

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 12 of 14



**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 4 - ROADWAY PLAN SHEETS

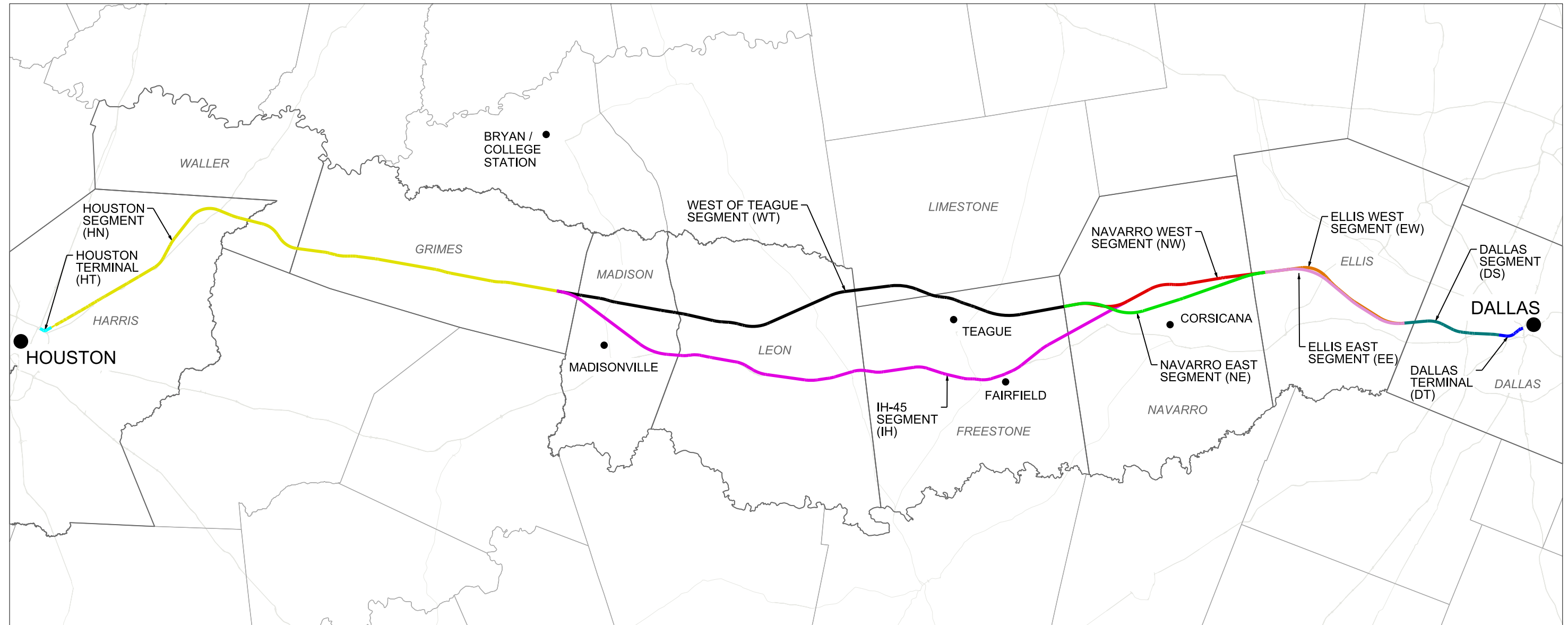
JULY 1, 2019



ARUP
Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

**FRESE
NICHOLS**
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

COVER SHEET



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.



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

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
GENERAL LOCATION PLAN

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-00002	Rev 01

VOLUME 1A - GENERAL SHEETS & TYPICAL SECTIONS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes sections 1A-1 GENERAL, 1A-2 RAILWAY TYPICAL SECTIONS, 1A-3 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS, 1A-4 CIVIL STRUCTURES TYPICAL DETAILS, 1A-5 CIVIL UTILITIES TYPICAL DETAILS, 1A-6 GENERAL - ALIGNMENT CURVE DATA TABLES.

VOLUME 1B - GENERAL SHEETS & TYPICAL SECTIONS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes section 1B-1 RAILWAY TYPICAL SECTIONS and 1B-2 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS.

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings for HOUSTON SEGMENT - CIVIL - KEY MAP, HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE, HOUSTON SEGMENT - CIVIL - PLAN, HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN, HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1, HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2.

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings for HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE, HOUSTON SEGMENT - CIVIL - PLAN, HOUSTON SEGMENT - CIVIL HIGHWAY - PLAN, HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN1, HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HN2, WEST OF TEAGUE SEGMENT.

Table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Includes a revision table and a table for drawing metadata.

Table with columns: DESIGNED BY, DRAWN BY, CHECKED BY, IN CHARGE, DATE. Lists project personnel and dates.



Project information including Drawing Title (GENERAL INDEX SHEET 1 OF 5), Scale (NO SCALE), Drawing Status (FINAL), Job No (234180), Drawing No (GEN-00-00003), and Rev (01).

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

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing entries for 2A-2 WEST OF TEAGUE SEGMENT, including drawings CVL-WT-01253 through CVL-WT-01314.

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing entries for 2A-2 WEST OF TEAGUE SEGMENT, 2A-3 NAVARRO WEST SEGMENT, and 2A-4 ELLIS WEST SEGMENT, including drawings CVL-WT-01314-A through CVL-EW-01708.

VOLUME 2A - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing entries for 2A-4 ELLIS WEST SEGMENT and 2A-5 DALLAS SEGMENT, including drawings CVL-EW-01708-A through CVL-DS-01926-A.

Revision table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Includes a header row and one data row.

Design information table with fields: DESIGNED BY (D. THOMPSON), DRAWN BY (D. THOMPSON), CHECKED BY (R. BURNS), IN CHARGE (C. TAYLOR), DATE (02/25/2019).



Project information table with fields: Drawing Title (GENERAL INDEX SHEET 2 OF 5), Scale (NO SCALE), Drawing Status (FINAL), Job No (234180), Drawing No (GEN-00-00004), Rev (01).

VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing numbers 01350-01420 and descriptions for IH-45 SEGMENT.

VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing numbers 01421-01442, 01600-01631, and 01800-01813, covering IH-45 SEGMENT, NAVARRO EAST SEGMENT, and ELLIS EAST SEGMENT.

VOLUME 2B - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Contains drawing numbers 01814-01823 and descriptions for ELLIS EAST SEGMENT.

Table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Includes a revision table and a design description table.

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



Drawing Title: GENERAL INDEX SHEET 3 OF 5
Scale: NO SCALE
Drawing Status: FINAL
Job No: 234180
Drawing No: GEN-00-00005
Rev: 01

PLOT TIME: 5/24/2018 3:22:14 PM
PLOT BY: M-YPWICS01S

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 100+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
CHECKED BY R. BURNS
IN CHARGE C. TAYLOR
DATE 02/25/2019



Drawing Title
GENERAL INDEX SHEET 4 OF 5

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

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)

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



Drawing Title
GENERAL INDEX SHEET 5 OF 5

Scale NO SCALE	Drawing Status FINAL
Job No 234180	Drawing No GEN-00-00007
	Rev 01

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 PREFERRED ALTERNATIVE. ADDITIONAL DESIGN DEVELOPMENT AND REFINEMENT OF ALTERNATIVE A WAS UNDERTAKEN TO MITIGATE IMPACTS AND TO IMPROVE CONSTRUCTABILITY. THIS REPORT ADDRESSES THE REFINED DESIGN APPROACHES AND DETAILS FOR THE SEGMENTS IN BUILD ALTERNATIVE A, FOR ALL OTHER SEGMENTS NOT A PART OF THE PREFERRED 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 (TNRS) AND HOUSTON-GALVESTON AREA COUNCIL (HGAC).
 - DALLAS COUNTY LIDAR, 2009, SOURCED FROM TNRS.
 - HGAC LIDAR, 2008.
 - TNRS LIDAR, 2009-2013.
 - TNRS 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 HH, 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

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



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title

GENERAL NOTES

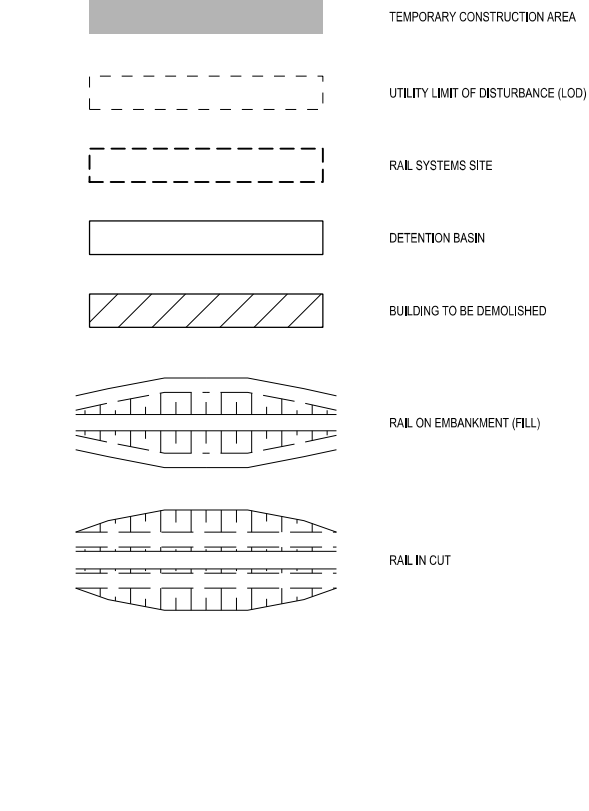
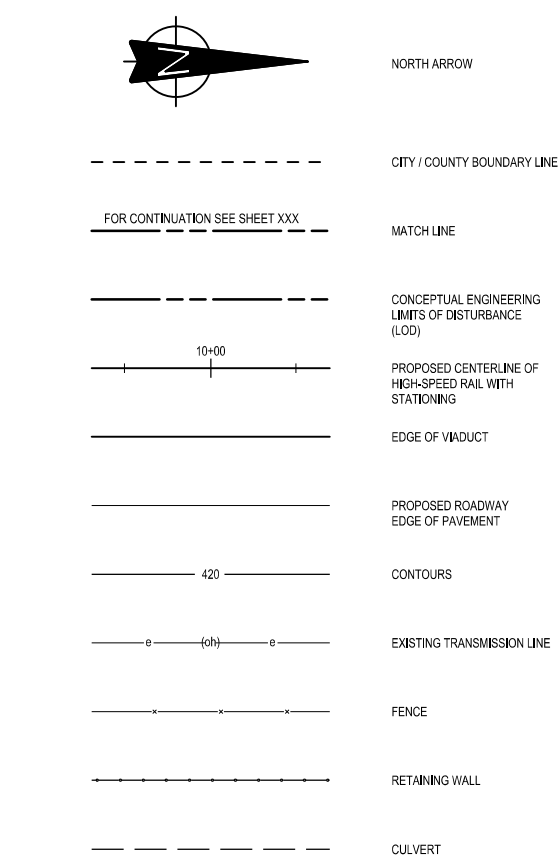
Scale	NO SCALE		
Drawing Status	FINAL		
Job No	Drawing No	Rev	
234180	GEN-00-00008	01	

ABBREVIATIONS

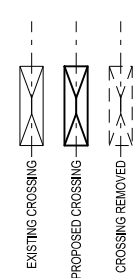
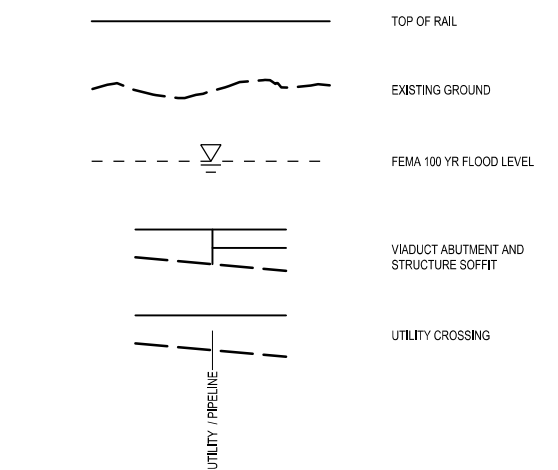
ALT	ALTERNATE ALIGNMENT	SC	SPIRAL CURVE
APPROX	APPROXIMATE	SH	STATE HIGHWAY
ATP	AUTOTRANSFORMER POST	SO	SIDING OFF
AVE	AVENUE	SP	SECTIONING POST
BLVD	BOULEVARD	SSH	SUB-SIGNAL HOUSE
BNSF	BURLINGTON NORTH SANTE FE RAILROAD	SSP	SUB-SECTIONING POST
BOT	BOTTOM	ST	STREET, SPIRAL TO TANGENT
CH	COMMUNICATION HOUSE	STA	STATION
CO RD	COUNTY ROAD	STD	STANDARD
CL	CENTERLINE	SYM	SYMMETRICAL
C	CENTERLINE	TBD	TO BE DETERMINED
CLSM	CONTROLLED LOW STRENGTH MATERIAL	TCEQ	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CO	COUNTY	TEMP	TEMPORARY
CR	COUNTY ROAD	THFN	TEXAS HIGHWAY FREIGHT NETWORK
CS	CURVE TO SPIRAL	TMF	TRAINSET MAINTENANCE FACILITY
CVL	CIVIL	TPSS	TRACTION POWER SUBSTATION
DIA	DIAMETER	TS	TANGENT SPIRAL
DIST	DISTANCE, DISTRICT	TYP	TYPICAL
DR	DRIVE	TOR	TOP OF RAIL
DRG	DRAWING	US	UNITED STATES, UNITED STATES HIGHWAY
DS	DALLAS SEGMENT	UPRR	UNION PACIFIC RAILROAD
DSN	DALLAS SEGMENT NORTH	VAR	VARIABLE
DSS	DALLAS SEGMENT SOUTH	VERT, V	VERTICAL
DT	DALLAS TERMINUS SEGMENT	WB	WESTBOUND
DWY	DRIVEWAY	WT	WEST OF TEAGUE
Ea	ACTUAL SUPERELEVATION	XING	CROSSING
EE	ELLIS EAST SEGMENT	YR	YEAR
ELECT	ELECTRIC		
ELEV	ELEVATION		
EMB	EMBANKMENT		
ENGR	ENGINEER		
EPA	ENVIRONMENTAL PROTECTION AGENCY		
ERMISA	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



PROFILE



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.

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



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

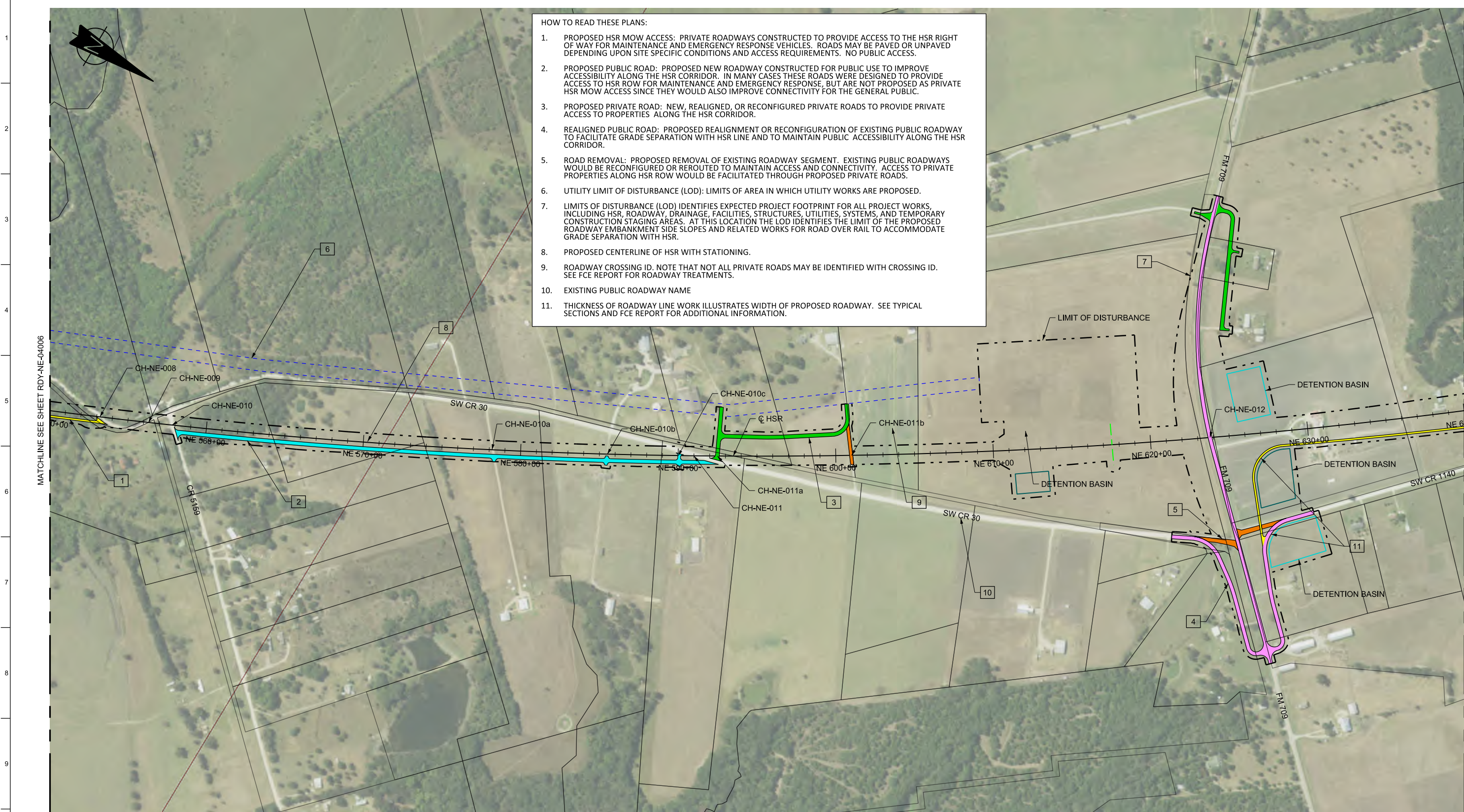


1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

GENERAL ABBREVIATIONS AND LEGEND

Scale NO SCALE		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-00009	Rev 01



HOW TO READ THESE PLANS:

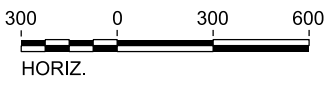
1. PROPOSED HSR MOW ACCESS: PRIVATE ROADWAYS CONSTRUCTED TO PROVIDE ACCESS TO THE HSR RIGHT OF WAY FOR MAINTENANCE AND EMERGENCY RESPONSE VEHICLES. ROADS MAY BE PAVED OR UNPAVED DEPENDING UPON SITE SPECIFIC CONDITIONS AND ACCESS REQUIREMENTS. NO PUBLIC ACCESS.
2. PROPOSED PUBLIC ROAD: PROPOSED NEW ROADWAY CONSTRUCTED FOR PUBLIC USE TO IMPROVE ACCESSIBILITY ALONG THE HSR CORRIDOR. IN MANY CASES THESE ROADS WERE DESIGNED TO PROVIDE ACCESS TO HSR ROW FOR MAINTENANCE AND EMERGENCY RESPONSE, BUT ARE NOT PROPOSED AS PRIVATE HSR MOW ACCESS SINCE THEY WOULD ALSO IMPROVE CONNECTIVITY FOR THE GENERAL PUBLIC.
3. PROPOSED PRIVATE ROAD: NEW, REALIGNED, OR RECONFIGURED PRIVATE ROADS TO PROVIDE PRIVATE ACCESS TO PROPERTIES ALONG THE HSR CORRIDOR.
4. REALIGNED PUBLIC ROAD: PROPOSED REALIGNMENT OR RECONFIGURATION OF EXISTING PUBLIC ROADWAY TO FACILITATE GRADE SEPARATION WITH HSR LINE AND TO MAINTAIN PUBLIC ACCESSIBILITY ALONG THE HSR CORRIDOR.
5. ROAD REMOVAL: PROPOSED REMOVAL OF EXISTING ROADWAY SEGMENT. EXISTING PUBLIC ROADWAYS WOULD BE RECONFIGURED OR REROUTED TO MAINTAIN ACCESS AND CONNECTIVITY. ACCESS TO PRIVATE PROPERTIES ALONG HSR ROW WOULD BE FACILITATED THROUGH PROPOSED PRIVATE ROADS.
6. UTILITY LIMIT OF DISTURBANCE (LOD): LIMITS OF AREA IN WHICH UTILITY WORKS ARE PROPOSED.
7. LIMITS OF DISTURBANCE (LOD) IDENTIFIES EXPECTED PROJECT FOOTPRINT FOR ALL PROJECT WORKS, INCLUDING HSR, ROADWAY, DRAINAGE, FACILITIES, STRUCTURES, UTILITIES, SYSTEMS, AND TEMPORARY CONSTRUCTION STAGING AREAS. AT THIS LOCATION THE LOD IDENTIFIES THE LIMIT OF THE PROPOSED ROADWAY EMBANKMENT SIDE SLOPES AND RELATED WORKS FOR ROAD OVER RAIL TO ACCOMMODATE GRADE SEPARATION WITH HSR.
8. PROPOSED CENTERLINE OF HSR WITH STATIONING.
9. ROADWAY CROSSING ID. NOTE THAT NOT ALL PRIVATE ROADS MAY BE IDENTIFIED WITH CROSSING ID. SEE FCE REPORT FOR ROADWAY TREATMENTS.
10. EXISTING PUBLIC ROADWAY NAME
11. THICKNESS OF ROADWAY LINE WORK ILLUSTRATES WIDTH OF PROPOSED ROADWAY. SEE TYPICAL SECTIONS AND FCE REPORT FOR ADDITIONAL INFORMATION.

MATCHLINE SEE SHEET RDY-NE-04006

MATCHLINE SEE SHEET RDY-NE-04008

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. ALMAGUER

DRAWN BY
P. TONKIN

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
GENERAL

ROADWAY ANNOTATION TO CLARIFY DESIGN INTENT

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-00011	Rev 01

VOLUME 4A

NOT USED

(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



Drawing Title
GENERAL

Scale NO SCALE		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-0000	Rev 01

VOLUME 4B

ROADWAY PLAN SHEETS

(SEGMENTS IH, NE, EE)

NOTE:

AFTER RELEASE OF THE DRAFT EIS (DEIS), WHICH IDENTIFIED ALTERNATIVE A AS THE PREFERRED ALTERNATIVE, ADDITIONAL DESIGN DEVELOPMENT AND REFINEMENT OF ALTERNATIVE A WAS UNDERTAKEN TO MITIGATE IMPACTS AND TO IMPROVE CONSTRUCTABILITY. THIS REPORT ADDRESSES THE REFINED DESIGN APPROACHES AND DETAILS FOR THE SEGMENTS IN BUILD ALTERNATIVE A. FOR ALL OTHER SEGMENTS NOT A PART OF THE PREFERRED ALTERNATIVE (ELLIS EAST, NAVARRO EAST, AND IH-45 SEGMENTS), NO CHANGES TO DESIGN WERE 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.

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

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE AND NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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 234180	Drawing No GEN-00-0000	Rev 01

VOLUME 4B-3

IH-45 SEGMENT

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR

DRAWN BY
D. THOMPSON

CHECKED BY
R. BURNS

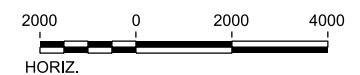
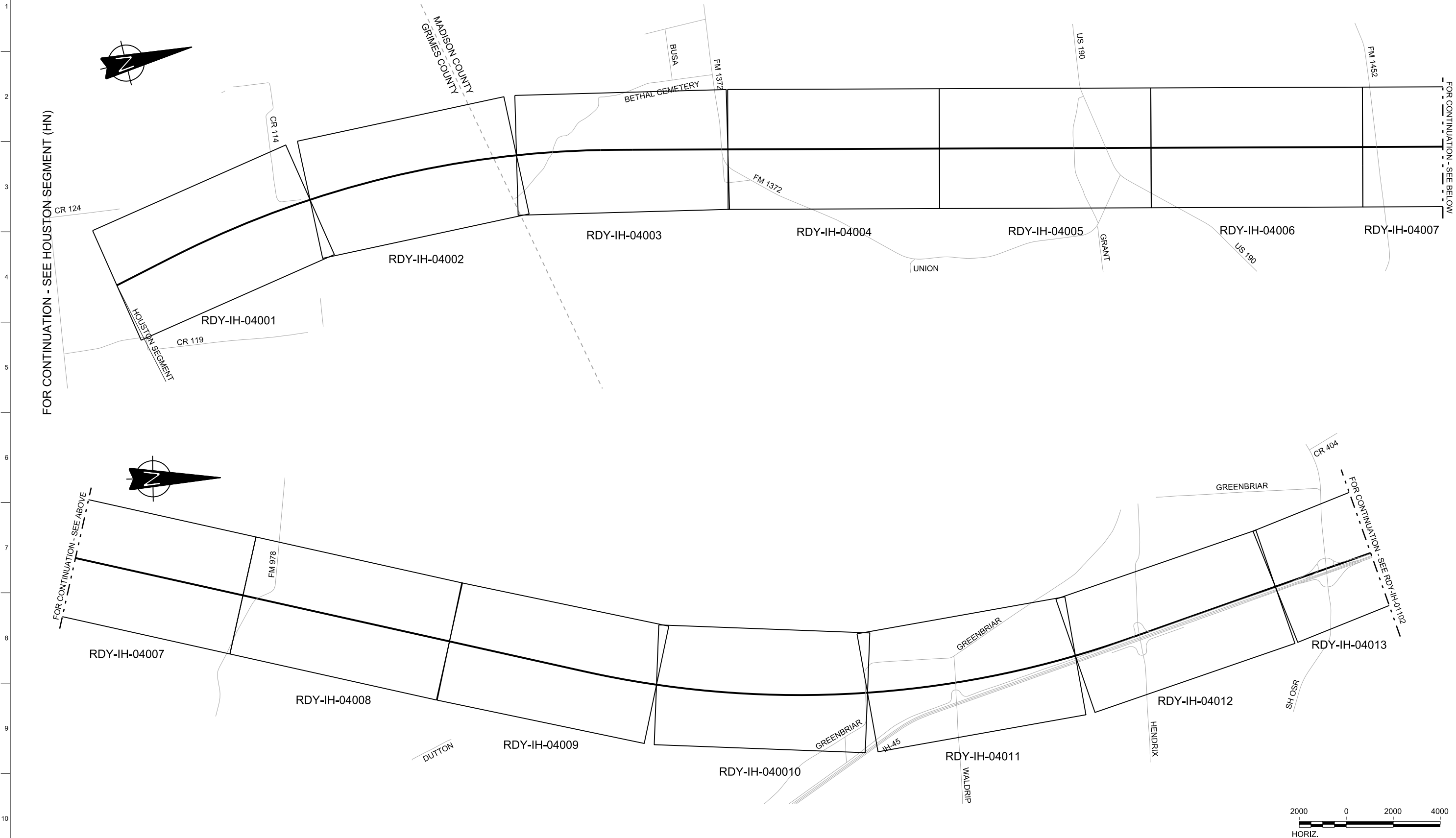
IN CHARGE
C. TAYLOR

DATE
2/25/2019



Drawing Title
GENERAL

Scale NO SCALE		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-0000	Rev 01



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
D. THOMPSON
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019

ARUP
Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

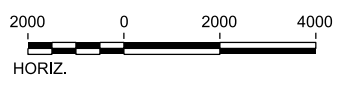
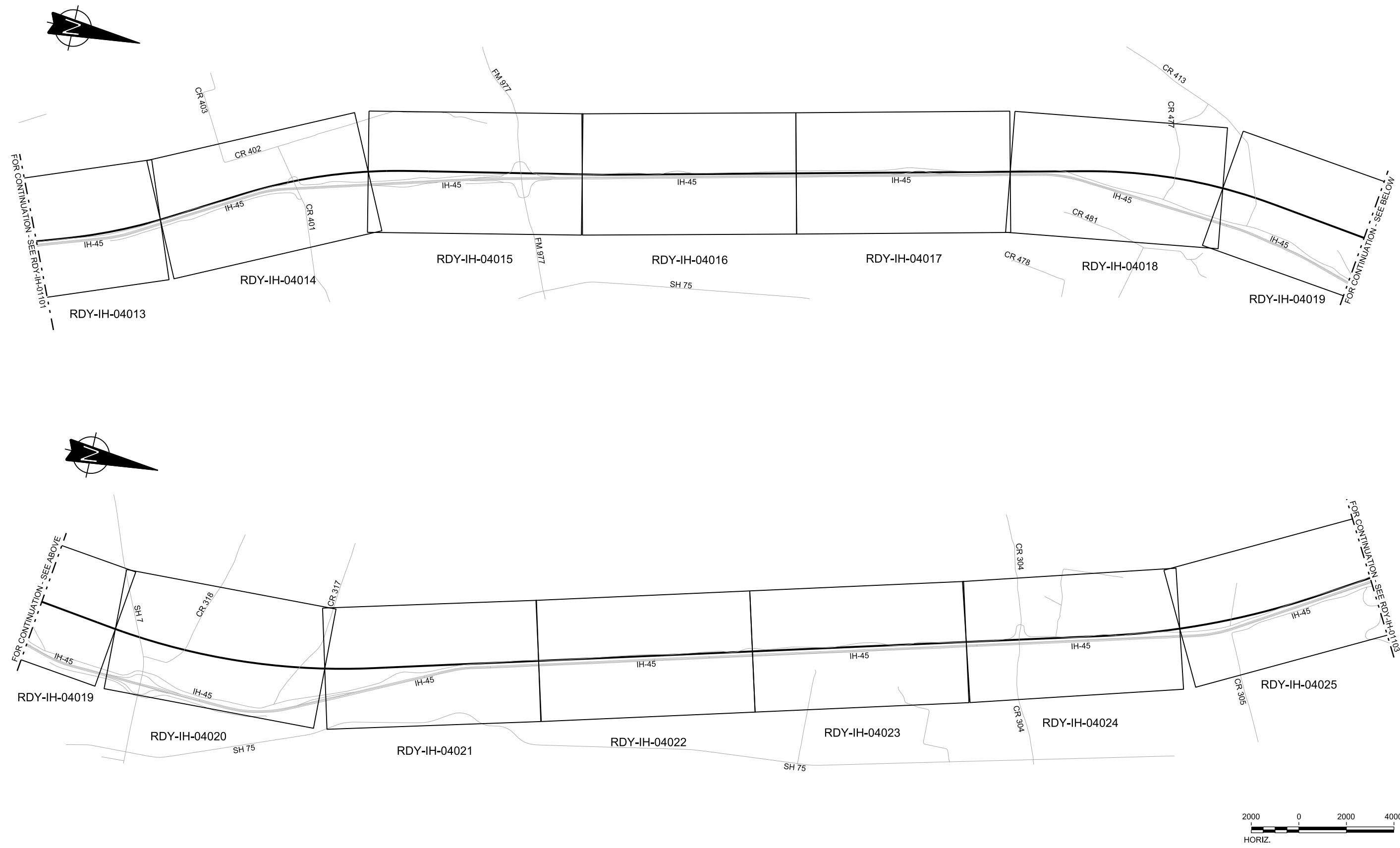
FREESSE & NICHOLS
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 1 OF 5
IH1 10+00 TO IH1 1120+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-01101	Rev 01



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
D. THOMPSON
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

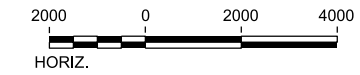
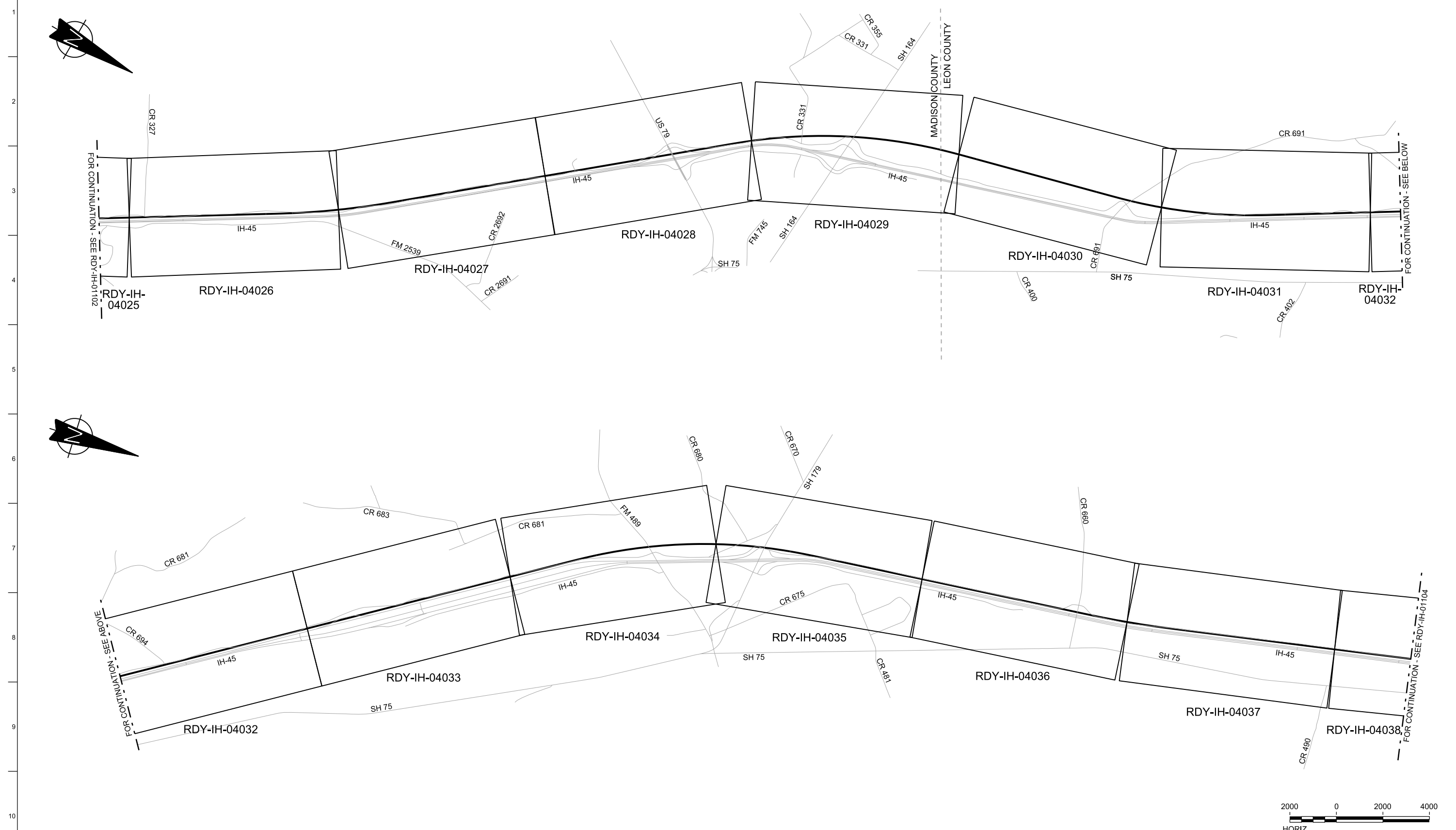
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 2 OF 5
IH1 1120+00 TO IH1 2240+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-01102	Rev 01



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
D. THOMPSON

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

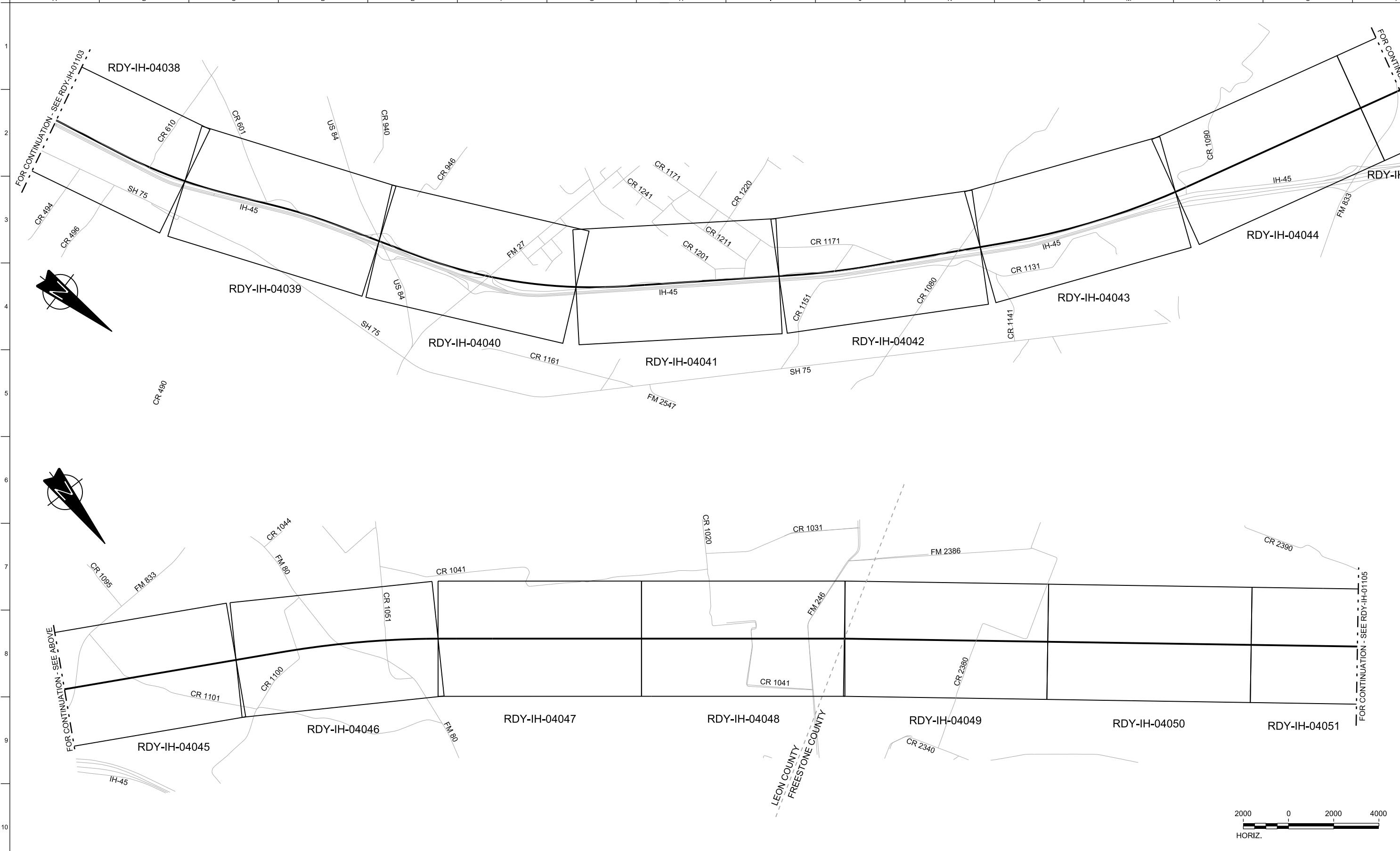
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freesse.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

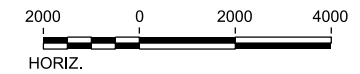
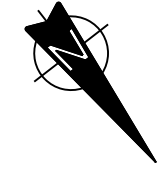
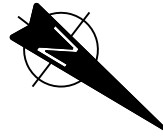
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**IH (45) SEGMENT
 CIVIL HIGHWAY
 KEY MAP - SHEET 3 OF 5
 IH1 2240+00 TO IH1 3360+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-01103	Rev 01



PLOT BY: NYPWICS01S PLOT TIME: 4/30/2019 8:48:54 PM



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
D. THOMPSON
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019

ARUP
Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

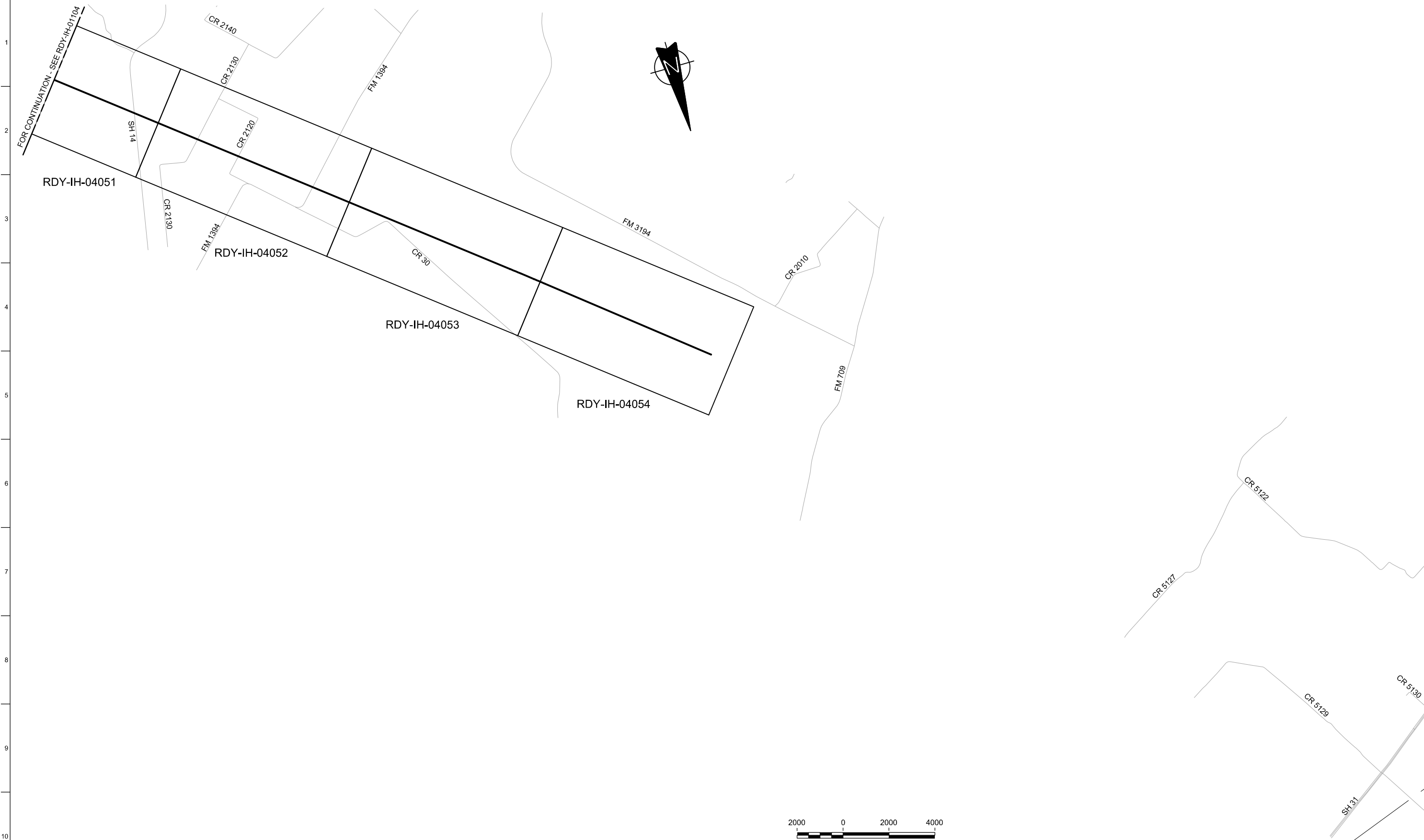
FRESE AND NICHOLS
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 4 OF 5
IH1 3360+00 TO IH2 224+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-01104	Rev 01



FOR CONTINUATION - SEE NAVARRO WEST SEGMENT (NW)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
D. THOMPSON

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 5 OF 5
IH2 224+00 TO IH2 540+81**

Scale
AS SHOWN

Drawing Status
FINAL

Job No 234180	Drawing No RDY-IH-01105	Rev 01
-------------------------	-----------------------------------	------------------

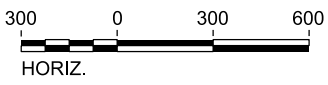


FOR CONTINUATION - SEE HOUSTON SEGMENT (HN)

MATCHLINE SEE SHEET RDY-IH-04002

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (RAIL)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		DETENTION BASIN (ROAD)
	REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 10+00 TO IH1 100+00**

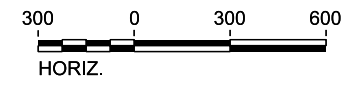
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04001	Rev 01



MATCHLINE SEE SHEET RDY-IH1-04001

MATCHLINE SEE SHEET RDY-IH1-04003

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREES & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 100+00 TO IH1 190+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04002	Rev 01



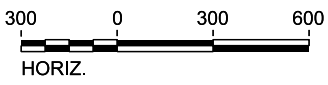
MATCHLINE SEE SHEET RDY-IH1-04002

MATCHLINE SEE SHEET RDY-IH1-04004

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 190+00 TO IH1 280+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04003	Rev 01

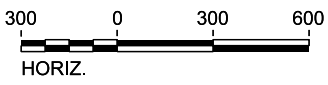


MATCHLINE SEE SHEET RDY-IH1-04003

MATCHLINE SEE SHEET RDY-IH1-04005

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 280+00 TO IH1 370+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04004	Rev 01

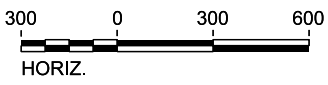


MATCHLINE SEE SHEET RDY-IH1-04004

MATCHLINE SEE SHEET RDY-IH1-04006

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

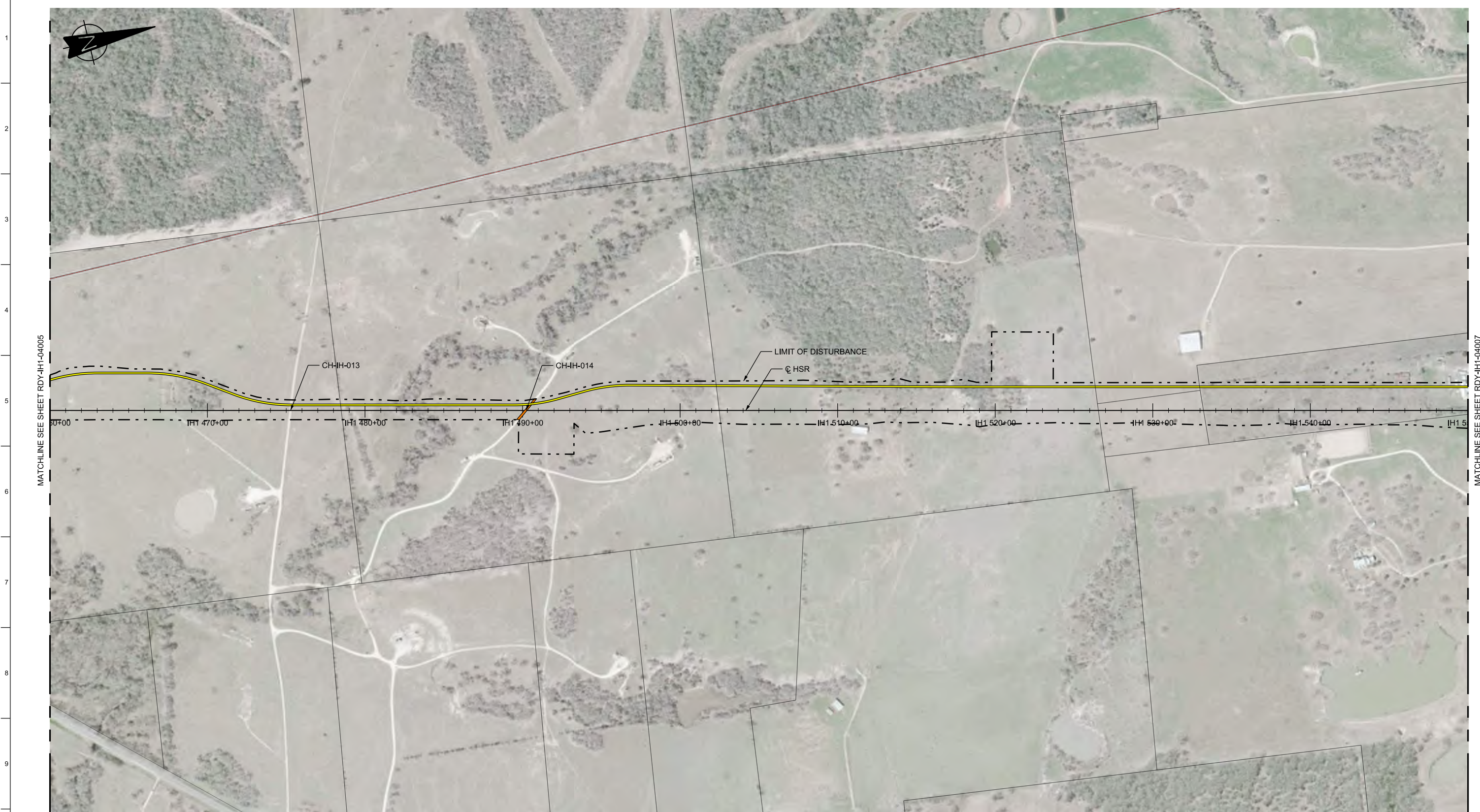
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 370+00 TO IH1 460+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04005	Rev 01



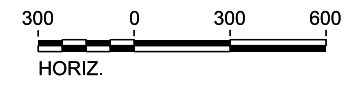
MATCHLINE SEE SHEET RDY-IH1-04005

MATCHLINE SEE SHEET RDY-IH1-04007

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELSI

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

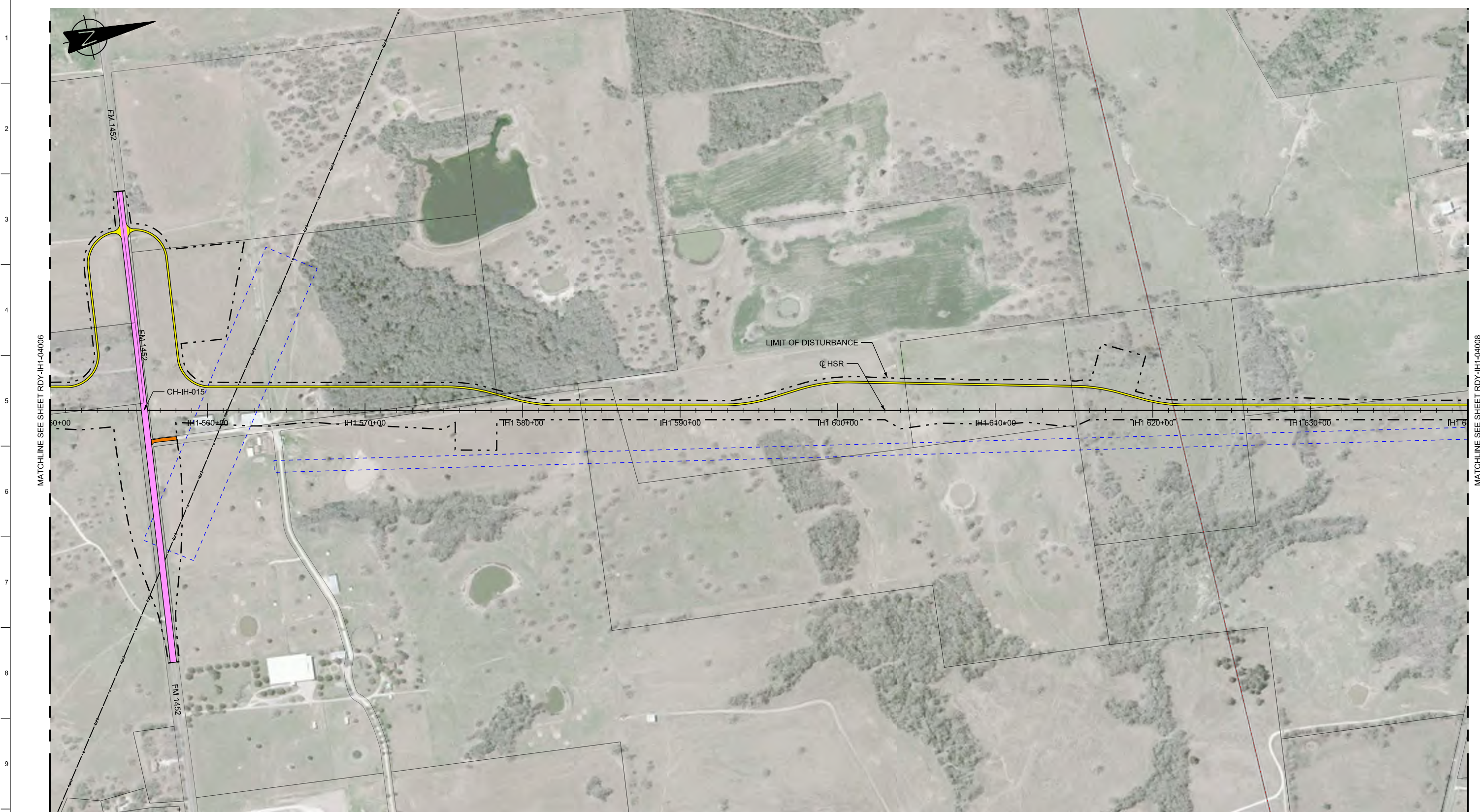
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 460+00 TO IH1 550+00**

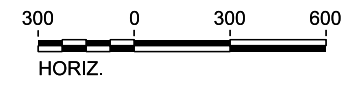
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04006	Rev 01



MATCHLINE SEE SHEET RDY-IH1-04006

MATCHLINE SEE SHEET RDY-IH1-04008

LEGEND							
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND				
	REALIGNED PUBLIC ROAD						



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

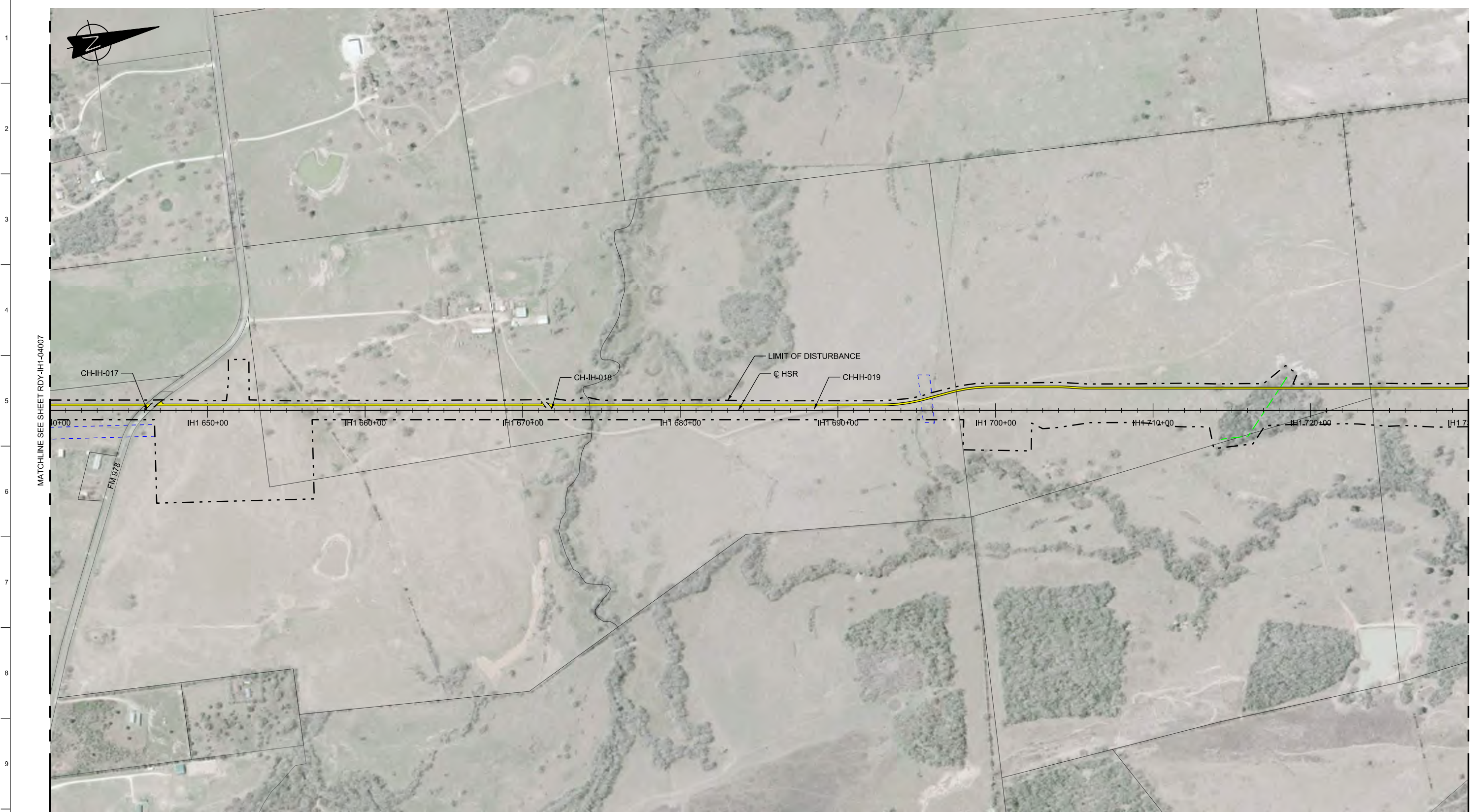
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 550+00 TO IH1 640+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04007	Rev 01



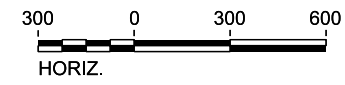
MATCHLINE SEE SHEET RDY-IH1-04007

MATCHLINE SEE SHEET RDY-IH1-04009

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

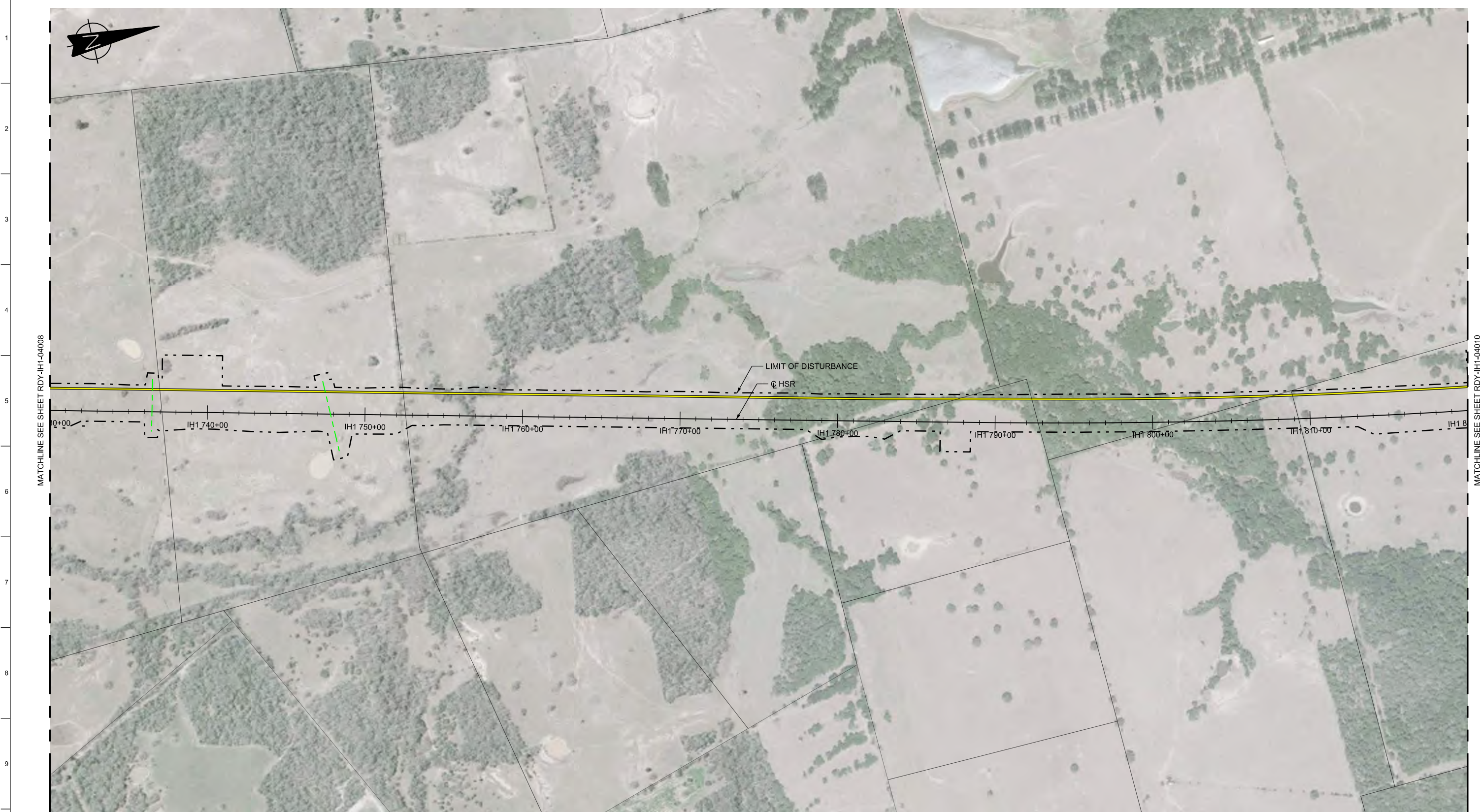
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 640+00 TO IH1 730+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04008	Rev 01



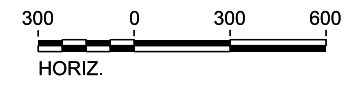
MATCHLINE SEE SHEET RDY-IH1-04008

MATCHLINE SEE SHEET RDY-IH1-04010

LIMIT OF DISTURBANCE
 C HSR

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		ELECTRICAL TRANS. LINE
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD				



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
 DRAWN BY
J. ALMAGUER
 CHECKED BY
G. VOWELS
 IN CHARGE
C. TAYLOR
 DATE
02/25/2019



Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 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
**WEST OF TEAGUE SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 IH1 730+00 TO IH1 820+00**

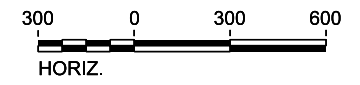
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04009	Rev 01



MATCHLINE SEE SHEET RDY-IH1-04009

MATCHLINE SEE SHEET RDY-IH1-04011

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

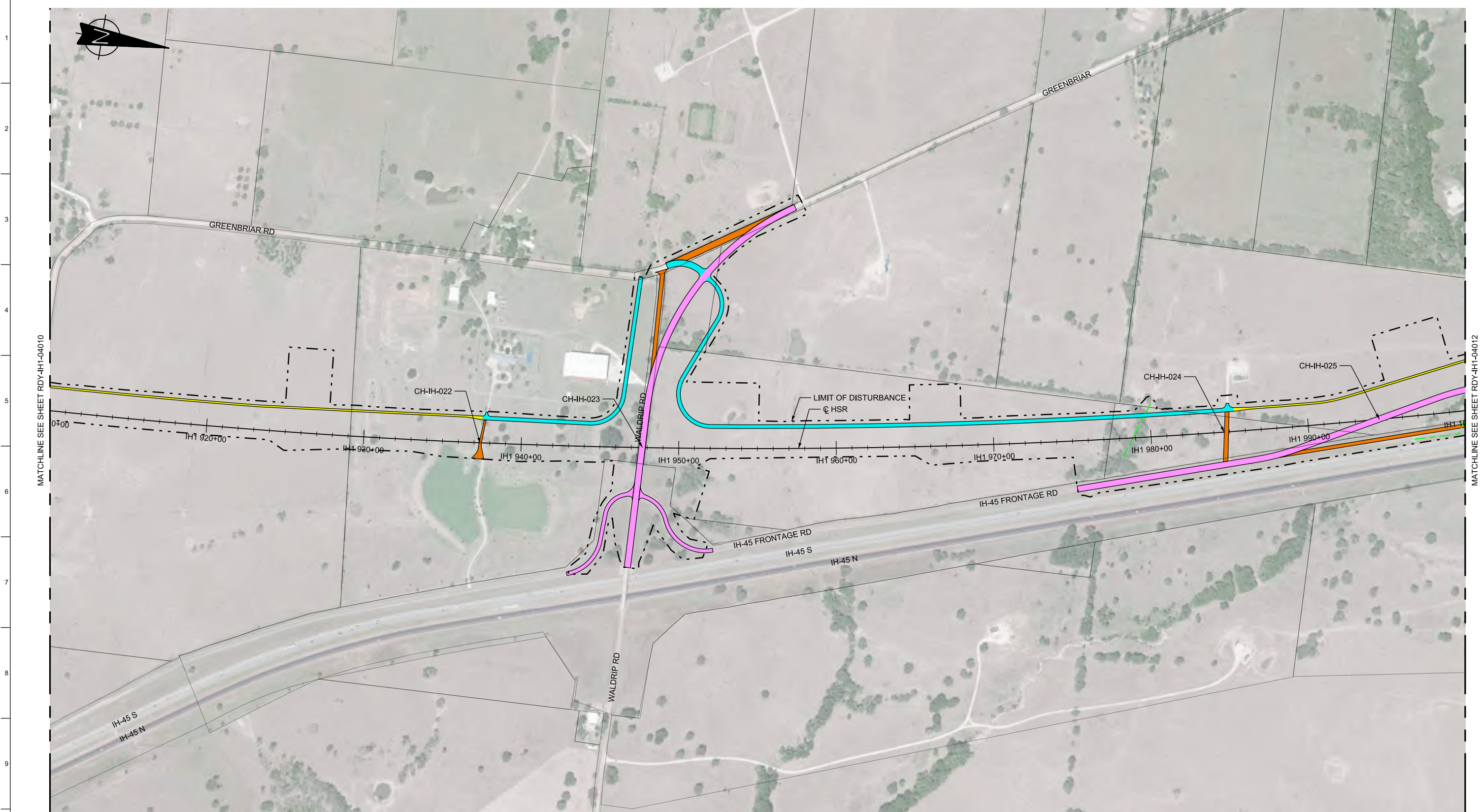
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 820+00 TO IH1 910+00**

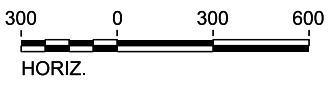
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04010	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

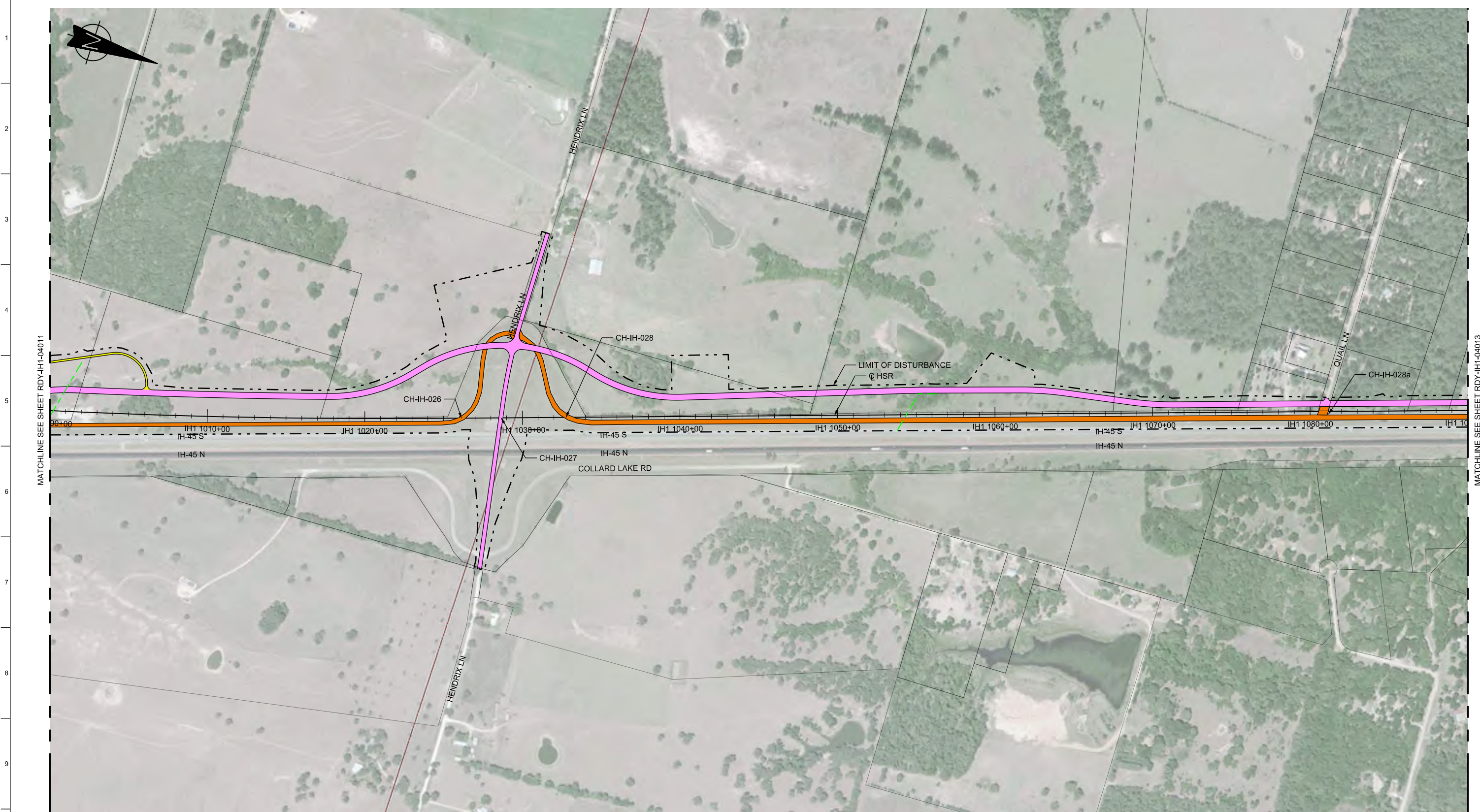
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 910+00 TO IH1 1000+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04011	Rev 01

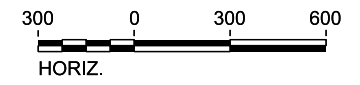


MATCHLINE SEE SHEET RDY-IH1-04011

MATCHLINE SEE SHEET RDY-IH1-04013

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

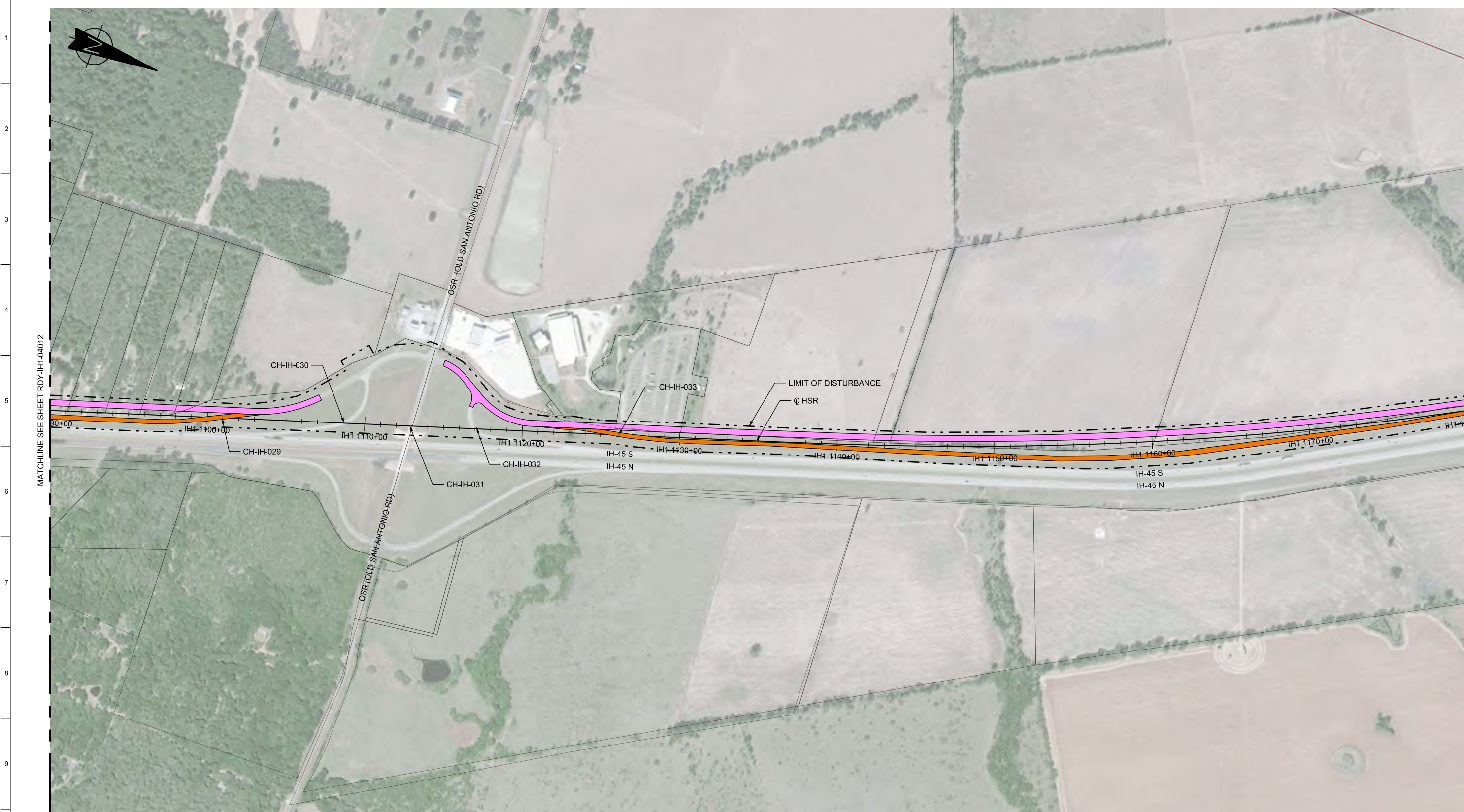
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1000+00 TO IH1 1090+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04012	Rev 01



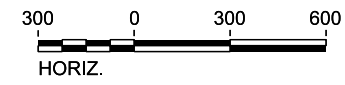
MATCHLINE SEE SHEET RDY-IH1-04012

MATCHLINE SEE SHEET RDY-IH1-04014

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



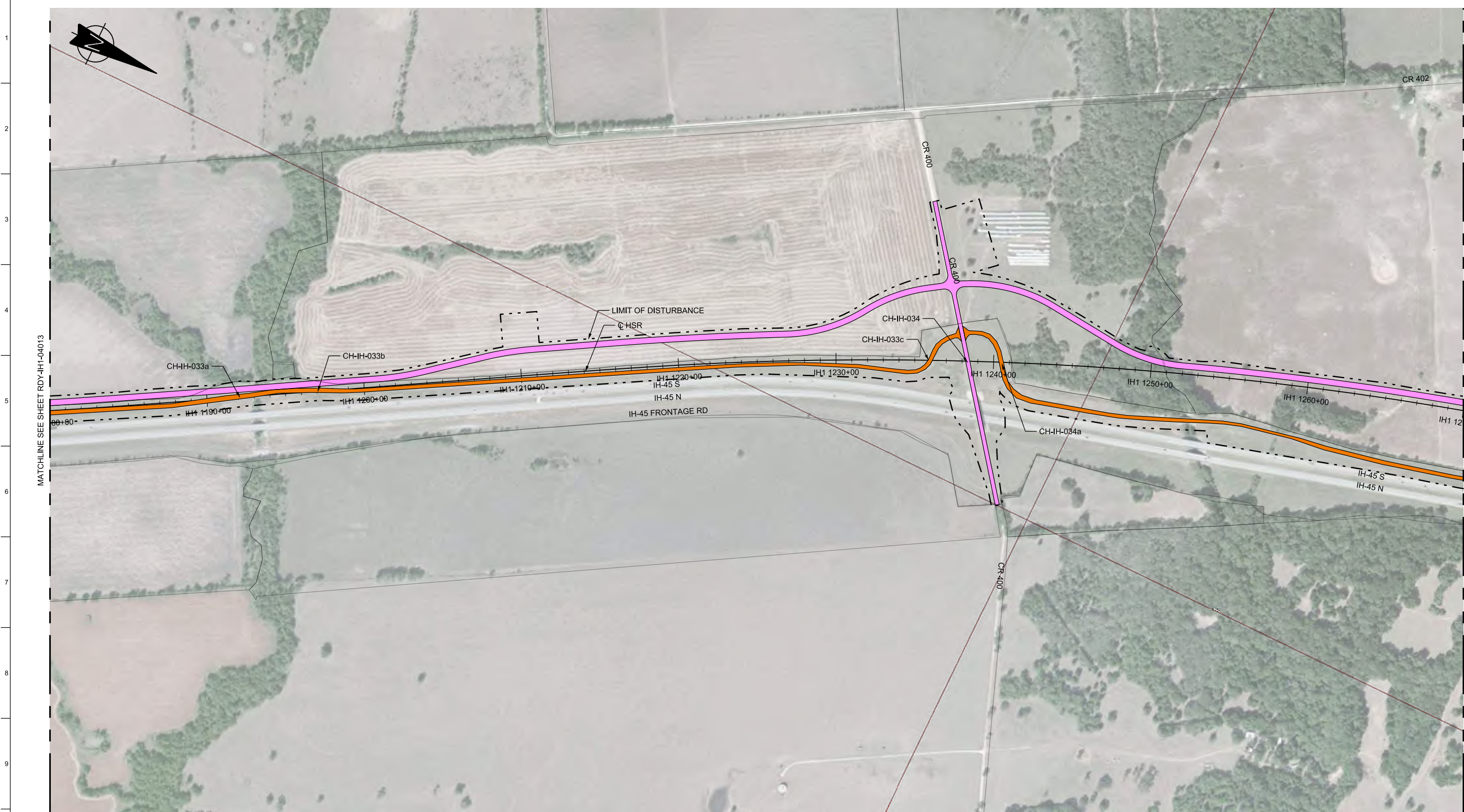
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1090+00 TO IH1 1180+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04013	Rev 01



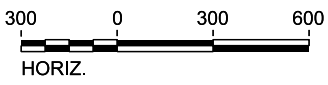
MATCHLINE SEE SHEET RDY-IH1-04013

MATCHLINE SEE SHEET RDY-IH1-04015

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		DETENTION BASIN (ROAD)		PROPOSED CULVERTS / DITCH REALIGNMENT
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1180+00 TO IH1 1270+00**

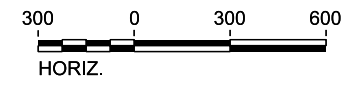
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04014	Rev 01



MATCHLINE SEE SHEET RDY-IH1-04014

MATCHLINE SEE SHEET RDY-IH1-04016

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

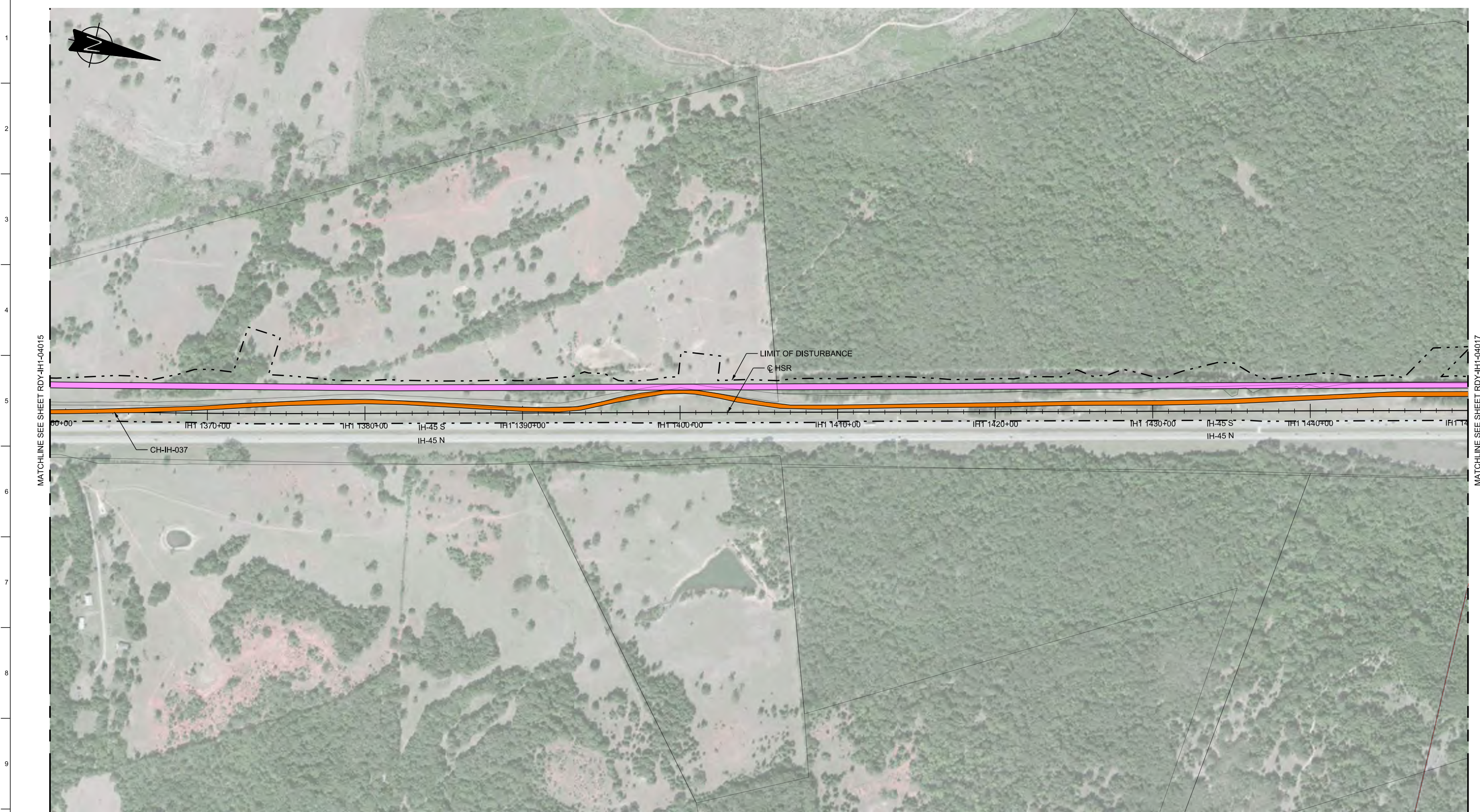
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1270+00 TO IH1 1360+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04015	Rev 01

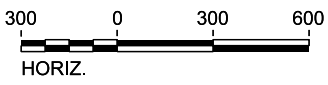


MATCHLINE SEE SHEET RDY-IH1-04015

MATCHLINE SEE SHEET RDY-IH1-04017

PLAN

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

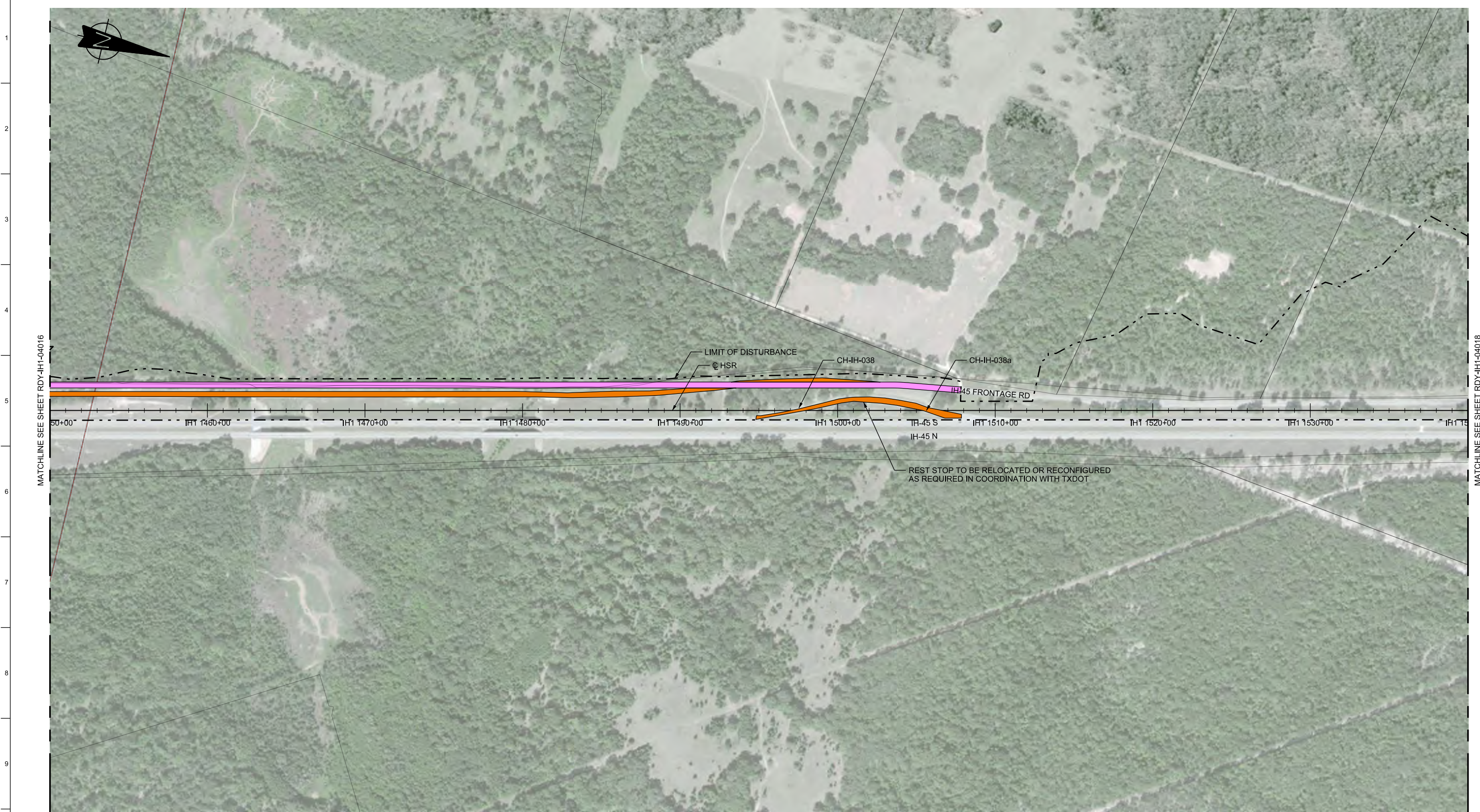
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1360+00 TO IH1 1450+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04016	Rev 01

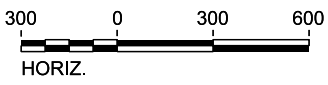


MATCHLINE SEE SHEET RDY-IH1-04016

MATCHLINE SEE SHEET RDY-IH1-04018

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREES & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

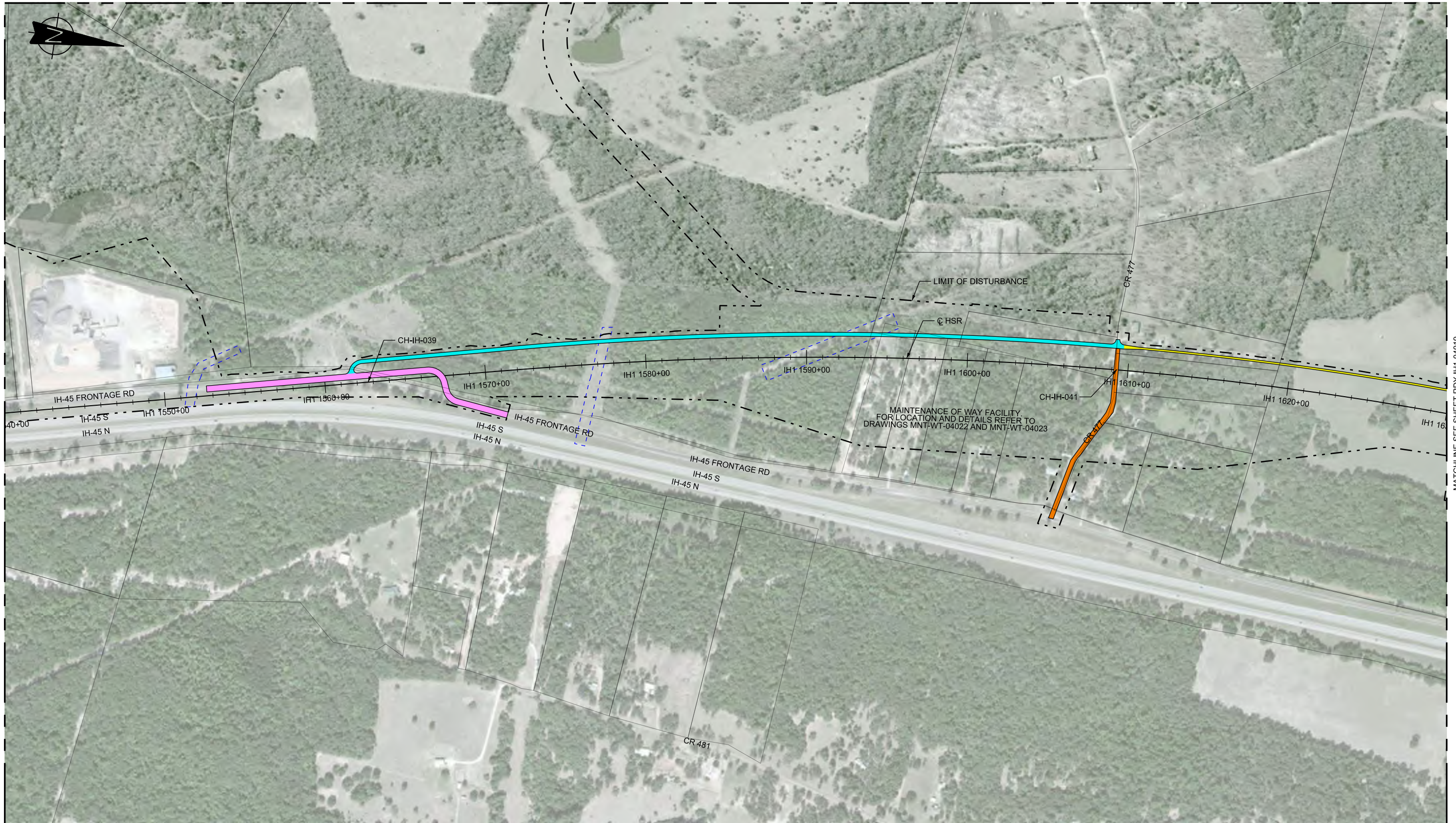
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1450+00 TO IH1 1540+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04017	Rev 01

MATCHLINE SEE SHEET RDY-IH1-04017

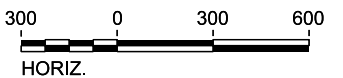
MATCHLINE SEE SHEET RDY-IH1-04019



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. COLQUHOUN
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

FREES & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.frees.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 IH1 1540+00 TO IH1 1630+00**

Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-IH-04018	Rev 01

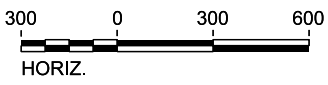


MATCHLINE SEE SHEET RDY-IH1-04018

MATCHLINE SEE SHEET RDY-IH1-04020

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1630+00 TO IH1 1720+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04019	Rev 01



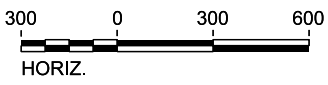
MATCHLINE SEE SHEET RDY-IH1-04019

MATCHLINE SEE SHEET RDY-IH1-04021

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		ELECTRICAL TRANS. LINE
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD				DETENTION BASIN (ROAD)

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

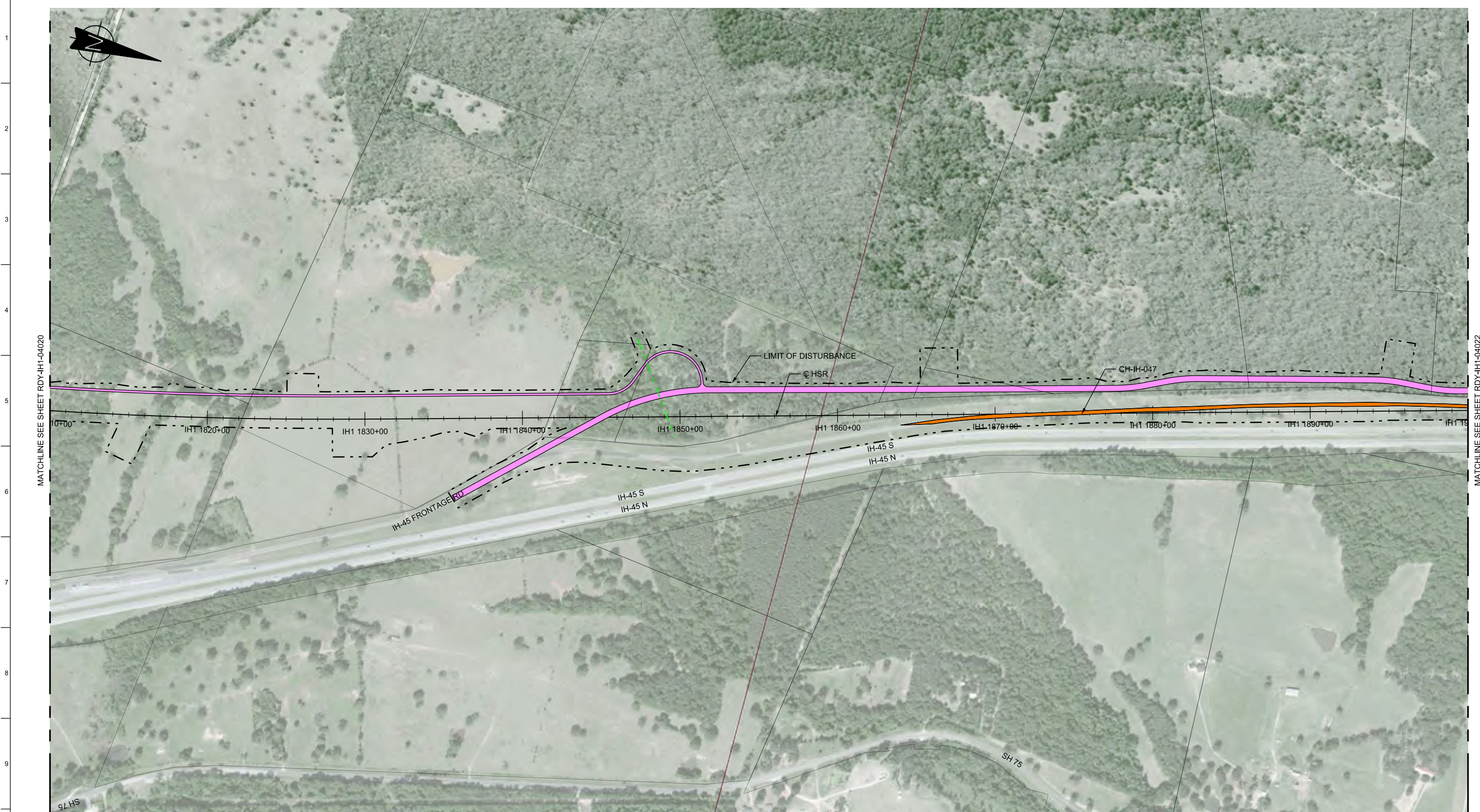
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

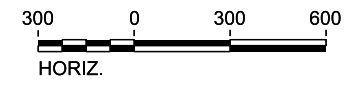
Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1720+00 TO IH1 1810+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04020	Rev 01



LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



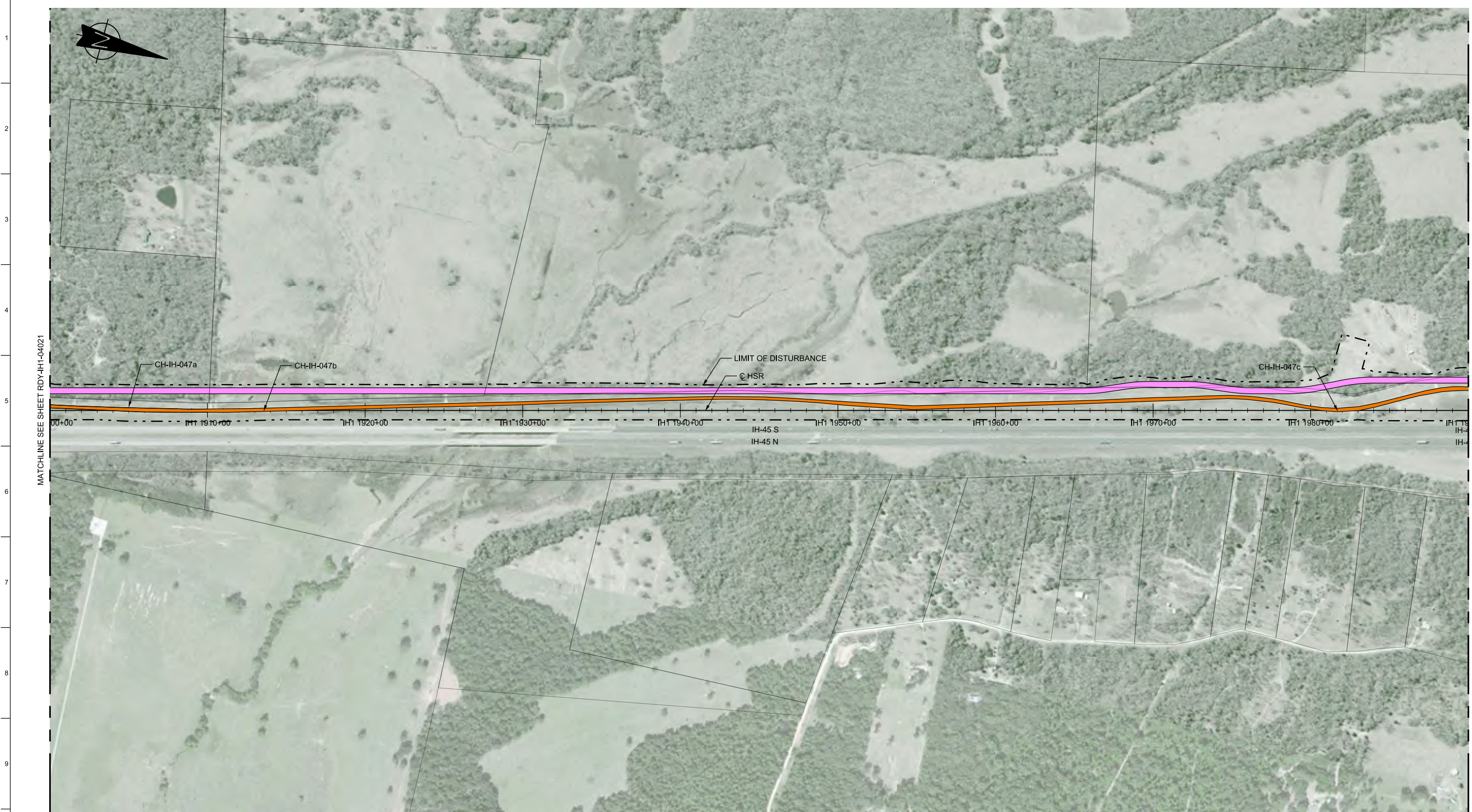
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1810+00 TO IH1 1900+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04021	Rev 01

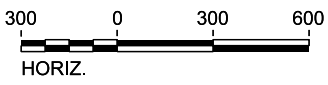


MATCHLINE SEE SHEET RDY-IH1-04021

MATCHLINE SEE SHEET RDY-IH1-04023

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

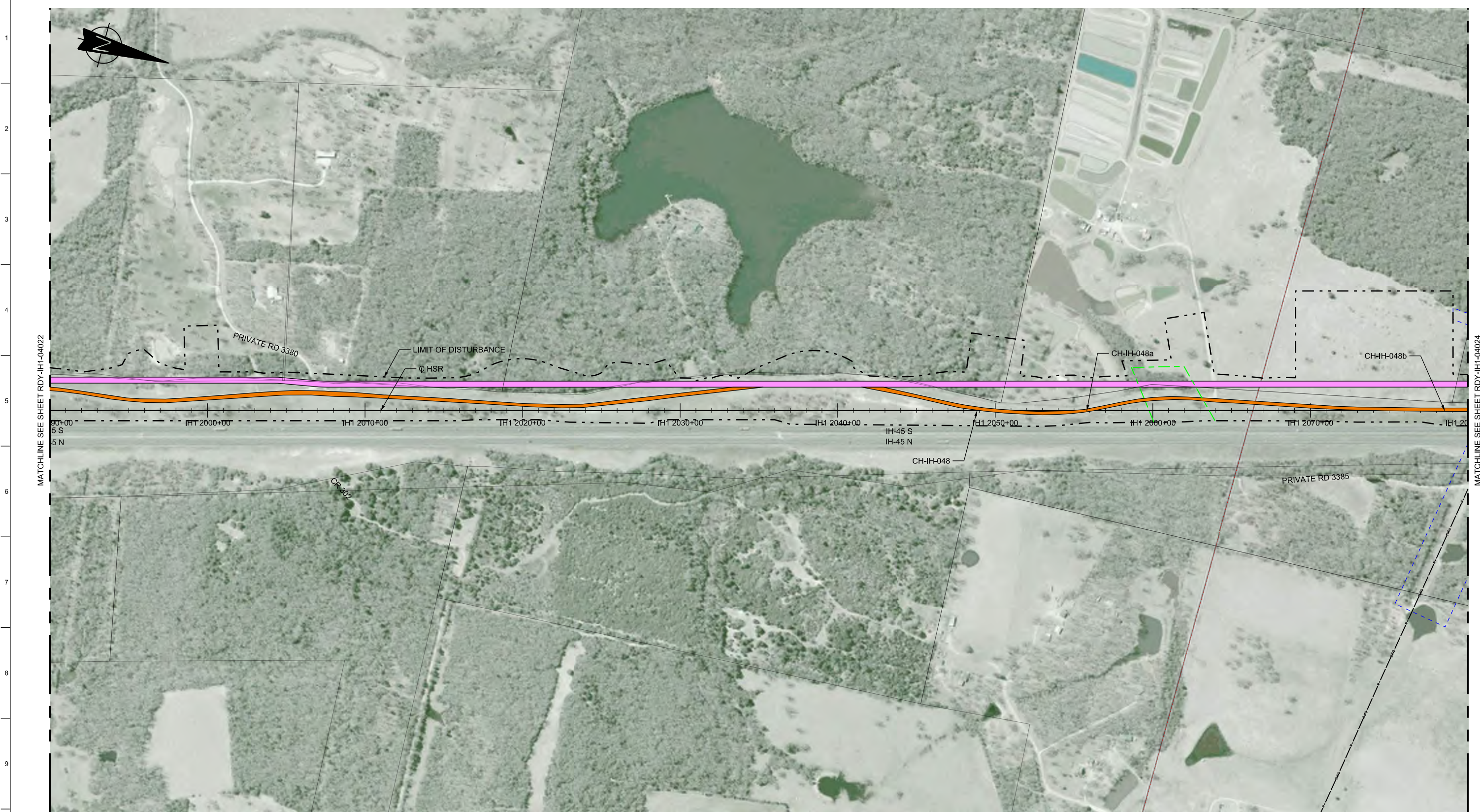
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

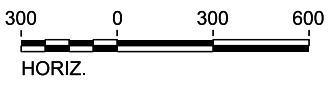
Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1900+00 TO IH1 1990+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04022	Rev 01



LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 1990+00 TO IH1 2080+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04023	Rev 01



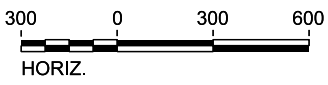
MATCHLINE SEE SHEET RDY-IH1-04023

MATCHLINE SEE SHEET RDY-IH1-04025

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		DETENTION BASIN (ROAD)		PROPOSED CULVERTS / DITCH REALIGNMENT
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

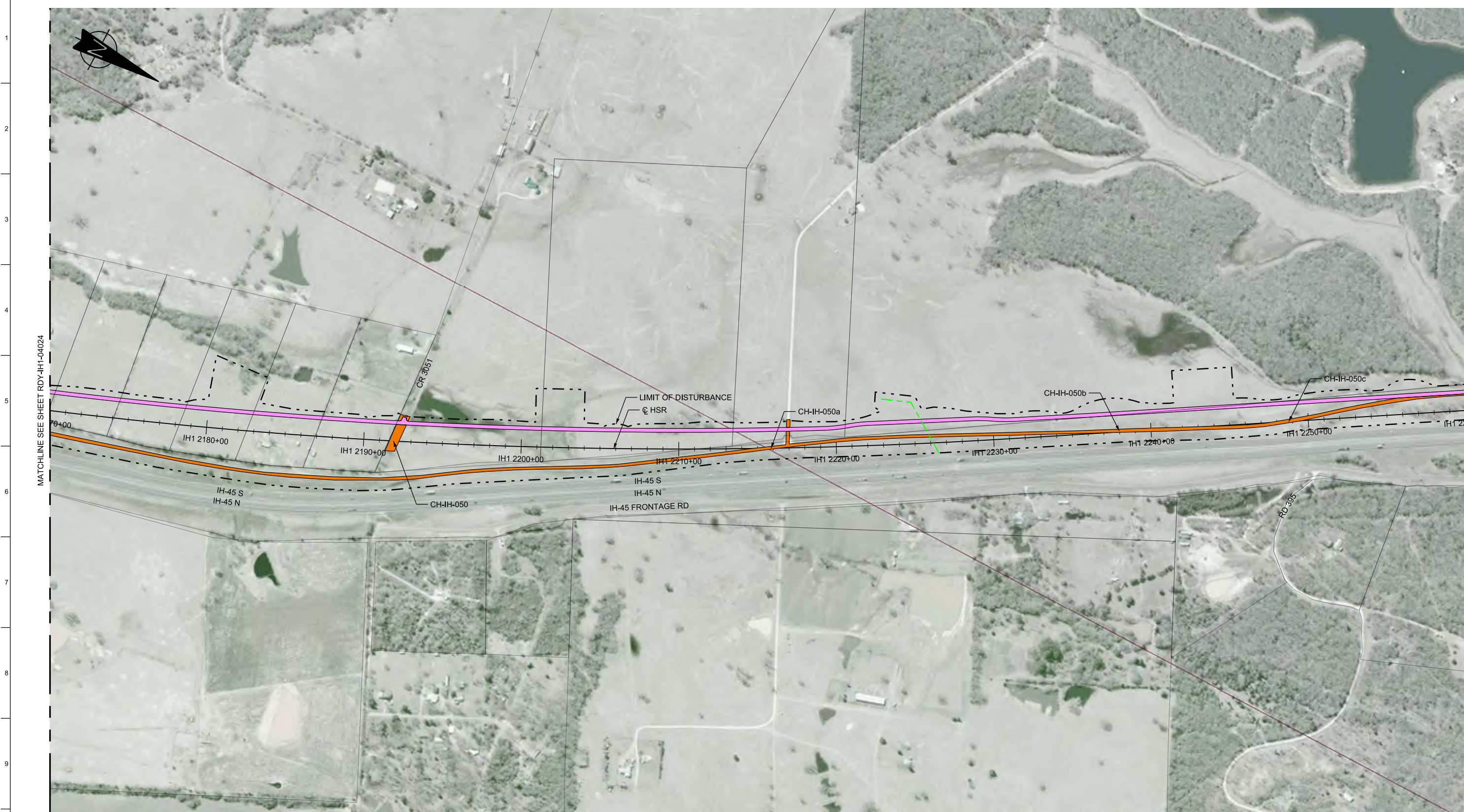
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2080+00 TO IH1 2170+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04024	Rev 01

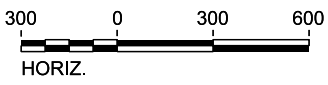


MATCHLINE SEE SHEET RDY-IH1-04024

MATCHLINE SEE SHEET RDY-IH1-04026

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2170+00 TO IH1 2260+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04025	Rev 01

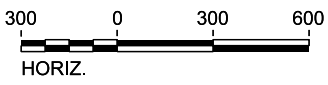


MATCHLINE SEE SHEET RDY-IH1-04025

MATCHLINE SEE SHEET RDY-IH1-04027

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

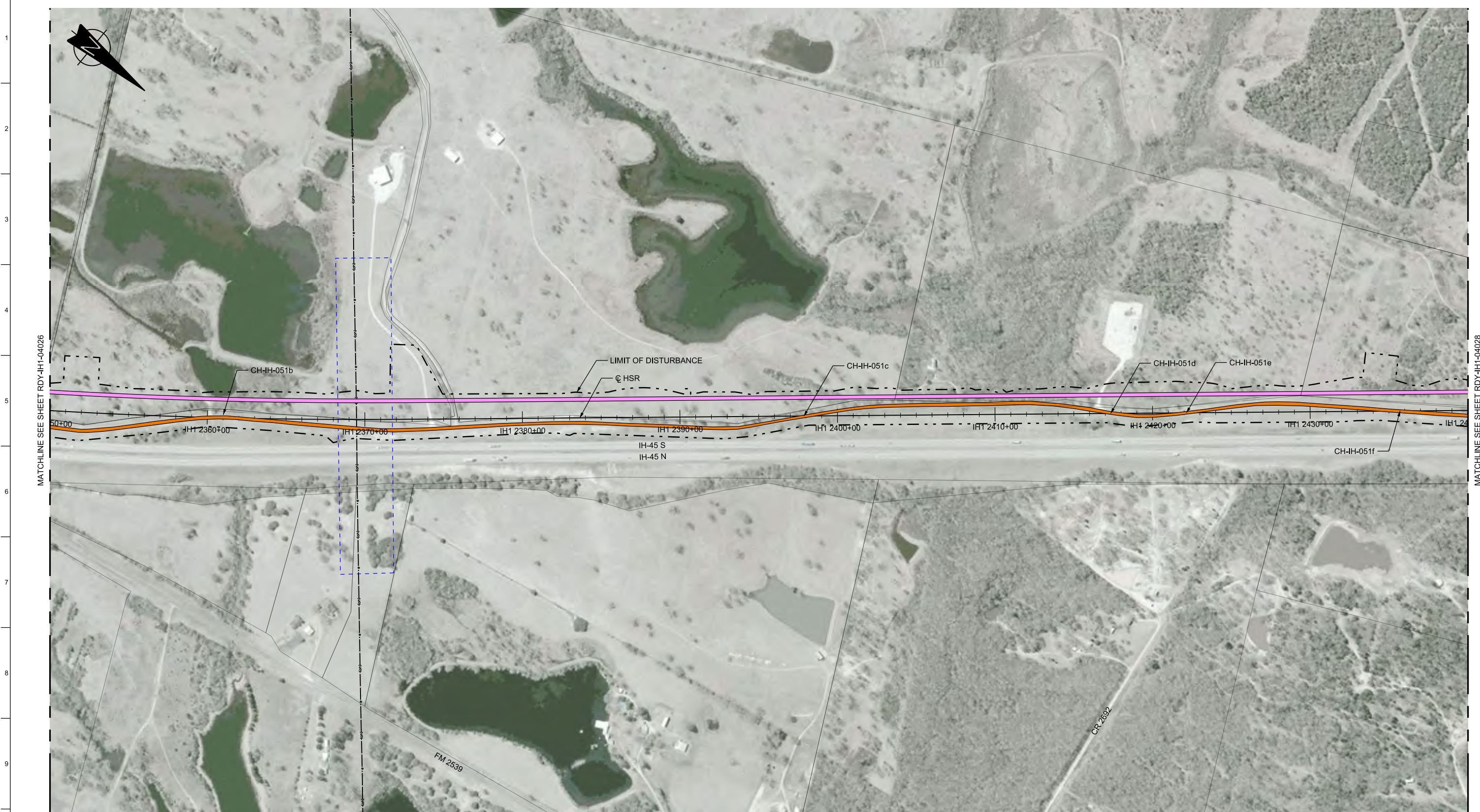
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

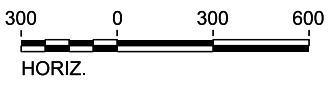
Drawing Title
**IH (45) SEGMENT RAILWAY
PLAN VIEW - STA.
IH1 2260+00 TO IH1 2350+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04026	Rev 01



LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

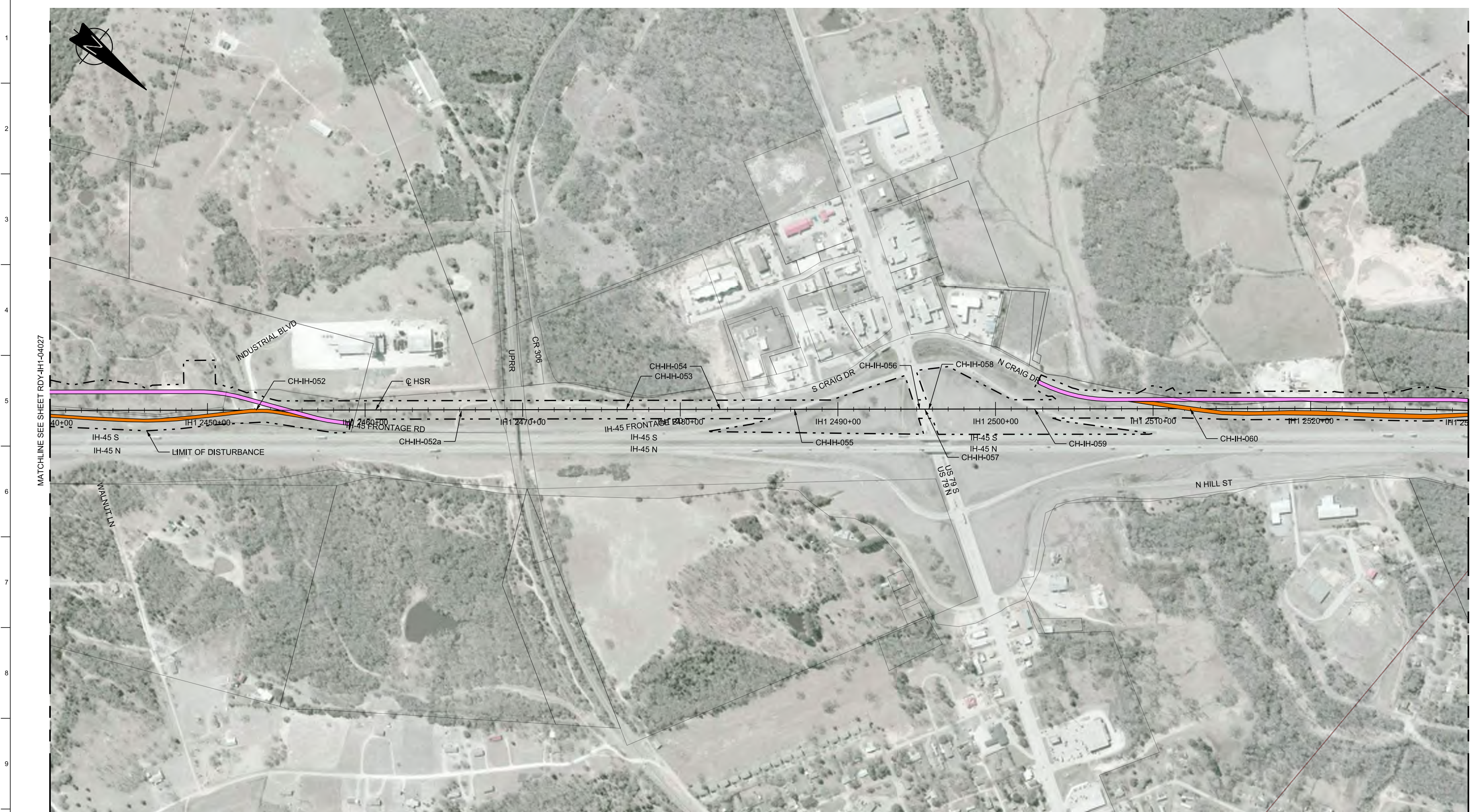
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2350+00 TO IH1 2440+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04027	Rev 01



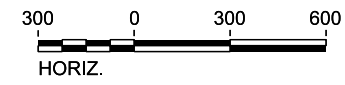
MATCHLINE SEE SHEET RDY-IH1-04027

MATCHLINE SEE SHEET RDY-IH1-04029

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

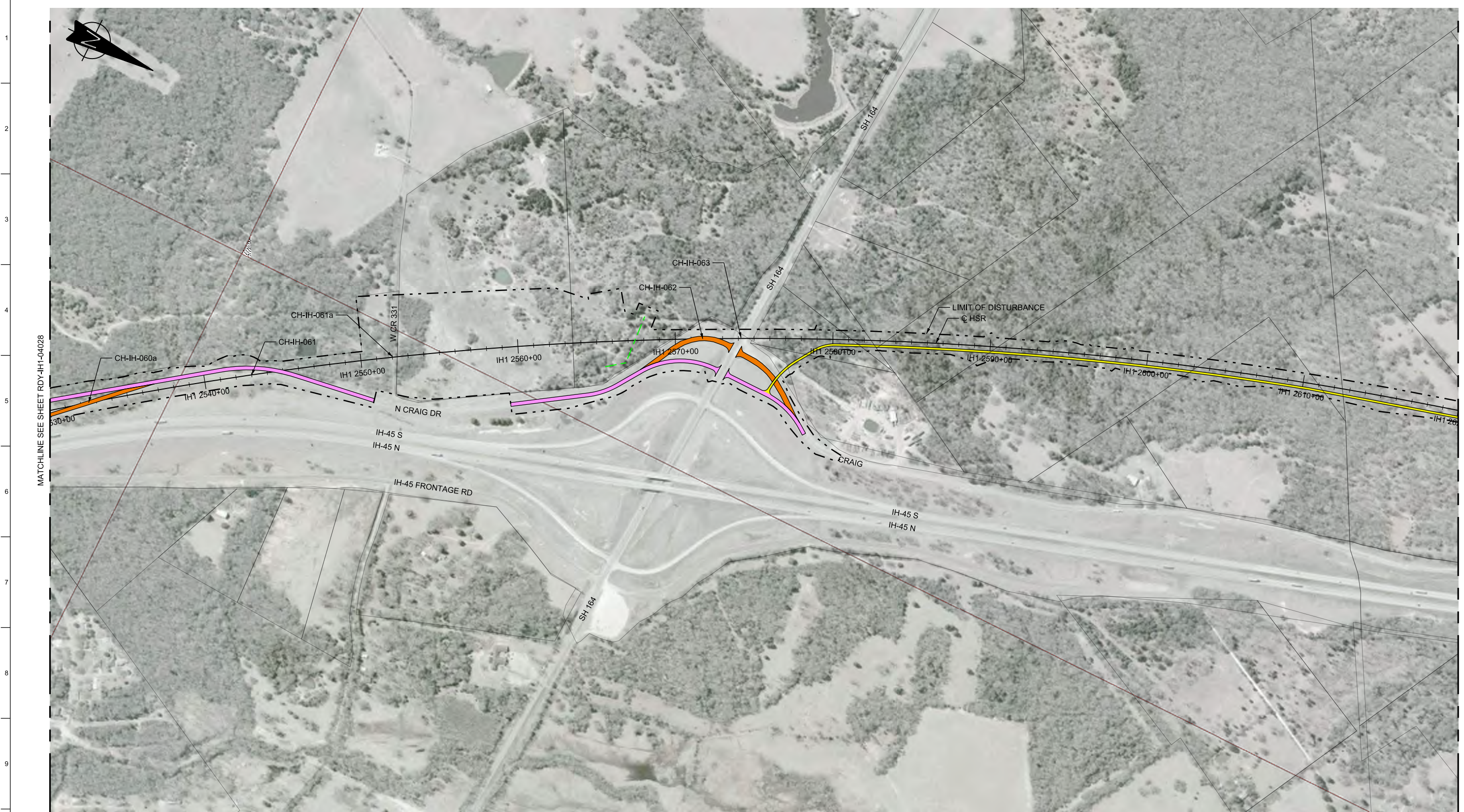
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2440+00 TO IH1 2530+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04028	Rev 01



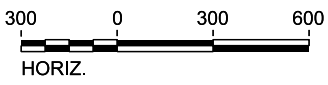
MATCHLINE SEE SHEET RDY-IH1-04028

MATCHLINE SEE SHEET RDY-IH1-04030

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. COLQUHOUN
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

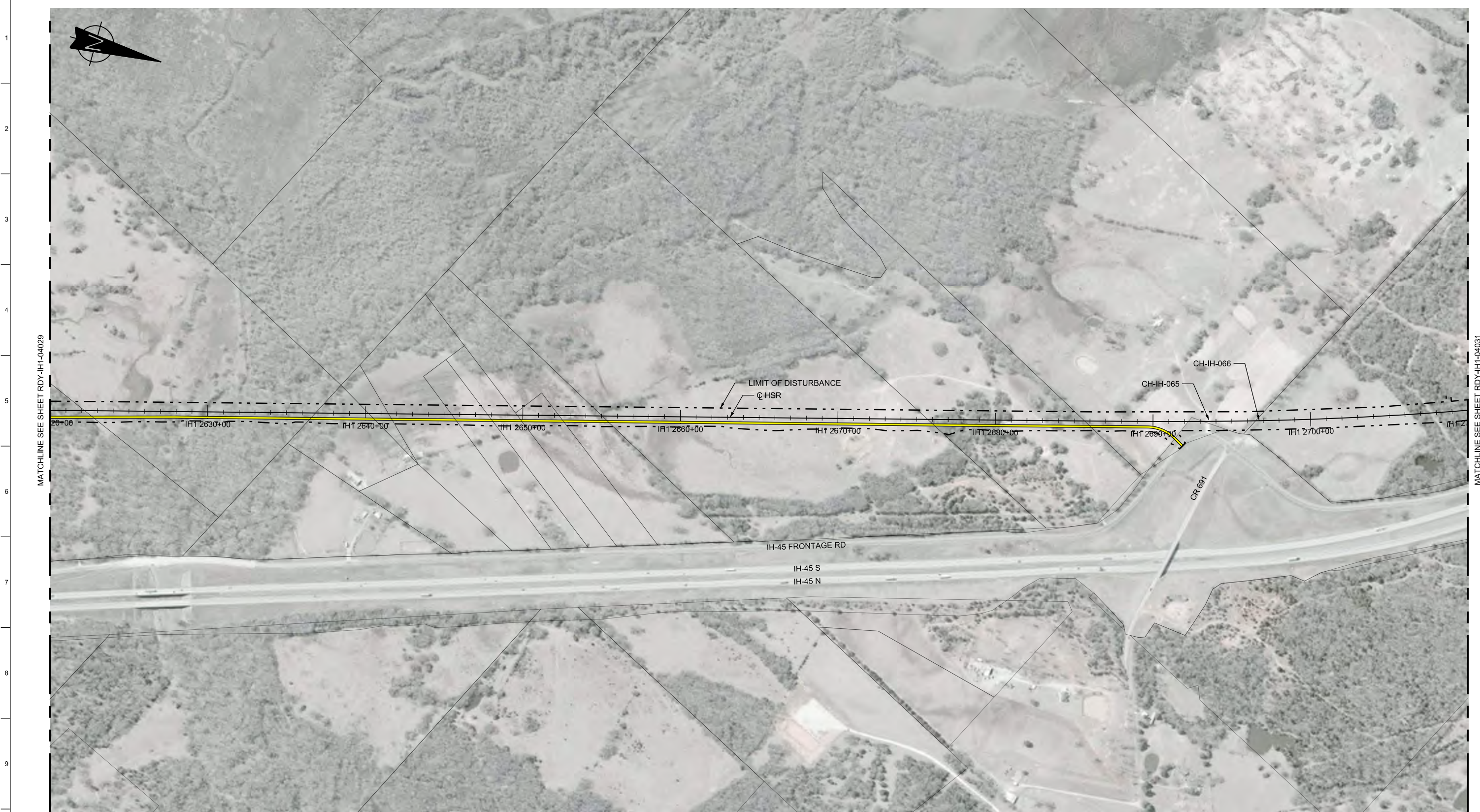
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2530+00 TO IH1 2620+00**

Scale AS SHOWN	Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04029	Rev 01	

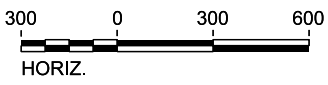


MATCHLINE SEE SHEET RDY-IH1-04029

MATCHLINE SEE SHEET RDY-IH1-04031

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2620+00 TO IH1 2710+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04030	Rev 01

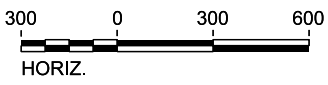


MATCHLINE SEE SHEET RDY-IH1-04030

MATCHLINE SEE SHEET RDY-IH1-04032

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

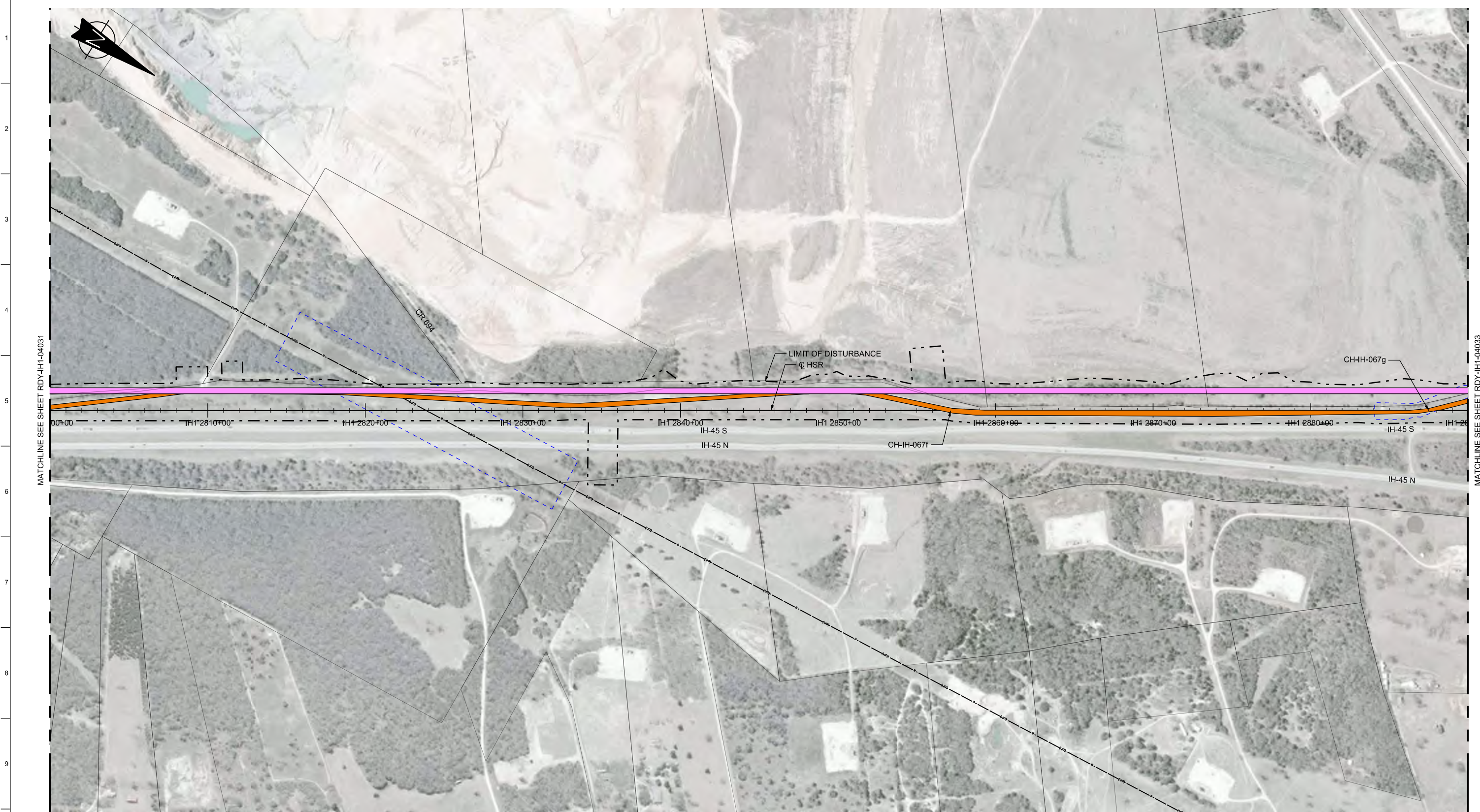
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2710+00 TO IH1 2800+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04031	Rev 01



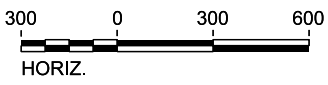
MATCHLINE SEE SHEET RDY-IH1-04031

MATCHLINE SEE SHEET RDY-IH1-04033

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

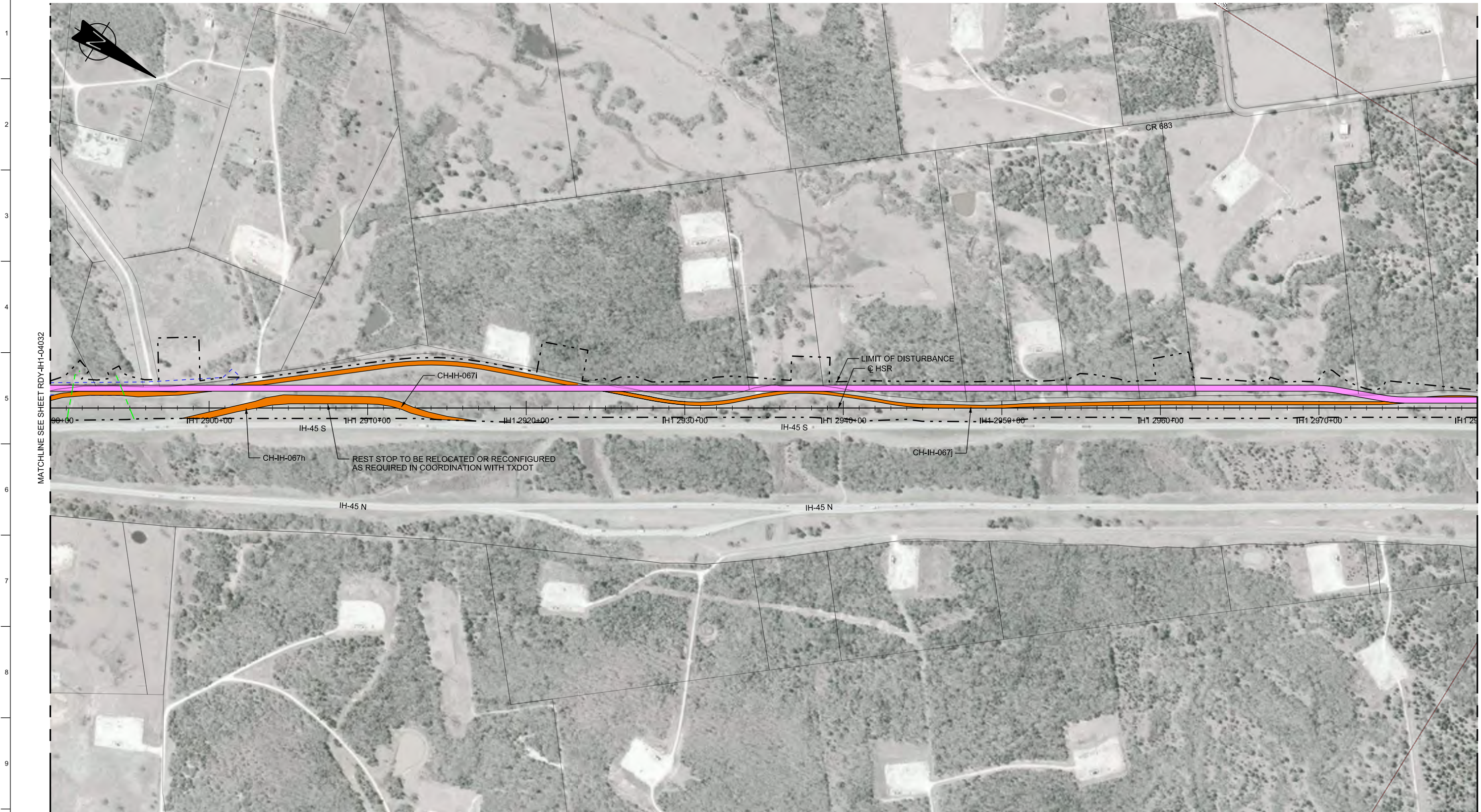
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

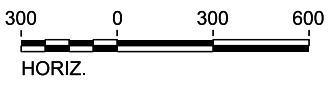
Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2800+00 TO IH1 2890+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04032	Rev 01



LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

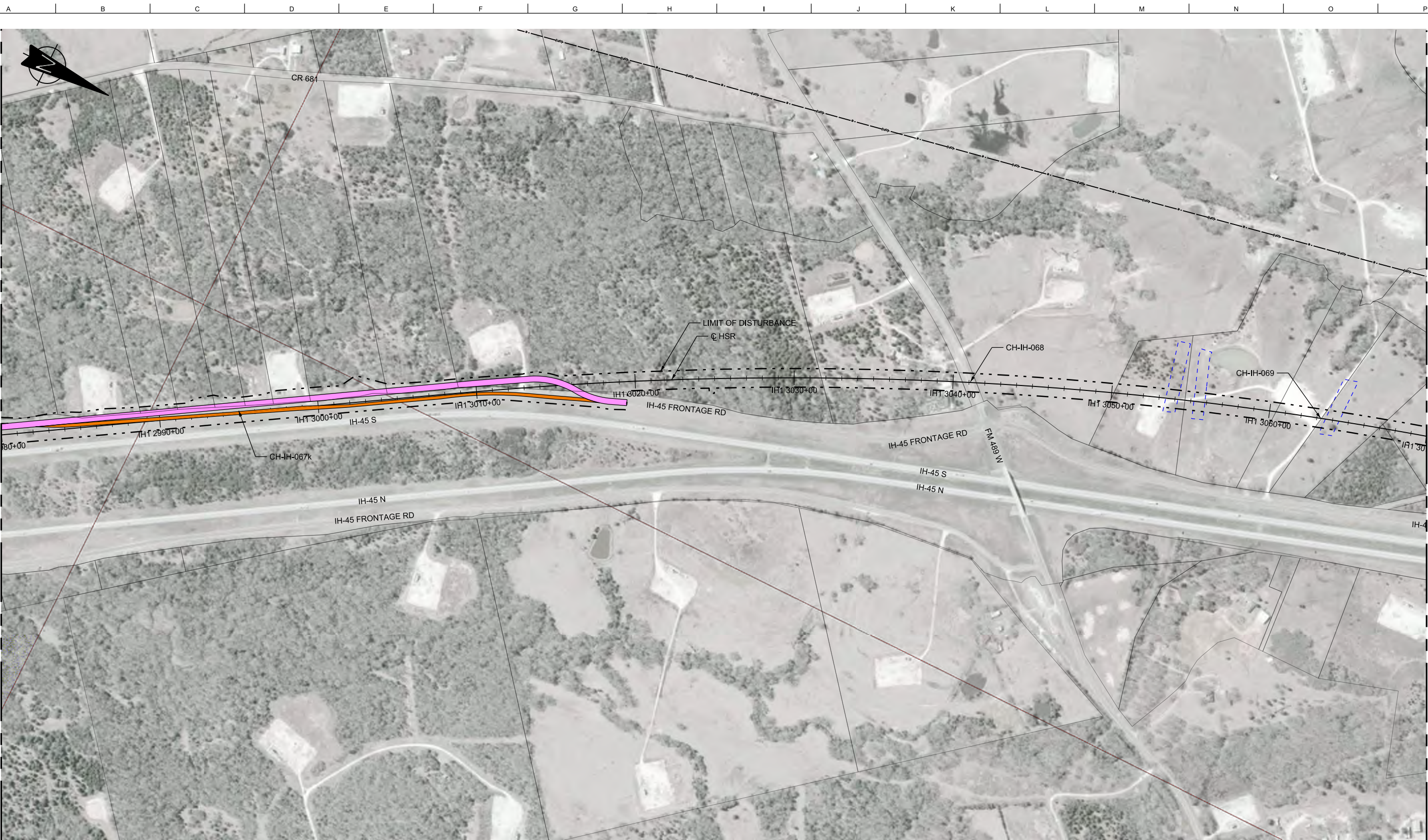
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2890+00 TO IH1 2980+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04033	Rev 01

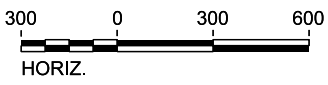


MATCHLINE SEE SHEET RDY-IH1-04033

MATCHLINE SEE SHEET RDY-IH1-04035

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

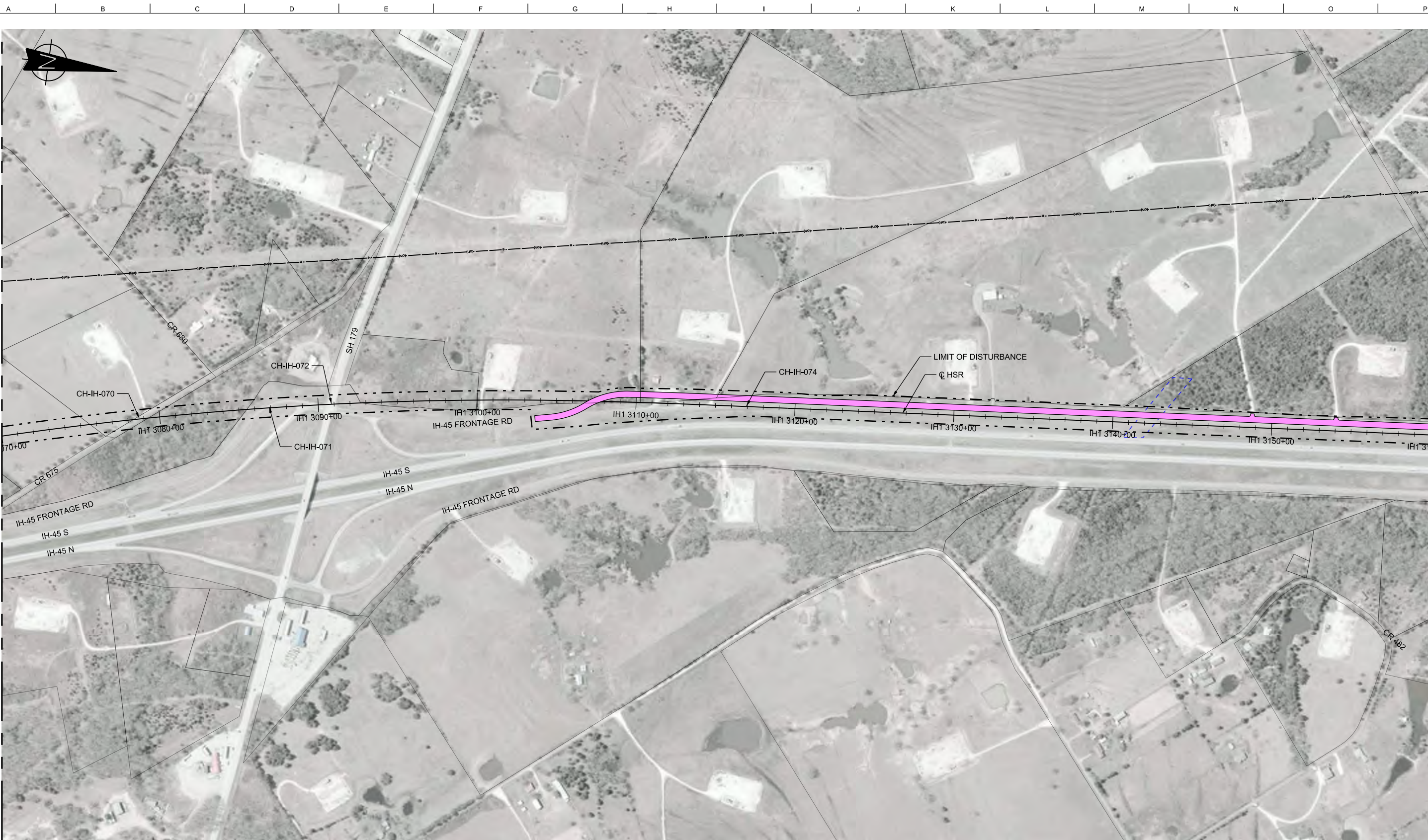
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title

**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 2980+00 TO IH1 3070+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04034	Rev 01



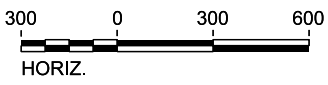
MATCHLINE SEE SHEET RDY-IH1-04034

MATCHLINE SEE SHEET RDY-IH1-04036

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

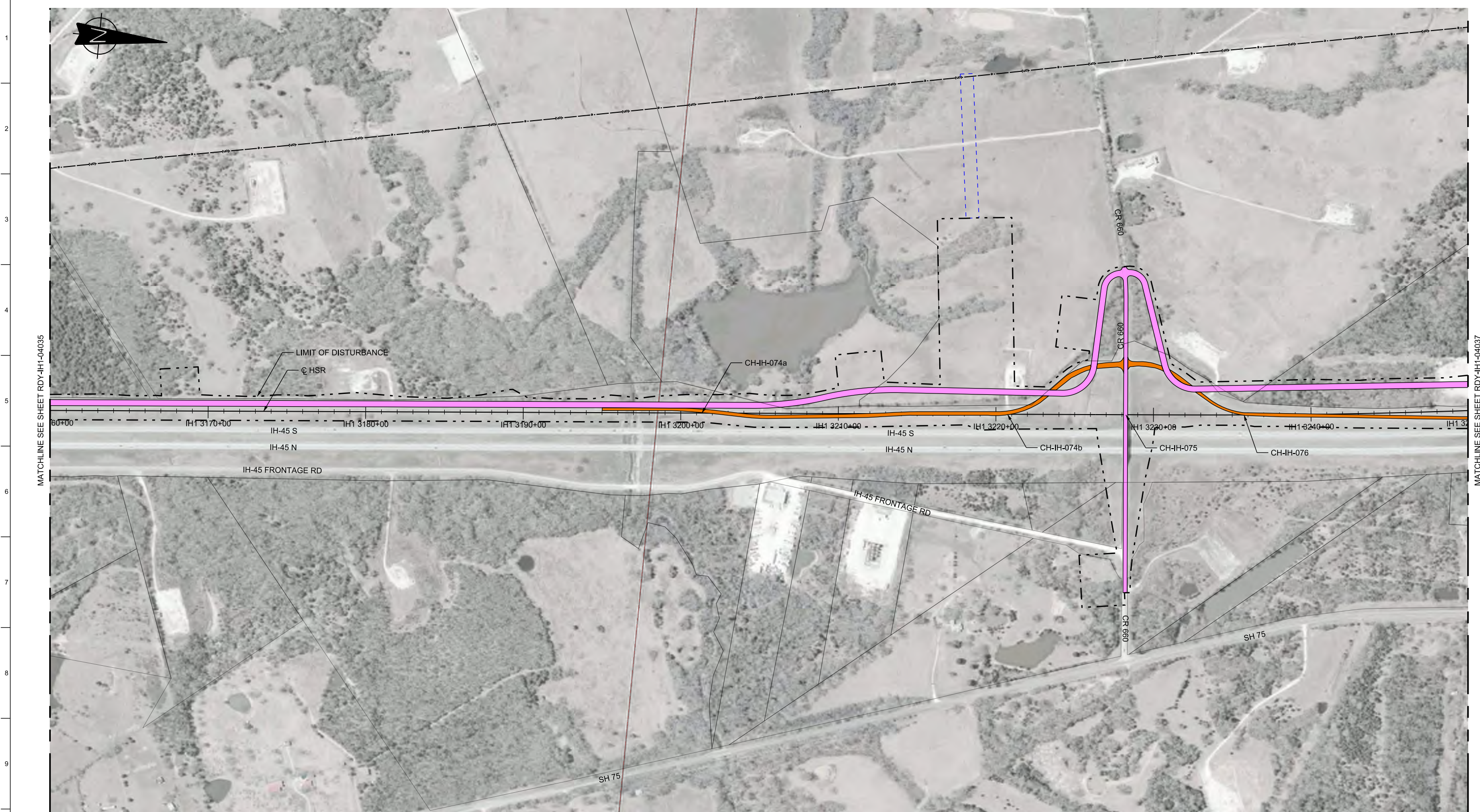
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3070+00 TO IH1 3160+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04035	Rev 01



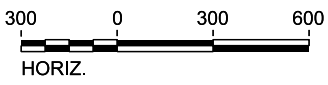
MATCHLINE SEE SHEET RDY-IH1-04035

MATCHLINE SEE SHEET RDY-IH1-04037

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT		EXIST. STREAM / POND / WETLAND
	PROPOSED PRIVATE ACCESS						
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3160+00 TO IH1 3250+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04036	Rev 01

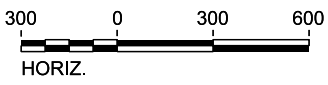


MATCHLINE SEE SHEET RDY-IH1-04036

MATCHLINE SEE SHEET RDY-IH1-04038

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

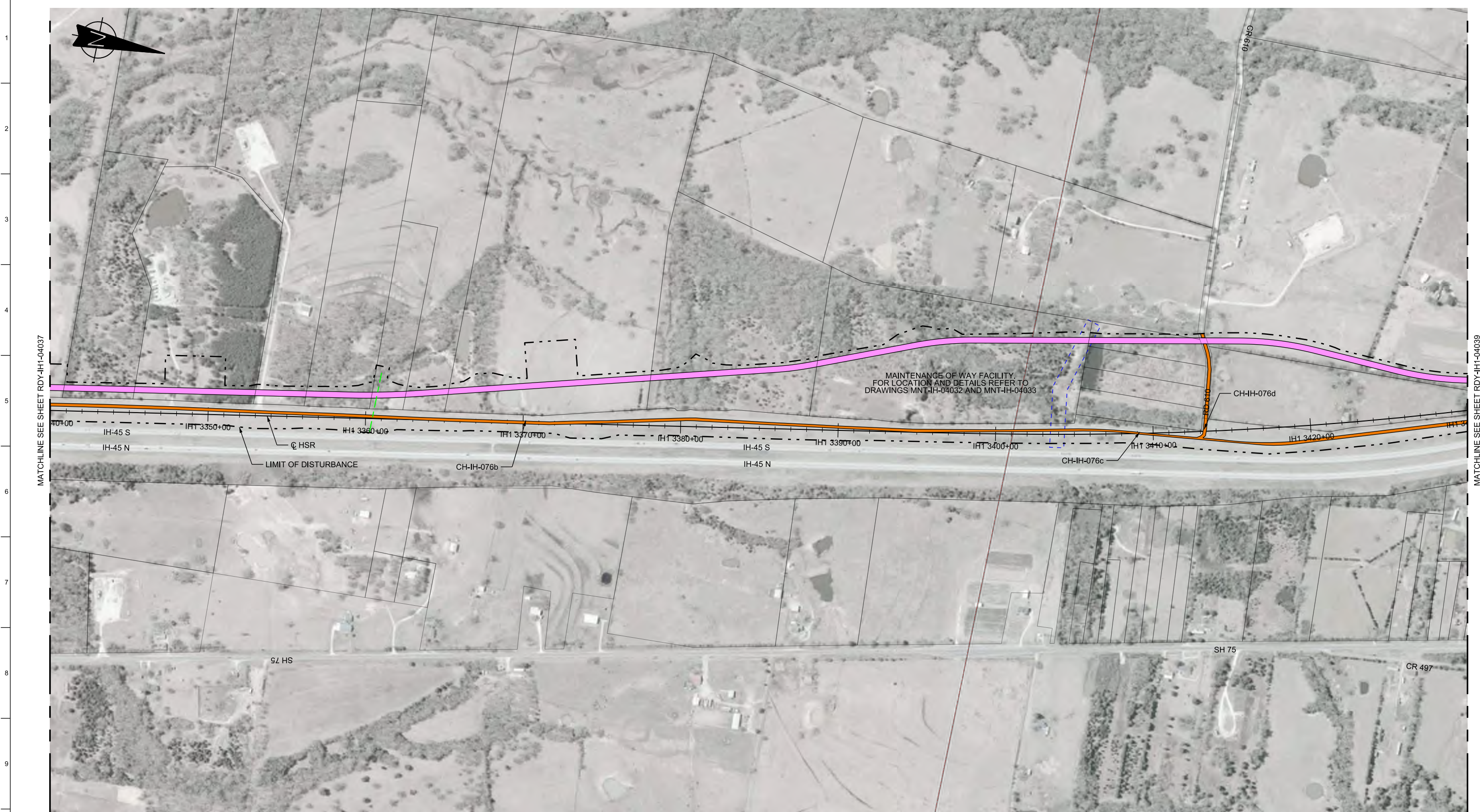
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3250+00 TO IH1 3340+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04037	Rev 01

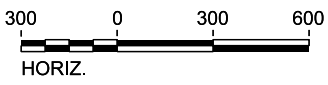


MAINTENANCE OF WAY FACILITY FOR LOCATION AND DETAILS REFER TO DRAWINGS MNT-IH-04032 AND MNT-IH-04033

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
J. ALMAGUER
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019

ARUP
Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

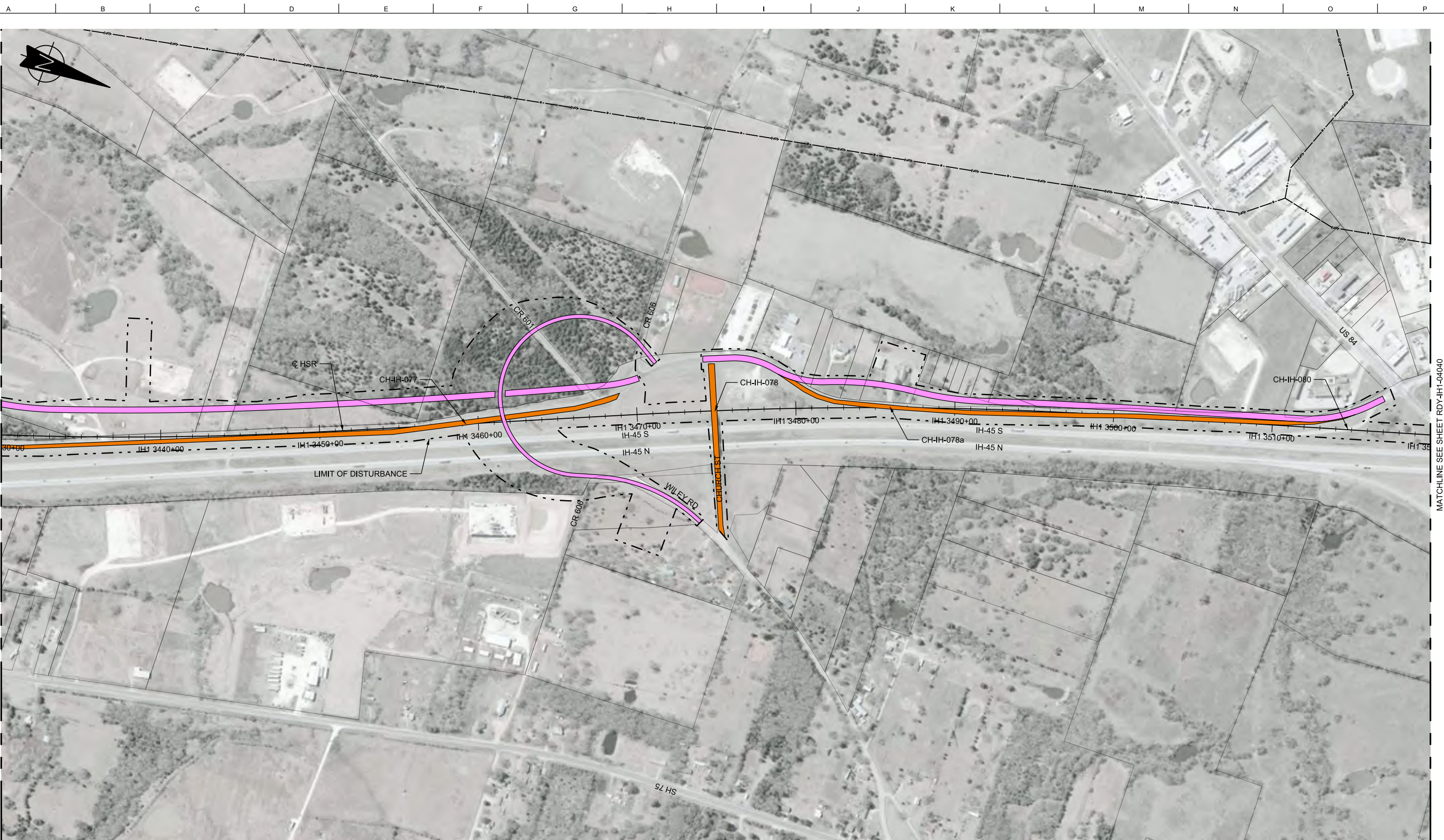
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3340+00 TO IH1 3430+00**

Scale
AS SHOWN

Drawing Status
FINAL

Job No	Drawing No	Rev
234180	RDY-IH-04038	01



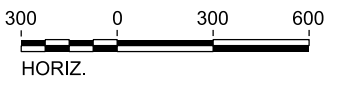
MATCHLINE SEE SHEET RDY-IH1-04038

MATCHLINE SEE SHEET RDY-IH1-04040

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
J. ALMAGUER
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019

ARUP
Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

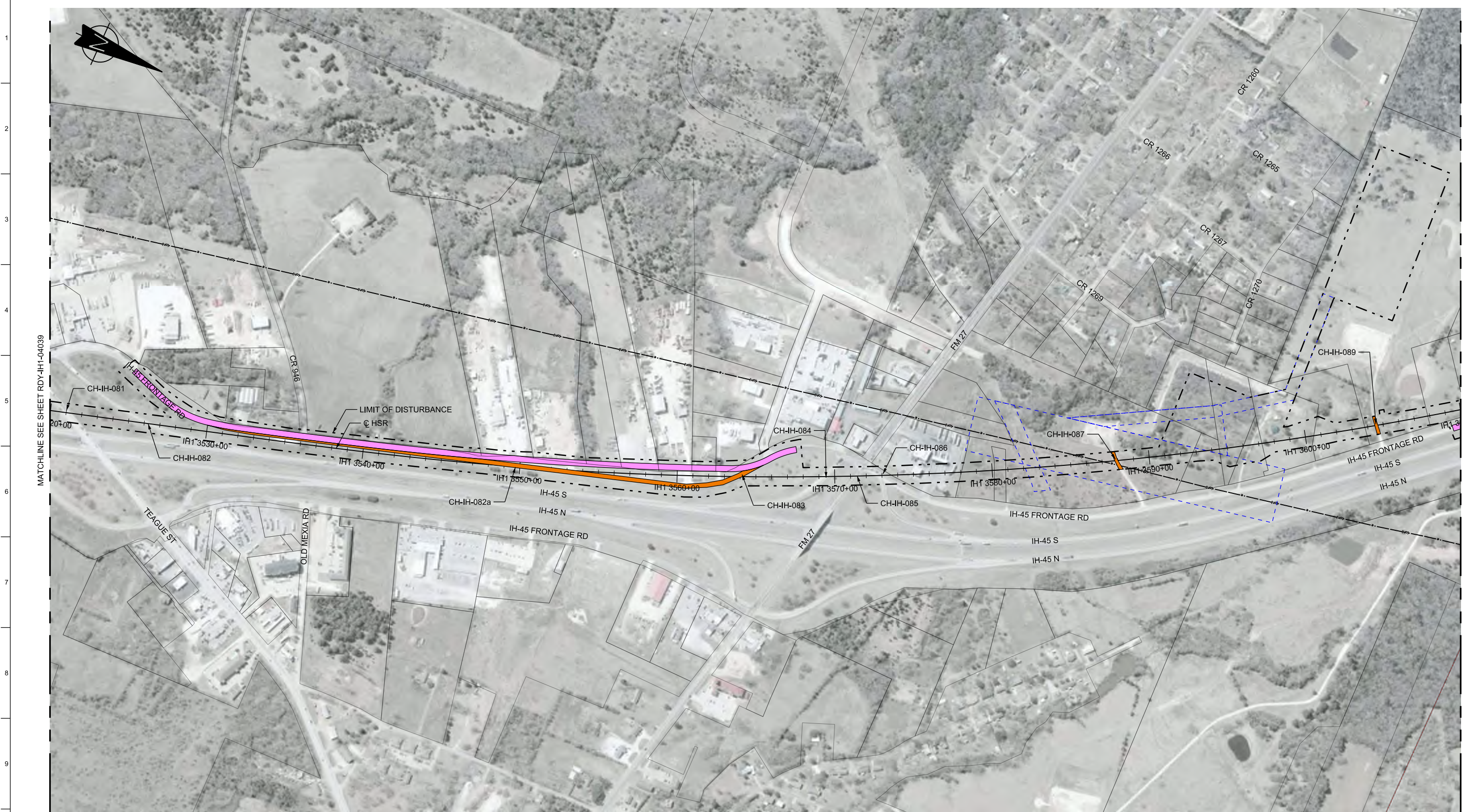
FREES & NICHOLS
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

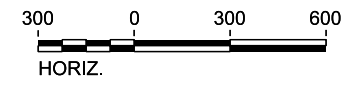
Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3430+00 TO IH1 3520+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04039	Rev 01



LEGEND	
PROPOSED HSR MOW ACCESS	ROAD REMOVAL
PROPOSED PUBLIC ROAD	UTILITY LIMIT OF DISTURBANCE
PROPOSED PRIVATE ACCESS	ELECTRICAL TRANS. LINE
REALIGNED PUBLIC ROAD	EXIST. STREAM / POND / WETLAND
DETENTION BASIN (RAIL)	DETENTION BASIN (ROAD)
PROPOSED CULVERTS / DITCH REALIGNMENT	

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

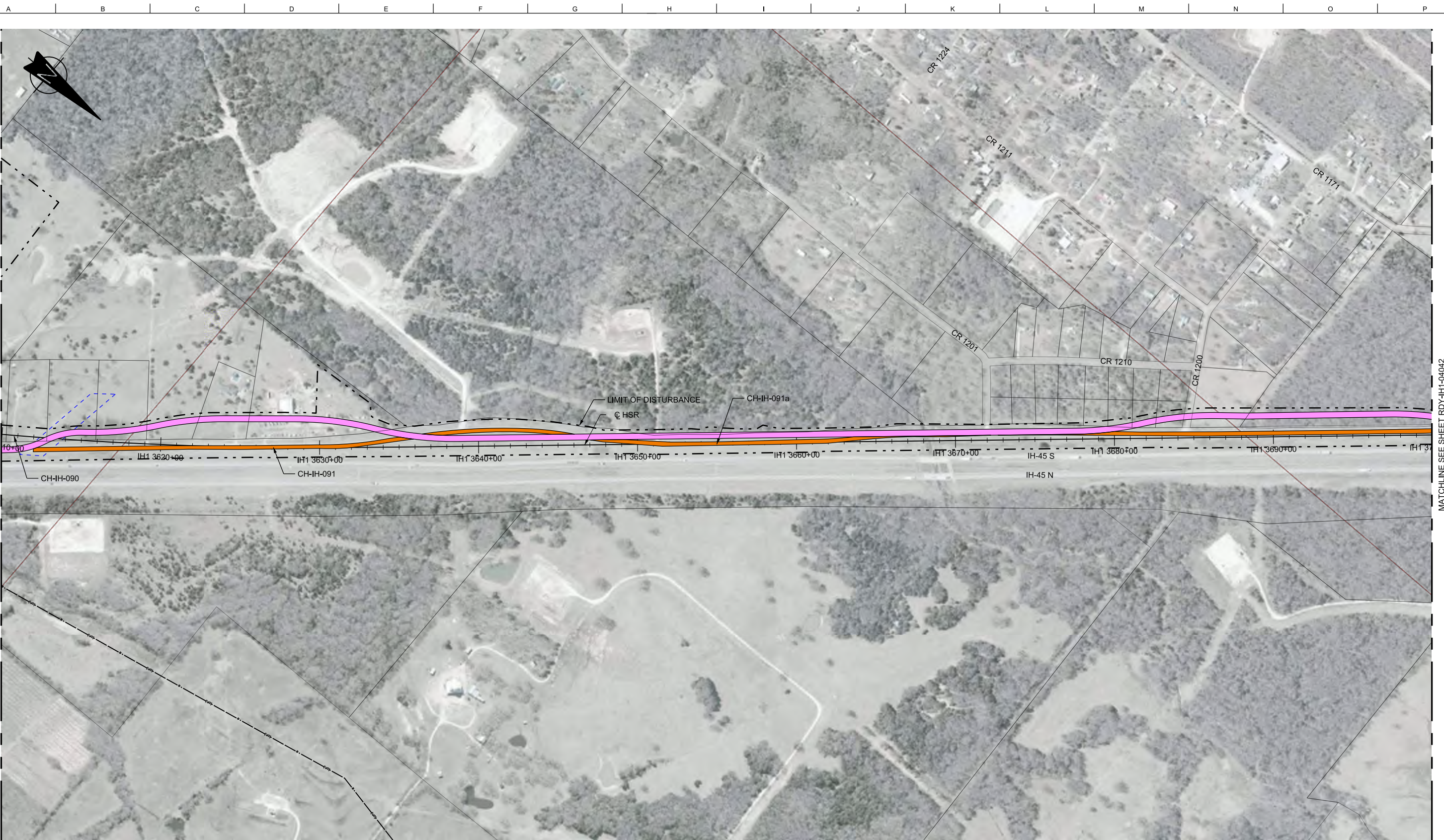
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3520+00 TO IH1 3610+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04040	Rev 01

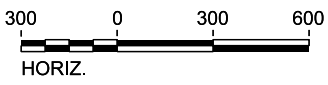


MATCHLINE SEE SHEET RDY-IH1-04040

MATCHLINE SEE SHEET RDY-IH1-04042

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		DETENTION BASIN (RAIL)
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

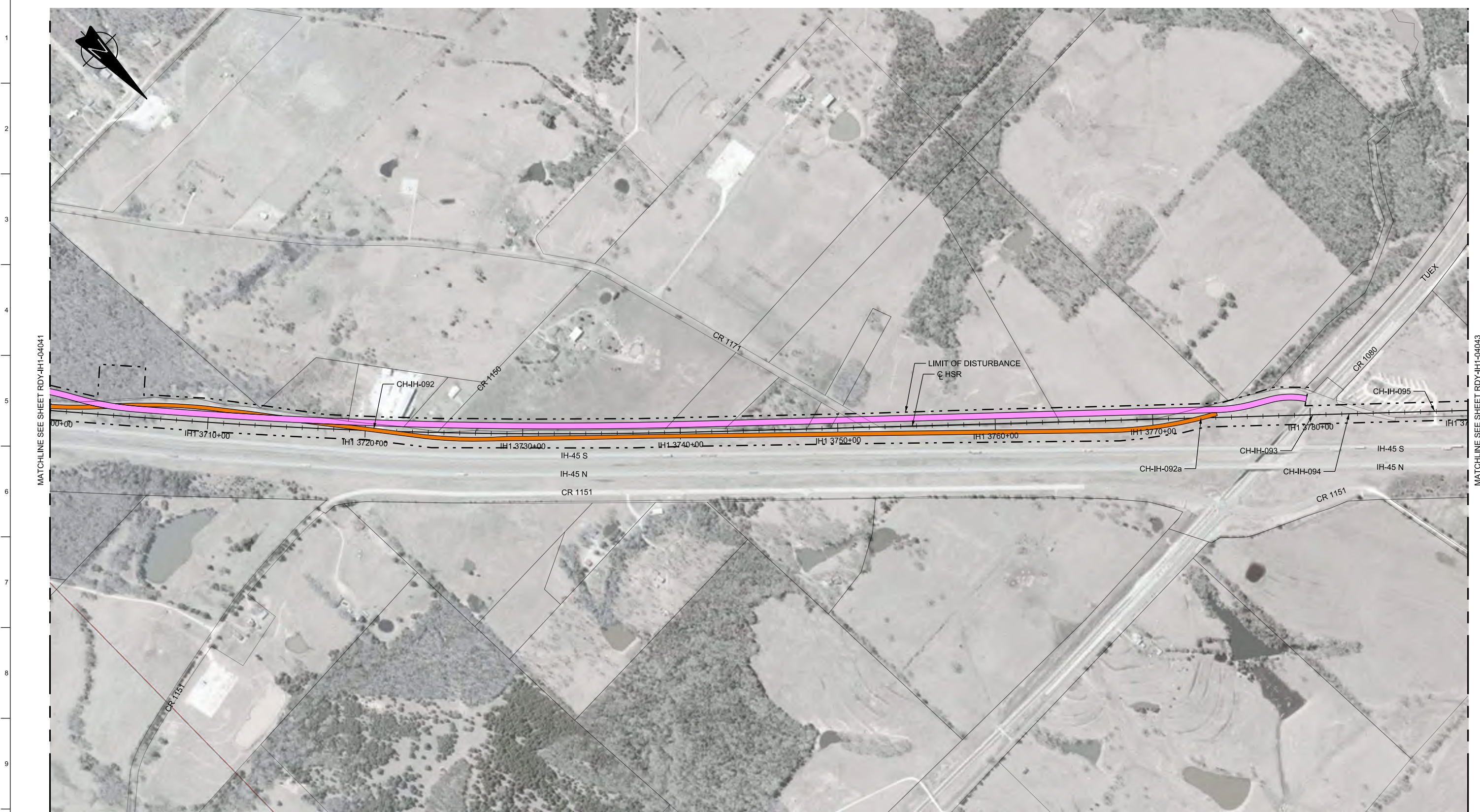
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3610+00 TO IH1 3700+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04041	Rev 01



MATCHLINE SEE SHEET RDY-IH1-04041

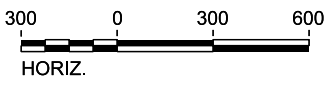
MATCHLINE SEE SHEET RDY-IH1-04043



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		PROPOSED CULVERTS / DITCH REALIGNMENT				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

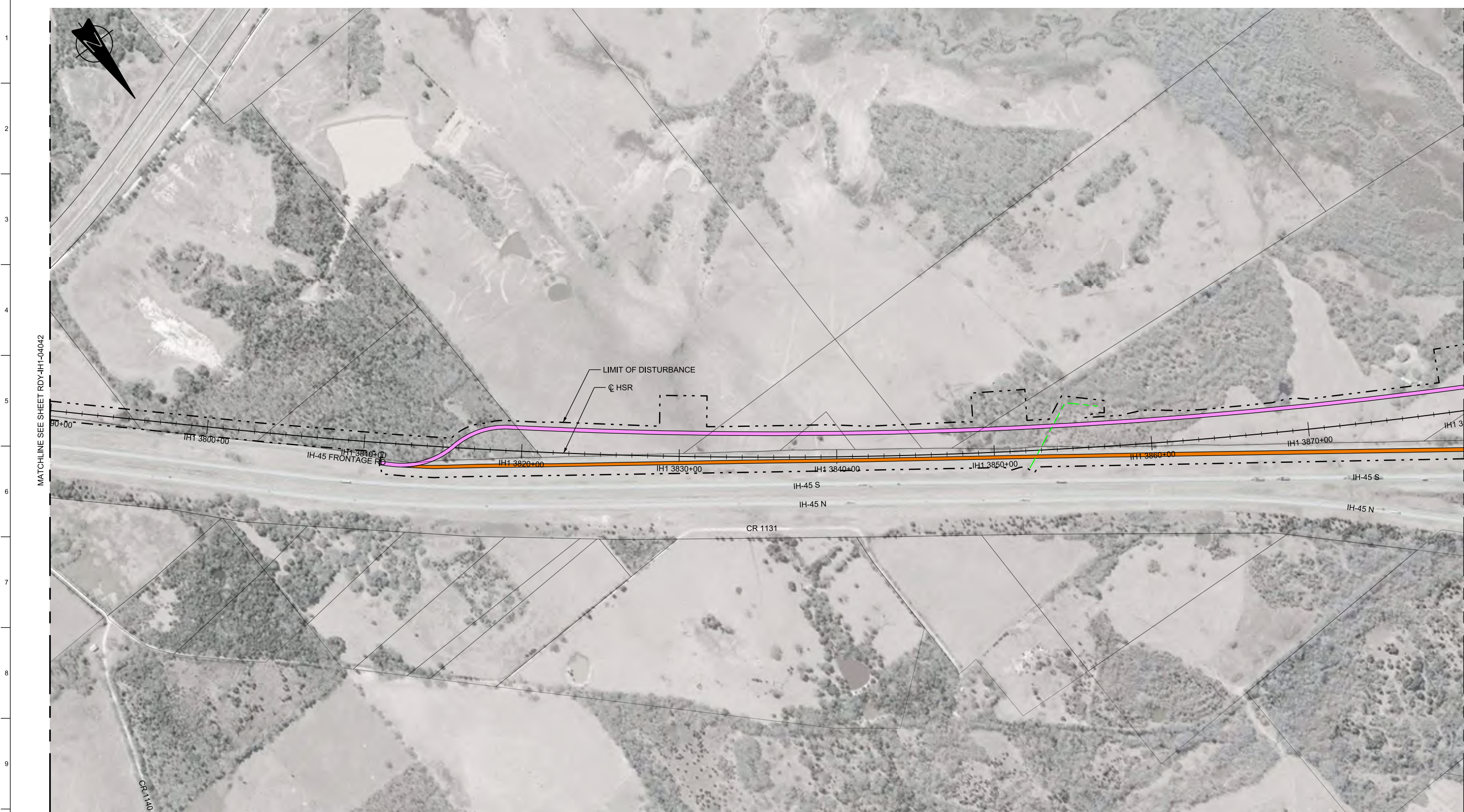
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3700+00 TO IH1 3790+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04042	Rev 01



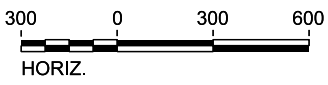
MATCHLINE SEE SHEET RDY-IH1-04042

MATCHLINE SEE SHEET RDY-IH1-04044

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3790+00 TO IH1 3880+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04043	Rev 01



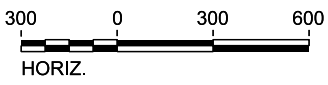
MATCHLINE SEE SHEET RDY-IH1-04043

MATCHLINE SEE SHEET RDY-IH1-04045

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT		DETENTION BASIN (ROAD)
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND				

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN
DRAWN BY
J. ALMAGUER
CHECKED BY
G. VOWELS
IN CHARGE
C. TAYLOR
DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3880+00 TO IH1 3970+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04044	Rev 01

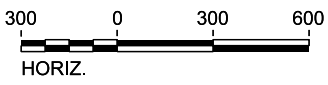


MATCHLINE SEE SHEET RDY-IH1-04044

MATCHLINE SEE SHEET RDY-IH1-04046

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		DETENTION BASIN (RAIL)
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

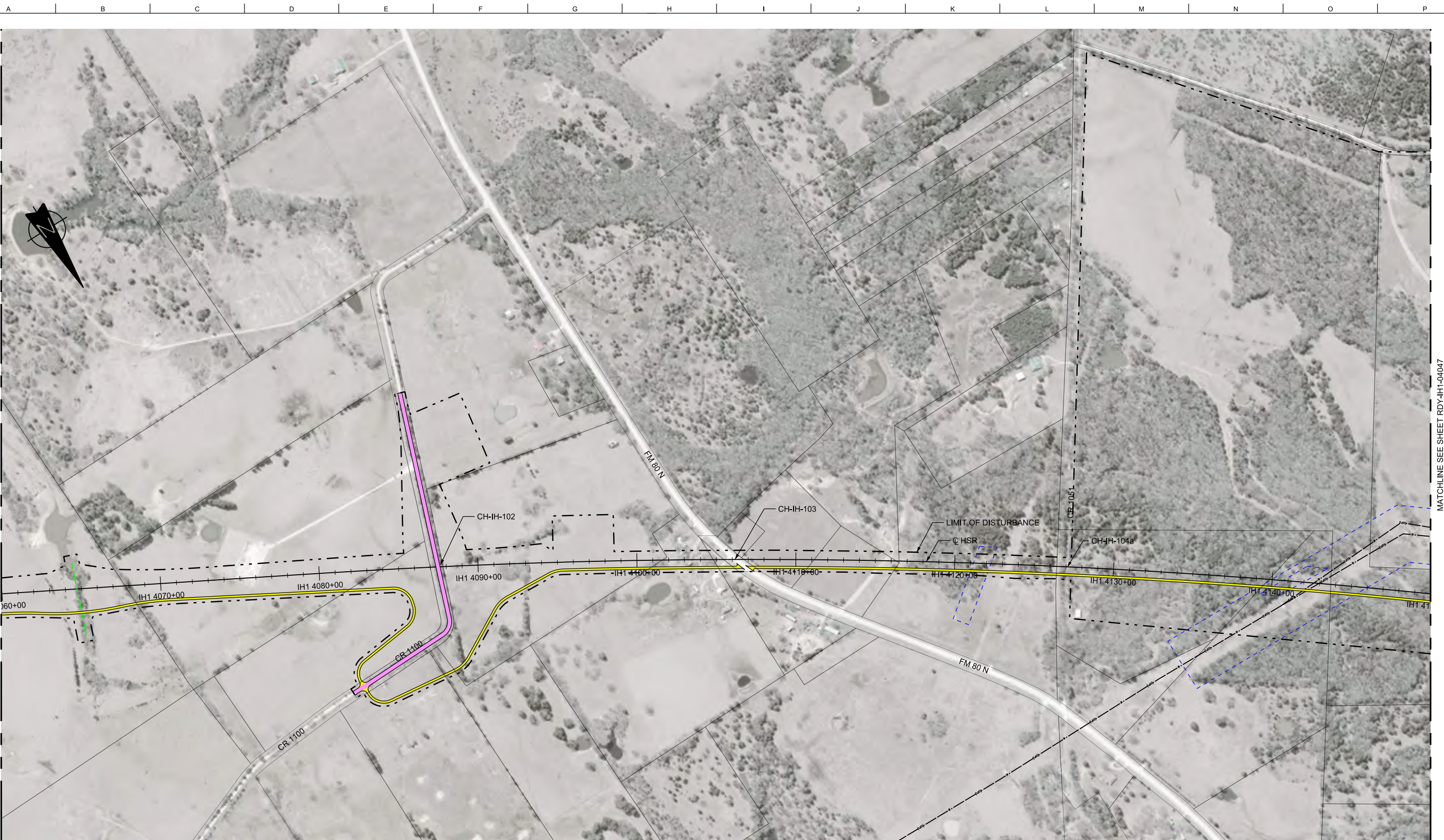
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 3970+00 TO IH1 4060+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04045	Rev 01

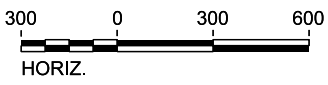


MATCHLINE SEE SHEET RDY-IH1-04045

MATCHLINE SEE SHEET RDY-IH1-04047

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 4060+00 TO IH1 4150+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04046	Rev 01



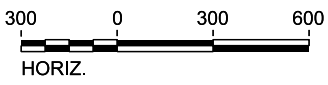
MATCHLINE SEE SHEET RDY-IH1-04046

MATCHLINE SEE SHEET RDY-IH1-04048



LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

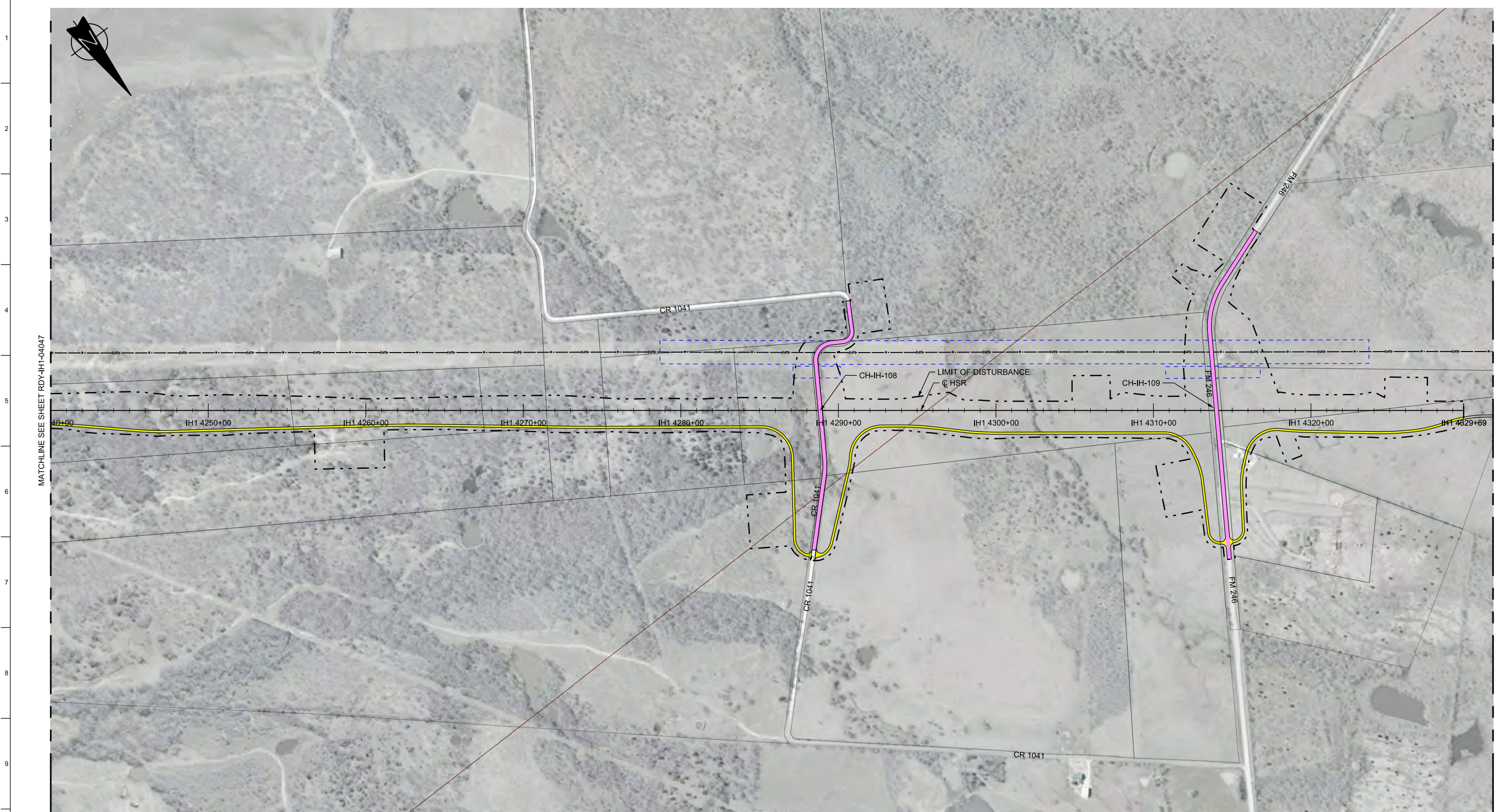
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH1 4150+00 TO IH1 4240+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04047	Rev 01



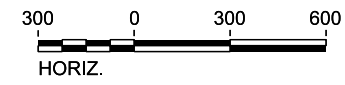
MATCHLINE SEE SHEET RDY-IH1-04047

MATCHLINE SEE SHEET RDY-IH2-04049

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



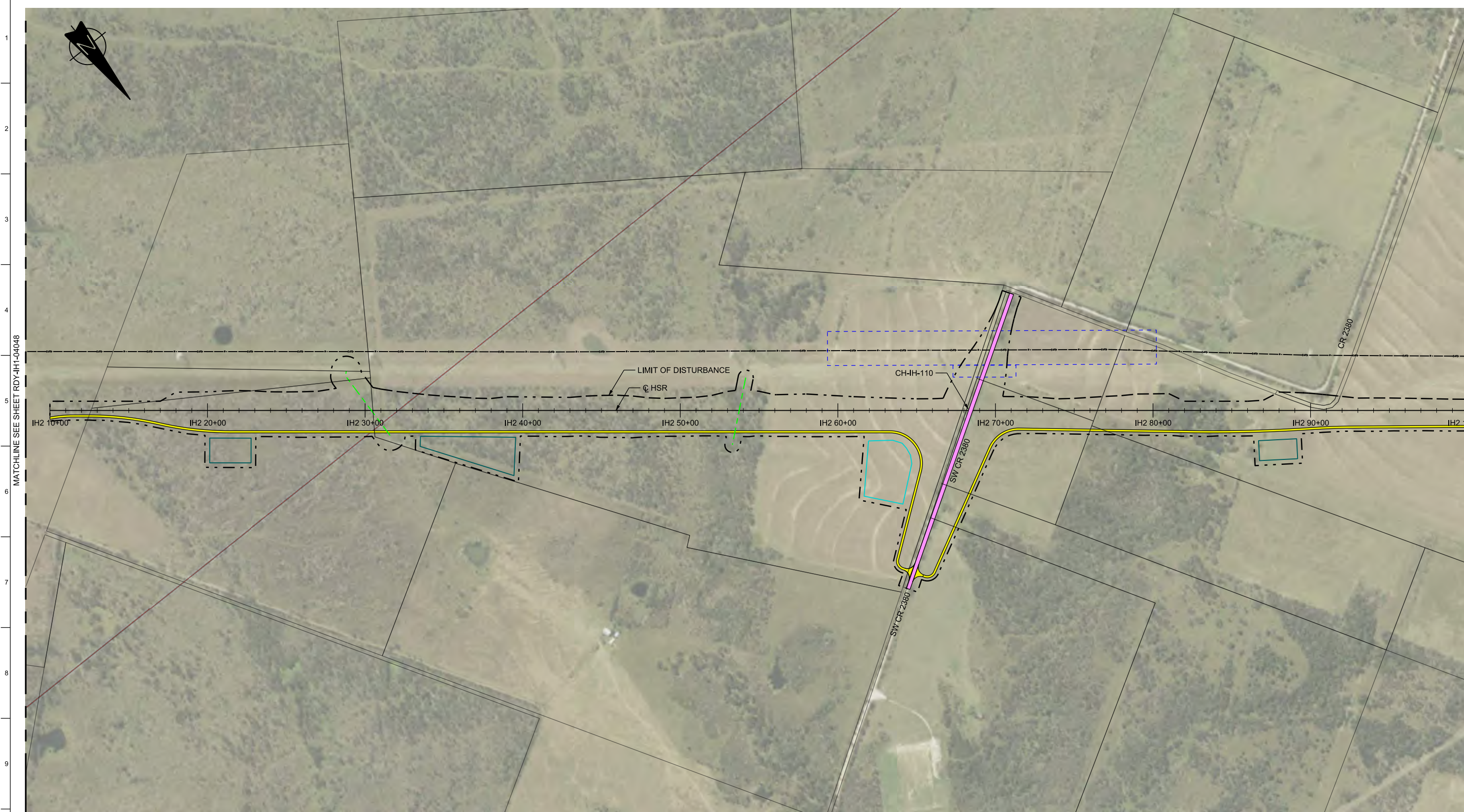
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

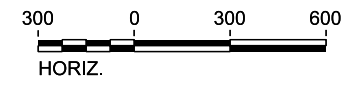
Drawing Title			Scale		
IH (45) SEGMENT CIVIL HIGHWAY PLAN VIEW - STA. IH1 4240+00 TO IH1 4329+69			AS SHOWN		
			Drawing Status		
			FINAL		
Job No	Drawing No	Rev			
234180	RDY-IH-04048	01			



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

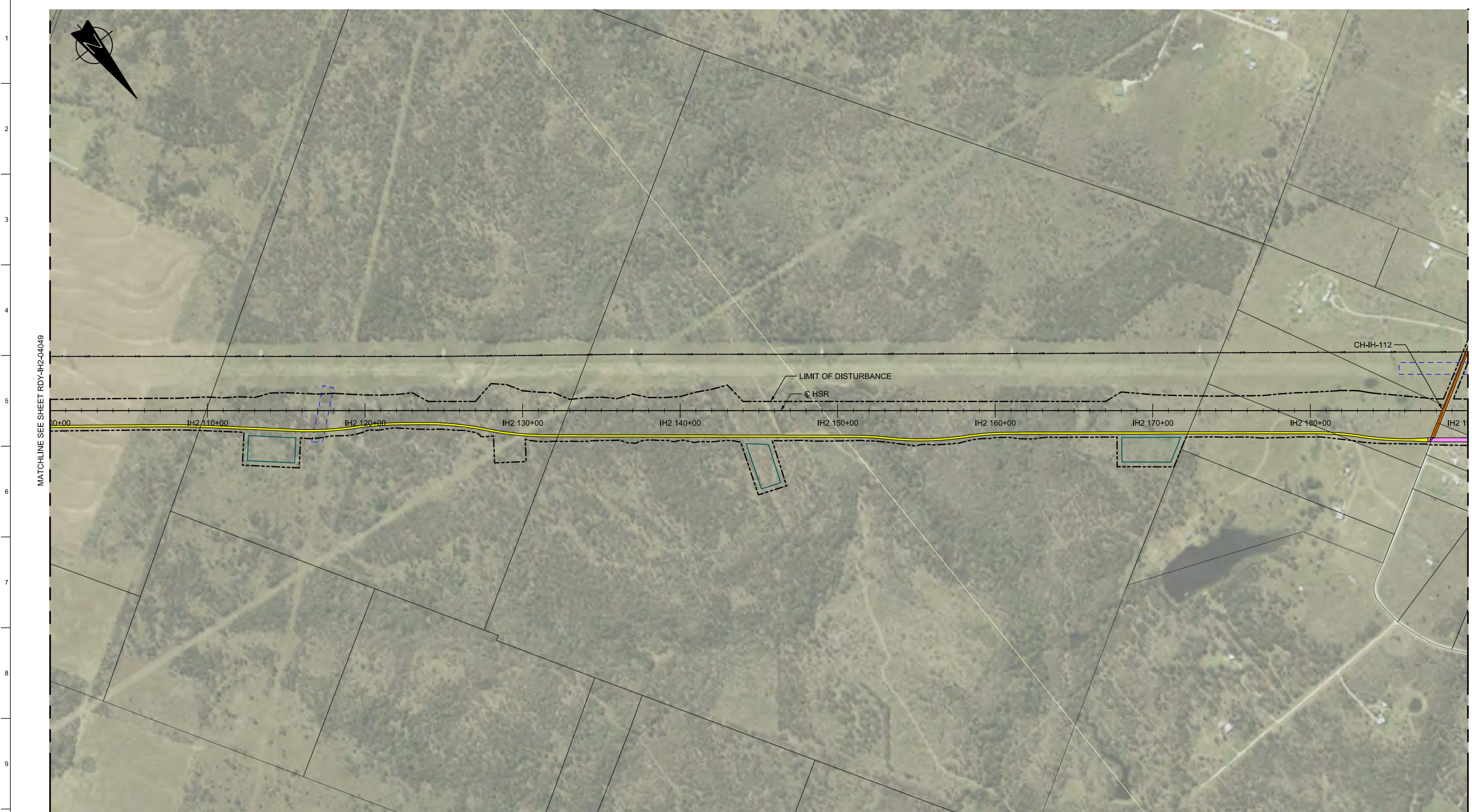
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 10+00 TO IH2 100+00**

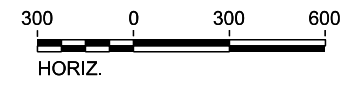
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04049	Rev 01



MATCHLINE SEE SHEET RDY-IH2-04049

MATCHLINE SEE SHEET RDY-IH2-04051

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

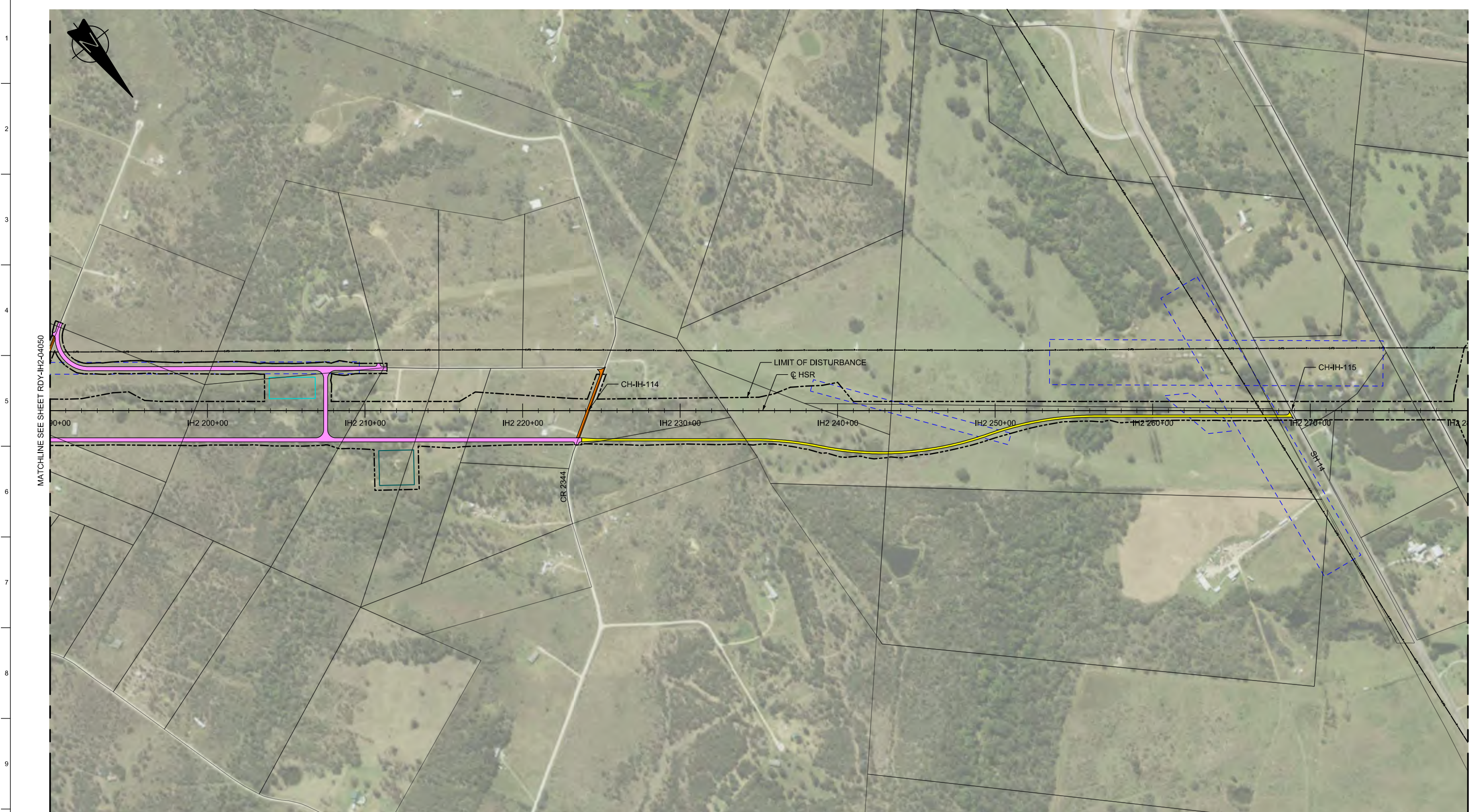
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 100+00 TO IH2 190+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04050	Rev 01

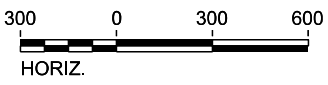


MATCHLINE SEE SHEET RDY-IH2-04050

MATCHLINE SEE SHEET RDY-IH2-04052

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 190+00 TO IH2 280+00**

Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-IH-04051	Rev 01



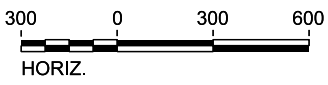
MATCHLINE SEE SHEET RDY-IH2-04051

MATCHLINE SEE SHEET RDY-IH2-04053

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 280+00 TO IH2 370+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04052	Rev 01



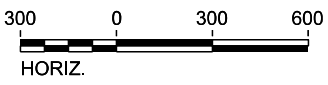
MATCHLINE SEE SHEET RDY-IH2-04052

MATCHLINE SEE SHEET RDY-IH2-04054

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREES & NICHOLS

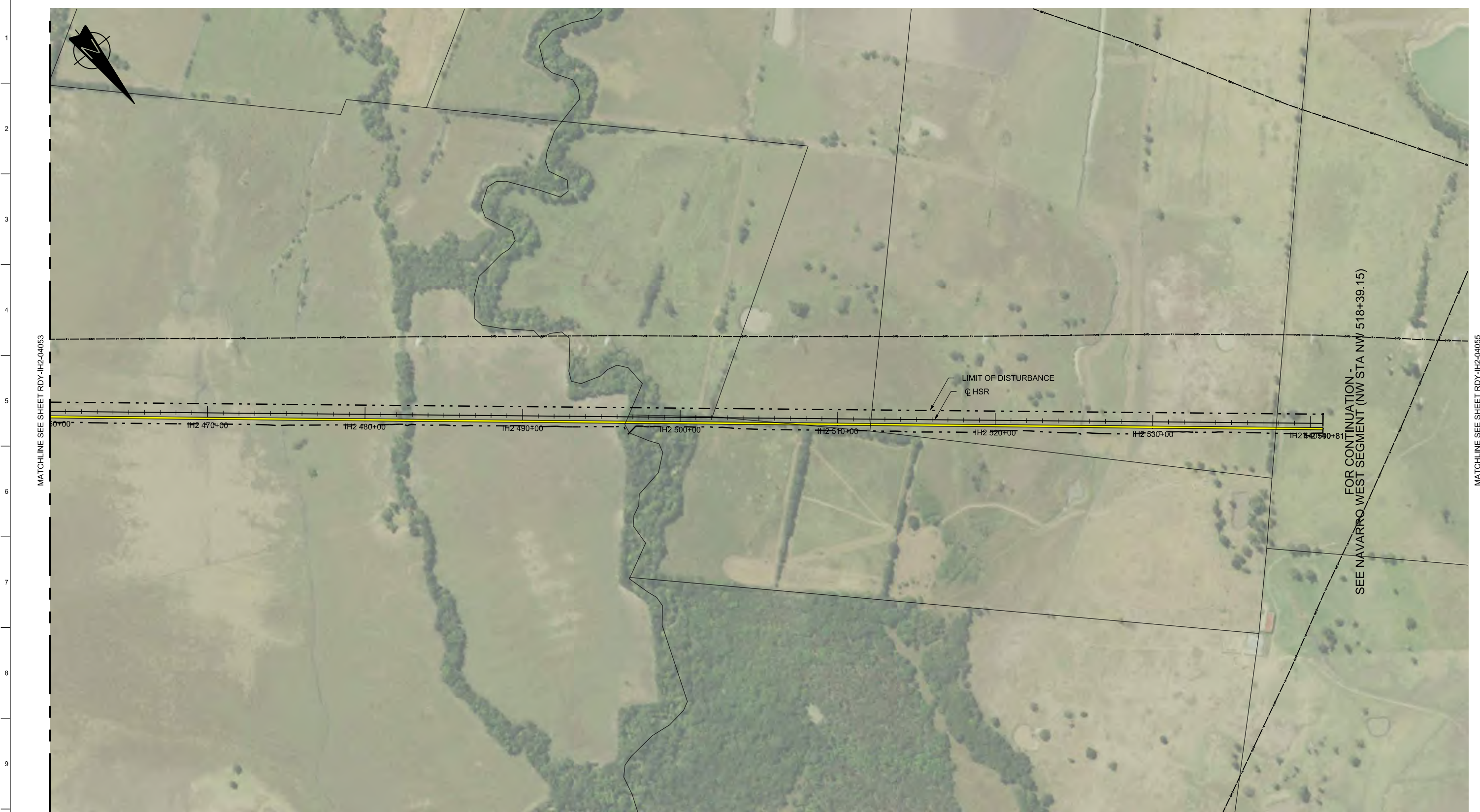
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 370+00 TO IH2 460+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04053	Rev 01



MATCHLINE SEE SHEET RDY-IH2-04053

MATCHLINE SEE SHEET RDY-IH2-04055

FOR CONTINUATION -
SEE NAVARRO WEST SEGMENT (NW STA NW 518+39.15)

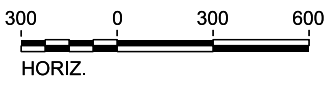
LIMIT OF DISTURBANCE
C HSR

IH2 460+00 IH2 470+00 IH2 480+00 IH2 490+00 IH2 500+00 IH2 510+00 IH2 520+00 IH2 530+00 IH2 540+81

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
J. COLQUHOUN

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title

**IH (45) SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
IH2 460+00 TO IH2 540+81**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-IH-04054	Rev 01

VOLUME 4B-5

NAVARRO EAST SEGMENT

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



Drawing Title
GENERAL

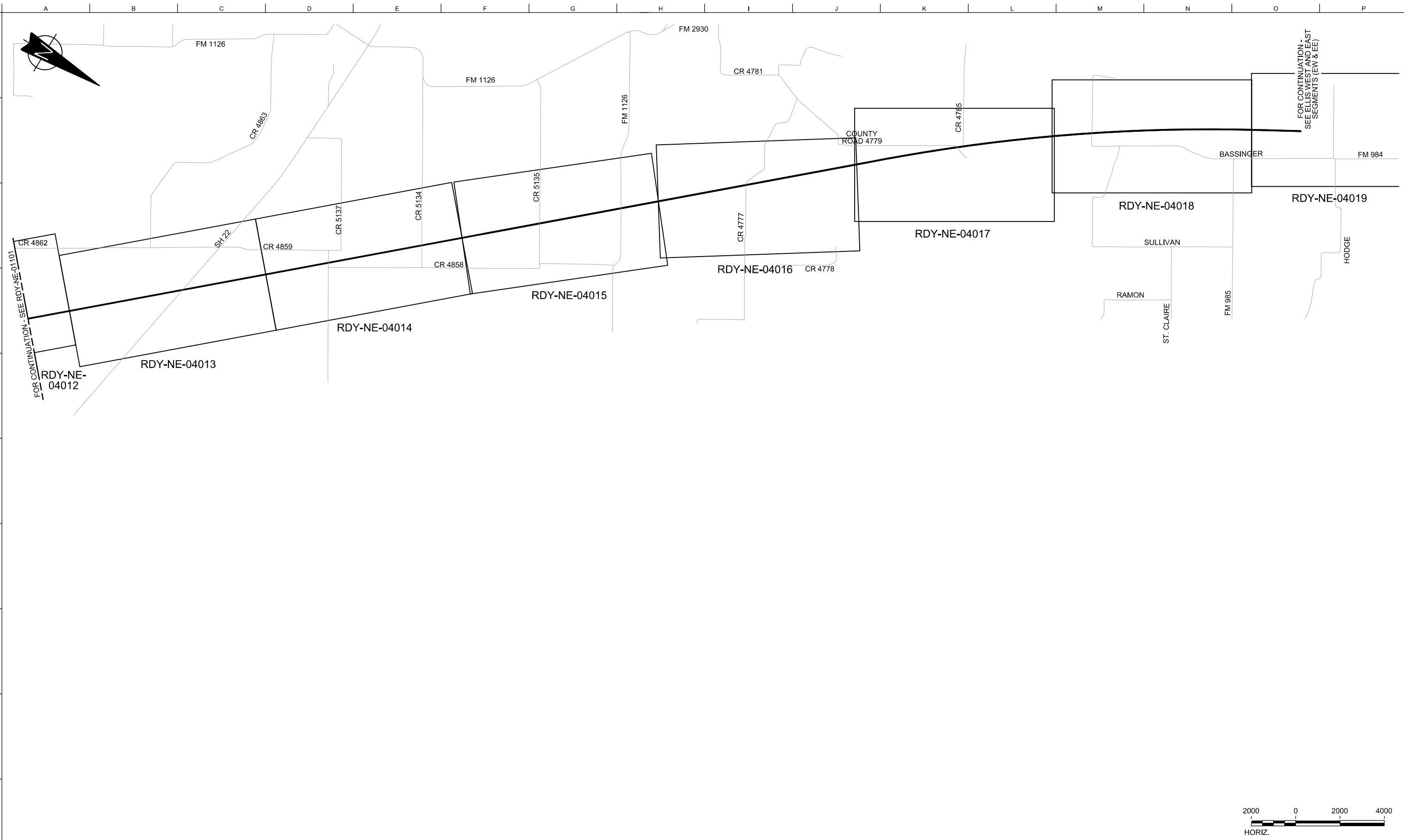
Scale
NO SCALE

Drawing Status
FINAL

Job No
234180

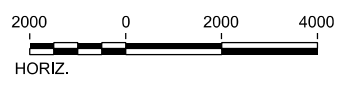
Drawing No
GEN-00-0000

Rev
01



FOR CONTINUATION - SEE RDY-NE-01101

FOR CONTINUATION - SEE ELLIS WEST AND EAST SEGMENTS (EW & EE)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
D. THOMPSON

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

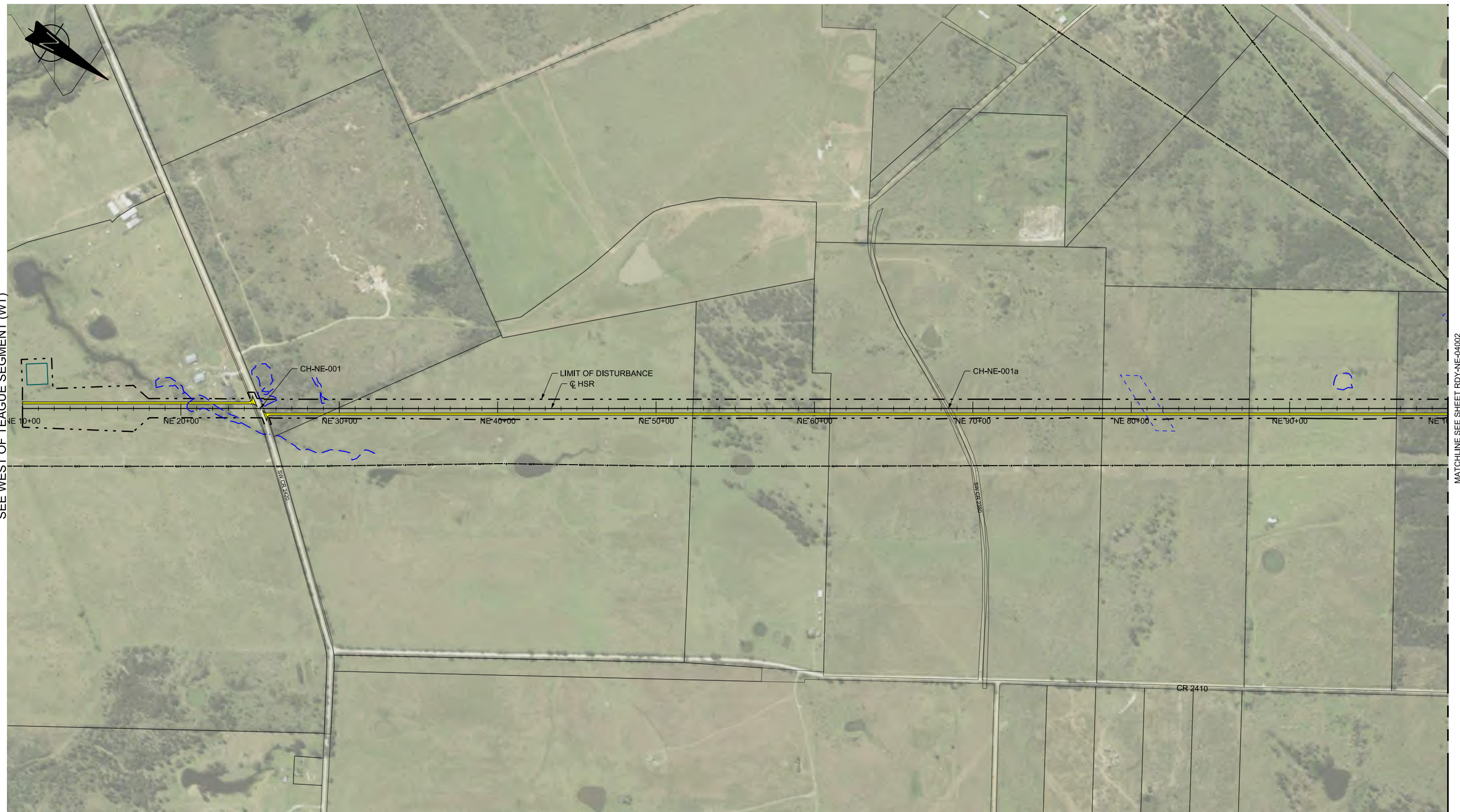
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 2 OF 2
NE 1070+00 TO NE 1652+05**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-01102	Rev 01

FOR CONTINUATION -
SEE WEST OF TEAGUE SEGMENT (WT)

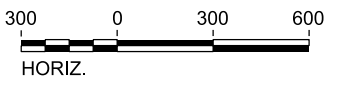
MATCHLINE SEE SHEET RDY-NE-04002



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		PROPOSED CULVERTS / DITCH REALIGNMENT				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 NE 10+00 TO NE 100+00**

Scale AS SHOWN	Drawing Status FINAL
Job No 234180	Drawing No RDY-NE-04001
	Rev 01



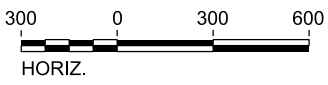
MATCHLINE SEE SHEET RDY-NE-04001

MATCHLINE SEE SHEET RDY-NE-04003

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

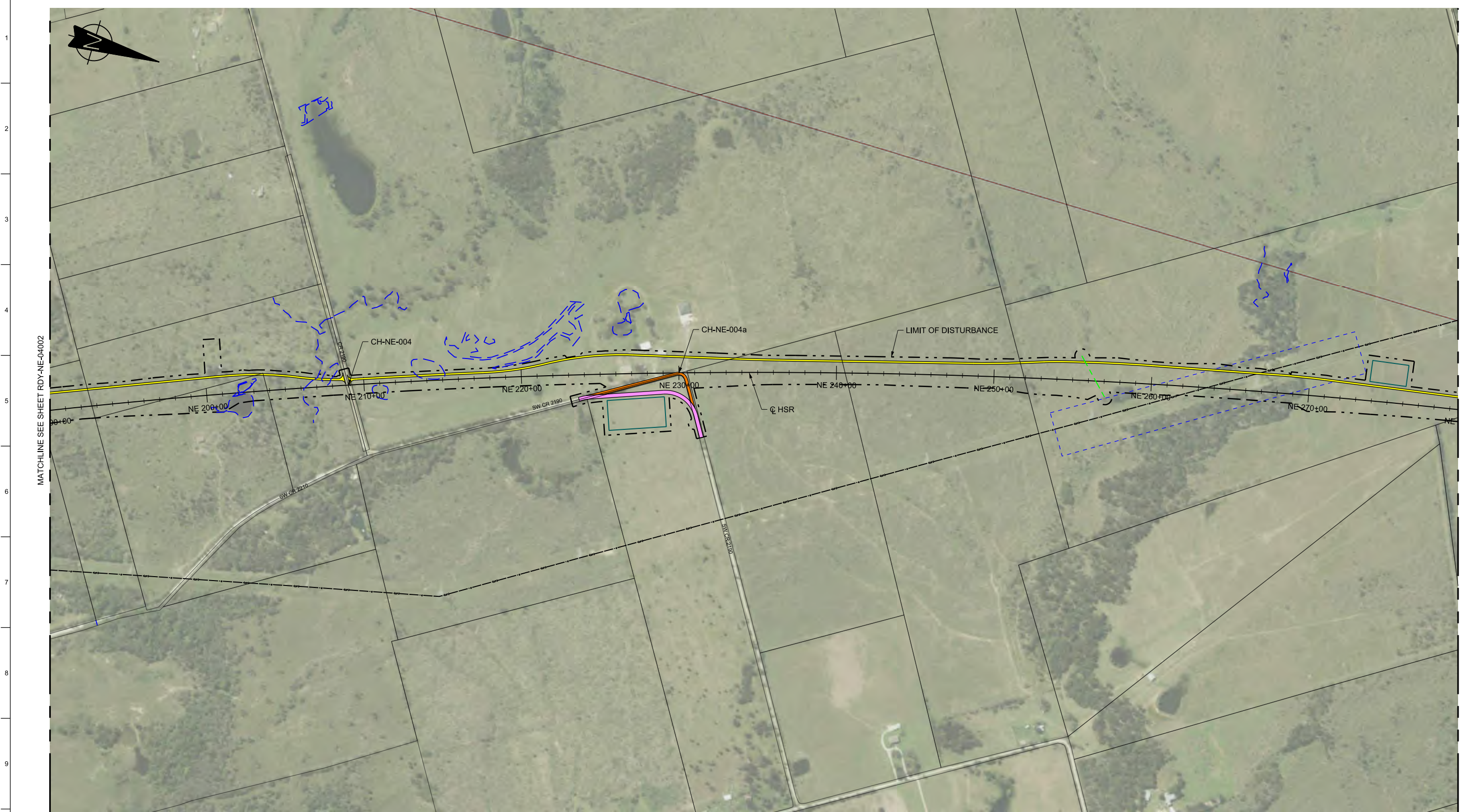
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 100+00 TO NE 190+00**

Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-NE-04002	Rev 01



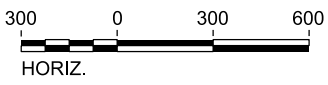
MATCHLINE SEE SHEET RDY-NE-04002

MATCHLINE SEE SHEET RDY-NE-04004

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 190+00 TO NE 280+00**

Scale
AS SHOWN

Drawing Status
FINAL

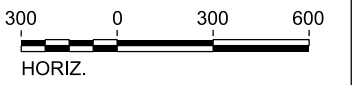
Job No	Drawing No	Rev
234180	RDY-NE-04003	01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

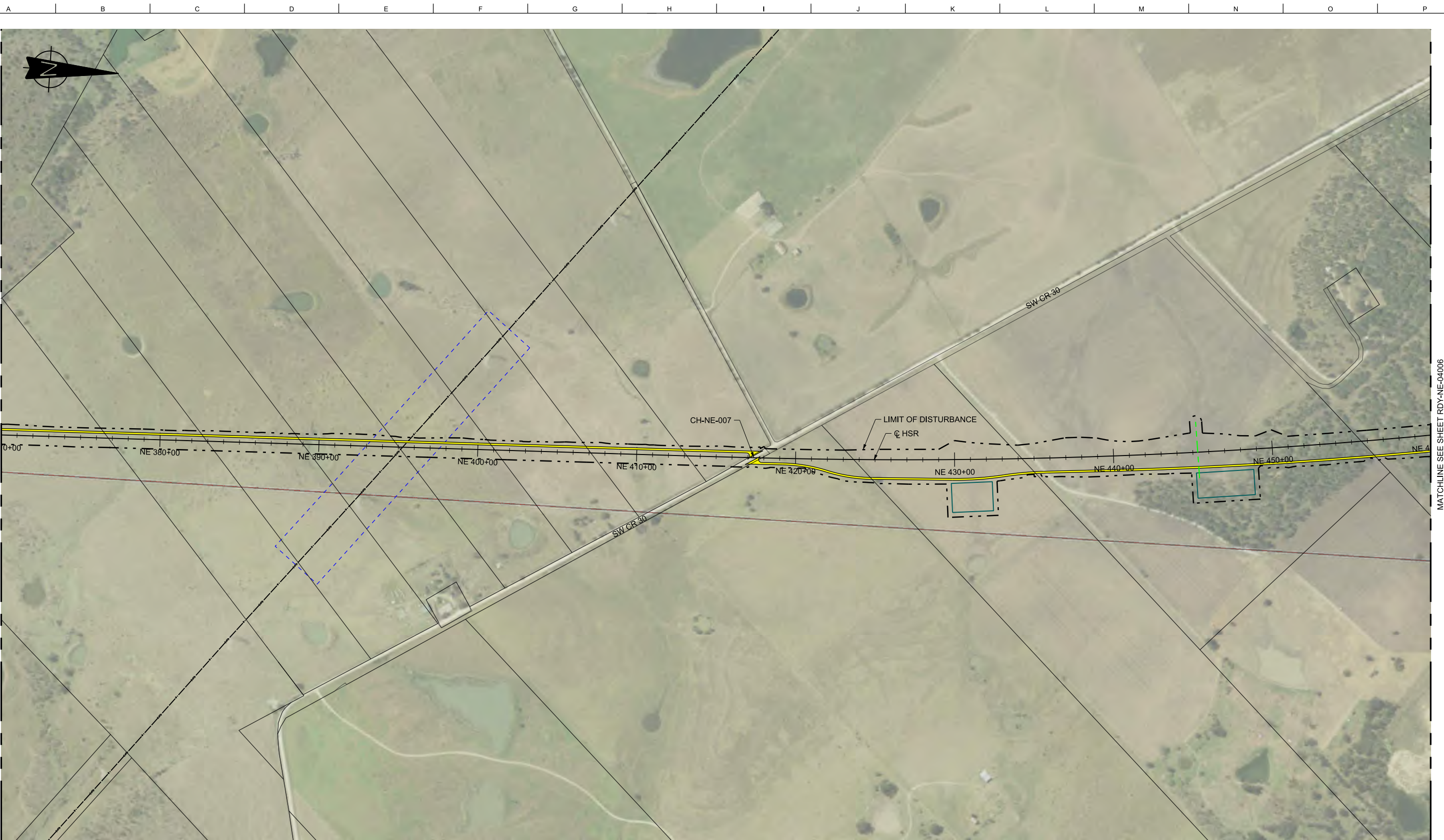
FREESSE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 NE 280+00 TO NE 370+00**

Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-NE-04004	Rev 01

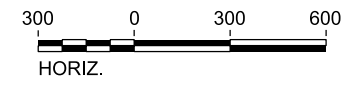


MATCHLINE SEE SHEET RDY-NE-04004

MATCHLINE SEE SHEET RDY-NE-04006

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 370+00 TO NE 460+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04005	Rev 01

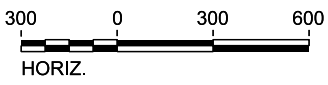


MATCHLINE SEE SHEET RDY-NE-04005

MATCHLINE SEE SHEET RDY-NE-04007

LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		DETENTION BASIN (RAIL)
	PROPOSED PRIVATE ACCESS		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	REALIGNED PUBLIC ROAD		PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

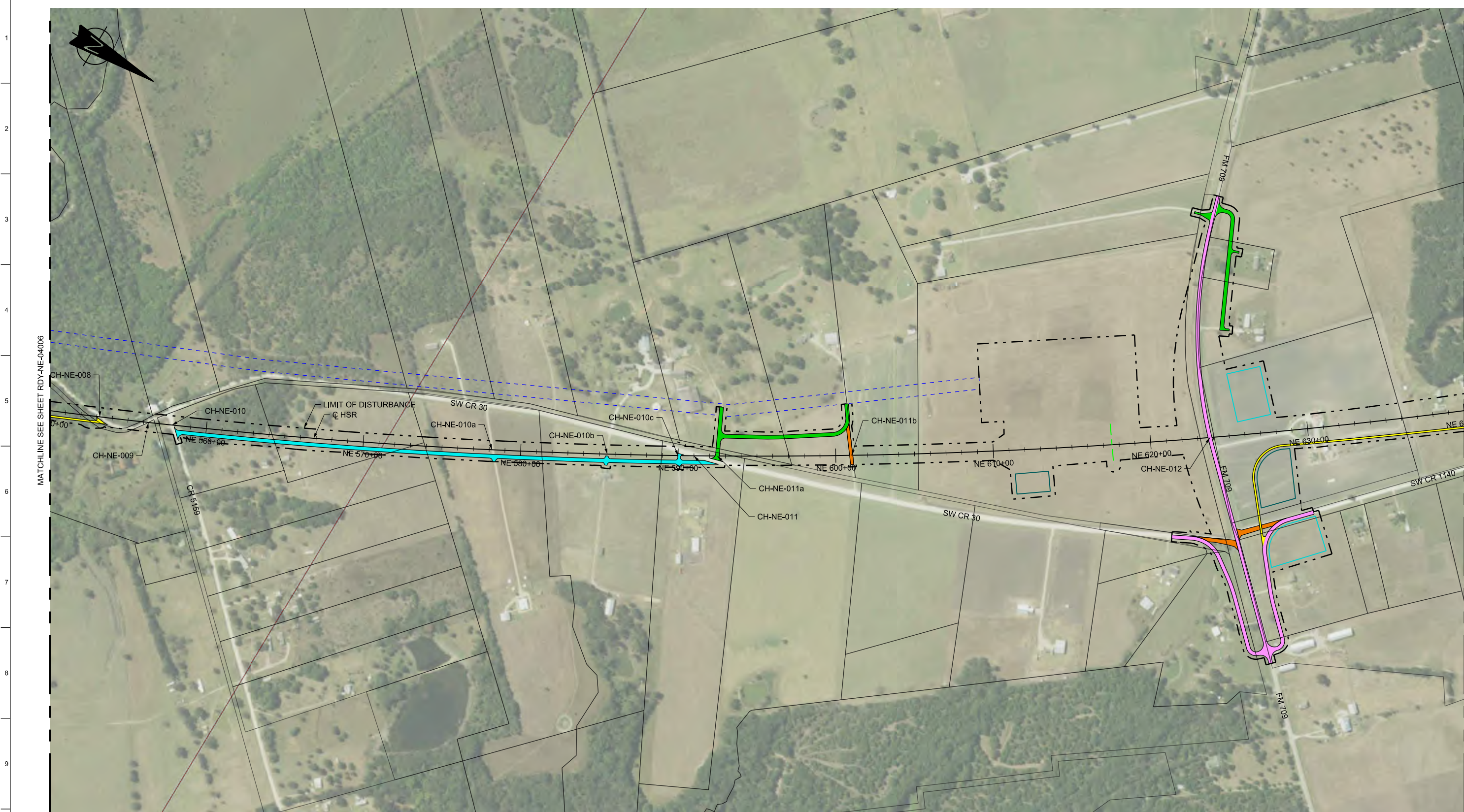
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

TEXAS CENTRAL

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 460+00 TO NE 550+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04006	Rev 01



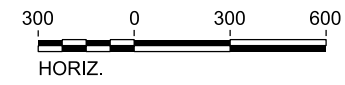
MATCHLINE SEE SHEET RDY-NE-04006

MATCHLINE SEE SHEET RDY-NE-04008

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

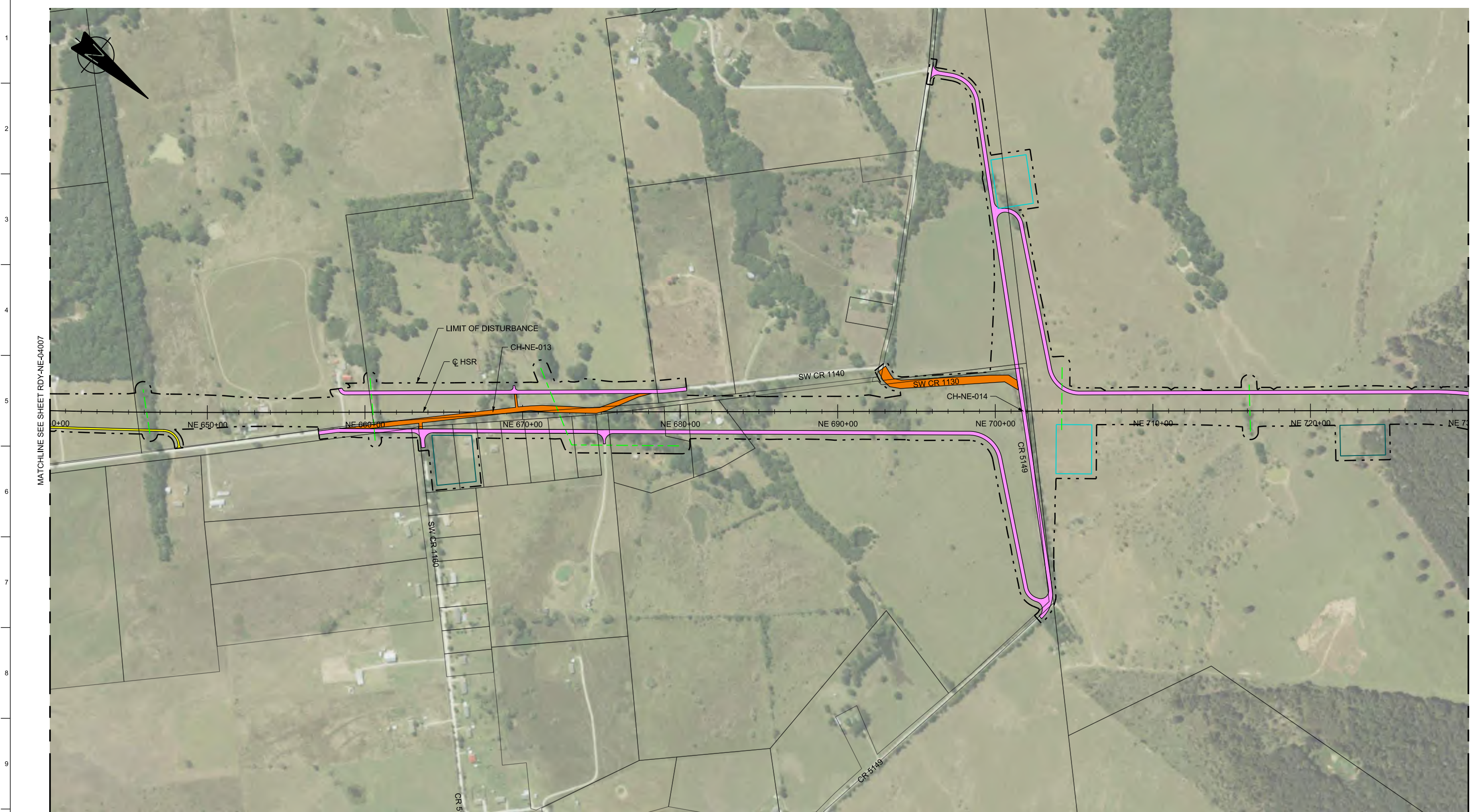
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 550+00 TO NE 640+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04007	Rev 01



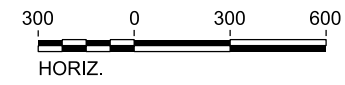
MATCHLINE SEE SHEET RDY-NE-04007

MATCHLINE SEE SHEET RDY-NE-04009

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 640+00 TO NE 730+00**

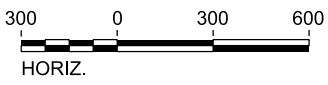
Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-NE-04008	Rev 01



MATCHLINE SEE SHEET RDY-NE-04008

MATCHLINE SEE SHEET RDY-NE-04010

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

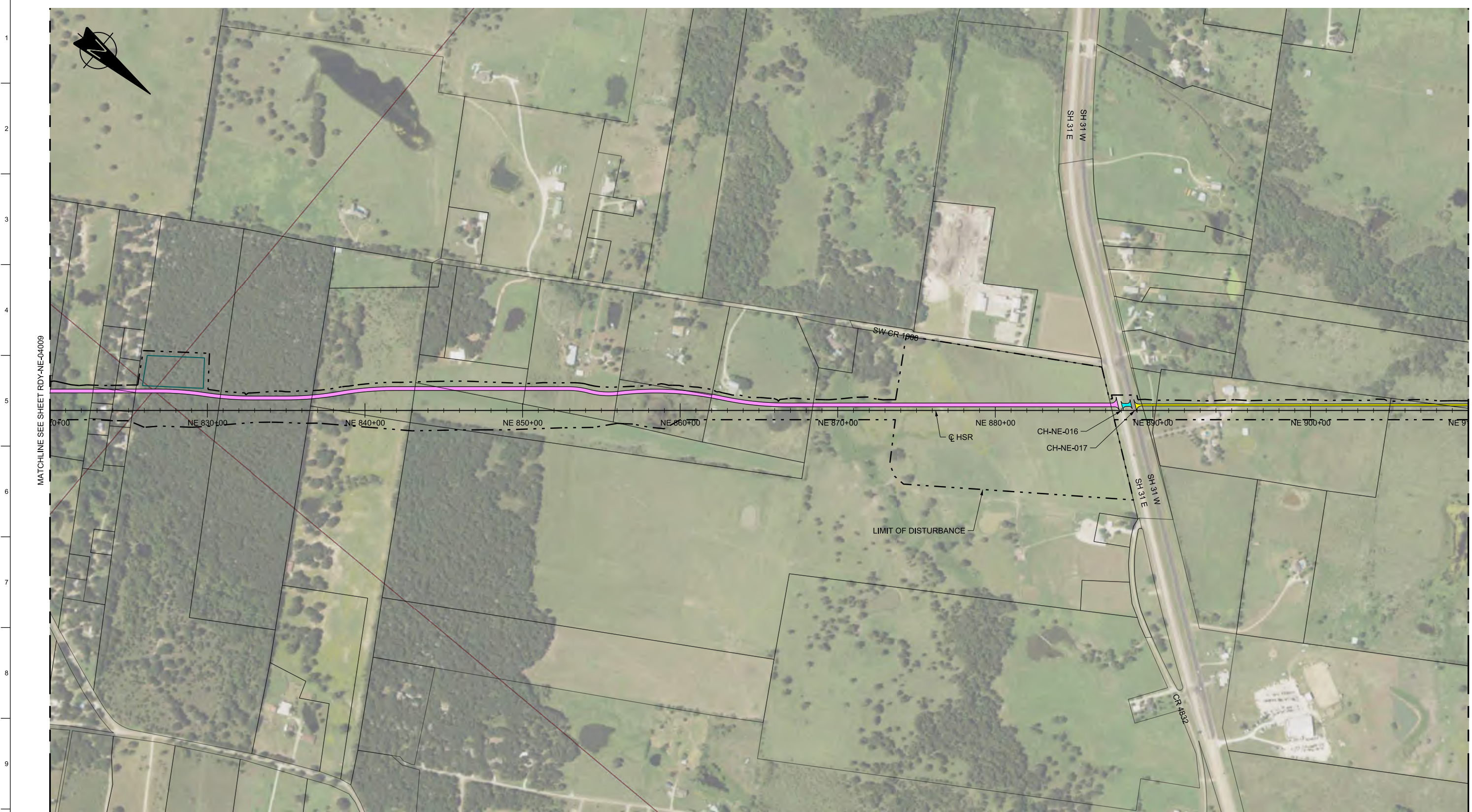
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 730+00 TO NE 820+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04009	Rev 01

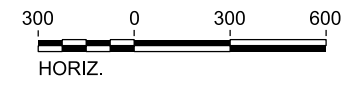


MATCHLINE SEE SHEET RDY-NE-04009

MATCHLINE SEE SHEET RDY-NE-04011

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

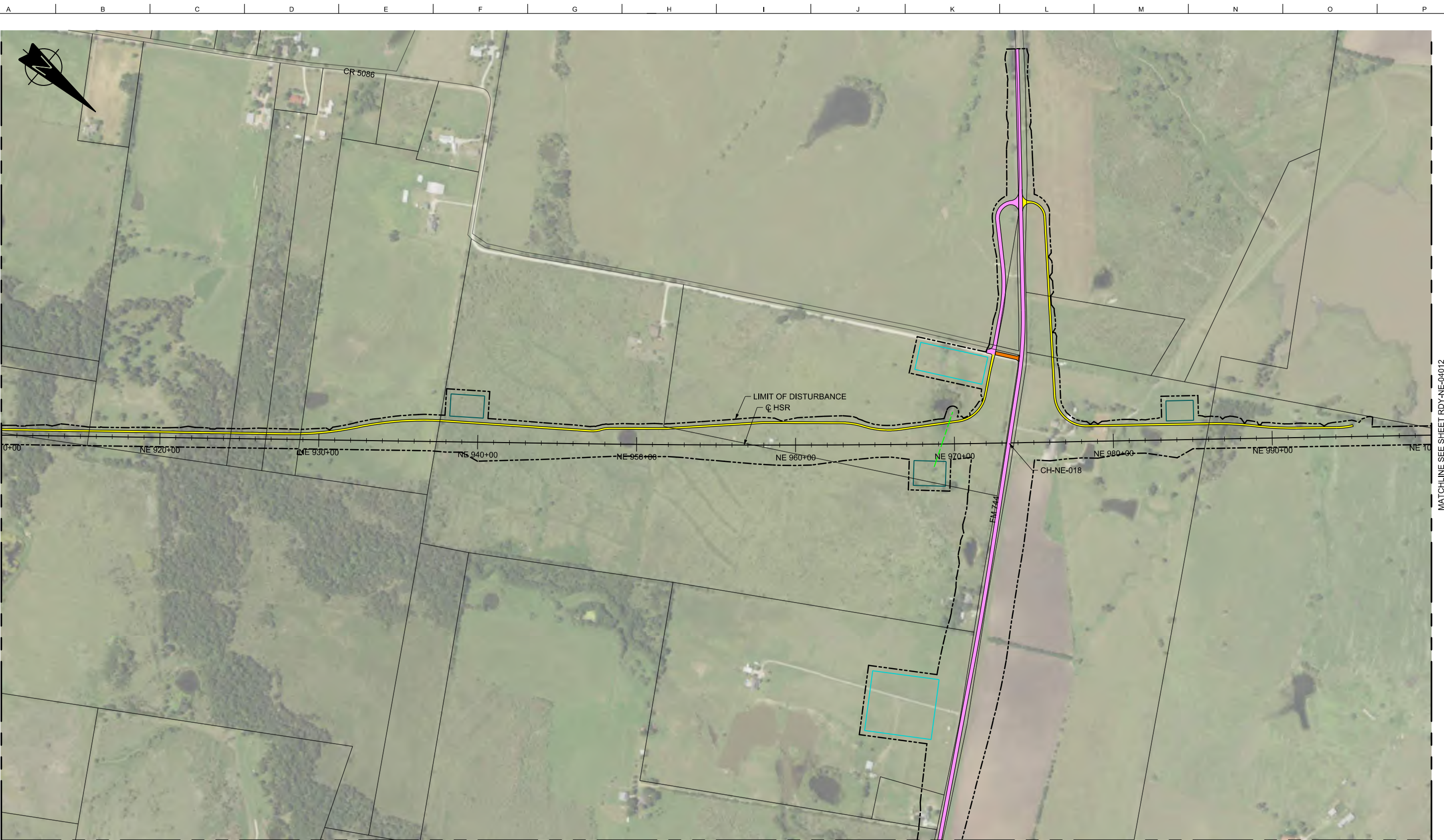
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 820+00 TO NE 910+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04010	Rev 01



MATCHLINE SEE SHEET RDY-NE-04010

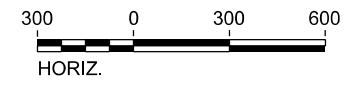
MATCHLINE SEE SHEET RDY-NE-04012

MATCHLINE SEE SHEET RDY-NE-04011-A

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	S. SASSER
DRAWN BY	J. ALMAGUER
CHECKED BY	G. VOWELS
IN CHARGE	C. TAYLOR
DATE	02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



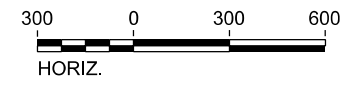
Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 910+00 TO NE 1000+00**

Scale	AS SHOWN	
Drawing Status	FINAL	
Job No	Drawing No	Rev
234180	RDY-NE-04011	01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	S. SASSER
DRAWN BY	J. ALMAGUER
CHECKED BY	G. VOWELS
IN CHARGE	C. TAYLOR
DATE	02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

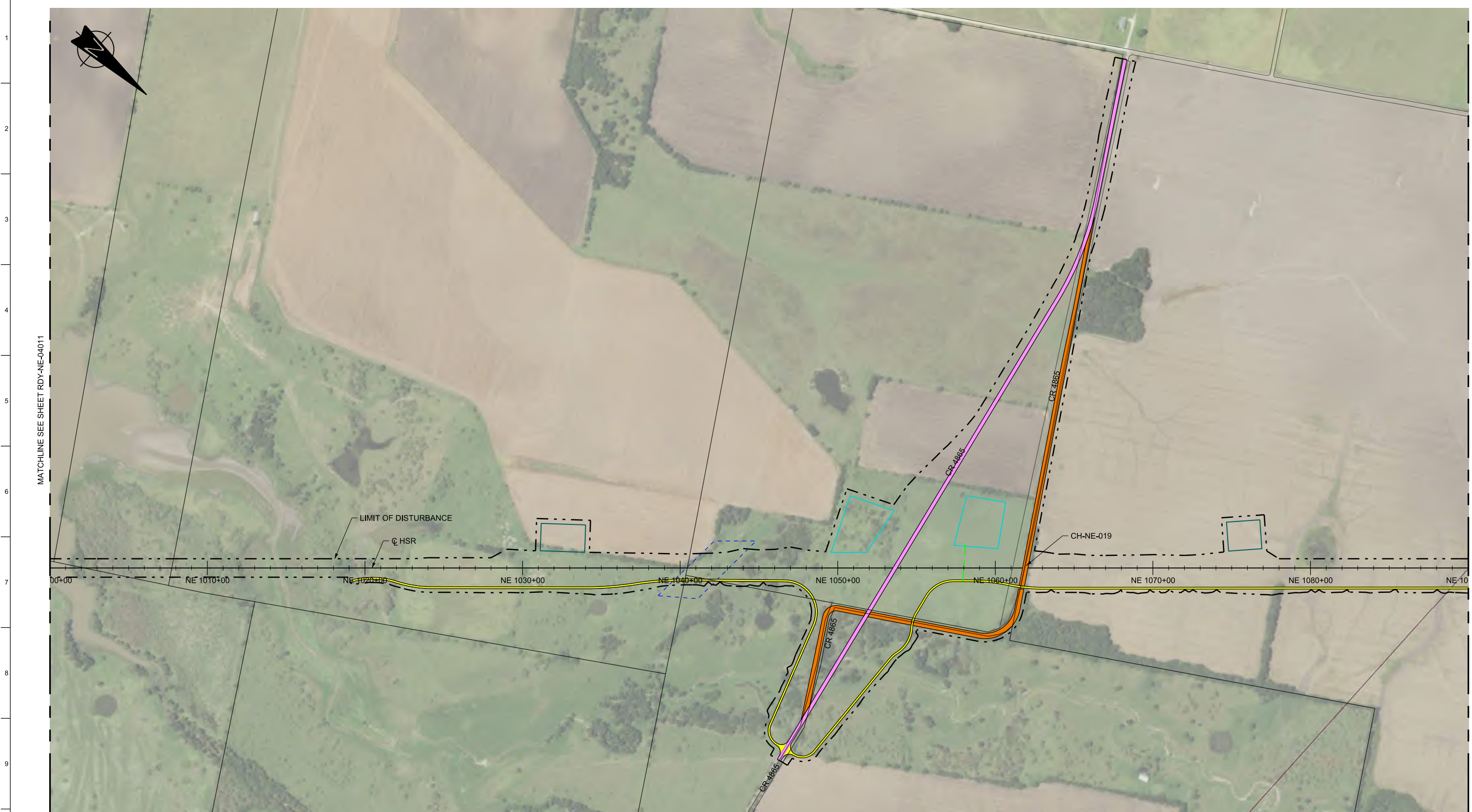
FREES & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW
 MATCHLINE RDY-NE-04011**

Scale	AS SHOWN	
Drawing Status	FINAL	
Job No	Drawing No	Rev
234180	RDY-NE-04011-A	01



MATCHLINE SEE SHEET RDY-NE-04011

MATCHLINE SEE SHEET RDY-NE-04013

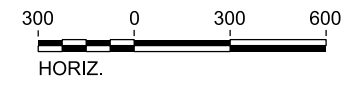
LIMIT OF DISTURBANCE

Q HSR

CH-NE-019

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

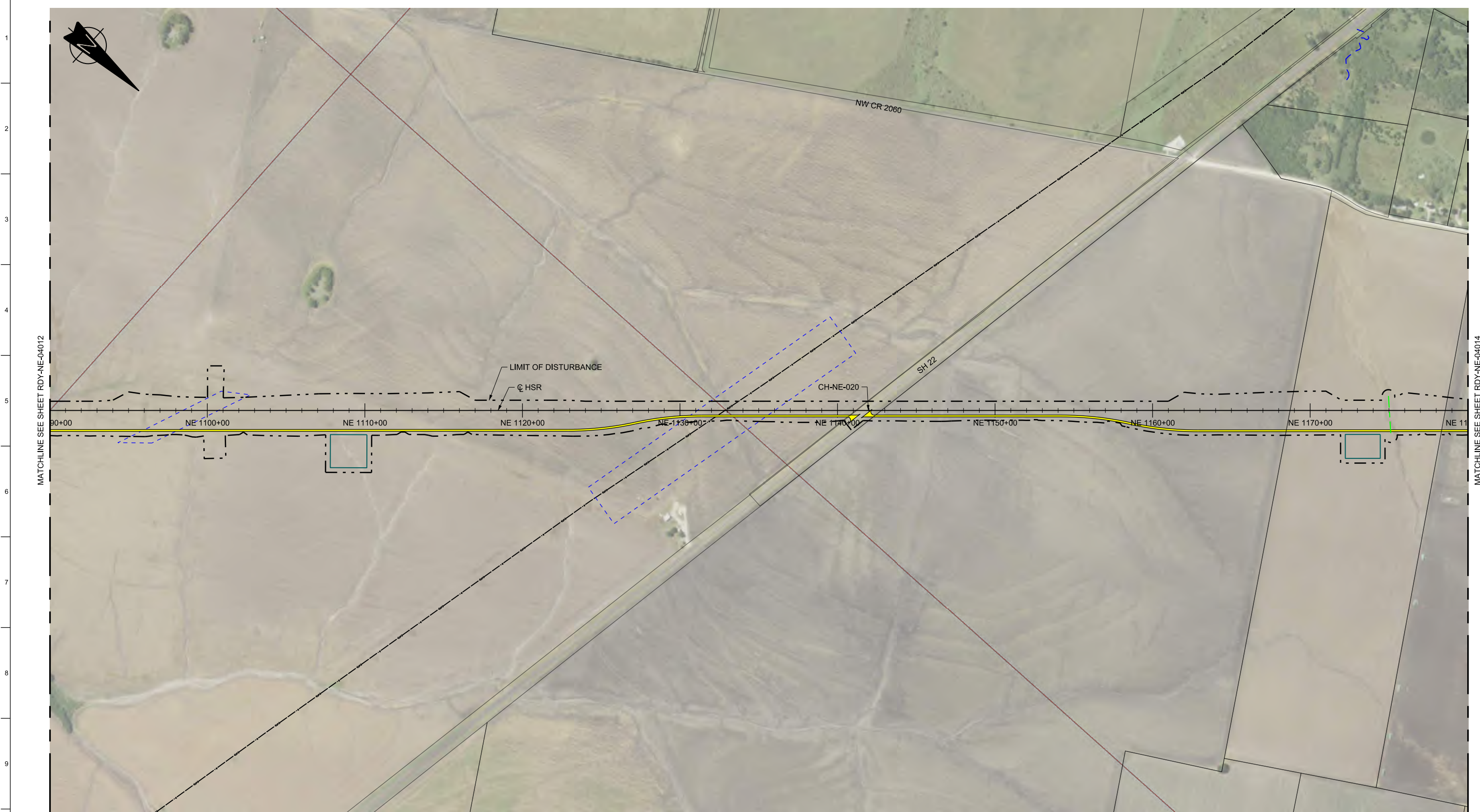
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

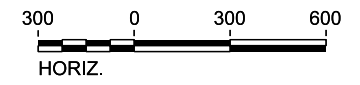
Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1000+00 TO NE 1090+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04012	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

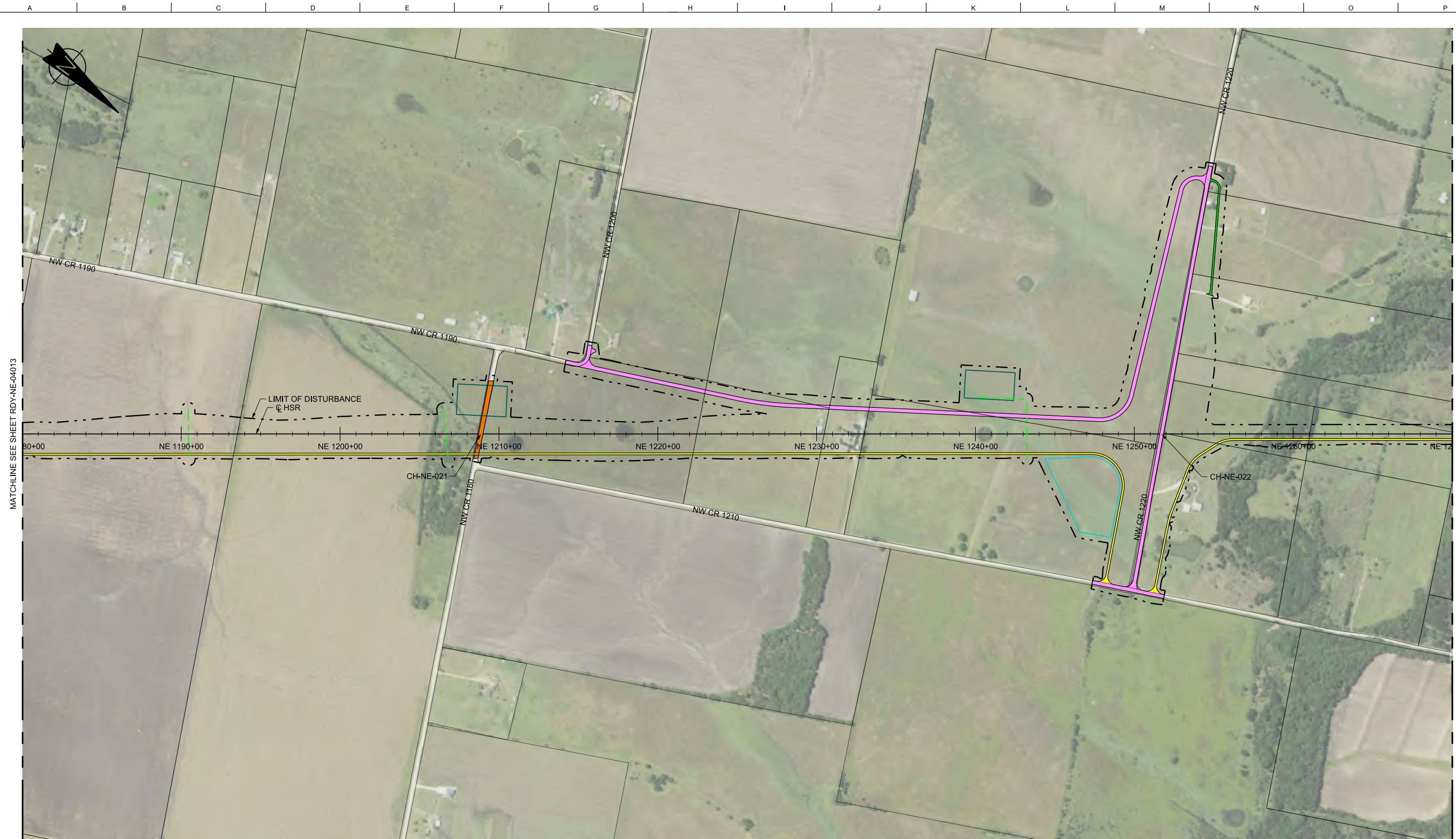
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1090+00 TO NE 1180+00**

Scale
AS SHOWN

Drawing Status
FINAL

Job No	Drawing No	Rev
234180	RDY-NE-04013	01



LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

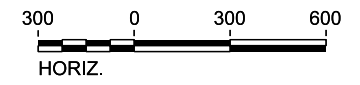
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1180+00 TO NE 1270+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04014	Rev 01



LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

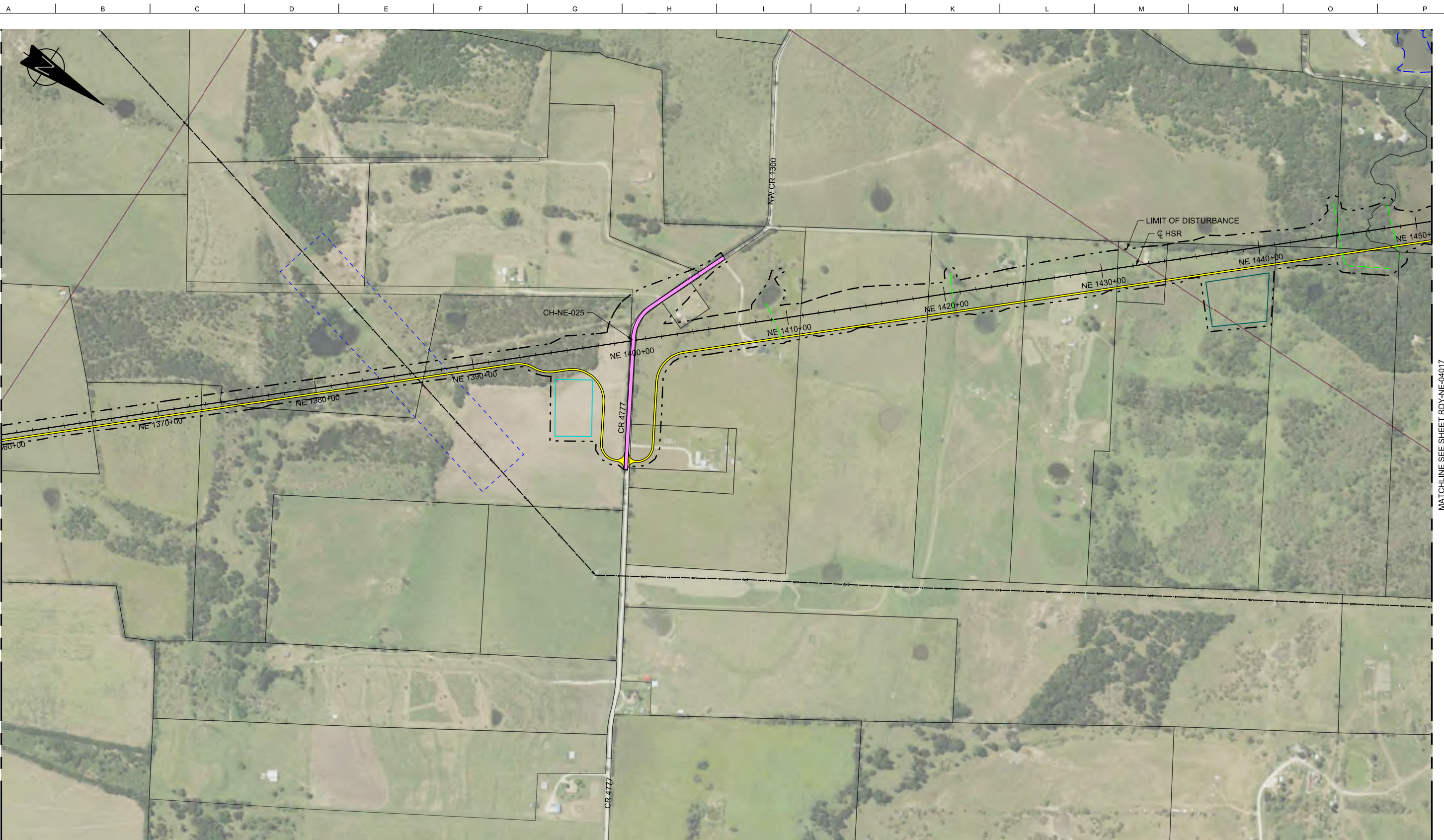
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1270+00 TO NE 1360+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04015	Rev 01



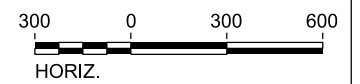
MATCHLINE SEE SHEET RDY-NE-04015

MATCHLINE SEE SHEET RDY-NE-04017

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

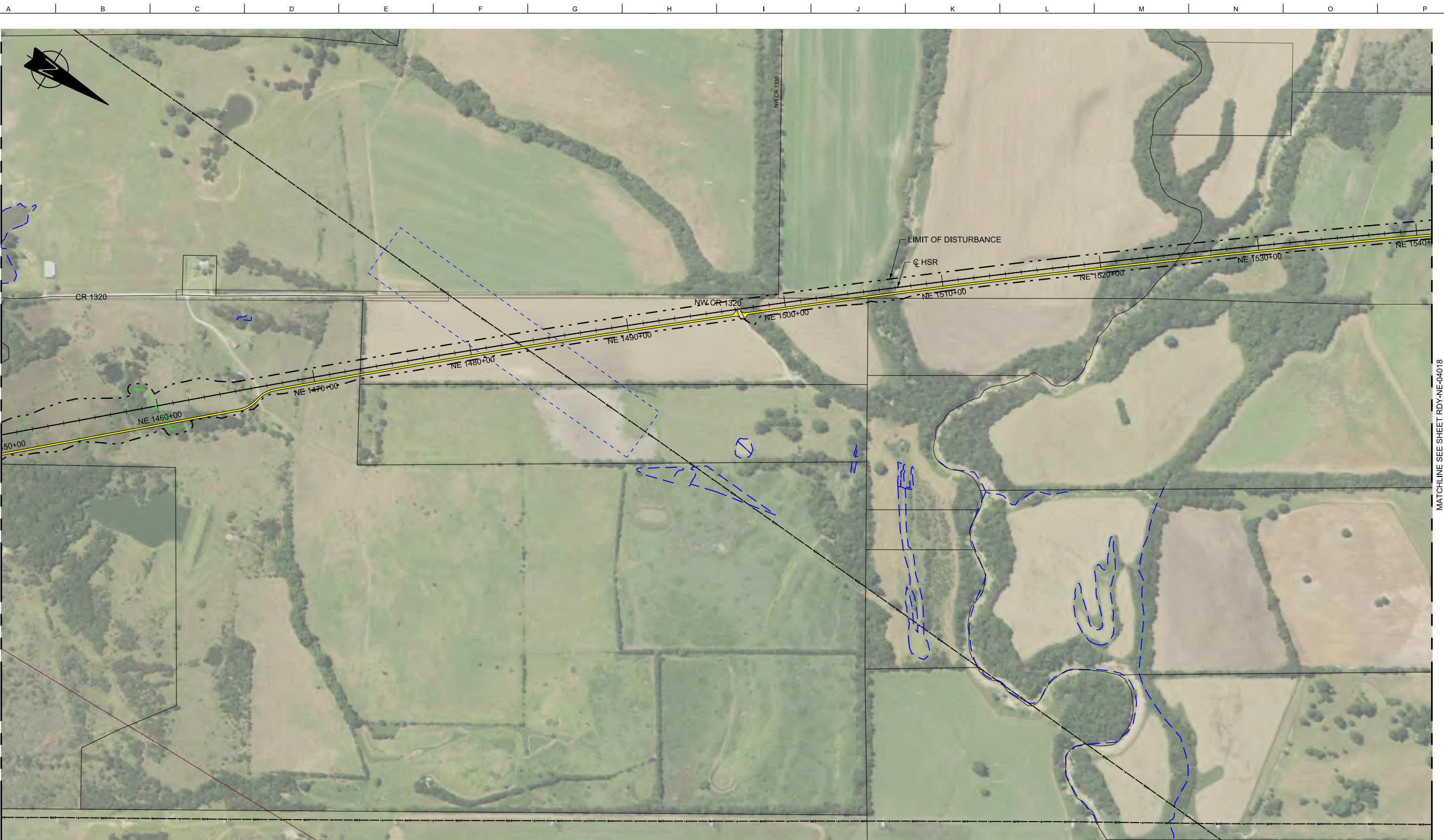
DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



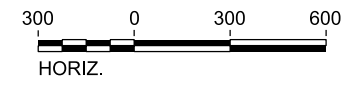
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1360+00 TO NE 1450+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04016	Rev 01



LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

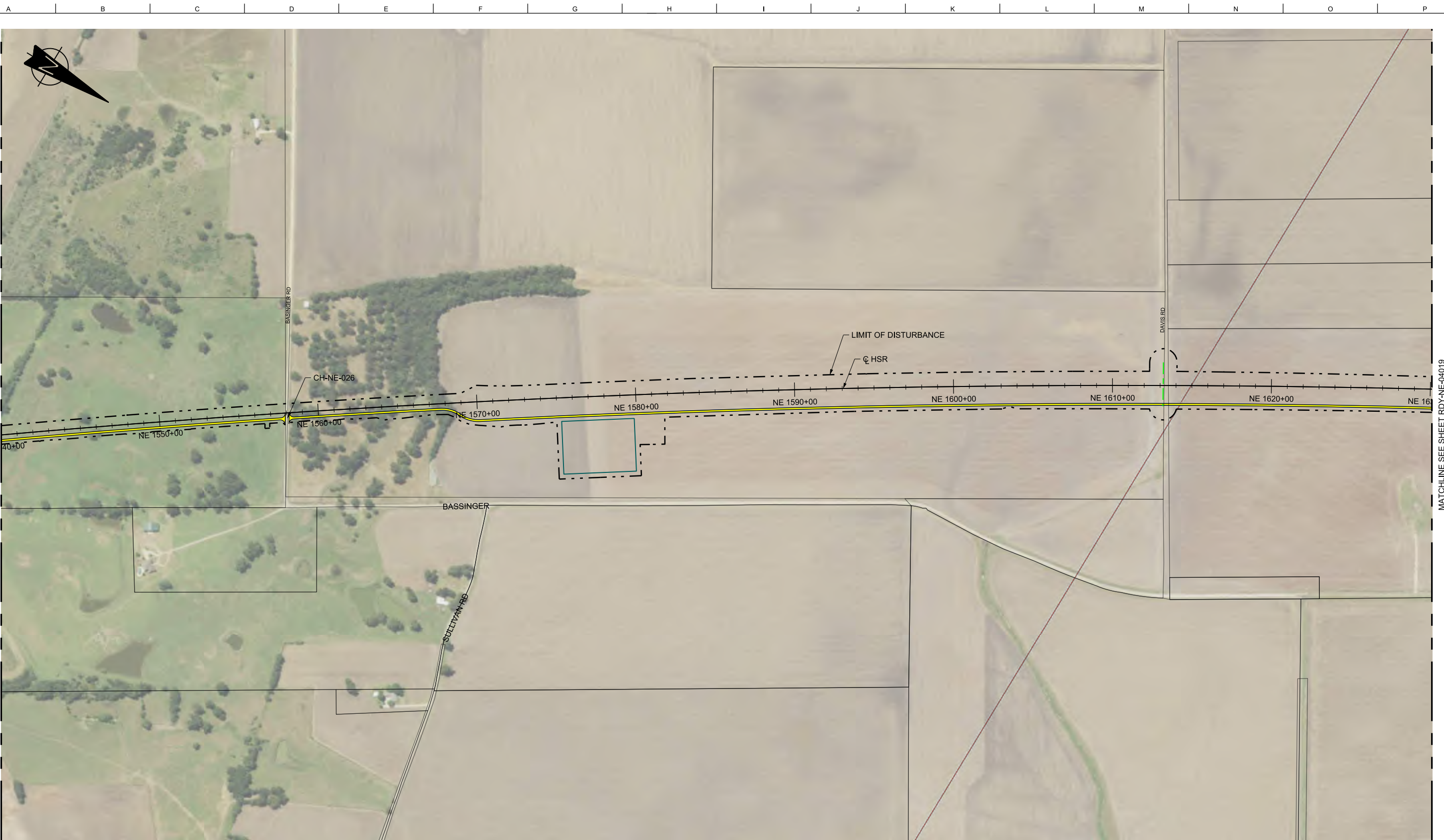
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

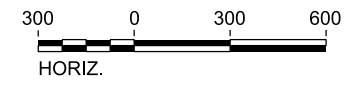
Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1450+00 TO NE 1540+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04017	Rev 01



LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**NAVARRO EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
NE 1540+00 TO NE 1630+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-NE-04018	Rev 01



MATCHLINE SEE SHEET RDY-NE-04018

FOR CONTINUATION - SEE ELLIS WEST AND EAST SEGMENTS (EW & EE)

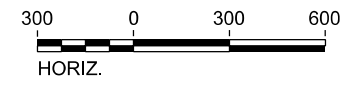
FM 984

HODGE RD

FM 984

FM 984

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freesse.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**NAVARRO EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 NE 1630+00 TO NE 1652+05**

Scale AS SHOWN	Drawing Status FINAL
Job No 234180	Drawing No RDY-NE-04019
	Rev 01

VOLUME 4B-7

ELLIS EAST SEGMENT

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR

DRAWN BY
D. THOMPSON

CHECKED BY
R. BURNS

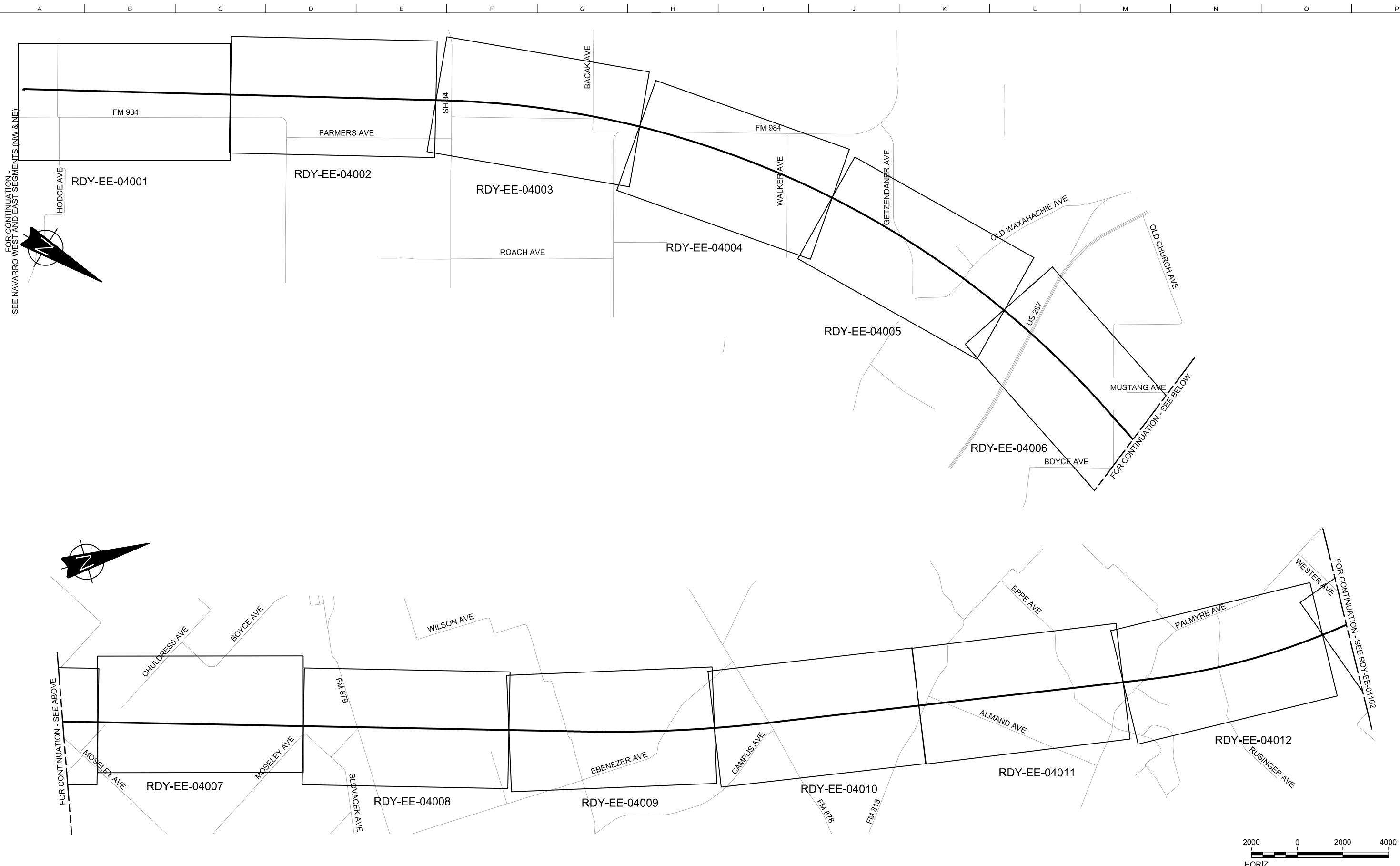
IN CHARGE
C. TAYLOR

DATE
2/25/2019



Drawing Title
GENERAL

Scale NO SCALE		
Drawing Status FINAL		
Job No 234180	Drawing No GEN-00-0000	Rev 01



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
D. THOMPSON

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE AND NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 1 OF 2
EE 9+56 TO EE 1064+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-01101	Rev 01



FOR CONTINUATION - SEE RDY-EE-01101

FOR CONTINUATION - SEE DALLAS SEGMENT (DS)



HORIZ.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
D. THOMPSON

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
KEY MAP - SHEET 2 OF 2
EE 1064+00 TO EE 1232+15**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-01102	Rev 01

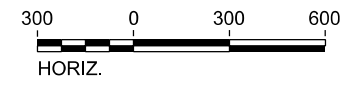


FOR CONTINUATION -
SEE NAVARRO WEST AND EAST SEGMENTS (NW & NE)

MATCHLINE SEE SHEET RDY-EE-04002

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 9+56 TO EE 100+00**

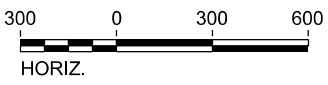
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04001	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 100+00 TO EE 190+00**

Scale
AS SHOWN

Drawing Status
FINAL

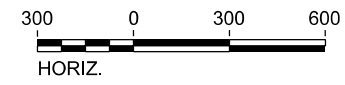
Job No 234180	Drawing No RDY-EE-04002	Rev 01
-------------------------	-----------------------------------	------------------



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		PROPOSED CULVERTS / DITCH REALIGNMENT				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	S. SASSER
DRAWN BY	J. ALMAGUER
CHECKED BY	G. VOWELS
IN CHARGE	C. TAYLOR
DATE	02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



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

Drawing Title		
ELLIS EAST SEGMENT CIVIL HIGHWAY PLAN VIEW - STA. EE 190+00 TO EE 280+00		
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04003	Rev 01

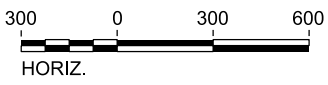


MATCHLINE SEE SHEET RDY-EE-04003

MATCHLINE SEE SHEET RDY-EE-04005

LEGEND	
	PROPOSED HSR MOW ACCESS
	PROPOSED PUBLIC ROAD
	PROPOSED PRIVATE ACCESS
	REALIGNED PUBLIC ROAD
	ROAD REMOVAL
	UTILITY LIMIT OF DISTURBANCE
	ELECTRICAL TRANS. LINE
	EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)
	DETENTION BASIN (ROAD)
	PROPOSED CULVERTS / DITCH REALIGNMENT

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS

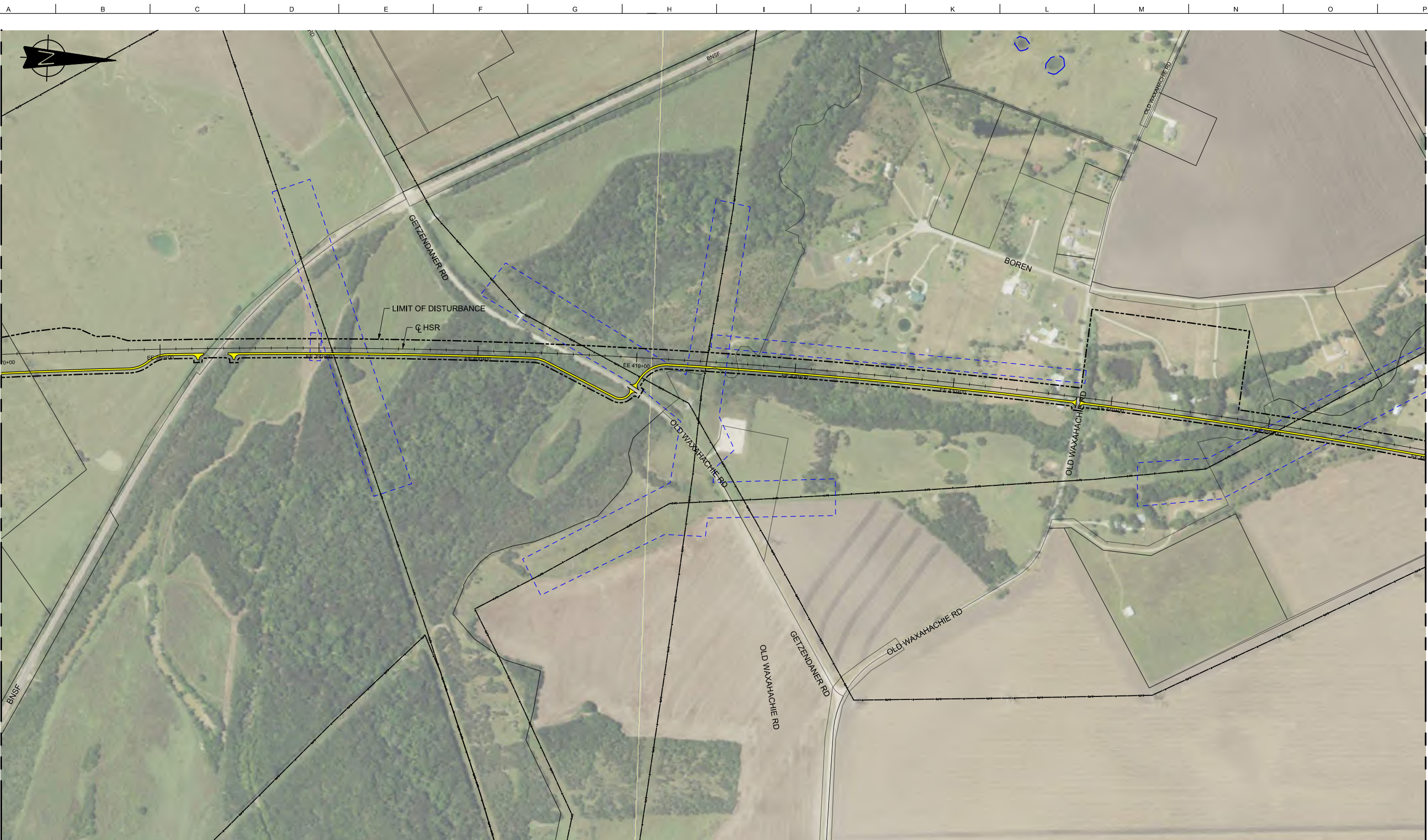
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 280+00 TO EE 370+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04004	Rev 01



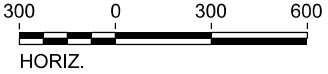
MATCHLINE SEE SHEET RDY-EE-04004

MATCHLINE SEE SHEET RDY-EE-04006

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		PROPOSED CULVERTS / DITCH REALIGNMENT				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



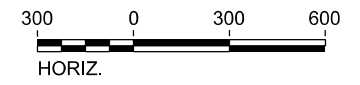
Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 370+00 TO EE 460+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04005	Rev 01



	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

FRESE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 EE 460+00 TO EE 550+00**

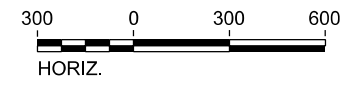
Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-EE-04006	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. SASSER
DRAWN BY J. ALMAGUER
CHECKED BY G. VOWELS
IN CHARGE C. TAYLOR
DATE 02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

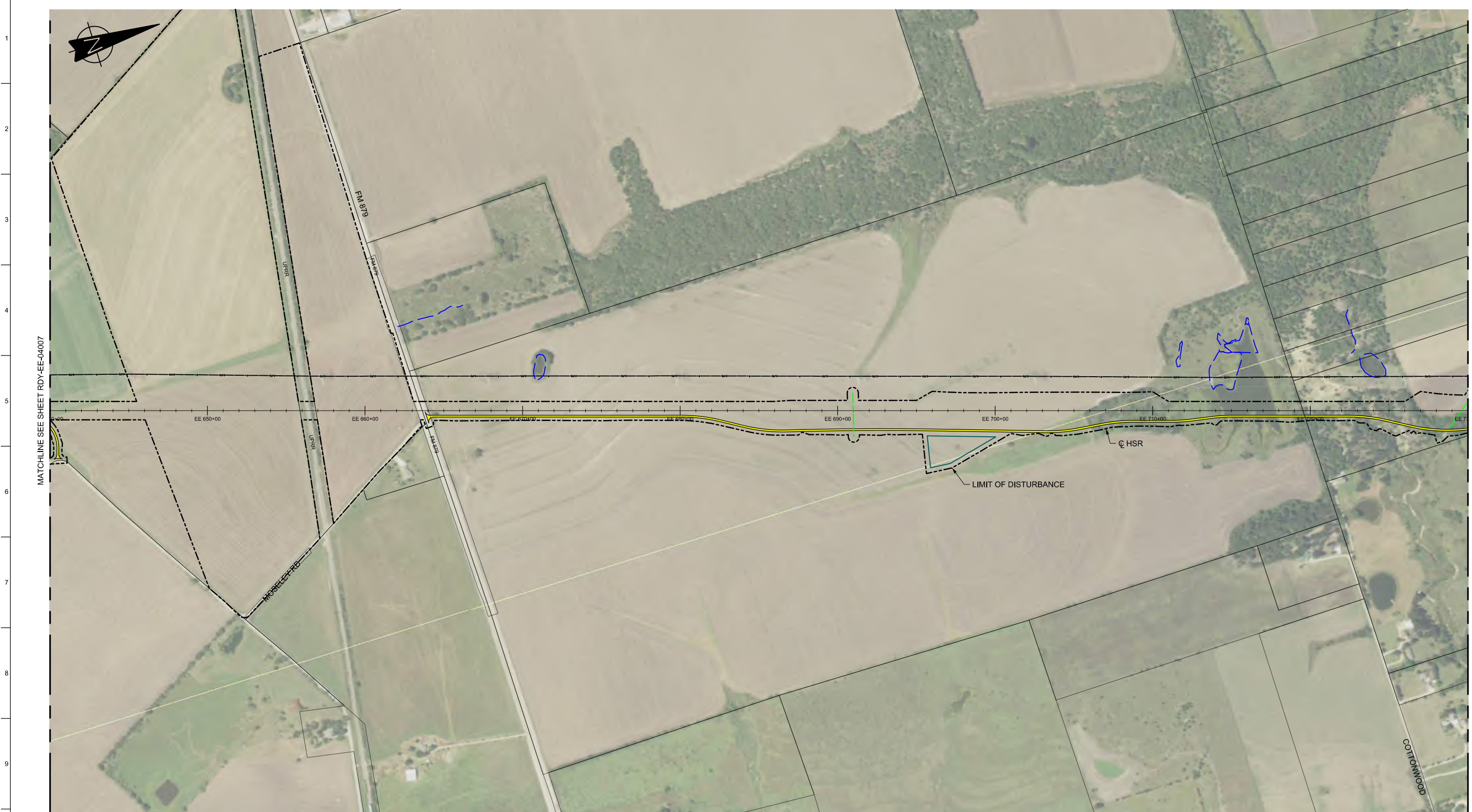
FREES & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 EE 550+00 TO EE 640+00**

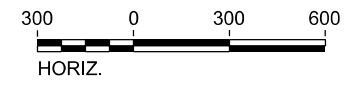
Scale AS SHOWN	Drawing Status FINAL	
Job No 234180	Drawing No RDY-EE-04007	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	S. SASSER
DRAWN BY	J. ALMAGUER
CHECKED BY	G. VOWELS
IN CHARGE	C. TAYLOR
DATE	02/25/2019

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

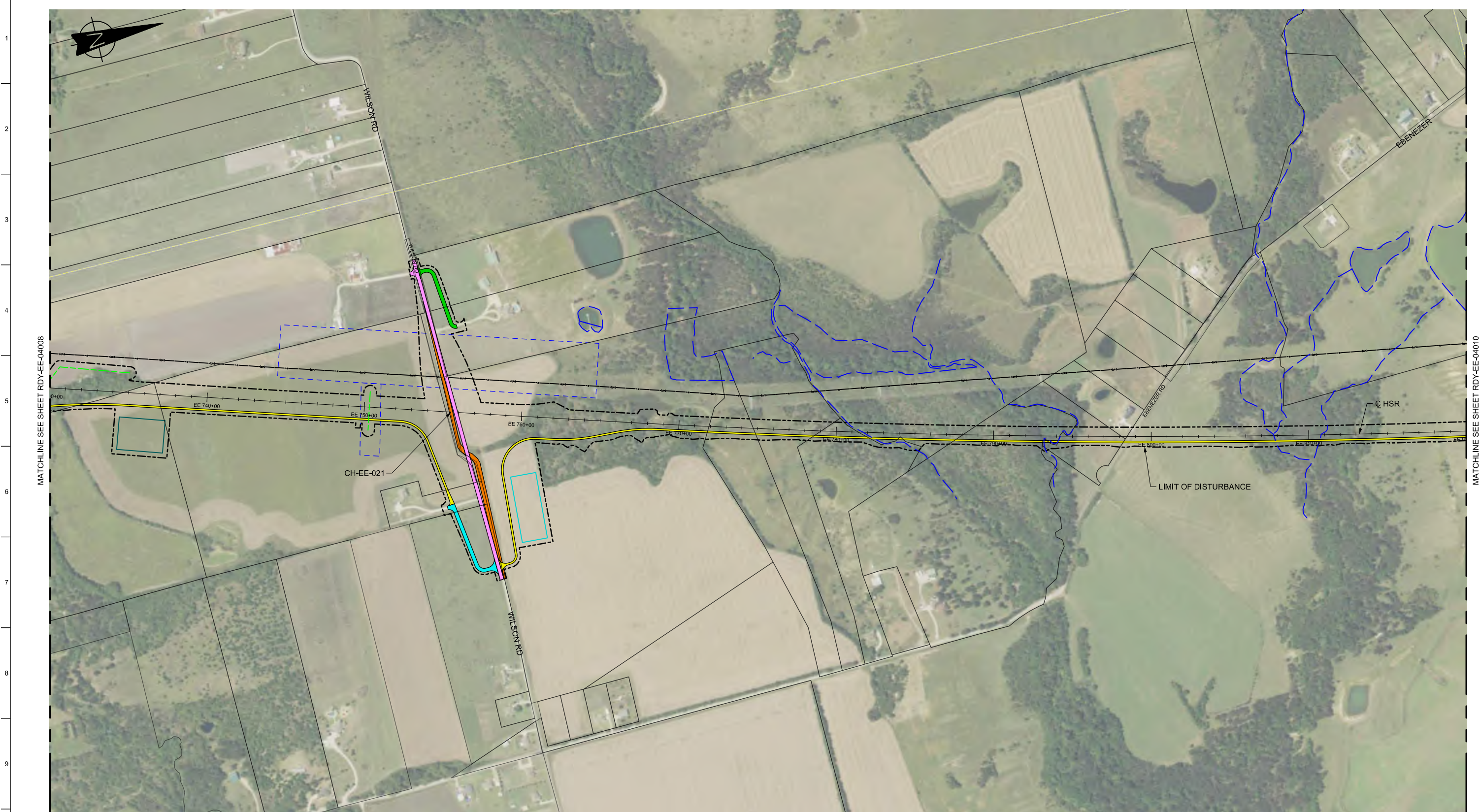
FRESE & NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
 FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
 CIVIL HIGHWAY
 PLAN VIEW - STA.
 EE 640+00 TO EE 730+00**

Scale	AS SHOWN	
Drawing Status	FINAL	
Job No	Drawing No	Rev
234180	RDY-EE-04008	01



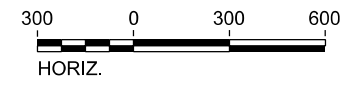
MATCHLINE SEE SHEET RDY-EE-04008

MATCHLINE SEE SHEET RDY-EE-04010

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019



Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990



2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING



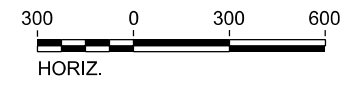
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 730+00 TO EE 820+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04009	Rev 01



LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

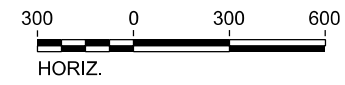
Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 820+00 TO EE 910+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04010	Rev 01



LEGEND					
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 910+00 TO EE 1000+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04011	Rev 01

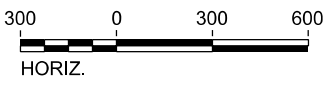


MATCHLINE SEE SHEET RDY-EE-04011

MATCHLINE SEE SHEET RDY-EE-04013

LEGEND			
	PROPOSED HSR MOW ACCESS		ROAD REMOVAL
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND
	DETENTION BASIN (RAIL)		PROPOSED CULVERTS / DITCH REALIGNMENT
	DETENTION BASIN (ROAD)		

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

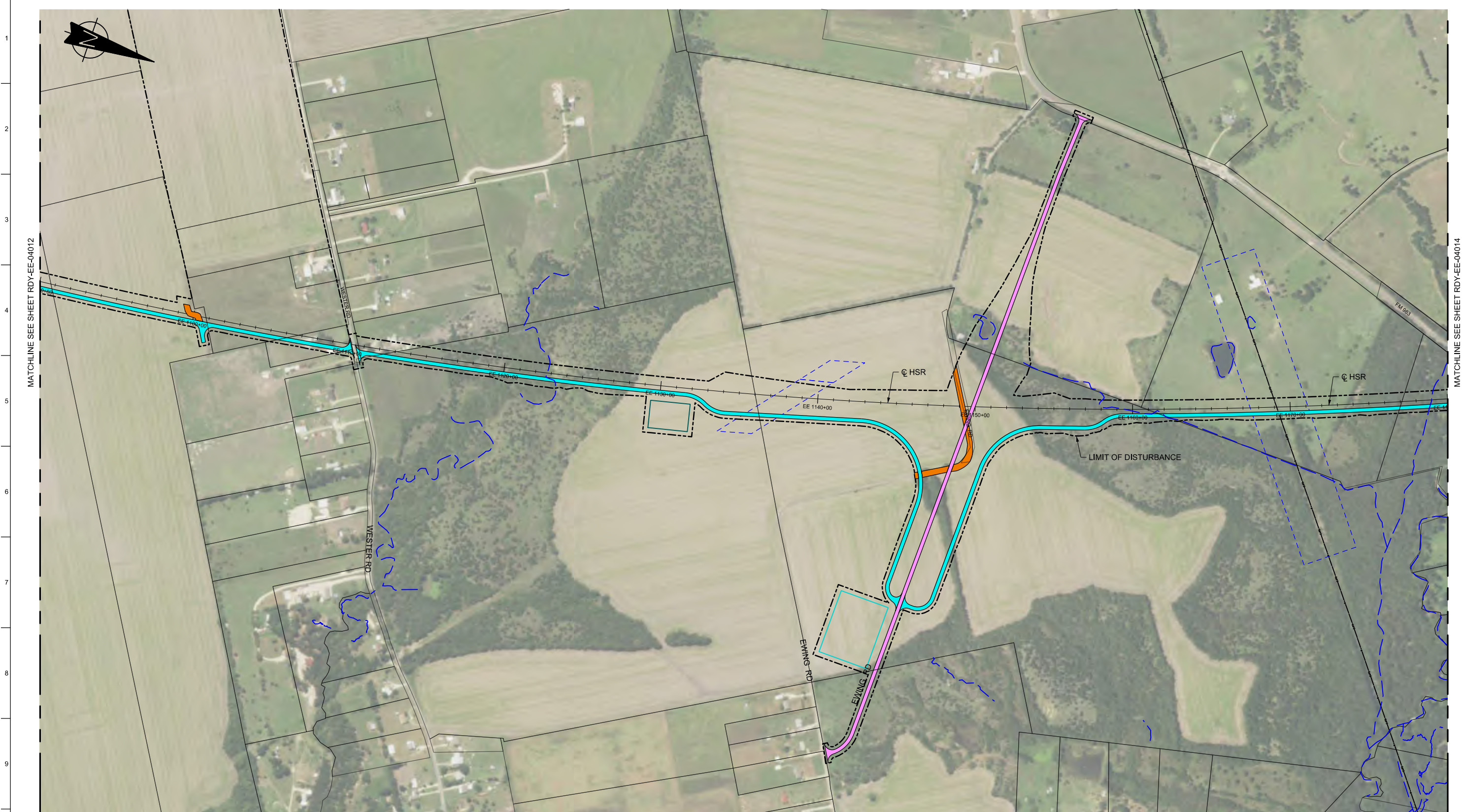
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 1000+00 TO EE 1090+00**

Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04012	Rev 01

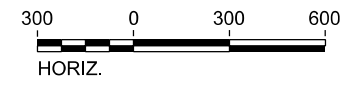


MATCHLINE SEE SHEET RDY-EE-04012

MATCHLINE SEE SHEET RDY-EE-04014

LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		ELECTRICAL TRANS. LINE		PROPOSED CULVERTS / DITCH REALIGNMENT
	REALIGNED PUBLIC ROAD		EXIST. STREAM / POND / WETLAND		



PLAN

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 1090+00 TO EE 1180+00**

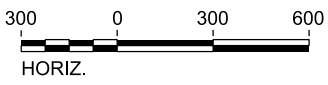
Scale AS SHOWN		
Drawing Status FINAL		
Job No 234180	Drawing No RDY-EE-04013	Rev 01



LEGEND

	PROPOSED HSR MOW ACCESS		ROAD REMOVAL		UTILITY LIMIT OF DISTURBANCE		DETENTION BASIN (RAIL)
	PROPOSED PUBLIC ROAD		ELECTRICAL TRANS. LINE		EXIST. STREAM / POND / WETLAND		DETENTION BASIN (ROAD)
	PROPOSED PRIVATE ACCESS		PROPOSED CULVERTS / DITCH REALIGNMENT				
	REALIGNED PUBLIC ROAD						

PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SASSER

DRAWN BY
J. ALMAGUER

CHECKED BY
G. VOWELS

IN CHARGE
C. TAYLOR

DATE
02/25/2019

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
Tel (713) 783 2787 Fax (713) 343 1467
www.arup.com
Texas Registered Engineering Firm: F-1990

FREESSE & NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

DALLAS TO HOUSTON HIGH-SPEED RAIL
FINAL CONCEPTUAL ENGINEERING

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

Drawing Title
**ELLIS EAST SEGMENT
CIVIL HIGHWAY
PLAN VIEW - STA.
EE 1180+00 TO EE 1232+15**

Scale
AS SHOWN

Drawing Status
FINAL

Job No 234180	Drawing No RDY-EE-04014	Rev 01
------------------	----------------------------	-----------