Dallas to Houston High-Speed Rail
Final Environmental Impact Statement

Appendix G

TEXAS CENTRAL

Dallas to Houston High-Speed Rail
Final Environmental Impact Statement

Appendix G:
Dallas to Houston High-Speed Rail
Passenger Service from Houston to Dallas
Final Conceptual Engineering
Plans and Details
Set 1 of 14

TEXAS
CENTRAL

TEXAS CENTRAL

DALLAS TO HOUSTON HIGH-SPEED RAIL

PASSENGER SERVICE FROM HOUSTON TO DALLAS

FINAL CONCEPTUAL ENGINEERING PLANS AND DETAILS

PROJECT DEFINITION FOR FINAL ENVIRONMENTAL IMPACT STATEMENT

JULY 1, 2019

U.S. Department of Transportation
Federal Railroad Administration

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COVER SHEET

GEN-00-00001

TEXAS CENTRAL

DALLAS TO HOUSTON HIGH-SPEED RAIL

PASSENGER SERVICE FROM HOUSTON TO DALLAS

FINAL CONCEPTUAL ENGINEERING PLANS AND DETAILS

PROJECT DEFINITION FOR FINAL ENVIRONMENTAL IMPACT STATEMENT

VOLUME 1 - GENERAL NOTES AND TYPICAL SECTIONS

JULY 1, 2019

U.S. Department of Transportation
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COVER SHEET

22x34

VOLUME 1A

GENERAL SHEETS AND TYPICAL SECTIONS (SEGMENTS HN, WT, NW, EW, DS)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY D. THOMPSON
CHECKED BY R. BURNS
IN CHARGE C. TAYLOR
DATE 2/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-0000	01

22x34

PLOT TIME: 4/30/2019 3:55:35 PM

PLOT BY: Andrew.Utz

1A-1

GENERAL

REV	DATE	BY	CHK	APP	DESCRIPTION

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

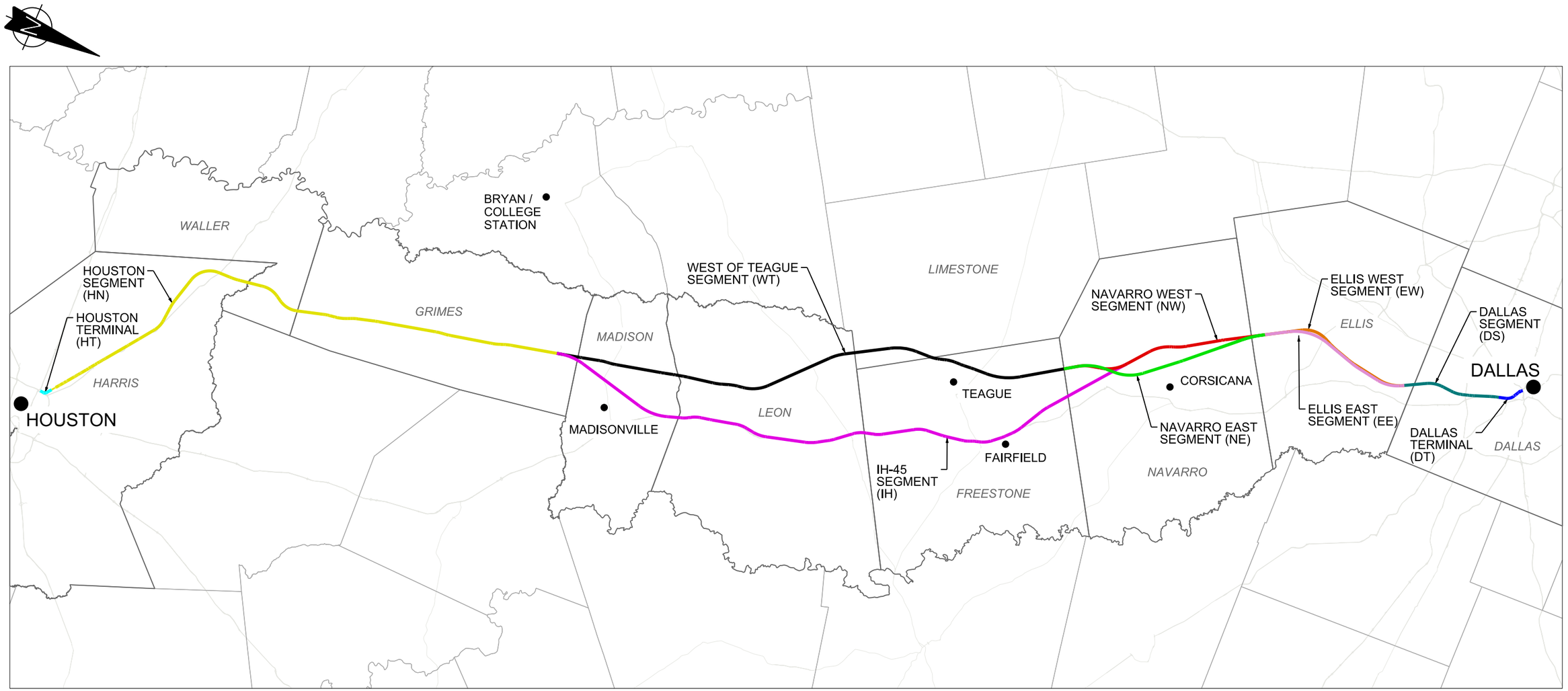
Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-0000	01

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-10 General (PG)\4-03-10-02 Sheets\234180-AFN-GEN-DWG-00-00031-V002

22x34



ALIGNMENT ALTERNATIVE	FRA SEGMENT ID	SEGMENT NAMES	SEGMENT ABBREVIATION
A	5, 4, 3A, 2A, 1	DALLAS SEGMENT, ELLIS WEST SEGMENT, NAVARRO WEST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EW, NW, WT, HN
B	5, 4, 3B, 2A,1	DALLAS SEGMENT, ELLIS WEST SEGMENT, NAVARRO EAST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EW, NE, WT, HN
C	5, 3C, 2A, 1	DALLAS SEGMENT, ELLIS WEST SEGMENT, IH-45 SEGMENT, HOUSTON SEGMENT	DS, EW, IH, HN
D	5, 4, 3A, 2B, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, NAVARRO WEST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EE, NW, WT, HN
E	5, 4, 3B, 2B, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, NAVARRO EAST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EE, NE, WT, HN
F	5, 3C, 2B, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, IH-45 SEGMENT, HOUSTON SEGMENT	DS, EE, IH, HN

NOTES:

1. REFER TO FCE REPORT FOR SEGMENT NAMES AND ALIGNMENT ALTERNATIVES.

40000 0 40000 80000
SCALE IN FEET

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. THOMPSON
DRAWN BY D. THOMPSON
CHECKED BY R. BURNS
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DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL LOCATION PLAN

Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-00002	01

Arup Texas Inc.

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PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 11:35:37 AM

22x34

VOLUME 1A - GENERAL SHEETS & TYPICAL SECTIONS

DRAWING NO.	DRAWING DESCRIPTIONS
	1A-1 GENERAL
	COVER SHEET
GEN-00-00002	GENERAL - LOCATION PLAN
GEN-00-00003	GENERAL - INDEX SHEET 1 OF 5
GEN-00-00004	GENERAL - INDEX SHEET 2 OF 5
GEN-00-00005	GENERAL - INDEX SHEET 3 OF 5
GEN-00-00006	GENERAL - INDEX SHEET 4 OF 5
GEN-00-00007	GENERAL - INDEX SHEET 5 OF 5
GEN-00-00008	GENERAL - NOTES
GEN-00-00009	GENERAL - ABBREVIATIONS AND LEGEND
GEN-00-00010	GENERAL - RAIL ANNOTATION TO CLARIFY DESIGN INTENT
	1A-2 RAILWAY TYPICAL SECTIONS
CVL-00-03001	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 1 OF 13
CVL-00-03002	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 2 OF 13
CVL-00-03003	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 3 OF 13
CVL-00-03004	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 4 OF 13
CVL-00-03005	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 5 OF 13
CVL-00-03006	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 6 OF 13
CVL-00-03007	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 7 OF 13
CVL-00-03008	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 8 OF 13
CVL-00-03009	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 9 OF 13
CVL-00-03010	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 10 OF 13
CVL-00-03011	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 11 OF 13
CVL-00-03012	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 12 OF 13
CVL-00-03013	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 13 OF 13
	1A-3 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS
CVL-00-03030	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 1 OF 4
CVL-00-03031	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 2 OF 4
CVL-00-03032	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 3 OF 4
CVL-00-03033	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 3 OF 4
CVL-00-03034	GENERAL - CIVIL HIGHWAY - ROAD OVER RAIL GRADE SEPARATION
	1A-4 CIVIL STRUCTURES TYPICAL DETAILS
CST-00-03003	GENERAL - CIVIL STRUCTURES - STRUCTURAL VIADUCT-TYPICAL DETAIL
CST-00-03007	GENERAL - CIVIL STRUCTURES - STRADDLE BENT- SHEET 1 OF 2
CST-00-03008	GENERAL - CIVIL STRUCTURES - STRADDLE BENT- SHEET 2 OF 2
CST-00-03017	GENERAL - CIVIL STRUCTURES - RETAINED FILL - TYPICAL DETAIL
CST-00-03018	GENERAL - CIVIL STRUCTURES - RETAINED CUT - TYPICAL DETAIL
CST-00-03020	GENERAL - CIVIL STRUCTURES - CULVERT AND ANIMAL CROSSING- SHEET 1 OF 2
CST-00-03021	GENERAL - CIVIL STRUCTURES - CULVERT AND ANIMAL CROSSING- SHEET 2 OF 2
CST-00-03022	GENERAL - CIVIL STRUCTURES - CULVERT TYPICAL DETAIL - SHEET 1 OF 2
CST-00-03023	GENERAL - CIVIL STRUCTURES - CULVERT TYPICAL DETAIL - SHEET 2 OF 2
WLC-00-04002	GENERAL - CIVIL STRUCTURES - WILDLIFE CROSSINGS FENCE DETAILS
CST-00-03024	GENERAL - CIVIL STRUCTURES - SLAB BRIDGE TYPICAL DETAIL
CST-00-03025	GENERAL - CIVIL STRUCTURES - HONEY SPRING CEMETERY - NETWORK TIED ARCH
CST-00-03026	GENERAL - CIVIL STRUCTURES - NETWORK TIED ARCH - ELEVATION
CST-00-03027	GENERAL - CIVIL STRUCTURES - NETWORK TIED ARCH - SECTION
CST-00-03028	GENERAL - CIVIL STRUCTURES - NETWORK TIED ARCH - DETAILS
	1A-5 CIVIL UTILITIES TYPICAL DETAILS
CUT-00-01000	GENERAL - CIVIL UTILITIES - TYPICAL CROSSING DETAIL - SHEET 1 OF 1
	1A-6 GENERAL - ALIGNMENT CURVE DATA TABLES
GEN-00-04001	GENERAL - ALIGNMENT AND CURVE DATA SHEET 1 OF 2
GEN-00-04002	GENERAL - ALIGNMENT AND CURVE DATA SHEET 2 OF 2

VOLUME 1B - GENERAL SHEETS & TYPICAL SECTIONS

DRAWING NO.	DRAWING DESCRIPTIONS
GEN-00-00011	GENERAL - ROADWAY ANNOTATION TO CLARIFY DESIGN INTENT
	1B-1 RAILWAY TYPICAL SECTIONS
CVL-00-03001B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 1 OF 11
CVL-00-03002B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 2 OF 11
CVL-00-03003B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 3 OF 11
CVL-00-03004B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 4 OF 11
CVL-00-03005B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 5 OF 11
CVL-00-03006B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 6 OF 11
CVL-00-03007B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 7 OF 11
CVL-00-03008B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 8 OF 11
CVL-00-03009B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 9 OF 11
CVL-00-03010B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 10 OF 11
CVL-00-03011B	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 11 OF 11
	1B-2 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS
CVL-00-03033B	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS - SHEET 1 OF 2
CVL-00-03034B	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS - SHEET 2 OF 2

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2A-1 HOUSTON SEGMENT
CVL-HN-01101	HOUSTON SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 4 - HT1 10+00 TO HN1 1024+00
CVL-HN-01102	HOUSTON SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 4 - HN1 1024+00 TO HN1 2088+00
CVL-HN-01103	HOUSTON SEGMENT - CIVIL - KEY MAP - SHEET 3 OF 4 - HN1 2088+00 TO HN2 814+00
CVL-HN-01104	HOUSTON SEGMENT - CIVIL - KEY MAP - SHEET 4 OF 4 - HN2 814+00 TO HN2 2073+80
CVL-HN-01105	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 10+00 TO HT1 38+00
CVL-HN-01106	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 38+00 TO HT1 60+00
CVL-HN-01107	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 60+00 TO HT1 88+00
CVL-HN-01108	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 88+00 TO HN1 16+00
CVL-HN-01107-2	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT2 10+00 TO HT2 34+00
CVL-HN-01108-2	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT2 34+00 TO HN1 16+00
CVL-HN-01107-3	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT3 10+00 TO HT3 33+00
CVL-HN-01108-3	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT3 33+00 TO HN1 16+00
CVL-HN-01109	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 16+00 TO HN1 44+00
CVL-HN-01110	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 44+00 TO HN1 72+00
CVL-HN-01111	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 72+00 TO HN1 100+00
CVL-HN-01112	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 100+00 TO HN1 128+00
CVL-HN-01113	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 128+00 TO HN1 156+00
CVL-HN-01114	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 156+00 TO HN1 184+00
CVL-HN-01115	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 184+00 TO HN1 212+00
CVL-HN-01116	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 212+00 TO HN1 240+00
CVL-HN-01117	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 240+00 TO HN1 268+00
CVL-HN-01118	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 268+00 TO HN1 296+00
CVL-HN-01119	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 296+00 TO HN1 324+00
CVL-HN-01119-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01120	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 324+00 TO HN1 352+00
CVL-HN-01121	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 352+00 TO HN1 380+00
CVL-HN-01122	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 380+00 TO HN1 408+00
CVL-HN-01123	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 408+00 TO HN1 436+00
CVL-HN-01124	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 436+00 TO HN1 464+00
CVL-HN-01124-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01125	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 464+00 TO HN1 492+00
CVL-HN-01126	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 492+00 TO HN1 520+00
CVL-HN-01127	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 520+00 TO HN1 548+00
CVL-HN-01128	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 548+00 TO HN1 576+00
CVL-HN-01129	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 576+00 TO HN1 604+00
CVL-HN-01130	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 604+00 TO HN1 632+00
CVL-HN-01131	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 632+00 TO HN1 660+00
CVL-HN-01131-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01131-B	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01132	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 660+00 TO HN1 688+00
CVL-HN-01132-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01133	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 688+00 TO HN1 716+00
CVL-HN-01134	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 716+00 TO HN1 744+00
CVL-HN-01135	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 744+00 TO HN1 772+00
CVL-HN-01136	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 772+00 TO HN1 800+00
CVL-HN-01136-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01137	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 800+00 TO HN1 828+00
CVL-HN-01138	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 828+00 TO HN1 856+00
CVL-HN-01139	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 856+00 TO HN1 884+00
CVL-HN-01140	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 884+00 TO HN1 912+00
CVL-HN-01141	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 912+00 TO HN1 940+00
CVL-HN-01142	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 940+00 TO HN1 968+00
CVL-HN-01143	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 968+00 TO HN1 996+00
CVL-HN-01143-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01144	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 996+00 TO HN1 1024+00
CVL-HN-01145	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1024+00 TO HN1 1080+00
CVL-HN-01146	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1080+00 TO HN1 1136+00
CVL-HN-01147	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1136+00 TO HN1 1192+00
CVL-HN-01147-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01147-B	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01148	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1192+00 TO HN1 1248+00
CVL-HN-01149	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1248+00 TO HN1 1304+00
CVL-HN-01149-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01150	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1304+00 TO HN1 1360+00
CVL-HN-01151	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1360+00 TO HN1 1416+00
CVL-HN-01152	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1416+00 TO HN1 1472+00
CVL-HN-01152-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01153	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1472+00 TO HN1 1528+00
CVL-HN-01154	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1528+00 TO HN1 1584+00
CVL-HN-01154-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01154-B	HOUSTON SEGMENT - CIVIL - PLAN - HN1 1528+00 - HN1 1584+00

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2A-1 HOUSTON SEGMENT
CVL-HN-01155	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1584+00 TO HN1 1640+00
CVL-HN-01155-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01155-B	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01156	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1640+00 TO HN1 1696+00
CVL-HN-01156-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01157	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1696+00 TO HN1 1752+00
CVL-HN-01157-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01158	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1752+00 TO HN1 1808+00
RDY-HN-01158A	HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN - WALLER SPRING CREEK RD
CVL-HN-01159	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1808+00 TO HN1 1864+00
CVL-HN-01159-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01160	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1864+00 TO HN1 1920+00
CVL-HN-01161	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1920+00 TO HN1 1976+00
CVL-HN-01162	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 1976+00 TO HN1 2032+00
CVL-HN-01162-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01163	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2032+00 TO HN1 2088+00
CVL-HN-01164	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2088+00 TO HN1 2144+00
CVL-HN-01165	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2144+00 TO HN1 2200+00
CVL-HN-01166	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2200+00 TO HN1 2256+00
CVL-HN-01167	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2256+00 TO HN1 2312+00
CVL-HN-01168	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2312+00 TO HN1 2368+00
CVL-HN-01169	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1 2368+00 TO HN2 30+00
CVL-HN-01170	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 30+00 TO HN2 86+00
CVL-HN-01171	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 86+00 TO HN2 142+00
CVL-HN-01172	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 142+00 TO HN2 198+00
CVL-HN-01173	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 198+00 TO HN2 254+00
CVL-HN-01174	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 254+00 TO HN2 310+00
CVL-HN-01175	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 310+00 TO HN2 366+00
CVL-HN-01175-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01176	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 366+00 TO HN2 422+00
CVL-HN-01177	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 422+00 TO HN2 478+00
CVL-HN-01177-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01178	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 478+00 TO HN2 534+00
CVL-HN-01179	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 534+00 TO HN2 590+00
CVL-HN-01180	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 590+00 TO HN2 646+00
CVL-HN-01181	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 646+00 TO HN2 702+00
CVL-HN-01182	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 702+00 TO HN2 758+00
CVL-HN-01183	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 758+00 TO HN2 814+00
CVL-HN-01184	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 814+00 TO HN2 870+00
RDY-HN-01184A	HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN - FM 1774
CVL-HN-01185	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 870+00 TO HN2 926+00
CVL-HN-01186	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 926+00 TO HN2 982+00
CVL-HN-01187	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 982+00 TO HN2 1038+00
CVL-HN-01188	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1038+00 TO HN2 1094+00
RDY-HN-01188A	HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN - FM 149
CVL-HN-01189	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1094+00 TO HN2 1150+00
CVL-HN-01190	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1150+00 TO HN2 1206+00
CVL-HN-01191	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1206+00 TO HN2 1262+00
CVL-HN-01192	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1262+00 TO HN2 1318+00
CVL-HN-01192-B	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01193	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1318+00 TO HN2 1374+00
RDY-HN-01193A	HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN - CR 226
CVL-HN-01194	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1374+00 TO HN2 1430+00
CVL-HN-01195	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1430+00 TO HN2 1486+00
CVL-HN-01196	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1486+00 TO HN2 1542+00
CVL-HN-01197	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1542+00 TO HN2 1598+00
RDY-HN-01197A	HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN - HN2 1558+00 TO HN2 1614+00
CVL-HN-01198	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1598+00 TO HN2 1654+00
CVL-HN-01199	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1654+00 TO HN2 1710+00
CVL-HN-01200	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1710+00 TO HN2 1766+00
CVL-HN-01201	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1766+00 TO HN2 1822+00
CVL-HN-01202	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1822+00 TO HN2 1878+00
CVL-HN-01203	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1878+00 TO HN2 1934+00
CVL-HN-01203-A	HOUSTON SEGMENT - CIVIL - PLAN
CVL-HN-01204	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1934+00 TO HN2 1990+00
CVL-HN-01205	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 1990+00 TO HN2 2046+00
CVL-HN-01206	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2 2046+00 TO HN2 2073+80
	2A-2 WEST OF TEAGUE SEGMENT
CVL-WT-01250	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 4 - WT 10+00 TO WT 1130+00
CVL-WT-01251	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 4 - WT 1130+00 TO WT 2250+00
CVL-WT-01252	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 3 OF 4 - WT 2250+00 TO WT 3370+00

PLOT TIME: 5/31/2019 9:49:34 AM

PLOT BY: N-YPWICS01$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. THOMPSON
DRAWN BY D. THOMPSON
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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
INDEX SHEET 1 OF 5

Scale NO SCALE
Drawing Status FINAL

Job No	Drawing No	Rev
234180	GEN-00-00003	01

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VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2A-2 WEST OF TEAGUE SEGMENT
CVL-WT-01253	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 4 OF 4 - WT 3370+00 TO WT 4118+87
CVL-WT-01254	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 10+00 TO WT 66+00
CVL-WT-01255	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 66+00 TO WT 122+00
CVL-WT-01256	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 122+00 TO WT 178+00
CVL-WT-01257	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 178+00 TO WT 234+00
CVL-WT-01258	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 234+00 TO WT 290+00
CVL-WT-01259	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 290+00 TO WT 346+00
CVL-WT-01260	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 346+00 TO WT 402+00
CVL-WT-01261	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 402+00 TO WT 458+00
CVL-WT-01261-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01262	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 458+00 TO WT 514+00
CVL-WT-01263	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 514+00 TO WT 570+00
CVL-WT-01264	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 570+00 TO WT 626+00
CVL-WT-01265	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 626+00 TO WT 682+00
CVL-WT-01266	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 682+00 TO WT 738+00
CVL-WT-01267	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 738+00 TO WT 794+00
CVL-WT-01267-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01268	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 794+00 TO WT 850+00
CVL-WT-01269	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 850+00 TO WT 906+00
CVL-WT-01270	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 906+00 TO WT 962+00
CVL-WT-01270-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01271	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 962+00 TO WT 1018+00
CVL-WT-01271-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01272	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1018+00 TO WT 1074+00
CVL-WT-01273	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1074+00 TO WT 1130+00
CVL-WT-01274	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1130+00 TO WT 1186+00
CVL-WT-01275	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1186+00 TO WT 1242+00
CVL-WT-01276	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1242+00 TO WT 1298+00
CVL-WT-01277	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1298+00 TO WT 1354+00
CVL-WT-01278	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1354+00 TO WT 1410+00
CVL-WT-01279	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1410+00 TO WT 1466+00
CVL-WT-01280	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1466+00 TO WT 1522+00
CVL-WT-01281	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1522+00 TO WT 1578+00
CVL-WT-01282	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1578+00 TO WT 1634+00
CVL-WT-01283	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1634+00 TO WT 1690+00
CVL-WT-01284	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1690+00 TO WT 1746+00
CVL-WT-01284-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01285	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1746+00 TO WT 1802+00
CVL-WT-01286	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1802+00 TO WT 1858+00
CVL-WT-01287	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1858+00 TO WT 1914+00
CVL-WT-01288	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1914+00 TO WT 1970+00
CVL-WT-01289	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1970+00 TO WT 2026+00
CVL-WT-01290	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2026+00 TO WT 2082+00
CVL-WT-01291	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2082+00 TO WT 2138+00
CVL-WT-01292	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2138+00 TO WT 2194+00
CVL-WT-01293	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2194+00 TO WT 2250+00
CVL-WT-01294	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2250+00 TO WT 2306+00
RDY-WT-01294A	WEST OF TEAGUE SEGMENT - CIVIL HIGHWAY - PLAN - FM 1512
CVL-WT-01295	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2306+00 TO WT 2362+00
CVL-WT-01295-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01296	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2362+00 TO WT 2418+00
CVL-WT-01297	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2418+00 TO WT 2474+00
CVL-WT-01297-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01298	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2474+00 TO WT 2530+00
CVL-WT-01299	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2530+00 TO WT 2586+00
CVL-WT-01300	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2586+00 TO WT 2642+00
CVL-WT-01301	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2642+00 TO WT 2698+00
CVL-WT-01302	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2698+00 TO WT 2754+00
CVL-WT-01302-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01303	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2754+00 TO WT 2810+00
CVL-WT-01304	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2810+00 TO WT 2866+00
CVL-WT-01305	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2866+00 TO WT 2922+00
CVL-WT-01306	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2922+00 TO WT 2978+00
CVL-WT-01307	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2978+00 TO WT 3034+00
CVL-WT-01308	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3034+00 TO WT 3090+00
CVL-WT-01309	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3090+00 TO WT 3146+00
CVL-WT-01310	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3146+00 TO WT 3202+00
CVL-WT-01311	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3202+00 TO WT 3258+00
CVL-WT-01312	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3258+00 TO WT 3314+00
CVL-WT-01313	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3314+00 TO WT 3370+00
CVL-WT-01314	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3370+00 TO WT 3426+00

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2A-2 WEST OF TEAGUE SEGMENT
CVL-WT-01314-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01315	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3426+00 TO WT 3482+00
CVL-WT-01315-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01316	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3482+00 TO WT 3538+00
CVL-WT-01317	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3538+00 TO WT 3594+00
CVL-WT-01318	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3594+00 TO WT 3650+00
CVL-WT-01319	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3650+00 TO WT 3706+00
CVL-WT-01320	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3706+00 TO WT 3762+00
CVL-WT-01321	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3762+00 TO WT 3818+00
CVL-WT-01322	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3818+00 TO WT 3874+00
RDY-WT-01322A	WEST OF TEAGUE SEGMENT - CIVIL HIGHWAY - PLAN - FM 1566
CVL-WT-01323	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3874+00 TO WT 3930+00
CVL-WT-01324	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3930+00 TO WT 3986+00
CVL-WT-01325	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 3986+00 TO WT 4042+00
RDY-WT-01325A	WEST OF TEAGUE SEGMENT - CIVIL HIGHWAY - PLAN - CR 995
CVL-WT-01326	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 4042+00 TO WT 4098+00
CVL-WT-01326-A	WEST OF TEAGUE SEGMENT - CIVIL - PLAN
CVL-WT-01327	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 4098+00 TO WT 4118+87
	2A-3 NAVARRO WEST SEGMENT
CVL-NW-01500	NAVARRO WEST SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 2 - NW 10+00 TO NW 1130+00
CVL-NW-01501	NAVARRO WEST SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 2 - NW 1130+00 TO NW 1638+12
CVL-NW-01502	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 10+00 TO NW 66+00
CVL-NW-01503	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 66+00 TO NW 122+00
CVL-NW-01503-A	NAVARRO WEST SEGMENT - CIVIL - PLAN
CVL-NW-01504	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 122+00 TO NW 178+00
CVL-NW-01505	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 178+00 TO NW 234+00
CVL-NW-01506	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 234+00 TO NW 290+00
CVL-NW-01507	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 290+00 TO NW 346+00
CVL-NW-01507-A	NAVARRO WEST SEGMENT - CIVIL - PLAN
CVL-NW-01508	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 346+00 TO NW 402+00
CVL-NW-01509	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 402+00 TO NW 458+00
RDY-NW-01509A	NAVARRO WEST SEGMENT - CIVIL HIGHWAY - PLAN - CR 0040
CVL-NW-01510	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 458+00 TO NW 514+00
CVL-NW-01511	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 514+00 TO NW 570+00
CVL-NW-01511-A	NAVARRO WEST SEGMENT - CIVIL - PLAN
CVL-NW-01512	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 570+00 TO NW 626+00
RDY-NW-01512A	NAVARRO WEST SEGMENT - CIVIL HIGHWAY - PLAN - FM 709
CVL-NW-01513	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 626+00 TO NW 682+00
CVL-NW-01514	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 682+00 TO NW 738+00
CVL-NW-01515	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 738+00 TO NW 794+00
CVL-NW-01516	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 794+00 TO NW 850+00
CVL-NW-01517	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 850+00 TO NW 906+00
CVL-NW-01517-A	NAVARRO WEST SEGMENT - CIVIL - PLAN
CVL-NW-01518	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 906+00 TO NW 962+00
CVL-NW-01519	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 962+00 TO NW 1018+00
CVL-NW-01520	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1018+00 TO NW 1074+00
CVL-NW-01521	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1074+00 TO NW 1130+00
CVL-NW-01522	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1130+00 TO NW 1186+00
CVL-NW-01523	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1186+00 TO NW 1242+00
CVL-NW-01523-A	NAVARRO WEST SEGMENT - CIVIL - PLAN
CVL-NW-01524	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1242+00 TO NW 1298+00
CVL-NW-01525	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1298+00 TO NW 1354+00
CVL-NW-01526	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1354+00 TO NW 1410+00
CVL-NW-01527	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1410+00 TO NW 1466+00
RDY-NW-01527A	NAVARRO WEST SEGMENT - CIVIL HIGHWAY - PLAN - CR 1300
CVL-NW-01528	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1466+00 TO NW 1522+00
CVL-NW-01529	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1522+00 TO NW 1578+00
CVL-NW-01530	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1578+00 TO NW 1634+00
CVL-NW-01531	NAVARRO WEST SEGMENT - CIVIL - PLAN AND PROFILE - NW 1634+00 TO NW 1638+12
	2A-4 ELLIS WEST SEGMENT
CVL-EW-01700	ELLIS WEST SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 2 - EW 10+00 TO EW 1130+00
CVL-EW-01701	ELLIS WEST SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 2 - EW 1130+00 TO EW 1246+26
CVL-EW-01702	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 10+00 TO EW 66+00
RDY-EW-01702A	ELLIS WEST SEGMENT - CIVIL HIGHWAY - PLAN - FM 984
CVL-EW-01703	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 66+00 TO EW 122+00
CVL-EW-01704	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 122+00 TO EW 178+00
CVL-EW-01705	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 178+00 TO EW 234+00
CVL-EW-01706	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 234+00 TO EW 290+00
RDY-EW-01706A	ELLIS WEST SEGMENT - CIVIL HIGHWAY - PLAN - BACAK ROAD
CVL-EW-01707	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 290+00 TO EW 346+00
CVL-EW-01708	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 346+00 TO EW 402+00

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2A-4 ELLIS WEST SEGMENT
CVL-EW-01708-A	ELLIS WEST SEGMENT - CIVIL - PLAN
CVL-EW-01709	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 402+00 TO EW 458+00
CVL-EW-01710	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 458+00 TO EW 514+00
CVL-EW-01710-A	ELLIS WEST SEGMENT - CIVIL - PLAN
CVL-EW-01711	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 514+00 TO EW 570+00
CVL-EW-01712	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 570+00 TO EW 626+00
CVL-EW-01713	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 626+00 TO EW 682+00
RDY-EW-01713A	ELLIS WEST SEGMENT - CIVIL HIGHWAY - PLAN - EW 655+00 to EW 683+00
CVL-EW-01714	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 682+00 TO EW 738+00
CVL-EW-01715	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 738+00 TO EW 794+00
CVL-EW-01716	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 794+00 TO EW 850+00
CVL-EW-01717	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 850+00 TO EW 906+00
CVL-EW-01718	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 906+00 TO EW 962+00
CVL-EW-01719	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 962+00 TO EW 1018+00
CVL-EW-01719-A	ELLIS WEST SEGMENT - CIVIL - PLAN
CVL-EW-01720	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1018+00 TO EW 1074+00
CVL-EW-01721	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1074+00 TO EW 1130+00
CVL-EW-01721-A	ELLIS WEST SEGMENT - CIVIL - PLAN
CVL-EW-01722	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1130+00 TO EW 1186+00
CVL-EW-01722-A	ELLIS WEST SEGMENT - CIVIL - PLAN
CVL-EW-01723	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1186+00 TO EW 1242+00
CVL-EW-01724	ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1242+00 TO EW 1246+26
	2A-5 DALLAS SEGMENT
CVL-DS-01900	DALLAS SEGMENT - CIVIL - KEY MAP - DS 10+00 TO DT 216+59
CVL-DS-01901	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 10+00 TO DS 66+00
CVL-DS-01902	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 66+00 TO DS 122+00
CVL-DS-01902-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01903	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 122+00 TO DS 178+00
RDY-DS-01903A	DALLAS SEGMENT - CIVIL HIGHWAY - PLAN - HASH ROAD
CVL-DS-01904	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 178+00 TO DS 234+00
CVL-DS-01905	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 234+00 TO DS 290+00
RDY-DS-01905A	DALLAS SEGMENT - CIVIL HIGHWAY - PLAN - DS 234+00 TO DS 290+00
CVL-DS-01906	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 290+00 TO DS 346+00
CVL-DS-01907	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 346+00 TO DS 402+00
CVL-DS-01907-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01908	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 402+00 TO DS 458+00
CVL-DS-01909	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 458+00 TO DS 514+00
CVL-DS-01910	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 514+00 TO DS 542+00
CVL-DS-01911	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 542+00 TO DS 570+00
CVL-DS-01912	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 570+00 TO DS 598+00
CVL-DS-01912-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01912-B	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01912-C	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01912-D	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01913	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 598+00 TO DS 626+00
CVL-DS-01914	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 626+00 TO DS 654+00
CVL-DS-01914-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01914-B	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01915	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 654+00 TO DS 682+00
CVL-DS-01916	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 682+00 TO DS 710+00
CVL-DS-01917	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 710+00 TO DS 738+00
CVL-DS-01918	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 738+00 TO DS 766+00
CVL-DS-01919	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DS 766+00 TO DT 33+00
CVL-DS-01919-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01919-B	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01920	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 33+00 TO DT 61+00
CVL-DS-01921	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 61+00 TO DT 89+00
CVL-DS-01922	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 89+00 TO DT 117+00
CVL-DS-01922-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01923	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 117+00 TO DT 145+00
CVL-DS-01924	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 145+00 TO DT 173+00
CVL-DS-01924-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01924-B	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01925	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 173+00 TO DT 201+00
CVL-DS-01925-A	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01925-B	DALLAS SEGMENT - CIVIL - PLAN
CVL-DS-01926	DALLAS SEGMENT - CIVIL - PLAN AND PROFILE DT 201+00 TO DT 216+59
CVL-DS-01926-A	DALLAS SEGMENT - CIVIL - PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. THOMPSON
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Drawing Title
GENERAL
INDEX SHEET 2 OF 5

Scale NO SCALE
Drawing Status FINAL
Job No 234180 | Drawing No GEN-00-00004 | Rev 01

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VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2B-1 IH-45 SEGMENT
CVL-IH-01350	IH-45 SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 5 - IH1 10+00 TO IH1 1130+00
CVL-IH-01351	IH-45 SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 5 - IH1 1130+00 TO IH1 2250+00
CVL-IH-01352	IH-45 SEGMENT - CIVIL - KEY MAP - SHEET 3 OF 5 - IH1 2250+00 TO IH1 3370+00
CVL-IH-01353	IH-45 SEGMENT - CIVIL - KEY MAP - SHEET 4 OF 5 - IH1 3370+00 TO IH2 234+00
CVL-IH-01354	IH-45 SEGMENT - CIVIL - KEY MAP - SHEET 5 OF 5 - IH2 234+00 TO IH2 540+81
CVL-IH-01355	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 10+00 TO IH1 66+00
CVL-IH-01356	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 66+00 TO IH1 122+00
CVL-IH-01357	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 122+00 TO IH1 178+00
CVL-IH-01358	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 178+00 TO IH1 234+00
CVL-IH-01359	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 234+00 TO IH1 290+00
CVL-IH-01360	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 290+00 TO IH1 346+00
CVL-IH-01361	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 346+00 TO IH1 402+00
CVL-IH-01362	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 402+00 TO IH1 458+00
CVL-IH-01363	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 458+00 TO IH1 514+00
CVL-IH-01364	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 514+00 TO IH1 570+00
CVL-IH-01365	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 570+00 TO IH1 626+00
CVL-IH-01366	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 626+00 TO IH1 682+00
CVL-IH-01367	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 682+00 TO IH1 738+00
CVL-IH-01368	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 738+00 TO IH1 794+00
CVL-IH-01369	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 794+00 TO IH1 850+00
CVL-IH-01370	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 850+00 TO IH1 906+00
CVL-IH-01371	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 906+00 TO IH1 962+00
CVL-IH-01372	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 962+00 TO IH1 1018+00
CVL-IH-01373	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1018+00 TO IH1 1074+00
CVL-IH-01374	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1074+00 TO IH1 1130+00
CVL-IH-01375	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1130+00 TO IH1 1186+00
CVL-IH-01376	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1186+00 TO IH1 1242+00
CVL-IH-01377	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1242+00 TO IH1 1298+00
CVL-IH-01378	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1298+00 TO IH1 1354+00
CVL-IH-01379	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1354+00 TO IH1 1410+00
CVL-IH-01380	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1410+00 TO IH1 1466+00
CVL-IH-01381	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1466+00 TO IH1 1522+00
CVL-IH-01382	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1522+00 TO IH1 1578+00
CVL-IH-01383	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1578+00 TO IH1 1634+00
CVL-IH-01384	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1634+00 TO IH1 1690+00
CVL-IH-01385	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1690+00 TO IH1 1746+00
CVL-IH-01386	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1746+00 TO IH1 1802+00
CVL-IH-01387	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1802+00 TO IH1 1858+00
CVL-IH-01388	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1858+00 TO IH1 1914+00
CVL-IH-01389	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1914+00 TO IH1 1970+00
CVL-IH-01390	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 1970+00 TO IH1 2026+00
CVL-IH-01391	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2026+00 TO IH1 2082+00
CVL-IH-01392	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2082+00 TO IH1 2138+00
CVL-IH-01393	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2138+00 TO IH1 2194+00
CVL-IH-01394	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2194+00 TO IH1 2250+00
CVL-IH-01395	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2250+00 TO IH1 2306+00
CVL-IH-01396	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2306+00 TO IH1 2362+00
CVL-IH-01397	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2362+00 TO IH1 2418+00
CVL-IH-01398	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2418+00 TO IH1 2474+00
CVL-IH-01399	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2474+00 TO IH1 2530+00
CVL-IH-01400	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2530+00 TO IH1 2586+00
CVL-IH-01401	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2586+00 TO IH1 2642+00
CVL-IH-01402	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2642+00 TO IH1 2698+00
CVL-IH-01403	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2698+00 TO IH1 2754+00
CVL-IH-01404	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2754+00 TO IH1 2810+00
CVL-IH-01405	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2810+00 TO IH1 2866+00
CVL-IH-01406	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2866+00 TO IH1 2922+00
CVL-IH-01407	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2922+00 TO IH1 2978+00
CVL-IH-01408	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 2978+00 TO IH1 3034+00
CVL-IH-01409	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3034+00 TO IH1 3090+00
CVL-IH-01410	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3090+00 TO IH1 3146+00
CVL-IH-01411	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3146+00 TO IH1 3202+00
CVL-IH-01412	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3202+00 TO IH1 3258+00
CVL-IH-01413	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3258+00 TO IH1 3314+00
CVL-IH-01414	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3314+00 TO IH1 3370+00
CVL-IH-01415	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3370+00 TO IH1 3426+00
CVL-IH-01416	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3426+00 TO IH1 3482+00
CVL-IH-01417	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3482+00 TO IH1 3538+00
CVL-IH-01418	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3538+00 TO IH1 3594+00
CVL-IH-01419	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3594+00 TO IH1 3650+00
CVL-IH-01420	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3650+00 TO IH1 3706+00

VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2B-1 IH-45 SEGMENT
CVL-IH-01421	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3706+00 TO IH1 3762+00
CVL-IH-01422	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3762+00 TO IH1 3818+00
CVL-IH-01423	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3818+00 TO IH1 3874+00
CVL-IH-01424	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3874+00 TO IH1 3930+00
CVL-IH-01425	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3930+00 TO IH1 3986+00
CVL-IH-01426	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 3986+00 TO IH1 4042+00
CVL-IH-01427	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4042+00 TO IH1 4098+00
CVL-IH-01428	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4098+00 TO IH1 4154+00
CVL-IH-01429	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4154+00 TO IH1 4210+00
CVL-IH-01430	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4210+00 TO IH1 4266+00
CVL-IH-01431	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4266+00 TO IH1 4322+00
CVL-IH-01432	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH1 4322+00 TO IH1 4329+69
CVL-IH-01433	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 10+00 TO IH2 66+00
CVL-IH-01434	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 66+00 TO IH2 122+00
CVL-IH-01435	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 122+00 TO IH2 178+00
CVL-IH-01436	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 178+00 TO IH2 234+00
CVL-IH-01437	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 234+00 TO IH2 290+00
CVL-IH-01438	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 290+00 TO IH2 346+00
CVL-IH-01439	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 346+00 TO IH2 402+00
CVL-IH-01440	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 402+00 TO IH2 458+00
CVL-IH-01441	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 458+00 TO IH2 514+00
CVL-IH-01442	IH-45 SEGMENT - CIVIL - PLAN AND PROFILE - IH2 514+00 TO IH2 540+81
	2B-2 NAVARRO EAST SEGMENT
CVL-NE-01600	NAVARRO EAST SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 2 - NE 10+00 TO NE 1074+00
CVL-NE-01601	NAVARRO EAST SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 2 - NE 1074+00 TO NE 1652+05
CVL-NE-01602	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 10+00 TO NE 66+00
CVL-NE-01603	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 66+00 TO NE 122+00
CVL-NE-01604	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 122+00 TO NE 178+00
CVL-NE-01605	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 178+00 TO NE 234+00
CVL-NE-01606	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 234+00 TO NE 290+00
CVL-NE-01607	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 290+00 TO NE 346+00
CVL-NE-01608	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 346+00 TO NE 402+00
CVL-NE-01609	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 402+00 TO NE 458+00
CVL-NE-01610	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 458+00 TO NE 514+00
CVL-NE-01611	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 514+00 TO NE 570+00
CVL-NE-01612	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 570+00 TO NE 626+00
CVL-NE-01613	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 626+00 TO NE 682+00
CVL-NE-01614	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 682+00 TO NE 738+00
CVL-NE-01615	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 738+00 TO NE 794+00
CVL-NE-01616	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 794+00 TO NE 850+00
CVL-NE-01617	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 850+00 TO NE 906+00
CVL-NE-01618	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 906+00 TO NE 962+00
CVL-NE-01619	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 962+00 TO NE 1018+00
CVL-NE-01620	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1018+00 TO NE 1074+00
CVL-NE-01621	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1074+00 TO NE 1130+00
CVL-NE-01622	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1130+00 TO NE 1186+00
CVL-NE-01623	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1186+00 TO NE 1242+00
CVL-NE-01624	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1242+00 TO NE 1298+00
CVL-NE-01625	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1298+00 TO NE 1354+00
CVL-NE-01626	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1354+00 TO NE 1410+00
CVL-NE-01627	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1410+00 TO NE 1466+00
CVL-NE-01628	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1466+00 TO NE 1522+00
CVL-NE-01629	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1522+00 TO NE 1578+00
CVL-NE-01630	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1578+00 TO NE 1634+00
CVL-NE-01631	NAVARRO EAST SEGMENT - CIVIL - PLAN AND PROFILE - NE 1634+00 TO NE 1652+05
	2B-3 ELLIS EAST SEGMENT
CVL-EE-01800-1	ELLIS EAST SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 2 - EE 9+56 TO EE 1098+00
CVL-EE-01800-2	ELLIS EAST SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 2 - EE 1098+00 TO EE 1232+15
CVL-EE-01801	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 9+56 TO EE 34+00
CVL-EE-01802	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 34+00 TO 90+00
CVL-EE-01803	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 90+00 TO 146+00
CVL-EE-01804	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 146+00 TO EE 202+00
CVL-EE-01805	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 202+00 TO EE 258+00
CVL-EE-01806	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 258+00 TO EE 314+00
CVL-EE-01807	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 314+00 TO EE 370+00
CVL-EE-01808	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 370+00 TO EE 426+00
CVL-EE-01809	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 426+00 TO EE 482+00
CVL-EE-01810	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 482+00 TO EE 538+00
CVL-EE-01811	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 538+00 TO EE 594+00
CVL-EE-01812	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 594+00 TO EE 650+00
CVL-EE-01813	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 650+00 TO EE 706+00

VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	2B-3 ELLIS EAST SEGMENT
CVL-EE-01814	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 706+00 TO EE 762+00
CVL-EE-01815	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 762+00 TO EE 818+00
CVL-EE-01816	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 818+00 TO EE 874+00
CVL-EE-01817	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 874+00 TO EE 930+00
CVL-EE-01818	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 930+00 TO EE 986+00
CVL-EE-01819	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 986+00 TO EE 1042+00
CVL-EE-01820	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 1042+00 TO EE 1098+00
CVL-EE-01821	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 1098+00 TO EE 1154+00
CVL-EE-01822	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 1154+00 TO EE 1210+00
CVL-EE-01823	ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE EE 1210+00 TO EE 1232+15

PLOT TIME: 5/24/2019 3:22:14 PM

PLOT BY: N-YPWICS01$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. THOMPSON
DRAWN BY D. THOMPSON
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DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
INDEX SHEET 3 OF 5

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-00005	01

22x34

VOLUME 3A - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	3A-1 STATIONS
STA-00-03000	GENERAL - STATIONS - TYPICAL SECTIONS
STA-HN-06000	HOUSTON SEGMENT - STATIONS - STATIONS SECTIONS
STA-HN-06001	HOUSTON SEGMENT - STATIONS - STATION SECTIONS - FUTURE EXPANSION
STA-HN-01005	HOUSTON SEGMENT - STATIONS - HOUSTON TRANSIT STATION - CIVIL SITE PLAN
STA-HN-01015	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MALL - CIVIL SITE PLAN (FSL)
STA-HN-01016	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MALL - TERMINAL ROAD - PLAN & PROFILE
STA-HN-01017	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MALL - MANGUM ROAD - PLAN & PROFILE
STA-HN-01018	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MALL - 18TH STREET - PLAN & PROFILE
STA-HN-01019	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MALL - CIVIL SITE PLAN - FUTURE BUILD
STA-HN-01025	HOUSTON SEGMENT - STATIONS - INDUSTRIAL STATION - CIVIL SITE PLAN
STA-HN-01034	HOUSTON SEGMENT - STATIONS - BRAZOS VALLEY STATION - CIVIL SITE PLAN
STA-DS-01045	DALLAS SEGMENT - STATIONS - STATION SECTIONS
STA-DS-01046	DALLAS SEGMENT - STATIONS - STATION SECTIONS - FUTURE EXPANSION
STA-DS-01049	DALLAS SEGMENT - STATIONS - DALLAS STATION - CIVIL SITE PLAN
STA-DS-01050	DALLAS SEGMENT - STATIONS - DALLAS STATION - HOTEL STREET - PLAN & PROFILE
STA-DS-01053	DALLAS SEGMENT - STATIONS - DALLAS STATION - PROPOSED STREET 1 - PLAN & PROFILE
STA-DS-01054	DALLAS SEGMENT - STATIONS - DALLAS STATION - PROPOSED STREET 2 - PLAN & PROFILE
	3A-2 MAINTENANCE FACILITIES, YARDS AND SHOPS
MNT-00-02002	HN, WT, EW, DS - MAINTENANCE FACILITIES - TYPICAL MOW FACILITY
MNT-00-02003	GENERAL - MAINTENANCE FACILITIES - TYPICAL SIDING OFF
MNT-00-02004	GENERAL - MAINTENANCE FACILITIES - KEY MAP
MNT-HN-04008	HOUSTON SEGMENT - MAINTENANCE FACILITIES - MOW-HN-2 - LAYOUT
MNT-HN-04009	HOUSTON SEGMENT - MAINTENANCE FACILITIES - MOW-HN-2 - PROFILE
MNT-HN-04010	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON TMF - SHEET 1 OF 3
MNT-HN-04011	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON TMF - SHEET 2 OF 3
MNT-HN-04012	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON TMF - SHEET 3 OF 3
MNT-HN-04013	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON TMF - PROFILE
MNT-HN-04014	HOUSTON SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HN-5 - LAYOUT
MNT-HN-04015	HOUSTON SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HN-5 - PROFILE
MNT-WT-04016	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-1 - LAYOUT
MNT-WT-04017	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-1 - PROFILE
MNT-WT-04018	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 1 OF 2
MNT-WT-04019	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 2 OF 2
MNT-WT-04020	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-2 - LAYOUT
MNT-WT-04021	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-2 - PROFILE
MNT-EW-04036	ELLIS WEST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EW-1 - LAYOUT
MNT-EW-04037	ELLIS WEST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EW-1 - PROFILE
MNT-DS-04042	DALLAS SEGMENT - MAINTENANCE FACILITIES - DALLAS TMF - SHEET 1 OF 2
MNT-DS-04043	DALLAS SEGMENT - MAINTENANCE FACILITIES - DALLAS TMF - SHEET 2 OF 2
MNT-DS-04044	DALLAS SEGMENT - MAINTENANCE FACILITIES - DALLAS TMF - PROFILE
	3A-3 RAILWAY FACILITIES
SYS-00-01001	HN, WT, NW, EW, DS - RAILWAY FACILITIES - SP, SSP, ATP - TYPICAL LAYOUT PLAN
SYS-00-01002	HN, WT, NW, EW, DS - RAILWAY FACILITIES - MSH, SSH, ISH, CH - TYPICAL LAYOUT PLAN
SYS-00-01003	HN, WT, NW, EW, DS - RAILWAY FACILITIES - TPSS LOOP 2FDR - TYPICAL LAYOUT PLAN
SYS-00-01004	HN, WT, NW, EW, DS - RAILWAY FACILITIES - TPSS LOOP 1FDR - TYPICAL LAYOUT PLAN
SYS-00-01005	HN, WT, NW, EW, DS - RAILWAY FACILITIES - TPSS RADIAL 2FDR - TYPICAL LAYOUT PLAN
SYS-00-01006	HN, WT, NW, EW, DS - RAILWAY FACILITIES - TPSS RADIAL 1FDR - TYPICAL LAYOUT PLAN
SYS-00-02000	GENERAL - RAILWAY FACILITIES - FACILITIES SPACING - ALIGN ALT A FSL
SYS-00-02001	GENERAL - RAILWAY FACILITIES - FACILITIES SPACING - ALIGN ALT A ISL
SYS-00-03000	HT1, HT2, HT3, HN1, HN2, - WT, NW, EW, DS, DT - RAILWAY FACILITIES - FACILITY LOCATIONS
	3A-4 ROADWAY FACILITIES
RDY-00-03037	GENERAL - ROADWAY FACILITIES - EMERGENCY RESPONSE MAINTENANCE – AND STAGING AREA LAYOUTS

VOLUME 3B - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	3B-1 STATIONS (NOT USED)
	3B-2 MAINTENANCE FACILITIES, YARDS AND SHOPS
MNT-00-02012	IH, EE - MAINTENANCE FACILITIES - TYPICAL MOW FACILITY
MNT-IH-04022	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-1 - LAYOUT - SHEET 1 OF 3
MNT-IH-04023	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-1 - LAYOUT - SHEET 2 OF 3
MNT-IH-04024	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-1 - LAYOUT - SHEET 3 OF 3
MNT-IH-04025	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 1 OF 8
MNT-IH-04026	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 2 OF 8
MNT-IH-04027	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 3 OF 8
MNT-IH-04028	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 4 OF 8
MNT-IH-04029	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 5 OF 8
MNT-IH-04030	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 6 OF 8
MNT-IH-04031	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 7 OF 8
MNT-IH-04032	IH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 8 OF 8
MNT-IH-04033	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-2 - LAYOUT - SHEET 1 OF 3
MNT-IH-04034	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-2 - LAYOUT - SHEET 2 OF 3
MNT-IH-04035	IH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY IH-2 - LAYOUT - SHEET 3 OF 3
MNT-EE-04038	ELLIS EAST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EE-1 - LAYOUT
	3B-3 RAILWAY FACILITIES
SYS-00-01010	IH, NE, EE - RAILWAY FACILITIES - TPSS - TYPICAL LAYOUT PLAN
SYS-00-01011	IH, NE, EE - RAILWAY FACILITIES - SP, SSP, ATP - TYPICAL LAYOUT PLAN
SYS-00-01012	IH, NE, EE - RAILWAY FACILITIES - MSH, SSH, ISH, CH - TYPICAL LAYOUT PLAN
SYS-00-02002	GENERAL - RAILWAY FACILITIES - FACILITY SPACING - ALIGNMENT ALTERNATIVE B
SYS-00-02003	GENERAL - RAILWAY FACILITIES - FACILITY SPACING - ALIGNMENT ALTERNATIVE C
SYS-00-02004	GENERAL - RAILWAY FACILITIES - FACILITY SPACING - ALIGNMENT ALTERNATIVE D
SYS-00-02005	GENERAL - RAILWAY FACILITIES - FACILITY SPACING - ALIGNMENT ALTERNATIVE E
SYS-00-02006	GENERAL - RAILWAY FACILITIES - FACILITY SPACING - ALIGNMENT ALTERNATIVE F
SYS-00-03010	IH, NE, EE- RAILWAY FACILITIES - FACILITY LOCATIONS

VOLUME 4B - NOT USED

VOLUME 4B - ROADWAY PLAN SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	4B-1 IH-45 SEGMENT
RDY-IH-01101	IH-45 SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 1 OF 5 IH1 10+00 TO IH1 1120+00
RDY-IH-01102	IH-45 SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 2 OF 5 IH1 1120+00 TO IH1 2240+00
RDY-IH-01103	IH-45 SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 3 OF 5 IH1 2240+00 TO IH1 3360+00
RDY-IH-01104	IH-45 SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 4 OF 5 IH1 3360+00 TO IH2 224+00
RDY-IH-01105	IH-45 SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 5 OF 5 IH2 224+00 TO IH2 540+81
RDY-IH1-04001	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 10+00 TO IH1 100+00
RDY-IH1-04002	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 100+00 TO IH1 190+00
RDY-IH1-04003	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 190+00 TO IH1 280+00
RDY-IH1-04004	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 280+00 TO IH1 370+00
RDY-IH1-04005	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 370+00 TO IH1 460+00
RDY-IH1-04006	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 460+00 TO IH1 550+00
RDY-IH1-04007	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 550+00 TO IH1 640+00
RDY-IH1-04008	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 640+00 TO IH1 730+00
RDY-IH1-04009	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 730+00 TO IH1 820+00
RDY-IH1-04010	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 820+00 TO IH1 910+00
RDY-IH1-04011	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 910+00 TO IH1 1000+00
RDY-IH1-04012	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1000+00 TO IH1 1090+00
RDY-IH1-04013	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1090+00 TO IH1 1180+00
RDY-IH1-04014	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1180+00 TO IH1 1270+00
RDY-IH1-04015	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1270+00 TO IH1 1360+00
RDY-IH1-04016	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1360+00 TO IH1 1450+00
RDY-IH1-04017	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1450+00 TO IH1 1540+00
RDY-IH1-04018	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1540+00 TO IH1 1630+00
RDY-IH1-04019	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1630+00 TO IH1 1720+00
RDY-IH1-04020	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1720+00 TO IH1 1810+00
RDY-IH1-04021	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1810+00 TO IH1 1900+00
RDY-IH1-04022	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1900+00 TO IH1 1990+00
RDY-IH1-04023	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 1990+00 TO IH1 2080+00
RDY-IH1-04024	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2080+00 TO IH1 2170+00
RDY-IH1-04025	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2170+00 TO IH1 2260+00
RDY-IH1-04026	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2260+00 TO IH1 2350+00
RDY-IH1-04027	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2350+00 TO IH1 2440+00
RDY-IH1-04028	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2440+00 TO IH1 2530+00
RDY-IH1-04029	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2530+00 TO IH1 2620+00
RDY-IH1-04030	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2620+00 TO IH1 2710+00
RDY-IH1-04031	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2710+00 TO IH1 2800+00
RDY-IH1-04032	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2800+00 TO IH1 2890+00
RDY-IH1-04033	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2890+00 TO IH1 2980+00
RDY-IH1-04034	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 2980+00 TO IH1 3070+00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. THOMPSON
DRAWN BY D. THOMPSON
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IN CHARGE C. TAYLOR
DATE 02/25/2019

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FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
INDEX SHEET 4 OF 5

Scale NO SCALE
Drawing Status FINAL
Job No 234180 | Drawing No GEN-00-00006 | Rev 01

PLOT TIME: 5/24/2019 3:22:19 PM
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VOLUME 4B - ROADWAY PLAN SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	4B-1 IH-45 SEGMENT
RDY-IH1-04035	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3070+00 TO IH1 3160+00
RDY-IH1-04036	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3160+00 TO IH1 3250+00
RDY-IH1-04037	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3250+00 TO IH1 3340+00
RDY-IH1-04038	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3340+00 TO IH1 3430+00
RDY-IH1-04039	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3430+00 TO IH1 3520+00
RDY-IH1-04040	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3520+00 TO IH1 3610+00
RDY-IH1-04041	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3610+00 TO IH1 3700+00
RDY-IH1-04042	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3700+00 TO IH1 3790+00
RDY-IH1-04043	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3790+00 TO IH1 3880+00
RDY-IH1-04044	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3880+00 TO IH1 3970+00
RDY-IH1-04045	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 3970+00 TO IH1 4060+00
RDY-IH1-04046	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 4060+00 TO IH1 4150+00
RDY-IH1-04047	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 4150+00 TO IH1 4240+00
RDY-IH1-04048	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH1 4240+00 TO IH1 4329+69
RDY-IH2-04049	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 10+00 TO IH2 100+00
RDY-IH2-04050	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 100+00 TO IH2 190+00
RDY-IH2-04051	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 190+00 TO IH2 280+00
RDY-IH2-04052	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 280+00 TO IH2 370+00
RDY-IH2-04053	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 370+00 TO IH2 460+00
RDY-IH2-04054	IH-45 SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. IH2 460+00 TO IH2 540+81
	4B-2 NAVARRO EAST SEGMENT
RDY-NE-01101	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 1 OF 2 NE 10+00 TO NE 1070+00
RDY-NE-01102	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 2 OF 2 NE 1070+00 TO NE 1652+05
RDY-NE-04001	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 10+00 TO NE 100+00
RDY-NE-04002	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 100+00 TO NE 190+00
RDY-NE-04003	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 190+00 TO NE 280+00
RDY-NE-04004	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 280+00 TO NE 370+00
RDY-NE-04005	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 370+00 TO NE 460+00
RDY-NE-04006	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 460+00 TO NE 550+00
RDY-NE-04007	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 550+00 TO NE 640+00
RDY-NE-04008	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 640+00 TO NE 730+00
RDY-NE-04009	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 730+00 TO NE 820+00
RDY-NE-04010	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 820+00 TO NE 910+00
RDY-NE-04011	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 910+00 TO NE 1000+00
RDY-NE-04011A	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - MATCHLINE RDY-NE-04011
RDY-NE-04012	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1000+00 TO NE 1090+00
RDY-NE-04013	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1090+00 TO NE 1180+00
RDY-NE-04014	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1180+00 TO NE 1270+00
RDY-NE-04015	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1270+00 TO NE 1360+00
RDY-NE-04016	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1360+00 TO NE 1450+00
RDY-NE-04017	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1450+00 TO NE 1540+00
RDY-NE-04018	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1540+00 TO NE 1630+00
RDY-NE-04019	NAVARRO EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. NE 1630+00 TO NE 1652+05
	4B-3 ELLIS EAST SEGMENT
RDY-EE-01101	ELLIS EAST SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 1 OF 2 EE 9+56 TO EE 1064+00
RDY-EE-01102	ELLIS EAST SEGMENT - CIVIL HIGHWAY - KEY MAP - SHEET 2 OF 2 EE 1064+00 TO EE 1232+15
RDY-EE-04001	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 9+56 TO EE 100+00
RDY-EE-04002	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 100+00 TO EE 190+00
RDY-EE-04003	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 190+00 TO EE 280+00
RDY-EE-04004	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 280+00 TO EE 370+00
RDY-EE-04005	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 370+00 TO EE 460+00
RDY-EE-04006	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 460+00 TO EE 550+00
RDY-EE-04007	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 550+00 TO EE 640+00
RDY-EE-04008	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 640+00 TO EE 730+00
RDY-EE-04009	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 730+00 TO EE 820+00
RDY-EE-04010	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 820+00 TO EE 910+00
RDY-EE-04011	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 910+00 TO EE 1000+00
RDY-EE-04012	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 1000+00 TO EE 1090+00
RDY-EE-04013	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 1090+00 TO EE 1180+00
RDY-EE-04014	ELLIS EAST SEGMENT - CIVIL HIGHWAY - PLAN VIEW - STA. EE 1180+00 TO EE 1232+15

Volume 5A - WILDLIFE CROSSING SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	Volume 5A
WLC-DS-04001	DS SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 1 OF 23)
WLC-DS-04002	DS SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 2 OF 23)
WLC-DS-04003	DS SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 3 OF 23)
WLC-EW-04001	EW SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 4 OF 23)
WLC-EW-04002	EW SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 5 OF 23)
WLC-NW-04001	NW SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 6 OF 23)
WLC-NW-04002	NW SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 7 OF 23)
WLC-NW-04003	NW SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 8 OF 23)
WLC-WT-04001	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 9 OF 23)
WLC-WT-04002	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 10 OF 23)
WLC-WT-04003	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 11 OF 23)
WLC-WT-04004	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 12 OF 23)
WLC-WT-04005	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 13 OF 23)
WLC-WT-04006	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 14 OF 23)
WLC-WT-04007	WT SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 15 OF 23)
WLC-HN-04001	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 16 OF 23)
WLC-HN-04002	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 17 OF 23)
WLC-HN-04003	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 18 OF 23)
WLC-HN-04004	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 19 OF 23)
WLC-HN-04005	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 20 OF 23)
WLC-HN-04006	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 21 OF 23)
WLC-HN-04007	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 22 OF 23)
WLC-HN-04008	HN SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 23 OF 23)

VOLUME 5B - WILDLIFE CROSSING SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
	Volume 5B
WLC-EE-04001	EE SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 1 OF 15)
WLC-EE-04002	EE SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 2 OF 15)
WLC-NE-04001	NE SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 3 OF 15)
WLC-NE-04002	NE SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 4 OF 15)
WLC-NE-04003	NE SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 5 OF 15)
WLC-IH-04001	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 6 OF 15)
WLC-IH-04002	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 7 OF 15)
WLC-IH-04003	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 8 OF 15)
WLC-IH-04004	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 9 OF 15)
WLC-IH-04005	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 10 OF 15)
WLC-IH-04006	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 11 OF 15)
WLC-IH-04007	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 12 OF 15)
WLC-IH-04008	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 13 OF 15)
WLC-IH-04009	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 14 OF 15)
WLC-IH-04010	IH-45 SEGMENT THSR - POTENTIAL WILDLIFE CROSSINGS (SHEET 15 OF 15)

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FINAL CONCEPTUAL ENGINEERING
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Drawing Title
GENERAL
INDEX SHEET 5 OF 5

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GENERAL NOTES:

1. THESE DRAWINGS ACCOMPANY FINAL CONCEPTUAL ENGINEERING (FCE) REPORT.
2. DRAWING SET INCLUDES FIVE (5) VOLUMES. AFTER RELEASE OF THE DRAFT EIS (DEIS), WHICH IDENTIFIED ALTERNATIVE A AS THE PERFERRED ALTERNATIVE, ADDITIONAL DESIGN DEVELOPMENT AND REFINEMENT OF ALTERNATIVE A WAS UNDERTAKEN TO MITIGATE IMPACTS AND TO IMPROVE CONSTRUCTABILITY, THIS REPORT ADDRESSES THE REFINED DESING APPROACHES AND DETAILS FOR THE SEGMENTS IN BUILD ALTERNATIVE A, FOR ALL OTHER SEGMENTS NOT A PART OF THE PERFERRED ALTERNATIVE (ELLIS EAST, NAVARRO EAST, AND IH-45 SEGMENTS), NO CHANGES TO DESIGN WAS ADVANCED OTHER THAN ALIGNMENT REVISIONS REQUIRED TO ACCOUNT FOR ALIGNMENT REVISIONS ADVANCED IN ALTERNATIVE A. TO FACILITATE COMPARISON FOR IMPACT ANALYSIS, THE APPENDICES TO THE FCE REPORT INCLUDES ALL SEGMENTS. THE DRAWING SET HAS BEEN ORGANIZED INTO VOLUMES 1A-5A AND 1B-5B, WITH THE PREFERRED ALTERNATIVE DESIGN DRAWINGS INCLUDED IN THE 1A-5A VOLUMES.
3. CONCEPTUAL ENGINEERING WAS DEVELOPED TO IDENTIFY PROJECT LIMIT OF DISTURBANCE (LOD), OR "PROJECT FOOTPRINT". CONCEPTUAL ENGINEERING DRAWINGS AND FCE REPORT ARE ISSUED TO PROVIDE PROJECT DEFINITION FOR ENVIRONMENTAL ANALYSES ONLY. FINAL DESIGN WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSES. NOT FOR CONSTRUCTION.
4. FOR STANDARD GENERAL ABBREVIATIONS, SEE DRAWING GEN-00-0009.
5. FOR STANDARD GENERAL SYMBOLS, SEE DRAWING GEN-00-0009.
6. "ORIGINAL GROUND" SHOWN ON PROFILES REFERS TO THE APPROXIMATE EXISTING GROUND LINE AT HSR CENTERLINE AS SHOWN ON PLAN AND PROFILE DRAWINGS.
7. ALL HORIZONTAL AND VERTICAL DISTANCES ARE IN US CUSTOMARY UNITS EXCEPT AS NOTED OTHERWISE.
8. GENERAL NOTES FOR PROJECT ELEMENTS INCLUDED ON GENERAL NOTES PAGES. REFER TO INDIVIDUAL DISCIPLINE DRAWINGS FOR ADDITIONAL NOTES.

BASEMAPPING NOTES:

1. DTM DATA SHOWN ON THE DRAWINGS WAS OBTAINED FROM THE TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNRIS) AND HOUSTON-GALVESTON AREA COUNCIL (HGAC).

   DALLAS COUNTY LIDAR, 2009, SOURCED FROM TNRIS.

   HGAC LIDAR, 2008.

   TNRIS LIDAR, 2009-2013.

   TNRIS STRATMAP CONTOURS, 1997.
2. LIDAR SOURCES WERE FILTERED TO SHOW ONLY BARE EARTH, AND SUPPLEMENTED BY CONTOUR DATA WHERE LIDAR SOURCES WERE NOT AVAILABLE.
3. NAD 83 HORIZONTAL CONTROL DATUM WAS USED FOR HORIZONTAL COORDINATE VALUES.
4. NAVD 88 VERTICAL DATUM WAS USED FOR ELEVATION VALUES.
5. ALL DATA HAS BEEN REPROJECTED TO TEXAS STATE PLANE, SOUTH CENTRAL, CENTRAL, AND NORTH CENTRAL ZONES, US SURVEY FEET.
6. AERIAL IMAGERY WAS OBTAINED FROM ARCGIS ONLINE SERVICES. SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.
7. THE BACKGROUND IMAGERY ON THE PLAN SHEETS MAY SHOW BUILDINGS AND OTHER INFRASTRUCTURE FEATURES THAT HAVE SUBSEQUENTLY BEEN REMOVED AND/OR DEMOLISHED. WHERE IT HAS BEEN VERIFIED THAT BUILDINGS HAVE BEEN REMOVED, DEMOLISHED, RECONFIGURED, OR CONSTRUCTED, THE AERIAL IMAGERY ON THE PLAN SHEET IS MARKED WITH HATCHING.

LOD NOTES:

1. THE PROJECT LOD WAS DEVELOPED TO DEFINE A CONSERVATIVE ESTIMATE OF THE POTENTIAL "PROJECT FOOTPRINT" FOR ENVIRONMENTAL ANALYSIS AND DOES NOT REPRESENT THE FINAL HSR RIGHT-OF-WAY (ROW).
2. LOD USED FOR EIS ANALYSIS FOOTPRINT. PROPERTY WITHIN THE LOD MAY BE RETURNED TO ADJACENT LANDOWNERS OR OTHER PRIVATE PARTIES FOLLOWING PROJECT CONSTRUCTION OR MAY BE TRANSFERRED TO ROADWAY OR UTILITY AUTHORITY AS APPROPRIATE. PROPOSED PROJECT WORKS WITHIN PRIVATE PROPERTIES WOULD BE SUBJECT TO NEGOTIATION WITH LANDOWNERS. ANY TEMPORARY OR PERMANENT USE OF LAND OWNED BY TXDOT, COUNTY, MUNICIPAL, OR OTHER PUBLIC ENTITIES WOULD REQUIRE APPROPRIATE APPROVALS.

TRACK NOTES:

1. THE ALIGNMENT SHOWN ON THE PLAN AND PROFILE DRAWINGS REPRESENTS THE CENTERLINE OF THE TWO-TRACK HSR MAINLINE TRACKS.
2. THE PROFILE SHOWN ON THE PLAN AND PROFILE DRAWINGS REPRESENTS THE TOP OF THE LOWER RAIL THROUGH HORIZONTAL CURVES AND SPIRALS FOR THE TWO-TRACK HSR SYSTEM.
3. THE PROPOSED HSR SYSTEM INCLUDES TWO TRACKS WITH ADDITIONAL TRACKS AT STATIONS, MAINTENANCE OF WAY FACILITIES, AND TRAINSET MAINTENANCE FACILITIES, AS SHOWN ON DRAWINGS.
4. MAINLINE CROSSOVERS ARE PROVIDED AT THE ENTRANCE AND EXIT OF ALL STATIONS, MAINTENANCE OF WAY (MOW) FACILITIES, AND TRAINSET MAINTENANCE FACILITIES (TMF).

PLAN AND PROFILE GENERAL NOTES:

1. SECTION TYPE DETAIL SHOWN ON PROFILE SHEETS REPRESENT A SIMPLIFIED SUMMARY OF THE MAJOR STRUCTURAL TYPE OF THE PROPOSED HSR. THE ACTUAL PLAN DIMENSIONS TAKE PRECEDENCE OVER THE SECTION TYPE IDENTIFIED IN PROFILE.
2. ALL EXISTING AND PROPOSED STRUCTURAL ELEMENTS SHOWN ARE BASED ON CONCEPTUAL ENGINEERING DESIGN AND AERIAL IMAGERY AND MAY BE REVISED BASED ON MORE ADVANCED SURVEY AND DESIGNS.
3. SEE SHEET GEN-00-00010 FOR A KEY TO INFORMATION SHOWN ON PLAN AND PROFILE DRAWINGS.
4. LIMITS OF SPECIAL TRACK WORK ARE INDICATED ON THE PLAN SHEETS. ADDITIONAL DETAILS FOR MAINTENANCE OF WAY FACILITIES AND TRAINSET MAINTENANCE FACILITIES ARE SHOWN ON THE VOLUME 3 DRAWINGS.

ROADWAY NOTES:

1. EXISTING ROADWAY LOCATIONS ARE APPROXIMATE BASED ON AERIAL IMAGERY BACKGROUNDS.
2. PROPOSED ROADWAY WORKS, INCLUDING NEW ROADWAYS, RECONFIGURATION AND REALIGNMENTS OF EXISTING ROADWAYS, AND ROADWAY REMOVALS ARE CONCEPTUAL IN NATURE AND WERE DEVELOPED TO IDENTIFY GENERAL CONFIGURATION AND LOCATION FOR ENVIRONMENTAL IMPACT ANALYSES. ROADWAY WORKS WOULD BE DETAILED DURING FINAL DESIGN AND WOULD COMPLY WITH APPLICABLE STATE, CITY, COUNTY, OR LOCAL REQUIREMENTS.
3. SEE SHEET GEN-00-00011 FOR A KEY TO INFORMATION SHOWN ON ROADWAY PLAN DRAWINGS.
4. ROADWAY GEOMETRY IS BASED ON TXDOT ROADWAY DESIGN MANUAL. ROAD DESIGN SPEEDS MATCH EXISTING POSTED SPEED LIMITS OR MATCH DESIGN SPEED DETERMINED FROM TXDOT ROADWAY FUNCTIONAL CLASSIFICATION SPEED GUIDELINES, WHICHEVER IS GREATER.
5. SUPERELEVATION TRANSITION LENGTHS WERE NOT DETAILED IN ROADWAY APPROACH DESIGN.
6. SEE DRAWINGS CVL-00-03030 TO CVL-00-03034B FOR TYPICAL ROADWAY CROSS SECTIONS.
7. FOR SEGMENTS HN, WT, NW, EW, AND DS, ROADWAY REMOVALS ARE SHOWN ON RAIL PLAN AND PROFILE SHEETS, FOR SEGMENTS IH, NE, AND EE, ROADWAY REMOVALS ARE NOT SHOWN ON RAIL PLAN AND PROFILE SHEETS. REFER TO ROADWAY PLAN SHEETS IN VOLUME 4 FOR SEGMENT 2B, 3B, AND 4B ROADWAY REMOVALS.
8. NOT ALL PRIVATE ROADS AND DRIVEWAYS ARE REPRESENTED ON THE RAIL PLAN AND PROFILE SHEETS.
9. THE CLEARANCE ENVELOPES SHOWN ON THE RAIL PLAN AND PROFILE SHEETS REPRESENT THE APPROXIMATE ROADWAY CLEARANCE ENVELOPE. THE BOTTOM OF THE CLEARANCE ENVELOPE REPRESENTS THE TOP OF THE ROADWAY PAVEMENT. CLEARANCE ENVELOPE DOES NOT INCLUDE ROADWAY STRUCTURAL ELEMENTS.
10. ROADWAY ELEVATIONS FOR ROADWAY OVER RAILWAY CROSSINGS DO NOT REPRESENT THE PROPOSED ROADWAY ELEVATION, BUT RATHER THE MINIMUM HEIGHT REQUIRED FOR CLEARANCES, INCLUDING ALLOWANCES FOR ROADWAY STRUCTURAL ELEMENTS. SEE FCE REPORT FOR ADDITIONAL INFORMATION.
11. ROADWAY TYPICAL SECTIONS ACCOUNT FOR THE NECESSARY SPACE TO CONSTRUCT TEMPORARY ROADWAYS DURING CONSTRUCTION. CLOSE COORDINATION WITH ROADWAY AUTHORITIES, COMMUNITIES, AND EMERGENCY RESPONSE ENTITIES WOULD BE UNDERTAKEN DURING FINAL DESIGN AND CONSTRUCTION TO ENSURE ACCESS DURING THE CONSTRUCTION PHASE.
12. USE OF TXDOT RIGHT-OF-WAY FOR PERMANENT IMPROVEMENTS WILL REQUIRE THE APPROPRIATE APPROVAL FROM TXDOT.
13. PLANNED ROADS, SUCH AS MTFP ROADS IN HOUSTON, ARE SHOWN IN PROFILES IN VOLUME 2, BUT ARE NOT SHOWN IN PLAN IN VOLUME 2, AS THESE ROADS ARE PLANNED AND NOT EXISTING, THE AERIAL IMAGERY BACKGROUNDS DO NOT SHOW THESE ROADS. PLANNED ROADS ARE SHOWN IN THE FCE REPORT APPENDIX B: ROAD SEPARATION DATABASE.

TYPICAL SECTIONS NOTES:

1. SECTIONS ILLUSTRATE TYPICAL REQUIREMENTS TO GUIDE CONCEPTUAL ENGINEERING DESIGN DEVELOPMENT, LOCATION SPECIFIC CONDITIONS WOULD ESTABLISH REQUIREMENTS AT EACH LOCATION AND OVERALL WIDTH OF LIMIT OF DISTURBANCE WOULD VARY AS IDENTIFIED ON DIMENSION LINES AND IN NOTES.
2. OFFSET BETWEEN INFRASTRUCTURE ELEMENTS SUCH AS DISTANCE BETWEEN EMBANKMENT, FENCES, DRAINAGE SWALE, ACCESS ROAD, ETC. WOULD VARY BASED ON LOCAL REQUIREMENTS AND SITE SPECIFIC CONDITIONS.
3. TYPICAL ROADWAY DRAINAGE SYSTEM PROVIDED AS SHOWN IN TYPICAL SECTIONS. LOCATION SPECIFIC CONFIGURATION AND SIZE WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
4. LOCATION SPECIFIC CONDITIONS WOULD DICTATE FENCING REQUIREMENTS.
5. EMBANKMENT HEIGHTS AND CUT DEPTHS VARY WITH SURROUNDING GRADE AND RAIL PROFILE ELEVATION.
6. CRASH BARRIERS NOT SHOWN. LOCATION SPECIFIC CONDITIONS WILL DICTATE CRASH BARRIER REQUIREMENTS TO ENSURE SAFETY AND TO SATISFY APPLICABLE REGULATORY REQUIREMENTS.
7. SUBSURFACE GROUND IMPROVEMENTS ARE NOT SHOWN AND WILL BE BASED ON SITE SPECIFIC REQUIREMENTS.
8. RAIL HEIGHT VARIES WITH SURROUNDING GRADE AND RAIL PROFILE, THE BOTTOM OF SUBBALLAST SHALL BE NO LESS THAN 2FT ABOVE 100 YEAR FLOODPLAIN.

UTILITIES NOTES:

1. REFER TO THE FCE REPORT FOR A LIST OF MAJOR UTILITY CROSSINGS, THEIR ASSUMED SIZE, AND ASSOCIATED LOCATIONS ALONG THE ALIGNMENT.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED ON INFORMATION RECEIVED, AS DOCUMENTED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
3. NO FIELD SURVEYS HAVE BEEN CONDUCTED TO LOCATE AND VERIFY UTILITY LOCATIONS.
4. NOT ALL EXISTING UNDERGROUND UTILITIES HAVE BEEN SHOWN. REFER TO THE FCE REPORT FOR MAJOR UTILITIES INCLUDED IN PROJECT MAPPING.
5. LOD NOT SHOWN FOR UTILITIES THAT ARE NOT IMPACTED BY THE ALIGNMENT. ONLY MAJOR UTILITIES THAT ARE PROTECTED, RELOCATED OR ELEVATED ARE SHOWN ON THE PLAN AND PROFILE VIEW. REFER TO DRAWING NO. CUT-00-0100 FOR TYPICAL UTILITY CROSSING DETAILS. UTILITY LODS FOR FUTURE PROPOSED CONNECTIONS TO TPSS FACILITIES ARE SHOWN.
6. FOR PARALLEL TRANSMISSION LINE CROSSINGS OVER NEW ELEVATED ROADWAYS, A LOD IS SHOWN ON THE PLAN ONLY. REFER TO DRAWING NO. CUT-00-0100 FOR TYPICAL UTILITY CROSSING DETAILS.
7. MANY UTILITY CONFLICTS ALONG THE HEMPSTEAD ROAD CORRIDOR IN HOUSTON WOULD BE RESOLVED DURING FINAL DESIGN. A CONTINUOUS LOD IS SHOWN ON THE DRAWINGS TO REPRESENT THAT UTILITIES WOULD BE RELOCATED ON ONE OR BOTH SIDES OF THE ROADWAY AS REQUIRED. ALL WORK WOULD BE COORDINATED WITH UTILITY PROVIDERS TO MINIMIZE IMPACTS AND COORDINATE WITH OTHER PLANNED UTILITY PROJECTS ALONG CORRIDOR.
8. FOR UTILITY WORK REQUIRED BY UTILITY COMPANIES, EACH UTILITY OWNER WOULD DEVELOP THE DESIGN IN ACCORDANCE WITH APPLICABLE DESIGN STANDARDS AND REGULATORY AGENCY REVIEW PROCESSES.

DRAINAGE NOTES:

1. PROPOSED DETENTION BASIN LOCATIONS AND DIMENSIONS SHOWN ARE APPROXIMATE AND ARE INTENDED FOR PRELIMINARY PLANNING AND ENVIRONMENTAL IMPACT ANALYSIS PURPOSES ONLY. SITE SPECIFIC CONFIGURATIONS WOULD BE DEVELOPED DURING FINAL DESIGN IN ACCORDANCE WITH APPLICABLE REQUIREMENTS.
2. EXISTING CULVERTS ARE NOT SHOWN.
3. PROPOSED TRACK AND ROADWAY STORMWATER DRAINAGE WOULD BE DEVELOPED DURING FINAL DESIGN IN ACCORDANCE WITH APPLICABLE REQUIREMENTS. REFER TO TYPICAL SECTION DRAWINGS FOR PROPOSED CONFIGURATIONS.
4. EXISTING STORMWATER FACILITIES ARE NOT SHOWN.
5. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) WATER QUALITY CRITERIA WOULD BE MET FOR STORMWATER RUNOFF AND PROTECTION OF EXISTING WATER RESOURCES.
6. CONSTRUCTION OF THE RAIL MAY REQUIRE THE RECONFIGURATION OF PONDS OR STOCK TANKS IMMEDIATELY ADJACENT TO THE RAIL CORRIDOR. IN CASES WHERE THE CURRENT DESIGN NECESSITATES A FULL RELOCATION OF THE POND, ALLOWANCES HAVE BEEN MADE WITHIN THE LOD. IN CASES WHERE THE FULL RELOCATION OF THE POND IS NOT REQUIRED UNDER THE CURRENT DESIGN, ADDITIONAL COORDINATION WITH LANDOWNER WILL BE UNDERTAKEN TO DEVELOP IMPROVEMENTS CONSIDERING LANDOWNER PREFERENCES.

STRUCTURES GENERAL NOTES:

1. TYPICAL SECTIONS WERE DEVELOPED TO IDENTIFY GENERAL ARRANGEMENTS AND ALLOWANCES FOR STRUCTURAL ELEMENTS. TYPICAL SECTIONS WERE USED AS THE BASIS FOR DEVELOPMENT OF LOD FOR ENVIRONMENTAL ANALYSIS.
2. APPROXIMATE HSR VIADUCT AND BRIDGE STRUCTURE LIMITS AND DEPTHS ARE SHOWN ON THE PROFILES TO SUPPORT ENVIRONMENTAL IMPACT ANALYSIS. LIMITS OF STRUCTURES AND EMBANKMENTS WOULD BE REFINED DURING FINAL DESIGN.
3. PLAN AND PROFILE DRAWINGS DO NOT SHOW LIMITS OF STRUCTURES IN PLAN VIEW. SITE SPECIFIC STRUCTURAL DESIGN WOULD BE DEVELOPED DURING FINAL ENGINEERING IN ACCORDANCE WITH APPLICABLE REQUIREMENTS. DESIGN OF FOUNDATIONS, ABUTMENTS, PIERS AND OTHER STRUCTURES WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSIS.
4. HSR PROFILE WAS DEVELOPED TO PROVIDE A MINIMUM 3FT VERTICAL CLEAR DISTANCE FROM ESTIMATED 100 YEAR FLOOD LEVEL TO BRIDGE SOFFIT FOR RIVER AND FLOODPLAIN CROSSINGS. FINAL DESIGN WOULD BE DEVELOPED TO MEET OR EXCEED THIS REQUIREMENT.
5. SPECIAL STRUCTURES WOULD BE REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC ISSUES SUCH AS LONG SPANS, CROSSOVER STRUCTURES, AND STRADDLE BENTS TO AVOID OR MITIGATE IMPACTS. THE CONSTRUCTABILITY REPORT IDENTIFIES SPECIAL STRUCTURE LOCATIONS. PLAN AND PROFILE DRAWINGS IDENTIFY ADDITIONAL LOD EXPECTED FOR CONSTRUCTION STAGING AND WORKING AREAS FOR SPECIAL STRUCTURES.

SYSTEMS GENERAL NOTES:

1. SYSTEMS SCHEMATICS, SHOWN ON SHEETS SYS-00-02000 THROUGH SYS-00-02006, SHOW LOCATIONS OF SYSTEMS FACILITIES THAT HAVE BEEN INCLUDED FOR EACH END-TO-END ALTERNATIVE.
2. AREA FOR SYSTEMS FACILITY SITES HAVE BEEN INCLUDED WITHIN THE PROJECT LOD. THESE AREAS ARE GENERICALLY CALLED OUT AS "RAIL SYSTEMS SITES" ON THE PLAN AND PROFILE SHEETS. REFER TO FCE REPORT TO DETERMINE THE SPECIFIC FACILITY TYPE AT EACH INDIVIDUAL LOCATION.
3. TYPICAL LAYOUT PLANS FOR EACH OF THE SYSTEMS FACILITIES ARE INCLUDED IN SHEETS SYS-00-01000 THROUGH SYS-00-01006.
4. LOD DEVELOPED FOR ENVIRONMENTAL IMPACT ANALYSIS OF SYSTEMS SITES INCLUDED SPACE FOR A DRIVEWAY AND SPACE TO PARK A LIMITED NUMBER OF MAINTENANCE VEHICLES.
5. SYSTEMS BUILDINGS WOULD BE DETAILED DURING FINAL DESIGN TO CONSIDER SITE SPECIFIC CONDITIONS, BE CONTEXT SENSITIVE, AND MINIMIZE VISUAL IMPACT. THE RADIO MAST AT COMMUNICATION FACILITIES WOULD BE APPROXIMATELY 50FT (15M) ABOVE THE TOP OF RAIL ELEVATION.
6. TPSS WOULD BE CONNECTED TO THE NEAREST 138KV TRANSMISSION LINES DESIGNED BY UTILITY PROVIDER AND SUBJECT TO ENVIRONMENTAL REVIEW.

FACILITY NOTES:

1. PROPOSED HSR FACILITIES WOULD INCLUDE STATIONS AND ASSOCIATED PARKING GARAGES, MAINTENANCE OF WAY (MOW) FACILITIES, TRAINSET MAINTENANCE FACILITIES (TMF), AND RAILWAY SYSTEMS SITES, INCLUDING TRACTION POWER SUPPLY FACILITIES, SIGNAL HOUSES, AND COMMUNICATIONS HOUSES. LOCATIONS, LIMITS OF DISTURBANCE, AND AREAS SHOWN FOR THE VARIOUS PROPOSED FACILITIES ARE FOR PRELIMINARY PLANNING PURPOSES ONLY.
2. ALL FACILITIES WOULD BE POWERED FROM THE LOCAL UTILITY GRID.
3. ACCESS, SECURITY, AND UTILITY PROVISION REQUIREMENTS FOR ALL FACILITIES WOULD BE DETAILED DURING FINAL DESIGN.

CONSTRUCTION CONSIDERATION NOTES:

1. CONSTRUCTION REQUIREMENTS WERE CONSIDERED DURING DEVELOPMENT OF THE CONCEPTUAL ENGINEERING AND ARE DOCUMENTED IN THE PROJECT CONSTRUCTABILITY REPORT.
2. TEMPORARY CONSTRUCTION AREAS REQUIRED FOR CONSTRUCTION ACCESS, CONSTRUCTION STAGING, AND PRECASTING FACILITIES WERE IDENTIFIED DURING DEVELOPMENT OF THE CONCEPTUAL ENGINEERING. CONSTRUCTION STAGING AREAS AND PRECAST FACILITIES ARE INCLUDED IN THE PROJECT LOD.
3. SPECIAL STRUCTURES REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC ISSUES SUCH AS LONG SPANS, CROSSOVER STRUCTURES, AND STRADDLE BENTS ARE IDENTIFIED IN THE CONSTRUCTABILITY REPORT.
4. MEASURES REQUIRED TO MITIGATE NOISE, TRAFFIC, AND OTHER ENVIRONMENTAL IMPACTS WOULD BE IDENTIFIED THROUGH THE ENVIRONMENTAL ANALYSES. MORE DETAILED DESIGN INCLUDING DEVELOPMENT OF MAINTENANCE AND PROTECTION OF TRAFFIC AND OTHER CONSTRUCTION SPECIFIC PLANS AND PROCEDURES WOULD BE REQUIRED TO SECURE APPLICABLE PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.

REV	DATE	BY	CHK	APP	DESCRIPTION

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL NOTES

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-00008	01

PLOT BY: PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 4:39:26 PM

ABBREVIATIONS

ALT	ALTERNATE	SC	SPIRAL CURVE
ALIGN	ALIGNMENT	SH	STATE HIGHWAY
APPROX	APPROXIMATE	SO	SIDING OFF
ATP	AUTOTRANSFORMER POST	SP	SECTIONING POST
AVE	AVENUE	SSH	SUB-SIGNAL HOUSE
		SSP	SUB-SECTIONING POST
BLVD	BOULEVARD	ST	STREET, SPIRAL TO TANGENT
BNSF	BURLINGTON NORTH SANTE FE RAILROAD	STA	STATION
BOT	BOTTOM	STD	STANDARD
		SYM	SYMMETRICAL
CH	COMMUNICATION HOUSE		
CO RD	COUNTY ROAD	TBD	TO BE DETERMINED
CL	CENTERLINE	TCEQ	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
℄	CENTERLINE		
CLSM	CONTROLLED LOW STRENGTH MATERIAL	TEMP	TEMPORARY
CO	COUNTY	THFN	TEXAS HIGHWAY FREIGHT NETWORK
CR	COUNTY ROAD	TMF	TRAINSET MAINTENANCE FACILITY
CS	CURVE TO SPIRAL	TPSS	TRACTION POWER SUBSTATION
CVL	CIVIL	TS	TANGENT SPIRAL
		TYP	TYPICAL
DIA	DIAMETER	TOR	TOP OF RAIL
DIST	DISTANCE, DISTRICT		
DR	DRIVE	US	UNITED STATES, UNITED STATES HIGHWAY
DRG	DRAWING	UPRR	UNION PACIFIC RAILROAD
DS	DALLAS SEGMENT		
DSN	DALLAS SEGMENT NORTH	VAR	VARIABLE
DSS	DALLAS SEGMENT SOUTH	VERT, V	VERTICAL
DT	DALLAS TERMINUS SEGMENT		
DWY	DRIVEWAY	WB	WESTBOUND
		WT	WEST OF TEAGUE
Ea	ACTUAL SUPERELEVATION		
EE	ELLIS EAST SEGMENT	XING	CROSSING
ELECT	ELECTRIC		
ELEV	ELEVATION	YR	YEAR
EMB	EMBANKMENT		
ENGR	ENGINEER		
EPA	ENVIRONMENTAL PROTECTION AGENCY		
ERMSA	EMERGENCY RESPONSE AND MAINTENANCE STAGING AREA		
Eu	UNBALANCED SUPERELEVATION		
EW	ELLIS WEST SEGMENT		
EXIST, EX.	EXISTING		
EXT	EXTERIOR		
FDN	FOUNDATION		
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY		
FG	FINISHED GRADE		
FIG	FIGURE		
FL	FLOW LINE		
FM	FARM TO MARKET ROAD		
FRS	FREIGHT RAIL SIDING		
FTG	FOOTING		
FWY	FREEWAY		
G	GRADIENT		
GEN	GENERAL		
H	HEIGHT, HIGHWAY BRIDGE		
HN	HOUSTON SEGMENT		
HNN	HOUSTON SEGMENT NORTH		
HNS	HOUSTON SEGMENT SOUTH		
HORIZ, H	HORIZONTAL		
HRW	HIGHWAY RETAINING WALL		
HSR	HIGH SPEED RAIL		
HT	HOUSTON TERMINUS SEGMENT		
HWY	HIGHWAY		
IH	INTERSTATE HIGHWAY		
ISH	INTERMEDIATE SIGNAL HOUSE		
JRC	CENTRAL JAPAN RAILWAY COMPANY		
KV	KILOVOLT		
L	LENGTH		
LN	LANE		
LOD	LIMITS OF DISTURBANCE		
LVC	LENGTH OF VERTICAL CURVE		
MAINT	MAINTENANCE		
MAX	MAXIMUM		
MOW	MAINTENANCE-OF-WAY		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MPH	MILES PER HOUR		
MSH	MAIN SIGNAL HOUSE		
MTFP	(CITY OF HOUSTON) MAJOR THOROUGHFARE AND FREEWAY PLAN		
NB	NORTHBOUND		
NE	NAVARRO EAST SEGMENT		
NED	NATIONAL ELEVATION DATASET		
NHD	NATIONAL HYDROGRAPHY DATASET		
NLCD	NATIONAL LAND COVER DATASET		
NO.	NUMBER		
NTS	NOT TO SCALE		
N/A	NOT APPLICABLE		
NW	NAVARRO WEST SEGMENT, NOISE WALL		
NWI	NATIONAL WETLANDS INVENTORY		
NWIH	PORTION OF NAVARRO WEST ASSOCIATED WITH IH-45 SEGMENT		
OCS	OVERHEAD CATENARY SYSTEM		
OD	OUTSIDE DIAMETER		
OG	ORIGINAL GRADE		
OH	OVERHEAD		
OPP	OPPOSITE		
PKWY	PARKWAY		
POB	POINT OF BEGINNING		
POE	POINT OF END		
PVMT	PAVEMENT		
PVC	POINT VERTICAL CURVATURE		
PVI	POINT VERTICAL INTERSECTION		
PVT	POINT VERTICAL TANGENT		
R	RADIUS, RAIL BRIDGE		
RD	ROAD		
RDWY	ROADWAY		
RM	RANCH TO MARKET ROAD		
ROW	RIGHT OF WAY		
RR, R/R	RAILROAD		
RTE	ROUTE		
RWY	RAILWAY		

LEGEND

PLAN

NORTH ARROW

CITY / COUNTY BOUNDARY LINE

MATCH LINE

CONCEPTUAL ENGINEERING LIMITS OF DISTURBANCE (LOD)

PROPOSED CENTERLINE OF HIGH-SPEED RAIL WITH STATIONING

EDGE OF VIADUCT

PROPOSED ROADWAY EDGE OF PAVEMENT

CONTOURS

EXISTING TRANSMISSION LINE

FENCE

RETAINING WALL

CULVERT

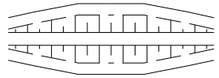
TEMPORARY CONSTRUCTION AREA

UTILITY LIMIT OF DISTURBANCE (LOD)

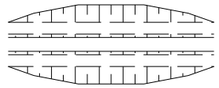
RAIL SYSTEMS SITE

DETENTION BASIN

BUILDING TO BE DEMOLISHED

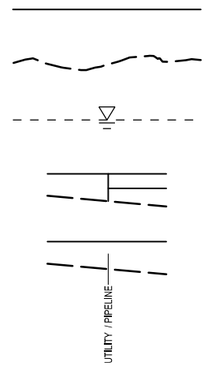


RAIL ON EMBANKMENT (FILL)



RAIL IN CUT

PROFILE



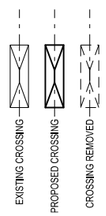
TOP OF RAIL

EXISTING GROUND

FEMA 100 YR FLOOD LEVEL

VIADUCT ABUTMENT AND STRUCTURE SOFFIT

UTILITY CROSSING



NOTE:

1. FOR ADDITIONAL DETAIL REGARDING INFORMATION SHOWN ON DRAWINGS, SEE RAIL ANNOTATION TO CLARIFY DESIGN INTENT, DRAWING GEN-00-00010. FOR SEGMENTS IH, NE, AND EE, SEE ROAD ANNOTATION TO CLARIFY DESIGN INTENT, DRAWING GEN-00-00011.

PLOT TIME: 6/28/2019 11:10:22 AM
PLOT BY: colleen.zwiebel

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: D. THOMPSON
DRAWN BY: D. THOMPSON
CHECKED BY: R. BURNS
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
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Drawing Title: GENERAL ABBREVIATIONS AND LEGEND

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-00009	01

22x34

PLOT TIME: 4/30/2019 4:03:21 PM

PLOT BY: Andrew.Utz

1A-2

RAILWAY TYPICAL SECTIONS

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: K. SEYMOUR
DRAWN BY: D. THOMPSON
CHECKED BY: R. BURNS
IN CHARGE: C. TAYLOR
DATE: 2/25/2019

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Scale: NO SCALE
Drawing Status: FINAL

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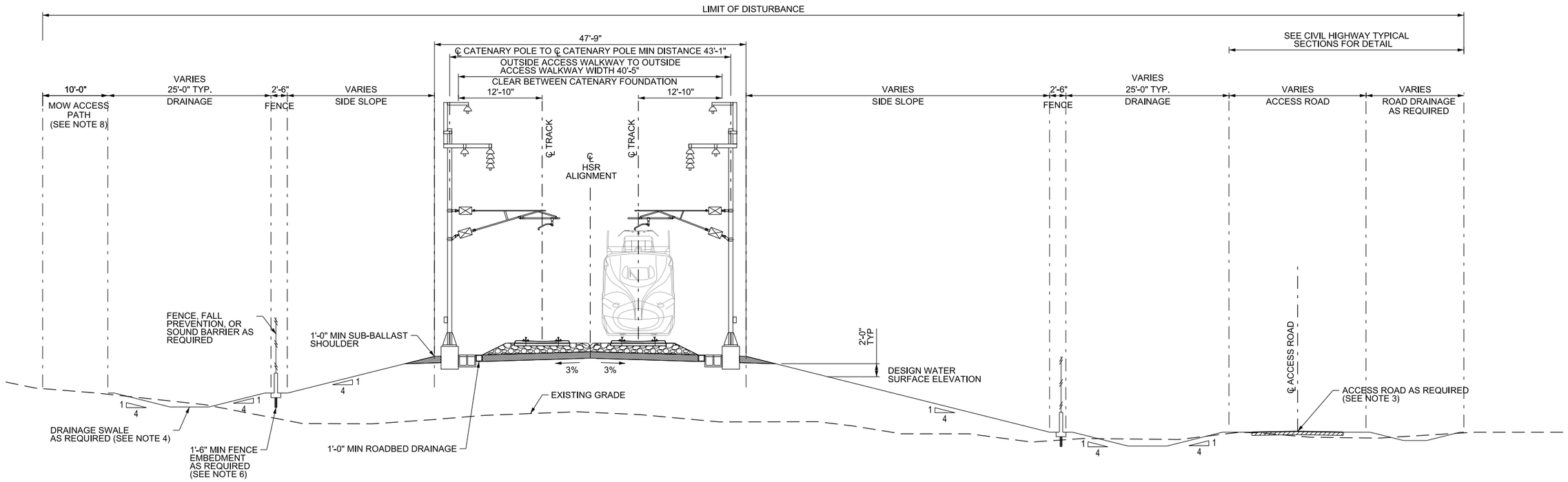
234180	GEN-00-0000	01

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-10 General (PG)\4-03-10-02 Sheets\234180-AFN-GEN-DWG-00-00031-V002

22x34



A TYPICAL EMBANKMENT

NOTES:

1. FOR DIMENSIONS OF TYPICAL TWO TRACK HSR SYSTEM, SEE DRAWING CVL-00-03013. FOR GENERAL NOTES ON TYPICAL SECTIONS, SEE DRAWINGS GEN-00-00008.
2. CENTERLINE HSR ALIGNMENT IS CENTERLINE OF TWO TRACK HSR ALIGNMENT AS SHOWN IN VOLUME 2 PLAN AND PROFILE DRAWINGS. EMBANKMENT HEIGHT VARIES WITH SURROUNDING GRADE AND RAIL PROFILE.
3. TWO TYPES OF ACCESS ROADS ARE INCLUDED IN DESIGN: FACILITIES ACCESS ROADS AND SHARED ACCESS ROADS. ALIGNMENT OF ACCESS ROAD INDEPENDENT OF HSR ALIGNMENT AND IS SHOWN ON DRAWINGS INCLUDED IN VOLUMES 2 AND 4. REQUIREMENTS AND DESIGN CRITERIA FOR EACH TYPE OF ACCESS ROAD IS PROVIDED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
4. DRAINAGE SWALE SIZE AND LOCATION WILL BE BASED ON SITE SPECIFIC CONSTRAINTS, TOPOGRAPHY, AND DRAINAGE REQUIREMENTS. A TYPICAL MINIMUM SWALE WIDTH OF 25 FT HAS BEEN PROVIDED AS SHOWN.
5. THE TRACKWAY WILL BE ENTIRELY SECURED BETWEEN DALLAS AND HOUSTON TO PREVENT UNAUTHORIZED ACCESS OR INTRUSION ON TO THE OPERATING RAILWAY. SOUND BARRIERS WILL BE PROVIDED WHERE REQUIRED TO MITIGATE NOISE IMPACTS AS IDENTIFIED THROUGH DETAILED ENVIRONMENTAL ANALYSIS. WHERE ON ELEVATED STRUCTURE, TRACKWAY FENCING MAY BE REPLACED WITH FALL PREVENTION RAILINGS BASED ON SITE SPECIFIC CONDITIONS.
6. FENCE LIMITS, LOCATION, HEIGHT, EMBEDMENT, AND OTHER DETAILS WILL BE DEVELOPED DURING MORE DETAILED DESIGN. DETAILS FOR FENCING AND OTHER INTRUSION PROTECTION MEASURES WILL BE INFORMED BY HAZARDS AND RISKS ANALYSIS AND WOULD BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE REGULATORY AUTHORITIES AND COMPLY WITH APPLICABLE REQUIREMENTS.
7. CONCEPTUAL SECTION SHOWN WITH SIDE SLOPES ON BOTH SIDES. SIDE SLOPES SUBJECT TO OPTIMIZATION AS SITE SPECIFIC GEOTECHNICAL DATA BECOMES AVAILABLE. RETAINING WALLS MAY BE UTILIZED ON ONE OR BOTH SIDES OF THE EMBANKMENT AS NECESSARY TO MINIMIZE IMPACTS TO ADJACENT PROPERTIES, UTILITIES, INFRASTRUCTURE OR ENVIRONMENTALLY SENSITIVE AREAS. SEE RETAINED FILL TYPICAL SECTION FOR DETAILS. LOCATION SPECIFIC CONFIGURATION WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
8. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOTPRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10FT SPACE ALLOWANCE WOULD BE GRADED, REVEGETATED, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S., PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN THE 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS, CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROAD AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.
9. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES SPACE PROVISIONS FOR DRAINAGE SWALES AND CONSTRUCTION ACCESS ON EACH SIDE OF RAIL FORMATION. DURING MORE DETAILED ENGINEERING DESIGN DEVELOPMENT, SITE SPECIFIC DRAINAGE DESIGN WOULD BE DEVELOPED TO OPTIMIZE SWALE CONFIGURATIONS AND ANALYSIS WAS DONE DURING CONCEPTUAL ENGINEERING TO CONFIRM THAT A MORE COMPACT FOOTPRINT ELIMINATING ONE SWALE AND ONE CONSTRUCTION ACCESS ALLOWANCE WAS FEASIBLE. LOCATIONS WHERE MORE COMPACT ARRANGEMENTS WERE USED IN THE FINAL CONCEPTUAL ENGINEERING DESIGN ARE SHOWN ON THE PLANS IN VOLUME 2.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. PETRIN
DRAWN BY S. PAUDEL
CHECKED BY K. SEYMOUR
IN CHARGE C. TAYLOR
DATE 02/25/2019

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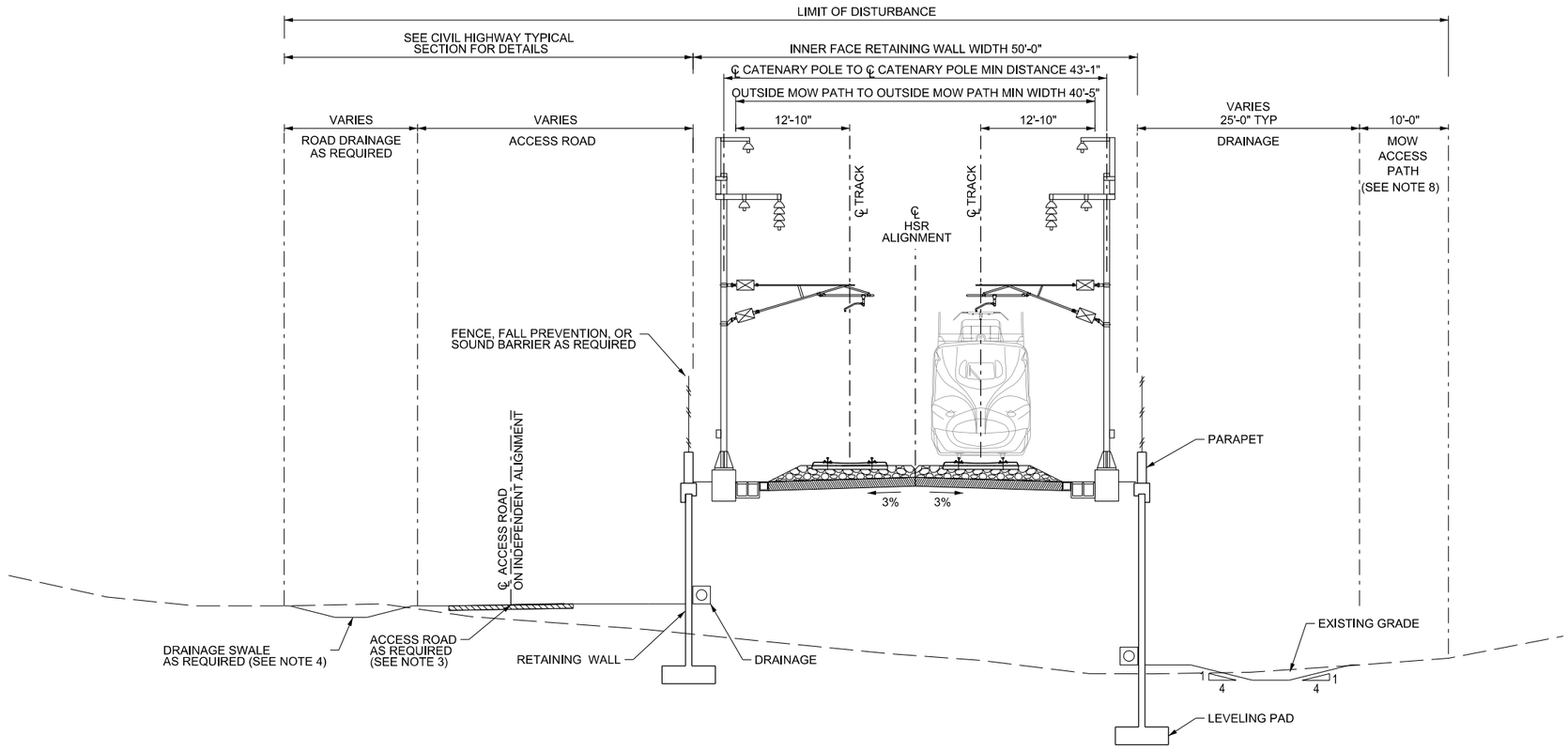
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 1 OF 13

Scale 1 1/4" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03001	01



B TYPICAL RETAINED FILL

NOTES:

1. FOR DIMENSIONS OF TYPICAL TWO TRACK HSR SYSTEM, SEE DRAWING CVL-00-03013. FOR GENERAL NOTES ON TYPICAL SECTIONS, SEE DRAWINGS GEN-00-00008.
2. CENTERLINE HSR ALIGNMENT IS CENTERLINE OF TWO TRACK HSR ALIGNMENT AS SHOWN IN VOLUME 2 PLAN AND PROFILE DRAWINGS. RETAINING WALL DETAILS TO BE DEVELOPED DURING MORE ADVANCED DESIGN BASED UPON SITE SPECIFIC CONDITIONS AND GEOTECHNICAL INVESTIGATIONS. MECHANICALLY STABILIZED EARTH (MSE) WALLS ASSUMED FOR CONCEPTUAL ENGINEERING. WALL TYPE CONSTRUCTED IN RETAINED FILL AREAS WOULD BE DETERMINED DURING MORE DETAILED DESIGN AND SUBJECT TO SITE SPECIFIC CONSTRAINTS AND GEOTECHNICAL RECOMMENDATION.
3. TWO TYPES OF ACCESS ROADS ARE INCLUDED IN DESIGN: FACILITIES ACCESS ROADS AND SHARED ACCESS ROADS. ALIGNMENT OF ACCESS ROAD INDEPENDENT OF HSR ALIGNMENT AND IS SHOWN ON DRAWINGS INCLUDED IN VOLUMES 2 AND 4. REQUIREMENTS AND DESIGN CRITERIA FOR EACH TYPE OF ACCESS ROAD IS PROVIDED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
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5. THE TRACKWAY WILL BE ENTIRELY SECURED BETWEEN DALLAS AND HOUSTON TO PREVENT UNAUTHORIZED ACCESS OR INTRUSION ON TO THE OPERATING RAILWAY. SOUND BARRIERS WILL BE PROVIDED WHERE REQUIRED TO MITIGATE NOISE IMPACTS AS IDENTIFIED THROUGH DETAILED ENVIRONMENTAL ANALYSIS. WHERE ON ELEVATED STRUCTURE TRACKWAY, FENCING MAY BE REPLACED WITH FALL PREVENTION RAILINGS BASED ON SITE SPECIFIC CONDITIONS.
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7. CONCEPTUAL SECTION SHOWN WITH RETAINING WALLS ON BOTH SIDES. SIDE SLOPES MAY BE USED ON ONE SIDE BASED ON SITE SPECIFIC CONDITIONS. SEE EMBANKMENT TYPICAL SECTION FOR DETAILS. LOCATION SPECIFIC CONFIGURATION WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
8. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOTPRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10FT SPACE ALLOWANCE WOULD BE GRADED, REVEGETATED, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S., PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN THE 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS, CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROAD AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.
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REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY S. PAUDEL
CHECKED BY K. SEYMOUR
IN CHARGE C. TAYLOR
DATE 02/25/2019

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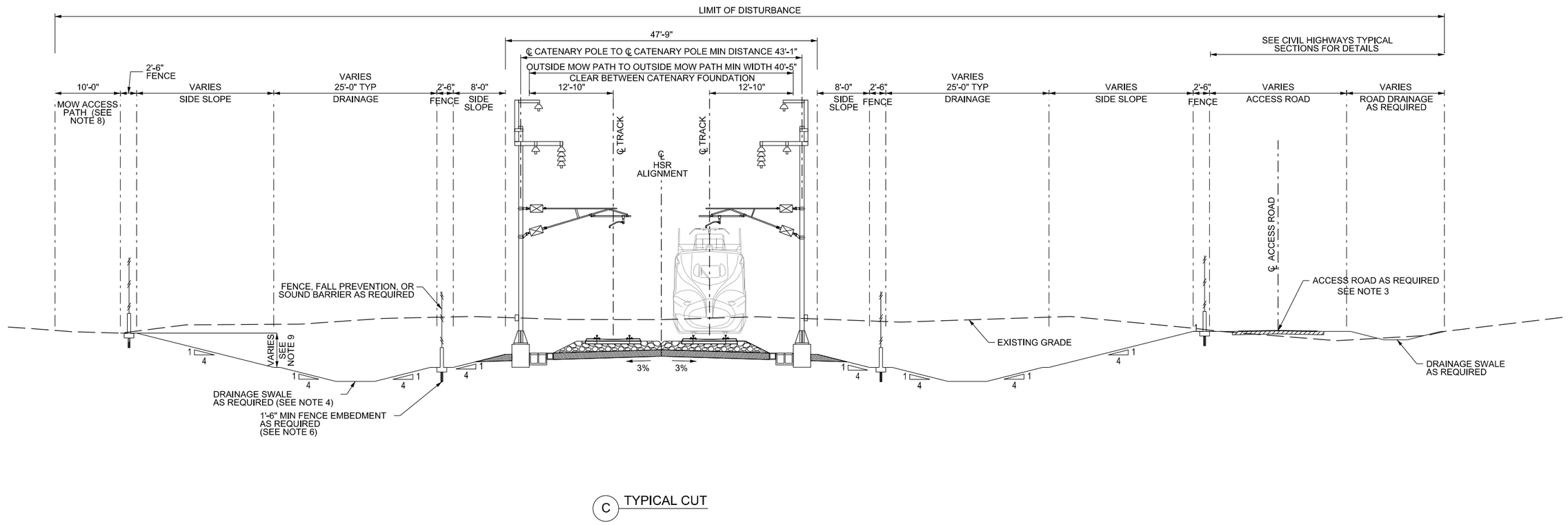
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 2 OF 13

Scale 1 1/4" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03002	01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 9:40:11 AM



C TYPICAL CUT

NOTES:

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2. CENTERLINE HSR ALIGNMENT IS CENTERLINE OF TWO TRACK HSR ALIGNMENT AS SHOWN IN VOLUME 2 PLAN AND PROFILE DRAWINGS. CUT DEPTH VARIES WITH SURROUNDING GRADE AND RAIL PROFILE. THE BOTTOM OF SUBBALLAST SHALL BE NO LESS THAN 2FT ABOVE 100 YEAR FLOODPLAIN.
3. IT IS ASSUMED THAT AN ACCESS ROAD WOULD BE PROVIDED ON AT LEAST ONE SIDE OF THE HSR LINE. TWO TYPES OF ACCESS ROADS ARE INCLUDED IN DESIGN: FACILITIES ACCESS ROADS AND SHARED ACCESS ROADS. ALIGNMENT OF ACCESS ROAD INDEPENDENT OF HSR ALIGNMENT AND IS SHOWN ON DRAWINGS INCLUDED IN VOLUMES 2 AND 4. REQUIREMENTS AND DESIGN CRITERIA FOR EACH TYPE OF ACCESS ROAD IS PROVIDED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
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9. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES SPACE PROVISIONS FOR DRAINAGE SWALES AND CONSTRUCTION ACCESS ON EACH SIDE OF RAIL FORMATION. DURING MORE DETAILED ENGINEERING DESIGN DEVELOPMENT, SITE SPECIFIC DRAINAGE DESIGN WOULD BE DEVELOPED TO OPTIMIZE SWALE CONFIGURATIONS. ANALYSIS WAS DONE DURING CONCEPTUAL ENGINEERING TO CONFIRM THAT A MORE COMPACT FOOTPRINT ELIMINATING ONE SWALE AND ONE CONSTRUCTION ACCESS ALLOWANCE WAS FEASIBLE. LOCATIONS WHERE MORE COMPACT ARRANGEMENTS WERE USED IN THE FINAL CONCEPTUAL ENGINEERING DESIGN ARE SHOWN ON THE PLANS IN VOLUME 2.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: D. PETRIN
DRAWN BY: S. PAUDEL
CHECKED BY: K. SEYMOUR
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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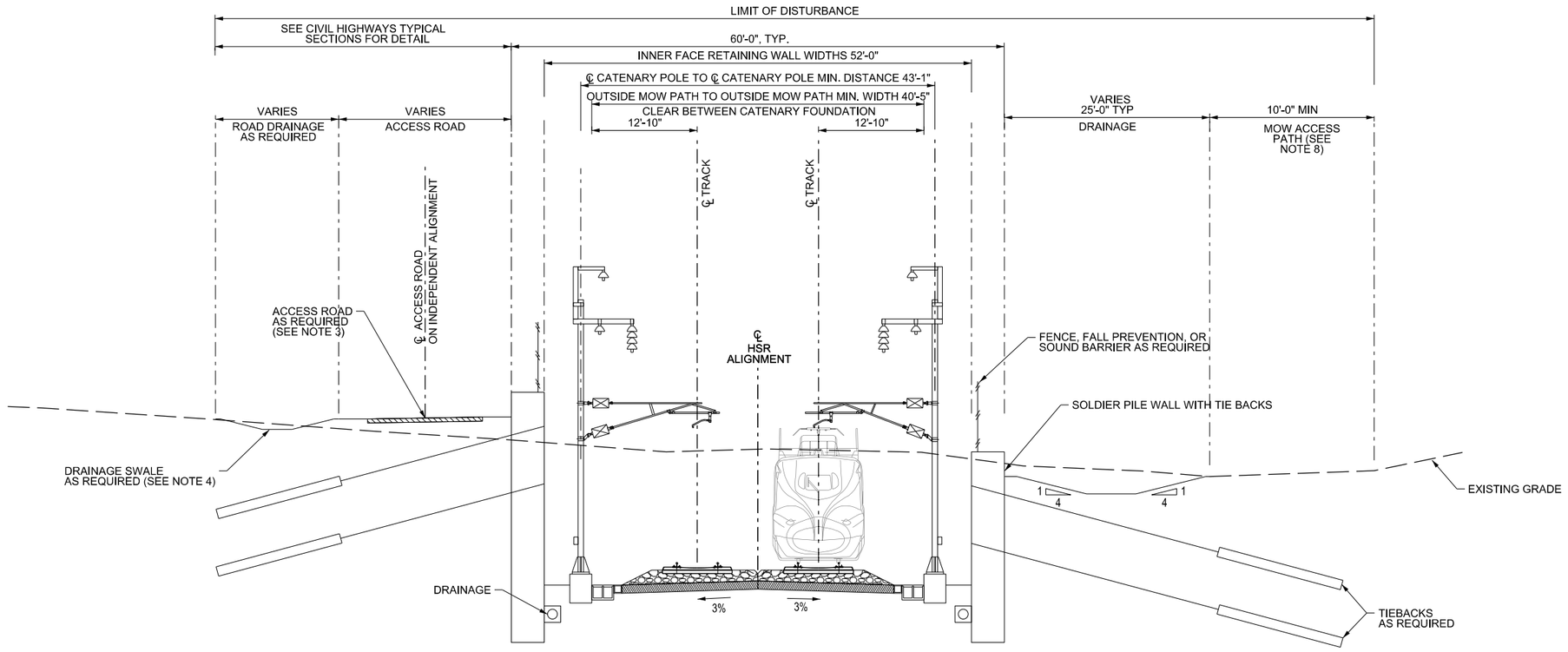
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 3 OF 13

Scale: 1 1/4" = 10'
Drawing Status: FINAL
Job No: 234180
Drawing No: CVL-00-03003
Rev: 01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 9:46:28 AM

22x34



D TYPICAL RETAINED CUT

NOTES:

1. FOR DIMENSIONS OF TYPICAL TWO TRACK HSR SYSTEM, SEE DRAWING CVL-00-03013. FOR GENERAL NOTES ON TYPICAL SECTIONS, SEE DRAWINGS GEN-00-00008.
2. CENTERLINE HSR ALIGNMENT IS CENTERLINE OF TWO TRACK HSR ALIGNMENT AS SHOWN IN VOLUME 2 PLAN AND PROFILE DRAWINGS.
3. TWO TYPES OF ACCESS ROADS ARE INCLUDED IN DESIGN: FACILITIES ACCESS ROADS AND SHARED ACCESS ROADS. ALIGNMENT OF ACCESS ROAD INDEPENDENT OF HSR ALIGNMENT AND IS SHOWN ON DRAWINGS INCLUDED IN VOLUMES 2 AND 4. REQUIREMENTS AND DESIGN CRITERIA FOR EACH TYPE OF ACCESS ROAD IS PROVIDED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
4. DRAINAGE SWALE SIZE AND LOCATION WILL BE BASED ON SITE SPECIFIC CONSTRAINTS, TOPOGRAPHY, AND DRAINAGE REQUIREMENTS. A TYPICAL MINIMUM SWALE WIDTH OF 25 FT HAS BEEN PROVIDED AS SHOWN.
5. THE TRACKWAY WILL BE ENTIRELY SECURED BETWEEN DALLAS AND HOUSTON TO PREVENT UNAUTHORIZED ACCESS OR INTRUSION ON TO THE OPERATING RAILWAY. SOUND BARRIERS WILL BE PROVIDED WHERE REQUIRED TO MITIGATE NOISE IMPACTS AS IDENTIFIED THROUGH DETAILED ENVIRONMENTAL ANALYSIS. WHERE ON ELEVATED STRUCTURE TRACKWAY, FENCING MAY BE REPLACED WITH FALL PREVENTION RAILINGS BASED ON SITE SPECIFIC CONDITIONS.
6. FENCE LIMITS, LOCATION, HEIGHT, EMBEDMENT, AND OTHER DETAILS WILL BE DEVELOPED DURING MORE DETAILED DESIGN. DETAILS FOR FENCING AND OTHER INTRUSION PROTECTION MEASURES WILL BE INFORMED BY HAZARDS AND RISKS ANALYSIS AND WOULD BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE REGULATORY AUTHORITIES AND COMPLY WITH APPLICABLE REQUIREMENTS.
7. CONCEPTUAL SECTION SHOWN WITH RETAINING WALLS ON BOTH SIDES. SIDE SLOPES MAY BE USED ON ONE SIDE BASED ON SITE SPECIFIC CONDITIONS. SEE TYPICAL CUT SECTION FOR DETAILS. LOCATION SPECIFIC CONFIGURATION WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
8. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOTPRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10FT SPACE ALLOWANCE WOULD BE GRADED, REVEGETATED, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S,, PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN THE 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS, CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROAD AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.
9. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES SPACE PROVISIONS FOR DRAINAGE SWALES AND CONSTRUCTION ACCESS ON EACH SIDE OF RAIL FORMATION. DURING MORE DETAILED ENGINEERING DESIGN DEVELOPMENT, SITE SPECIFIC DRAINAGE DESIGN WOULD BE DEVELOPED TO OPTIMIZE SWALE CONFIGURATIONS. ANALYSIS WAS DONE DURING CONCEPTUAL ENGINEERING TO CONFIRM THAT A MORE COMPACT FOOTPRINT ELIMINATING ONE SWALE AND ONE CONSTRUCTION ACCESS ALLOWANCE WAS FEASIBLE. LOCATIONS WHERE MORE COMPACT ARRANGEMENTS WERE USED IN THE FINAL CONCEPTUAL ENGINEERING DESIGN ARE SHOWN ON THE PLANS IN VOLUME 2.

REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY S. PAUDEL
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IN CHARGE C. TAYLOR
DATE 02/25/2019

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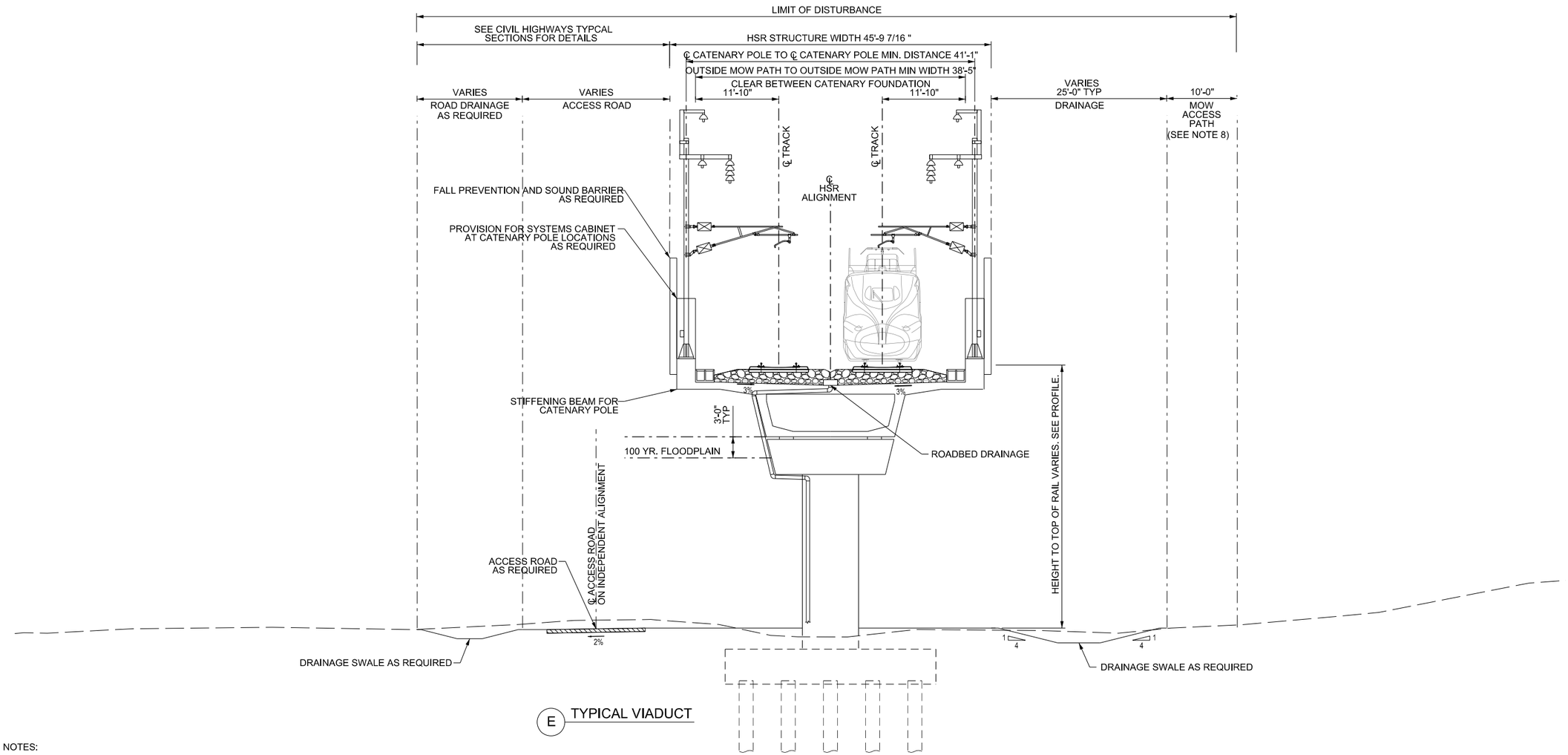
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 4 OF 13

Scale 1 1/4" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03004	01



E TYPICAL VIADUCT

NOTES:

1. FOR DIMENSIONS OF TYPICAL TWO TRACK HSR SYSTEM, SEE DRAWING CVL-00-03013. FOR GENERAL NOTES ON TYPICAL SECTIONS, SEE DRAWINGS GEN-00-00008.
2. CENTERLINE HSR ALIGNMENT IS CENTERLINE OF TWO TRACK HSR ALIGNMENT AS SHOWN IN VOLUME 2 PLAN AND PROFILE DRAWINGS.
3. TWO TYPES OF ACCESS ROADS ARE INCLUDED IN DESIGN: FACILITIES ACCESS ROADS AND SHARED ACCESS ROADS. ALIGNMENT OF ACCESS ROAD INDEPENDENT OF HSR ALIGNMENT AND IS SHOWN ON DRAWINGS INCLUDED IN VOLUMES 2 AND 4. REQUIREMENTS AND DESIGN CRITERIA FOR EACH TYPE OF ACCESS ROAD IS PROVIDED IN THE FINAL CONCEPTUAL ENGINEERING REPORT.
4. DRAINAGE SWALE SIZE AND LOCATION WILL BE BASED ON SITE SPECIFIC CONSTRAINTS, TOPOGRAPHY, AND DRAINAGE REQUIREMENTS. A TYPICAL MINIMUM SWALE WIDTH OF 25 FT HAS BEEN PROVIDED AS SHOWN. THE PLACEMENT OF DRAINAGE SWALES IN WATERS OF THE U.S. WILL BE AVOIDED AND, IF UNAVOIDABLE, MINIMIZED AND CONSTRUCTED TO NOT DRAIN WATERS OF THE U.S.
5. FOUNDATION REQUIREMENTS WILL VARY BASED ON SITE SPECIFIC CONDITIONS INCLUDING VIADUCT HEIGHT AND GEOTECHNICAL CONDITIONS.
5. THE TRACKWAY WILL BE ENTIRELY SECURED BETWEEN DALLAS AND HOUSTON TO PREVENT UNAUTHORIZED ACCESS OR INTRUSION ON TO THE OPERATING RAILWAY. SOUND BARRIERS WILL BE PROVIDED WHERE REQUIRED TO MITIGATE NOISE IMPACTS AS IDENTIFIED THROUGH DETAILED ENVIRONMENTAL ANALYSIS. WHERE ON ELEVATED STRUCTURE TRACKWAY, FENCING MAY BE REPLACED WITH FALL PREVENTION RAILINGS BASED ON SITE SPECIFIC CONDITIONS.
6. FENCE LIMITS, LOCATION, HEIGHT, EMBEDMENT, AND OTHER DETAILS WILL BE DEVELOPED DURING MORE DETAILED DESIGN. DETAILS FOR FENCING AND OTHER INTRUSION PROTECTION MEASURES WILL BE INFORMED BY HAZARDS AND RISKS ANALYSIS AND WOULD BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE REGULATORY AUTHORITIES AND COMPLY WITH APPLICABLE REQUIREMENTS.
7. STAIRCASES NOT SHOWN WOULD BE PROVIDED AS REQUIRED TO SATISFY EMERGENCY ACCESS/EGRESS REQUIREMENTS. STAIRCASE LOCATIONS AND CONFIGURATIONS WOULD BE DEVELOPED DURING MORE DETAILED DESIGN IN CLOSE COORDINATION WITH EMERGENCY PROVIDERS AND BASED ON SITE SPECIFIC CONDITIONS, MAINTENANCE AND SAFETY REQUIREMENTS, AND ACCESS ROAD LOCATION. SEE DETAIL SHEET CVL-00-03009 FOR TYPICAL STAIR CONFIGURATIONS.
8. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOTPRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10FT SPACE ALLOWANCE WOULD BE GRADED, REVEGETATED TO PREVENT EROSION, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S., PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN THE 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER THE CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS, CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROAD AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.
9. SITE SPECIFIC VIADUCT SPANS, VIADUCT DEPTHS, AND COLUMN WIDTHS SHALL BE DETERMINED DURING MORE DETAILED DESIGN BASED ON SITE SPECIFIC CONSIDERATIONS AND VIADUCT HEIGHTS. FOR CONCEPTUAL DESIGN, SPANS ARE ASSUMED TO BE 120 FT, VIADUCT DEPTH IS ASSUMED TO BE 10.5 FT, AND COLUMNS ARE ASSUMED TO BE RECTANGULAR IN SHAPE AND BETWEEN 28 SQUARE FT AND 196 SQUARE FT.
10. WITH THE EXCEPTION OF VIADUCT COLUMN LOCATIONS, PRECONSTRUCTION CONTOURS WOULD BE RESTORED AND ALL TEMPORARY FILLS WOULD BE REMOVED FROM WATERS OF THE U.S. BENEATH VIADUCT SPANS.

REV	DATE	BY	CHK	APP	DESCRIPTION

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CHECKED BY K. SEYMOUR
IN CHARGE C.TAYLOR
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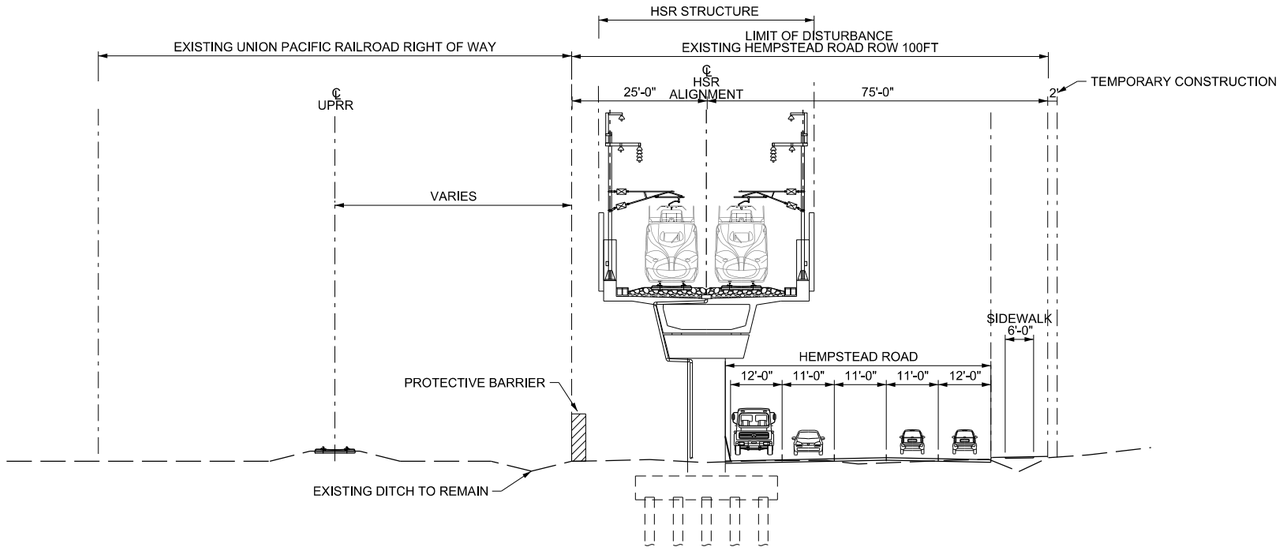
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 5 OF 13

Scale 1 1/4" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03005	01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 9:54:48 AM

22x34



F VIADUCT SECTION ADJACENT TO HEMPSTEAD ROAD

NOTES:

1. THIS SECTION ILLUSTRATES TYPICAL CONFIGURATION ADJACENT TO HEMPSTEAD ROAD AND UPRR LOOKING NORTHWEST. DETAILS OF THE INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE VIADUCT SECTION. REFER TO DRAWING NO. CVL-00-03005 FOR ADDITIONAL NOTES FOR VIADUCT SECTION.
2. HSR STRUCTURE DRAINAGE IS CONNECTED TO DETENTION BASINS VIA PERIODIC CROSS DRAINAGE BENEATH HEMPSTEAD ROAD. DETENTION BASIN LOCATIONS AND SIZES ARE SHOWN ON PLAN.
3. OFFSET TO UPRR ROW VARIES BASED ON SITE SPECIFIC GEOMETRY AND CONSTRAINTS.
4. LIMIT OF DISTURBANCE ALONG HEMPSTEAD ROAD AS REQUIRED TO PROVIDE TWO LANES IN EACH DIRECTION AND CENTER TURN LANE AS SHOWN ON PLANS IN VOLUME 2. ADDITIONAL RIGHT TURN LANES PROVIDED AT SELECT LOCATIONS AS DETERMINED THROUGH COORDINATION WITH CITY OF HOUSTON. DETAILED DESIGN FOR ROADWAY WORKS AND UTILITIES RELOCATION TO BE DEVELOPED DURING MORE ADVANCED DESIGN BASED UPON SITE SPECIFIC SURVEY, UTILITIES INVESTIGATION, AND STAKEHOLDER COORDINATION.
5. VIADUCT LOCATED JUST INSIDE OF HEMPSTEAD ROAD ROW TO AVOID PROPERTY IMPACTS TO UPRR. LOD AND TEMPORARY UTILITY LOD IS SET AT EDGE OF UPRR WITHIN THIS SECTION OF HEMPSTEAD ROAD. DUE TO DRAWING SCALE, THESE LOD LIMITS APPEAR JUST AT VIADUCT EDGE. SEE DRAWINGS CVL-HN-1108-2 THROUGH CVL-HN-01120.
6. LIMIT OF INTRUSION PROTECTION BARRIER PROVIDED ALONG UPRR RIGHT-OF-WAY TO BE CONFIRMED THROUGH MORE DETAILED DESIGN AND COORDINATION WITH UPRR. PIER PROTECTION FOR VIADUCT COLUMNS TO BE PROVIDED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND GUIDELINES.
7. PLANNED PROJECTS NOT CURRENTLY UNDER CONSTRUCTION NOT INCLUDED ON FCE DRAWINGS AT THIS STAGE AND COORDINATION UNDERWAY FOR MORE ADVANCED PROJECT PLANNING.
8. EXISTING UTILITIES BENEATH HEMPSTEAD ROAD TO BE SURVEYED DURING MORE ADVANCED DESIGN. RELOCATION OF UTILITIES AND DRAINAGE IMPROVEMENTS TO SHOULDER AREAS SHOWN TO BE CONSIDERED DURING MORE ADVANCED DESIGN TO FACILITATE CONSTRUCTION.
9. LONG TERM MAINTENANCE SHOULDER AREA TO BE USED FOR SIDEWALKS, BIKE LANES OR SHOULDERS DURING MORE DETAILED DESIGN IN CLOSE COORDINATION WITH CITY OF HOUSTON AND APPLICABLE AUTHORITIES.
10. CLOSE COORDINATION WITH TXDOT REQUIRED TO INTEGRATE HEMPSTEAD ROAD IMPROVEMENTS WITH THE TXDOT MY290 PROJECT.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: G. MEJIA
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IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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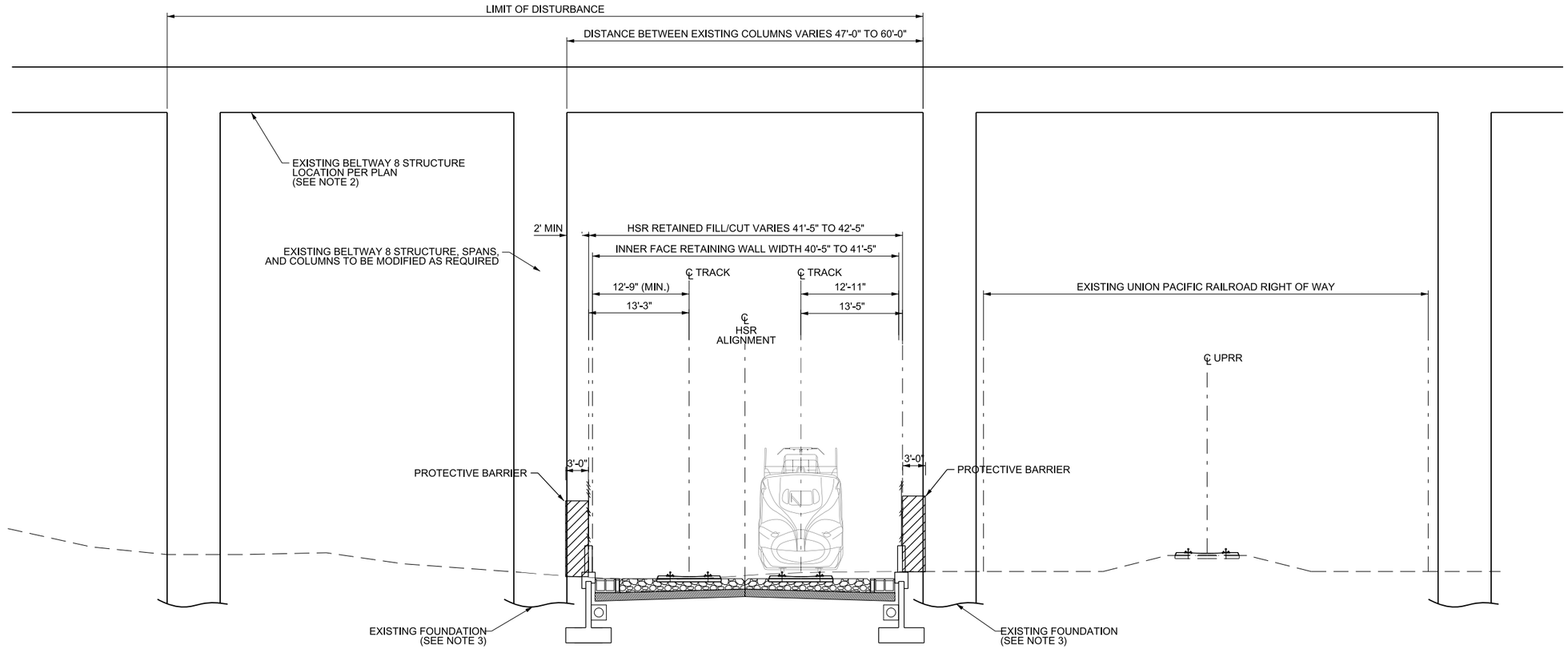
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 6 OF 13

Scale: 5/8" = 10'
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CVL-00-03006	01



G TYPICAL RETAINED FILL/CUT UNDER BELTWAY 8

NOTES:

1. DETAILS OF INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE RETAINED FILL AND RETAINED CUT SECTIONS. REFER TO DRAWING NO. CVL-00-03002 AND CVL-00-03004 FOR ADDITIONAL NOTES FOR RETAINED FILL AND RETAINED CUT SECTIONS.
2. TYPICAL SECTION INDICATES MOST CONSTRAINED SPAN UNDER BELTWAY 8, WHERE ADEQUATE HORIZONTAL CLEARANCE IS AVAILABLE STANDARD RETAINED CUT/ FILL SECTION WILL APPLY. OFFSET BETWEEN INFRASTRUCTURE ELEMENTS SUCH AS DISTANCE BETWEEN RETAINING WALL, WILL VARY BASED ON EXISTING COLUMN LOCATION UNDER BELTWAY 8.
3. COLUMN LOCATION, FOOTINGS AND SPACING FOR EXISTING BELTWAY 8 TO BE VERIFIED BY STRUCTURAL AS BUILT DRAWINGS AND FIELD VERIFICATION. TYPICAL SECTION ILLUSTRATES CONCEPTUAL PLACEMENT OF HSR ELEMENTS. CLEARANCE AND PIER PROTECTION REQUIREMENTS TO BELTWAY 8 STRUCTURE TO BE CONFIRMED DURING FINAL DESIGN. MODIFICATION TO EXISTING STRUCTURE MAY BE REQUIRED.
4. OVERHEAD CATENARY SYSTEM NOT SHOWN. CATENARY POLE PLACEMENT WOULD BE DEVELOPED DURING MORE DETAILED DESIGN. PROTECTION AND ISOLATION OF OVERHEAD CATENARY WIRE AND SYSTEMS WOULD BE PROVIDED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND GUIDELINES.
5. PROTECTIVE BARRIER IS INCLUDED IN PIER PROTECTION/STRUCTURAL FOOTING ON BOTH SIDES.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. MEJIA
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IN CHARGE C. TAYLOR
DATE 02/25/2019

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FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
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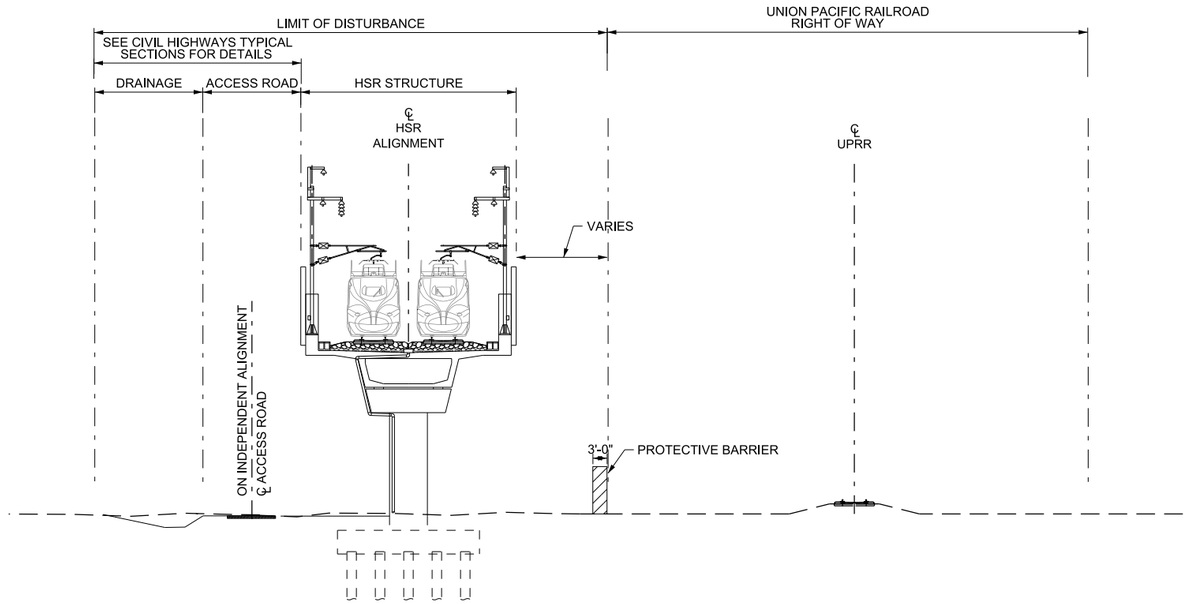
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 7 OF 13

Scale NTS
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03007	01

PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 10:40:58 AM



H TYPICAL VIADUCT SECTION ADJACENT TO UPRR

NOTES:

1. DETAILS OF THE INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE VIADUCT SECTION.
2. REFER TO DRAWING NO. CVL-00-03005 FOR ADDITIONAL NOTES FOR VIADUCT SECTION.
3. OFFSET TO UPRR VARIES. SEE PLAN AND PROFILE IN VOLUME 2 FOR LOCATION.
4. LIMIT OF DISTURBANCE ALONG THE CONSTRAINED HEMPSTEAD ROAD CORRIDOR AND ADJACENT TO THE UPRR RIGHT OF WAY WAS REDUCED FROM THE STANDARD FOOTPRINT TO MITIGATE PROPERTY OR ENVIRONMENTAL IMPACTS WHERE DRAINAGE AND ACCESS REQUIREMENTS COULD BE OTHERWISE SATISFIED OR REDUCED. SITE SPECIFIC SURVEYS, UTILITIES INVESTIGATIONS, AND STAKEHOLDER COORDINATION WOULD BE ADVANCED DURING MORE DETAILED DESIGN TO LIMIT IMPACTS TO THE EXTENT PRACTICABLE.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. MEJIA
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DATE 02/25/2019

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Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 8 OF 13

Scale 5/8" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03008	01

PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 10:39:37 AM
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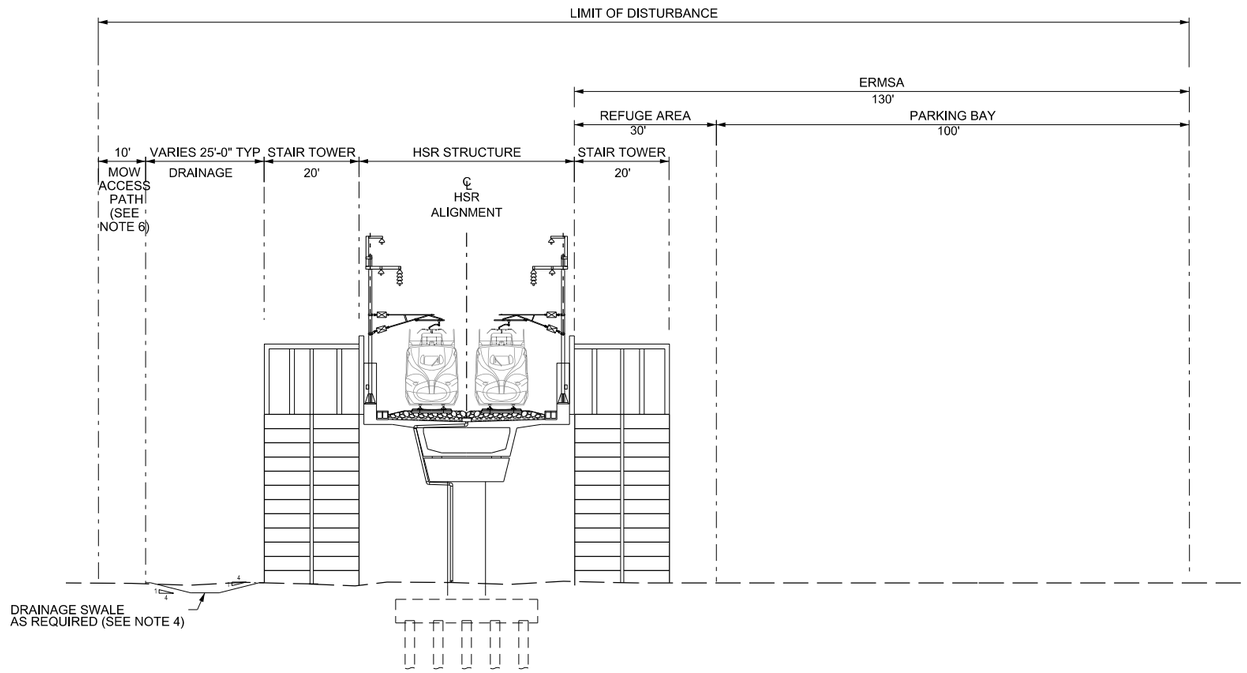

I TYPICAL VIADUCT SECTION ADJACENT TO ERMSA

NOTES:

1. DETAILS OF THE INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE VIADUCT SECTION.
2. REFER TO DRAWING NO. CVL-00-03005 FOR ADDITIONAL NOTES FOR VIADUCT SECTION.
3. OFFSET TO UPRR VARIES. SEE PLAN AND PROFILE IN VOLUME 2 FOR LOCATION.
4. IN SELECT LOCATIONS WHERE REQUIRED TO MITIGATE PROPERTY OR ENVIRONMENTAL IMPACTS, AND WHERE DRAINAGE AND ACCESS REQUIREMENTS COULD BE OTHERWISE ACCOMMODATED, LOD FOR VIADUCT SEGMENT WAS LIMITED TO WIDTH OF VIADUCT.
5. THE LAYOUT FOR THE EMERGENCY RESPONSE AND MAINTENANCE AREA (ERMSA) IS BASED ON THE ADJACENT ROAD TYPE IN THE LOCATION. FOR ERMSA LAYOUT DRAWINGS, SEE DRAWING RDY-00-03037 IN VOLUME 3. FOR LOCATIONS OF THE ERMSA SEE PLANS IN VOLUME 2.
6. ERMSA LOCATIONS ARE DISTANT FROM VIADUCT ALONG THE CONSTRAINED HEMPSTEAD ROAD CORRIDOR. STAIR TOWERS WOULD BE ARRANGED DURING MORE DETAILED DESIGN TO MINIMIZE IMPACTS AND TO PROTECT ACCESS FROM ADJACENT UPRR OPERATIONS AND ROADWAY TRAFFIC.
7. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOT PRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10 FT SPACE ALLOWANCE WOULD BE GRADED, SEEDED WITH NATIVE GRASSES TO PREVENT EROSION, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S., PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER THE CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS. CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROADS AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.
8. ACCESS TO THE SECURED ROW WILL BE PROVIDED THROUGH SECURED ACCESS GATES WITH STAIR TOWERS ON VIADUCT SEGMENTS. ACCESS GATES WOULD BE LOCATED AT A DISTANCE NOT GREATER THAN 100FT (30.5M) FROM THE ERMSA LOCATIONS. THESE ERMSAS WOULD BE PROVIDED AT A NOMINAL SPACING OF 2.5 MILES (4.0KM) WITH A MAXIMUM 3.5 MILES (5.6KM) INTERVAL. ERMSA LOCATIONS WOULD BE ON ALTERNATE SIDES WHERE POSSIBLE.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S. DI BRATTO
DRAWN BY: S. PAUDEL
CHECKED BY: K. SEYMOUR
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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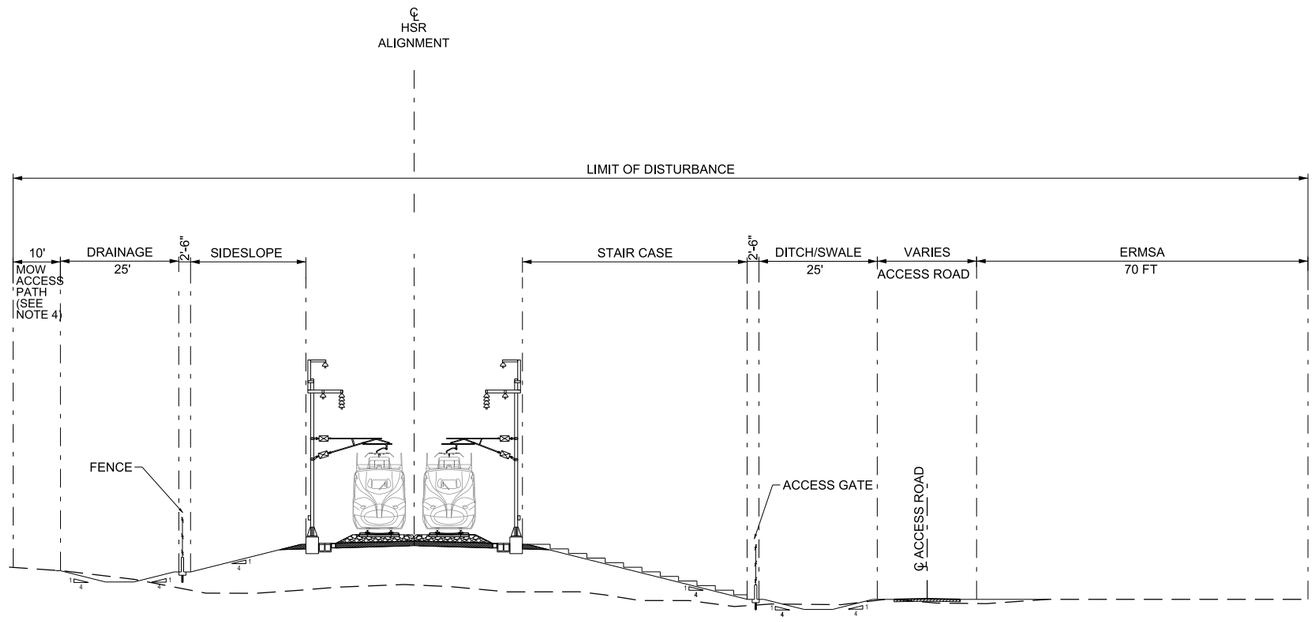
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 9 OF 13

Scale: 5/8"=10'
Drawing Status: FINAL
Job No: 234180
Drawing No: CVL-00-03009
Rev: 01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:17:10 AM



J TYPICAL EMBANKMENT SECTION ADJACENT TO ERMSA

NOTES

1. WHERE PRACTICABLE ROADS MAY BE CONSTRUCTED TO ALLOW FOR JOINT USE BY UTILITY PROVIDER AND TCRR FOR MAINTENANCE PURPOSES TO LIMIT IMPACTS.

2. DETAILS OF THE INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE EMBANKMENT TYPICAL SECTION. REFER TO DRAWING NO. CVL-00-03001 FOR ADDITIONAL NOTES FOR TYPICAL EMBANKMENT SECTION.

3. THE ERMSA LAYOUT DEPENDS UPON THE ROAD TYPE ADJACENT TO THE LOCATION. SEE DRAWING RDY-00-03037 IN VOLUME 3, FOR ERMSA LAYOUT.

4. LIMIT OF DISTURBANCE PROVIDED FOR ENVIRONMENTAL ANALYSIS AS SHOWN INCLUDES 10FT BEYOND THE FOOTPRINT REQUIRED FOR CIVIL INFRASTRUCTURE, INCLUDING RAIL FORMATION, FENCING, ACCESS ROADS, AND DRAINAGE ELEMENTS. THIS 10FT SPACE ALLOWANCE WOULD BE CLEARED AND GRADED TO ALLOW FOR CONSTRUCTION ACCESS. FOLLOWING CONSTRUCTION, THIS 10FT SPACE ALLOWANCE WOULD BE GRADED, SEEDED WITH NATIVE GRASSES TO PREVENT EROSION, AND MAINTAINED AS AN MOW PATH TO PROVIDE FOR INSPECTION, MAINTENANCE, AND EMERGENCY RESPONSE ACCESS. IN WATERS OF THE U.S., PRECONSTRUCTION CONTOURS WOULD BE RESTORED WITHIN 10FT SPACE ALLOWANCE AND ALL TEMPORARY FILLS WOULD BE REMOVED IN THEIR ENTIRETY AFTER THE CONSTRUCTION IS COMPLETE. WHERE PERMANENT ACCESS ROAD IS PROVIDED AS SHOWN ON PLANS. CONSTRUCTION ACCESS WOULD BE PROVIDED WITHIN LIMITS OF THE PROPOSED ACCESS ROADS AND NO ADDITIONAL MOW PATH WOULD BE PROVIDED.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. DI BRATTO
DRAWN BY S. PAUDEL
CHECKED BY K. SEYMOUR
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

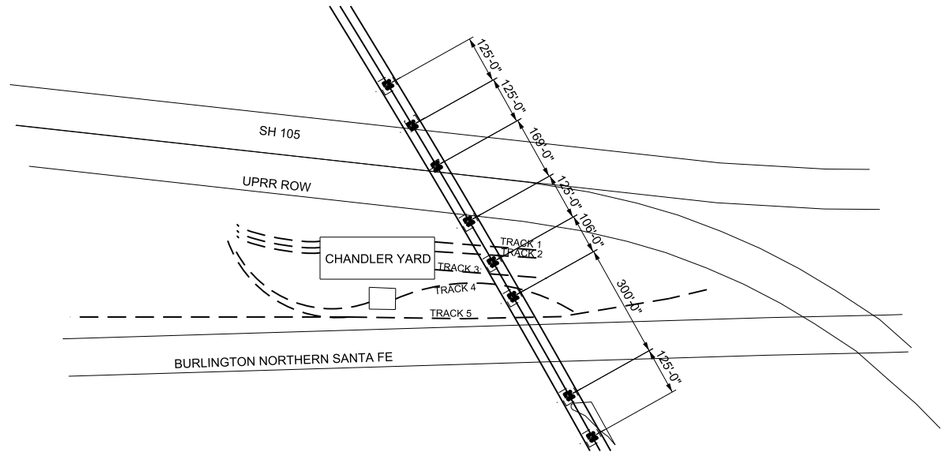
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 10 OF 13

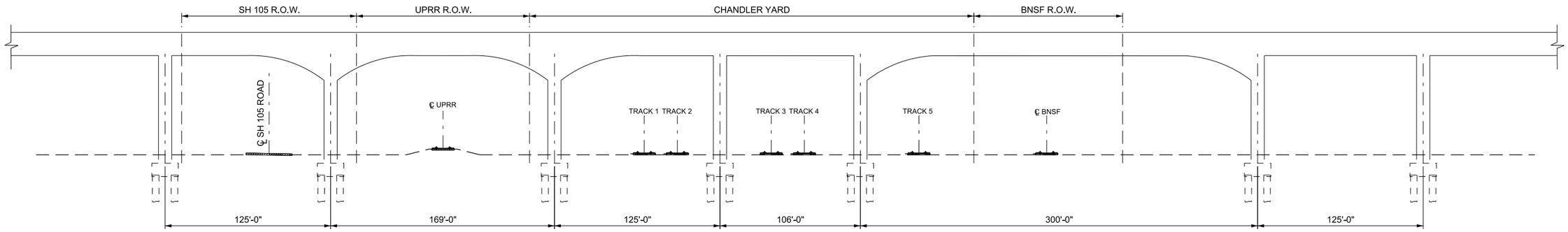
Scale 5/8"=10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03010	01

22x34



K HSR PLAN VIEW OVER CHANDLER YARD



L HSR ELEVATION - CHANDLER YARD

NOTES:

1. CONCEPTUAL LAYOUT FOR STRUCTURAL CROSSING OF H.C. CHANDLER & SON, INC. YARD LOCATED AT HN2 360+00. STRUCTURAL FORM, SPANS, COLUMN LOCATIONS, AND FOUNDATION ORIENTATIONS TO BE FURTHER REFINED THROUGH STAKEHOLDER ENGAGEMENT AND CLOSE COORDINATION WITH DESIGN OF CROSSINGS OF THE UPRR AND BNSF RAILROADS, AND THE CROSSING OF SH 105.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.PAUDEL
DRAWN BY S. PAUDEL
CHECKED BY K. SEYMOUR
IN CHARGE C. TAYLOR
DATE 02/25/2019

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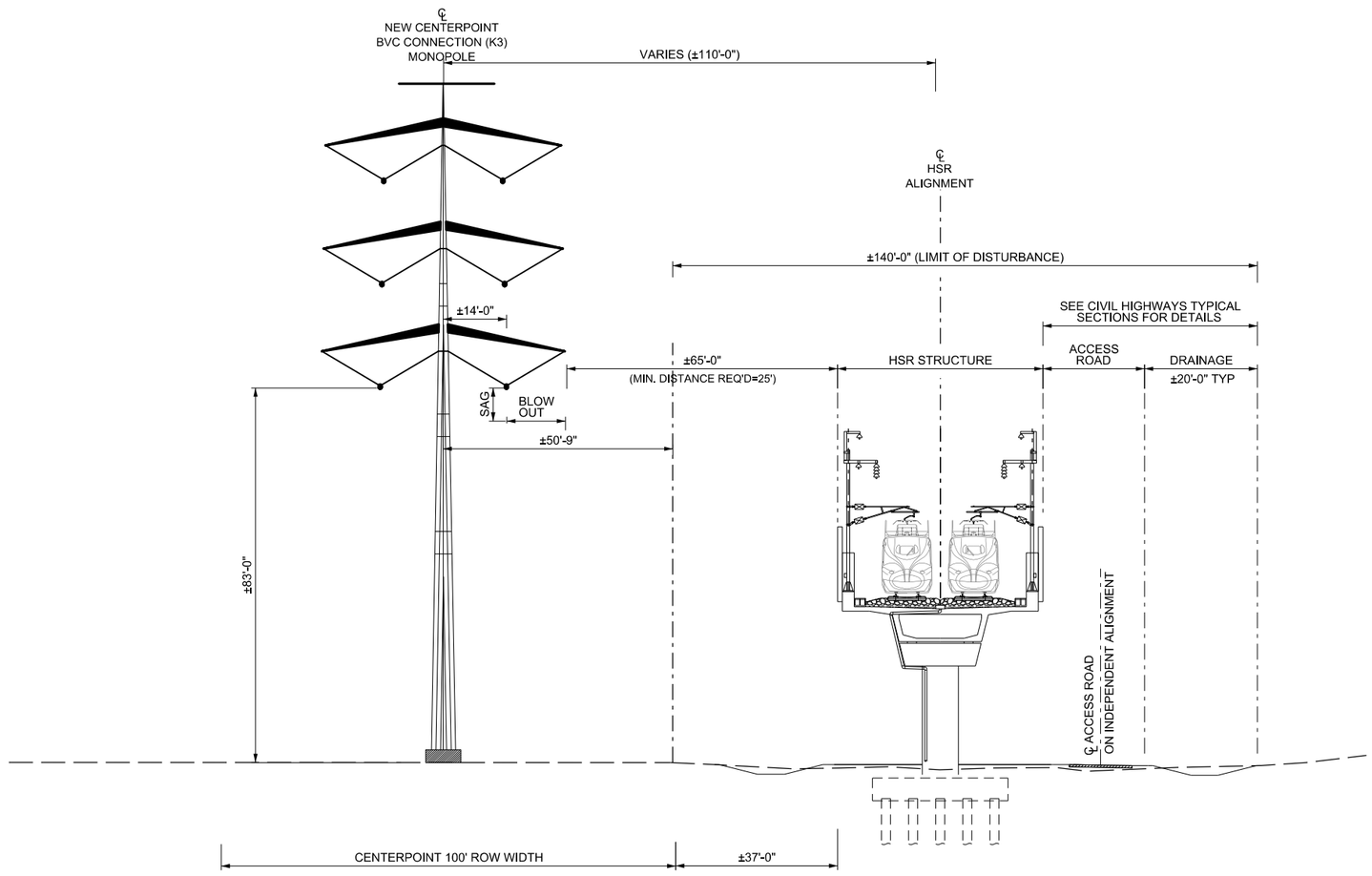
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
CHANDLER YARD
SHEET 11 OF 13

Scale NTS
Drawing Status FINAL
Job No 234180
Drawing No CVL-00-03011
Rev 01

22x34



M TYPICAL VIADUCT SECTION ADJACENT TO CENTERPOINT "K3" SEGMENT

NOTES:

1. THIS SECTION DEVELOPED THROUGH COORDINATION WITH CENTERPOINT FOR THE NEW BVC CONNECTION (K3) MONOPOLE. SECTION ILLUSTRATES MINIMAL SEPARATION OF 25FT REQUIRED BETWEEN HSR OVERHEAD CATENARY SYSTEM AND TRANSMISSION LINE. REALIGNMENT OR REPROFILING OF EXISTING TRANSMISSION LINES AT CROSSINGS WOULD BE DEVELOPED IN CLOSE COORDINATION WITH UTILITY PROVIDERS DURING MORE DETAILED DESIGN AND WOULD SATISFY APPLICABLE REGULATORY REQUIREMENTS AND GUIDELINES.
2. DURING DETAILED DESIGN DEVELOPMENT AND COORDINATION WITH UTILITY PROVIDER, EXISTING TRANSMISSION LINE ROW AND EASEMENTS WILL BE CONFIRMED.
3. WHERE PRACTICABLE ROADS MAY BE CONSTRUCTED TO ALLOW FOR JOINT USE BY UTILITY PROVIDER AND TCRR FOR MAINTENANCE PURPOSES TO LIMIT IMPACTS.
4. DETAILS OF THE INFRASTRUCTURE ELEMENTS, SIZE, AND POSITION WITHIN THE LIMIT OF DISTURBANCE ARE SHOWN IN THE VIADUCT TYPICAL SECTION. REFER TO DRAWING NO. CVL-00-03005 FOR ADDITIONAL NOTES FOR TYPICAL VIADUCT SECTION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. PAUDEL
DRAWN BY S. PAUDEL
CHECKED BY K. SEYMOUR
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
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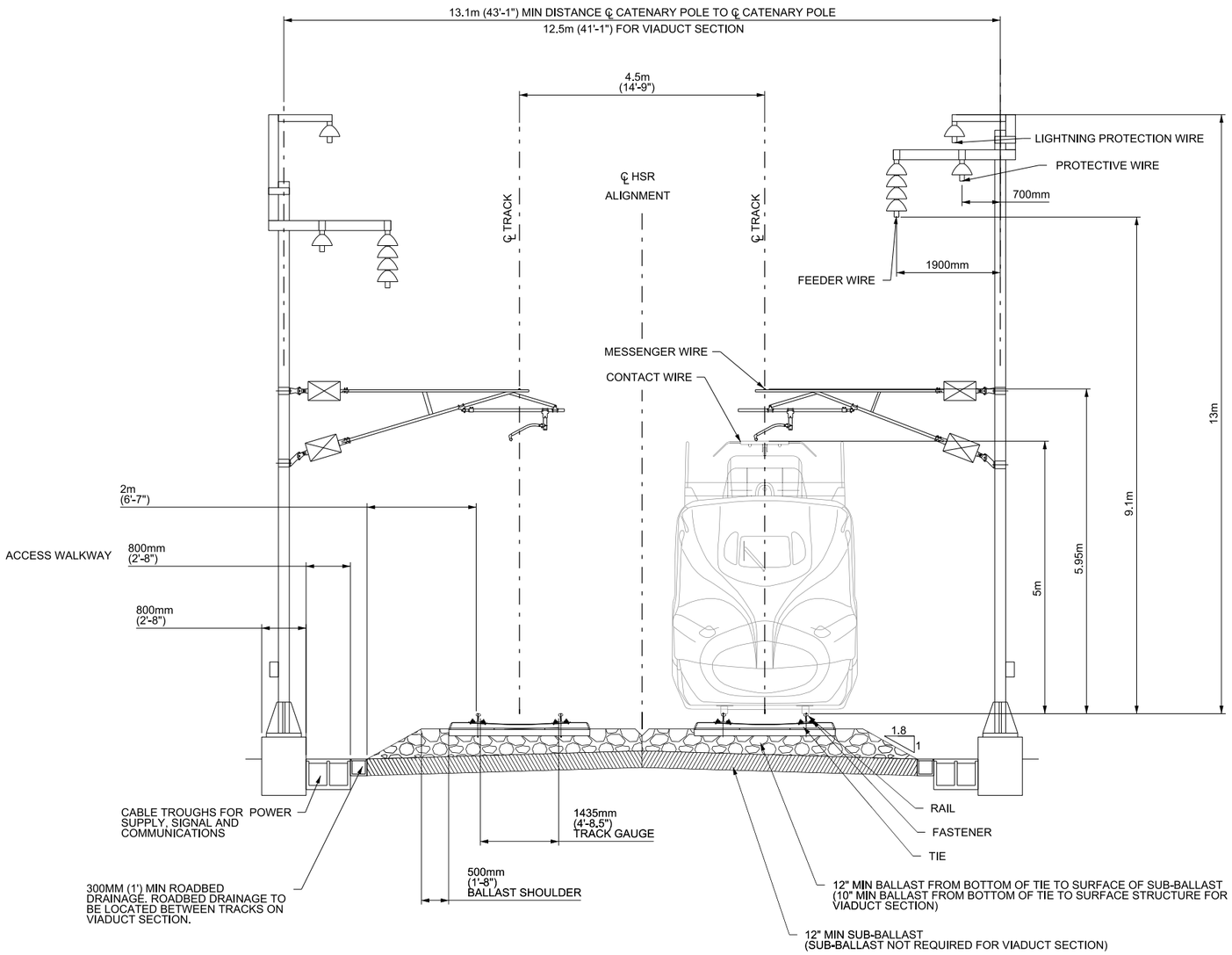
Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 12 OF 13

Scale 5/8"=10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03012	01

22x34



N TYPICAL TRACK SECTION

NOTES:

1. TYPICAL SECTION FOR MAINLINE HSR SECTION BASED ON EMBANKMENT. SEE DRAWINGS CVL-00-03001 TO CVL-00-03005 FOR EACH SECTION TYPE. BALLAST SHOULDER SLOPE AND OTHER DIMENSIONS FROM TECHNICAL REGULATORY STANDARDS ON JAPANESE RAILWAY, ARTICLE 21.
2. 300mm (1 FT) SUBBALLAST SHOULDER ALLOWANCE REQUIRED FOR TYPICAL EMBANKMENT AND CUT SECTIONS.
3. CATENARY POLE FOUNDATION TO BE DEVELOPED DURING MORE DETAILED DESIGN.
4. TWO CABLE TROUGHS ARE PROVIDED ON EACH SIDE OF THE HSR TRACKWAY, ONE FOR POWER SUPPLY AND ONE FOR SIGNALS AND COMMUNICATIONS.
5. 2'-8" MIN MOW PATH AT TOP OF CABLE TROUGH AS REQUIRED. CABLE TROUGHS WOULD BE DESIGNED AND CONSTRUCTED TO ENSURE AN ADEQUATE AND STABLE WORKING SURFACE FOR MOW ACCESS AND EMERGENCY EGRESS. MOW PATH TO SERVE AS EVACUATION, REFUGE, AND MAINTENANCE AISLE.
6. ACCESS WALKWAY SET AT MINIMUM DISTANCE OF 2.0m (6'-7") FROM FIELD SIDE OF NEAREST RAIL TO PROVIDE FOR ROADWAY WORKER SAFETY.
7. FOR TYPICAL MAINLINE, RAIL SHALL BE 60KG, TIES SHALL BE TYPE-3H OF JIS E 1201 PRESTRESSED CONCRETE SLEEPERS, AND FASTENERS SHALL BE JIS E 1118. FOR TRACK MATERIALS WITHIN YARDS, SHOPS, STATIONS, AND TURNOUTS, SEE JRC SPECIFICATION.
8. KEY DIMENSIONS FOR SYSTEMS INFRASTRUCTURE DESIGN, INCLUDING TRACK GEOMETRY KEY DIMENSIONS SUCH AS GAUGE AND SUPERELEVATION LIMITS, ARE PROVIDED IN METRIC UNITS TO ALLOW FOR COORDINATION WITH RPA EFFORTS TO ACHIEVE REGULATORY APPROVAL TO THE PROJECT FOR USE OF SHINKANSEN TECHNOLOGY.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J.SERRANO
DRAWN BY J. BORGHESI
CHECKED BY C. ZWIEBEL
IN CHARGE C. TAYLOR
DATE 02/25/2019

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FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL RAIL
TYPICAL SECTIONS
SHEET 13 OF 13

Scale 2 1/2" = 10'
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03013	01

PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 10:40:17 AM

22x34

PLOT TIME: 4/30/2019 4:04:00 PM

PLOT BY: Andrew.Utz

1A-3

ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY D. THOMPSON
CHECKED BY R. BURNS
IN CHARGE C. TAYLOR
DATE 2/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

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Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-0000	01

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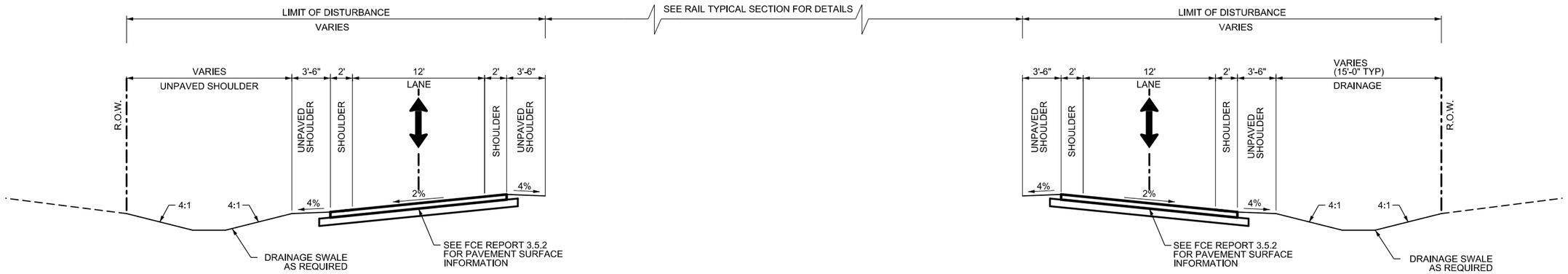
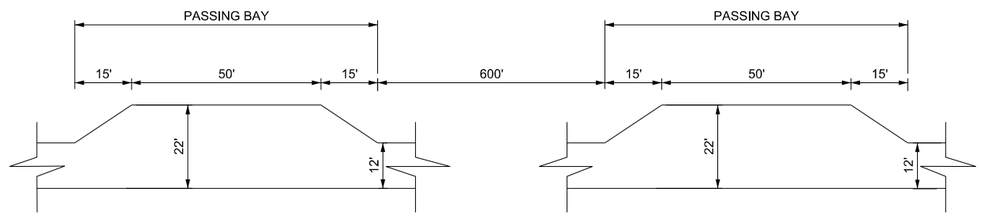
22x34



1 LEFT FACILITY ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

2 RIGHT FACILITY ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE



3 PASSING LANE FOR FACILITY ACCESS ROADS PROPOSED TYPICAL LAYOUT
NOT TO SCALE

NOTES:

1. ACCESS ROADS PROVIDED FOR MAINTENANCE ACCESS, FACILITIES ACCESS, AND EMERGENCY RESPONSE. FOR DEFINITION OF ACCESS ROAD TYPES, INTENDED USE, AND DESIGN CRITERIA, SEE FCE REPORT SECTION 3.5.2.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: T. SANSONE
DRAWN BY: S. PAUDEL
CHECKED BY: D. PETRIN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL HIGHWAY
TYPICAL SECTIONS
SHEET 1 OF 4

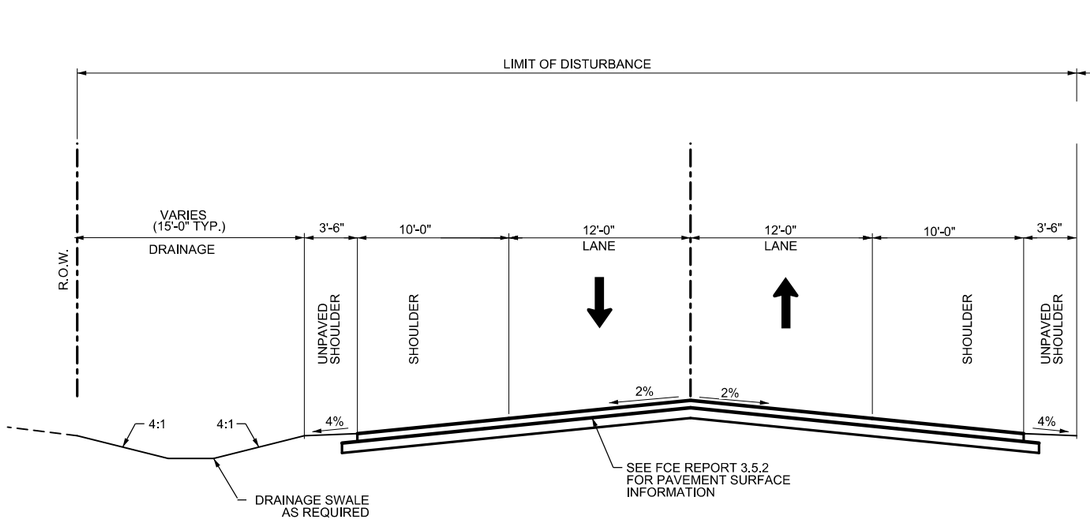
Scale: NOT TO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CVL-00-03030	01

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-31 Civil Highways (CH)\4-03-31-02 Sheets\Segment 00\Volume 1A Typicals & Details\234180-AFN-RDY-DWG-00-03030-V002

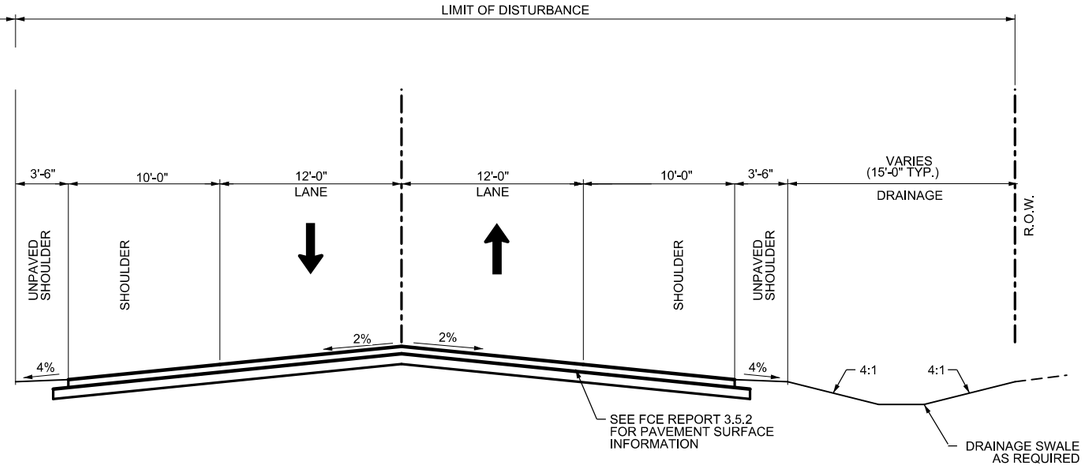
PLOT TIME: 6/28/2019 10:27:37 AM
PLOT BY: colleen.zwiebel

22x34



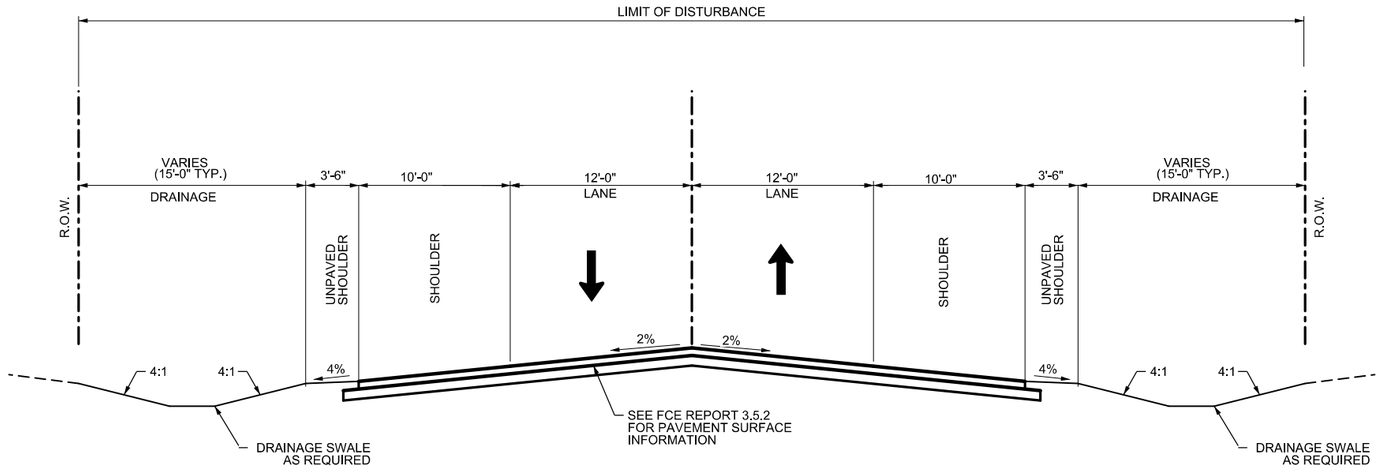
4 LEFT PUBLIC ROAD PROPOSED TYPICAL SECTION

NOT TO SCALE



5 RIGHT PUBLIC ROAD PROPOSED TYPICAL SECTION

NOT TO SCALE



6 TWO LANE PUBLIC ROAD PROPOSED TYPICAL SECTION

NOT TO SCALE

NOTES:

1. PUBLIC ROADS PAVING SURFACES AND LANE CONFIGURATIONS SHALL BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE ROADWAY AUTHORITY DURING MORE DETAILED DESIGN. MINIMUM CONFIGURATION SHOWN. FOR PUBLIC ROAD LOCATIONS SEE PLANS.
2. SEE FCE REPORT 3.5.2 FOR DESIGN CRITERIA OF PUBLIC ROADS.
3. PUBLIC ROADS TYPICALLY ARE NEW ROADS OR RECONFIGURED OR REROUTED EXISTING ROADS AND SERVE TO PROVIDE TEXAS CENTRAL MAINTENANCE ACCESS, EMERGENCY RESPONSE AND PUBLIC ACCESS FOR PROPERTIES ALONG THE HSR LINE.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: T. SANSONE
DRAWN BY: S. PAUDEL
CHECKED BY: D. PETRIN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

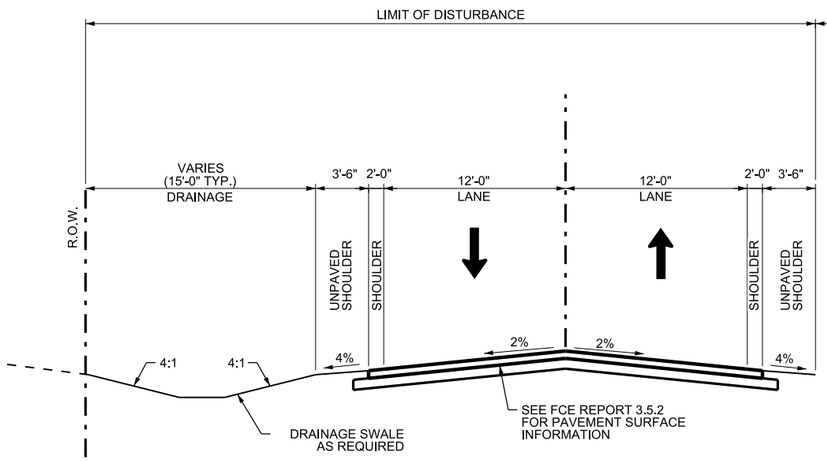
Drawing Title
GENERAL
CIVIL HIGHWAY
TYPICAL SECTIONS
SHEET 2 OF 4

Scale: NOT TO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CVL-00-03031	01

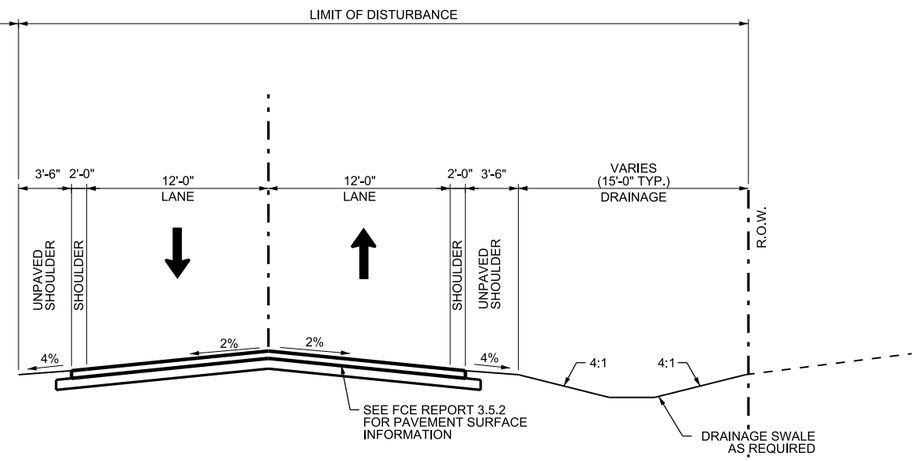
pw:\\N-YPWINT01\AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-31 Civil Highways (CH)\4-03-31-02 Sheets\Segment 00\Volume 1A Typicals & Details\234180-AFN-RDY-DWG-00-03031-V002

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:28:49 AM

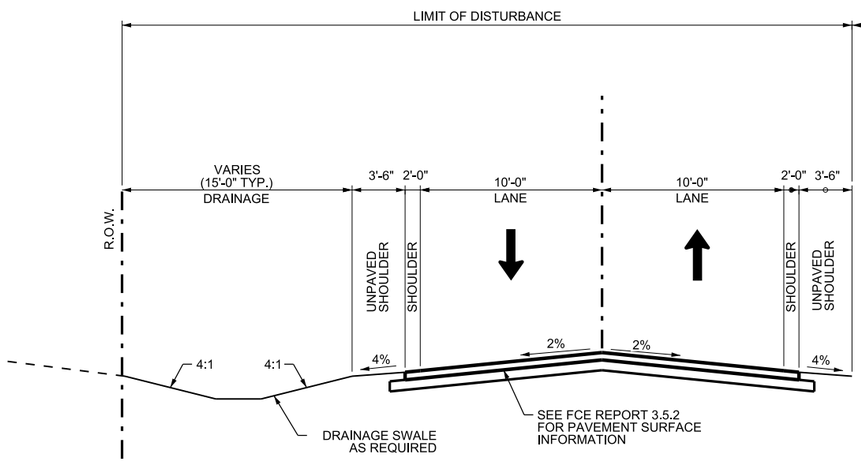


7 LEFT FACILITY ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

SEE RAIL TYPICAL SECTION FOR DETAILS

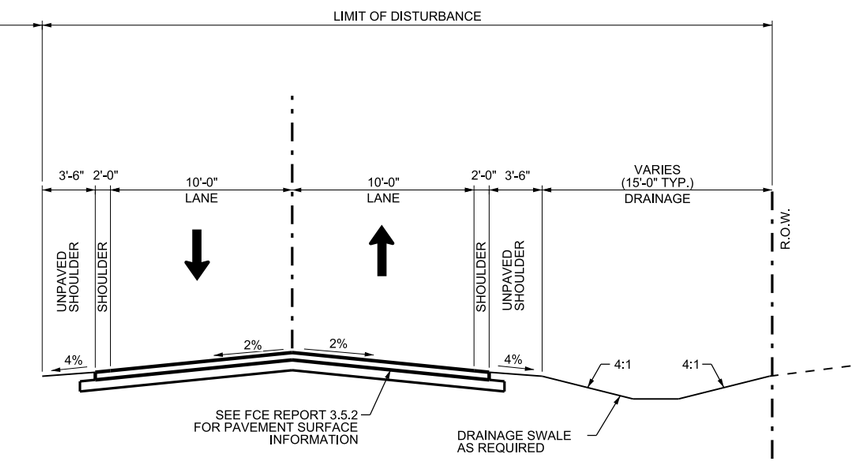


8 RIGHT FACILITY ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE



9 LEFT SHARED ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

SEE RAIL TYPICAL SECTION FOR DETAILS



10 RIGHT SHARED ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

NOTES:

1. SHARED ACCESS ROADS PAVING SURFACES AND LANE CONFIGURATIONS SHALL BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE ROADWAY AUTHORITY DURING MORE DETAILED DESIGN. MINIMUM CONFIGURATION SHOWN. FOR SHARED ACCESS ROAD LOCATIONS SEE PLANS.
2. SEE FCE REPORT SECTION 3.5.2 FOR DESCRIPTION, PURPOSE AND DESIGN CRITERIA OF SHARED ACCESS ROADS.
3. SEE FCE REPORT 3.5.2 FOR DESCRIPTION, PURPOSE AND DESIGN CRITERIA OF MOW AND TMF FACILITY ACCESS ROADS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. VOWELS
DRAWN BY S. PAUDEL
CHECKED BY D. PETRIN
IN CHARGE C. TAYLOR
DATE 02/25/2019

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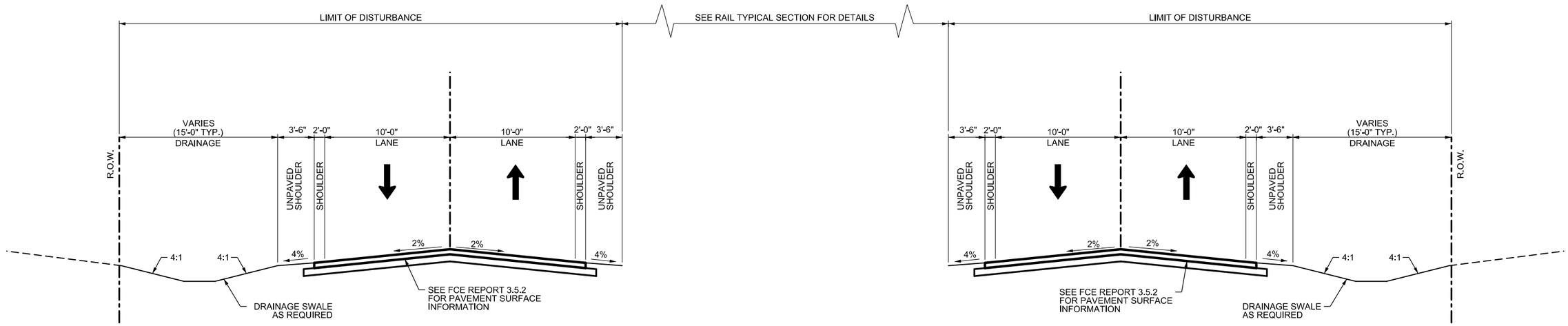
Drawing Title
GENERAL
CIVIL HIGHWAY
TYPICAL SECTIONS
SHEET 3 OF4

Scale NOT TO SCALE
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03032	01

PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 10:38:21 AM



11 LEFT PRIVATE ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

12 RIGHT PRIVATE ACCESS ROAD PROPOSED TYPICAL SECTION
NOT TO SCALE

NOTES:

1. SEE FCE REPORT SECTION 3.5.2 FOR DESCRIPTION, PURPOSE AND DESIGN CRITERIA OF PRIVATE ACCESS ROADS.
2. PRIVATE ACCESS ROAD TYPICALLY SERVES TO PROVIDE PROPERTY ACCESS TO ADJACENT LAND OWNERS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. VOWELS
DRAWN BY S. PAUDEL
CHECKED BY D. PETRIN
IN CHARGE C. TAYLOR
DATE 02/25/2019

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FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

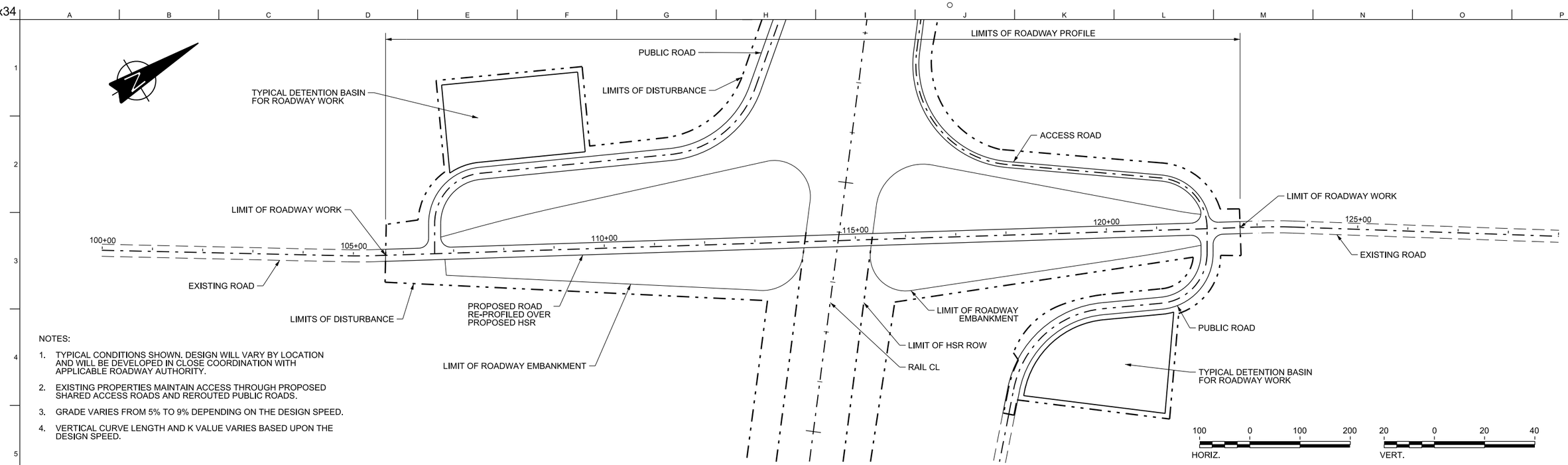
Drawing Title
GENERAL
CIVIL HIGHWAY
TYPICAL SECTION
SHEET 4 OF 4

Scale NOT TO SCALE
Drawing Status FINAL

Job No	Drawing No	Rev
234180	CVL-00-03033	01

22x34

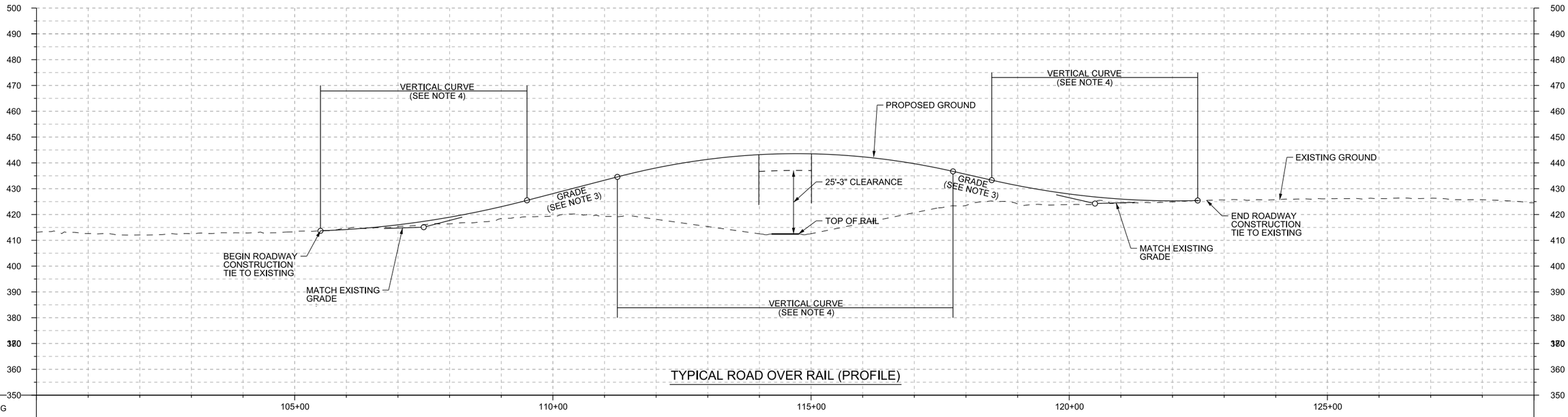
PLOT BY: N-YPWICS01$ PLOT TIME: 6/27/2019 10:39:07 AM



NOTES:

1. TYPICAL CONDITIONS SHOWN. DESIGN WILL VARY BY LOCATION AND WILL BE DEVELOPED IN CLOSE COORDINATION WITH APPLICABLE ROADWAY AUTHORITY.
2. EXISTING PROPERTIES MAINTAIN ACCESS THROUGH PROPOSED SHARED ACCESS ROADS AND REROUTED PUBLIC ROADS.
3. GRADE VARIES FROM 5% TO 9% DEPENDING ON THE DESIGN SPEED.
4. VERTICAL CURVE LENGTH AND K VALUE VARIES BASED UPON THE DESIGN SPEED.

TYPICAL ROAD OVER RAIL (PLAN)



TYPICAL ROAD OVER RAIL (PROFILE)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S. BARRY
DRAWN BY: M. MARROQUIN
CHECKED BY: S. BURGES
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL HIGHWAY
ROAD OVER RAIL
GRADE SEPARATION

Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CVL-00-03034	01

\\N-YPWICS01\ICS Temp\44194\74884_3\234180-AFN-RDY-DWG-00-03034-V002.dgn

22x34

PLOT TIME: 4/30/2019 4:04:21 PM

PLOT BY: Andrew.Utz

1A-4

CIVIL STRUCTURES TYPICAL DETAILS

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: K. SEYMOUR
DRAWN BY: D. THOMPSON
CHECKED BY: R. BURNS
IN CHARGE: C. TAYLOR
DATE: 2/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

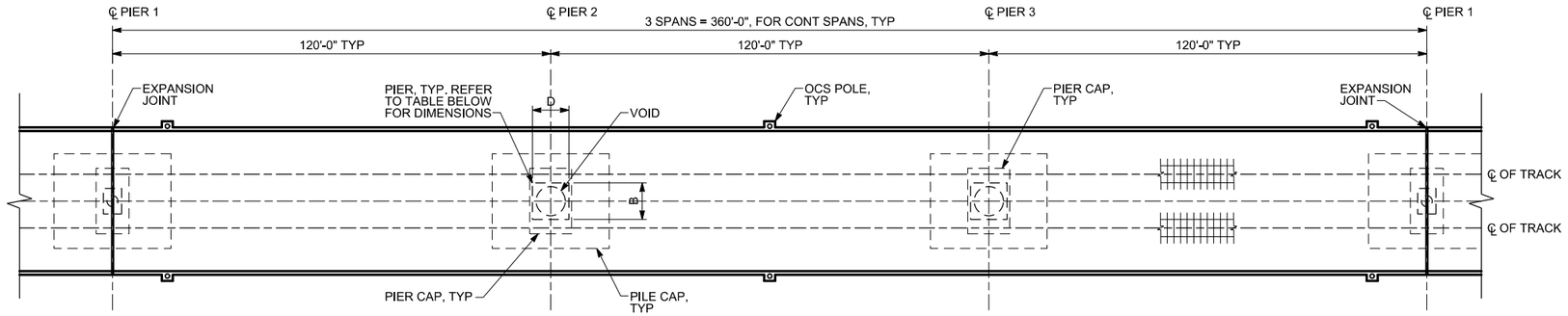
Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-0000	01

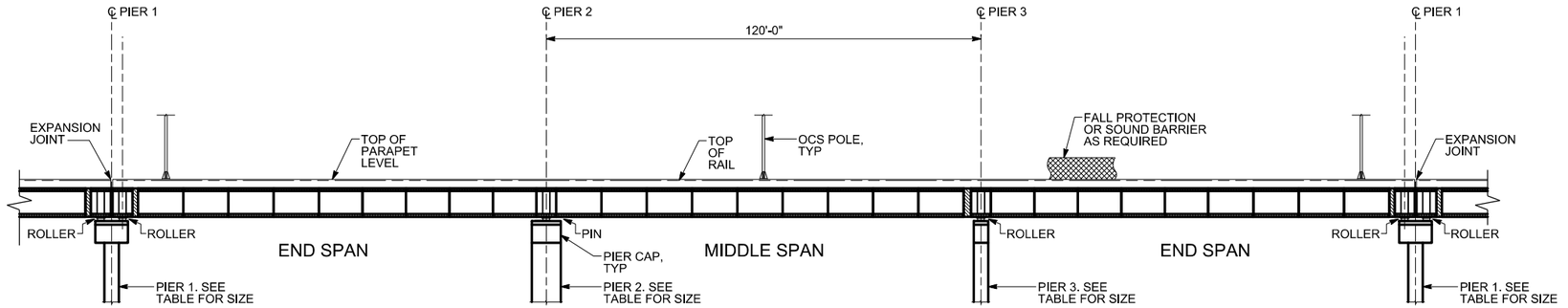
pw:\\N-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-10 General (PG)\4-03-10-02 Sheets\234180-AFN-GEN-DWG-00-00031-V002

22x34



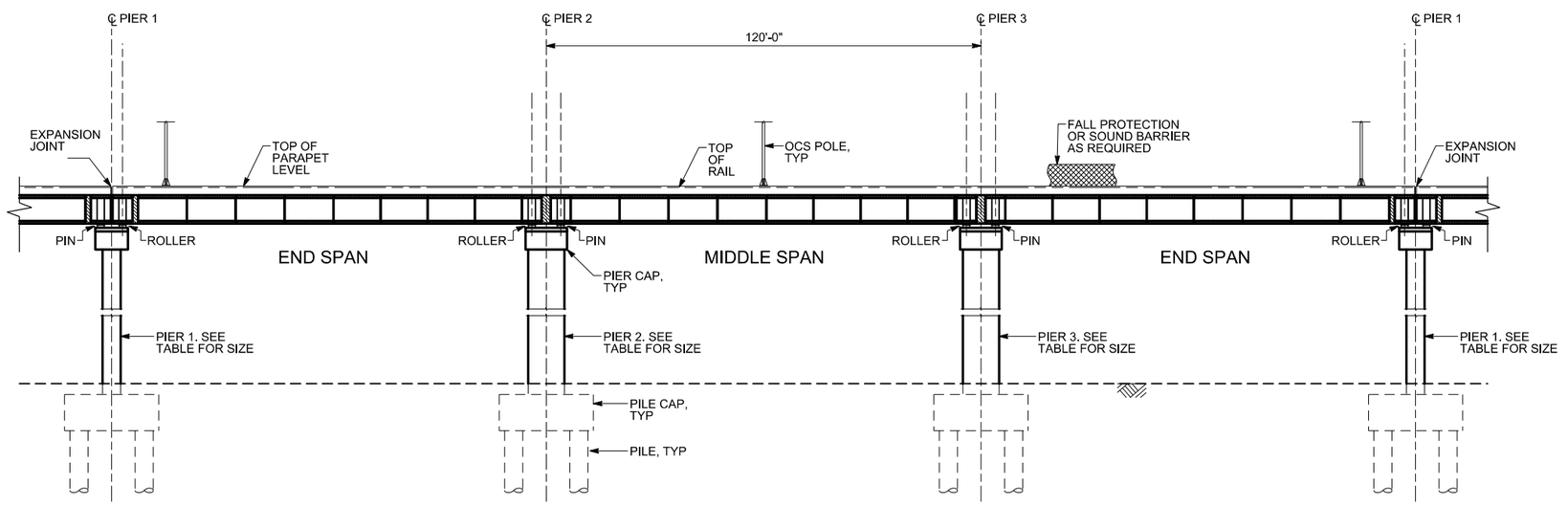
PLAN - VIADUCT

SCALE 1" = 20'



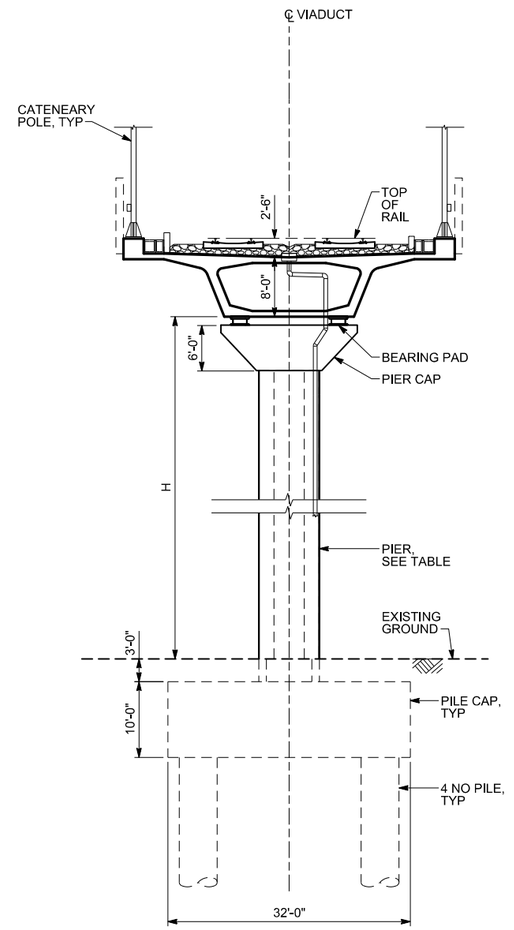
ELEVATION / SECTION - VIADUCT (FOR PIER HEIGHT H ≤ 35 FT)

SCALE 1" = 20'



ELEVATION / SECTION - VIADUCT (FOR PIER HEIGHT H > 35 FT)

SCALE 1" = 20'



TYPICAL CROSS SECTION

SCALE 1" = 10'

PIER HEIGHT H (ft)	PIER SIZE (ft)								
	PIER 1			PIER 2			PIER 3		
	B	D	void dia.	B	D	void dia.	B	D	void dia.
H ≤ 35	7	4	solid	8	8	5	7	4	solid
35 < H ≤ 60	7	4	solid	8	8	5	8	8	5
60 < H ≤ 80	7	5	3	10	10	6	10	10	6
80 < H ≤ 100	14	5	solid	14	14	10	14	14	10

NOTES:

1. SEE SHEET CVL-00-03005 FOR TYPICAL VIADUCT SECTION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: B. RAINE
DRAWN BY: S. PAUDEL
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

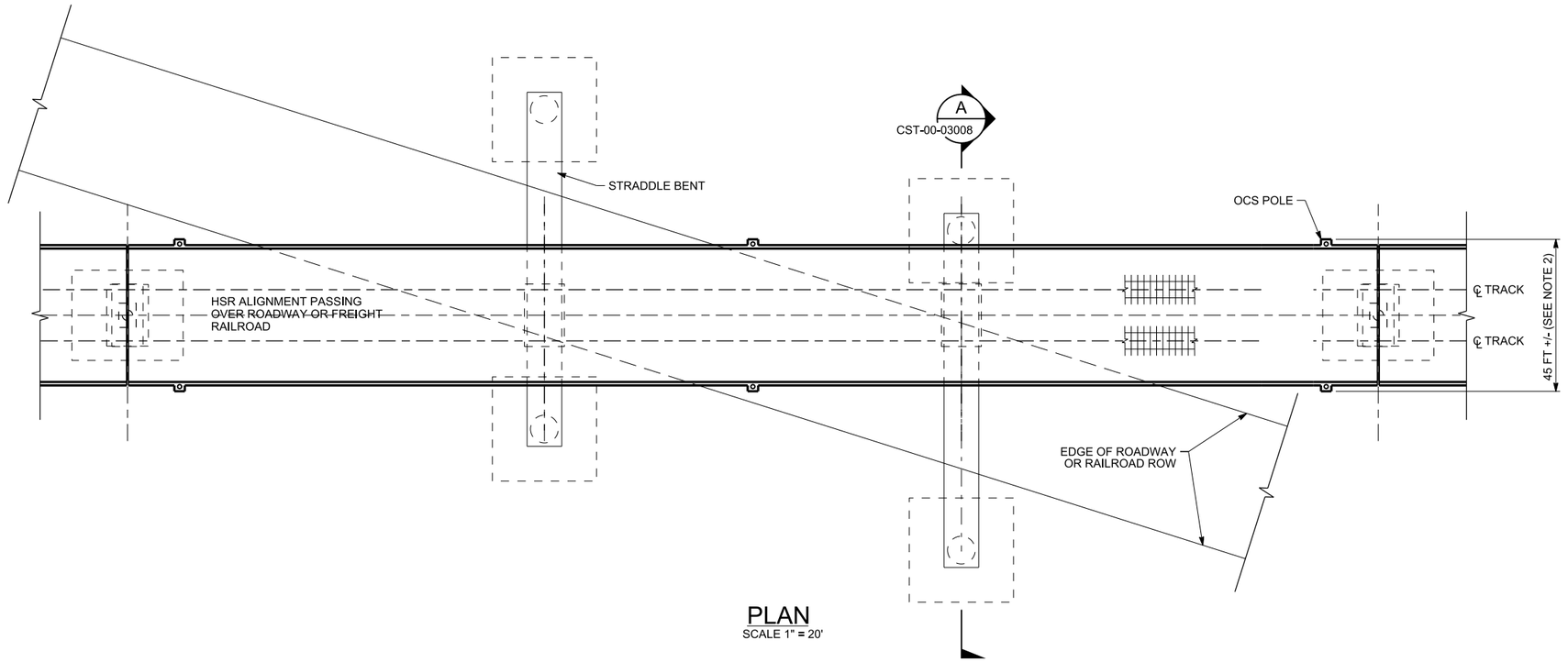
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL CIVIL STRUCTURES STANDARD VIADUCT TYPICAL DETAIL

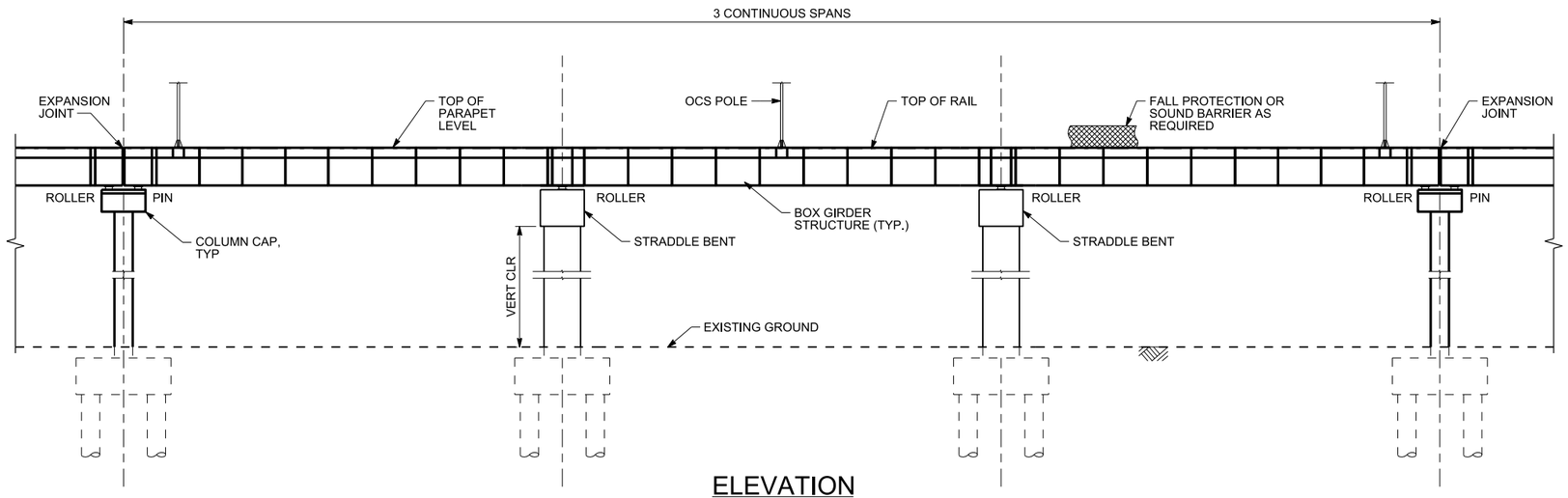
Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
238957	CST-00-03003	01

22x34



PLAN
SCALE 1" = 20'



ELEVATION
SCALE 1" = 20'

NOTES:

1. FOR TYPICAL CROSS SECTION OF STRADDLE BENT, SEE SHEET CST-00-03008.
2. VIADUCT WIDTH VARIES DEPENDING ON LOCATION OF OCS POLES, SOUND BARRIERS, AND OTHER SITE SPECIFIC REQUIREMENTS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S.T. MAK
DRAWN BY: S. PAUDEL
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
STRADDLE BENT
SHEET 1 OF 2

Scale: 1" = 20'
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CST-00-03007	01

PLOT BY: N-YPWICS01$ PLOT TIME: 4/30/2019 6:04:53 PM

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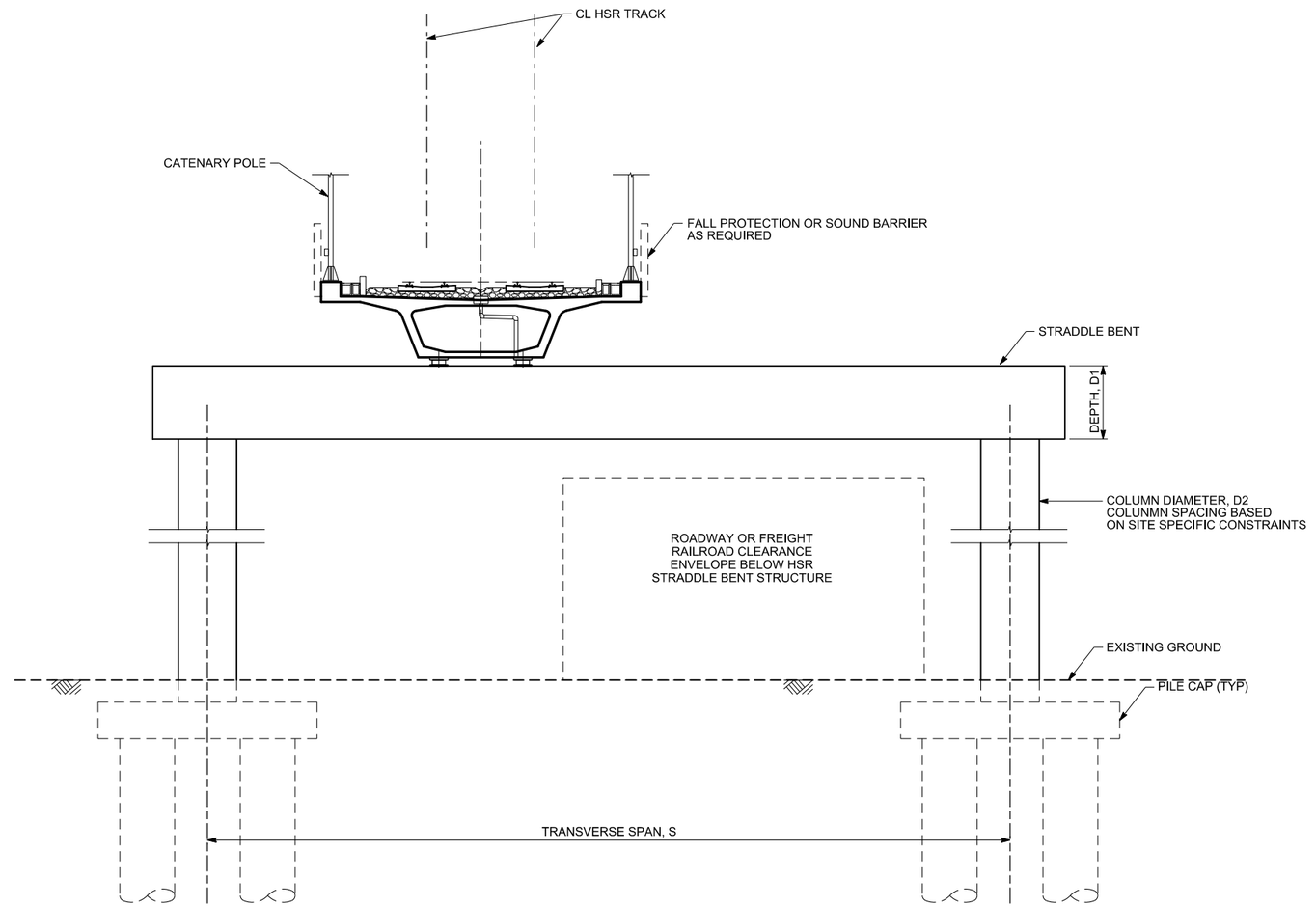
22x34



A STRADDLE BENT STRUCTURE SECTION

SCALE 1" = 10'

TRANSVERSE SPAN, S [ft]	STRADDLE BENT DEPTH, D1 [ft]	COLUMN DIAMETER, D2 [ft]
<80	10	8
100	12	9
120	14	11
140	16	12

NOTES:

1. VIADUCT WIDTH VARIES DEPENDING ON LOCATION OF OCS POLES, SOUND BARRIERS, AND OTHER SITE SPECIFIC REQUIREMENTS.
2. FOR VIADUCT BOX GIRDER DETAILS NOT NOTED, SEE SHEET CVL-00-03005.
3. TYPICAL ARRANGEMENT AND STRUCTURAL SIZES SHOWN FOR ENVIRONMENTAL ANALYSIS. DETAILED DESIGN DEVELOPMENT WILL CONSIDER SITE SPECIFIC CONDITIONS, CLEARANCE REQUIREMENTS, CRASH BARRIERS, AND PIER PROTECTION REQUIREMENTS.
4. INTERPOLATE TABLE VALUES BETWEEN DATA PROVIDED.
5. WALL TYPE CONSTRUCTED IN RETAINED FILL AREAS WOULD BE DETERMINED DURING MORE DETAILED DESIGN AND SUBJECT TO SITE SPECIFIC CONSTRAINTS AND GEOTECHNICAL RECOMMENDATION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY S. PAUDEL
CHECKED BY L. CHEN
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

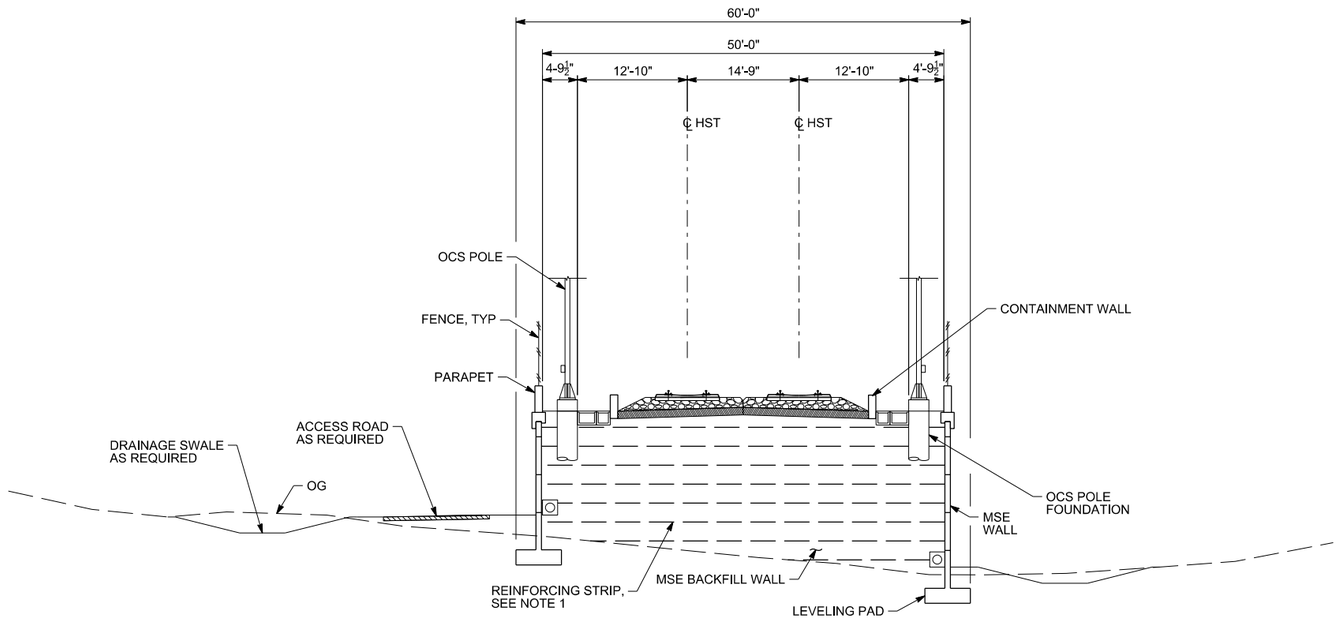
Drawing Title
GENERAL
CIVIL STRUCTURES
STRADDLE BENT
SHEET 2 OF 2

Scale 1" = 10'
Drawing Status FINAL
Job No 234180
Drawing No CST-00-03008
Rev 01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:40:13 AM

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-30 Civil Structure (CS)\4-03-30-02 Sheets\General Sheets\234180-AFN-CST-DWG-00-03008-V001

22x34



RETAINED FILL TYPICAL CROSS SECTION

SCALE 1" = 10'

NOTES:

1. ALTER ORIENTATION OF REINFORCING STRIPS AS REQUIRED TO AVOID OCS POLE FOUNDATION.
2. FOR LIMITS OF RETAINING WALLS, SEE ALIGNMENT DRAWINGS.
3. RETAINING WALL DETAILS TO BE DEVELOPED DURING MORE ADVANCED DESIGN BASED UPON SITE SPECIFIC CONDITIONS AND GEOTECHNICAL INVESTIGATIONS. MECHANICALLY STABILIZED EARTH (MSE) WALLS ASSUMED FOR CONCEPTUAL ENGINEERING. WALL TYPE CONSTRUCTED IN RETAINED FILL AREAS WOULD BE DETERMINED DURING MORE DETAILED DESIGN AND SUBJECT TO SITE SPECIFIC CONSTRAINTS AND GEOTECHNICAL RECOMMENDATION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S.T. MAK
DRAWN BY: E. SUDHAUSEN
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

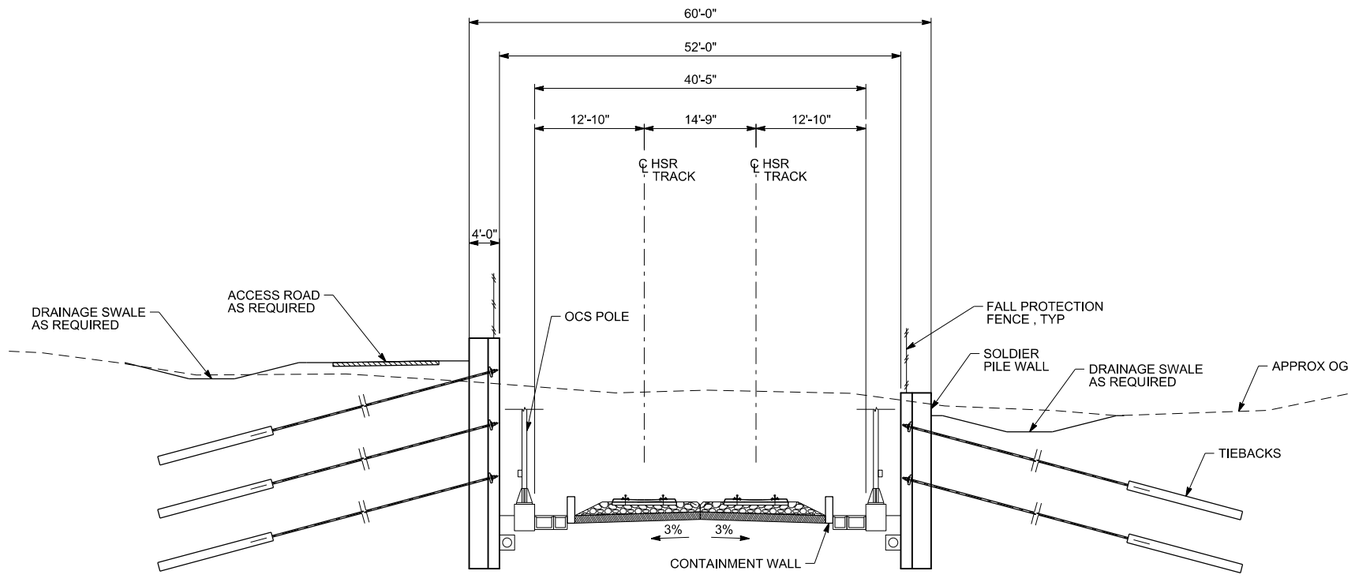
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL CIVIL STRUCTURES RETAINED FILL TYPICAL DETAIL

Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CST-00-03017	01

22x34



RETAINED CUT TYPICAL CROSS SECTION

SCALE 1" = 10'

NOTES:

1. FOR LIMITS OF RETAINED CUT SEE ALIGNMENT DRAWINGS.
2. RETAINING WALL DETAILS TO BE DEVELOPED DURING MORE ADVANCED DESIGN BASED UPON SITE SPECIFIC CONDITIONS AND GEOTECHNICAL INVESTIGATIONS. MECHANICALLY STABILIZED EARTH (MSE) WALLS ASSUMED FOR CONCEPTUAL ENGINEERING. WALL TYPE CONSTRUCTED IN RETAINED FILL AREAS WOULD BE DETERMINED DURING MORE DETAILED DESIGN AND SUBJECT TO SITE SPECIFIC CONSTRAINTS AND GEOTECHNICAL RECOMMENDATION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY E. SUDHAUSEN
CHECKED BY L. CHEN
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

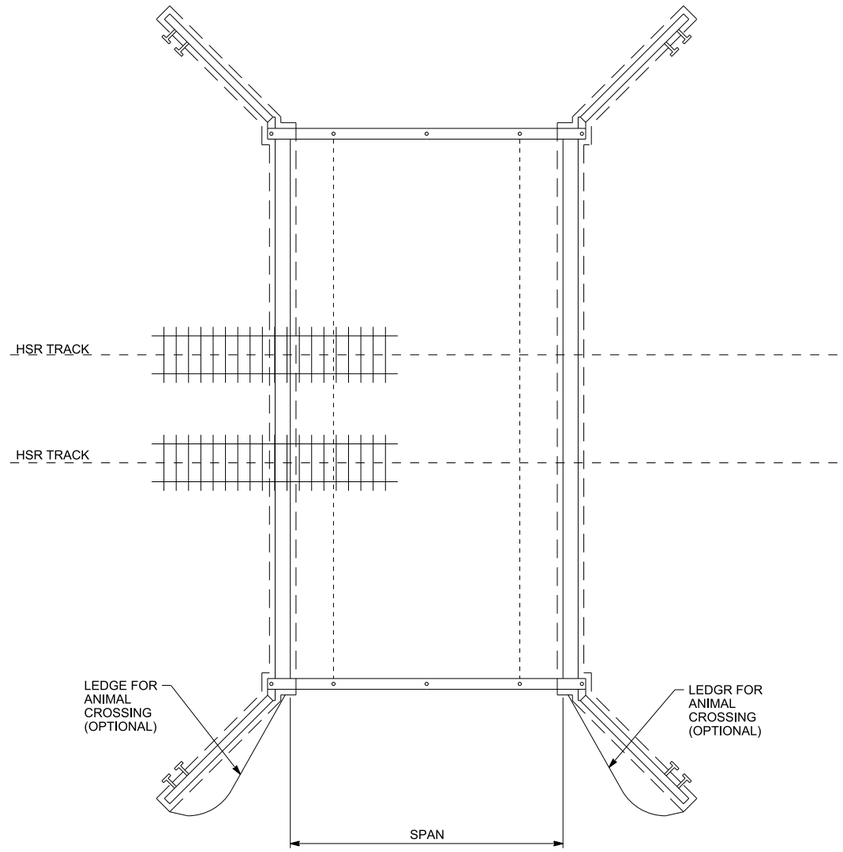
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
RETAINED CUT
TYPICAL DETAIL

Scale AS SHOWN
Drawing Status FINAL

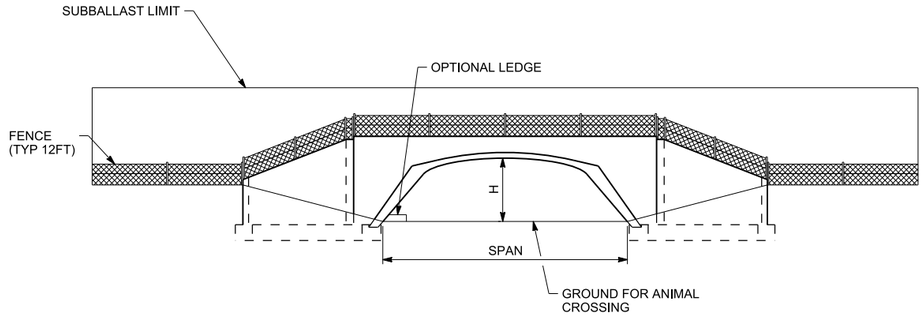
Job No	Drawing No	Rev
234180	CST-00-03018	01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:46:35 AM



CULVERT AND ANIMAL CROSSING PLAN

SCALE 1" = 10'



OPEN BOTTOM CULVERT AND ANIMAL CROSSING ELEVATION

SCALE 1" = 10'

USAGE	STRUCTURAL TYPE	RECOMMENDED DIMENSIONS (FT)		DRAWING No.
		S	H	
LARGE ANIMALS	OPEN BOTTOM CULVERT	20	10	CST-00-03020
MEDIUM ANIMALS	OPEN BOTTOM CULVERT	10	6	CST-00-03020
SMALL ANIMALS 1	OPEN BOTTOM CULVERT	10	4	CST-00-03020
SMALL ANIMALS 2	BOX	4	2	CST-00-03021

NOTE:

1. SEE FINAL CONCEPTUAL ENGINEERING REPORT, SECTION 3.6.2.6 FOR ADDITIONAL DETAILS.
2. NUMBER OF CELLS VARIES BY CROSSING, REFER FCE, APPENDIX D HYDROLOGY AND HYDRAULICS SUMMARY.
3. WHERE THE CROSSING WOULD BE COLOCATED WITH A DRAINAGE FEATURE, A LEDGE WOULD BE INCLUDED DURING DETAILED DESIGN EFFORTS TO FACILITATE USE OF THE CROSSING BY ANIMALS DURING PERIODS OF FLOODING.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY S. PAUDEL
CHECKED BY J. DIXON
IN CHARGE C. TAYLOR
DATE 02/25/2019

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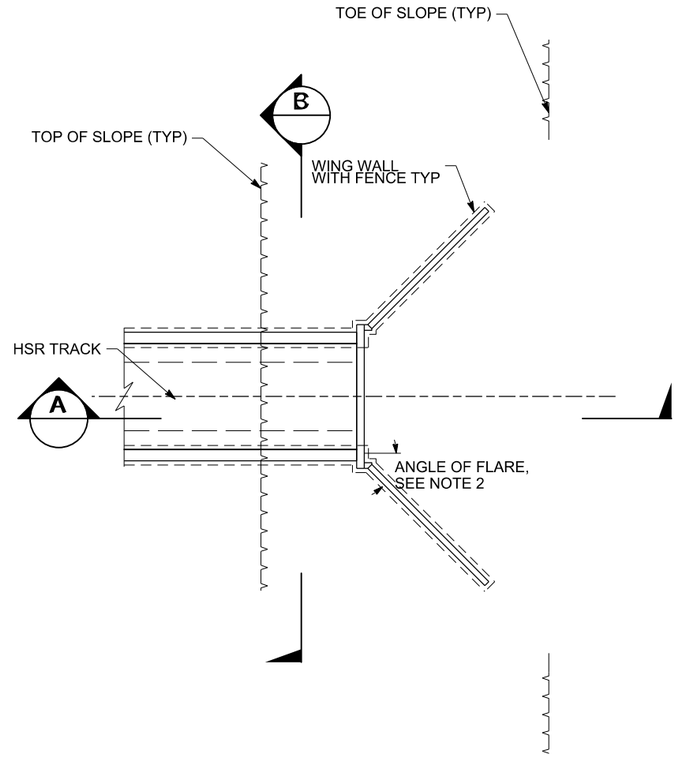
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
CULVERT & ANIMAL CROSSING
SHEET 1 OF 2

Scale: AS SHOWN
Drawing Status: FINAL

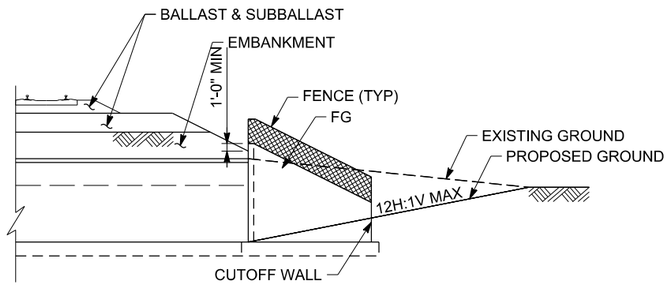
Job No	Drawing No	Rev
234180	CST-00-03020	01

22x34



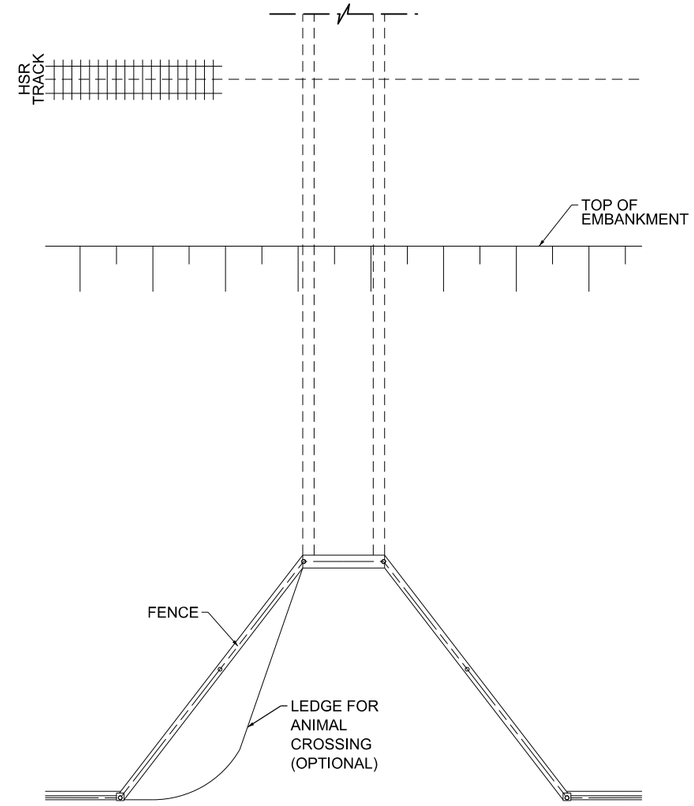
SINGLE-CELL BOX PLAN

SCALE: 1" = 10'

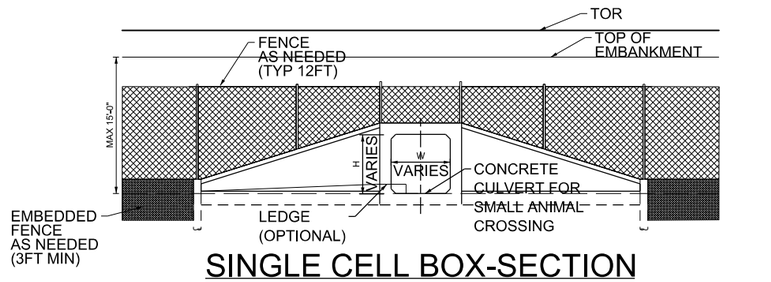


NOTE:
NOT USED IN LOCATIONS OF DRAINAGE

MODIFICATION FOR WILDLIFE CROSSING WITH LOW CLEARANCE



SINGLE-CELL BOX - PLAN
SMALL ANIMAL (MAMMAL, REPTILE, OR AMPHIBIAN)



SINGLE CELL BOX-SECTION
SMALL ANIMAL (MAMMAL, REPTILE, OR AMPHIBIAN)

NOTES:
1. WHERE THE CROSSING WOULD BE COLOCATED WITH A DRAINAGE FEATURE, A LEDGE WOULD BE INCLUDED DURING DETAILED DESIGN EFFORTS TO FACILITATE USE OF THE CROSSING BY ANIMALS DURING PERIODS OF FLOODING.
2. ANGLE OF FLARE TO BE DETERMINED BASED ON FIELD CONDITION.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S.T. MAK
DRAWN BY: S. PAUDEL
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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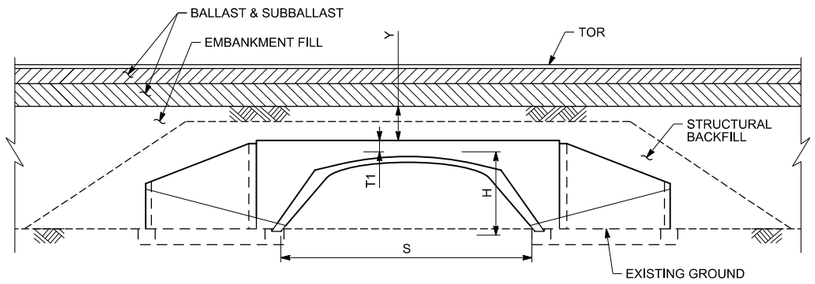
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
CULVERT & ANIMAL CROSSING
SHEET 2 OF 2

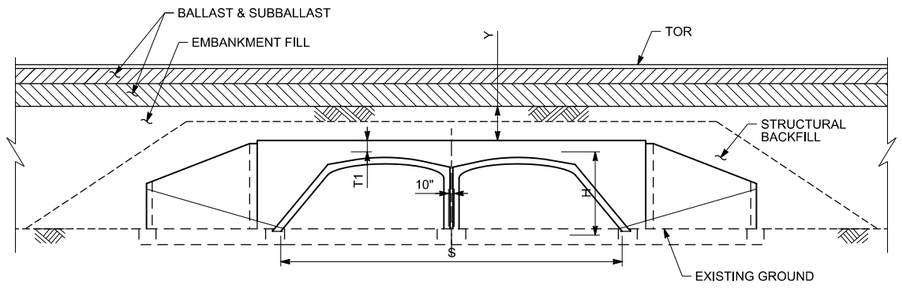
Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CST-00-03021	01

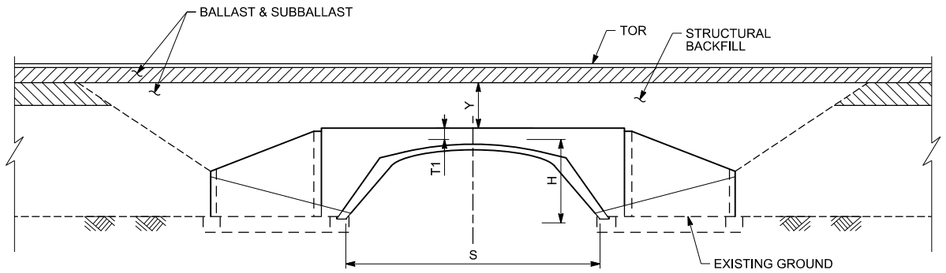
PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:50:48 AM
pw:\\N-YPWINT01:AMX_DS01\Documents\234180-0004 Internal Project Data\4-03 Drawings\4-03-30 Civil Structure (CS)\4-03-30-02 Sheets\General Sheets\234180-AFN-CST-DWG-00-03021-V001



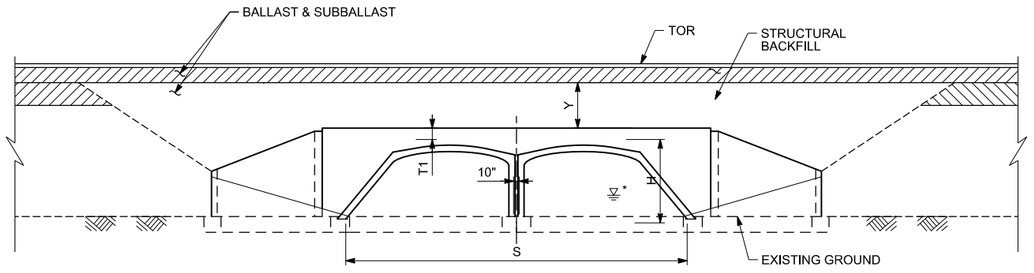
C SECTION C (Y > 4'-6")
SCALE: 1" = 10'



D SECTION D (Y > 4'-6")
SCALE: 1" = 10'



C SECTION C (Y < 4'-6")
SCALE: 1" = 10'



D SECTION D (Y < 4'-6")
SCALE: 1" = 10'

SINGLE-CELL OPEN BOTTOM CULVERT

MAX. COVER (Y)	SPAN (S)	HEIGHT (H)	T1
10'- 0"	10'- 0"	5'- 0"	1'- 3"
10'- 0"	10'- 0"	10'- 0"	1'- 3"
10'- 0"	15'- 0"	5'- 0"	1'- 3"
10'- 0"	15'- 0"	10'- 0"	1'- 3"
20'- 0"	10'- 0"	5'- 0"	1'- 3"
20'- 0"	10'- 0"	10'- 0"	1'- 6"
20'- 0"	15'- 0"	5'- 0"	1'- 6"
20'- 0"	15'- 0"	10'- 0"	2'- 0"

2-CELL OPEN BOTTOM CULVERT

MAX. COVER (Y)	SPAN (S)	HEIGHT (H)	T1
10'- 0"	10'- 0"	5'- 0"	1'- 3"
10'- 0"	10'- 0"	10'- 0"	1'- 3"
10'- 0"	15'- 0"	5'- 0"	1'- 3"
10'- 0"	15'- 0"	10'- 0"	1'- 3"
20'- 0"	10'- 0"	5'- 0"	1'- 3"
20'- 0"	10'- 0"	10'- 0"	1'- 6"
20'- 0"	15'- 0"	5'- 0"	2'- 0"
20'- 0"	15'- 0"	10'- 0"	2'- 0"

NOTE:

1. FINAL CULVERT DESIGN AND DETAILS TO BE DEVELOPED ON LOCATION-SPECIFIC GEOTECHNICAL CONDITIONS AND HYDRAULIC REQUIREMENTS. DETAILS TO BE FURTHER DEFINED THROUGH ENVIRONMENTAL REVIEW BY USACE, USFWS, AND APPLICABLE REGULATORY BODIES.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY S. PAUDEL
CHECKED BY R. ZARATE
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
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Texas Registered Engineering Firm: F-2144

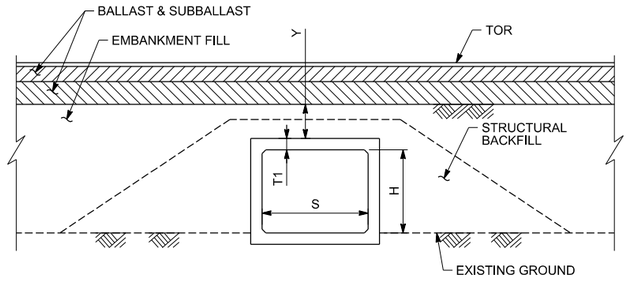
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
CULVERT TYPICAL DETAIL
SHEET 1 OF 2

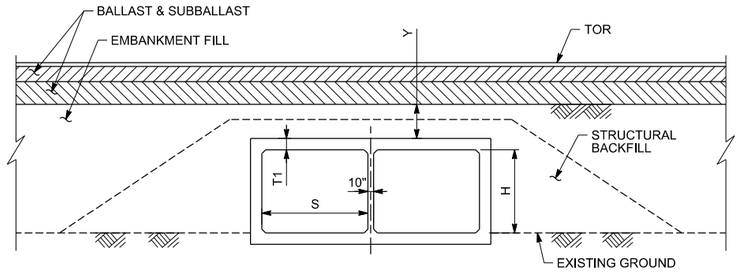
Scale: AS SHOWN
Drawing Status: FINAL
Job No: 234180
Drawing No: CST-00-03022
Rev: 01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:52:41 AM

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-0014 Internal Project Data\4-03 Drawings\4-03-30 Civil Structure (CS)\4-03-30-02 Sheets\General Sheets\234180-AFN-CST-DWG-00-03022-V001



C SECTION C (Y > 4'-6")
SCALE: 1" = 10'



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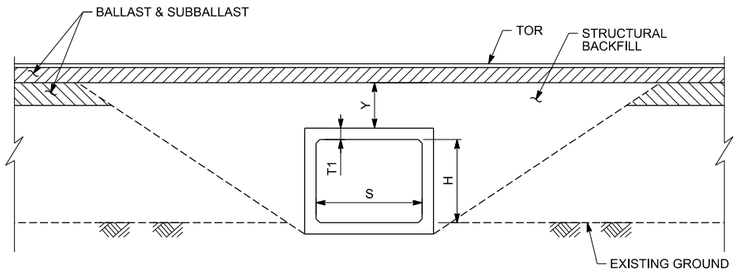
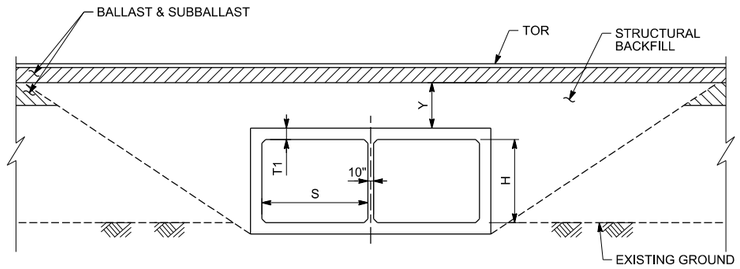


C SECTION C (Y < 4'-6")
SCALE: 1" = 10'



D SECTION D (Y < 4'-6")
SCALE: 1" = 10'

SINGLE-CELL BOX CULVERT

MAX. COVER (Y)	SPAN (S)	HEIGHT (H)	T1
10'- 0"	10'- 0"	5'- 0"	1'- 3"
10'- 0"	10'- 0"	10'- 0"	1'- 3"
10'- 0"	15'- 0"	5'- 0"	1'- 3"
10'- 0"	15'- 0"	10'- 0"	1'- 3"
20'- 0"	10'- 0"	5'- 0"	1'- 3"
20'- 0"	10'- 0"	10'- 0"	1'- 6"
20'- 0"	15'- 0"	5'- 0"	1'- 6"
20'- 0"	15'- 0"	10'- 0"	2'- 0"

2-CELL BOX CULVERT

MAX. COVER (Y)	SPAN (S)	HEIGHT (H)	T1
10'- 0"	10'- 0"	5'- 0"	1'- 3"
10'- 0"	10'- 0"	10'- 0"	1'- 3"
10'- 0"	15'- 0"	5'- 0"	1'- 3"
10'- 0"	15'- 0"	10'- 0"	1'- 3"
20'- 0"	10'- 0"	5'- 0"	1'- 3"
20'- 0"	10'- 0"	10'- 0"	1'- 6"
20'- 0"	15'- 0"	5'- 0"	2'- 0"
20'- 0"	15'- 0"	10'- 0"	2'- 0"

NOTE:

1. FINAL CULVERT DESIGN AND DETAILS TO BE DEVELOPED ON LOCATION-SPECIFIC GEOTECHNICAL CONDITIONS AND HYDRAULIC REQUIREMENTS. DETAILS TO BE FURTHER DEFINED THROUGH ENVIRONMENTAL REVIEW BY USACE, USFWS, AND APPLICABLE REGULATORY BODIES.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S.T. MAX
DRAWN BY: S. PAUDEL
CHECKED BY: R. ZARATE
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

ARUP
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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

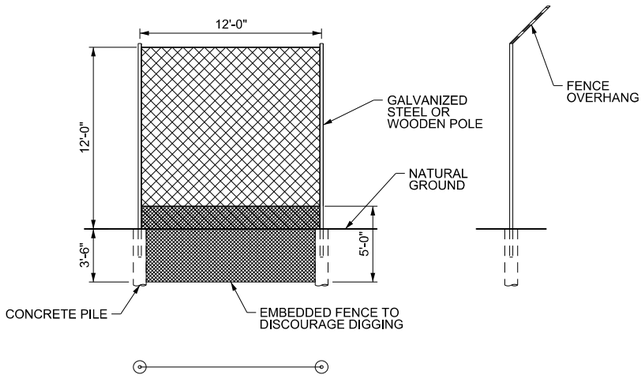
Drawing Title
GENERAL
CIVIL STRUCTURES
CULVERT TYPICAL DETAIL
SHEET 2 OF 2

Scale: AS SHOWN
Drawing Status: FINAL

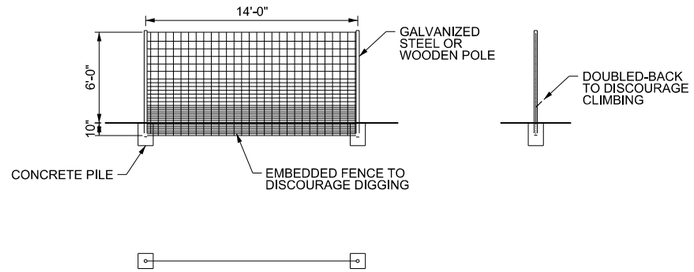
Job No	Drawing No	Rev
234180	CST-00-03023	01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:54:05 AM

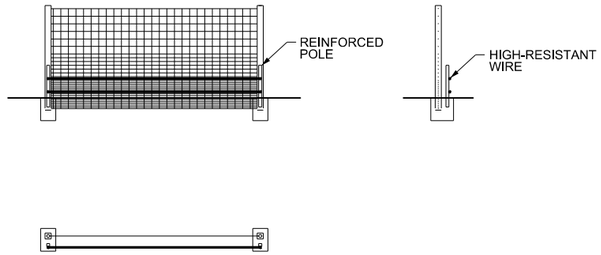
22x34



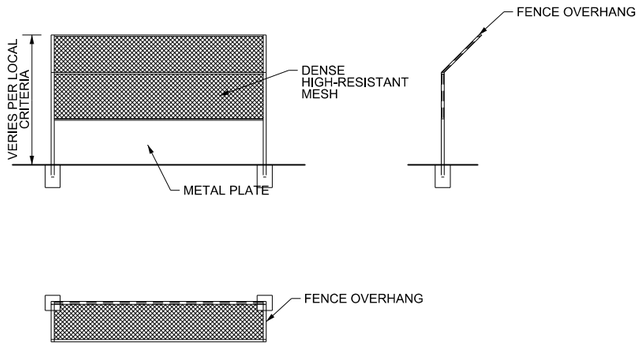
STANDARD FENCE FOR LARGE ANIMALS



STANDARD FENCE FOR SMALL ANIMALS



REINFORCED FENCE



INTRUSION PROTECTION FENCE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: R. ALDREDGE
DRAWN BY: S. PAUDEL
CHECKED BY: R. ZARATE
IN CHARGE: C. TAYLOR
DATE: 2/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
WILDLIFE CROSSING
FENCE DETAILS

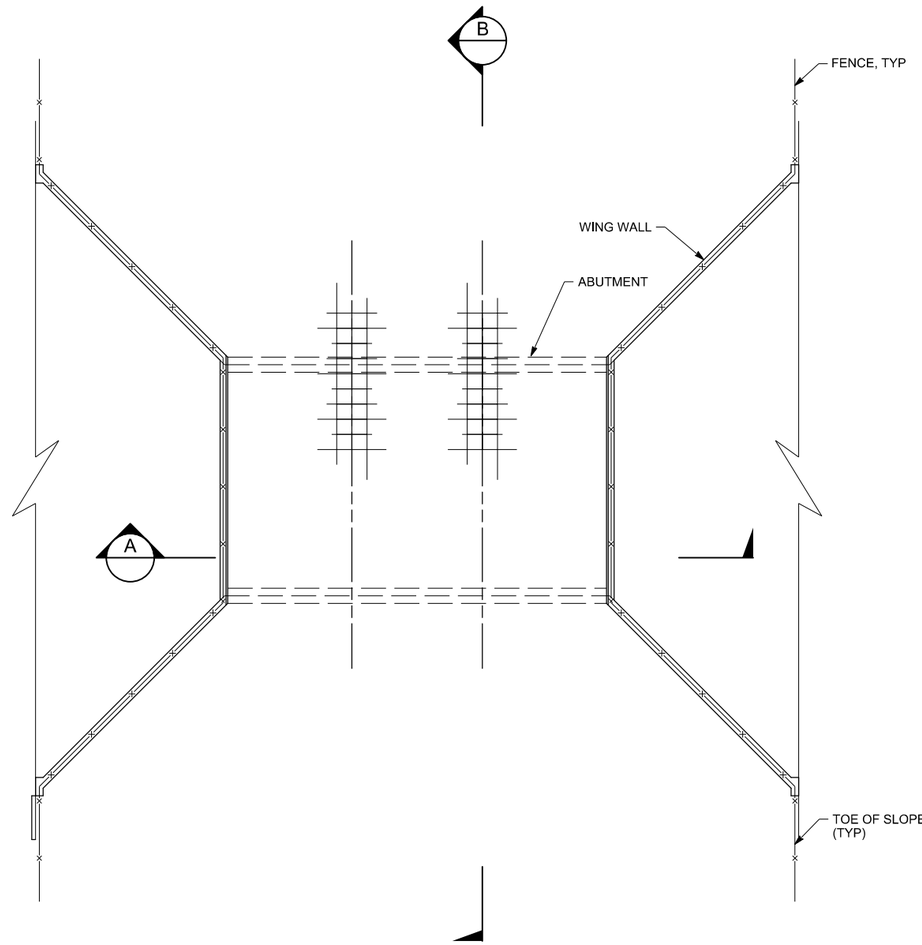
Scale: 1"=10'
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	WLC-00-04002	

PLOT BY: colleen.zwiebel PLOT TIME: 5/8/2019 4:17:55 PM

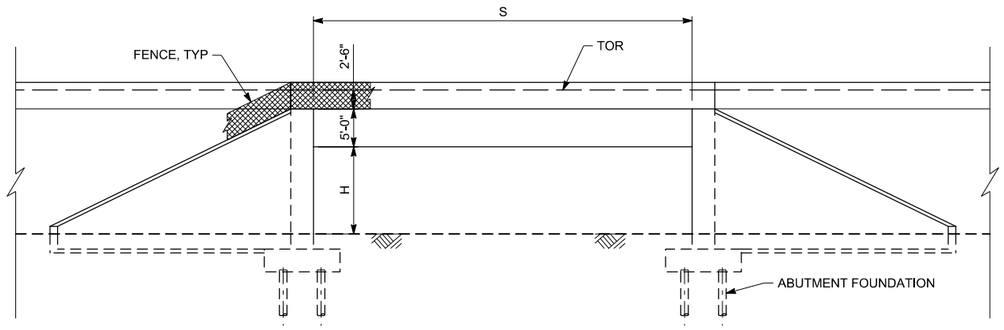
pw:\\IN-YPWINT01:AMX_DS01\Documents\234180-00\4 Internal Project Data\4-03 Drawings\4-03-30 Civil Structure (CS)\4-03-30-02 Sheets\General Sheets\234180-AFN-CST-DWG-00-03029-D001

22x34



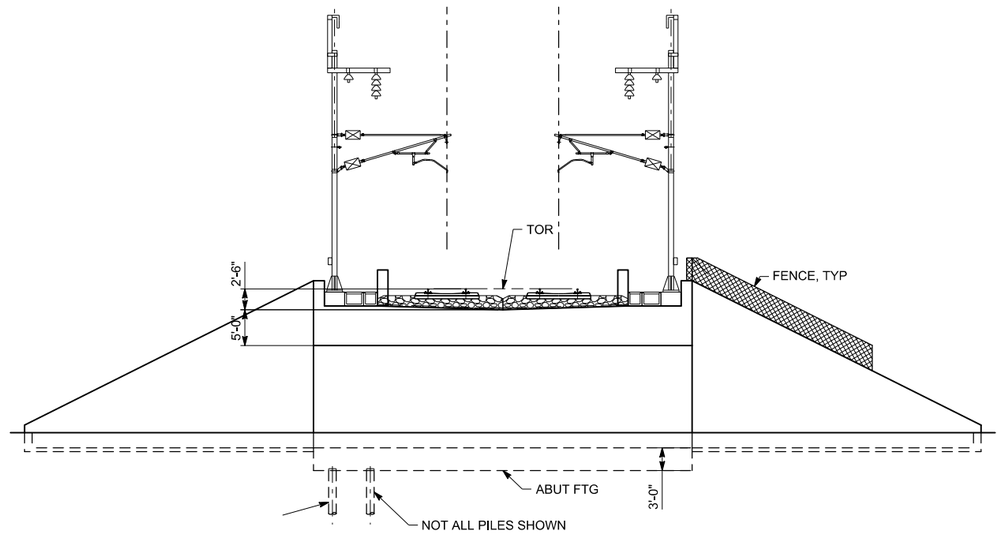
SLAB BRIDGE PLAN

SCALE: 1" = 10'



B ELEVATION B-B

SCALE: 1" = 10'



A SECTION A

SCALE: 1" = 10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY E. SUDHAUSEN
CHECKED BY L. CHEN
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title

GENERAL
CIVIL STRUCTURES
SLAB BRIDGE
TYPICAL DETAIL

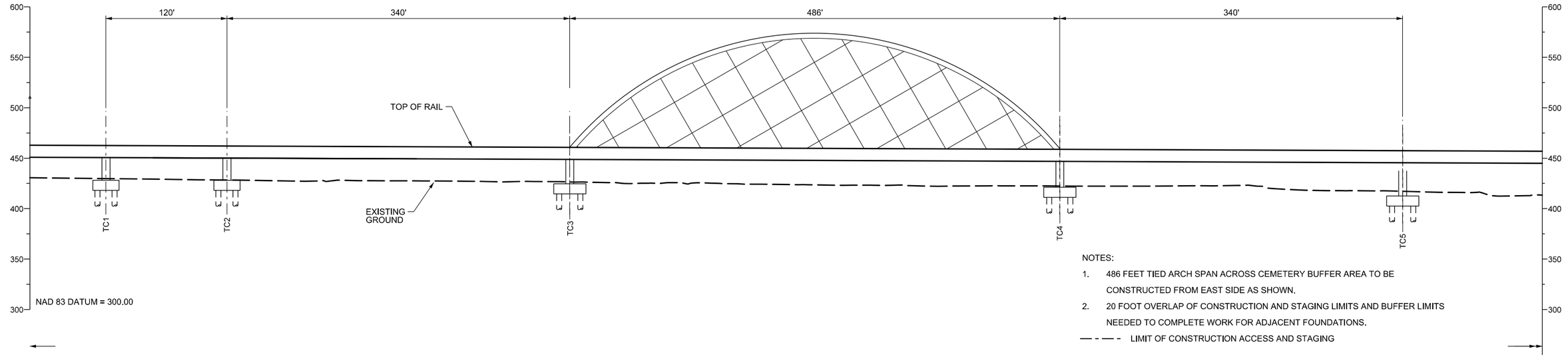
Scale: AS SHOWN
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CST-00-03024	01

PLOT TIME: 4/30/2019 6:43:33 PM
PLOT BY: Andrew.Utz

22x34

FOR CONTINUATION, PLEASE REFER TO SHEET CVL-DS-01918



NOTES:

1. 486 FEET TIED ARCH SPAN ACROSS CEMETERY BUFFER AREA TO BE CONSTRUCTED FROM EAST SIDE AS SHOWN.
2. 20 FOOT OVERLAP OF CONSTRUCTION AND STAGING LIMITS AND BUFFER LIMITS NEEDED TO COMPLETE WORK FOR ADJACENT FOUNDATIONS.

— — — — LIMIT OF CONSTRUCTION ACCESS AND STAGING

ELEVATION

SCALE: 1"=50'

MATCH LINE, SEE SHEET DWG-DS-00101

FOR CONTINUATION, PLEASE REFER TO SHEET CVL-DS-01918

FOR CONTINUATION, PLEASE REFER TO SHEET CVL-DS-01918

PLAN

SCALE: 1"=50'

50 0 50 100

SCALE: 1" = 50'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: S. PAUDEL
DRAWN BY: S. PAUDEL
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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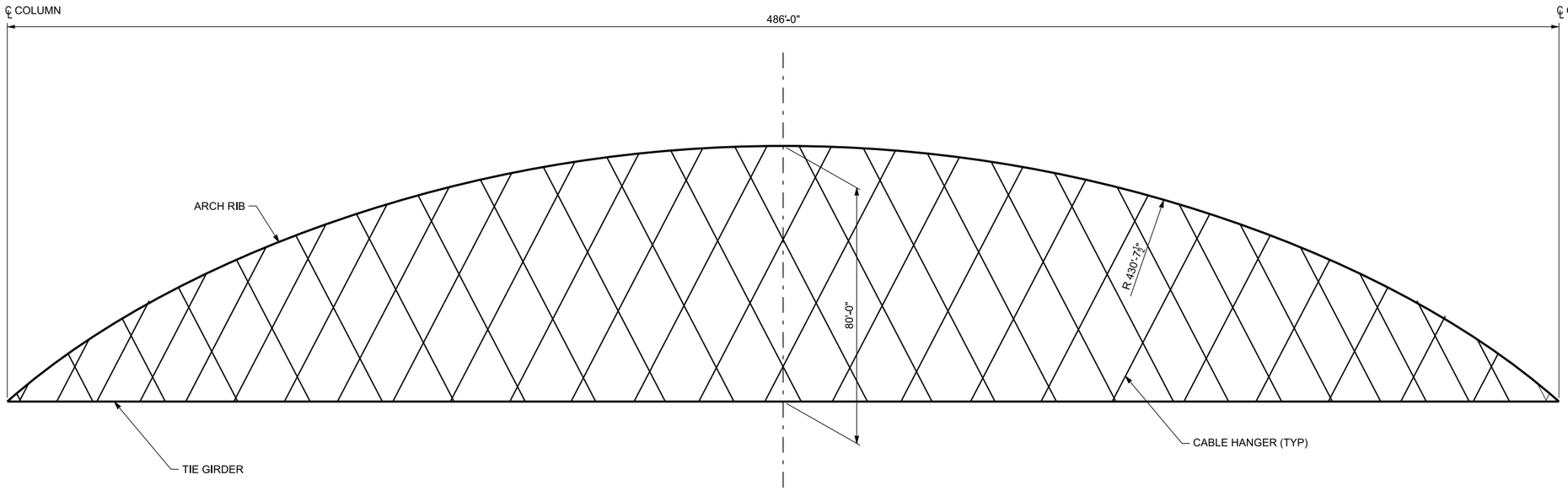
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
HONEY SPRING CEMETERY
NETWORK TIED ARCH

Scale: AS SHOWN
Drawing Status: FINAL

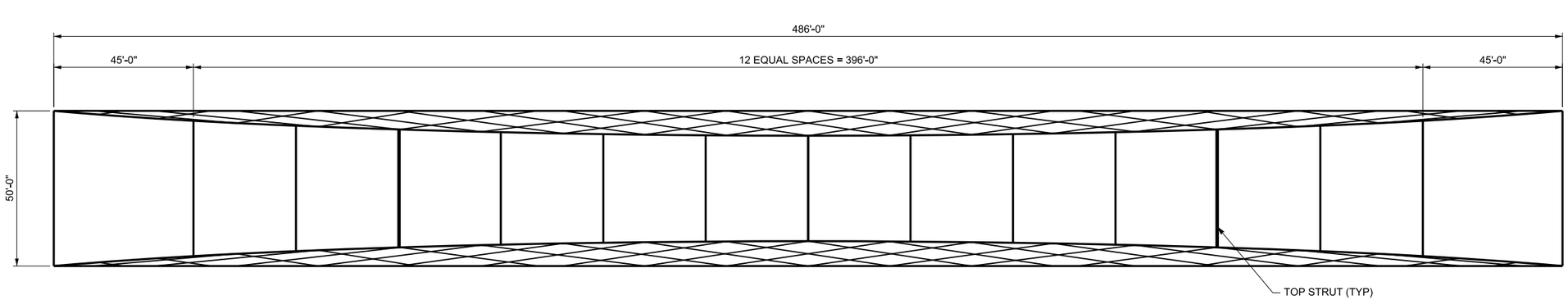
Job No	Drawing No	Rev
238957	CST-00-03025	01

22x34



ELEVATION

SCALE 1"=20'



PLAN

SCALE 1"=20'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: L. CHEN
DRAWN BY: M.NGUYEN
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

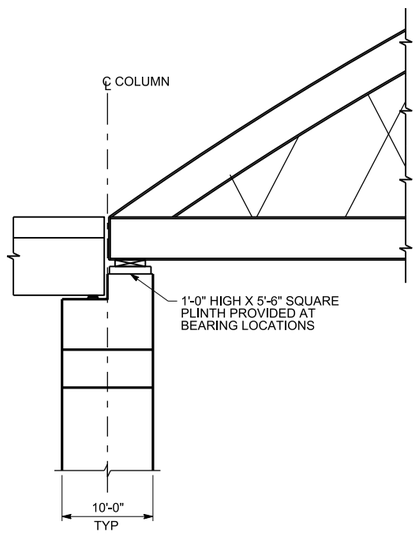
TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
NETWORK TIED ARCH
ELEVATION

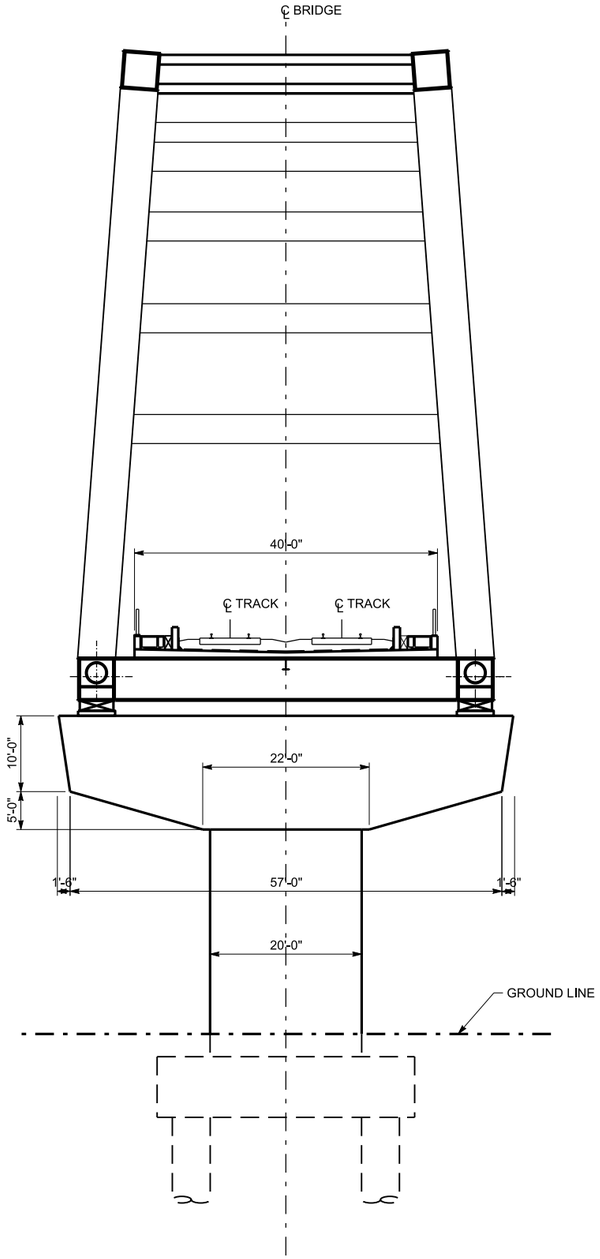
Scale: AS SHOWN
Drawing Status: FINAL
Job No: 238957
Drawing No: CST-00-03026
Rev:

22x34



ELEVATION

SCALE 1"=10'



TYPICAL SECTION

SCALE 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. CHEN
DRAWN BY M.NGUYEN
CHECKED BY L. CHEN
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
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Texas Registered Engineering Firm: F-1990

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Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

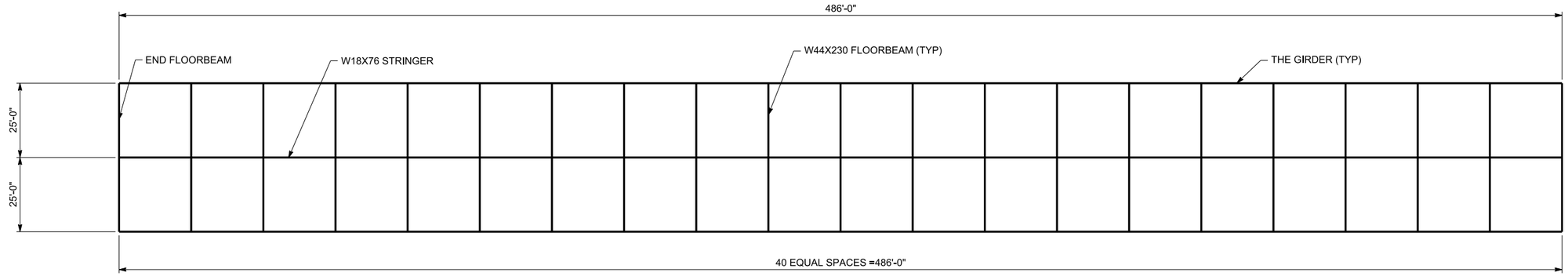
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

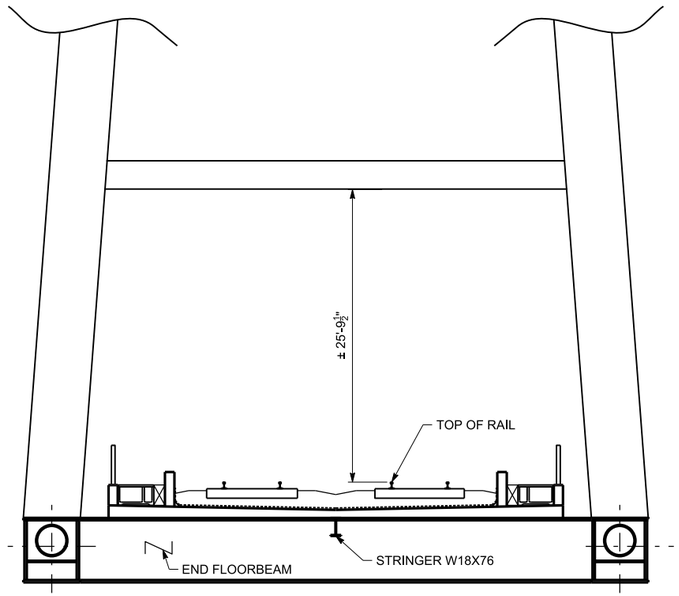
GENERAL
CIVIL STRUCTURES
NETWORK TIED ARCH
SECTIONS

Scale: AS SHOWN
Drawing Status: FINAL

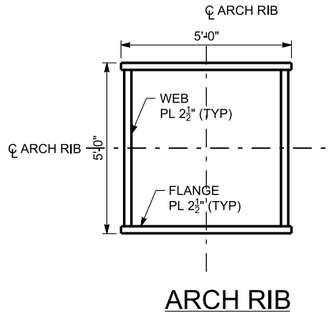
Job No	Drawing No	Rev
238957	CST-00-03027	



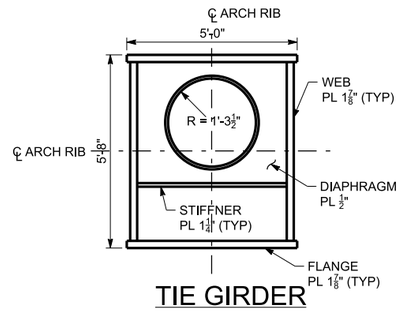
DECK FRAMING



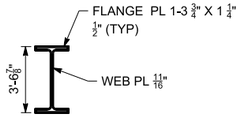
TYPICAL SECTION



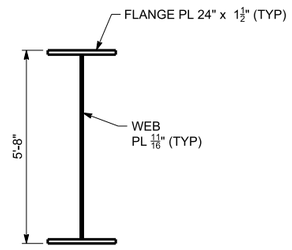
ARCH RIB



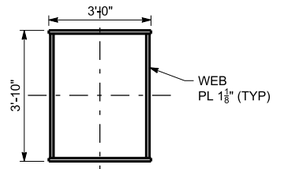
TIE GIRDER



TYPICAL FLOORBEAM W44X230



END FLOOR BEAM



TOP STRUT

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: M. NGUYEN
DRAWN BY: M.NGUYEN
CHECKED BY: L. CHEN
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL STRUCTURES
NETWORK TIED ARCH
DETAILS

Scale: NOT TO SCALE
Drawing Status: FINAL
Job No: 238957
Drawing No: CST-00-03028
Rev:

PLOT BY: N-YPWICS01$ PLOT TIME: 4/30/2019 6:03:44 PM
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22x34

PLOT TIME: 4/30/2019 4:06:14 PM

PLOT BY: Andrew.Utz

1A-5

CIVIL UTILITIES TYPICAL DETAILS

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: K. SEYMOUR
DRAWN BY: D. THOMPSON
CHECKED BY: R. BURNS
IN CHARGE: C. TAYLOR
DATE: 2/25/2019

ARUP
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www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

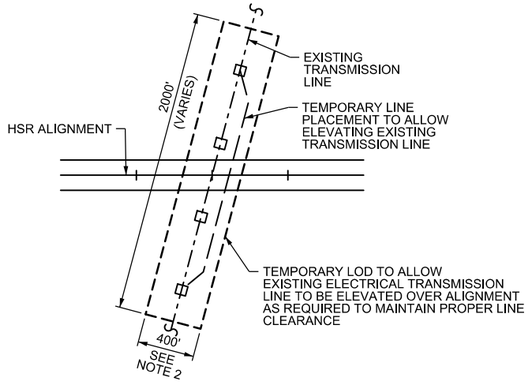
Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

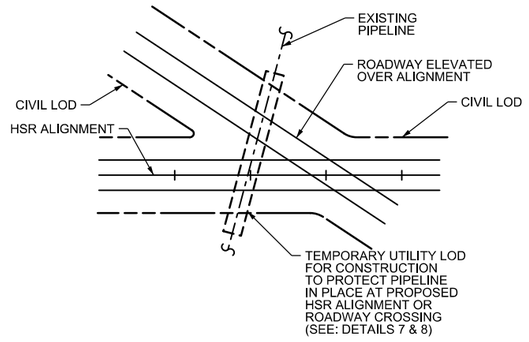
Job No	Drawing No	Rev
234180	GEN-00-0000	01

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-004 Internal Project Data\4-03 Drawings\4-03-10 General (PG)\4-03-10-02 Sheets\234180-AFN-GEN-DWG-00-00031-V002

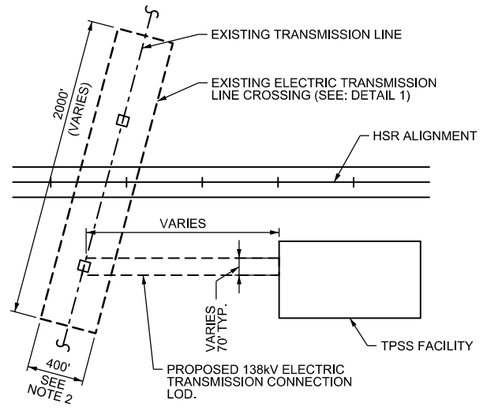
22x34



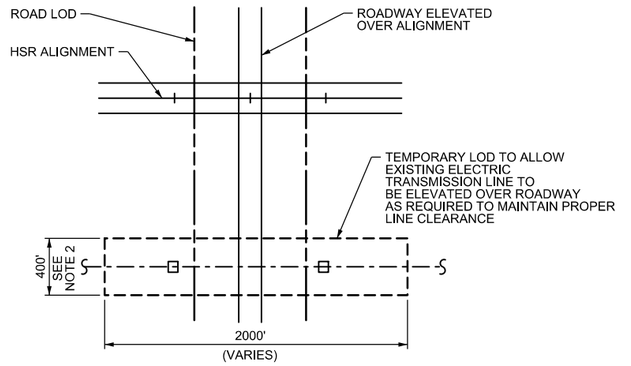
1 - TYPICAL EXISTING ELECTRIC TRANSMISSION LINE ELEVATED OVER ALIGNMENT



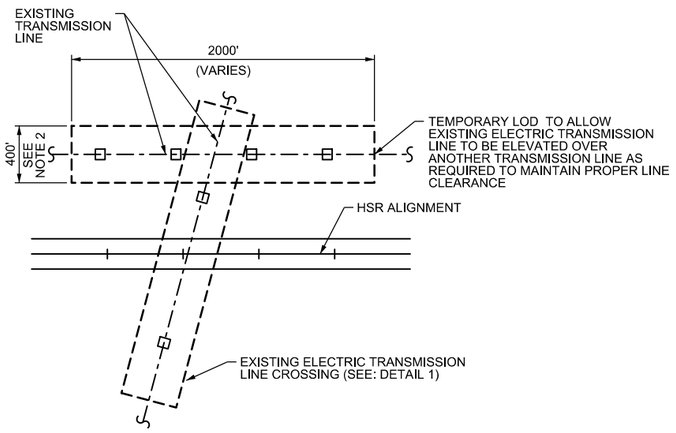
2 - TYPICAL PIPELINE UTILITY CROSSING - "PROTECT"



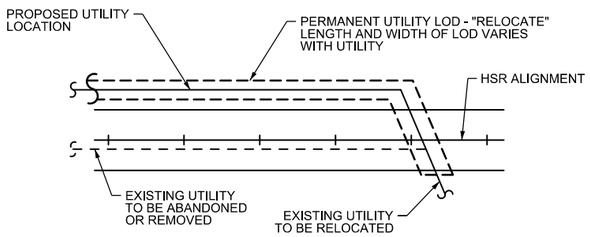
3 - TYPICAL NEW ELECTRIC TRANSMISSION CONNECTION TO TPSS



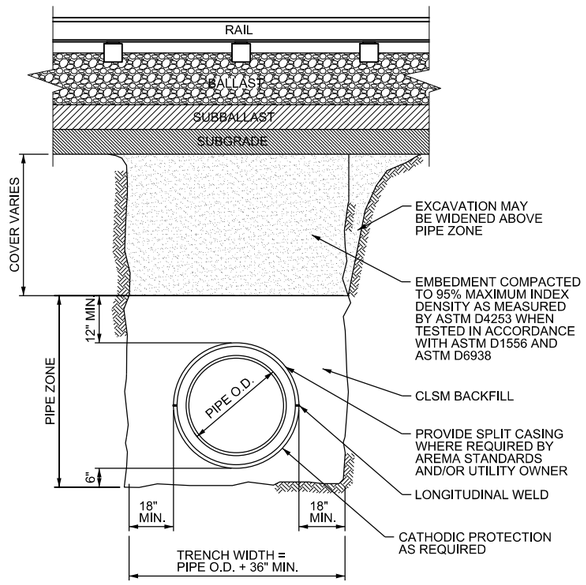
4 - TYPICAL EXISTING ELECTRIC TRANSMISSION LINE ELEVATED OVER ROADWAY



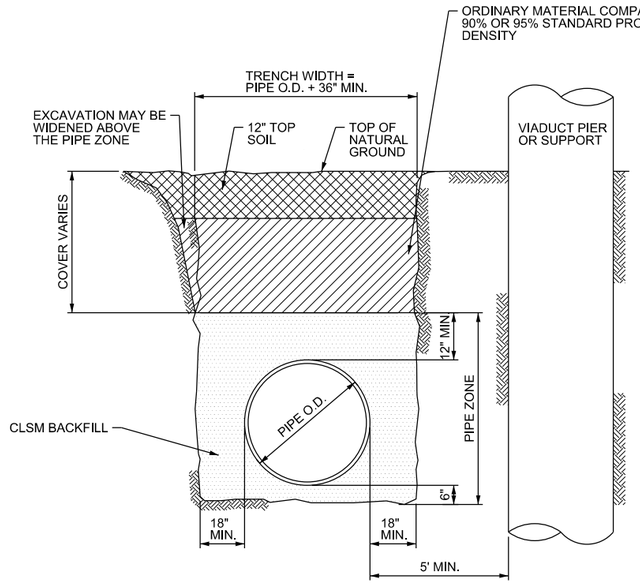
5 - TYPICAL EXISTING ELECTRIC TRANSMISSION LINE ELEVATED OVER OTHER TRANSMISSION LINE



6 - TYPICAL BELOW GRADE UTILITY CROSSING - "RELOCATE"



7 - PIPELINE ENCASEMENT



8 - PIPELINE NEAR VIADUCT SUPPORT

NOTE:

1. REFER TO DRAWING NO. GEN-00-00008 FOR GENERAL CIVIL UTILITY NOTES.
2. FINAL DESIGN TO BE DEVELOPED BY UTILITY PROVIDER. TEMPORARY LOD OF 400' ASSUMED FOR PURPOSES OF IDENTIFYING POTENTIAL IMPACTS OF ENVIRONMENTAL ANALYSIS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: A. YOUNG
DRAWN BY: D. THOMPSON
CHECKED BY: J. HAMMOND
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title
GENERAL
CIVIL UTILITIES
TYPICAL CROSSING DETAILS
SHEET 1 OF 1

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	CUT-00-01000	01

PLOT BY: colleen.zwiebel PLOT TIME: 6/28/2019 10:58:46 AM

22x34

PLOT TIME: 4/30/2019 4:06:33 PM

PLOT BY: Andrew.Utz

1A-6

GENERAL-ALIGNMENT CURVE DATA TABLES

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY D. THOMPSON
CHECKED BY R. BURNS
IN CHARGE C. TAYLOR
DATE 2/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-0000	01

pw:\\N-YPWINT01:AMX_DS01\Documents\234180-004 Internal Project Data\4-03 Drawings\4-03-10 General (PG)\4-03-10-02 Sheets\234180-AFN-GEN-DWG-00-00031-V002

22x34

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment HT1															
C-HT1-1	40+21.51	43+71.51	60+29.46	63+79.46	350	1658	350	2000	610	65	25	57	65	25	57

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment HT2															
C-HT2-1	31+18.71	32+08.71	36+43.72	37+33.72	90	435	90	3000	914	65	25	30	65	25	30
C-HT2-2	49+36.56	50+26.56	54+66.65	55+56.65	90	440	90	3000	914	65	25	30	65	25	30

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment HT3															
C-HT3-1	18+49.97	19+59.97	21+28.49	22+38.49	110	169	110	1500	457	45	25	27	45	25	27
C-HT3-2	31+86.30	33+36.30	37+38.79	38+88.79	150	402	150	3000	914	65	25	30	65	25	30

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment HN1															
C-HN1-1	35+32.12	39+32.12	43+33.88	47+33.88	400	402	400	145000	44196	300	10	14	330	10	19
C-HN1-2	76+04.17	80+54.17	86+11.82	90+61.82	450	558	450	120000	36576	300	10	19	330	10	25
C-HN1-3	113+95.88	117+45.88	121+06.03	124+56.03	350	360	350	190000	57912	300	10	8	330	10	12
C-HN1-4	141+96.75	145+46.75	149+05.15	152+55.15	350	358	350	205000	62484	300	5	12	330	5	16
C-HN1-5	211+98.18	216+48.18	221+29.68	225+79.68	450	482	450	125000	38100	300	5	23	330	5	29
C-HN1-6	235+01.53	240+51.53	248+11.05	253+61.05	550	760	550	105000	32004	300	10	23	330	10	30
C-HN1-7	267+00.35	271+50.35	277+12.21	281+62.21	450	562	450	120000	36576	300	10	19	330	10	25
C-HN1-8	323+29.21	326+29.21	343+45.21	346+45.21	300	1716	300	30000	9144	235	40	31	235	40	31
C-HN1-9	346+45.21	349+45.21	366+35.27	369+35.27	300	1690	300	30000	9144	235	40	31	235	40	31
C-HN1-10	403+83.10	406+33.10	423+09.71	425+59.71	250	1677	250	70000	21336	265	25	14	265	25	14
C-HN1-11	425+59.71	428+09.71	444+86.24	447+36.24	250	1677	250	70000	21336	265	25	14	265	25	14
C-HN1-12	458+34.49	462+84.49	471+09.15	475+59.15	450	825	450	80000	24384	300	15	29	330	25	28
C-HN1-13	486+47.71	490+97.71	498+96.76	503+46.76	450	799	450	80000	24384	300	25	19	330	25	28
C-HN1-14	696+97.12	700+47.12	709+52.96	713+02.96	350	906	350	320000	97536	300	5	6	330	5	8
C-HN1-15	798+84.82	802+84.82	806+08.44	810+08.44	400	324	400	160000	48768	300	5	17	330	5	21
C-HN1-16	936+95.87	953+05.87	1039+22.82	1055+32.82	1610	8617	1610	18700	5700	300	150	36	320	155	57
C-HN1-17	1152+30.75	1165+40.75	1227+39.54	1240+49.54	1310	6199	1310	42000	12802	300	65	18	330	65	35
C-HN1-18	1427+58.19	1443+68.19	1668+82.35	1684+92.35	1610	22514	1610	18700	5700	300	150	36	320	155	57
C-HN1-19	1769+22.30	1787+22.30	1837+88.77	1855+88.77	1800	5066	1800	50000	15240	300	60	10	320	60	19
C-HN1-20	2034+67.27	2050+77.27	2165+85.55	2181+95.55	1610	11508	1610	18700	5700	300	150	36	320	155	57
C-HN1-21	2217+78.87	2233+88.87	2371+42.76	2387+52.76	1610	13754	1610	18700	5700	300	150	36	320	155	57
Segment HN2															
C-HN2-1	208+48.75	226+48.75	246+73.21	264+73.21	1800	2024	1800	30000	9144	300	90	26	330	90	51
C-HN2-2	304+82.03	322+82.03	385+63.65	403+63.65	1800	6282	1800	30000	9144	300	90	26	330	90	51
C-HN2-3	429+63.65	447+63.65	472+20.81	490+20.81	1800	2457	1800	30000	9144	300	90	26	330	90	51
C-HN2-4	616+60.59	626+60.59	643+70.17	653+70.17	1000	1710	1000	60000	18288	300	45	13	330	45	25
C-HN2-5	1100+60.61	1114+10.61	1146+77.03	1160+27.03	1350	3266	1350	42000	12802	300	65	18	330	65	35
C-HN2-6	1173+68.65	1187+18.65	1213+94.25	1227+44.25	1350	2676	1350	42000	12802	300	65	18	330	65	35
C-HN2-7	1548+94.51	1562+44.51	1609+44.24	1622+94.24	1350	4700	1350	42000	12802	300	65	18	330	65	35
C-HN2-8	1648+20.49	1661+70.49	1702+29.75	1715+79.75	1350	4059	1350	42000	12802	300	65	18	330	65	35

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment WT															
C-WT-1	192+11.27	197+61.27	207+40.07	212+90.07	550	979	550	105000	32004	300	15	18	330	15	25
C-WT-2	345+73.88	357+23.88	401+66.57	413+16.57	1150	4443	1150	42000	12802	300	65	18	330	65	35
C-WT-3	427+21.88	438+71.88	476+62.99	488+12.99	1150	3791	1150	42000	12802	300	65	18	330	65	35
C-WT-4	840+53.98	845+03.98	866+47.51	870+97.51	450	2144	450	115000	35052	300	15	15	330	15	22
C-WT-5	933+62.96	938+62.96	953+95.95	958+95.95	500	1533	500	110000	33528	300	15	17	330	15	23
C-WT-6	1015+08.06	1022+08.06	1051+06.73	1058+06.73	700	2899	700	70000	21336	300	35	15	330	35	25
C-WT-7	1256+29.88	1267+79.88	1322+49.85	1333+99.85	1150	5470	1150	42000	12802	300	65	18	330	65	35
C-WT-8	1371+25.16	1382+75.16	1448+73.75	1460+23.75	1150	6599	1150	42000	12802	300	65	18	330	65	35
C-WT-9	1492+16.10	1510+16.10	1692+91.58	1710+91.58	1800	18275	1800	30000	9144	300	95	21	330	95	46
C-WT-10	2222+85.75	2234+35.75	2346+78.69	2358+28.69	1150	11243	1150	42000	12802	300	65	18	330	65	35
C-WT-11	2705+98.39	2717+48.39	2913+59.86	2925+09.86	1150	19611	1150	42000	12802	300	65	18	330	65	35
C-WT-12	3024+36.72	3042+36.72	3098+90.15	3116+90.15	1800	5653	1800	30000	9144	300	95	21	330	95	46
C-WT-13	3153+36.22	3171+36.22	3232+64.86	3250+64.86	1800	6129	1800	30000	9144	300	95	21	330	95	46
C-WT-14	3276+09.81	3286+09.81	3308+45.80	3318+45.80	1000	2236	1000	50000	15240	300	55	15	330	55	29
C-WT-15	3366+83.50	3373+83.50	3394+21.12	3401+21.12	700	2038	700	70000	21336	300	35	15	330	35	25
C-WT-16	3495+09.60	3505+09.60	3764+61.74	3774+61.74	1000	25952	1000	50000	15240	300	55	15	330	55	29

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment WT															
C-NE-1	110+17.96	123+67.96	336+79.49	350+29.49	1350	21312	1350	42000	12802	300	65	18	330	65	35
C-NE-2	408+84.50	423+84.50	641+68.04	656+68.04	1500	21784	1500	35000	10668	300	85	15	330	85	35
C-NE-3	943+13.92	950+13.92	969+89.12	976+89.12	700	1975	700	80000	24384	300	30	14	330	30	23
C-NE-4	1459+72.76	1466+72.76	1628+73.42	1635+73.42	700	16201	700	80000	24384	300	30	14	330	30	23

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment WT															
C-IH1-1	29+28.05	42+78.05	225+74.38	239+24.38	1350	18296	1350	42000	12802	300	65	18	330	65	35
C-IH1-2	782+09.10	795+59.10	1017+01.04	1030+51.04	1350	22142	1350	42000	12802	300	65	18	330	65	35
C-IH1-3	1130+16.04	1147+66.04	1174+67.72	1192+17.72	1750	2702	1750	22000	6706	300	130	28	330	130	62
C-IH1-4	1206+90.32	1224+40.32	1277+83.94	1295+33.94	1750	5344	1750	22000	6706	300	130	28	330	130	62
C-IH1-5	1358+54.24	1365+04.24	1372+35.03	1378+85.03	650	731	650	50000	15240	300	60	10	330	60	24
C-IH1-6	1563+29.65	1580+79.65	1643+25.80	1660+75.80	1750	6246	1750	22000	6706	300	130	28	330	130	62
C-IH1-7	1711+93.75	1723+43.75	1823+94.60	1835+44.60	1150	10051	1150	28000	8534	300	105	19	330	105	46
C-IH1-8	2131+42.34	2142+92.34	2224+89.61	2236+39.61	1150	8197	1150	33000	10058	300	85	21	330	85	43
C-IH1-9	2318+83.66	2330+33.66	2366+28.42	2377+78.42	1150	3595	1150	33000	10058	300	85	21	330	85	43
C-IH1-10	2514+31.72	2531+81.72	2610+38.61	2627+88.61	1750	7857	1750	22000	6706	300	130	28	330	130	62
C-IH1-11	2681+30.33	2698+80.33	2745+87.76	2763+37.76	1750	4707	1750	22000	6706	300	130	28	330	130	62
C-IH1-12	3000+80.86	3018+30.86	3102+03.74	3119+53.74	1750	8373	1750	22000	6706	300	130	28	330	130	62
C-IH1-13	3226+32.04	3239+82.04	3261+79.03	3275+29.03	1350	2197	1350	42000	12802	300	65	18	330	65	35
C-IH1-14	3389+80.83	3407+30.83	3441+18.72	3458+68.72	1750	3388	1750	22000	6706	300	130	28	330	130	62
C-IH1-15	3464+15.62	3478+65.62	3492+66.32	3507+16.32	1450	1401	1450	24000	7315	300	115	30	330	115	61
C-IH1-16	3528+55.36	3546+05.36	3622+89.50	3640+39.50	1750	7684	1750	22000	6706	300	130	28	330	130	62
C-IH1-17	3700+87.14	3712+37.14	3735+57.76	3747+07.76	1150	2321	1150	33000	10058	300	85	21	330	85	43
C-IH1-18	3795+56.60	3807+06.60	3879+63.96	3891+13.96	1150	7257	1150	33000	10058	300	85	21	330	85	43
C-IH1-19	4073+55.41	4087+05.41	4144+62.93	4158+12.93	1350	5758	1350	42000	12802	300	65	18	330	65	35
Segment 2B zNC															
C-IH2-1	445+73.23	450+73.23	457+07.78	462+07.78	500	635	500	120000	36576	300	20	9	330	20	15

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment NW															
C-NW-1	110+00.88	130+00.88	218+42.61	238+42.61	2000	8842	2000	30000	9144	300	85	31	330	85	56
C-NW-2	295+40.07	315+40.07	498+39.15	518+39.15	2000	18299	2000	30000	9144	300	85	31	330	85	56
C-NW-3	709+01.54	725+01.54	880+81.59	896+81.59	1600	15580	1600	32000	9754	300	75	34	330	75	57
C-NW-4	914+10.41	927+60.41	1011+07.40	1024+57.40	1350	8347	1350	46000	14021	300	50	26	330	50	42
C-NW-5	1286+49.22	1296+49.22	1311+27.63	1321+27.63	1000	1478	1000	60000	18288	300	50	8	330	50	20

NOTES:

1. Ea + Eu = 11.8(V²/R)
2. STATIONING AND RADIUS PROVIDED IN U.S. CUSTOMARY UNITS TO COORDINATE WITH ALL CIVIL WORK ELEMENTS. RADIUS, SPEED, AND SUPERELEVATION VALUES SHOWN IN METRIC UNITS AND SPEED SHOWN FOR BOTH INITIAL OPERATING SPEED AND DESIGN OPERATING SPEED FOR COORDINATION WITH FRA RULE OF PARTICULAR APPLICABILITY PETITION. FOR MORE INFORMATION SEE FINAL CONCEPTUAL ENGINEERING REPORT.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY: K. SEYMOUR
DRAWN BY: D. THOMPSON
CHECKED BY: T. SMELCER
IN CHARGE: C. TAYLOR
DATE: 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas,Texas 75215

Drawing Title: GENERAL ALIGNMENT AND CURVE DATA SHEET 1 OF 2

Scale: NO SCALE
Drawing Status: FINAL

Job No	Drawing No	Rev
234180	GEN-00-04001	01

PLOT TIME: 6/27/2019 10:37:26 AM
PLOT BY: N-YPWICS01$

22x34

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment EW															
C-EW-1	289+42.12	306+92.12	499+49.28	516+99.28	1750	19257	1750	22000	6706	300	140	18	330	140	52
C-EW-2	560+06.40	571+06.40	626+51.33	637+51.33	1100	5545	1100	50000	15240	300	40	30	330	40	44
C-EW-3	747+45.43	760+95.43	802+61.57	816+11.57	1350	4166	1350	42000	12802	300	50	33	330	50	50
C-EW-4	1029+66.66	1047+66.66	1225+97.84	1243+97.84	1800	17831	1800	30000	9144	300	90	26	330	90	51

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment WT															
C-EE-1	186+87.85	201+87.85	515+74.04	530+74.04	1500	31386	1500	40000	12192	300	60	27	330	60	45
C-EE-2	755+24.51	771+74.51	835+16.50	851+66.50	1650	6342	1650	60000	18288	300	45	13	330	45	25
C-EE-3	1000+98.16	1018+98.16	1196+78.92	1214+78.92	1800	17781	1800	30000	9144	300	95	21	330	95	46

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment DS															
C-DS-1	173+15.23	193+15.23	303+02.67	323+02.67	2000	10987	2000	23000	7010	300	135	16	330	135	48
C-DS-2	389+61.78	409+61.78	467+64.85	487+64.85	2000	5803	2000	22000	6706	300	135	23	330	135	57
C-DS-3	527+24.02	539+24.02	564+13.69	576+13.69	1200	2490	1200	50000	15240	300	60	10	330	60	24
C-DS-4	700+75.36	712+75.36	746+43.98	758+43.98	1200	3369	1200	50000	15240	300	60	10	330	60	24

CURVE #	STA TS	STA SC	STA CS	STA ST	LEADING TRANSITION CURVE LENGTH (ft)	CIRCULAR CURVE LENGTH (ft)	TRAILING TRANSITION CURVE LENGTH (ft)	RADIUS		INITIAL SERVICE LEVEL			FINAL SERVICE LEVEL		
										SPEED	Ea	Eu	SPEED	Ea	Eu
								(ft)	(m)	(km/h)	(mm)	(mm)	(km/h)	(mm)	(mm)
Segment DT															
C-DT-1	61+33.69	69+83.69	129+12.52	137+62.52	850	5929	850	8550	2606	200	130	51	200	130	51
C-DT-2	145+94.67	147+54.67	151+25.22	152+85.22	160	371	160	15000	4572	140	30	21	140	30	21
C-DT-3	169+71.68	171+31.68	178+84.50	180+44.50	160	753	160	15000	4572	140	25	26	140	25	26
C-DT-4	192+19.06	193+54.06	198+25.43	199+60.43	135	471	135	1500	457	50	25	40	50	25	40

NOTES:

1. Ea + Eu = 11.8(V²/R)
2. STATIONING AND RADIUS PROVIDED IN U.S. CUSTOMARY UNITS TO COORDINATE WITH ALL CIVIL WORK ELEMENTS. RADIUS, SPEED, AND SUPERELEVATION VALUES SHOWN IN METRIC UNITS AND SPEED SHOWN FOR BOTH INITIAL OPERATING SPEED AND DESIGN OPERATING SPEED FOR COORDINATION WITH FRA RULE OF PARTICULAR APPLICABILITY PETITION. FOR MORE INFORMATION SEE FINAL CONCEPTUAL ENGINEERING REPORT.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
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CHECKED BY T. SMELCER
IN CHARGE C. TAYLOR
DATE 02/25/2019

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DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL ALIGNMENT AND CURVE DATA SHEET 2 OF 2

Scale NO SCALE
Drawing Status FINAL
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