Texas Department of Transportation

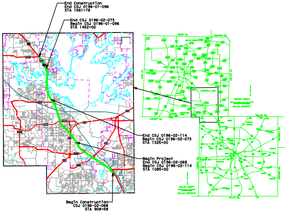
Dallas District Design Schematic
William L. Hale, P.E., District Engineer

IH 35E

From: PGBT
To: FM 2181 S. in Corinth
Dallas & Denton County
Functional Class: Urban Freeway
Project Length: 12.27 Miles

CSJ's: 0196-01-096
0196-02-073
0196-02-114
0196-02-068

Design Speeds:
Mainlanes 70 mph
Managed Lanes 70 mph
Ramps 40 mph
Turnaround Ramps 20 mph
Frontage Roads 40 mph
Cross Streets 30 mph
Collector Distributor 50 mph
Direct Connectors 50 mph


End Construction
End CSJ 0196-01-096
STA 1561+78
End CSJ 0196-02-073
Begin CSJ 0196-01-096
STA 1452+00
End CSJ 0196-02-114
Begin CSJ 0196-02-073
STA 1325+00
Begin Project
End CSJ 0196-02-068
Begin CSJ 0196-02-114
STA 1085+00
Begin Construction
CSJ 0196-02-068
STA 908+58
DENTON COUNTY
DALLAS DISTRICT
DALLAS COUNTY
DALLAS DISTRICT

Scale:
Horizontal 1"=100'
Vertical 1"=10'

October 2010

MIDDLE SEGMENT - DIRECT CONNECTORS, COLLECTOR DISTRIBUTORS, GENERAL PURPOSE LANES AND TURNAROUNDS
Roll 7 of 9

SCHEMATIC PREPARED BY:
HDR ENGINEERING, INC.
REGISTRATION NUMBER 754
FOR INTERIM REVIEW ONLY. NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.
Prepared by or under the Direct Supervision of:

NAME	P.E. NUMBER
PHILLIP WAYNE ULLMAN	71426
M. SHANE WALTERS	100195

DATE: 10-18-2010

HDR Engineering, Inc.
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Dallas, Texas 75248-1229

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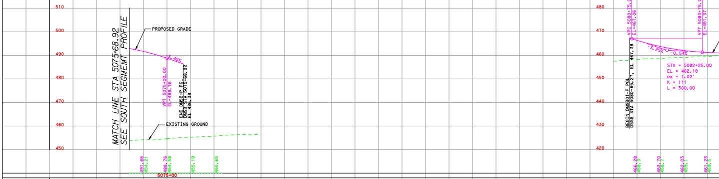
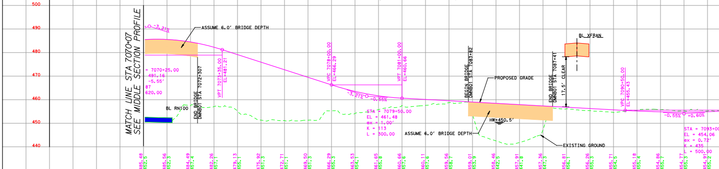
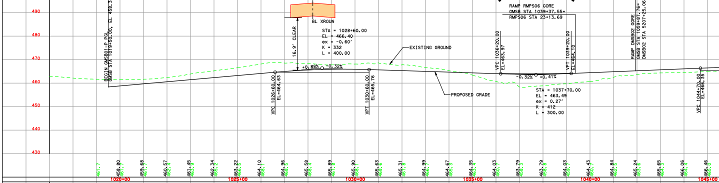
COLLECTOR DISTRIBUTOR PROFILE (DMSB)


MATCH LINE STA 5075+68.92
SEE SOUTH SEGMENT PROFILE
PROPOSED GRADE
EXISTING GROUND
VPT 5075+00.00
EL=481.76
END DMSB-P PGL
DMSB STA 5075+68.92
-3.45%
VPC 5080+75.00
EL=467.06
VPT 5083+75.00
EL=461.37
BEGIN DMSB01-P PGL
-3.26%
-0.54%
STA = 5082+25.00
EL = 462.18
ex = 1.02'
K = 111
L = 300.00
5075+00
COLL

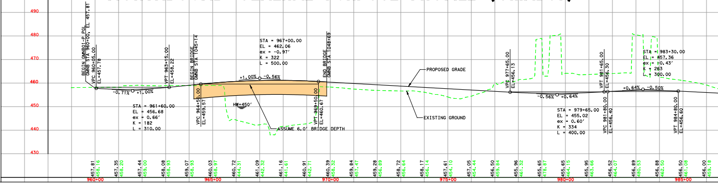
COLLECTOR DISTRIBUTOR PROFILE (DMNB01)


MATCH LINE STA 7070+07
SEE MIDDLE SECTION PROFILE
ASSUME 6.0' BRIDGE DEPTH
-3.21%
STA = 7070+25.00
EL = 491.16
ex = -5.55'
K = 87
L = 620.00
BL RN100
END BRIDGE
DMNB01 STA 7072+30?
VPT 7073+35.00
EL=481.21
VPC 7078+00.00
EL=466.29
VPT 7081+00.00
EL=460.66
-3.21%
-0.55%
STA = 7079+50.00
EL = 461.48
ex = -1.00'
K = 113
L = 300.00
ASSUME 6.0' BRIDGE DEPTH
BEGIN BRIDGE
DMNB01 STA 7083+82
PROPOSED GRADE
HW=450.5'
END BRIDGE
DMNB01 STA 7087+41
17.5' CLEAR
BL XFRAN
EXISTING GROUND
VPC 7090+50.00
EL=455.43
-0.55%
+0.60%
STA = 7093+00
EL = 454.06
ex = 0.72'
K = 435
L = 500.00
7070+00
7075+00
7080+00
7085+00
7090+00

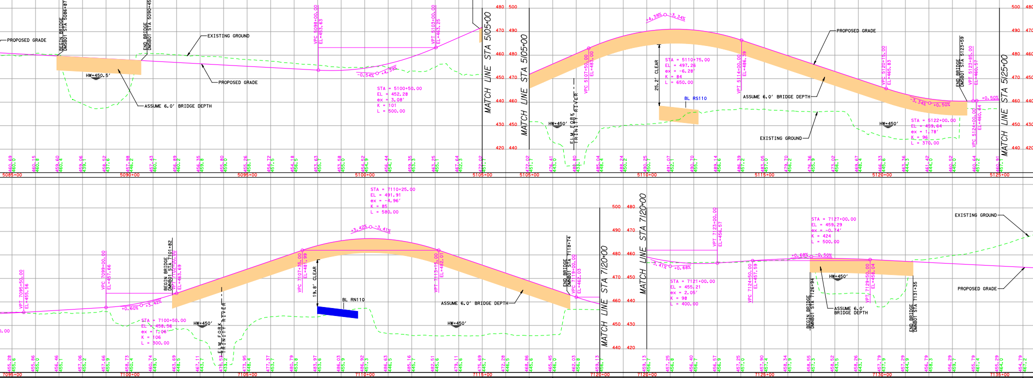
SOUTHBOUND GENERAL PURPOSE PROFILE (GMSB01)

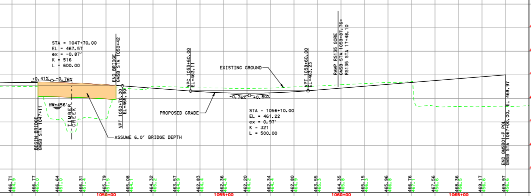

BEGIN GMSB01-P PGL
GMSB STA 1019+50.00, EL 458.36
BL XROUN
16.9' CLEAR
STA = 1028+60.00
EL = 466.40
ex = -0.60'
K = 332
L = 400.00
+0.88%
-0.32%
EXISTING GROUND
VPC 1026+60.00
EL=464.63
VPT 1030+60.00
EL=465.76
PROPOSED GRADE
RAMP RMPS06 GORE
GMSB STA 1039+37.55=
RMPS06 STA 23+13.69
VPC 1036+20.00
EL=463.97
VPT 1039+20.00
EL=464.10
-0.32%
+0.41%
STA = 1037+70.00
EL = 463.49
ex = 0.27'
K = 412
L = 300.00
RAMP DMSB02 GORE
GMSB STA 1059+87.76=
DMSB02 STA 5207+25.06
VPC 1044+70.00
EL=466.35
1020+00
1025+00
1030+00
1035+00
1040+00
1045+00

NORTHBOUND GENERAL PURPOSE PROFILE (GMNB01)


BEGIN GMNB01-P PGL
GMNB STA 960+00, EL 457.81
VPC 960+65.00
EL=457.78
-0.71%
+1.00%
STA = 961+60.00
EL = 456.68
ex = 0.66'
K = 182
L = 310.00
VPT 963+15.00
EL=458.22
BEGIN BRIDGE
GMNB STA 1045+14
VPC 964+50.00
EL=459.57
HW=450'
+1.00%
-0.56%
STA = 967+00.00
EL = 462.06
ex = -0.97'
K = 322
L = 500.00
ASSUME 6.0' BRIDGE DEPTH
VPT 969+50.00
EL=460.67
END BRIDGE
GMNB STA 1048+69
PROPOSED GRADE
EXISTING GROUND
VPC 977+65.00
EL=456.13
-0.56%
+0.64%
STA = 979+65.00
EL = 455.02
ex = 0.60'
K = 334
L = 400.00
VPT 981+65.00
EL=456.30
VPC 981+80.00
EL=456.40
+0.64%
-0.50%
STA = 983+30.00
EL = 457.36
ex = -0.43'
K = 263
L = 300.00
VPT 984+80.00
EL=456.60
960+00
965+00
970+00
975+00
980+00
985+00

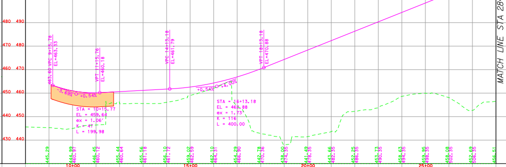
LECTOR DISTRIBUTOR PROFILE (DMSB01)


PROPOSED GRADE
BEGIN BRIDGE DMSB01 STA 5086+87
END BRIDGE DMSB01 STA 5090+45
EXISTING GROUND
HW=450.5'
ASSUME 6.0' BRIDGE DEPTH
PROPOSED GRADE
VPC 5098+00.00 EL=453.63
VPT 5103+00.00 EL=463.25
-0.54% +4.39%
STA = 5100+50.00
EL = 452.28
ex = 3.08'
K = 101
L = 500.00
BEGIN BRIDGE DMSB01 STA 5104+85
MATCH LINE STA 5105+00
MATCH LINE STA 5105+00
+4.39% -3.34%
VPC 5107+50.00 EL=483.00
25.2' CLEAR
STA = 5110+75.00
EL = 497.26
ex = -6.28'
K = 84
L = 650.00
BL RS110
VPT 5114+00.00 EL=486.39
ASSUME 6.0' BRIDGE DEPTH
PROPOSED GRADE
EXISTING GROUND
HW=450'
ELM FORK TRINITY RIVER
VPC 5120+15.00 EL=465.83
-3.34% +0.50%
STA = 5122+00.00
EL = 459.64
ex = 1.78'
K = 96
L = 370.00
HW=450'
END BRIDGE DMSB01 STA 5123+59
VPT 5123+85.00 EL=460.57
VPC 5124+00.00 EL=460.64
+0.50%
MATCH LINE STA 5125+00
5085+00
5090+00
5095+00
5100+00
5105+00
5110+00
5115+00
5120+00
5125+00
VPT 7095+50.00 EL=455.56
VPC 7099+00.00 EL=457.66
+0.60% +3.42%
STA = 7100+50.00
EL = 458.56
ex = 1.06'
K = 106
L = 300.00
BEGIN BRIDGE DMNB01 STA 7101+82
VPC 7101+50.00 EL=463.69
HW=450'
ELM FORK TRINITY RIVER
STA = 7110+25.00
EL = 491.91
ex = -4.96'
K = 85
L = 580.00
+3.42% -3.41%
VPT 7107+35.00 EL=481.99
19.8' CLEAR
BL RN110
VPT 7113+15.00 EL=482.01
ASSUME 6.0' BRIDGE DEPTH
HW=450'
END BRIDGE DMNB01 STA 7118+74
VPC 7119+00.00 EL=462.03
MATCH LINE STA 7120+00
MATCH LINE STA 7120+00
-3.41% +0.68%
VPT 7123+00.00 EL=456.57
STA = 7121+00.00
EL = 455.21
ex = 2.05'
K = 98
L = 400.00
VPC 7124+60.00 EL=457.59
STA = 7127+00.00
EL = 459.29
ex = -0.74'
K = 424
L = 500.00
+0.68% -0.50%
HW=450'
BEGIN BRIDGE DMNB01 STA 7126+94
ASSUME 6.0' BRIDGE DEPTH
VPT 7129+50.00 EL=458.04
END BRIDGE DMNB01 STA 7131+35
EXISTING GROUND
PROPOSED GRADE
7095+00
7100+00
7105+00
7110+00
7115+00
7120+00
7125+00
7130+00
7135+00

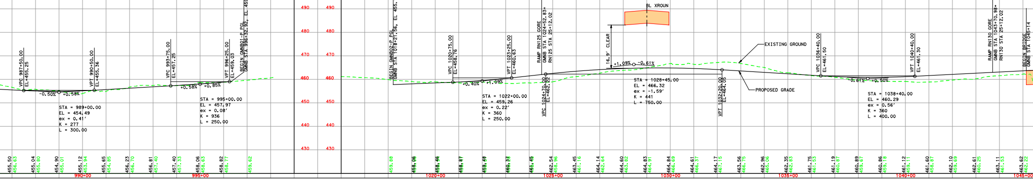

STA = 1047+70.00
EL = 467.57
ex = -0.87'
K = 516
L = 600.00
+0.41% -0.76%
HW=456'
TIMBER CREEK
BEGIN BRIDGE GMSB STA 1047+11
END BRIDGE GMSB STA 1050+42
VPT 1050+70.00 EL=465.10
ASSUME 6.0' BRIDGE DEPTH
VPC 1053+60.00 EL=463.11
EXISTING GROUND
PROPOSED GRADE
-0.76% +0.80%
STA = 1056+10.00
EL = 461.22
ex = 0.97'
K = 321
L = 500.00
VPT 1058+60.00 EL=463.23
RAMP RS135 GORE GMSB STA 1059+87.76= RS135 STA 17+48.10
END GMSB01-P PGL GMSB STA 1067+00.00, EL 469.97
1050+00
1055+00
1060+00
1065+00

DIRECT CONNECTOR (DM21WS)

WB 121 TOLL TO SB IH35E


VPC 9+15.78 EL=463.33
-3.69% +0.54%
VPT 11+15.76 EL=460.18
STA = 10+15.77
EL = 459.64
ex = 1.06'
K = 47
L = 199.98
VPC 14+13.18 EL=461.79
+0.54% +4.00%
STA = 16+13.18
EL = 462.88
ex = 1.73'
K = 116
L = 400.00
VPT 18+13.18 EL=470.88
MATCH LINE STA 28+00
10+00
15+00
20+00
25+00

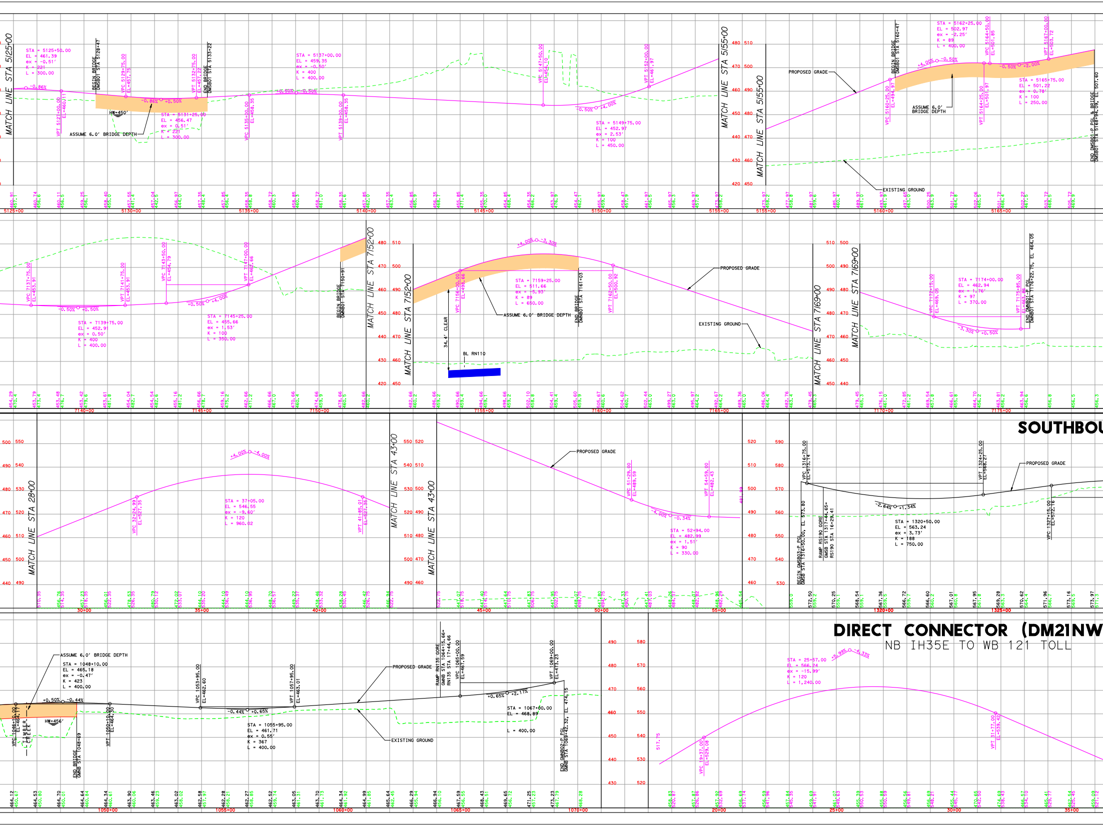
NORTHBOUND GENERAL PURPOSE PROFILE (GMNB02)


VPC 987+50.00 EL=455.25
-0.50% +0.58%
STA = 989+00.00
EL = 454.49
ex = 0.41'
K = 277
L = 300.00
VPT 990+50.00 EL=455.36
VPC 993+75.00 EL=457.25
+0.58% +0.85%
STA = 995+00.00
EL = 457.97
ex = 0.08'
K = 936
L = 250.00
VPT 996+25.00 EL=459.03
BEGIN GMNB01-P PGL GMNB STA 996+32.92, EL 459.10
BEGIN GMNB02-P PGL GMNB STA 1018+21.56, EL 455.12
VPC 1020+75.00 EL=458.76
+0.40% +1.09%
STA = 1022+00.00
EL = 459.26
ex = 0.22'
K = 360
L = 250.00
VPT 1023+25.00 EL=460.63
RAMP RN125 GORE GMNB STA 1024+52.83= RN125 STA 25+12.02
VPC 1024+70.00 EL=462.22
BL XROUN
16.9' CLEAR
+1.09% -0.61%
STA = 1028+45.00
EL = 466.32
ex = -1.59'
K = 441
L = 750.00
VPT 1032+20.00 EL=464.05
EXISTING GROUND
PROPOSED GRADE
VPC 1036+40.00 EL=461.50
-0.61% +0.50%
STA = 1038+40.00
EL = 460.29
ex = 0.56'
K = 360
L = 400.00
VPT 1040+40.00 EL=461.30
RAMP RN130 GORE GMNB STA 1043+70.98= RN130 STA 25+12.02
BEGIN BRIDGE GMNB STA 1045+14
990+00
995+00
1020+00
1025+00
1030+00
1035+00
1040+00
1045+00

SOUTHBOU

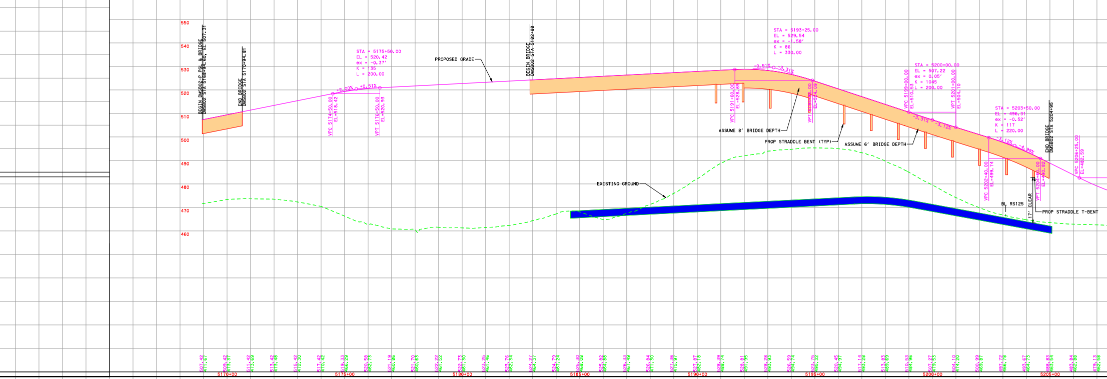
DIRECT CONNECTOR (DM21NW

NB IH35E TO WB 121 TOLL



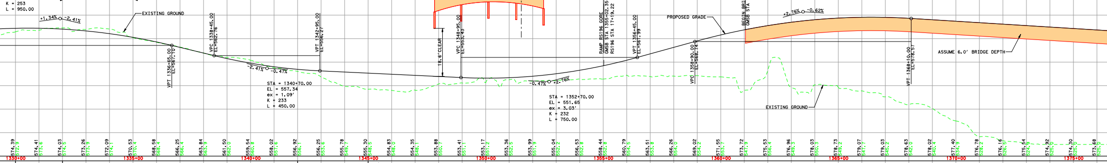
MATCH LINE STA 5125+00
STA = 5125+50.00
EL = 461.39
ex = -0.51'
K = 221
L = 300.00
-0.86%
VPT 5127+00.00 EL=460.11
BEGIN BRIDGE DMSB01 STA 5128+47
VPC 5129+75.00 EL=457.75
-0.86% +0.50%
HW=450'
ASSUME 6.0' BRIDGE DEPTH
VPT 5132+75.00 EL=457.22
END BRIDGE DMSB01 STA 5133+22
STA = 5131+25.00
EL = 456.47
ex = 0.51'
K = 221
L = 300.00
VPC 5135+00.00 EL=458.35
STA = 5137+00.00
EL = 459.35
ex = -0.50'
K = 400
L = 400.00
+0.50% -0.50%
VPT 5139+00.00 EL=458.35
VPC 5147+50.00 EL=454.10
VPT 5152+00.00 EL=461.97
-0.50% +4.00%
STA = 5149+75.00
EL = 452.97
ex = 2.53'
K = 100
L = 450.00
MATCH LINE STA 5155+00
MATCH LINE STA 5155+00
PROPOSED GRADE
BEGIN BRIDGE DMSB01 STA 5160+47
VPC 5160+25.00 EL=494.97
+4.00% -0.50%
ASSUME 6.0' BRIDGE DEPTH
STA = 5162+25.00
EL = 502.97
ex = -2.25'
K = 89
L = 400.00
VPC 5164+50.00 EL=501.85
VPT 5164+25.00 EL=501.97
-0.50% +2.00%
STA = 5165+75.00
EL = 501.22
ex = 0.78'
K = 100
L = 250.00
VPT 5167+00.00 EL=503.72
END DMSB01-P PGL & BRIDGE DMSB01 STA 5168+94.09, EL 507.60
EXISTING GROUND
5125+00
5130+00
5135+00
5140+00
5145+00
5150+00
5155+00
5155+00
5160+00
5165+00
VPC 7137+75.00 EL=453.91
-0.50% +0.50%
STA = 7139+75.00
EL = 452.91
ex = 0.50'
K = 400
L = 400.00
VPT 7141+75.00 EL=453.91
VPC 7143+50.00 EL=454.79
+0.50% +4.00%
STA = 7145+25.00
EL = 455.66
ex = 1.53'
K = 100
L = 350.00
VPT 7147+00.00 EL=462.66
BEGIN BRIDGE DMSB01 STA 7150+91
MATCH LINE STA 7152+00
MATCH LINE STA 7152+00
+4.00% -3.30%
VPC 7156+00.00 EL=498.66
ASSUME 6.0' BRIDGE DEPTH
STA = 7159+25.00
EL = 511.66
ex = -5.93'
K = 89
L = 650.00
END BRIDGE DMSB01 STA 7161+03
VPT 7162+50.00 EL=500.92
PROPOSED GRADE
EXISTING GROUND
34.4' CLEAR
BL RN110
MATCH LINE STA 7169+00
MATCH LINE STA 7169+00
VPC 7172+15.00 EL=469.05
-3.30% +0.50%
STA = 7174+00.00
EL = 462.94
ex = 1.76'
K = 97
L = 370.00
VPT 7175+85.00 EL=463.86
END DMSB01-P PGL DMSB01 STA 7176+22.75, EL 464.05
7140+00
7145+00
7150+00
7155+00
7160+00
7165+00
7170+00
7175+00
MATCH LINE STA 28+00
+4.00% -4.00%
VPC 32+24.99 EL=527.35
STA = 37+05.00
EL = 546.55
ex = -9.60'
K = 120
L = 960.02
VPT 41+85.01 EL=527.35
MATCH LINE STA 43+00
MATCH LINE STA 43+00
PROPOSED GRADE
VPC 51+29.00 EL=489.59
-4.00% -0.34%
STA = 52+94.00
EL = 482.99
ex = 1.51'
K = 90
L = 330.00
VPT 54+59.00 EL=482.43
30+00
35+00
40+00
45+00
50+00
55+00
BEGIN GMSB03-P PGL GMSB STA 1316+00.00, EL 573.80
VPC 1316+75.00 EL=573.14
RAMP RS190 CORE GMSB STA 1317+44.65= RS190 STA 16+29.41
-2.64% +1.34%
STA = 1320+50.00
EL = 563.24
ex = 3.73'
K = 188
L = 750.00
VPT 1324+25.00 EL=568.27
PROPOSED GRADE
VPC 1327+15.00 EL=572.16
1320+00
1325+00
ASSUME 6.0' BRIDGE DEPTH
STA = 1048+10.00
EL = 465.18
ex = -0.47'
K = 423
L = 400.00
+0.50% -0.44%
VPC 1046+10.00 EL=464.17
TIMBER CREEK
HW=456'
END BRIDGE GMNB STA 1048+69
VPT 1050+10.00 EL=464.35
VPC 1053+95.00 EL=462.60
-0.44% +0.65%
STA = 1055+95.00
EL = 461.71
ex = 0.55'
K = 367
L = 400.00
VPT 1057+95.00 EL=463.01
PROPOSED GRADE
EXISTING GROUND
RAMP RN135 CORE GMNB STA 1064+15.66= RN135 STA 17+44.66
VPC 1065+00.00 EL=467.59
+0.65% +2.17%
STA = 1067+00.00
EL = 468.89
L = 400.00
VPT 1069+00.00 EL=473.23
END GMNB02-P PGL GMNB STA 1069+42.32, EL 474.15
1050+00
1055+00
1060+00
1065+00
1070+00
STA = 25+57.00
EL = 566.24
ex = -15.99'
K = 120
L = 1,240.00
+5.99% -4.33%
VPC 19+37.00 EL=529.08
VPT 31+77.00 EL=539.42
20+00
25+00
30+00
35+00

COLLECTOR DISTRIBUTOR PROFILE (DMSB02)



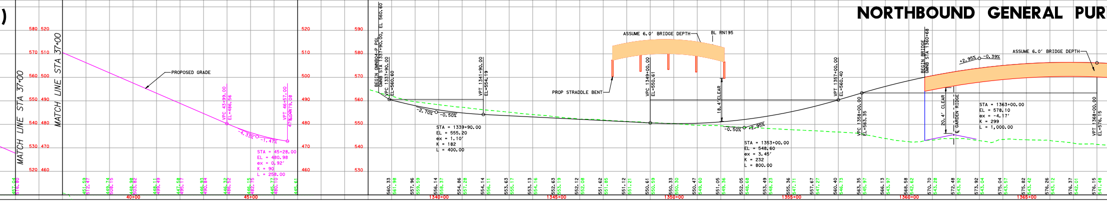
BEGIN DMSB02-P PGL & BRIDGE DMSB02 STA 5168+94.60, EL 507.31
END BRIDGE DMSB02 STA 5170+94.81
STA = 5175+50.00
EL = 520.42
ex = -0.37'
K = 135
L = 200.00
+2.00%
+0.51%
VPC 5174+50.00 EL=518.42
VPT 5176+50.00 EL=520.93
PROPOSED GRADE
BEGIN BRIDGE DMSB02 STA 5182+88
STA = 5193+25.00
EL = 529.54
ex = -1.58'
K = 86
L = 330.00
+0.51%
-3.31%
VPC 5191+60.00 EL=528.69
ASSUME 8' BRIDGE DEPTH
PROP STRADDLE BENT (TYP)
ASSUME 6' BRIDGE DEPTH
STA = 5200+00.00
EL = 507.22
ex = 0.05'
K = 1045
L = 200.00
VPC 5199+00.00 EL=510.53
VPT 5201+00.00 EL=504.10
-3.31%
-3.12%
STA = 5203+50.00
EL = 496.31
ex = -0.52'
K = 117
L = 220.00
-3.12%
-4.99%
VPC 5202+40.00 EL=499.74
END BRIDGE DMSB02 STA 5204+95
VPC 5206+25.00 EL=482.59
EXISTING GROUND
BL RS125
17' CLEAR
PROP STRADDLE T-BENT
550
540
530
520
510
500
490
480
470
460
5170+00
5175+00
5180+00
5185+00
5190+00
5195+00
5200+00
5205+00

UND GENERAL PURPOSE PROFILE (GMSB03)

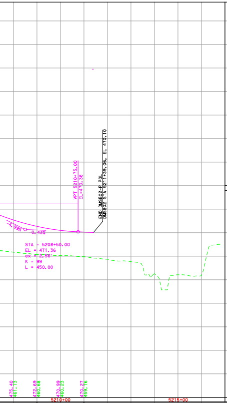


STA = 1331+90.00
EL = 578.54
ex = -4.45'
K = 253
L = 950.00
+1.34%
-2.41%
EXISTING GROUND
VPT 1336+65.00 EL=567.10
VPC 1338+45.00 EL=562.76
-2.41%
-0.47%
VPT 1342+95.00 EL=556.27
STA = 1340+70.00
EL = 557.34
ex = 1.09'
K = 233
L = 450.00
ASSUME 6.0' BRIDGE DEPTH
BL RS195
18.6' CLEAR
VPC 1348+95.00 EL=553.43
-0.47%
+2.76%
STA = 1352+70.00
EL = 551.65
ex = 3.03'
K = 232
L = 750.00
RAMP RS196 GORE GMSB STA 1355+02.35= RS196 STA 17+19.22
VPT 1356+45.00 EL=561.99
PROPOSED GRADE
VPC 1358+90.00 EL=568.74
BEGIN BRIDGE GMSB STA 1361+05
STA = 1363+50.00
EL = 581.43
ex = -3.88'
K = 272
L = 920.00
+2.76%
-0.62%
VPT 1368+10.00 EL=578.57
ASSUME 6.0' BRIDGE DEPTH
EXISTING GROUND
1330+00
1335+00
1340+00
1345+00
1350+00
1355+00
1360+00
1365+00
1370+00
1375+00

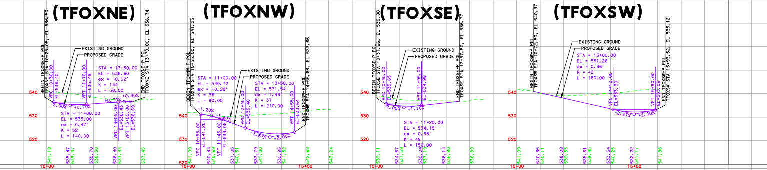
NORTHBOUND GENERAL PUR



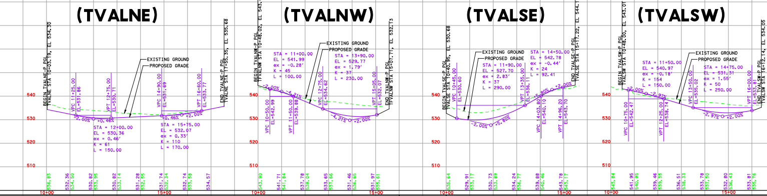
MATCH LINE STA 37+00
MATCH LINE STA 37+00
PROPOSED GRADE
VPC 43+99.00 EL=486.56
VPT 46+57.00 EL=479.08
-4.33%
-1.47%
STA = 45+28.00
EL = 480.98
ex = 0.92'
K = 90
L = 258.00
580 520
570 510
560 500
550 490
540 480
530 470
520 460
40+00
45+00
BEGIN GMNB04-P PGL GMNB STA 1337+90.00, EL 560.60
VPC 1337+90.00 EL=560.60
-2.70%
-0.50%
STA = 1339+90.00
EL = 555.20
ex = 1.10'
K = 182
L = 400.00
VPT 1341+90.00 EL=554.19
ASSUME 6.0' BRIDGE DEPTH
BL RN195
PROP STRADDLE BENT
VPC 1349+00.00 EL=550.61
18.4' CLEAR
-0.50%
+2.95%
STA = 1353+00.00
EL = 548.60
ex = 3.45'
K = 232
L = 800.00
VPT 1357+00.00 EL=560.40
VPC 1358+00.00 EL=563.35
BEGIN BRIDGE GMNB STA 1360+68
20.4' CLEAR
℄ GARDEN RIDGE
+2.95%
-0.39%
ASSUME 6.0' BRIDGE DEPTH
STA = 1363+00.00
EL = 578.10
ex = -4.17'
K = 299
L = 1,000.00
VPT 1368+00.00 EL=576.15
590
580
570
560
550
540
530
1340+00
1345+00
1350+00
1355+00
1360+00
1365+00

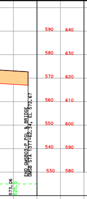

END DMSB02-P PGL
DMSB02 STA 5211+39.06, EL 470.70
VPT 5210+75.00
EL=470.38
-4.99%
-0.43%
STA = 5208+50.00
EL = 471.36
ex = 2.58'
K = 99
L = 450.00
5210+00
5215+00

FOX TURNAROUNDS

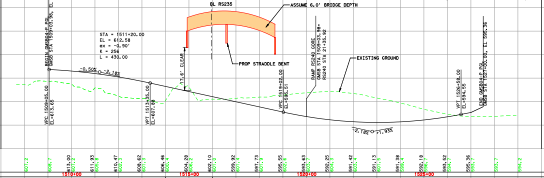

(TFOXNE)
(TFOXNW)
(TFOXSE)
(TFOXSW)
BEGIN TFOXNE-P PGL
TFOXNE STA 10+26.05, EL 536.50
END TFOXNE-P PGL
TFOXNE STA 13+70.00, EL 536.74
EXISTING GROUND
PROPOSED GRADE
STA = 13+30.00
EL = 536.60
ex = -0.02'
K = 144
L = 50.00
STA = 11+00.00
EL = 535.00
ex = 0.47'
K = 52
L = 140.00
-2.00%
+0.70%
+0.35%
BEGIN TFOXNW-P PGL
TFOXNW STA 10+55.00, EL 541.25
END TFOXNW-P PGL
TFOXNW STA 14+55.63, EL 533.66
STA = 11+00.00
EL = 540.72
ex = -0.28'
K = 36
L = 90.00
STA = 13+50.00
EL = 531.54
ex = 1.49'
K = 37
L = 210.00
-1.20%
-3.67%
+2.00%
BEGIN TFOXSE-P PGL
TFOXSE STA 10+37.66, EL 535.80
END TFOXSE-P PGL
TFOXSE STA 13+57.50, EL 536.77
STA = 11+20.00
EL = 534.15
ex = 0.58'
K = 48
L = 150.00
-2.00%
+1.10%
BEGIN TFOXSW-P PGL
TFOXSW STA 10+72.50, EL 540.97
END TFOXSW-P PGL
TFOXSW STA 15+93.52, EL 533.12
STA = 15+00.00
EL = 531.26
ex = 0.96'
K = 42
L = 180.00
-2.27%
+2.00%
540
530
520
10+00
15+00

VALLEY RIDGE TURNAROUNDS

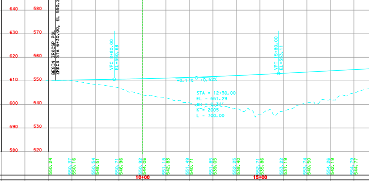

(TVALNE)
(TVALNW)
(TVALSE)
(TVALSW)
BEGIN TVALNE-P PGL
TVALNE STA 10+03.19, EL 534.30
END TVALNE-P PGL
TVALNE STA 17+55.35, EL 535.68
EXISTING GROUND
PROPOSED GRADE
STA = 12+00.00
EL = 530.36
ex = 0.46'
K = 61
L = 150.00
STA = 15+75.00
EL = 532.07
ex = 0.33'
K = 110
L = 170.00
-2.00%
+0.46%
+2.00%
BEGIN TVALNW-P PGL
TVALNW STA 10+48.02, EL 543.03
END TVALNW-P PGL
TVALNW STA 15+01.71, EL 532.73
STA = 11+00.00
EL = 541.99
ex = -0.28'
K = 45
L = 100.00
STA = 13+90.00
EL = 529.77
ex = 1.79'
K = 37
L = 230.00
-2.00%
-4.21%
+2.00%
BEGIN TVALSE-P PGL
TVALSE STA 10+40.95, EL 530.68
END TVALSE-P PGL
TVALSE STA 15+17.22, EL 544.12
STA = 11+90.00
EL = 527.70
ex = 2.83'
K = 37
L = 290.00
STA = 14+50.00
EL = 542.78
ex = -0.44'
K = 24
L = 92.41
-2.00%
+5.80%
+2.00%
BEGIN TVALSW-P PGL
TVALSW STA 10+48.00, EL 543.07
END TVALSW-P PGL
TVALSW STA 16+12.14, EL 534.05
STA = 11+50.00
EL = 540.97
ex = -0.18'
K = 154
L = 150.00
STA = 14+75.00
EL = 531.31
ex = 1.55'
K = 50
L = 250.00
-2.00%
-2.97%
+2.00%
540
530
520
510
10+00
15+00


END GMSB03-P PGL & BRIDGE
GMSB STA 1377+62.34, EL 572.67
590
580
570
560
550
540
530

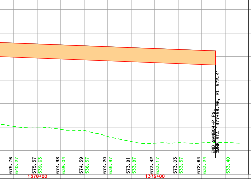
SOUTHBOUND GENERAL PURPOSE PROFILE (GMSB04)


BL RS235
ASSUME 6.0' BRIDGE DEPTH
PROP STRADDLE BENT
17.6' CLEAR
BEGIN GMSB04-P PGL
GMSB STA 1509+03.98, EL 613.66
STA = 1511+20.00
EL = 612.58
ex = -0.90'
K = 256
L = 430.00
-0.50%
-2.18%
RAMP RS240 GORE
GMSB STA 1509+03.98=
RS240 STA 21+35.92
EXISTING GROUND
END GMSB04-P PGL
GMSB STA 1527+00.00, EL 595.36
VPC 1509+05.00
EL=613.65
VPT 1513+35.00
EL=607.88
VPC 1519+02.00
EL=595.51
VPT 1526+58.00
EL=594.55
-2.18%
+1.93%
640
630
620
610
600
590
580
1510+00
1515+00
1520+00
1525+00

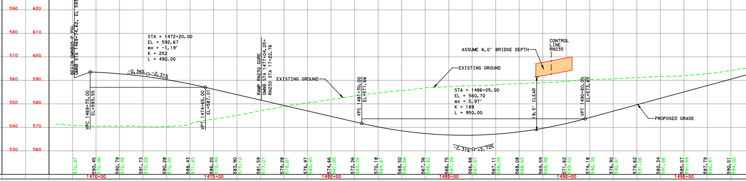
KANSAS CITY SOUTH


BEGIN ZRKCSP PGL
ZRKCS STA 6+30.00, EL 550.25
VPC 6+80.00
EL=550.68
VPT 5+80.00
EL=553.11
-0.11%
+0.52%
STA = 12+30.00
EL = 551.29
ex = 0.31'
K = 2005
L = 700.00
580
570
560
550
540
530
520
10+00
15+00

POSE PROFILE (GMNB04)

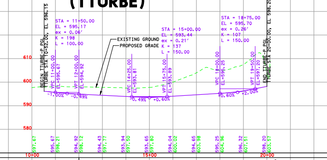

END GMNB04-P PGL
GMNB STA 1377+58.96, EL 572.41
590
580
570
560
550
540
530
620
610
600
590
580
570
560
1370+00
1375+00

NORTHBOUND GENERAL PURPOSE PROFILE (GMNB05)

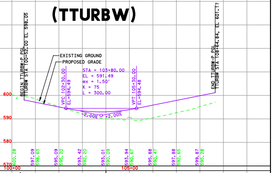

BEGIN GMNB05-P PGL
GMNB STA 1469+74.82, EL 593.55
STA = 1472+20.00
EL = 592.67
ex = -1.19'
K = 252
L = 490.00
-0.36%
-2.31%
RAMP RN230 GORE
GMNB STA 1477+04.05=
RN230 STA 17+22.76
EXISTING GROUND
ASSUME 6.0' BRIDGE DEPTH
CONTROL
LINE
RN235
STA = 1486+05.00
EL = 560.70
ex = 5.97'
K = 189
L = 950.00
19.5' CLEAR
PROPOSED GRADE
VPC 1469+75.00
EL=593.55
VPT 1474+65.00
EL=587.01
VPC 1481+30.00
EL=571.66
VPT 1490+80.00
EL=573.63
-2.31%
+2.72%
1470+00
1475+00
1480+00
1485+00
1490+00
1495+00

TURBEVILLE / HUNDLEY TURNAROUNDS

(TTURBE)

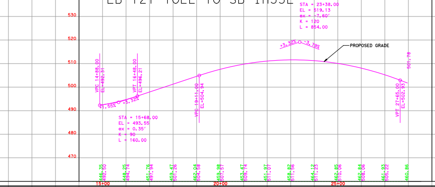

BEGIN TTURBE-P PGL
TTURBE STA 10+52.00, EL 596.15
STA = 11+50.00
EL = 595.17
ex = 0.06'
K = 198
L = 100.00
EXISTING GROUND
PROPOSED GRADE
STA = 15+00.00
EL = 593.44
ex = 0.21'
K = 137
L = 150.00
STA = 18+75.00
EL = 595.70
ex = 0.26'
K = 107
L = 150.00
END TTURBE-P PGL
TTURBE STA 20+00.00, EL 598.20
VPC 11+00.00
EL=595.67
VPT 12+00.00
EL=594.92
VPC 14+25.00
EL=593.81
VPT 15+75.00
EL=593.89
VPC 18+00.00
EL=595.25
VPT 19+50.00
EL=597.20
-1.00%
-0.49%
-0.49%
+0.60%
+0.60%
+2.00%
610
600
590
580
597.67
595.67 598.21
594.92 598.12
594.43 597.77
593.94 597.50
593.65 597.80
594.04 600.02
594.65 603.98
595.25 604.96
596.32 607.51
598.20 603.57
10+00
15+00
20+00

(TTURBW)


BEGIN TTURBW-P PGL
TTURBW STA 100+52.00 EL 598.05
EXISTING GROUND
PROPOSED GRADE
VPC 102+30.00
EL=594.49
STA = 103+80.00
EL = 591.49
ex = 1.50'
K = 75
L = 300.00
VPT 105+30.00
EL=594.48
-2.00%
+2.00%
END TTURBW-P PGL
TTURBW STA 108+64.84, EL 601.17
600
590
580
570
600.28
597.09 598.63
595.09 595.20
593.42 592.20
593.01 590.09
593.94 590.67
595.88 590.47
597.88 592.65
599.87 595.28
100+00
105+00

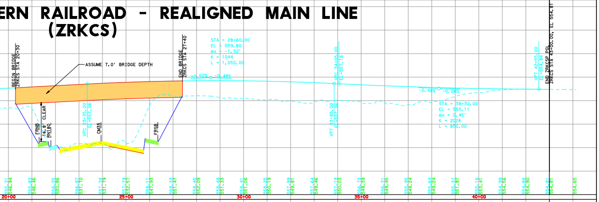
DIRECT CONNECTOR (DM21ES)

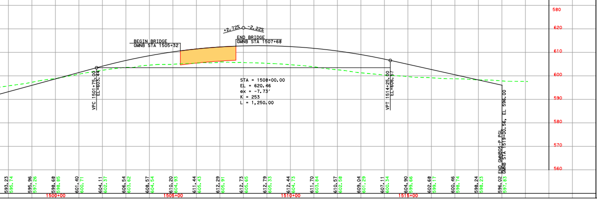
EB 121 TOLL TO SB IH35E


STA = 23+38.00
EL = 519.13
ex = -7.60'
K = 120
L = 854.00
+3.32%
-3.79%
PROPOSED GRADE
501.78
VPC 14+88.00
EL=492.31
VPT 16+48.00
EL=496.21
+1.55%
+3.32%
VPC 19+11.00
EL=504.94
VPT 27+65.00
EL=502.93
STA = 15+68.00
EL = 493.55
ex = 0.35'
K = 90
L = 160.00
530
520
510
500
490
480
470
446.35 492.50
448.25 494.74
451.76 497.94
459.47 501.26
462.04 504.58
459.98 507.57
453.47 509.74
451.97 511.07
458.82 511.56
464.12 511.23
462.85 510.06
462.84 508.06
461.93 505.22
460.86
15+00
20+00
25+00

ERN RAILROAD - REALIGNED MAIN LINE

(ZRKCS)


BEGIN BRIDGE
ZRKCS STA 20+30
ASSUME 7.0' BRIDGE DEPTH
END BRIDGE
ZRKCS STA 27+40
STA = 28+60.00
EL = 559.80
ex = -1.32'
K = 1044
L = 1,050.00
+0.52%
-0.48%
16.8' CLEAR
FRNB
RN180
VPC 23+35.00
EL=557.06
CM35
FRSB
VPC 34+05.00
EL=557.16
VPT 33+85.00
EL=557.26
-0.48%
-0.06%
STA = 38+30.00
EL = 555.11
ex = 0.45'
K = 2026
L = 850.00
VPT 42+55.00
EL=554.84
END ZRKCSP PGL
ZRKCS STA 43+00.00, EL 554.81
555.31 546.94
555.83 546.46
556.35 530.86
556.87 531.70
557.38 531.79
557.79 532.57
558.11 547.93
558.33 551.47
558.45 552.09
558.48 551.33
558.41 551.06
558.25 550.19
557.99 549.81
557.64 549.46
557.19 550.03
556.73 549.39
556.31 549.45
555.95 548.24
555.64 549.24
555.37 551.87
555.16 553.41
554.99 554.56
554.88 554.90
554.81 554.81
554.65
20+00
25+00
30+00
35+00
40+00


+2.72%
-2.22%
BEGIN BRIDGE
GMNB STA 1505+32
END BRIDGE
GMNB STA 1507+68
VPC 1501+75.00
EL=603.44
STA = 1508+00.00
EL = 620.46
ex = -7.73'
K = 253
L = 1,250.00
VPT 1514+25.00
EL=606.57
END GMNB05-P PGL
GMNB STA 1519+00.56, EL 596.00
580
620
610
600
590
580
570
560
593.23 595.74
595.96 597.26
598.68 598.85
601.40 600.71
604.11 602.37
606.54 603.62
608.57 604.54
610.20 604.93
611.44 605.43
612.29 605.91
612.73 605.65
612.79 605.33
612.44 604.73
611.70 603.84
610.57 602.58
609.04 601.29
607.11 600.34
604.90 599.66
602.68 599.17
600.46 598.74
598.24 598.23
596.02 597.83
1500+00
1505+00
1510+00
1515+00

®
Texas Department of Transportation

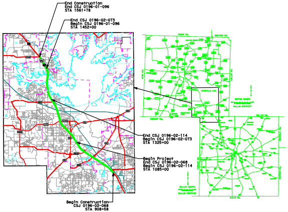
Dallas District Design Schematic
William L. Hale, P.E., District Engineer

IH 35E

From: PGBT
To: FM 2181 S. in Corinth
Dallas & Denton County
Functional Class: Urban Freeway
Project Length: 12.27 Miles

CSJ's: 0196-01-096
0196-02-073
0196-02-114
0196-02-068

Design Speeds:
Mainlanes 70 mph
Managed Lanes 70 mph
Ramps 40 mph
Turnaround Ramps 20 mph
Frontage Roads 40 mph
Cross Streets 30 mph
Collector Distributor 50 mph
Direct Connectors 50 mph


End Construction
End CSJ 0196-01-096
STA 1561+78
End CSJ 0196-02-073
Begin CSJ 0196-01-096
STA 1452+00
End CSJ 0196-02-114
Begin CSJ 0196-02-073
STA 1325+00
Begin Project
End CSJ 0196-02-068
Begin CSJ 0196-02-114
STA 1085+00
Begin Construction
CSJ 0196-02-068
STA 908+58
DENTON COUNTY
DALLAS DISTRICT
DALLAS COUNTY
DALLAS DISTRICT
COOKE CO.
GRAYSON CO.
COLLIN CO.
TARRANT CO.
ELLIS CO.
DALLAS

Scale:
Horizontal 1"=100'
Vertical 1"=10'

October 2010

MIDDLE SEGMENT - DIRECT CONNECTORS, COLLECTOR DISTRIBUTORS, GENERAL PURPOSE LANES AND TURNAROUNDS
Roll 7 of 9

SCHEMATIC PREPARED BY:

HDR ENGINEERING, INC.
REGISTRATION NUMBER 754

FOR INTERIM REVIEW ONLY. NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.

Prepared by or under the Direct Supervision of:

NAME	P.E. NUMBER
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M. SHANE WALTERS	100195

10-18-2010
DATE

HDR Engineering, Inc.
17111 Preston Road, Suite 200
Dallas, Texas 75248-1229

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