

CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

DRAFT

Merced to Fresno Section
Draft EIR-EIS

Volume III:

Section E – Alignment Plans

Hybrid Alternative with Ave 24 Wye

August 2011



CALIFORNIA
High-Speed Rail Authority



U.S. Department of Transportation
Federal Railroad Administration



ABBREVIATIONS

ALIGNMENT

<u>HORIZONTAL</u>	
BC	BEGINNING OF CURVE
CS	CURVE TO SPIRAL
EC	END OF CURVE
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CIRCULAR CURVES
PCS	POINT OF CURVE TO SPIRAL
PF	POINT OF FROG
PI	POINT OF INTERSECTION OF TWO TANGENTS
PITO	POINT OF INTERSECTION OF TURNOUT
POC	POINT ON CURVE
POS	POINT ON SPIRAL
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVES
PS	POINT OF SWITCH
PSC	POINT OF SPIRAL TO CURVE
PT	POINT OF TANGENCY
R	RADIUS OF CURVATURE IN FEET
SC	SPIRAL TO CURVE
SPO	POINT OF ORIGIN OF COMPOUND SPIRAL
SS	POINT OF SPIRAL TO SPIRAL
ST	SPIRAL TO TANGENT
TS	TANGENT TO SPIRAL
V	DESIGN VELOCITY IN MILES PER HOUR

<u>VERTICAL</u>	
PVC	POINT OF VERTICAL CURVE (BEGINNING OF CURVE)
PVI	POINT OF VERTICAL INTERSECTION (OF TANGENTS)
PVT	POINT OF VERTICAL TANGENCY (ENDING OF CURVE)
VC	VERTICAL CURVE

MISCELLANEOUS

BEG	BEGIN
BLVD	BOULEVARD
CL	CENTER LINE
CL	CENTERLINE, CLASS
CLR	CLEAR
COL	COLUMN
DWG	DRAWING
EQ	EQUATION
EXIST(E)	EXISTING
IN	INCH
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NB	NORTH BOUND
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
O/H OH	OVER HEAD
PG&E	PACIFIC GAS & ELECTRIC
PGL	PROFILE GRADE LINE
RR	RAILROAD
RD	ROAD
R/W ROW	RIGHT OF WAY
RT	RIGHT
SS	SANITARY SEWER
SHT	SHEET
ST	STREET
STD	STANDARD
SD	STORM DRAIN
STRUCT	STRUCTURE
T	TELEPHONE
	(OH) OVERHEAD LINE
	(UG) UNDERGROUND LINE
TOR	TOP OF RAIL
TK	TRACK
TO	TURNOUT
TYP	TYPICAL
TBD	TO BE DETERMINED
TF	TELECOMMUNICATIONS FIBER
	OPTIC
V VERT	VERTICAL
W	WATER, WEST

SYMBOLS

	MATCH LINE
	HST TRACK
	PROPOSED HST RIGHT-OF-WAY
	FREIGHT/PASSENGER TRACK - EXISTING
	EXISTING RIGHT-OF-WAY
	EXISTING BRIDGE FEATURES
	RETAINING WALLS
	ORIGINAL GROUND
	GAS LINE (16")
	COMMUNICATION LINE
	WATER LINE
	FIBER OPTIC LINE
	ELECTRICAL LINE
	ELECTRICAL TOWER
	SEWER LINE
	STORM DRAIN LINE
	FUEL LINE
	TELEPHONE LINE
	PETROLEUM LINE (12")
	OVERHEAD
	NORTH ARROW
	PVI
	POTENTIAL NOISE BARRIER

NOTES:

- EXISTING ROADS TO BE GRADE SEPARATED OVER THE HIGH SPEED TRAIN (HST) RIGHT OF WAY ARE INDICATED IN THE ALIGNMENT PROFILE. ALL OTHER ROADS CROSSING THE PROPOSED HST TRACKS WILL BE CLOSED OR RELOCATED. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.
- SEE STRUCTURE PLANS FOR LIMITS AND DETAILS OF VIADUCTS, STREAM CROSSINGS, RETAINING WALLS AND OTHER HST STRUCTURES.
- SEE ROADWAY PLANS FOR ROADWAY RELOCATIONS, GRADE SEPARATIONS, AND MODIFICATIONS TO STATE HIGHWAY FACILITIES.
- UTILITIES INDICATED ON THE PLANS ARE FOR REFERENCE ONLY. SEE "UTILITIES CONFLICT MEMO" FOR ADDITIONAL INFORMATION AND PROPOSED RELOCATION CONCEPTS.
- ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

7/21/2011 1:00:40 PM I:\CHSR\60022962\Task-02_Merced-Fresno\cadd\Civil\Sheet\TRACKWORK\A1\A1_GENERAL.WF-T-0100.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY B. CHAN
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE 07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

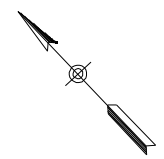
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

GENERAL

ABBREVIATIONS, SYMBOLS AND NOTES

CONTRACT NO. HSR06-007
DRAWING NO. T0100-A
SCALE NO SCALE
SHEET NO. ### OF ###

7/21/2011 6:14:18 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-0101-A.dgn



END CONSTRUCTION
PHASE 1 6066+19.24
MERCED CONNECTION

5556+91.21
WCDO/HYBRID MERCED
CONNECTION NB=
5556+98.70
MERCED CONNECTION

5556+97.18
WCDO/HYBRID MERCED
CONNECTION SB=
5556+98.34
MERCED CONNECTION

MATCH LINE
SEE T0102-A

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. SHIELDS
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

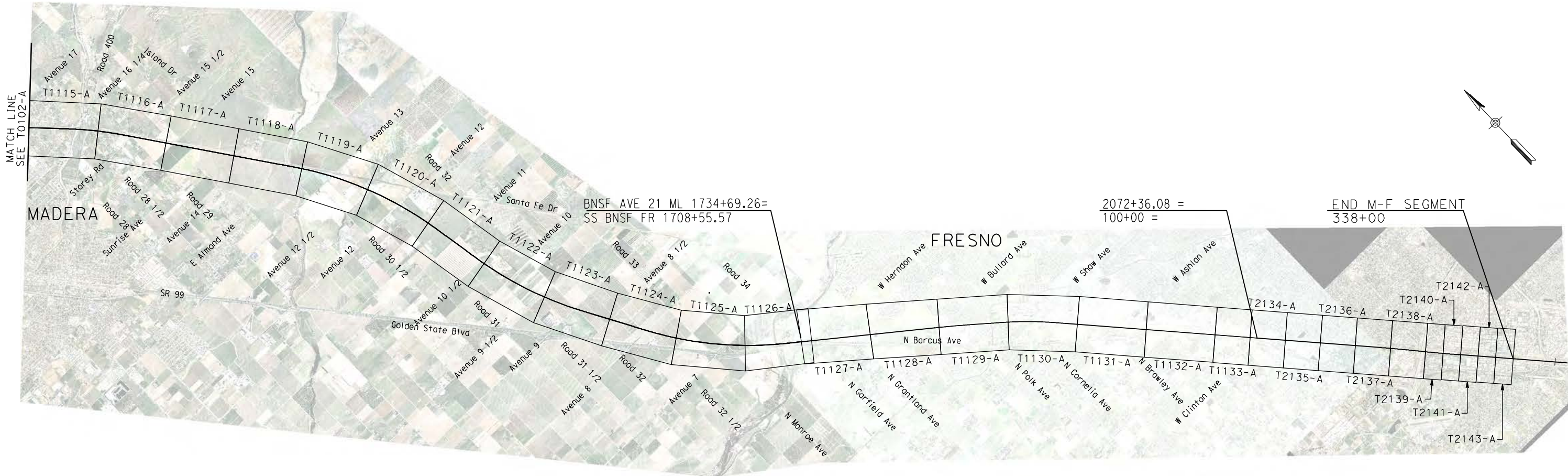
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 24
KEY MAP
SHEET 1 OF 3

CONTRACT NO.
HSR06-007
DRAWING NO.
T0101-A
SCALE
NO SCALE
SHEET NO.
OF

7/21/2011 6:16:08 PM i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-0103-A.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
HYBRID ALIGNMENT
AVENUE 24
KEY MAP
SHEET 3 OF 3

CONTRACT NO.
HSR06-007
DRAWING NO.
T0103-A
SCALE
NO SCALE
SHEET NO.
OF

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID MAIN LINE SB

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION	BEGIN DRAWING
HYBRID225	250	40500	4.06	2.93	1300	1389+53.83	1723+31.35	T1102-A
HYBRID202	250	28000	6.00	2.93	2000	2106+38.05	2169+50.77	T1115-A
HYBRID203	250	28000	6.00	2.93	2000	2288+03.95	2432+77.00	T1118-A
HYBRID204	250	28016.5	6.00	2.93	2000	2452+42.23	2566+35.87	T1121-A
HYBRID205	250	28016.5	6.00	2.93	2000	2599+58.87	2731+68.17	T1124-A
HYBRID206	250	42995.5	3.25	2.56	1199.87	2708+55.57	2748+44.15	T1127-A
HYBRID207	250	43000	3.25	2.56	1200	2852+76.45	2927+63.38	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR HYBRID-SB MERCED CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION	BEGIN DRAWING
UPRR238	150	32000			220	5058+80.31	5070+68.54	T2380-A
UPRR239	150	24000	1.25	2.50	220	5070+68.54	5080+47.49	T2380-A
UPRR240	145	10000	5.50	2.91	1000	5085+76.31	5253+03.33	T2381-A
UPRR241	250	28000	6.00	3.00	2000	5318+28.64	5556+97.18	T2385-A
UPRR115	150	10000	6.00	3.00	1200	5981+82.99	6030+04.80	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WCDO/HYBRID WYE-SB CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION	BEGIN DRAWING
UPRR243	150	32000			220	148+82.51	161+03.62	T2410-A
UPRR244	150	20208.38	1.25	2.50	220	120+03.63	127+73.63	T2411-A
UPRR245	150	10000	6.00	3.00	1200	179+44.88	348+32.82	T2411-A
UPRR246	150	24000	1.25	2.50	220	363+61.57	372+01.33	T2414-A
UPRR247	150	32000			220	372+01.33	382+24.68	T2414-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID MAIN LINE NB

SHT NO.	DWG NO.	DESIGN SPEED (V) (MPH)	DRAWING TITLE LINE 3	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	DRAWING TITLE LINE 4	UNBALANCED SUPERELEVATION (Eu) (IN)	DRAWING TITLE LINE 5	SPIRAL LENGTH (Ls) (FT)	DRAWING TITLE LINE 6	BEGIN STATION	END STATION	BEGIN DRAWING
HYBRID125		250		40500	4.06		2.93		1300		1389+53.83	1723+31.35	T1102-A
HYBRID102		250		28016.5	6.00		2.93		2000		2106+50.94	2169+66.78	T1115-A
HYBRID103		250		28016.5	6.00		2.93		2000		2288+19.38	2433+00.37	T1118-A
HYBRID104		250		28000	6.00		2.93		2000		2452+65.60	2566+53.12	T1121-A
HYBRID105		250		28000	6.00		2.93		2000		2599+58.87	2731+68.17	T1121-A
HYBRID106		250		43012	3.25		2.56		1200		2708+55.57	2748+44.15	T1127-A
HYBRID107		250		43016.5	3.25		2.56		1200		2852+76.45	2927+63.38	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - HYBRID-NB MERCED CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION	BEGIN DRAWING
UPRR238	150	32000			220	5061+66.32	5071+80.46	T2360-A
UPRR239	150	24000	1.25	2.50	220	5071+80.46	5080+29.07	T2360-A
UPRR140	145	10000	5.50	2.91	1000	5086+34.11	5253+61.04	T2361-A
UPRR141	250	28016.5	6.00	3.00	2000	5318+09.77	5556+91.21	T2365-A
UPRR215	150	10016.5	6.00	3.00	1200	5981+82.99	6030+04.80	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WCDO/HYBRID WYE-NB CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION	BEGIN DRAWING
UPRR143	150	32000			220	524+67	534+80.96	T2421-A
UPRR144	150	24028.48	1.25	2.50	220	534+63.17	543+30.17	T2421-A
UPRR145	145	10000	6.00	2.41	1000	548+58.65	715+47.65	T2421-A
UPRR146	150	24000	1.25	2.50	220	721+33.73	728+73.02	T2424-A
UPRR147	150	32000			220	728+73.02	738+88.07	T2424-A

7/22/2011 11:09:07 AM i:\cnsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID 24 WF-T-0150A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
A. SHIELDS
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT

TRACK GEOMETRIC DATA
SHEET 1 OF 1

CONTRACT NO.
H8806007

DRAWING NO.
TOT6010

SCALE
NO BOWE

SHEET NO.
OF ###

7/20/2011 3:31:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3000-A.dgn

ALTERNATIVE HYBRID AVENUE 24				
ALIGNMENT	BEGIN STATION	END STATION	SECTION	
HYBRID 24	892+90	926+80	AG2	
	926+80	1020+00	WYE1	
	1020+00	1185+00	AG2	
	1185+00	1230+00	WYE1	
	1230+00	1360+00	AG2	
	1360+00	1375+00	RF2	
	1375+00	1435+00	EL1	
	1435+00	1443+00	RF2	
	1443+00	2681+00	AG2	
	2681+00	2695+00	RF2	
	2695+00	2731+50	EL1	
	2731+50	2740+55	EL5	
	HYBRID-FR	1713+98	1737+00	EL6
		1737+00	1764+78	EL7
1764+78		1767+00	EL8	
1767+00		1788+84	RF3	
1788+84		1843+35	AG6	
1843+35		1893+95	RF3	
1893+95		1958+00	AG6	
1958+00		2072+36	AG7	
UPRR/SR 99 WCDO/HYBRID MC SB	5061+66	5015+00	WYE1	
	5015+00	5235+00	AG4	
	5235+00	5285+00	WYE 1	
	5288+00	5556+91	AG2	
UPRR/SR 99 WCDO/HYBRID MC NB	5058+80	5110+00	WYE1	
	5110+00	5121+00	EL2	
	5121+00	5127+00	RF2	
	5127+00	5235+00	AG4	
	5235+00	5285+00	WYE1	
	5285+00	5597+00	AG2	
UPRR/SR 99-21MC	5556+98	5910+00	AG1	
	5910+00	5916+50	TR2	
	5916+50	5917+60	CC1	
	5917+60	5925+00	TR2	
	5925+00	5977+70	AG1	
	5977+70	5989+20	TR2	
	5989+20	5990+20	CC1	
	5990+20	6003+00	TR2	
	6003+00	6022+00	AG1	
	6022+00	6040+60	TR2	
	6040+60	6042+90	CC1	
	6042+90	6052+50	TR1	
	6052+50	6066+20	AG5	
	UPRR/SR 99 WCDO/HYBRID WC NB	148+82	205+00	WYE1
205+00		211+00	EL2	
211+00		219+00	RF2	
219+00		313+50	AG4	
313+50		320+00	RF2	
320+00		330+00	EL2	
330+00		382+25	WYE1	
UPRR/SR 99 WCDO/HYBRID WC SB	524+67	570+00	WYE1	
	570+00	695+00	AG4	
	695+00	738+88	WYE1	

ALTERNATIVE HYBRID AVENUE 21				
ALIGNMENT	BEGIN STATION	END STATION	SECTION	
HYBRID 21	892+90	330+00	AG2	
	330+00	430+00	WYE1	
	430+00	565+00	AG2	
	565+00	580+00	RF2	
	580+00	630+00	EL1	
	630+00	640+00	RF2	
	640+00	680+00	WYE1	
	680+00	868+87=	AG2	
	868+87=	2681+00	AG2	
	2681+00	2695+00	RF2	
	2695+00	2731+50	EL1	
	2731+50	2740+55	EL5	
	HYBRID-FR	1713+98	1737+00	EL6
		1737+00	1764+78	EL7
1764+78		1767+00	EL8	
1767+00		1788+84	RF3	
1788+84		1843+35	AG6	
1843+35		1893+95	RF3	
1893+95		1958+00	AG6	
1958+00		2072+36	AG7	
HYBRID MC SB - 21	200+20	250+00	WYE1	
	250+00	290+00	EL2	
	290+00	377+99	EL1	
HYBRID MC NB - 21	500+00	550+00	WYE1	
	550+00	590+00	EL2	
	590+00	677+40	EL1	
UPRR/SR 99-21MC	4907+27	4975+00	EL1	
	4975+00	5045+00	WYE2	
	5045+00	5385+00	EL1	
	5385+00	5425+00	RF2	
	5425+00	5910+00	AG1	
	5910+00	5915+50	TR2	
	5915+50	5916+60	CC1	
	5916+60	5924+00	TR2	
	5924+00	5977+70	AG1	
	5977+70	5989+30	TR2	
UPRR/SR 99-21WC NB	505+00	610+00	WYE1	
	610+00	619+50	EL2	
	619+50	628+35	RF1	
	628+35	714+80	AG4	
	714+80	724+20	RF1	
	724+20	780+00	EL2	
	780+00	846+94	WYE2	
	UPRR/SR 99-21WC SB	105+00	180+00	WYE1
		180+00	298+80	AG4
		298+80	313+21	RF1
		313+21	340+00	EL2
		340+00	397+52	WYE2

ALTERNATIVE BNSF AVENUE 21				
ALIGNMENT	BEGIN STATION	END STATION	SECTION	
BNSF-21ML	267+41	562+00	AG2	
	562+00	582+61	RF2	
	582+61	634+76	EL1	
	634+76	665+80	RF2	
	665+80	859+40	AG2	
	859+40	881+05	RF2	
	881+05	925+00	EL1	
	925+00	985+00	WYE1	
	985+00	1042+75	EL1	
	1042+75	1060+00	RF2	
	1060+00	1305+00	AG1	
	1305+00	1685+00	AG2	
	1685+00	1696+00	RF2	
	1696+00	1731+50	EL1	
	1731+50	1741+00	EL5	
	BNSF-FR	1713+98	1737+00	EL6
		1737+00	1764+78	EL7
		1764+78	1767+00	EL8
1767+00		1788+84	RF3	
BNSF-21WC NB	105+85	205+00	WYE2	
	205+00	220+66	EL2	
	220+66	230+00	RF1	
	230+00	357+00	AG4	
	357+00	371+02	RF1	
	371+02	383+00	EL2	
	383+00	474+09	WYE1	
BNSF-21WC SB	500+00	550+00	WYE2	
	550+00	720+00	AG4	
	720+00	765+39	WYE1	
BNSF-MC	4302+03	4345+02	EL2	
	4345+02	4351+00	RF1	
	4351+00	4405+00	WYE1	
	4405+00	5296+45	AG1	
	5296+45	5266+88	RF2	
	5266+88	5352+88	EL3	
	5352+88	5371+50	RF2	
	5371+50	5850+85	AG1	
	5850+85	5866+57	RF2	
	5866+57	5960+00	EL1	
	5960+00	5967+00	RF2	
	5967+00	5977+70	AG1	
	5977+70	5989+20	TR2	
	5989+20	5990+20	CC1	
5990+20	6003+00	TR2		
6003+00	6022+00	AG1		
6022+00	6040+60	TR2		
6040+60	6042+90	CC1		
6042+90	6052+50	TR1		
6052+50	6066+20	AG5		

ALTERNATIVE BNSF AVENUE 24				
ALIGNMENT	BEGIN STATION	END STATION	SECTION	
BNSF-24ML	892+90	1185+00	AG2	
	1185+00	1235+00	WYE1	
	1235+00	1332+20	AG2	
	1332+20	1350+84	RF2	
	1350+84	1430+00	WYE2	
	1430+00	1431+49	EL1	
	1431+49	1451+90	RF2	
	1451+90	1864+25	AG2	
	1864+25	1881+05	RF2	
	1881+05	1890+17	EL1	
	BNSF-24WC NB	104+65	195+00	WYE2
		195+00	220+66	EL2
		220+66	227+55	RF1
		227+55	400+70	AG4
400+70		438+00	RF1	
438+00		450+00	EL2	
450+00		477+55	WYE1	
477+55		508+20	RF1	
BNSF-24WC SB	500+00	582+14	WYE2	
	582+14	592+75	RF1	
	592+75	840+00	AG4	
	840+00	896+06	WYE1	

ALTERNATIVE UPRR/SR 99 AVENUE 21				
ALIGNMENT	BEGIN STATION	END STATION	SECTION	
UPRR/SR 99-21ML	270+60	604+70	AG2	
	604+70	626+28	RF2	
	626+28	715+00	EL1	
	715+00	805+00	WYE1	
	805+00	1294+33	EL1	
	1294+33	1305+00	RF2	
	1305+00	1570+00	AG1	
	1570+00	1593+20	TR2	
	1593+20	1594+10	CC1	
	1594+10	1610+00	TR2	
	1610+00	1615+00	AG1	
	1615+00	1622+00	RF2	
	1622+00	1635+00	EL1	
	1635+00	1633+24	EL5	
	UPRR/SR 99-FR	1713+98	1737+00	EL6
		1737+00	1764+78	EL7
		1764+78	1767+00	EL8
		1767+00	1788+84	RF3
1788+84		1843+35	AG6	
1843+35		1893+95	RF3	
1893+95		1958+00	AG6	
1958+00		2072+36	AG7	
UPRR/SR 99-21WC NB	505+00	610+00	WYE1	
	610+00	619+50	EL2	
	619+50	628+35	RF1	
	628+35	714+80	AG4	
	714+80	724+20	RF1	
	724+20	780+00	EL2	
	780+00	846+94	WYE2	
UPRR/SR 99-21WC SB	105+00	180+00	WYE1	
	180+00	298+80	AG4	
	298+80	313+21	RF1	
	313+21	340+00	EL2	
	340+00	397+52	WYE2	
UPRR/SR 99-21MC	4586+50	4670+00	WYE1	
	4670+00	4796+00	AG1	
	4796+00	4810+00	RF2	
	4810+00	4975+00	EL1	
	4975+00	5045+00	WYE2	
	5045+00	5385+00	EL1	
	5385+00	5425+00	RF2	
	5425+00	5910+00	AG1	
	5910+00	5915+50	TR2	
	5915+50	5916+60	CC1	
	5916+60	5924+00	TR2	
	5924+00	5977+70	AG1	
	5977+70	5989+30	TR2	
	5989+30	5990+40	CC1	
5990+40	6003+00	TR2		
6003+00	6022+00	AG1		
6022+00	6040+60	TR2		
6040+60	6042+90	CC1		
6042+90	6052+50	TR1		
6052+50	6066+20	AG5		

ALTERNATIVE UPRR/SR 99 AVENUE 24			
ALIGNMENT	BEGIN STATION	END STATION	SECTION
UPRR/SR 99-24ML	917+20	965+00	AG2
	965+00	1030+00	WYE1
	1030+00	1330+00	AG2
	1330+00	1380+00	RF2
	1380+00	1515+00	EL1
	1515+00	1590+00	EL5
	1590+00	1753+40	EL1
UPRR/SR 99-24WC NB	105+00	205+00	WYE1
	205+00	220+00	EL2
	220+00	227+00	RF1
	227+00	349+90	AG4
	349+90	494+12	AG2
	494+12	521+00	AG4
	521+00	527+00	RF1
	527+00	555+00	EL2
UPRR/SR 99-24WC SB	705+00	775+00	WYE1
	775+00	921+72	AG4
	921+72	1062+85	AG2
	1062+85	1130+00	AG4
	1130+00	1191+24	WYE 1
UPRR/SR 99-24MC	4760+15	4845+00	WYE2
	4845+00	4907+25	EL1

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
A. SHIELDS
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

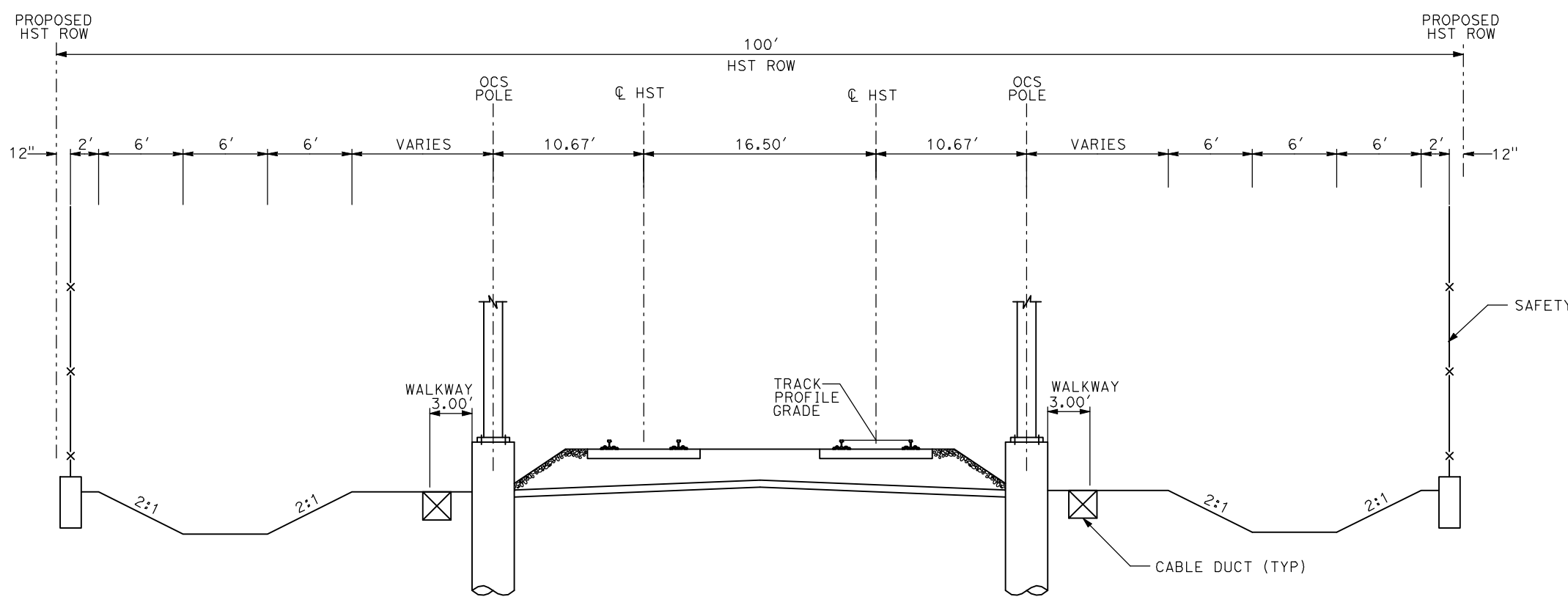
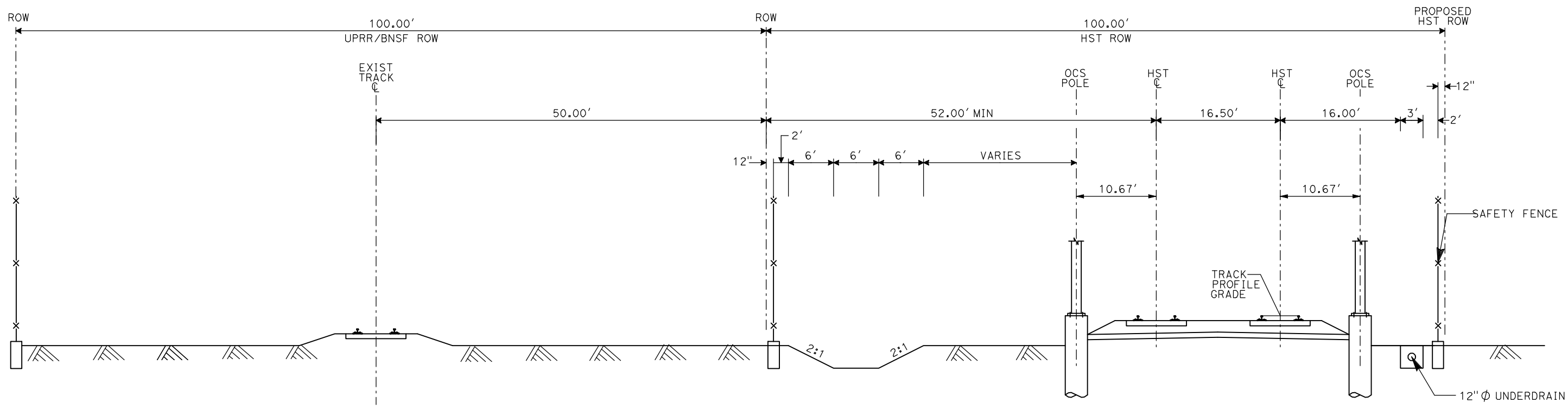


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

GENERAL

TYPICAL SECTION LIMITS

7/20/2011 3:31:37 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3001-A.dgn



- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

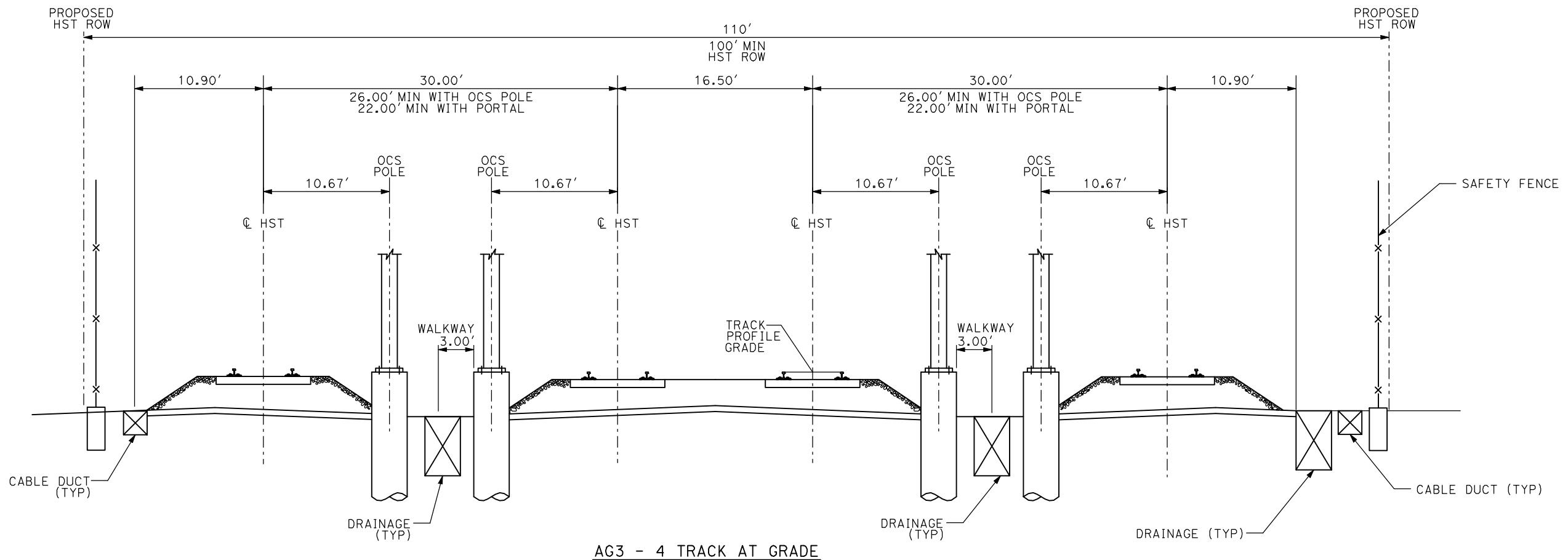
NOT FOR
CONSTRUCTION



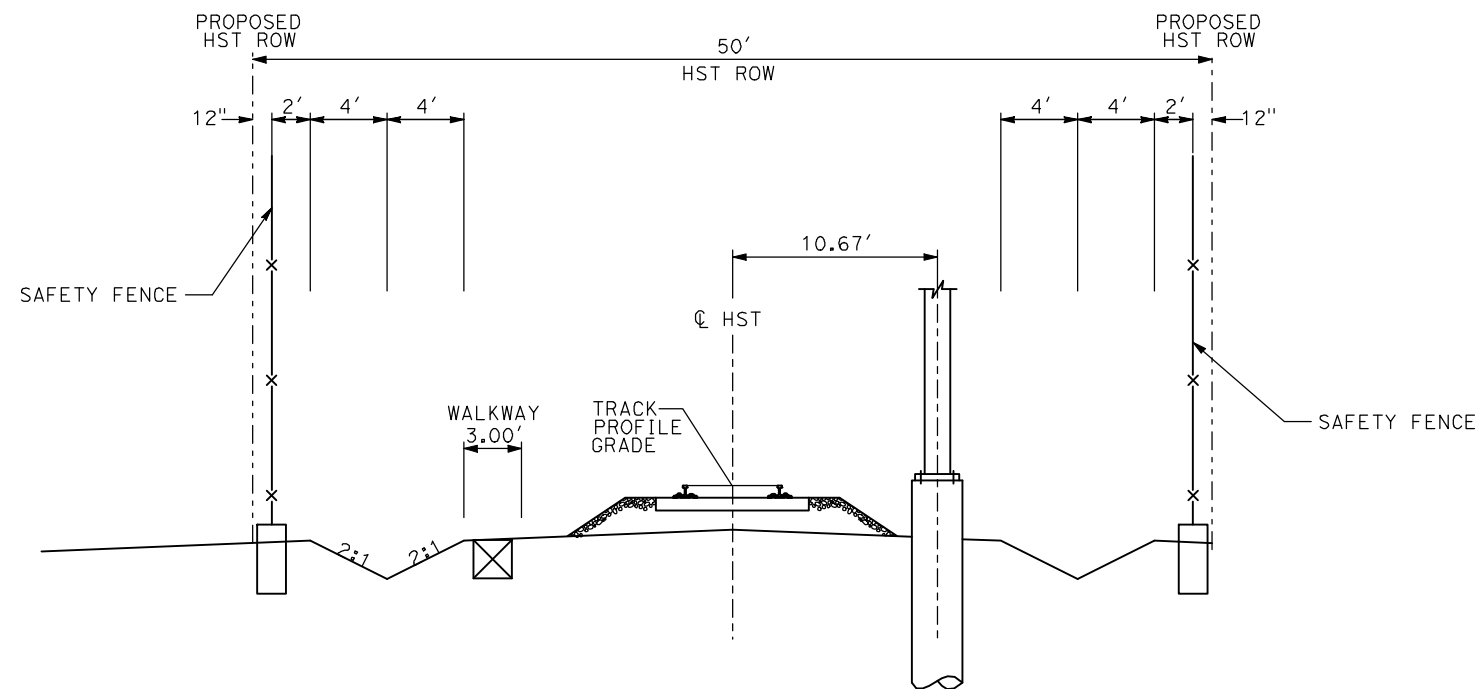
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 1 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3001-A
SCALE	NO SCALE
SHEET NO.	OF ###



AG3 - 4 TRACK AT GRADE



AG4 - SINGLE TRACK AT GRADE

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

7/20/2011 3:31:42 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3002-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

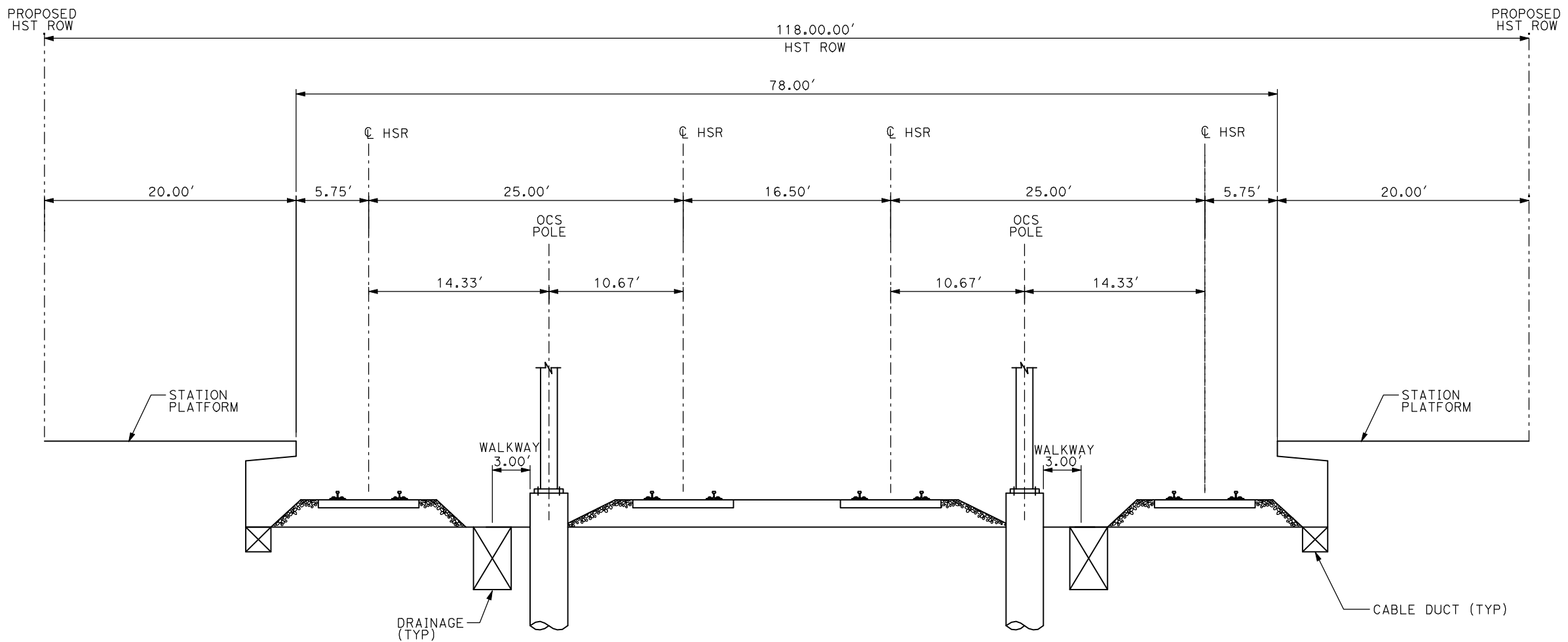
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 2 OF 17

CONTRACT NO.
HSR06-007
DRAWING NO.
T3002-A
SCALE
NO SCALE
SHEET NO.
OF ###



AG5 - 4 TRACK AT GRADE MERCED STATION

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

7/20/2011 3:31:46 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3003-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

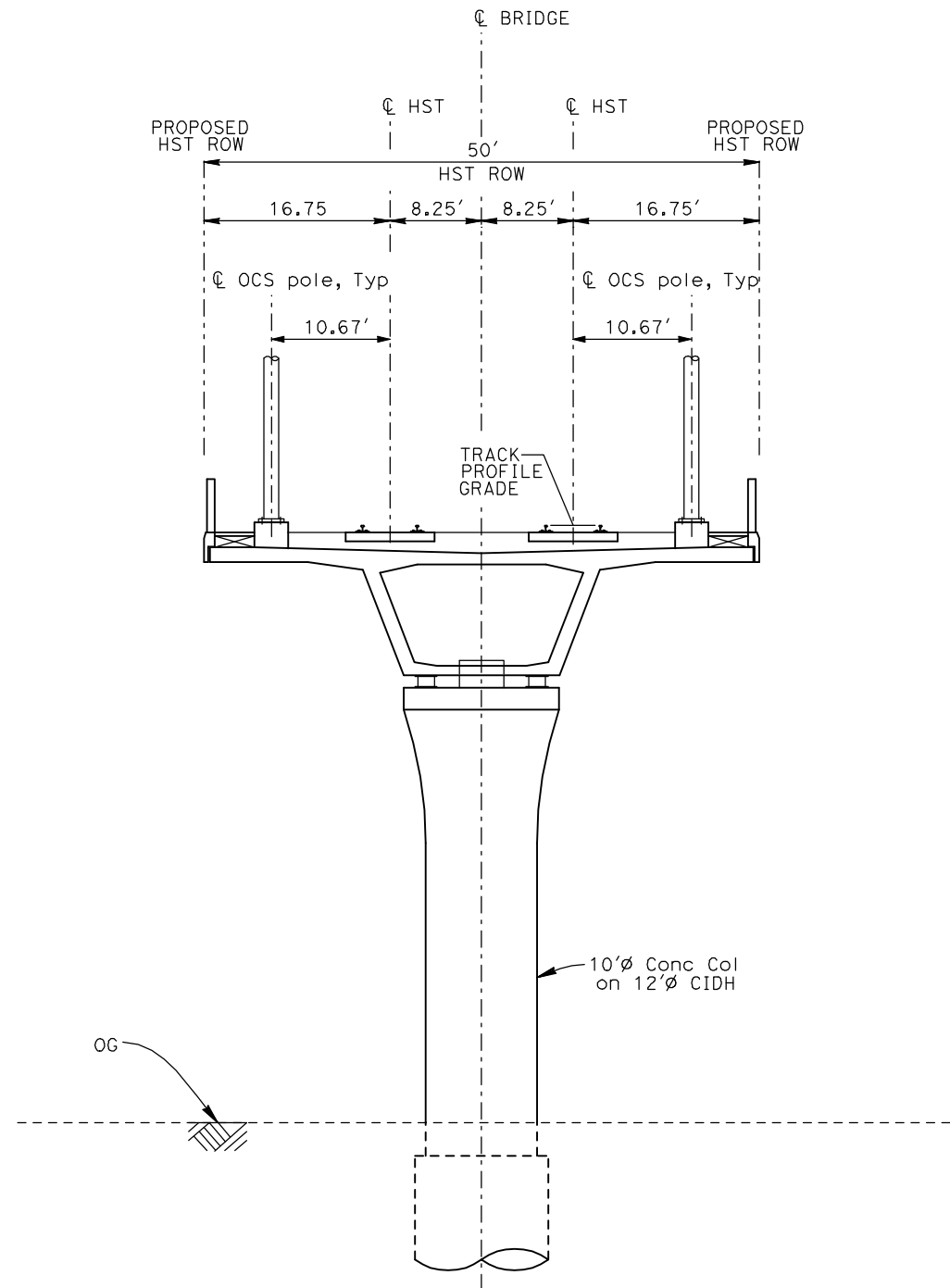
**NOT FOR
CONSTRUCTION**



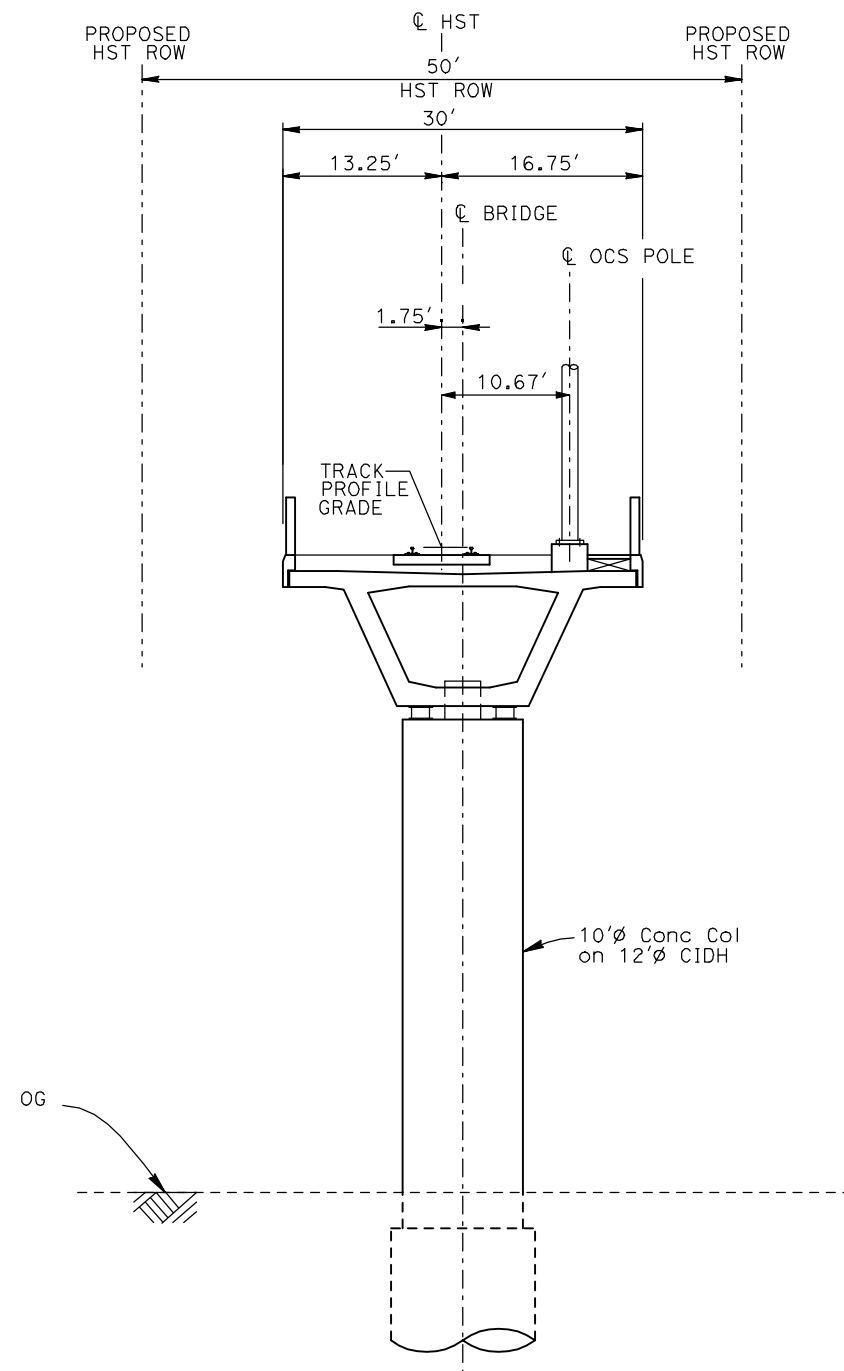
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 3 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3003-A
SCALE	NO SCALE
SHEET NO.	OF ###



EL1 - DOUBLE TRACK ELEVATED



EL2 - SINGLE TRACK ELEVATED

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. BACK-TO-BACK CANTILEVERS ON A SINGLE POLE MAY BE PERMITTED AT PASSENGER STATIONS.
 3. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

7/20/2011 3:31:50 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3004-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

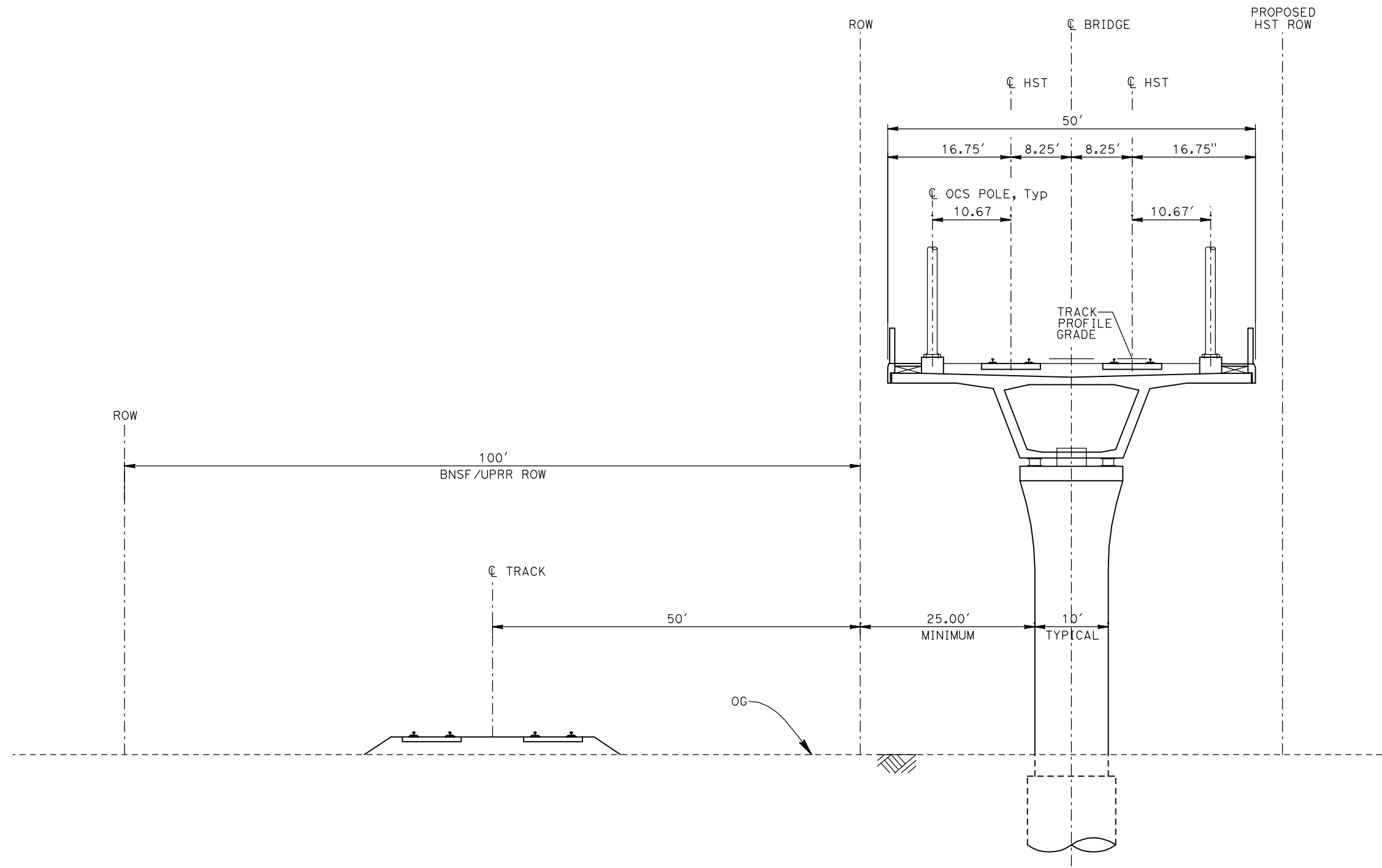


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 4 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3004-A
SCALE	NO SCALE
SHEET NO.	OF ###

7/20/2011 3:31:54 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3005-A.dgn



EL3 - DOUBLE TRACK ELEVATED ADJACENT TO UPRR/BNSF

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

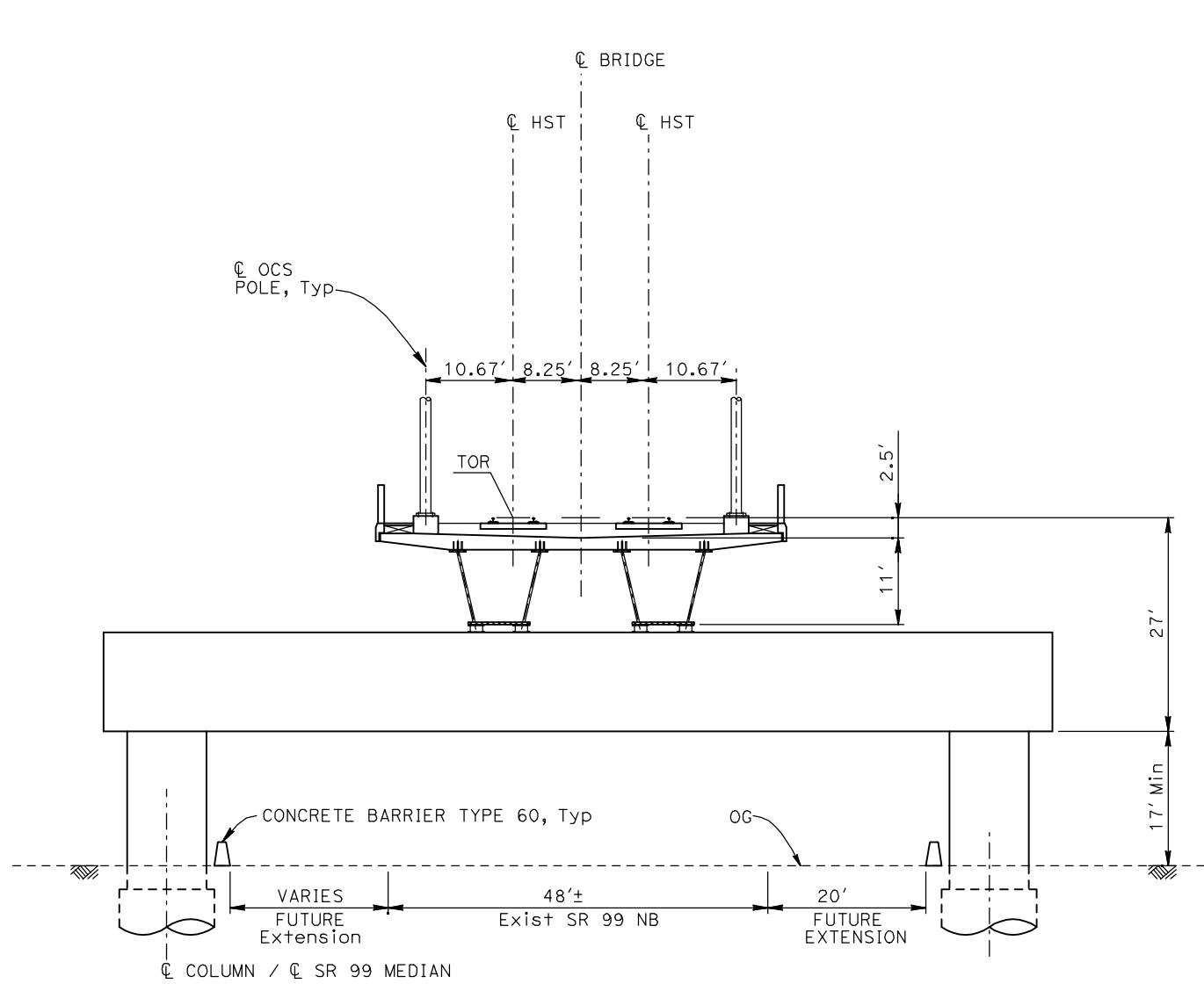


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

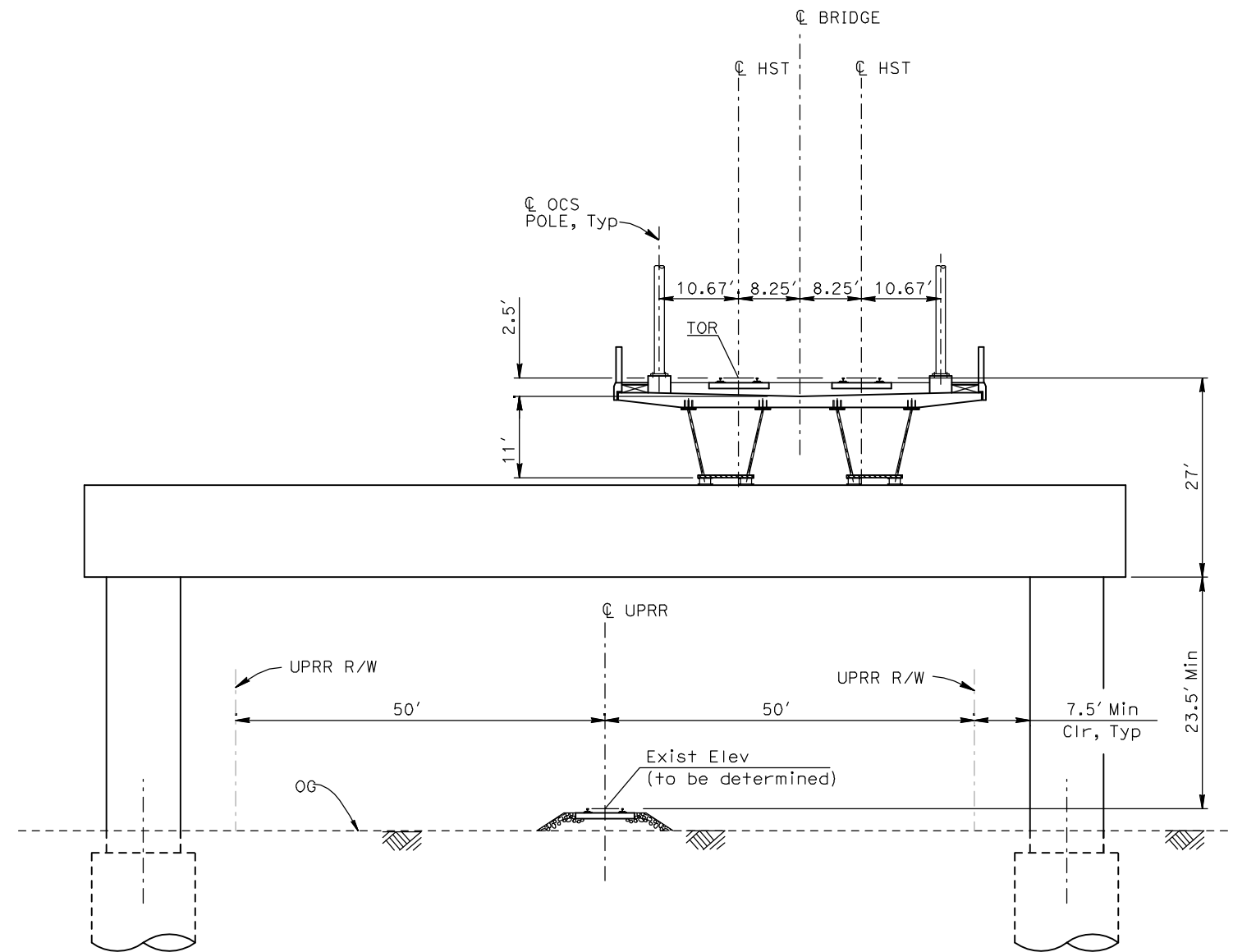
TYPICAL SECTIONS
SHEET 5 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3005-A
SCALE	NO SCALE
SHEET NO.	OF ###

7/20/2011 3:31:58 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3006-A.dgn



EL4 - DOUBLE TRACK ELEVATED CROSSING SR99



EL5 - DOUBLE TRACK ELEVATED CROSSING UPRR/BNSF

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

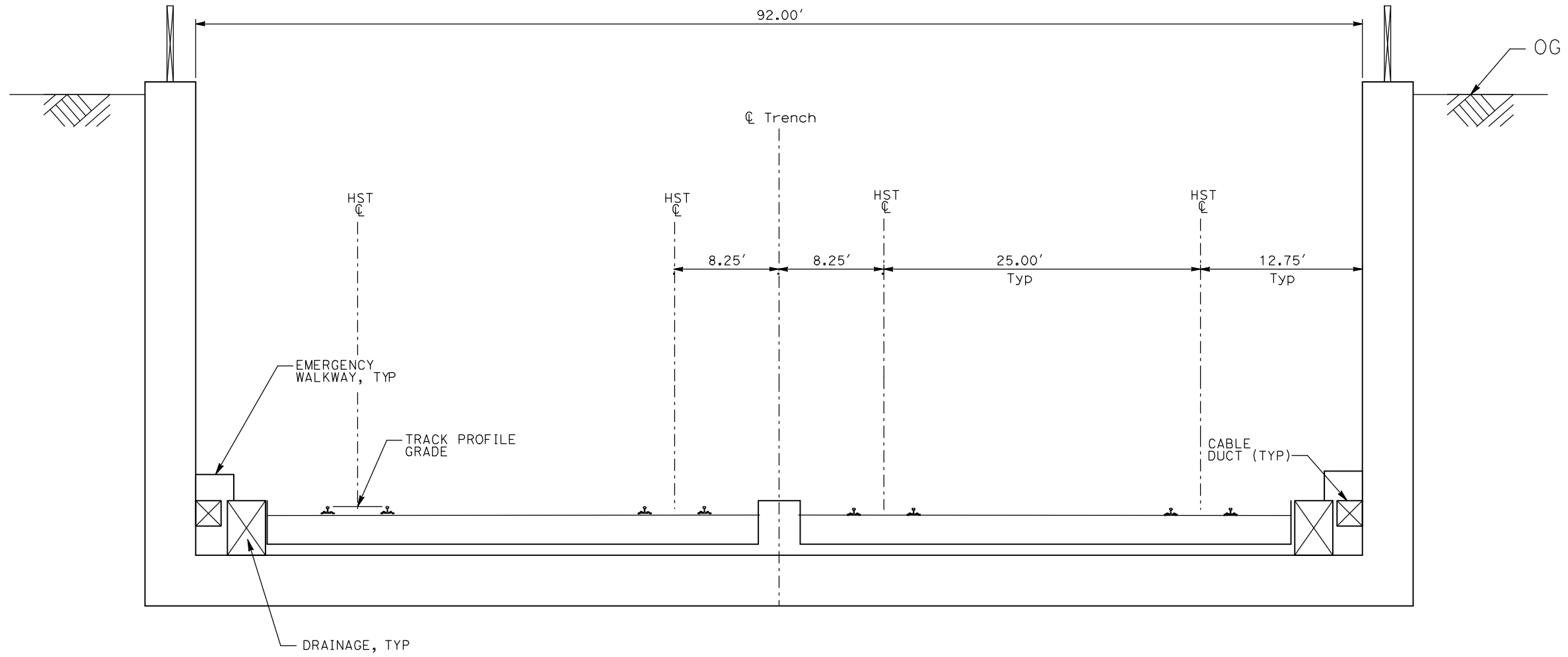
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 6 OF 17

CONTRACT NO.
HSR06-007
DRAWING NO.
T3006-A
SCALE
NO SCALE
SHEET NO.
OF ###



TR1 - 4 TRACK TRENCH STATION APPROACH

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

7/20/2011 3:32:02 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3007-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

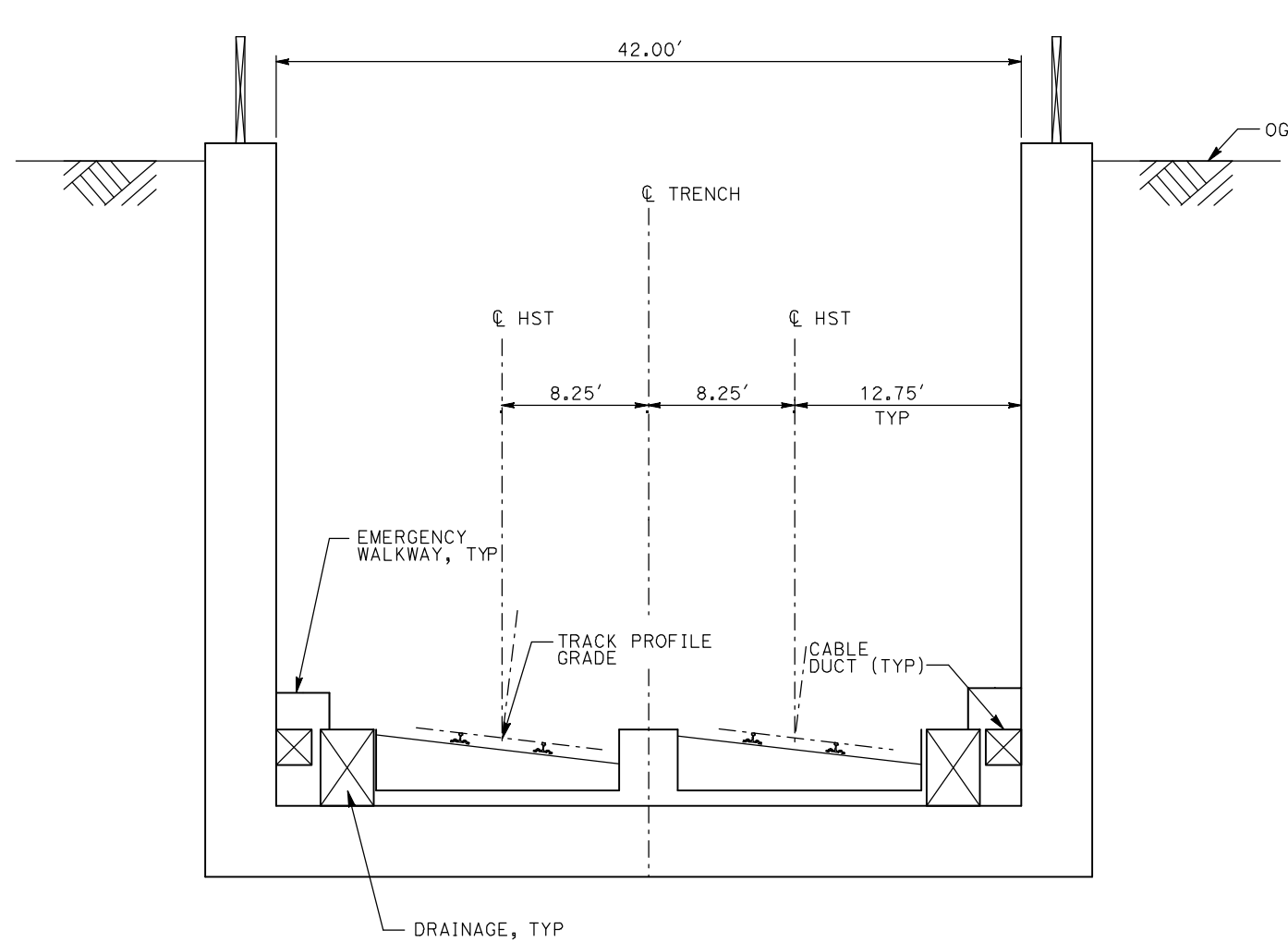


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

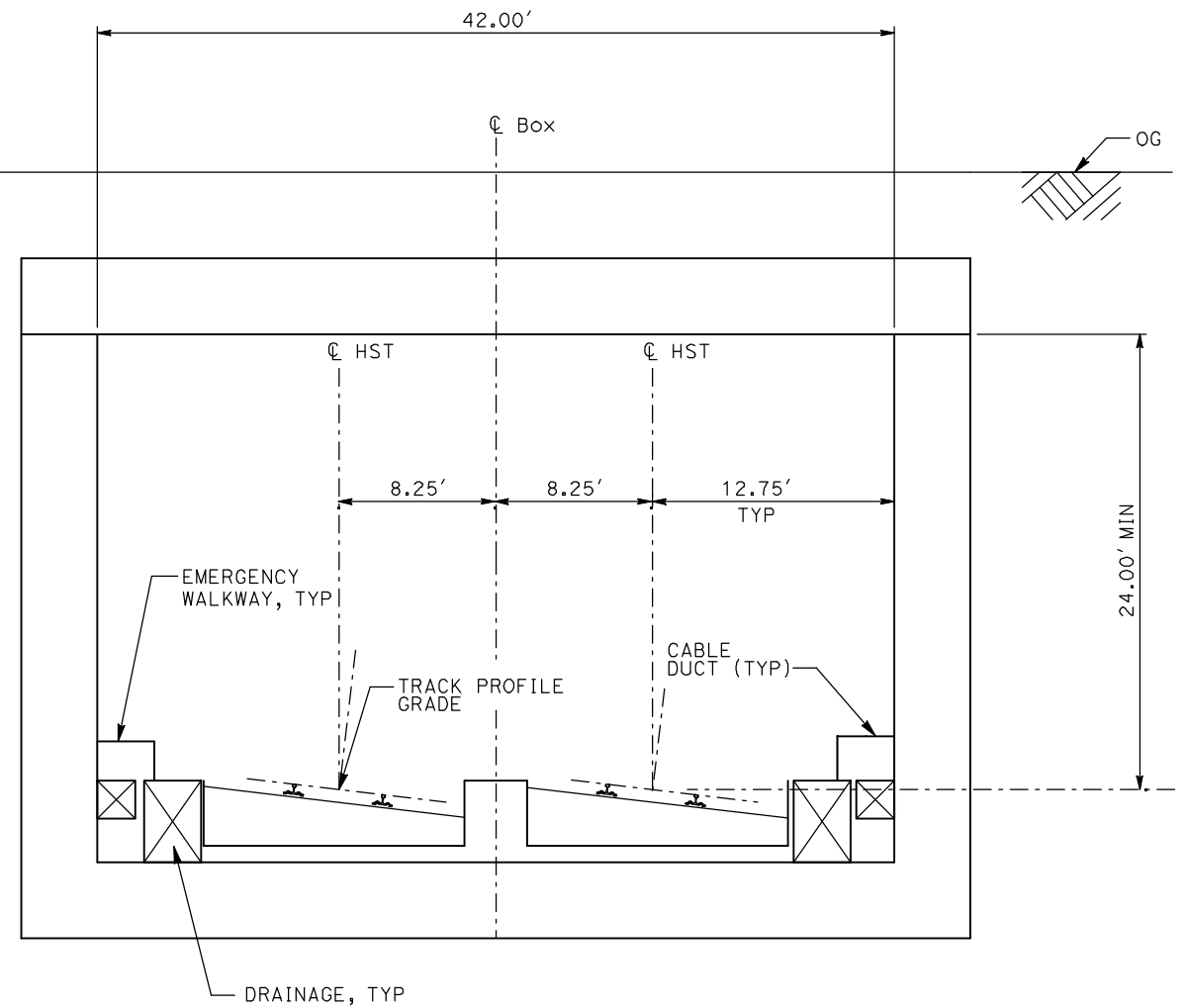
TYPICAL SECTIONS
SHEET 7 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3007-A
SCALE	NO SCALE
SHEET NO.	OF ###

7/20/2011 3:32:06 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\MF-T-3008-A.dgn



TR2 - 2 TRACK TRENCH



CC1 - 2 TRACK CUT AND COVER CLOSED BOX

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

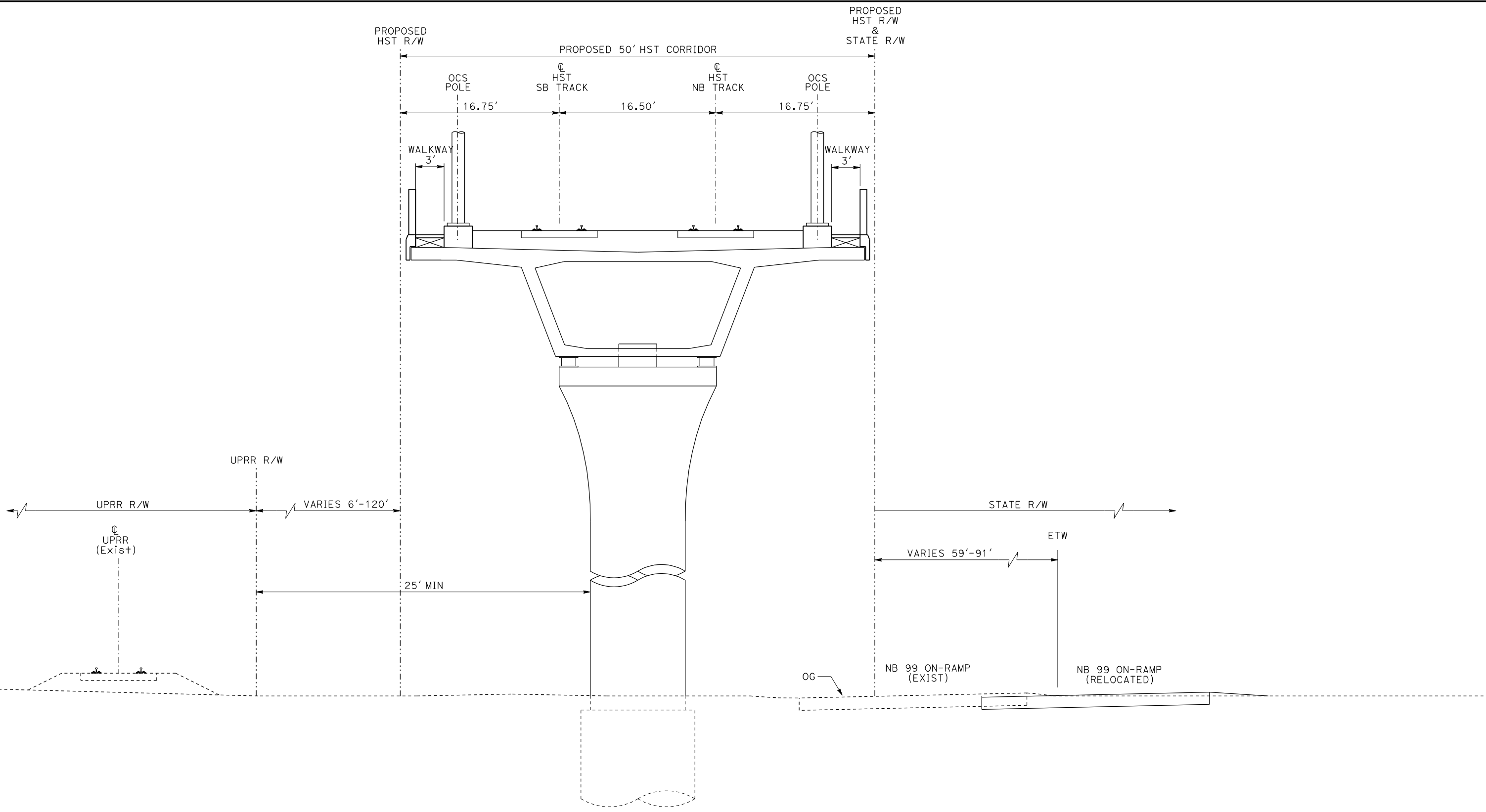
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 8 OF 17

CONTRACT NO.
HSR06-007
DRAWING NO.
T3008-A
SCALE
NO SCALE
SHEET NO.
OF ###



EL6 - DOUBLE TRACK ELEVATED ADJACENT TO UPRR

NOTE:
 POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS.
 FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE
 ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR
 DRAWN BY
S. LEONG
 CHECKED BY
V. CHIO
 IN CHARGE
J. VALSECCHI
 DATE
JULY 2011

RECORD SET
15% DESIGN
SUBMITTAL

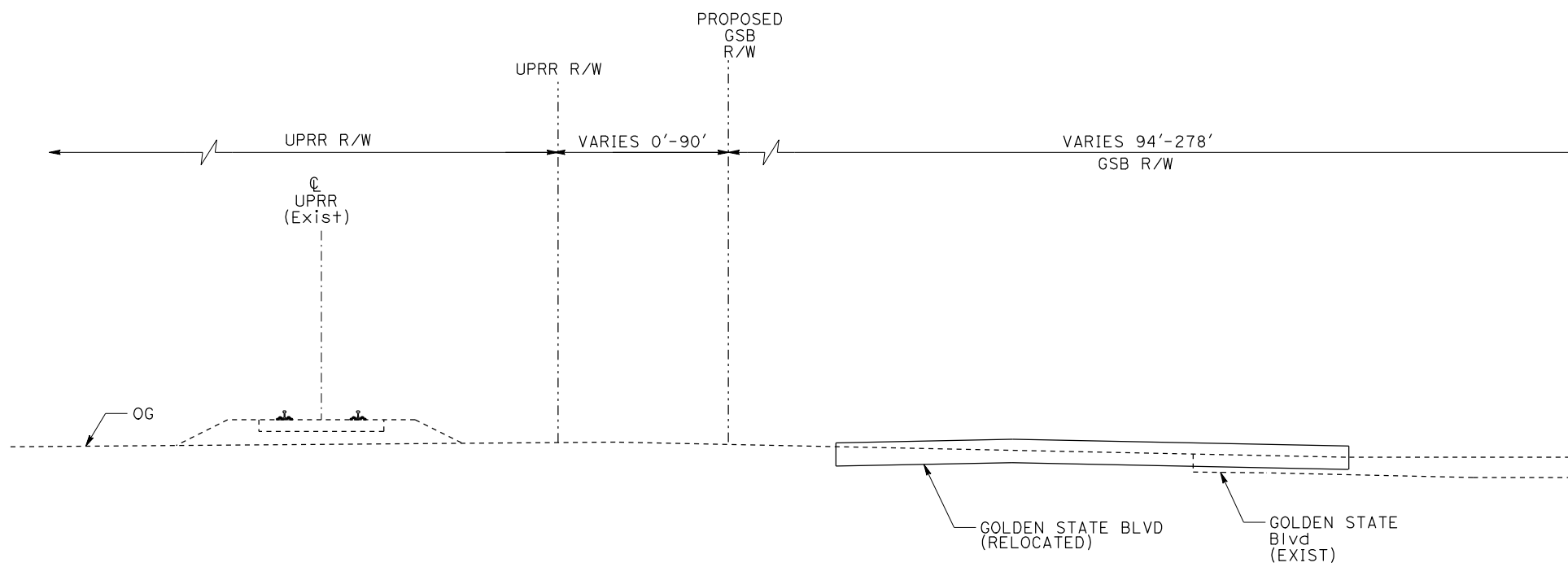
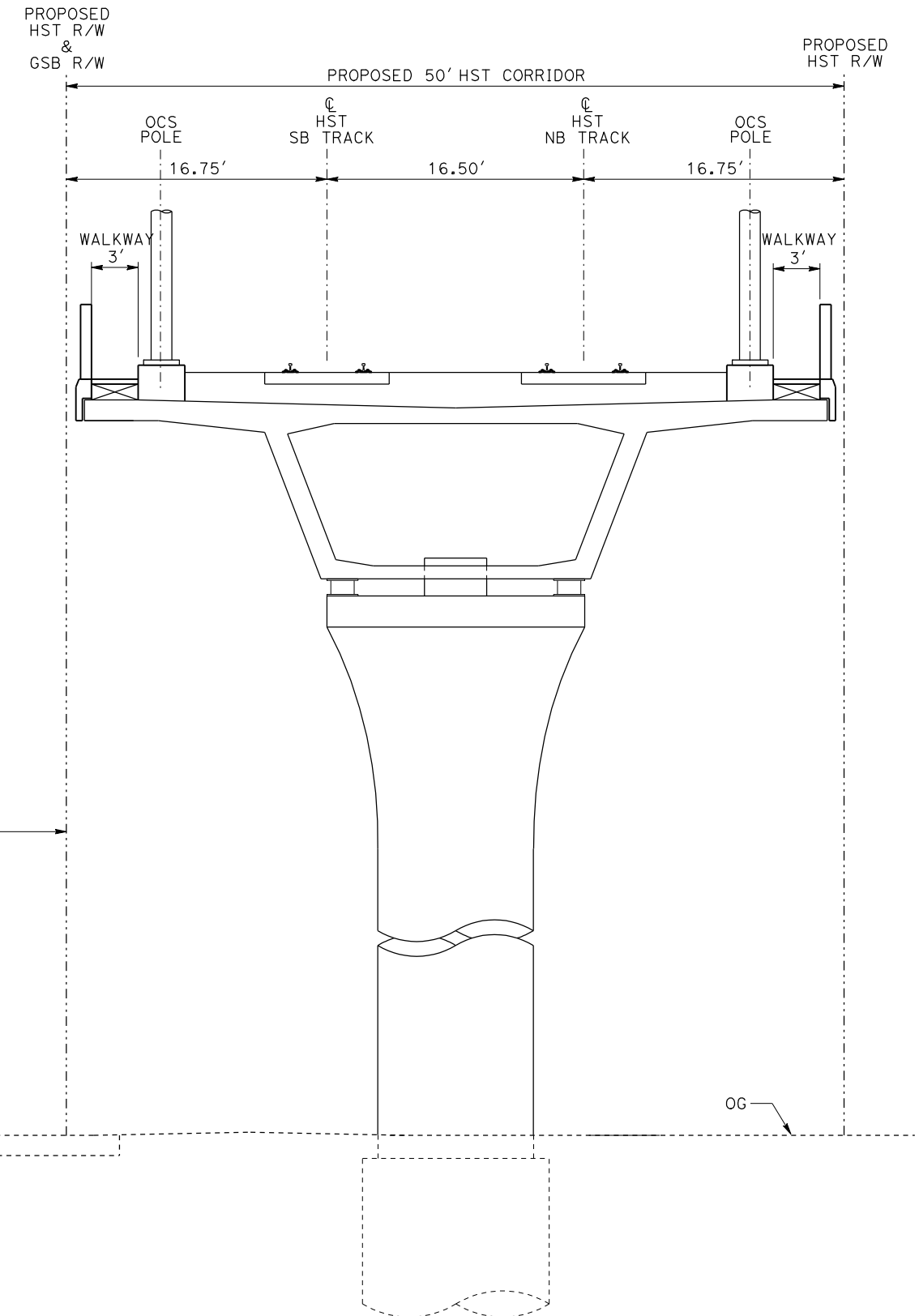
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
 SHEET 9 OF 17

CONTRACT NO.
HSR06-007
 DRAWING NO.
T3009-A
 SCALE
NO SCALE
 SHEET NO.



EL7 - DOUBLE TRACK ELEVATED ADJACENT TO GOLDEN STATE BOULEVARD

NOTE:
 POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS.
 FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE
 ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR
 DRAWN BY
S. LEONG
 CHECKED BY
V. CHIO
 IN CHARGE
J. VALSECCHI
 DATE
JULY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

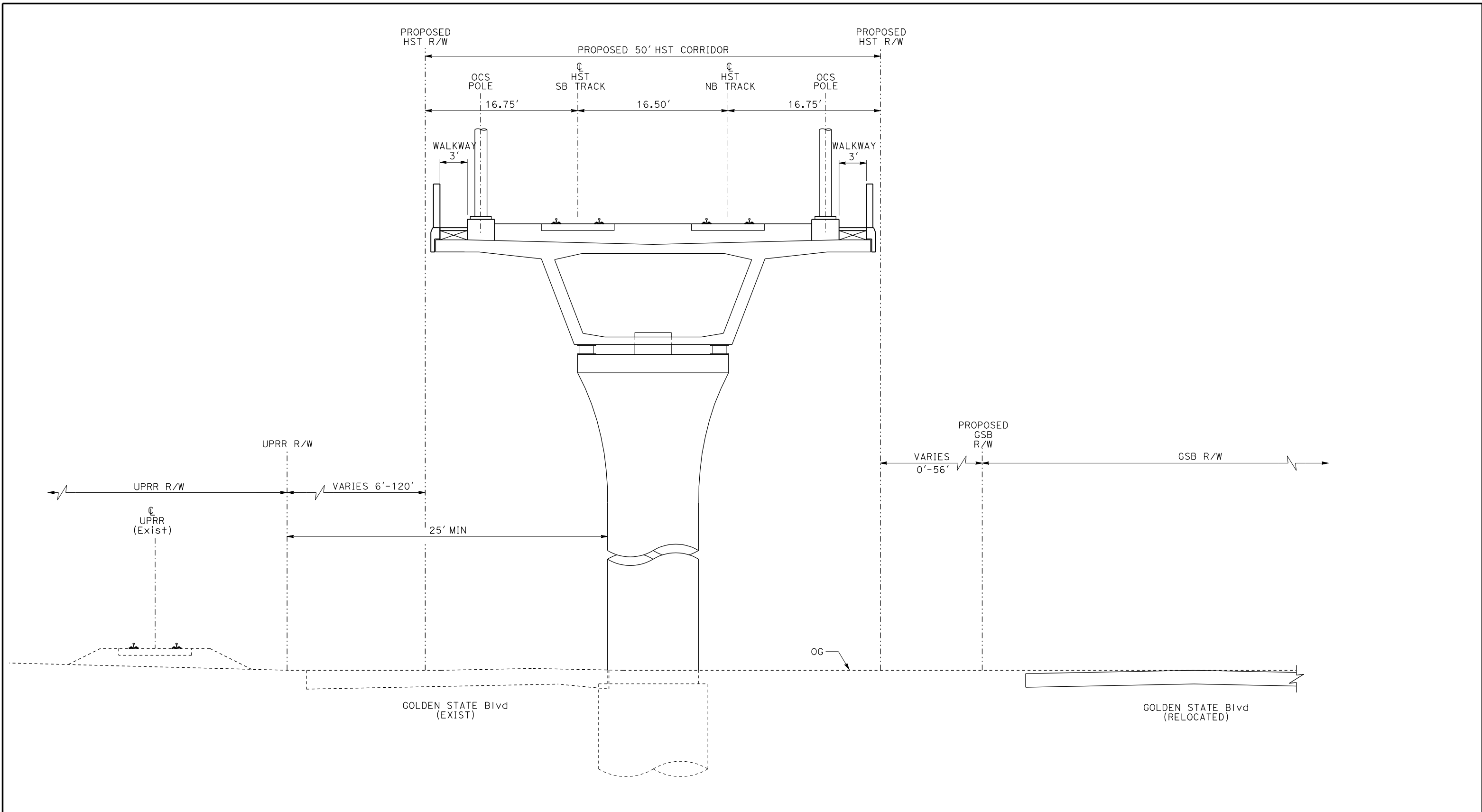


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

 TYPICAL SECTIONS
 SHEET 10 OF 17

CONTRACT NO.
HSR06-007
 DRAWING NO.
T3010-A
 SCALE
NO SCALE
 SHEET NO.

DATE PLOTTED => 21-JUL-2011
 TIME PLOTTED => 12:44



EL8 - DOUBLE TRACK ELEVATED BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:
 POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS.
 FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE
 ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR
 DRAWN BY
S. LEONG
 CHECKED BY
V. CHIO
 IN CHARGE
J. VALSECCHI
 DATE
JULY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

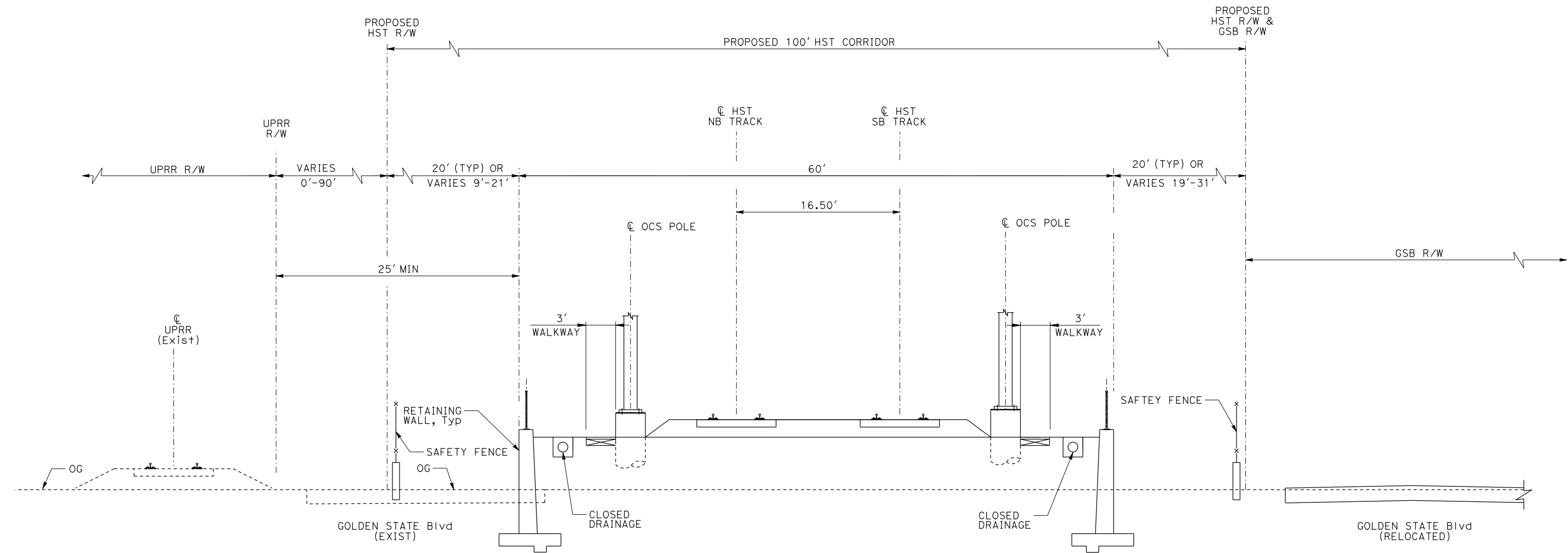


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

 TYPICAL SECTIONS
 SHEET 11 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3011-A
SCALE	NO SCALE
SHEET NO.	

DATE PLOTTED => 21-JUL-2011
 TIME PLOTTED => 12:45



RF3 - DOUBLE TRACK BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR
DRAWN BY
S. LEONG
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
JULY 2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

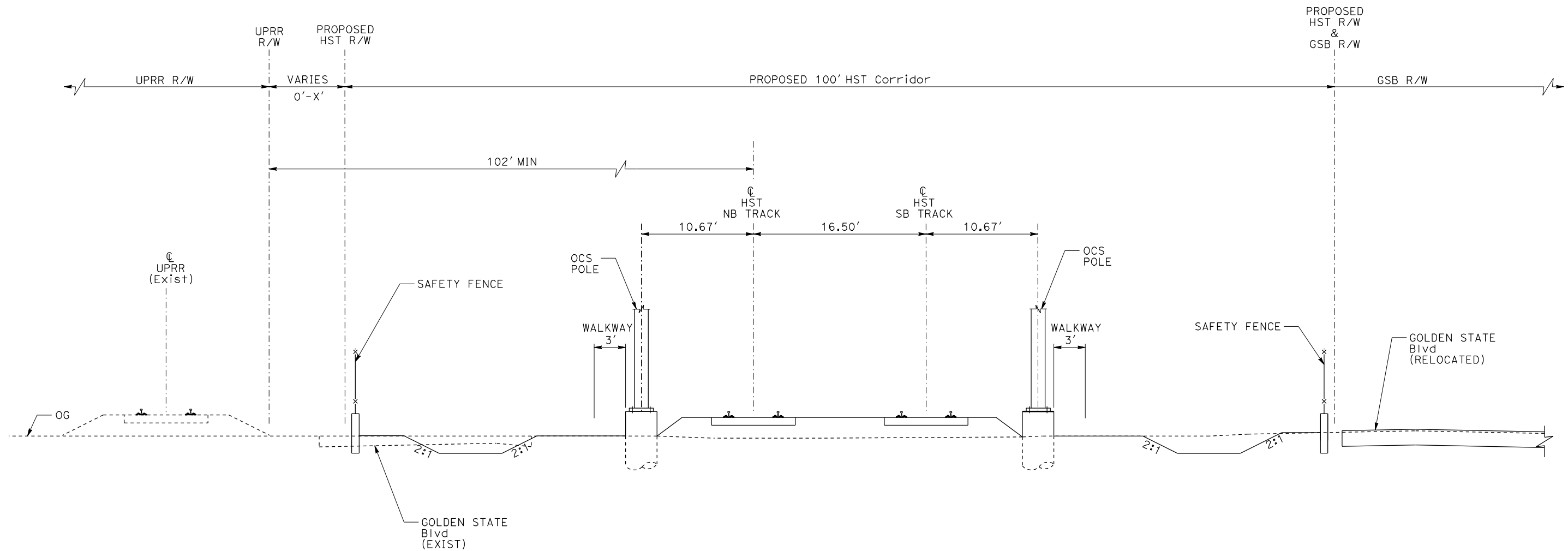


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTION
SHEET 12 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3012-A
SCALE NO SCALE
SHEET NO.

DATE PLOTTED => 21-JUL-2011
TIME PLOTTED => 12:47



AG6 - DOUBLE TRACK BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR

DRAWN BY
S. LEONG

CHECKED BY
V. CHIO

IN CHARGE
J. VALSECCHI

DATE
JULY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



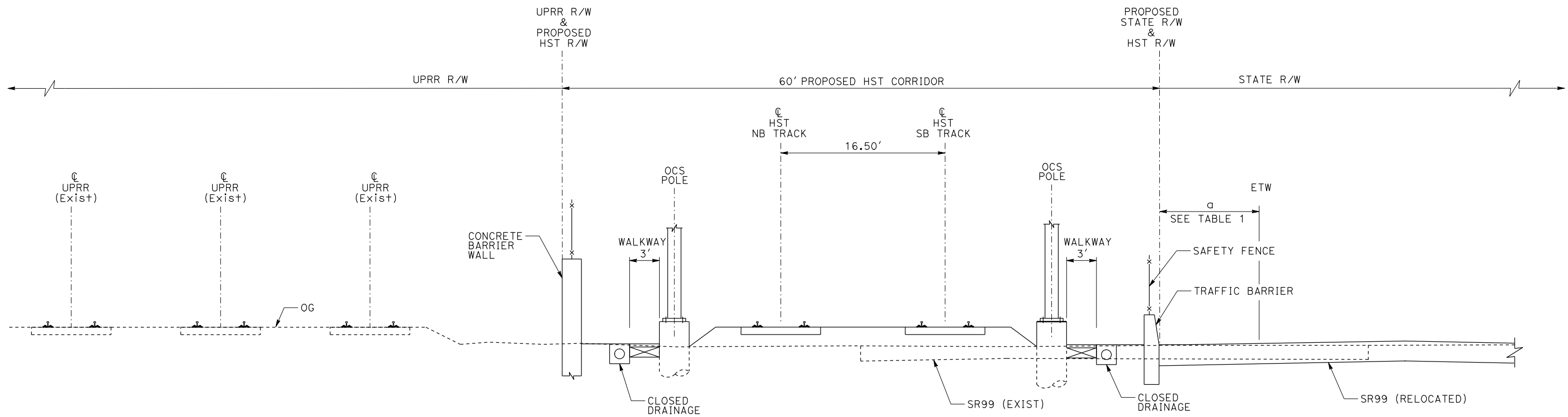
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTION
SHEET 13 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3013-A
SCALE	NO SCALE
SHEET NO.	

TABLE 1

$a > 30'$	NO TRAFFIC BARRIER
$4' < a < 30'$	TRAFFIC BARRIER



AG7 - DOUBLE TRACK BETWEEN UPRR AND STATE ROUTE 99

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
L. PROCTOR
DRAWN BY
S. LEONG
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
JULY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

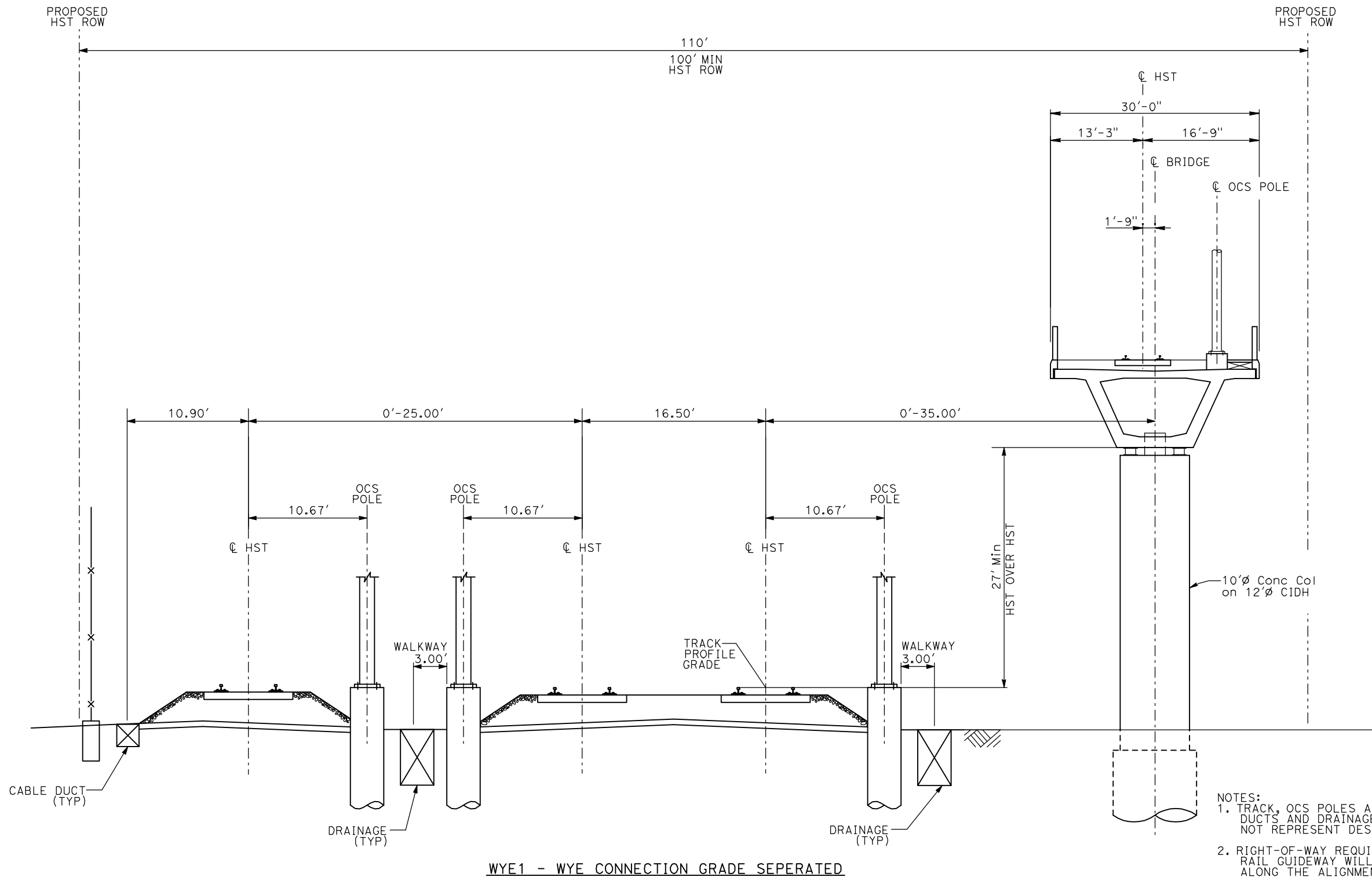


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTION
SHEET 14 OF 17

CONTRACT NO.	HSR06-007
DRAWING NO.	T3014-A
SCALE	NO SCALE
SHEET NO.	

7/20/2011 3:32:10 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3015-A.dgn



WYE1 - WYE CONNECTION GRADE SEPERATED

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

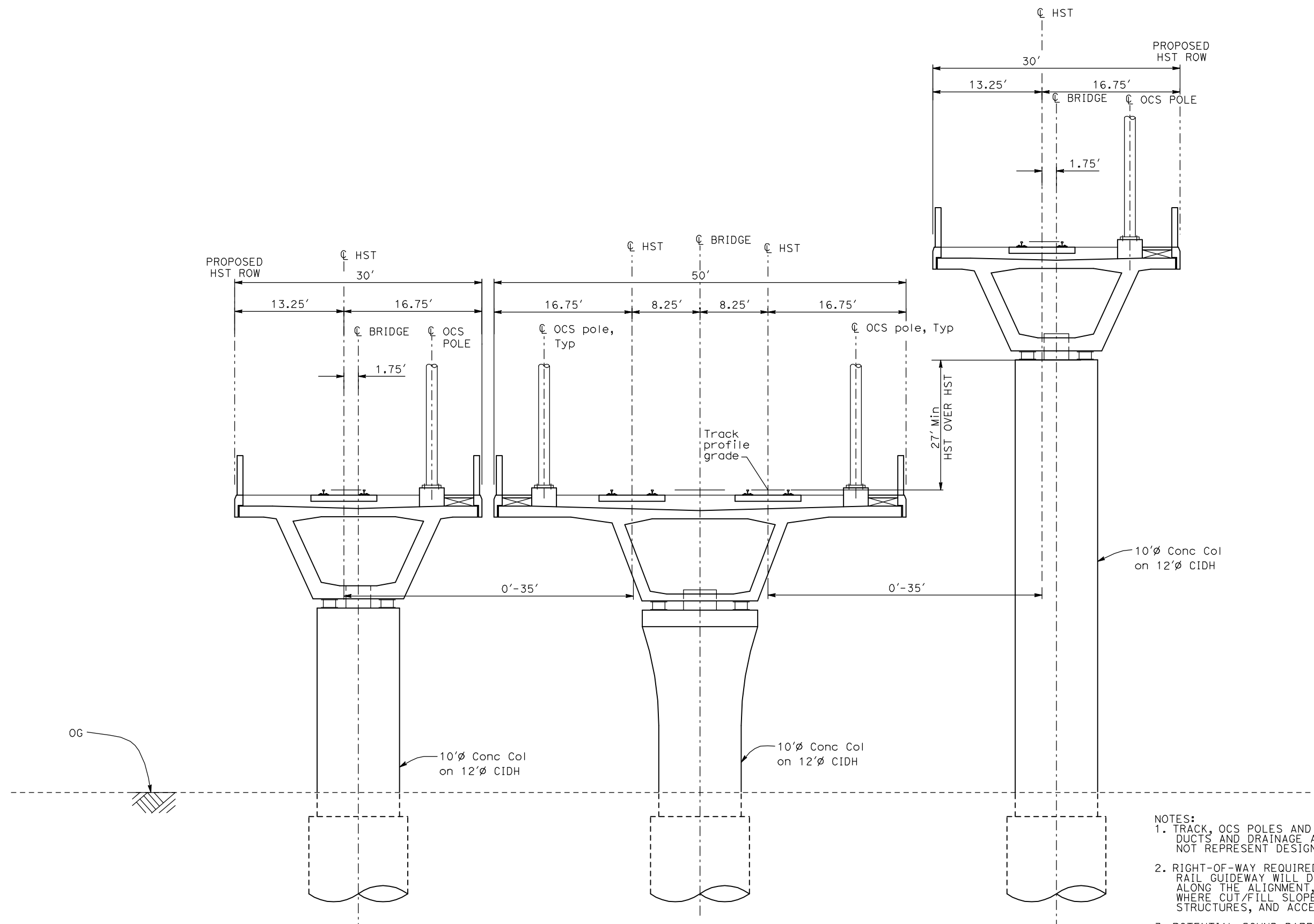


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 15 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3015-A
SCALE NO SCALE
SHEET NO. OF ###

7/20/2011 3:32:14 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3016-A.dgn



- NOTES:**
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

WYE2 - WYE CONNECTION GRADE SEPERATED

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

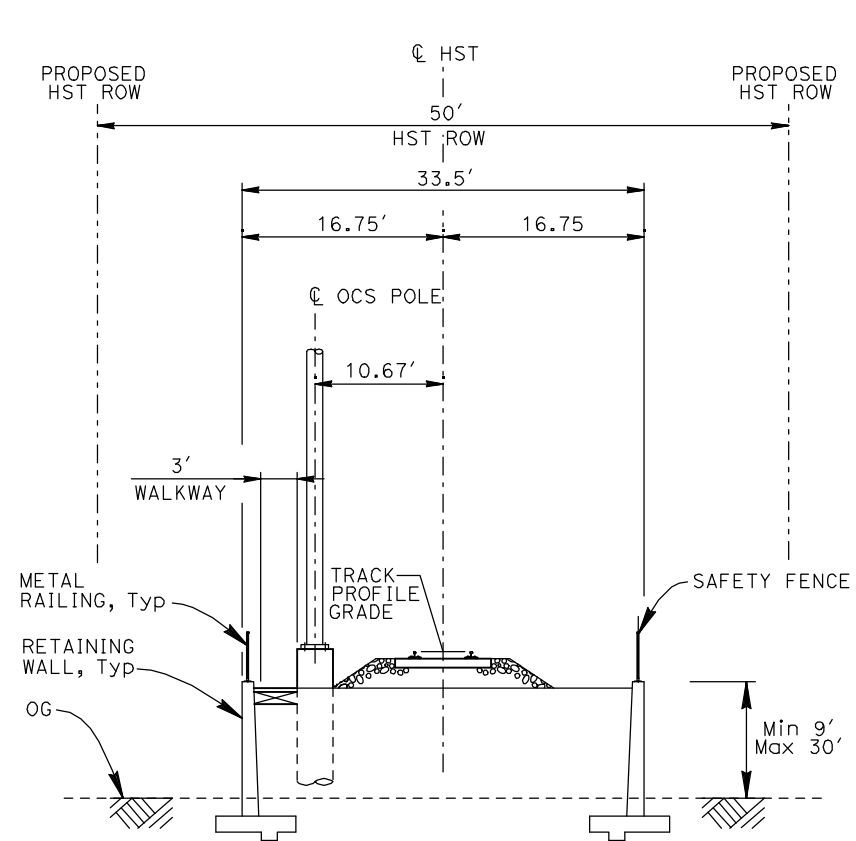


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

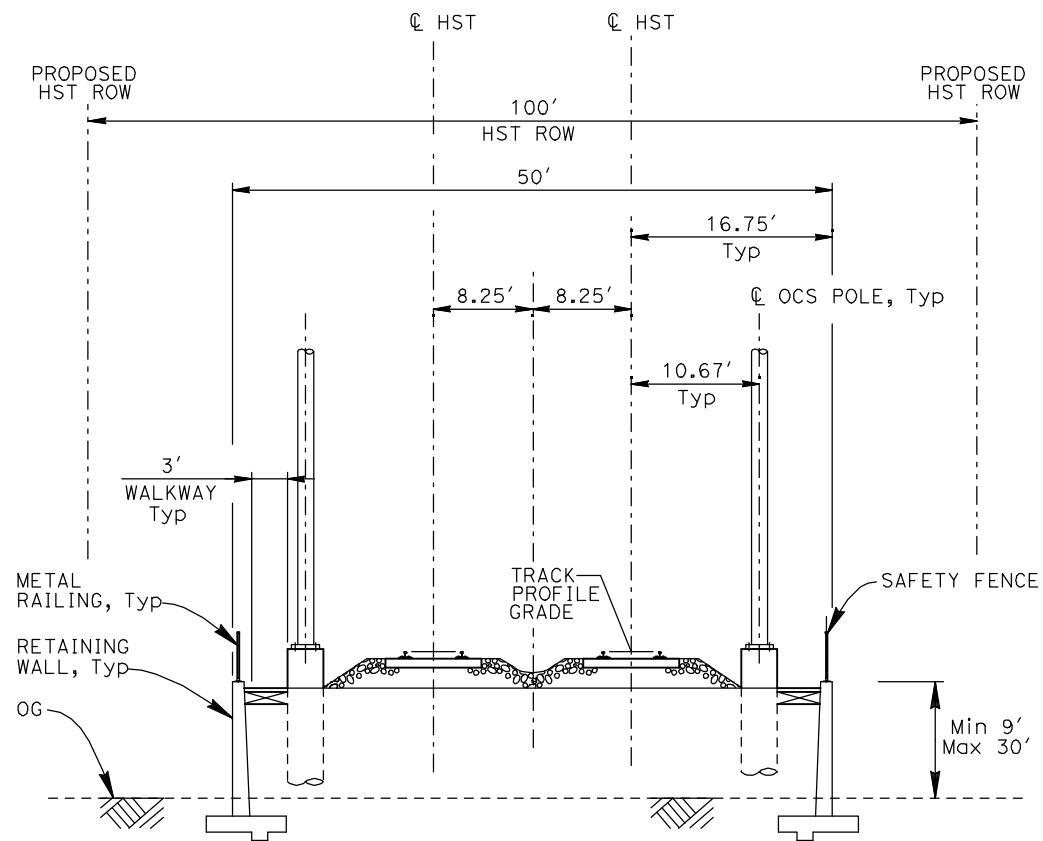
TYPICAL SECTIONS
SHEET 16 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3016-A
SCALE NO SCALE
SHEET NO. OF ###

7/20/2011 3:32:18 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3017-A.dgn



RF1 - SINGLE TRACK RETAINED FILL



RF2 - DOUBLE TRACK RETAINED FILL

- NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
 2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
C. VALADAO
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

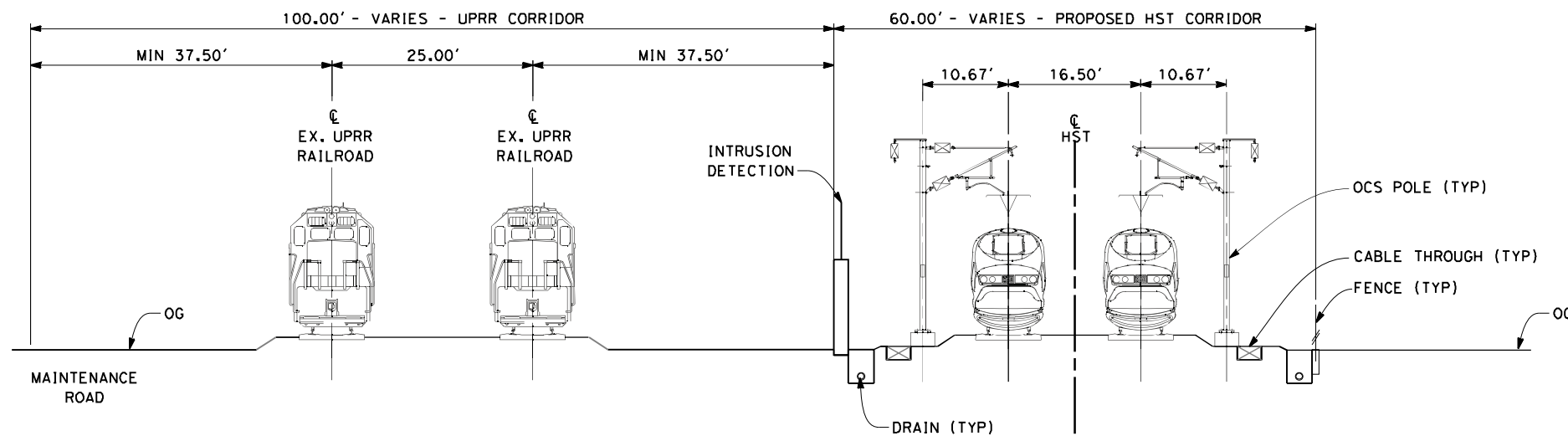


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 17 OF 17

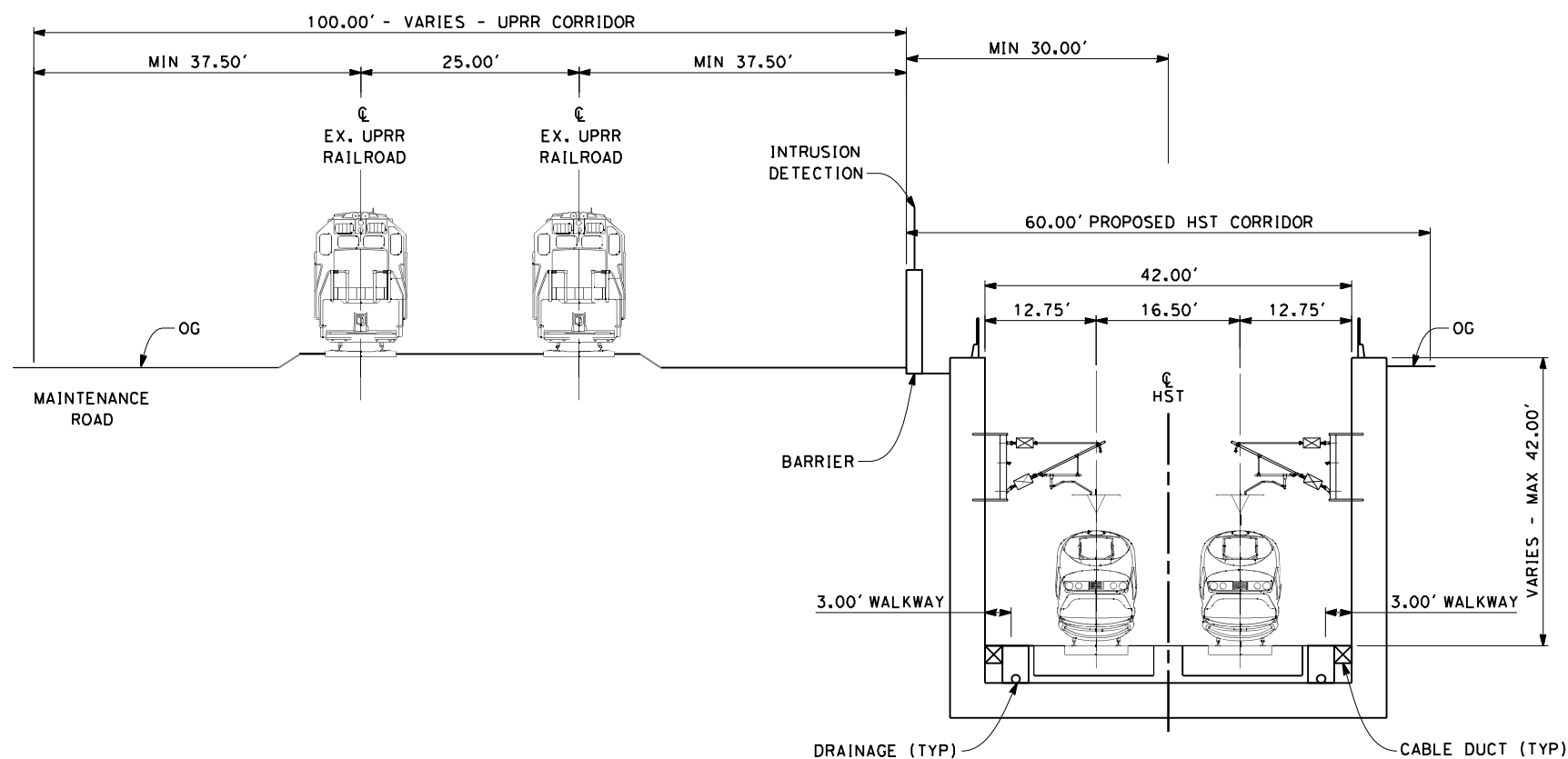
CONTRACT NO.
HSR06-007
DRAWING NO.
T3017-A
SCALE
NO SCALE
SHEET NO.
OF ###

7/21/2011 11:12:47 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3018-A-F1.dgn



SECTION 1

TWIN TRACK AT GRADE 60FT ROW ADJACENT TO UPRR
 STA 100+00 THROUGH STA 182+00

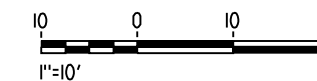


SECTION 2

TWIN TRACK IN TRENCH
 STA 196+00 THROUGH STA 260+00

NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 05/13/11

**RECORD SET 15%
 DESIGN SUBMISSION**

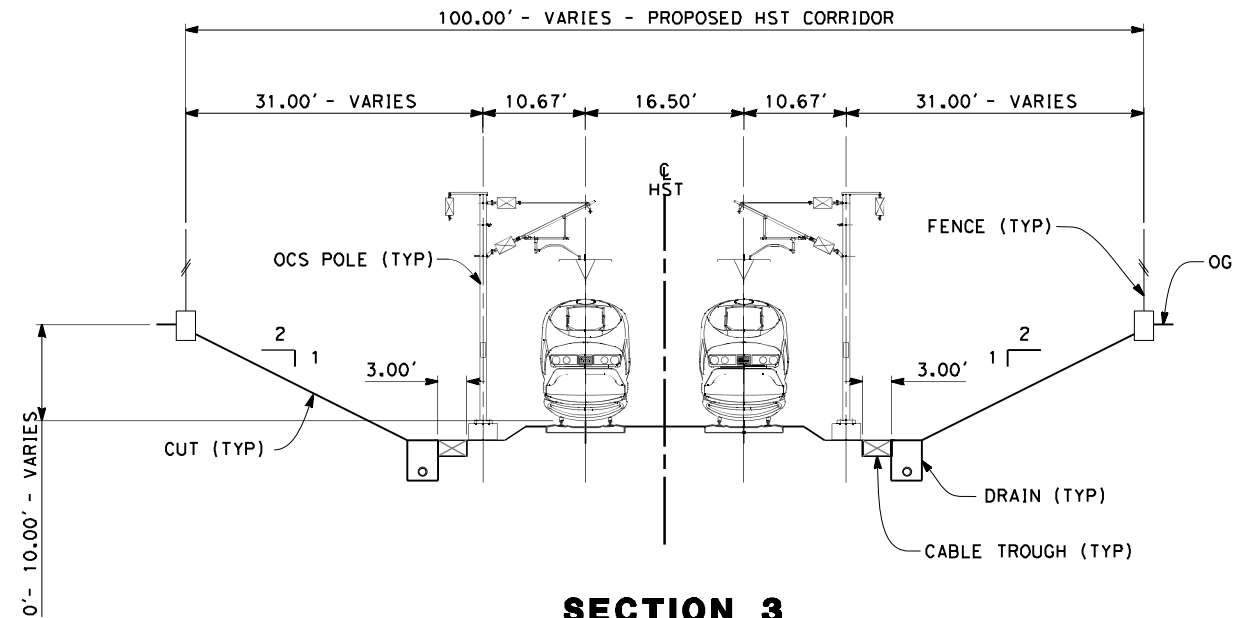
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

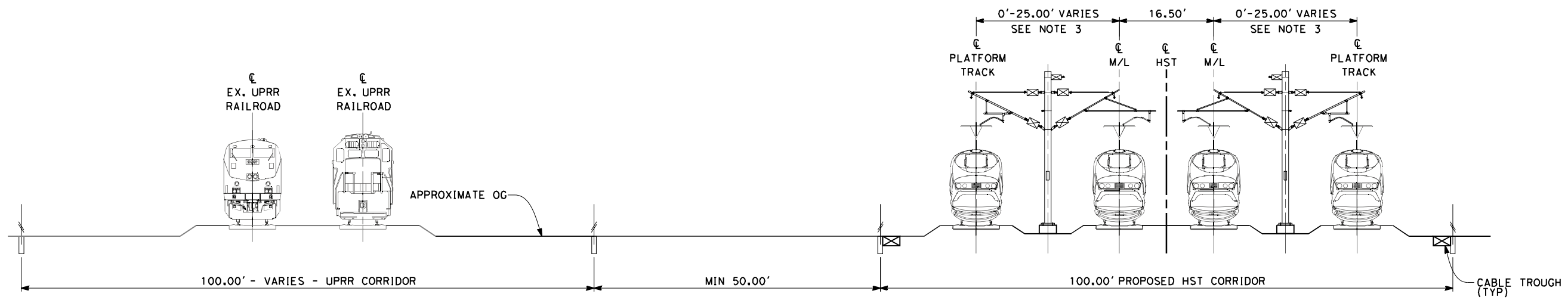
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3018-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

7/21/2011 11:12:49 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3019-A-F1.dgn

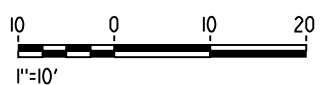


SECTION 3
 TWIN TRACK IN OPEN CUT
 STA 260+00 THROUGH STA 264+25
 STA 260+00 THROUGH STA 270+74 (KERN OPTION)

- NOTES:**
1. TRACKFORM SHOWN IS INDICATIVE
 2. SUPERELEVATION IS NOT SHOWN THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
 3. DISTANCE BETWEEN TRACKS VARIES FROM 0-25.00' THROUGH TURNOUTS AND REVERSE TO PARALLEL.
 4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS



SECTION 4
 4 TRACK AT GRADE STATION APPROACH
 STA 264+25 THROUGH STA 285+84
 STA 286+84 THROUGH STA 287+20
 STA 301+30 THROUGH STA 302+00
 STA 320+25 THROUGH STA 324+25
 STA 270+74 THROUGH STA 285+84 (KERN OPTION)
 STA 286+84 THROUGH STA 293+70 (KERN OPTION)
 STA 307+80 THROUGH STA 308+50 (KERN OPTION)
 STA 326+75 THROUGH STA 334+00 (KERN OPTION)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 06/30/11

**RECORD SET 15%
 DESIGN SUBMISSION**

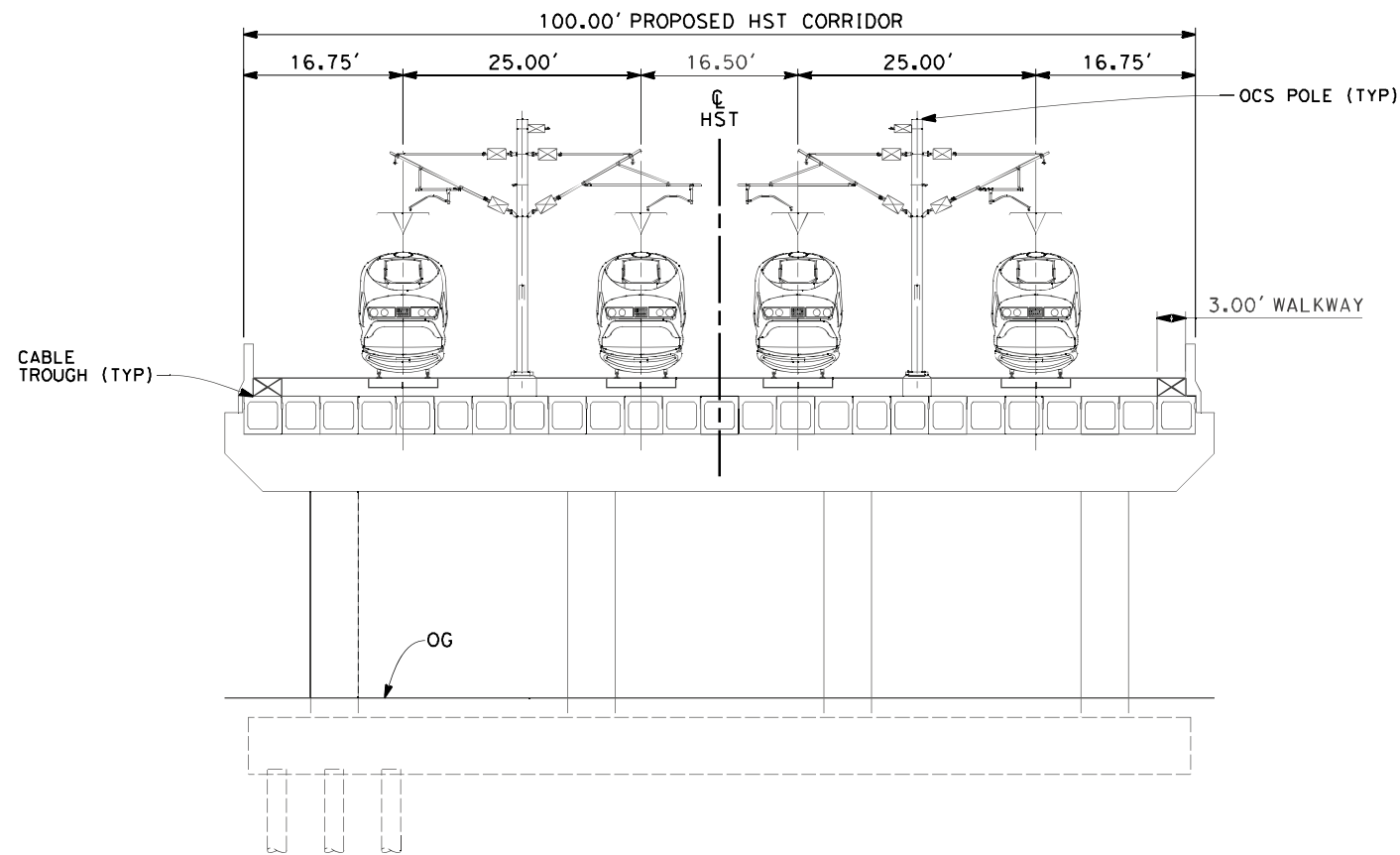
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

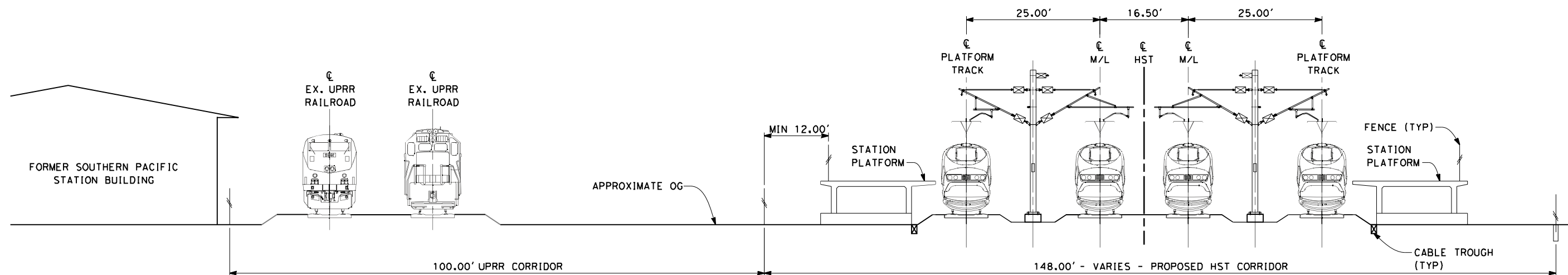
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3019-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

7/21/2011 11:13:03 AM O:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3020-A-F1.dgn



SECTION 5

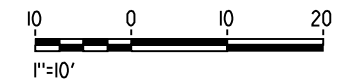
TWIN TRACK - BOX GIRDER BRIDGE
 STA 285+84 THROUGH STA 286+84



SECTION 6

4 TRACK AT GRADE PLATFORMS
 STA 287+20 THROUGH STA 301+30
 STA 293+70 THROUGH STA 307+80 (KERN OPTION)

- NOTES:**
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 06/30/11

**RECORD SET 15%
 DESIGN SUBMISSION**

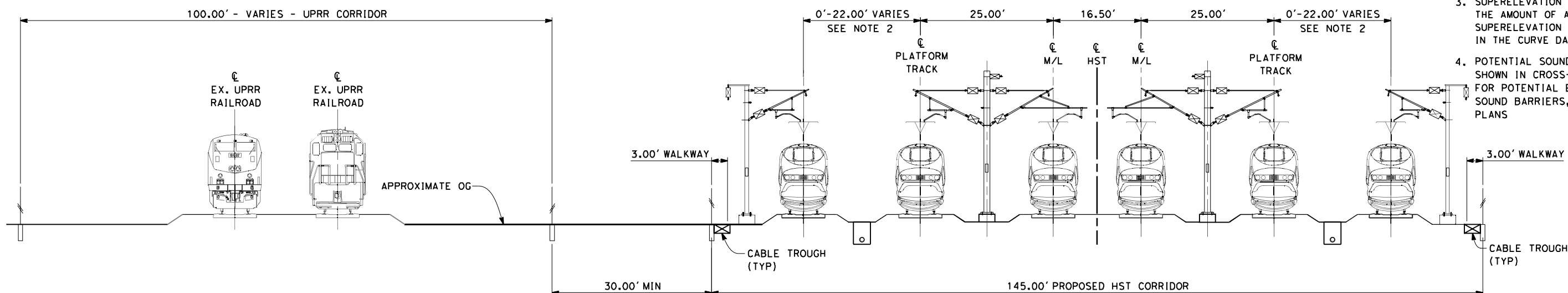
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3020-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

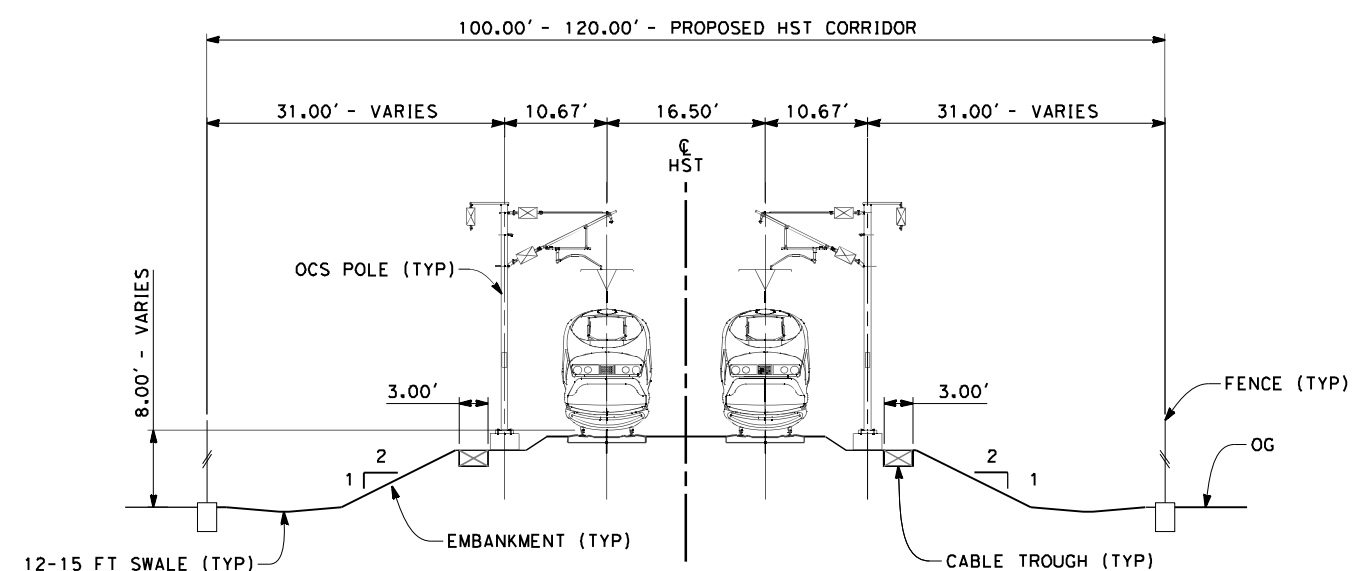
7/21/2011 11:13:06 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3021-A-F1.dgn



- NOTES:**
1. TRACKFORM SHOWN IS INDICATIVE
 2. DISTANCE BETWEEN TRACKS VARIES FROM 0-22.00' THROUGH TURNOUTS AND REVERSE TO PARALLEL.
 3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
 4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS

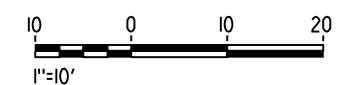
SECTION 7

6 TRACK AT GRADE INCLUDING STORAGE TRACKS
 STA 302+00 THROUGH STA 320+25
 STA 308+50 THROUGH STA 326+75 (KERN OPTION)



SECTION 8

TWIN TRACK AT GRADE 100FT ROW
 STA 324+25 THROUGH STA 338+50



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 06/30/11

**RECORD SET 15%
 DESIGN SUBMISSION**

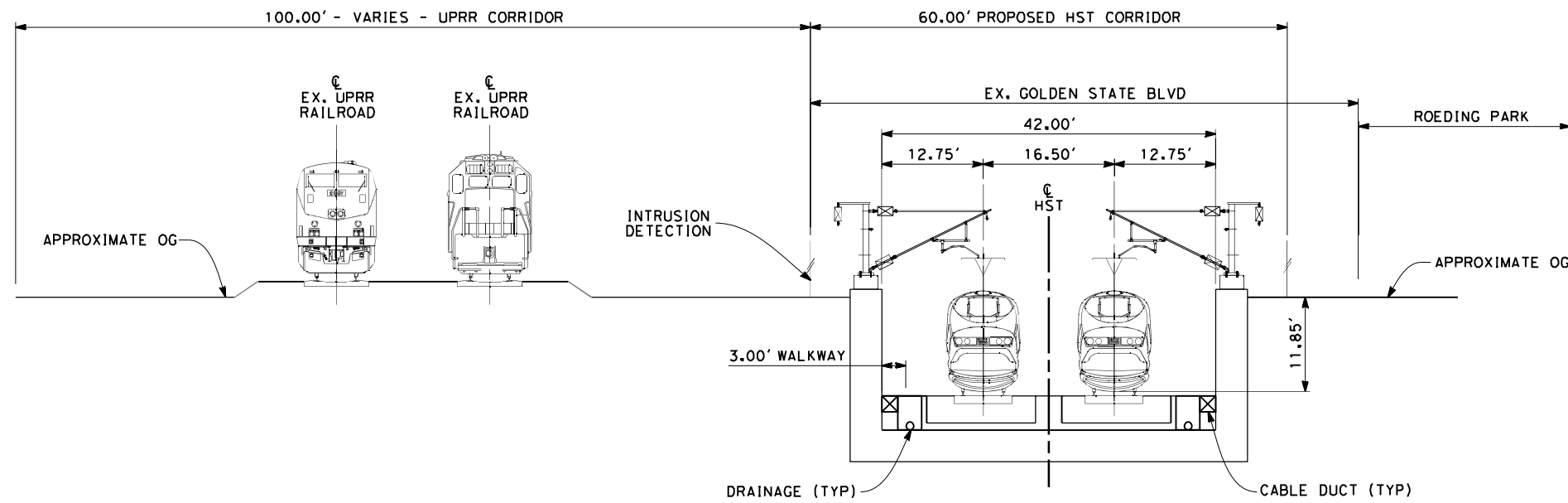
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

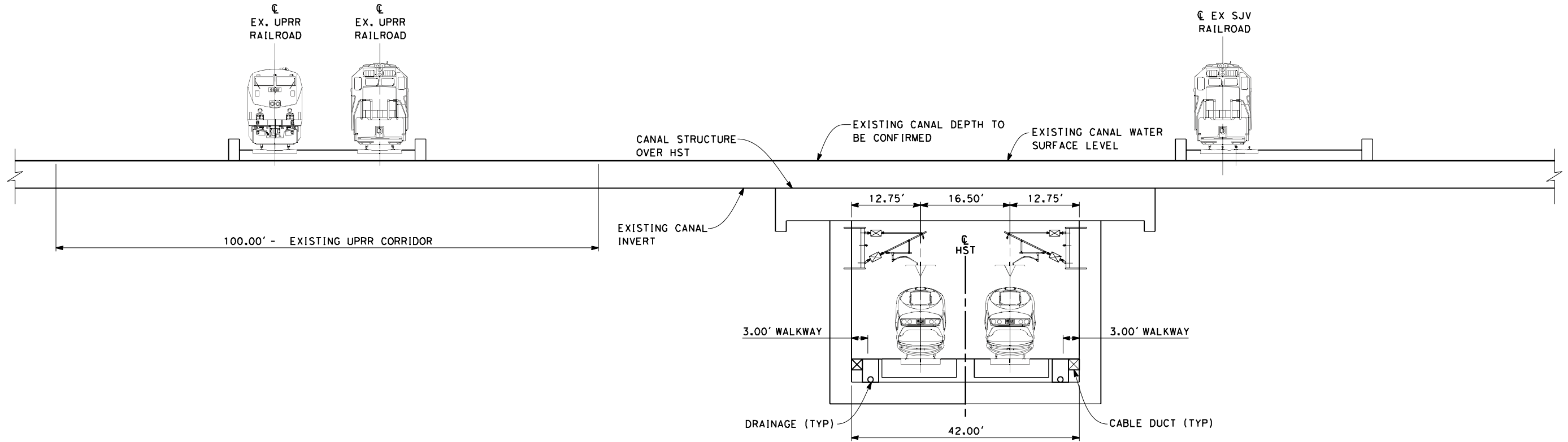
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3021-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

7/21/2011 11:13:09 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3022-A-F1.dgn



SECTION 13

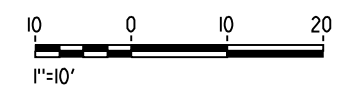
TWIN TRACK IN TRENCH ADJACENT TO UPRR AND ROEDING PARK STA 195+00



SECTION 14

TWIN TRACK IN TRENCH UNDER CANAL STA 228+30

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
 4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
E. CAQUIAS
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
05/13/11

**RECORD SET 15%
DESIGN SUBMISSION**

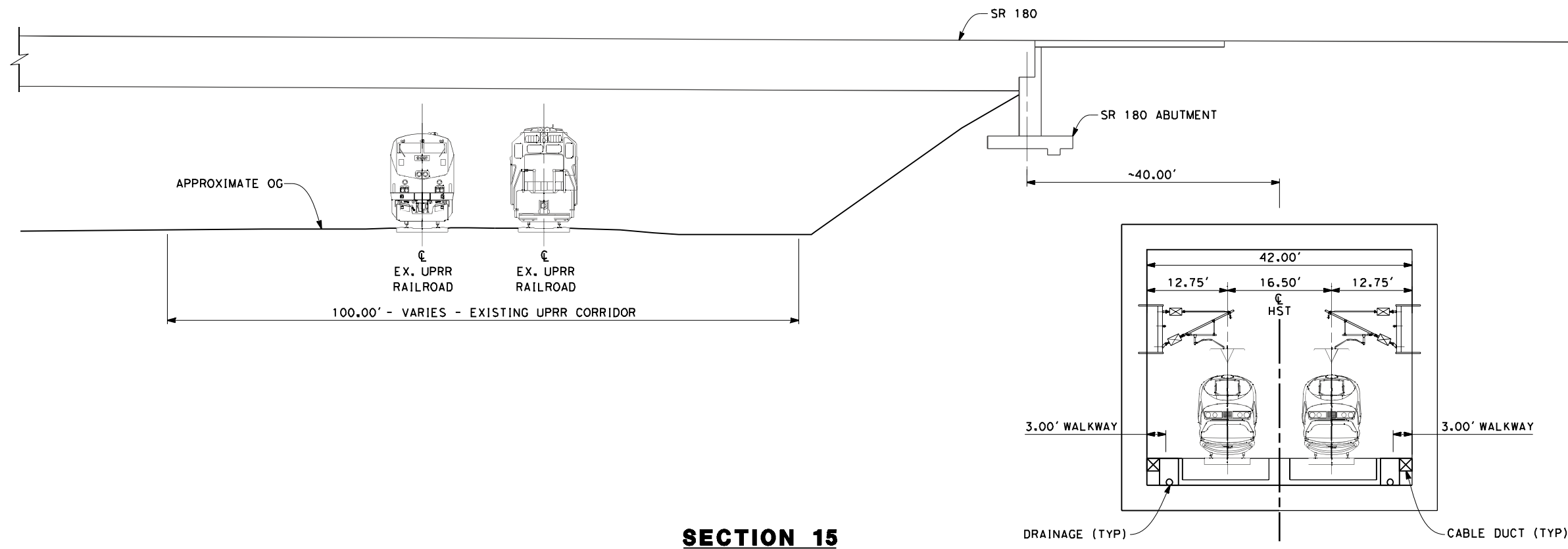
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T3022-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

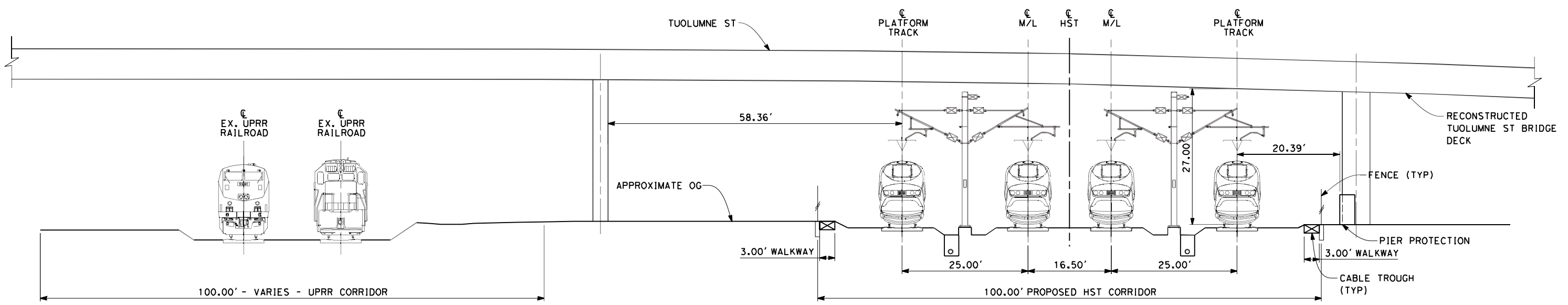
7/21/2011 11:13:11 AM O:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3023-A-F1.dgn
 frank.palermo



SECTION 15

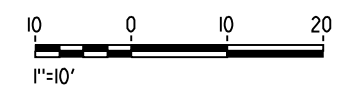
TWIN TRACK IN BOX ADJACENT TO SR-180 ABUTMENT
STA 232+00

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
 4. FOR SECTION 16 OCS POLES TO BE SPACED BEFORE & AFTER BRIDGE. POSITIONS ARE INDICATIVE
 5. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS



SECTION 16

4 TRACK AT GRADE STATION APPROACH UNDER TUOLUMNE ST
STA 276+50
STA 276+50 (KERN OPTION)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
E. CAQUIAS
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
05/13/11

**RECORD SET 15%
DESIGN SUBMISSION**

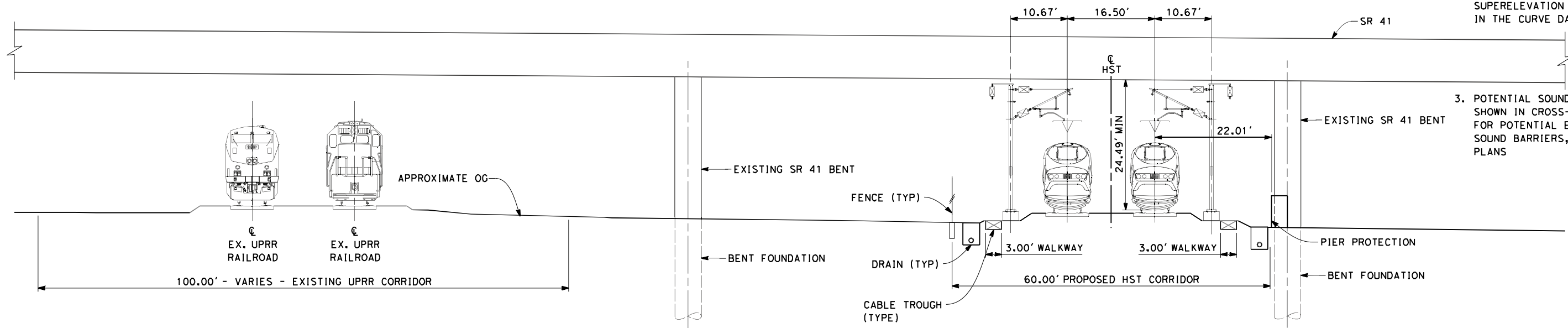
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

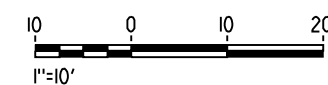
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T3023-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

7/21/2011 11:13:14 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR Alignment - Ave 21\FB-T3024-A-F1.dgn



- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS

SECTION 17
 TWIN TRACK UNDER SR-41
 STA 333+00
 STA 333+00 (KERN OPTION)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 06/30/11

**RECORD SET 15%
 DESIGN SUBMISSION**

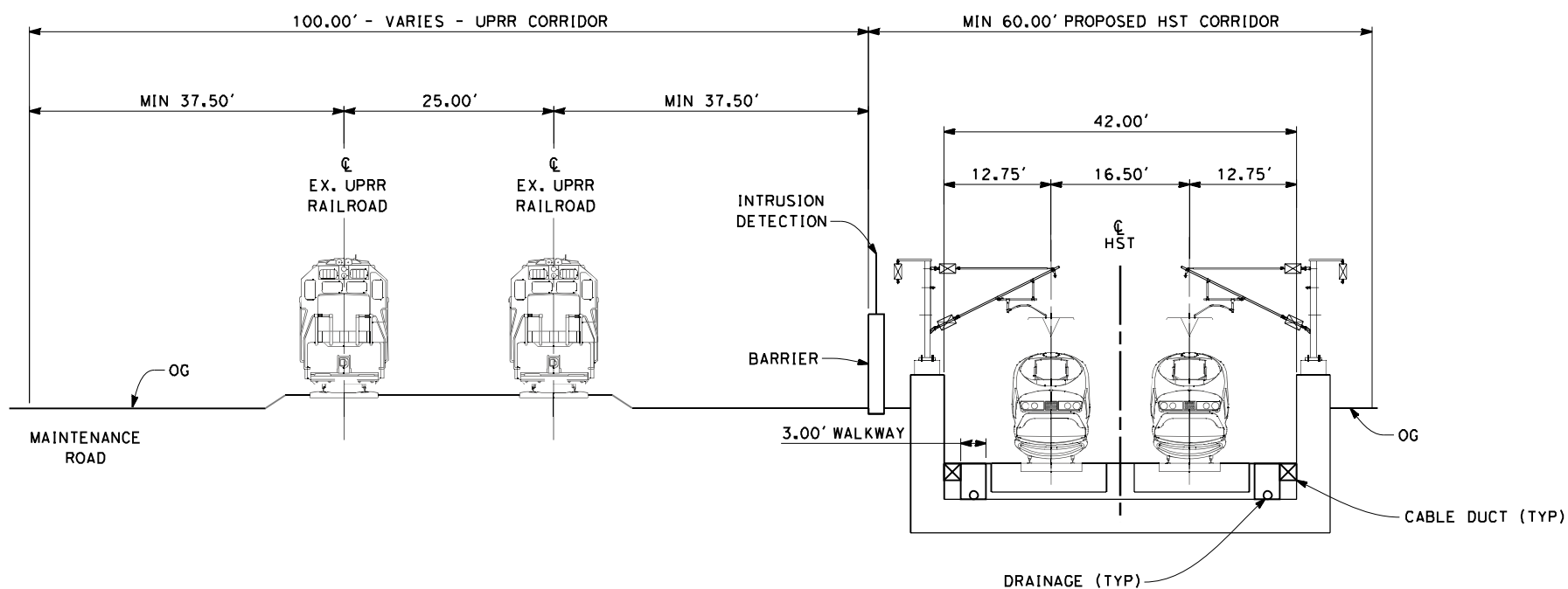
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

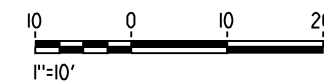
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3024-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

7/21/2011 11:13:15 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR Alignment - Ave 21\FB-T3025-A-F1.dgn



SECTION 19
 TWIN TRACK IN TRENCH
 STA 182+00 THROUGH STA 196+00

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS-SECTION(S). FOR POTENTIAL EXTENTS OF SOUND BARRIERS, SEE ALIGNMENT PLANS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 K. SEYMOUR
 DRAWN BY
 E. CAQUIAS
 CHECKED BY
 D. HUNT
 IN CHARGE
 A. LUFT
 DATE
 06/30/11

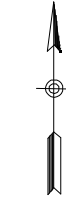
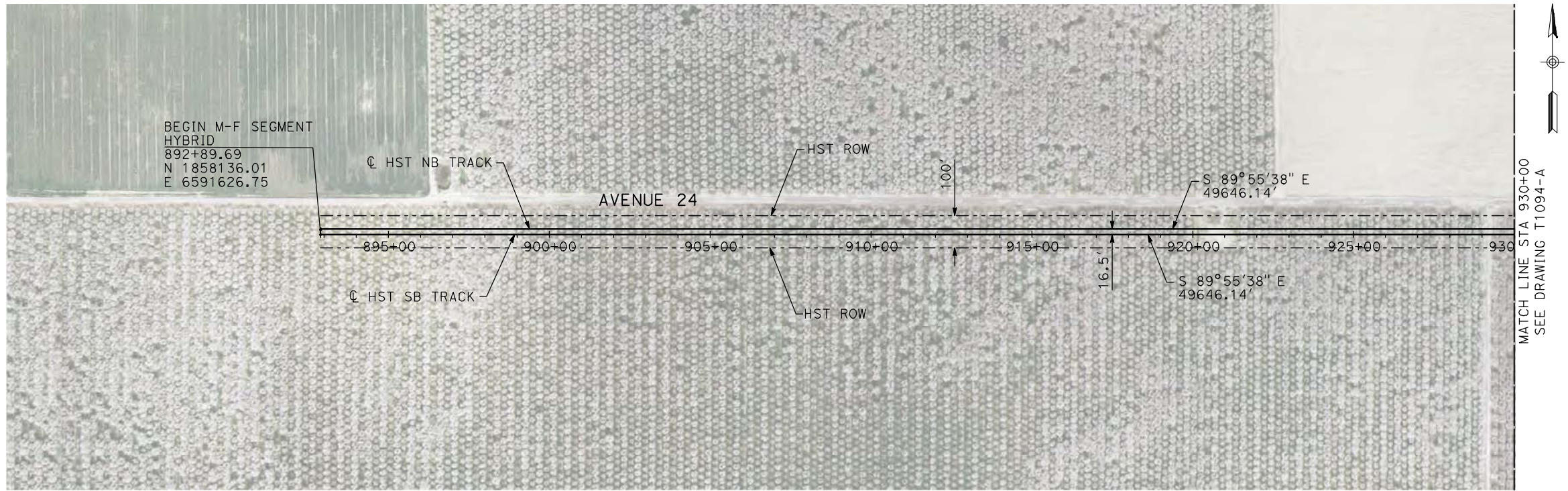
**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



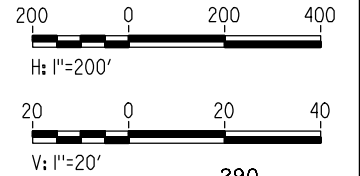
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3025-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 892+89.69 TO STA 930+00

CONTRACT NO.
HSR06-007

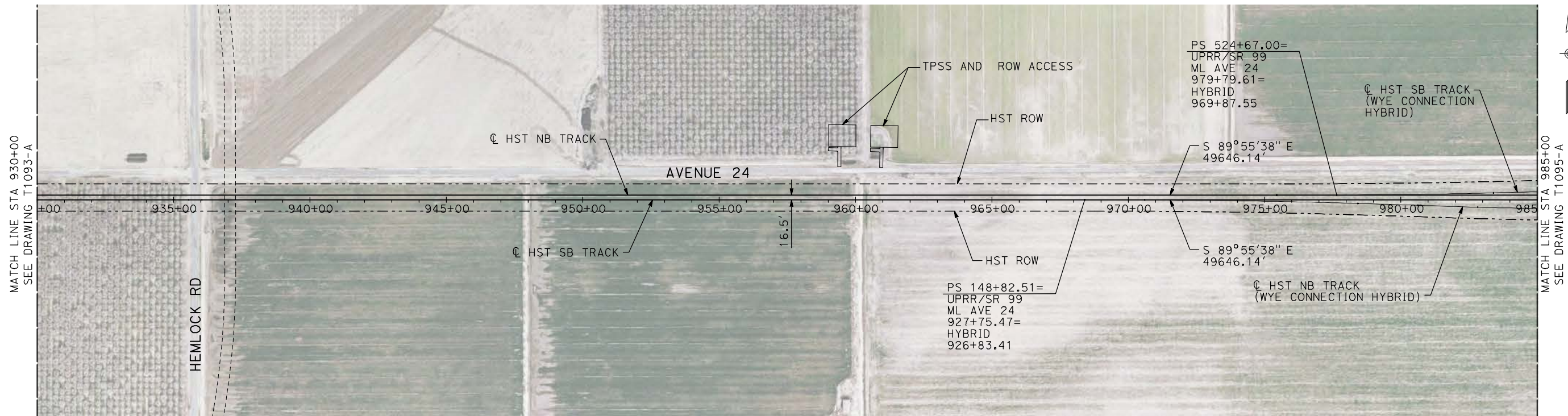
DRAWING NO.
T1093-A

SCALE
AS SHOWN

SHEET NO.
OF

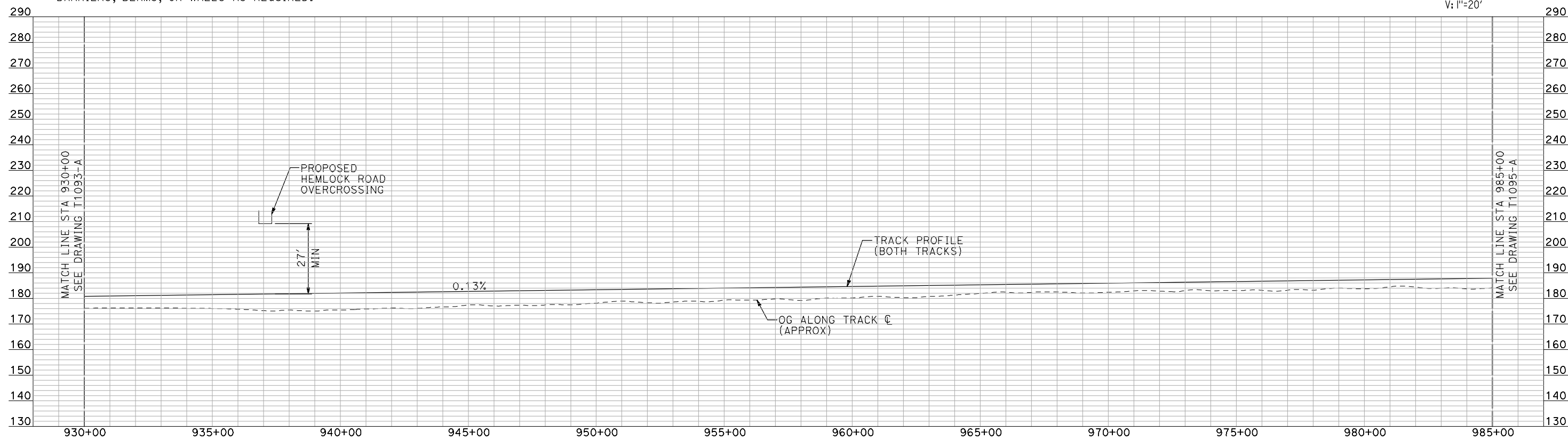
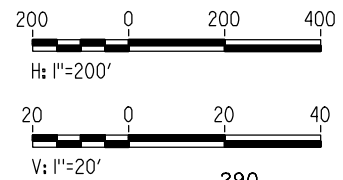
7/21/2011 2:49:16 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1093-A.dgn machadoe

7/21/2011 2:49:30 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1094-A.dgn machadoe



PLAN

- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

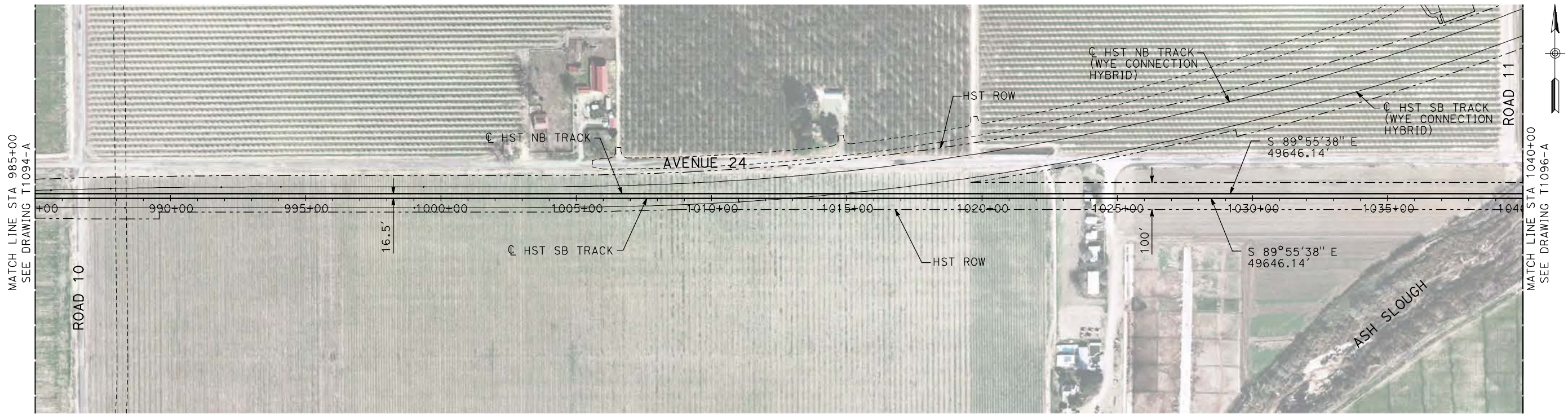


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

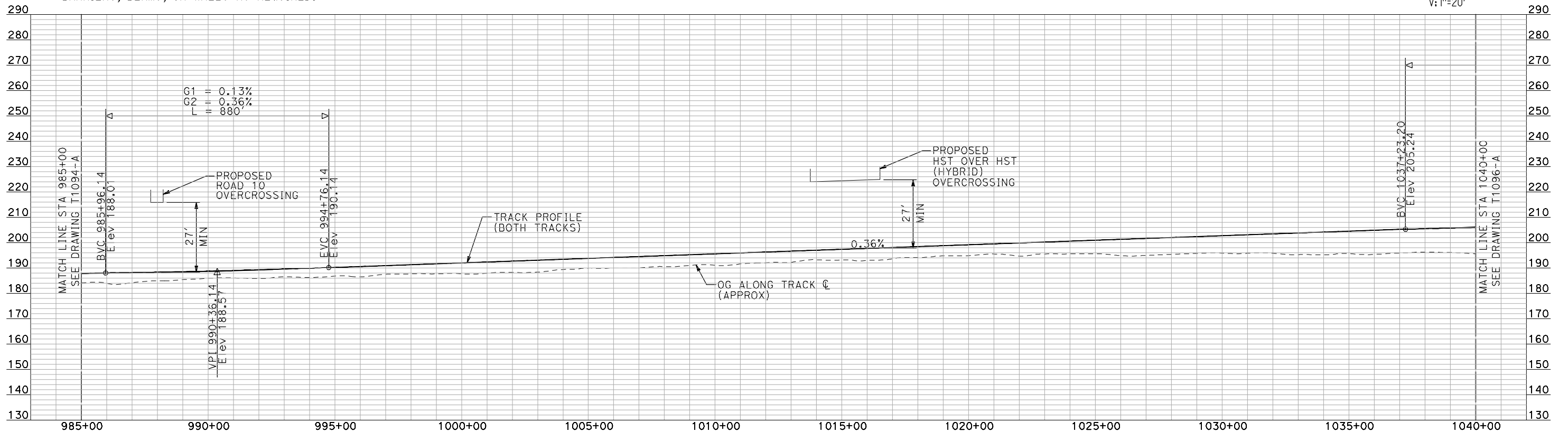
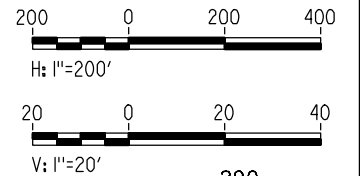
PLAN AND PROFILE
STA 930+00 TO STA 985+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1094-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



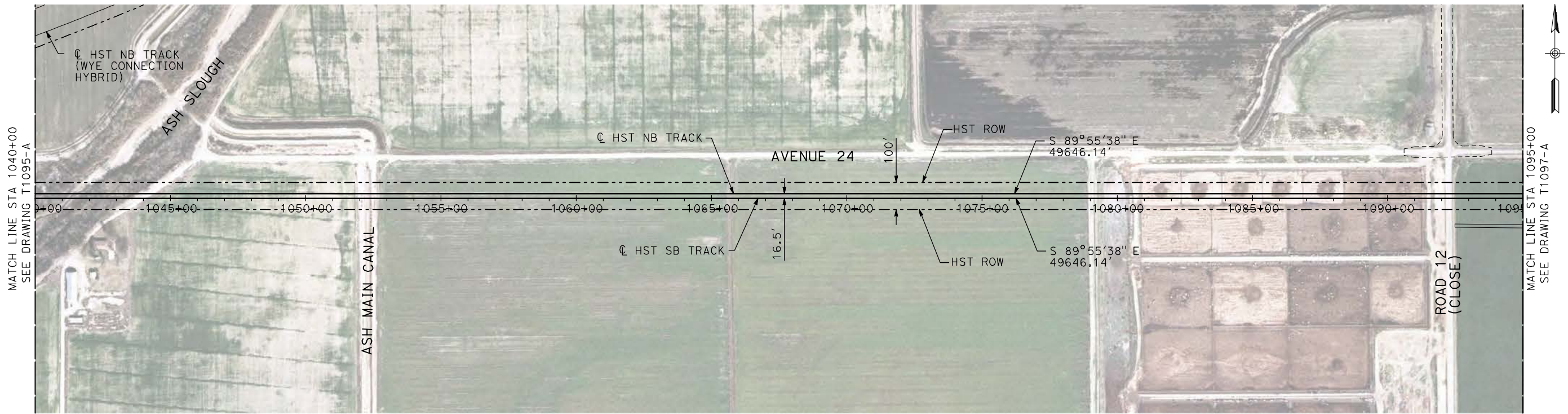
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

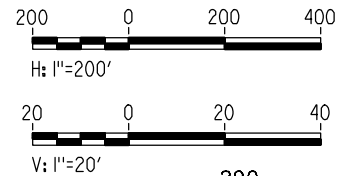
PLAN AND PROFILE
STA 985+00 TO STA 1040+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1095-A
SCALE
AS SHOWN
SHEET NO.
OF

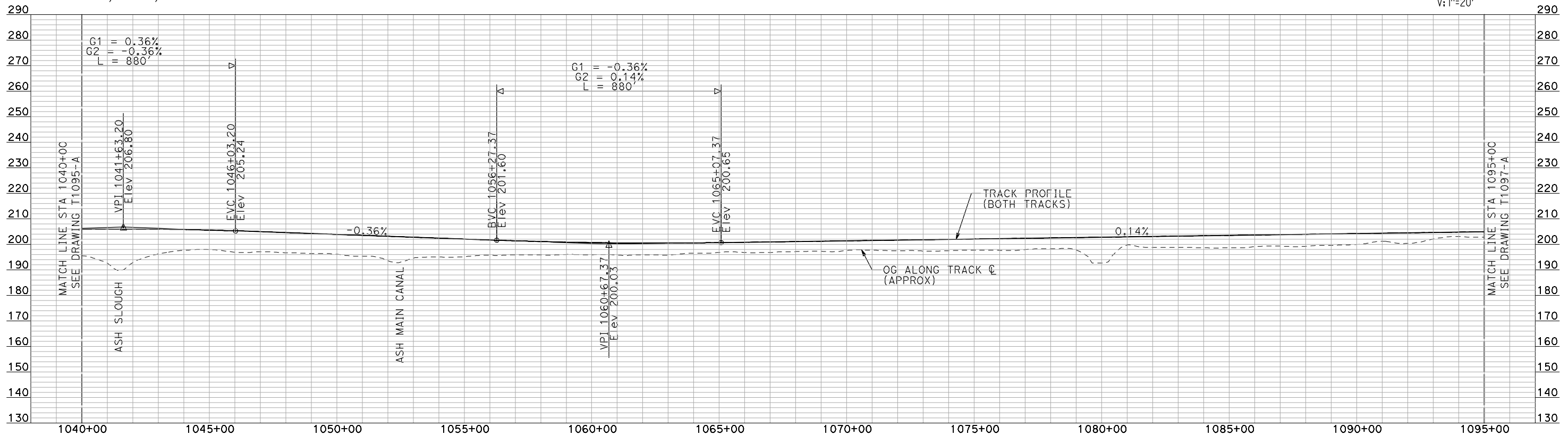
7/21/2011 2:49:42 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1095-A.dgn machadoe



PLAN



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:49:57 PM i:\chsr\60022962\task-02_merced-fresno-cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1096-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

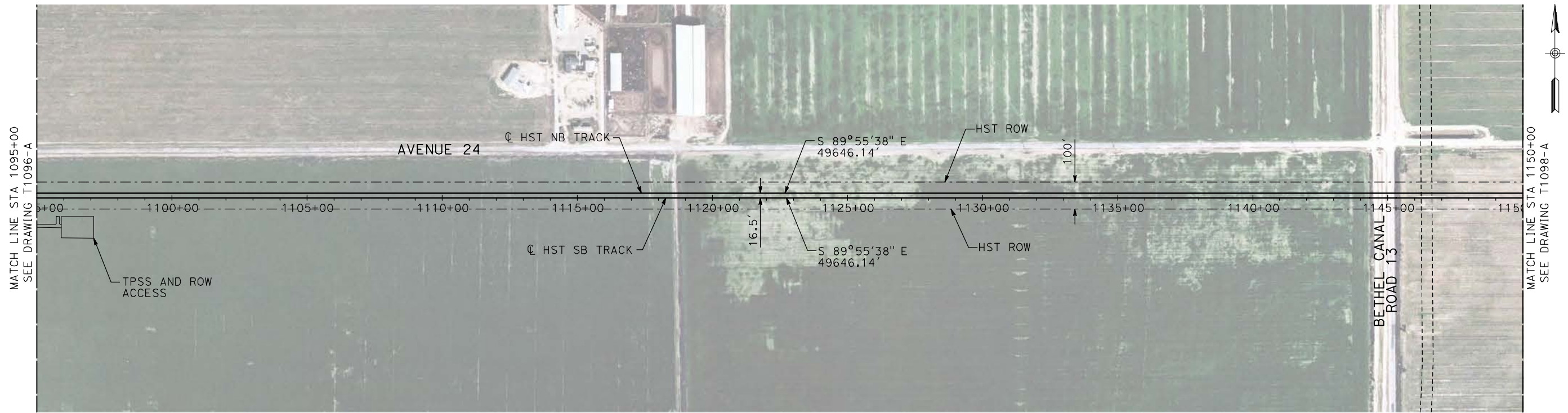
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

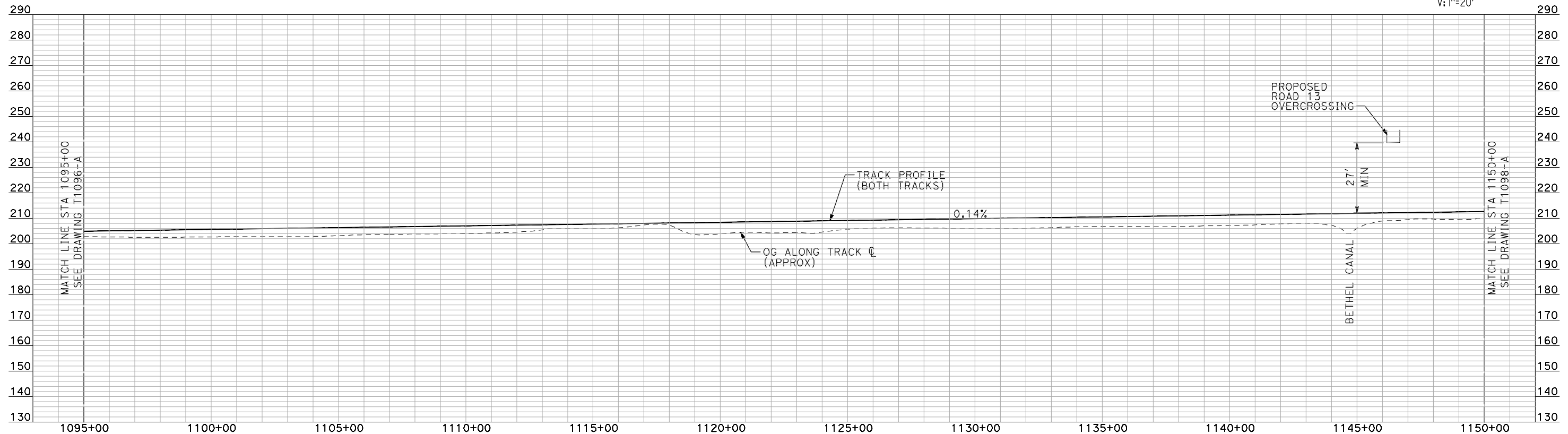
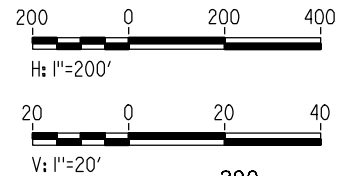
PLAN AND PROFILE
STA 1040+00 TO STA 1095+00

CONTRACT NO. HSR06-007
DRAWING NO. T1096-A
SCALE AS SHOWN
SHEET NO. ### OF ###



PLAN

- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



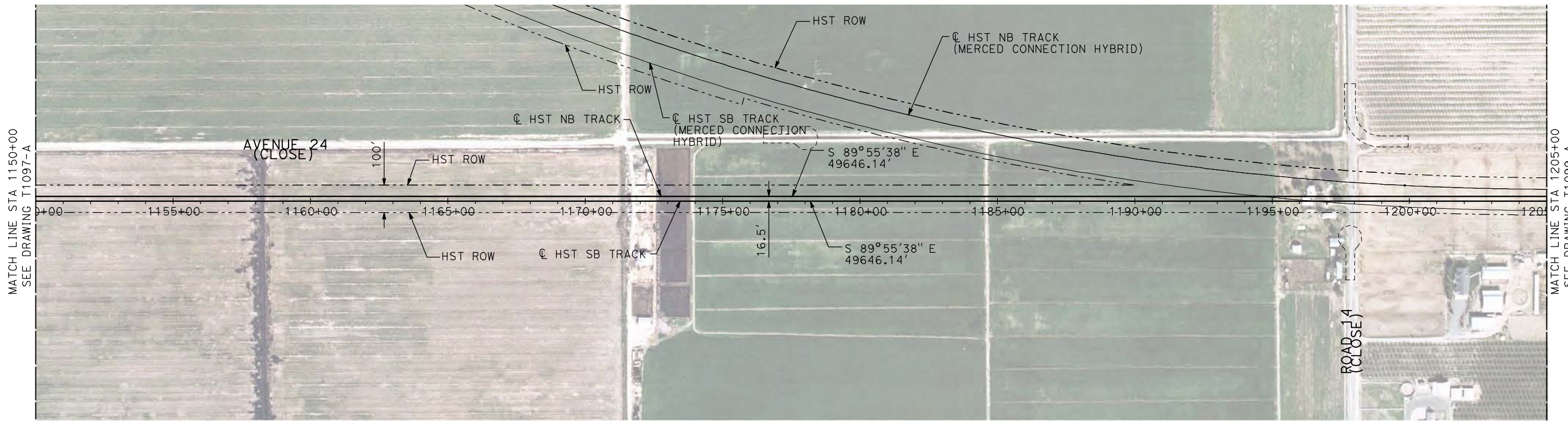
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

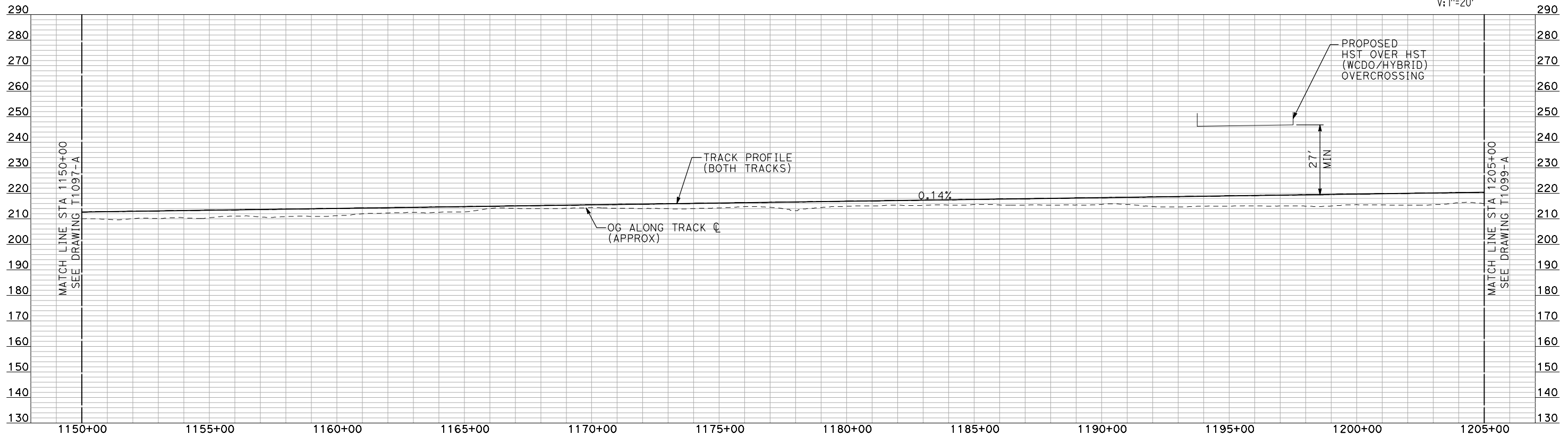
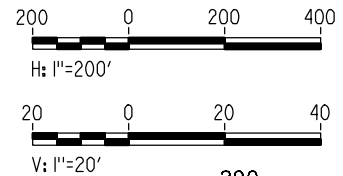
PLAN AND PROFILE
STA 1095+00 TO STA 1150+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1097-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:50:12 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1097-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:50:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1098-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

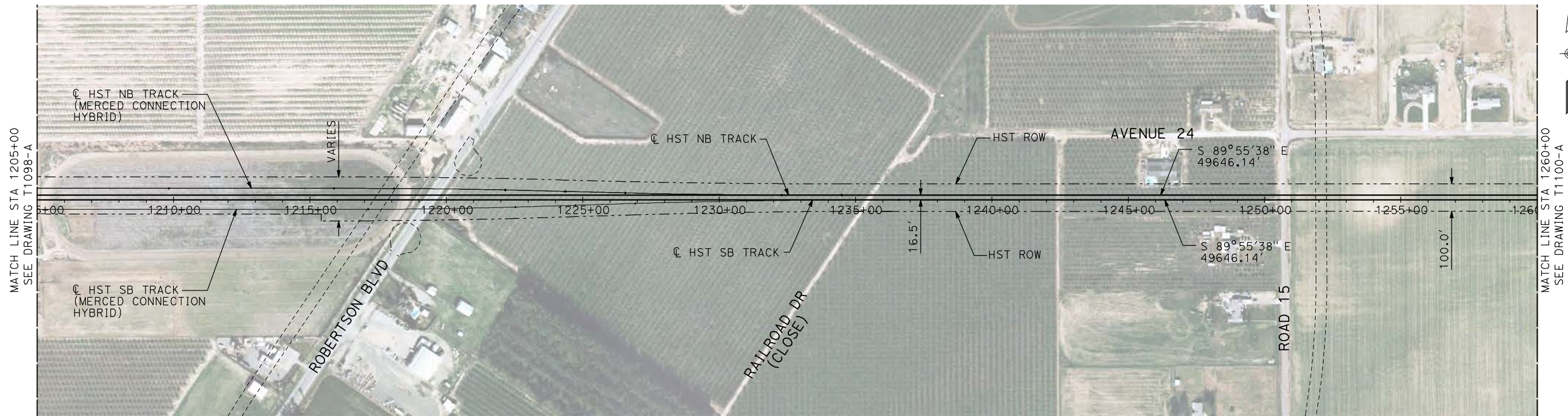


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 1150+00 TO STA 1205+00

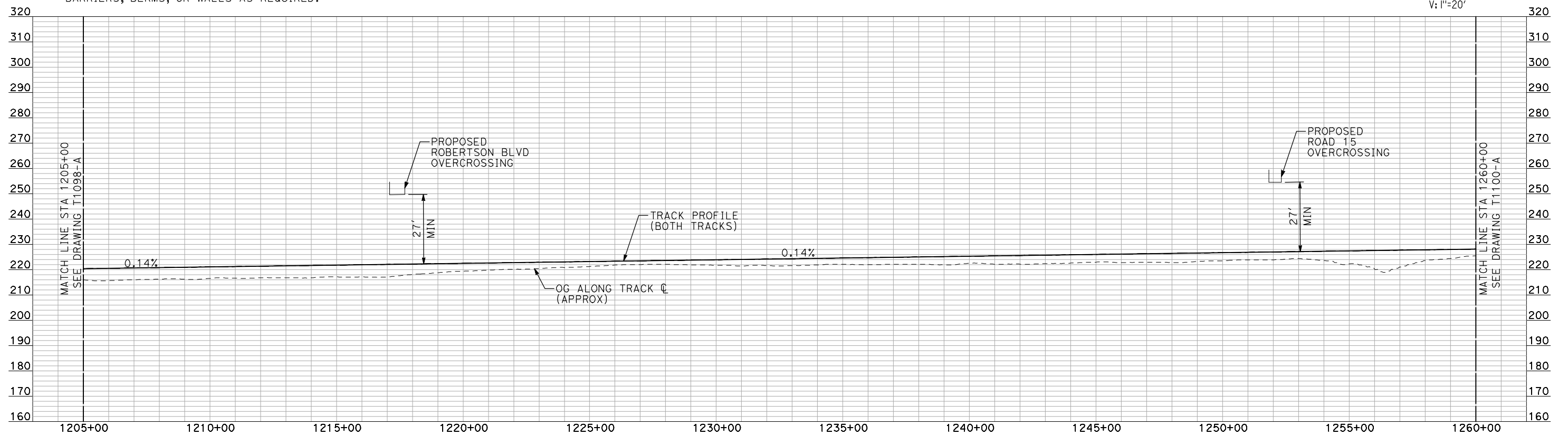
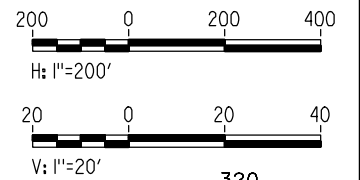
CONTRACT NO.
HSR06-007
DRAWING NO.
T1098-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:50:39 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1099-A.dgn



PLAN

- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

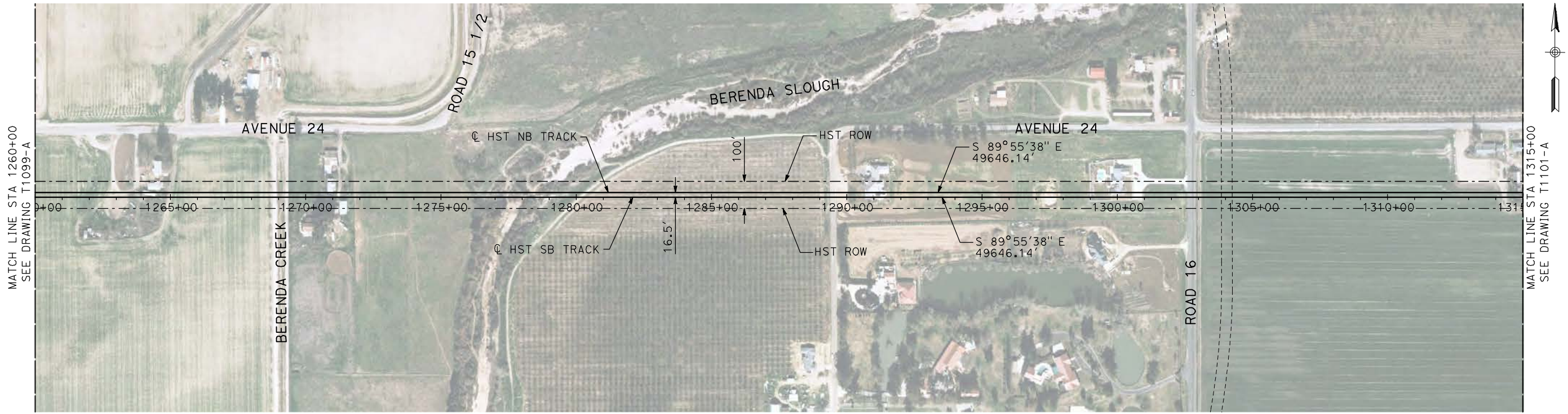


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

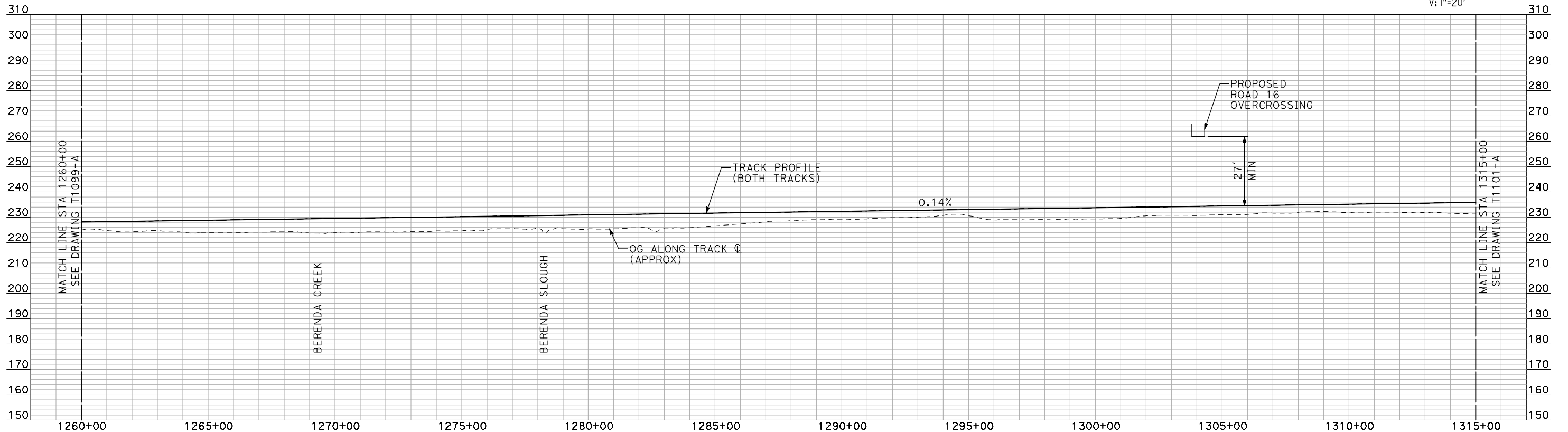
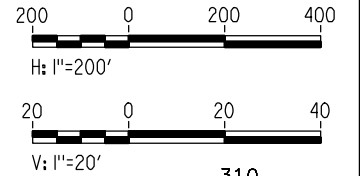
PLAN AND PROFILE
STA 1205+00 TO STA 1260+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1099-A
SCALE
AS SHOWN
SHEET NO.
OF



PLAN

- NOTES:
 1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
 DRAWN BY
H. SULLIVAN
 CHECKED BY
A. BOONE
 IN CHARGE
A. BOONE
 DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



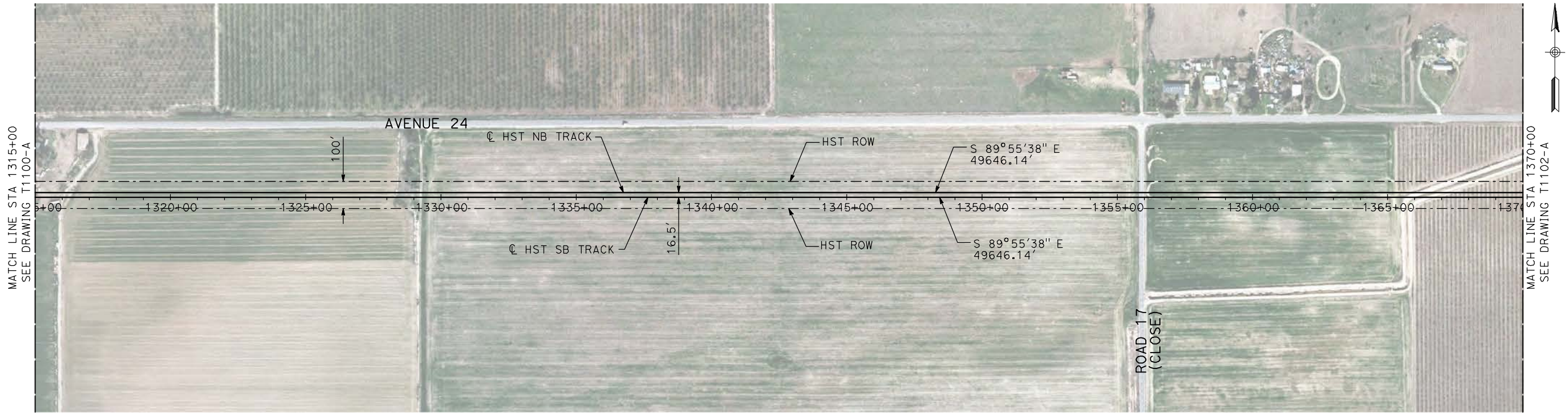
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1260+00 TO STA 1315+00

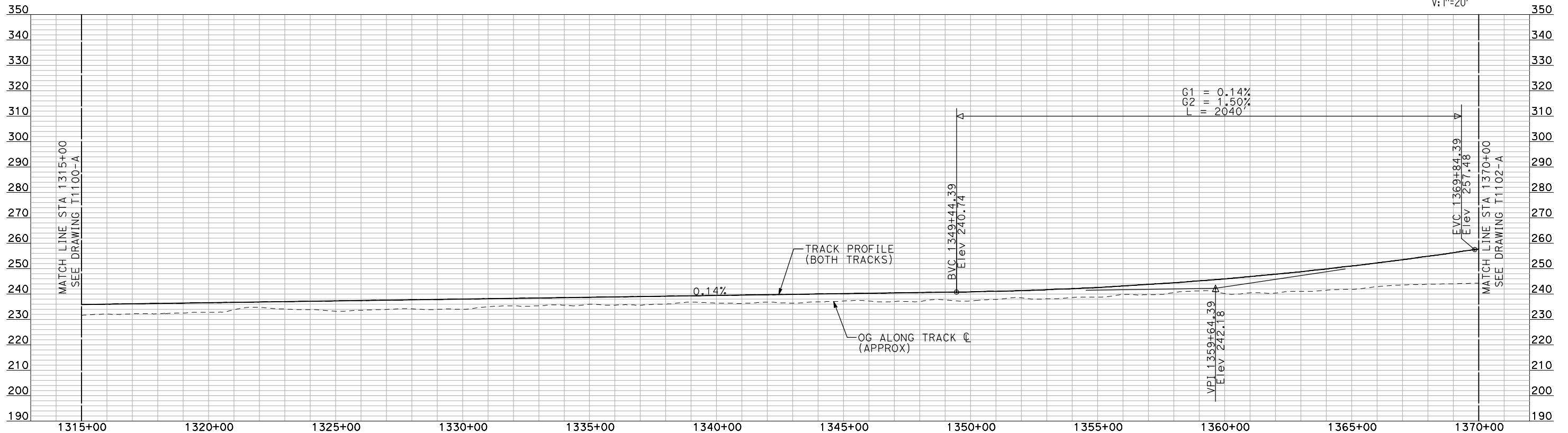
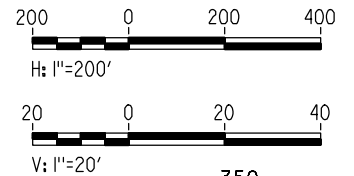
CONTRACT NO. HSR06-007
DRAWING NO. T1100-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/21/2011 2:50:52 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1100-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT. TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
HYBRID

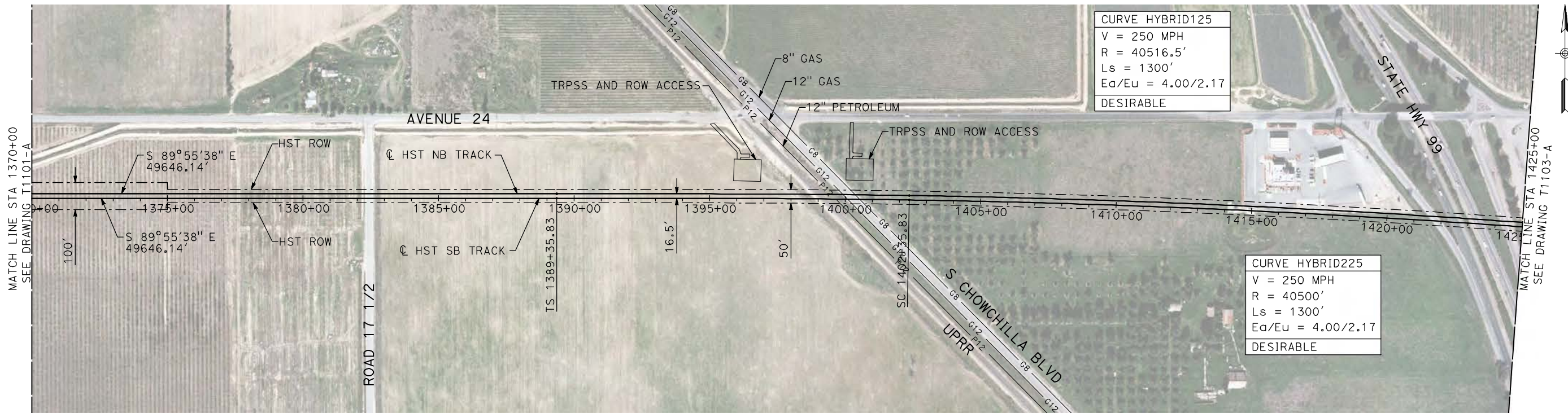
PLAN AND PROFILE
STA 1315+00 TO STA 1370+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1101-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:51:04 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1101-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

7/21/2011 2:51:18 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1102-A.dgn

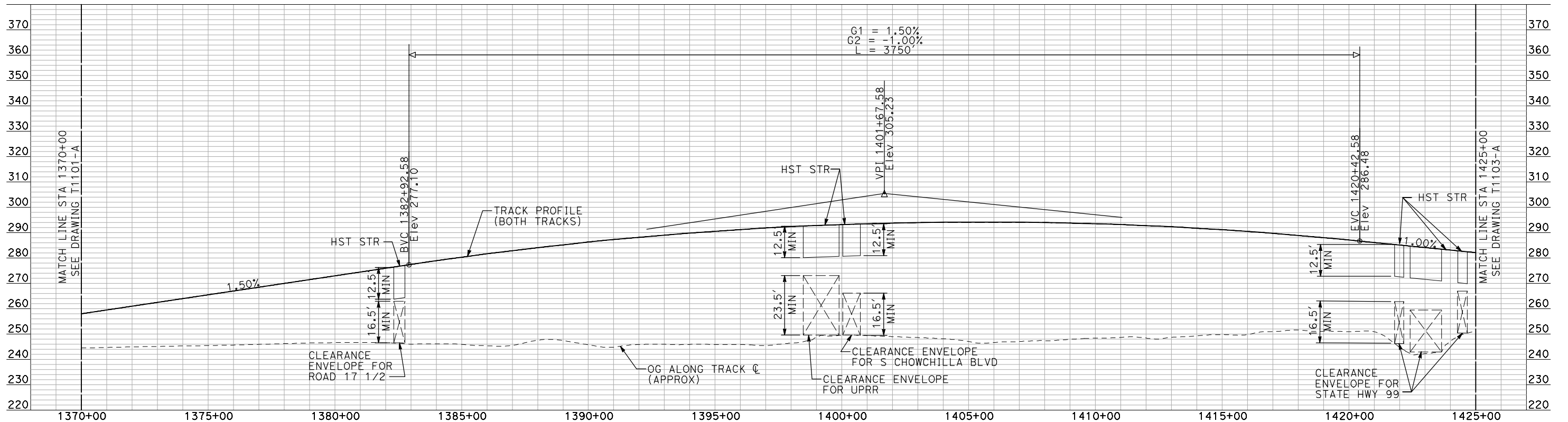
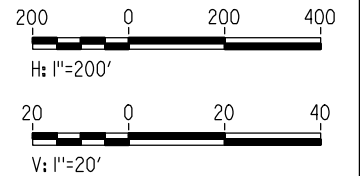


CURVE HYBRID125
 V = 250 MPH
 R = 40516.5'
 Ls = 1300'
 Ea/Eu = 4.00/2.17
 DESIRABLE

CURVE HYBRID225
 V = 250 MPH
 R = 40500'
 Ls = 1300'
 Ea/Eu = 4.00/2.17
 DESIRABLE

- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS

DRAWN BY
H. SULLIVAN

CHECKED BY
A. BOONE

IN CHARGE
A. BOONE

DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

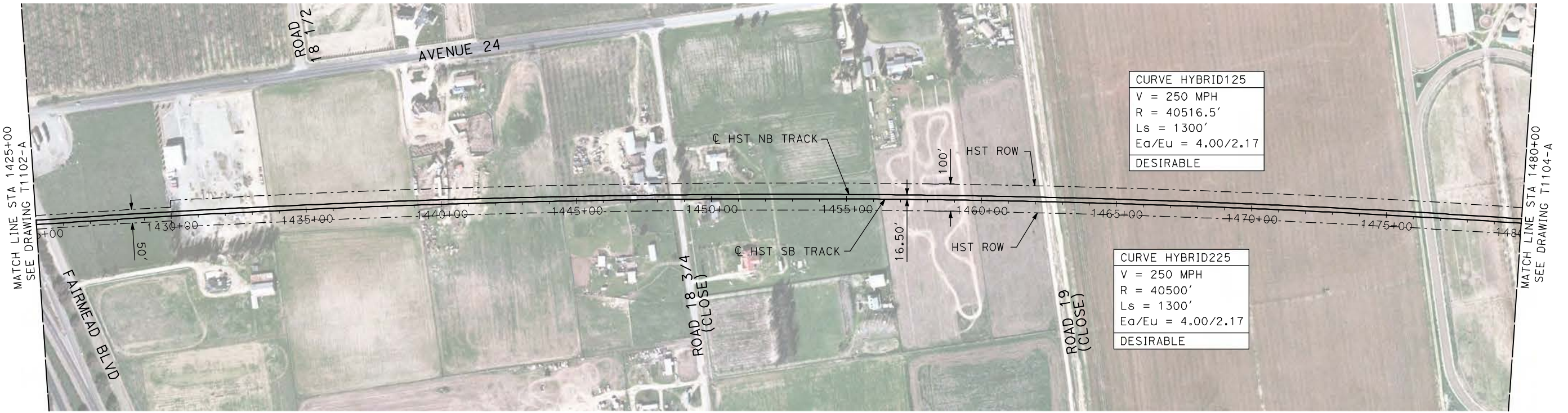
PLAN AND PROFILE
 STA 1370+00 TO STA 1425+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T1102-A

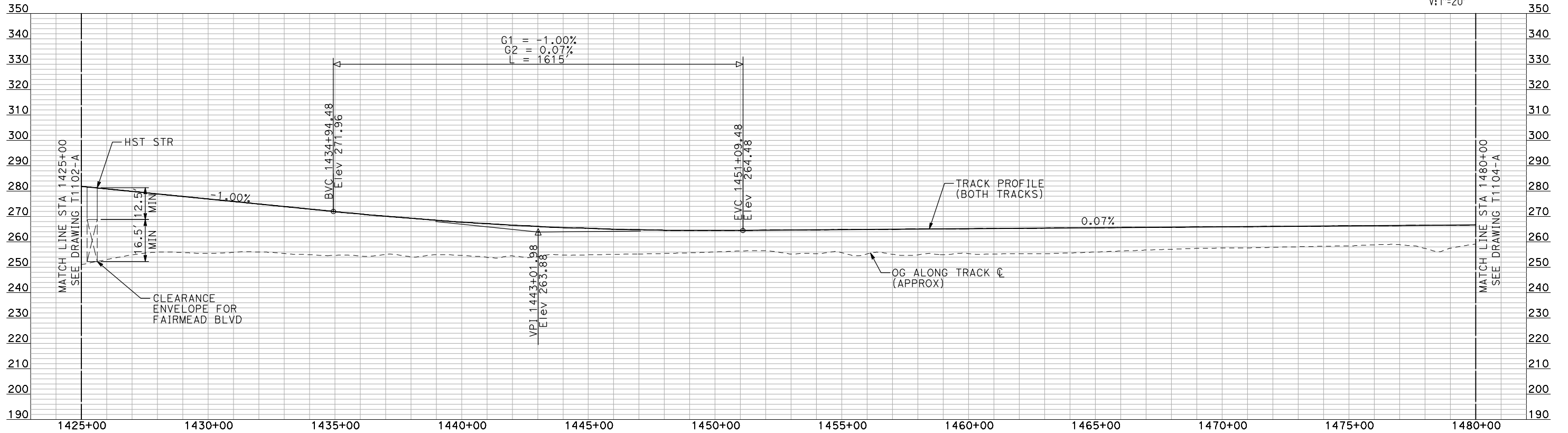
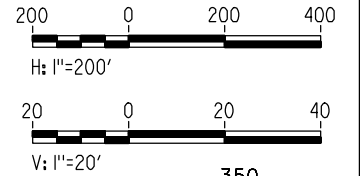
SCALE
AS SHOWN

SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

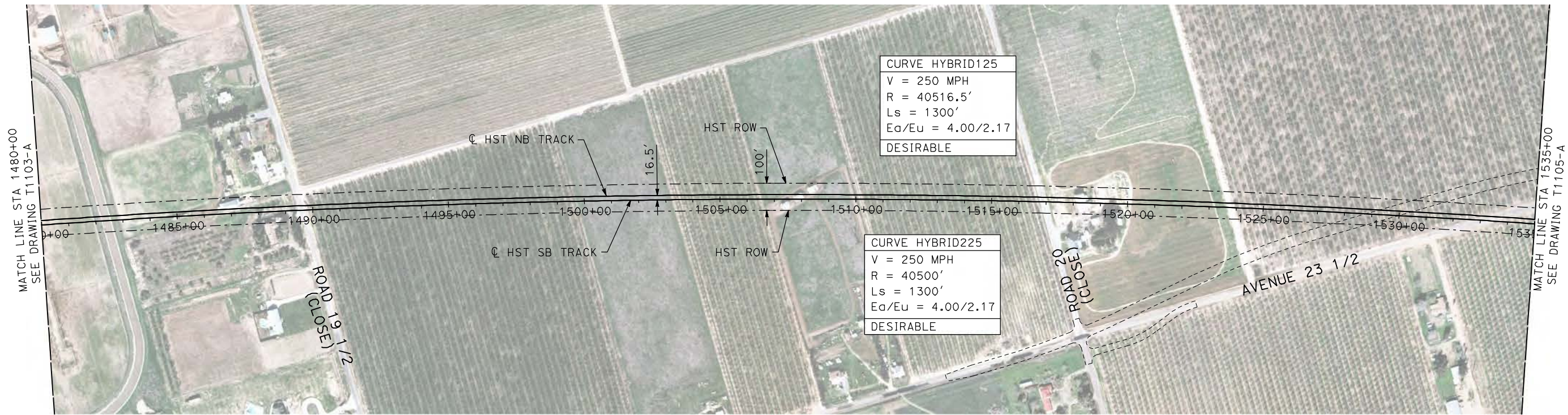


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
PLAN AND PROFILE
STA 1425+00 TO STA 1480+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1103-A
SCALE
AS SHOWN
SHEET NO.
OF

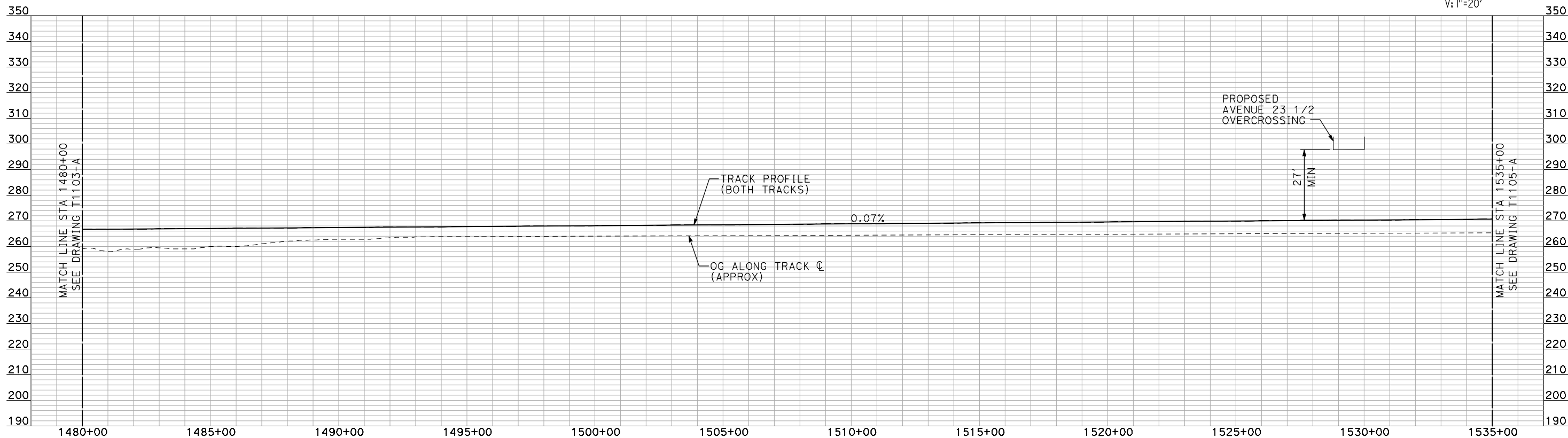
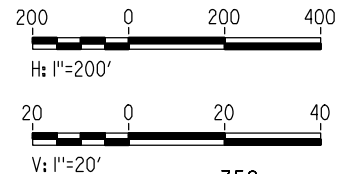
7/21/2011 2:51:33 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1103-A.dgn machadoe

7/21/2011 2:51:48 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1104-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



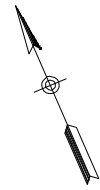
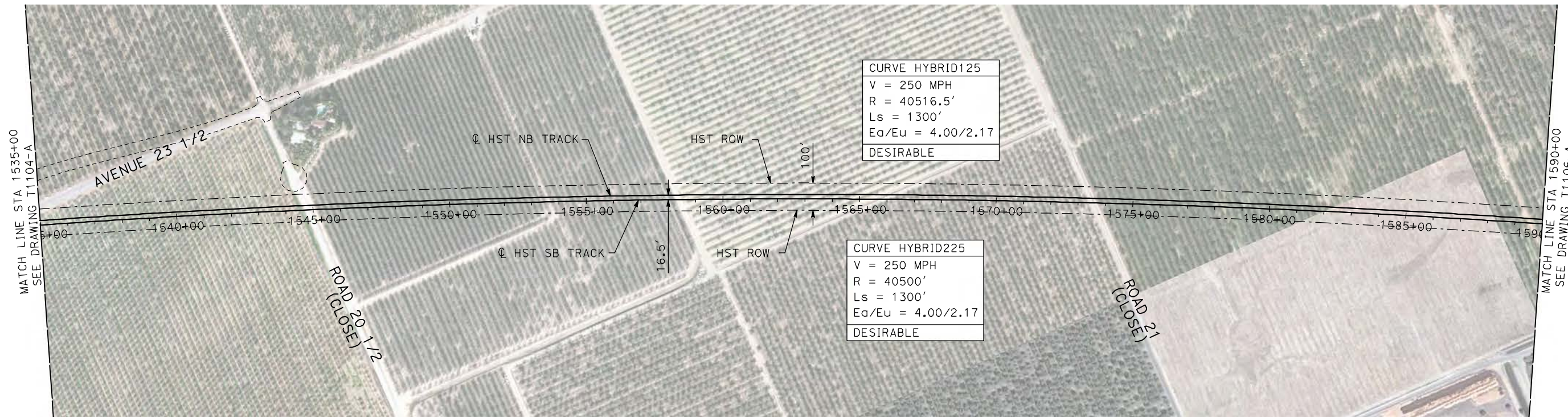
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1480+00 TO STA 1535+00

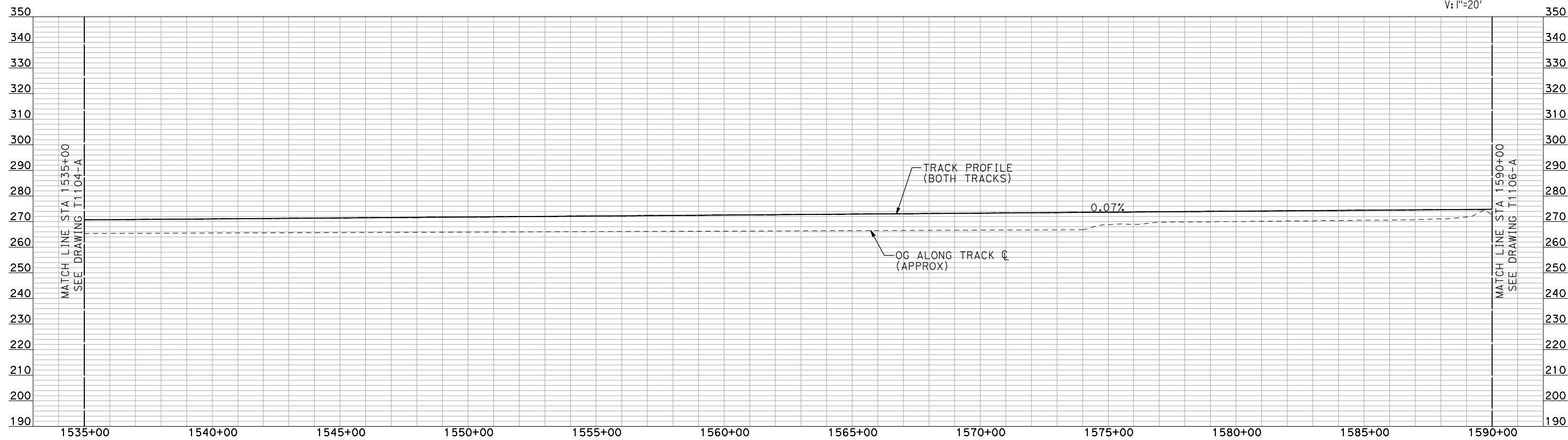
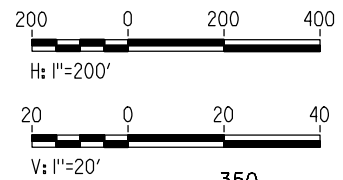
CONTRACT NO.
HSR06-007
DRAWING NO.
T1104-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:52:04 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1105-A.dgn machadoe



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



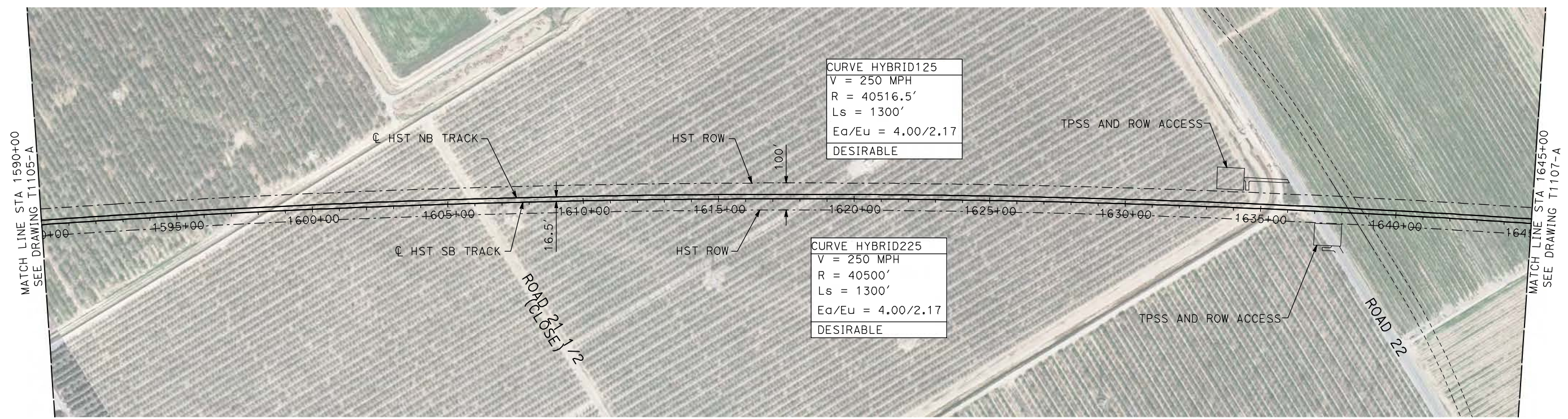
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1535+00 TO STA 1590+00

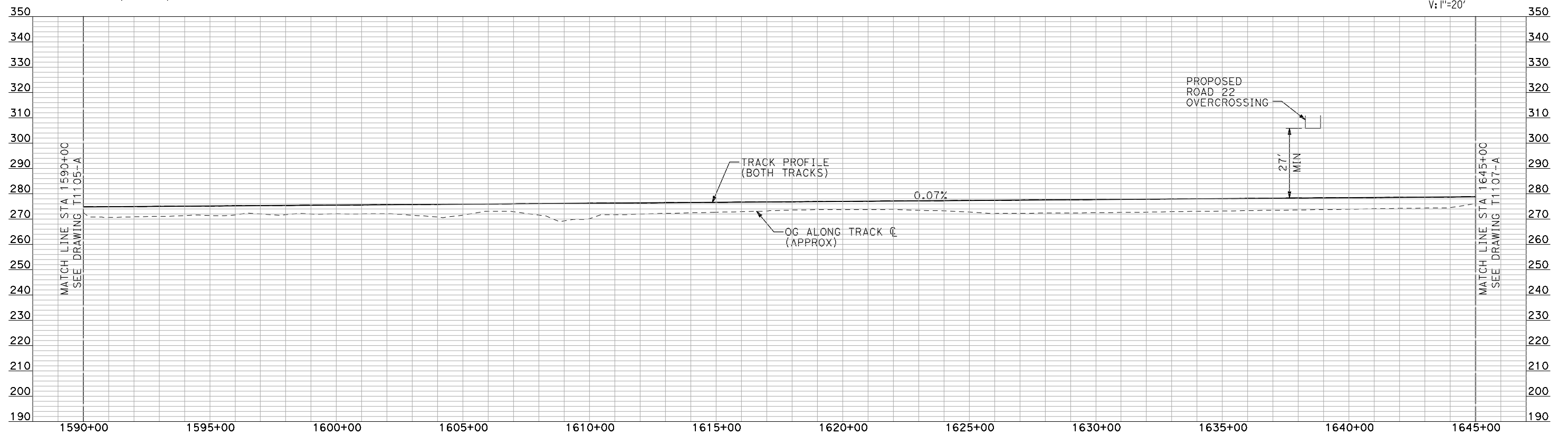
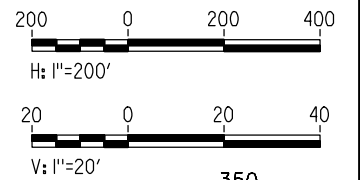
CONTRACT NO.
HSR06-007
DRAWING NO.
T1105-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:52:21 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1106-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



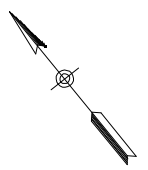
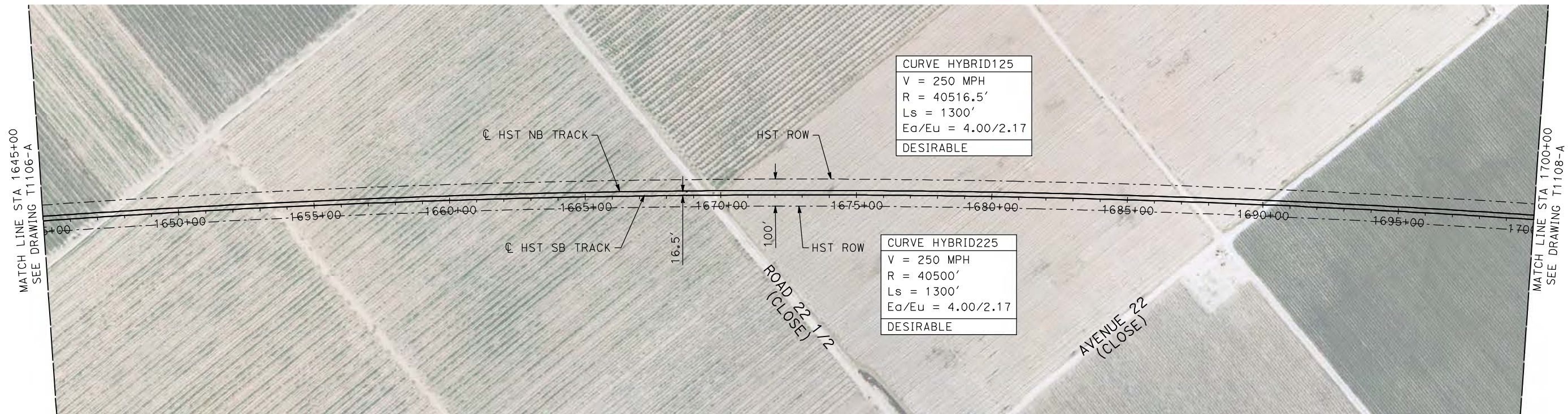
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1590+00 TO STA 1645+00

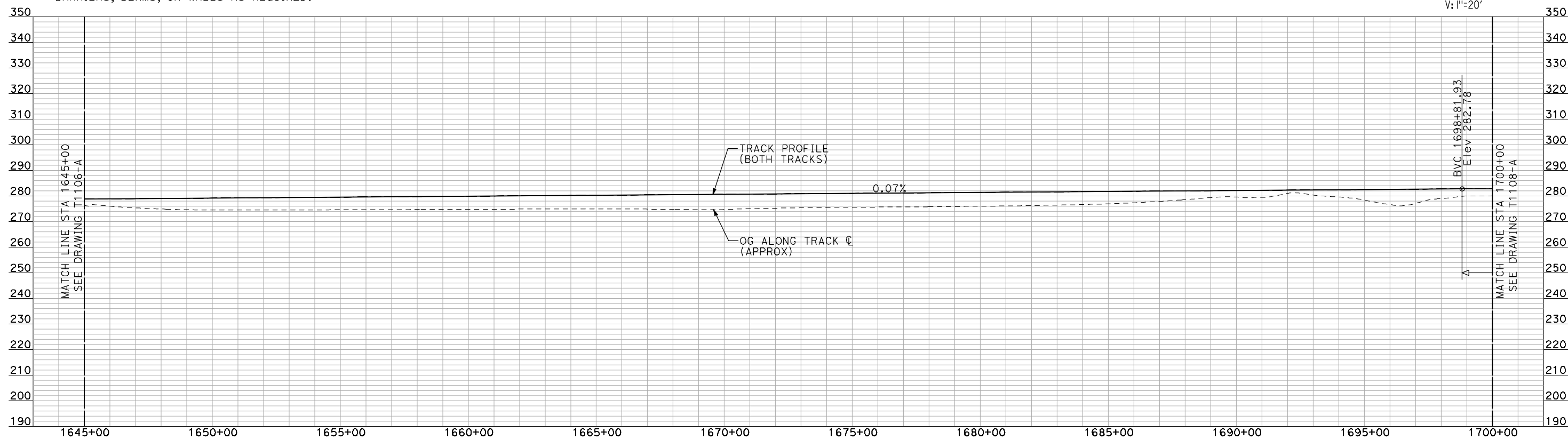
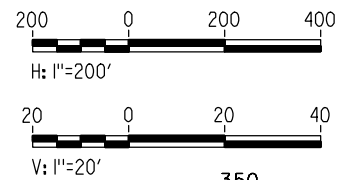
CONTRACT NO.
HSR06-007
DRAWING NO.
T1106-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:52:38 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24_MF-T-1107-A.dgn



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1645+00 TO STA 1700+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T1107-A

SCALE
AS SHOWN

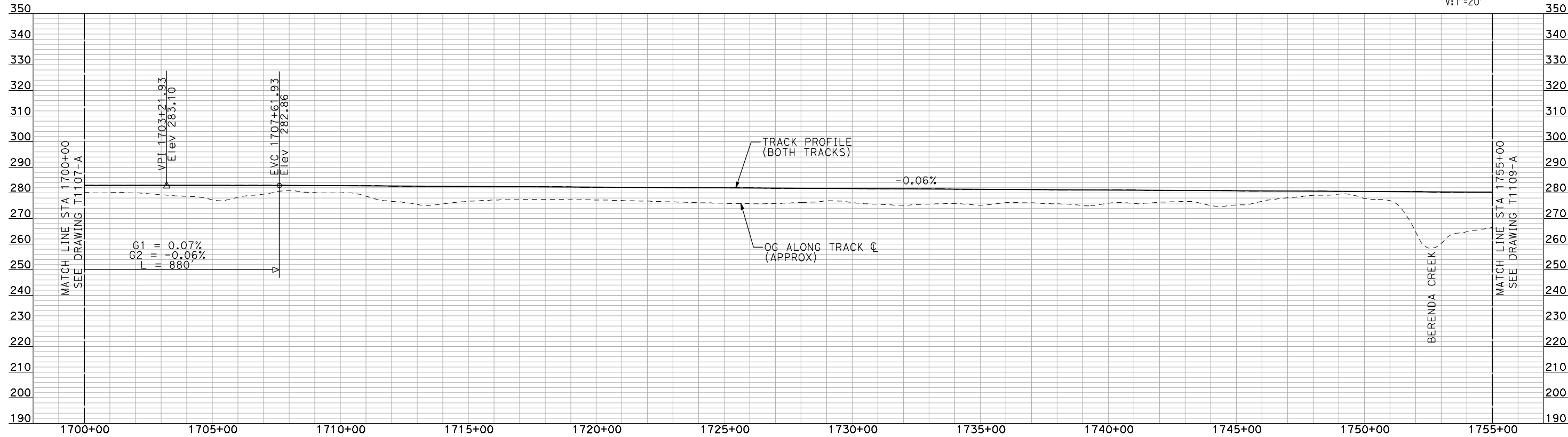
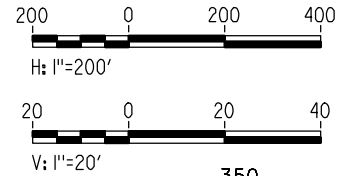
SHEET NO.
OF

7/21/2011 2:52:53 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1108-A.dgn



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
 DRAWN BY
H. SULLIVAN
 CHECKED BY
A. BOONE
 IN CHARGE
A. BOONE
 DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

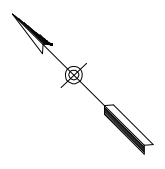
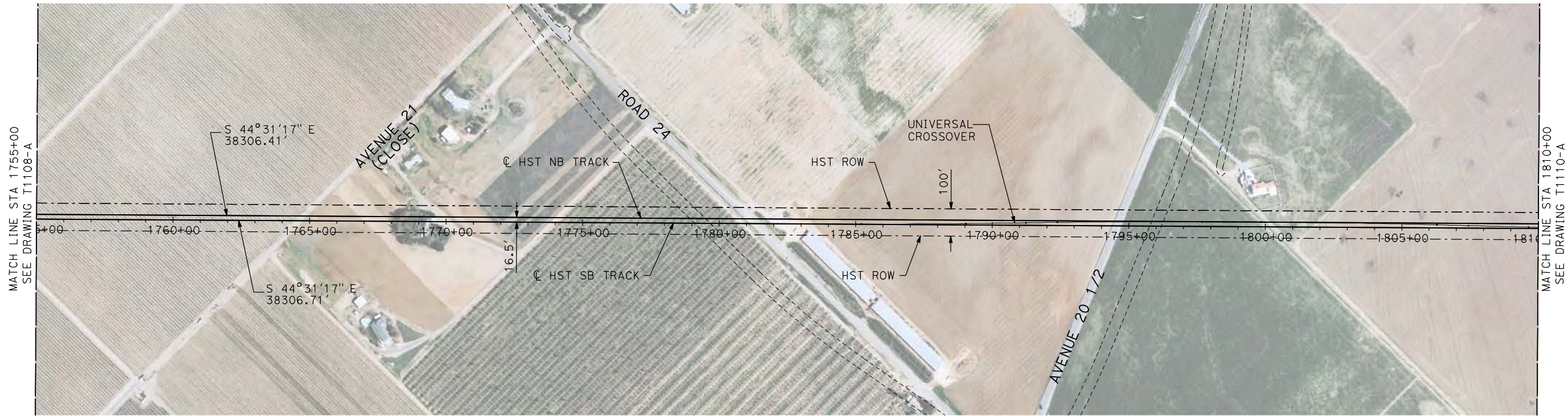
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID

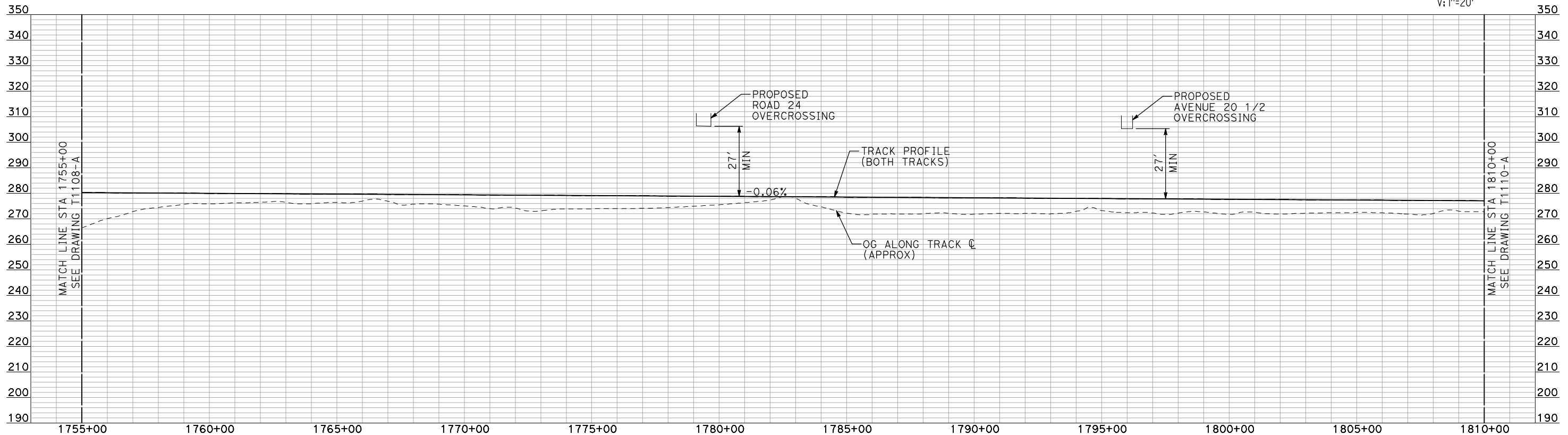
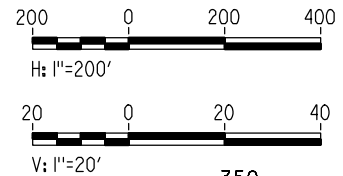
PLAN AND PROFILE
 STA 1700+00 TO STA 1755+00

CONTRACT NO. HSR06-007
DRAWING NO. T1108-A
SCALE AS SHOWN
SHEET NO. ### OF ###



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:53:10 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1109-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

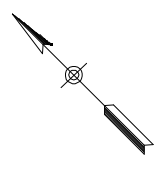
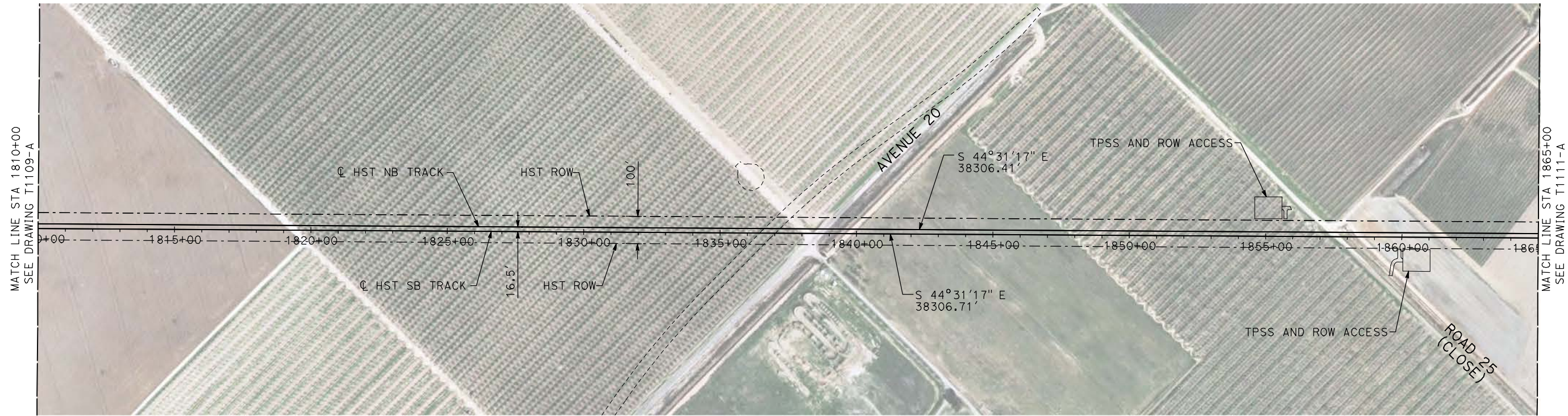


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

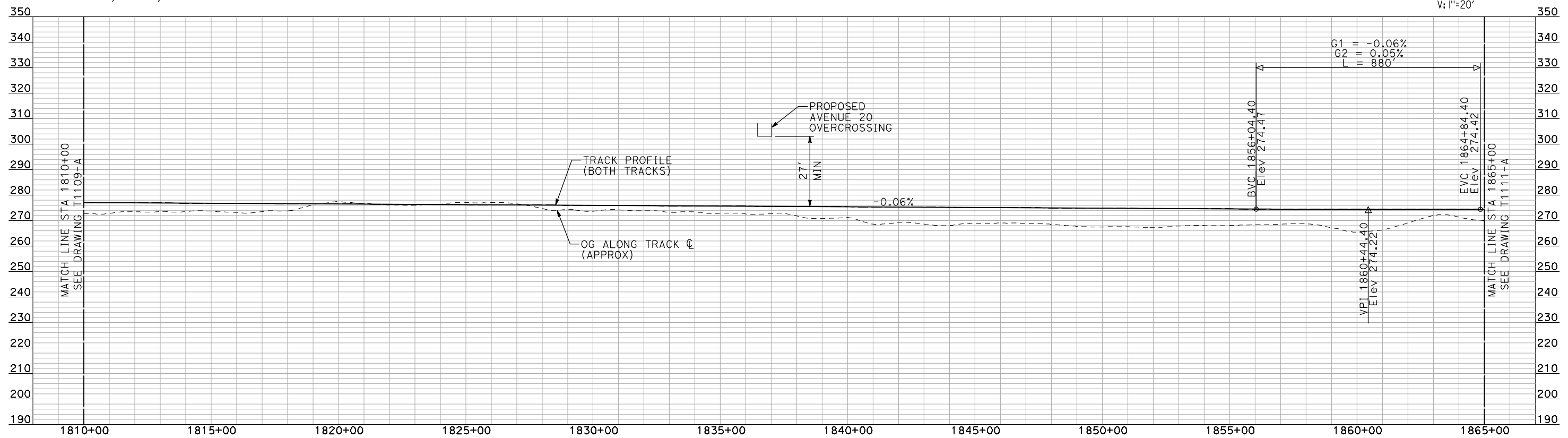
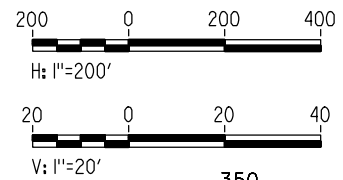
PLAN AND PROFILE
STA 1755+00 TO STA 1810+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1109-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:53:26 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1110-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

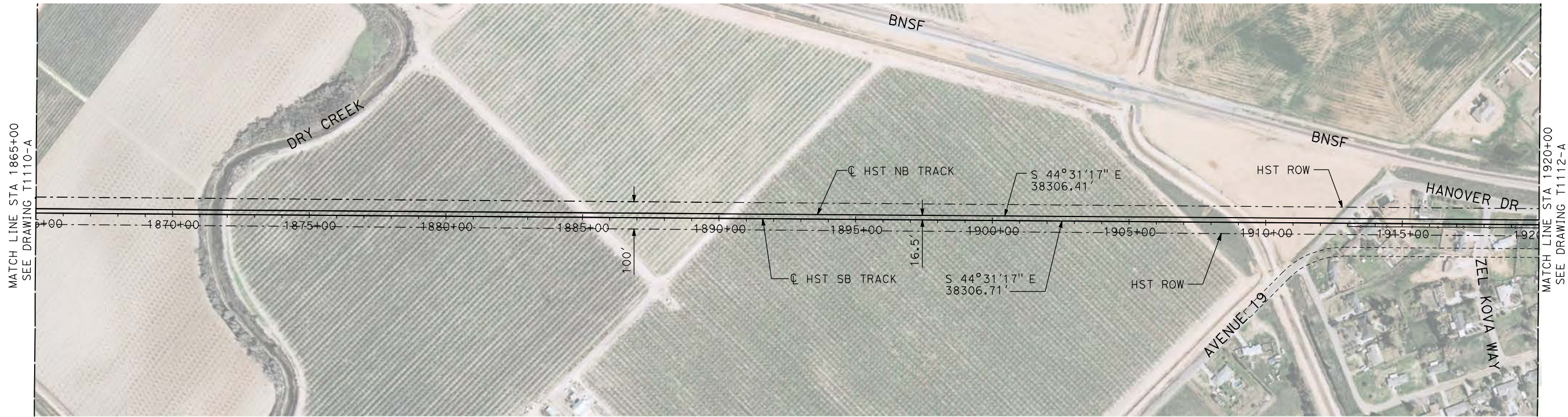
PLAN AND PROFILE
STA 1810+00 TO STA 1865+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T1110-A

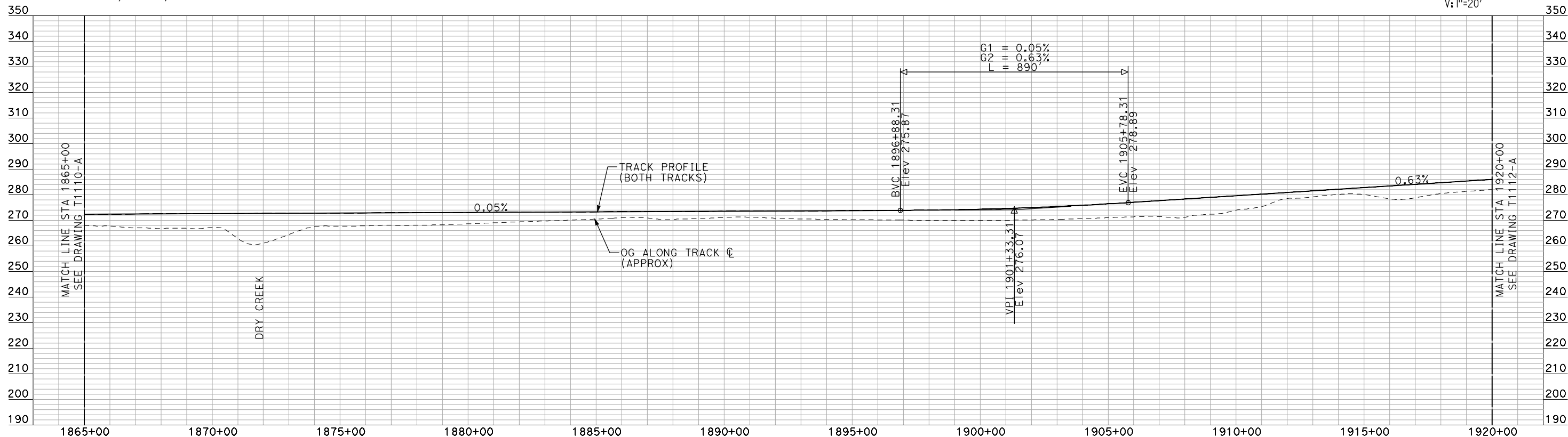
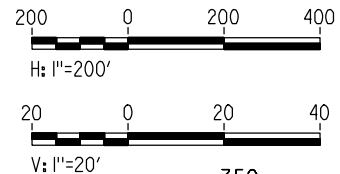
SCALE
AS SHOWN

SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



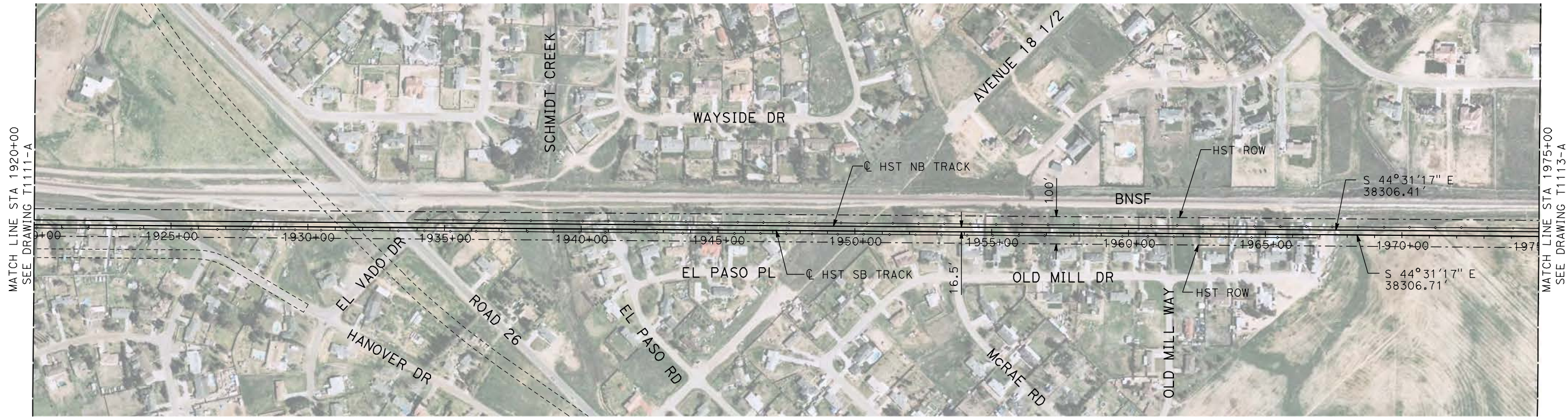
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1865+00 TO STA 1920+00

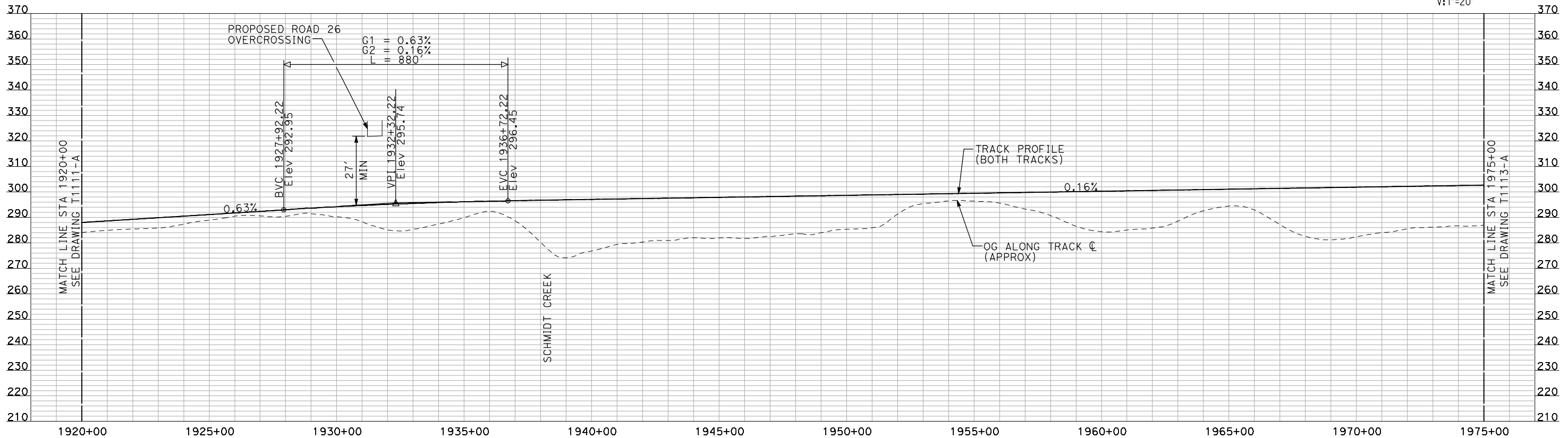
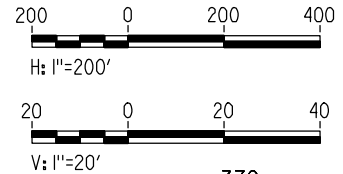
CONTRACT NO.
HSR06-007
DRAWING NO.
T1111-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:53:45 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1111-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



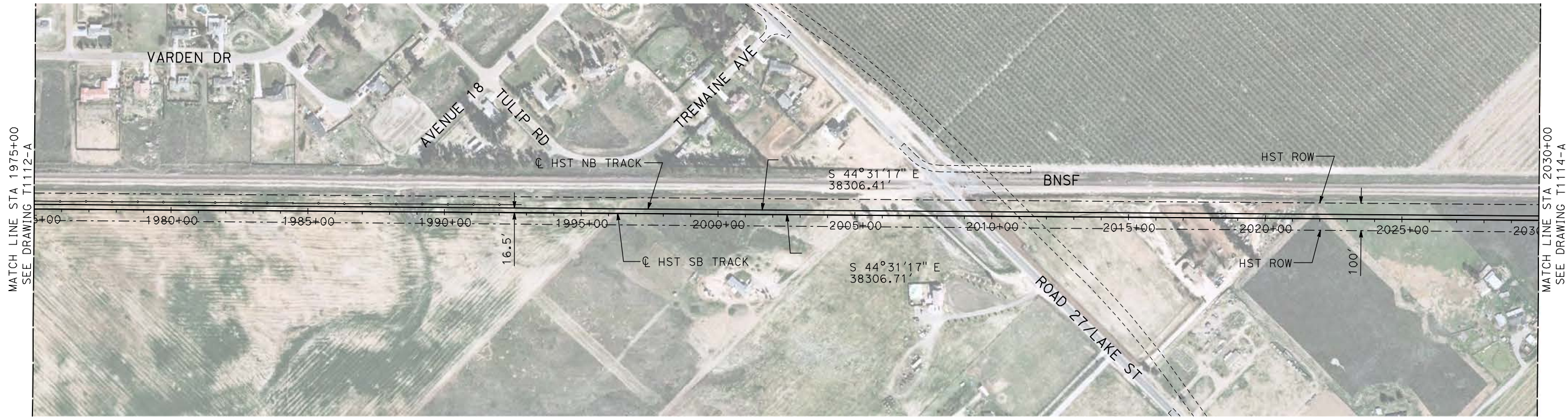
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1920+00 TO STA 1975+00

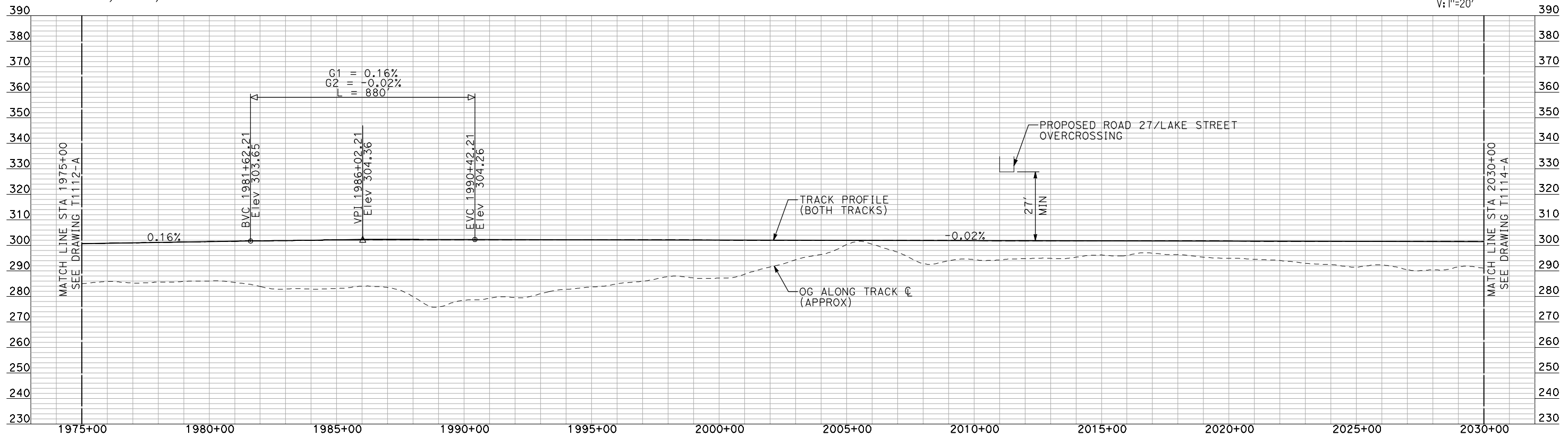
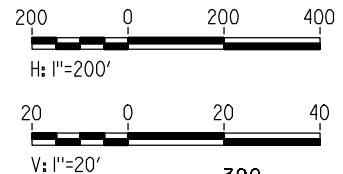
CONTRACT NO.
HSR06-007
DRAWING NO.
T1112-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:54:02 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1112-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



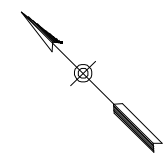
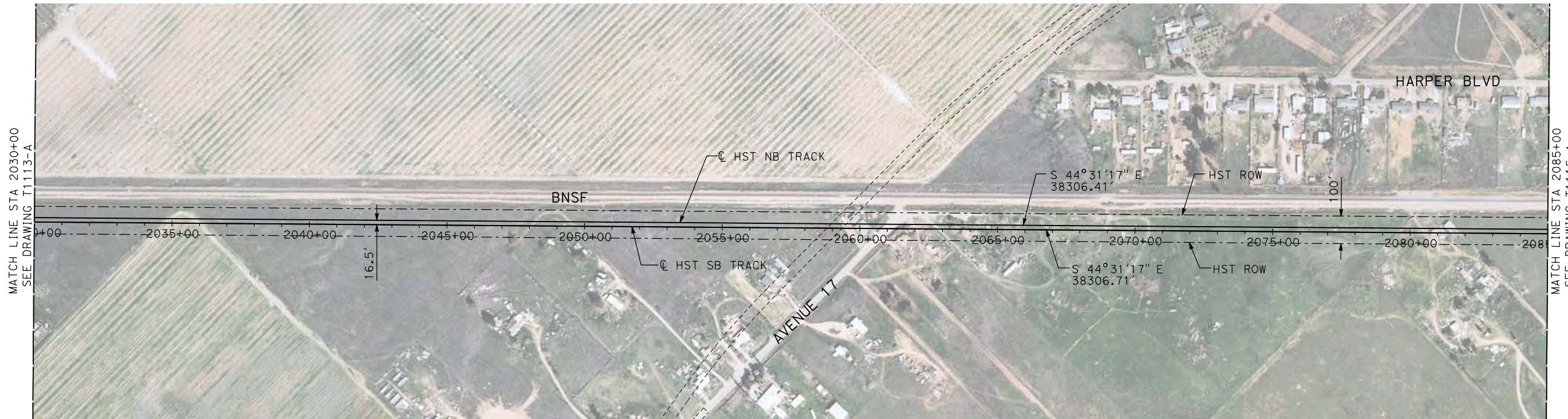
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 1975+00 TO STA 2030+00

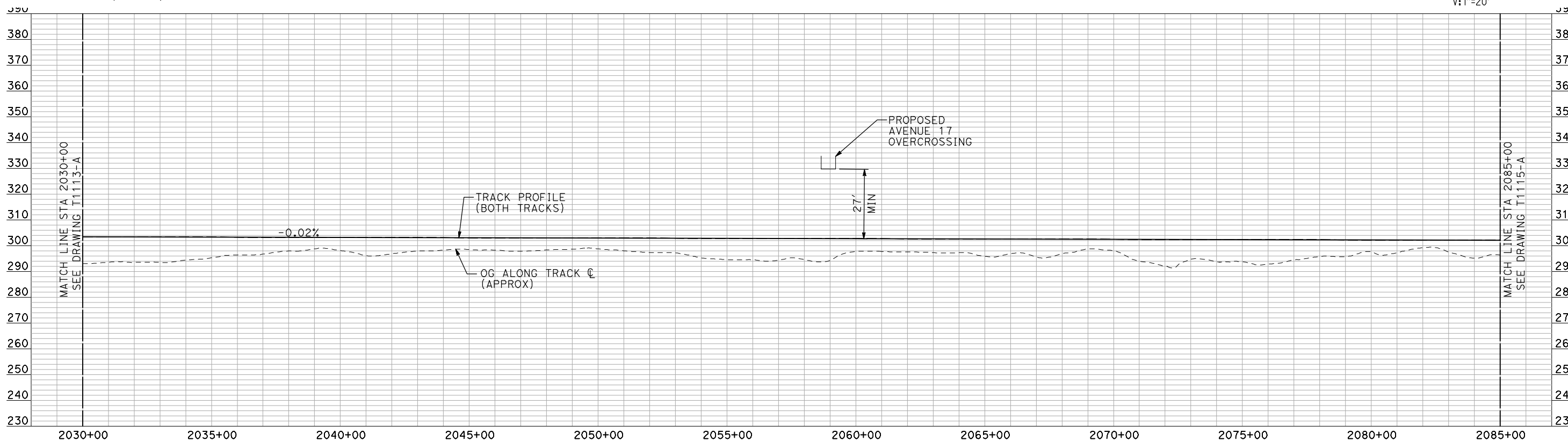
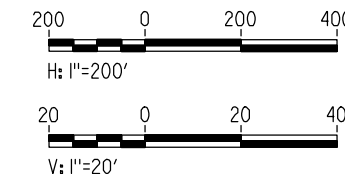
CONTRACT NO. HSR06-007
DRAWING NO. T1113-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/21/2011 2:54:20 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1113-A.dgn machadoe



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:55:07 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\work\1114-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

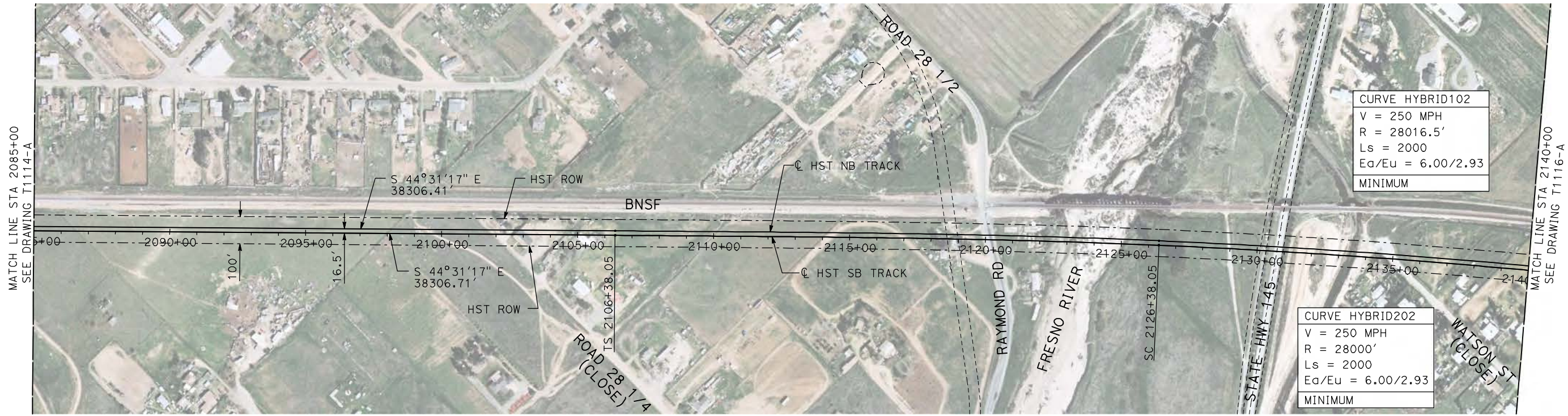


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

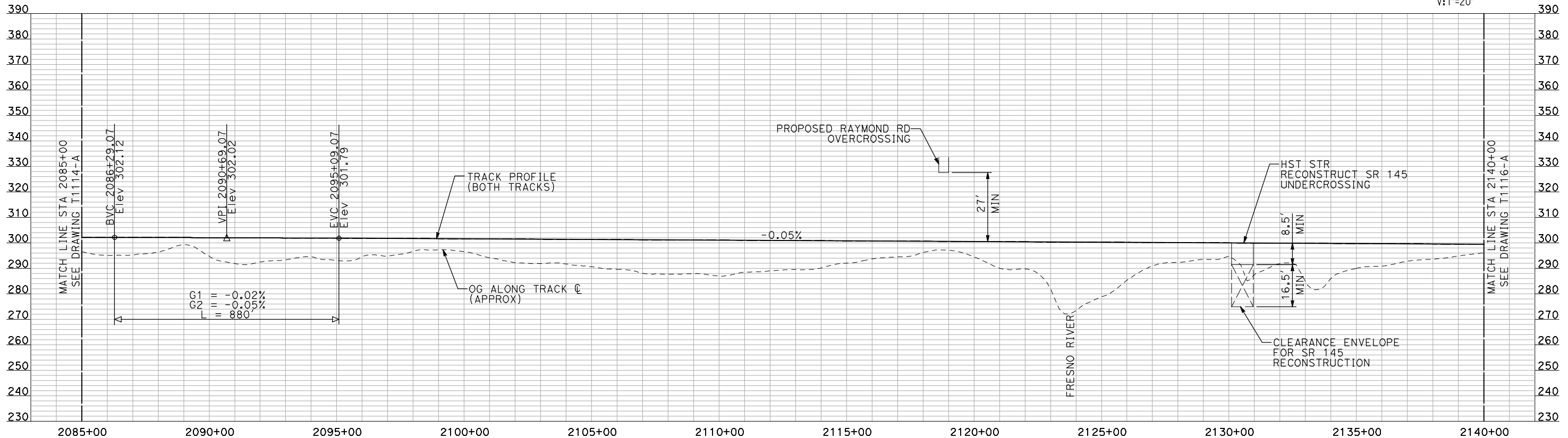
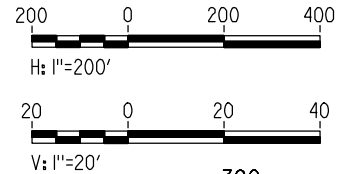
PLAN AND PROFILE
STA 2030+00 TO STA 2085+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1114-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:**
- ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 - TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS

DRAWN BY
H. SULLIVAN

CHECKED BY
A. BOONE

IN CHARGE
A. BOONE

DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



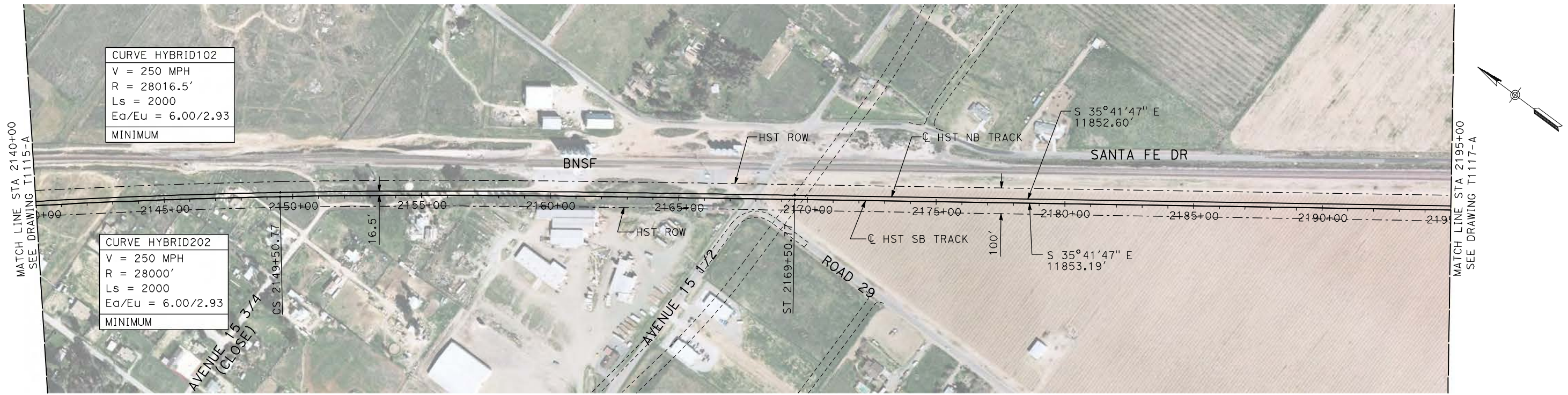
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID

PLAN AND PROFILE
 STA 2085+00 TO STA 2140+00

CONTRACT NO. HSR06-007
DRAWING NO. T1115-A
SCALE AS SHOWN
SHEET NO. ### OF ###

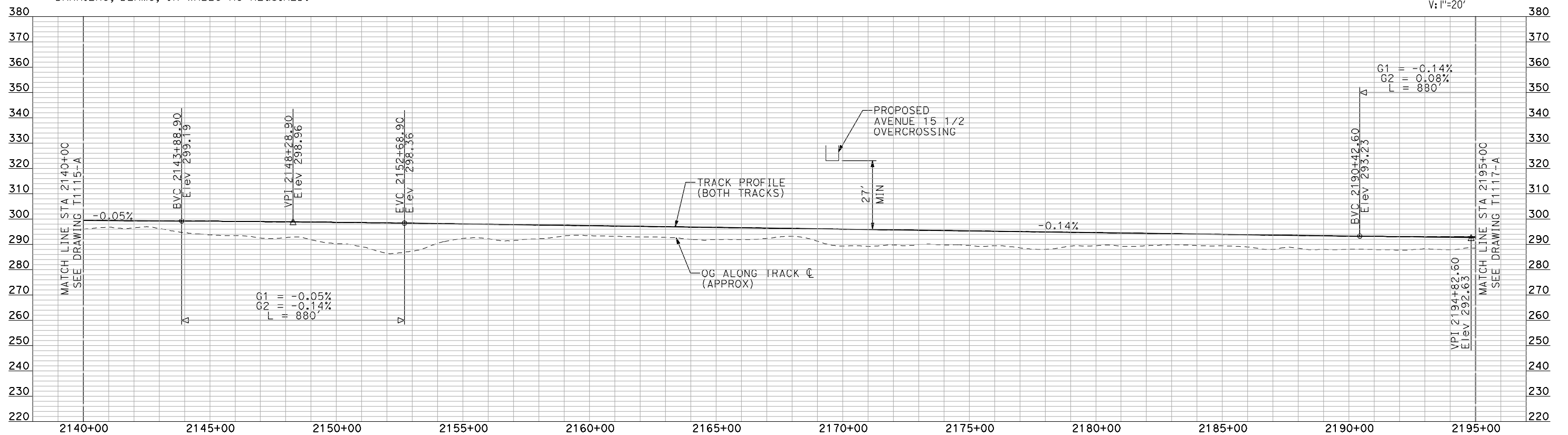
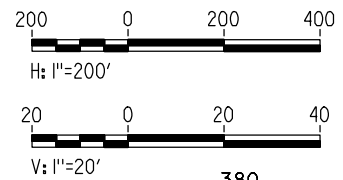
7/21/2011 2:55:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_24\MF-T-1115-A.dgn machadoc

7/21/2011 2:55:44 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1116-A.dgn



PLAN

- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

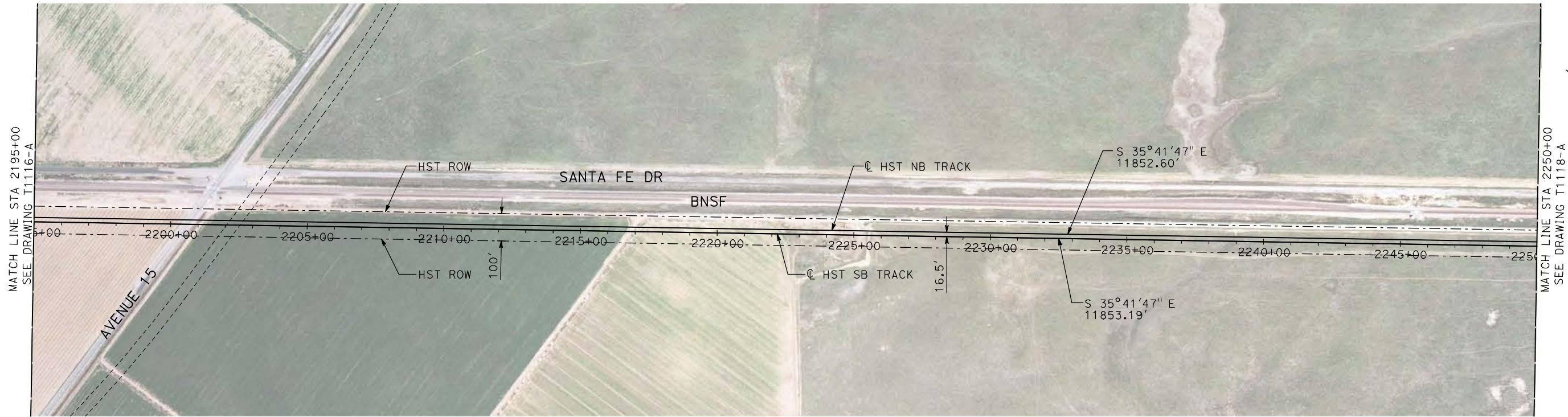
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



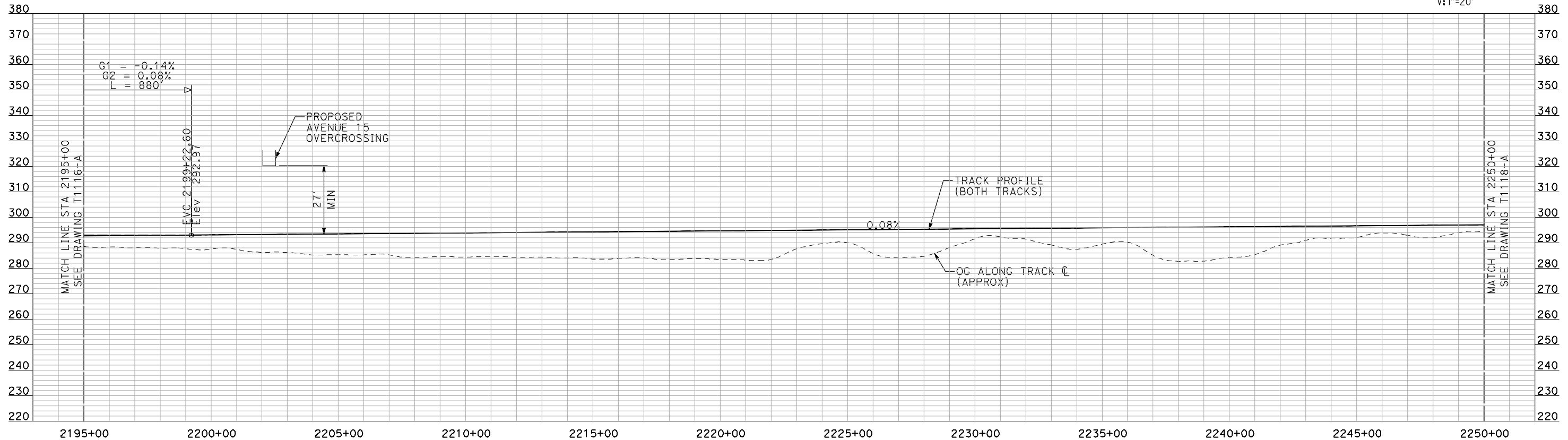
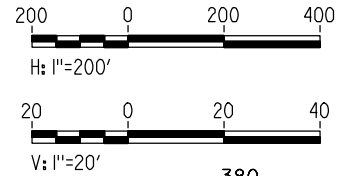
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
PLAN AND PROFILE
STA 2140+00 TO STA 2195+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1116-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:56:02 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1117-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

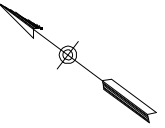
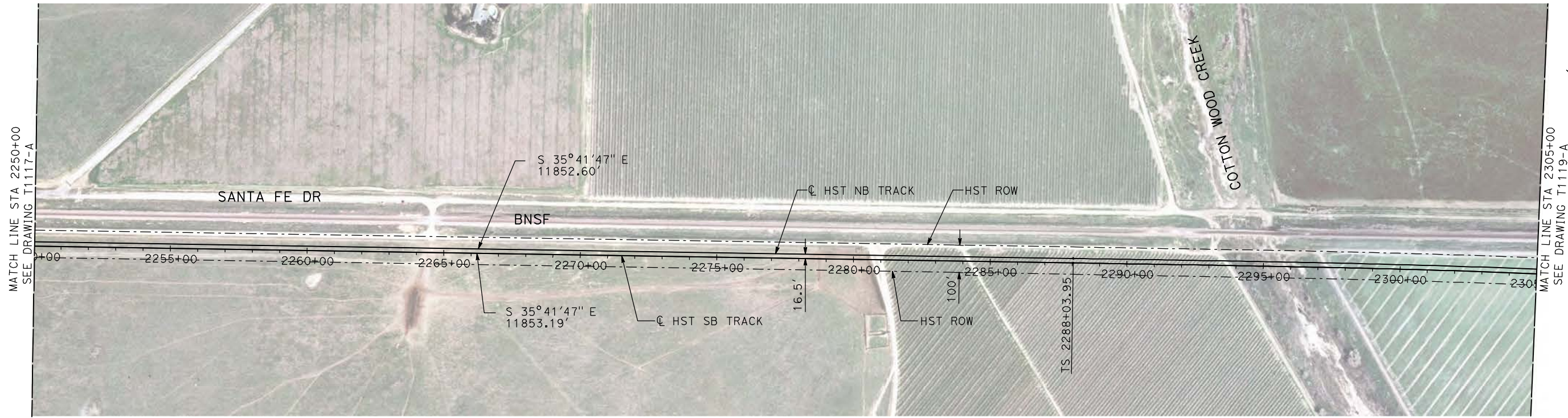


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

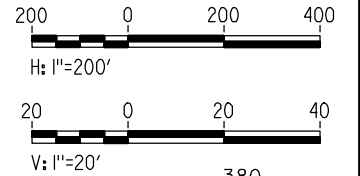
PLAN AND PROFILE
STA 2195+00 TO STA 2250+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1117-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:56:19 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1118-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



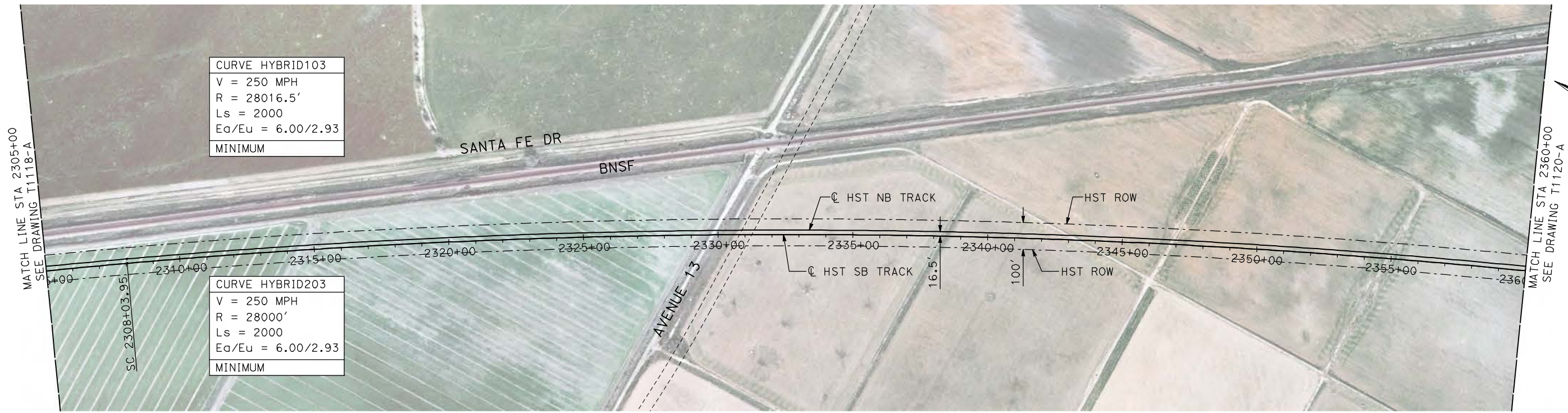
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 2250+00 TO STA 2305+00

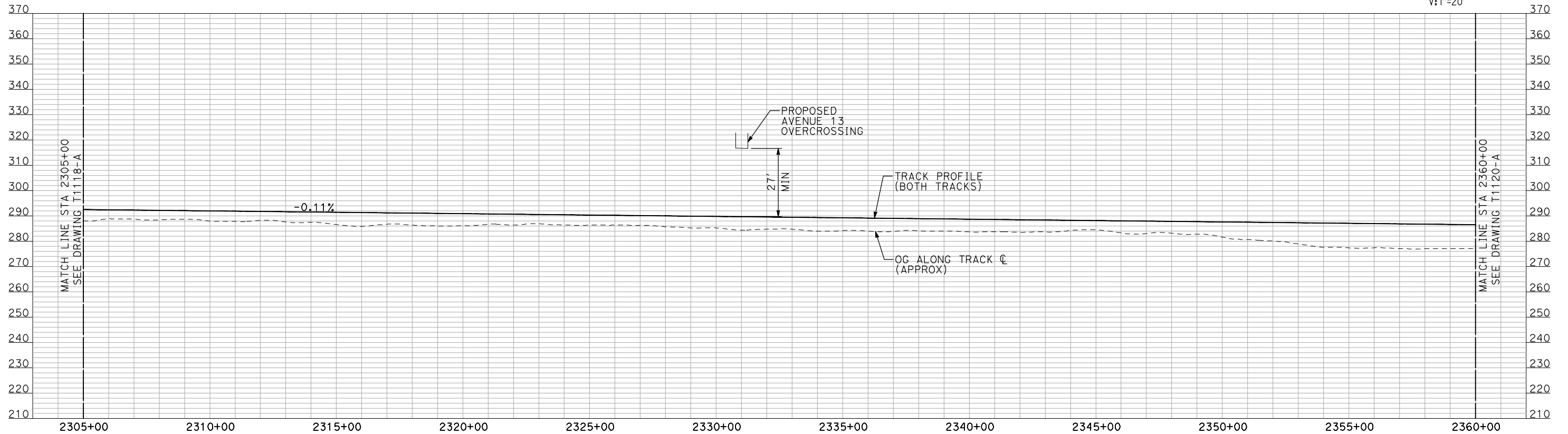
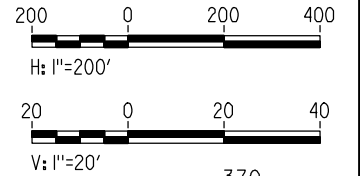
CONTRACT NO. HSR06-007
DRAWING NO. T1118-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/21/2011 2:56:33 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1119-A.dgn



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



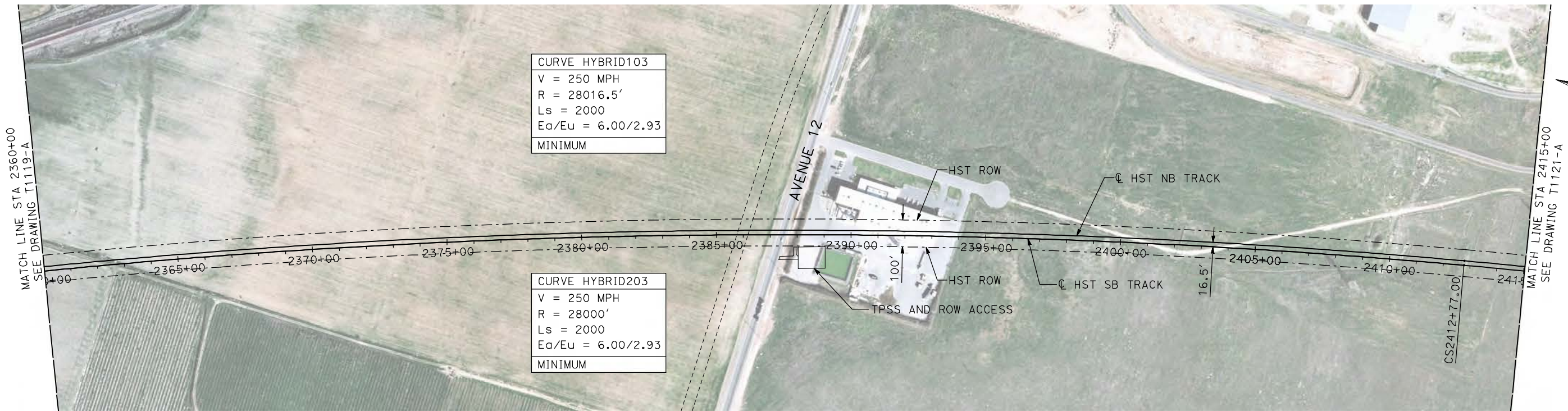
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 2305+00 TO STA 2360+00

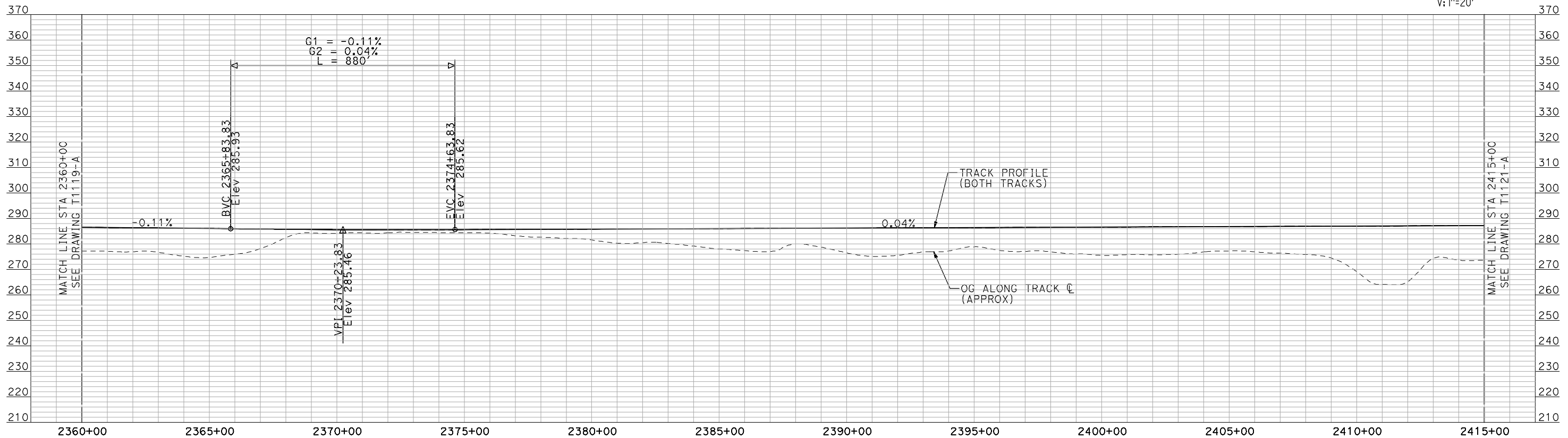
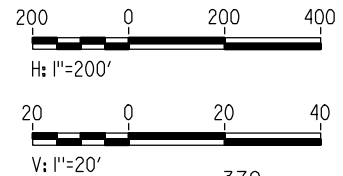
CONTRACT NO.
HSR06-007
DRAWING NO.
T1119-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:56:49 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1120-A.dgn



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



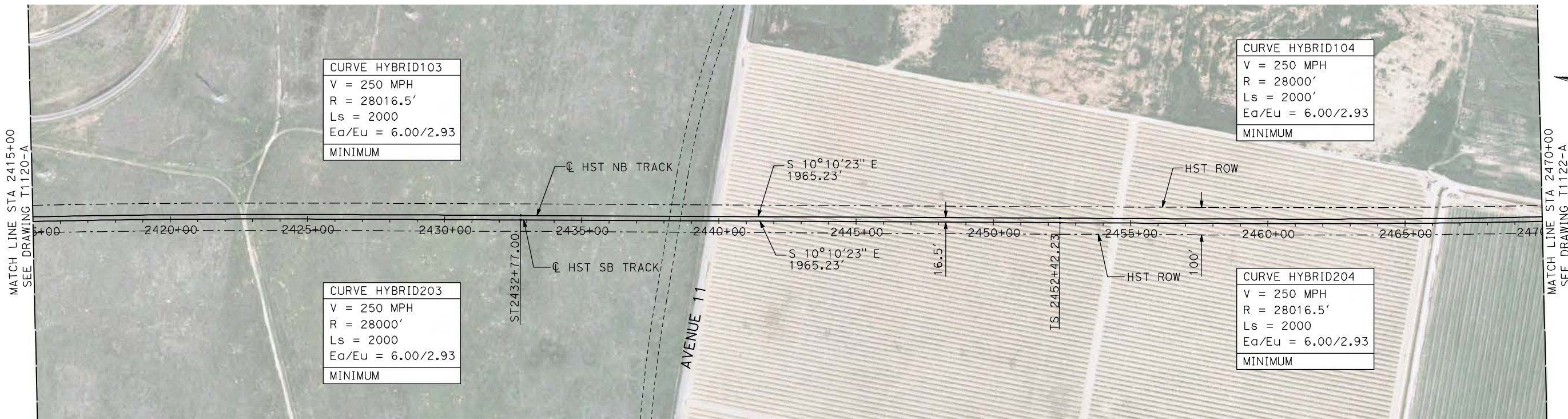
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 2360+00 TO STA 2415+00

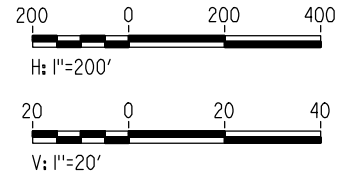
CONTRACT NO.
HSR06-007
DRAWING NO.
T1120-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:57:03 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1121-A.dgn



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

PLAN AND PROFILE
STA 2415+00 TO STA 2470+00

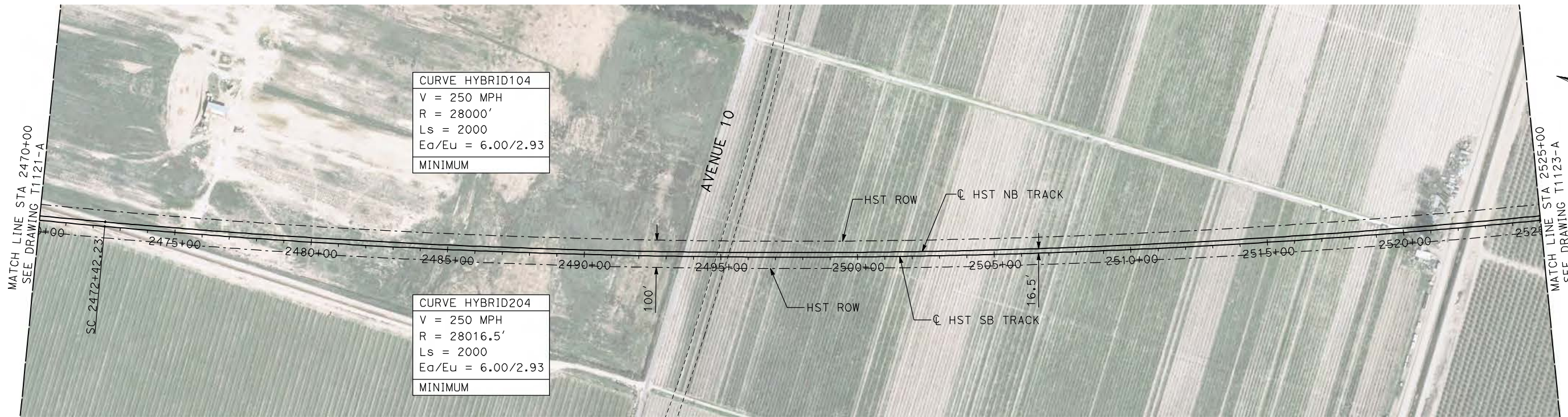
CONTRACT NO.
HSR06-007

DRAWING NO.
T1121-A

SCALE
AS SHOWN

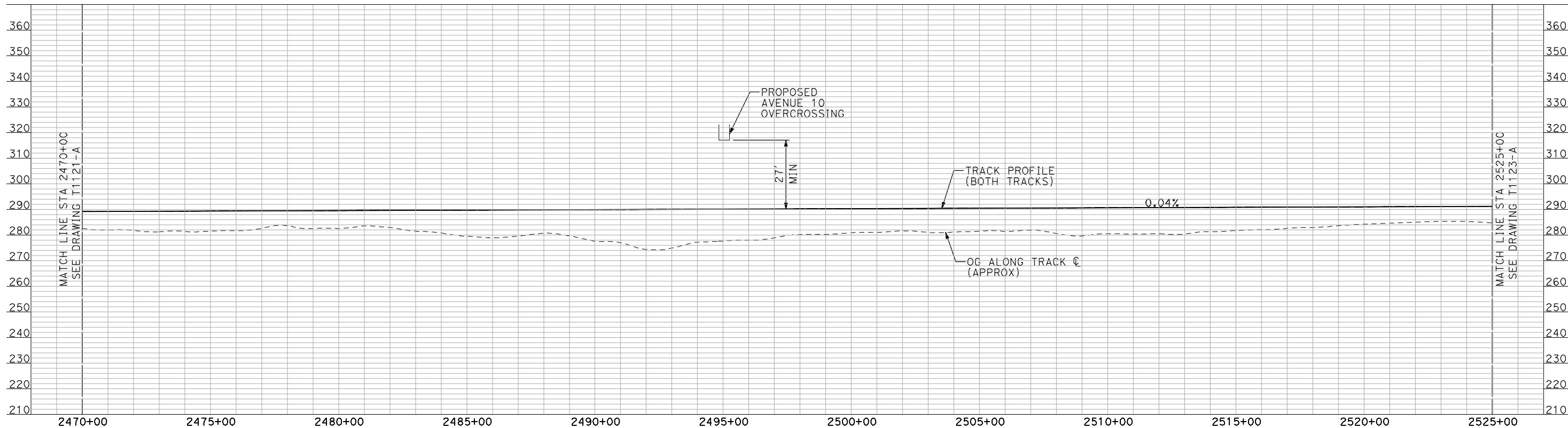
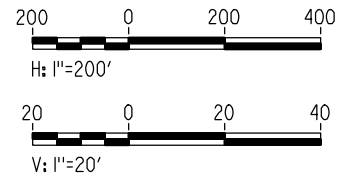
SHEET NO.
OF

7/21/2011 2:57:18 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1122-A.dgn



- NOTES:**
- ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 - TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA 2470+00 TO STA 2525+00

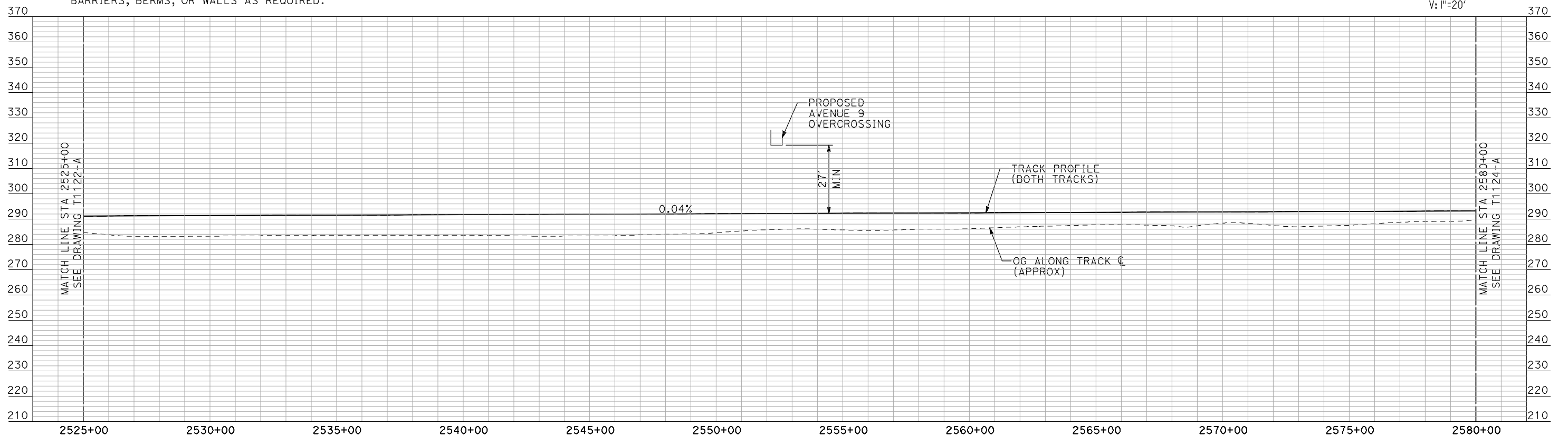
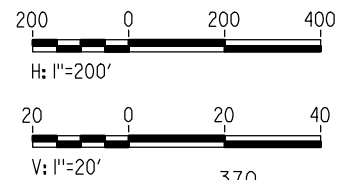
CONTRACT NO.
HSR06-007
DRAWING NO.
T1122-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:57:33 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1123-A.dgn



PLAN

- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

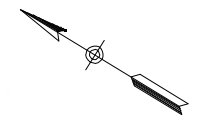
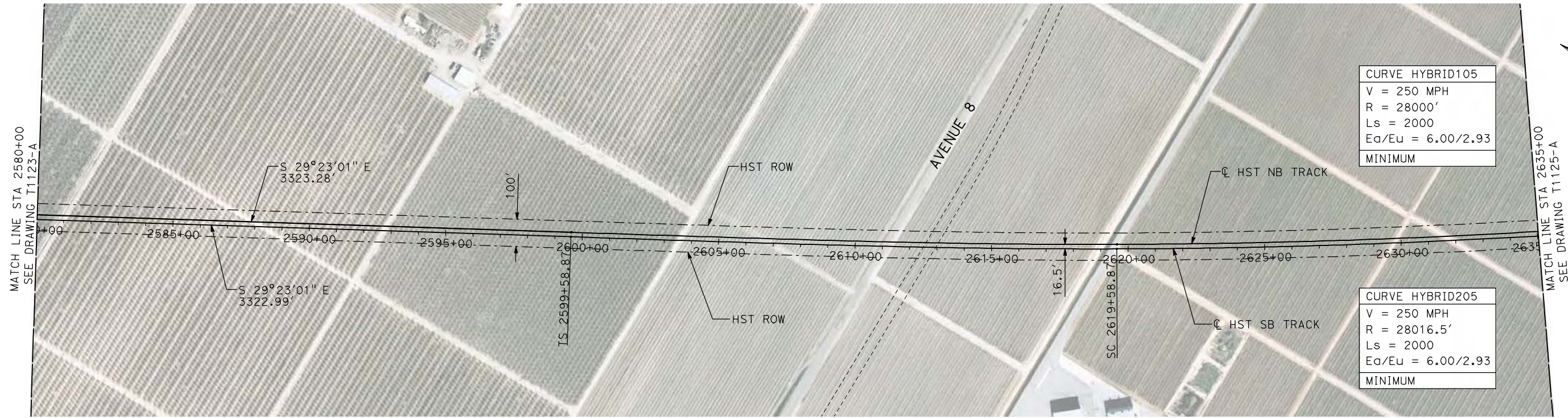


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

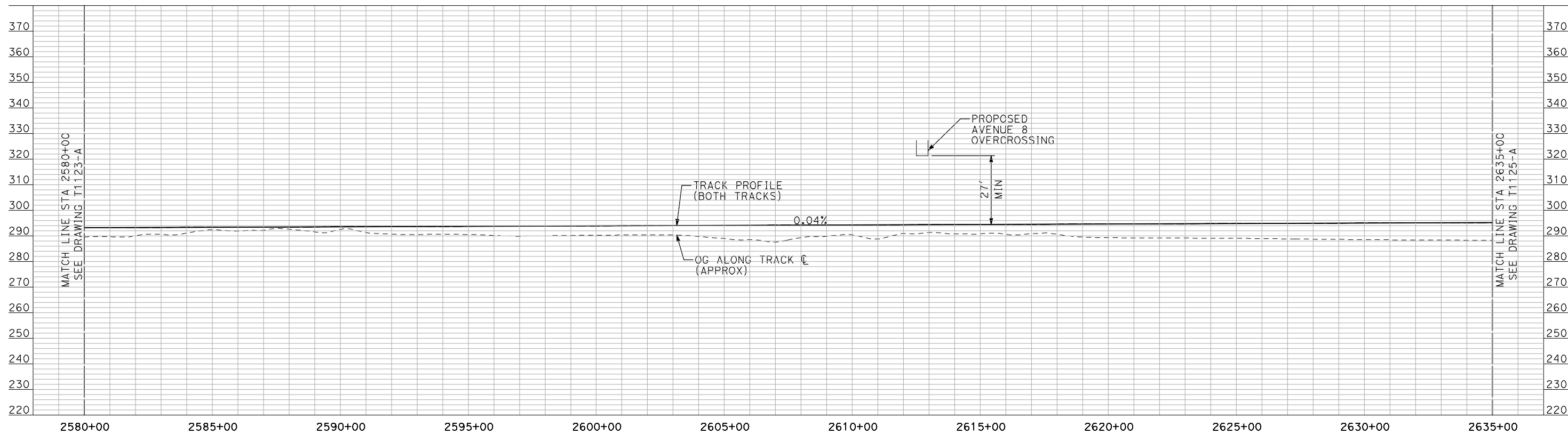
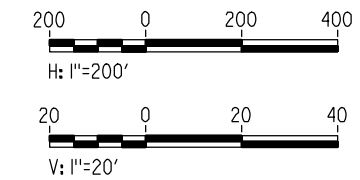
PLAN AND PROFILE
STA 2525+00 TO STA 2580+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1123-A
SCALE
AS SHOWN
SHEET NO.
OF



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 2:57:49 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24_MF-T-1124-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

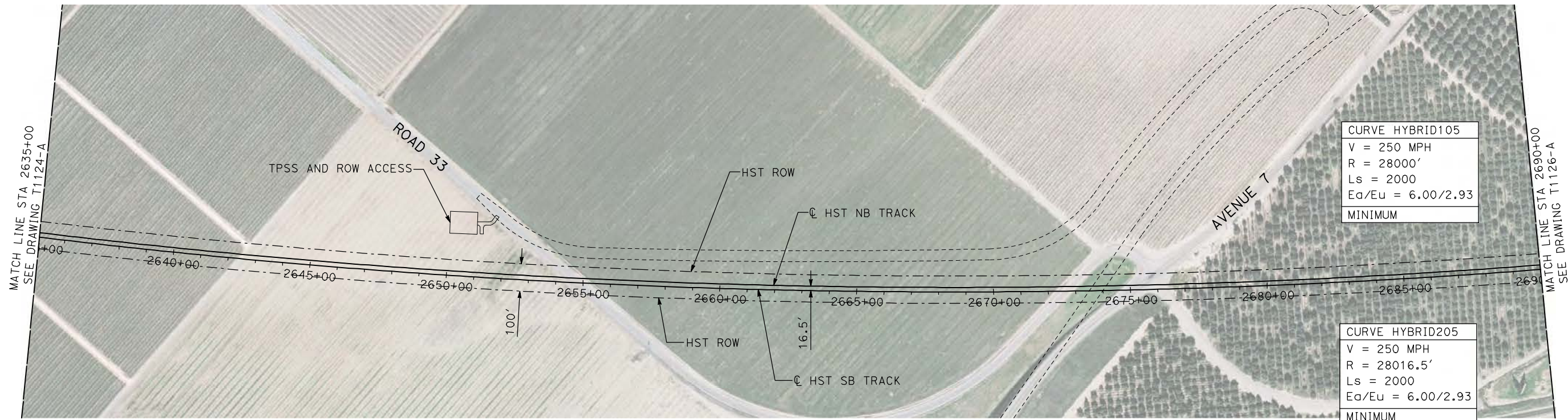
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
PLAN AND PROFILE
STA 2580+00 TO STA 2635+00

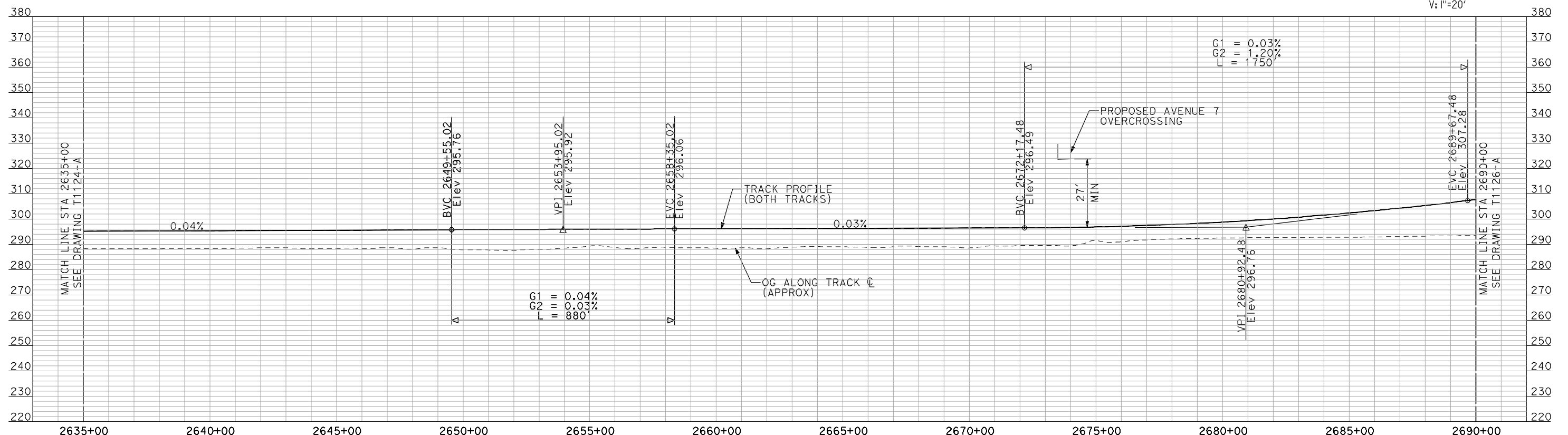
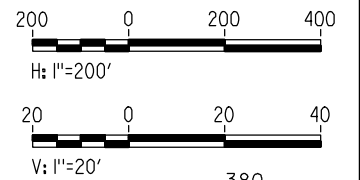
CONTRACT NO.
HSR06-007
DRAWING NO.
T1124-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:58:04 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-1125-A.dgn



- NOTES:**
- ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 - TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

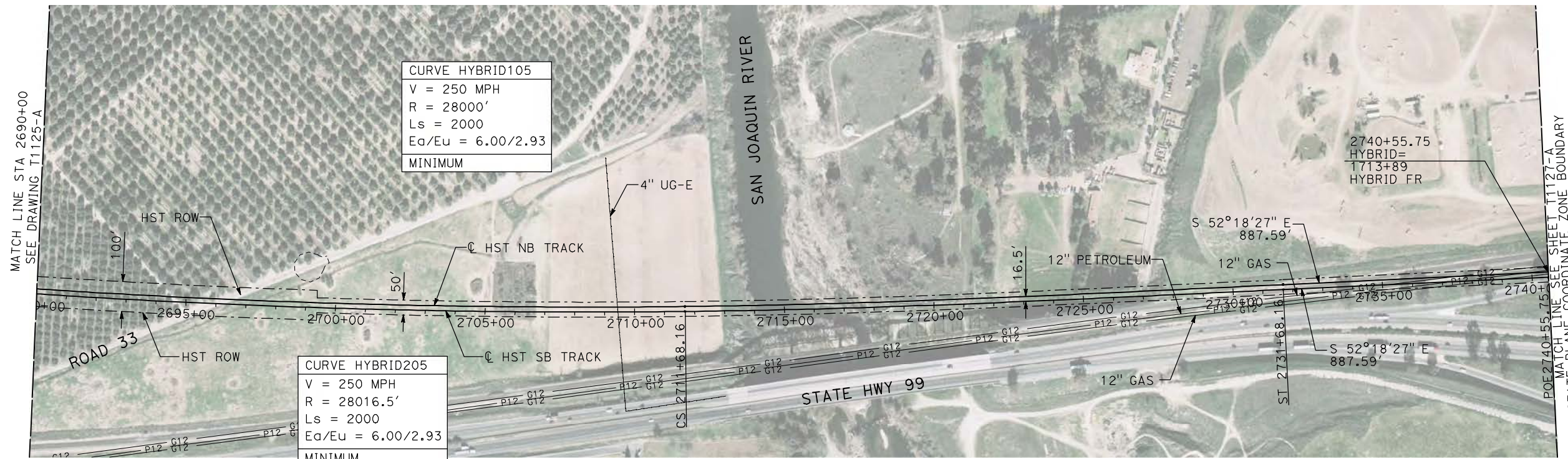
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
PLAN AND PROFILE
STA 2635+00 TO STA 2690+00

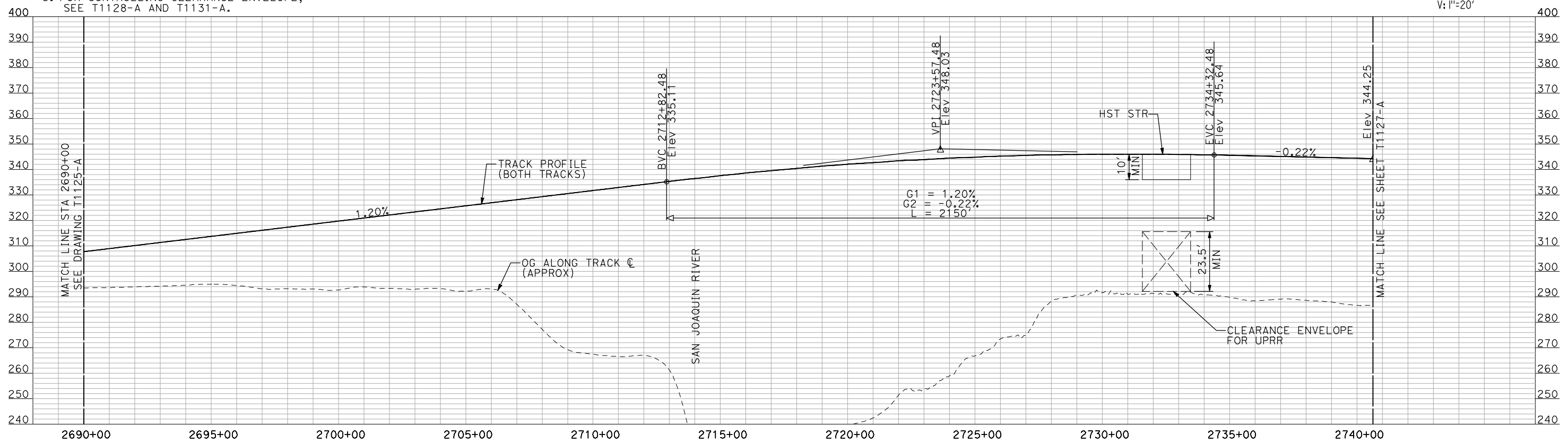
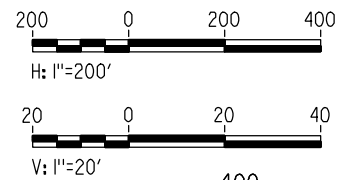
CONTRACT NO.
HSR06-007
DRAWING NO.
T1125-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 2:58:20 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24 MF-T-1126-A.dgn machadoc



- NOTES:**
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.
 3. FOR CONTROLLING CLEARANCE ENVELOPE, SEE T1128-A AND T1131-A.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



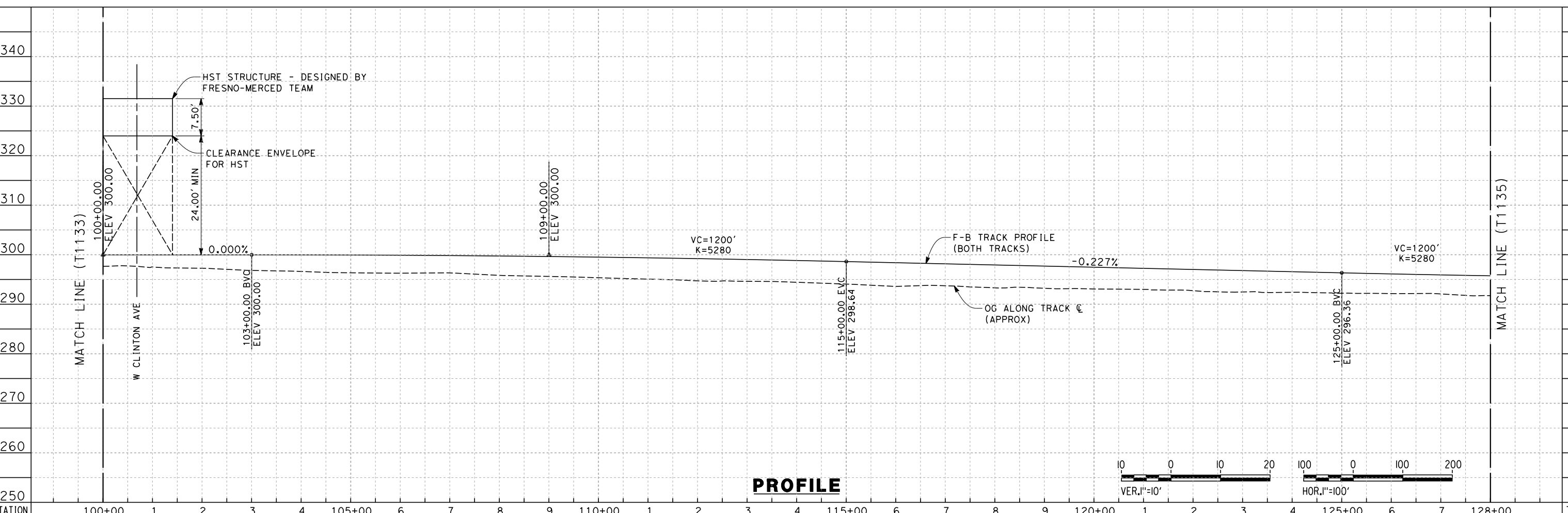
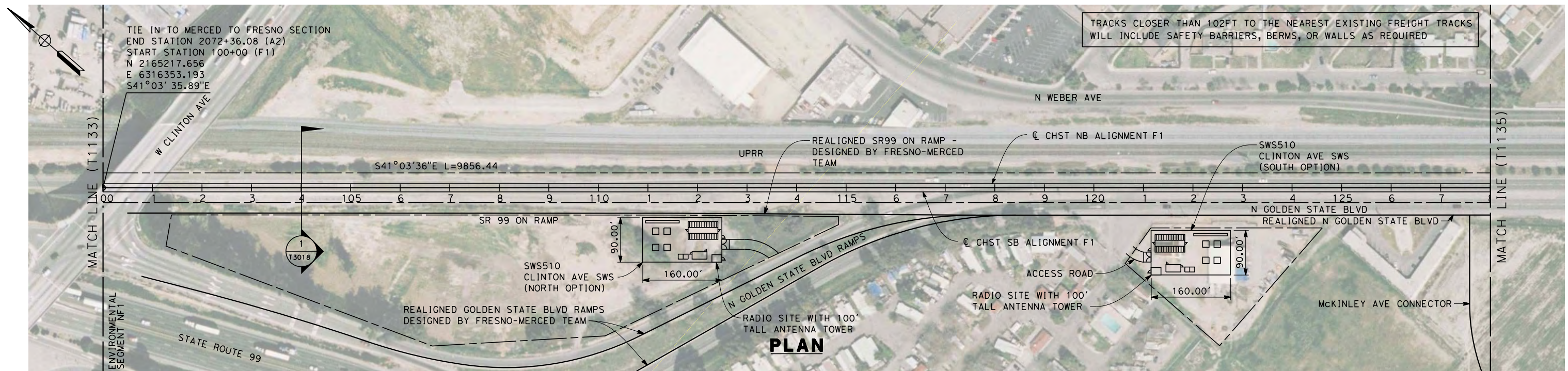
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

PLAN AND PROFILE
STA 2690+00 TO STA 2740+55.75

CONTRACT NO. HSR06-007
DRAWING NO. T1126-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/22/2011 10:25:52 AM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1134-A-F1.dgn



STATION	100+00	1	2	3	4	105+00	6	7	8	9	110+00	1	2	3	4	115+00	6	7	8	9	120+00	1	2	3	4	125+00	6	7	128+00	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

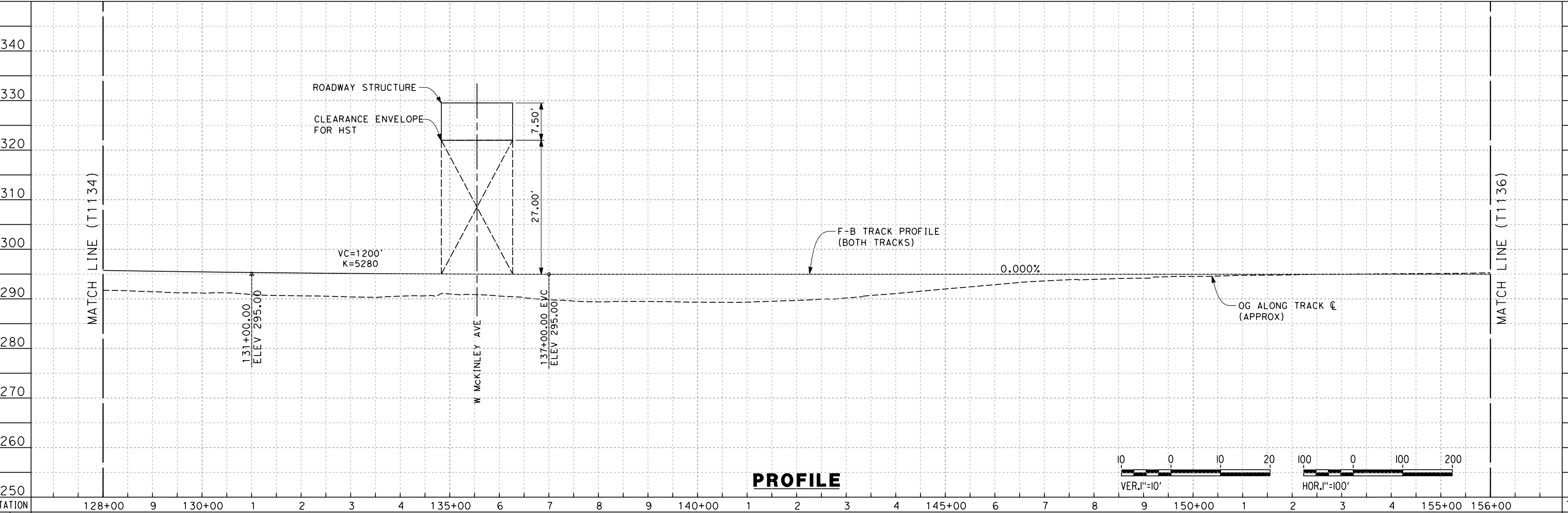
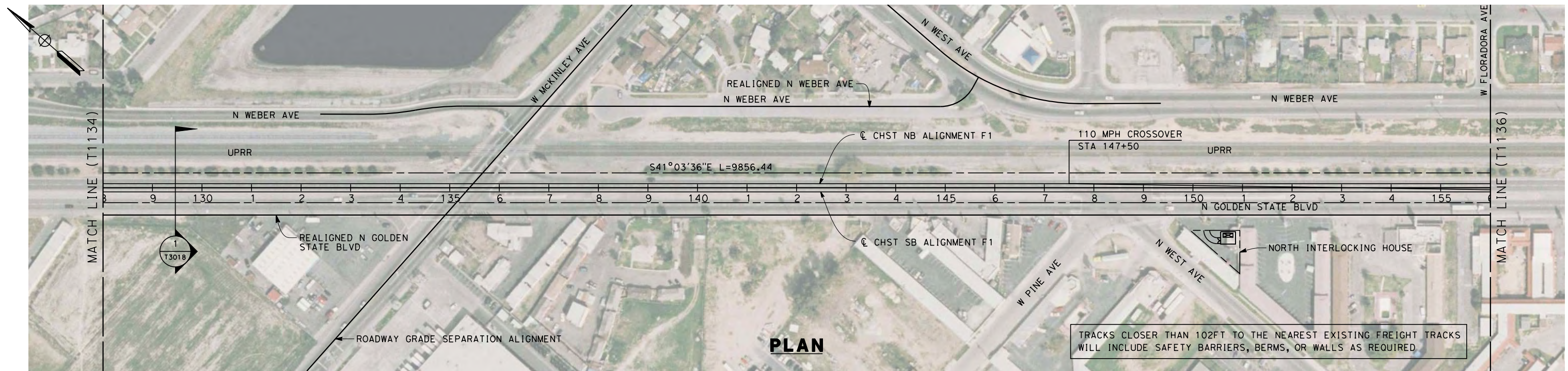


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 PLAN AND PROFILE
 STA. 100+00 TO 128+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1134-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:25:56 AM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1135-A-F1.dgn



STATION	128+00	9	130+00	1	2	3	4	135+00	6	7	8	9	140+00	1	2	3	4	145+00	6	7	8	9	150+00	1	2	3	4	155+00	156+00	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

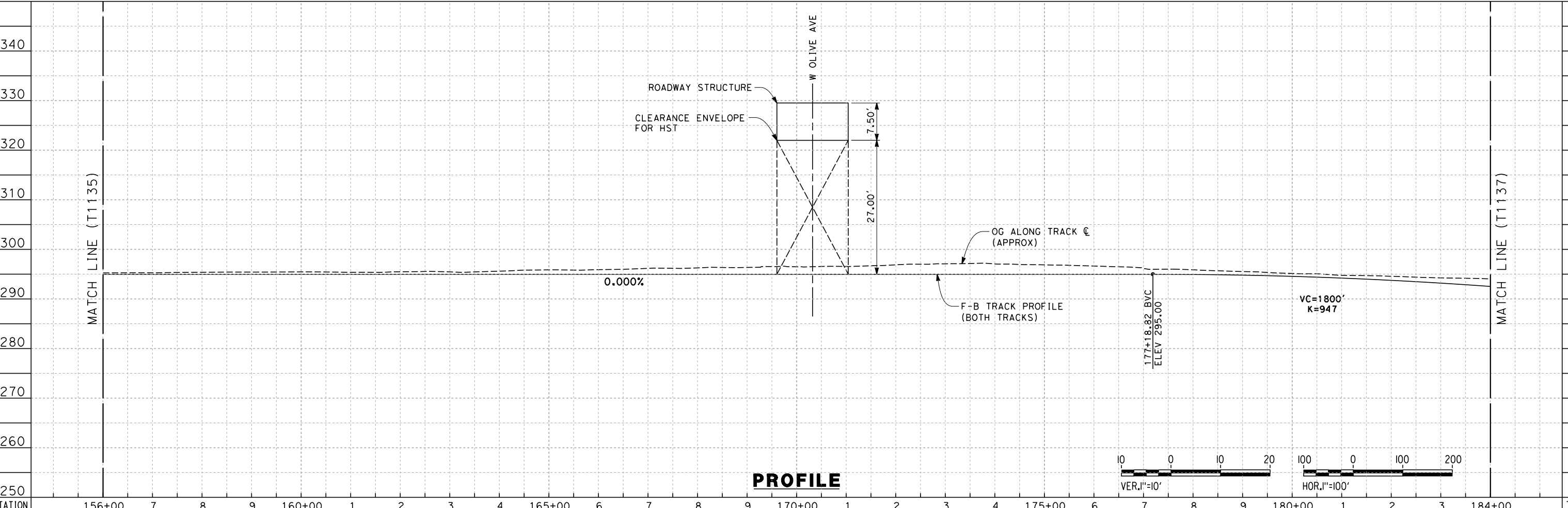
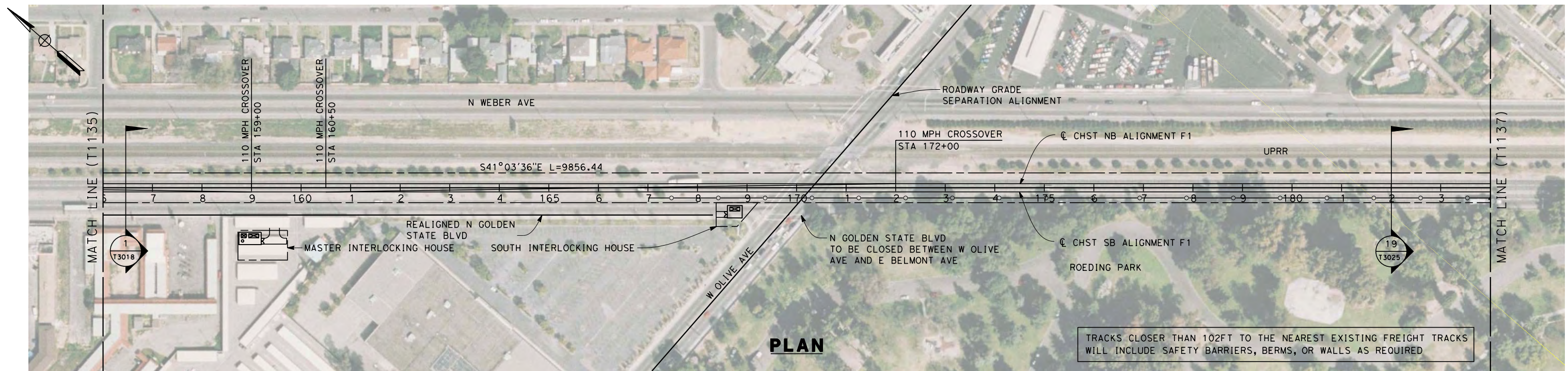


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 PLAN AND PROFILE
 STA. 128+00 TO 156+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1135-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:25:59 AM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1136-A-F1.dgn



STATION	156+00	7	8	9	160+00	1	2	3	4	165+00	6	7	8	9	170+00	1	2	3	4	175+00	6	7	8	9	180+00	1	2	3	184+00	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
DRAWN BY
P. TONKIN
CHECKED BY
D. HUNT
IN CHARGE
A. LUFT
DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

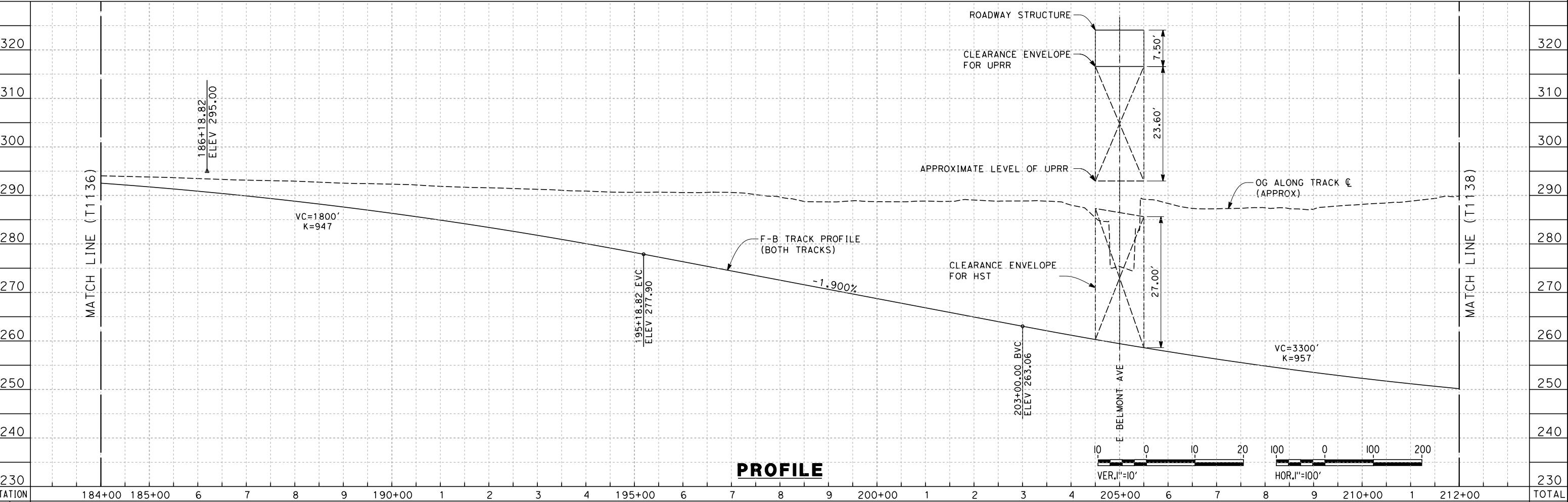
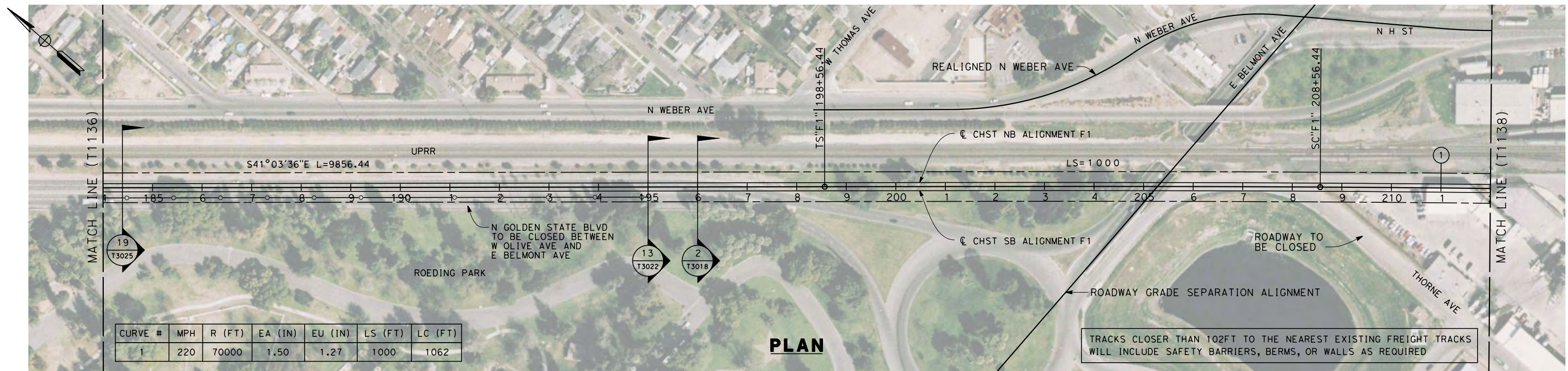
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
HYBRID
PLAN AND PROFILE
STA. 156+00 TO 184+00

CONTRACT NO.
HSR 06-0003
DRAWING NO.
T1136-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:26:02 AM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\NSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1137-A-F1.dgn



STATION	184+00	185+00	6	7	8	9	190+00	1	2	3	4	195+00	6	7	8	9	200+00	1	2	3	4	205+00	6	7	8	9	210+00	1	212+00	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



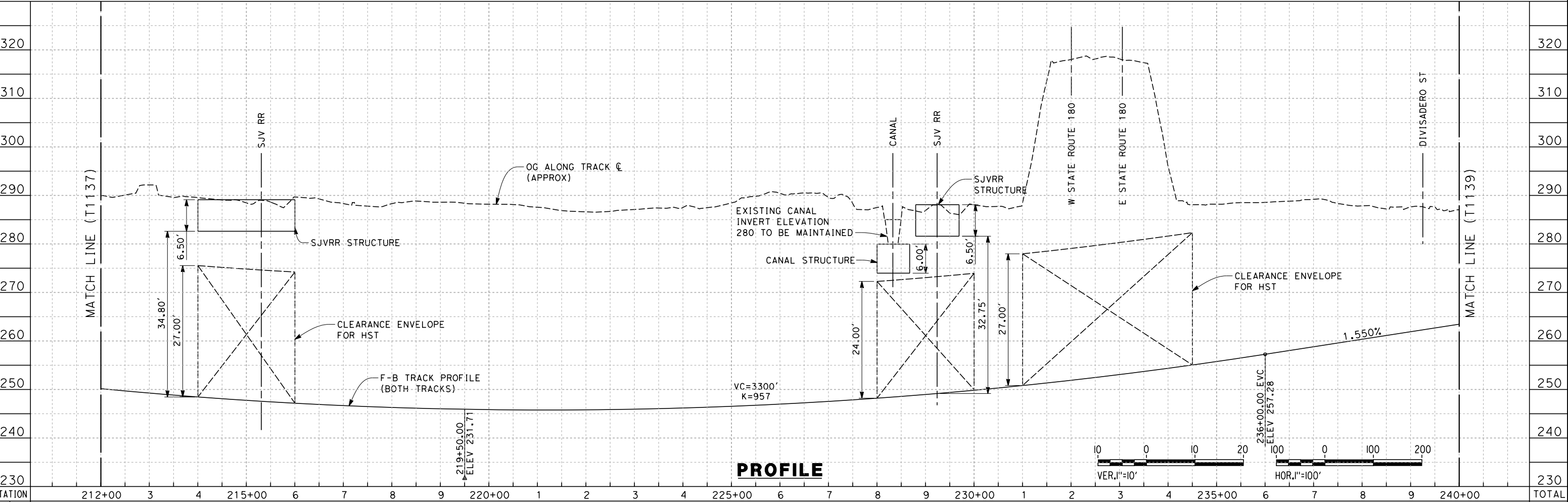
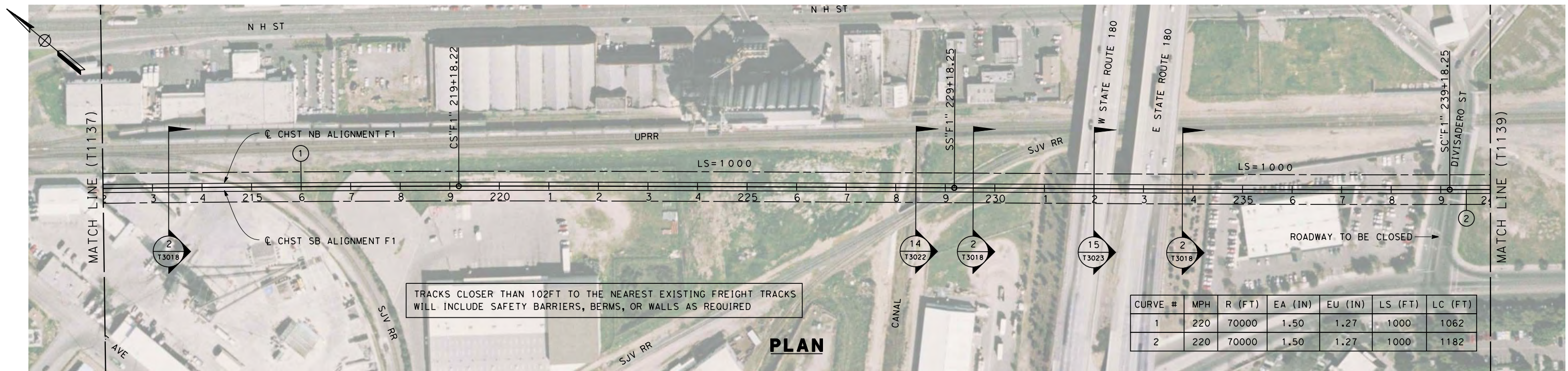
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

PLAN AND PROFILE
STA. 184+00 TO 212+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1137-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:05 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid - Ave 21\FB-T1138-A-F1.dgn



STATION	212+00	3	4	215+00	6	7	8	9	220+00	1	2	3	4	225+00	6	7	8	9	230+00	1	2	3	4	235+00	6	7	8	9	240+00	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

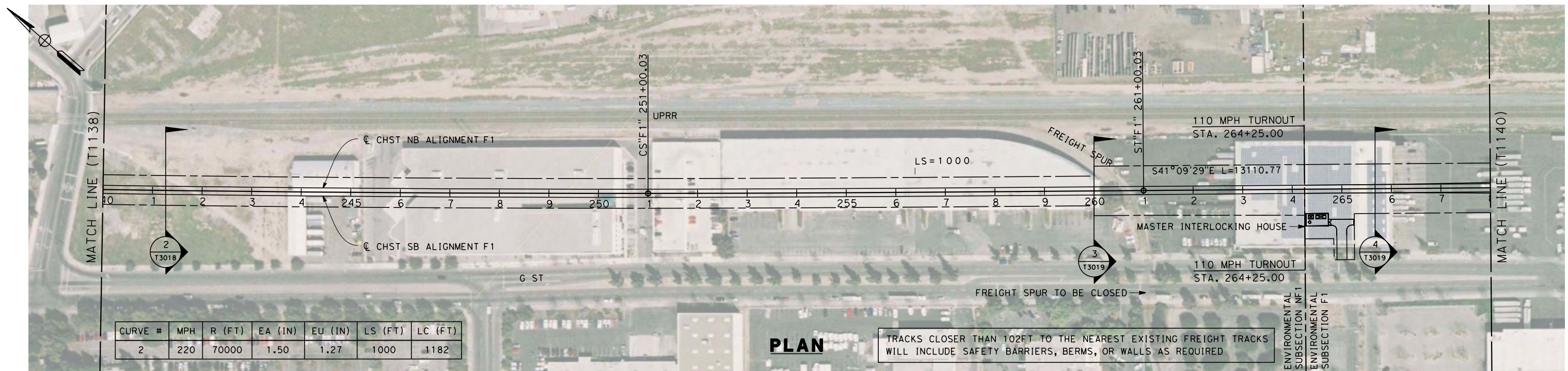
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 212+00 TO 240+00

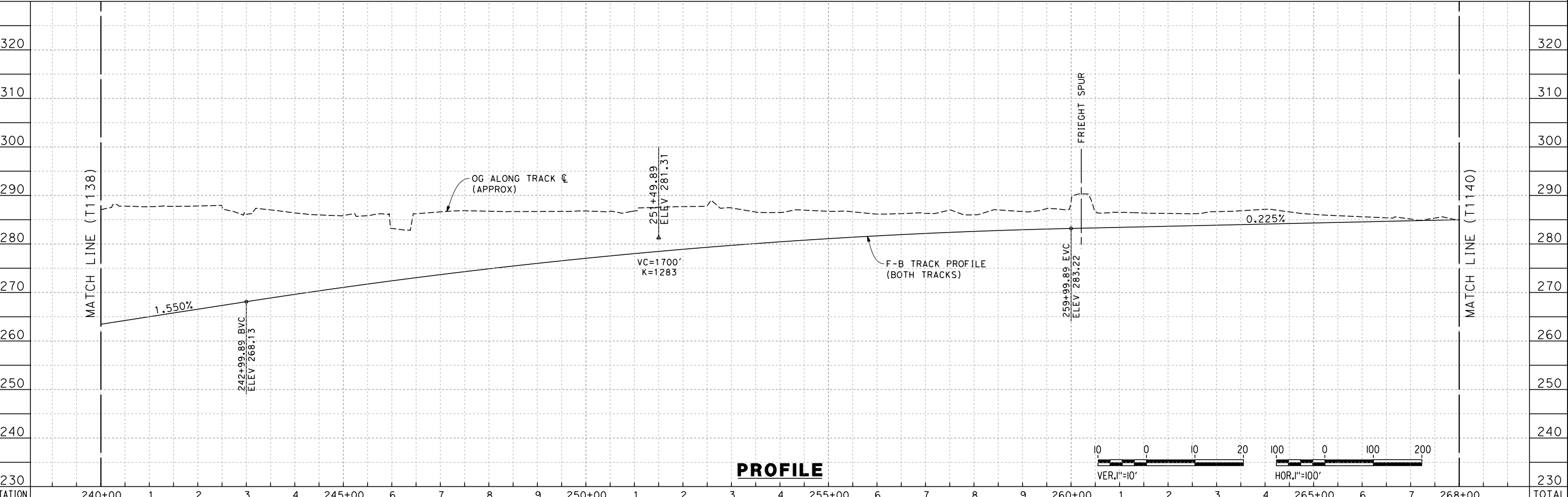
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1138-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:07 AM O:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1139-A-F1.dgn

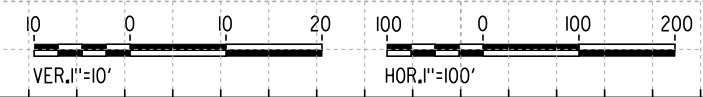


PLAN

TRACKS CLOSER THAN 102FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED



PROFILE



STATION	240+00	1	2	3	4	245+00	6	7	8	9	250+00	1	2	3	4	255+00	6	7	8	9	260+00	1	2	3	4	265+00	6	7	268+00	TOTAL
Exc																														
Emb																														

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

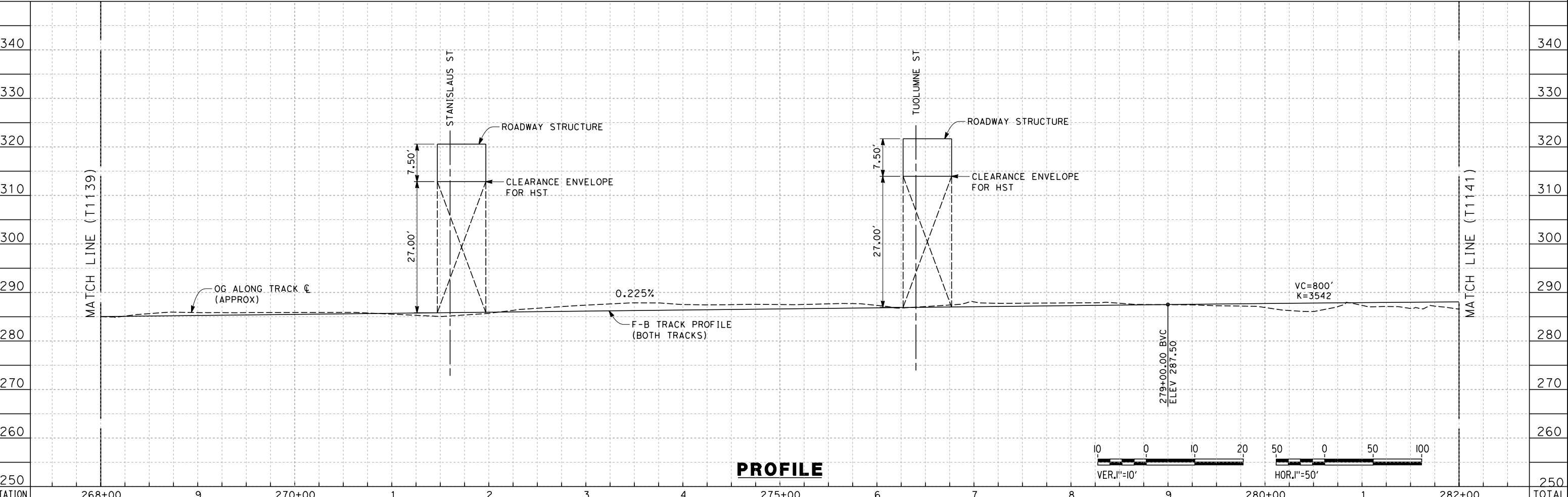
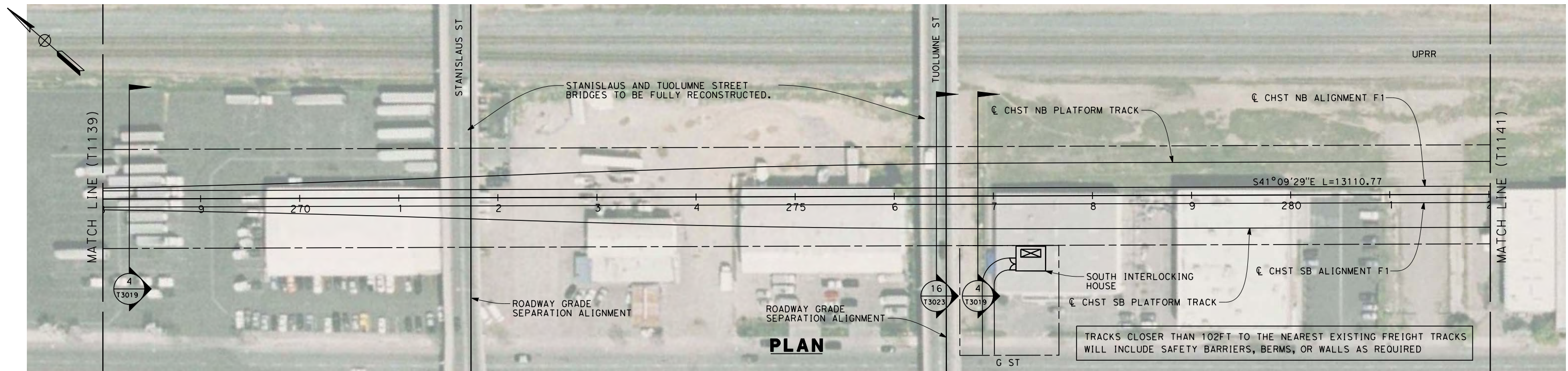


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 240+00 TO 268+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1139-A
 SCALE
AS SHOWN
 SHEET NO.
OF

REV	DATE	BY	CHK	APP	DESCRIPTION

7/22/2011 10:26:11 AM O:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1140-A-F1.mxd
 frank.palermo



STATION	268+00	9	270+00	1	2	3	4	275+00	6	7	8	9	280+00	1	282+00	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

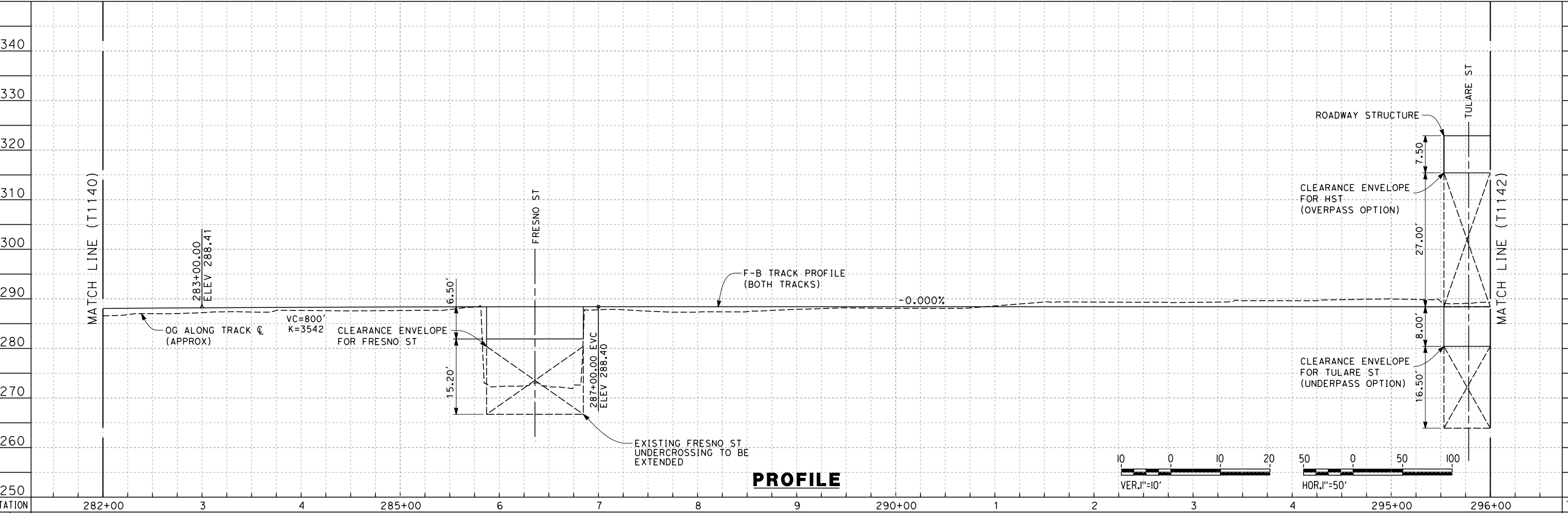
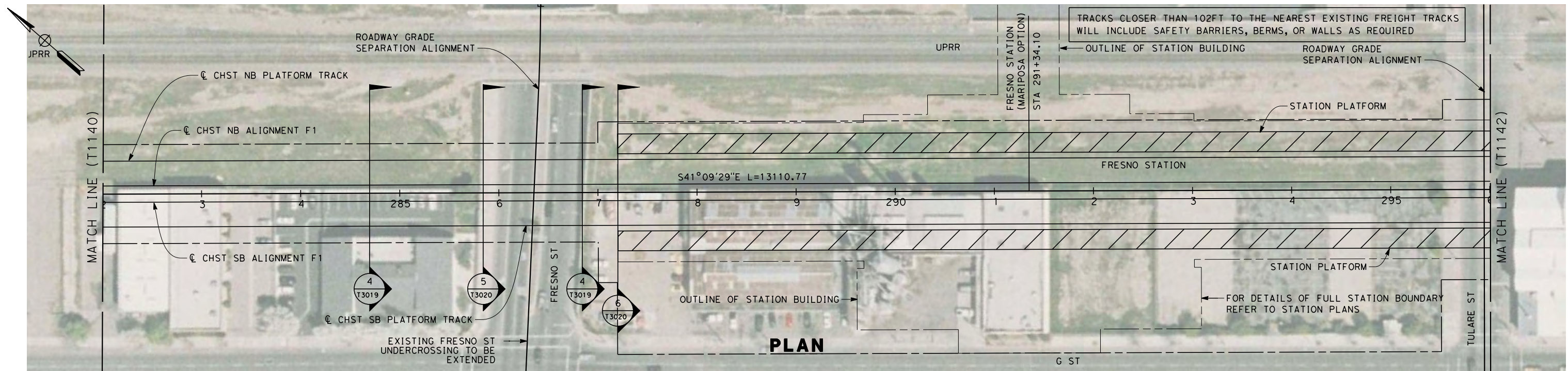


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 PLAN AND PROFILE
 STA. 268+00 TO 282+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1140-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:14 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1141-A-F1.m.dgn



STATION	282+00	3	4	285+00	6	7	8	9	290+00	1	2	3	4	295+00	296+00	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

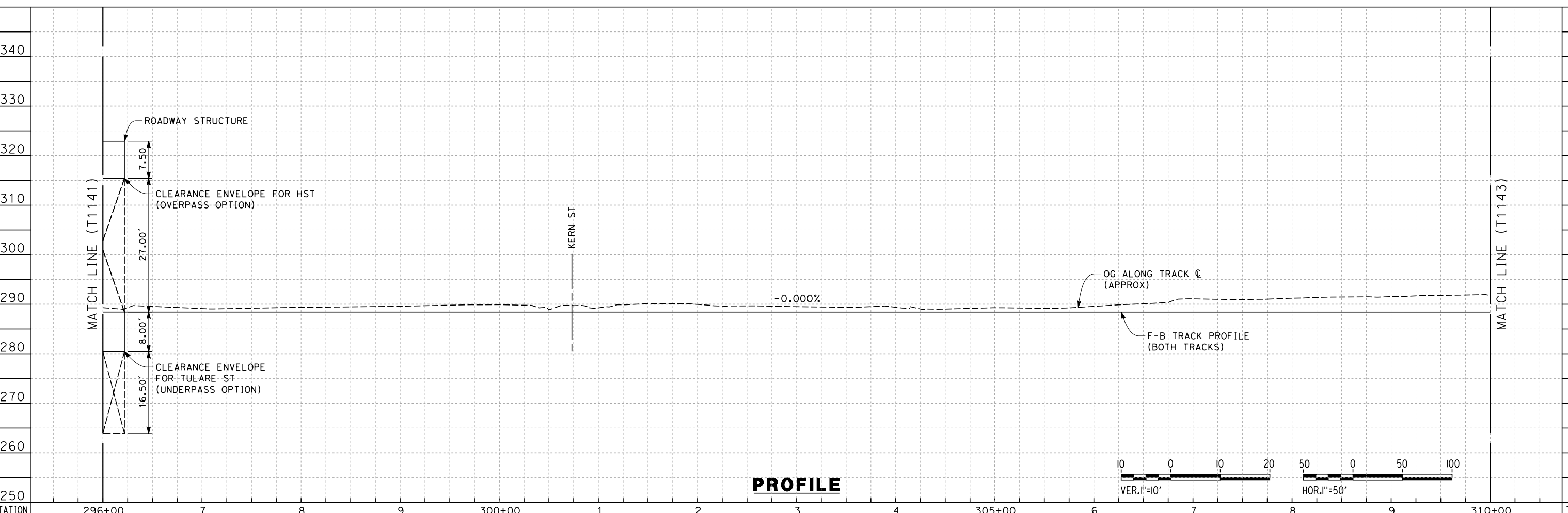
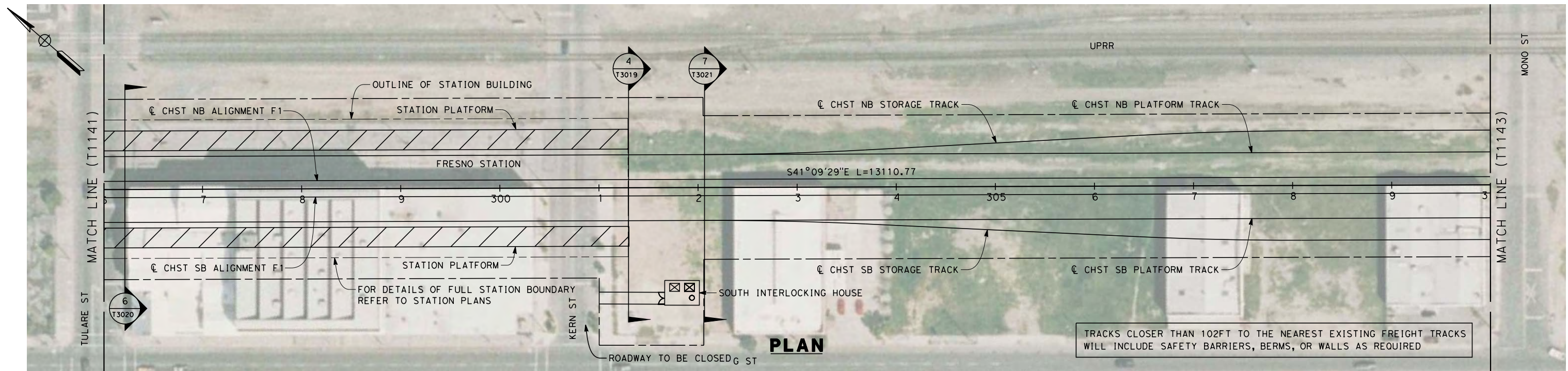
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 282+00 TO 296+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1141-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:16 AM O:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1142-A-F1m.dgn



STATION	296+00	7	8	9	300+00	1	2	3	4	305+00	6	7	8	9	310+00	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
06/30/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

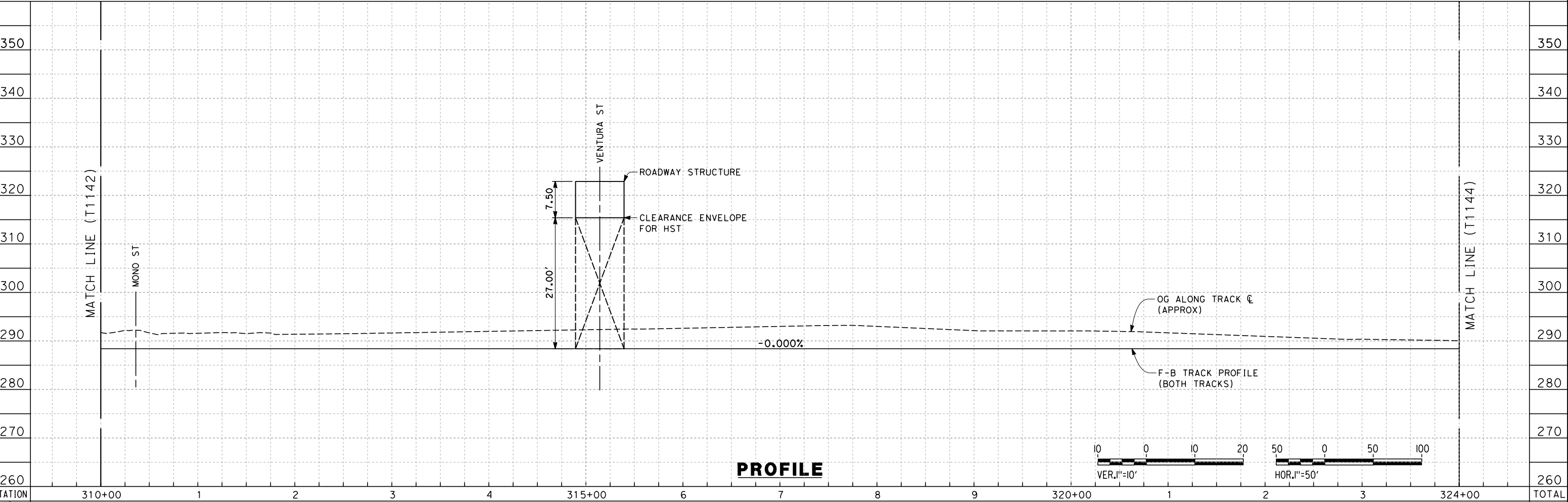
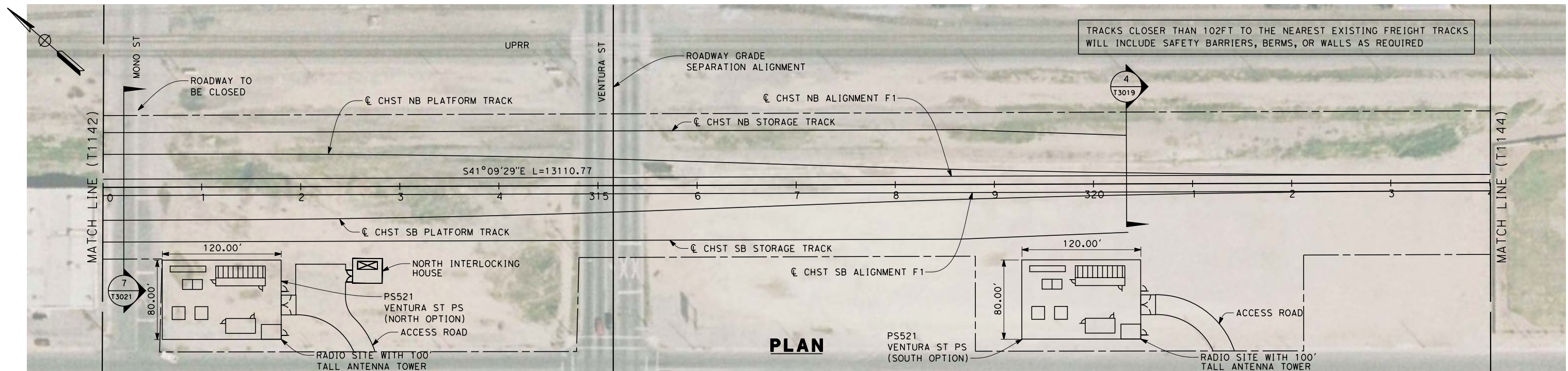


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 PLAN AND PROFILE
 STA. 296+00 TO 310+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1142-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:32:49 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1143-A-F1.mxd
 frank.palermo



STATION	310+00	1	2	3	4	315+00	6	7	8	9	320+00	1	2	3	324+00	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
05/13/11

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

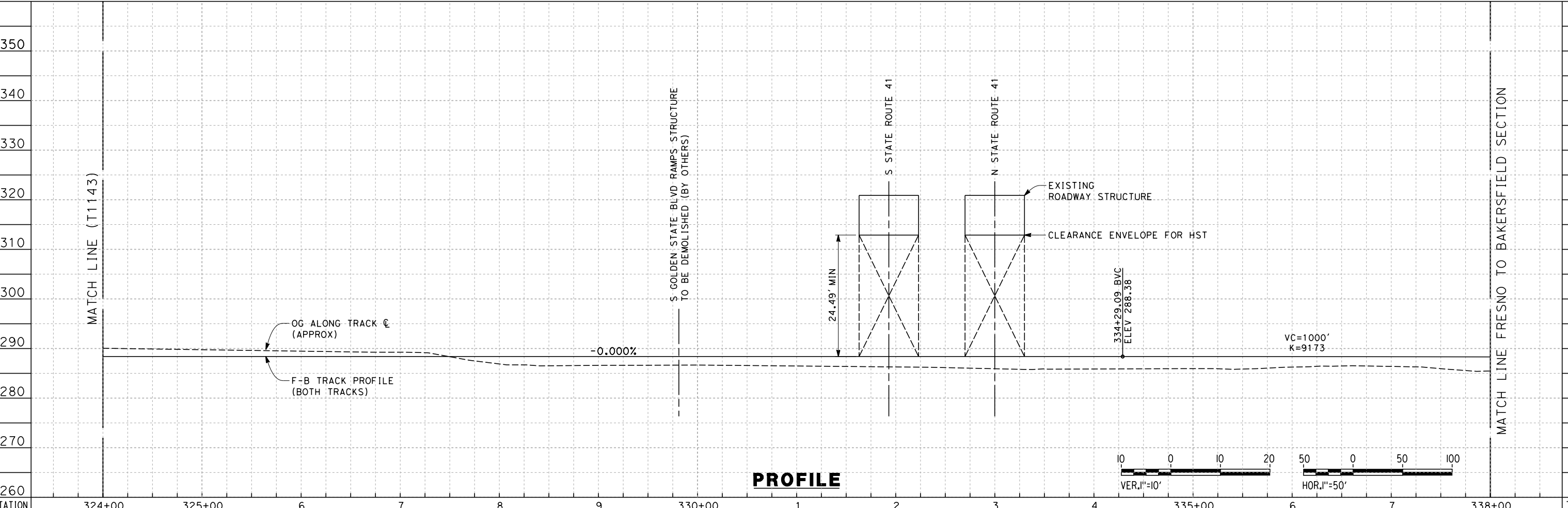
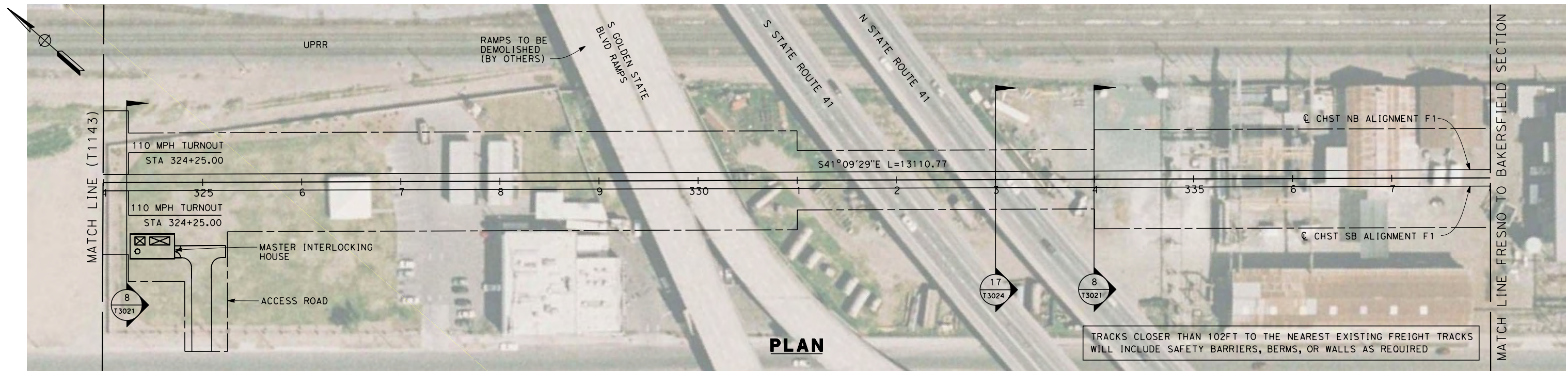


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 PLAN AND PROFILE
 STA. 310+00 TO 324+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1143-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

7/22/2011 10:26:23 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\Hybrid Alignment - Ave 21\FB-T1144-A-F1.mxd
 frank.palermo



STATION	324+00	325+00	6	7	8	9	330+00	1	2	3	4	335+00	6	7	338+00	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
K. SEYMOUR
 DRAWN BY
P. TONKIN
 CHECKED BY
D. HUNT
 IN CHARGE
A. LUFT
 DATE
05/13/11

**RECORD SET 15%
DESIGN SUBMISSION**

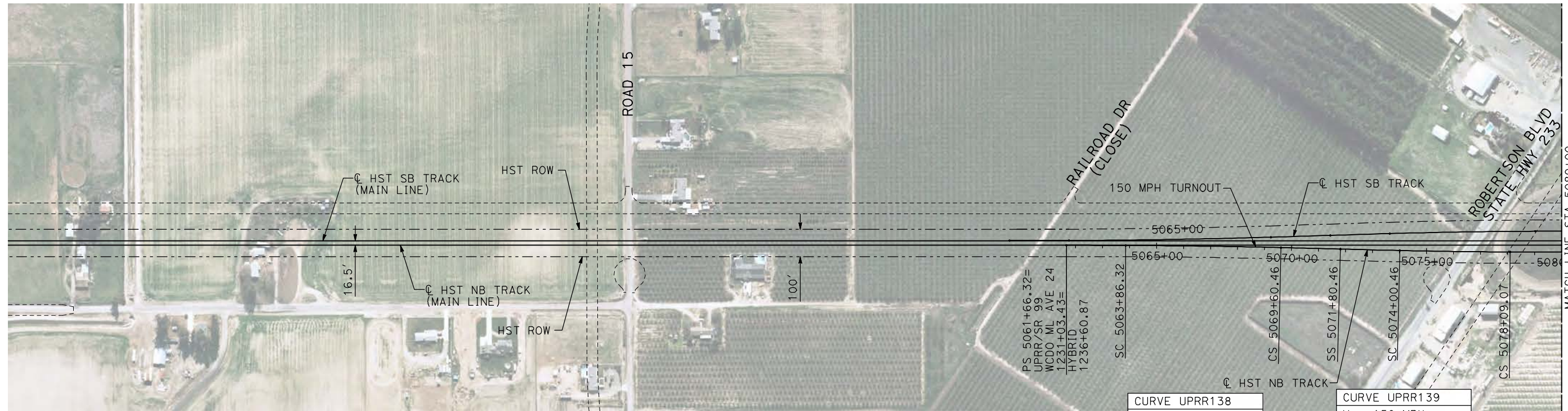
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 324+00 TO 338+00

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1144-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

7/21/2011 3:57:53 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2360-A.dgn machadoe



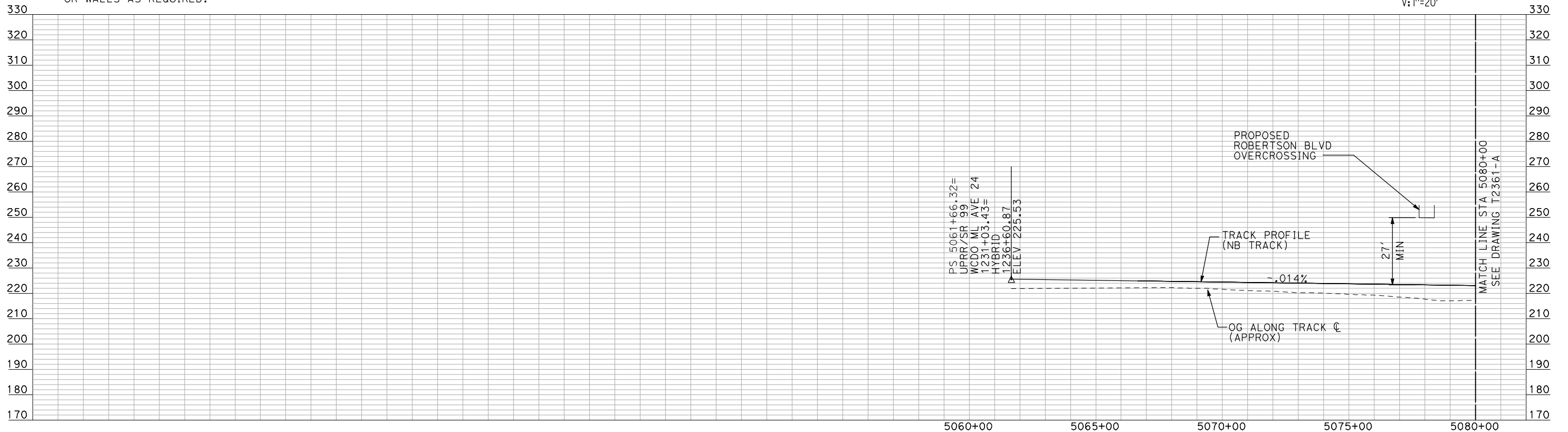
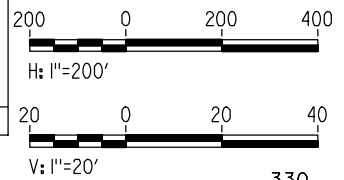
NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

CURVE UPRR138
V = 150 MPH
R = 32000'
Ls = 220'
Ed/Eu =
150 MPH TURNOUT

CURVE UPRR139
V = 150 MPH
R = 24000'
Ls = 220'
Ed/Eu = 1.25/2.50
150 MPH TURNOUT



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5061+66.32 TO STA 5080+00

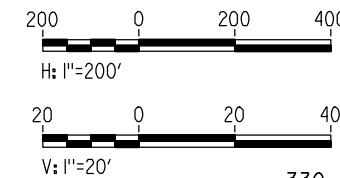
CONTRACT NO.
HSR06-007
DRAWING NO.
T2360-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.




PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 3:58:14 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2361-A.dgn machadoe

DESIGNED BY A. SHIELDS	RECORD SET 15% DESIGN SUBMITTAL NOT FOR CONSTRUCTION	 <small>Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811</small> 		CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION AVENUE 24 PLAN AND PROFILE STA 5080+00 TO STA 5135+00	CONTRACT NO. HSR06-007
DRAWN BY H. SULLIVAN					DRAWING NO. T2361-A
CHECKED BY A. BOONE					SCALE AS SHOWN
IN CHARGE A. BOONE					SHEET NO. ### OF ###
DATE 07/20/2011					

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

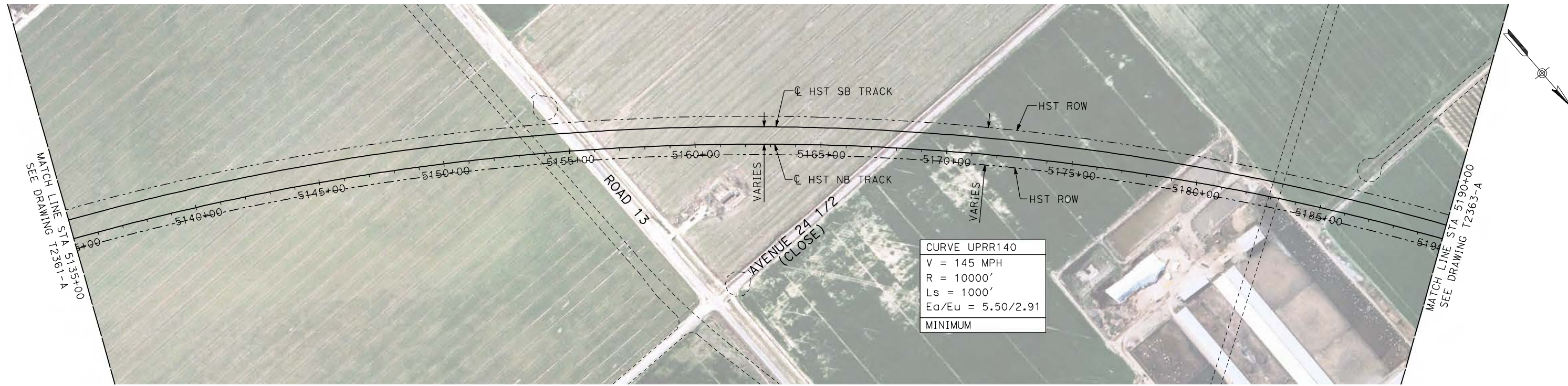
 **CALIFORNIA**
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5080+00 TO STA 5135+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2361-A
SCALE
AS SHOWN
SHEET NO.
OF

REV	DATE	BY	CHK	APP	DESCRIPTION
-----	------	----	-----	-----	-------------

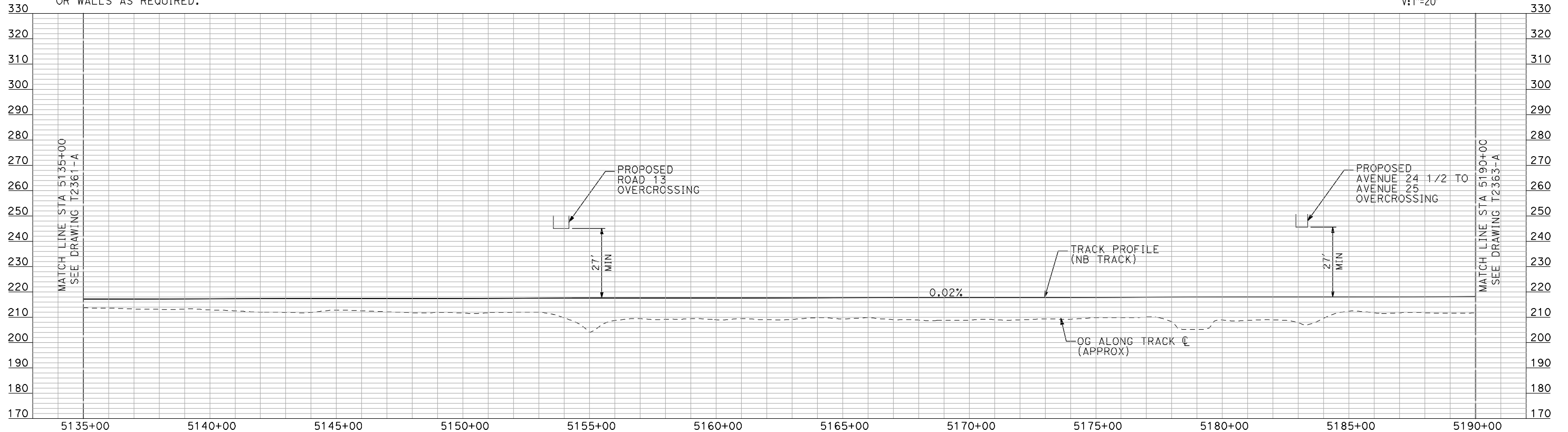
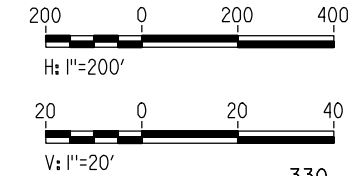
7/21/2011 3:58:30 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2362-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5135+00 TO STA 5190+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2362-A
SCALE
AS SHOWN
SHEET NO.
OF

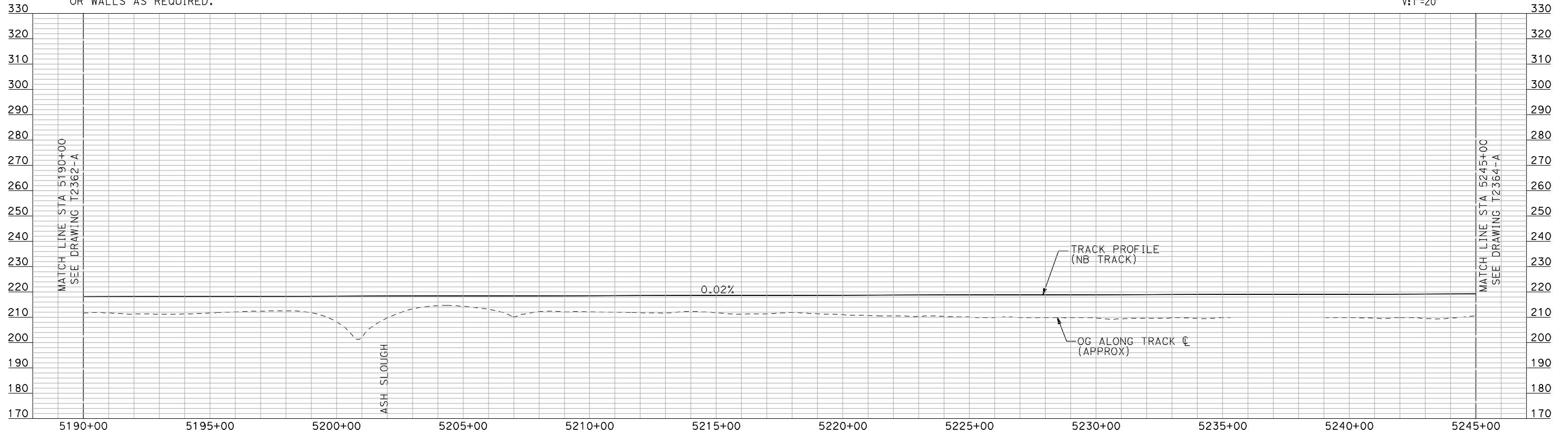
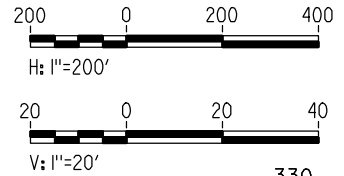
7/21/2011 3:58:45 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2363-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

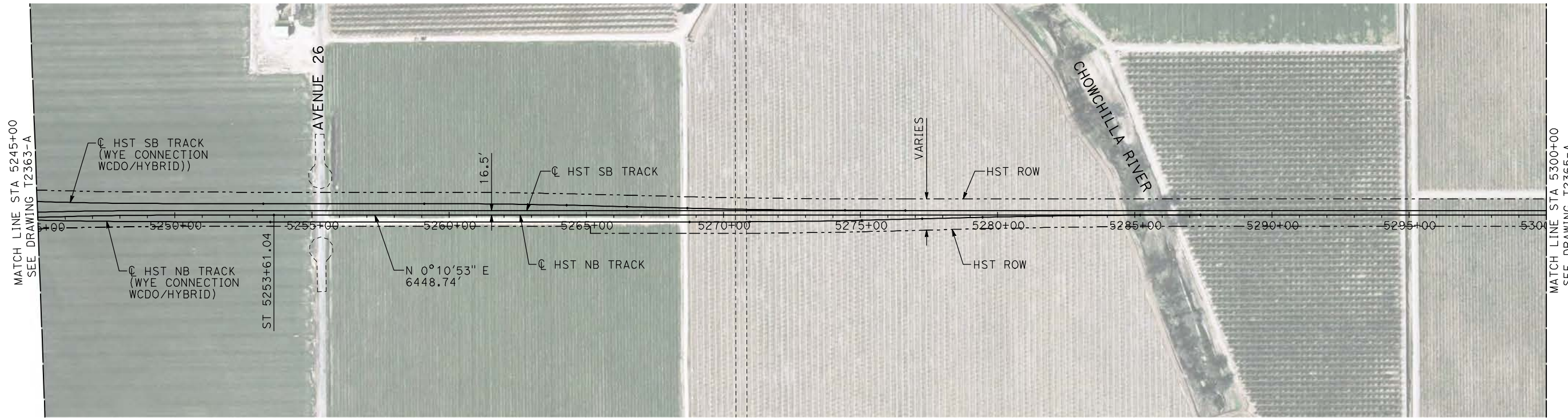
UPRR/SR 99 WCO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5190+00 TO STA 5245+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2363-A

SCALE
AS SHOWN

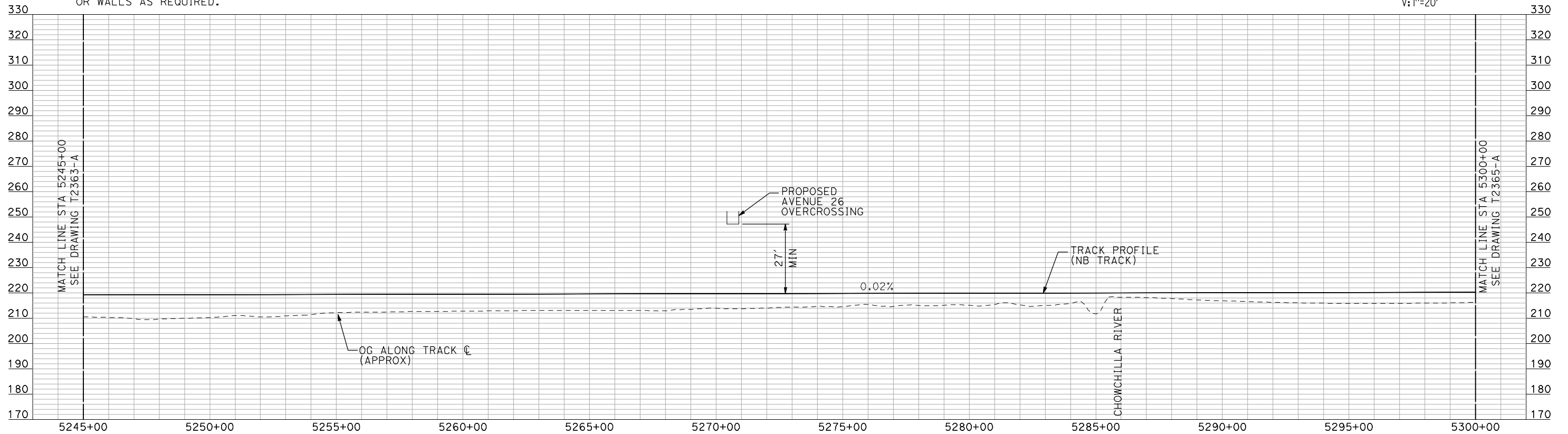
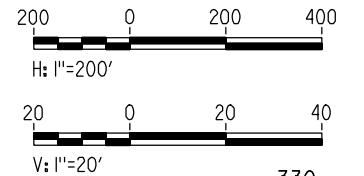
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 3:58:58 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2364-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

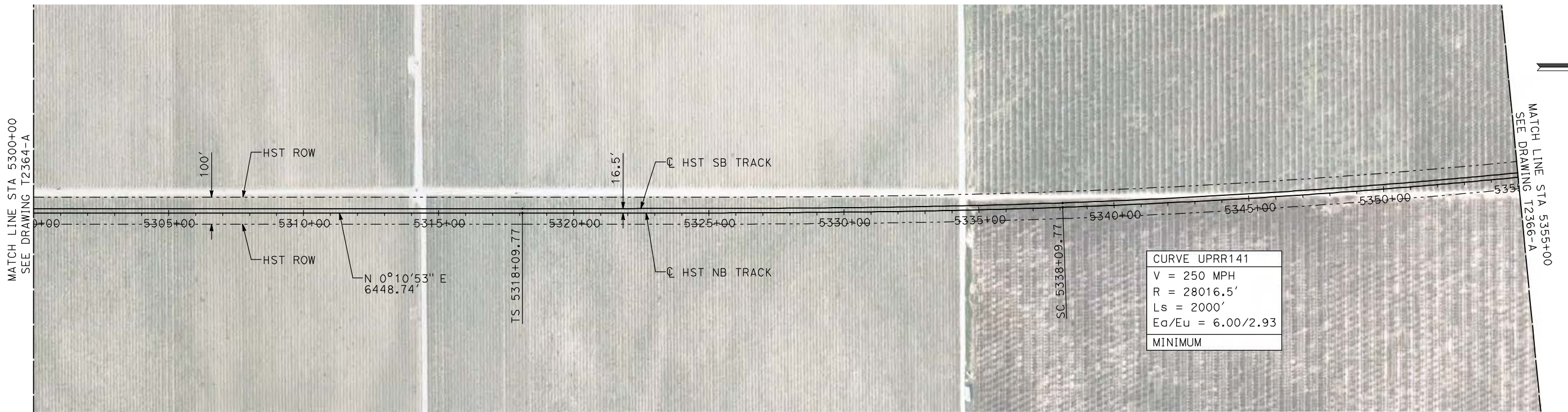
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5245+00 TO STA 5300+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2364-A
SCALE
AS SHOWN
SHEET NO.
OF

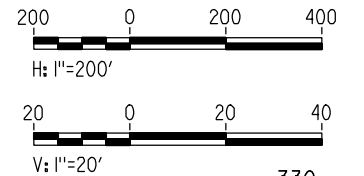


CURVE UPRR141
V = 250 MPH
R = 28016.5'
Ls = 2000'
Ea/Eu = 6.00/2.93
MINIMUM

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



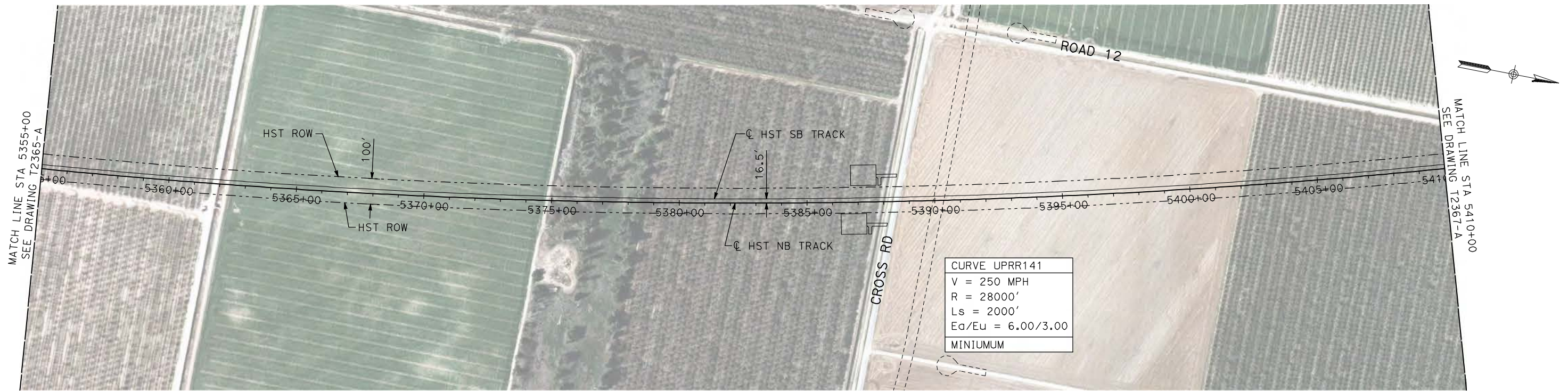
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5300+00 TO STA 5355+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2365-A
SCALE
AS SHOWN
SHEET NO.
OF

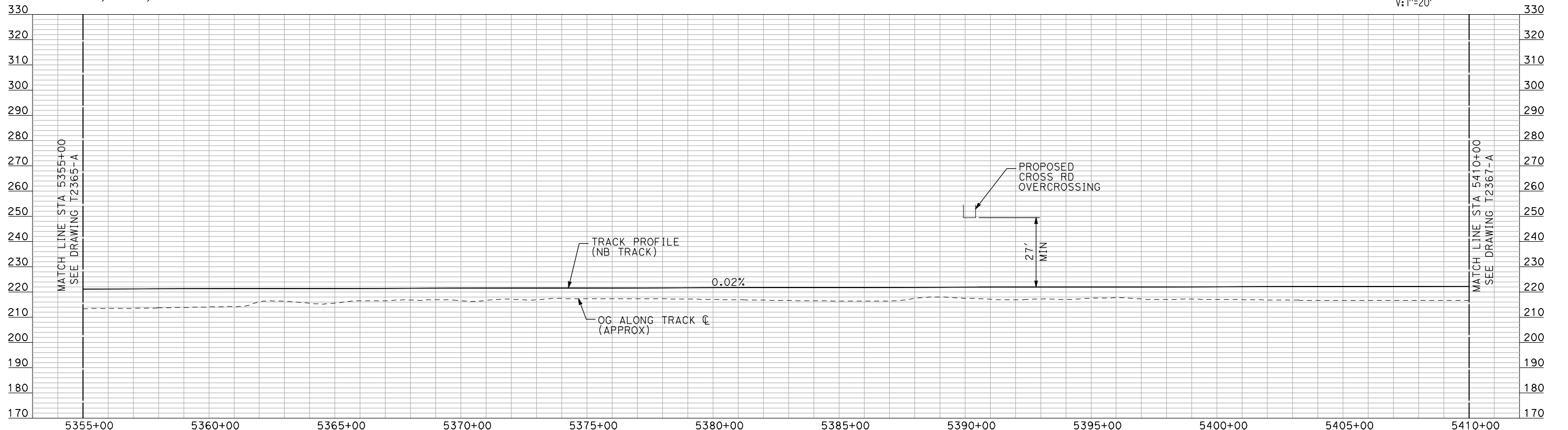
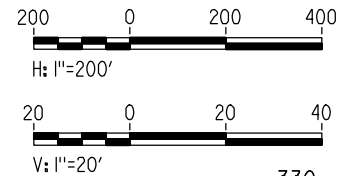
7/21/2011 3:59:12 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2365-A.dgn machadoe

7/21/2011 3:59:26 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_24\MF-T-2366-A.dgn



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

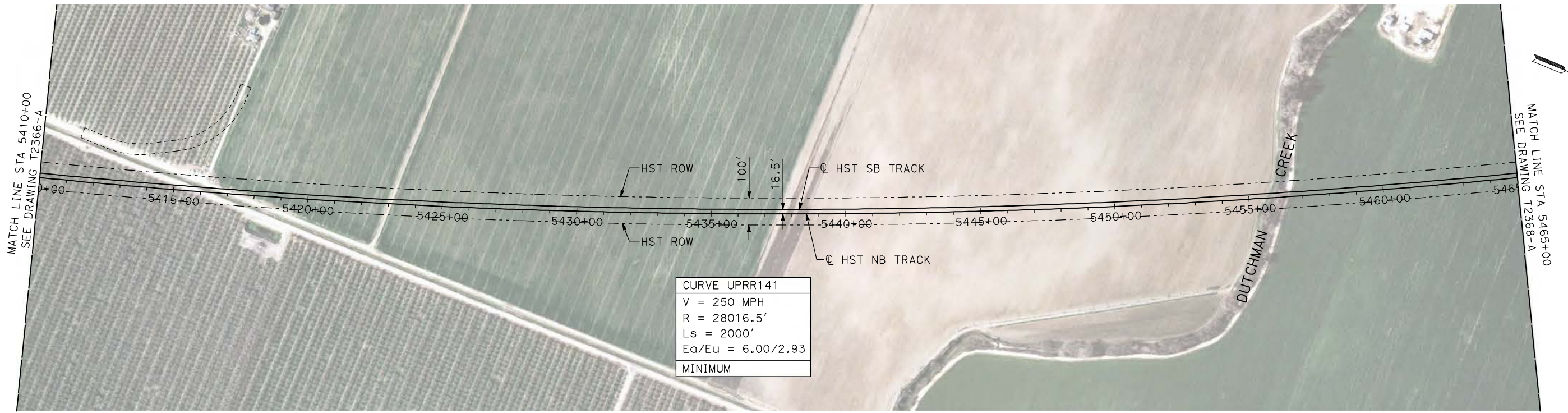
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5355+00 TO STA 5410+00

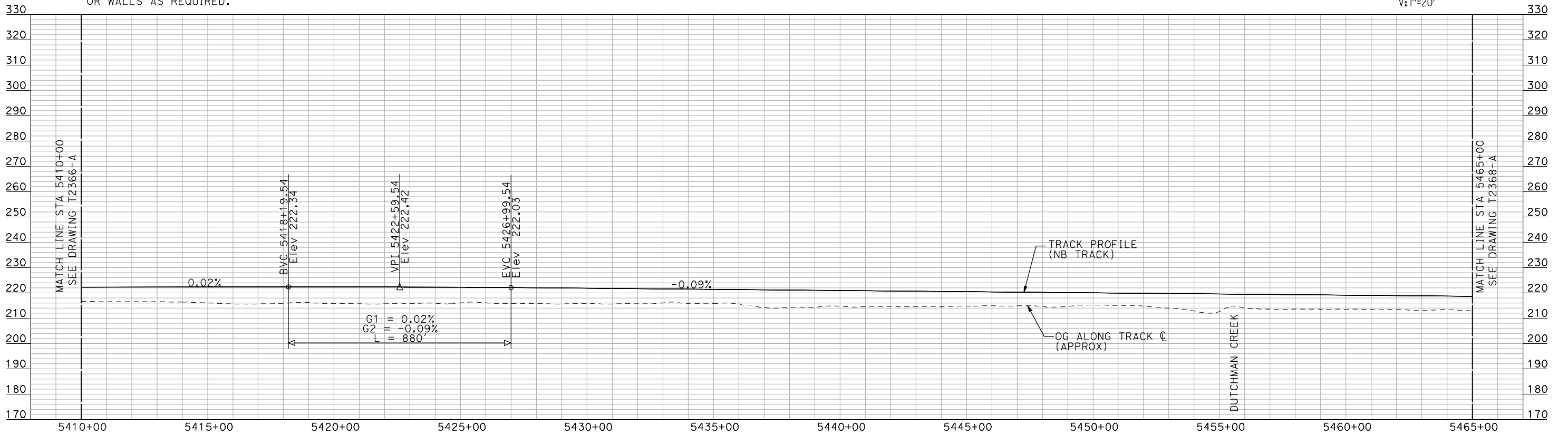
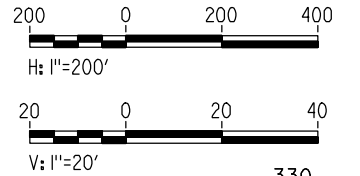
CONTRACT NO.
HSR06-007
DRAWING NO.
T2366-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 3:59:40 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2367-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

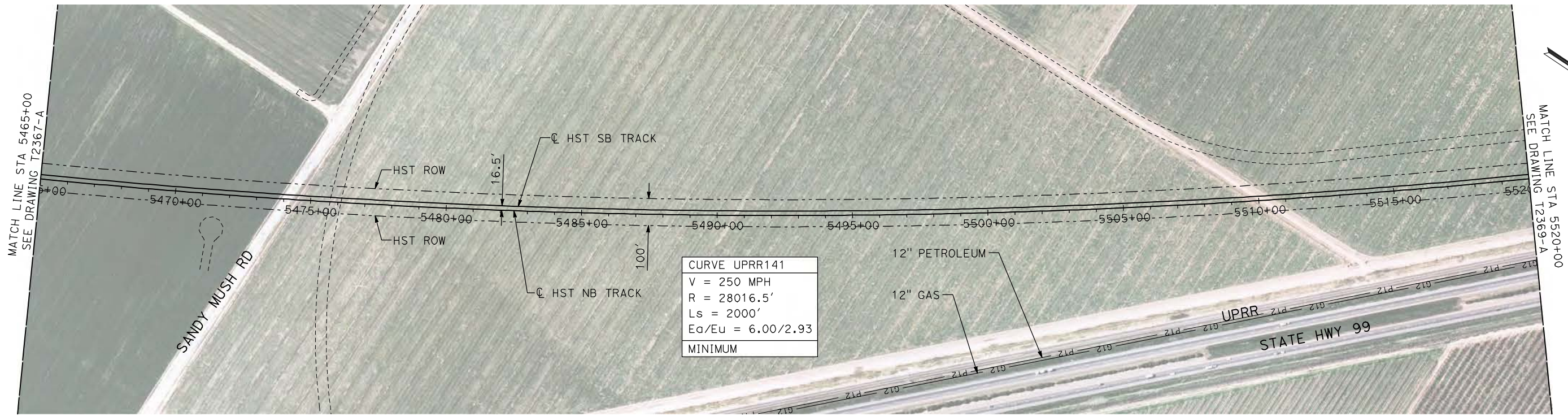
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5410+00 TO STA 5465+00

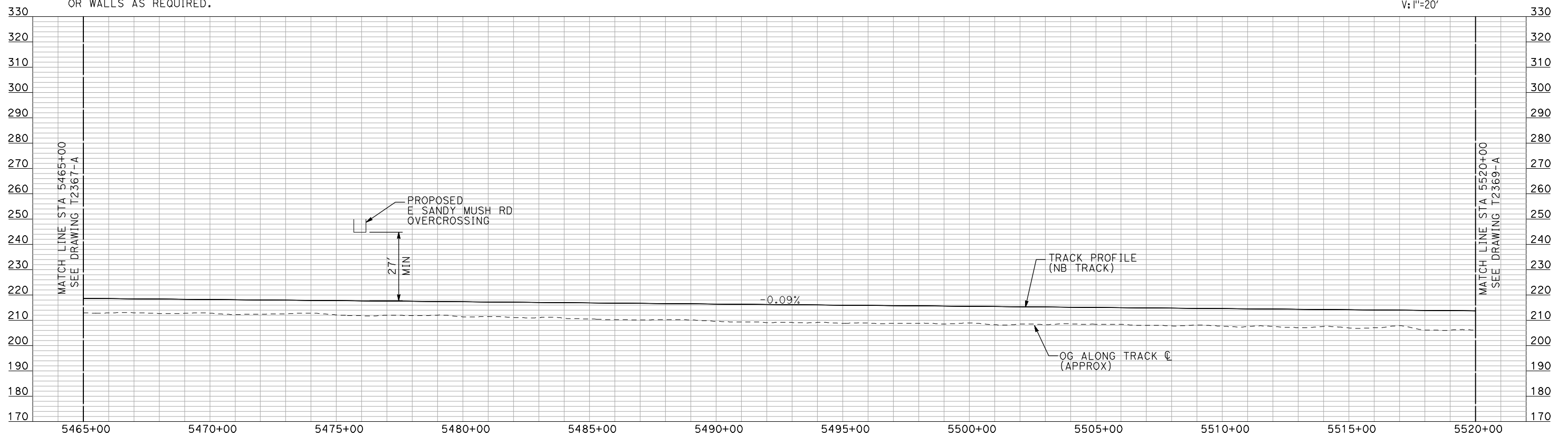
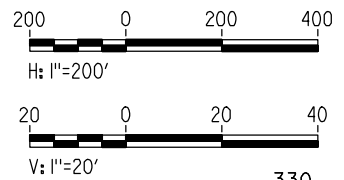
CONTRACT NO.
HSR06-007
DRAWING NO.
T2367-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 3:59:56 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2368-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

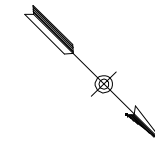
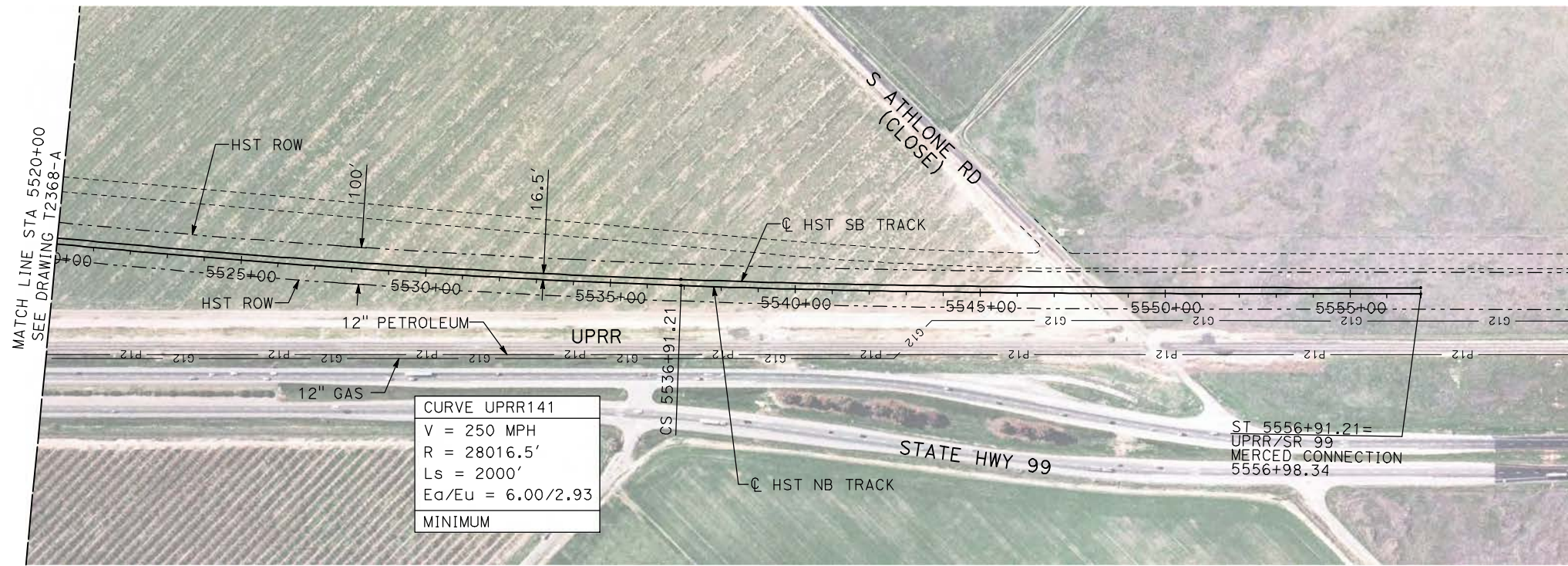


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5465+00 TO STA 5520+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2368-A
SCALE
AS SHOWN
SHEET NO.
OF

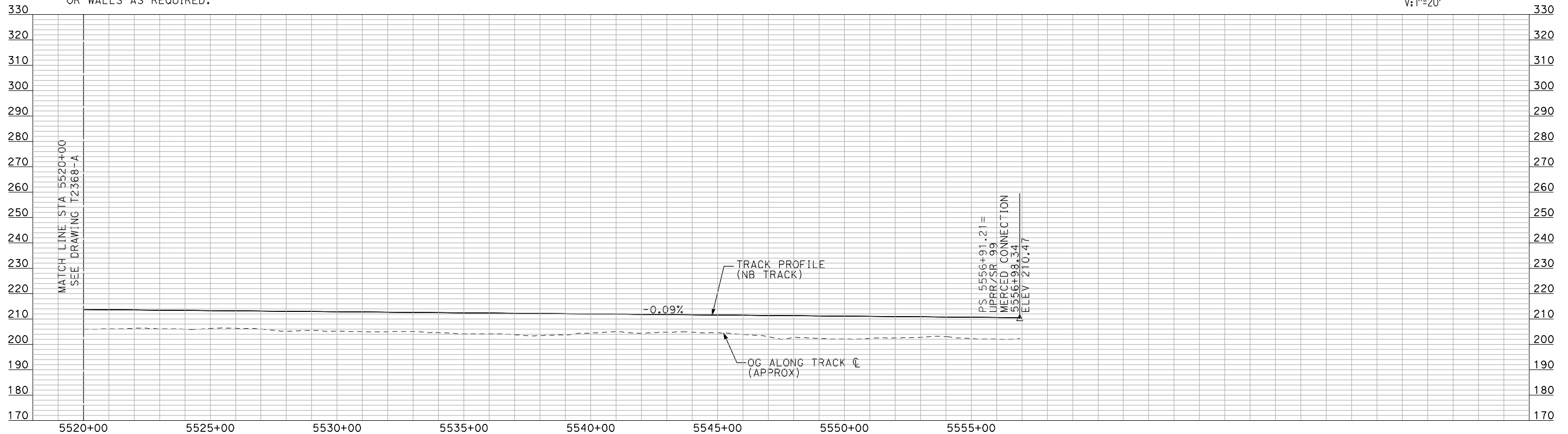
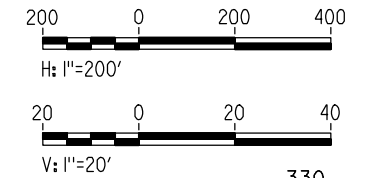
7/21/2011 4:00:12 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2369-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

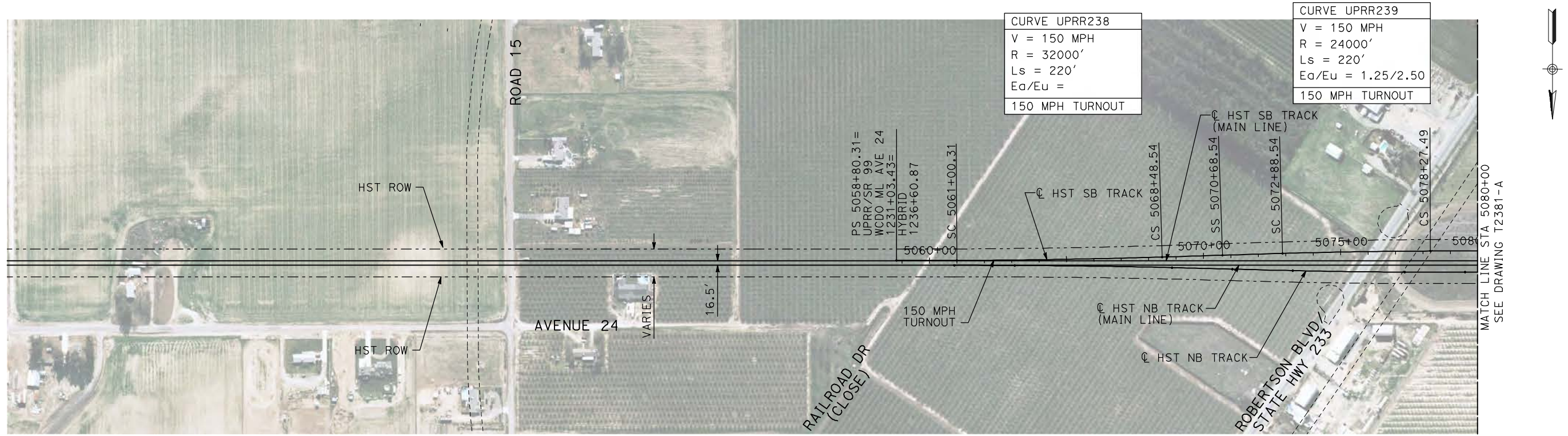
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - NB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5520+00 TO STA 5556+91.21

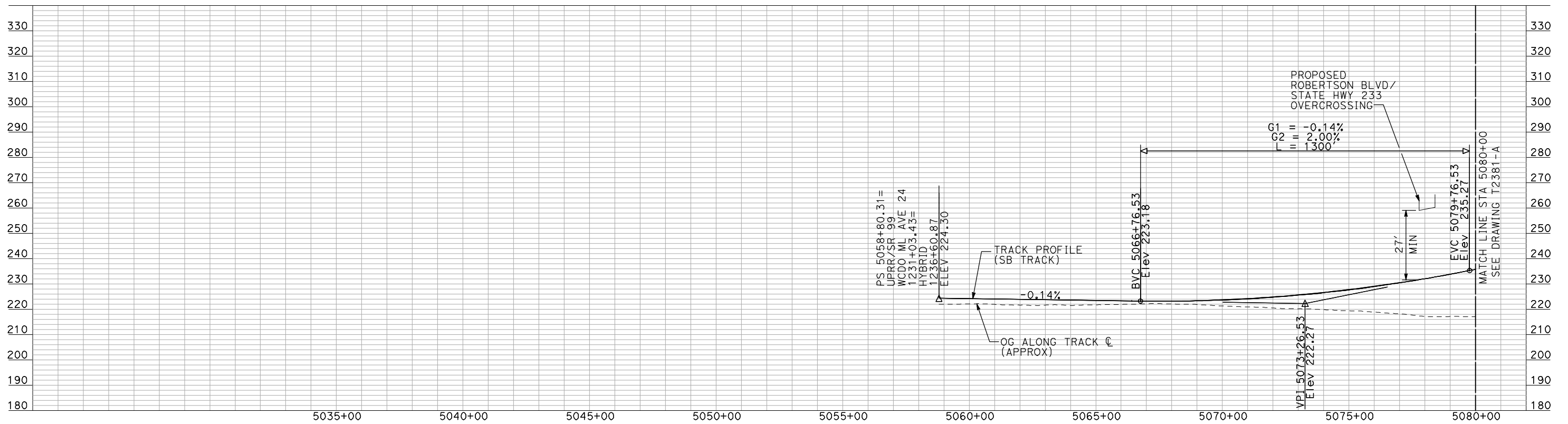
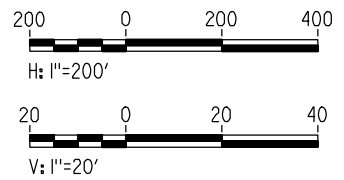
CONTRACT NO.	HSR06-007
DRAWING NO.	T2369-A
SCALE	AS SHOWN
SHEET NO.	### OF ###



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:00:24 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2380-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5058+80.31 TO STA 5080+00

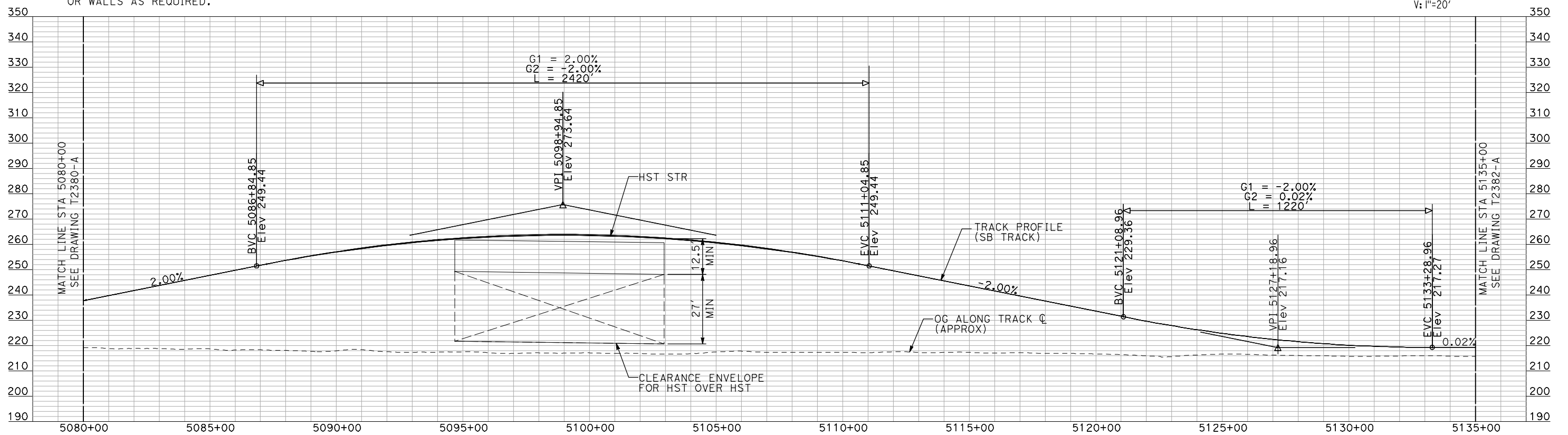
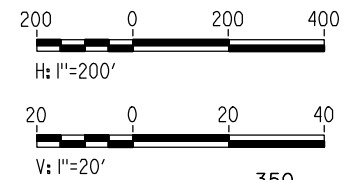
CONTRACT NO.
HSR06-007
DRAWING NO.
T2380-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:00:36 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2381-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5080+00 TO STA 5135+00

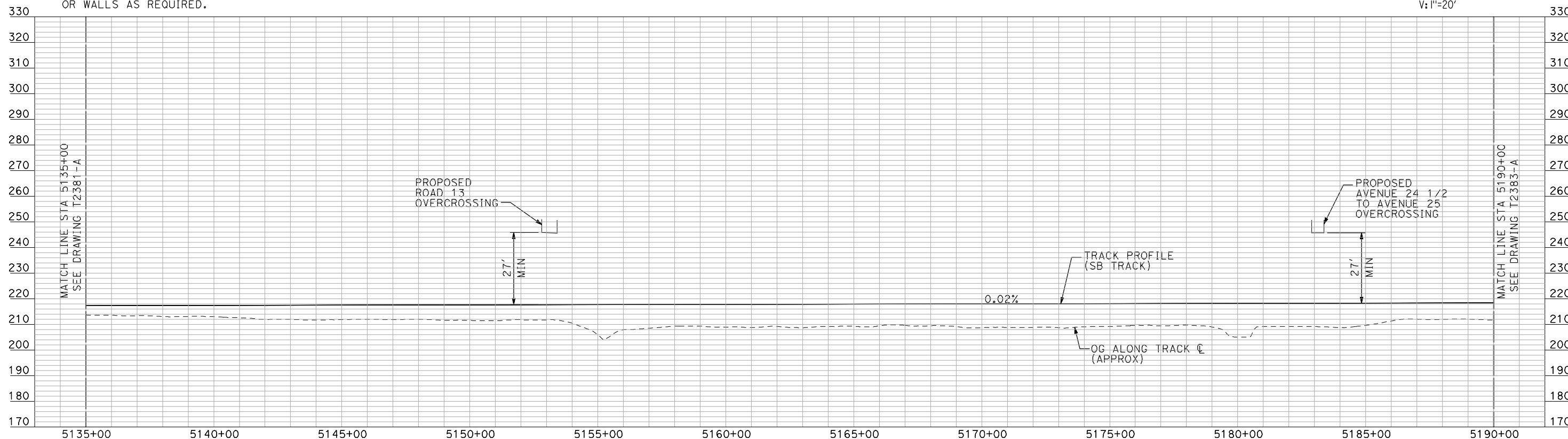
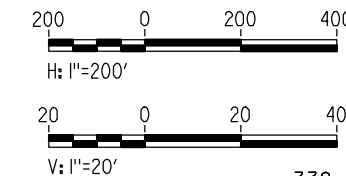
CONTRACT NO.
HSR06-007
DRAWING NO.
T2381-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.




PLAN



PROFILE

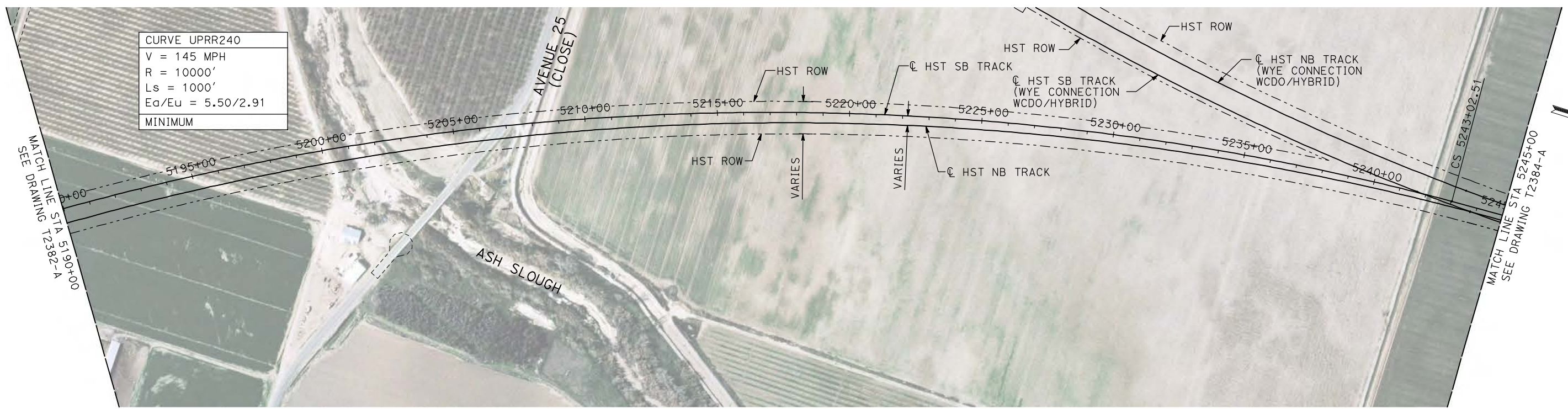
"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:00:50 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2382-A.dgn machadoe

DESIGNED BY A. SHIELDS	RECORD SET 15% DESIGN SUBMITTAL NOT FOR CONSTRUCTION	 <small>Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811</small> 	 CALIFORNIA <small>HIGH-SPEED RAIL AUTHORITY</small>	CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION AVENUE 24 PLAN AND PROFILE STA 5135+00 TO STA 5190+00	CONTRACT NO. HSR06-007
DRAWN BY H. SULLIVAN					DRAWING NO. T2382-A
CHECKED BY A. BOONE					SCALE AS SHOWN
IN CHARGE A. BOONE					SHEET NO. ### OF ###
DATE 07/20/2011					

REV	DATE	BY	CHK	APP	DESCRIPTION

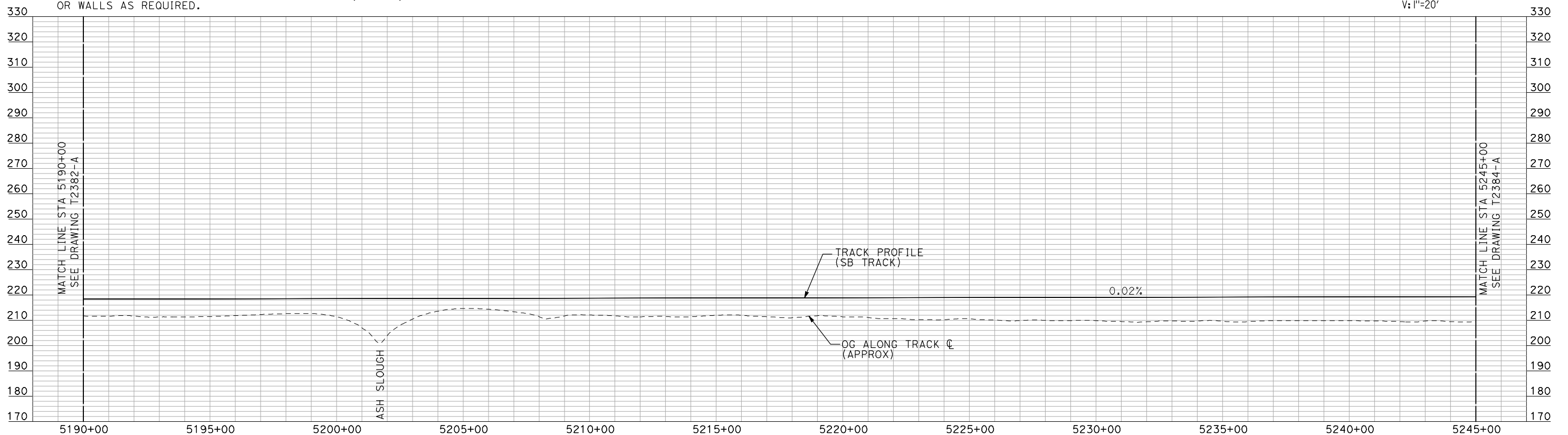
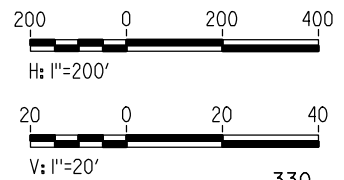
CURVE UPRR240
 V = 145 MPH
 R = 10000'
 Ls = 1000'
 Ea/Eu = 5.50/2.91
 MINIMUM



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:01:04 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2383-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
 DRAWN BY
H. SULLIVAN
 CHECKED BY
A. BOONE
 IN CHARGE
A. BOONE
 DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

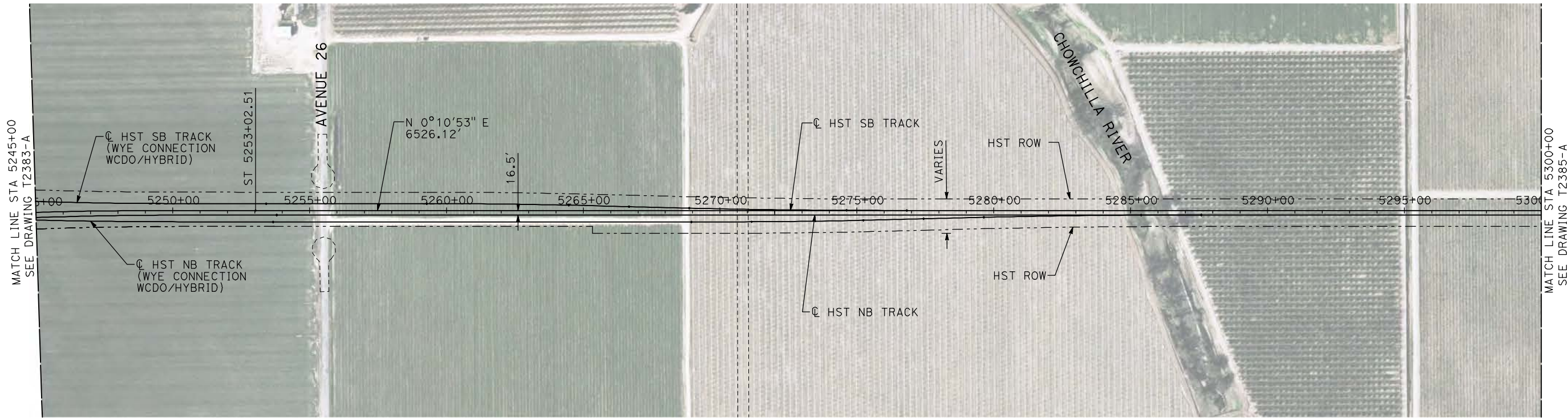
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 WCD0/HYBRID - SB MERCED CONNECTION
 AVENUE 24
 PLAN AND PROFILE
 STA 5190+00 TO STA 5245+00

CONTRACT NO.
HSR06-007
 DRAWING NO.
T2383-A
 SCALE
AS SHOWN
 SHEET NO.
OF

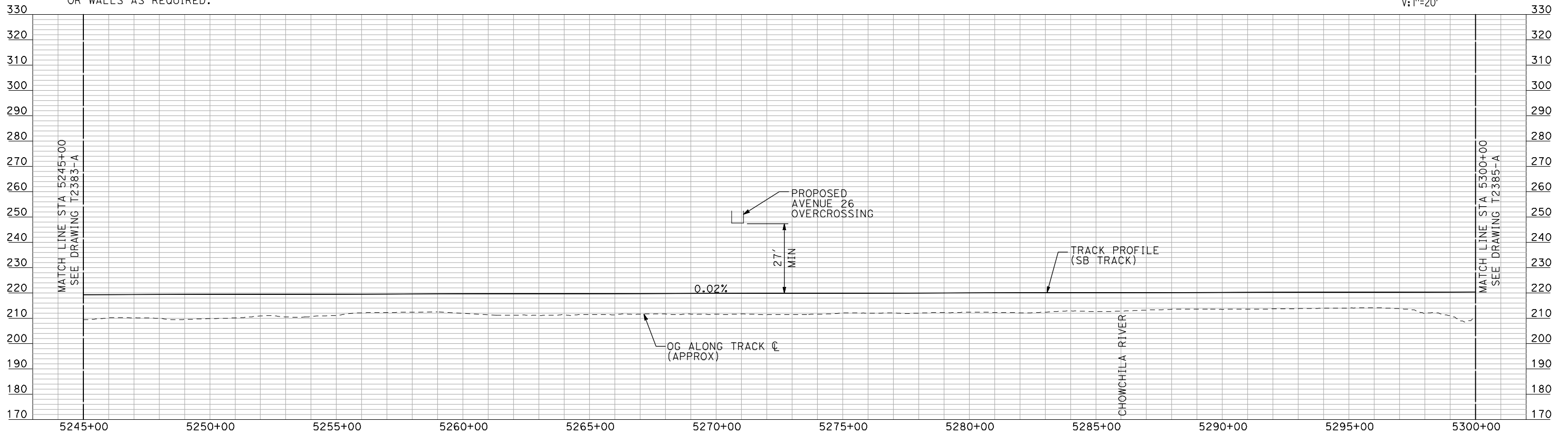
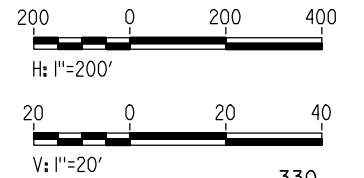
7/21/2011 4:01:18 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2384-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

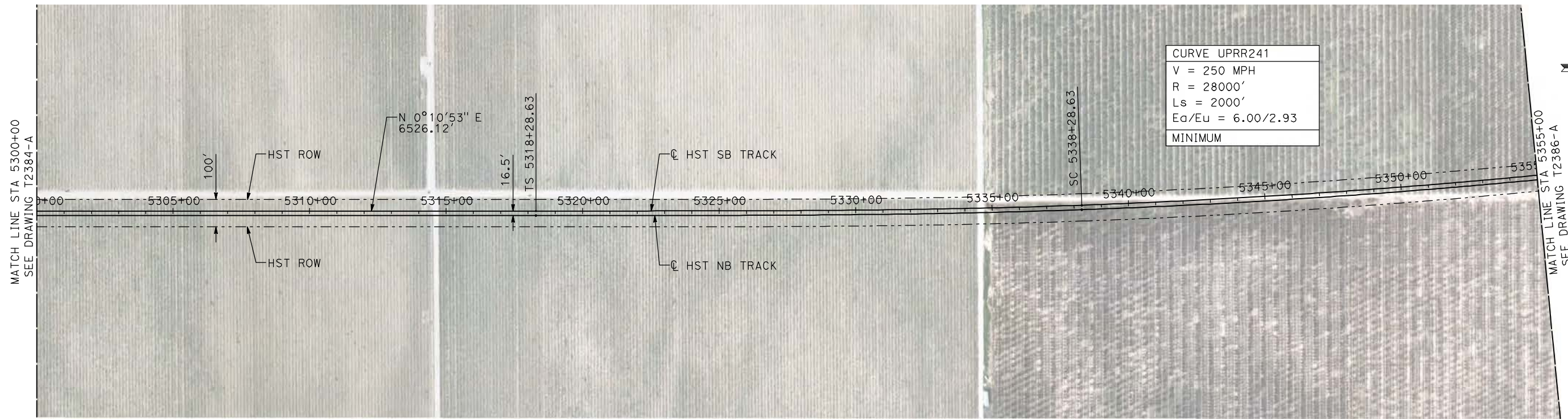


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5245+00 TO STA 5300+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2384-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 4:01:30 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2385-A.dgn machadoe

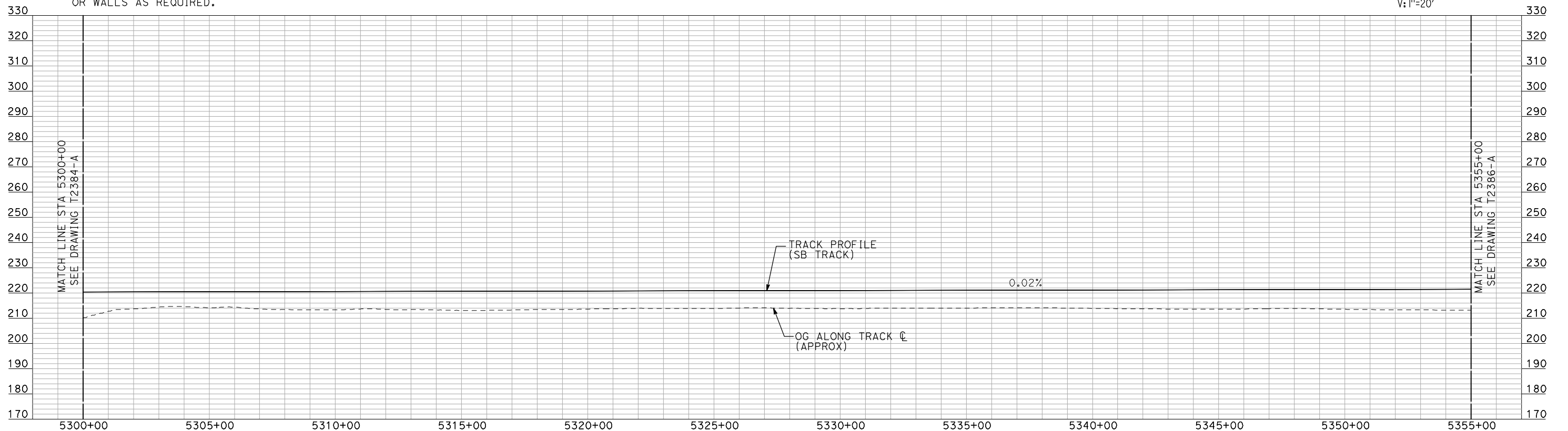
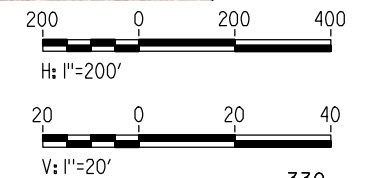


CURVE UPRR241
V = 250 MPH
R = 28000'
Ls = 2000'
Ea/Eu = 6.00/2.93
MINIMUM

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5300+00 TO STA 5355+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2385-A
SCALE
AS SHOWN
SHEET NO.
OF

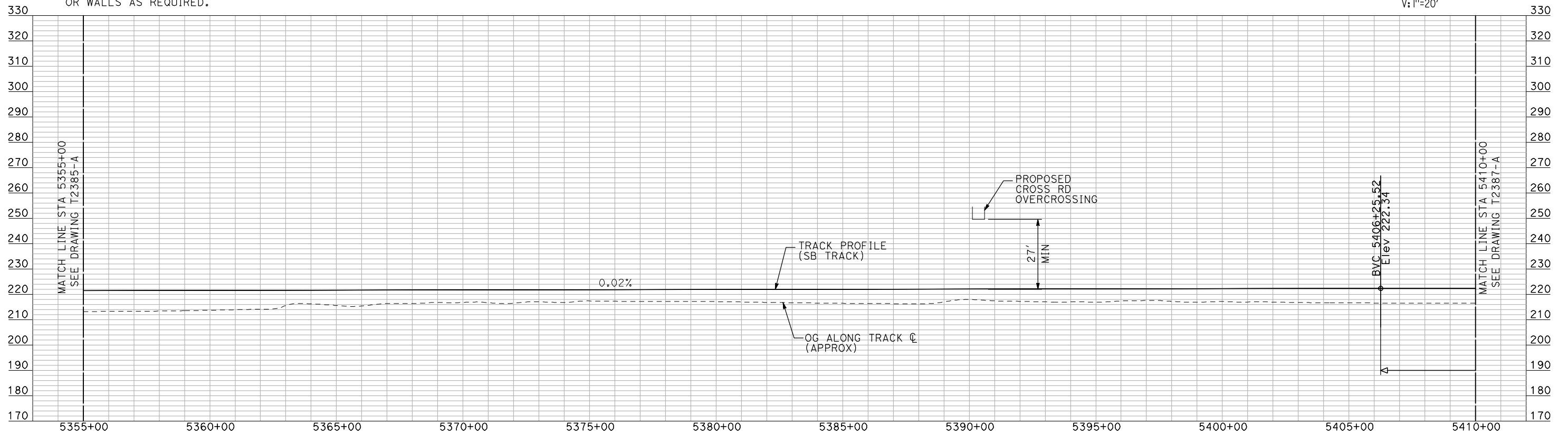
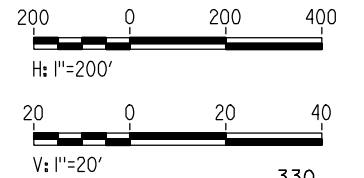
7/21/2011 4:01:43 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2386-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

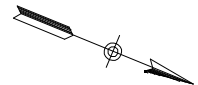
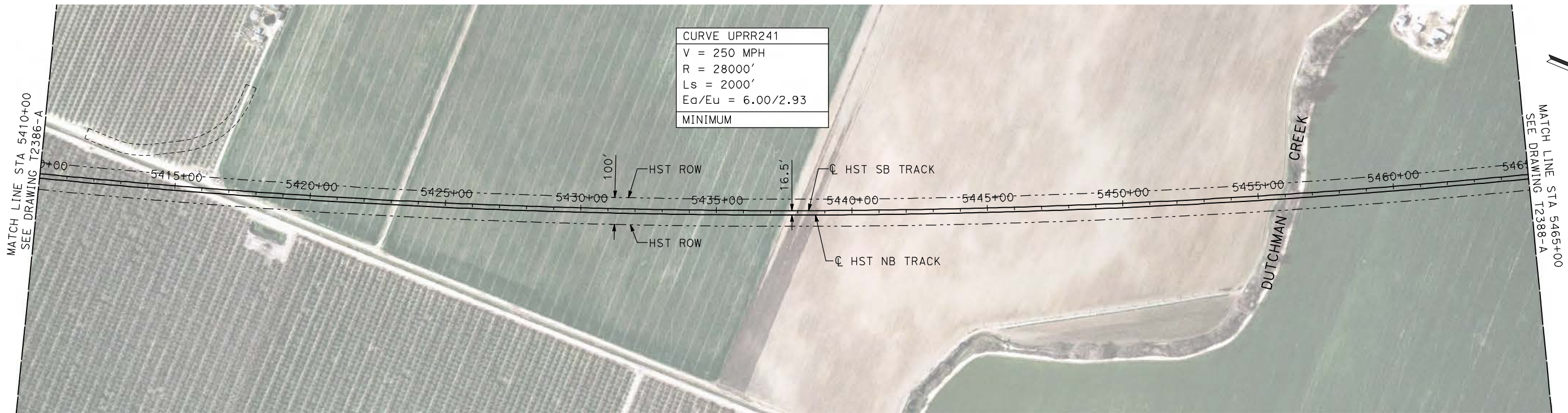
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5355+00 TO STA 5410+00

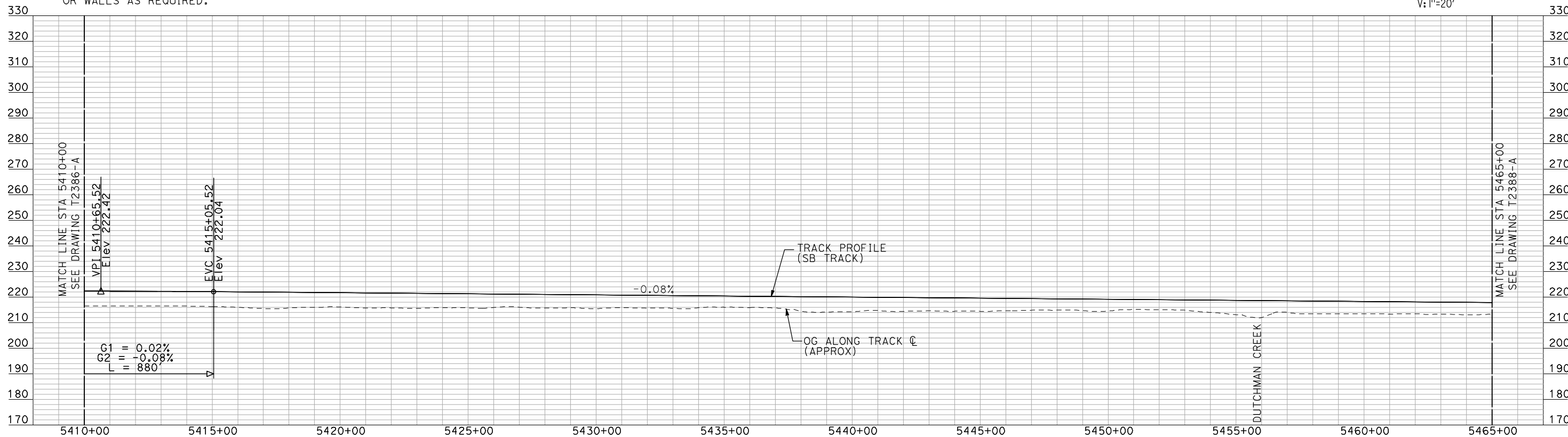
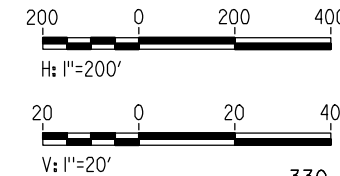
CONTRACT NO.
HSR06-007
DRAWING NO.
T2386-A
SCALE
AS SHOWN
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:01:57 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2387-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS

DRAWN BY
H. SULLIVAN

CHECKED BY
A. BOONE

IN CHARGE
A. BOONE

DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
 AVENUE 24
 PLAN AND PROFILE
 STA 5410+00 TO STA 5465+00

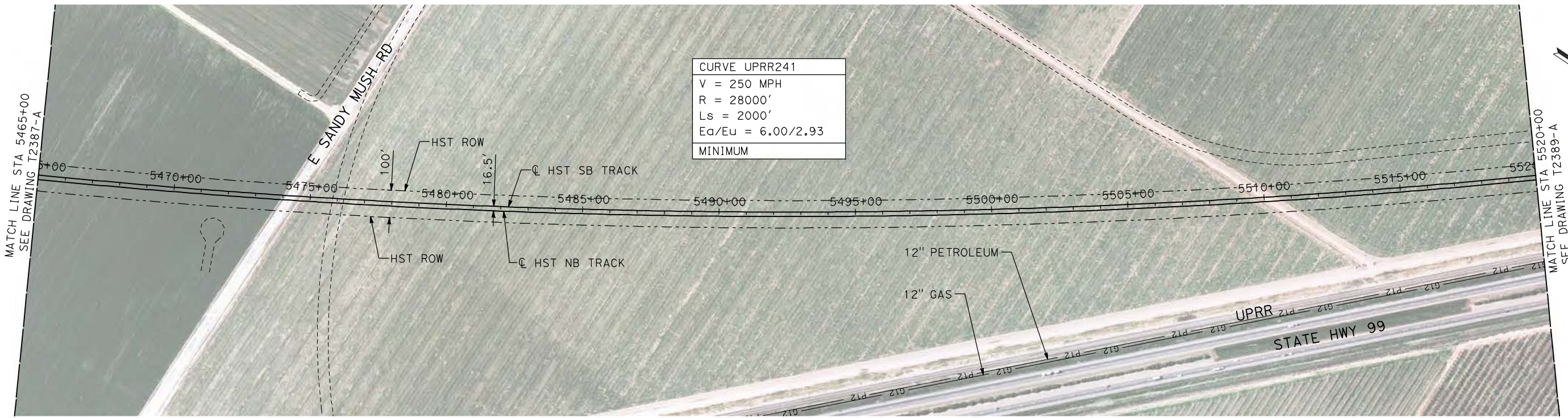
CONTRACT NO.
HSR06-007

DRAWING NO.
T2387-A

SCALE
AS SHOWN

SHEET NO.
OF

7/21/2011 4:02:12 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2388-A.dgn machadoe

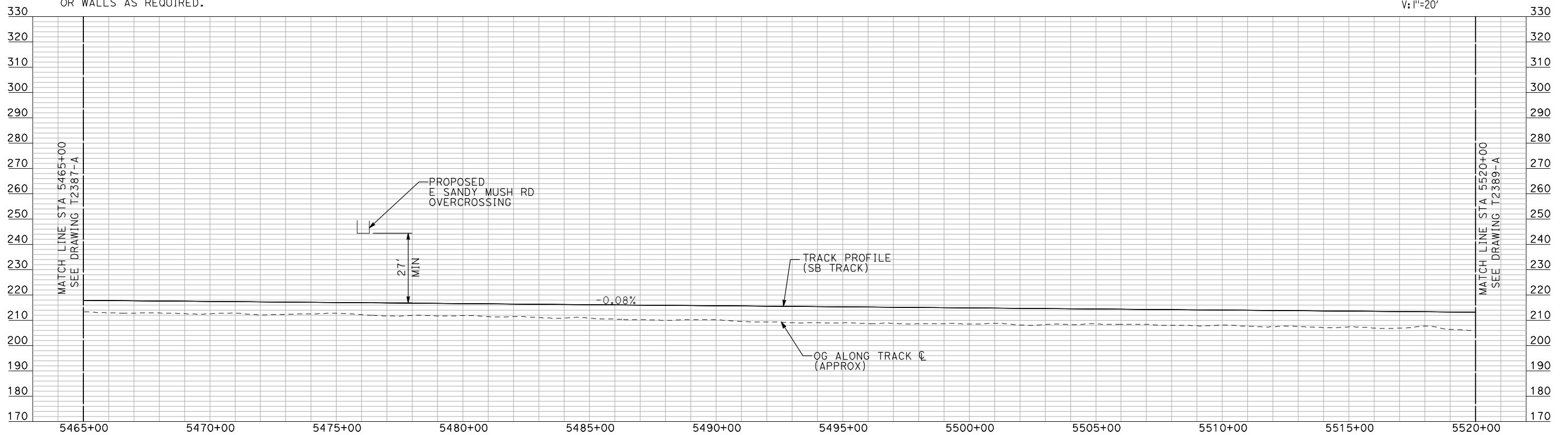
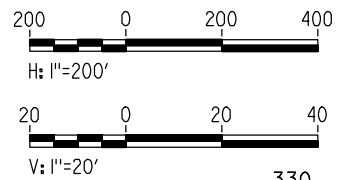


CURVE UPRR241
V = 250 MPH
R = 28000'
Ls = 2000'
Ea/Eu = 6.00/2.93
MINIMUM

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

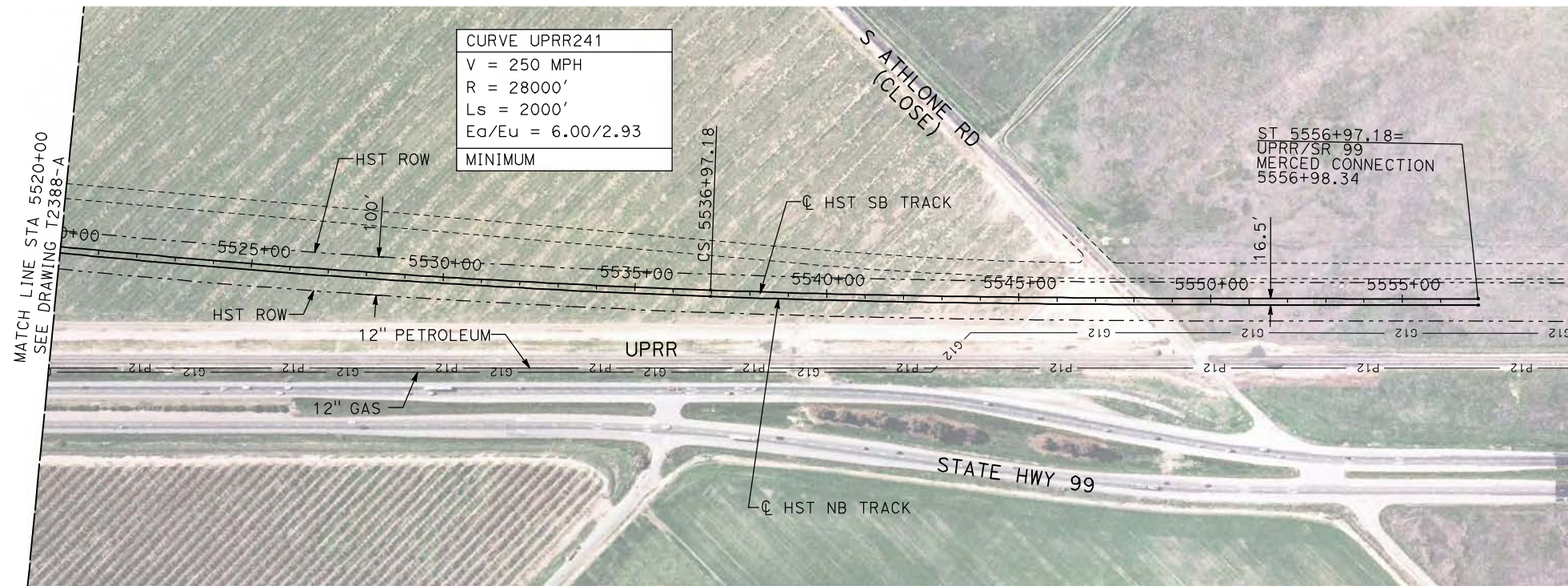


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

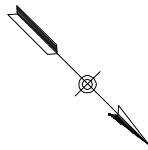
UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5465+00 TO STA 5520+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2388-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 4:02:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2389-A.dgn machadoe



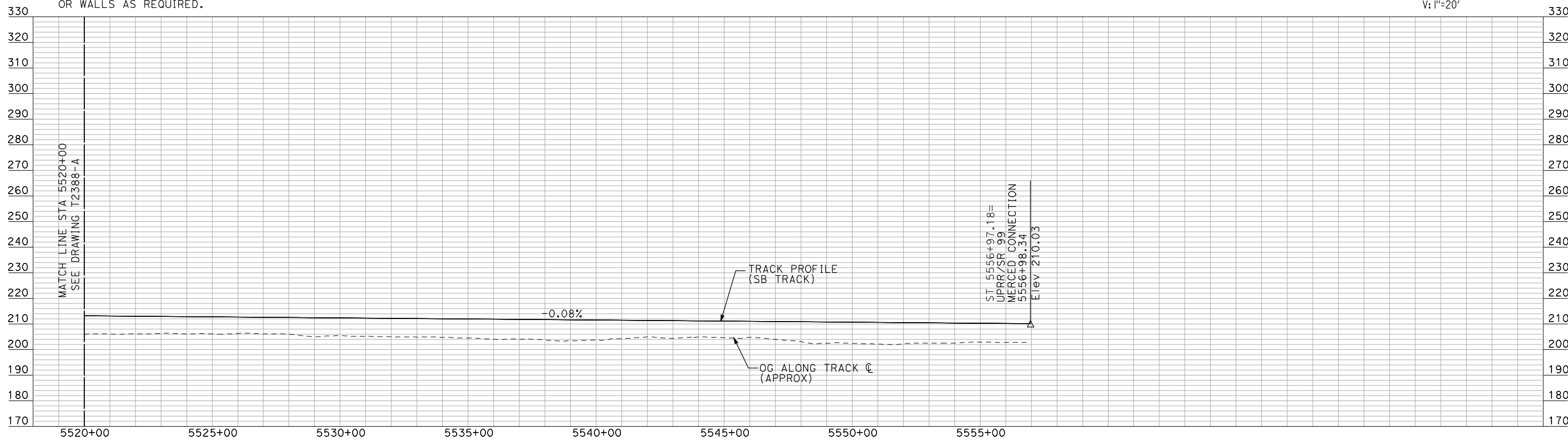
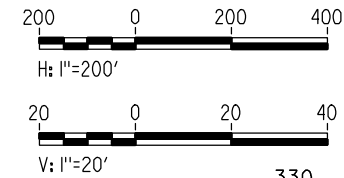
CURVE UPRR241
V = 250 MPH
R = 28000'
Ls = 2000'
Ea/Eu = 6.00/2.93
MINIMUM



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

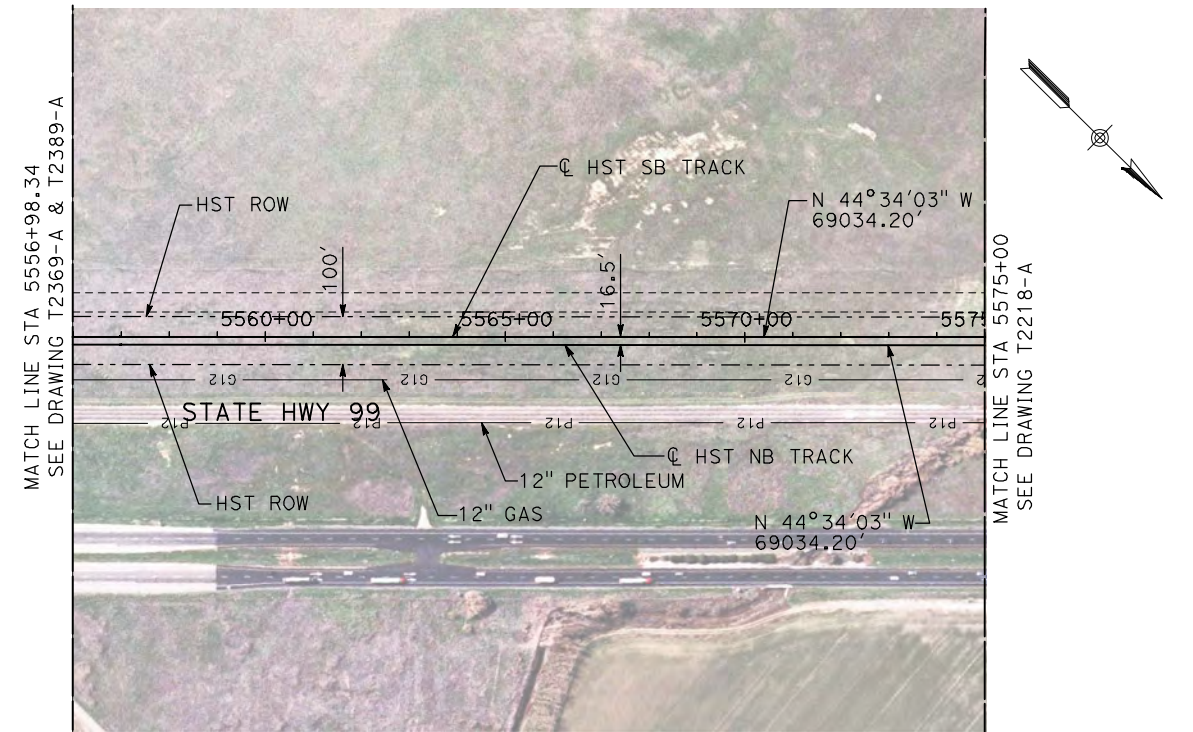


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCDO/HYBRID - SB MERCED CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 5520+00 TO STA 5556+97.18

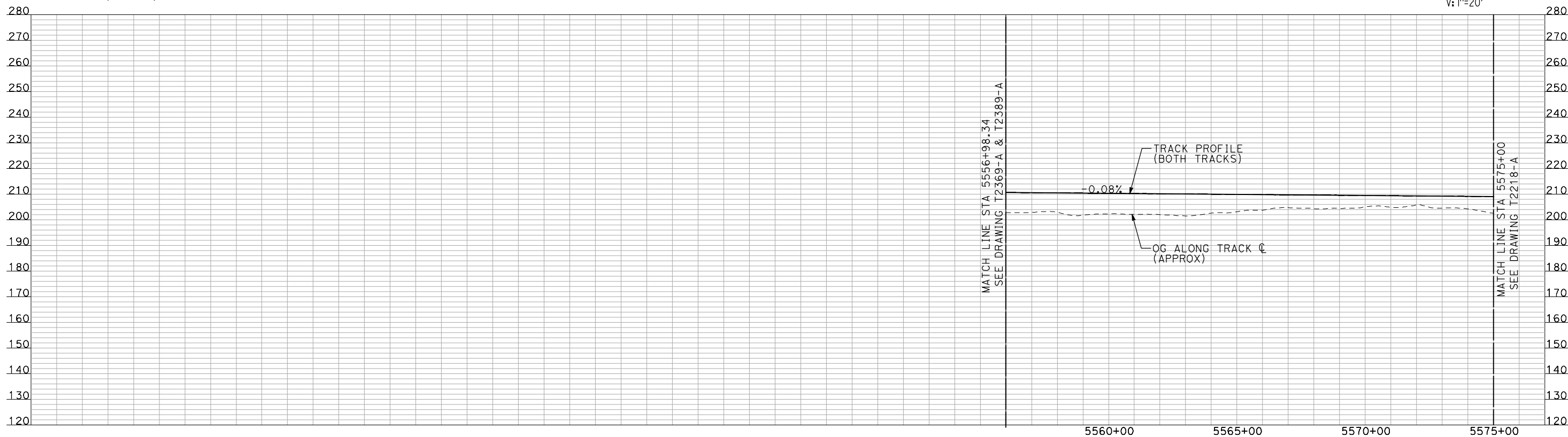
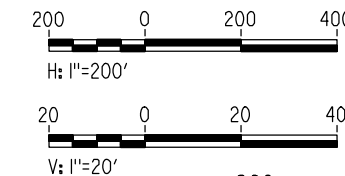
CONTRACT NO.	HSR06-007
DRAWING NO.	T2389-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

7/21/2011 4:02:36 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-2217-A.dgn machadoe



PLAN

- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS

DRAWN BY
H. SULLIVAN

CHECKED BY
A. BOONE

IN CHARGE
A. BOONE

DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MERCED CONNECTION

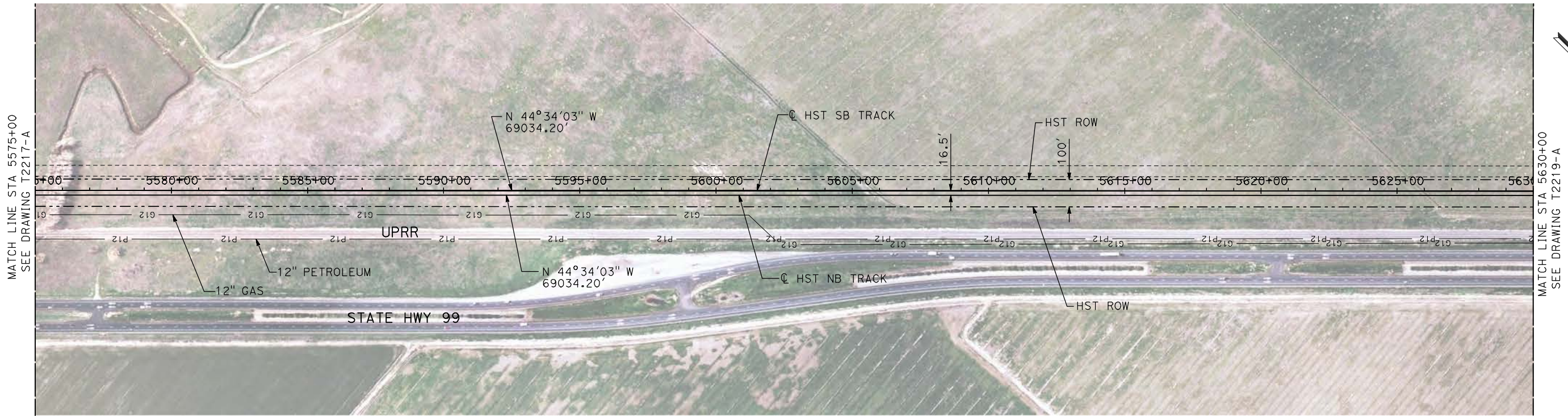
PLAN AND PROFILE
STA 5556+98.34 TO STA 5575+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2217-A

SCALE
AS SHOWN

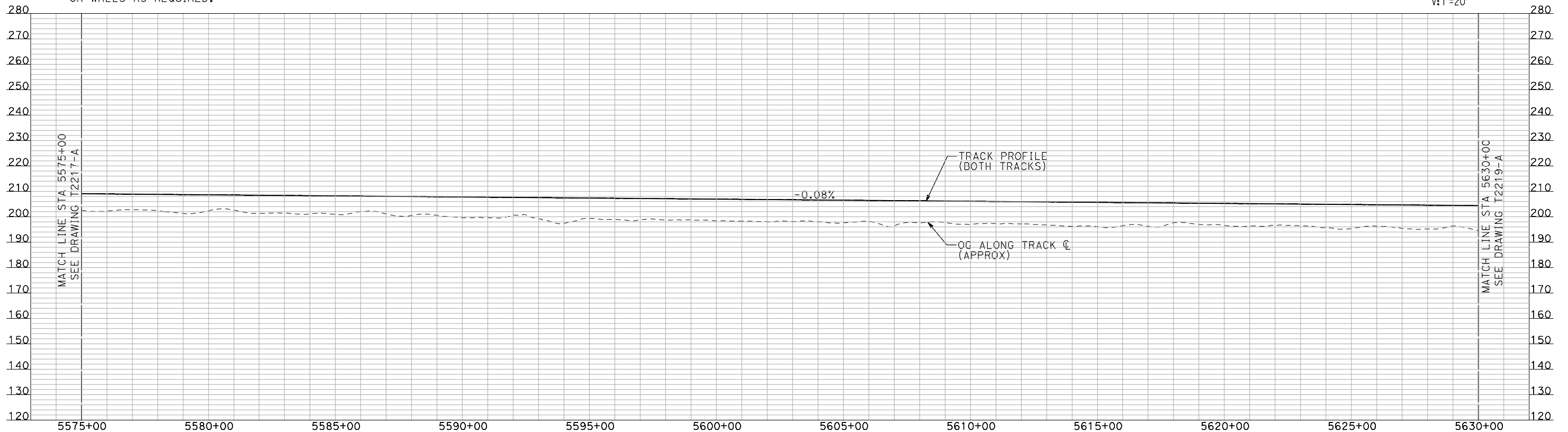
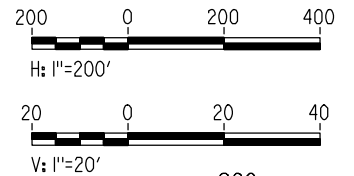
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



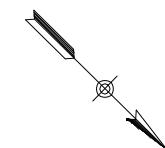
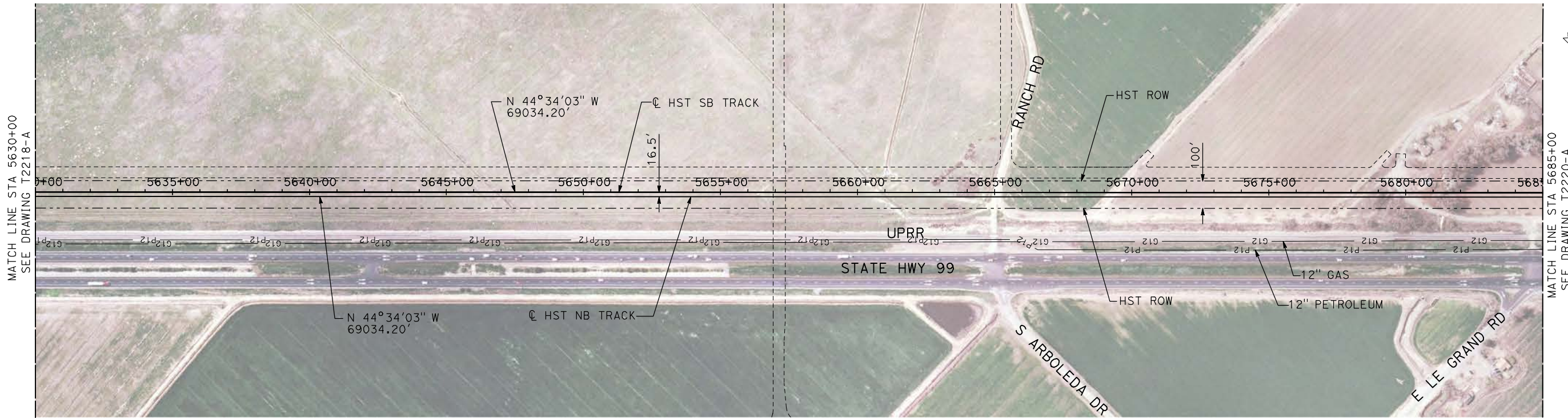
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5575+00 TO STA 5630+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2218-A
SCALE
AS SHOWN
SHEET NO.
OF

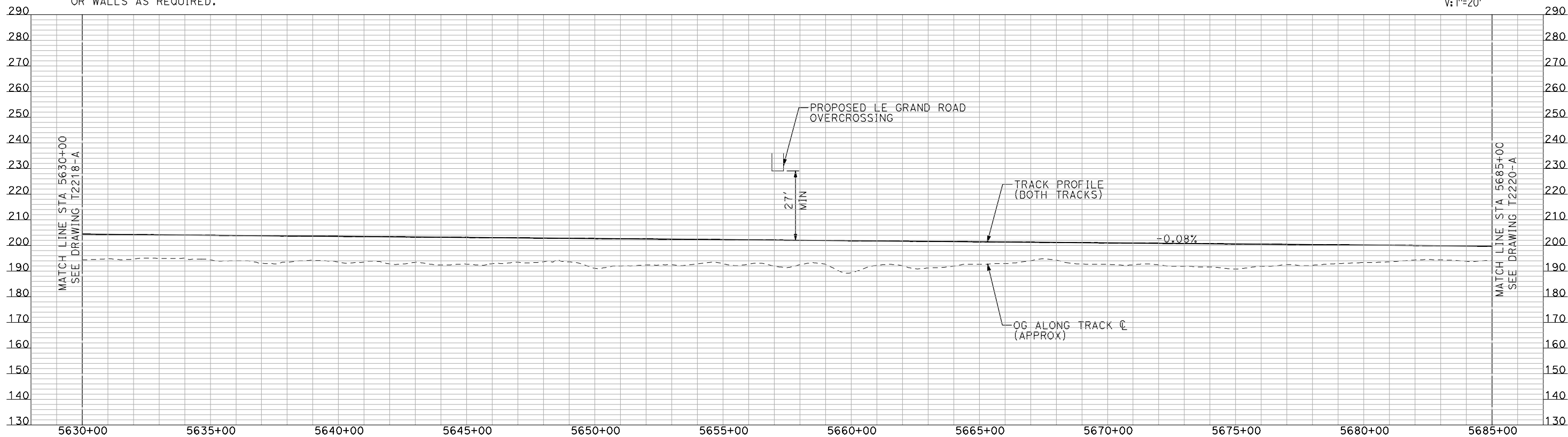
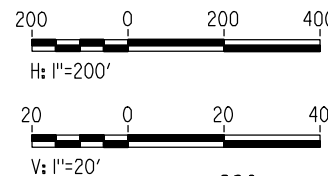
7/21/2011 4:02:50 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2218-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:03:06 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2219-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



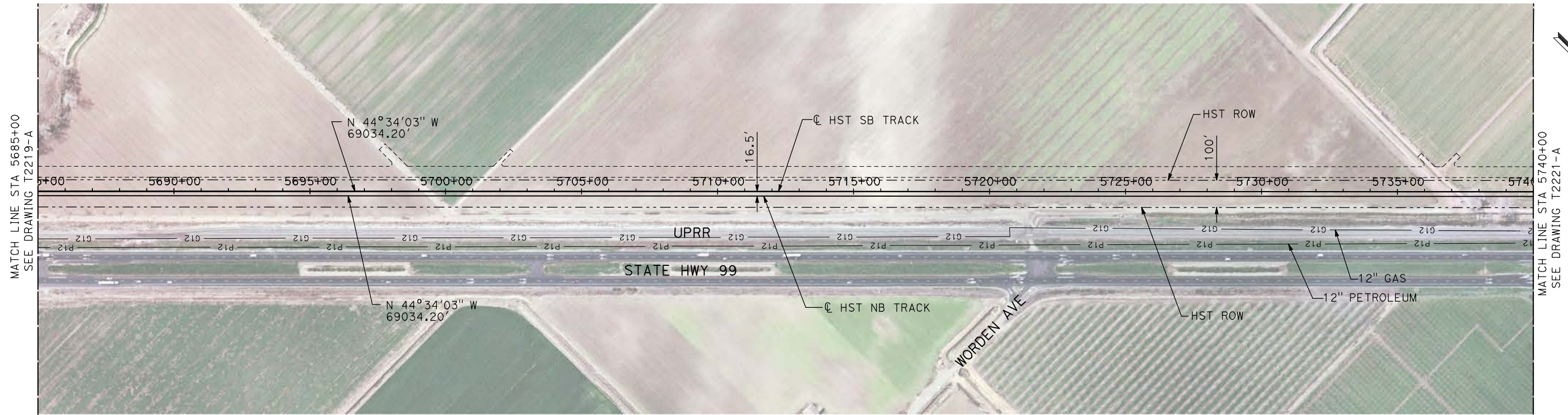
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5630+00 TO STA 5685+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2219-A
SCALE
AS SHOWN
SHEET NO.
OF

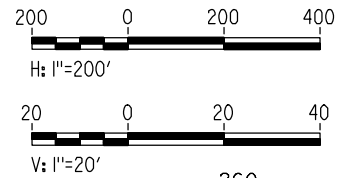
7/21/2011 4:03:24 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2220-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MERCED CONNECTION

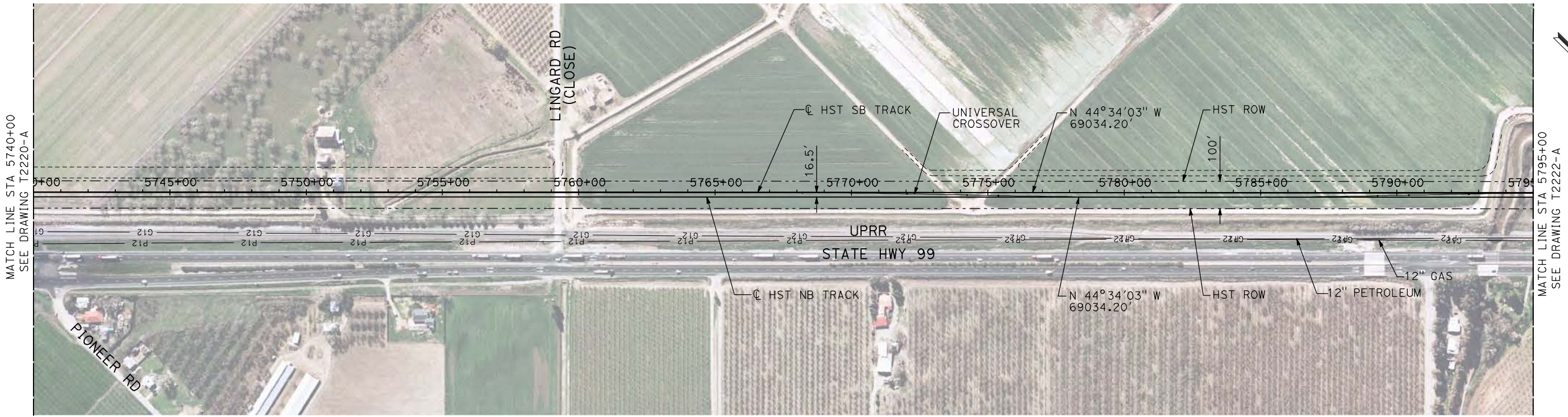
PLAN AND PROFILE
STA 5685+00 TO STA 5740+00

CONTRACT NO.
HSR06-007

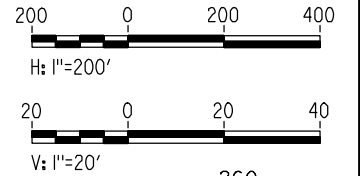
DRAWING NO.
T2220-A

SCALE
AS SHOWN

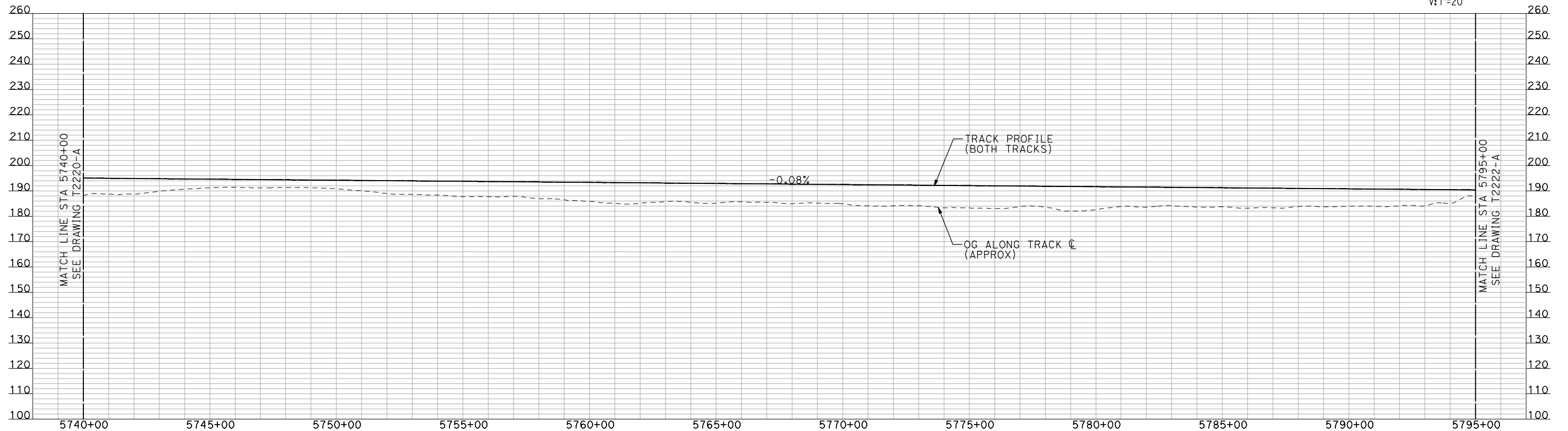
SHEET NO.
OF



PLAN



- NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

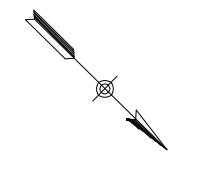
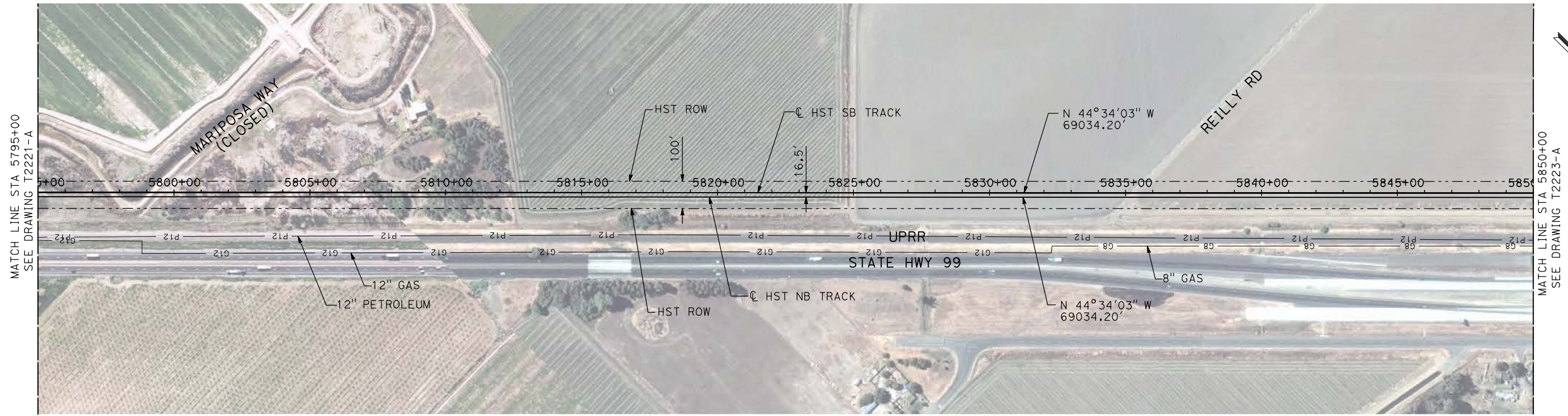
UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5740+00 TO STA 5795+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2221-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 4:03:40 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_24\MF-T-2221-A.dgn machadoe

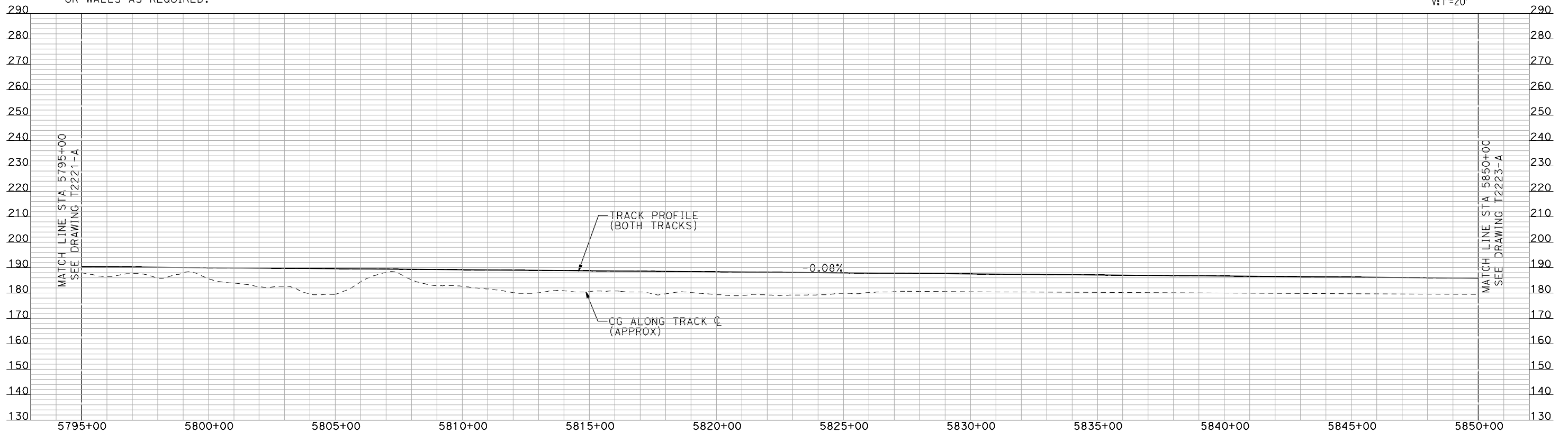
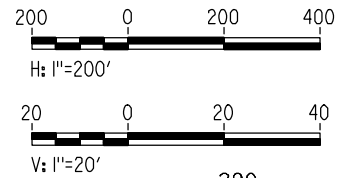
7/21/2011 4:03:55 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2222-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MERCED CONNECTION

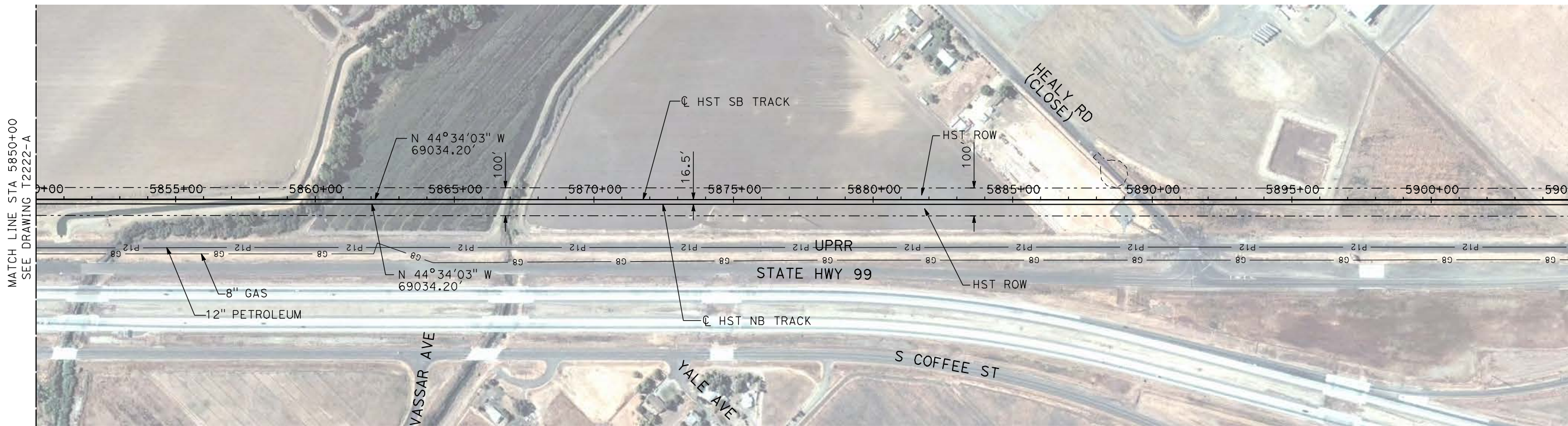
PLAN AND PROFILE
STA 5795+00 TO STA 5850+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2222-A

SCALE
AS SHOWN

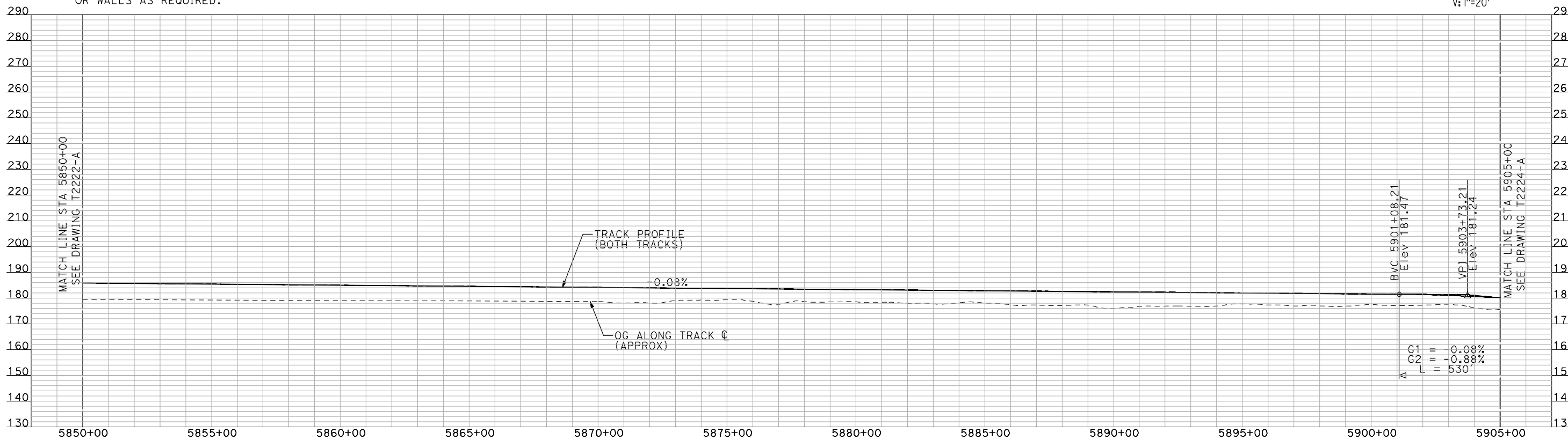
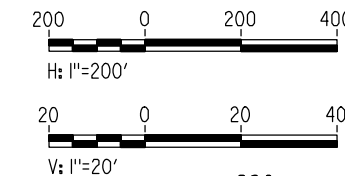
SHEET NO.
OF



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

7/21/2011 4:04:07 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2223-A.dgn machadoe

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MERCED CONNECTION
PLAN AND PROFILE
STA 5850+00 TO STA 5905+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2223-A
SCALE
AS SHOWN
SHEET NO.
OF

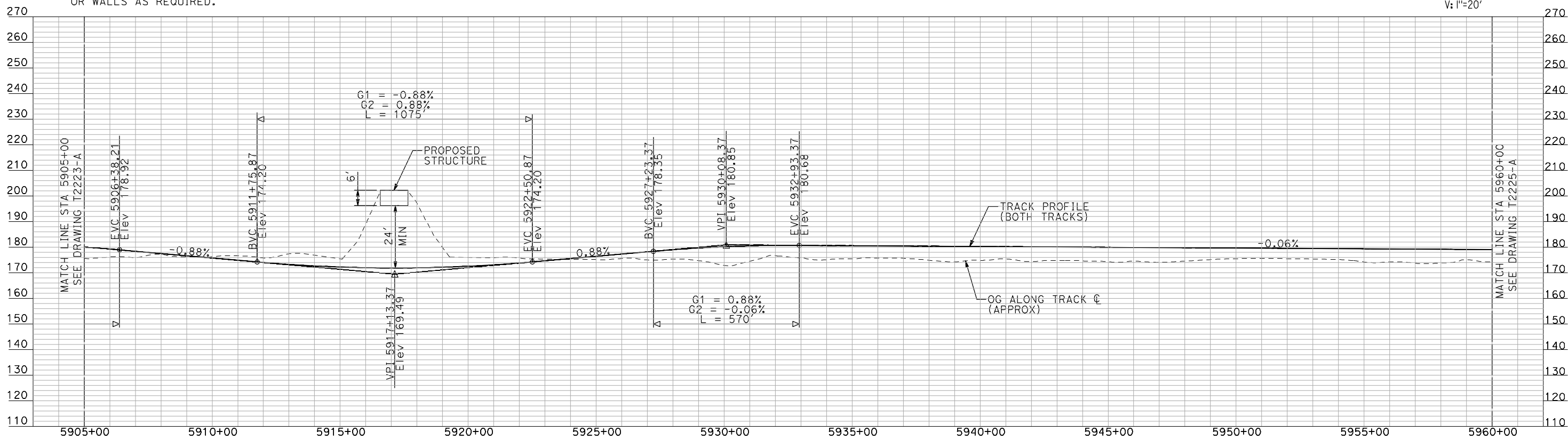
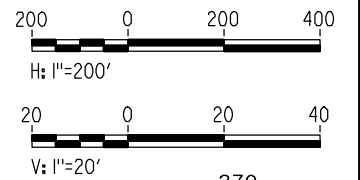
7/21/2011 4:04:19 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2224-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5905+00 TO STA 5960+00

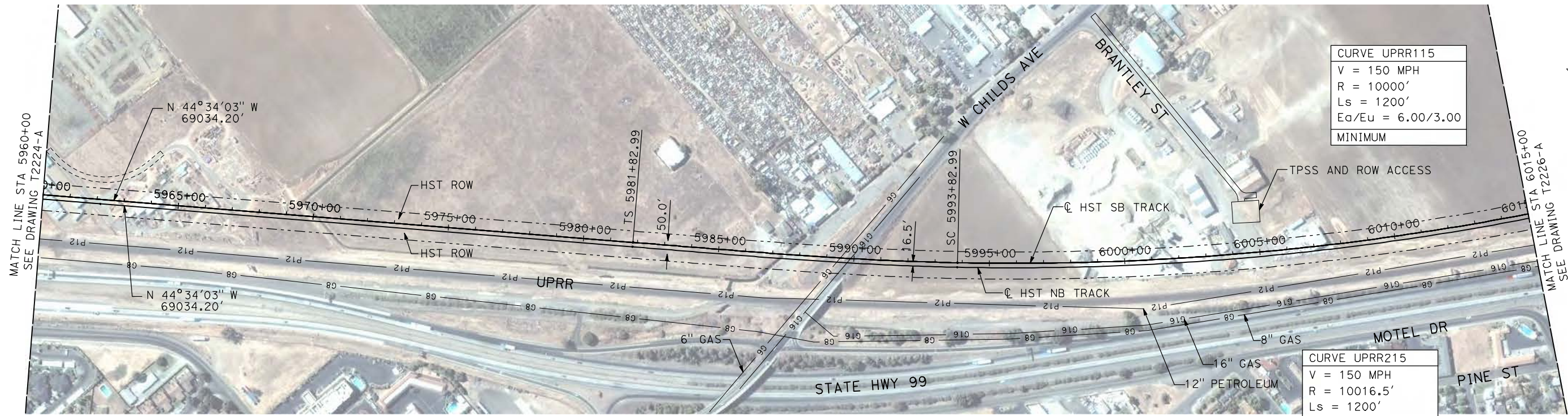
CONTRACT NO.
HSR06-007

DRAWING NO.
T2224-A

SCALE
AS SHOWN

SHEET NO.
OF

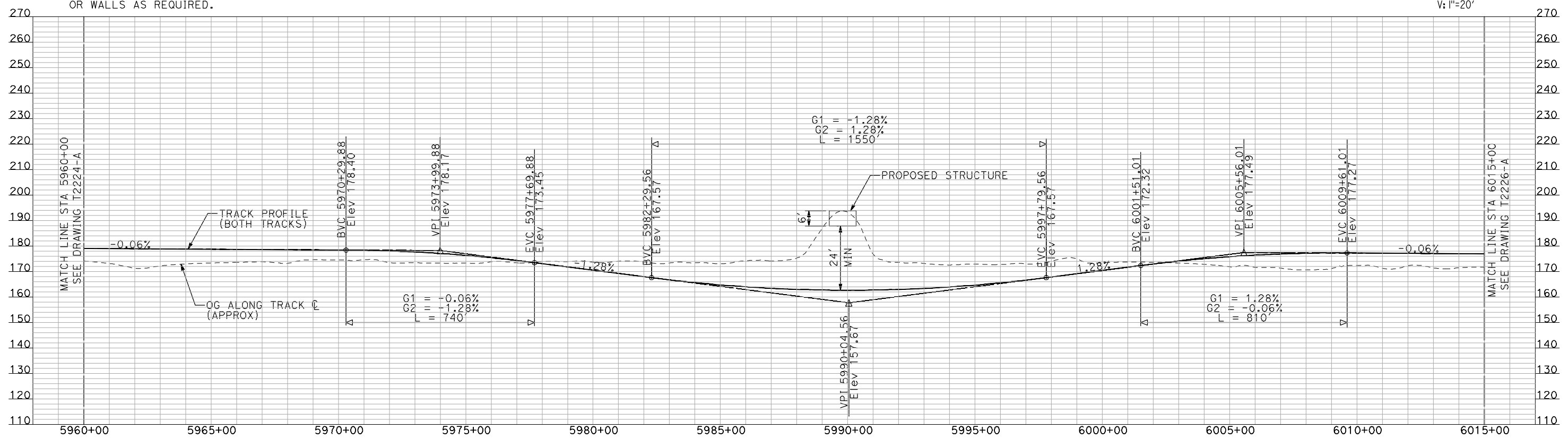
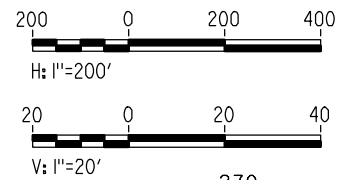
7/21/2011 4:04:32 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\uprr_ave_21\WF-T-2225-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

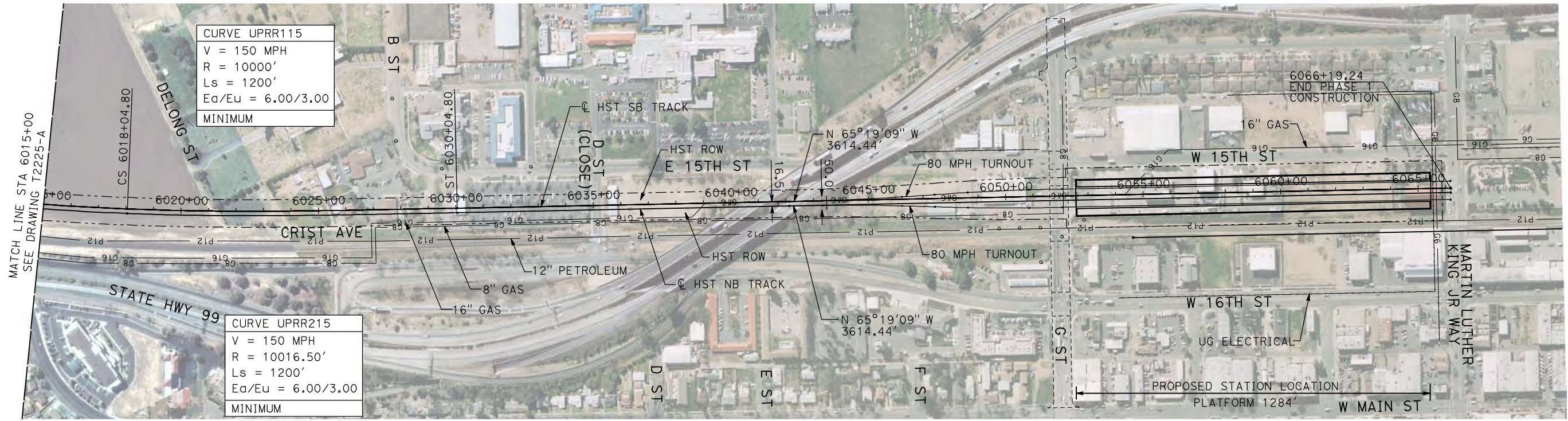
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MERCED CONNECTION
PLAN AND PROFILE
STA 5960+00 TO STA 6015+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2225-A
SCALE
AS SHOWN
SHEET NO.
OF

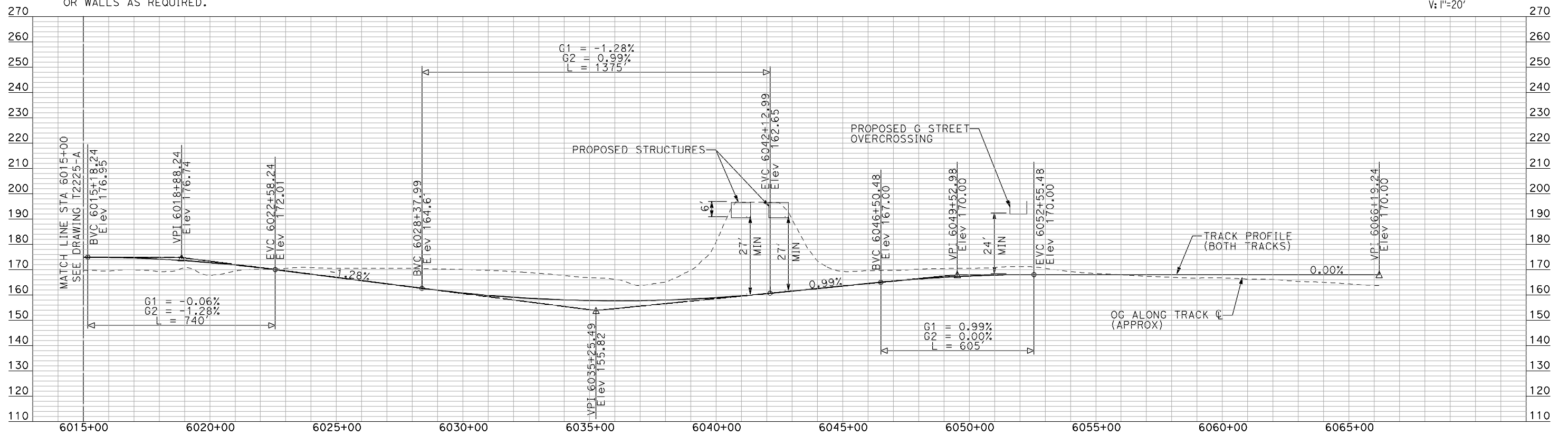
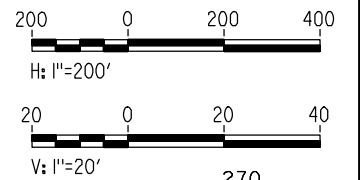
7/21/2011 4:04:49 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2226-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

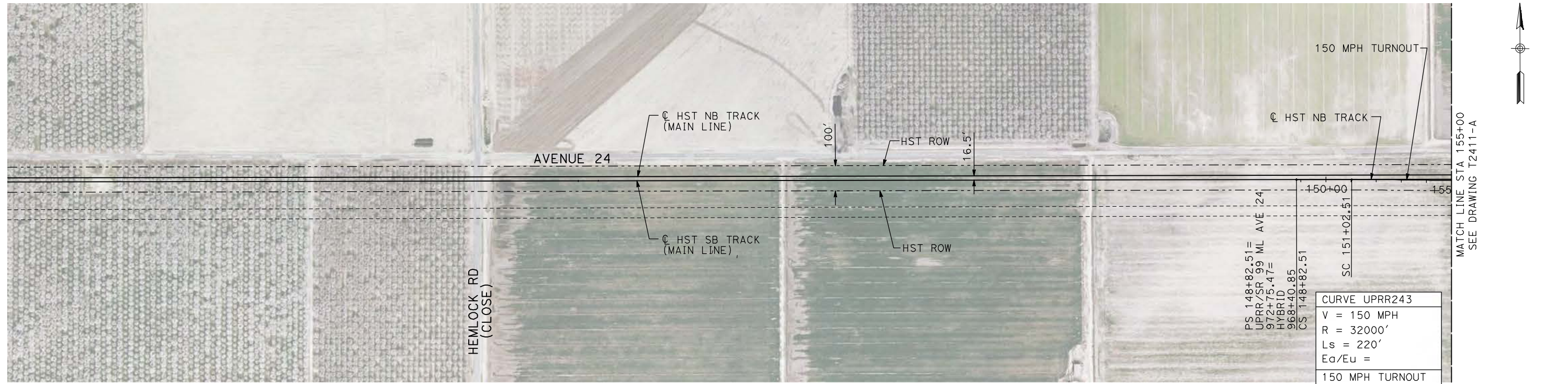
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MERCED CONNECTION
PLAN AND PROFILE
STA 6015+00 TO STA 6066+19.24

CONTRACT NO.
HSR06-007
DRAWING NO.
T2226-A
SCALE
AS SHOWN
SHEET NO.
OF

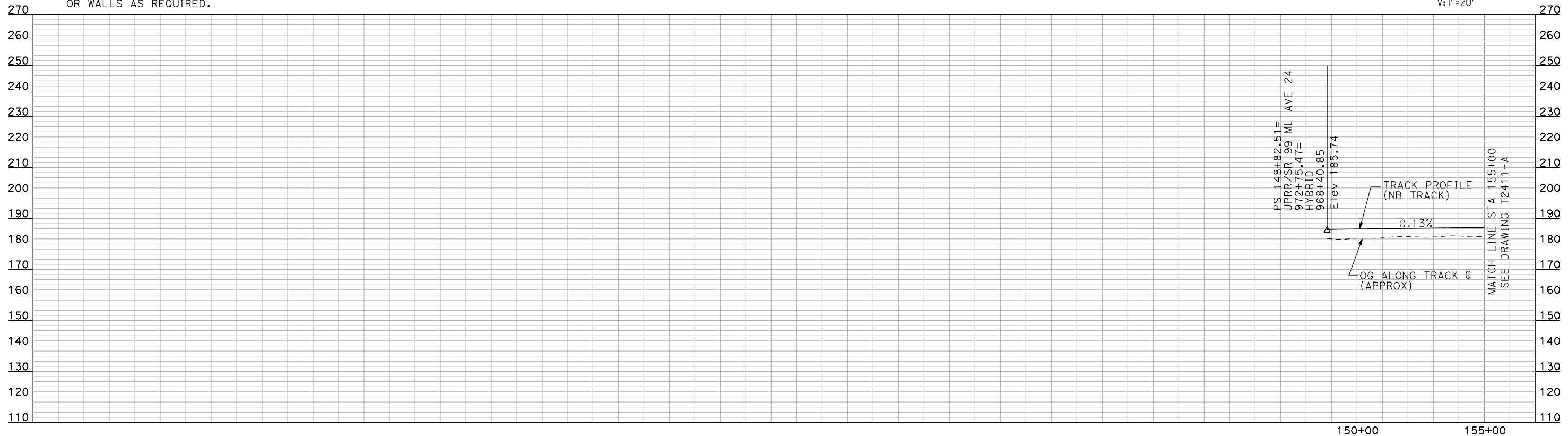
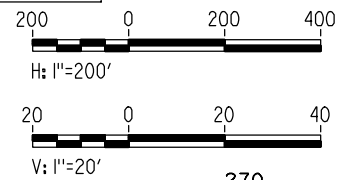
7/21/2011 4:09:50 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2410-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

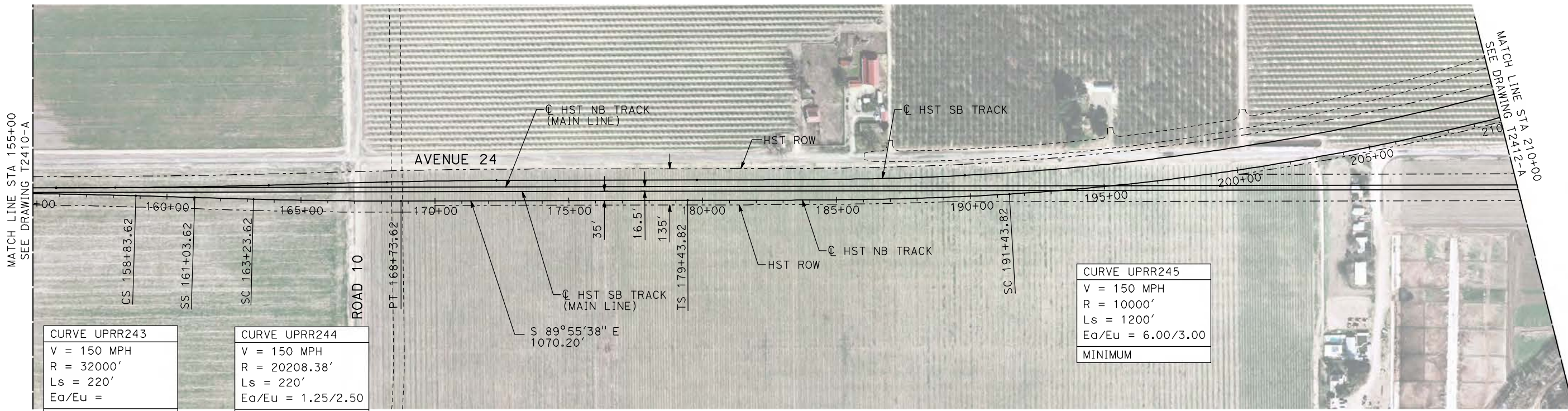
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID WYE - NB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 148+82.51 TO STA 155+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2410-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 4:10:03 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2411-A.dgn machadoe



CURVE UPRR243	
V = 150 MPH	
R = 32000'	
Ls = 220'	
Ea/Eu =	
150 MPH TURNOUT	

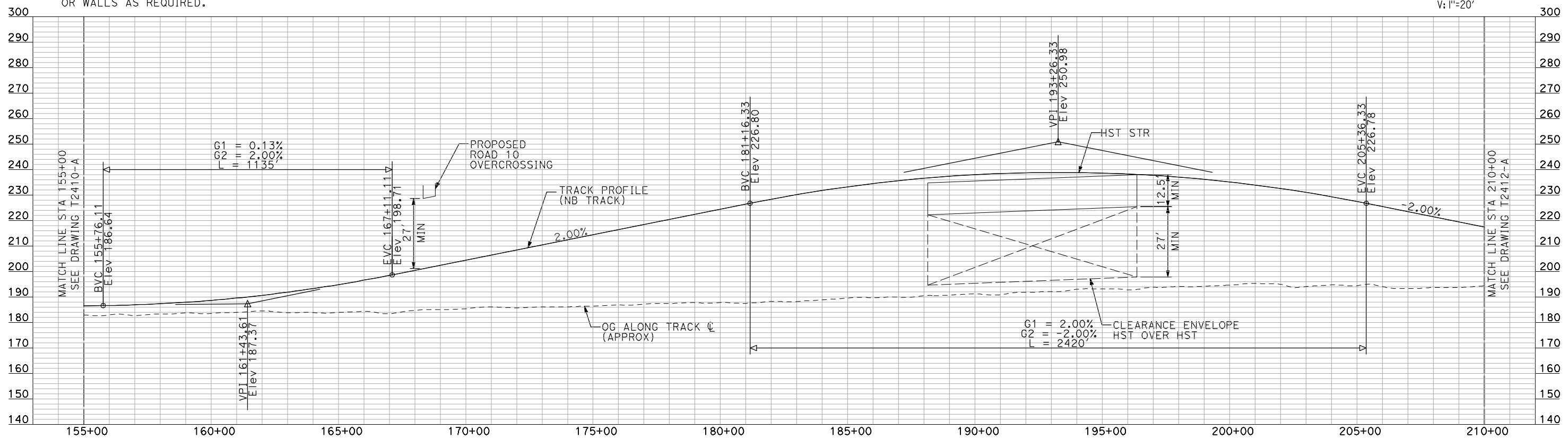
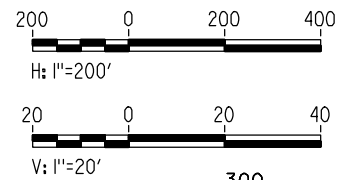
CURVE UPRR244	
V = 150 MPH	
R = 20208.38'	
Ls = 220'	
Ea/Eu = 1.25/2.50	
150 MPH TURNOUT	

CURVE UPRR245	
V = 150 MPH	
R = 10000'	
Ls = 1200'	
Ea/Eu = 6.00/3.00	
MINIMUM	

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



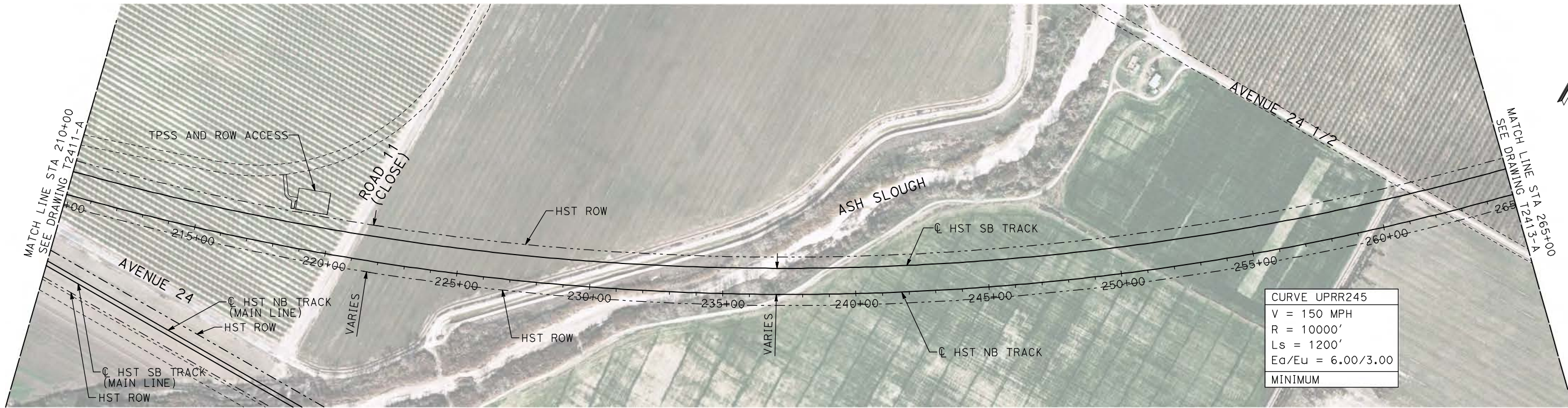
PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

DESIGNED BY A. SHIELDS	RECORD SET 15% DESIGN SUBMITTAL NOT FOR CONSTRUCTION	 <small>Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811</small> 	 CALIFORNIA <small>HIGH-SPEED RAIL AUTHORITY</small>	CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO UPRR/SR 99 WCDO/HYBRID WYE - NB CONNECTION AVENUE 24 PLAN AND PROFILE STA 155+00 TO STA 210+00	CONTRACT NO. HSR06-007
DRAWN BY H. SULLIVAN					DRAWING NO. T2411-A
CHECKED BY A. BOONE					SCALE AS SHOWN
IN CHARGE A. BOONE					SHEET NO. ### OF ###
DATE 07/20/2011					

REV	DATE	BY	CHK	APP	DESCRIPTION

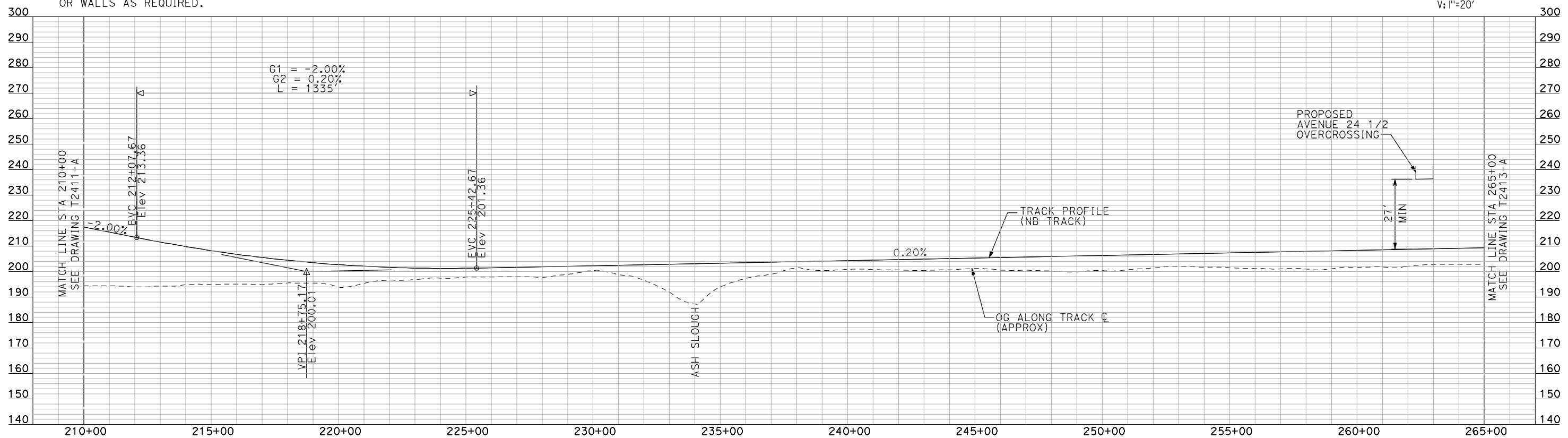
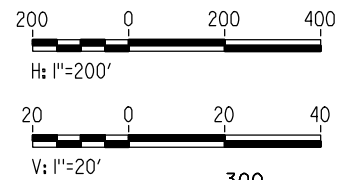
7/21/2011 4:10:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2412-A.dgn machadoe



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

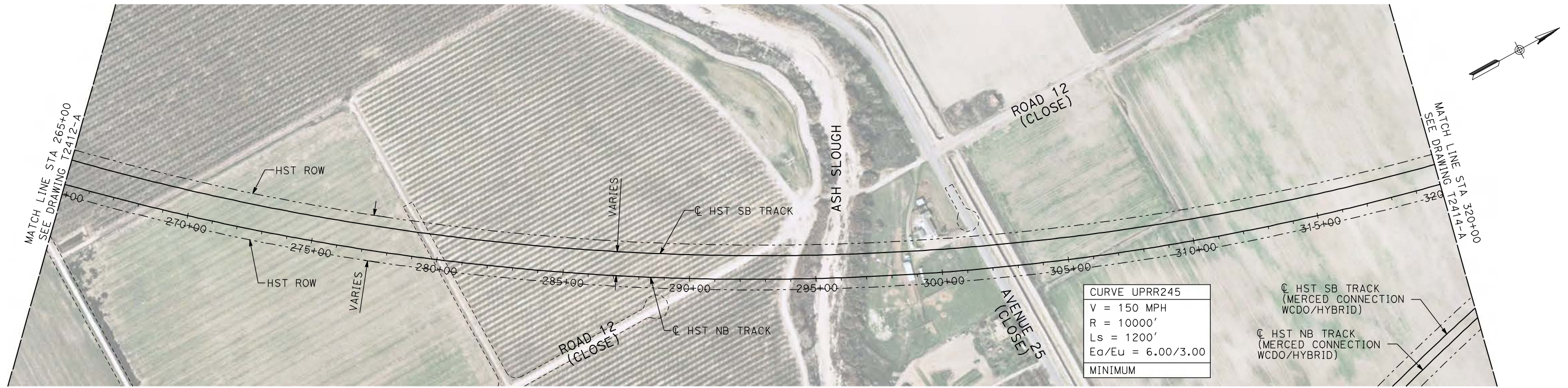
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID WYE - NB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 210+00 TO STA 265+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2412-A
SCALE
AS SHOWN
SHEET NO.
OF

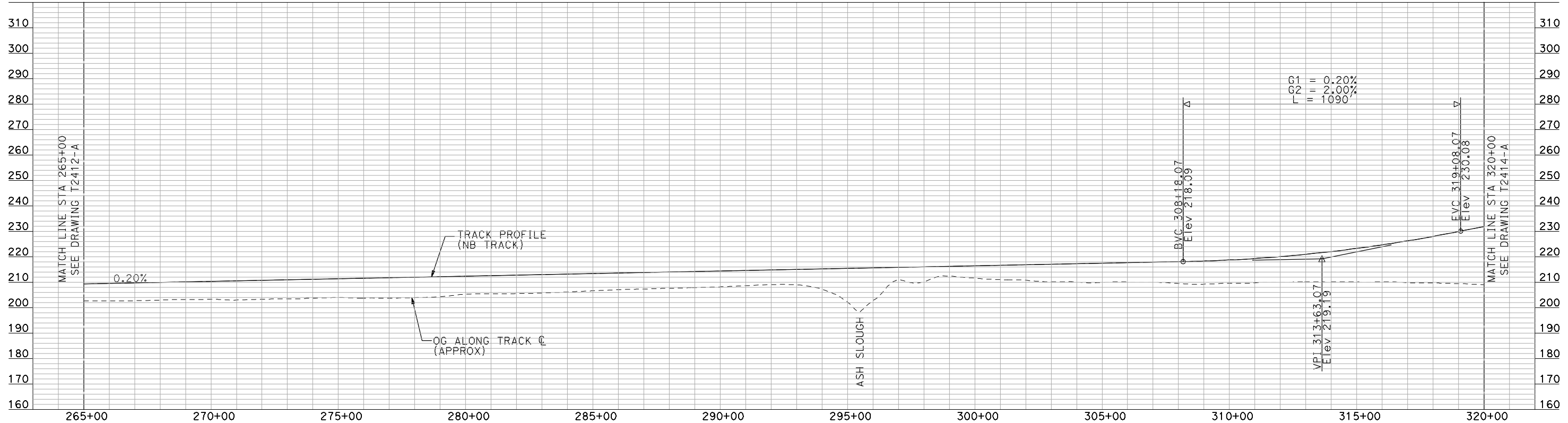
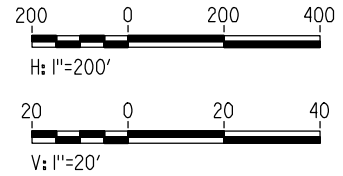
7/21/2011 4:10:42 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2413-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

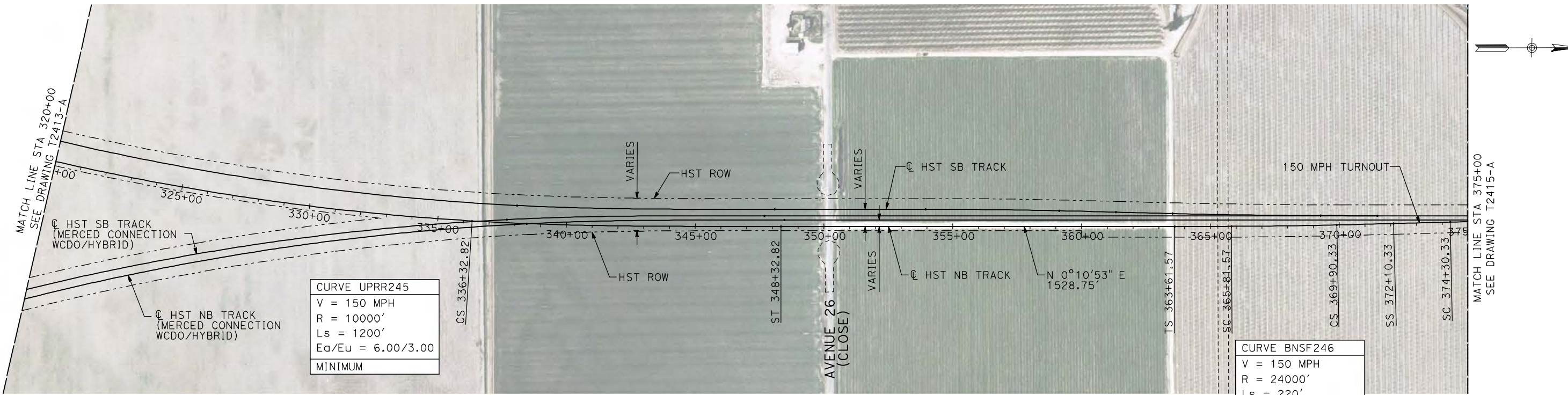
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID WYE - NB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 265+00 TO STA 320+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2413-A
SCALE
AS SHOWN
SHEET NO.
OF

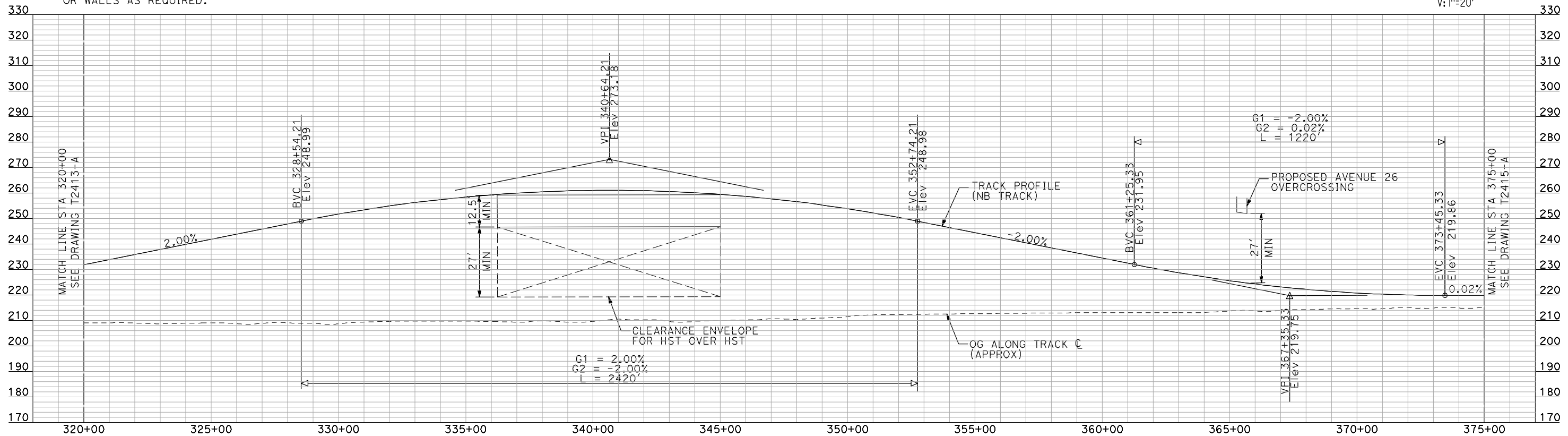
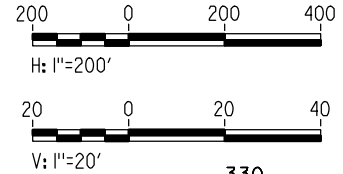
7/21/2011 4:11:01 PM i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2414-A.dgn



NOTES:

- ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
 DRAWN BY
H. SULLIVAN
 CHECKED BY
A. BOONE
 IN CHARGE
A. BOONE
 DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

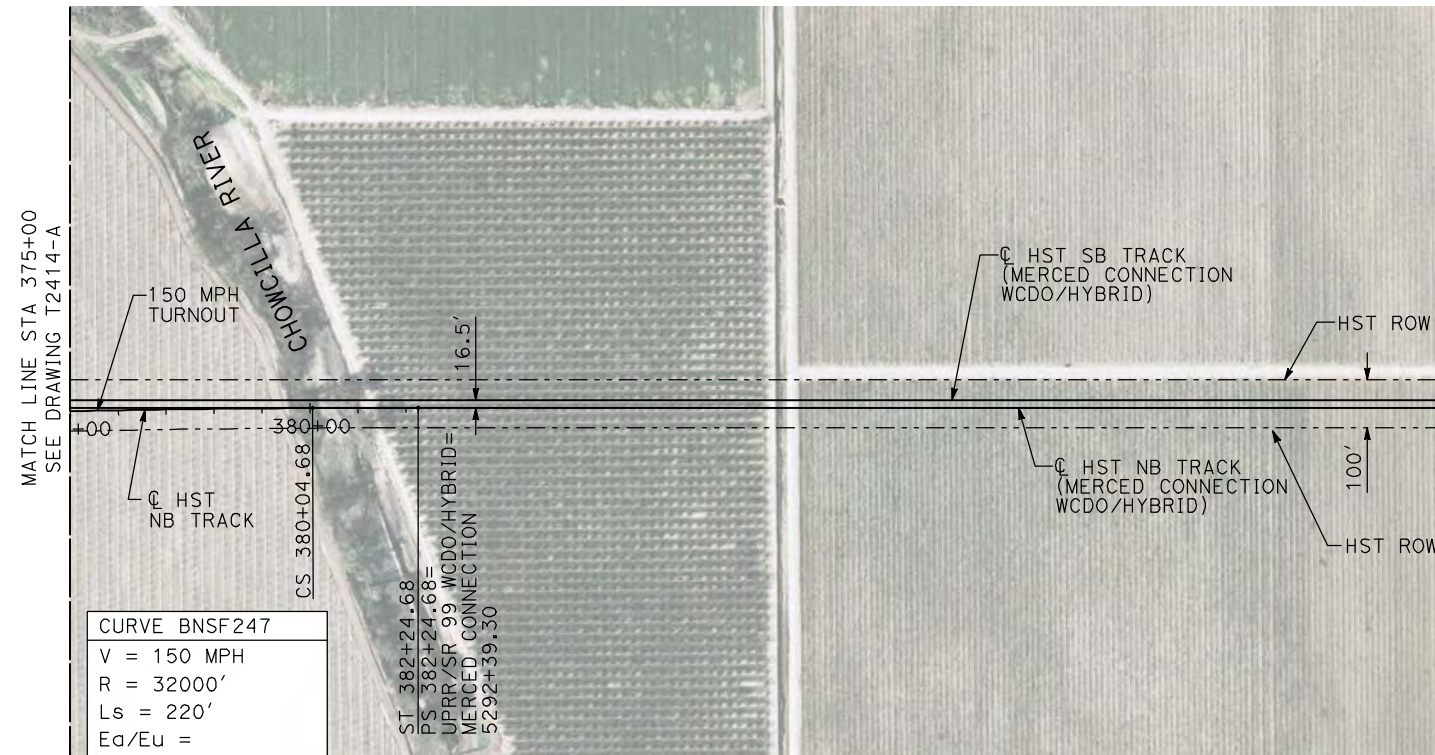
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 WCDO/HYBRID WYE - NB CONNECTION
 AVENUE 24
 PLAN AND PROFILE
 STA 320+00 TO STA 375+00

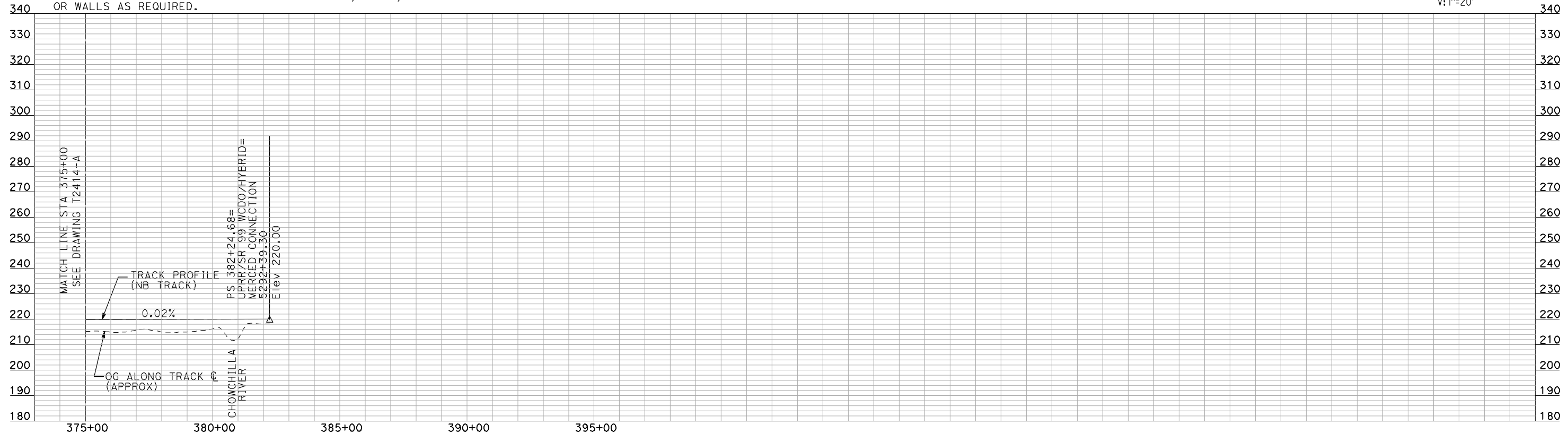
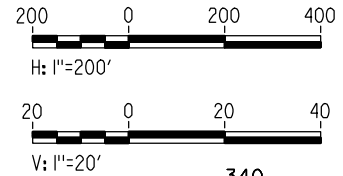
CONTRACT NO.
HSR06-007
 DRAWING NO.
T2414-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/21/2011 4:11:20 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2415-A.dgn machadoe



PLAN

- NOTES:
- ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 - TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

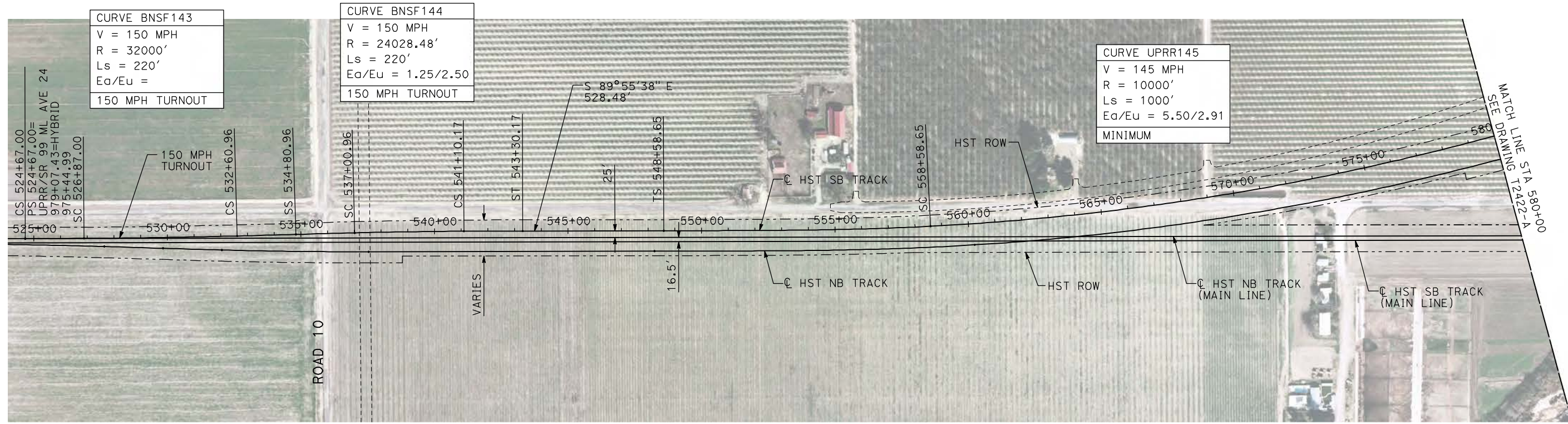
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID WYE- NB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 375+00 TO STA 382+24.68

CONTRACT NO.
HSR06-007
DRAWING NO.
T2415-A
SCALE
AS SHOWN
SHEET NO.
OF

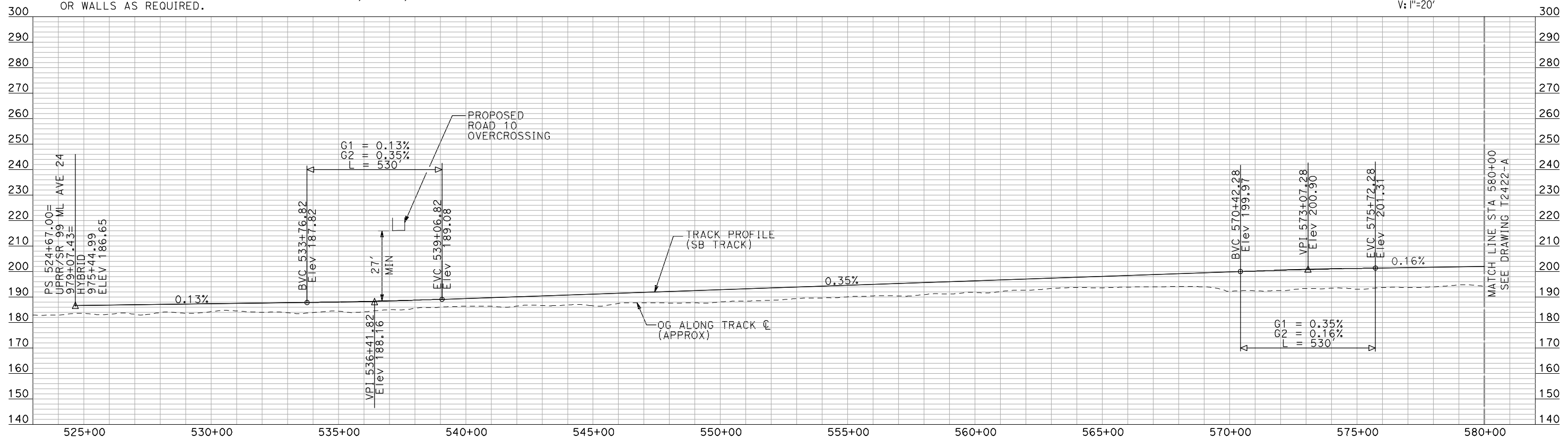
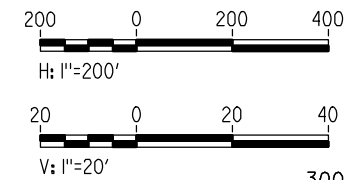
7/21/2011 4:11:31 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2421-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

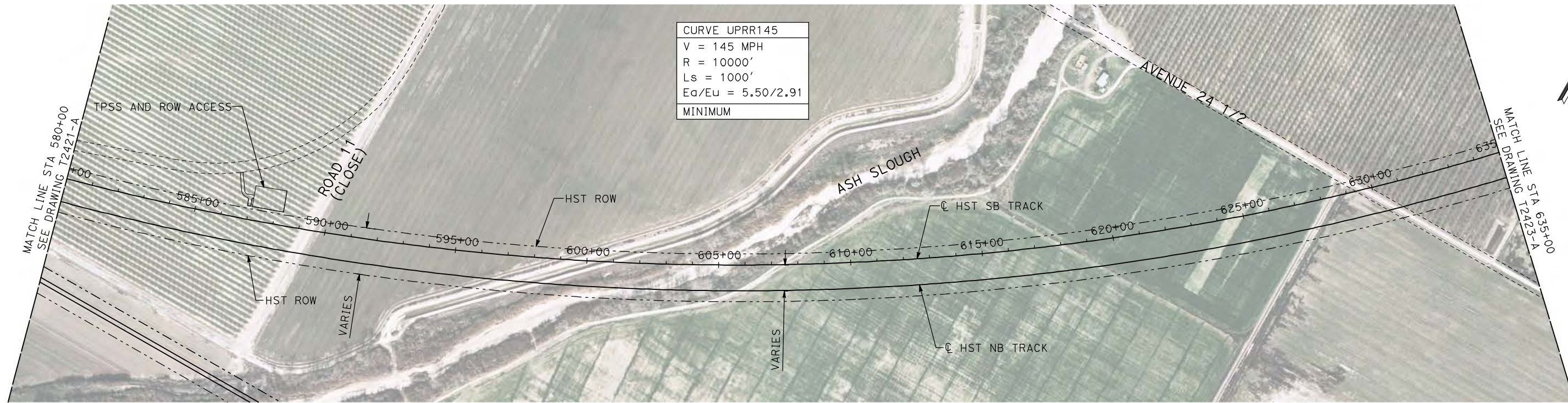
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCO/HYBRID WYE - SB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 524+67 TO STA 580+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2421-A
SCALE
AS SHOWN
SHEET NO.
OF

7/21/2011 4:11:46 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2422-A.dgn machadoe

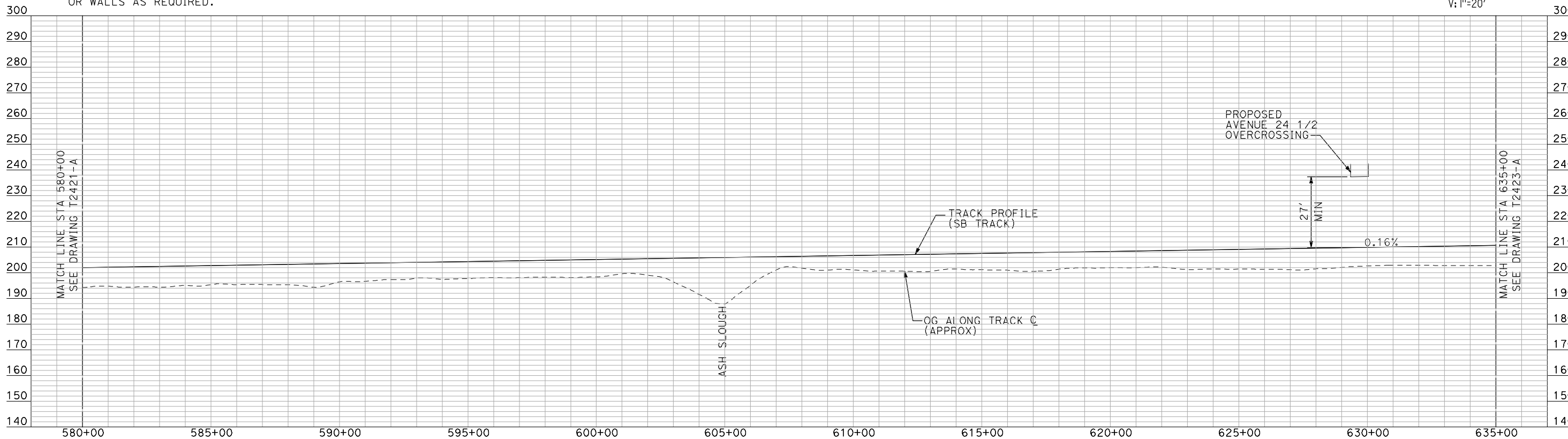
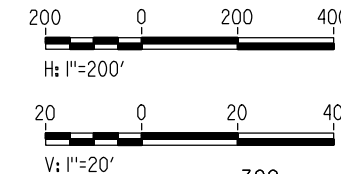


CURVE UPRR145
V = 145 MPH
R = 10000'
Ls = 1000'
Ea/Eu = 5.50/2.91
MINIMUM

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

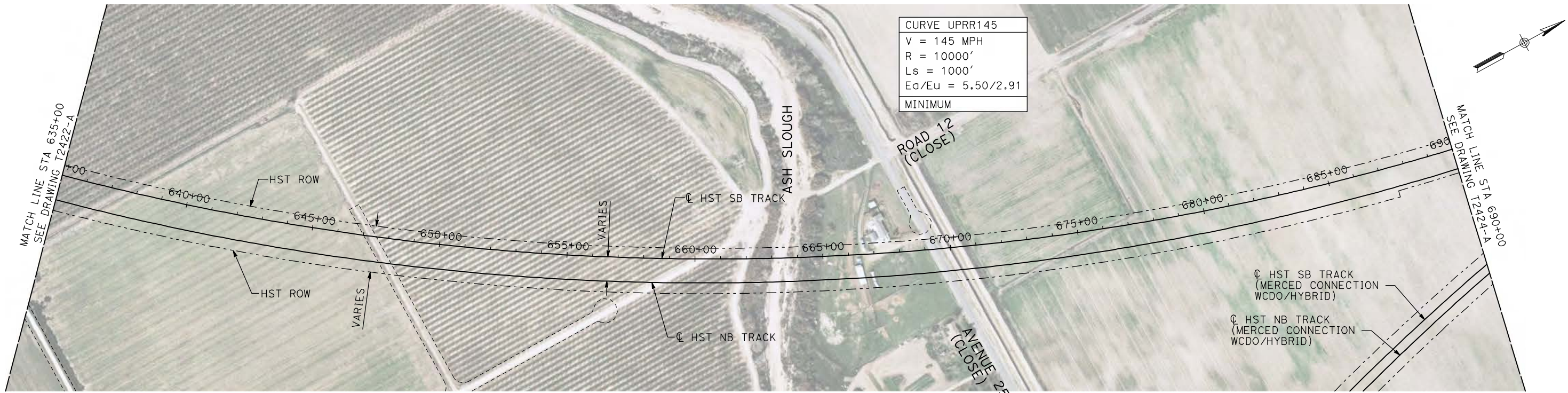
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
UPRR/SR 99 WCO/HYBRID WYE - SB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 580+00 TO STA 635+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2422-A
SCALE
AS SHOWN
SHEET NO.
OF

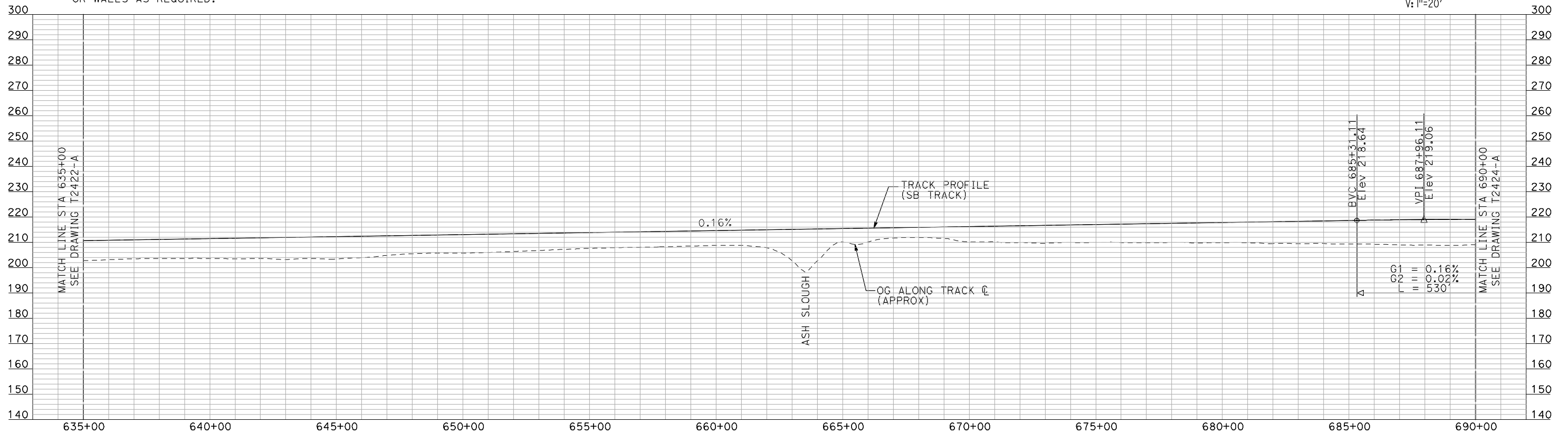
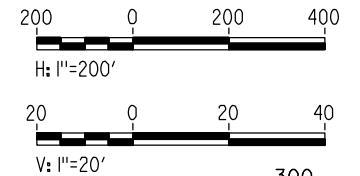
7/21/2011 4:12:08 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 24\MF-T-2423-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WCD0/HYBRID WYE - SB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 635+00 TO STA 690+00

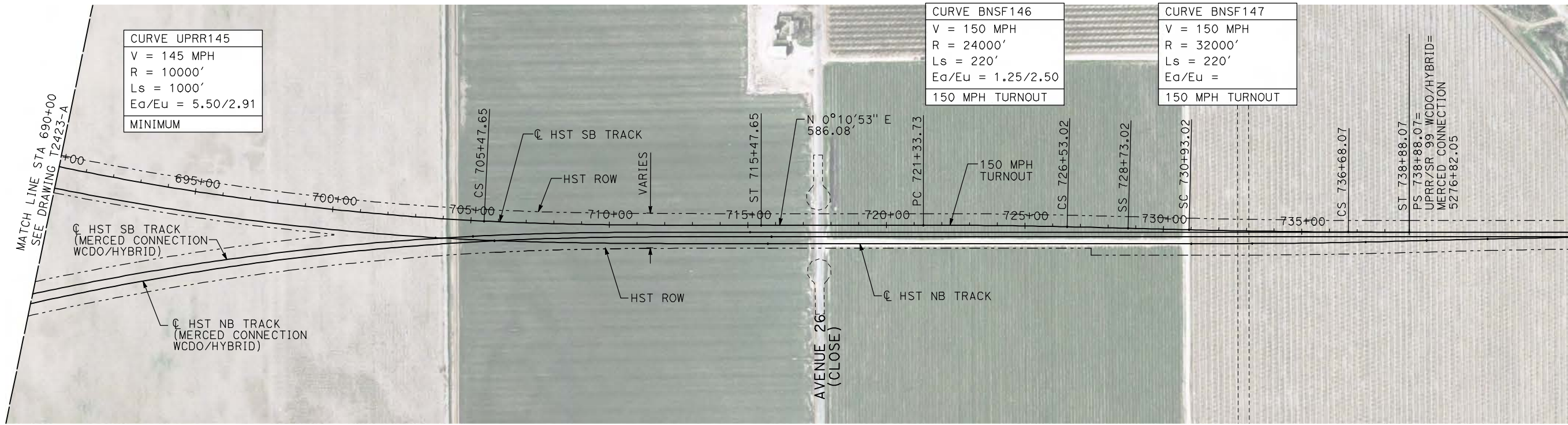
CONTRACT NO.
HSR06-007

DRAWING NO.
T2423-A

SCALE
AS SHOWN

SHEET NO.
OF

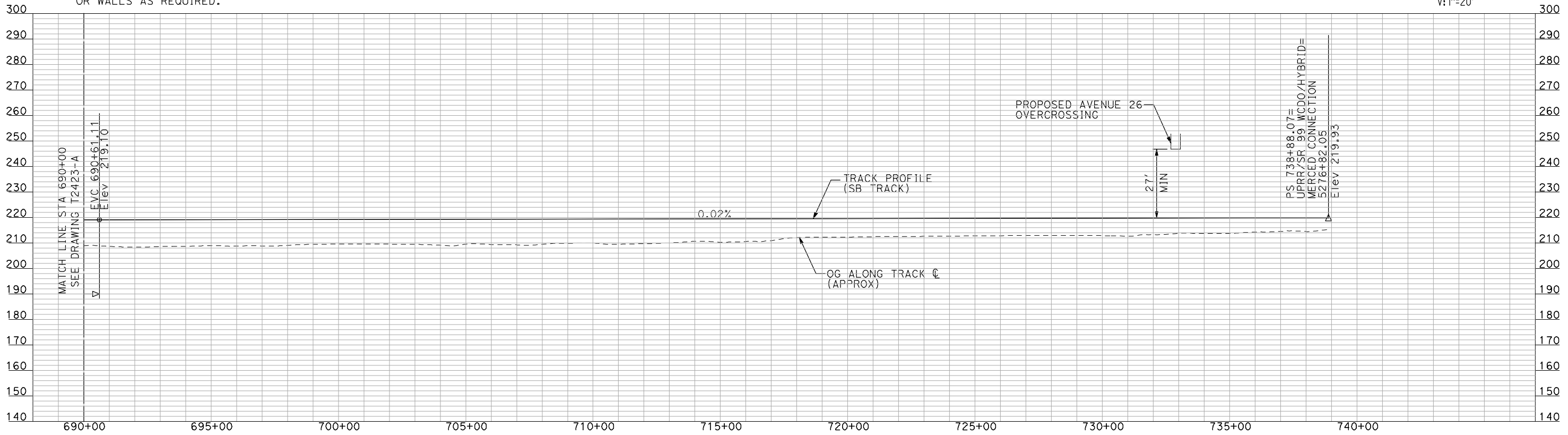
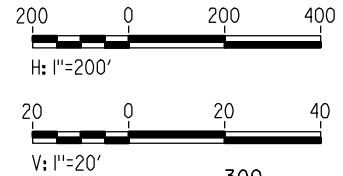
7/21/2011 4:12:22 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_24\MF-T-2424-A.dgn



NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS
DRAWN BY
H. SULLIVAN
CHECKED BY
A. BOONE
IN CHARGE
A. BOONE
DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WCDO/HYBRID WYE - SB CONNECTION
AVENUE 24
PLAN AND PROFILE
STA 690+00 TO STA 738+88.07

CONTRACT NO.	HSR06-007
DRAWING NO.	T2424-A
SCALE	AS SHOWN
SHEET NO.	### OF ###