION FROM UTILITY COMPANIES.

EASTBOUND TO NORTHBOUND DIRECT CONNECTOR

EB TO NB CURVE 3
PI STATION = 143+88.83
DELTA = 127° 09′ 49.60" (LT)
DEGREE OF CURVE = 5° 43′ 55.08"
TANGENT = 2,012.89
LENGTH = 2,218.50
RADIUS = 1,000.00
PC STATION = 123+75.94
PT STATION = 145+94.44

EB TO NB CURVE 7
PI STATION = 185+26.25
DELTA = 2° 11′ 50.73" (LT)
DEGREE OF CURVE = 0° 57′ 17.79"
TANGENT = 115.07
LENGTH = 230.11
RADIUS = 6,000.00
PC STATION = 184+11.18
PT STATION = 186+41.29

EB TO NB CURVE 4
PI STATION = 167+64.47
DELTA = 1° 08′ 48.27" (LT)
DEGREE OF CURVE = 0° 57′ 17.79"
TANGENT = 60.05
LENGTH = 120.09
RADIUS = 6,000.00
PC STATION = 167+04.43
PT STATION = 168+24.51

EB TO NB CURVE 8
PI STATION = 194+61.95
DELTA = 3° 34′ 05.86" (LT)
DEGREE OF CURVE = 1° 54′ 35.81"
TANGENT = 93.45
LENGTH = 186.83
RADIUS = 3,000.00
PC STATION = 193+68.50
PT STATION = 195+55.33

EB TO NB CURVE 5
PI STATION = 170+61.16
DELTA = 1° 56′ 57.63" (RT)
DEGREE OF CURVE = 0° 57′ 17.79"
TANGENT = 102.08
LENGTH = 204.13
RADIUS = 6,000.00
PC STATION = 169+59.09
PT STATION = 171+63.22

EB TO NB CURVE 9
PI STATION = 197+70.43
DELTA = 3° 34′ 00.83" (RT)
DEGREE OF CURVE = 1° 54′ 35.81"
TANGENT = 93.41
LENGTH = 186.75
RADIUS = 3,000.00
PC STATION = 196+77.02
PT STATION = 198+63.77

EB TO NB CURVE 6
PI STATION = 180+55.19
DELTA = 3° 37′ 50.76" (RT)
DEGREE OF CURVE = 0° 57′ 17.79"
TANGENT = 190.17
LENGTH = 380.21
RADIUS = 6,000.00
PC STATION = 178+65.02
PT STATION = 182+45.23

IH45 WESTBOUND FRONTAGE RD

IH45 WB CURVE 1
PI STATION = 101+67.05
DELTA = 4° 38′ 57.87" (RT)
DEGREE OF CURVE = 3° 47′ 33.37"
TANGENT = 61.34
LENGTH = 122.59
RADIUS = 1,511.00
PC STATION = 101+05.71
PT STATION = 102+28.30

IH45 WB CURVE 3
PI STATION = 110+74.12
DELTA = 7° 04′ 40.73" (LT)
DEGREE OF CURVE = 3° 49′ 04.37"
TANGENT = 92.83
LENGTH = 185.39
RADIUS = 1,501.00
PC STATION = 109+81.29
PT STATION = 111+66.68

IH45 WB CURVE 2
PI STATION = 103+88.05
DELTA = 4° 48′ 16.48" (LT)
DEGREE OF CURVE = 3° 49′ 04.37"
TANGENT = 62.97
LENGTH = 125.84
RADIUS = 1,501.00
PC STATION = 103+25.08
PT STATION = 104+50.92

IH45 EASTBOUND RAMP

IH45 EB RAMP CURVE 1
PI STATION = 103+08.61
DELTA = 3° 51′ 44.99" (RT)
DEGREE OF CURVE = 1° 54′ 44.99"
TANGENT = 101.02
LENGTH = 201.96
RADIUS = 2,996.00
PC STATION = 102+07.58
PT STATION = 104+09.54

IH45 EB RAMP CURVE 2
PI STATION = 106+18.65
DELTA = 2° 23′ 41.63" (LT)
DEGREE OF CURVE = 0° 34′ 21.83"
TANGENT = 209.11
LENGTH = 418.15
RADIUS = 10,004.00
PC STATION = 104+09.54
PT STATION = 108+27.70

IH45 EASTBOUND FRONTAGE RD

IH45 EB CURVE 1
PI STATION = 101+53.48
DELTA = 17° 26′ 02.71" (RT)
DEGREE OF CURVE = 5° 43′ 34.45"
TANGENT = 153.48
LENGTH = 304.46
RADIUS = 1,001.00
PC STATION = 100+00.00
PT STATION = 103+04.46

IH45 EB CURVE 3
PI STATION = 121+41.02
DELTA = 2° 17′ 26.20" (LT)
DEGREE OF CURVE = 1° 54′ 35.81"
TANGENT = 59.98
LENGTH = 119.93
RADIUS = 3,000.00
PC STATION = 120+81.05
PT STATION = 122+00.98

IH45 EB CURVE 2
PI STATION = 118+40.81
DELTA = 2° 17′ 26.20" (RT)
DEGREE OF CURVE = 1° 54′ 35.81"
TANGENT = 59.98
LENGTH = 119.93
RADIUS = 3,000.00
PC STATION = 117+80.83
PT STATION = 119+00.76

IH45 EB CURVE 4
PI STATION = 131+34.50
DELTA = 23° 24′ 45.60" (RT)
DEGREE OF CURVE = 4° 46′ 33.71"
TANGENT = 248.65
LENGTH = 490.21
RADIUS = 1,200.00
PC STATION = 128+85.85
PT STATION = 133+76.06

IH45 EB CURVE 5
PI STATION = 142+02.97
DELTA = 22° 32′ 27.59" (RT)
DEGREE OF CURVE = 3° 11′ 00.63"
TANGENT = 358.71
LENGTH = 708.06
RADIUS = 1,800.00
PC STATION = 138+44.26
PT STATION = 145+52.32

SOUTHBOUND TO WESTBOUND DIRECT CONNECTOR

SB TO WB CURVE 1
PI STATION = 102+72.16
DELTA = 5° 31′ 31.56" (RT)
DEGREE OF CURVE = 1° 00′ 57.18"
TANGENT = 272.16
LENGTH = 543.90
RADIUS = 5,640.00
PC STATION = 100+00.00
PT STATION = 105+43.90

SB TO WB CURVE 2
PI STATION = 128+54.07
DELTA = 135° 17′ 32.95" (RT)
DEGREE OF CURVE = 6° 01′ 52.08"
TANGENT = 2,310.16
LENGTH = 2,243.23
RADIUS = 950.00
PC STATION = 105+43.90
PT STATION = 127+87.14

35 NORTHBOUND DIRECT CONNECTOR

35 NB CURVE 2
PI STATION = 113+46.70
DELTA = 45° 01′ 20.41" (LT)
DEGREE OF CURVE = 5° 43′ 46.48"
TANGENT = 414.44
LENGTH = 785.79
RADIUS = 1,000.00
PC STATION = 109+32.25
PT STATION = 117+18.04

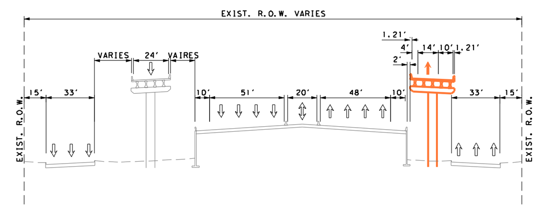
CONNECTOR "O"

O CURVE 1
PI STATION = 111+54.42
DELTA = 13° 27′ 40.12" (RT)
DEGREE OF CURVE = 1° 54′ 35.49"
TANGENT = 354.04
LENGTH = 704.82
RADIUS = 3,000.00
PC STATION = 108+00.38
PT STATION = 115+05.21

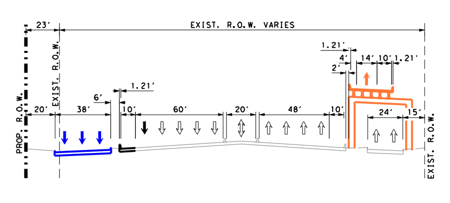
O CURVE 2
PI STATION = 123+95.42
DELTA = 11° 34′ 07.49" (LT)
DEGREE OF CURVE = 0° 57′ 17.75"
TANGENT = 607.80
LENGTH = 1,211.48
RADIUS = 6,000.00
PC STATION = 117+87.62
PT STATION = 129+99.10

ENTRANCE RAMP DIRECT CONNECTOR

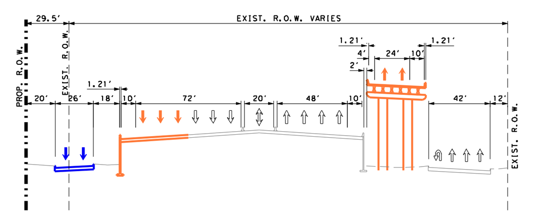
ENTRAMP CURVE 1
PI STATION = 98+69.51
DELTA = 9° 07′ 40.92" (LT)
DEGREE OF CURVE = 2° 52′ 25.36"
TANGENT = 159.17
LENGTH = 317.64
RADIUS = 1,994.00
PC STATION = 97+10.34
PT STATION = 100+27.97



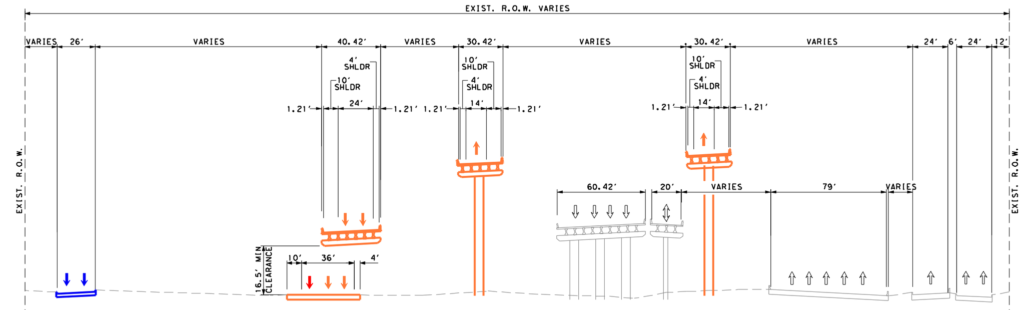
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

0 50 100 200

NOT A BIDDING DOCUMENT

MASHHOOD A. SHAH, P.E.
82080
TEXAS REGISTRATION NUMBER
10/27/2008
DATE

PRELIMINARY

THIS PRINT IS FURNISHED FOR INFORMATION ONLY. THE PLAN INFORMATION OR OTHER DATA SHOWN HEREON IS SUBJECT TO CHANGE AND MUST NOT BE CONSTRUED AS FINAL.

Texas Department of Transportation
© 2006

TCB | AECOM

TURNER COLLIE & BRADEN
5757 WOODWAY
HOUSTON, TEXAS 77057
WWW.TCB.AECOM.COM

PROPOSED IH 45(S) AT IH 610
INTERCHANGE IMPROVEMENTS
ALTERNATIVE 3

SHEET 1 OF 4

Date: 10/27/2008
File Nm. ...\SCHEM\45-610-ALT3-SCH01.dgn

\\ushou1fp002\Trans\TxDOT\60003893-IH45-610\CADD\SCHEM\45-610-ALT3-SCH01.dgn