

CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

DRAFT

Merced to Fresno Section
Draft EIR-EIS

Volume III:

Section F – Alignment Plans

Hybrid Alternative with Ave 21 Wye

August 2011



CALIFORNIA
High-Speed Rail Authority



U.S. Department of Transportation
Federal Railroad Administration



7/22/2011 12:28:39 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Civil\Sheet\TRACKWORK\DEIR\HYBRID_21\MF-T-0010-A.dgn

Table with 5 columns: SHT NO., DWG NO., DRAWING TITLE LINE 3, DRAWING TITLE LINE 4, DRAWING TITLE LINE 5, DRAWING TITLE LINE 6. Lists drawing sheets for Avenue 21 alignment and track geometry.

Table with 5 columns: SHT NO., DWG NO., DRAWING TITLE LINE 3, DRAWING TITLE LINE 4, DRAWING TITLE LINE 5, DRAWING TITLE LINE 6. Lists drawing sheets for Avenue 21 profile and UPRR/SR 99 connection.

Revision table with columns: 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, AVENUE 21, INDEX OF DRAWINGS, SHEET 1 OF 2

Table with columns: CONTRACT NO. (HSR06-007), DRAWING NO. (T0010-A), SCALE (NONE), SHEET NO. (OF ###)

SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
	T2260-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 105+00 TO STA 125+00
	T2261-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 125+00 TO STA 180+00
	T2262-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 180+00 TO STA 235+00
	T2263-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 235+00 TO STA 290+00
	T2264-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 290+00 TO STA 345+00
	T2265-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 345+00 TO STA 400+00
	T2266-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 400+00 TO STA 416+33.89

7/22/2011 12:28:46 PM i:\cnsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\Trackwork\deir\HYBRID_21\MF-T-0011-A.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**

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

CH2MHILL



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

HYBRID ALIGNMENT
AVENUE 21
INDEX OF DRAWINGS
SHEET 2 OF 2

CONTRACT NO.
HSR06-007

DRAWING NO.
T0011-A

SCALE
NONE

SHEET NO.
OF ###

ABBREVIATIONS

ALIGNMENT

HORIZONTAL	
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

VERTICAL	
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:

1. 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.
2. SEE STRUCTURE PLANS FOR LIMITS AND DETAILS OF VIADUCTS, STREAM CROSSINGS, RETAINING WALLS AND OTHER HST STRUCTURES.
3. SEE ROADWAY PLANS FOR ROADWAY RELOCATIONS, GRADE SEPARATIONS, AND MODIFICATIONS TO STATE HIGHWAY FACILITIES.
4. UTILITIES INDICATED ON THE PLANS ARE FOR REFERENCE ONLY. SEE "UTILITIES CONFLICT MEMO" FOR ADDITIONAL INFORMATION AND PROPOSED RELOCATION CONCEPTS.
5. 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

CH2M HILL



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 6:10:05 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-0101-A.dgn



END CONSTRUCTION
PHASE 1 6066+19.24
MERCED CONNECTION

MERCED

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

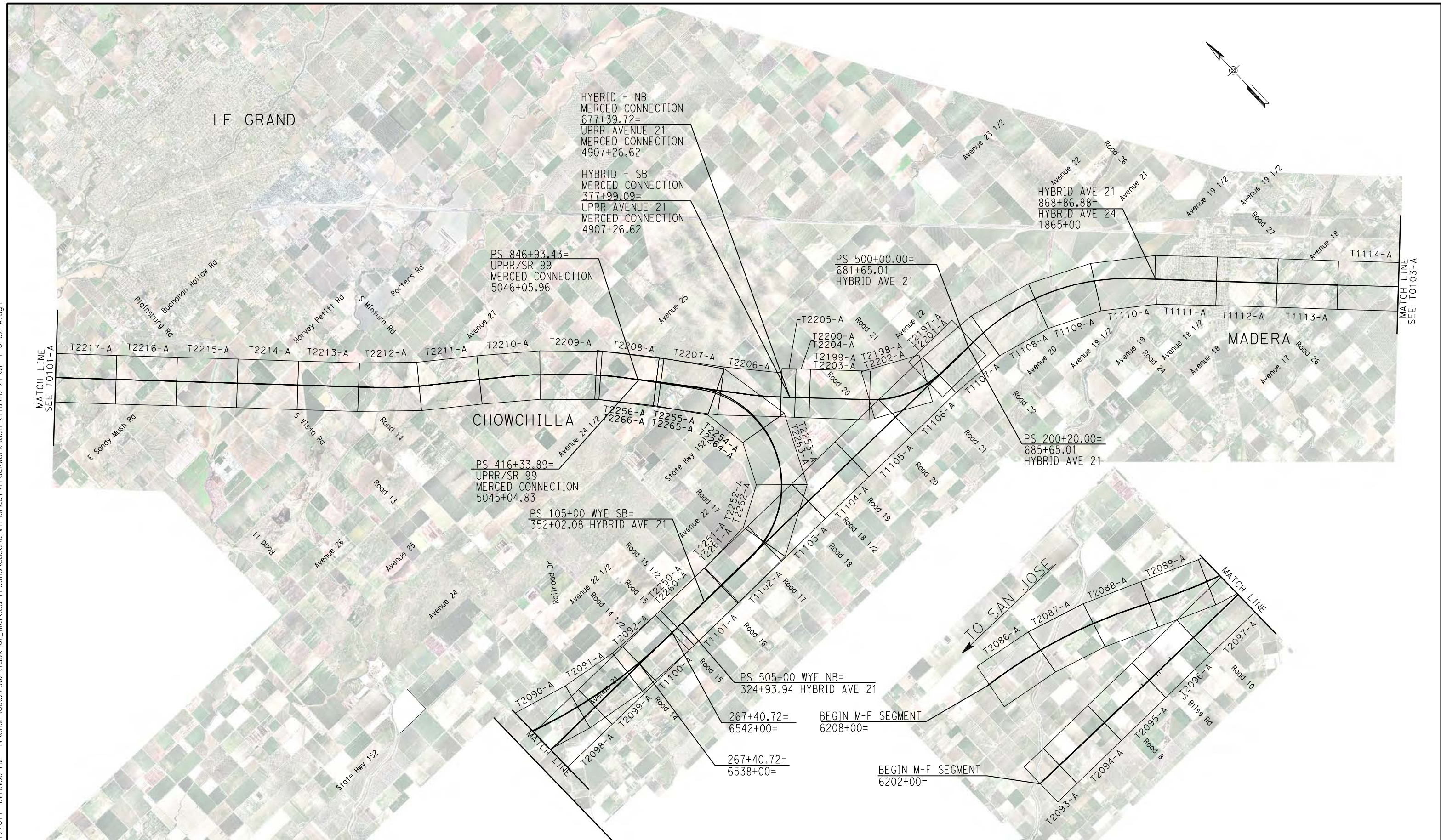
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 21
KEY MAP
SHEET 1 OF 3

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

7/21/2011 6:10:58 PM i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-0102-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 21

KEY MAP
SHEET 2 OF 3

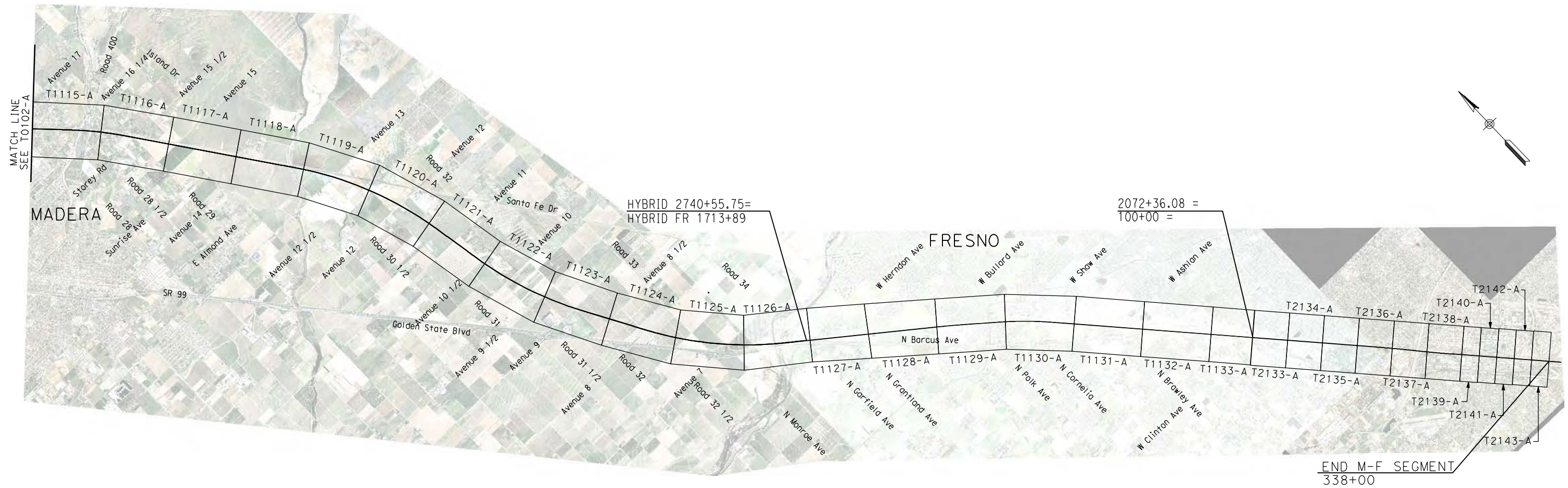
CONTRACT NO.
HSR06-007

DRAWING NO.
T0102-A

SCALE
NO SCALE

SHEET NO.
OF

7/21/2011 6:12:22 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID 21\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

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

CH2MHILL



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 21
KEY MAP
SHEET 3 OF 3

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

TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")		
				NORTHING	EASTING										START ANGLE	END ANGLE	
	TANGENT	POB	5367+74.09	1858039.02	6512080.45		10097.07							S 89°46'01" E			
	TANGENT	TS	5468+71.16	1857997.95	6522177.45												
SR-1-SB	CLOTHOID	TS	5468+71.16	1857997.95	6522177.45												
	CLOTHOID	SPI	5479+71.18	1857993.48	6523277.46		1650.00	1°03'02"	824.99	2.52					S 89°46'01" E	S 88°43'00" E	
	CLOTHOID	SC	5485+21.16	1857981.16	6523827.34												
	ARC	SC	5485+21.16	1857981.16	6523827.34												
	ARC	PI	5543+57.72	1857850.43	6529662.42	45000.00	11608.30	14°46'49"			250	4.00	1.56		S 88°43'00" E	S 73°56'11" E	
	ARC	CC		1812992.45	6522819.41												
	ARC	CS	5601+29.47	1856235.43	6535271.09												
	CLOTHOID	CS	5601+29.47	1856235.43	6535271.09												
	CLOTHOID	SPI	5606+79.48	1856083.24	6535799.63		1650.00	1°03'02"	824.99	2.52					S 73°56'11" E	S 72°53'10" E	
	CLOTHOID	ST	5617+79.47	1855759.53	6536850.94												
	TANGENT	ST	5617+79.47	1855759.53	6536850.94		3900.12							S 72°53'10" E			
	TANGENT	TS	5656+79.58	1854611.83	6540578.37												
SR-2-SB	CLOTHOID	TS	5656+79.58	1854611.83	6540578.37												
	CLOTHOID	SPI	5667+79.60	1854288.12	6541629.68		1650.00	1°03'00"	824.99	2.52					S 72°53'10" E	S 73°56'10" E	
	CLOTHOID	SC	5673+29.58	1854135.93	6542158.22												
	ARC	SC	5673+29.58	1854135.93	6542158.22												
	ARC	PI	5732+61.69	1852494.45	6547858.7	45016.50	11796.24	15°00'50"			250	4.00	1.55		S 73°56'10" E	S 88°57'00" E	
	ARC	CC		1897394.68	6554614.76												
	ARC	CS	5791+25.83	1852385.74	6553789.81												
	CLOTHOID	CS	5791+25.83	1852385.74	6553789.81												
	CLOTHOID	SPI	5796+75.84	1852375.66	6554339.73		1650.00	1°03'00"	824.99	2.52					S 88°57'00" E	S 90°00'00" E	
	CLOTHOID	ST	5807+75.83	1852375.66	6554339.75												
	TANGENT	ST	5807+75.83	1852375.66	6554339.75		28794.12							S 90°00'00" E			
	TANGENT	TS	6095+69.95	1852375.66	6584233.87												
SR-3-SB	CLOTHOID	TS	6095+69.95	1852375.66	6584233.87												
	CLOTHOID	SPI	6106+69.97	1852375.66	6585333.89		1650.00	1°03'02"	824.99	2.52					S 90°00'00" E	S 88°56'58" E	
	CLOTHOID	SC	6112+19.95	1852365.58	6585883.81												
	ARC	SC	6112+19.95	1852365.58	6585883.81												
	ARC	PI	6204+28.65	1852196.76	6595090.97	45000.00	18166.59	23°07'50"			250	4.00	1.56		S 88°56'58" E	S 65°49'09" E	
	ARC	CC		1807373.14	6585058.86												
	ARC	CS	6293+86.54	1848424.71	6603491.68												
	CLOTHOID	CS	6293+86.54	1848424.71	6603491.68												
	CLOTHOID	SPI	6299+36.56	1848199.41	6603993.44		1650.00	1°03'02"	824.99	2.52					S 65°49'09" E	S 64°46'07" E	
	CLOTHOID	ST	6310+36.54	1847730.5	6604988.51												
	TANGENT	ST	6310+36.54	1847730.5	6604988.51		1353.50							S 64°46'07" E			
	TANGENT	TS	6323+90.04	1847153.54	6606212.88												

7/21/2011 1:15:03 PM c:\pwworking\ptgwiseb\p0037225\dms66818\JM-TJ-7401A.dgn

P0037225

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO.
HSR08-05

DRAWING NO.
TJ7401A

SCALE
NO SCALE

SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
SR-4-SB	CLOTHOID	TS	6323+90.04	1847153.54	6606212.88											
	CLOTHOID	SPI	6334+90.06	1846684.64	6607207.95		1650.00	1°03'00"	824.99	2.52					S 64°46'07" E	S 65°49'08" E
	CLOTHOID	SC	6340+40.04	1846459.33	6607709.7											
	ARC	SC	6340+40.04	1846459.33	6607709.7											
	ARC	PI	6434+27.70	1842613.92	6616273.64	45016.50	18510.04	23°33'33"			250	4.00	1.55		S 65°49'08" E	S 89°22'40" E
	ARC	CC		1887525.83	6626149.55											
	ARC	CS	6525+50.08	1842511.99	6625660.74											
	CLOTHOID	CS	6525+50.08	1842511.99	6625660.74											
	CLOTHOID	SPI	6531+00.10	1842506.01	6626210.73		1650.00	1°03'00"	824.99	2.52					S 89°22'40" E	N 89°34'20" E
	CLOTHOID	ST	6542+00.08	1842514.23	6627310.72											

7/21/2011 1:15:17 PM c:\pw_working\ptgwiseb\p0037225\dms66818\JM-TJ-7402A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO.
HSR08-05
DRAWING NO.
TJ7402A
SCALE
NO SCALE
SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")		
				NORTHING	EASTING										START ANGLE	END ANGLE	
	TANGENT	POB	5367+74.09	1858055.52	6512080.52		10096.92							S 89°46'01" E			
	TANGENT	TS	5468+71.01	1858014.45	6522177.36												
SR-1-NB	CLOTHOID	TS	5468+71.01	1858014.45	6522177.36												
	CLOTHOID	SPI	5479+71.23	1858009.98	6523277.57		1650.30	1°03'01"	825.14	2.52					S 89°46'01" E	S 88°43'00" E	
	CLOTHOID	SC	5485+21.31	1857997.66	6523827.55												
	ARC	SC	5485+21.31	1857997.66	6523827.55												
	ARC	PI	5543+60.16	1857866.9	6529664.94	45016.50	11612.86	14°46'50"			250	4.00	1.55		S 88°43'00" E	S 73°56'10" E	
	ARC	CC		1812992.45	6522819.41												
	ARC	CS	5601+34.18	1856251.25	6535275.8												
	CLOTHOID	CS	5601+34.18	1856251.25	6535275.8												
	CLOTHOID	SPI	5606+84.30	1856099.02	6535804.44		1650.30	1°03'01"	825.14	2.52					S 73°56'10" E	S 72°53'10" E	
	CLOTHOID	ST	5617+84.48	1855775.26	6536855.94												
	TANGENT	ST	5617+84.48	1855775.26	6536855.94		3900.12							S 72°53'10" E			
	TANGENT	TS	5656+84.59	1854627.56	6540583.37												
SR-2-NB	CLOTHOID	TS	5656+84.59	1854627.56	6540583.37												
	CLOTHOID	SPI	5667+84.41	1854303.91	6541634.49		1649.70	1°03'01"	824.84	2.52					S 72°53'10" E	S 73°56'10" E	
	CLOTHOID	SC	5673+34.29	1854151.74	6542162.93												
	ARC	SC	5673+34.29	1854151.74	6542162.93												
	ARC	PI	5732+64.07	1852510.93	6547861.18	45000.00	11791.62	15°00'49"			250	4.00	1.56		S 73°56'10" E	S 88°56'59" E	
	ARC	CC		1897394.68	6554614.76												
	ARC	CS	5791+25.91	1852402.24	6553789.96												
	CLOTHOID	CS	5791+25.91	1852402.24	6553789.96												
	CLOTHOID	SPI	5796+75.83	1852392.16	6554339.78		1649.70	1°03'01"	824.84	2.52					S 88°56'59" E	S 90°00'00" E	
	CLOTHOID	ST	5807+75.61	1852392.16	6555439.6												
	TANGENT	ST	5807+75.61	1852392.16	6555439.6		28794.12							S 90°00'00" E			
	TANGENT	TS	6095+69.73	1852392.16	6584233.72												
SR-3-NB	CLOTHOID	TS	6095+69.73	1852392.16	6584233.72												
	CLOTHOID	SPI	6106+69.95	1852392.16	6585333.94		1650.30	1°03'01"	825.14	2.52					S 90°00'00" E	S 88°56'59" E	
	CLOTHOID	SC	6112+20.03	1852382.08	6585883.96												
	ARC	SC	6112+20.03	1852382.08	6585883.96												
	ARC	PI	6204+32.27	1852213.23	6595094.66	45016.50	18173.56	23°07'51"			250	4.00	1.55		S 88°56'59" E	S 65°49'08" E	
	ARC	CC		1807373.14	6585058.86												
	ARC	CS	6293+93.59	1848439.7	6603498.58												
	CLOTHOID	CS	6293+93.59	1848439.7	6603498.58												
	CLOTHOID	SPI	6299+43.71	1848214.36	6604000.42		1650.30	1°03'01"	825.14	2.52					S 65°49'08" E	S 64°46'07" E	
	CLOTHOID	ST	6310+43.89	1847745.37	6604995.68												
	TANGENT	ST	6310+43.89	1847745.37	6604995.68		1353.50							S 64°46'07" E			
	TANGENT	TS	6323+97.39	1847168.41	6606220.04												

7/21/2011 1:15:31 PM c:\pw_working\ptgwiseb\p0037225\dms66818\JM-TJ-7403A.dgn

P0037225

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO.
HSR08-05

DRAWING NO.
TJ7403A

SCALE
NO SCALE

SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
SR-4-NB	CLOTHOID	TS	6323+97.39	1847168.41	6606220.04											
	CLOTHOID	SPI	6334+97.21	1846699.58	6607214.94		1649.70	1°03'01"	824.84	2.52					S 64°46'07" E	S 65°49'08" E
	CLOTHOID	SC	6340+47.09	1846474.32	6607716.6											
	ARC	SC	6340+47.09	1846474.32	6607716.6											
	ARC	PI	6434+31.15	1842630.41	6616277.26	45000.00	18502.95	23°33'31"			250	4.00	1.56		S 65°49'08" E	S 89°22'40" E
	ARC	CC		1887525.83	6626149.55											
	ARC	CS	6525+50.04	1842528.49	6625660.77											
	CLOTHOID	CS	6525+50.04	1842528.49	6625660.77											
	CLOTHOID	SPI	6530+99.96	1842522.51	6626210.65		1649.70	1°03'01"	824.84	2.52					S 89°22'40" E	N 89°34'20" E
	CLOTHOID	ST	6541+99.74	1842530.73	6627310.44											

7/21/2011 1:15:47 PM c:\pw_working\ptgwiseb\p0037225\dms66818\JM-TJ-7404A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO.
HSR08-05

DRAWING NO.
TJ7404A

SCALE
NO SCALE

SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	A 6085+46.45	1842427.27	6581100.50		16,264.68							S 89°45'06" E		
	TANGENT	TS	A 6248+11.13	1842356.80	6597365.02											
V21-8	CLOTHOID	TS	A 6248+11.13	1842356.80	6597365.02			0°06'46"							S 89°45'06" E	
	CLOTHOID	SPI	A 6252+57.79	1842354.87	6597811.69		670.00		335	0.11						S 89°51'53" E
	CLOTHOID	SC	A 6254+81.13	1842354.34	6598035.02											
	ARC	SC	A 6254+81.13	1842354.34	6598035.02			0°14'53"								S 89°51'53" E
	ARC	PI	A 6258+49.28	1842353.47	6598403.17	170,000.00	736.31				250	1.00	0.47			N 89°53'14" E
	ARC	CC		2012353.87	6598436.51											
	ARC	CS	A 6262+17.43	1842354.20	6598771.32											
	CLOTHOID	CS	A 6262+17.43	1842354.20	6598771.32			0°06'46"								N 89°53'14" E
	CLOTHOID	SPI	A 6264+40.77	1842354.64	6598994.66		670.00		335	0.11						N 89°46'27" E
CLOTHOID	ST	A 6268+87.43	1842356.40	6599441.32												
	TANGENT	ST	A 6268+87.43	1842356.40	6599441.32		12,106.35								N 89°46'27" E	
	TANGENT	TS	A 6389+93.79	1842404.10	6611547.58											
V21-9	CLOTHOID	TS	A 6389+93.79	1842404.10	6611547.58			0°02'53"							N 89°46'27" E	
	CLOTHOID	SPI	A 6394+40.45	1842405.86	6611994.24		670.00		335	0.05						N 89°43'35" E
	CLOTHOID	SC	A 6396+63.79	1842406.92	6612217.57											
	ARC	SC	A 6396+63.79	1842406.92	6612217.57			0°07'59"								N 89°43'35" E
	ARC	PI	A 6401+27.95	1842409.14	6612681.73	400,000.00	928.33				250	0.50	0.13			N 89°35'36" E
	ARC	CC		2242402.36	6610306.54											
	ARC	CS	A 6405+92.12	1842412.43	6613145.89											N 89°35'36" E
	CLOTHOID	CS	A 6405+92.12	1842412.43	6613145.89			0°02'53"	335							N 89°32'43" E
	CLOTHOID	SPI	A 6408+15.45	1842414.02	6613369.22		670.00			0.05						
CLOTHOID	ST	A 6412+62.12	1842417.56	6613815.87												
	TANGENT	ST	A 6412+62.12	1842417.56	6613815.87		6,891.32								N 89°32'43" E	
	TANGENT	TS	A 6481+53.44	1842472.25	6620706.97											
V21-10								0°04'36"							N 89°32'43" E	
	CLOTHOID	TS	A 6481+53.44	1842472.25	6620706.97				335							
	CLOTHOID	SPI	A 6486+00.11	1842475.80	6621153.63		670.00			0.07						N 89°37'19" E
	CLOTHOID	SC	A 6488+23.44	1842477.27	6621376.96											N 89°37'19" E
	ARC	SC	A 6488+23.44	1842477.27	6621376.96	250,000.00										
	ARC	PI	A 6488+29.38	1842477.31	6621382.90		11.89				250	0.25	0.25			N 89°37'29" E
	ARC	CC		1592482.71	6623025.93											
	ARC	CS	A 6488+35.33	1842477.35	6621388.84											N 89°37'29" E
	CLOTHOID	CS	A 6488+35.33	1842477.35	6621388.84				335							
CLOTHOID	SPI	A 6490+58.66	1842478.81	6621612.17		670.00			0.07						N 89°42'06" E	
CLOTHOID	ST	A 6495+05.33	1842481.14	6622058.83												
	TANGENT	ST	A 6495+05.33	1842481.14	6622058.83		1,126.57								N 89°42'06" E	
	TANGENT	POE	A 6506+31.89	1842487.01	6623185.38											

7/21/2011 12:02:26 PM c:\pw_working\ptg\pwiseb\p0037225\dms66817\JM-TJ7903.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
DRAWN BY
J. PAZ
CHECKED BY
S. GOOLLA
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO.
HSR08-05

DRAWING NO.
TJ7903

SCALE
NO SCALE

SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")		
				NORTHING	EASTING										START ANGLE	END ANGLE	
V21-7	CLOTHOID	TS	6053+64.47	1842448.23	6579090.93												
	CLOTHOID	SPI	6058+04.48	1842448.18	6579530.95		660.02	0°03'33"	330.01	0.06					S 89°59'36" E	S 89°56'04" E	
	CLOTHOID	SC	6060+24.49	1842447.93	6579750.95												
	ARC	SC	6060+24.49	1842447.93	6579750.95												
	ARC	PI	6063+69.30	1842447.54	6580095.76	320,016.50	689.61	0°07'24"				250	0.50	0.28		S 89°56'04" E	S 89°48'39" E
	ARC	CC		1522431.64	6579384.17												
	ARC	CS	6067+14.10	1842446.4	6580440.56												
	CLOTHOID	CS	6067+14.10	1842446.4	6580440.56												
	CLOTHOID	SPI	6069+34.11	1842445.67	6580660.57		660.02	0°03'33"	330.01	0.06						S 89°48'39" E	S 89°45'06" E
	CLOTHOID	ST	6073+74.12	1842443.77	6581100.58												
	TANGENT	ST	6073+74.12	1842443.77	6581100.58		16,264.69								S 89°45'06" E		
	TANGENT	TS	6236+38.81	1842373.30	6597365.11												
V21-8	CLOTHOID	TS	6236+38.81	1842373.30	6597365.11												
	CLOTHOID	SPI	6240+85.45	1842371.37	6597811.75		669.97	0°06'46"	334.98	0.11					S 89°45'06" E	S 89°51'53" E	
	CLOTHOID	SC	6243+08.78	1842370.84	6598035.07												
	ARC	SC	6243+08.78	1842370.84	6598035.07												
	ARC	PI	6246+76.88	1842369.97	6598403.17	169,983.50	736.20	0°14'53"				250	1.00	0.47		S 89°51'53" E	N 89°53'14" E
	ARC	CC		2012353.87	6598436.51												
	ARC	CS	6250+44.98	1842370.70	6598771.28												
	CLOTHOID	CS	6250+44.98	1842370.70	6598771.28												
	CLOTHOID	SPI	6252+68.30	1842371.14	6598994.60		669.97	0°06'46"	334.98	0.11						N 89°53'14" E	N 89°46'27" E
	CLOTHOID	ST	6257+14.95	1842372.90	6599441.24												
	TANGENT	ST	6257+14.95	1842372.90	6599441.24		12,106.38								N 89°46'27" E		
	TANGENT	TS	6378+21.32	1842420.60	6611547.52												
V21-9	CLOTHOID	TS	6378+21.32	1842420.60	6611547.52												
	CLOTHOID	SPI	6382+67.98	1842422.36	6611994.17		669.99	0°02'53"	334.99	0.05					N 89°46'27" E	N 89°43'35" E	
	CLOTHOID	SC	6384+91.31	1842423.42	6612217.50												
	ARC	SC	6384+91.31	1842423.42	6612217.50												
	ARC	PI	6389+55.45	1842425.64	6612681.64	399,983.50	928.28	0°07'59"				250	0.50	0.13		N 89°43'35" E	N 89°35'36" E
	ARC	CC		2242402.36	6610306.54												
	ARC	CS	6394+19.59	1842428.93	6613145.76												
	CLOTHOID	CS	6394+19.59	1842428.93	6613145.76												
	CLOTHOID	SPI	6396+42.92	1842430.52	6613369.09		669.99	0°02'53"	334.99	0.05						N 89°35'36" E	N 89°32'43" E
	CLOTHOID	ST	6400+89.57	1842434.06	6613815.73												
	TANGENT	ST	6400+89.57	1842434.06	6613815.73		6,550.38								N 89°32'43" E		
	TANGENT	TS	6466+39.96	1842486.05	6620365.91												
V21-10	CLOTHOID	TS	6466+39.96	1842486.05	6620365.91												
	CLOTHOID	SPI	6470+86.63	1842489.59	6620812.57		670.01	0°02'18"	335.01	0.04					N 89°32'43" E	N 89°37'19" E	
	CLOTHOID	SC	6473+09.97	1842491.21	6621035.90												
	ARC	SC	6473+09.97	1842491.21	6621035.90												
	ARC	PI	6476+56.87	1842493.74	6621382.79	500,016.50	693.81	0°04'46"				250	0.25	0.25		N 89°37'19" E	N 89°37'29" E
	ARC	CC		1342487.91	6624668.96												
	ARC	CS	6480+03.77	1842495.77	6621729.69												
	CLOTHOID	CS	6480+03.77	1842495.77	6621729.69												
	CLOTHOID	SPI	6482+27.11	1842497.09	6621953.02		670.01	0°02'18"	335.01	0.04						N 89°37'29" E	N 89°42'06" E
	CLOTHOID	ST	6486+73.79	1842499.41	6622399.69												
	TANGENT	ST	6486+73.79	1842499.41	6622399.69		785.62								N 89°42'06" E		
	TANGENT	POE	6494+59.40	1842503.51	6623185.30												

7/21/2011 11:11:24 AM c:\pw_working\ptgwiseb\p0037225\dms66817\JM-TJ7906.dgn

P0037225

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
DRAWN BY
J. PAZ
CHECKED BY
S. GOOLLA
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 21
TRACK GEOMETRY DATA
SHEET 6 OF 6

CONTRACT NO.
HSR08-05

DRAWING NO.
TJ7906

SCALE
NO SCALE

SHEET NO.

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID AVE 21 MAIN LINE SB

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID201	220	19500	5.93	4.00	1350	T1107-A
HYBRID202	250	28000	6.00	2.93	2000	T1115-A
HYBRID203	250	28000	6.00	2.93	2000	T1118-A
HYBRID204	250	28016.5	6.00	2.93	2000	T1121-A
HYBRID205	250	28016.5	6.00	2.93	2000	T1124-A
HYBRID206	250	62000	2.75	1.28	900	T1129-A
HYBRID207	250	28000	6.00	2.93	2000	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID AVE 21 MAIN LINE NB

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID101	220	19516.5	5.93	4.00	1350	T1107-A
HYBRID102	250	28016.5	6.00	2.93	2000	T1115-A
HYBRID103	250	28016.5	6.00	2.93	2000	T1118-A
HYBRID104	250	28000	6.00	2.93	2000	T1121-A
HYBRID105	250	28000	6.00	2.93	2000	T1124-A
HYBRID106	250	62016.5	2.75	1.28	900	T1129-A
HYBRID107	250	28016.5	6.00	2.93	2000	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - HYBRID AVE 21-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
HYBRID228	150	32000	0	0	220	T2197-A
HYBRID229	150	20224.46	1.25	2.50	220	T2197-A
HYBRID230	150	9200	7.00	4.00	1400	T2197-A
UPRR111	250	28016.5	6.00	2.93	2000	T2205-A
UPRR112	250	28000	6.00	2.93	2000	T2208-A
UPRR113	250	28000	6.00	2.93	2000	T2209-A
UPRR114	250	28016.5	6.00	2.93	2000	T2211-A
UPRR115	150	10000	6.00	3.00	1200	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - HYBRID AVE 21-NB MERCED CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID128	150	32000	0	0	220	T2201-A
HYBRID129	150	24000	1.25	2.50	220	T2201-A
HYBRID130	150	9200	7.00	4.00	1400	T2201-A
UPRR211	250	28000	6.00	2.93	2000	T2205-A
UPRR212	250	28016.5	6.00	2.93	2000	T2208-A
UPRR213	250	28016.5	6.00	2.93	2000	T2209-A
UPRR214	250	28000	6.00	2.93	2000	T2211-A
UPRR215	150	10016.5	6.00	3.00	1200	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WYE-SB CONNECTION AVE 21

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
UPRR118	150	32000	0	0	220	T2260-A
UPRR119	150	24000.00	1.25	2.50	220	T2260-A
UPRR120	140	8815.0	6.00	2.89	1200	T2261-A
UPRR121	150	32000	3.19	2.81	220	T2266-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WYE-NB CONNECTION AVE 21

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
UPRR218	150	32000	0	0	220	T2250-A
UPRR219	150	24020.25	1.25	2.50	220	T2150-A
UPRR220	140	9000	6.00	2.71	1200	T2251-A
UPRR221	150	24020.25	1.25	2.50	220	T2155-A
UPRR222	150	32000	3.19	2.81	220	T2256-A

7/22/2011 10:32:00 AM I:\CHSR\60022962\Task-02_Merced-Fresno\cadd\Civil\Sheet\TRACKWORK\DEIR\HYBRID_21_MF-T-0150-A.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
AVENUE 21
TRACK GEOMETRY DATA
SHEET 1 OF 1

CONTRACT NO.
HSR06-007
DRAWING NO.
T0150-A
SCALE
NO SCALE
SHEET NO.
OF ###

GENERAL 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. SEE STRUCTURES, VIADUCT AND TUNNEL PLANS FOR DETAILED CROSS SECTIONS OF STRUCTURES.
4. BALLASTED OR UNBALLASTED TRACK STRUCTURE TO BE DETERMINED.

**SECTION A-A
TANGENT**

STATION 5367+74.09 TO 5468+71.16

SUPERELEVATED

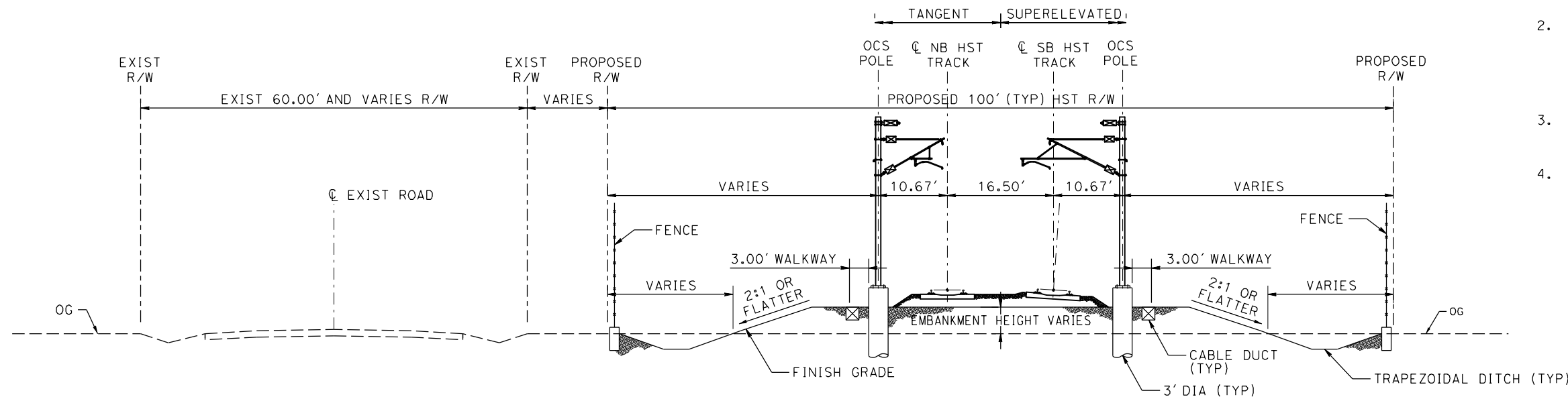
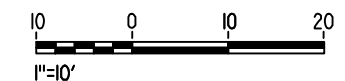
STATION 5468+71.16 TO 5494+50.00

**SECTION B-B
TANGENT**

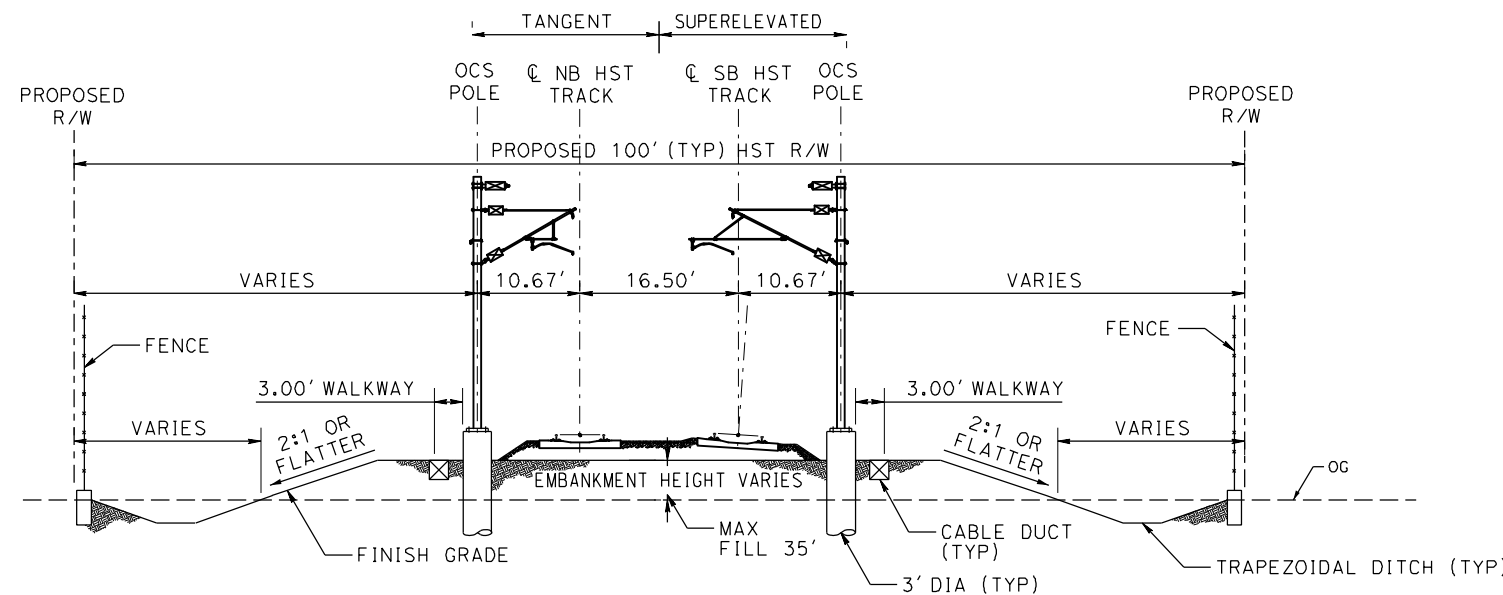
STATION 5944+30.06 TO 6095+69.95
STATION 6310+36.54 TO 6323+90.04

SUPERELEVATED

STATION 5494+50.00 TO 5582+51.76
STATION 6095+69.95 TO 6147+15.51
STATION 6277+56.72 TO 6310+30.54
STATION 6323+90.04 TO 6542+00.08



**SECTION A-A
TRACK ON EMBANKMENT WITH ADJACENT ROAD**



**SECTION B-B
TRACK ON EMBANKMENT WITH ADJACENT ROAD**

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

7/21/2011 1:14:34 PM c:\pw_working\ptgwiseb\p0037225\dms66818\JM-TJ-3401A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TYPICAL SECTION

CONTRACT NO.
HSR08-05
DRAWING NO.
TJ3401A
SCALE
1"=10'
SHEET NO.

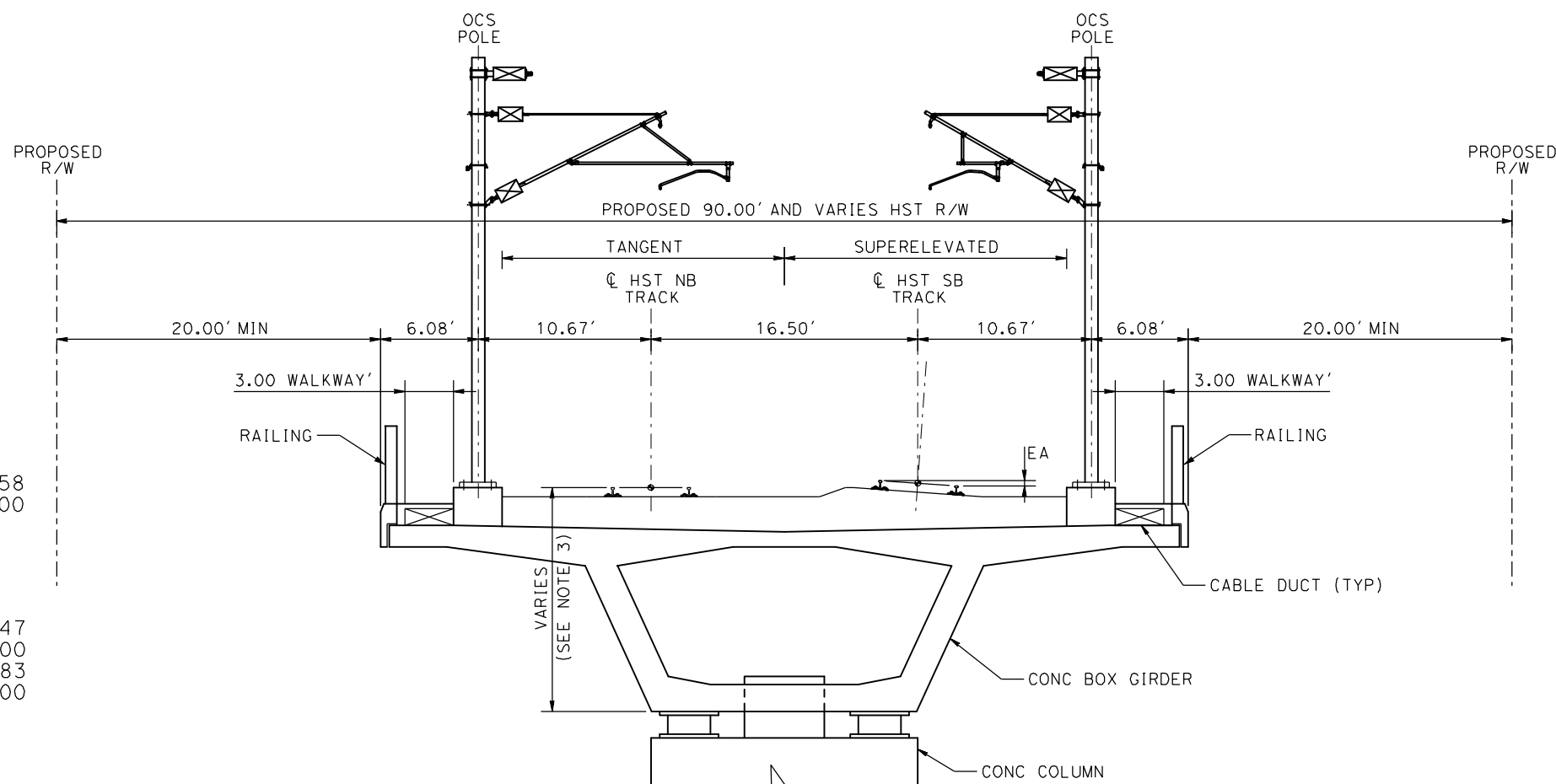
NOTE:
 POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS

SECTION A-A
 TANGENT

STATION 5617+79.47 TO 5656+79.58
 STATION 5807+75.83 TO 5906+50.00

SUPERELEVATED

STATION 5617+00.00 TO 5617+79.47
 STATION 5656+79.58 TO 5703+50.00
 STATION 5764+00.00 TO 5807+75.83
 STATION 6178+00.00 TO 6248+00.00



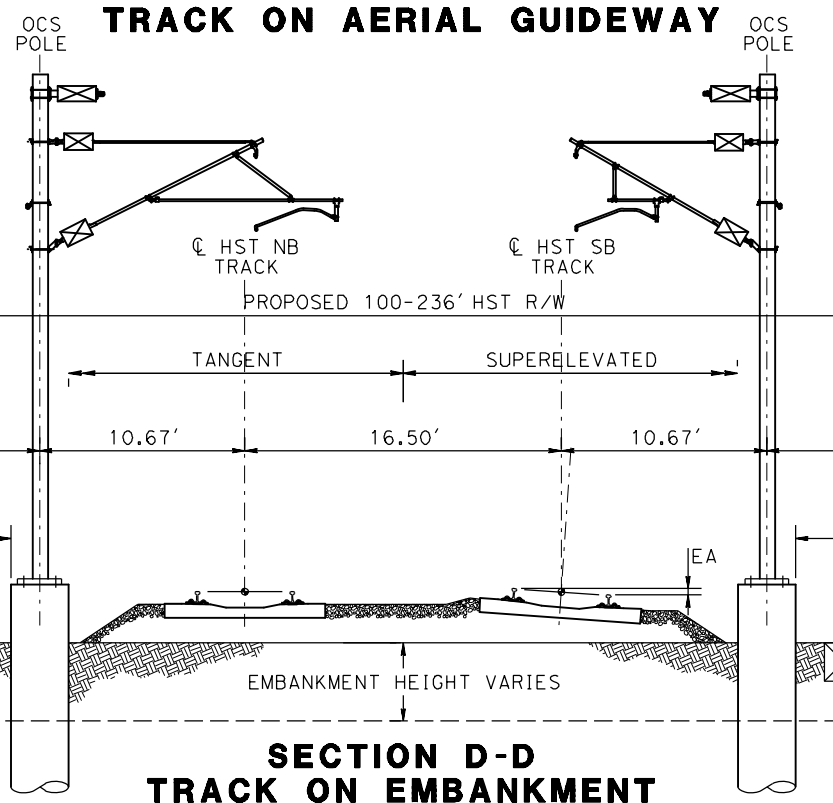
SECTION B-B
 TANGENT

STATION 5906+50.00 TO 5944+30.06

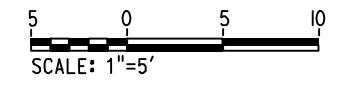
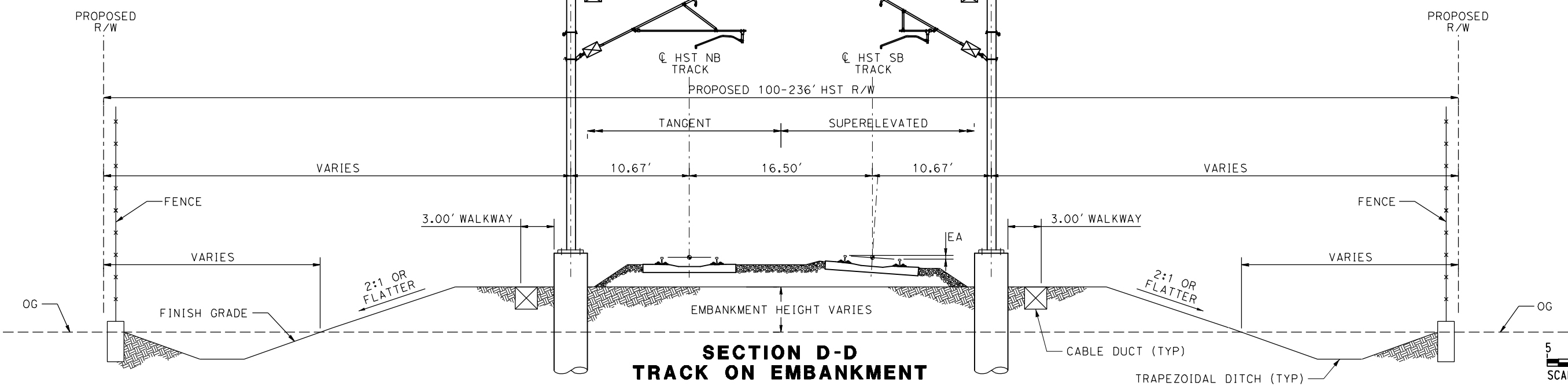
SUPERELEVATED

STATION 5582+51.76 TO 5617+00.00
 STATION 5703+50.00 TO 5764+00.00
 STATION 6147+15.51 TO 6178+00.00
 STATION 6248+00.00 TO 6277+56.72

SECTION C-C
 TRACK ON AERIAL GUIDEWAY



SECTION D-D
 TRACK ON EMBANKMENT



7/21/2011 1:14:48 PM c:\pw_working\ptgwiseb\p0037225\dms66818\JM-TJ-3402A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
 DRAWN BY
ALBERT S.
 CHECKED BY
RESHMA C.
 IN CHARGE
D. WEMMER
 DATE
4/15/2011

**15% DRAFT
 SUBMITTAL
 FOR INTERNAL
 USE ONLY**

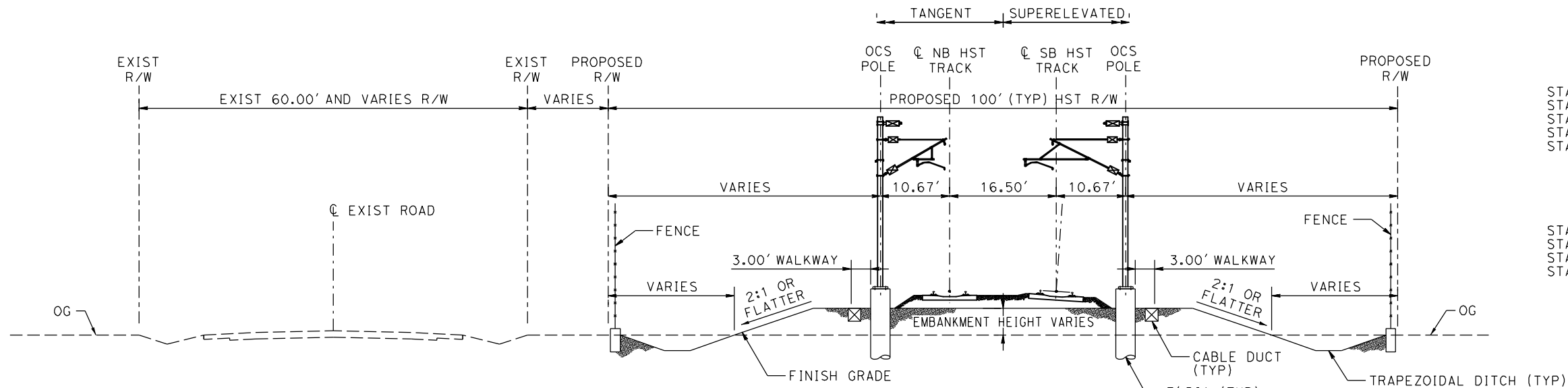
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID
 AVENUE 24/SR152/AVENUE 21
 TYPICAL SECTION

CONTRACT NO.
HSR08-05
 DRAWING NO.
TJ3402A
 SCALE
1"=5'
 SHEET NO.

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



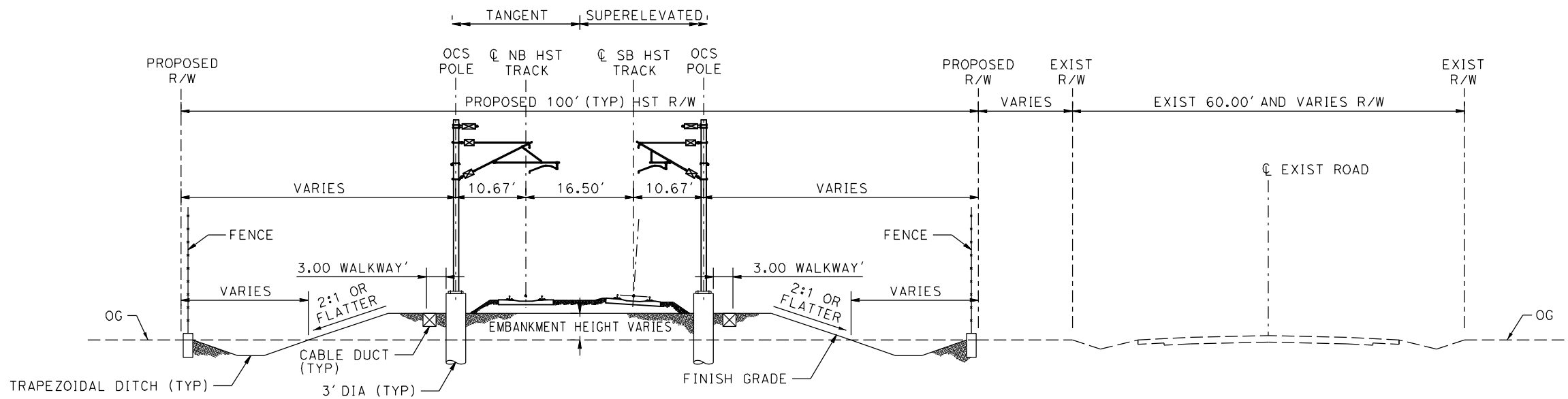
**SECTION C-C
 TRACK ON EMBANKMENT WITH ADJACENT ROAD**

**SECTION C
 TANGENT**

STATION A 4695+35.55 TO A 4697+25.00
 STATION A 4782+00.00 TO A 4821+82.78
 STATION A 4842+01.13 TO A 4956+10.00
 STATION A 5038+90.00 TO A 5254+31.95
 STATION A 5289+21.13 TO A 5367+74.09

SUPERELEVATED

STATION A 4663+00.00 TO A 4695+35.55
 STATION A 4821+82.78 TO A 4842+01.13
 STATION A 5254+31.95 TO A 5289+21.13
 STATION A 5367+74.09 TO A 5400+00.00



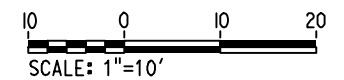
**SECTION D-D
 TRACK ON EMBANKMENT WITH ADJACENT ROAD**

**SECTION D
 TANGENT**

STATION A 5953+15.11 TO A 6065+36.88
 STATION A 6085+46.45 TO A 6097+25.00
 STATION A 6163+75.00 TO A 6248+11.13
 STATION A 6268+87.43 TO A 6389+93.79
 STATION A 6412+62.12 TO A 6748+12.50
 STATION A 6498+46.27 TO A 6506+31.89

SUPERELEVATED

STATION A 4639+00.00 TO A 4663+00.00
 STATION A 5900+95.00 TO A 5953+15.11
 STATION A 6065+36.88 TO A 6085+46.45
 STATION A 6248+11.13 TO A 6268+87.43
 STATION A 6389+93.79 TO A 6412+62.12
 STATION A 6748+12.50 TO A 6498+46.27

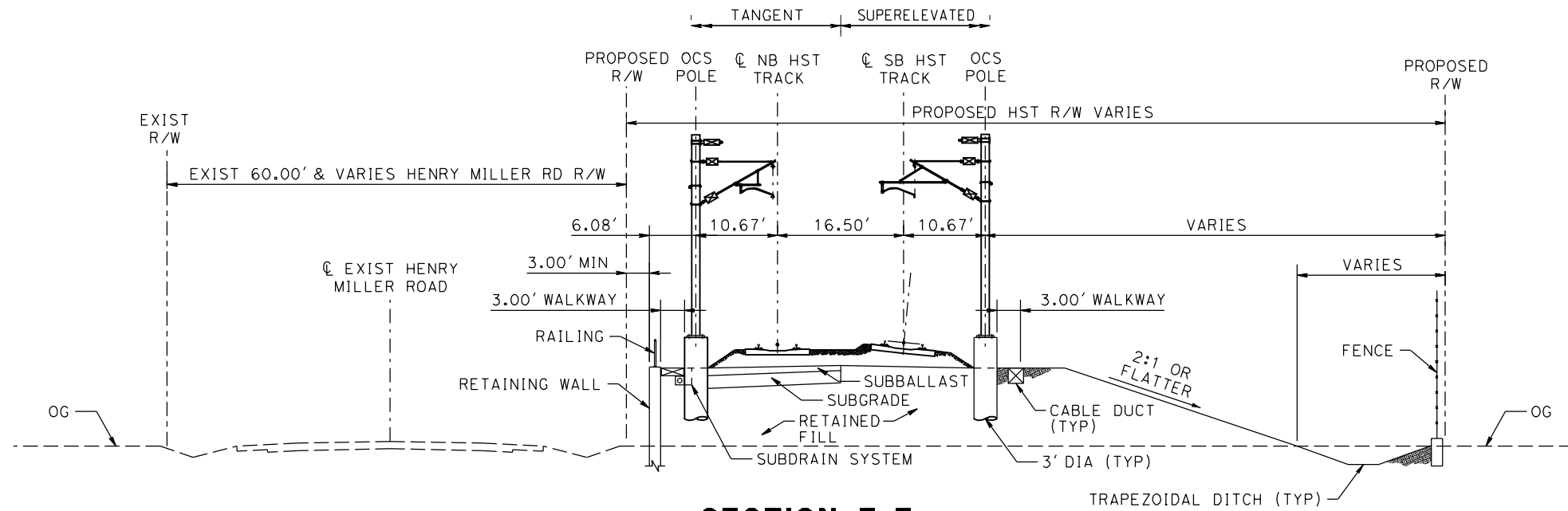


7/21/2011 11:09:25 AM c:\pw_working\ptg\wiseb\p0037225\dms66817\JM-TJ3902.dgn

DESIGNED BY A. GURA	15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION			CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO HYBRID AVENUE 21 TYPICAL SECTIONS SHEET 2 OF 3	CONTRACT NO. HSR08-05
DRAWN BY S. HICKS					DRAWING NO. TJ3902
CHECKED BY S. GOOLLA					SCALE 1"=10'
IN CHARGE D. WEMMER					SHEET NO.
DATE 4/15/2011					

REV	DATE	BY	CHK	APP	DESCRIPTION
	4/15/11				DRAFT 15% SUBMITTAL

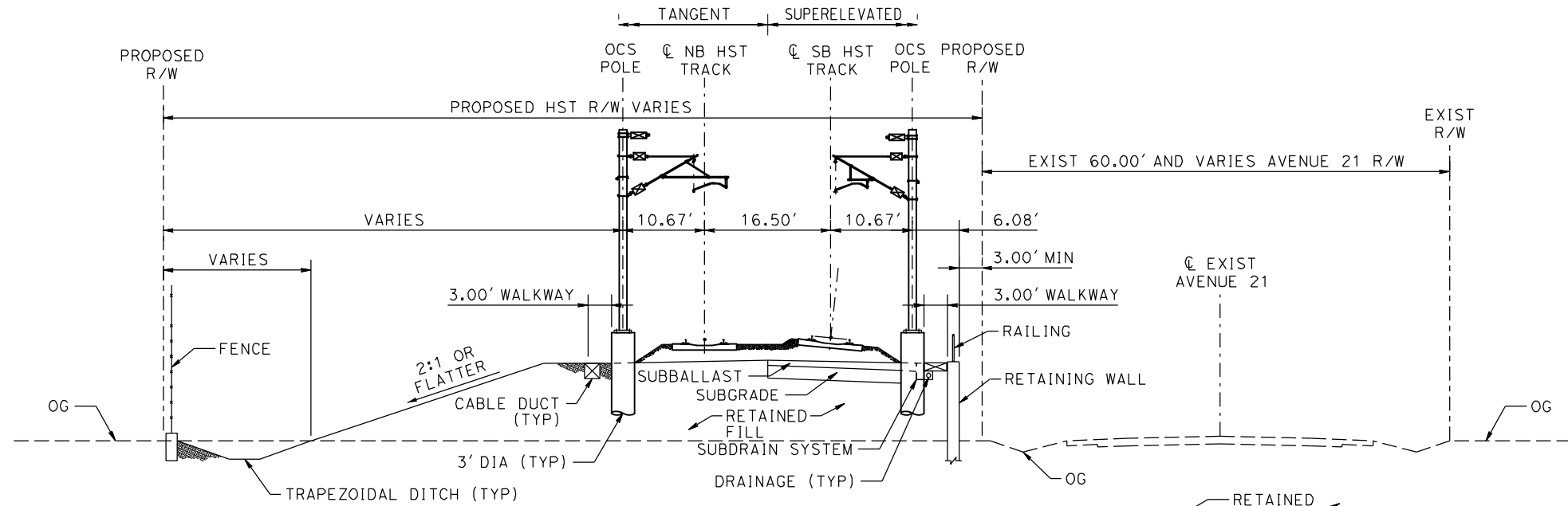
NOTE: POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS



**SECTION E-E
TYPICAL SECTION WITH RETAINED FILL ON LEFT**

TANGENT
STATION A 4697+25 TO A 4723+88
STATION A 4767+88 TO A 4782+00

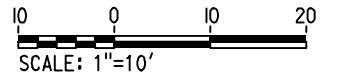
SUPERELEVATED
N/A



**SECTION E-E
TYPICAL SECTION WITH RETAINED FILL ON RIGHT**

TANGENT
STATION A 6097+25 TO A 6116+75
STATION A 6142+00 TO A 6163+75

SUPERELEVATED
N/A



\$USER \$ DATE \$ TIME \$ FILE \$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
 DRAWN BY
A. GURA
 CHECKED BY
S. GOOLLA
 IN CHARGE
D. WEMMER
 DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**

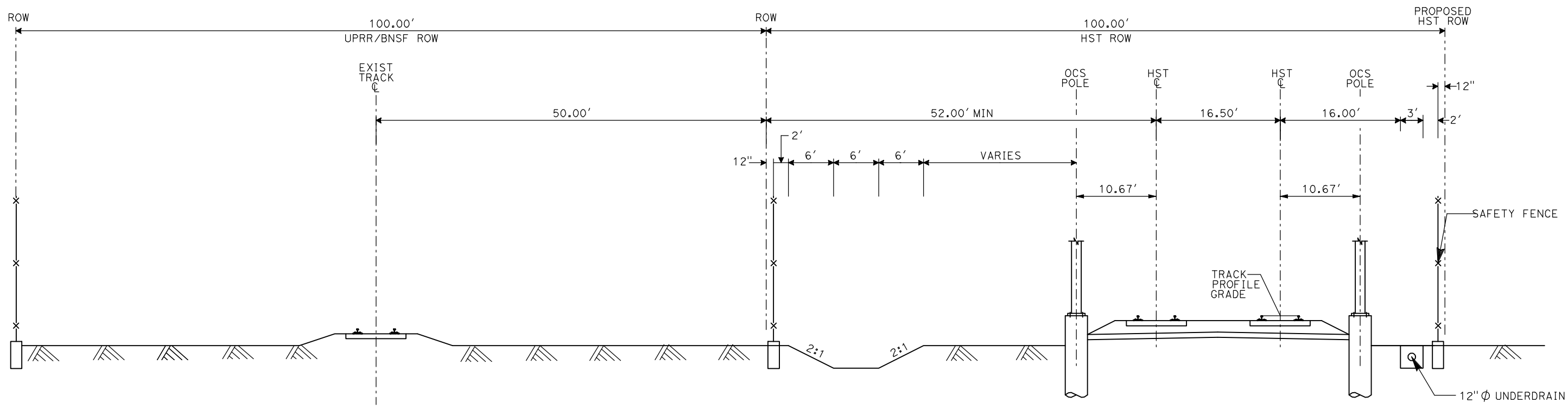


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

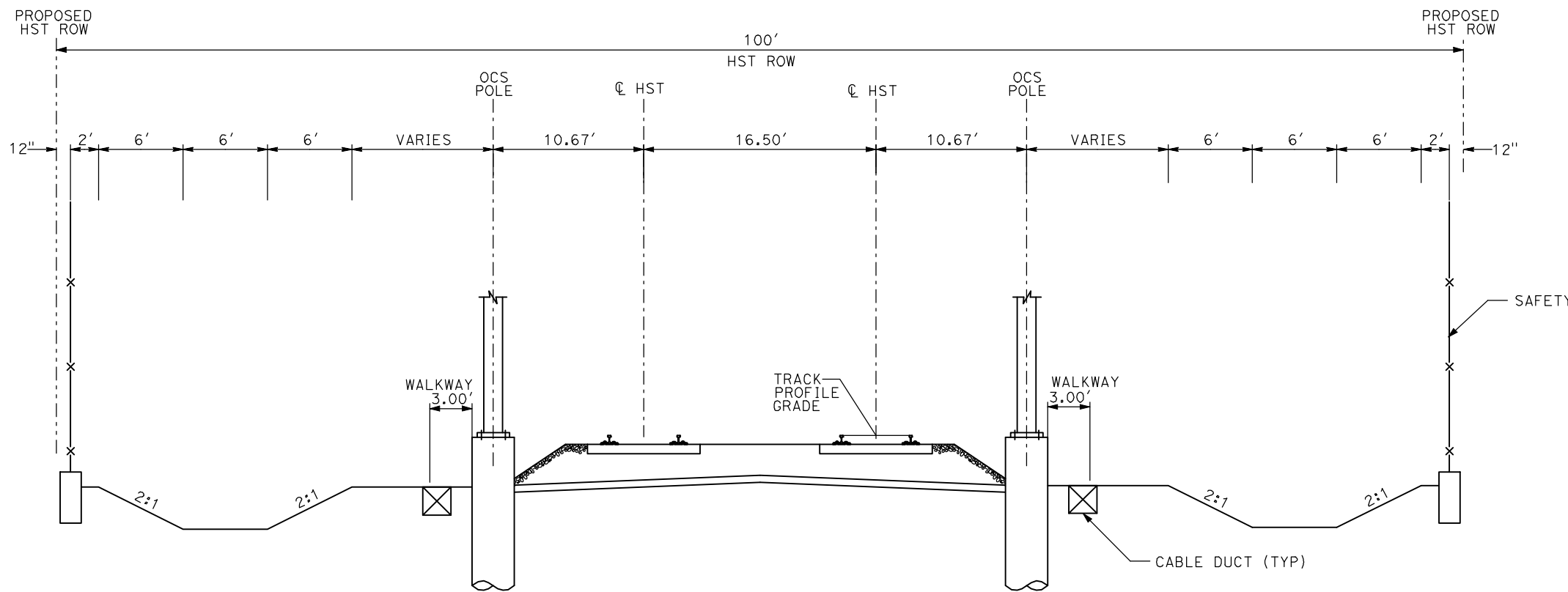
 HYBRID
 AVENUE 21
 TYPICAL SECTIONS
 SHEET 3 OF 3

CONTRACT NO.
HSR08-05
 DRAWING NO.
TJ3903
 SCALE
1" = 10'
 SHEET NO.

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



AG1- DOUBLE TRACK AT GRADE ADJACENT TO UPRR/BNSF



AG2 - DOUBLE 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.

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

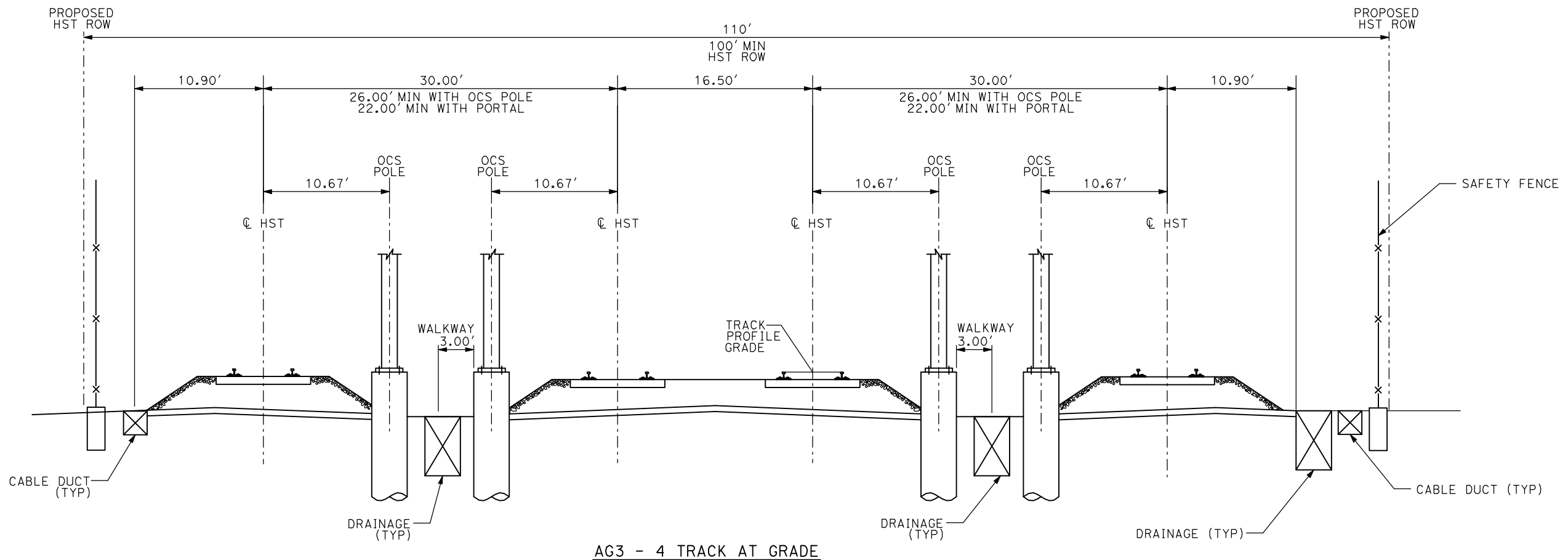
NOT FOR
CONSTRUCTION



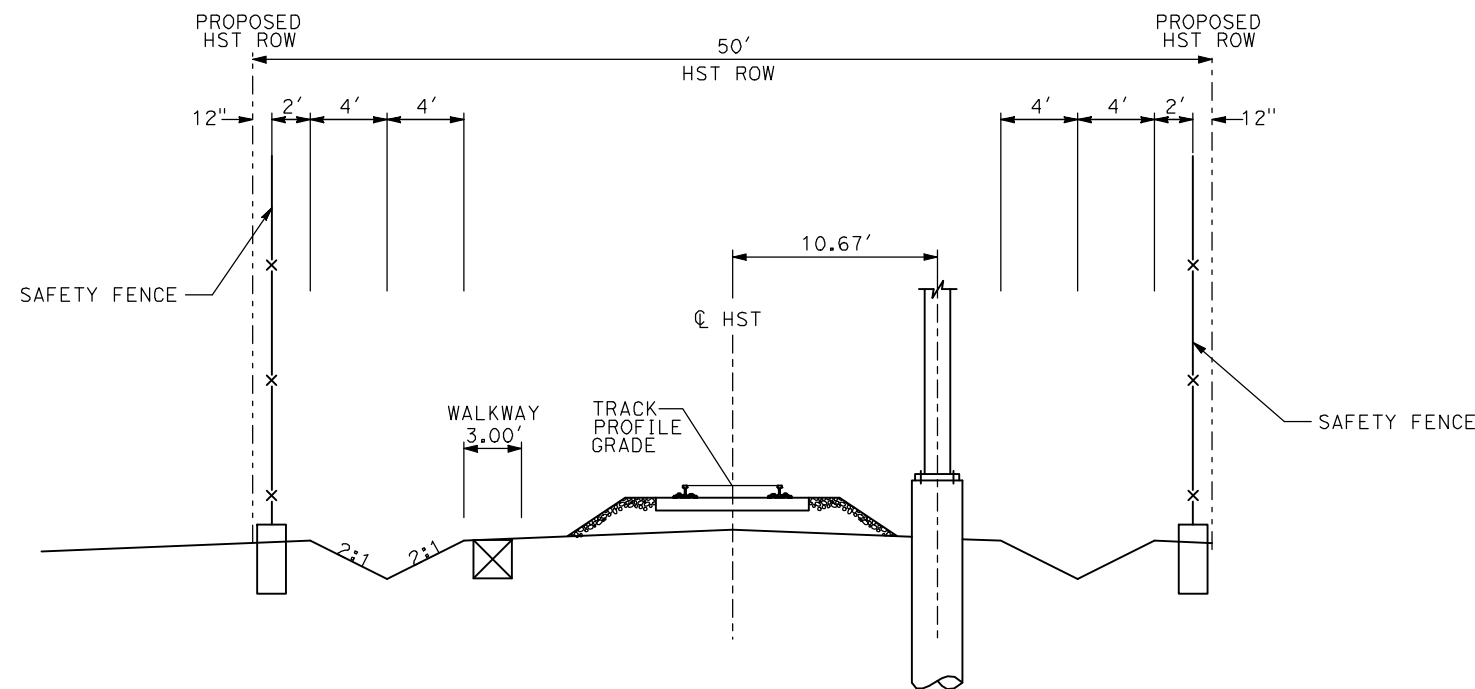
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

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

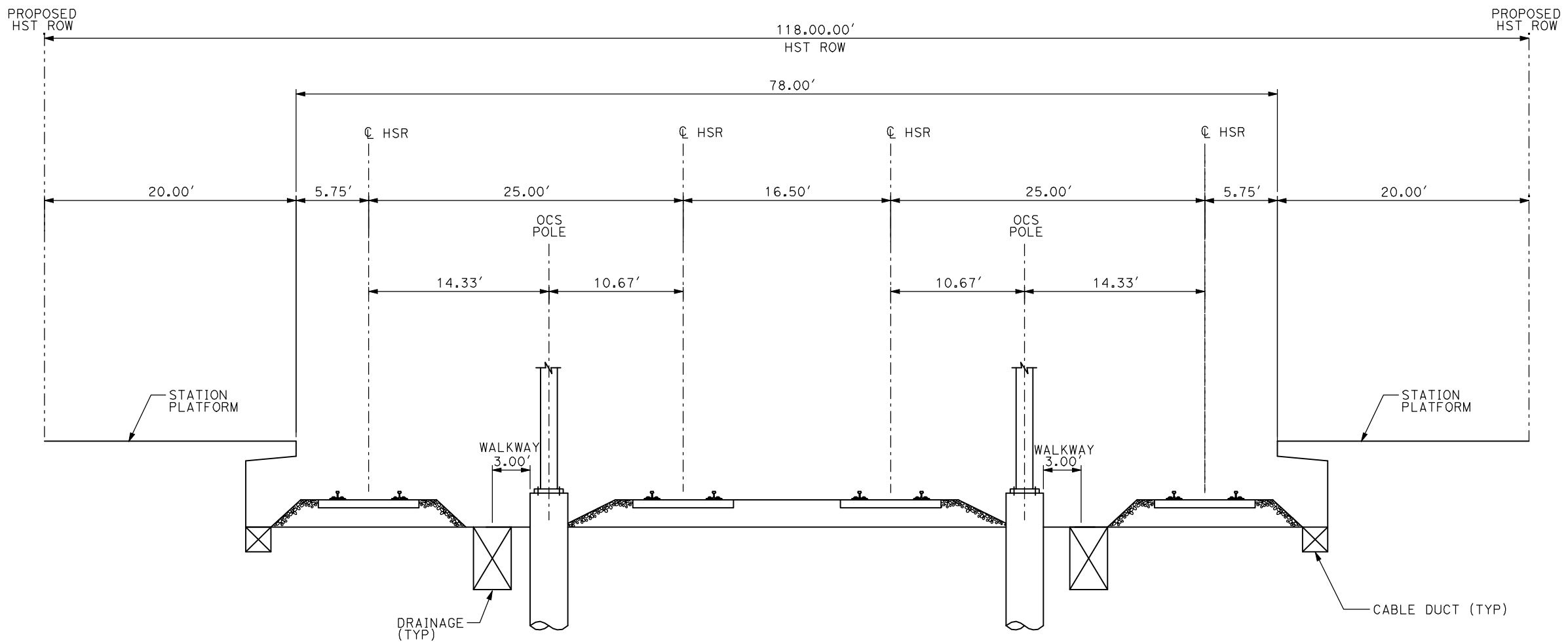
NOT FOR
CONSTRUCTION



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**

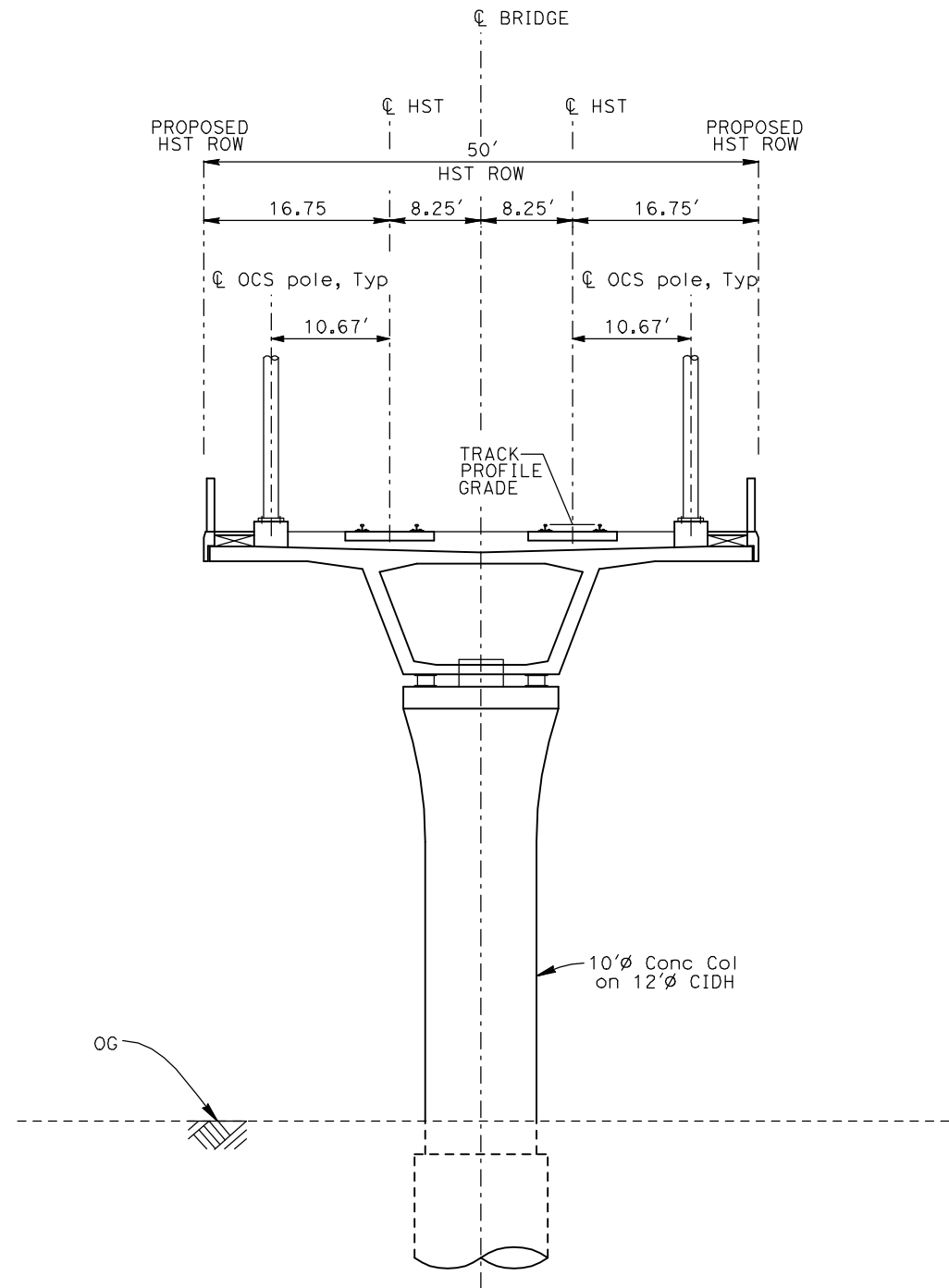
**NOT FOR
CONSTRUCTION**



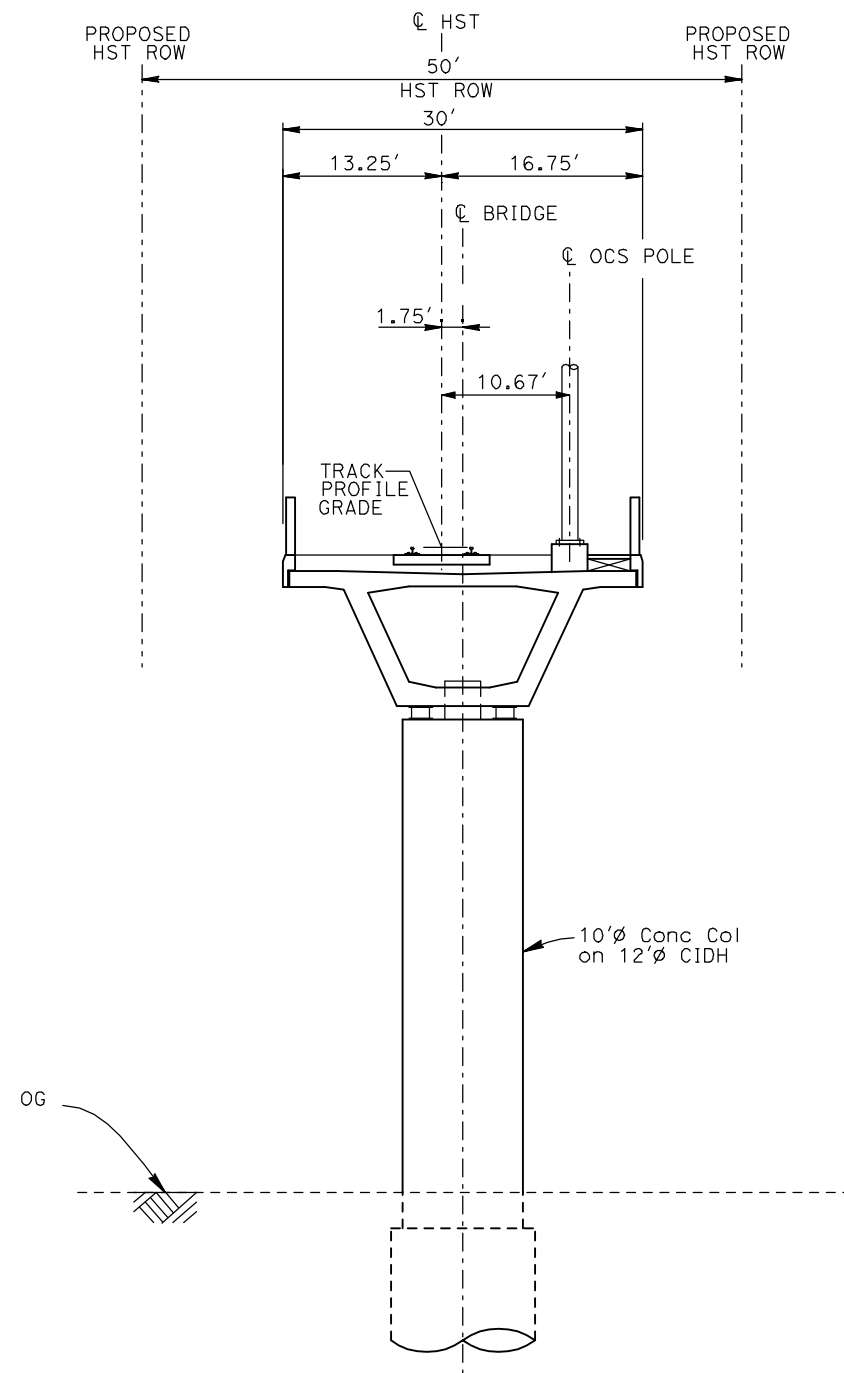
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

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**

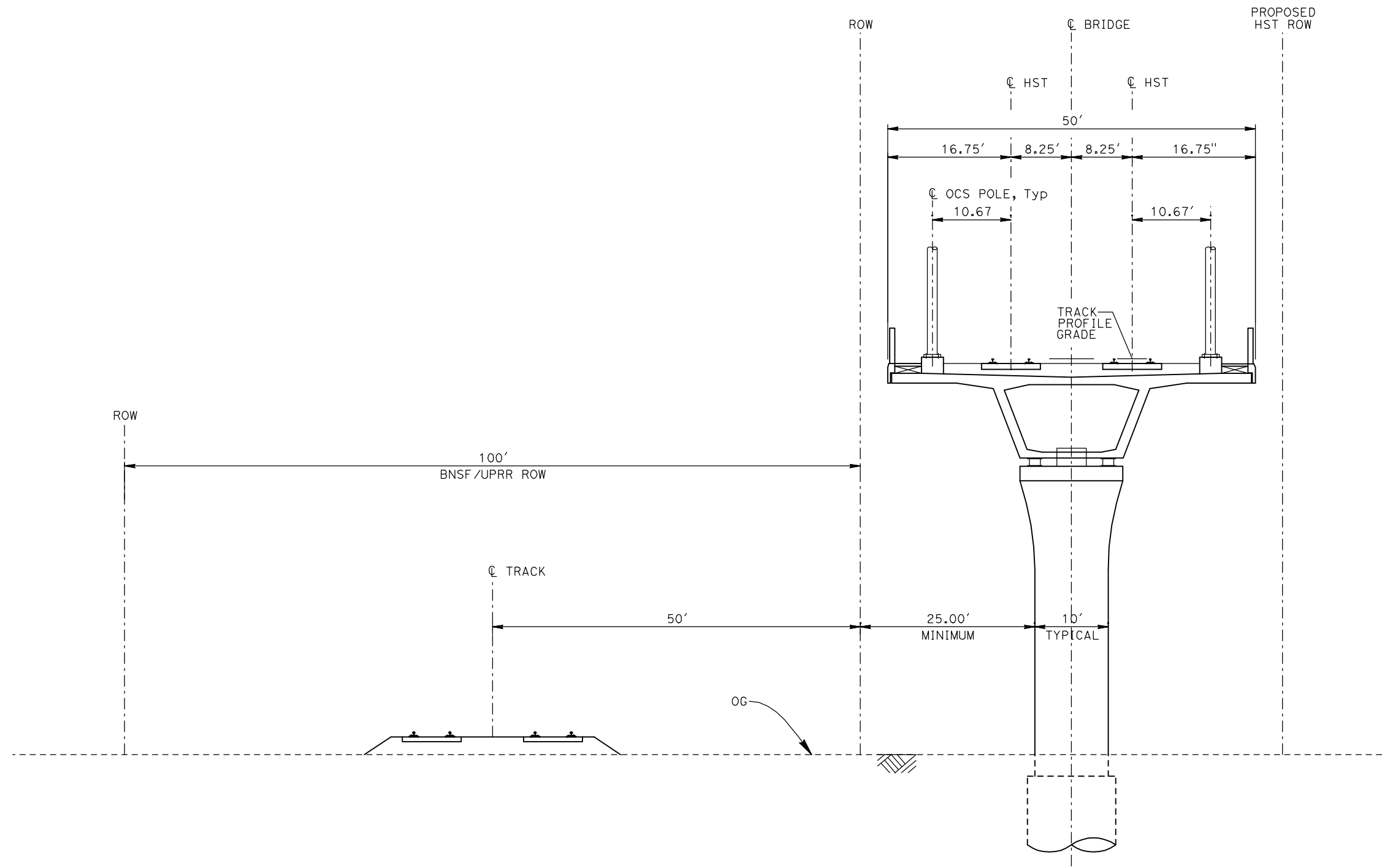


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

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**

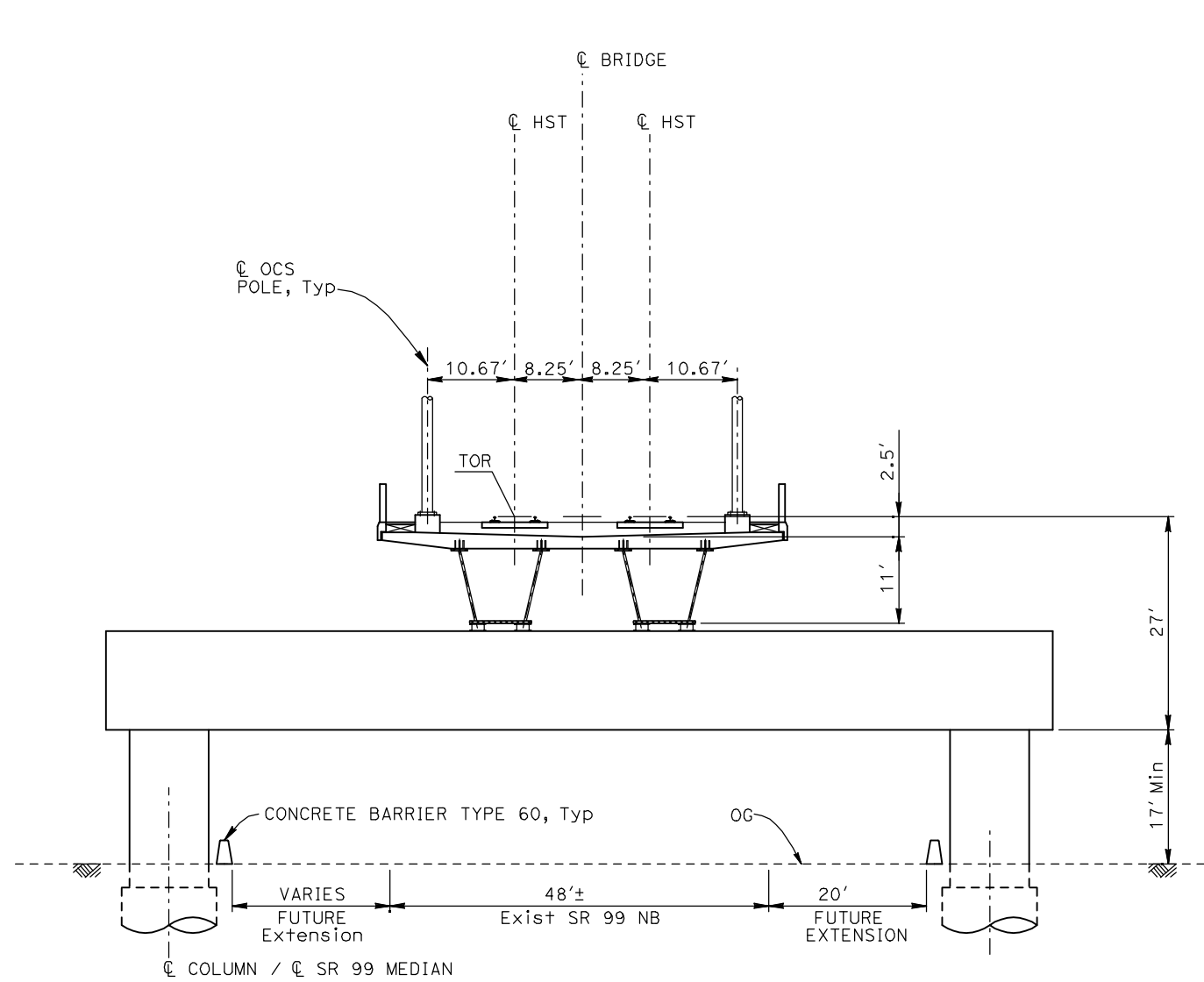


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

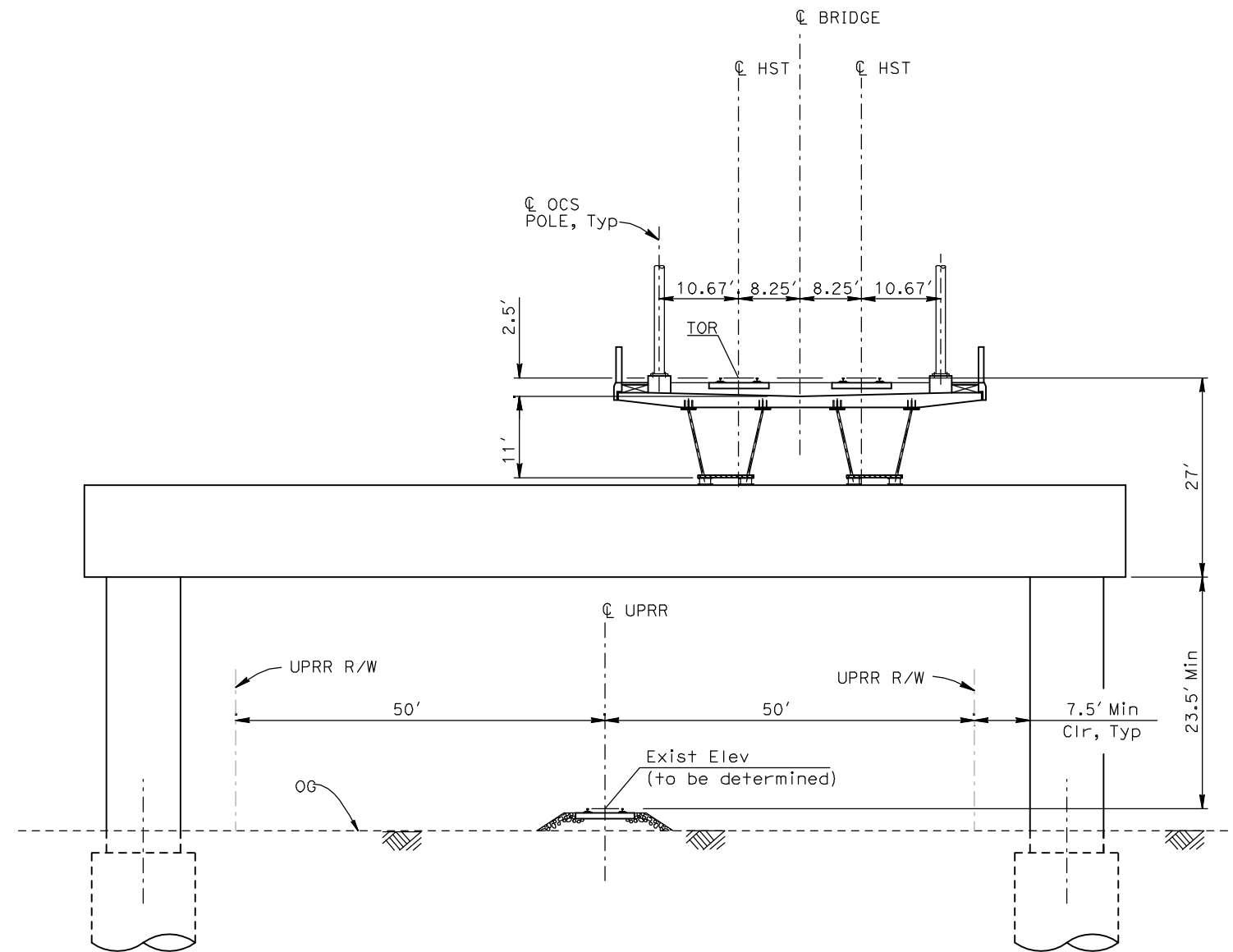
TYPICAL SECTIONS
SHEET 5 OF 17

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\WF-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**

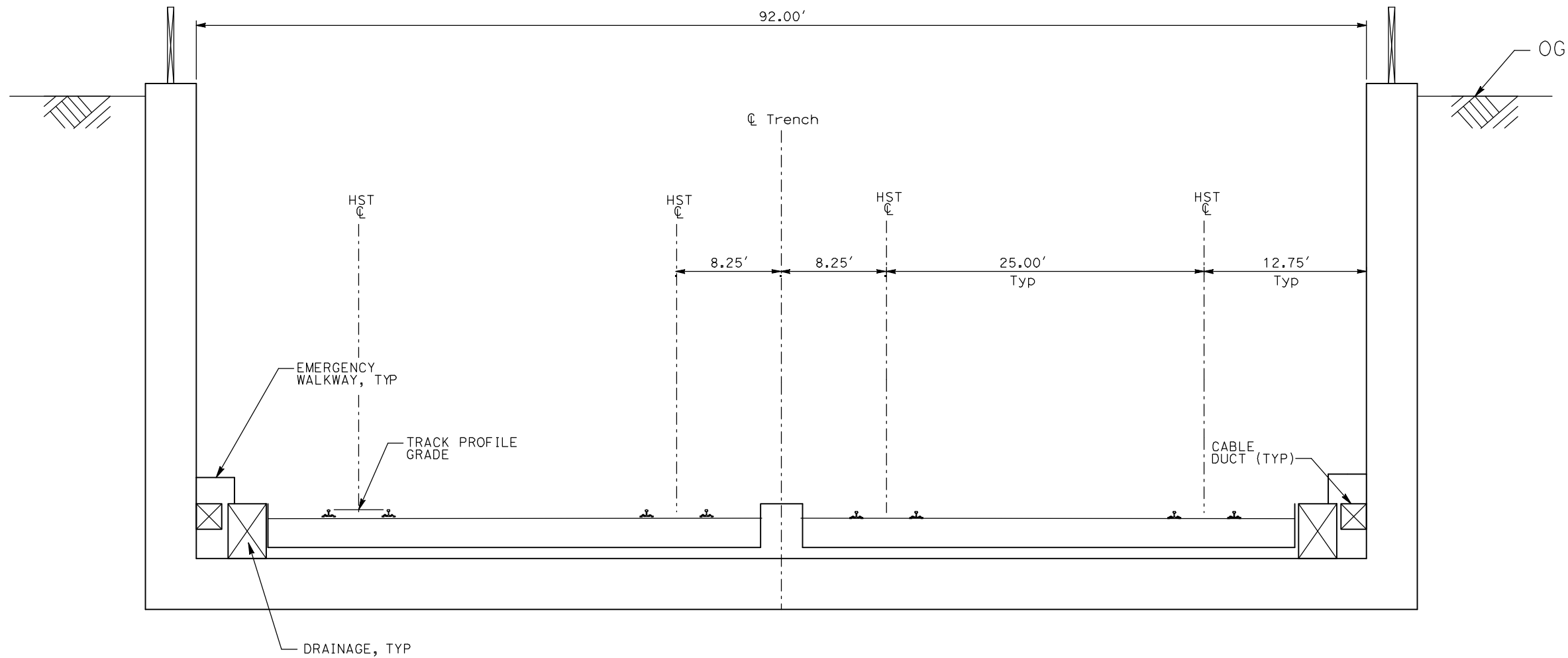
**NOT FOR
CONSTRUCTION**



**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\WF-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**



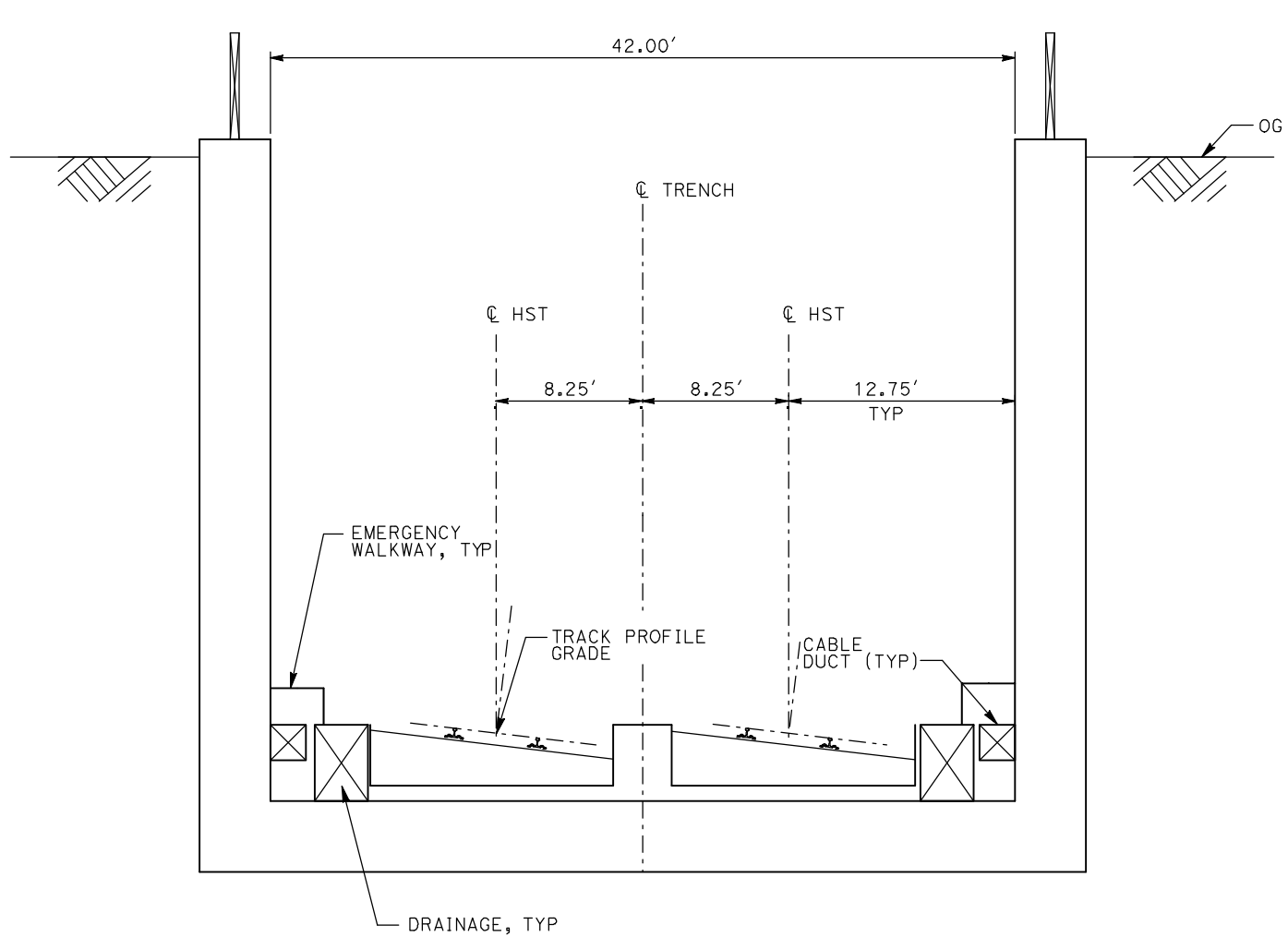
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 7 OF 17

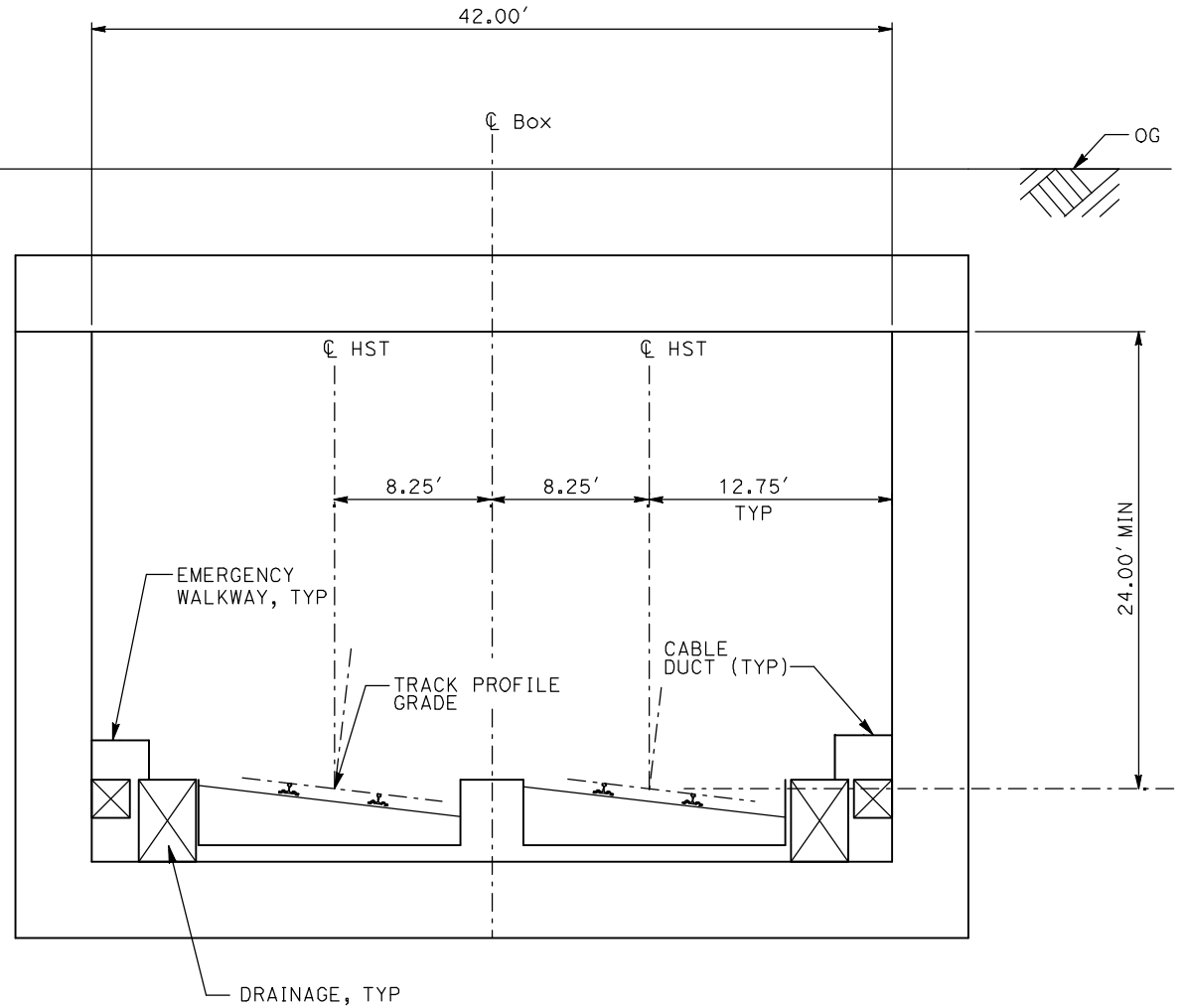
CONTRACT NO.
HSR06-007
DRAWING NO.
T3007-A
SCALE
NO SCALE
SHEET NO.
OF ###

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\typical_sections\WF-T-3008-A.dgn

ShieldsA



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**

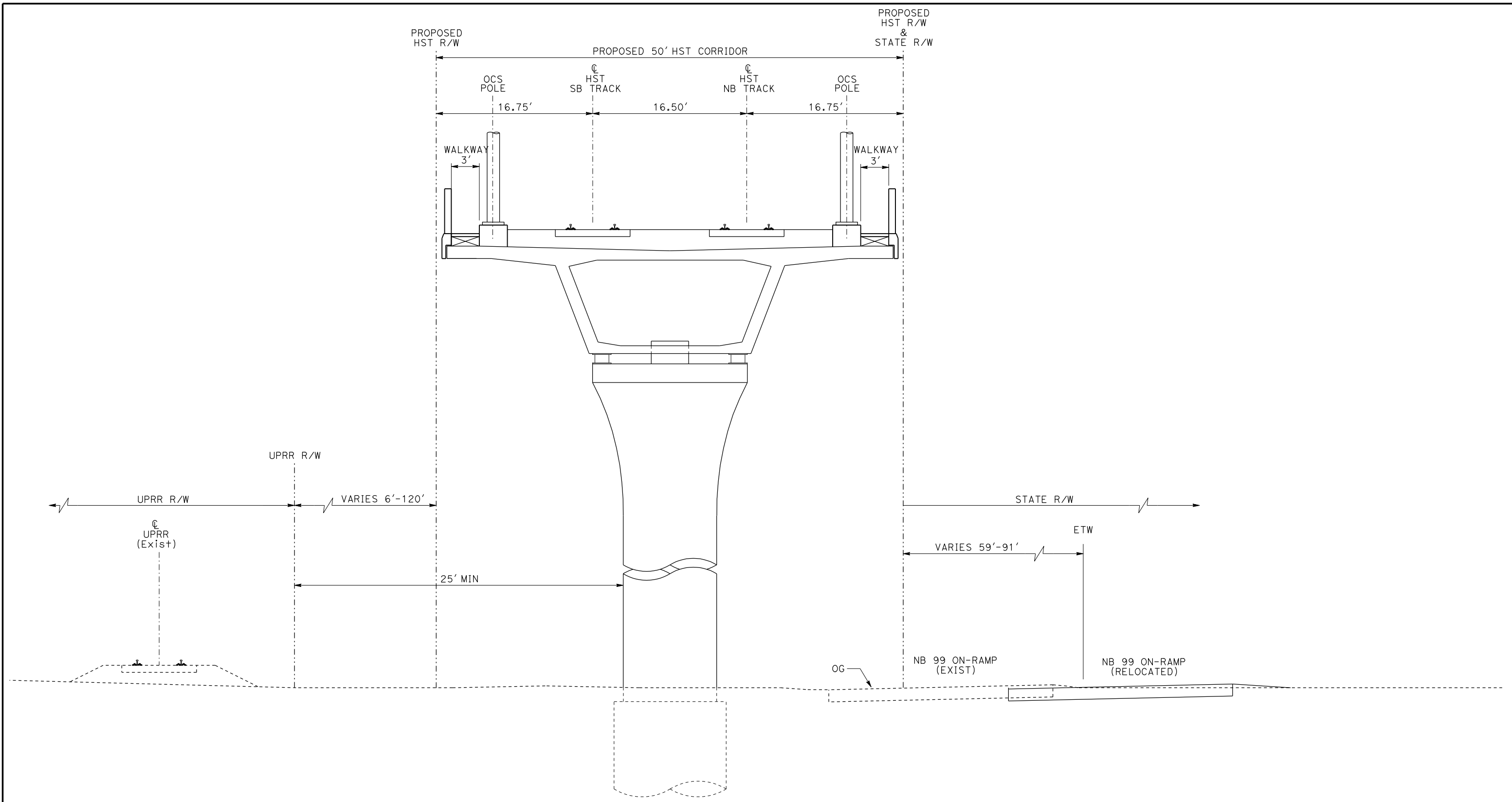
**NOT FOR
CONSTRUCTION**



**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

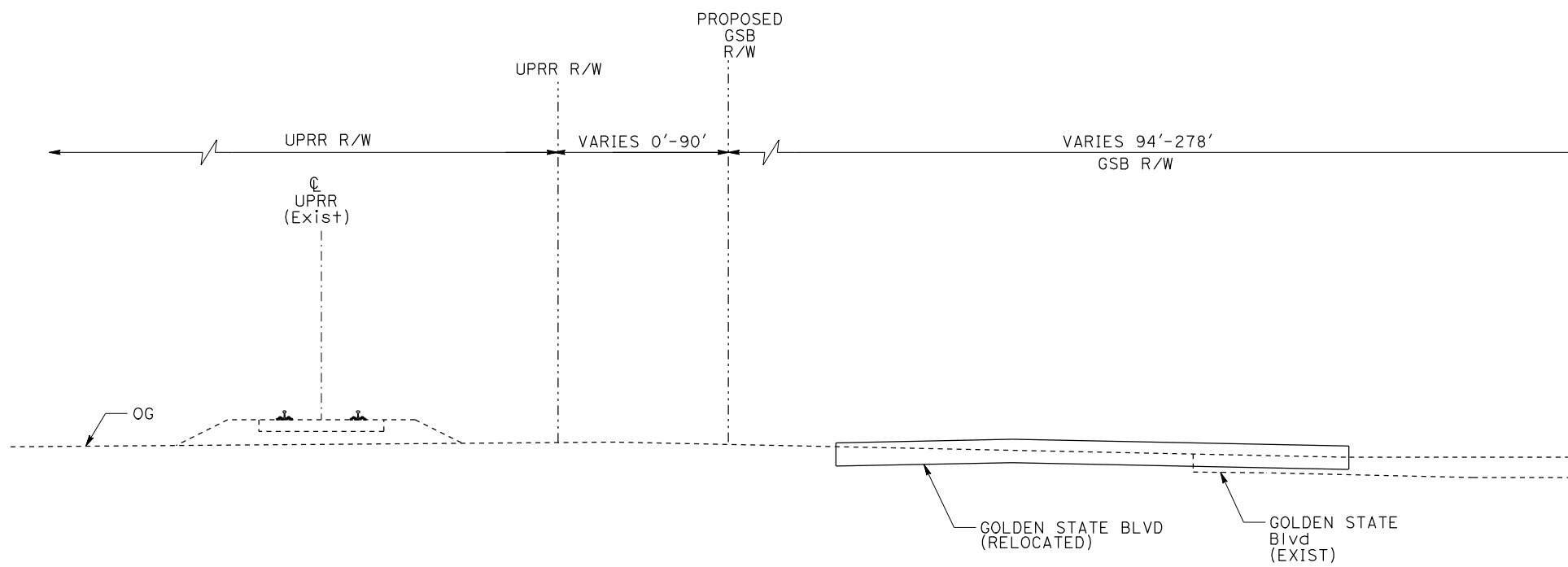
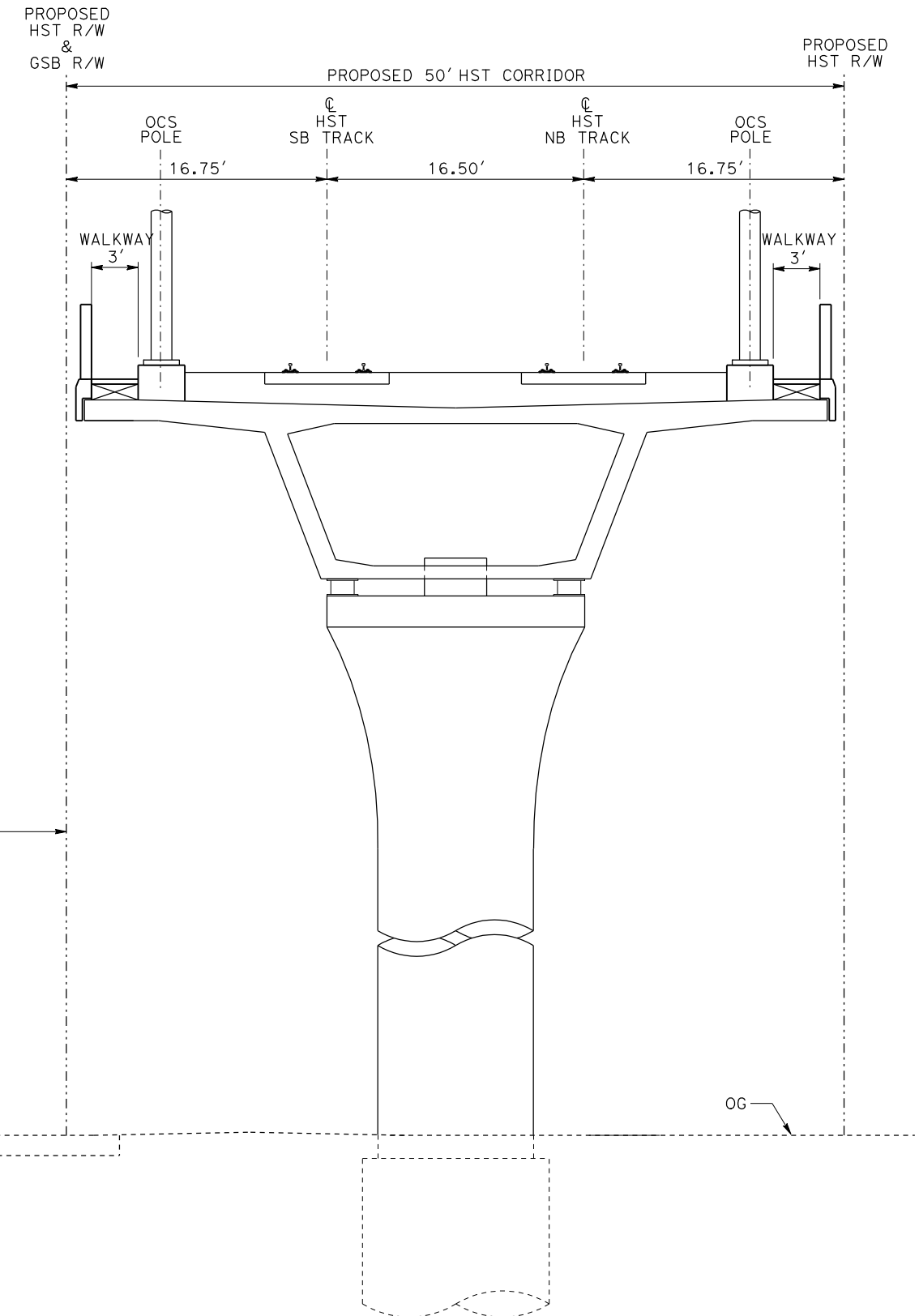
NOT FOR
CONSTRUCTION



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

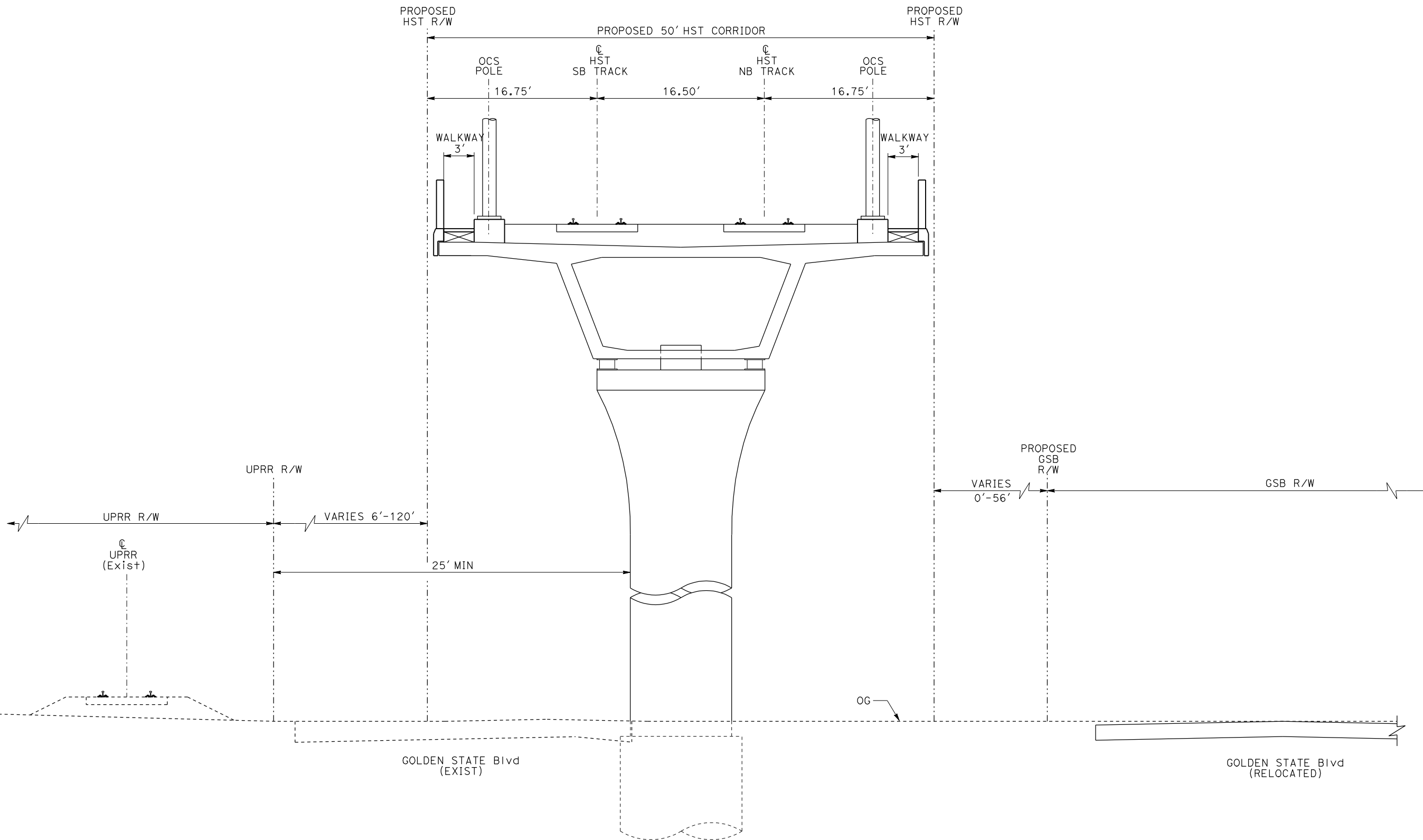


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

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

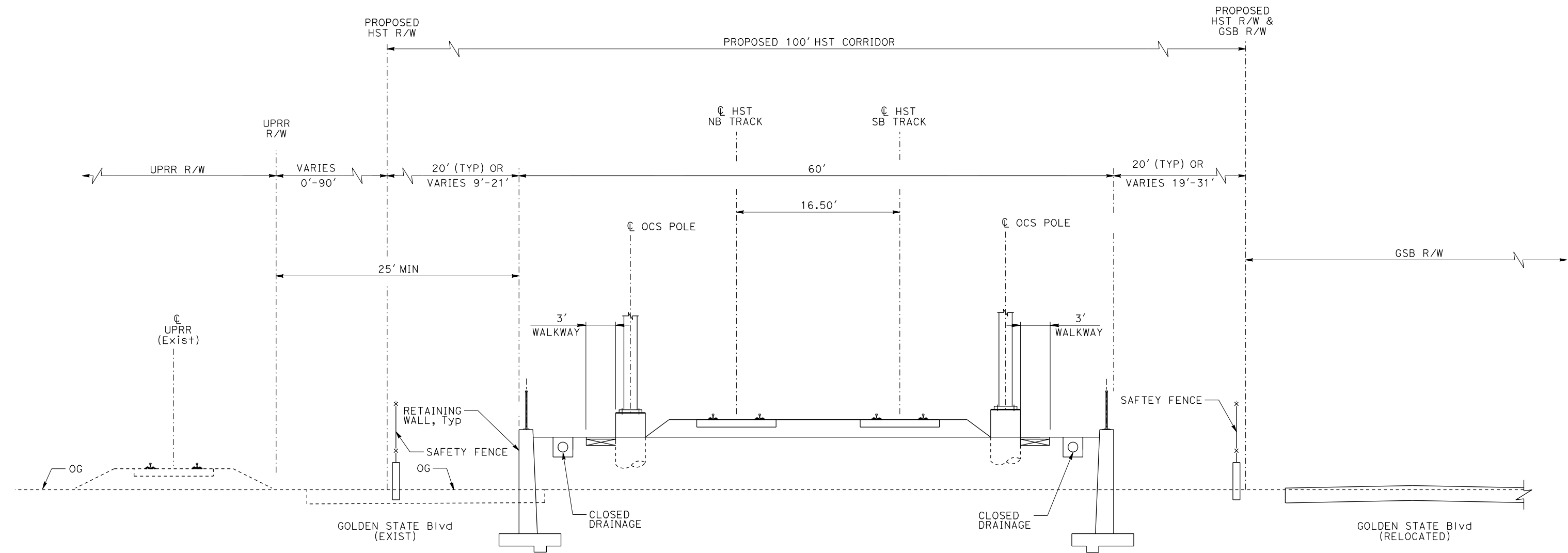


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

 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

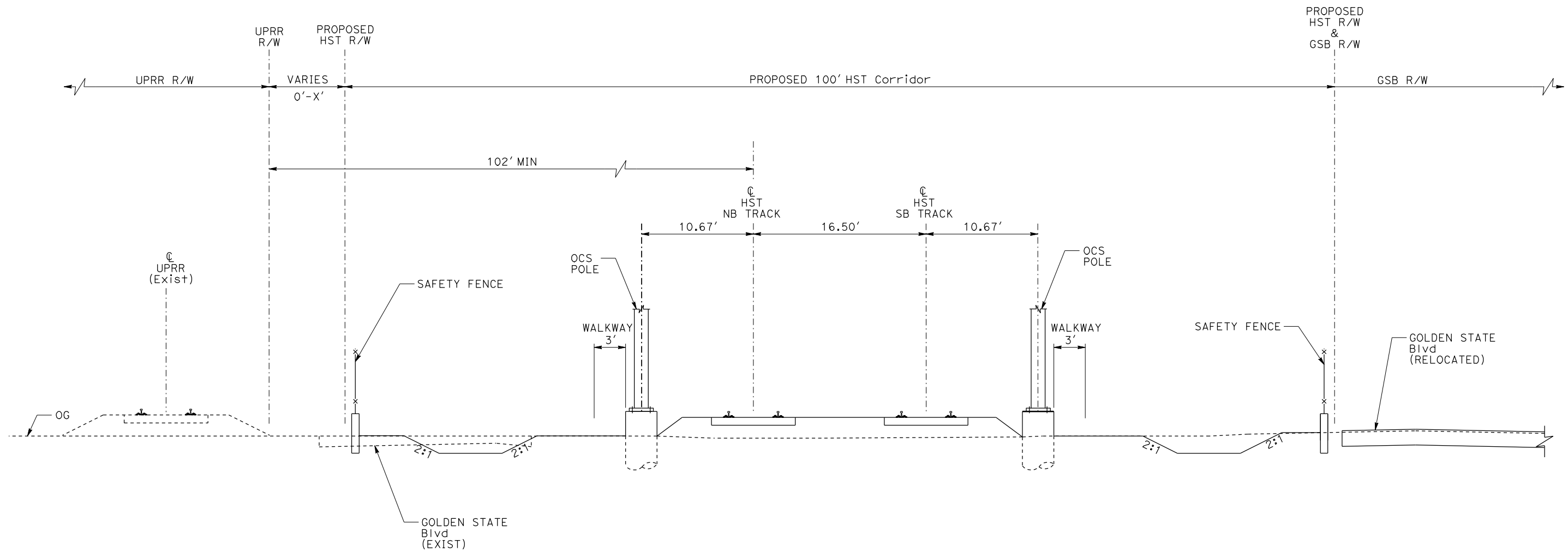


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

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

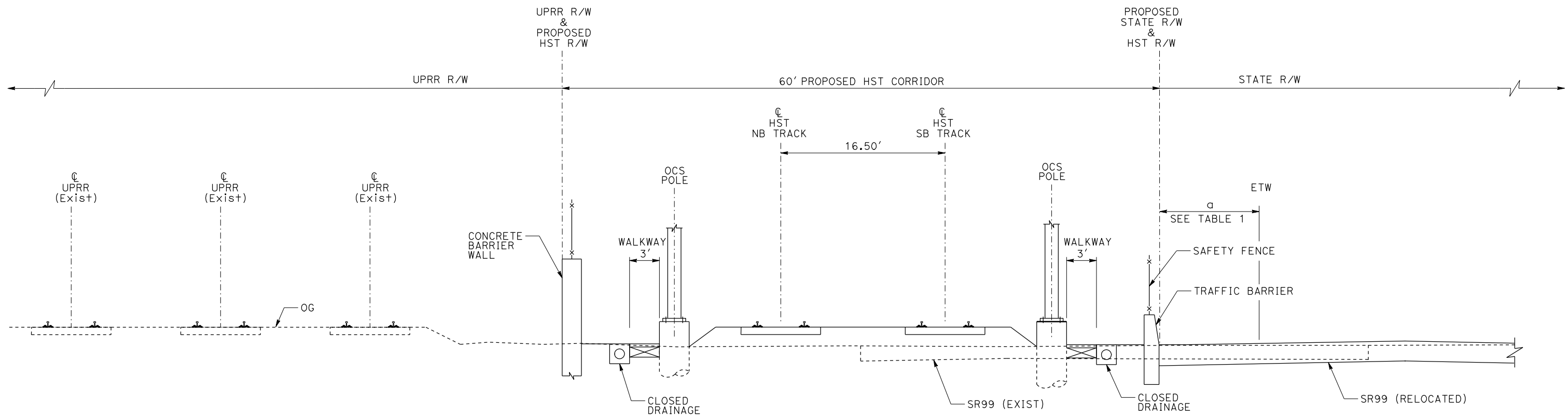
DRAWING NO.
T3013-A

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

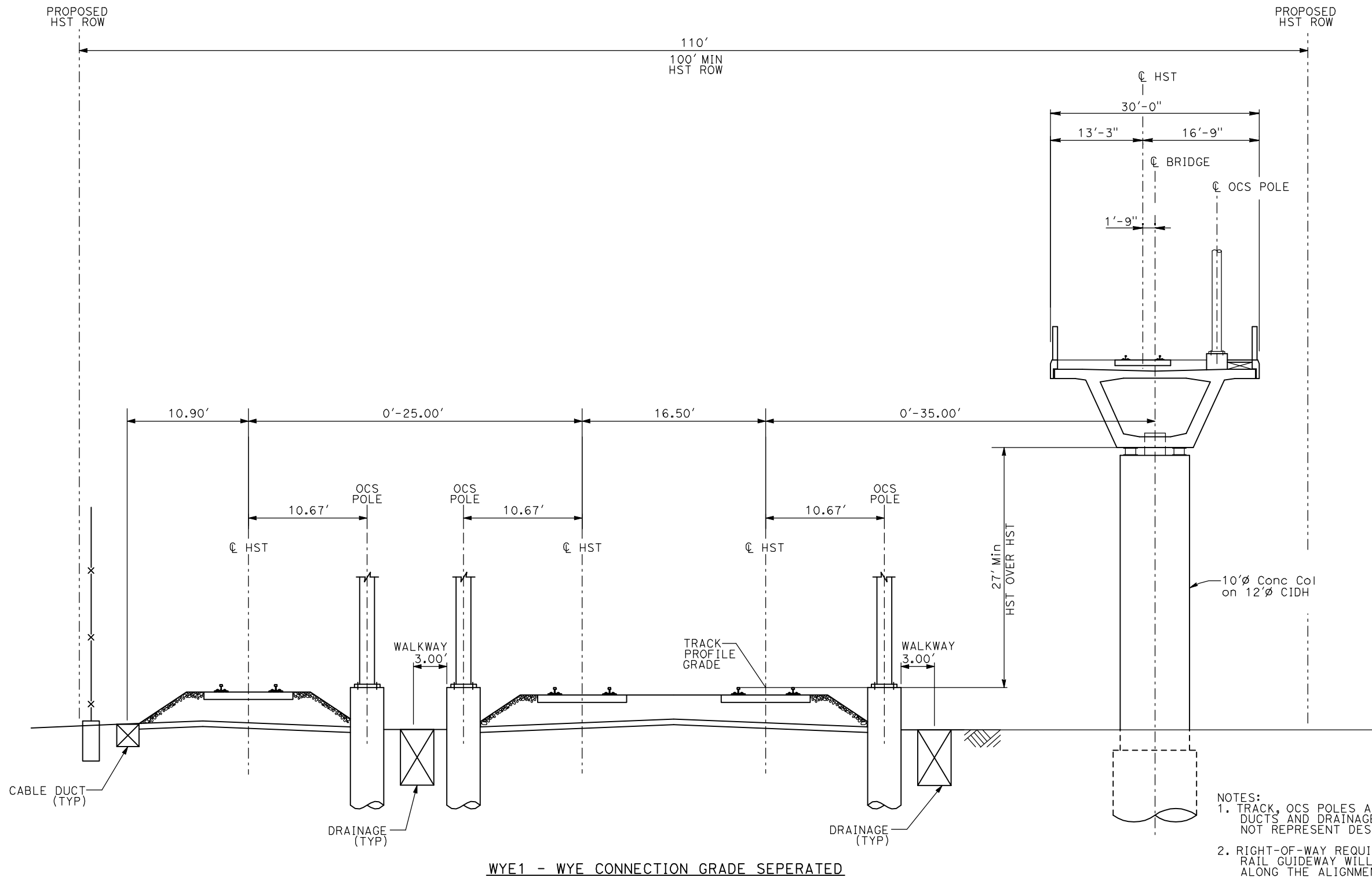


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

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**

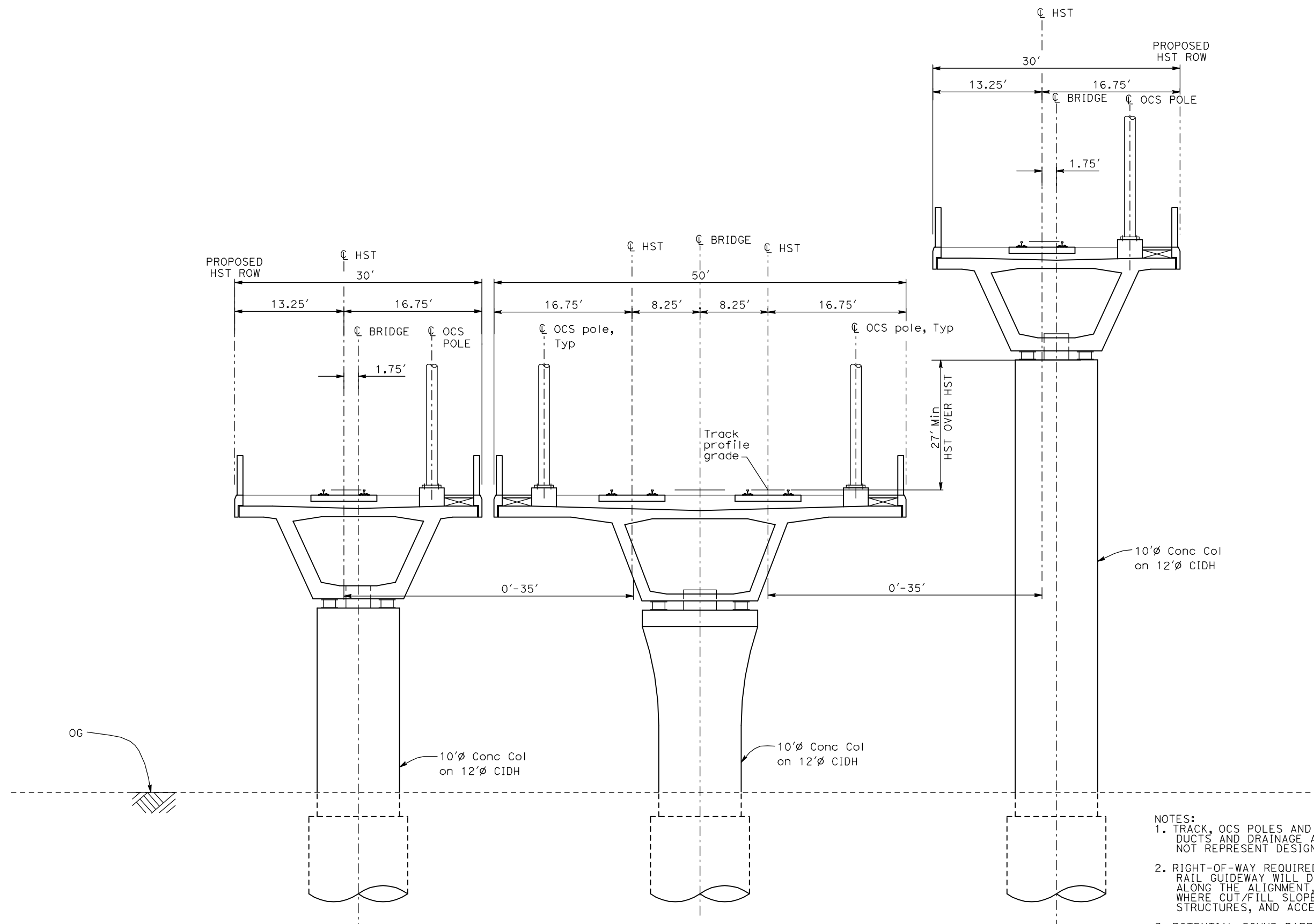


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

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



WYE2 - 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

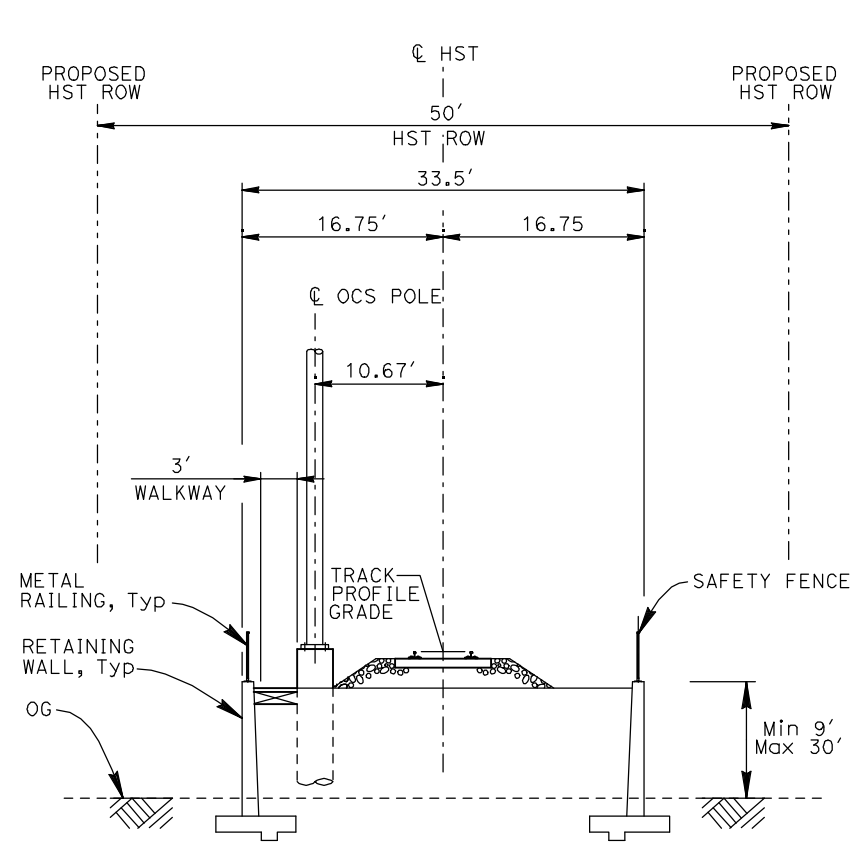


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

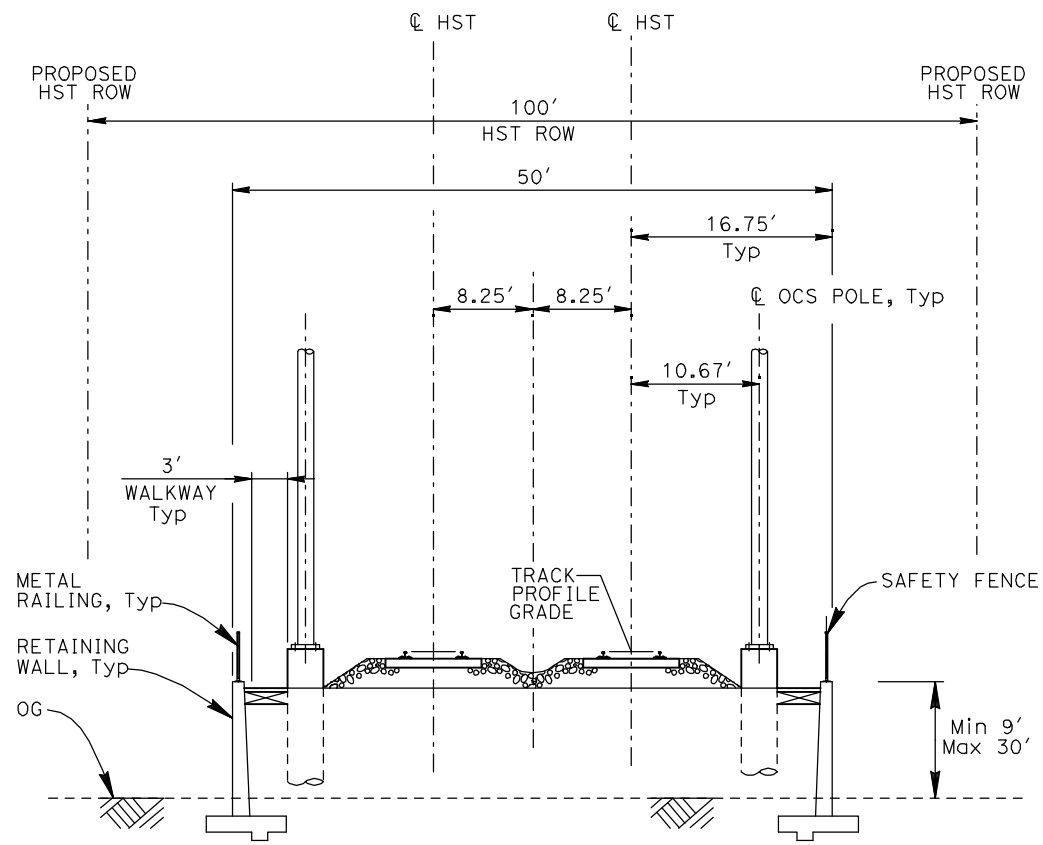
TYPICAL SECTIONS
SHEET 16 OF 17

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**

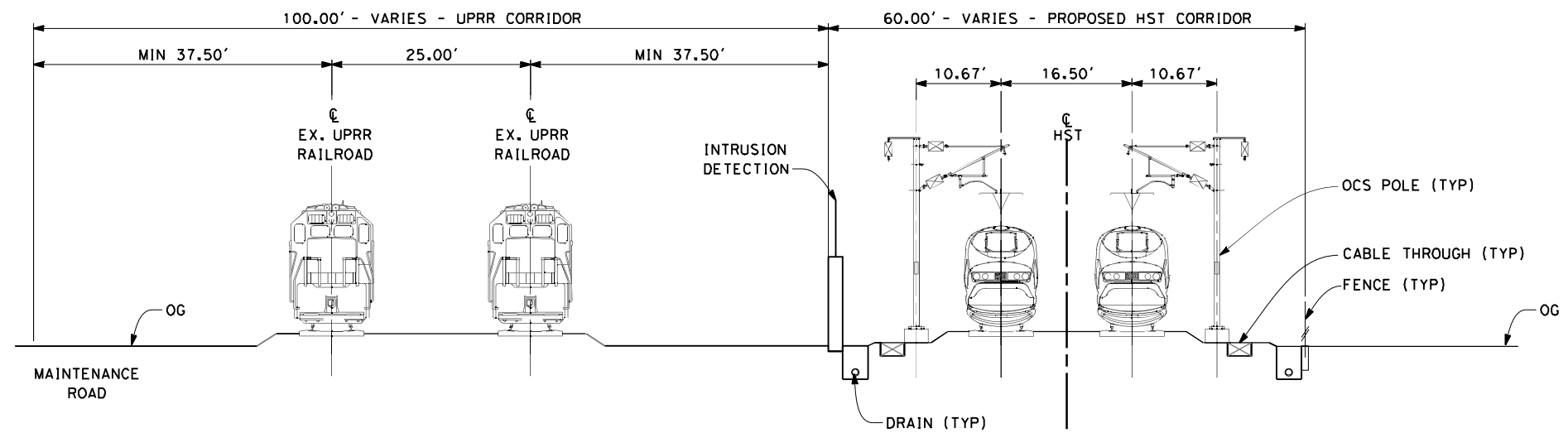


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

TYPICAL SECTIONS
SHEET 17 OF 17

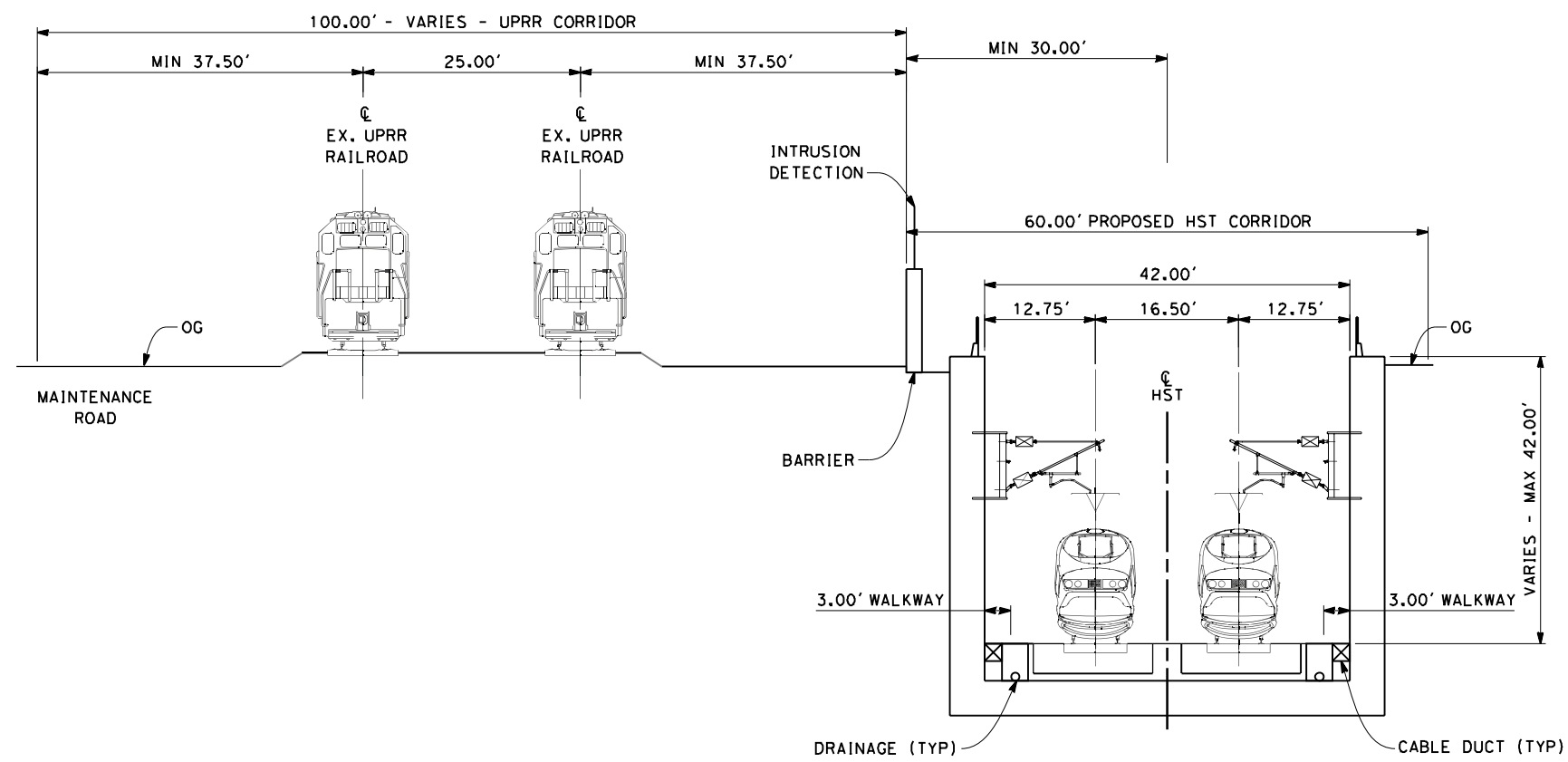
CONTRACT NO.
HSR06-007
DRAWING NO.
T3017-A
SCALE
NO SCALE
SHEET NO.
OF ###

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

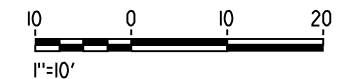
TWIN TRACK AT GRADE 60FT ROW ADJACENT TO UPRR
 STA 100+00 THROUGH STA 182+00



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**

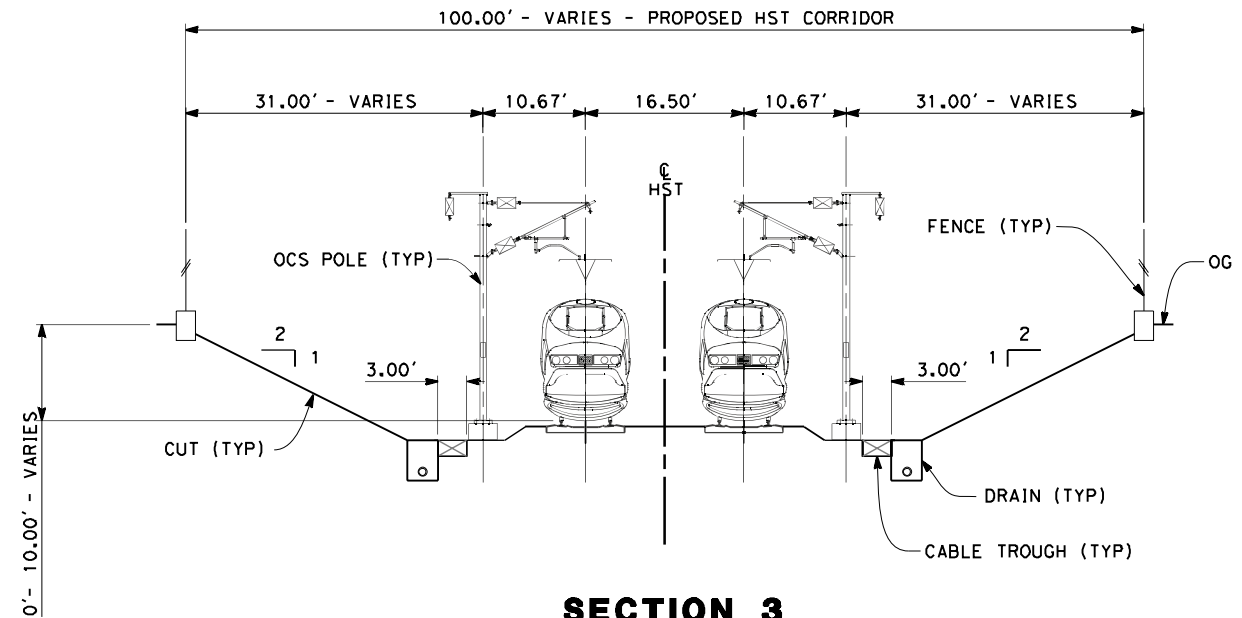
**NOT FOR
 CONSTRUCTION**



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

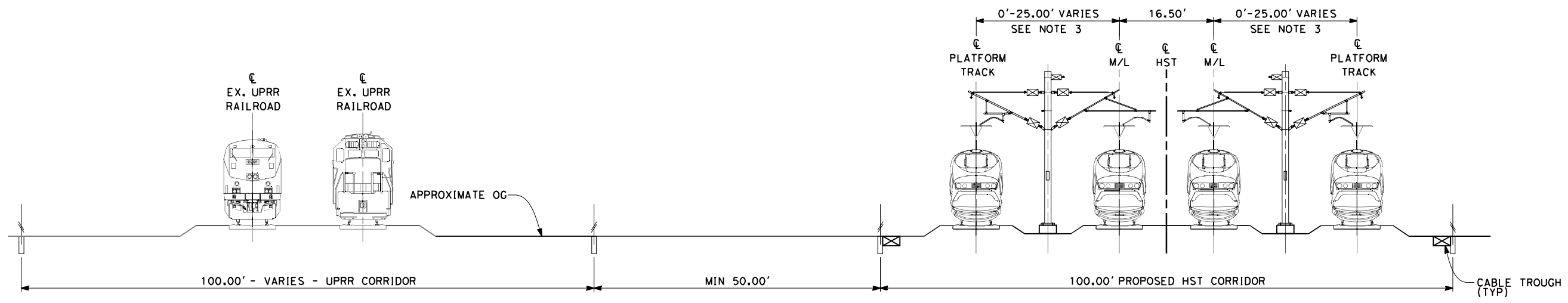
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3018-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

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

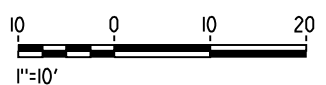


SECTION 3
 TWIN TRACK IN OPEN CUT
 STA 260+00 THROUGH STA 264+25
 STA 260+00 THROUGH STA 270+74 (KERN OPTION)

- 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**

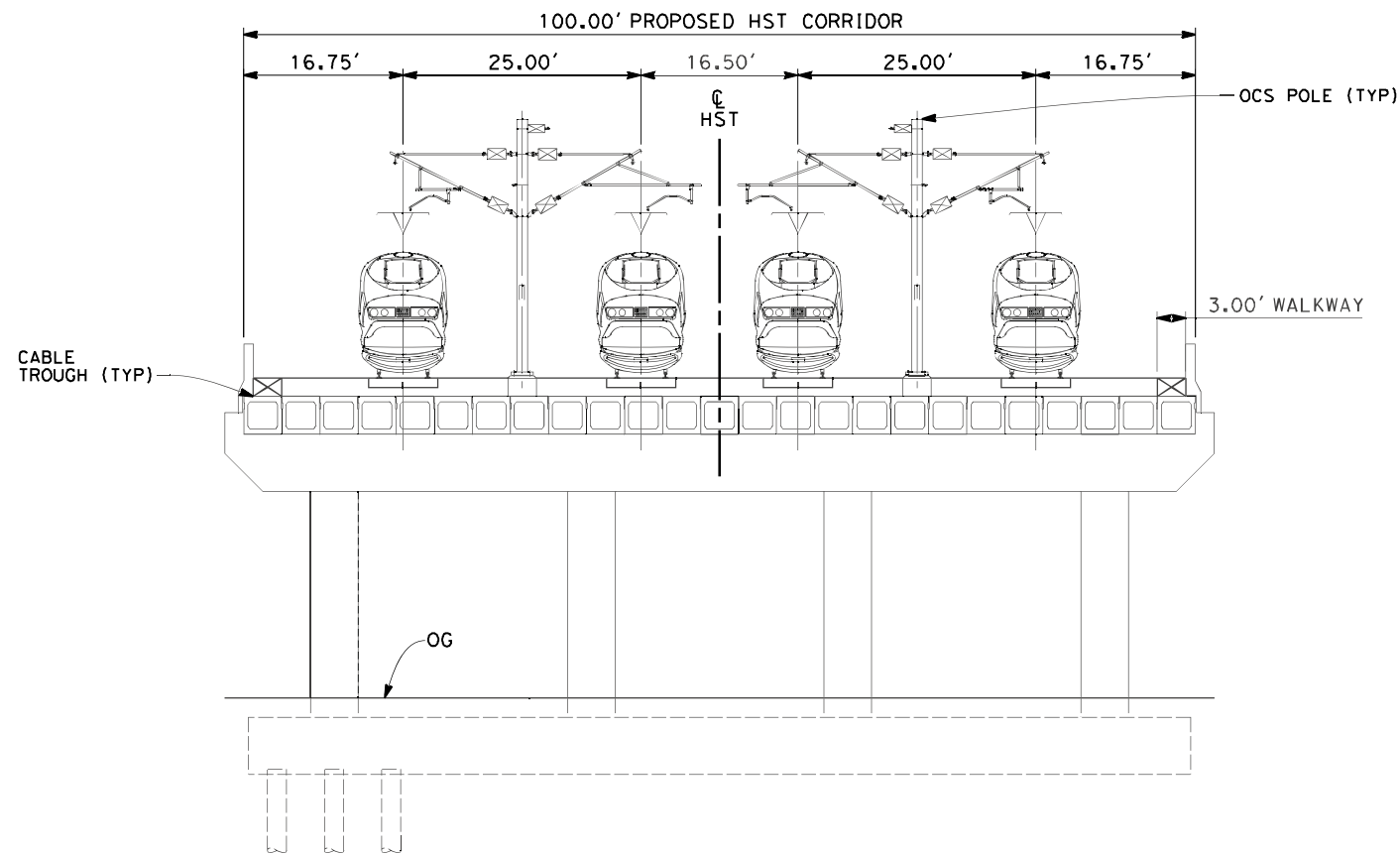
**NOT FOR
 CONSTRUCTION**



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

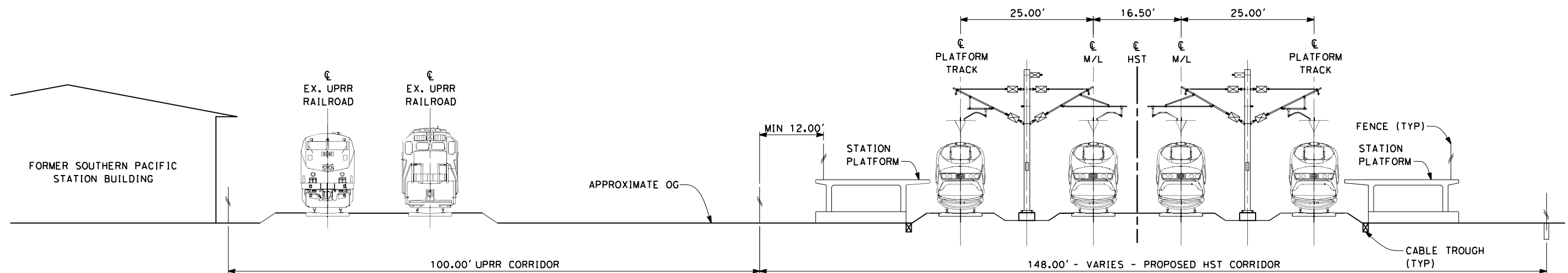
7/21/2011 11:13:03 AM O:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3020-A-F1.dgn



SECTION 5

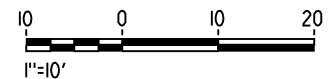
TWIN TRACK - BOX GIRDER BRIDGE
 STA 285+84 THROUGH STA 286+84

- 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



SECTION 6

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

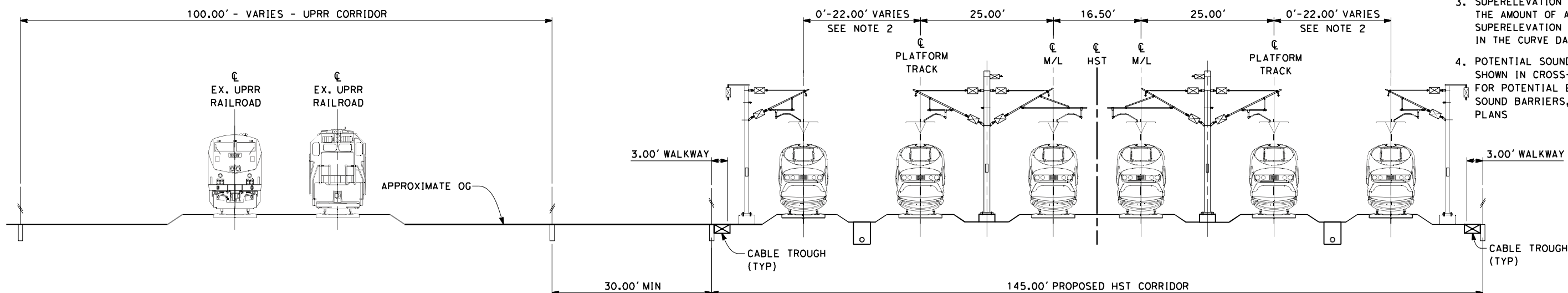
**NOT FOR
 CONSTRUCTION**



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

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

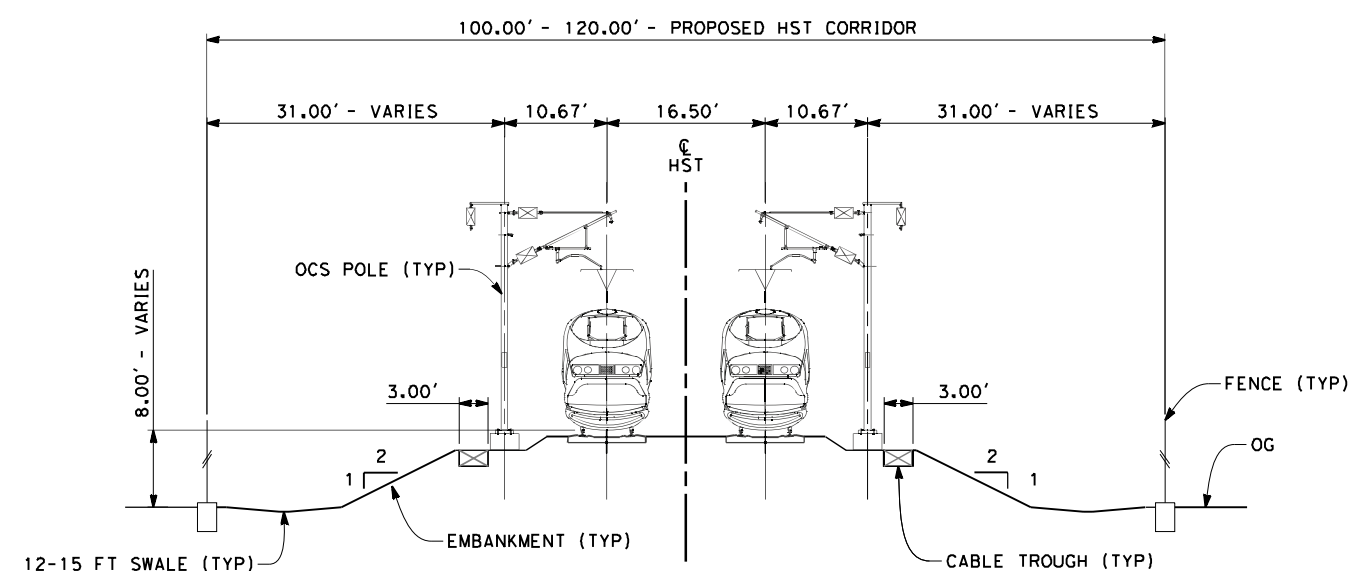
7/21/2011 11:13:06 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3021-A-F1.dgn



- 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

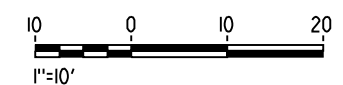
SECTION 7

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

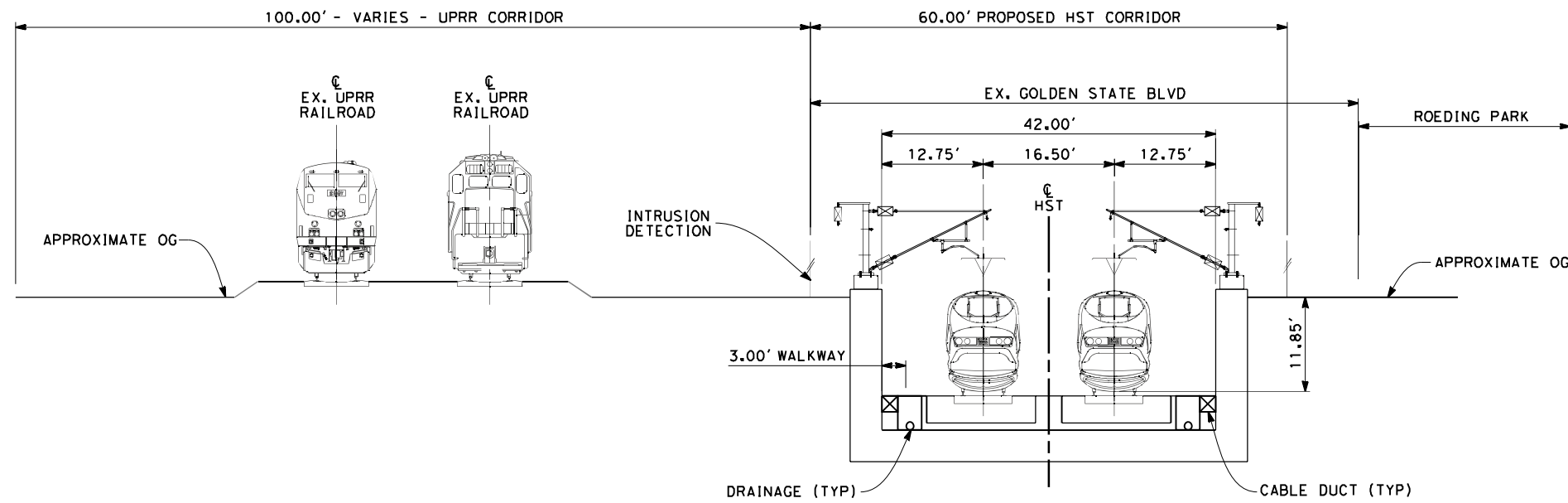
**RECORD SET 15%
 DESIGN SUBMISSION**
 NOT FOR
 CONSTRUCTION



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

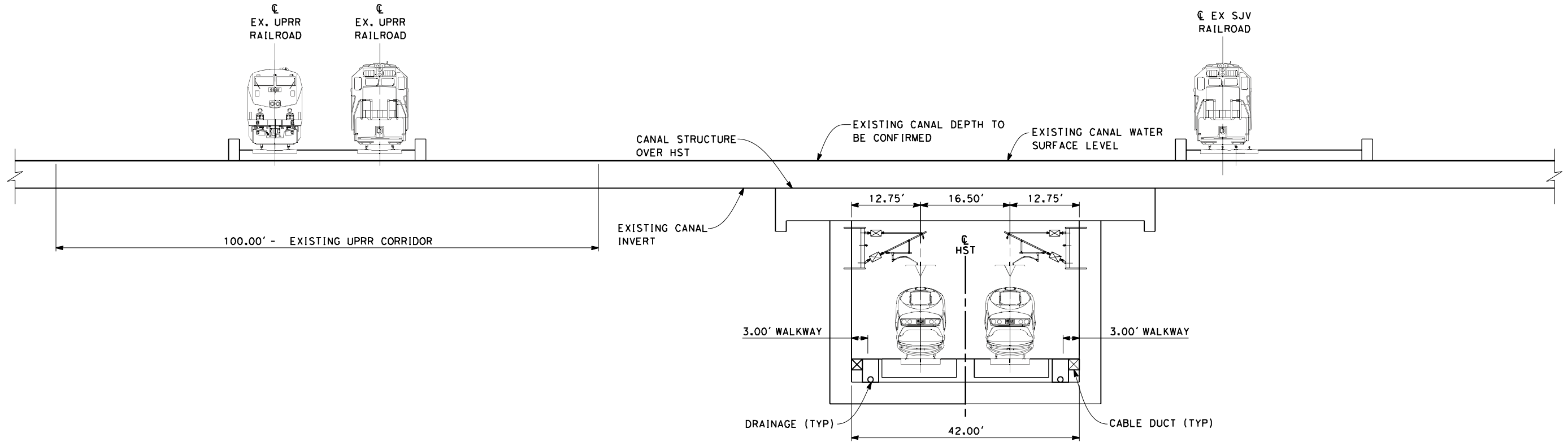
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T3021-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

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

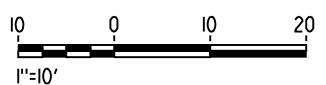
TWIN TRACK IN TRENCH ADJACENT TO UPRR AND ROEDING PARK STA 195+00



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**

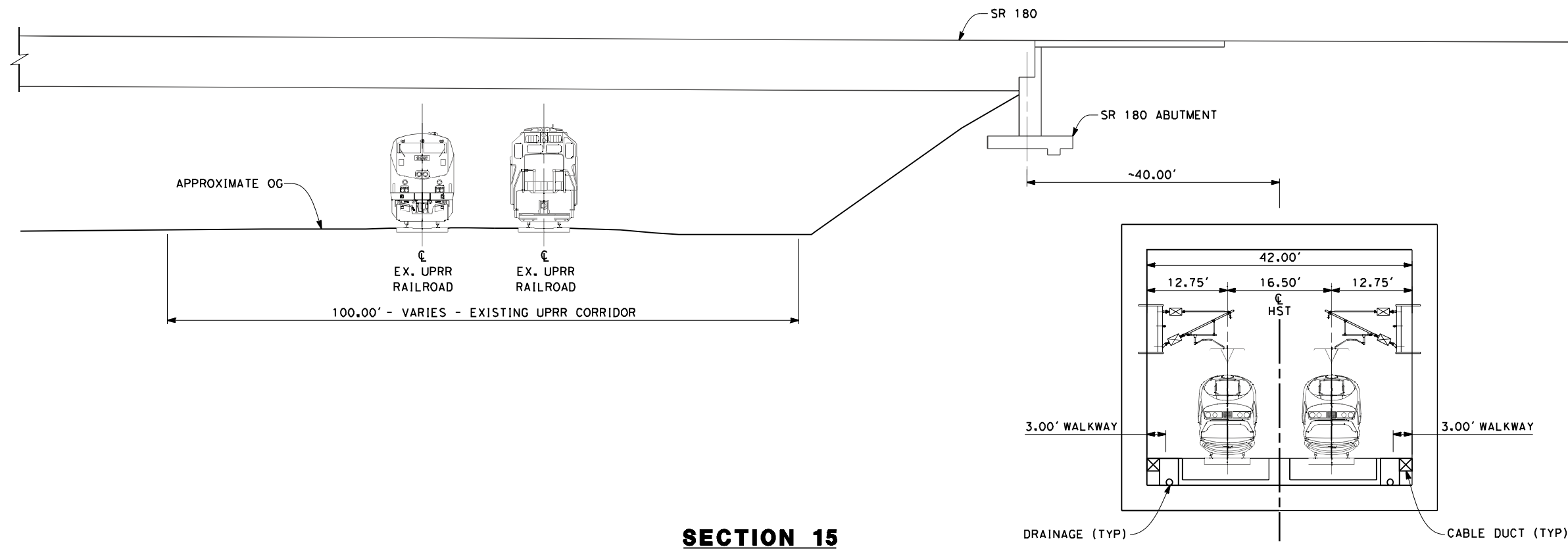
**NOT FOR
 CONSTRUCTION**



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

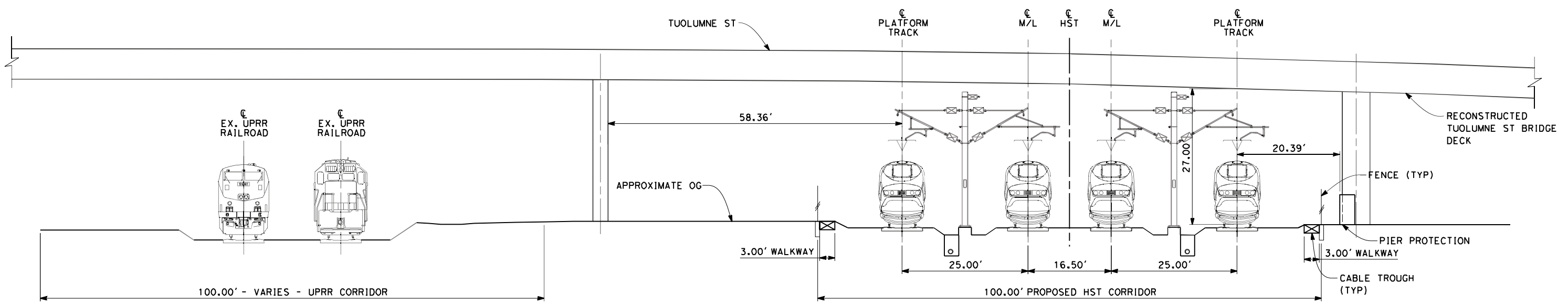
7/21/2011 11:13:11 AM O:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\HSR 15% Design\AECOM\BNSF Alignment - Ave 21\FB-T3023-A-F1.dgn
 frank.palermo



SECTION 15

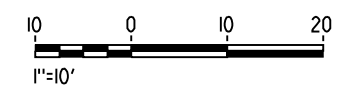
TWIN TRACK IN BOX ADJACENT TO SR-180 ABUTMENT
 STA 232+00

- 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**

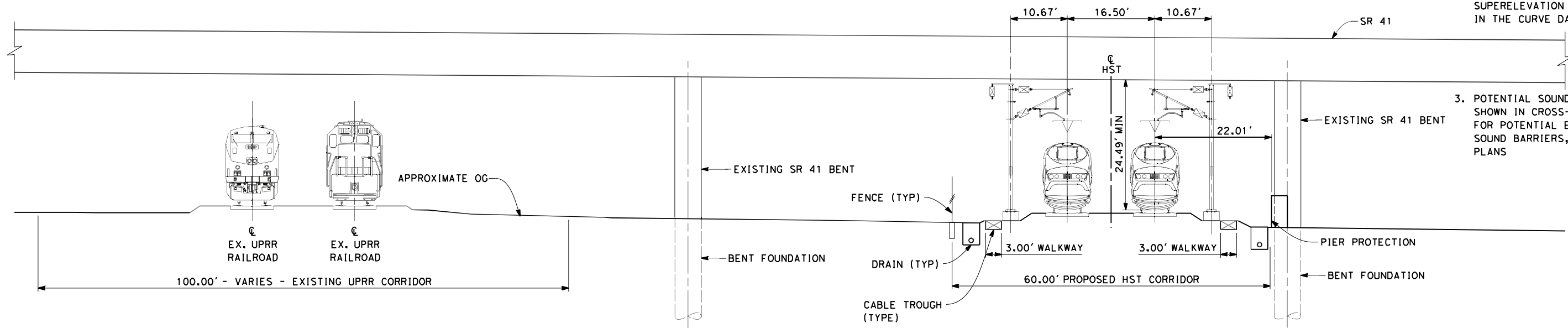
**NOT FOR
 CONSTRUCTION**



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

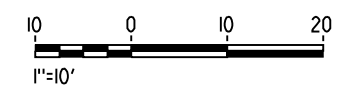
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 T3023-A
 SCALE
 AS SHOWN
 SHEET NO.
 XX OF XX

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**

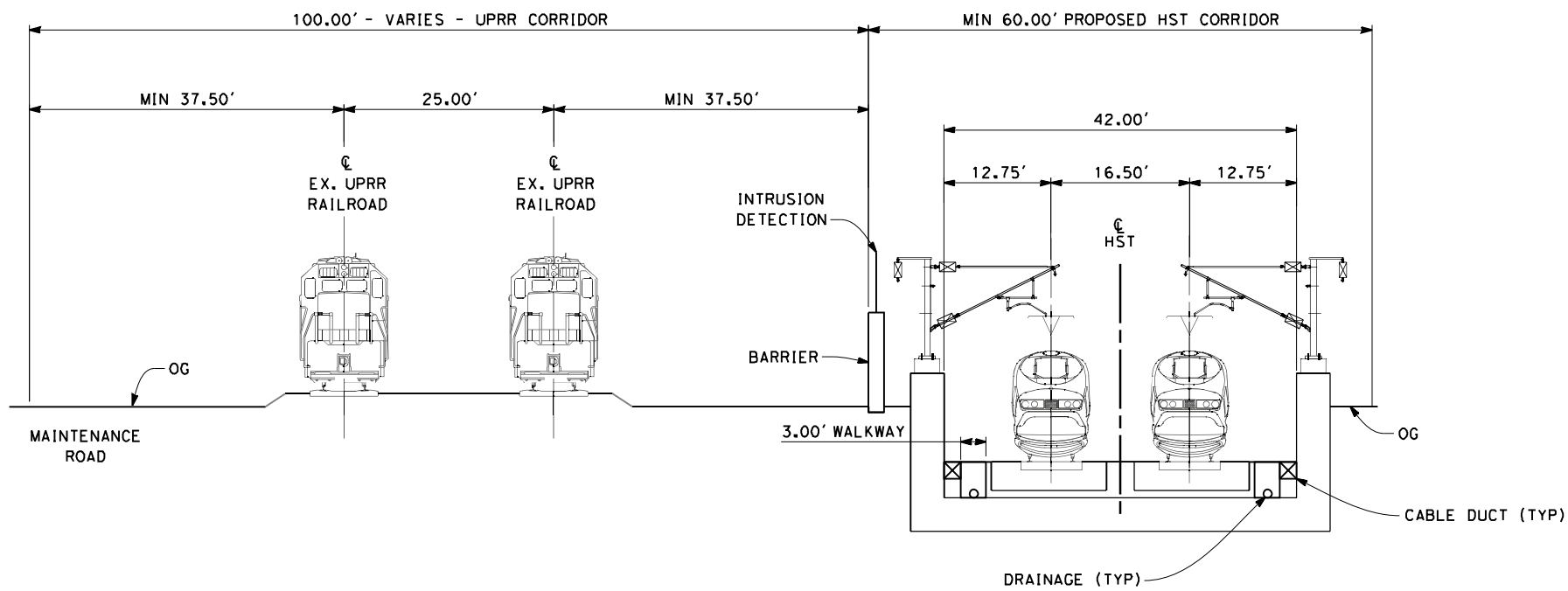
**NOT FOR
 CONSTRUCTION**



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

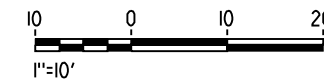


NOTES:

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.

SECTION 19

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



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**



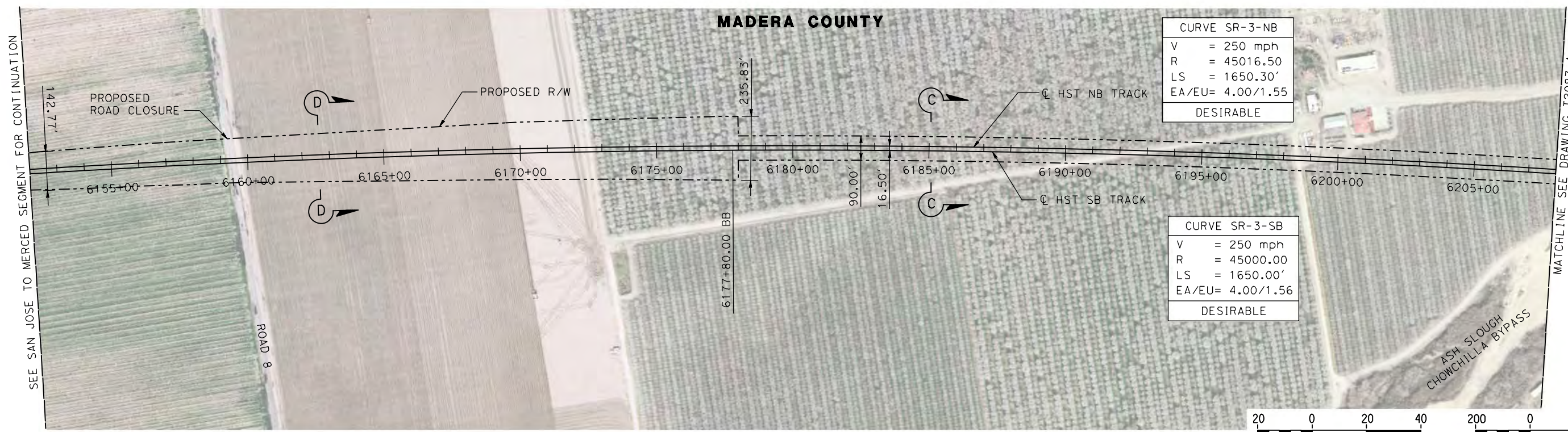
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 FRESNO SUBSECTION
 ALIGNMENT F1
 CROSS SECTIONS

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

MADERA COUNTY

CURVE SR-3-NB	
V	= 250 mph
R	= 45016.50
LS	= 1650.30'
EA/EU	= 4.00/1.55
DESIRABLE	

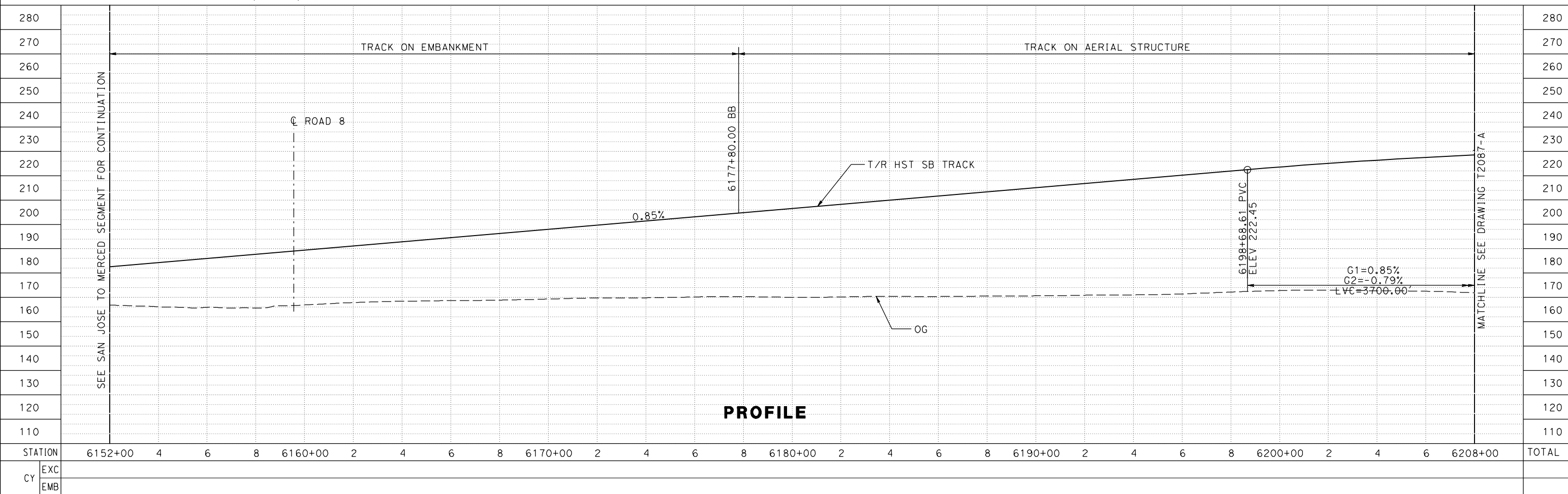
CURVE SR-3-SB	
V	= 250 mph
R	= 45000.00
LS	= 1650.00'
EA/EU	= 4.00/1.56
DESIRABLE	



PLAN



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



PROFILE

STATION	6152+00	4	6	8	6160+00	2	4	6	8	6170+00	2	4	6	8	6180+00	2	4	6	8	6190+00	2	4	6	8	6200+00	2	4	6	6208+00	TOTAL
EXC																														
EMB																														

7/21/2011 1:07:29 PM c:\pw_working\ptg\pwiseb\p0037225\dms66818\JM-T-2086-A.dgn

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6152+00 TO STA 6208+00

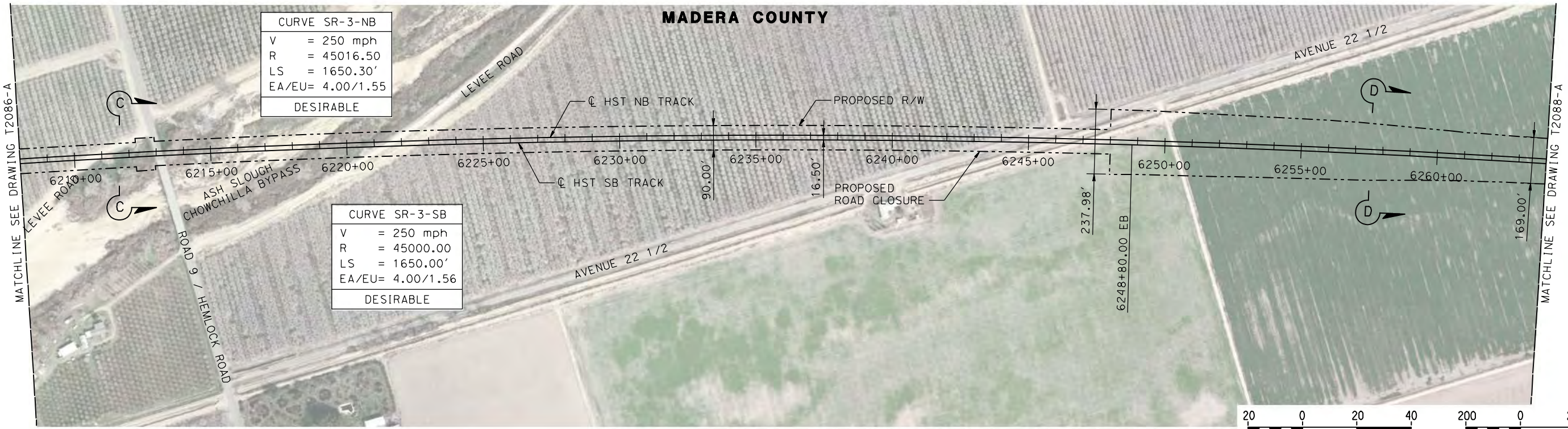
CONTRACT NO.
HSR08-05

DRAWING NO.
T2086-A

SCALE
AS SHOWN

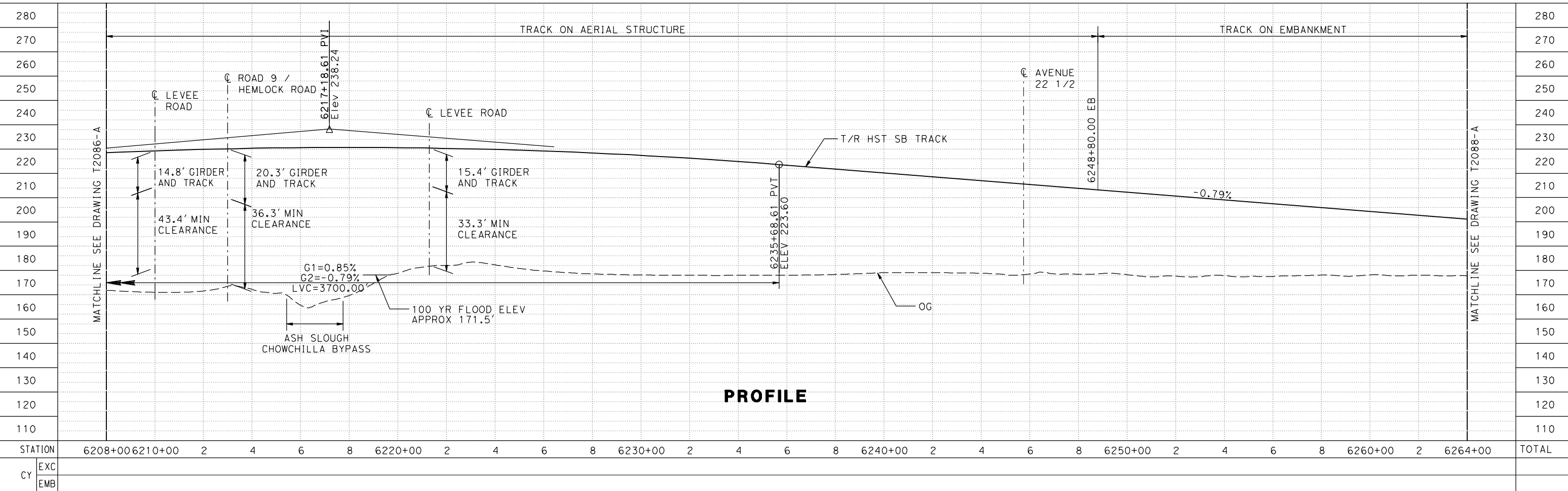
SHEET NO.

7/21/2011 1:10:24 PM c:\pw_working\ptg\pwiseb\p0037225\dms66818\JM-T-2087-A.dgn



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

PLAN



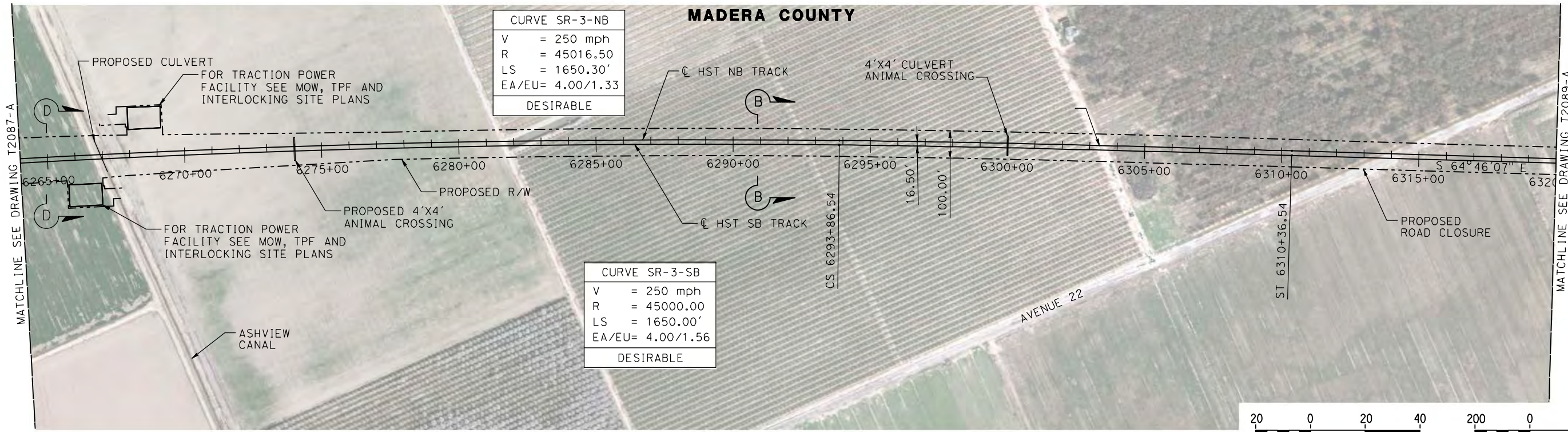
PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY	15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION		
DRAWN BY ALBERT S.			
CHECKED BY RESHMA C.			
IN CHARGE D. WEMMER			
DATE 4/15/2011			

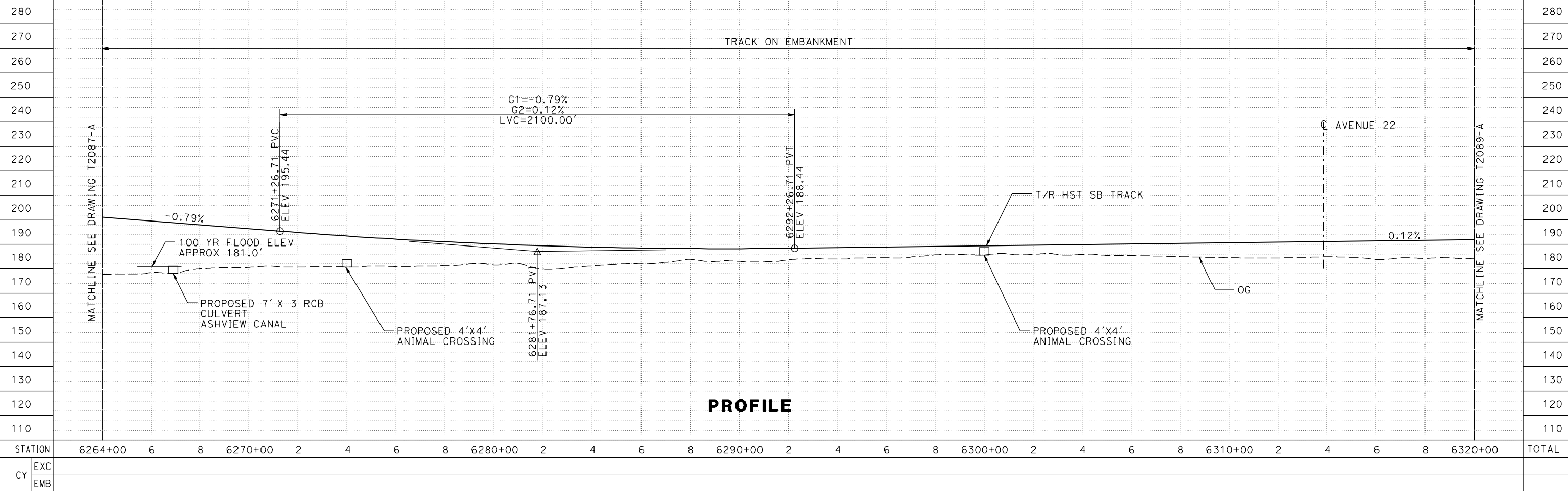
CALIFORNIA HIGH-SPEED TRAIN PROJECT		CONTRACT NO. HSR08-05
MERCED TO FRESNO		DRAWING NO. T2087-A
HYBRID		SCALE AS SHOWN
AVENUE 24/SR152/AVENUE 21		SHEET NO.
TRACK PLAN AND PROFILE		
STA 6208+00 TO STA 6264+00		

7/21/2011 1:11:15 PM c:\pw_working\ptg\pwiseb\p0037225\dms66818\JM-T-2088-A.dgn



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

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

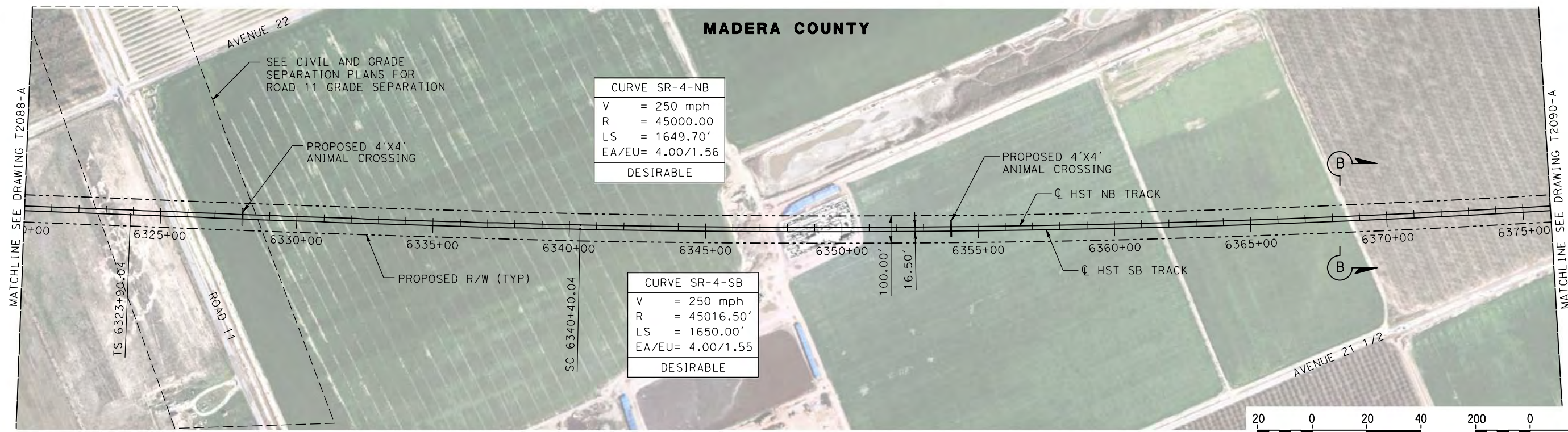
**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6264+00 TO STA 6320+00

CONTRACT NO.
HSR08-05
DRAWING NO.
T2088-A
SCALE
AS SHOWN
SHEET NO.

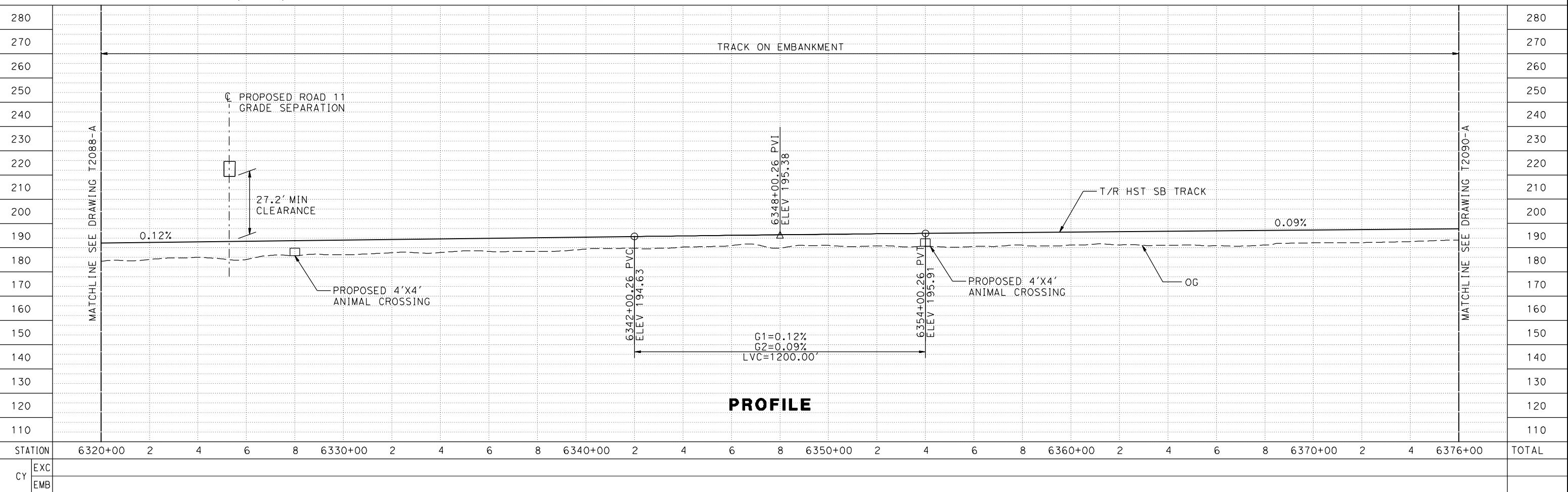


CURVE SR-4-NB	
V	= 250 mph
R	= 45000.00
LS	= 1649.70'
EA/EU	= 4.00/1.56
DESIRABLE	

CURVE SR-4-SB	
V	= 250 mph
R	= 45016.50'
LS	= 1650.00'
EA/EU	= 4.00/1.55
DESIRABLE	

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

PLAN



PROFILE

7/21/2011 1:11:57 PM c:\pwworking\ptg\pwiseb\p0037225\dms66818\JM-T-2089-A.dgn

STATION	6320+00	2	4	6	8	6330+00	2	4	6	8	6340+00	2	4	6	8	6350+00	2	4	6	8	6360+00	2	4	6	8	6370+00	2	4	6376+00	TOTAL
EXC																														
EMB																														

DESIGNED BY	P. JACOBY
DRAWN BY	ALBERT S.
CHECKED BY	RESHMA C.
IN CHARGE	D. WEMMER
DATE	4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**

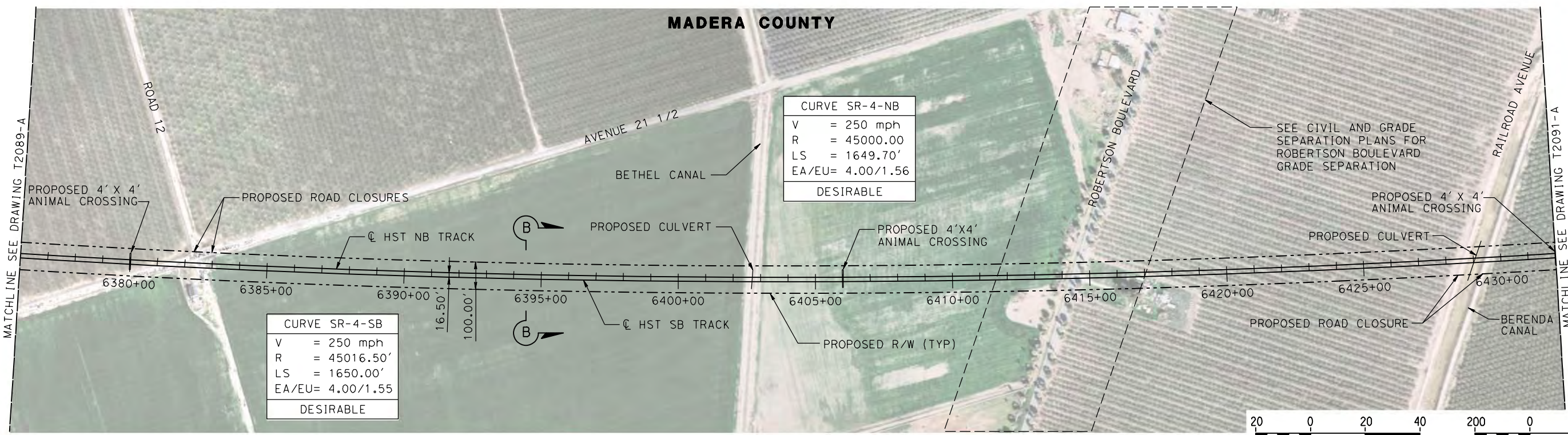


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6320+00 TO STA 6376+00

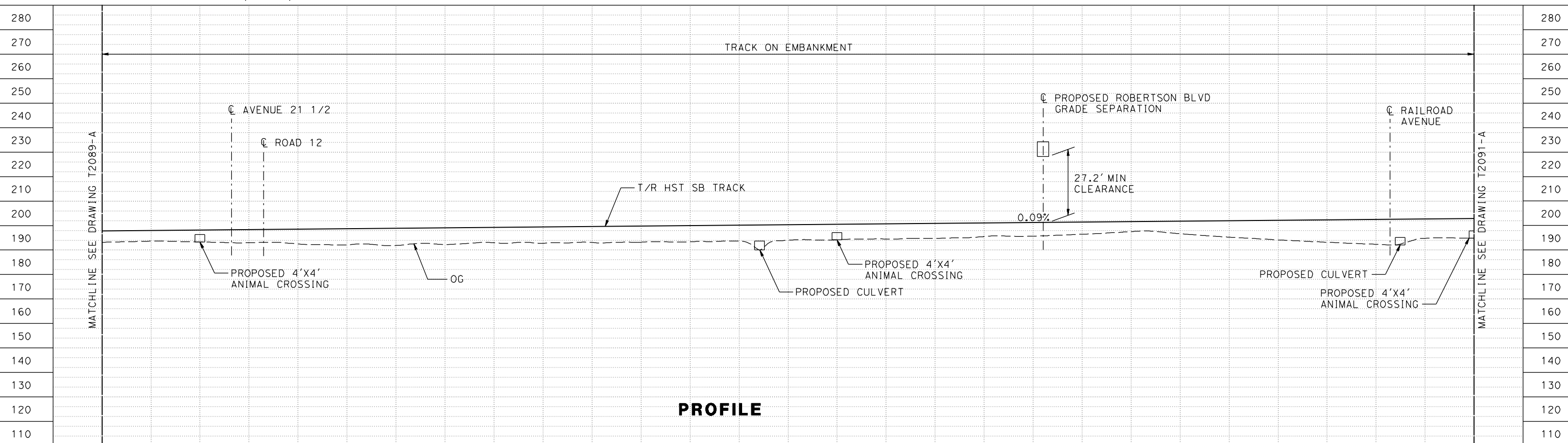
CONTRACT NO.	HSR08-05
DRAWING NO.	T2089-A
SCALE	AS SHOWN
SHEET NO.	

7/21/2011 1:12:43 PM c:\pw_working\ptg\pwiseb\p0037225\dms66818\JM-T-2090-A.dgn



PLAN

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



PROFILE

STATION	6376+00	8	6380+00	2	4	6	8	6390+00	2	4	6	8	6400+00	2	4	6	8	6410+00	2	4	6	8	6420+00	2	4	6	8	6430+00	6432+00	TOTAL
EXC																														
EMB																														

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



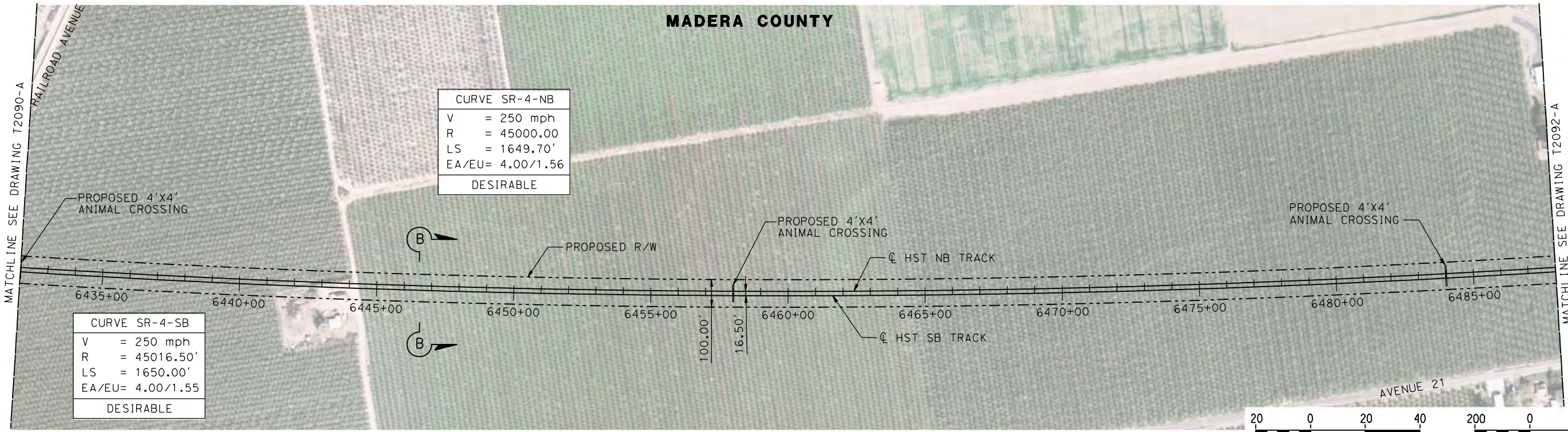
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6376+00 TO STA 6432+00

CONTRACT NO.
HSR08-05
DRAWING NO.
T2090-A
SCALE
AS SHOWN
SHEET NO.

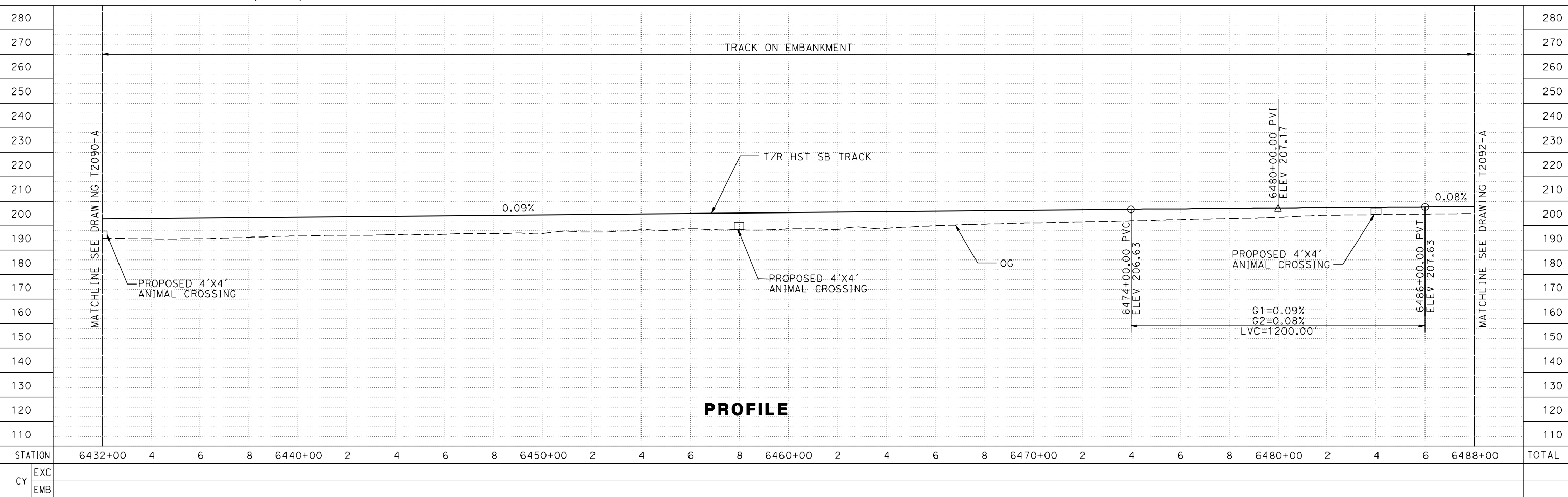
REV	DATE	BY	CHK	APP	DESCRIPTION

MADERA COUNTY



PLAN

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



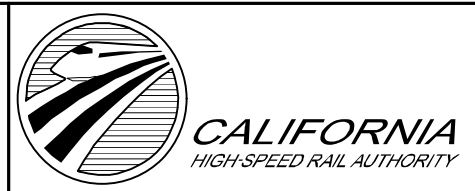
PROFILE

7/21/2011 1:13:30 PM c:\pw_working\pdpw\seeb\p0037225\dms66818\JM-T-2091-A.dgn

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**

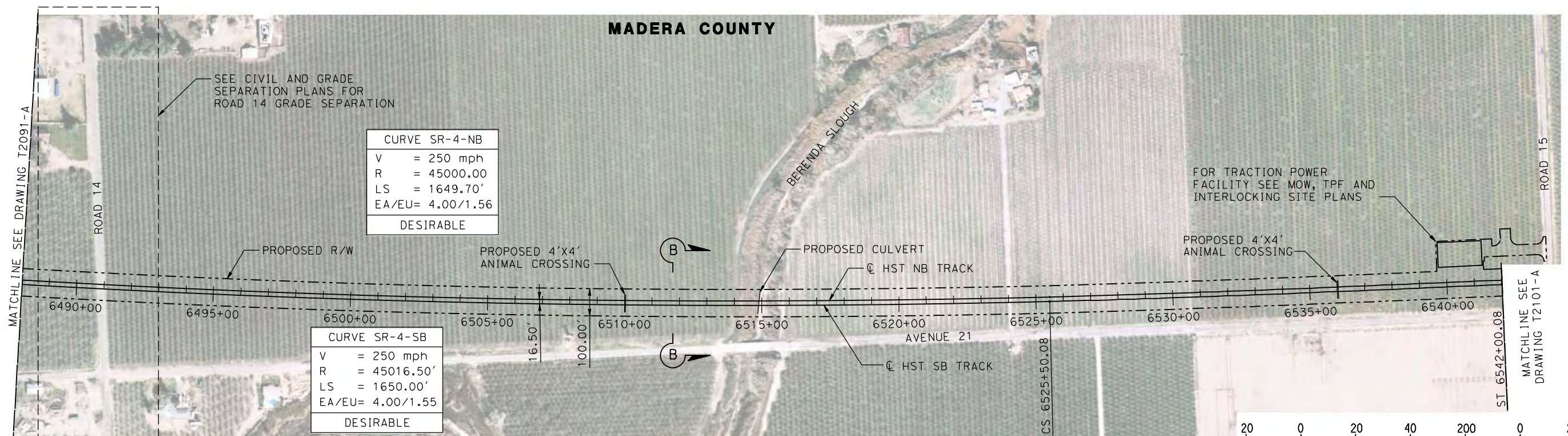


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6432+00 TO STA 6488+00

CONTRACT NO.
HSR08-05
DRAWING NO.
T2091-A
SCALE
AS SHOWN
SHEET NO.

MADERA COUNTY



CURVE SR-4-NB

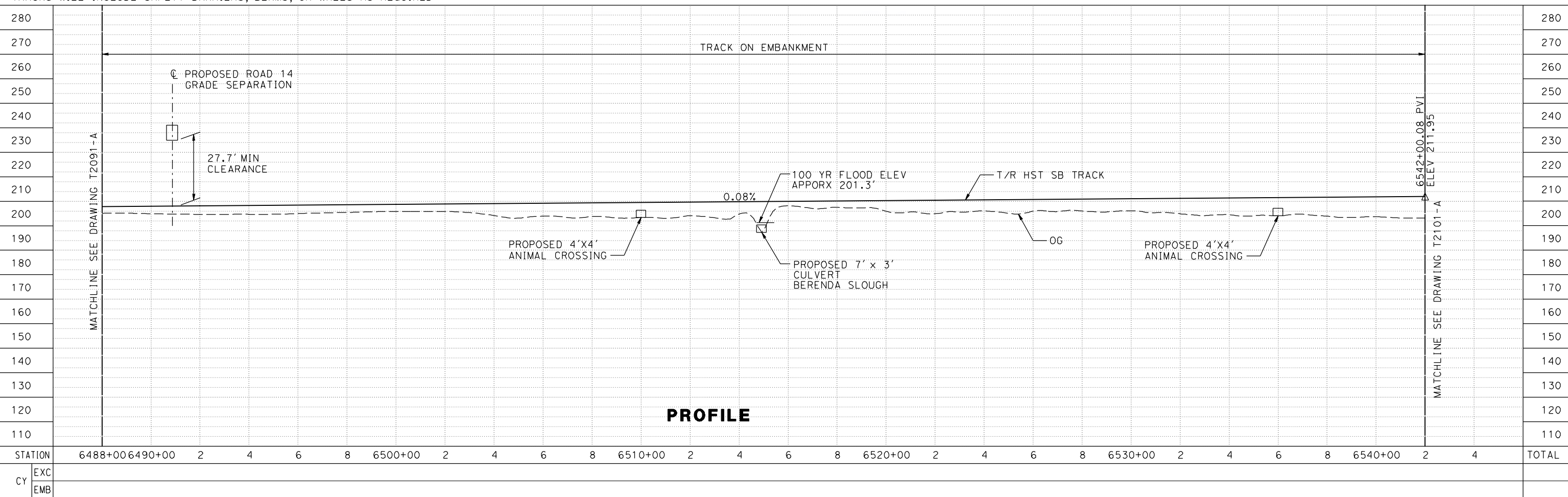
V	= 250 mph
R	= 45000.00
LS	= 1649.70'
EA/EU	= 4.00/1.56
DESIRABLE	

CURVE SR-4-SB

V	= 250 mph
R	= 45016.50'
LS	= 1650.00'
EA/EU	= 4.00/1.55
DESIRABLE	

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

PLAN



PROFILE

STATION	6488+00	6490+00	2	4	6	8	6500+00	2	4	6	8	6510+00	2	4	6	8	6520+00	2	4	6	8	6530+00	2	4	6	8	6540+00	2	4	TOTAL
EXC																														
EMB																														

7/21/2011 1:14:17 PM c:\pw_working\ptg\pwiseb\p0037225\dms66818\JM-T-2092-A.dgn

DESIGNED BY
P. JACOBY
DRAWN BY
ALBERT S.
CHECKED BY
RESHMA C.
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

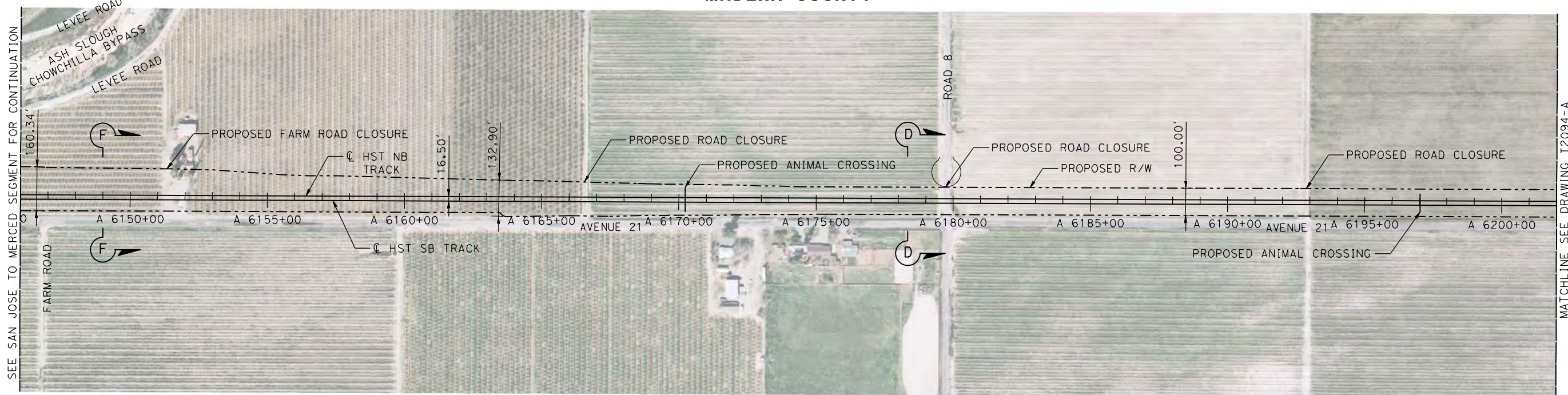
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
6488+00 TO STA 6542+00

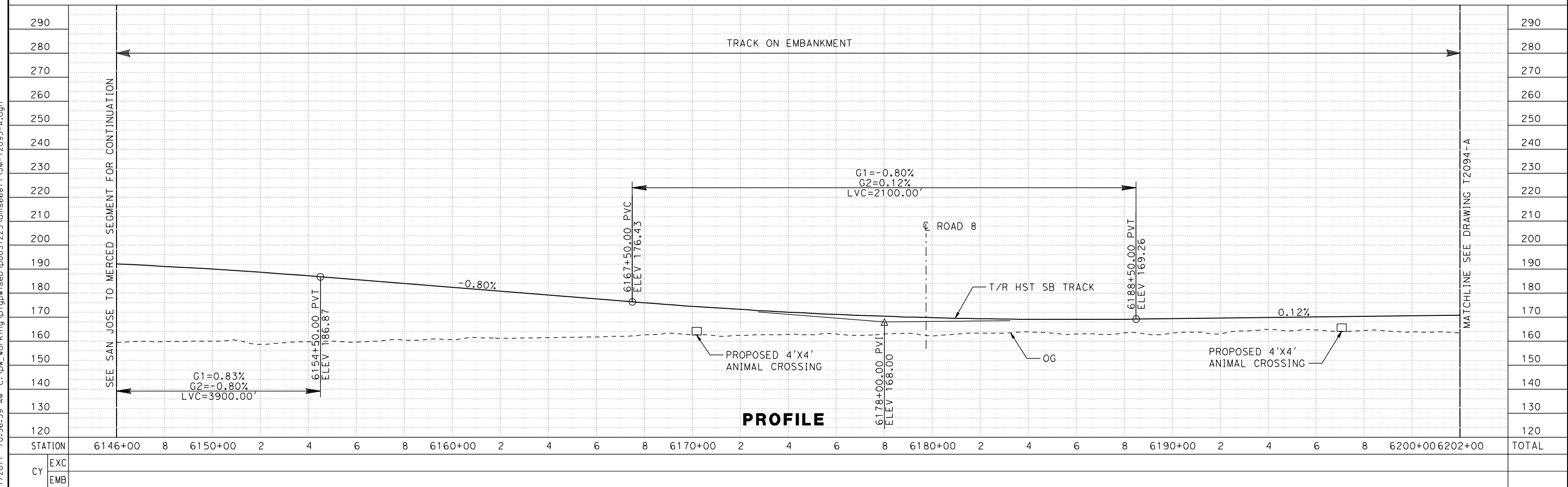
CONTRACT NO.
HSR08-05
DRAWING NO.
T2092-A
SCALE
AS SHOWN
SHEET NO.

MADERA COUNTY



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

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
DRAWN BY
A. GURA
CHECKED BY
S. GOOLLA
IN CHARGE
D. WEMMER
DATE
4/15/2011

**15X DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



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

HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6146+00 TO STA A 6202+00

CONTRACT NO.
HSR08-05
DRAWING NO.
T2093-A
SCALE
AS SHOWN
SHEET NO.

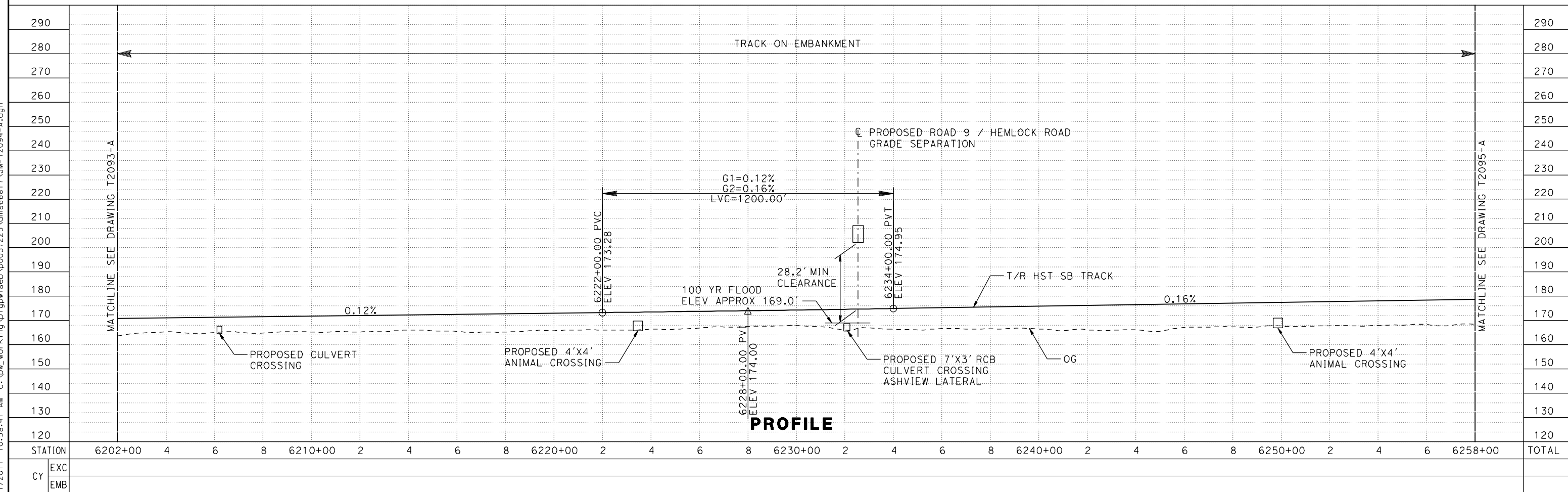
7/21/2011 10:56:39 AM c:\pw_working\ptgwiseb\p0037225\dms66817\JM-T2093-A.dgn

MADERA COUNTY



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

PLAN



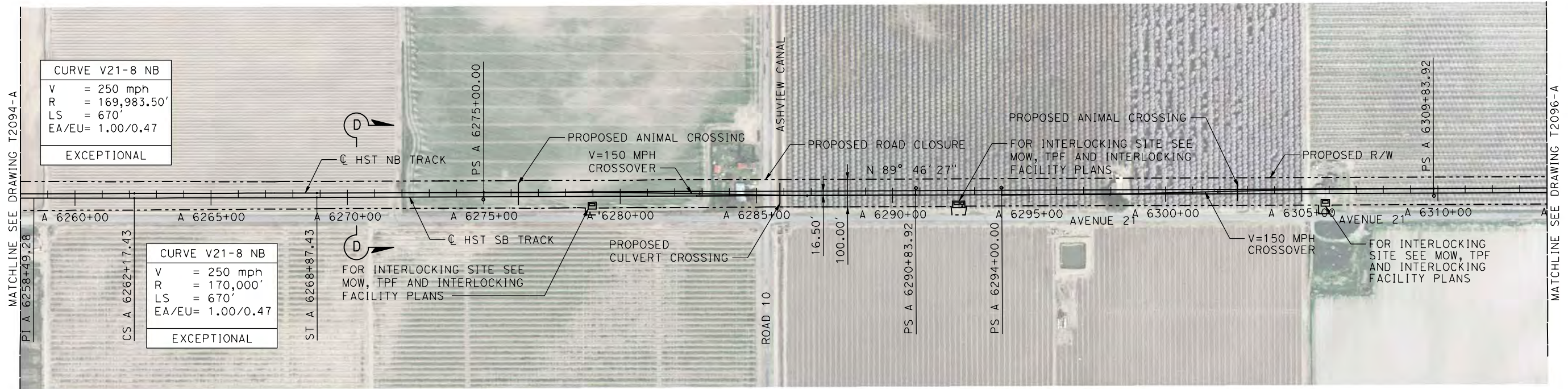
PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA	15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION	 	CONTRACT NO. HSR08-05
DRAWN BY A. GURA			DRAWING NO. T2094-A
CHECKED BY S. GOOLLA			SCALE AS SHOWN
IN CHARGE D. WEMMER			SHEET NO.
DATE 4/15/2011			CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO HYBRID AVENUE 21 TRACK PLAN AND PROFILE STA A 6202+00 TO STA A 6258+00

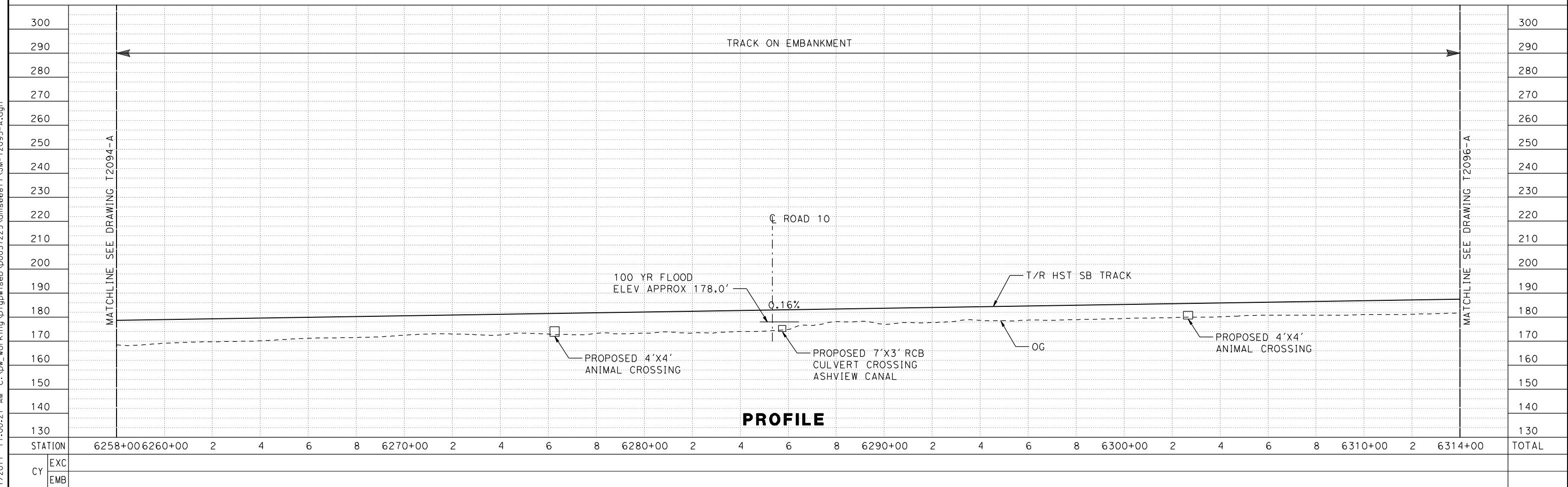
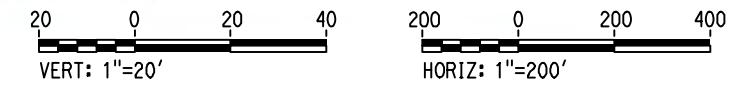
7/21/2011 10:58:41 AM c:\pw_working\ptg\pwiseb\p0037225\dms66817\JM-T2094-A.dgn

MADERA COUNTY



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

PLAN



PROFILE

7/21/2011 11:00:21 AM c:\pwworking\p0037225\dms66817\JM-T2095-A.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
 DRAWN BY
A. GURA
 CHECKED BY
S. GOOLLA
 IN CHARGE
D. WEMMER
 DATE
4/15/2011

**15% DRAFT
 SUBMITTAL
 FOR INTERNAL
 USE ONLY**

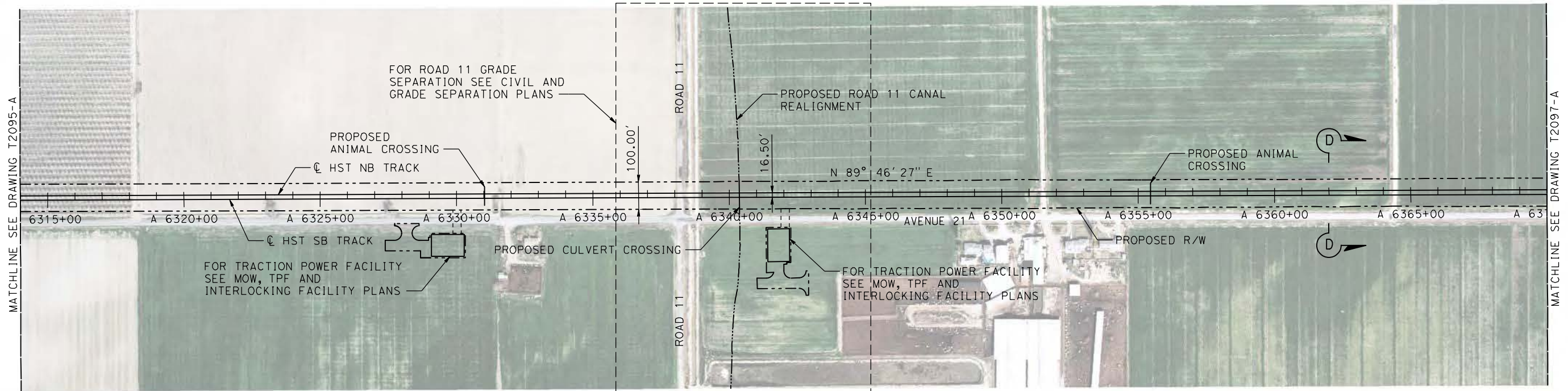
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID
 AVENUE 21
 TRACK PLAN AND PROFILE
 STA A 6258+00 TO STA A 6314+00

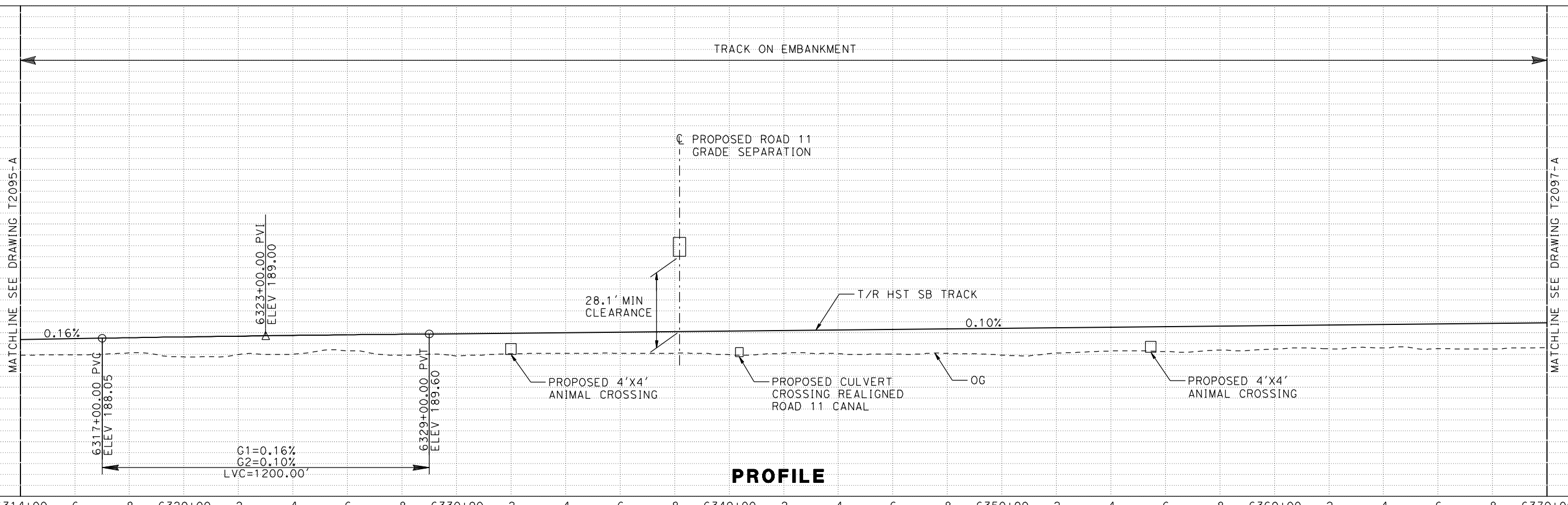
CONTRACT NO.
HSR08-05
 DRAWING NO.
T2095-A
 SCALE
AS SHOWN
 SHEET NO.

MADERA COUNTY



PLAN

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



PROFILE

7/21/2011 11:02:17 AM c:\pwworking\ptg\pwiseb\p0037225\dms66817\JM-T2096-A.dgn

STATION	6314+00	6	8	6320+00	2	4	6	8	6330+00	2	4	6	8	6340+00	2	4	6	8	6350+00	2	4	6	8	6360+00	2	4	6	8	6370+00	TOTAL
EXC																														
EMB																														

DESIGNED BY	A. GURA
DRAWN BY	A. GURA
CHECKED BY	S. GOOLLA
IN CHARGE	D. WEMMER
DATE	4/15/2011

**15% DRAFT
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**

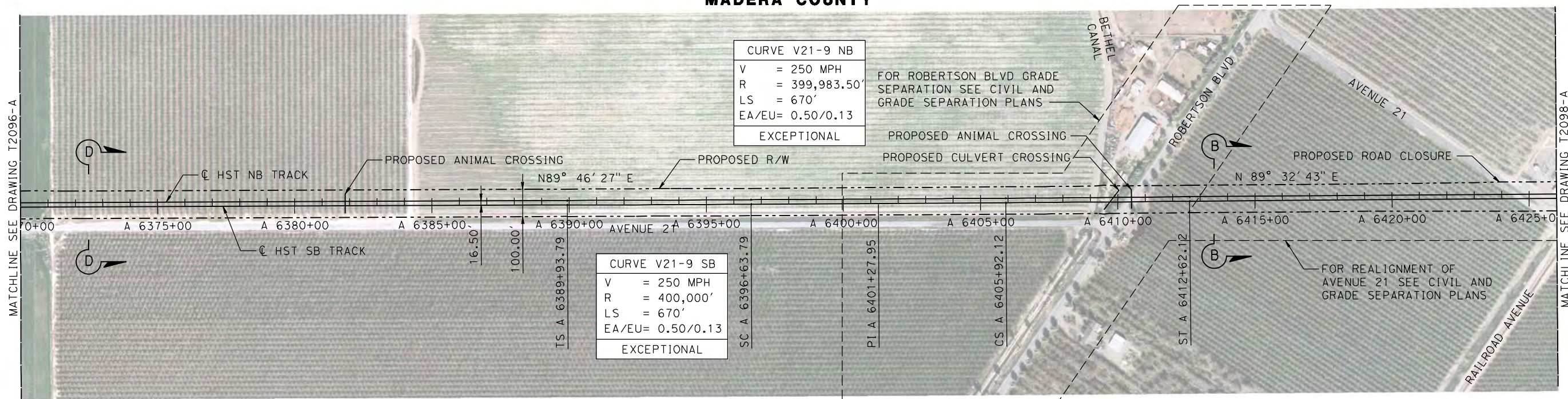


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6314+00 TO STA A 6370+00

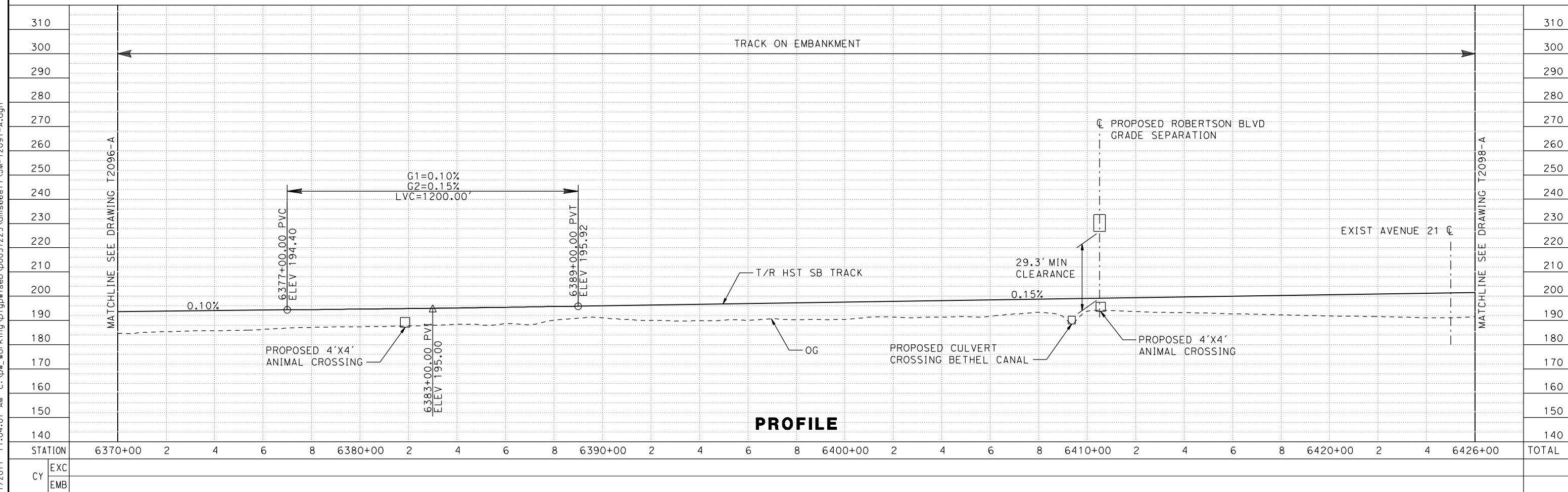
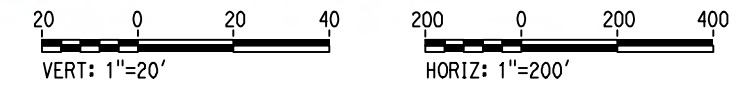
CONTRACT NO.	HSR08-05
DRAWING NO.	T2096-A
SCALE	AS SHOWN
SHEET NO.	

MADERA COUNTY



PLAN

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



PROFILE

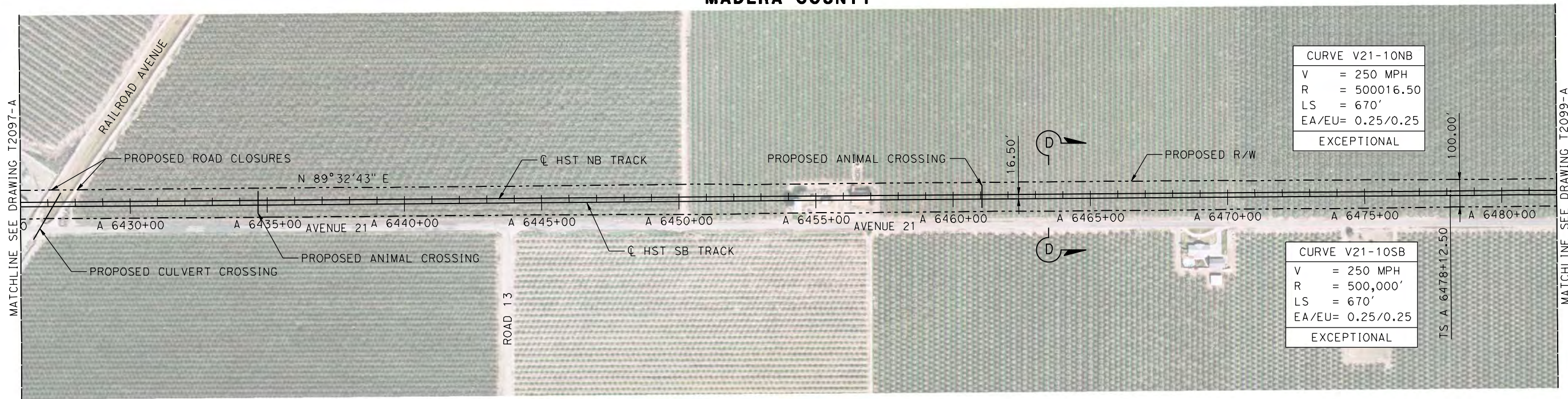
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA	15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION
DRAWN BY A. GURA	
CHECKED BY S. GOOLLA	
IN CHARGE D. WEMMER	
DATE 4/15/2011	

CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO HYBRID AVENUE 21 TRACK PLAN AND PROFILE STA A 6370+00 TO STA A 6426+00		CONTRACT NO. HSR08-05 DRAWING NO. T2097-A SCALE AS SHOWN SHEET NO.
--	--	--

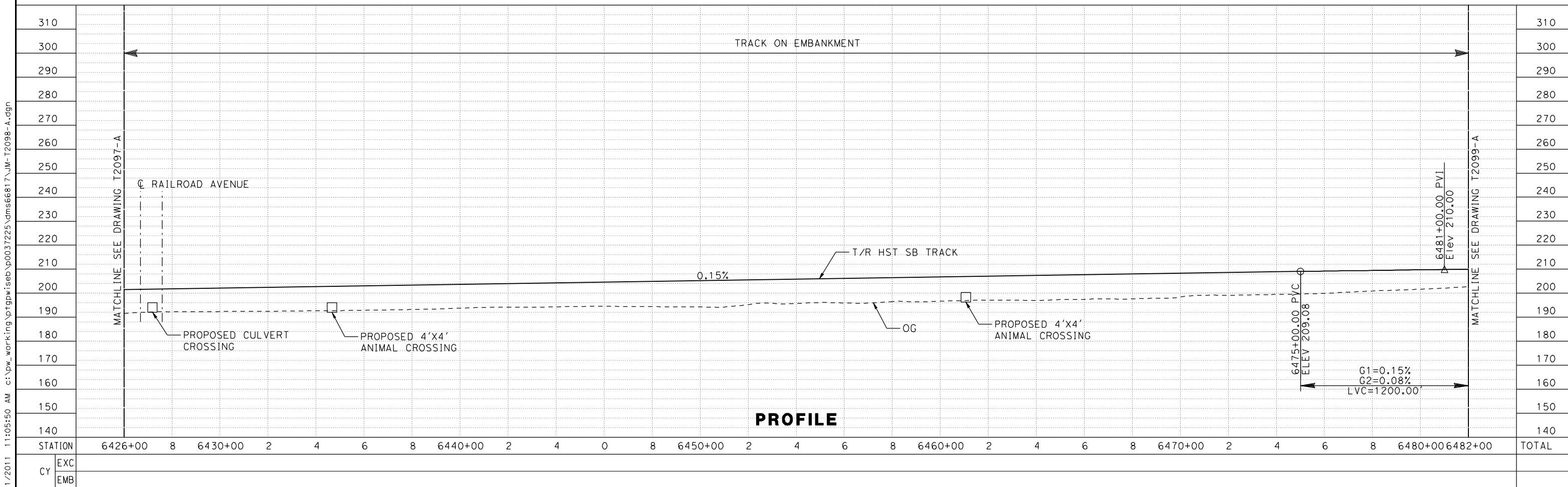
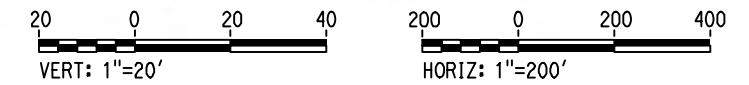
7/21/2011 11:04:01 AM c:\pwworking\p0037225\dms66817\JM-T2097-A.dgn

MADERA COUNTY



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

PLAN



PROFILE

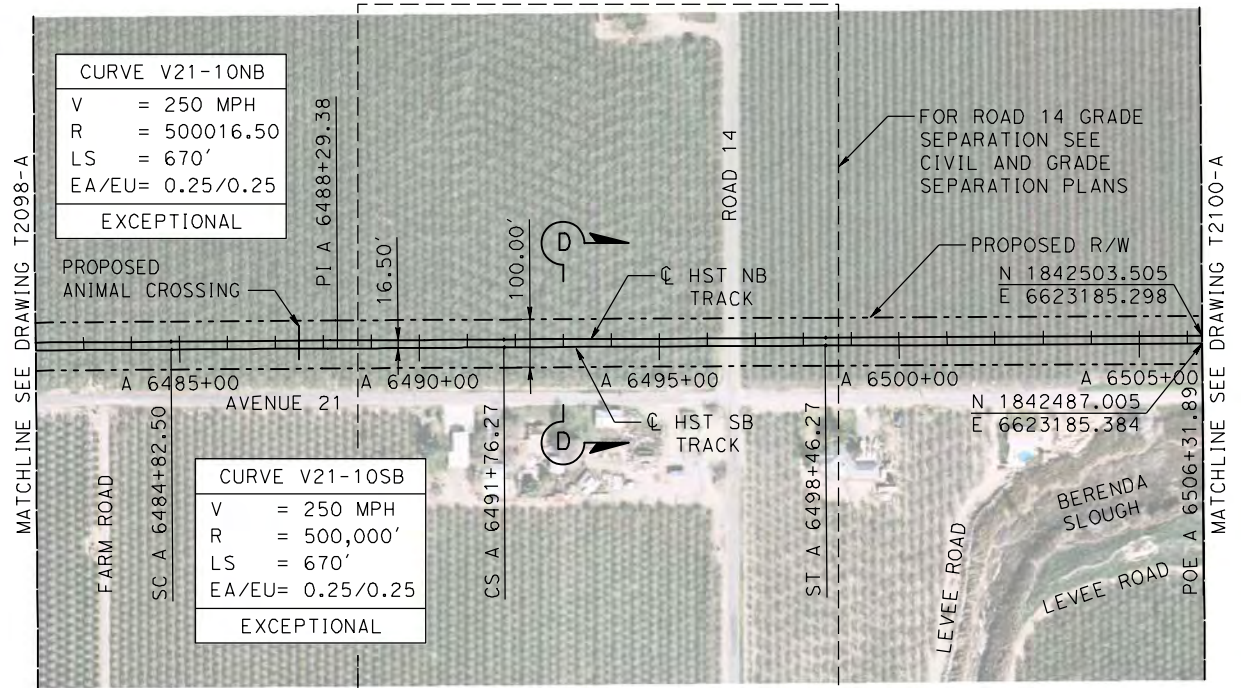
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA	15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION
DRAWN BY A. GURA	
CHECKED BY S. GOOLLA	
IN CHARGE D. WEMMER	
DATE 4/15/2011	

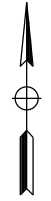
CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO HYBRID AVENUE 21 TRACK PLAN AND PROFILE STA A 6426+00 TO STA A 6482+00		CONTRACT NO. HSR08-05 DRAWING NO. T2098-A SCALE AS SHOWN SHEET NO.
--	--	--

7/21/2011 11:05:50 AM c:\pw_working\ptg\pwiseb\p0037225\dms66817\JM-T2098-A.dgn

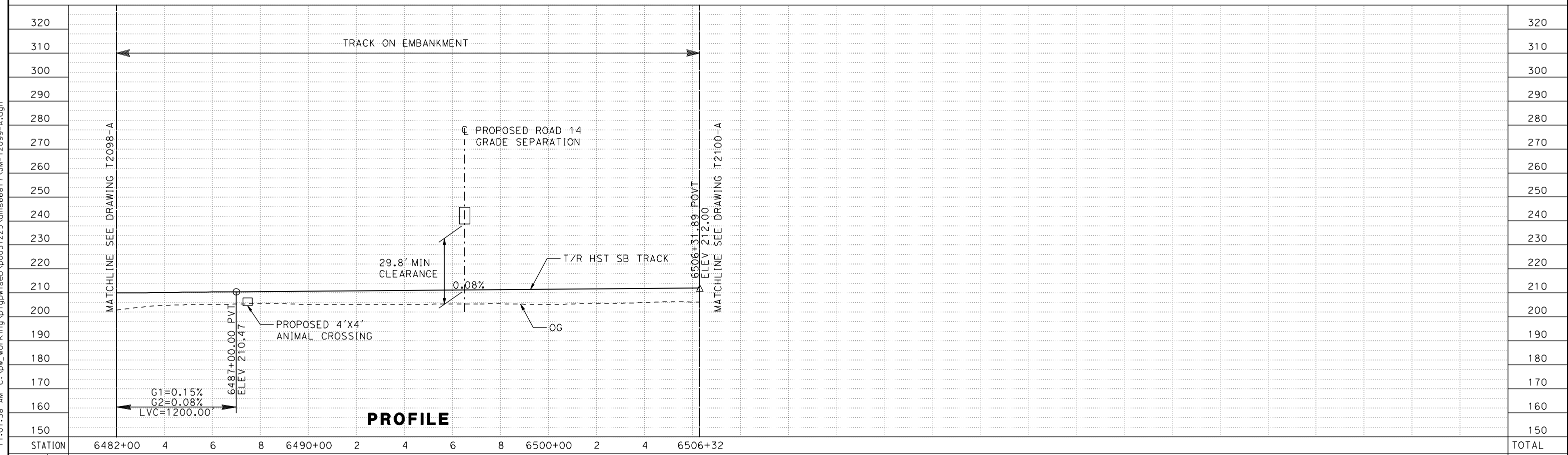
MADERA COUNTY



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



PLAN



PROFILE

STATION	6482+00	4	6	8	6490+00	2	4	6	8	6500+00	2	4	6506+32	TOTAL
EXC														
EMB														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. GURA
 DRAWN BY
A. GURA
 CHECKED BY
S. GOOLLA
 IN CHARGE
D. WEMMER
 DATE
4/15/2011

**15% DRAFT
 SUBMITTAL
 FOR INTERNAL
 USE ONLY**

**NOT FOR
 CONSTRUCTION**



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

HYBRID
 AVENUE 21
 TRACK PLAN AND PROFILE
 STA A 6482+00 TO STA A 6506+32

CONTRACT NO.
HSR08-05

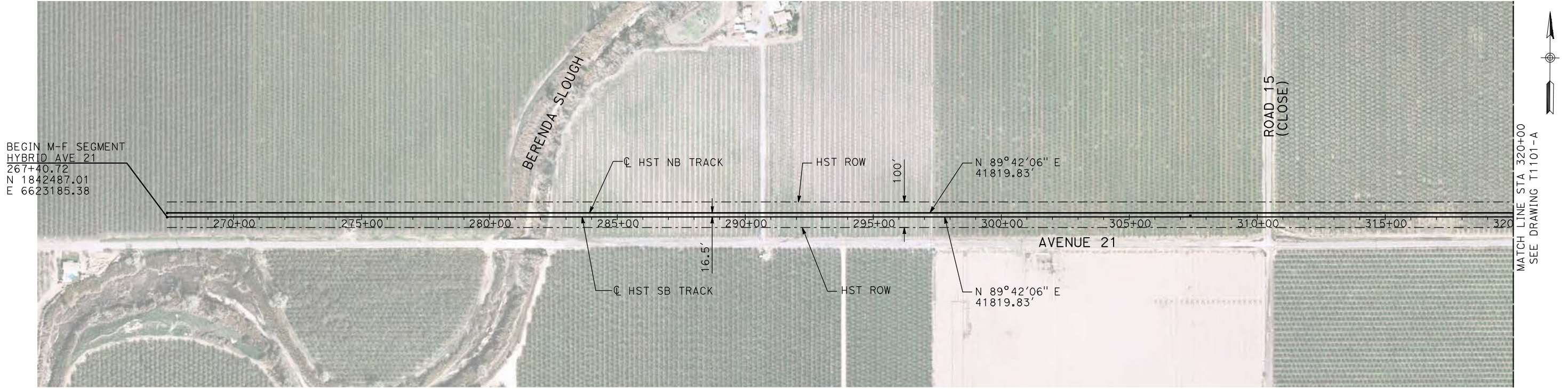
DRAWING NO.
T2099-A

SCALE
AS SHOWN

SHEET NO.

7/21/2011 11:07:38 AM c:\pw_working\ptg\pwiseb\p0037225\dms66817\JM-T2099-A.dgn

7/22/2011 10:18:37 AM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Civil\Sheet\TRACKWORK\HYBRID_21\MF-T-1100-A.dgn

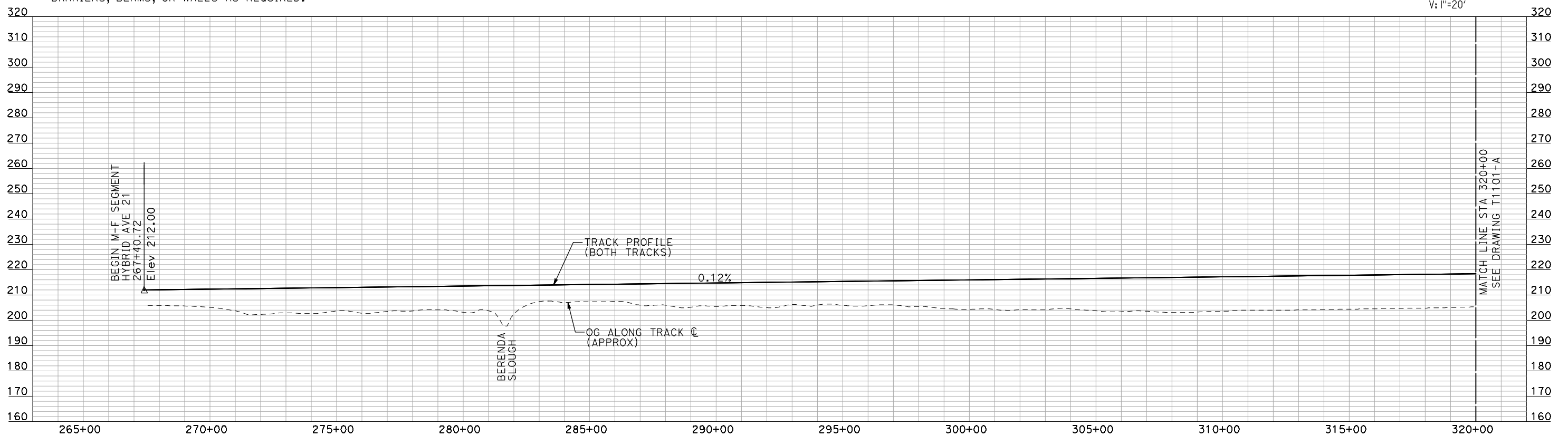
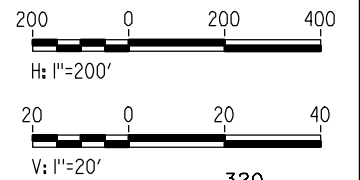


BEGIN M-F SEGMENT
HYBRID AVE 21
267+40.72
N 1842487.01
E 6623185.38

MATCH LINE STA 320+00
SEE DRAWING T1101-A

- 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

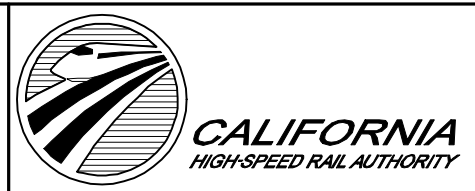
"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

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**

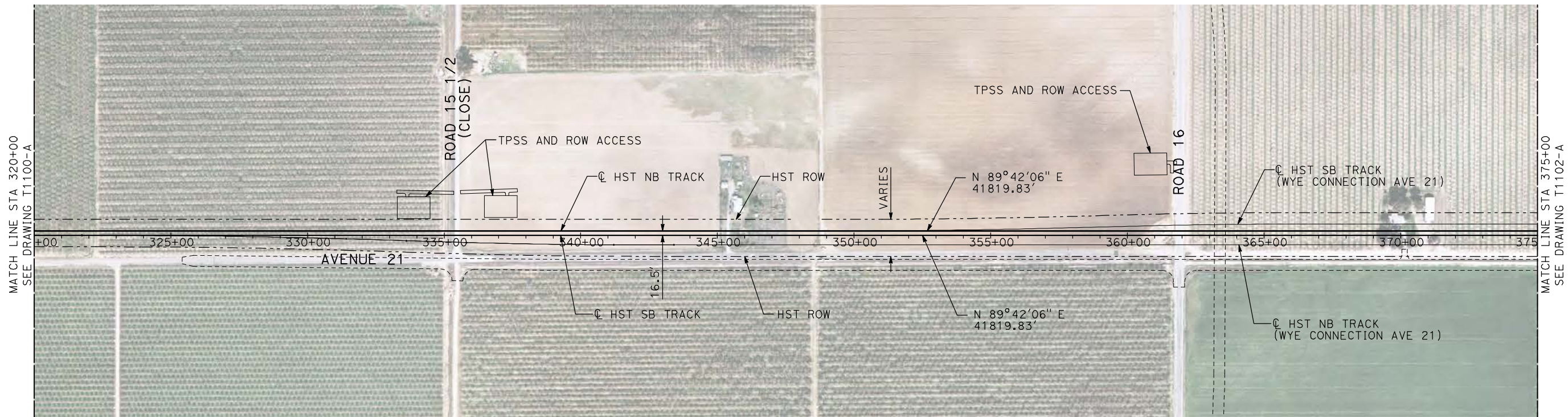


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

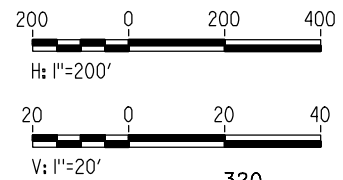
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 267+40.72 TO STA 320+00

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

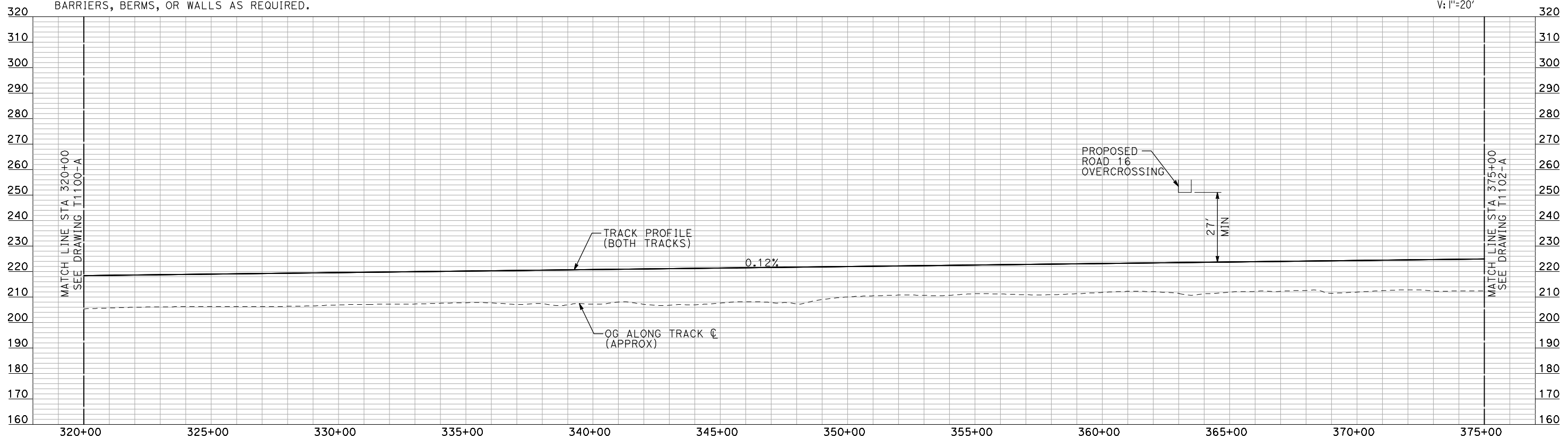
7/22/2011 10:18:51 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1101-A.dgn



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

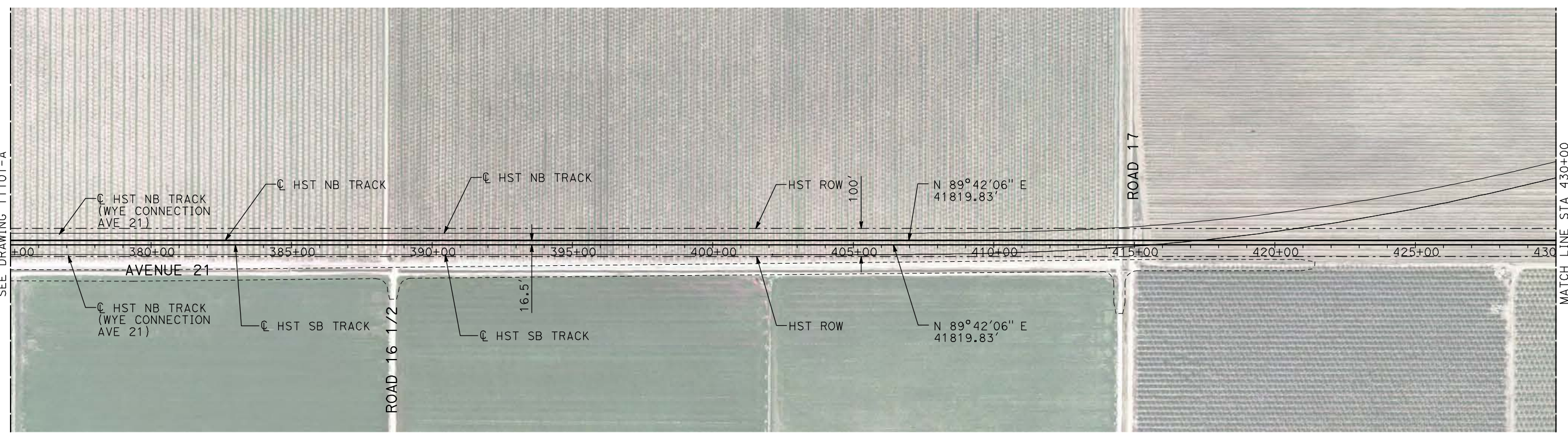
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 320+00 TO STA 375+00

CONTRACT NO.
HSR06-007

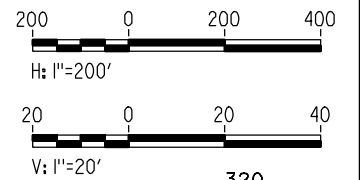
DRAWING NO.
T1101-A

SCALE
AS SHOWN

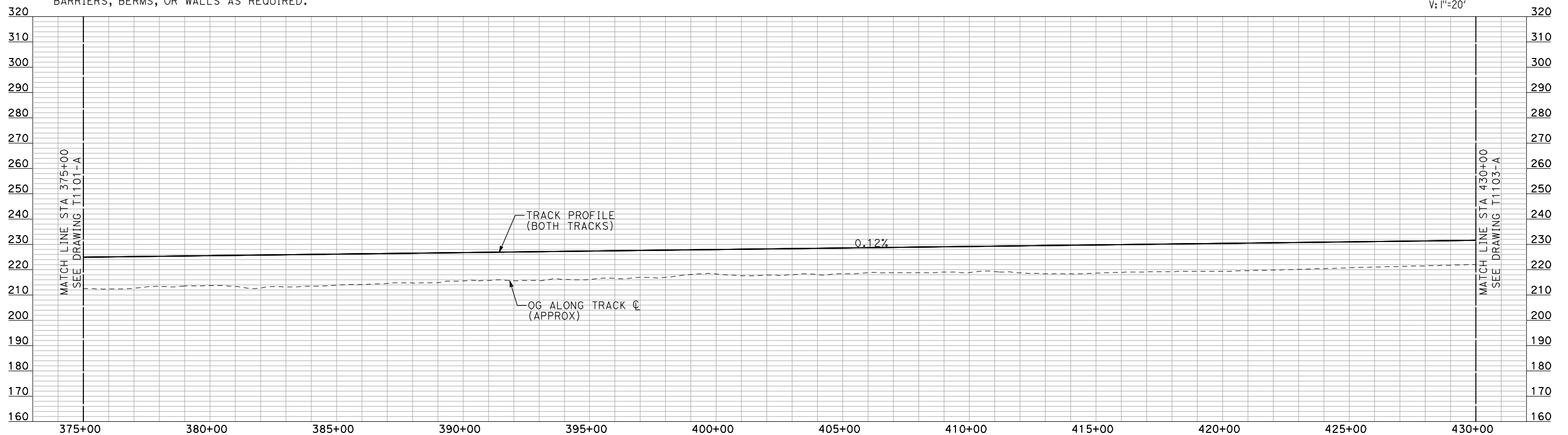
SHEET NO.
OF



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"

7/22/2011 10:19:07 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1102-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**

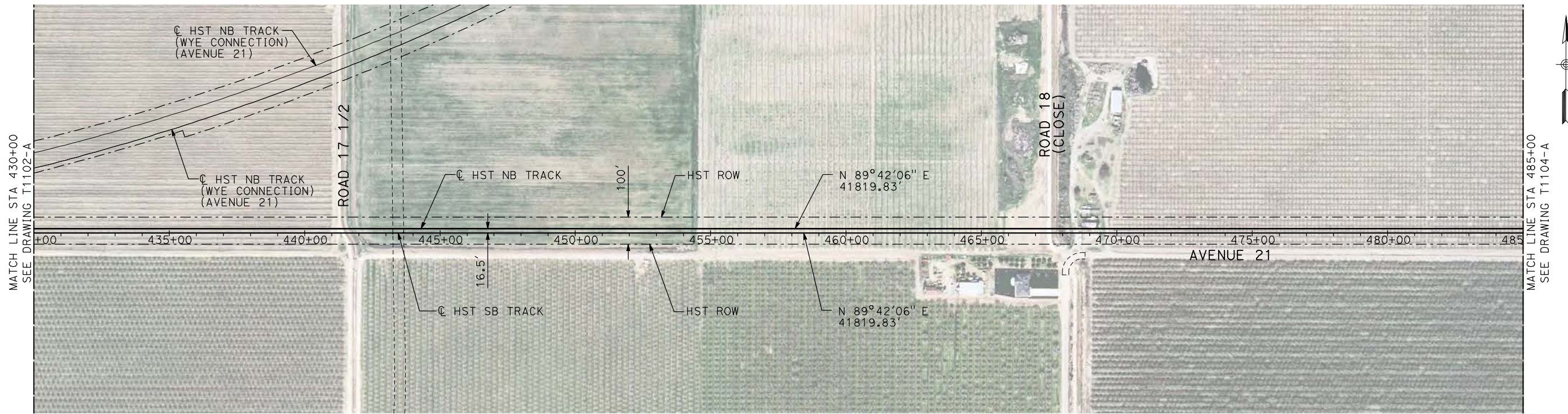
**NOT FOR
CONSTRUCTION**



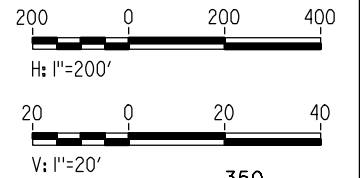
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 375+00 TO STA 430+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1102-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**

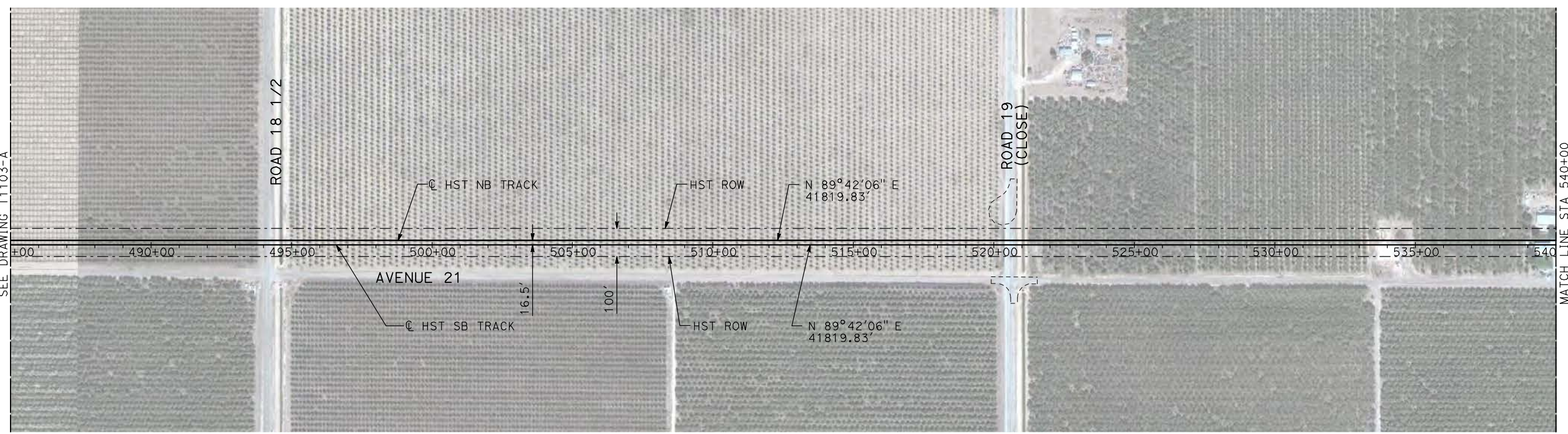


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 430+00 TO STA 485+00

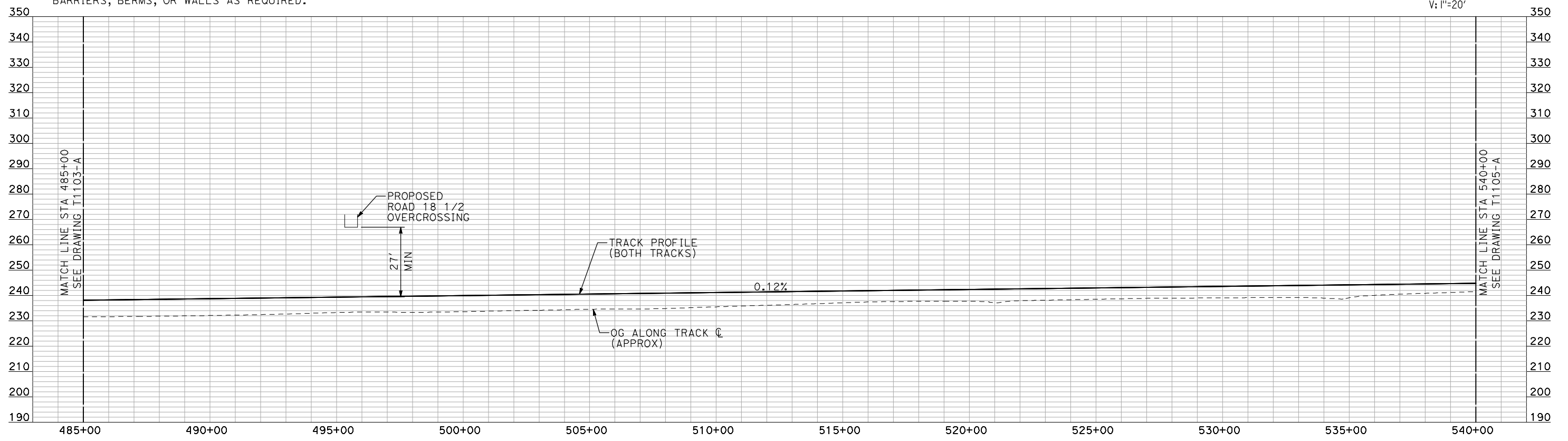
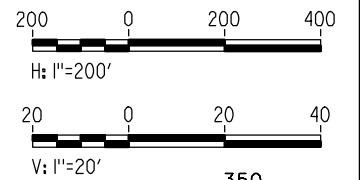
CONTRACT NO.
HSR06-007
DRAWING NO.
T1103-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:19:22 AM I:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1103-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"

7/22/2011 10:19:36 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1104-A.dgn machadoe

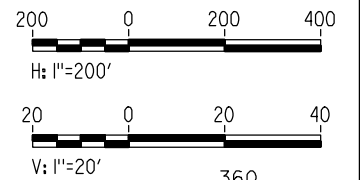
DESIGNED BY A. SHIELDS	RECORD SET 15% DESIGN SUBMITTAL NOT FOR CONSTRUCTION	 <small>Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811</small>			CONTRACT NO. HSR06-007
DRAWN BY H. SULLIVAN		DRAWING NO. T1104-A			
CHECKED BY A. BOONE		SCALE AS SHOWN			
IN CHARGE A. BOONE		SHEET NO. ### OF ###			
DATE 07/20/2011					

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

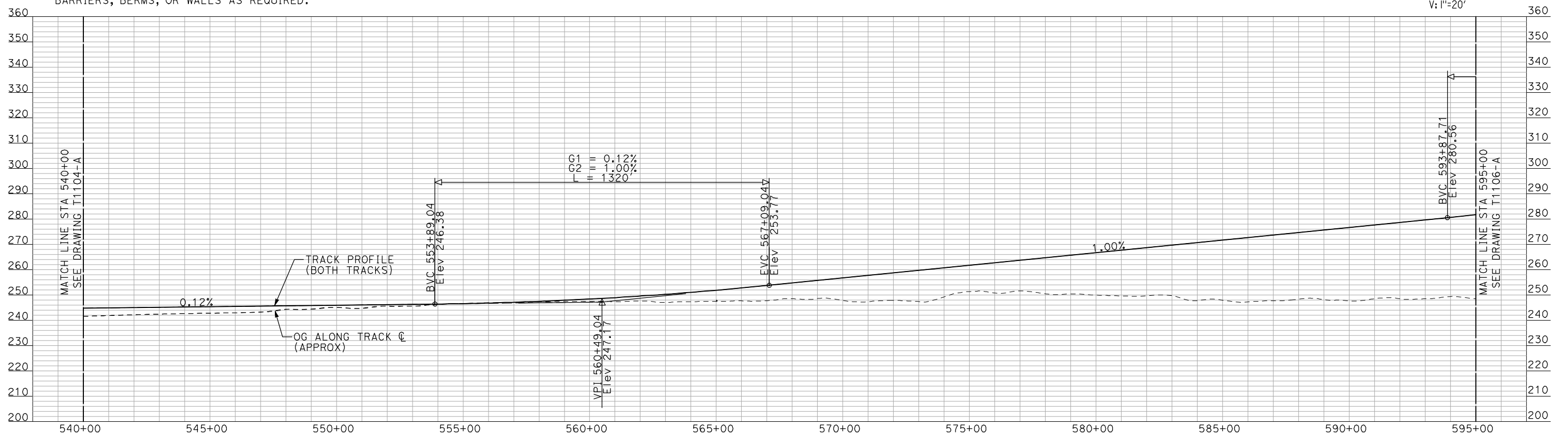
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID
 AVENUE 21
 PLAN AND PROFILE
 STA 485+00 TO STA 540+00



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"

7/22/2011 10:19:48 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1105-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**

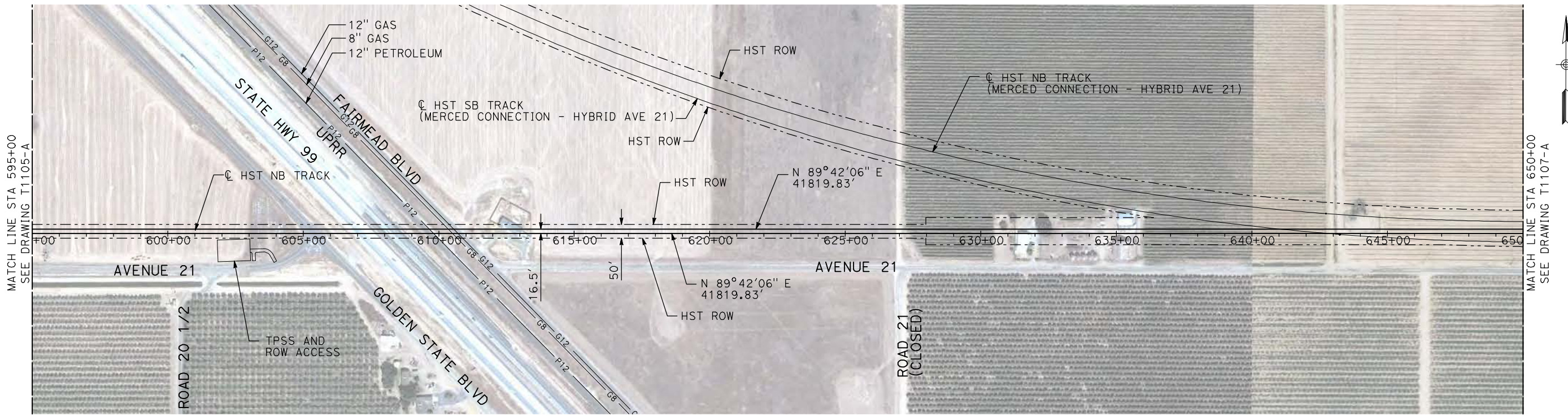
**NOT FOR
CONSTRUCTION**



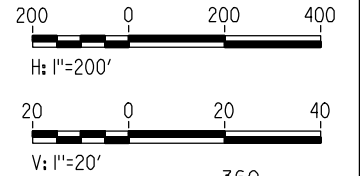
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 540+00 TO STA 595+00

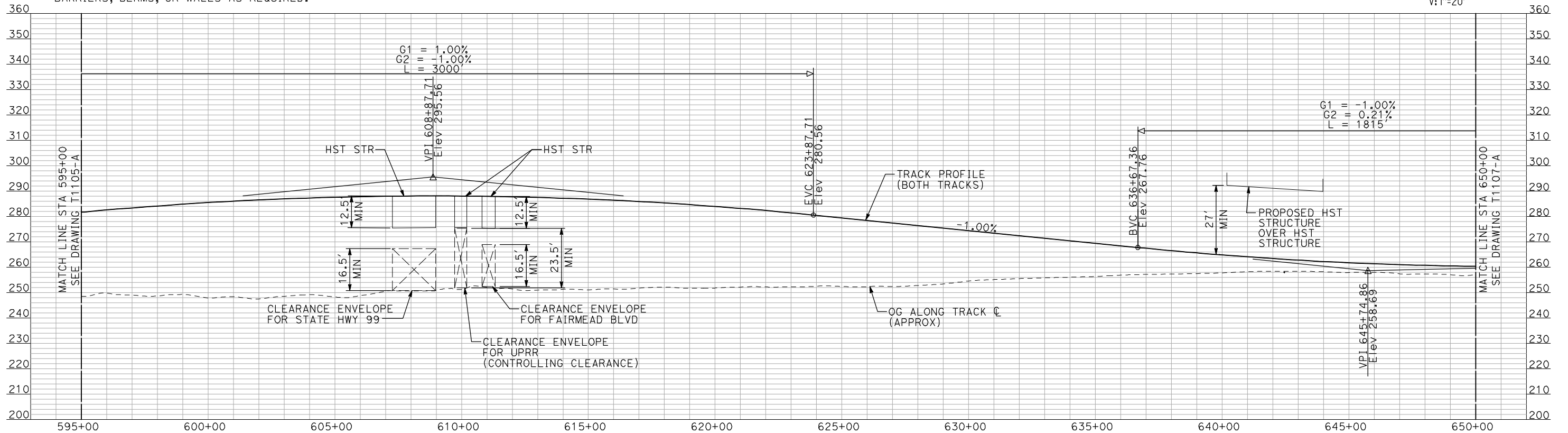
CONTRACT NO.
HSR06-007
DRAWING NO.
T1105-A
SCALE
AS SHOWN
SHEET NO.
OF



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"

7/22/2011 10:20:01 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1106-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
AVENUE 21
PLAN AND PROFILE
STA 595+00 TO STA 650+00

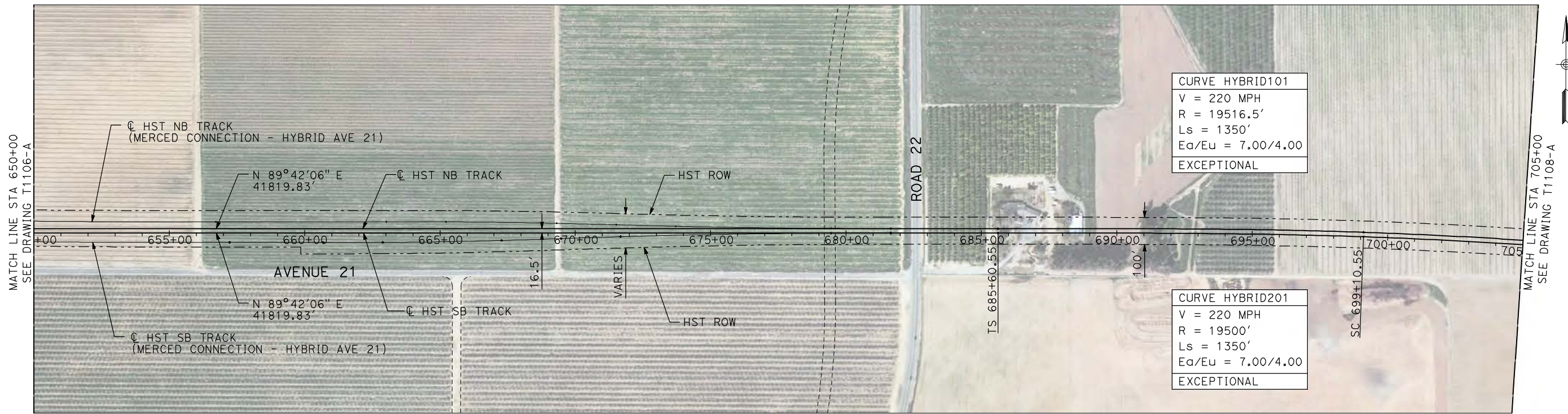
CONTRACT NO.
HSR06-007

DRAWING NO.
T1106-A

SCALE
AS SHOWN

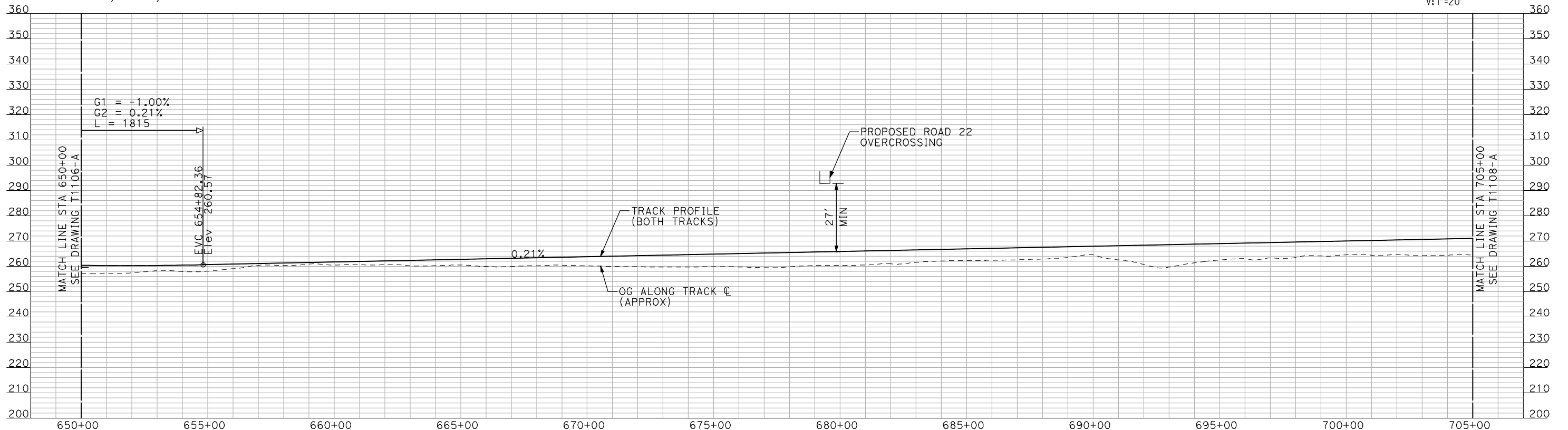
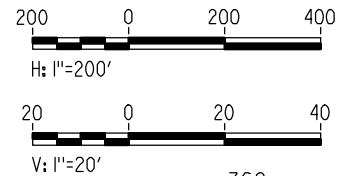
SHEET NO.
OF

7/22/2011 10:20:14 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1107-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**

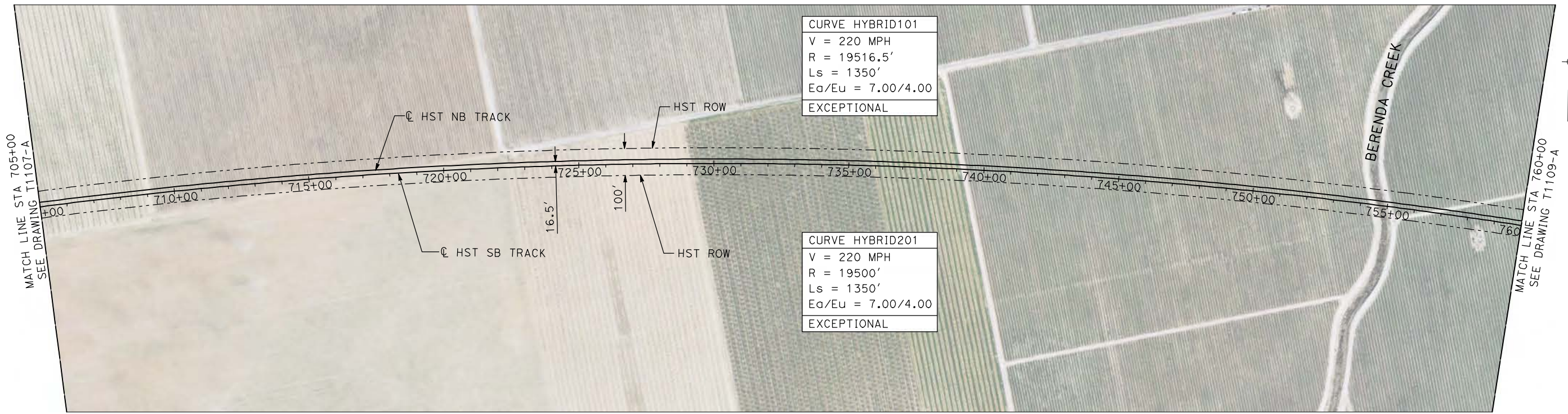


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

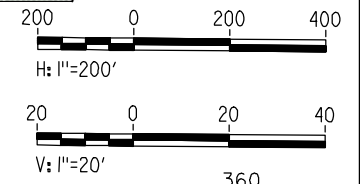
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 650+00 TO STA 705+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1107-A
SCALE
AS SHOWN
SHEET NO.
OF

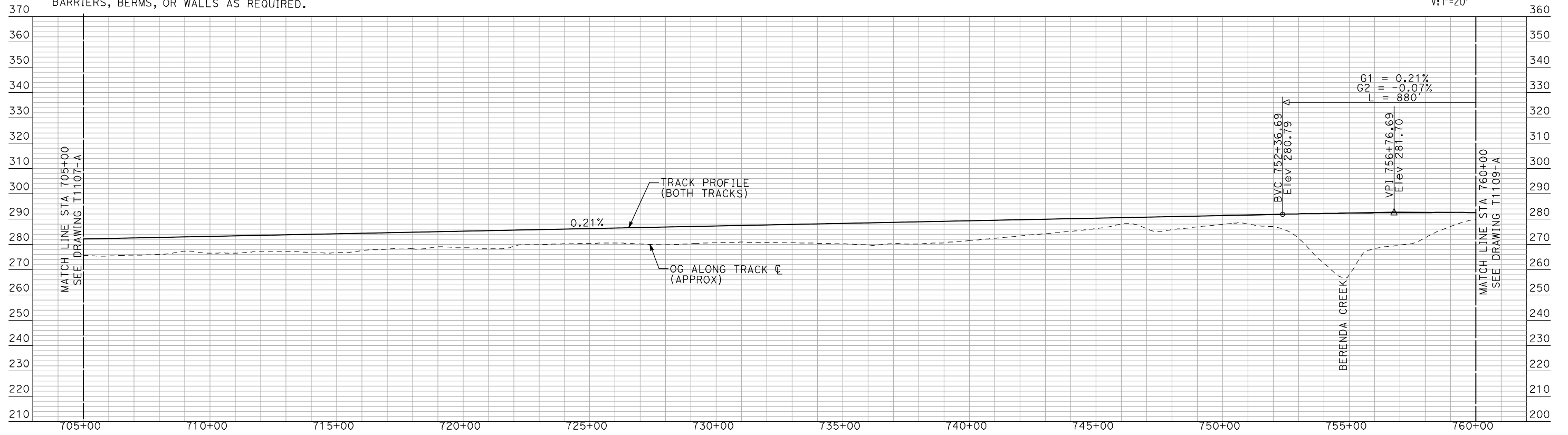
7/22/2011 10:20:27 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1108-A.dgn



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**

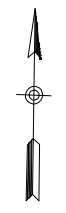
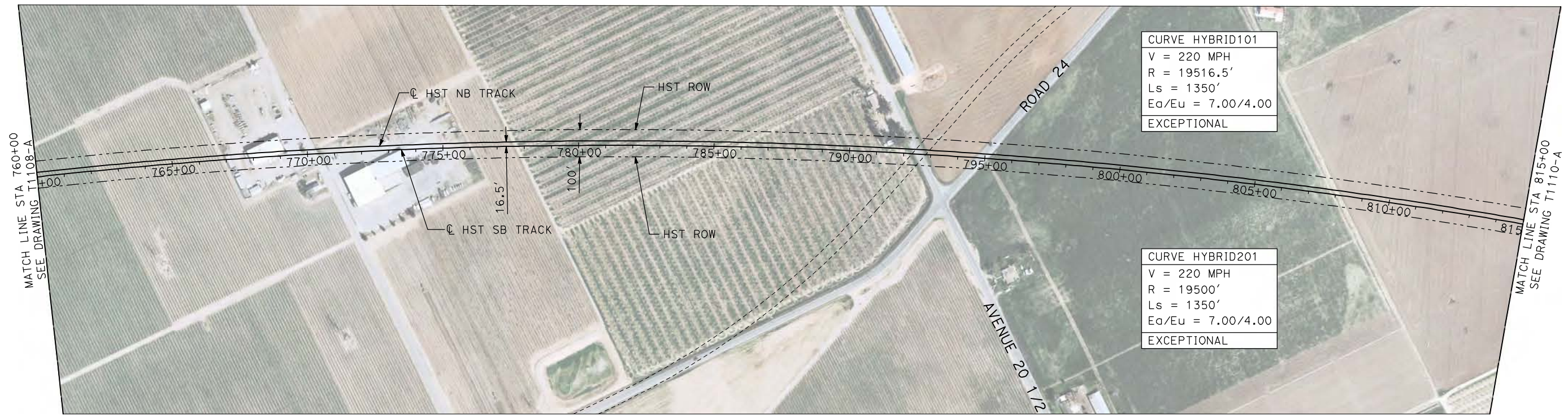


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 705+00 TO STA 760+00

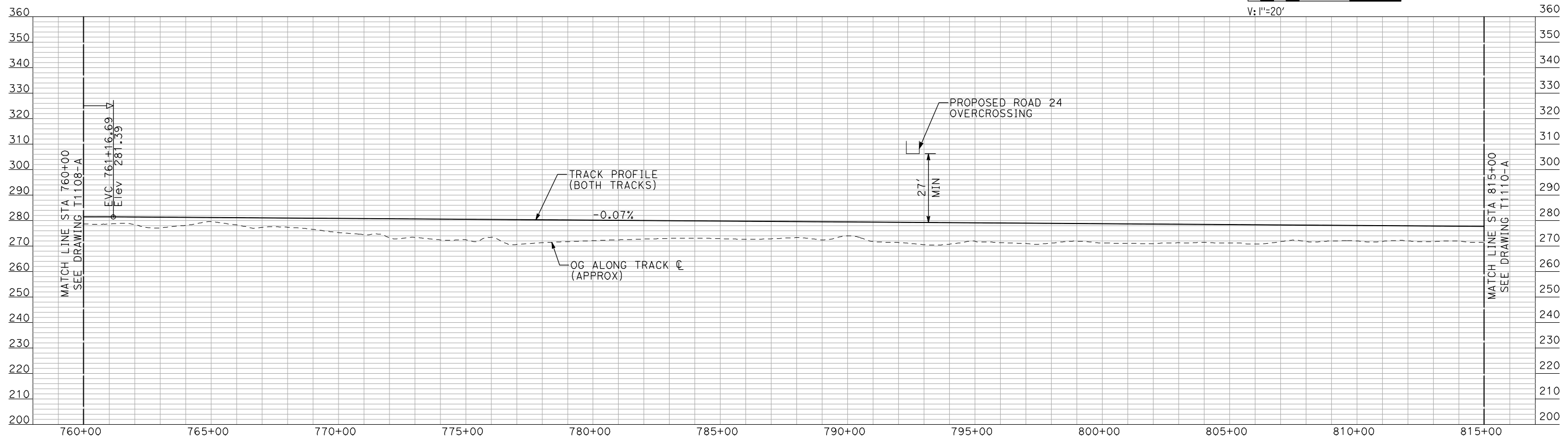
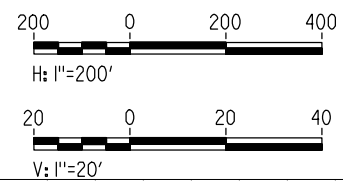
CONTRACT NO.
HSR06-007
DRAWING NO.
T1108-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:20:40 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1109-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**

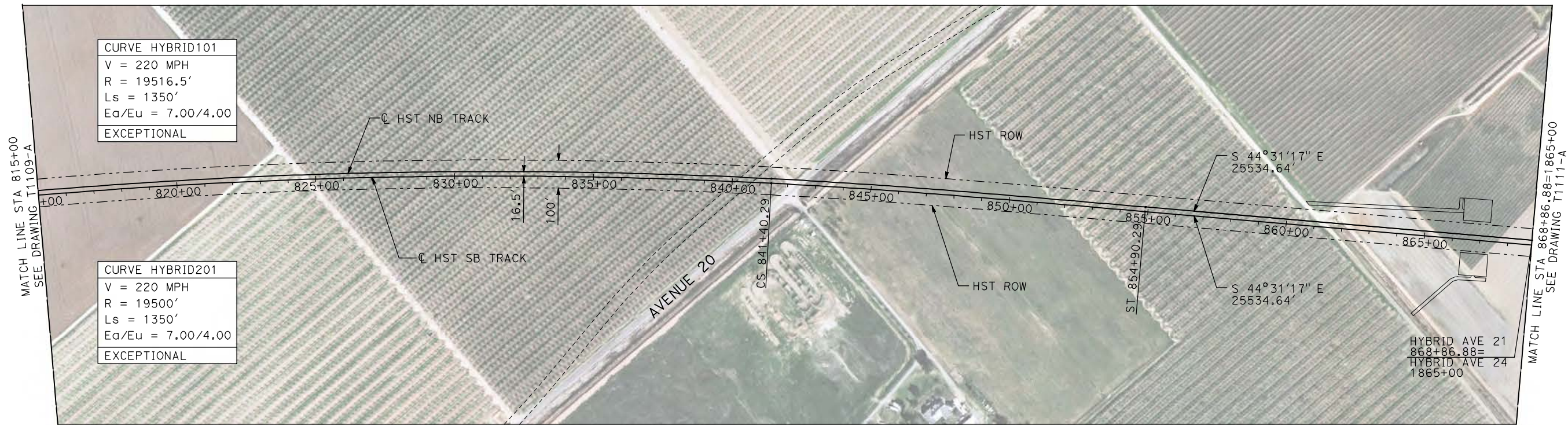


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 760+00 TO STA 815+00

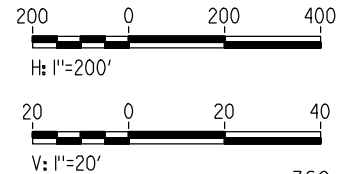
CONTRACT NO.
HSR06-007
DRAWING NO.
T1109-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:20:56 AM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1110-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

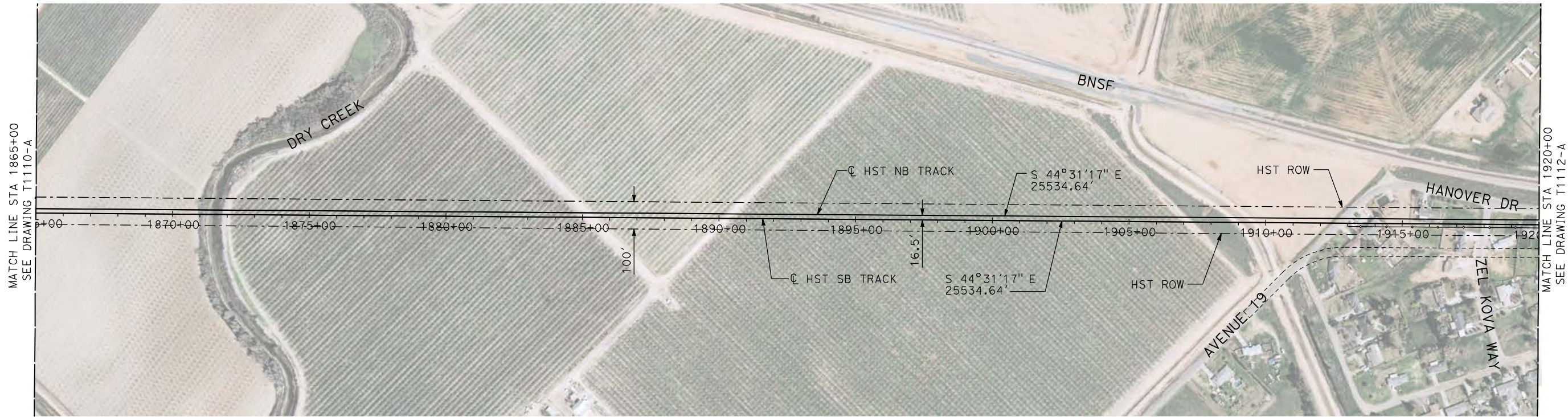
NOT FOR
CONSTRUCTION



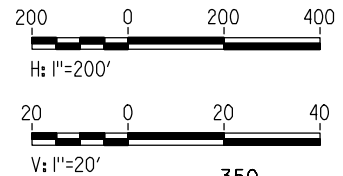
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID
 AVENUE 21
 PLAN AND PROFILE
 STA 815+00 TO STA 868+86.88

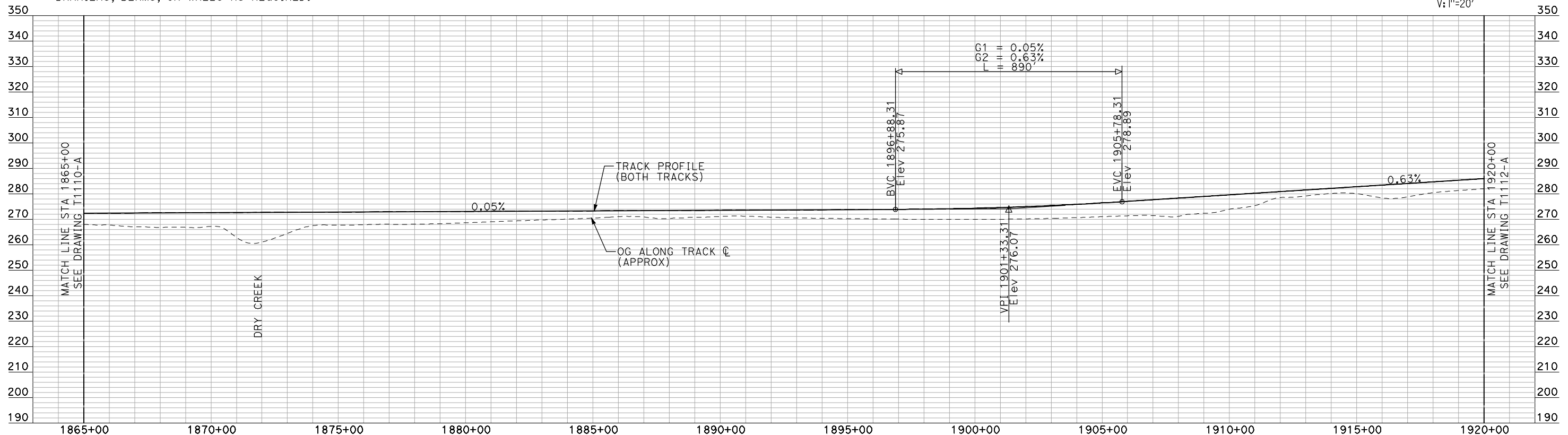
CONTRACT NO. HSR06-007
DRAWING NO. T1110-A
SCALE AS SHOWN
SHEET NO. ### OF ###



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"

7/22/2011 10:21:12 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1111-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

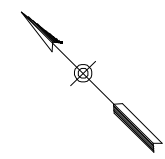
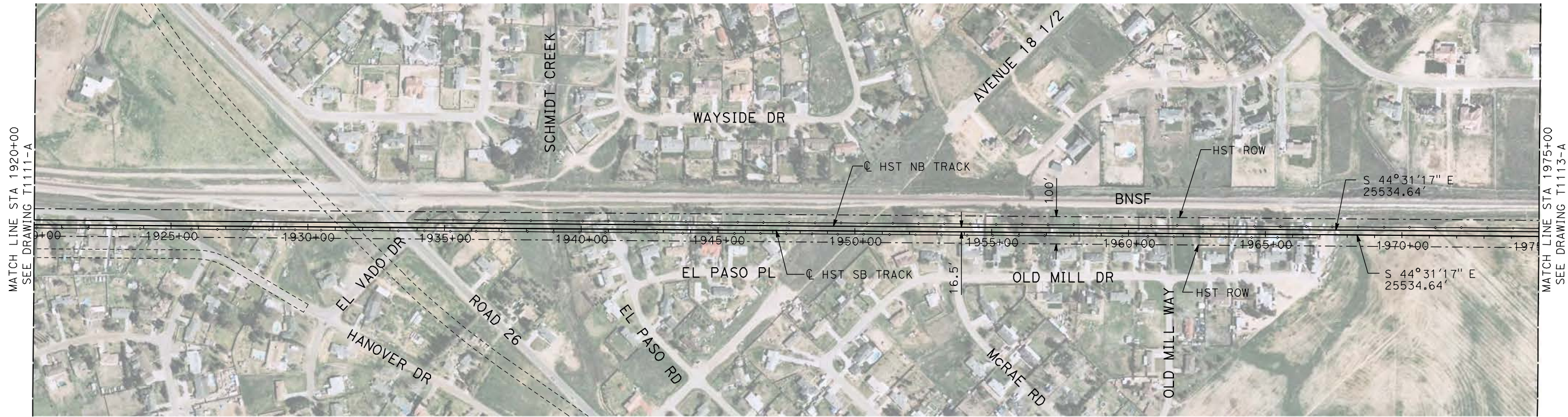
NOT FOR
CONSTRUCTION



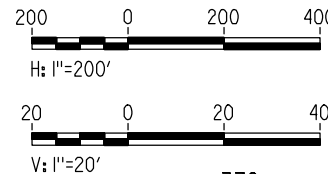
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

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

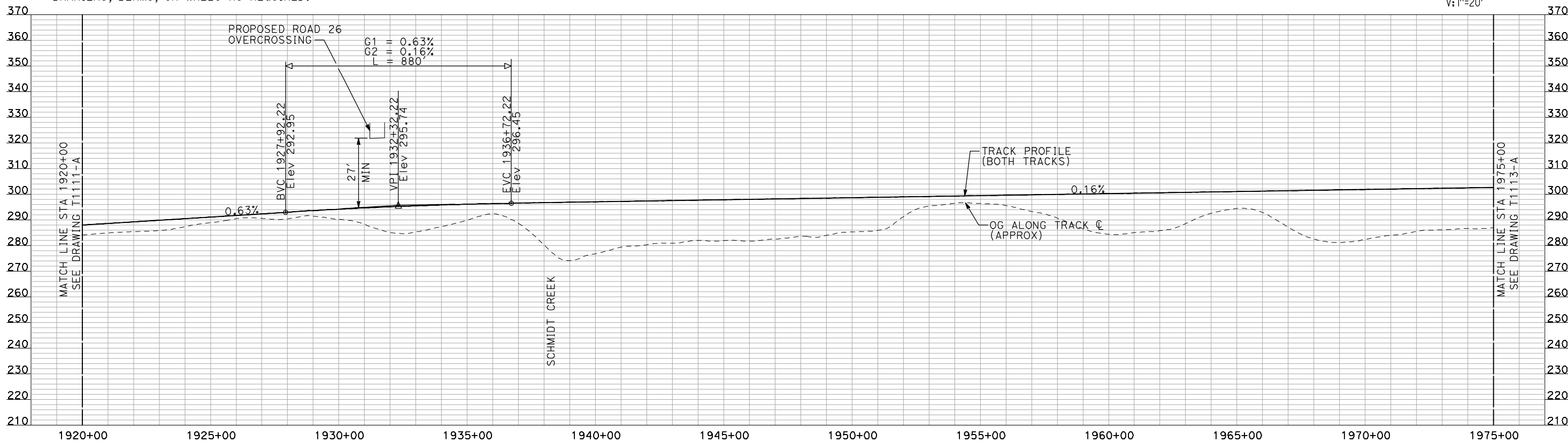
CONTRACT NO. HSR06-007
DRAWING NO. T1111-A
SCALE AS SHOWN
SHEET NO. ### OF ###



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"

7/22/2011 10:21:31 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1112-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

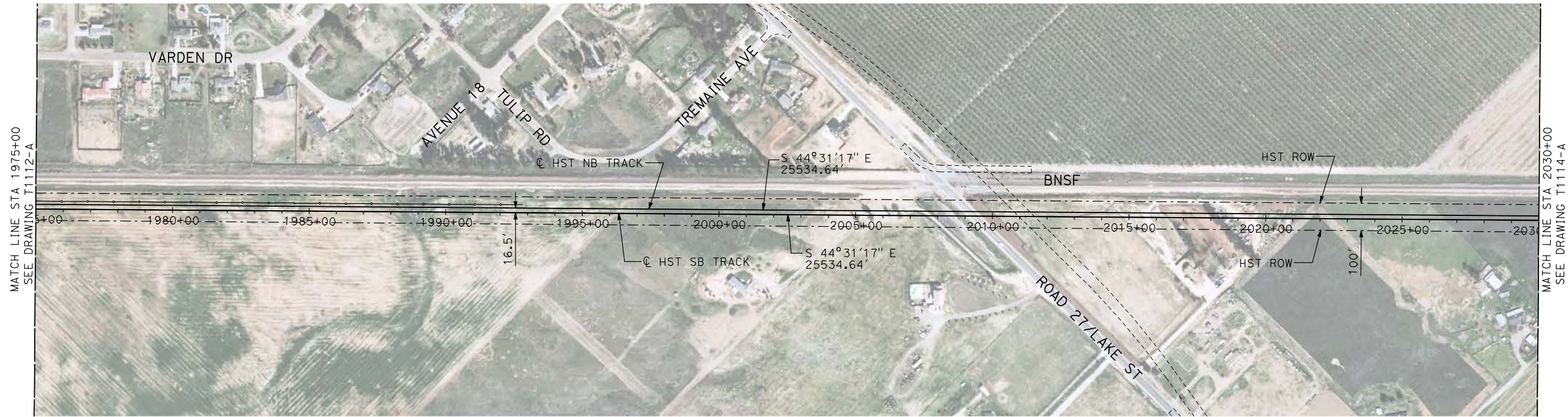
PLAN AND PROFILE
STA 1920+00 TO STA 1975+00

CONTRACT NO.
HSR06-007

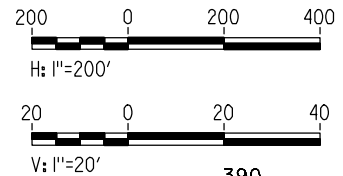
DRAWING NO.
T1112-A

SCALE
AS SHOWN

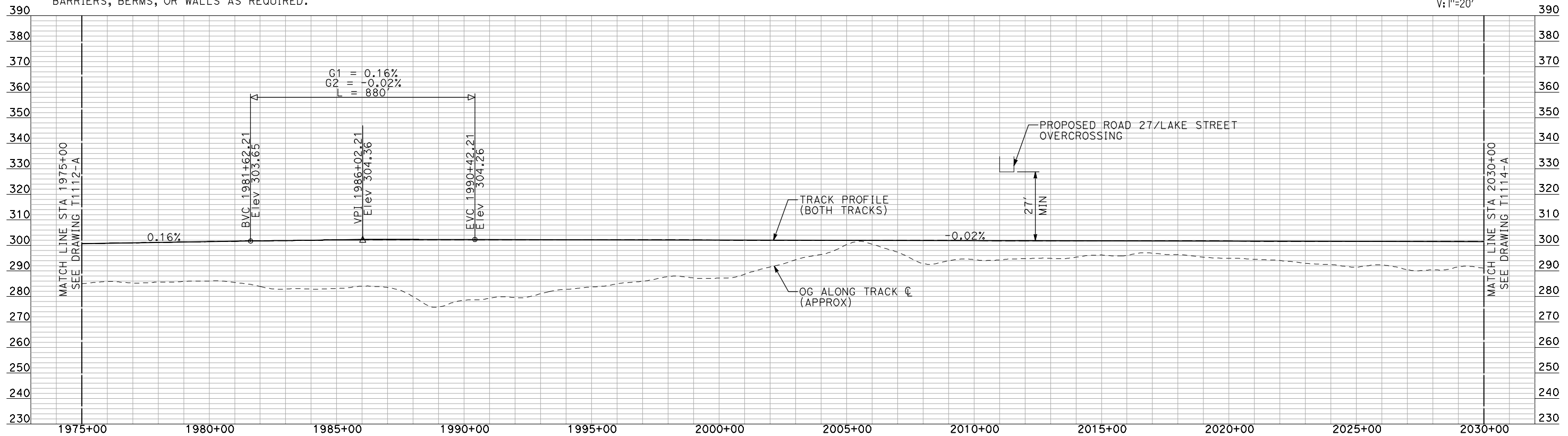
SHEET NO.
OF



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**

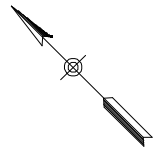
HYBRID

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

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

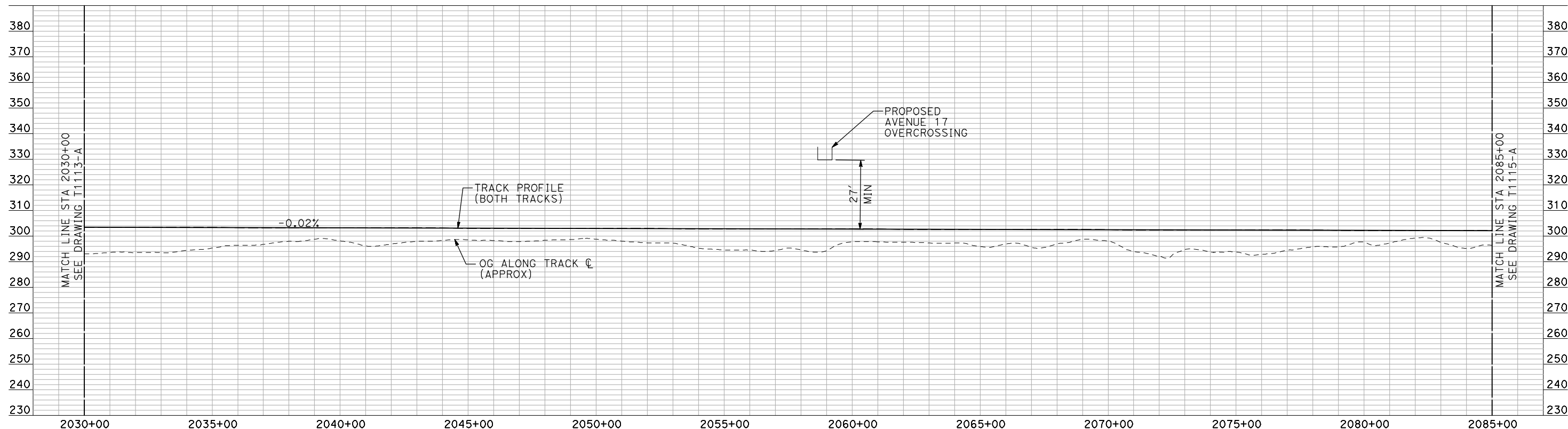
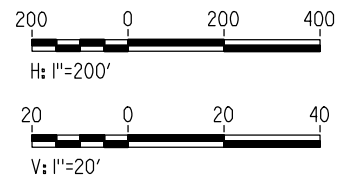
7/22/2011 10:21:49 AM I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1113-A.dgn machadoe

7/22/2011 10:22:32 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\WF-T-1114-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**

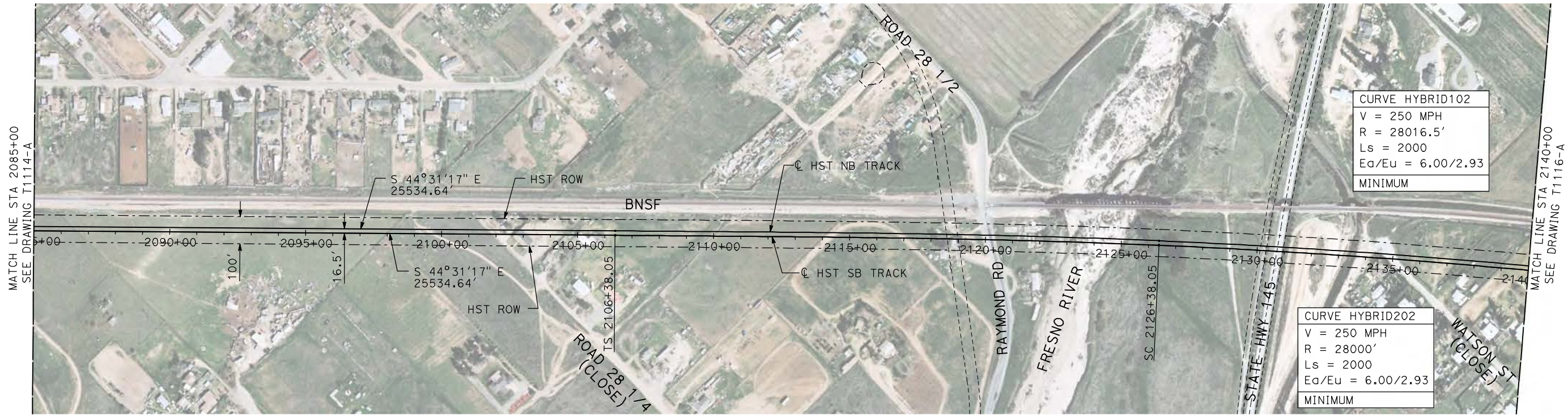


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID

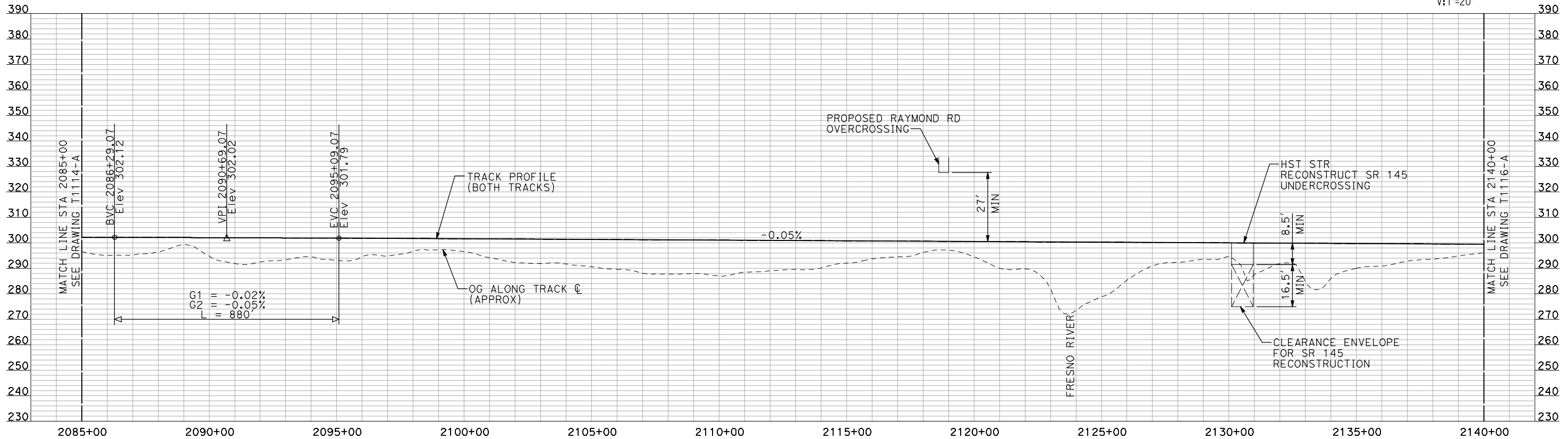
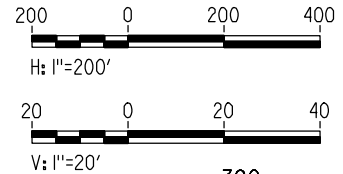
PLAN AND PROFILE
STA 2030+00 TO STA 2085+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1114-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**

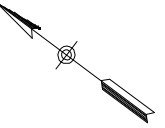
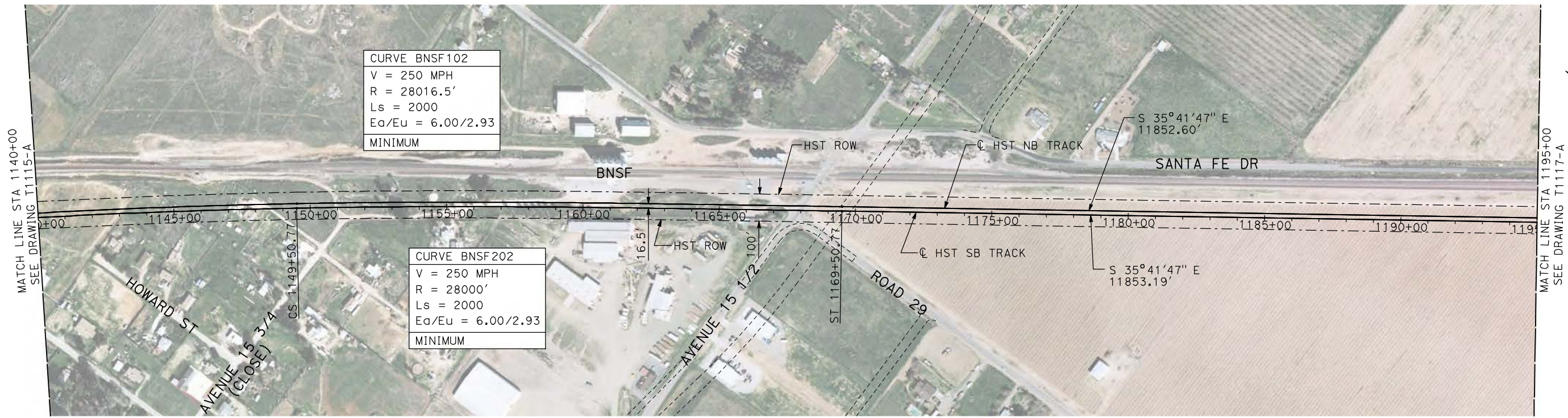
HYBRID

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

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

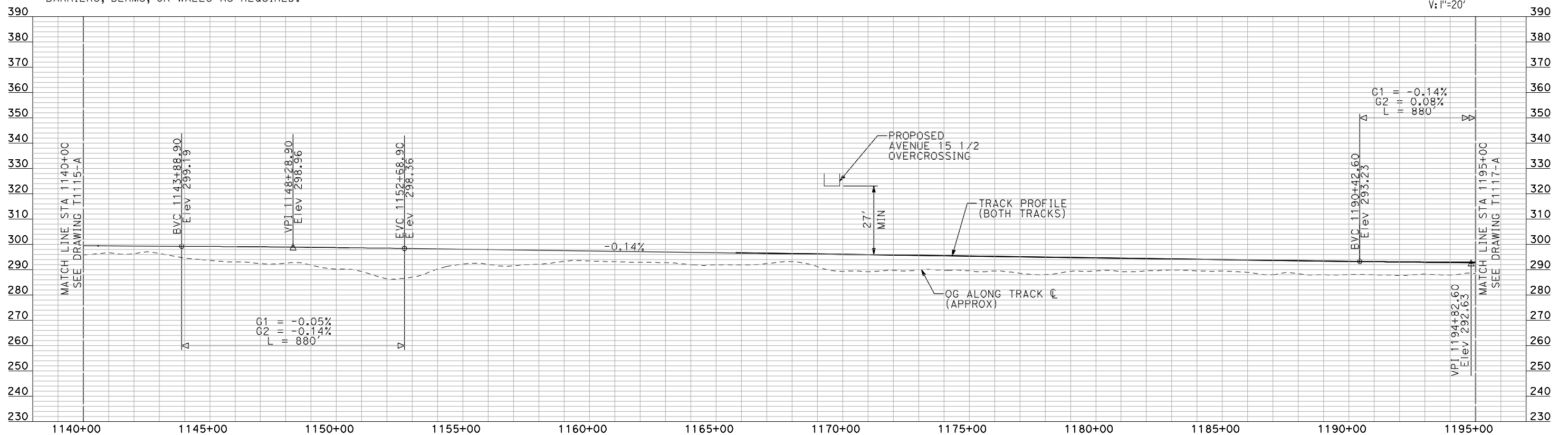
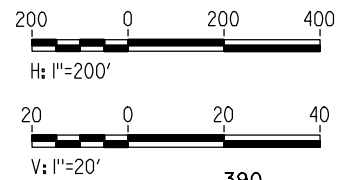
7/22/2011 10:22:49 AM I:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-1115-A.dgn machadoe

7/22/2011 10:23:35 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave_21\WF-T-1116-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**

BNSF MAIN LINE

PLAN AND PROFILE
STA 1140+00 TO STA 1195+00

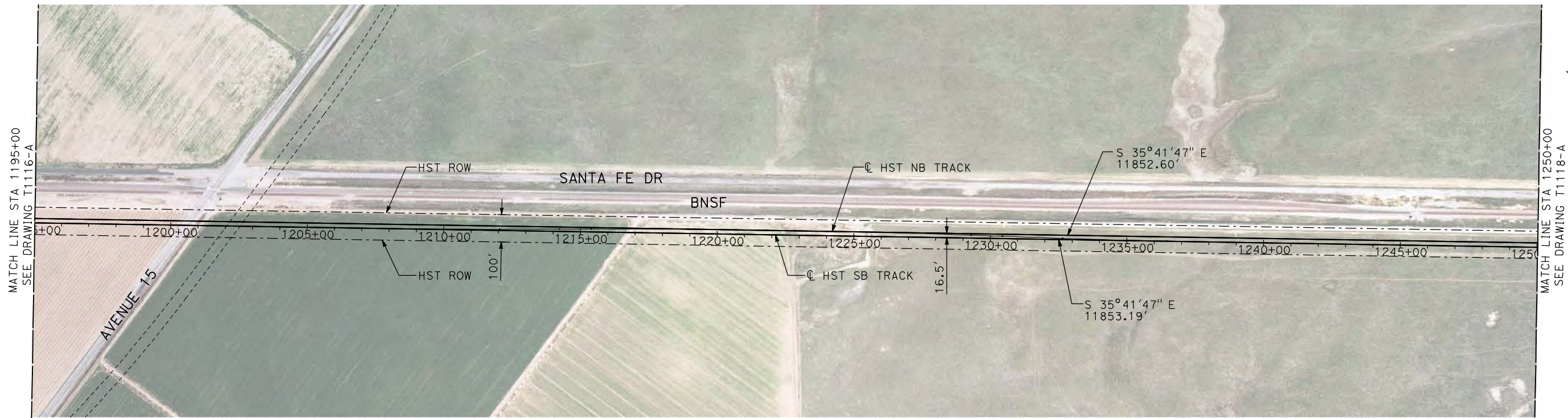
CONTRACT NO.
HSR06-007

DRAWING NO.
T1116-A

SCALE
AS SHOWN

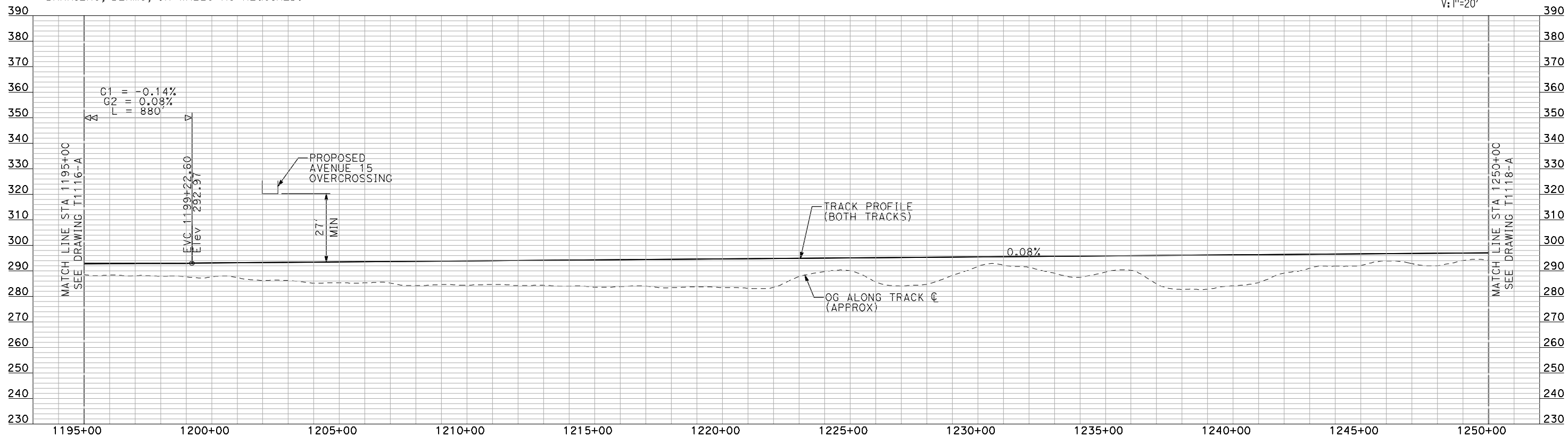
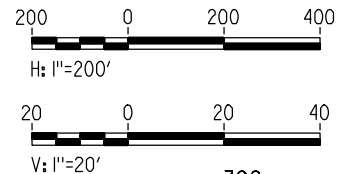
SHEET NO.
OF

7/22/2011 10:24:22 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave_21\WF-T-1117-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**

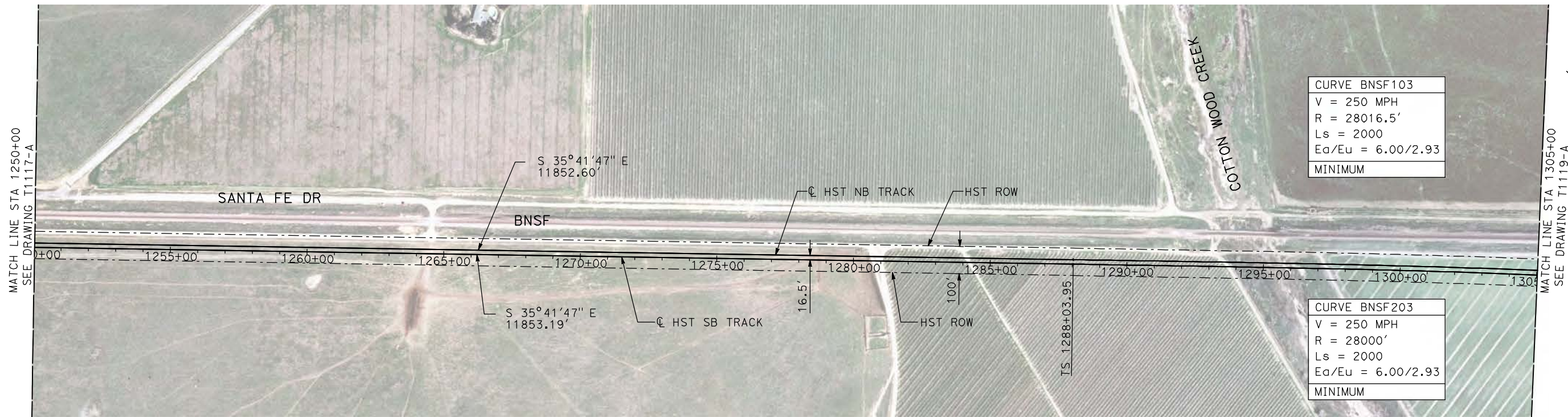


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

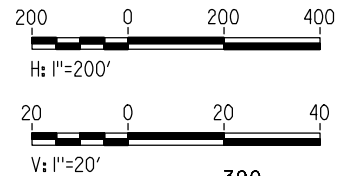
BNSF MAIN LINE

PLAN AND PROFILE
STA 1195+00 TO STA 1250+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1117-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"

7/22/2011 10:25:09 AM I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave_21\WF-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

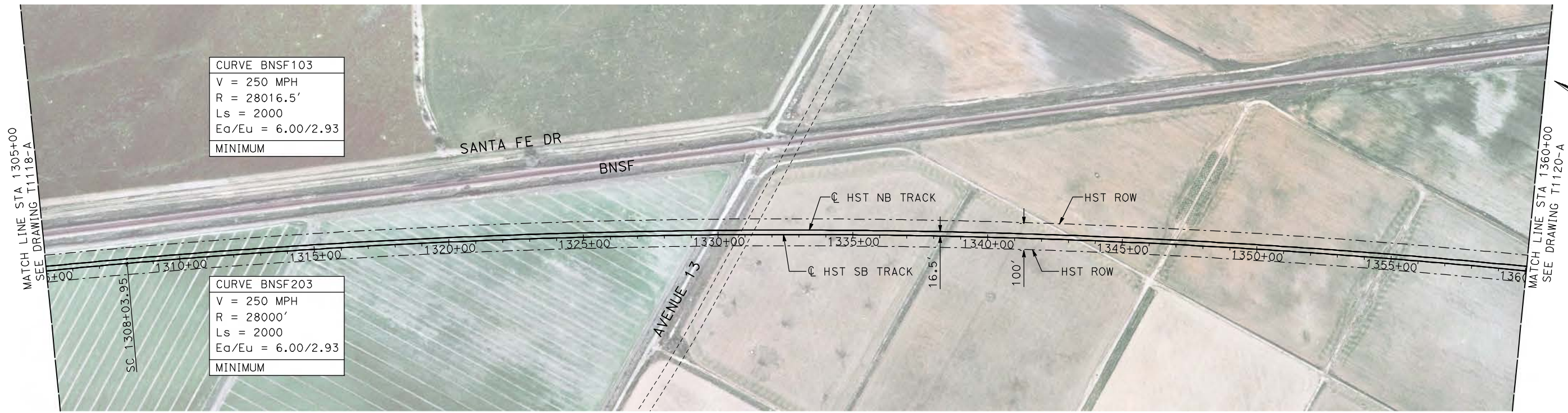
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 BNSF MAIN LINE
 PLAN AND PROFILE
 STA 1250+00 TO STA 1305+00

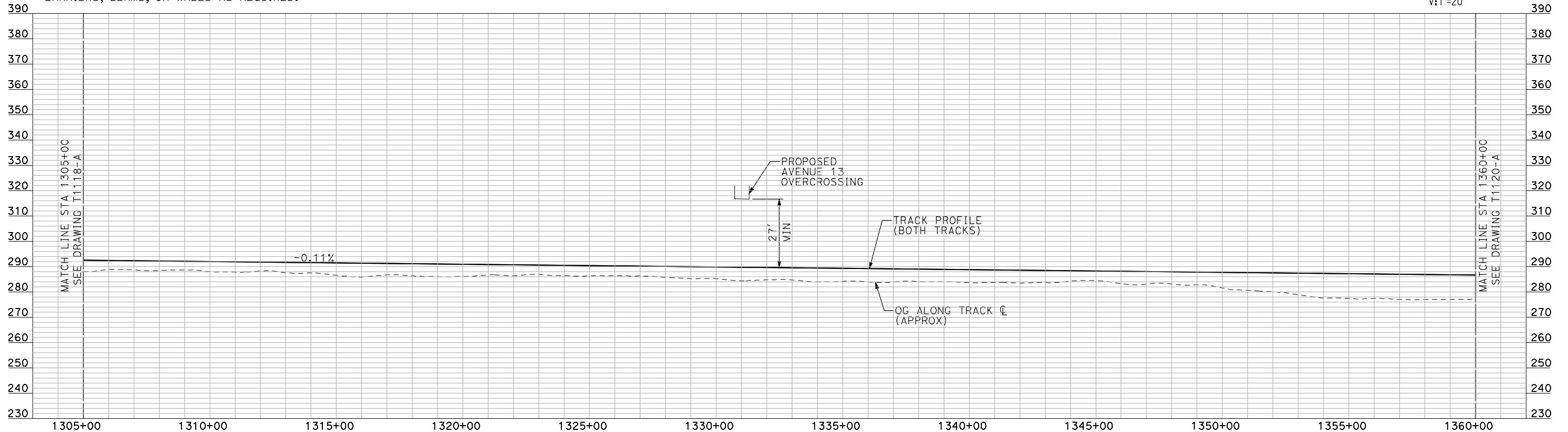
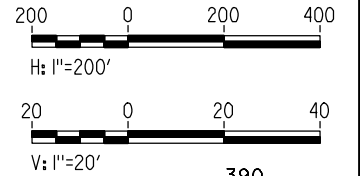
CONTRACT NO. HSR06-007
DRAWING NO. T1118-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/22/2011 10:25:53 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave 21\MF-T-1119-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

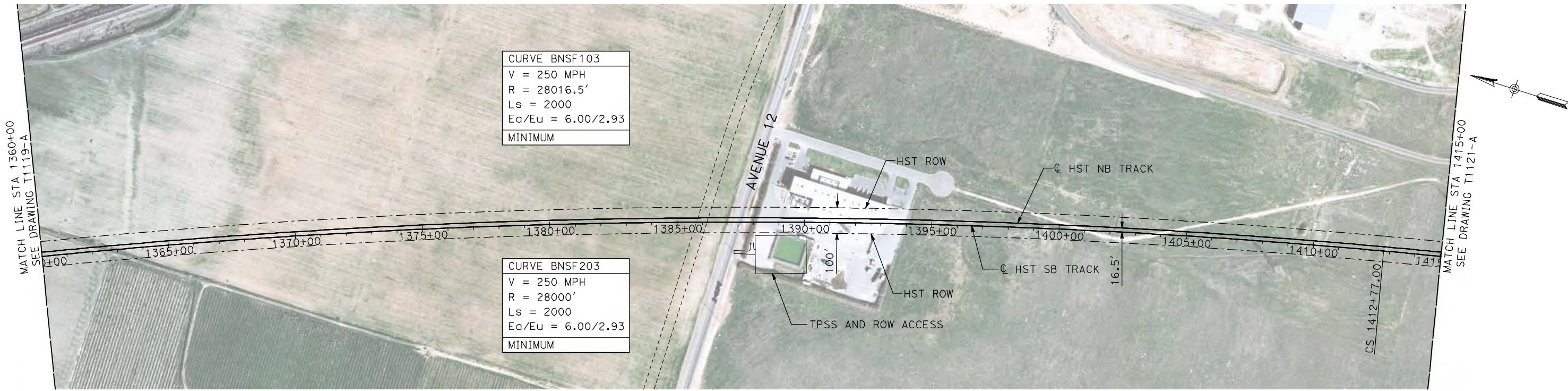
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 BNSF MAIN LINE
 PLAN AND PROFILE
 STA 1305+00 TO STA 1360+00

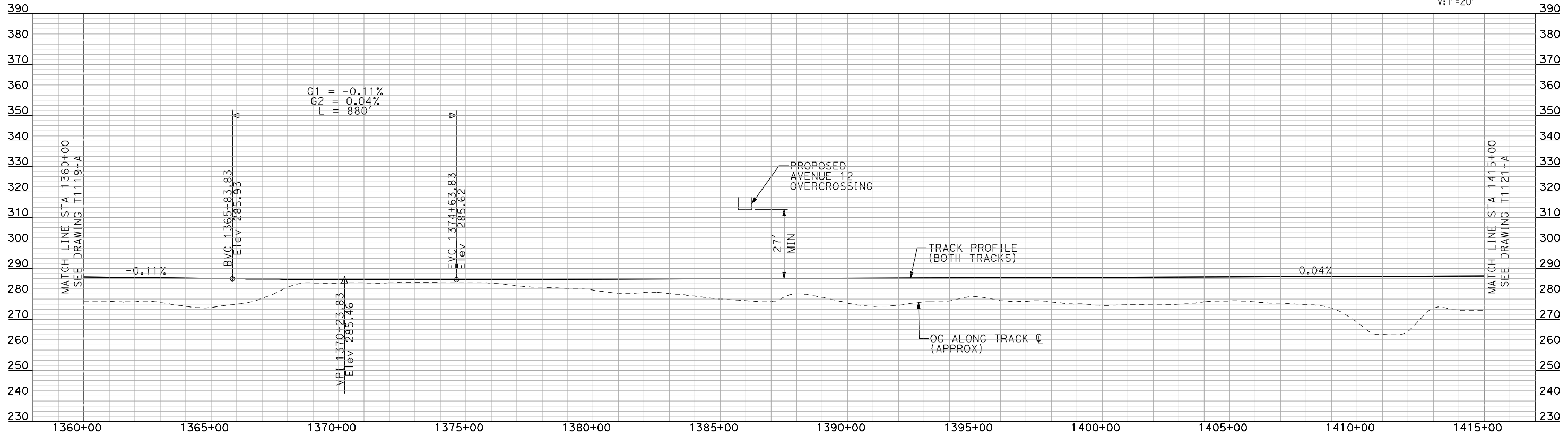
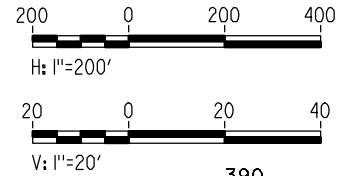
CONTRACT NO.
HSR06-007
 DRAWING NO.
T1119-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:36 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\BNSF_AVE 21\MF-T-1120-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.

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**

BNSF MAIN LINE

PLAN AND PROFILE
STA 1360+00 TO STA 1415+00

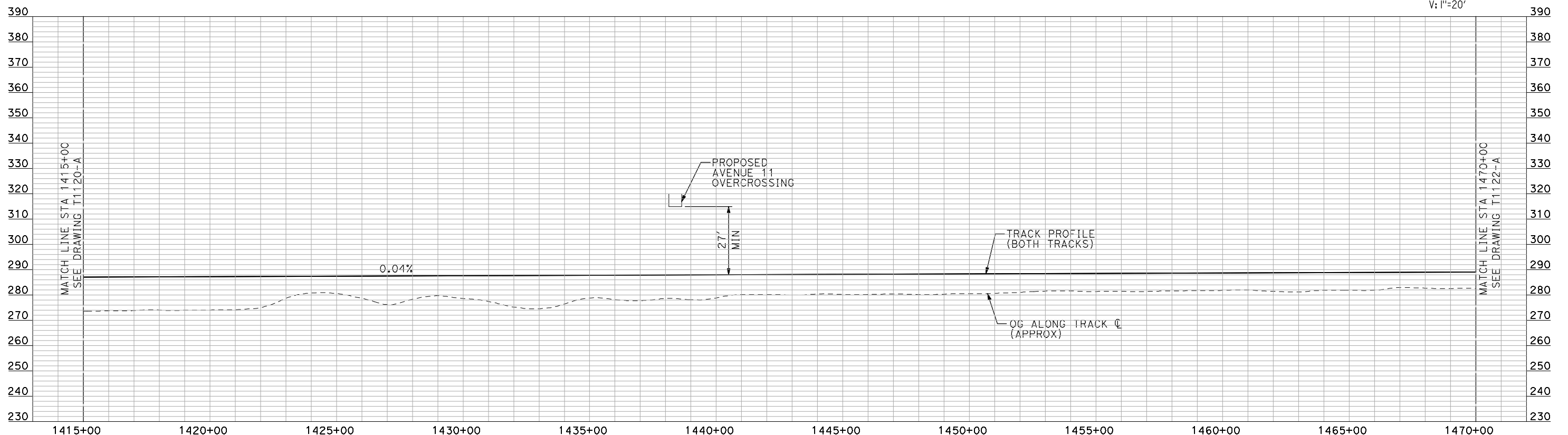
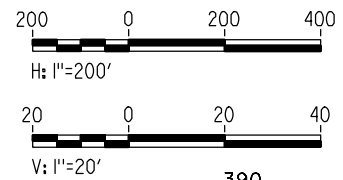
CONTRACT NO.
HSR06-007
DRAWING NO.
T1120-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:27:22 AM I:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\BNSF_AVE 21\MF-T-1121-A.dgn machadoe



- 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**

BNSF MAIN LINE

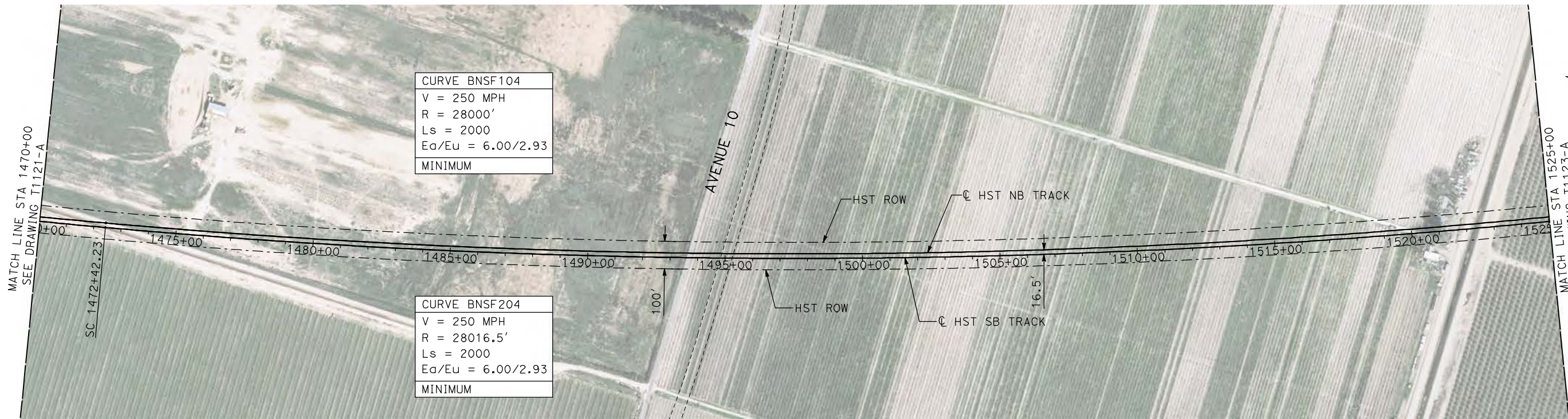
PLAN AND PROFILE
STA 1415+00 TO STA 1470+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T1121-A

SCALE
AS SHOWN

SHEET NO.
OF

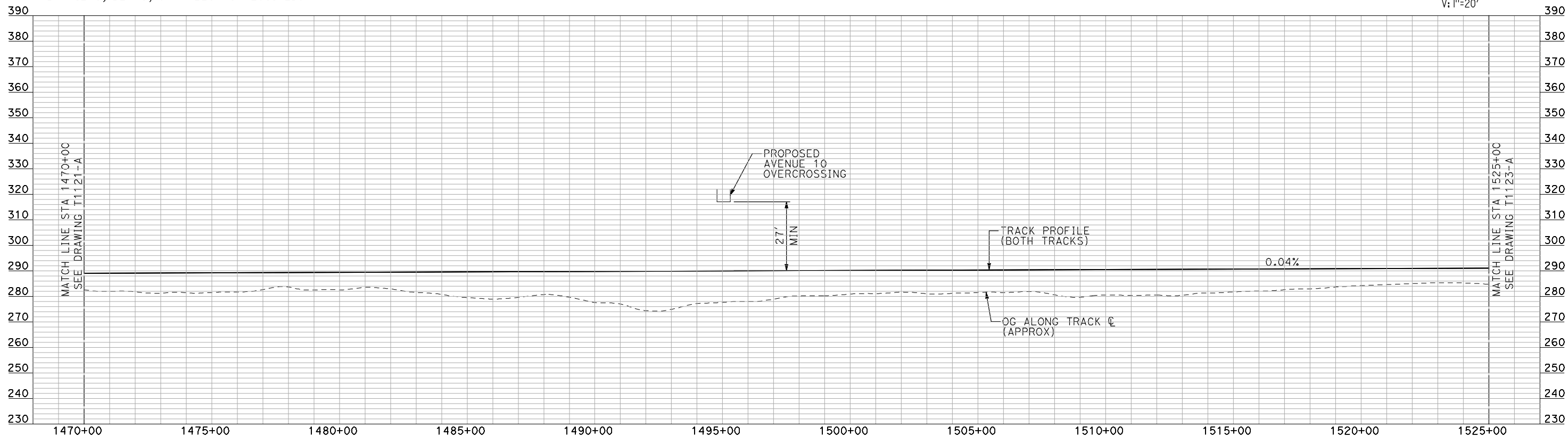
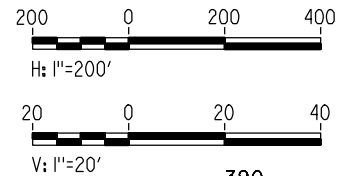


CURVE BNSF104
 V = 250 MPH
 R = 28000'
 Ls = 2000
 Ea/Eu = 6.00/2.93
 MINIMUM

CURVE BNSF204
 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"

7/22/2011 10:28:06 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave 21\WF-T-1122-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**

BNSF MAIN LINE

PLAN AND PROFILE
 STA 1470+00 TO STA 1525+00

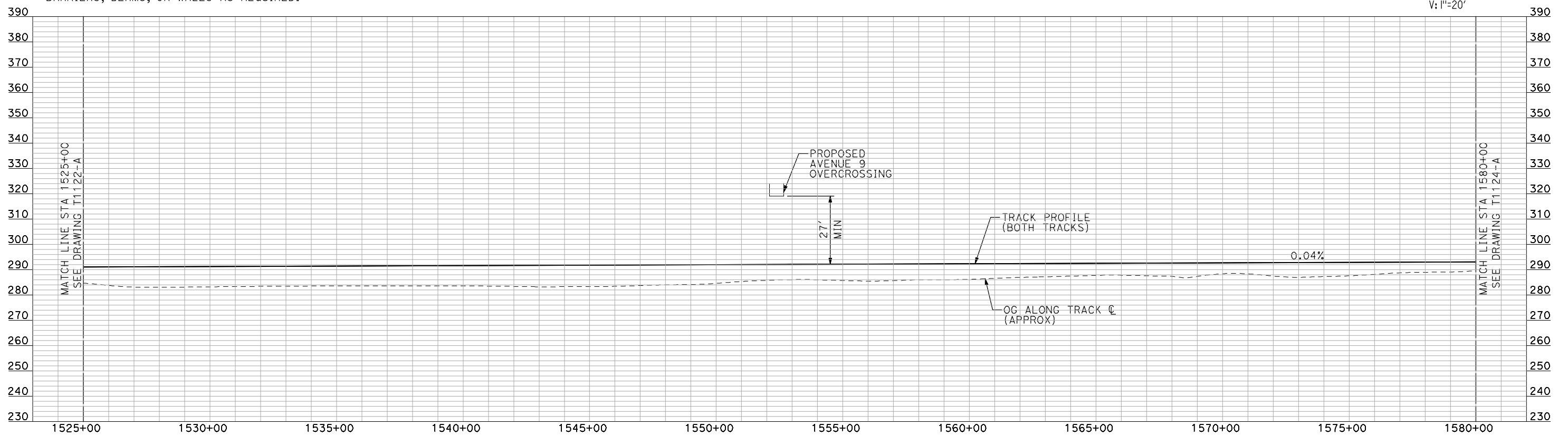
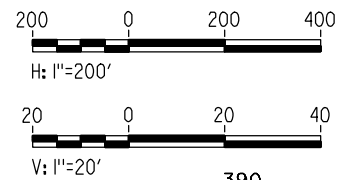
CONTRACT NO.
HSR06-007
 DRAWING NO.
T1122-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:28:51 AM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\BNSF_AVE 21\MF-T-1123-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**

BNSF MAIN LINE

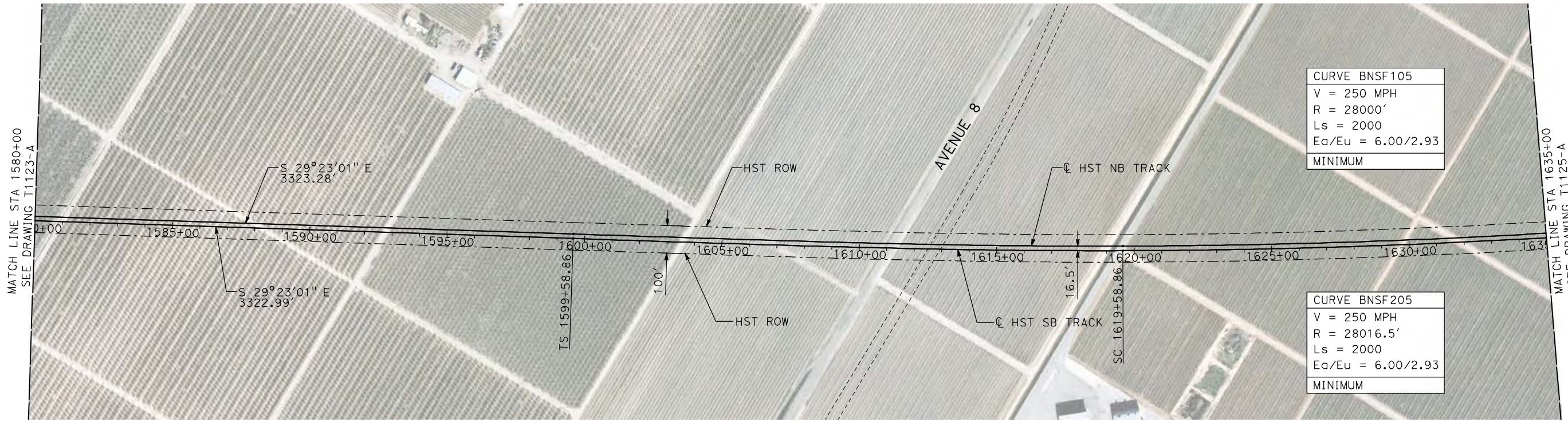
PLAN AND PROFILE
STA 1525+00 TO STA 1580+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T1123-A

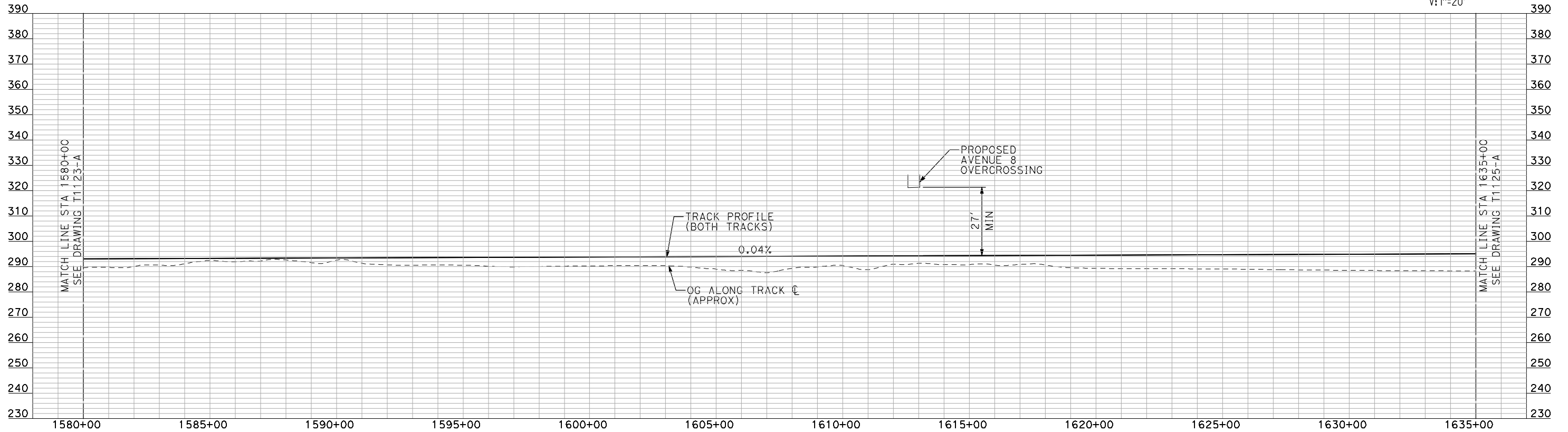
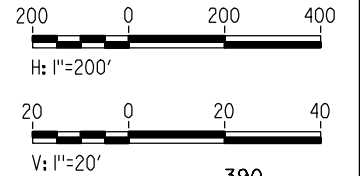
SCALE
AS SHOWN

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"

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**

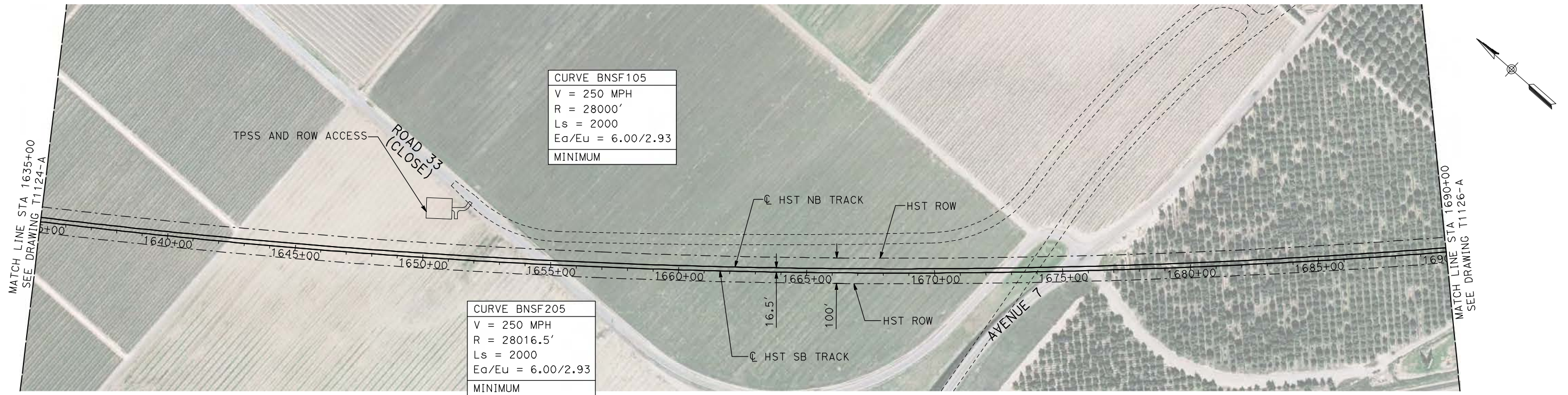
BNSF MAIN LINE

PLAN AND PROFILE
STA 1580+00 TO STA 1635+00

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

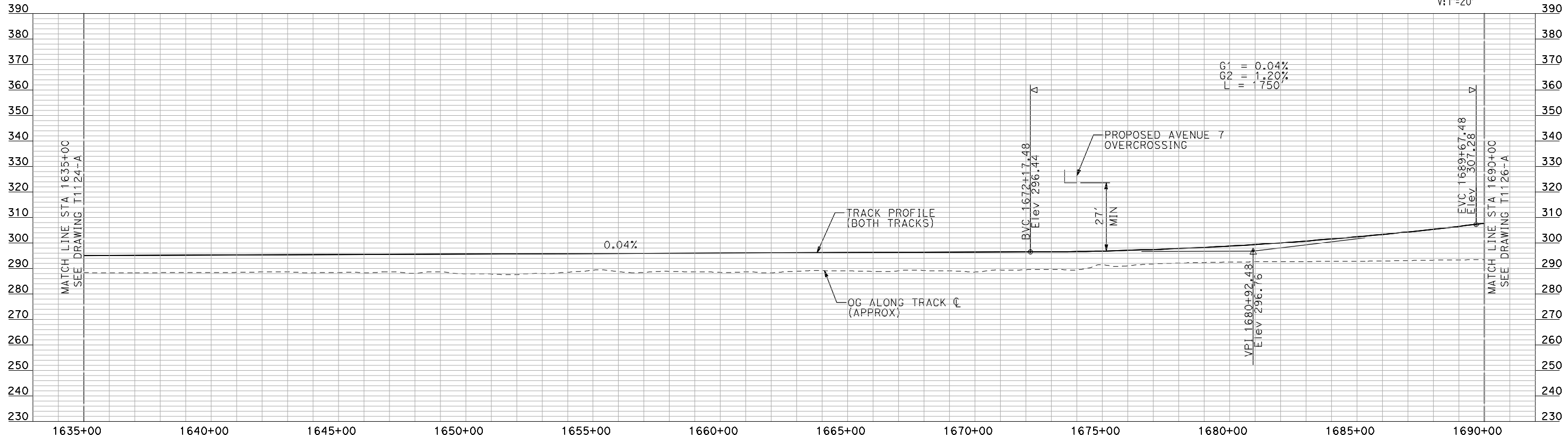
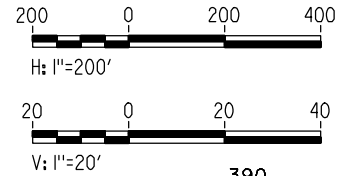
7/22/2011 10:29:38 AM I:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave_21\MF-T-1124-A.dgn machadoe

7/22/2011 10:30:24 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\bnsf_ave_21\WF-T-1125-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**



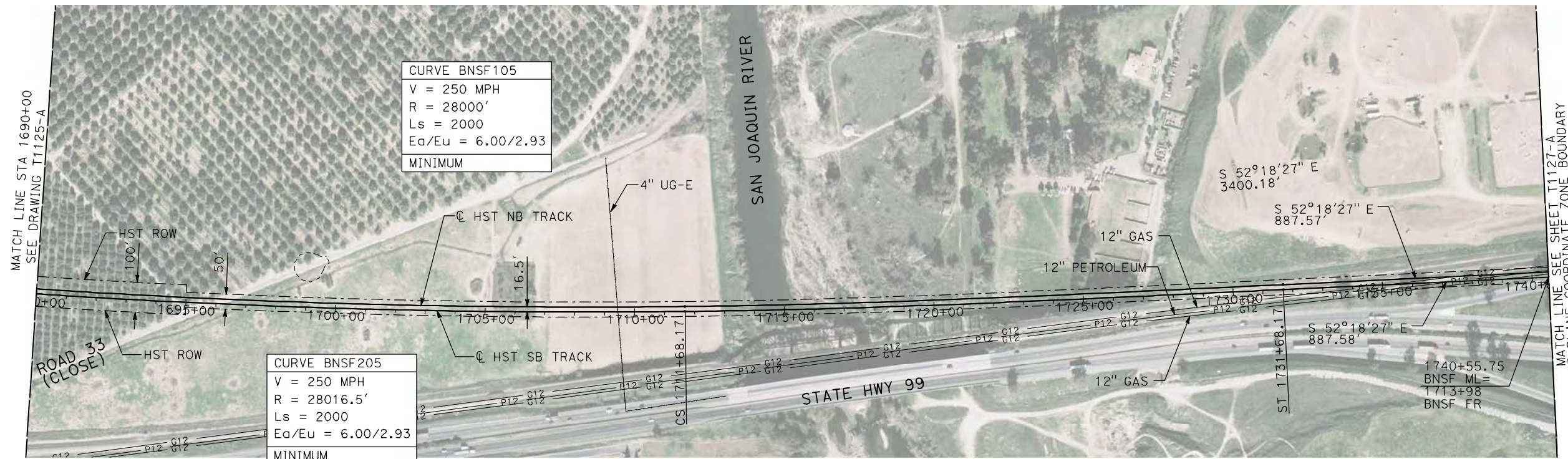
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

BNSF MAIN LINE

PLAN AND PROFILE
STA 1635+00 TO STA 1690+00

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

7/22/2011 10:31:10 AM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\BNSF_AVE 21\MF-T-1126-A.dgn machadoe

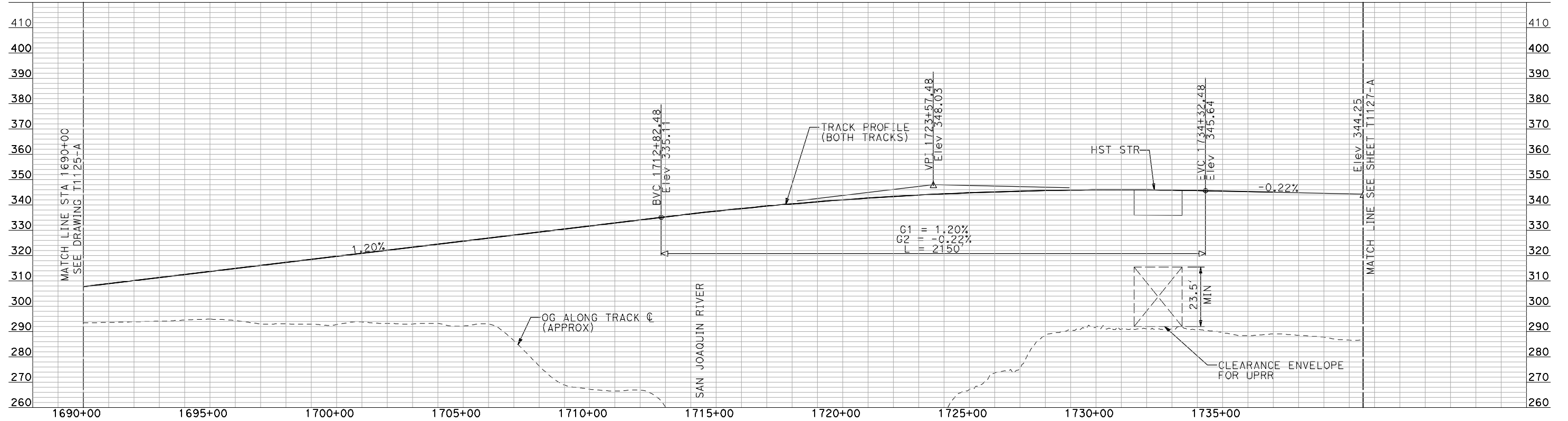
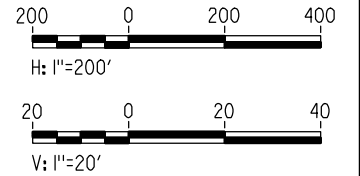
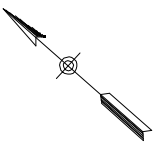


CURVE BNSF105
 V = 250 MPH
 R = 28000'
 Ls = 2000
 Ea/Eu = 6.00/2.93
 MINIMUM

CURVE BNSF205
 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.
 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

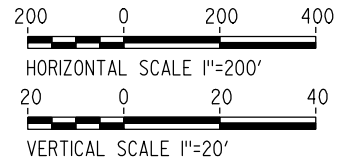


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 BNSF MAIN LINE
 PLAN AND PROFILE
 STA 1690+00 TO STA 1740+55.75

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

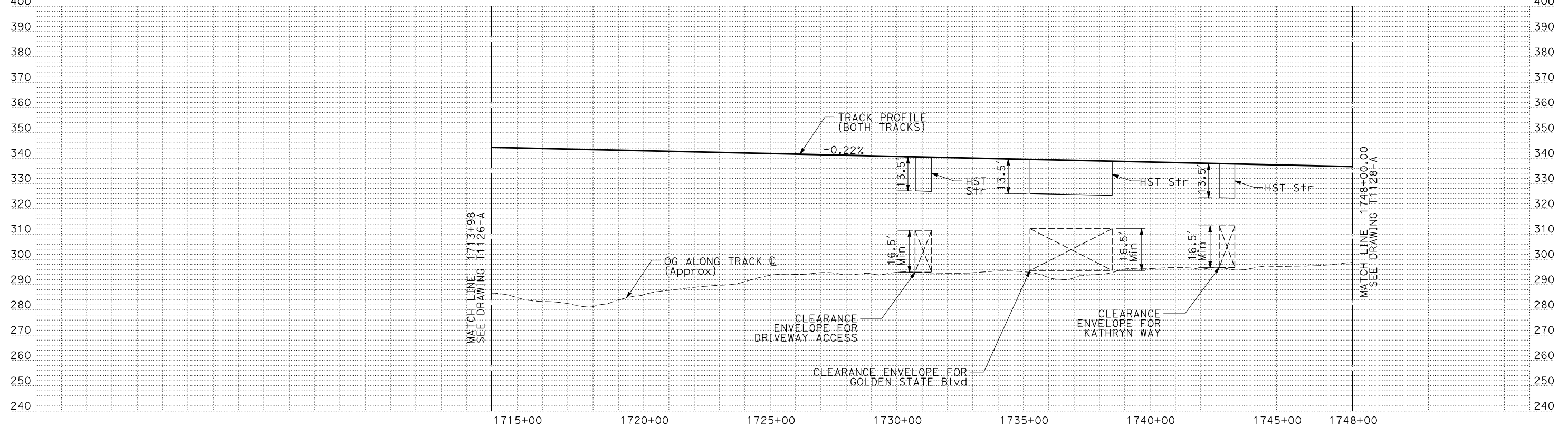


PLAN



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
C. CHIU
DRAWN BY
M. McKEON
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
MAY 2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**



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

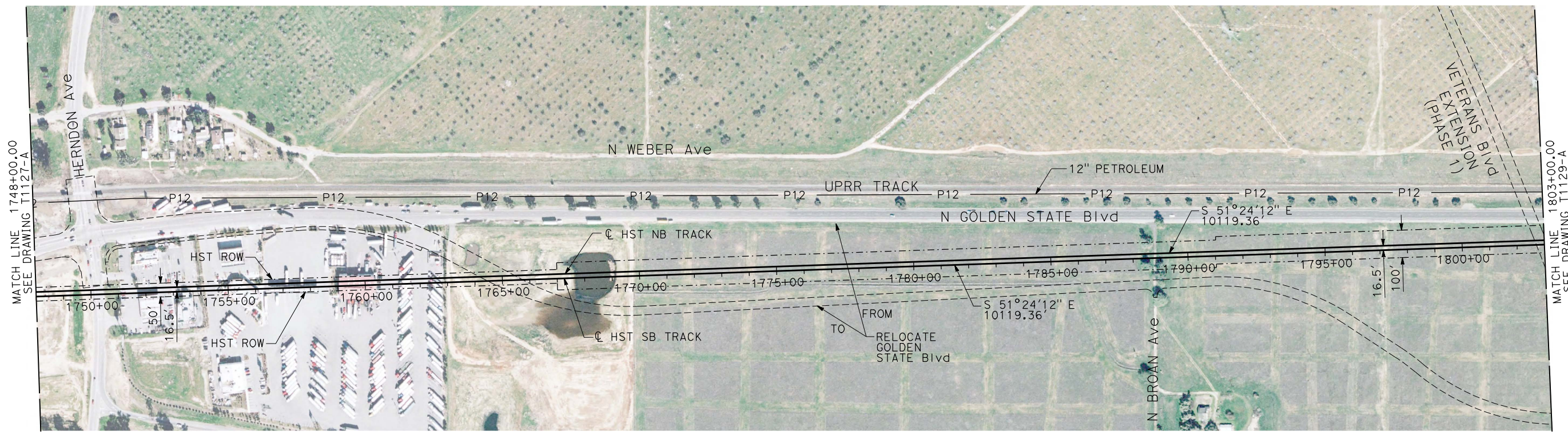
HYBRID

PLAN AND PROFILE
STA 1713+98 TO STA 1748+00

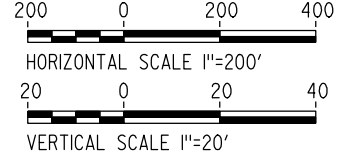
CONTRACT NO. HSR06-007
DRAWING NO. T1127-A
SCALE AS SHOWN
SHEET NO.

DATE PLOTTED => 20-JUL-2011
TIME PLOTTED => 12:59

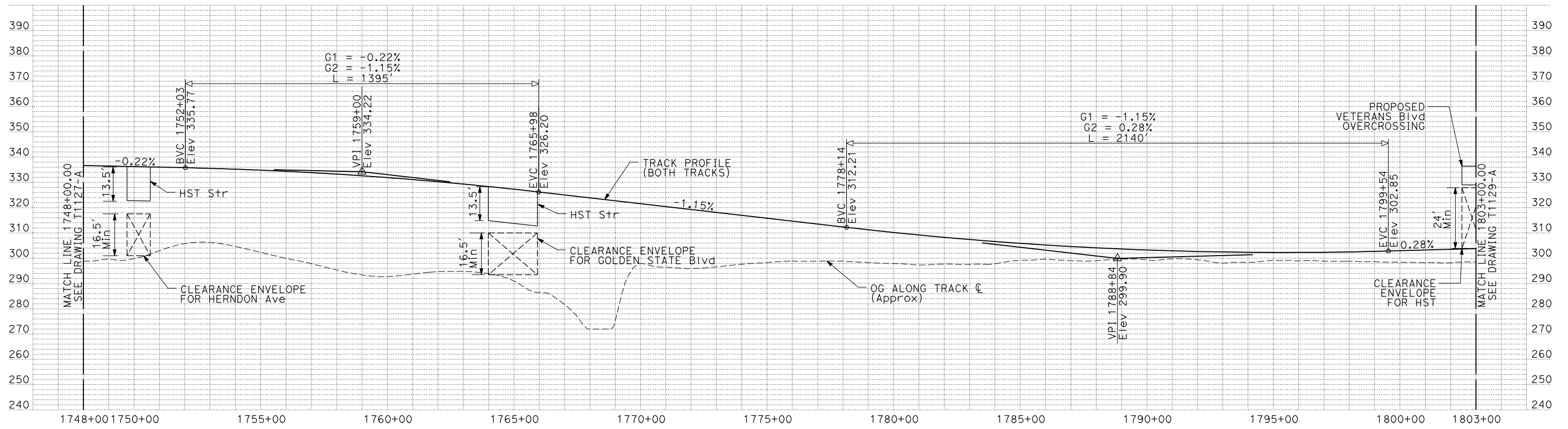
USERNAME => lwebster
DGN FILE => MF-T-1127-HYB-



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
C. CHIU

DRAWN BY
M. MCKEON

CHECKED BY
V. CHIO

IN CHARGE
J. VALSECCHI

DATE
MAY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

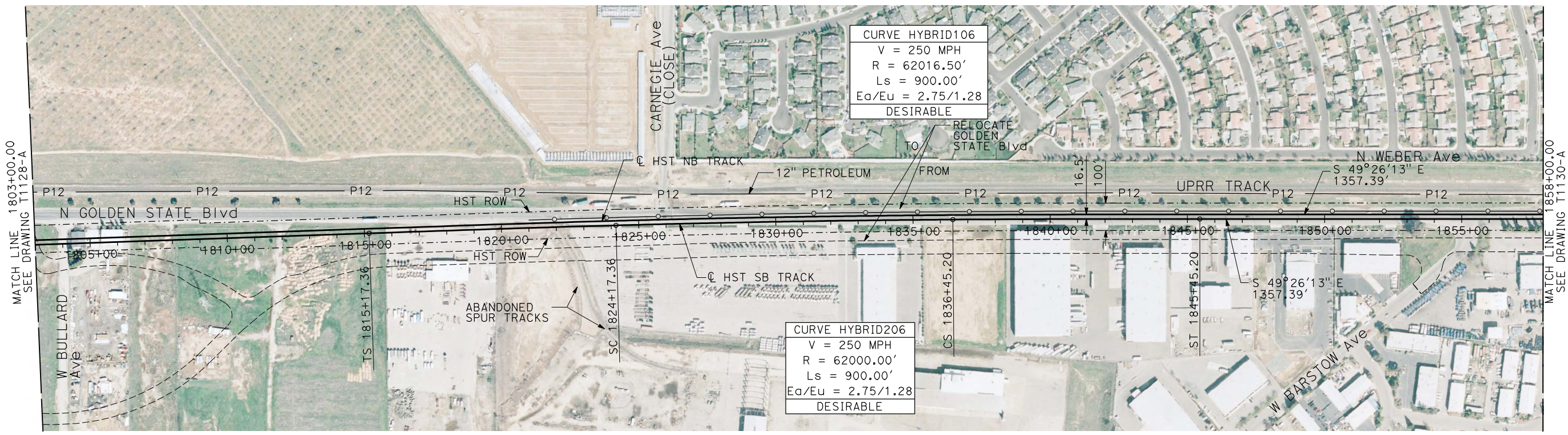
HYBRID

PLAN AND PROFILE
STA 1748+00 TO STA 1803+00

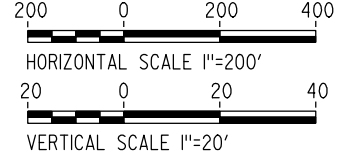
CONTRACT NO. HSR06-007
DRAWING NO. T1128-A
SCALE AS SHOWN
SHEET NO.

DATE PLOTTED => 20-JUL-2011
TIME PLOTTED => 12:55

USERNAME => lwebster
DGN FILE => MF-T-1128-HYB-

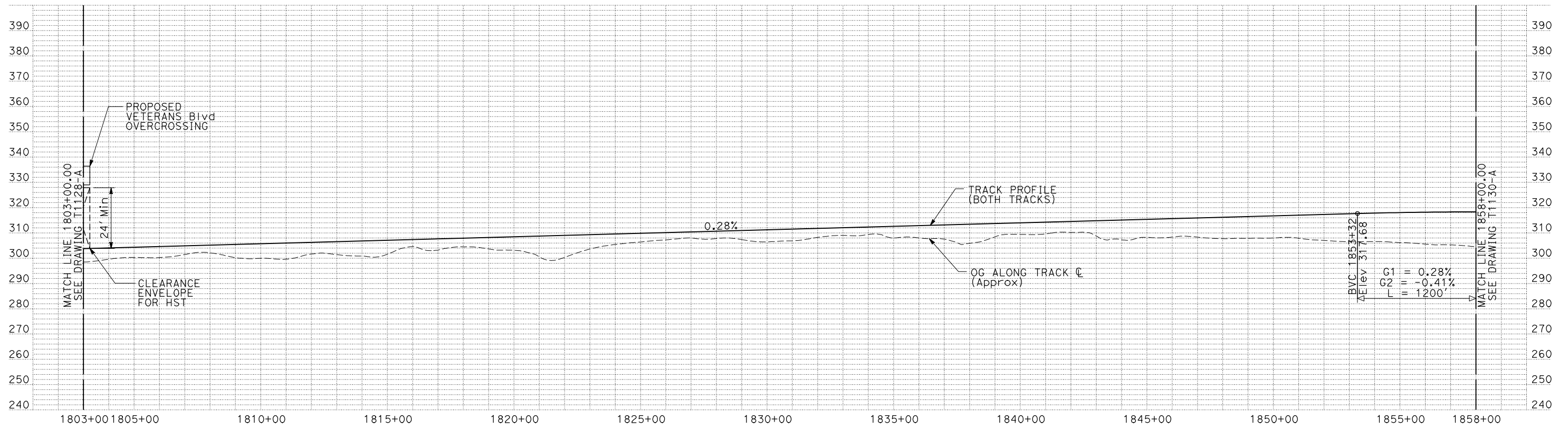


PLAN



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
C. CHIU
DRAWN BY
M. McKEON
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
MAY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



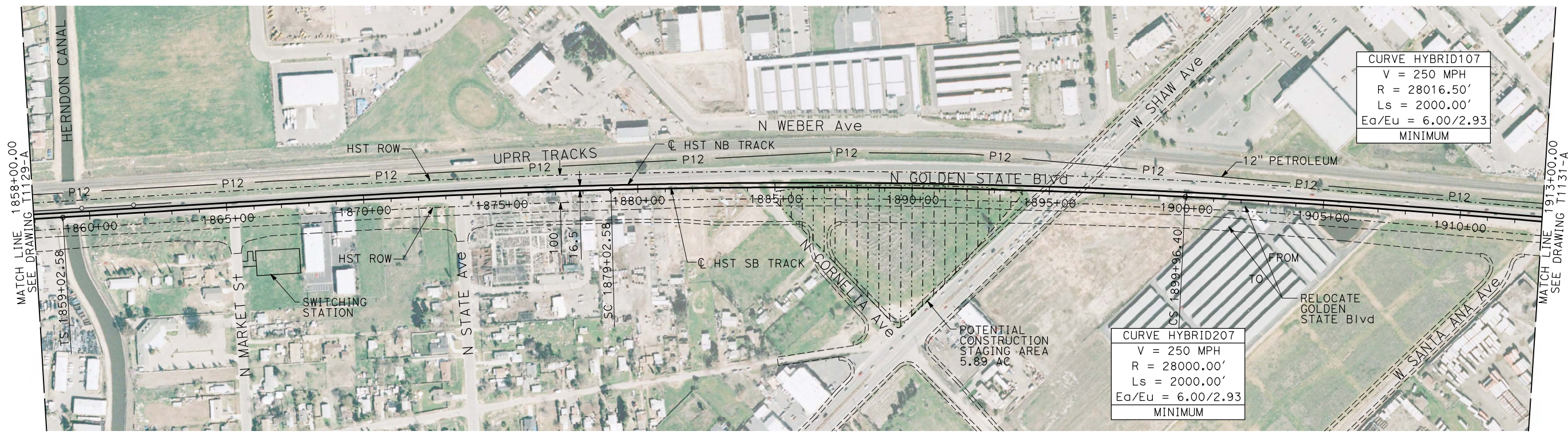
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID
PLAN AND PROFILE
STA 1803+00 TO STA 1858+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1129-A
SCALE
AS SHOWN
SHEET NO.

DATE PLOTTED => 20-JUL-2011
TIME PLOTTED => 12:50

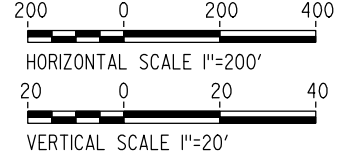
USERNAME => lwebster
DGN FILE => MF-T-1129-HYB-



CURVE HYBRID107
 V = 250 MPH
 R = 28016.50'
 Ls = 2000.00'
 Ea/Eu = 6.00/2.93
 MINIMUM

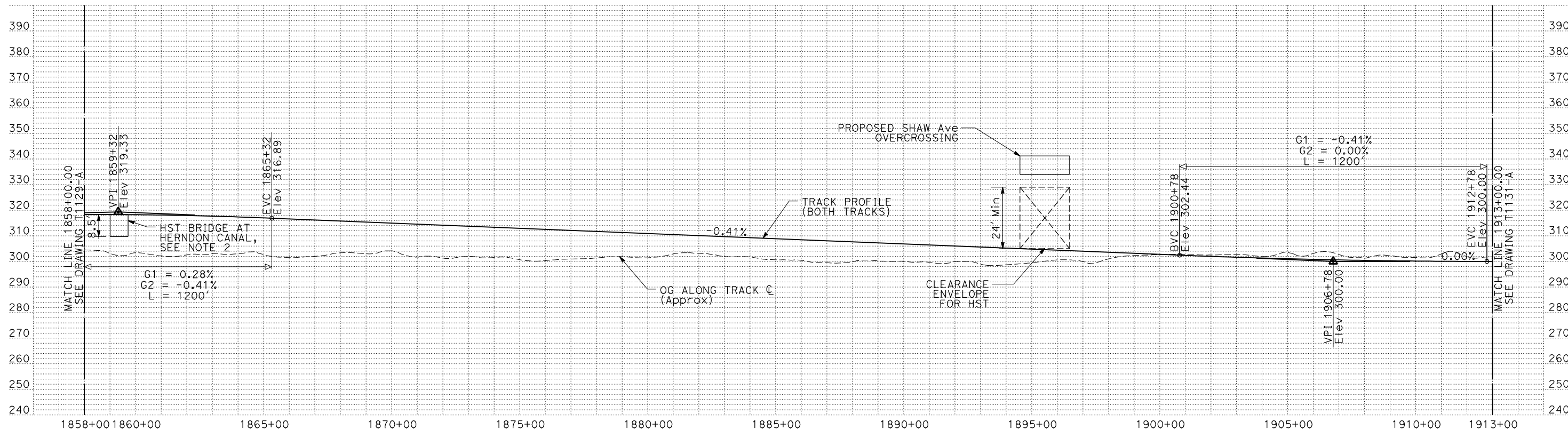
CURVE HYBRID207
 V = 250 MPH
 R = 28000.00'
 Ls = 2000.00'
 Ea/Eu = 6.00/2.93
 MINIMUM

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.
3. A MINIMUM OF 2 FEET OF FREEBOARD ABOVE THE LEVEE TOP IS ASSUMED AT HERNDON CANAL.



PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
C. CHIU
 DRAWN BY
M. McKEON
 CHECKED BY
V. CHIO
 IN CHARGE
J. VALSECCHI
 DATE
MAY 2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

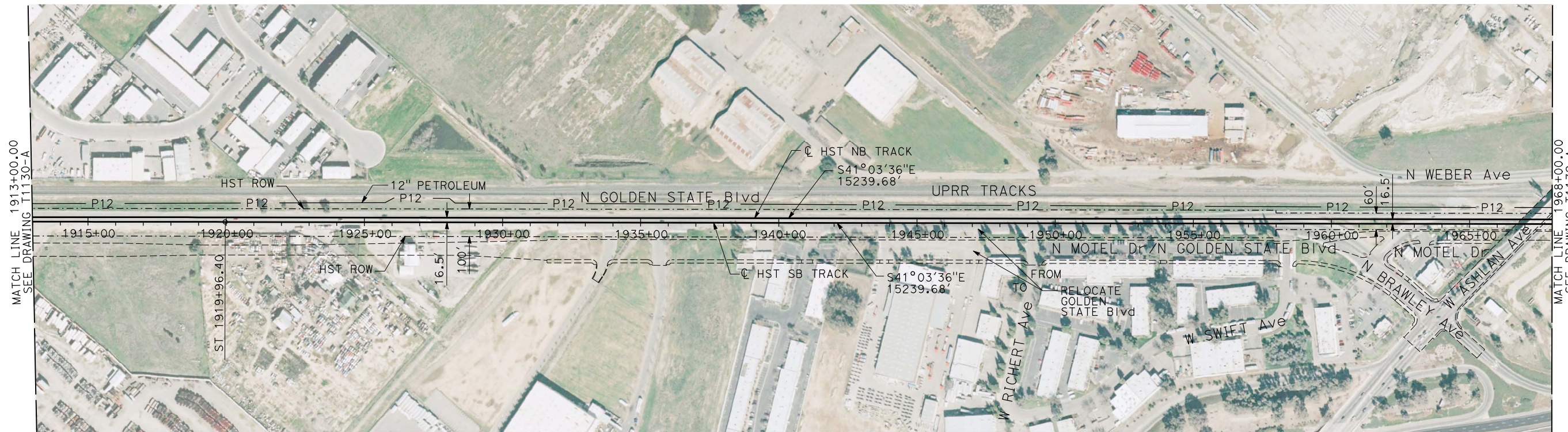


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID
 PLAN AND PROFILE
 STA 1858+00 TO STA 1913+00

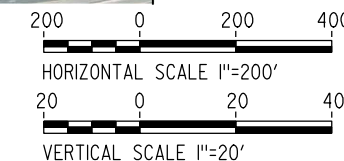
CONTRACT NO.	HSR06-007
DRAWING NO.	T1130-A
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED => 20-JUL-2011
 TIME PLOTTED => 12:45

USERNAME => lwebster
 DGN FILE => MF-T-1130-HYB-

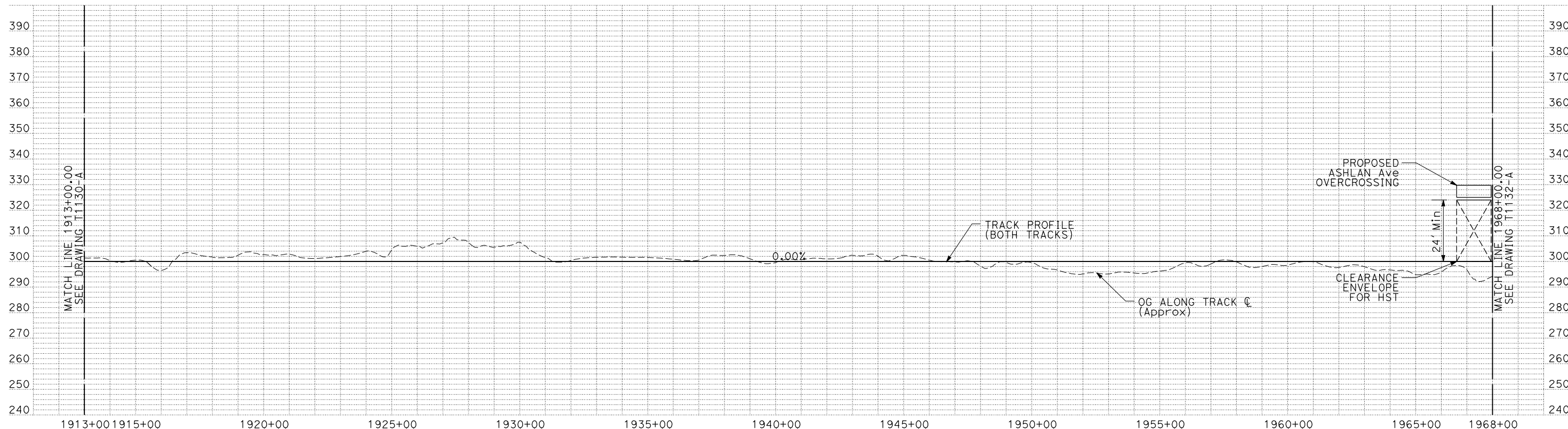


PLAN



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
C. CHIU
DRAWN BY
M. MCKEON
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
MAY 2011

**RECORD SET
15% DESIGN
SUBMITTAL**

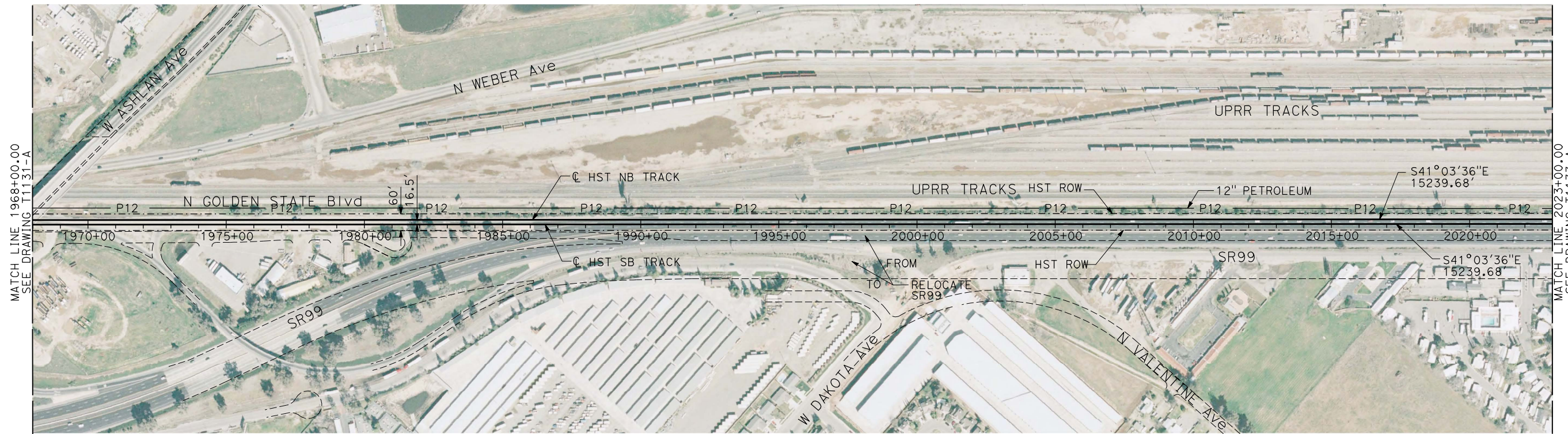
**NOT FOR
CONSTRUCTION**



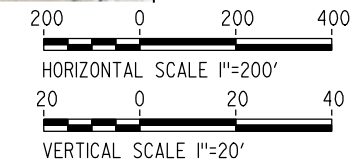
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
PLAN AND PROFILE
STA 1913+00 TO STA 1968+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1131-A
SCALE
AS SHOWN
SHEET NO.

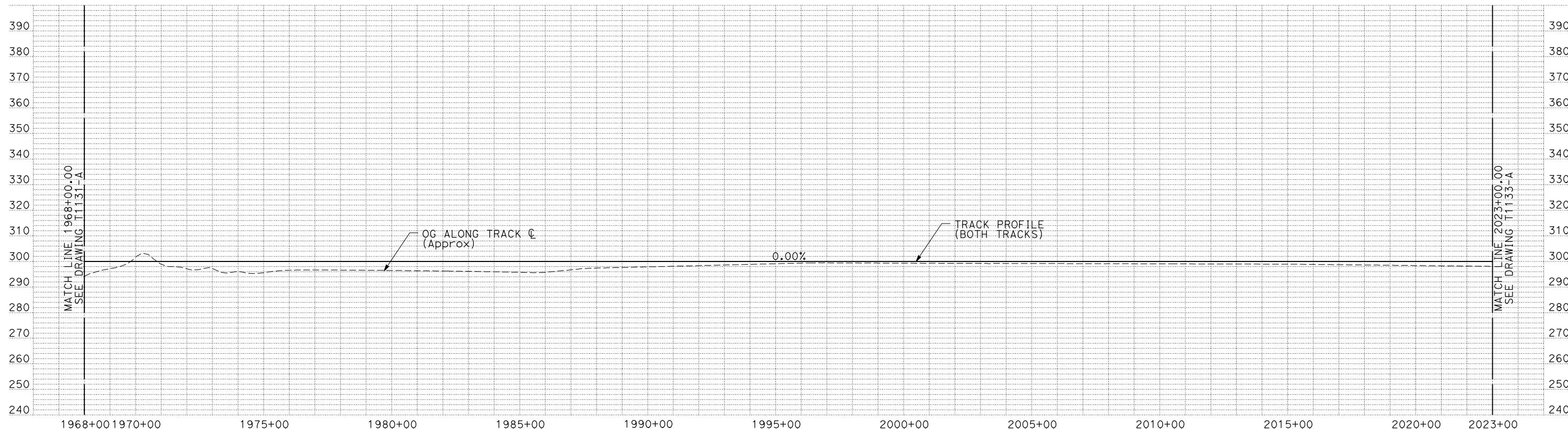


PLAN



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
C. CHIU
DRAWN BY
M. MCKEON
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
MAY 2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

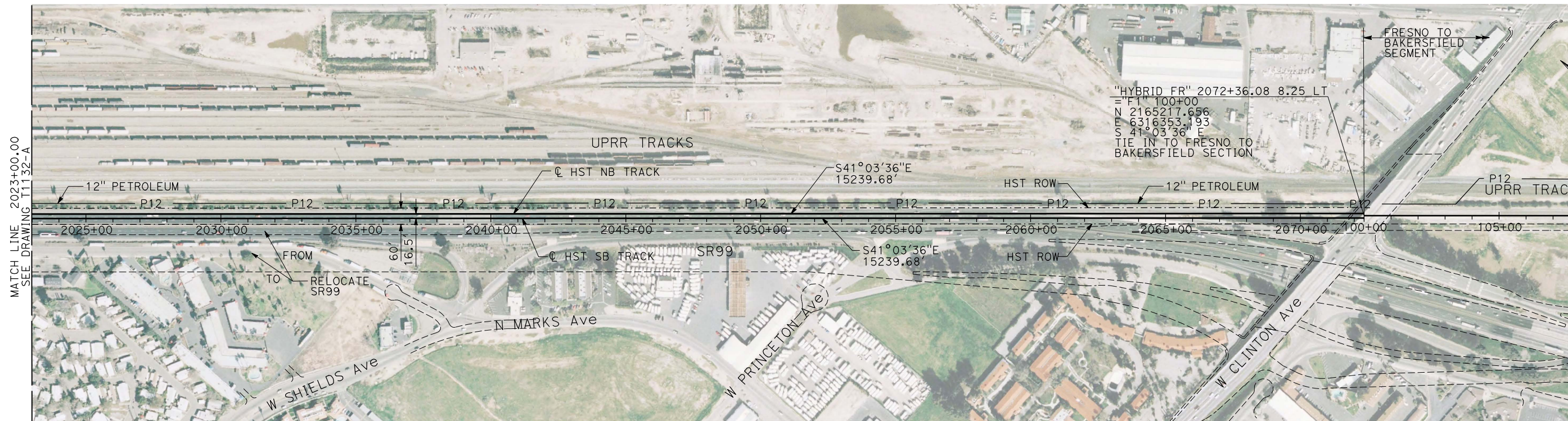


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

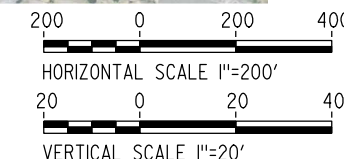
HYBRID

PLAN AND PROFILE
STA 1968+00 TO STA 2023+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T1132-A
SCALE
AS SHOWN
SHEET NO.

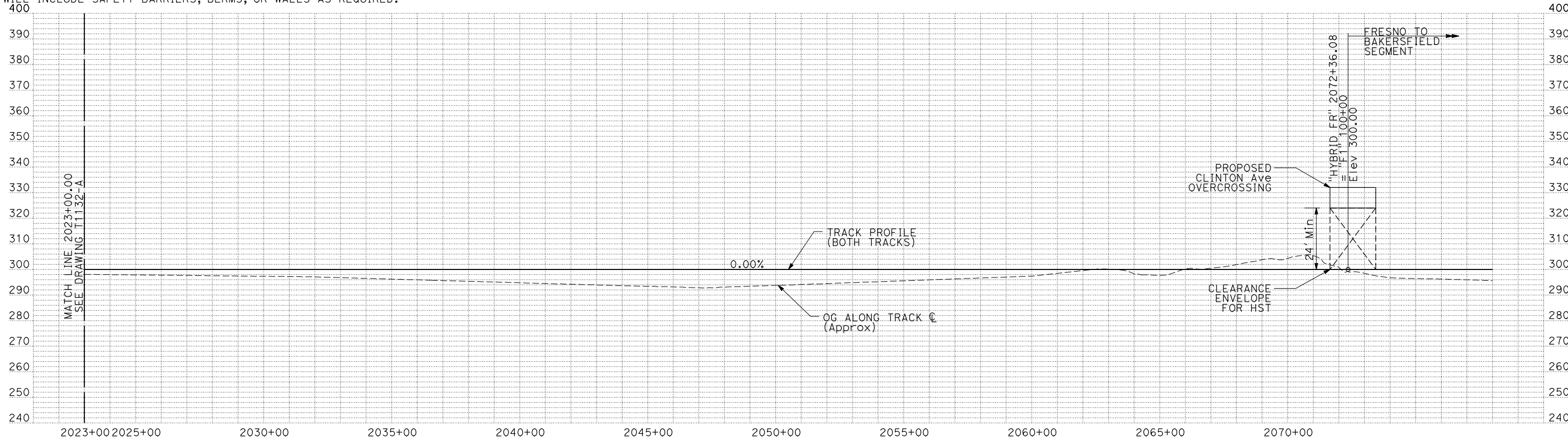


PLAN



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
C. CHIU
DRAWN BY
M. McKEON
CHECKED BY
V. CHIO
IN CHARGE
J. VALSECCHI
DATE
MAY 2011

**RECORD SET
15% DESIGN
SUBMITTAL**

**NOT FOR
CONSTRUCTION**

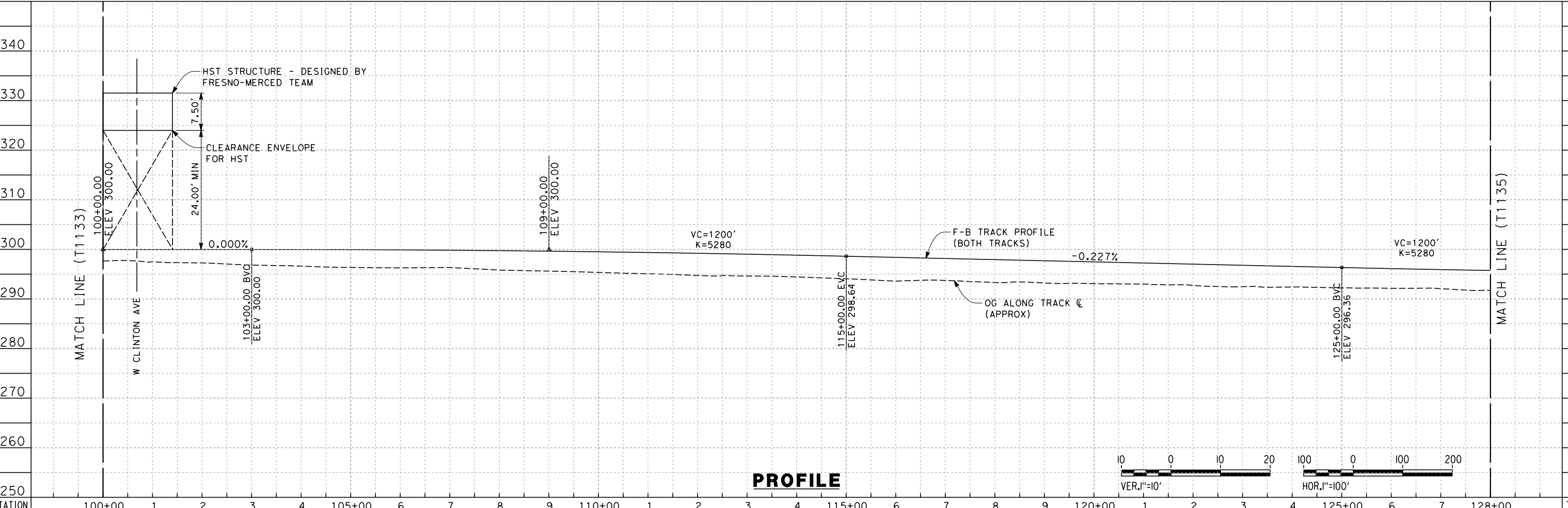
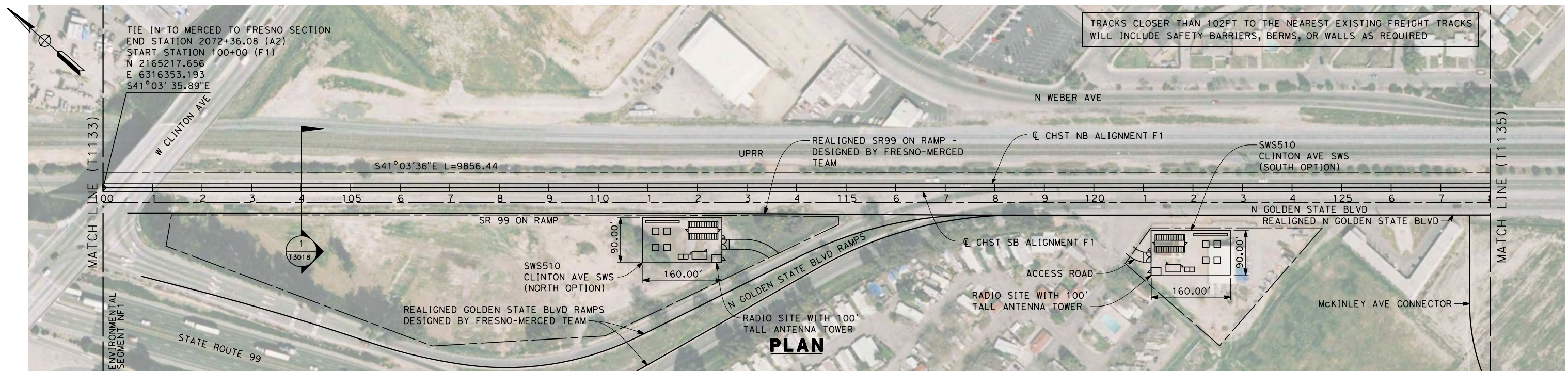


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID
PLAN AND PROFILE
STA 2023+00 TO STA 2072+36.08

CONTRACT NO.	HSR06-007
DRAWING NO.	T1133-A
SCALE	AS SHOWN
SHEET NO.	

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**

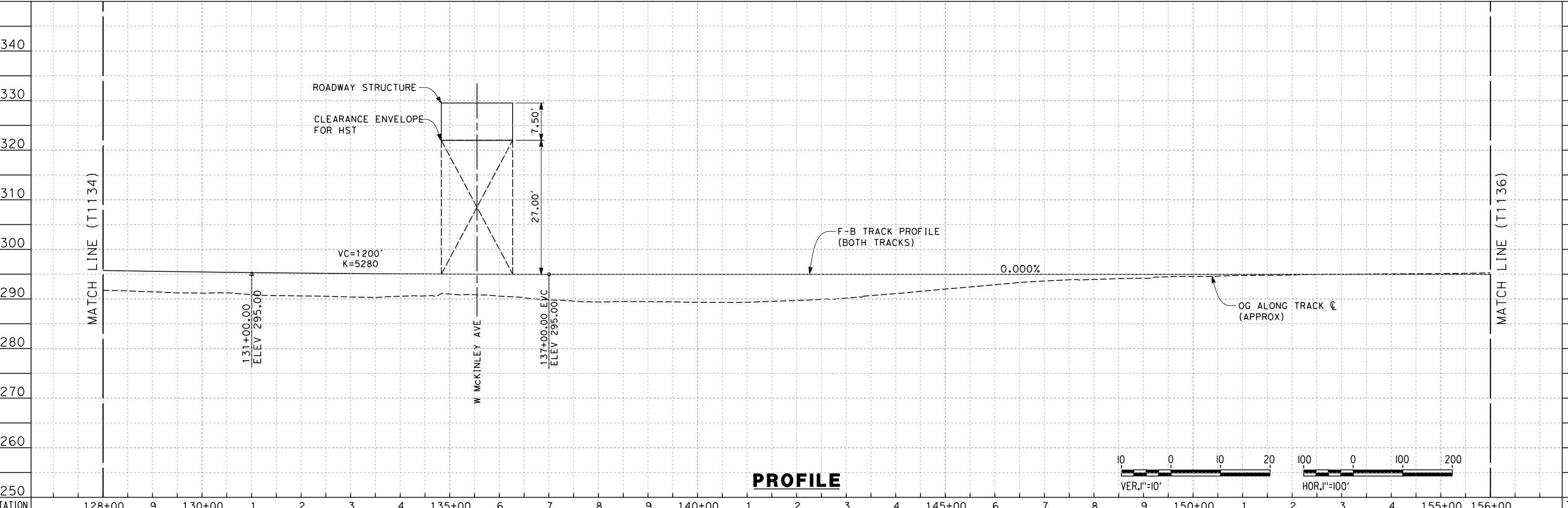
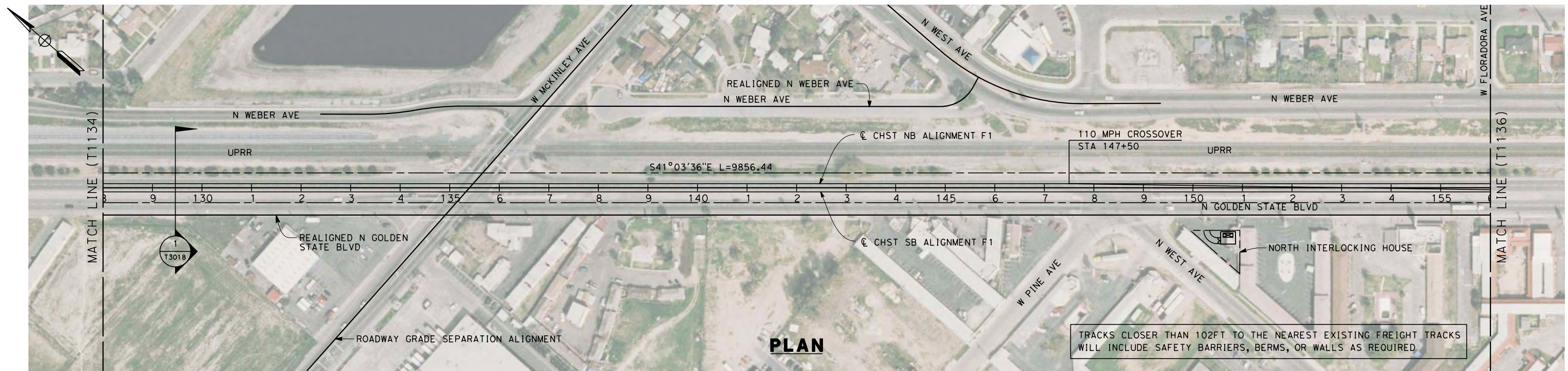


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 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**

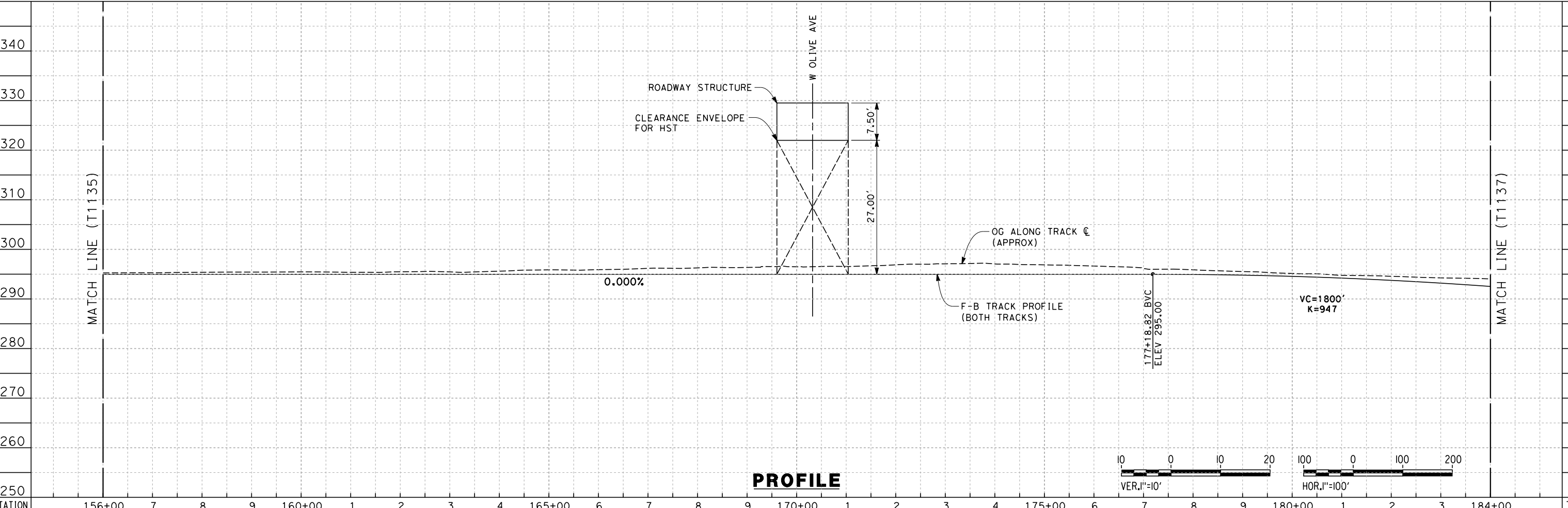
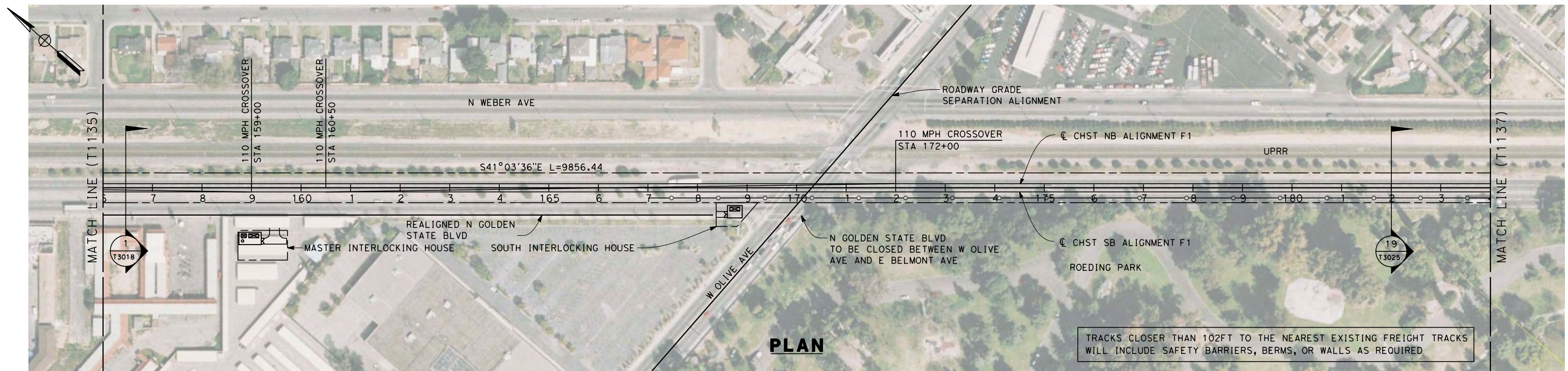


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 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**

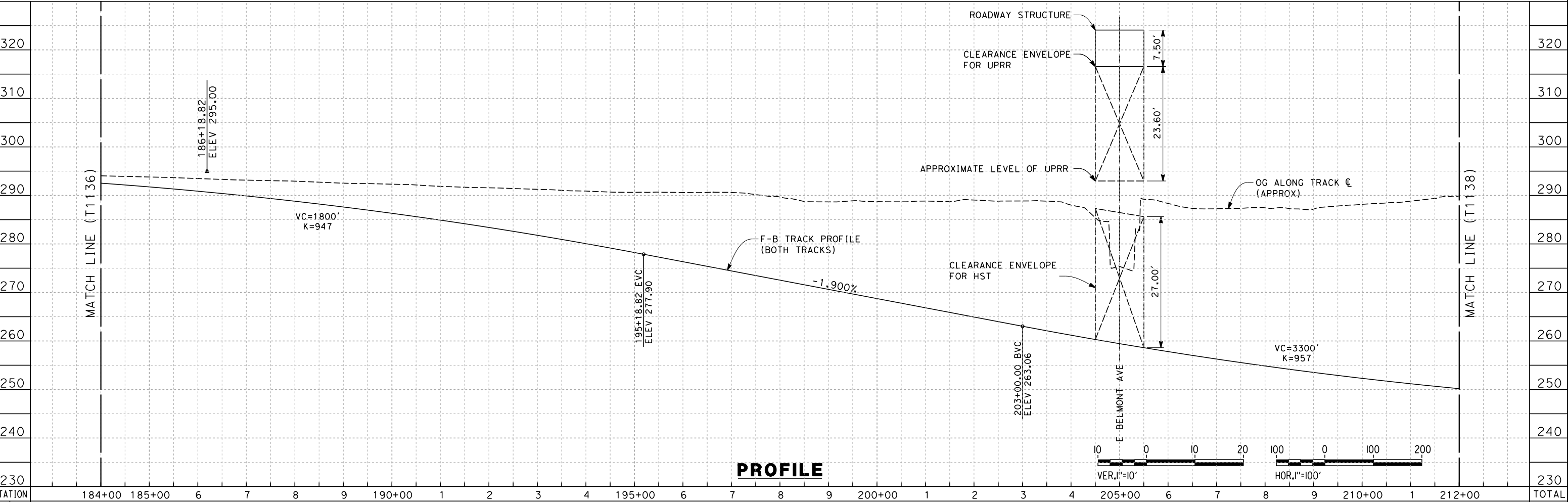
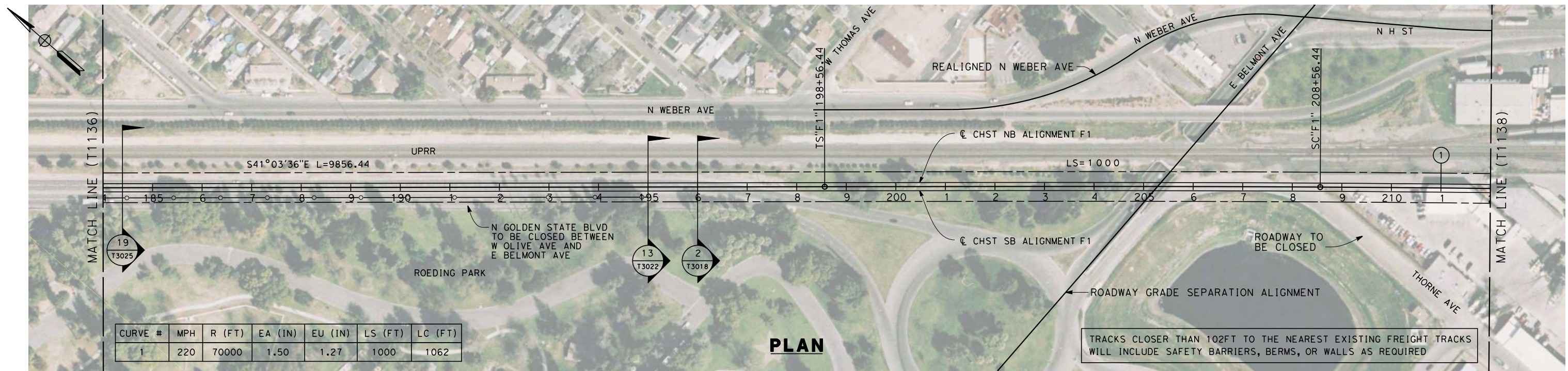


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 HYBRID

 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**

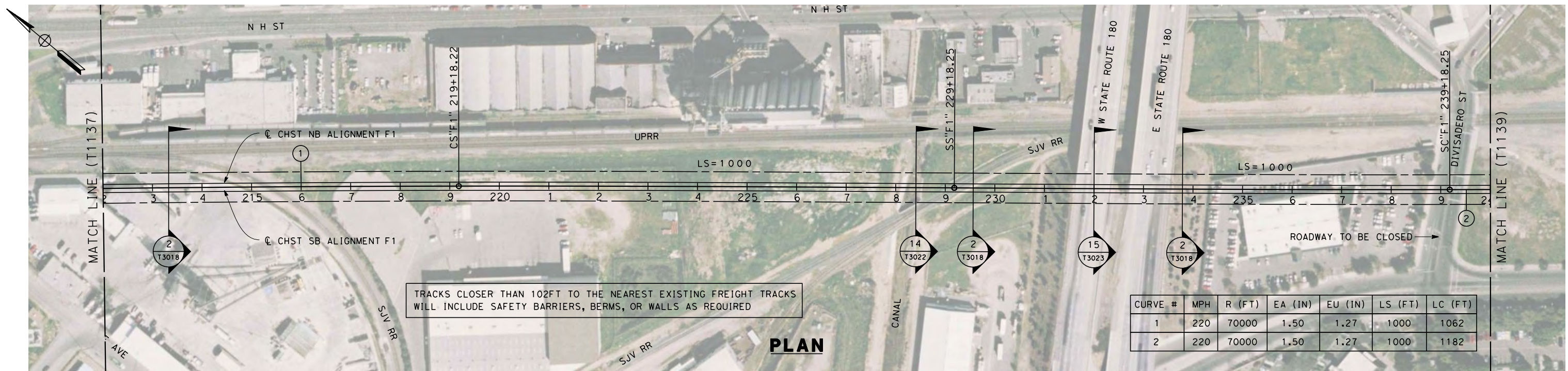
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 184+00 TO 212+00

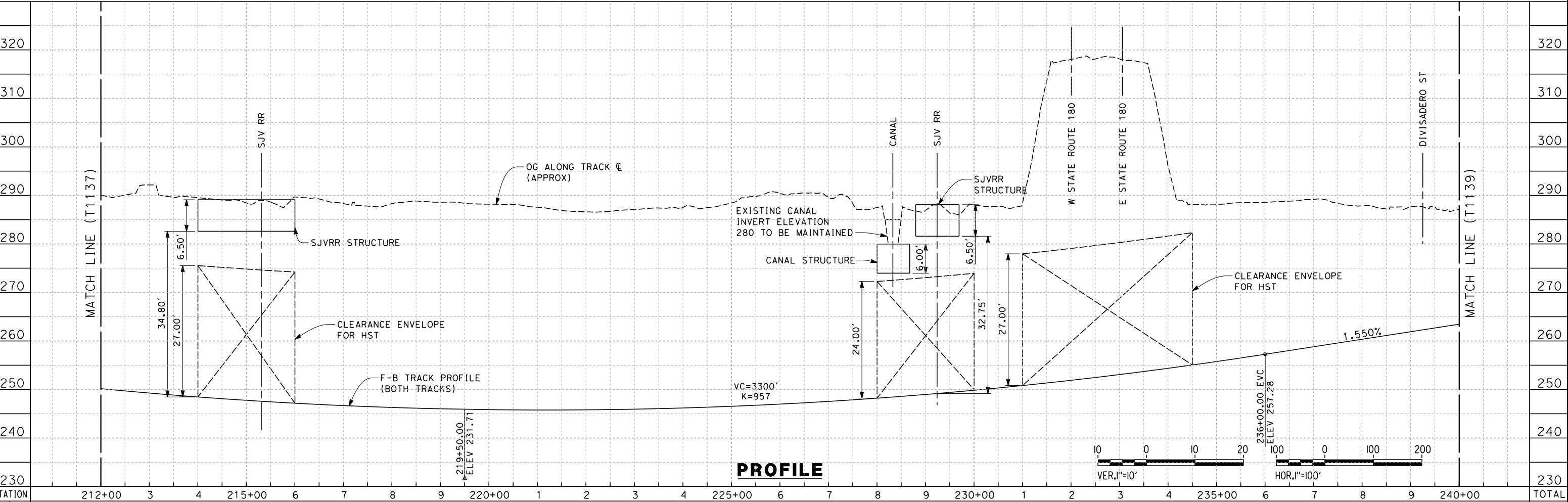
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1137-A
 SCALE
AS SHOWN
 SHEET NO.
OF

7/22/2011 10:26:05 AM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Rail\NHSR 15% Design\AECOM\Hybrid - Ave 21\FB-T1138-A-F1.dgn



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

PLAN



PROFILE

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																														

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**

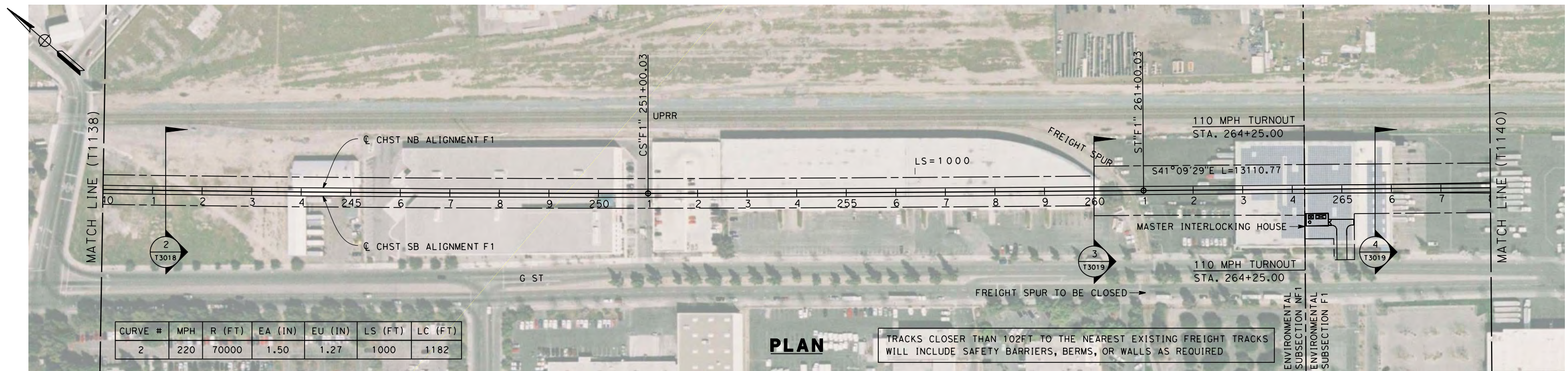
**NOT FOR
CONSTRUCTION**



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

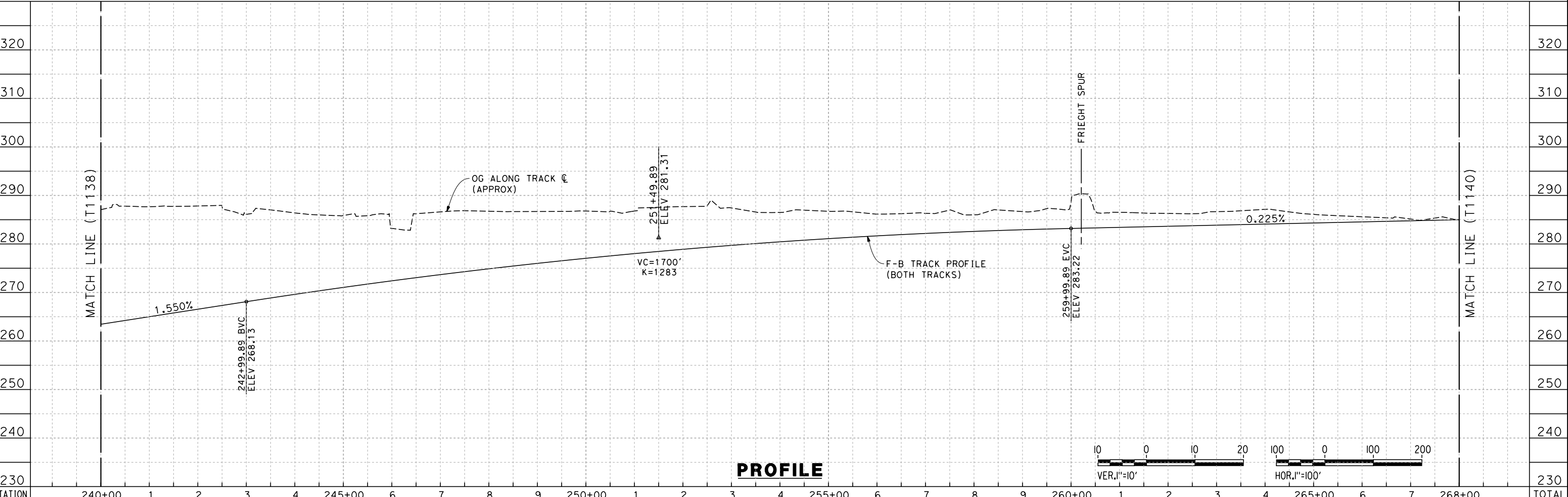
CONTRACT NO.
HSR 06-0003
DRAWING NO.
T1138-A
SCALE
AS SHOWN
SHEET NO.
OF

7/22/2011 10:26:07 AM 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-T1139-A-F1.dgn

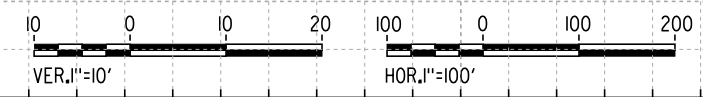


PLAN

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



PROFILE

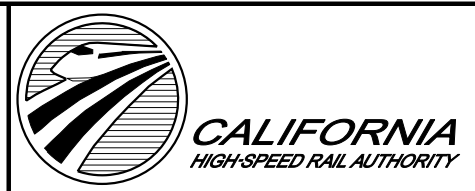


STATION	240+00	1	2	3	4	245+00	6	7	8	9	250+00	1	2	3	4	255+00	6	7	8	9	260+00	1	2	3	4	265+00	6	7	268+00	TOTAL
Exc																														
Emb																														

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**

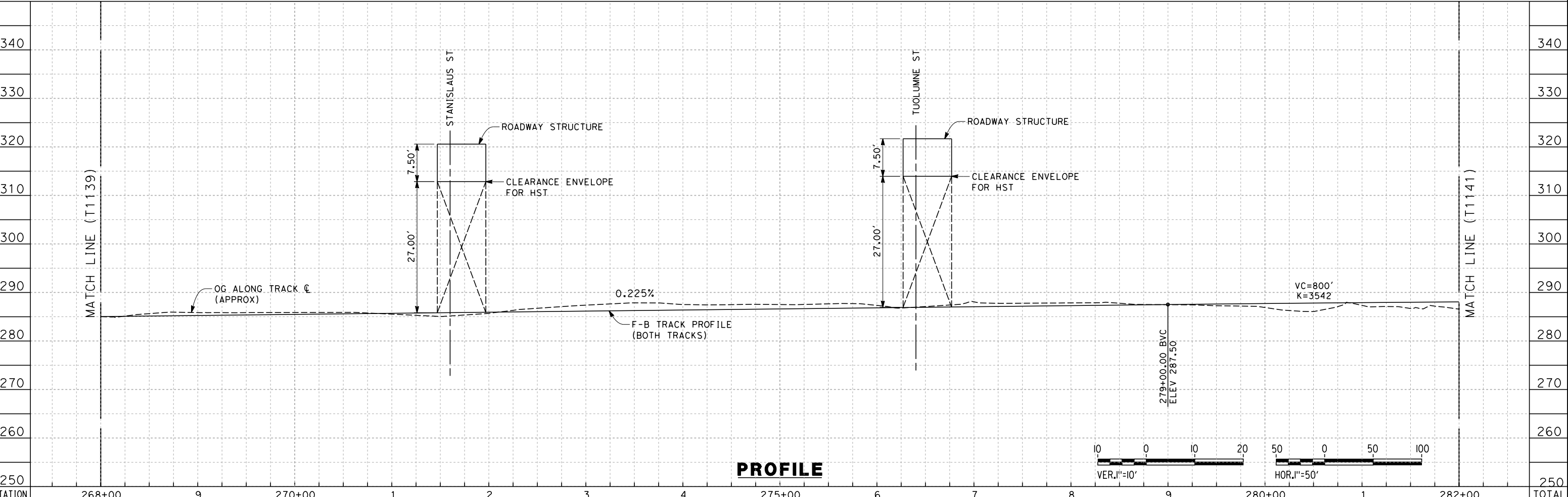
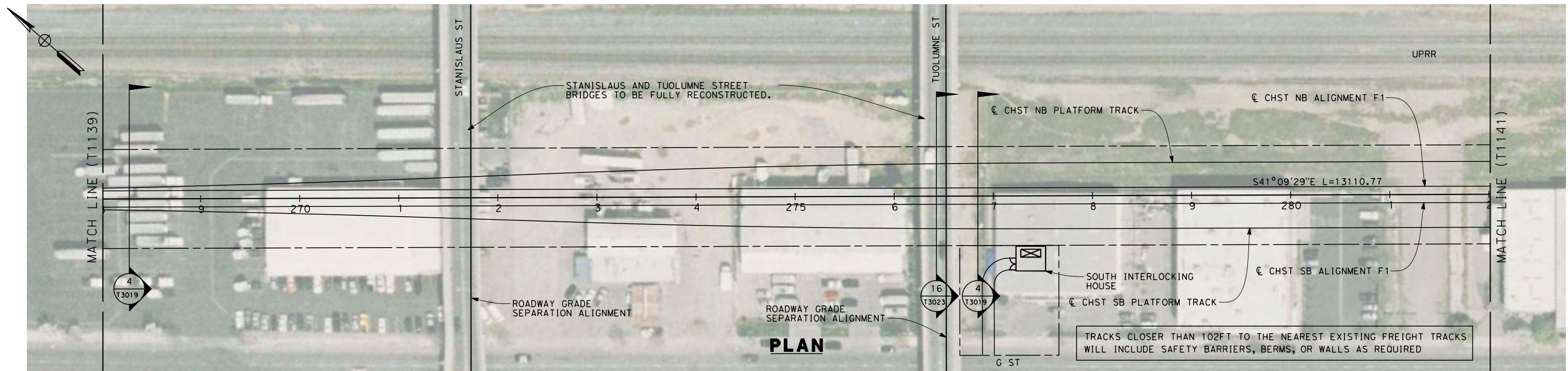


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID
 PLAN AND PROFILE
 STA. 240+00 TO 268+00

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**

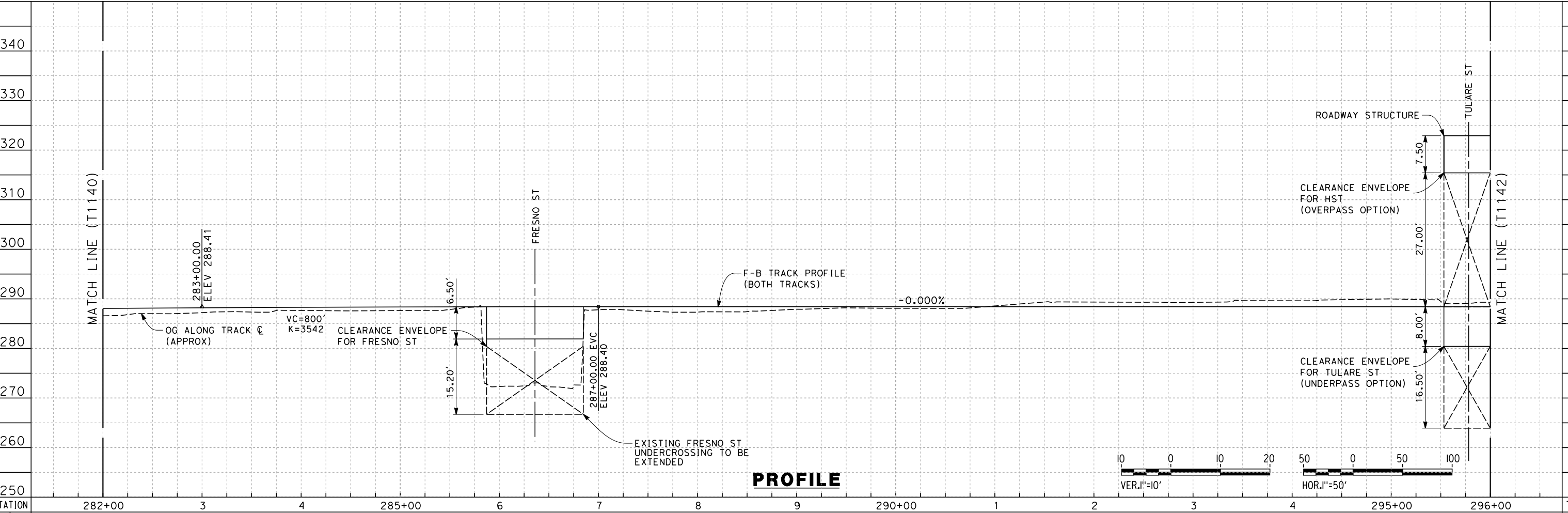
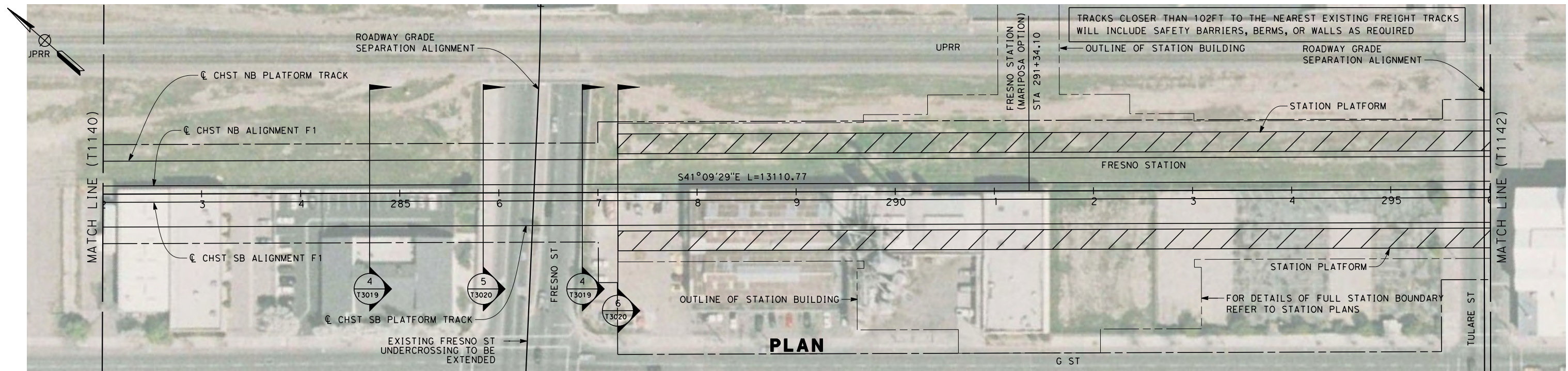
**NOT FOR
CONSTRUCTION**



**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**

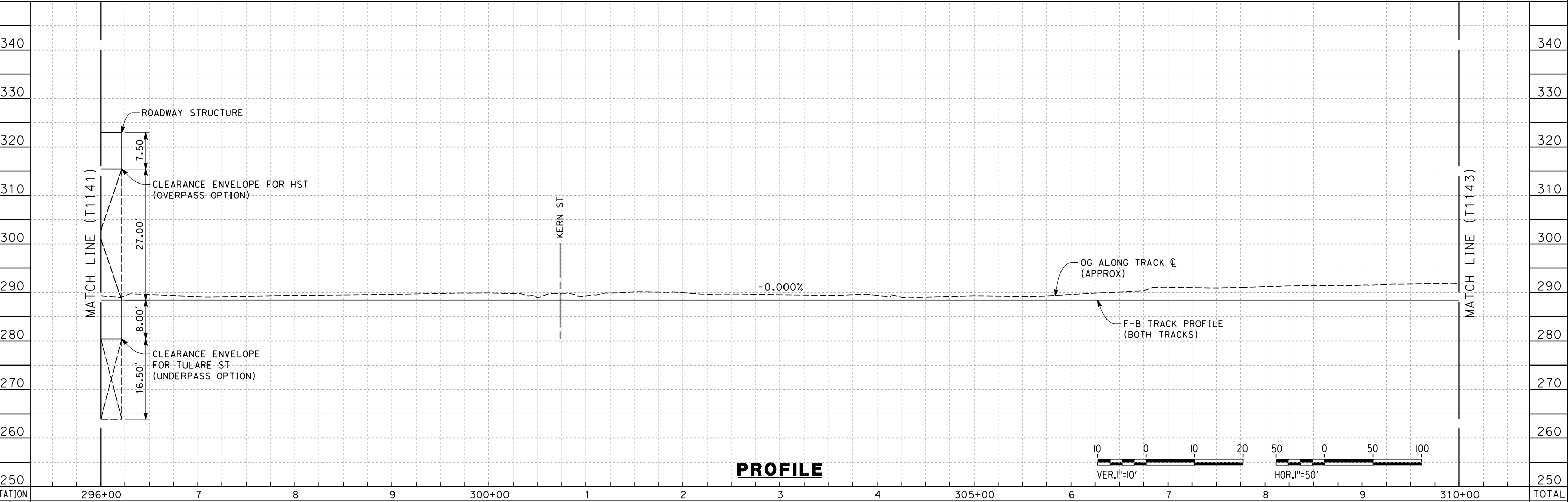
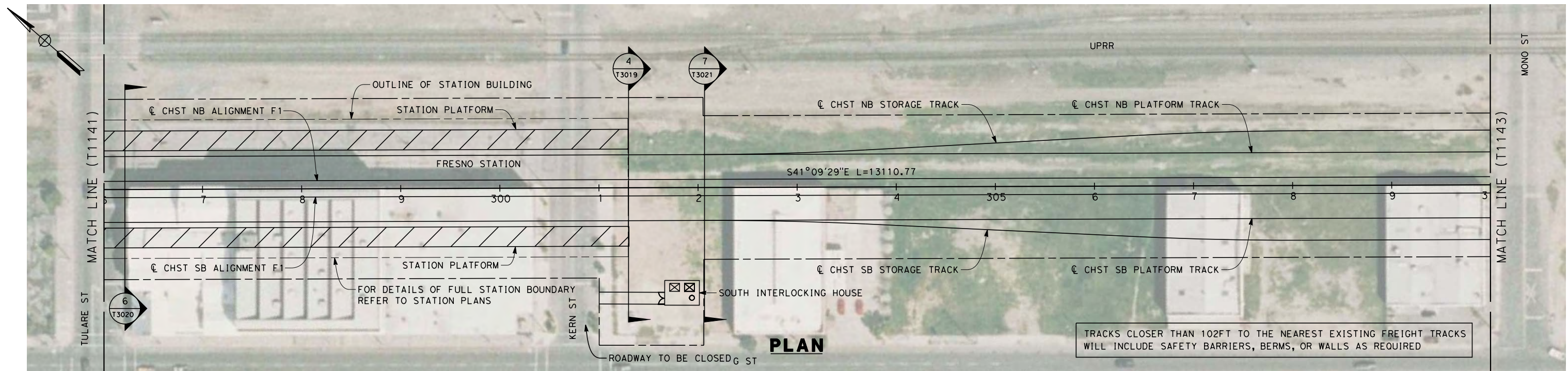


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 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



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**

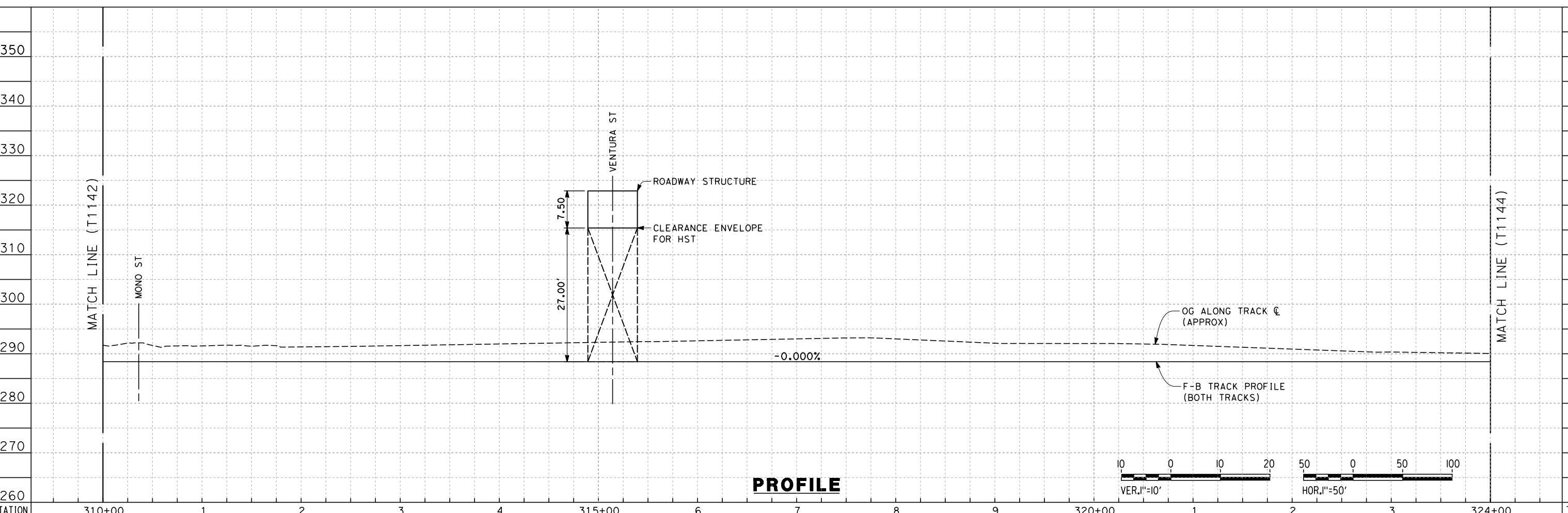
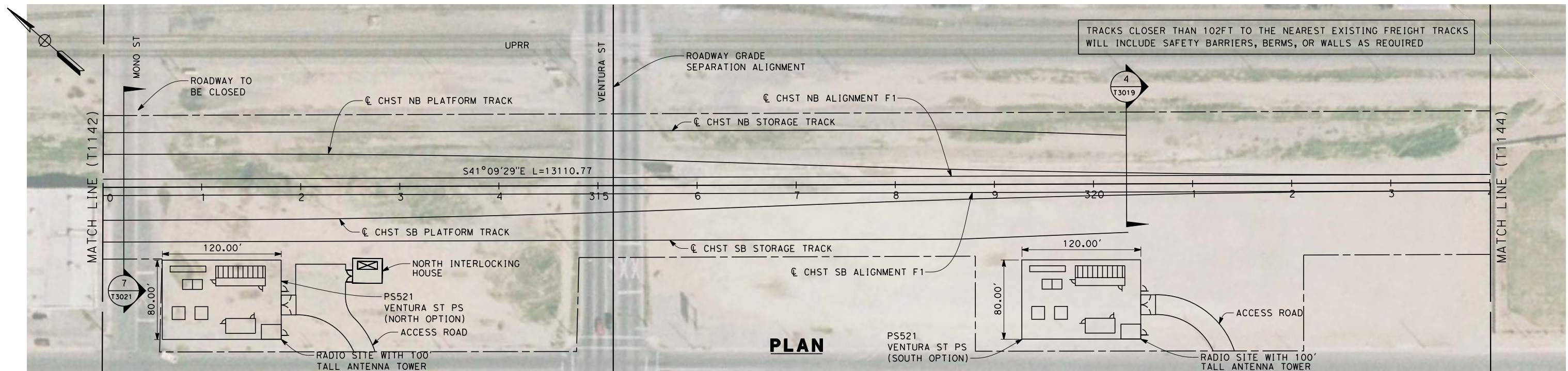


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 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-F1m.dgn



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**

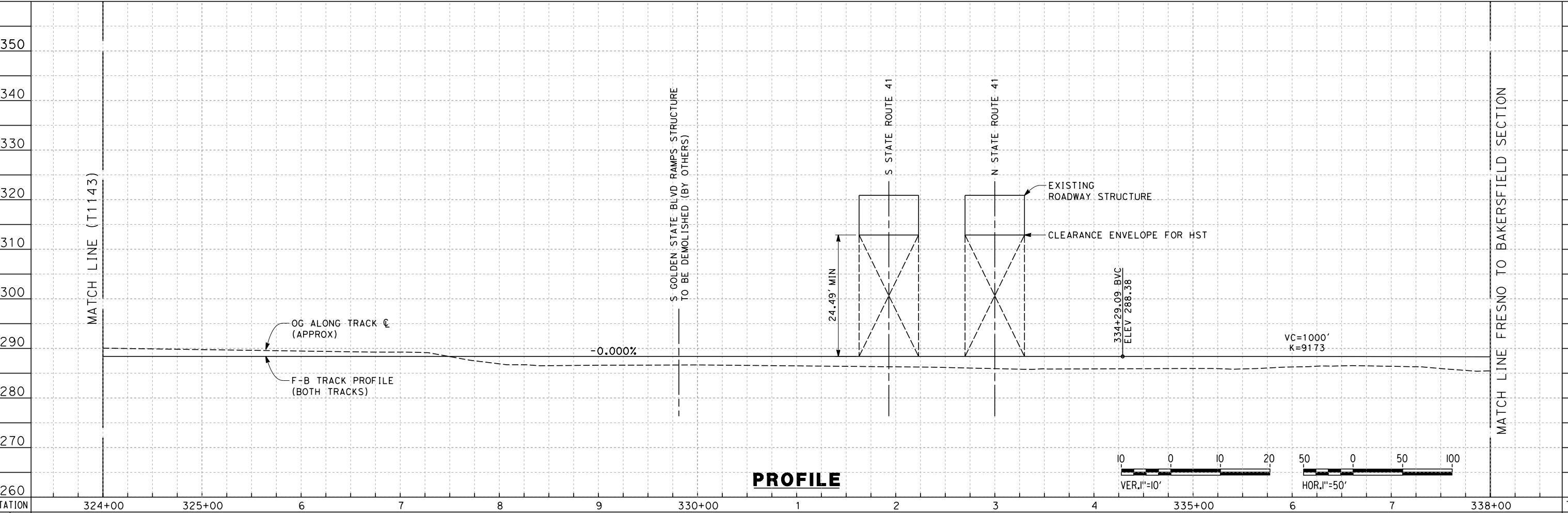
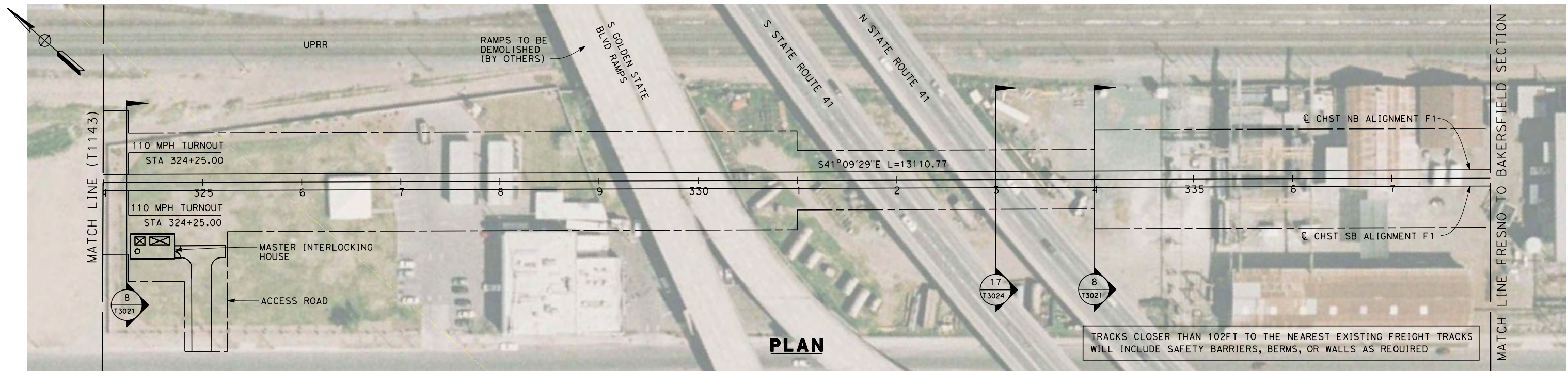


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
 HYBRID

 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**

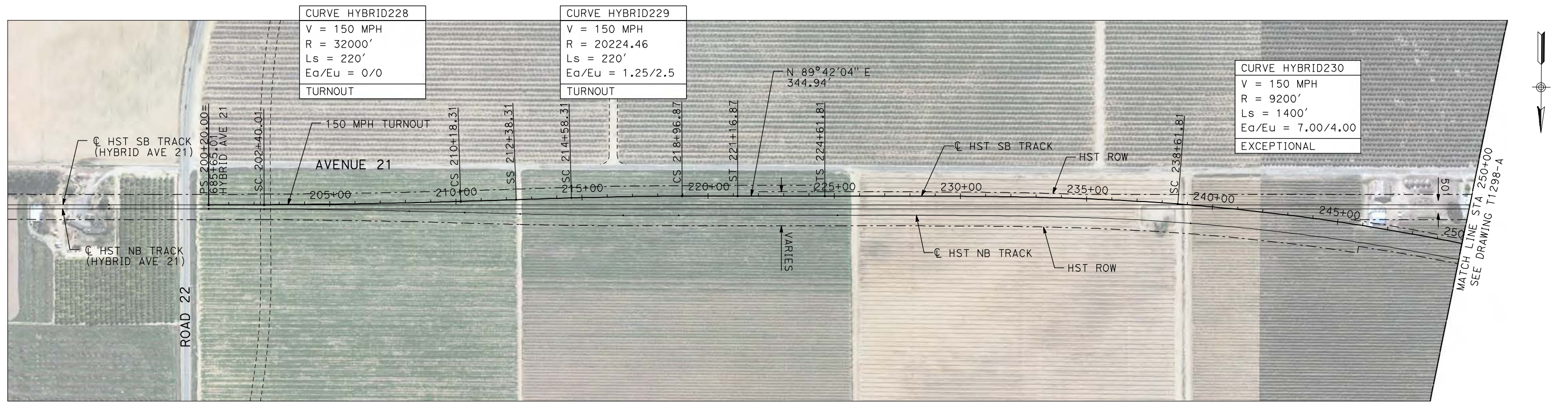
**NOT FOR
CONSTRUCTION**



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

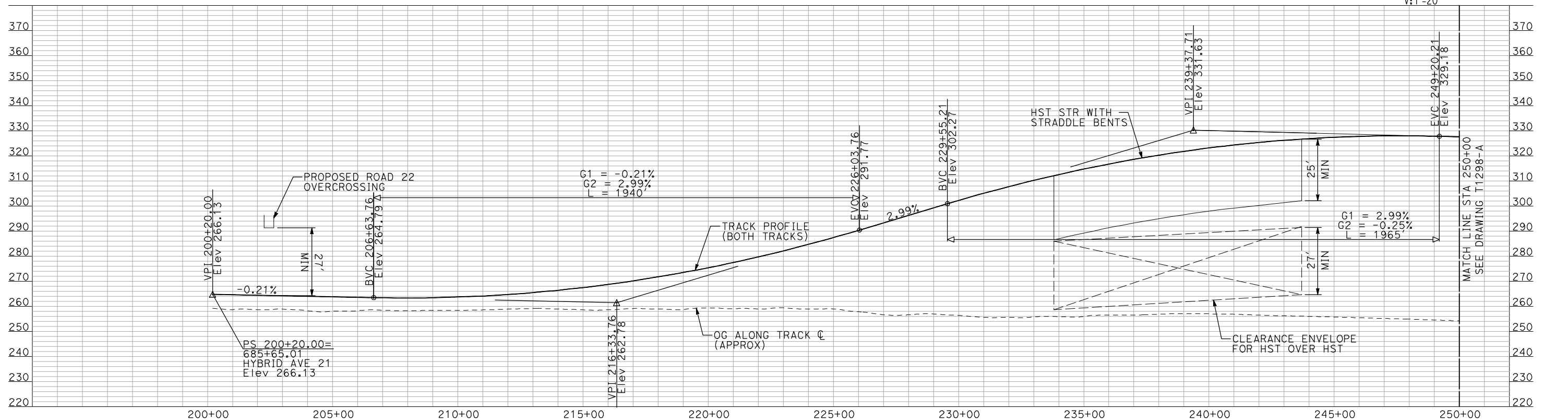
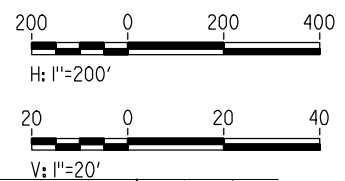
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
T1144-A
 SCALE
AS SHOWN
 SHEET NO.
XX OF XX

7/21/2011 4:45:43 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2197-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

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

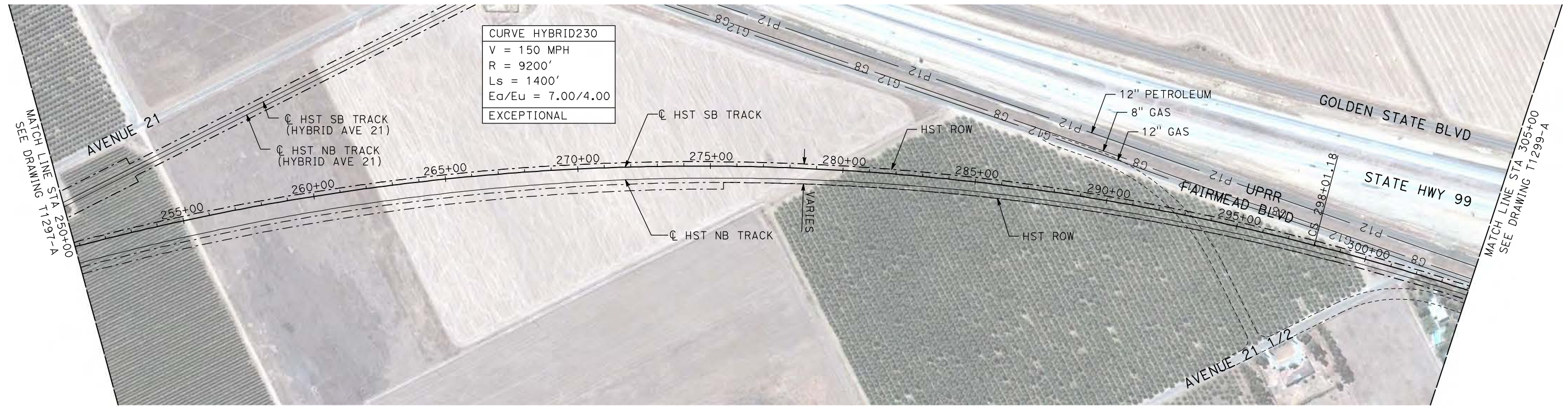
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 200+20 TO STA 250+00

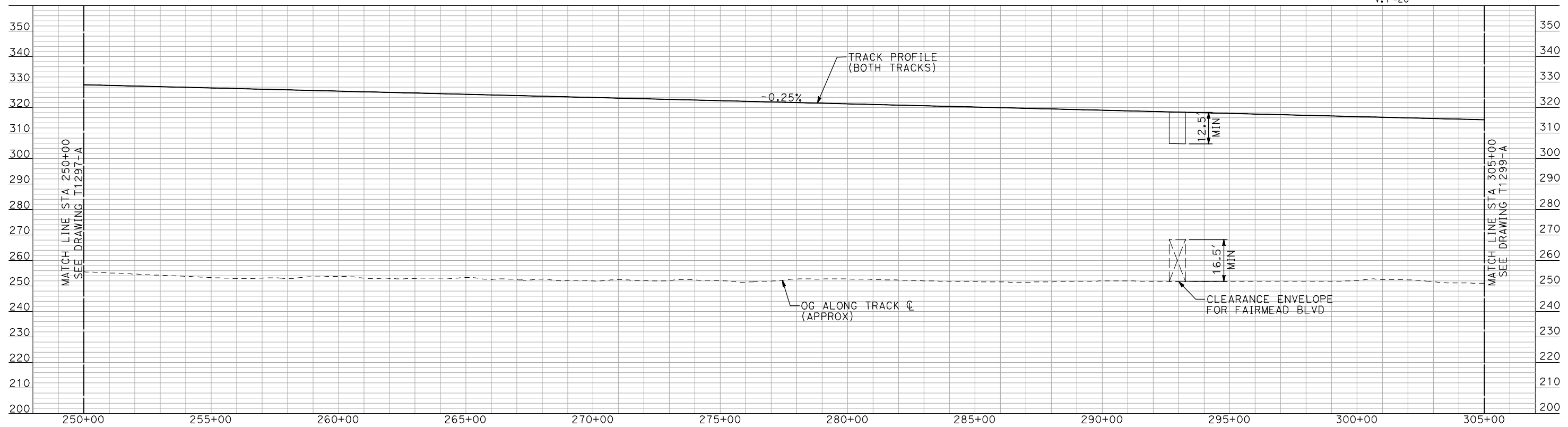
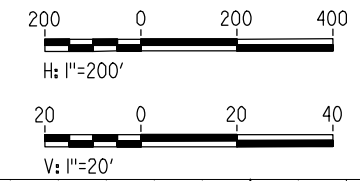
CONTRACT NO.
HSR06-007
DRAWING NO.
T2197-A
SCALE
AS SHOWN
SHEET NO.
OF



CURVE HYBRID230
 V = 150 MPH
 R = 9200'
 Ls = 1400'
 Ea/Eu = 7.00/4.00
 EXCEPTIONAL

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 4:45:55 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID 21\MF-T-2198-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

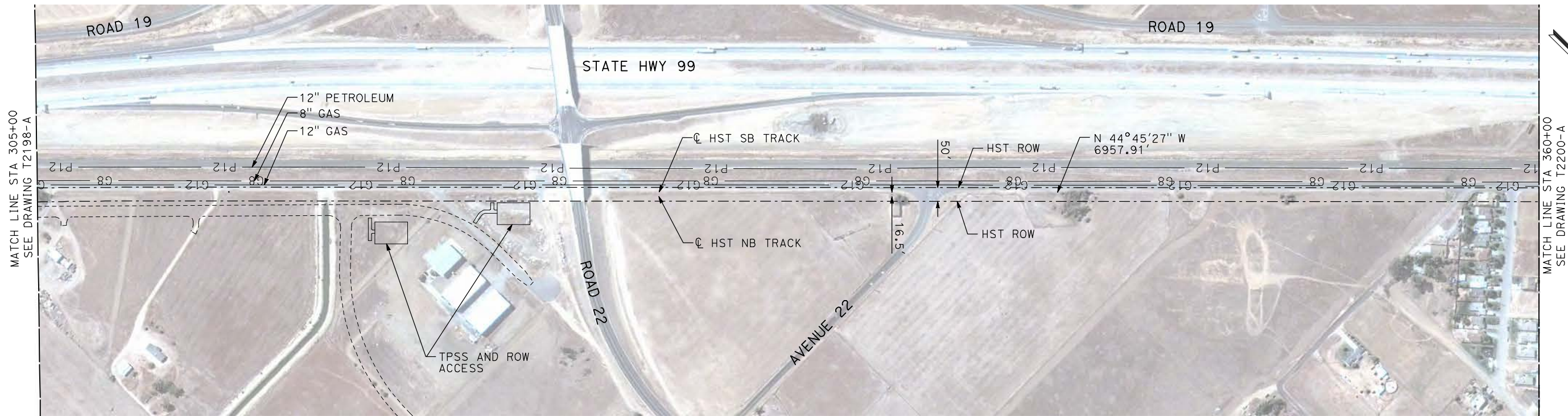
**RECORD SET
 15% DESIGN
 SUBMITTAL**

**NOT FOR
 CONSTRUCTION**

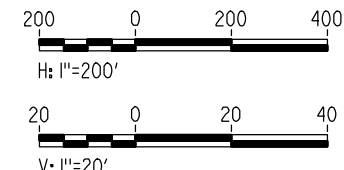


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 MERCED TO FRESNO**
 HYBRID - SB MERCED CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 250+00 TO STA 305+00

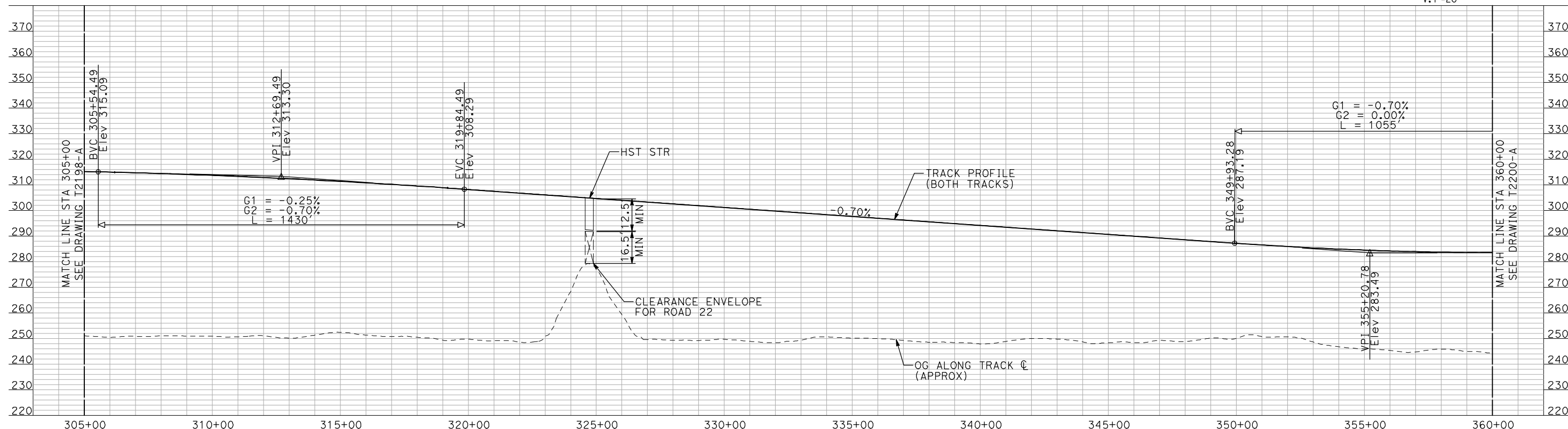
CONTRACT NO.
HSR06-007
 DRAWING NO.
T2198-A
 SCALE
AS SHOWN
 SHEET NO.
OF



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"

7/21/2011 4:46:06 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hwybrid_21\mf-t-2199-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**

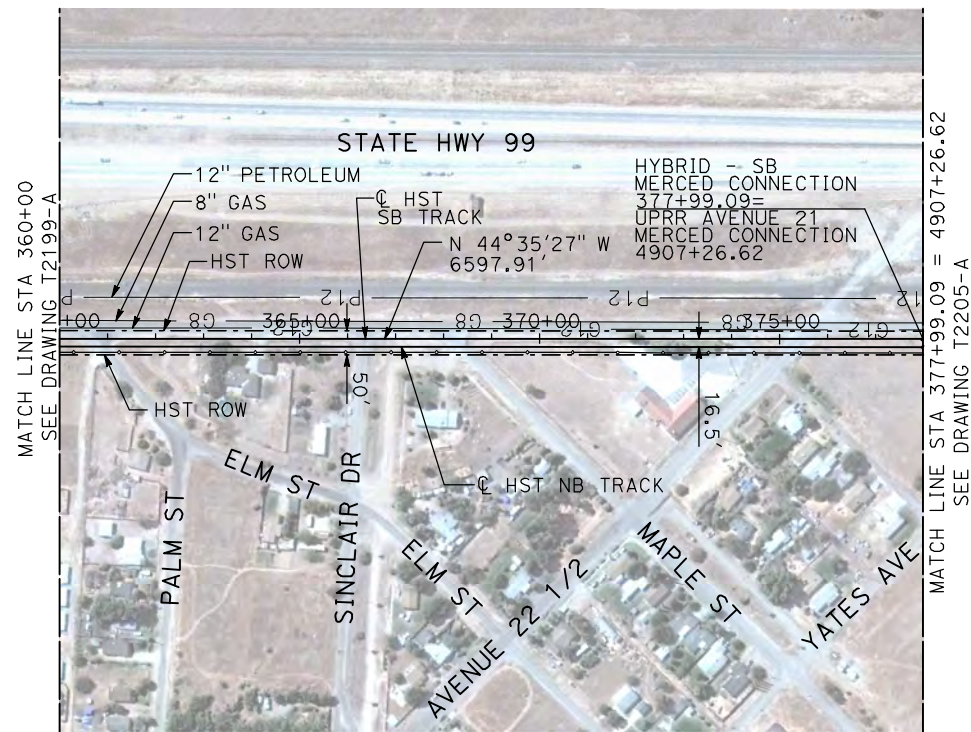
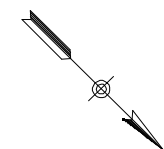
**NOT FOR
CONSTRUCTION**



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

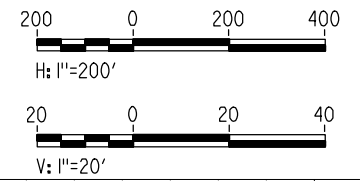
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 305+00 TO STA 360+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2199-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"

7/21/2011 4:46:16 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2200-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**

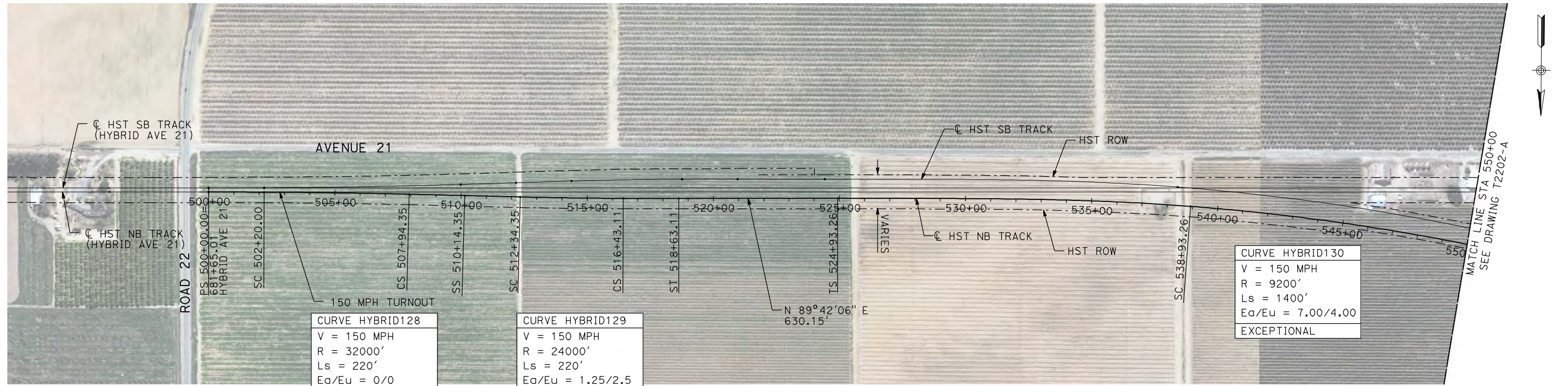


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 360+00 TO STA 377+99.09

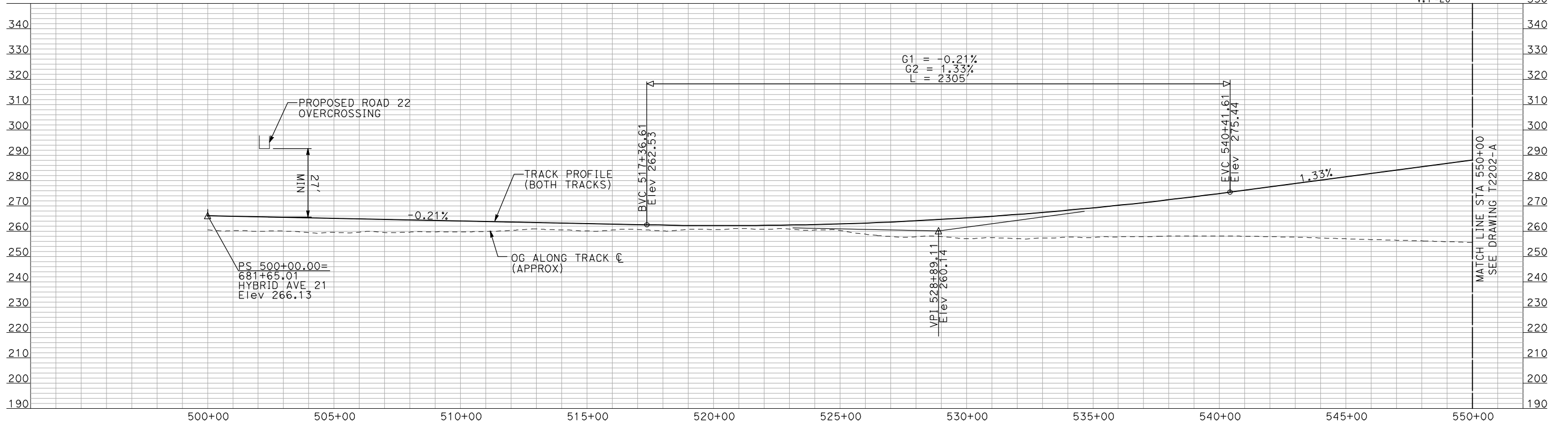
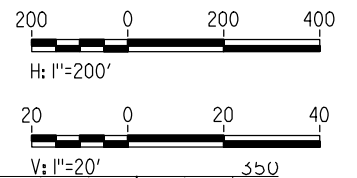
CONTRACT NO. HSR06-007
DRAWING NO. T2200-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/21/2011 4:46:26 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2201-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

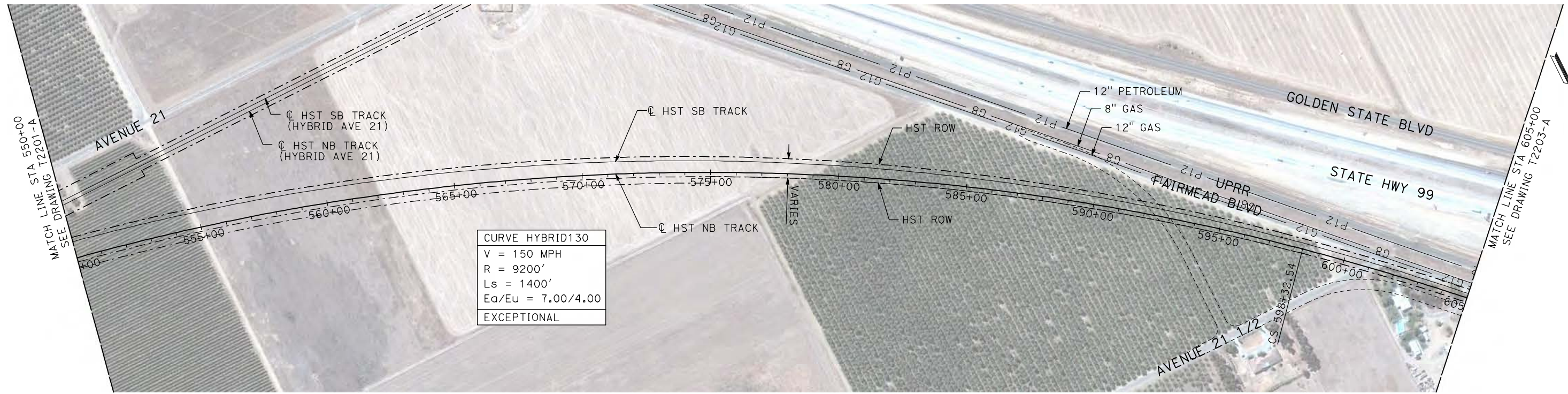
HYBRID - NB MERCED CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 500+00 TO STA 550+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2201-A

SCALE
AS SHOWN

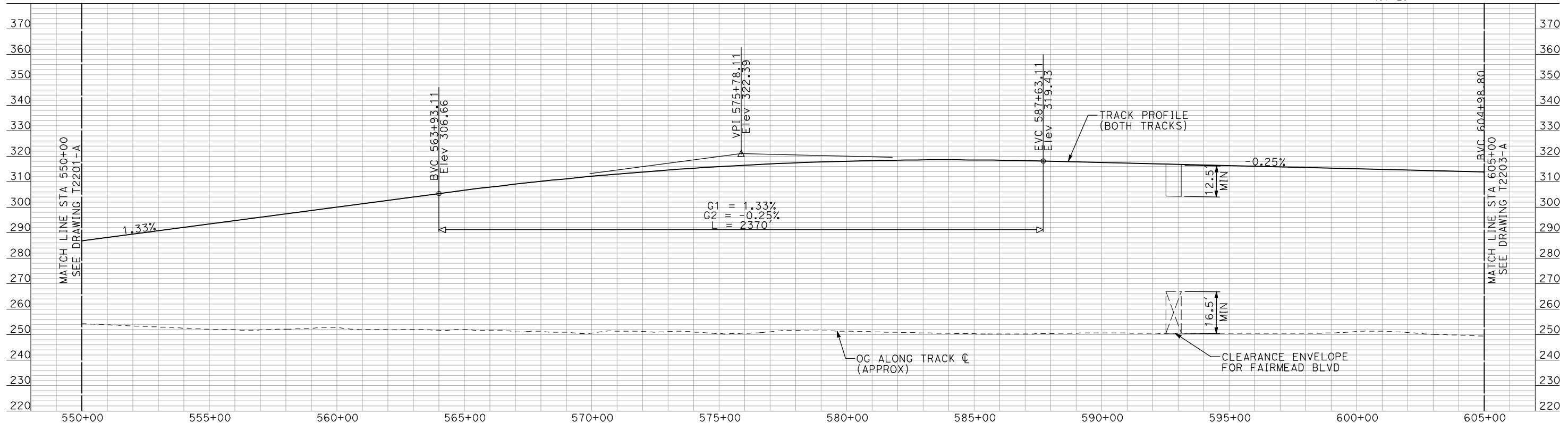
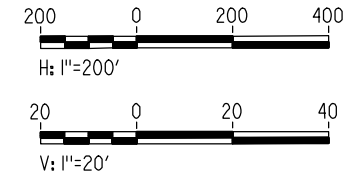
SHEET NO.
OF



CURVE HYBRID130
V = 150 MPH
R = 9200'
Ls = 1400'
Ed/Eu = 7.00/4.00
EXCEPTIONAL

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.



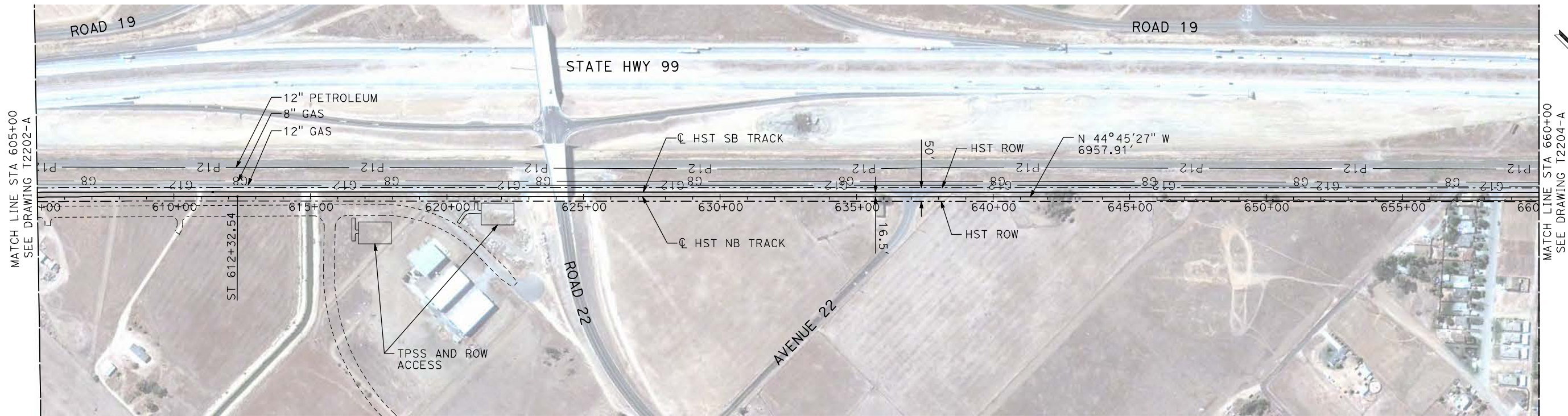
PROFILE

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

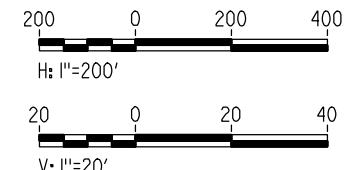
7/21/2011 4:46:36 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2202-A.dgn machadoe

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 HYBRID - NB MERCED CONNECTION AVENUE 21 PLAN AND PROFILE STA 550+00 TO STA 605+00	CONTRACT NO. HSR06-007
DRAWN BY H. SULLIVAN					DRAWING NO. T2202-A
CHECKED BY A. BOONE					SCALE AS SHOWN
IN CHARGE A. BOONE					SHEET NO. ### OF ###
DATE 07/20/2011					

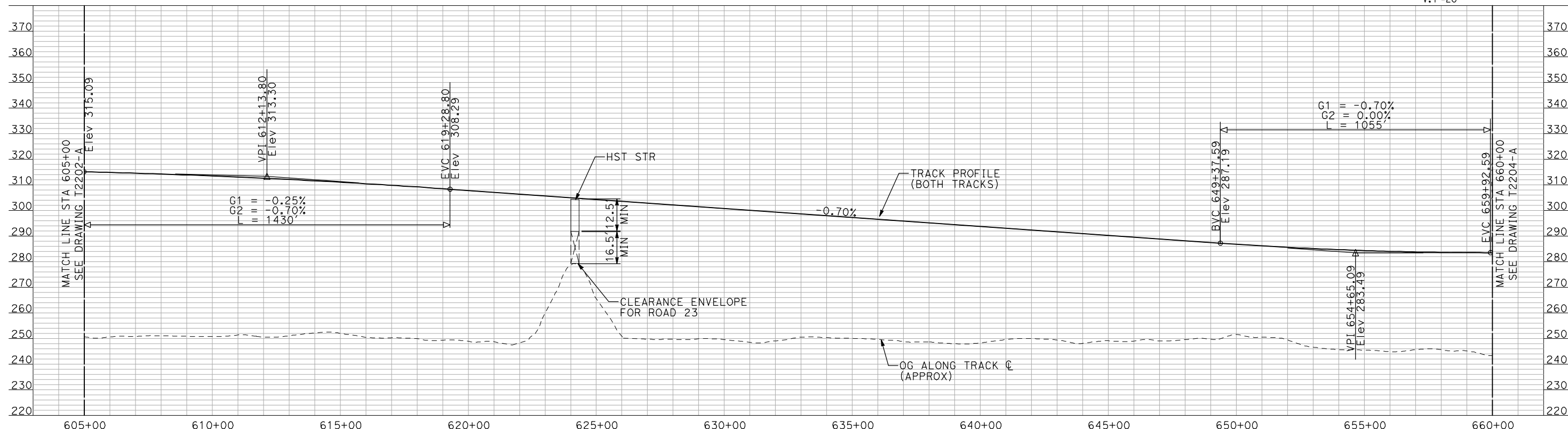
REV	DATE	BY	CHK	APP	DESCRIPTION
-----	------	----	-----	-----	-------------



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 4:46:48 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\hybrid_21\MF-T-2203-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**

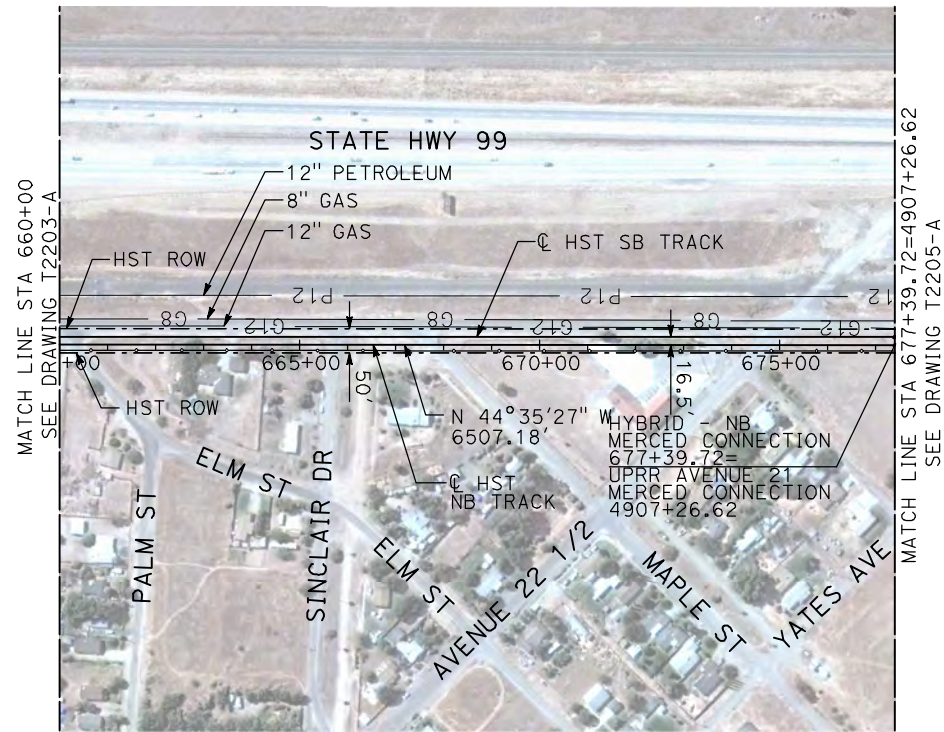
**NOT FOR
CONSTRUCTION**



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

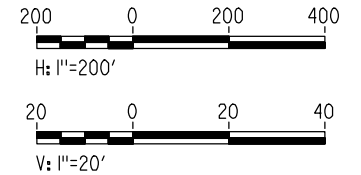
HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 605+00 TO STA 660+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2203-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 4:46:58 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2204-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**

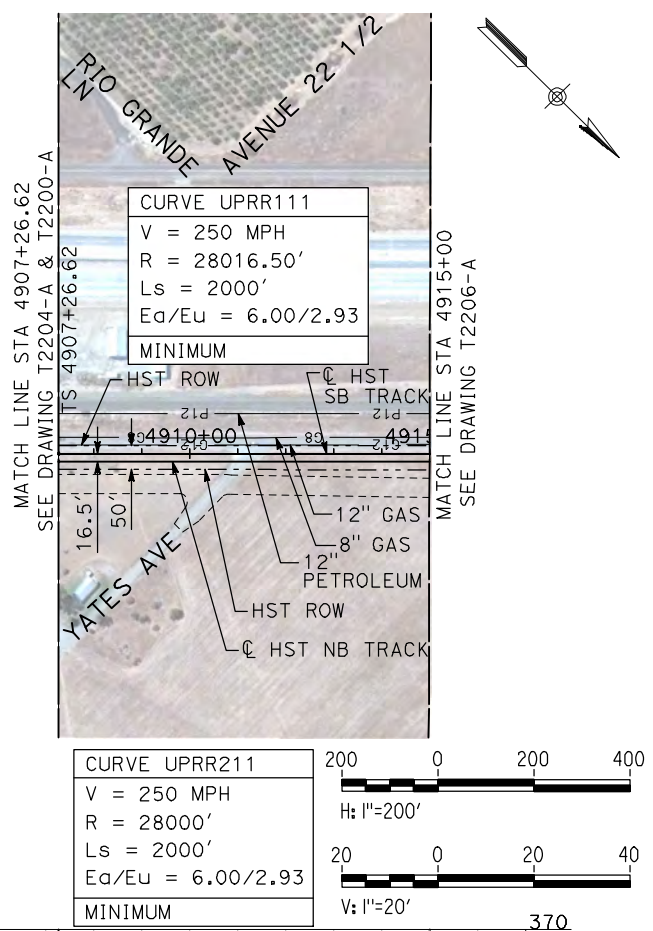


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 660+00 TO STA 677+39.72

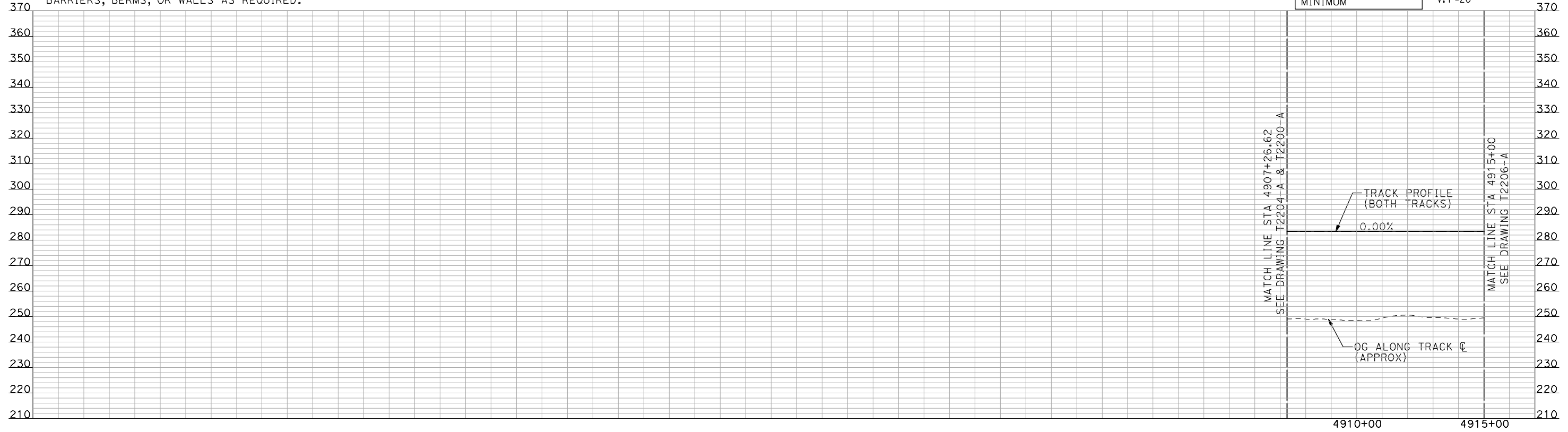
CONTRACT NO. HSR06-007
DRAWING NO. T2204-A
SCALE AS SHOWN
SHEET NO. ### OF ###

7/21/2011 4:47:04 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\HYBRID_21\MF-T-2205-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



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

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. SHIELDS

DRAWN BY
H. SULLIVAN

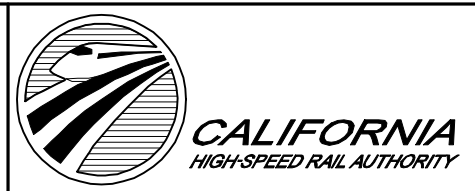
CHECKED BY
A. BOONE

IN CHARGE
A. BOONE

DATE
07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

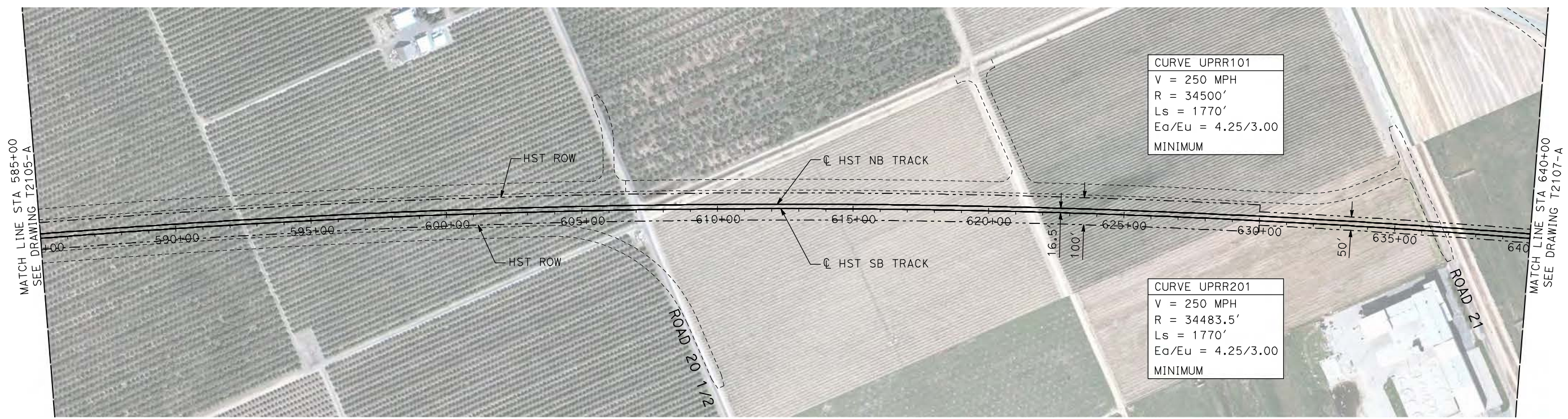
UPRR/SR 99 MERCED CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 4907+26.62 TO STA 4915+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2205-A

SCALE
AS SHOWN

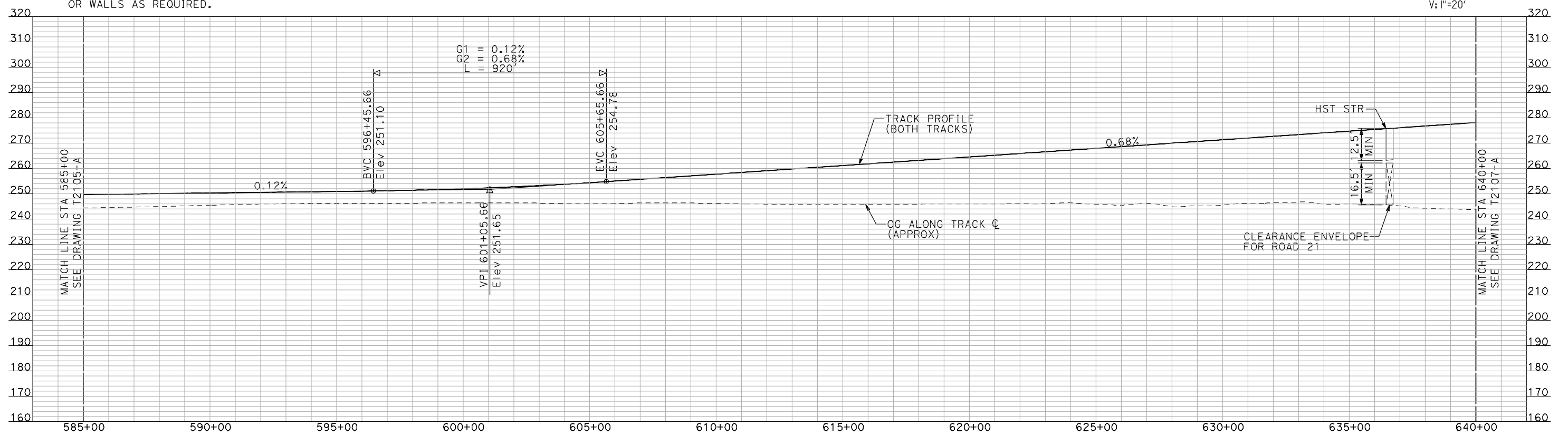
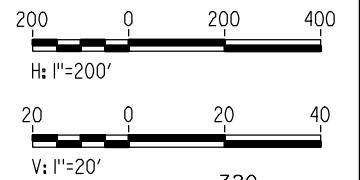
SHEET NO.
OF



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

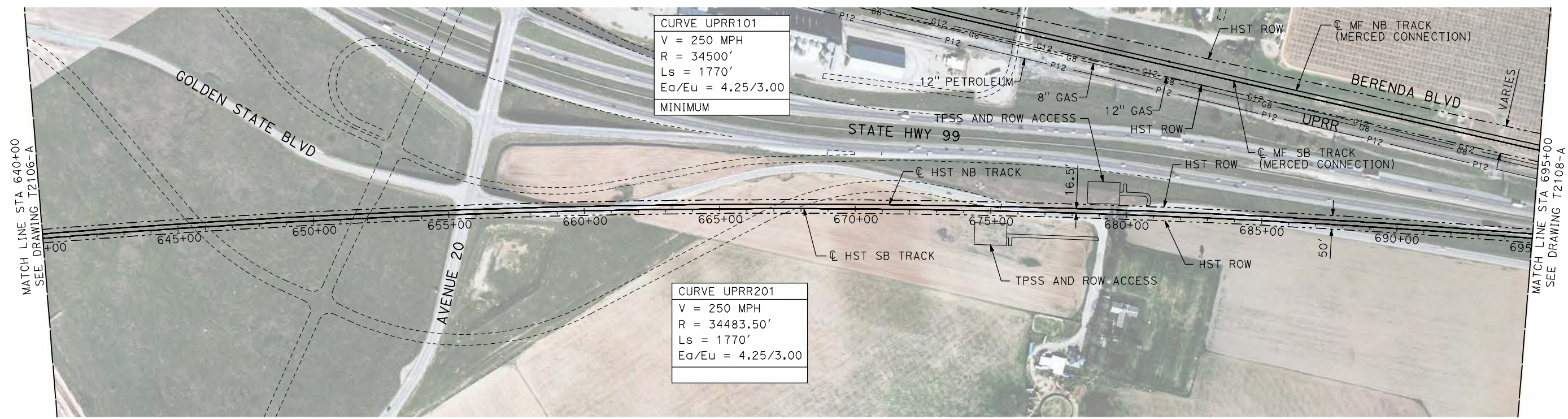
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 MAIN LINE
 AVENUE 21
 PLAN AND PROFILE
 STA 585+00 TO STA 640+00

CONTRACT NO.
HSR06-007
 DRAWING NO.
T2106-A
 SCALE
AS SHOWN
 SHEET NO.
OF

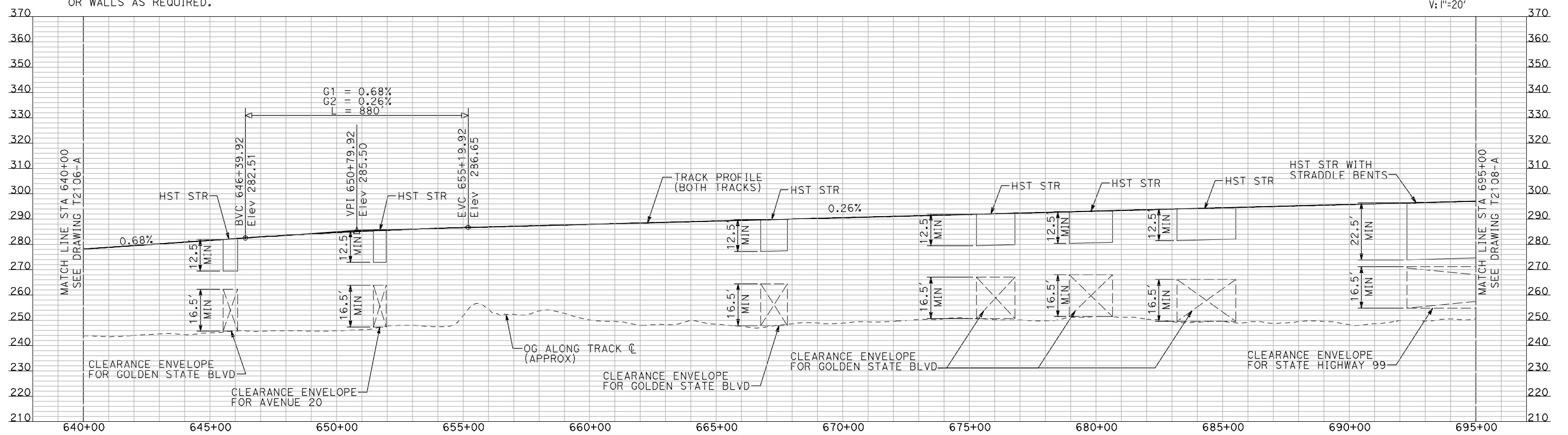
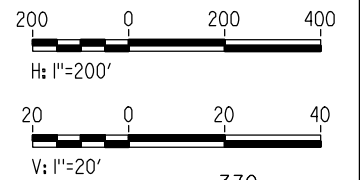
7/21/2011 4:47:15 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2106-A.dgn machadoe



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"

7/21/2011 4:47:31 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2107-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

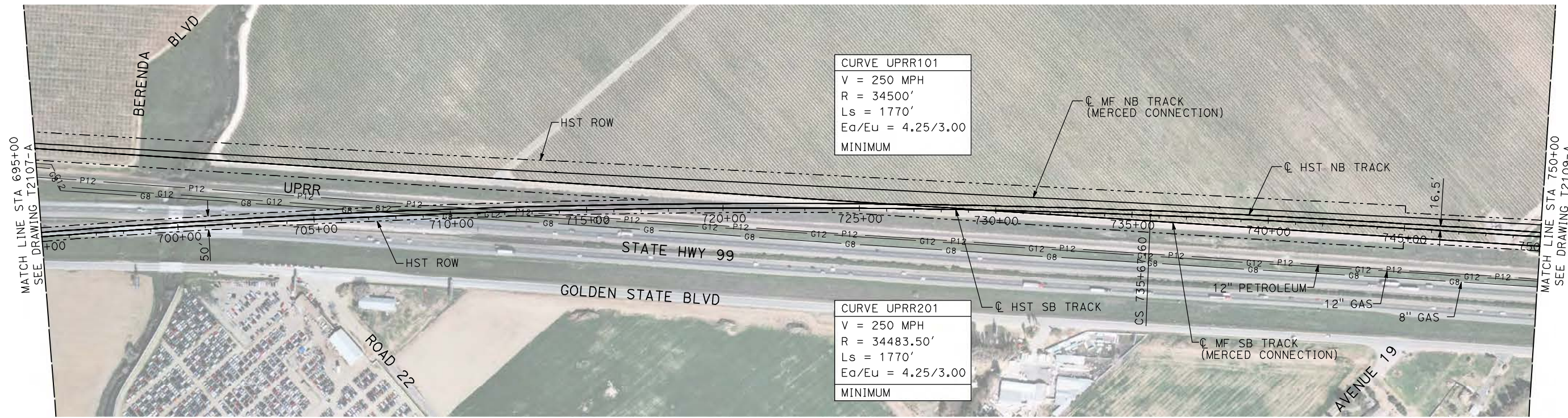
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MAIN LINE
AVENUE 21
PLAN AND PROFILE
STA 640+00 TO STA 695+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2107-A
SCALE
AS SHOWN
SHEET NO.
OF

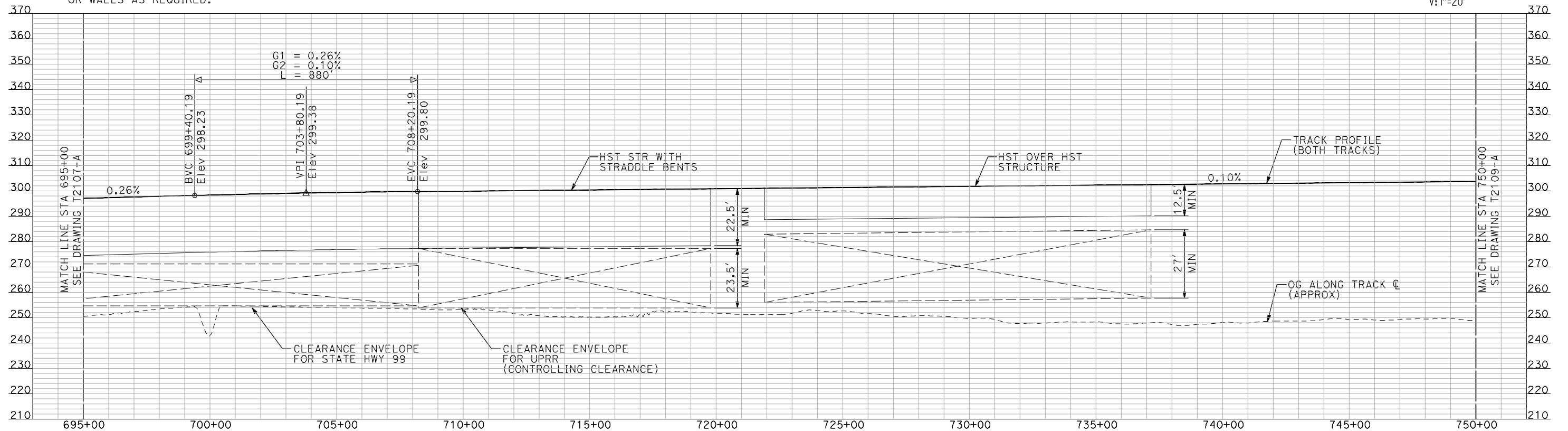
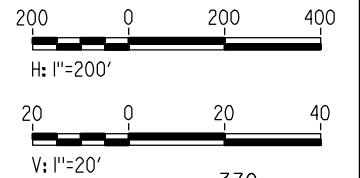
7/21/2011 4:47:47 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2108-A.dgn machadoe



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**

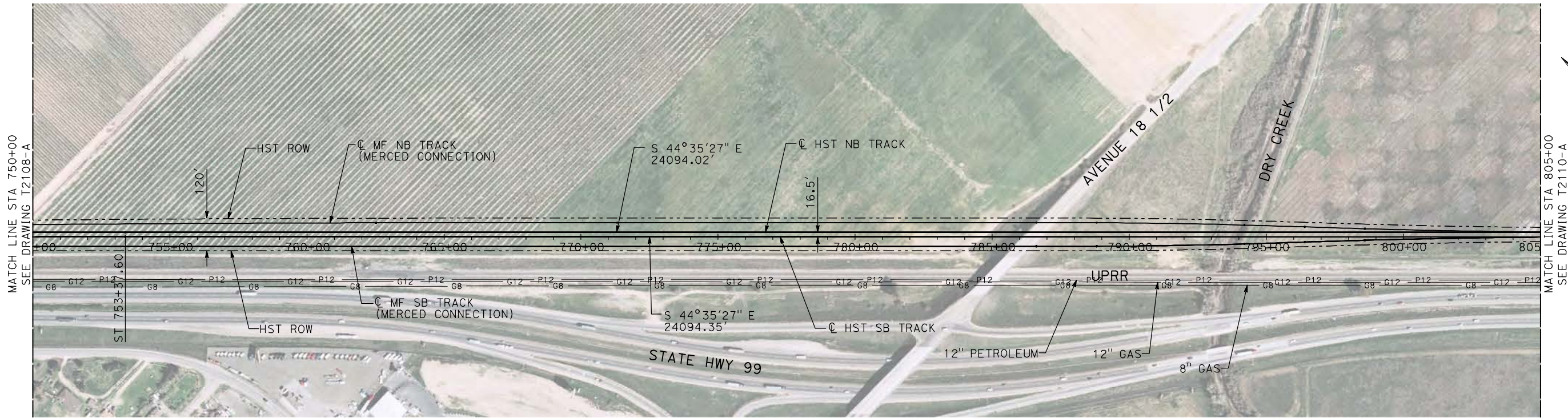
**NOT FOR
CONSTRUCTION**



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

UPRR/SR 99 MAIN LINE
AVENUE 21
PLAN AND PROFILE
STA 695+00 TO STA 750+00

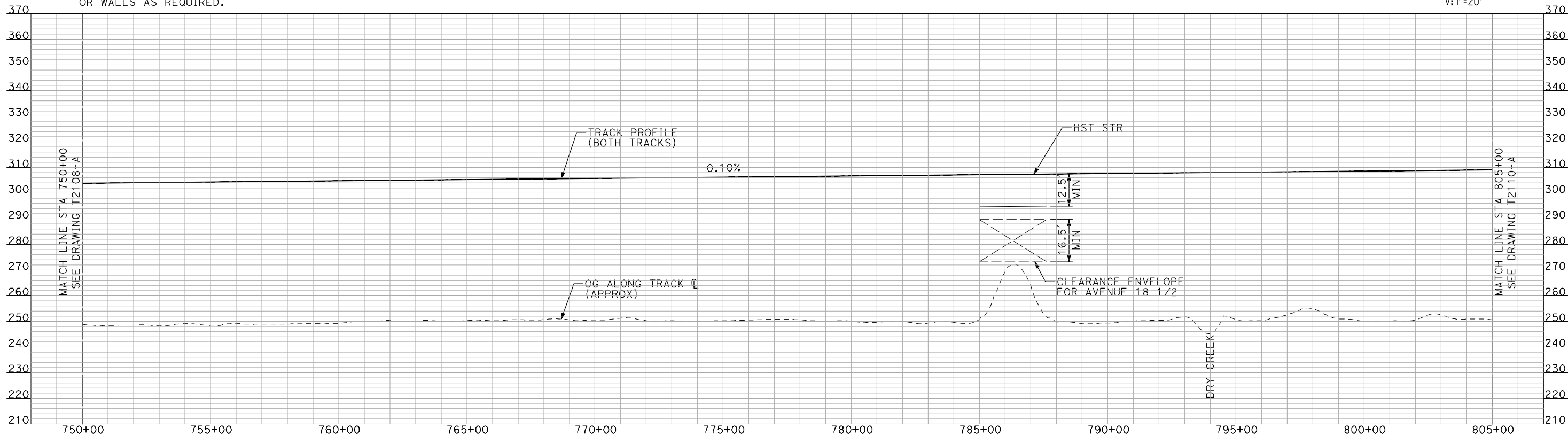
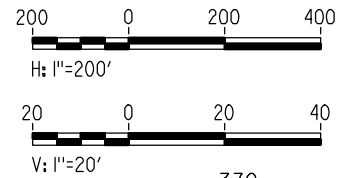
CONTRACT NO. HSR06-007
DRAWING NO. T2108-A
SCALE AS SHOWN
SHEET NO. ### OF ###



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 4:48:03 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2109-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**

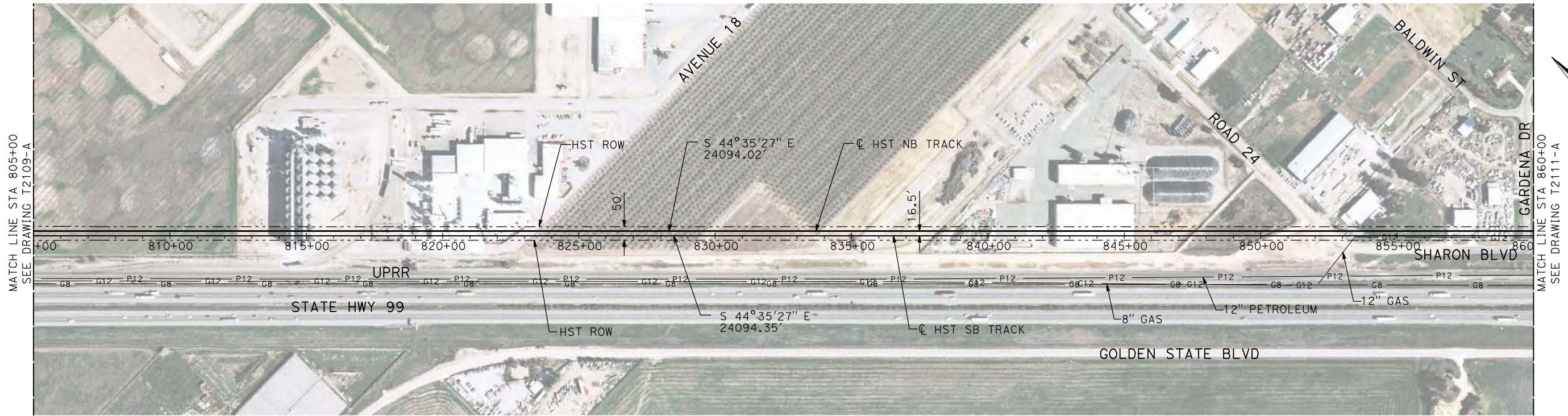


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 750+00 TO STA 805+00

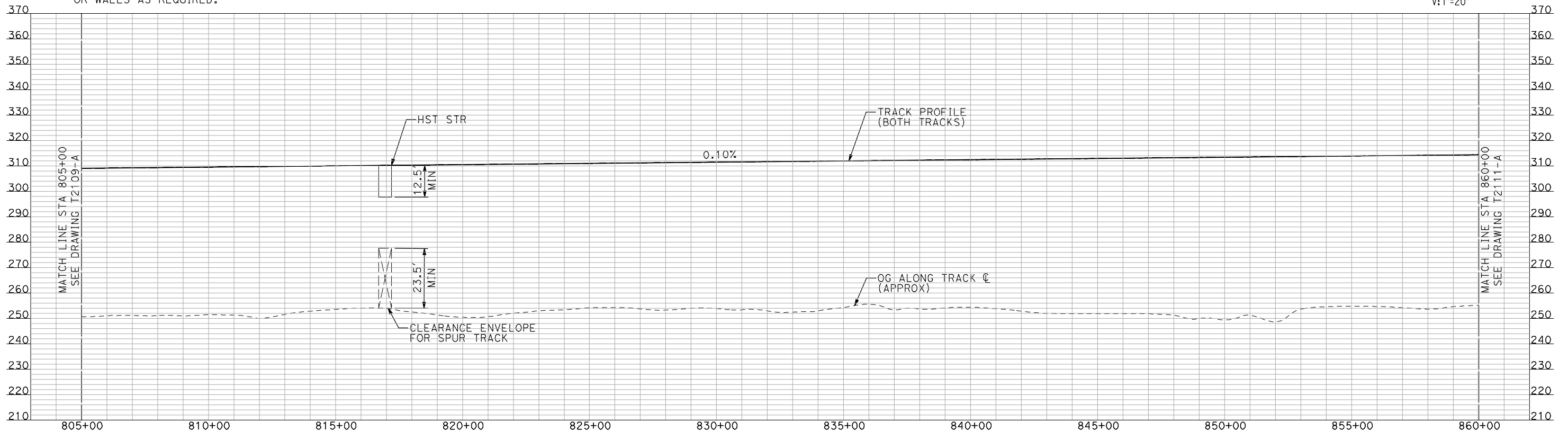
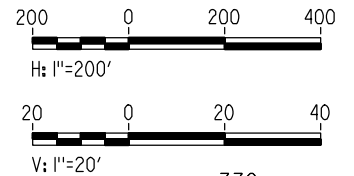
CONTRACT NO.
HSR06-007
DRAWING NO.
T2109-A
SCALE
AS SHOWN
SHEET NO.
OF



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 MAIN LINE

PLAN AND PROFILE
STA 805+00 TO STA 860+00

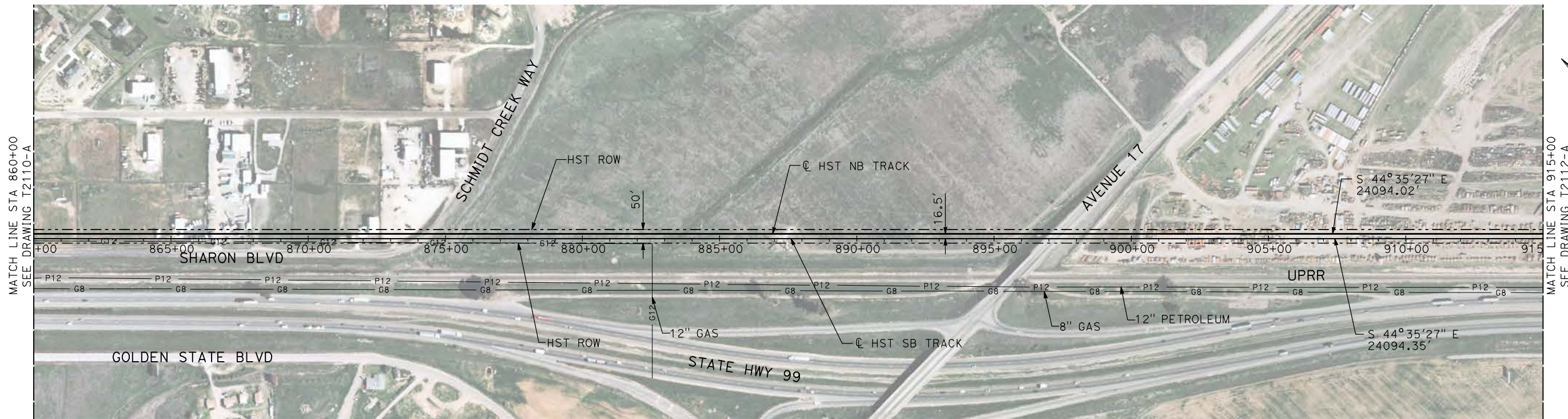
CONTRACT NO.
HSR06-007

DRAWING NO.
T2110-A

SCALE
AS SHOWN

SHEET NO.
OF

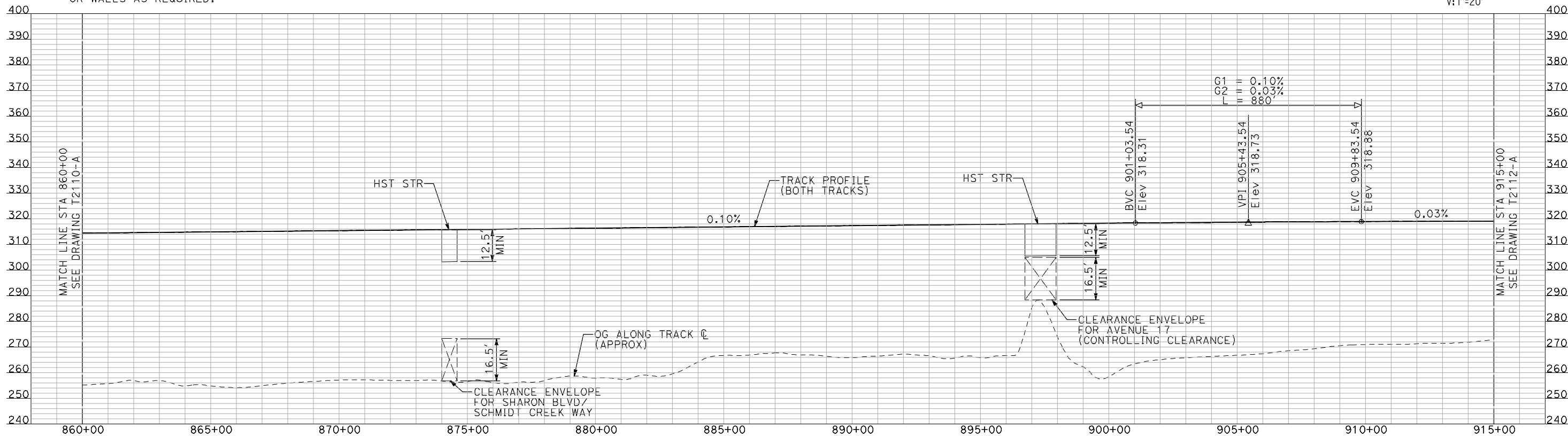
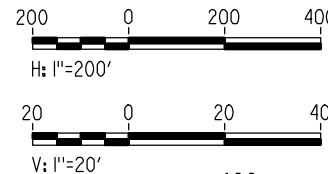
7/21/2011 4:48:19 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2110-A.dgn machadoe



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**

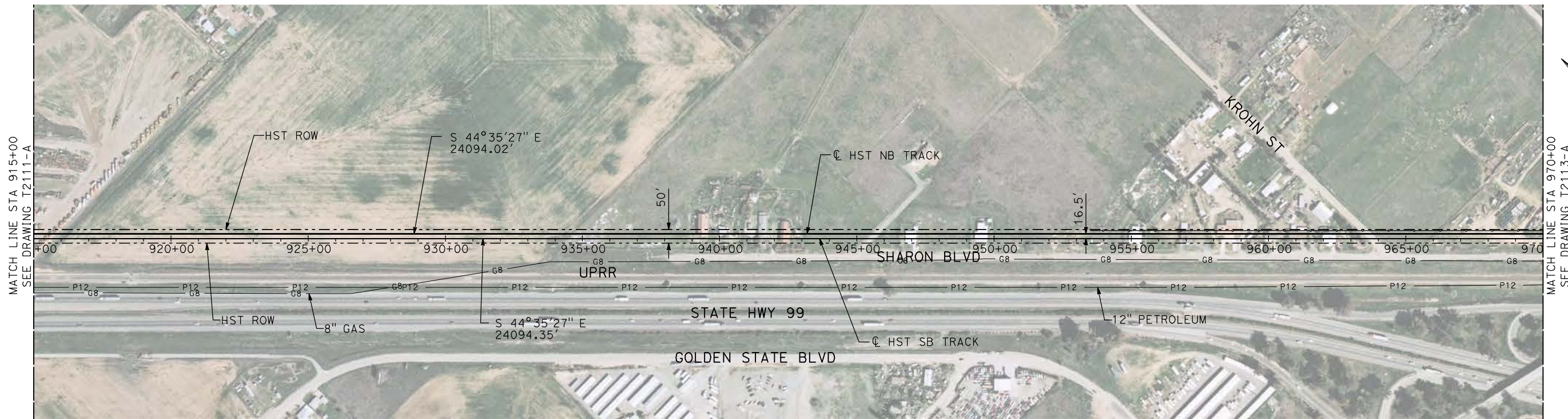
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**
UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 860+00 TO STA 915+00

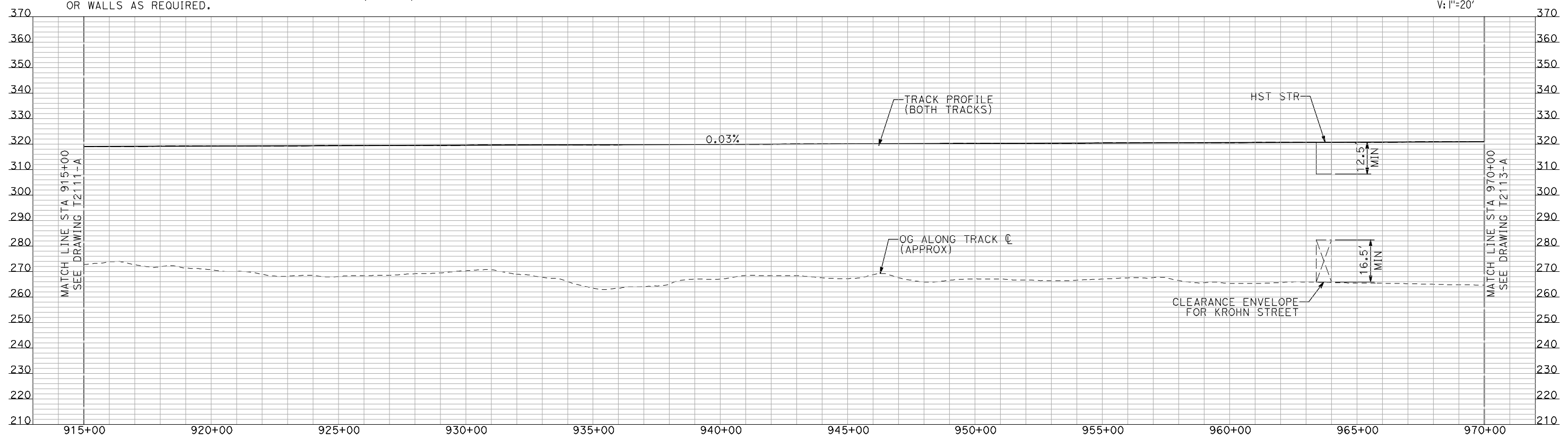
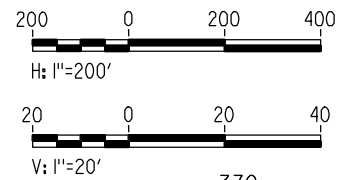
CONTRACT NO.
HSR06-007
DRAWING NO.
T2111-A
SCALE
AS SHOWN
SHEET NO.
OF



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"

7/21/2011 4:48:51 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2112-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 MAIN LINE

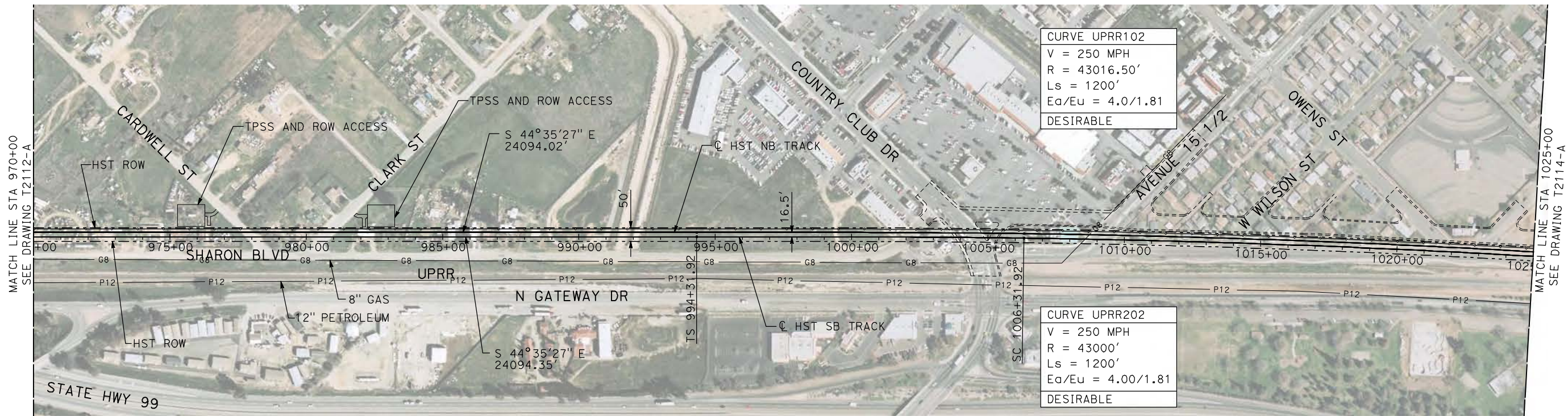
PLAN AND PROFILE
STA 915+00 TO STA 970+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2112-A

SCALE
AS SHOWN

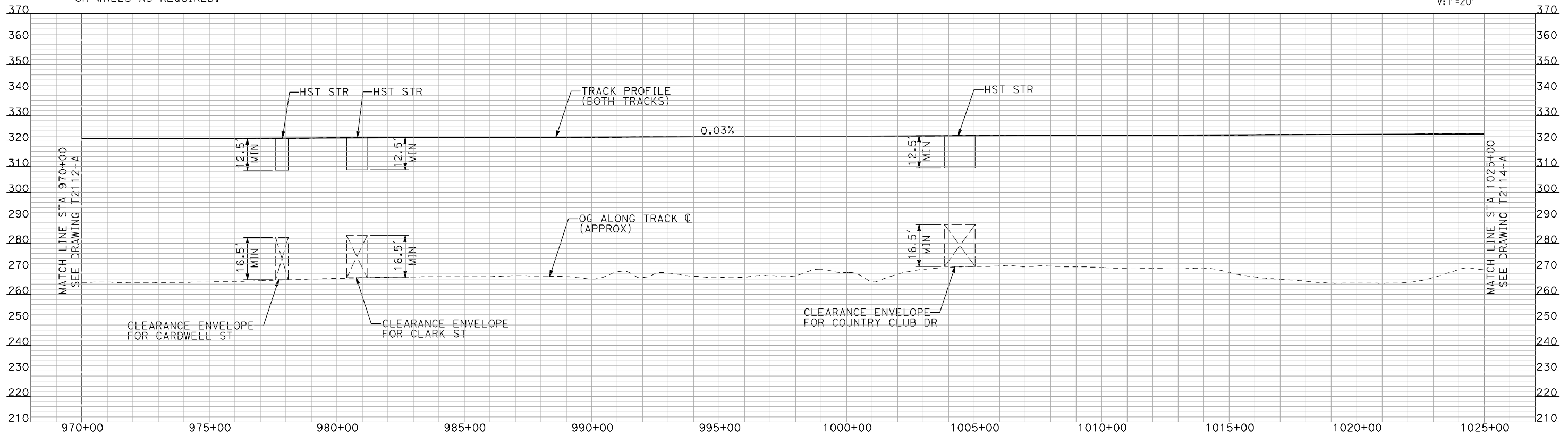
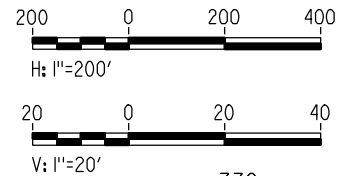
SHEET NO.
OF



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 4:49:08 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2113-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

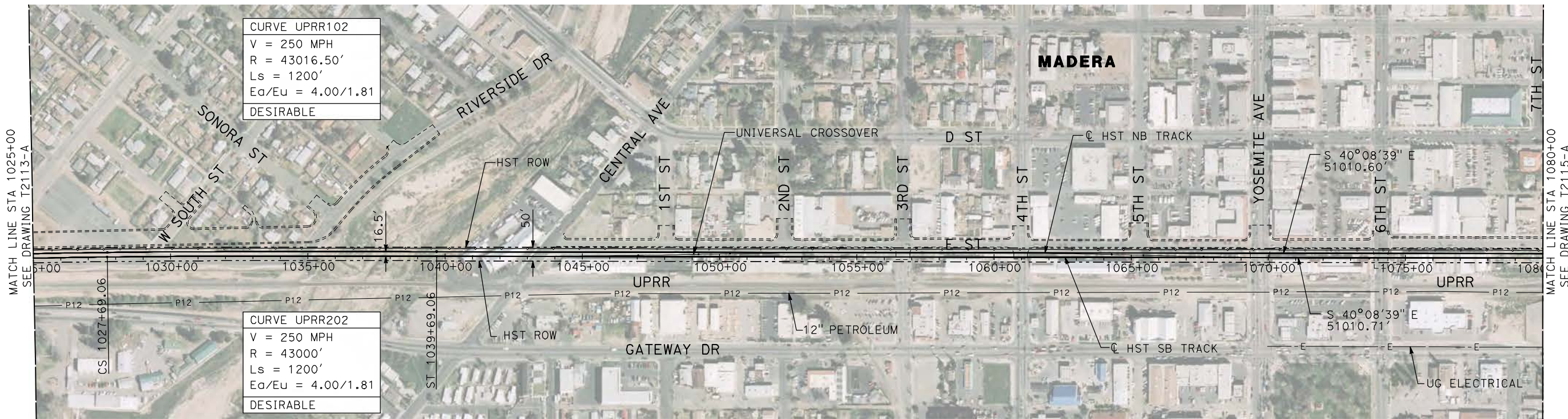


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 970+00 TO STA 1025+00

CONTRACT NO.	HSR06-007
DRAWING NO.	T2113-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

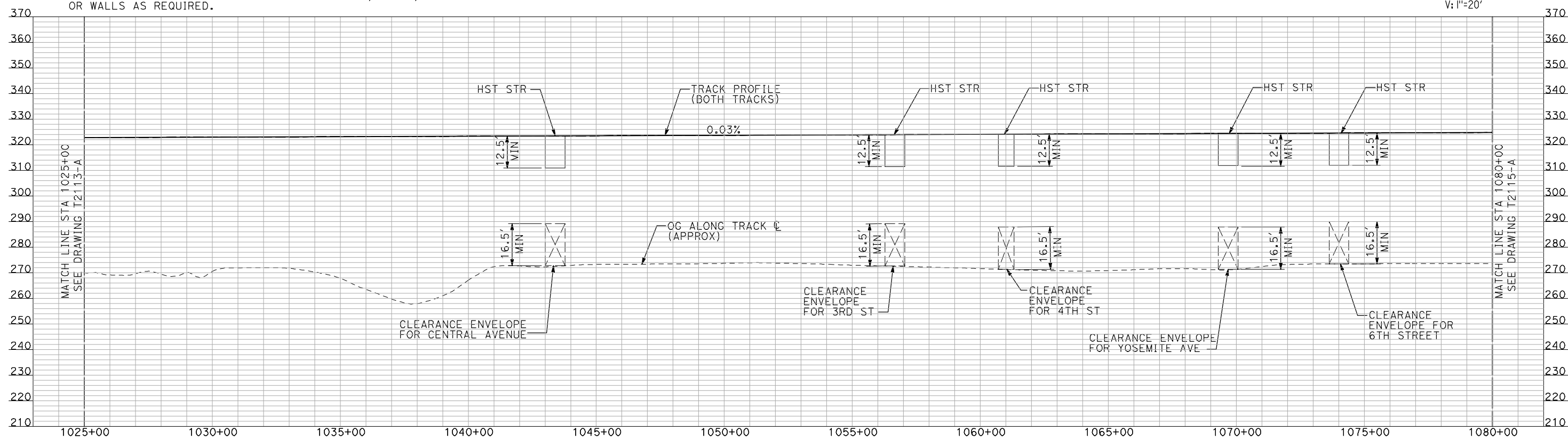
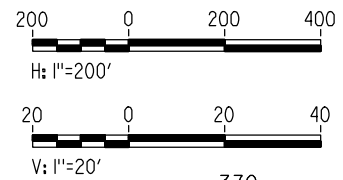
7/21/2011 4:49:25 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2114-A.dgn machadoe



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 MAIN LINE

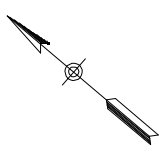
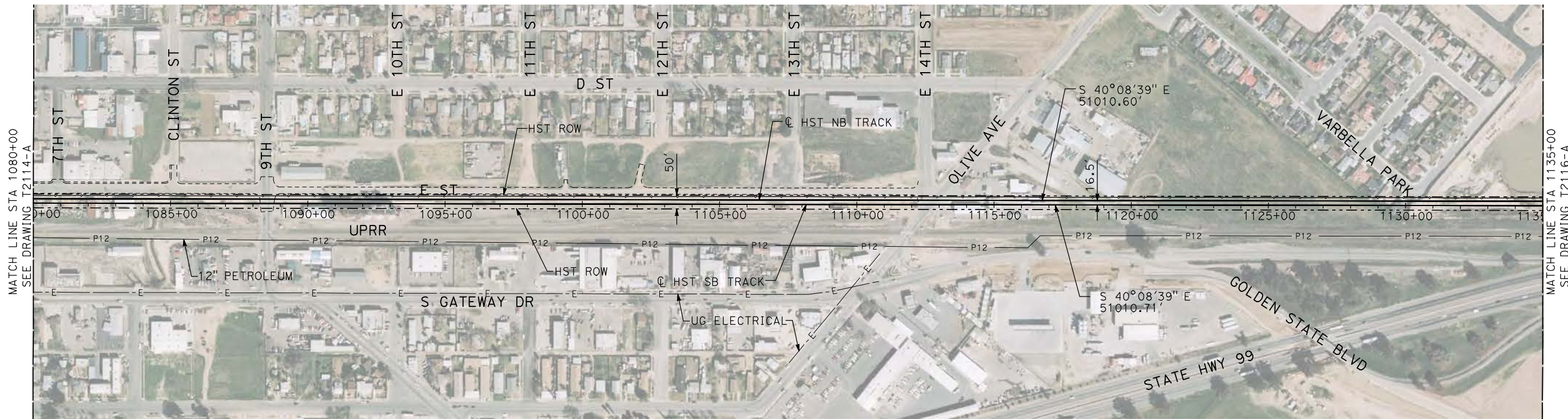
PLAN AND PROFILE
STA 1025+00 TO STA 1080+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2114-A

SCALE
AS SHOWN

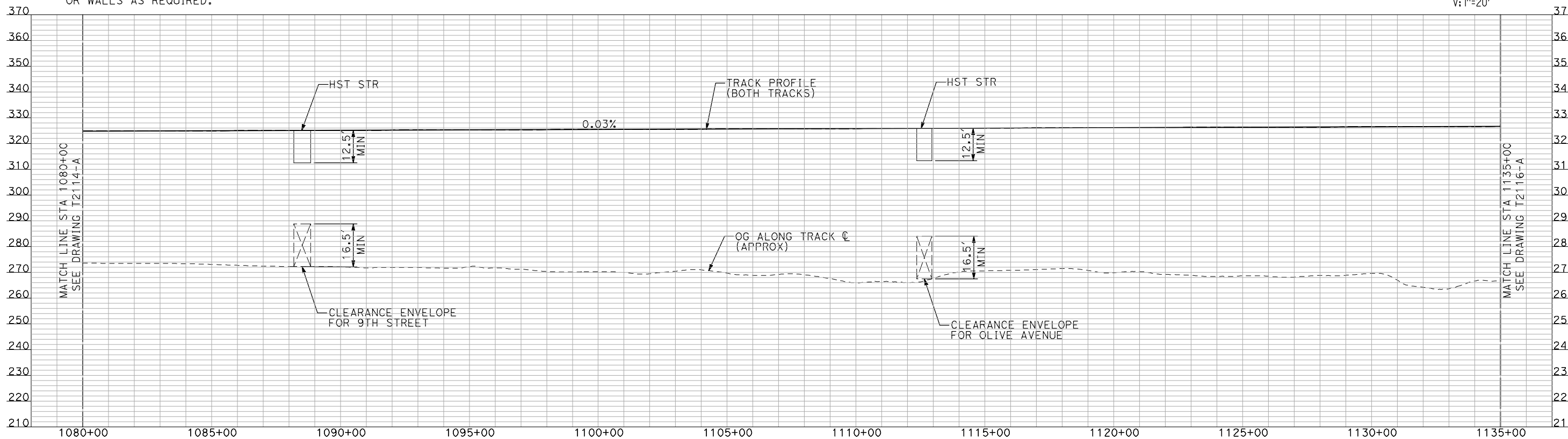
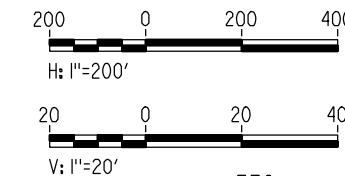
SHEET NO.
OF



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**



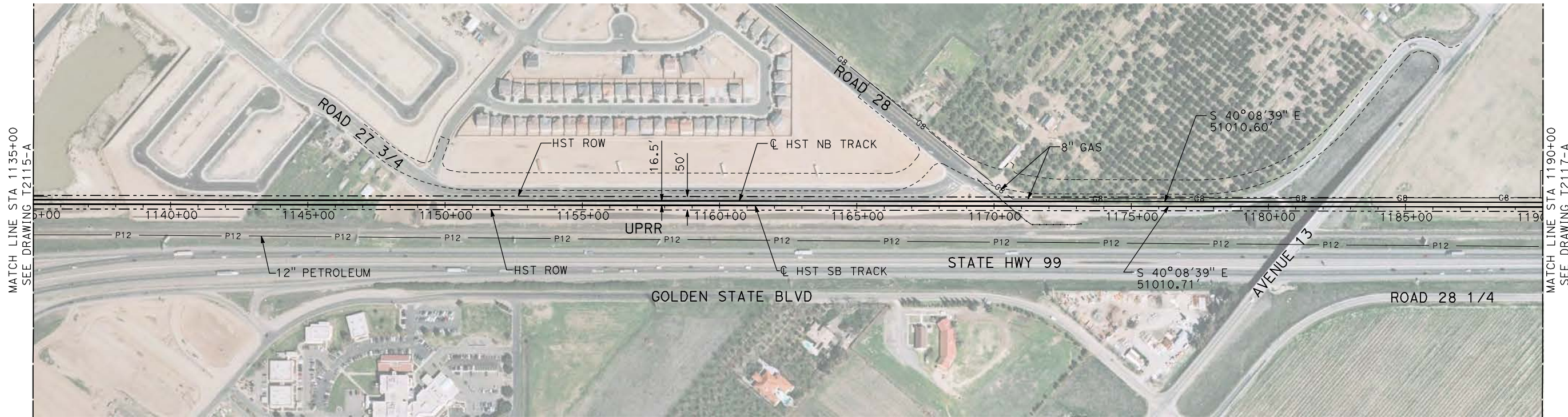
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1080+00 TO STA 1135+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2115-A
SCALE
AS SHOWN
SHEET NO.
OF

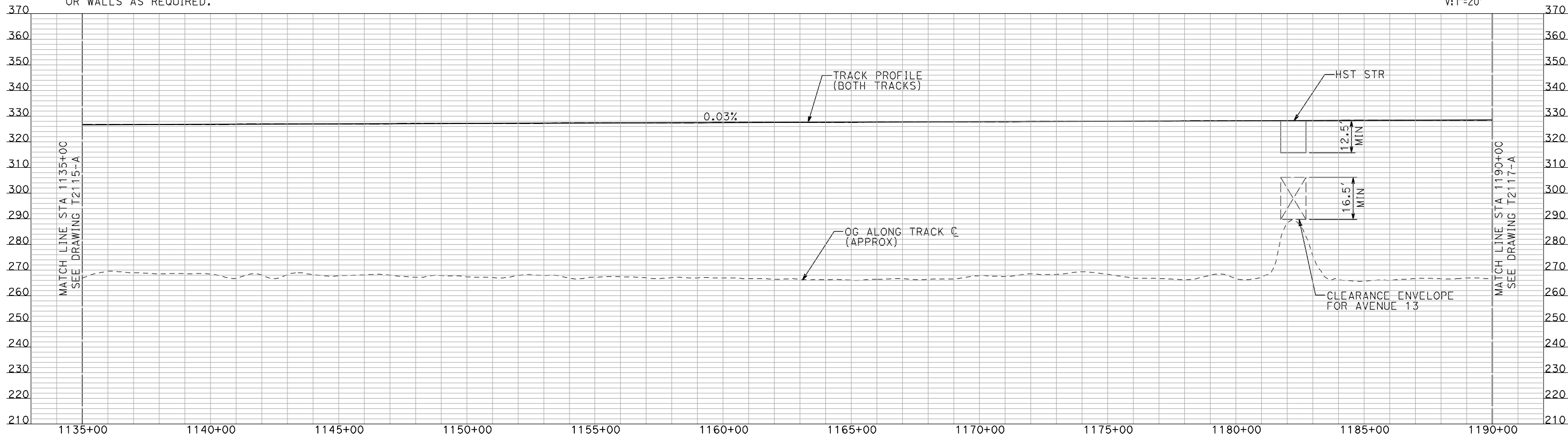
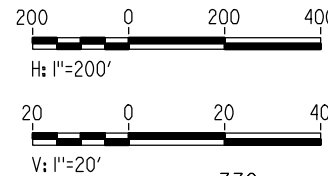
7/21/2011 4:49:42 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2115-A.dgn machadoe



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

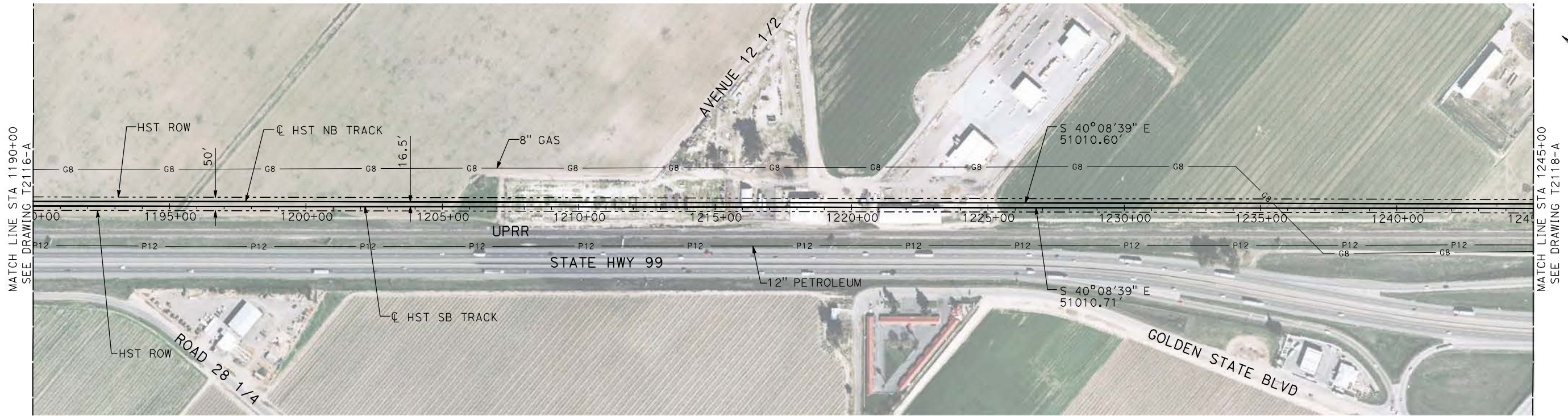


CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1135+00 TO STA 1190+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2116-A
SCALE
AS SHOWN
SHEET NO.
OF

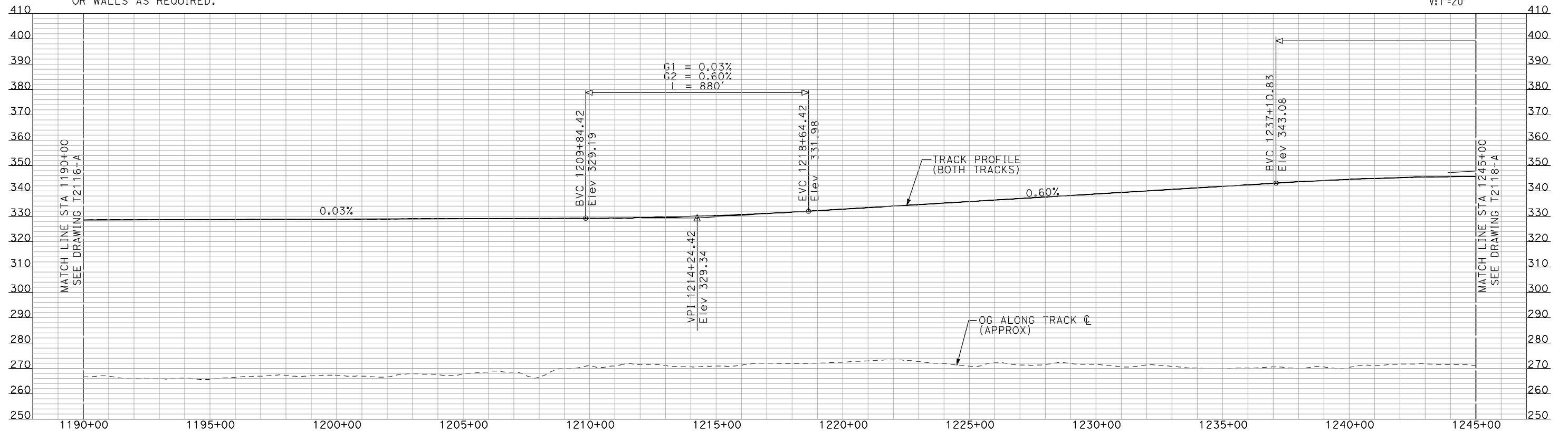
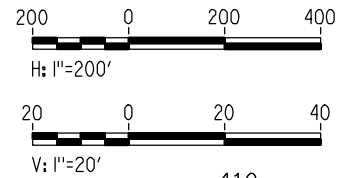
7/21/2011 4:49:58 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2116-A.dgn machadoe



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 4:50:14 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2117-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

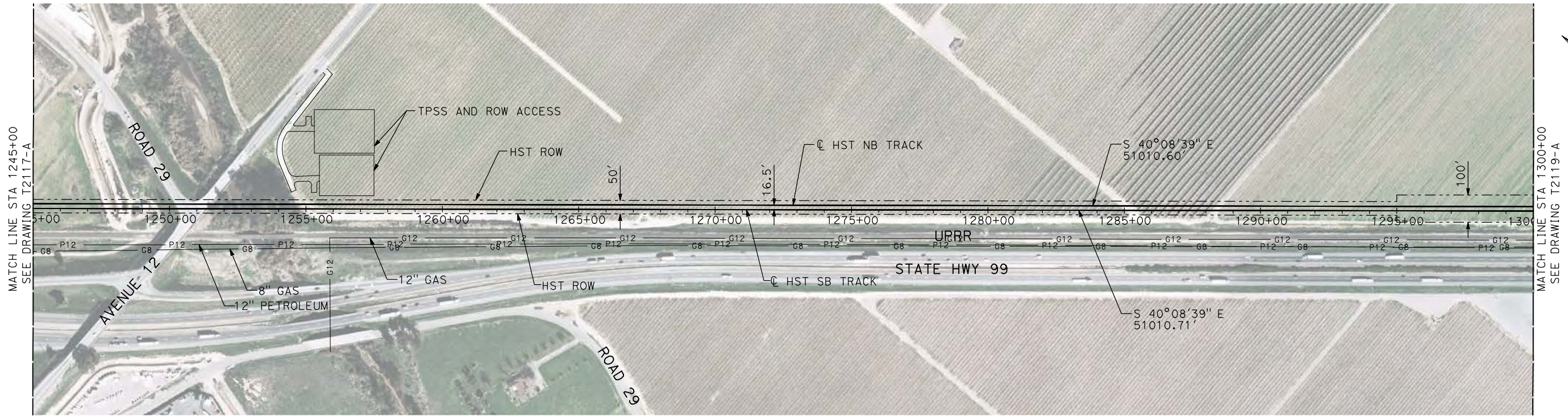
NOT FOR
CONSTRUCTION



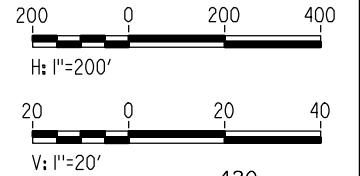
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1190+00 TO STA 1245+00

CONTRACT NO.	HSR06-007
DRAWING NO.	T2117-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

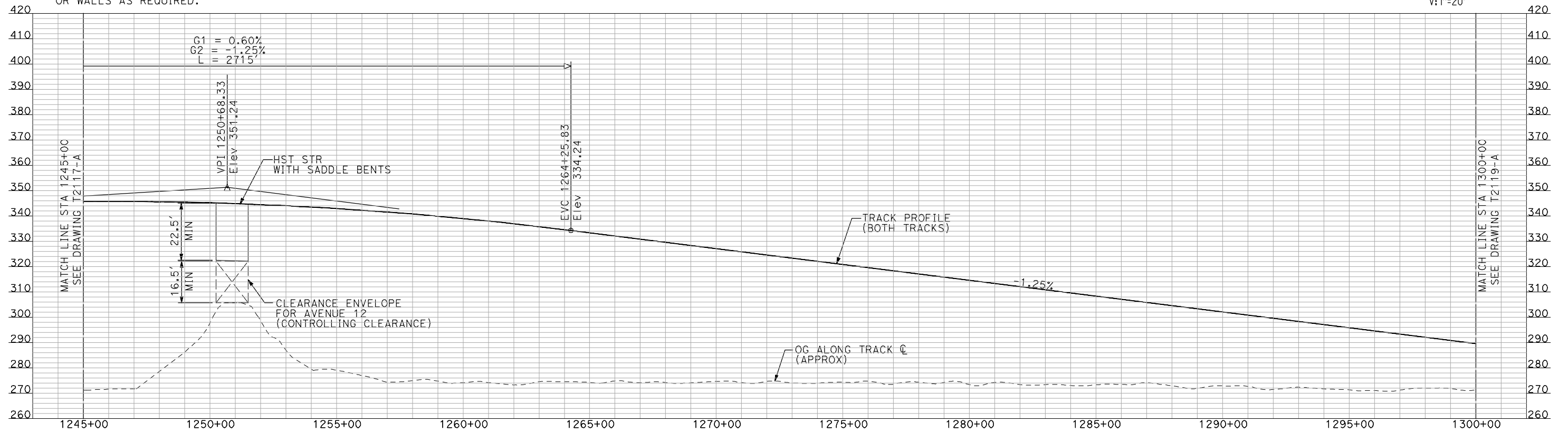


PLAN



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"

7/21/2011 4:50:30 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2118-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 MAIN LINE

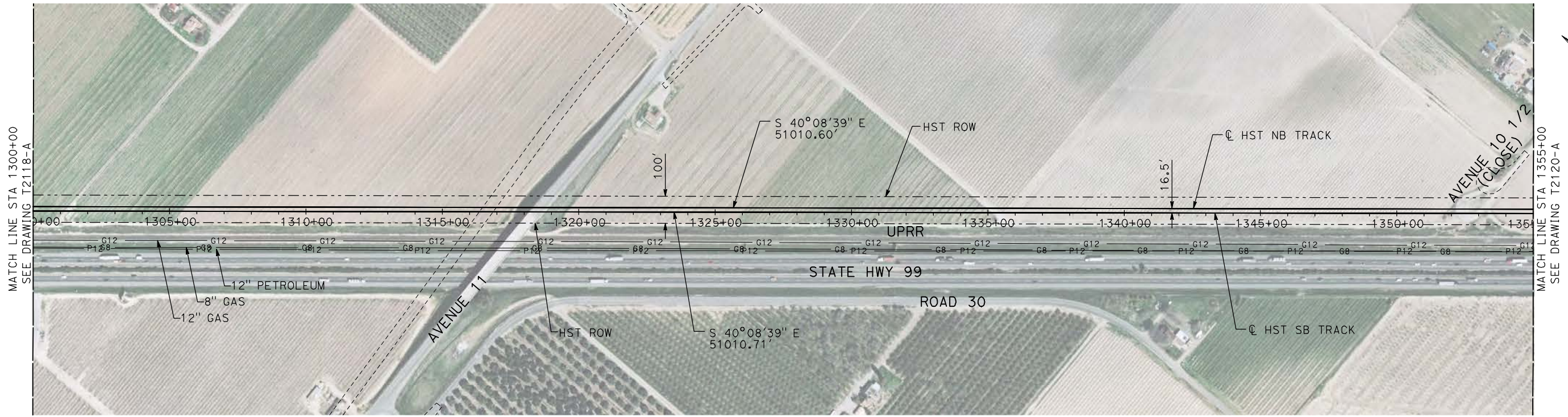
PLAN AND PROFILE
STA 1245+00 TO STA 1300+00

CONTRACT NO.
HSR06-007

DRAWING NO.
T2118-A

SCALE
AS SHOWN

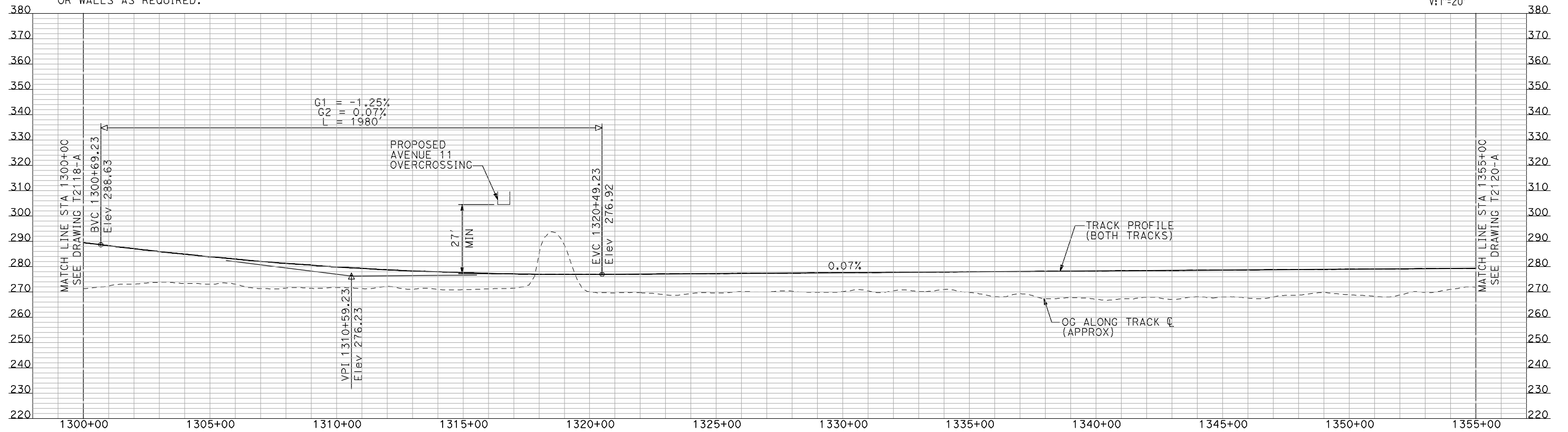
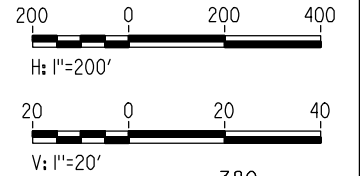
SHEET NO.
OF



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

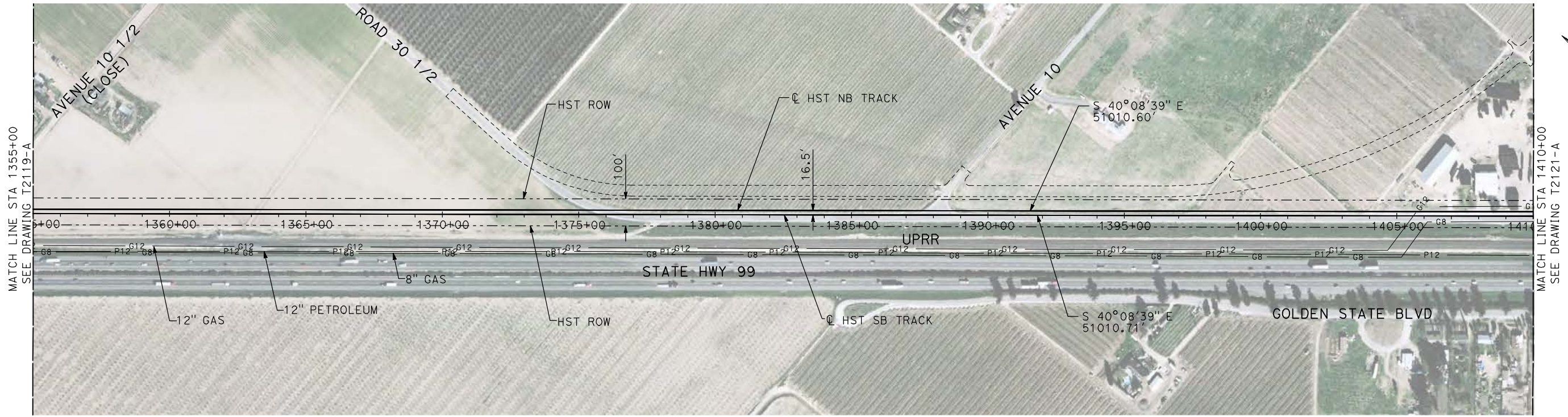
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 MAIN LINE
PLAN AND PROFILE
STA 1300+00 TO STA 1355+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2119-A
SCALE
AS SHOWN
SHEET NO.
OF

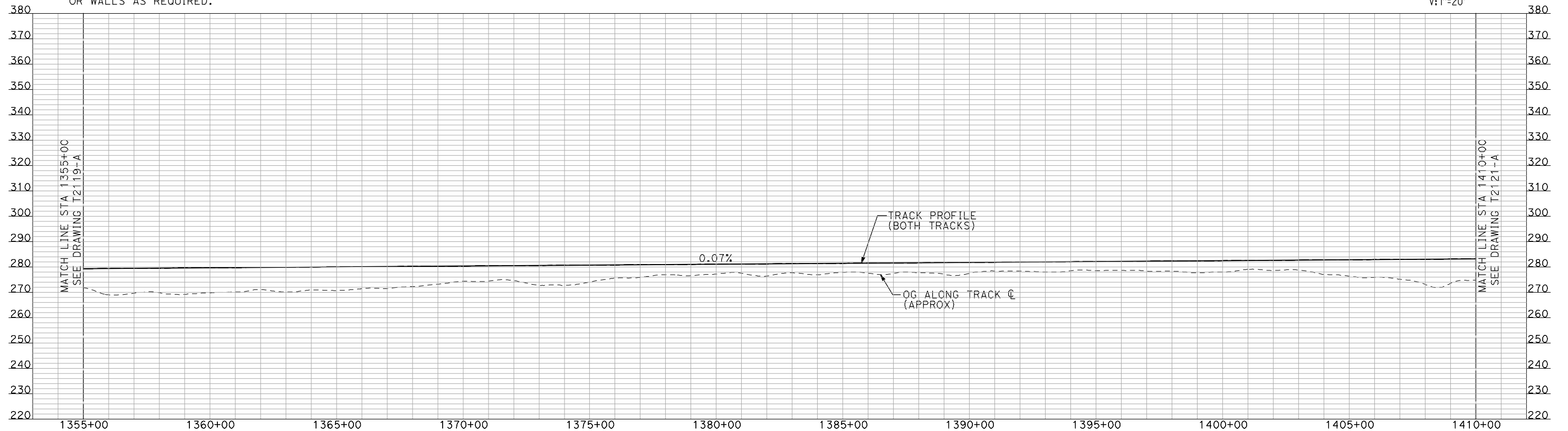
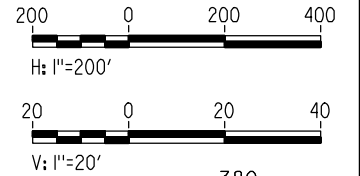
7/21/2011 4:50:47 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2119-A.dgn machadoe



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**



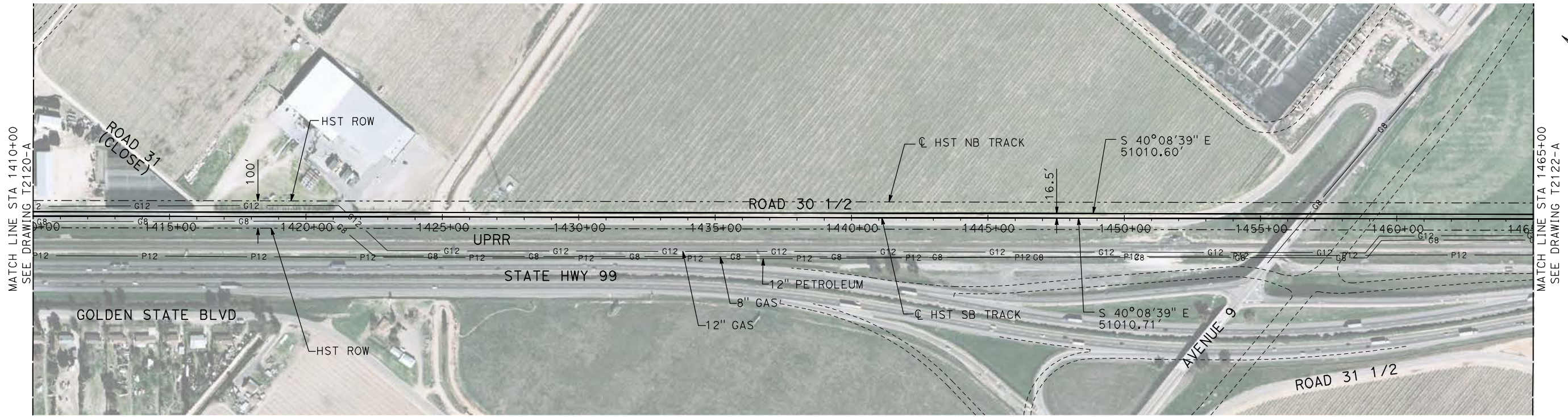
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1355+00 TO STA 1410+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2120-A
SCALE
AS SHOWN
SHEET NO.
OF

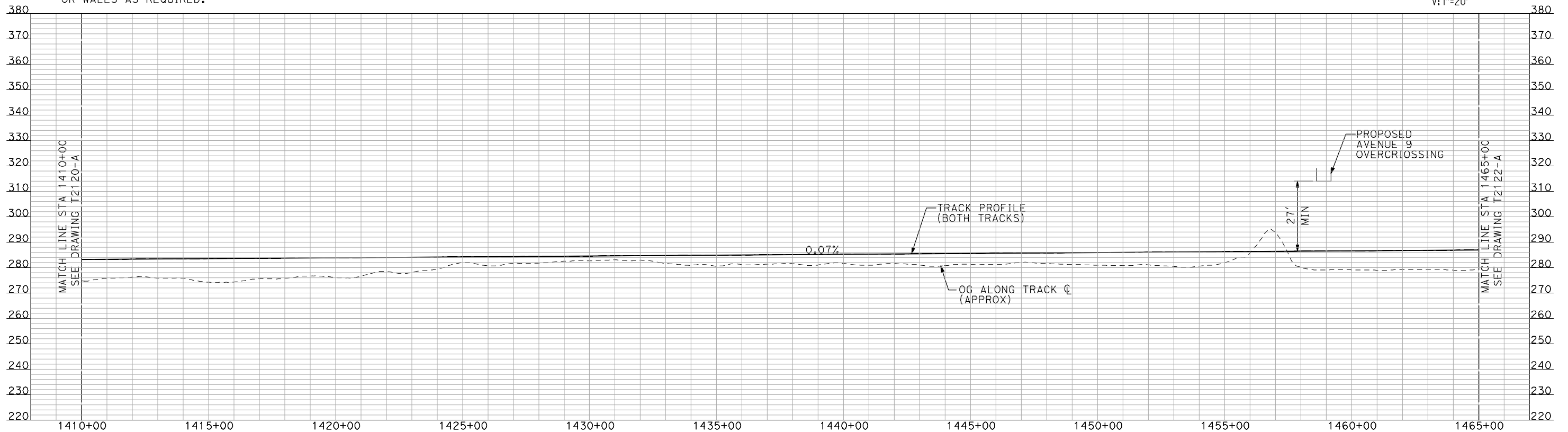
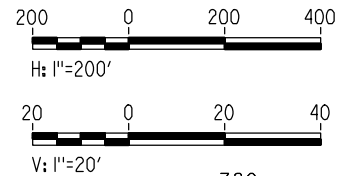
7/21/2011 4:51:03 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2120-A.dgn machadoe



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 4:51:20 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2121-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**



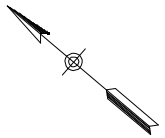
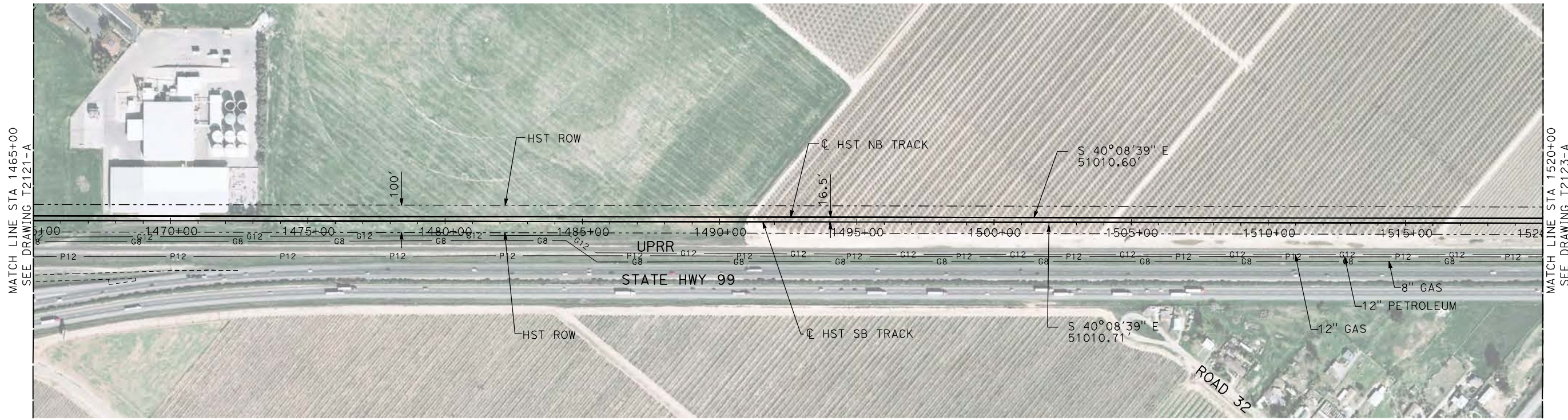
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1410+00 TO STA 1465+00

CONTRACT NO.	HSR06-007
DRAWING NO.	T2121-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

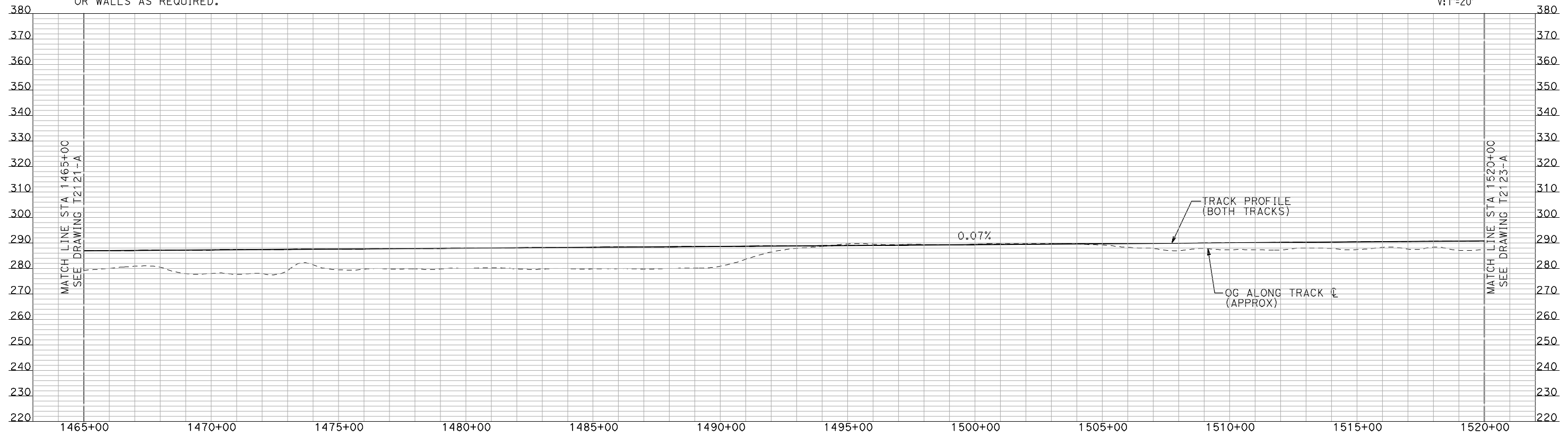
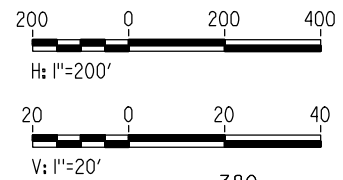
7/21/2011 4:51:35 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2122-A.dgn



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 MAIN LINE

PLAN AND PROFILE
STA 1465+00 TO STA 1520+00

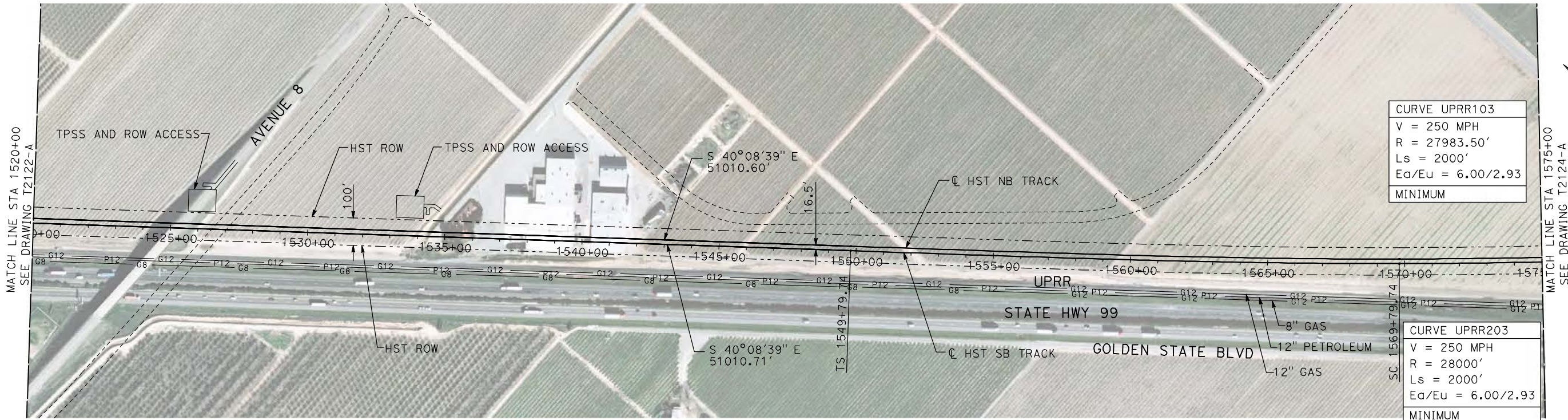
CONTRACT NO.
HSR06-007

DRAWING NO.
T2122-A

SCALE
AS SHOWN

SHEET NO.
OF

7/21/2011 4:51:52 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2123-A.dgn machadoe



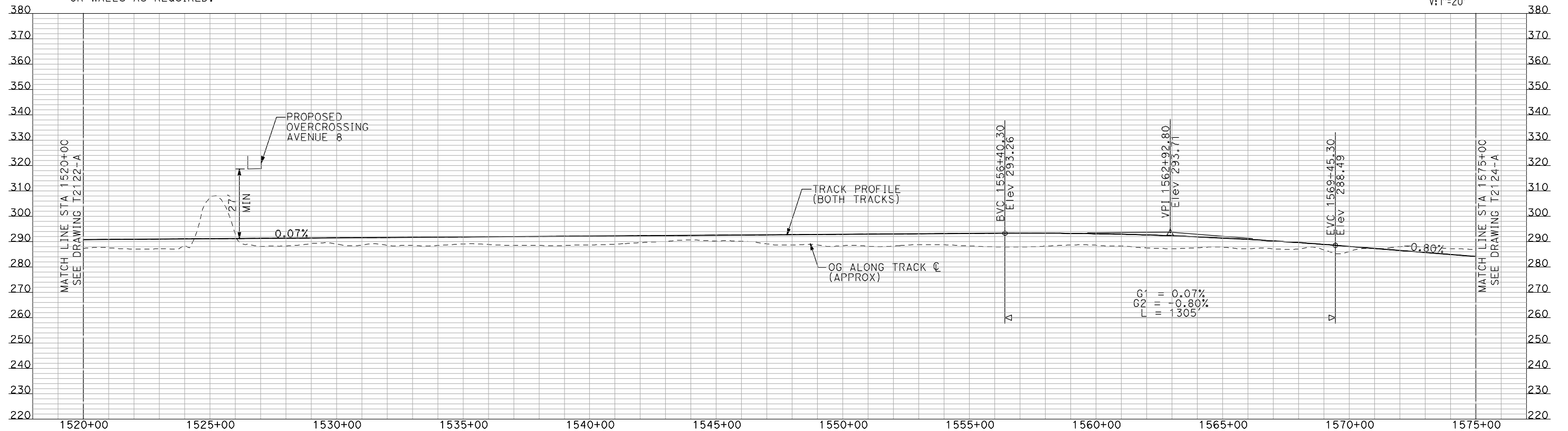
CURVE UPRR103
 V = 250 MPH
 R = 27983.50'
 Ls = 2000'
 Ea/Eu = 6.00/2.93
 MINIMUM

CURVE UPRR203
 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

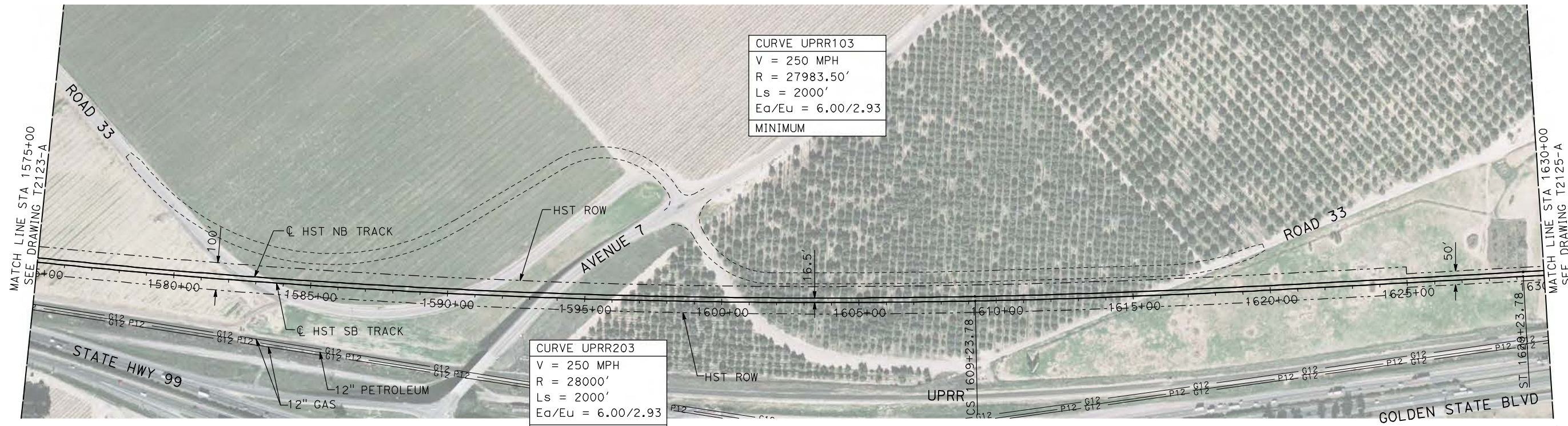
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 MAIN LINE
 PLAN AND PROFILE
 STA 1520+00 TO STA 1575+00

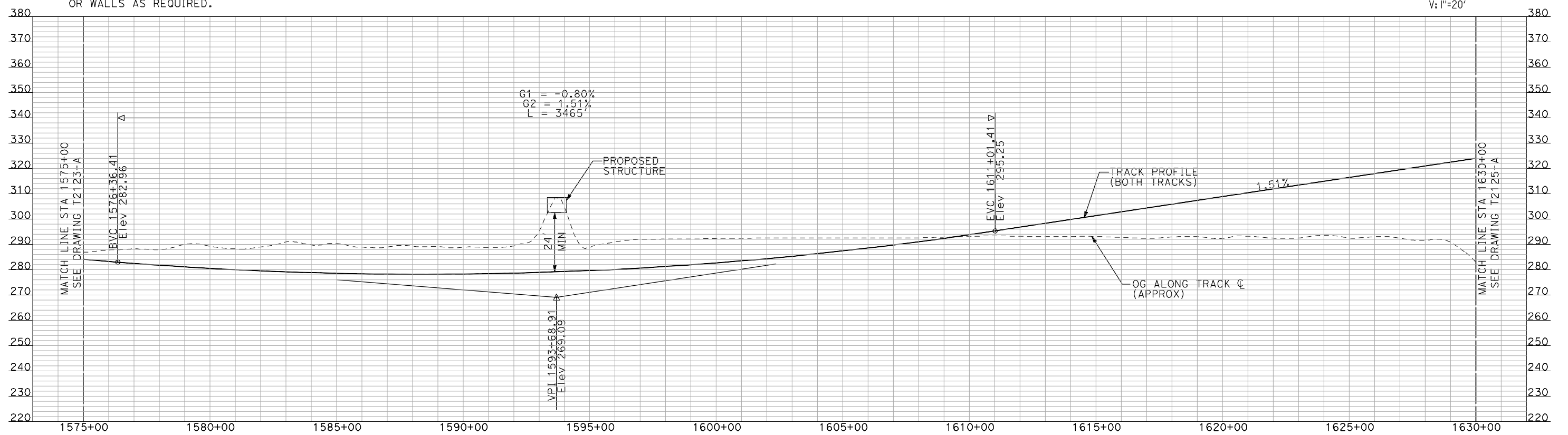
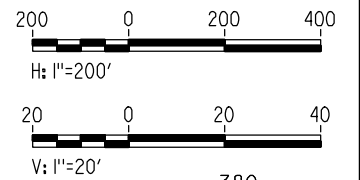
CONTRACT NO.
HSR06-007
 DRAWING NO.
T2123-A
 SCALE
AS SHOWN
 SHEET NO.
OF



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"

7/21/2011 4:52:08 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2124-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 MAIN LINE

PLAN AND PROFILE
STA 1575+00 TO STA 1630+00

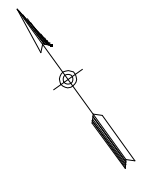
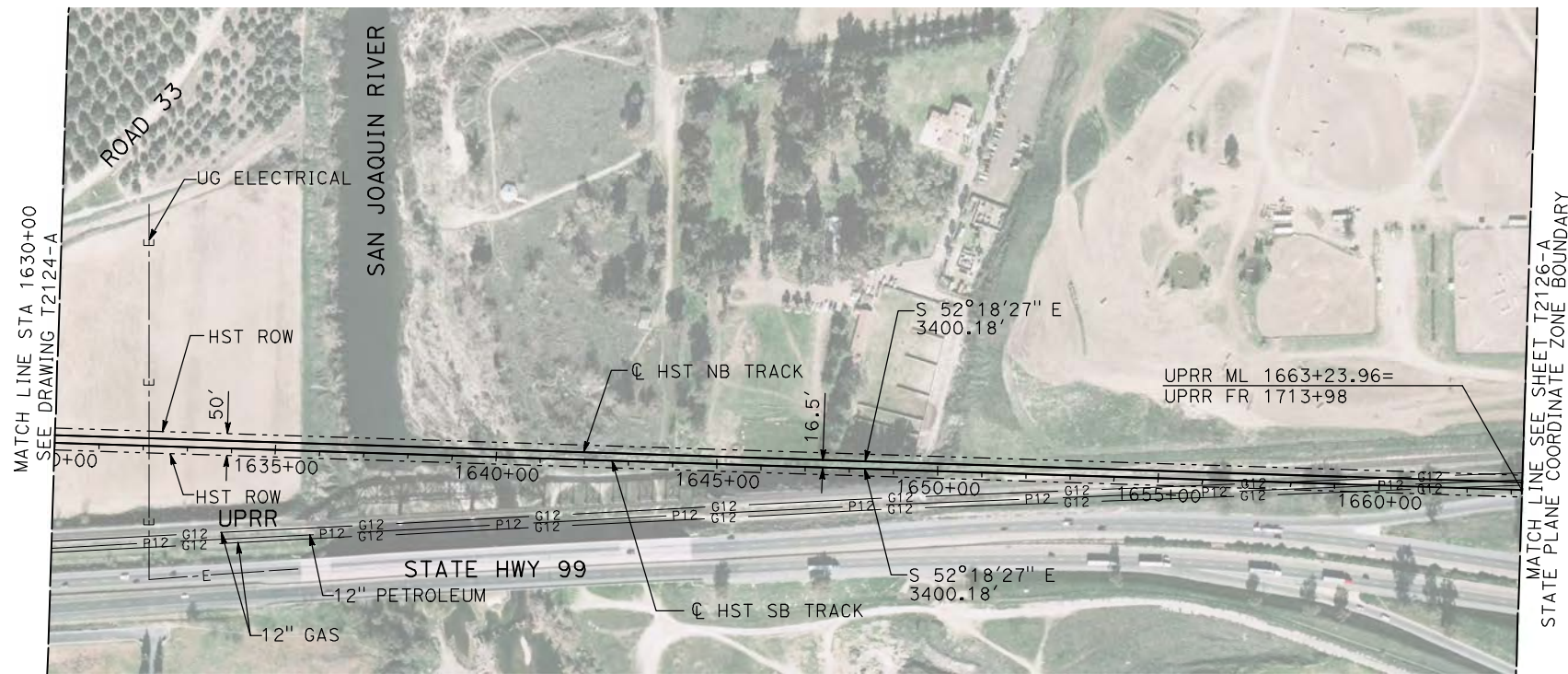
CONTRACT NO.
HSR06-007

DRAWING NO.
T2124-A

SCALE
AS SHOWN

SHEET NO.
OF

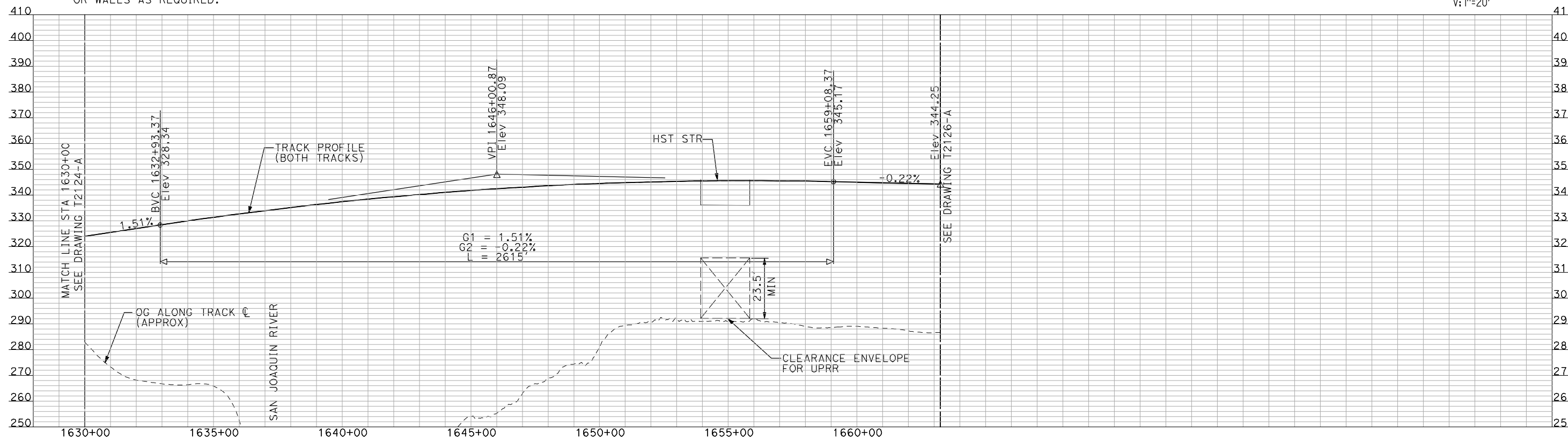
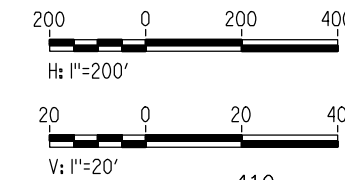
7/21/2011 4:52:22 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2125-A.dgn machadoe



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**



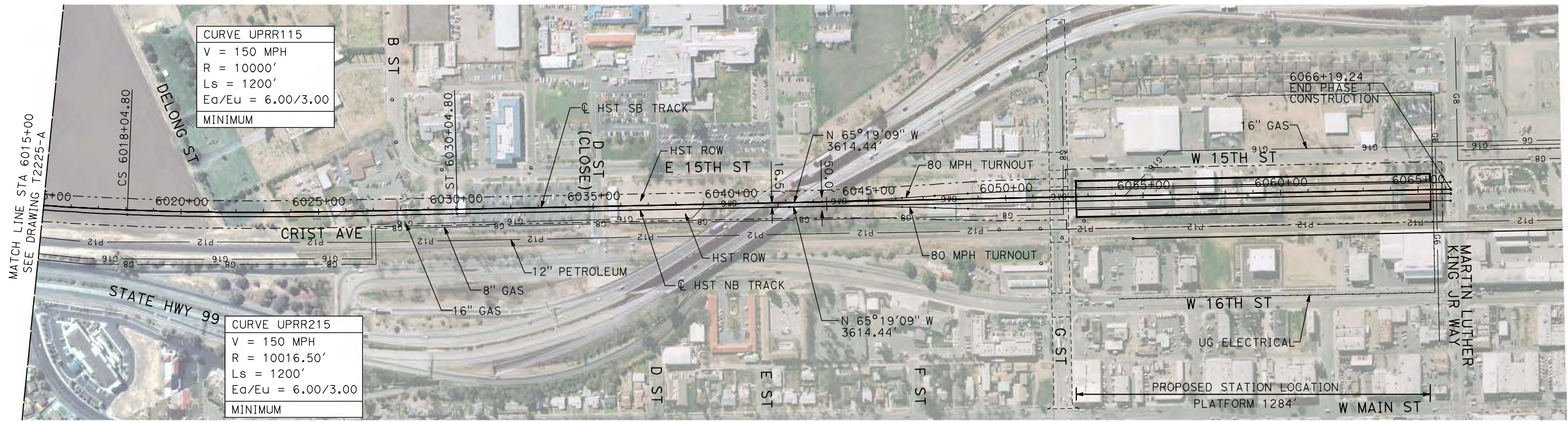
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 MAIN LINE

PLAN AND PROFILE
STA 1630+00 TO STA 1663+23.96

CONTRACT NO. HSR06-007
DRAWING NO. T2125-A
SCALE AS SHOWN
SHEET NO. ### OF ###

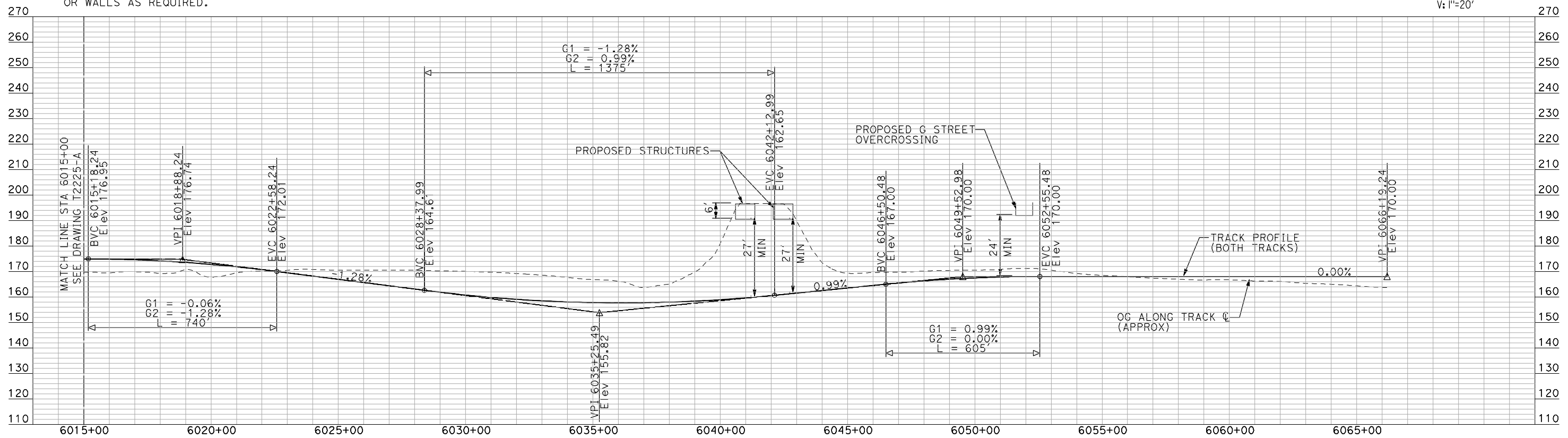
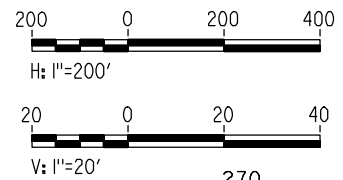
7/21/2011 4:52:36 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2226-A.dgn



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

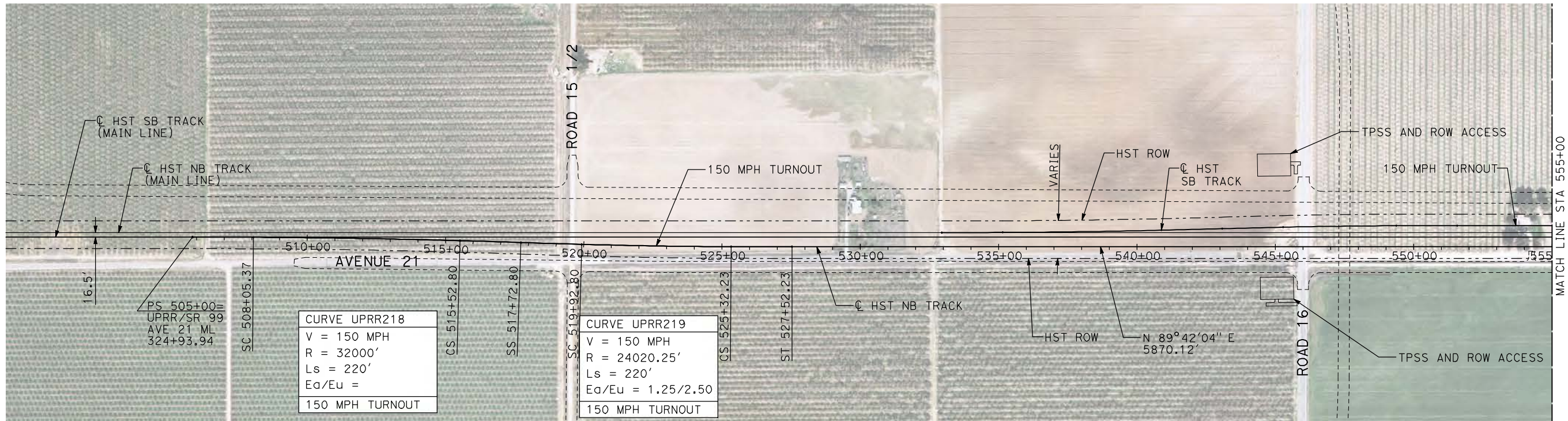
RECORD SET
15% DESIGN
SUBMITTAL

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

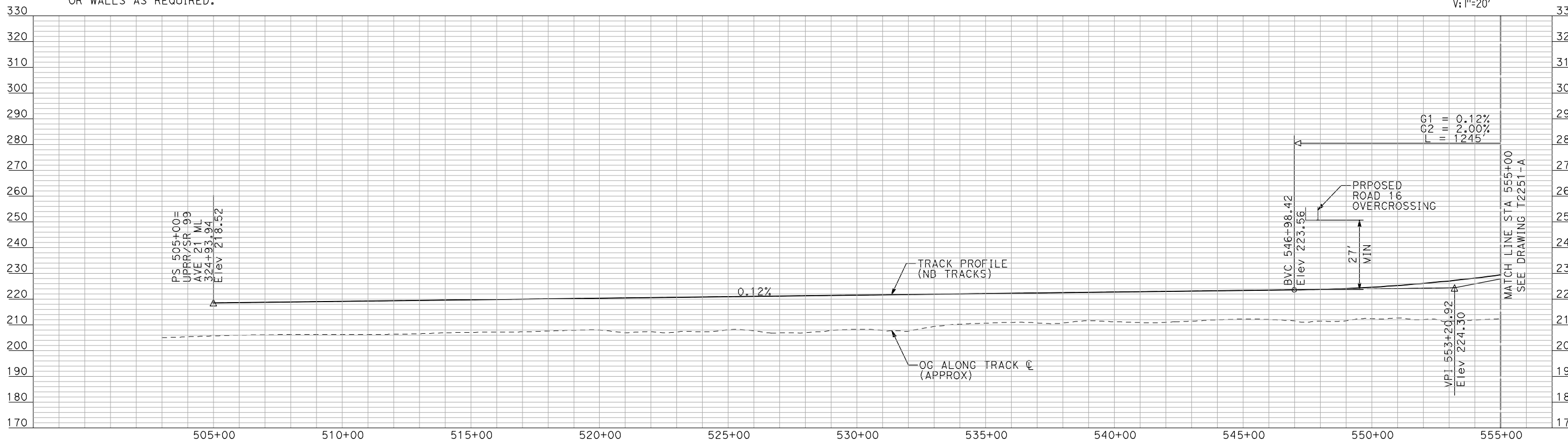
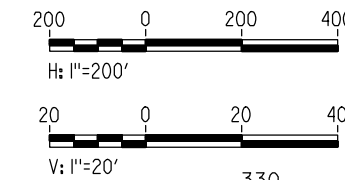
CONTRACT NO.
HSR06-007
 DRAWING NO.
T2226-A
 SCALE
AS SHOWN
 SHEET NO.
OF



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"

7/20/2011 2:59:46 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2250-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

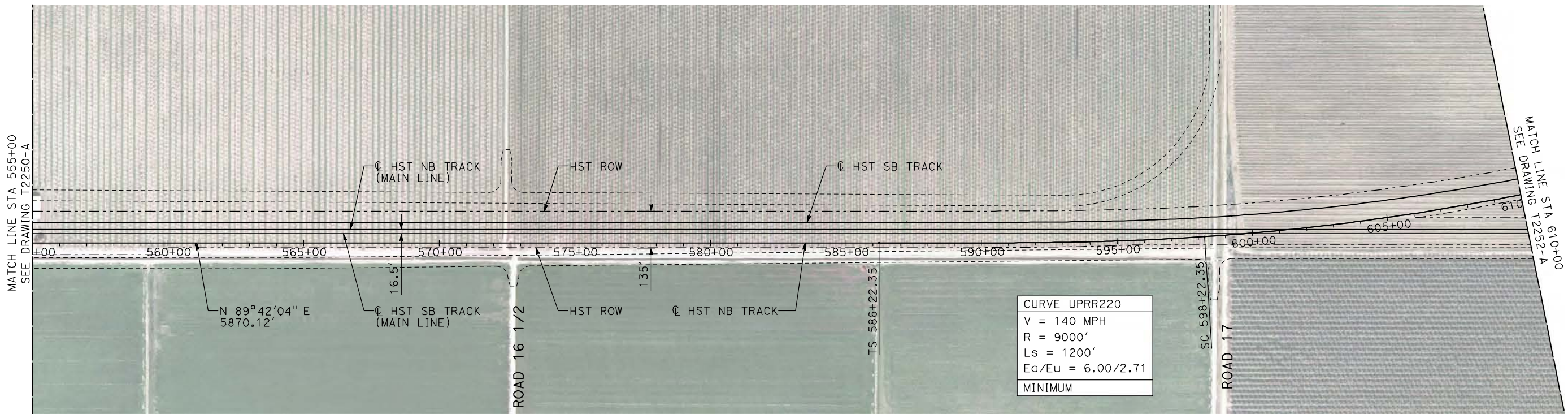
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 505+00 TO STA 555+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2250-A
SCALE
AS SHOWN
SHEET NO.
OF

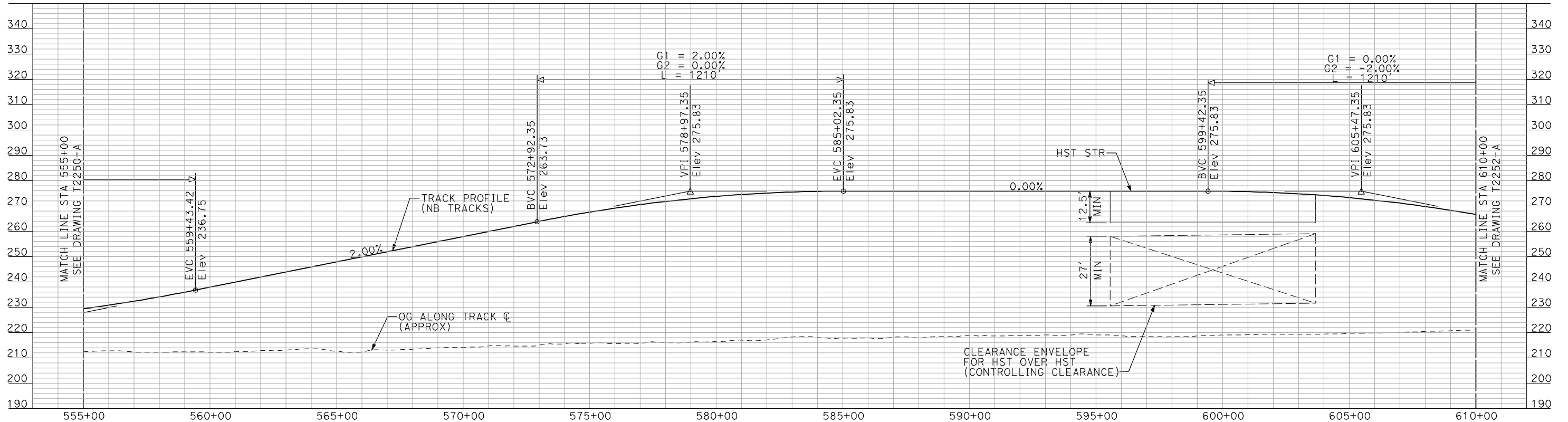
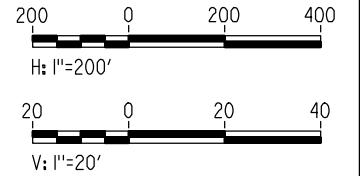
7/20/2011 3:00:00 PM i:\chsr\60022962\Task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2251-A.dgn machadoe



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

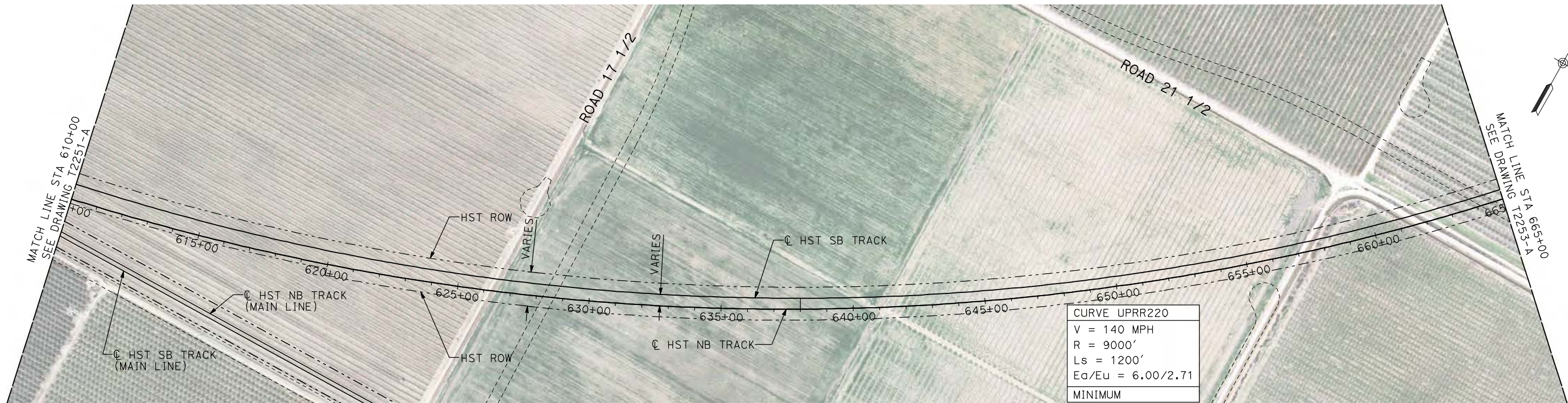
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 555+00 TO STA 610+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2251-A
SCALE
AS SHOWN
SHEET NO.
OF

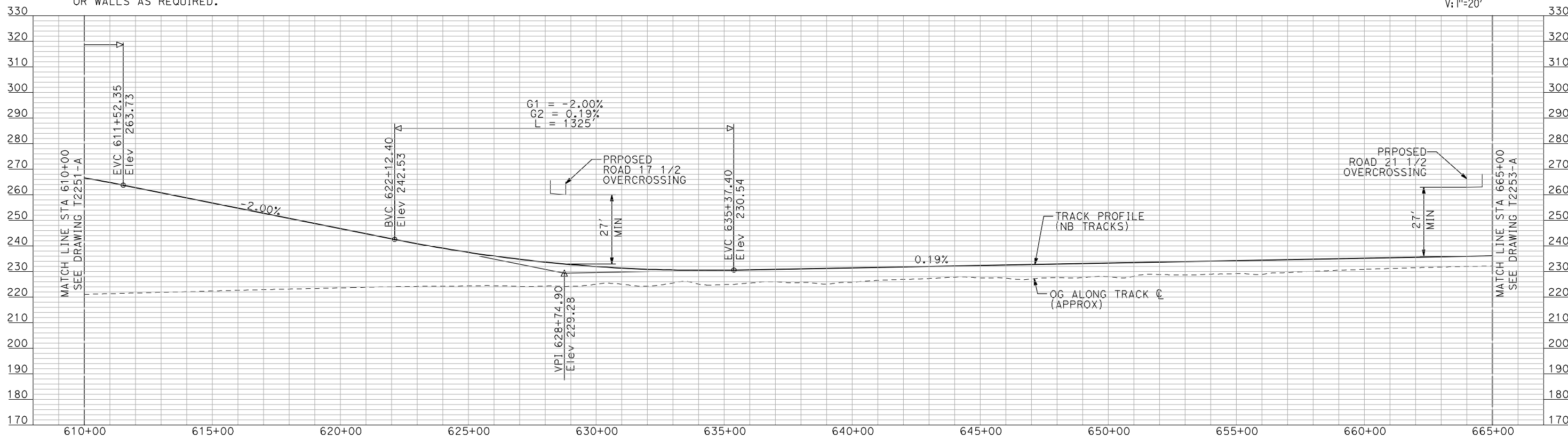
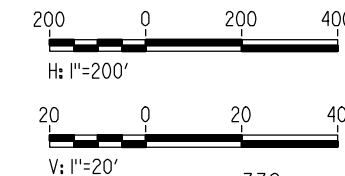
7/20/2011 3:00:15 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2252-A.dgn



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 WYE - NB CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 610+00 TO STA 665+00

CONTRACT NO.
 HSR06-007
 DRAWING NO.
 T2252-A
 SCALE
 AS SHOWN
 SHEET NO.
 ### OF ###

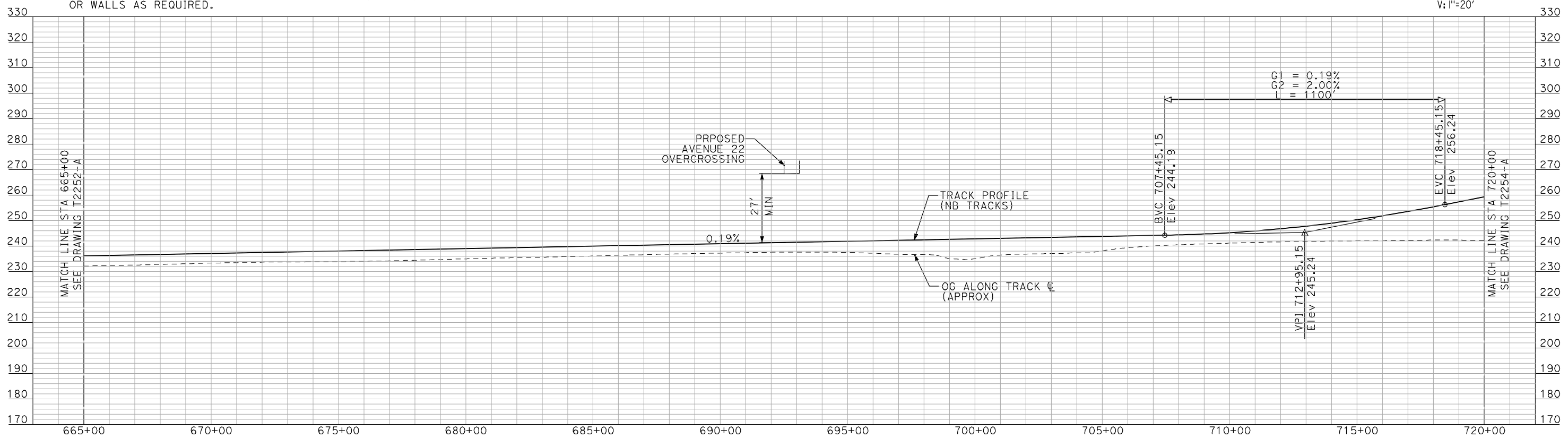
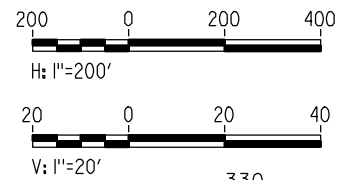
7/20/2011 3:00:31 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2253-A.dgn



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 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 665+00 TO STA 720+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2253-A
SCALE
AS SHOWN
SHEET NO.
OF

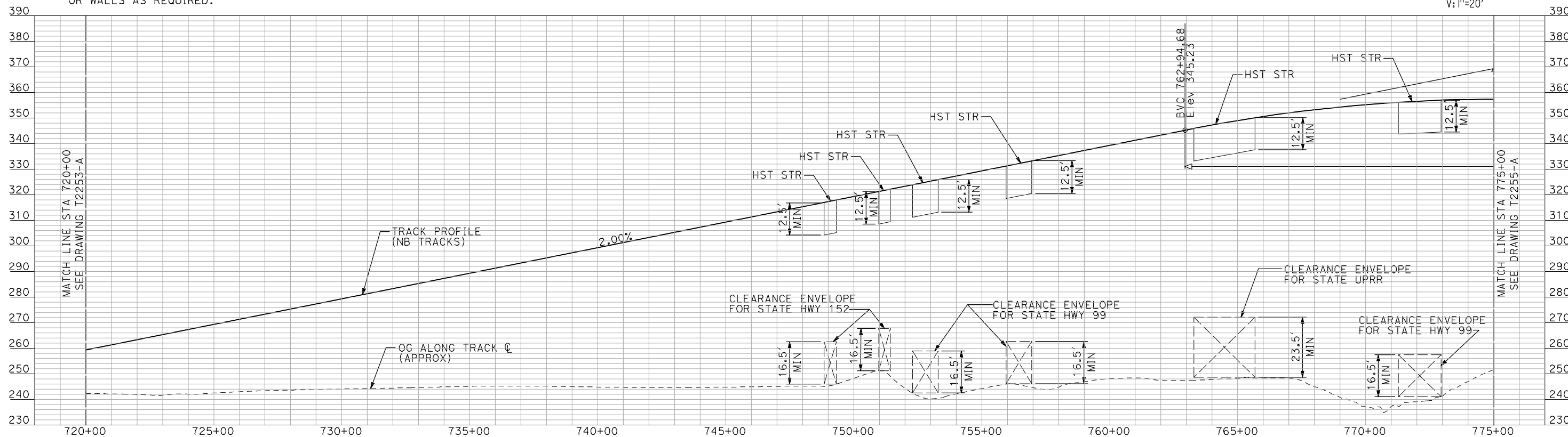
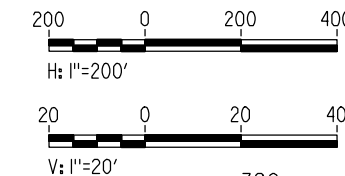
7/20/2011 3:00:45 PM i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2254-A.dgn machadoc



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.

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

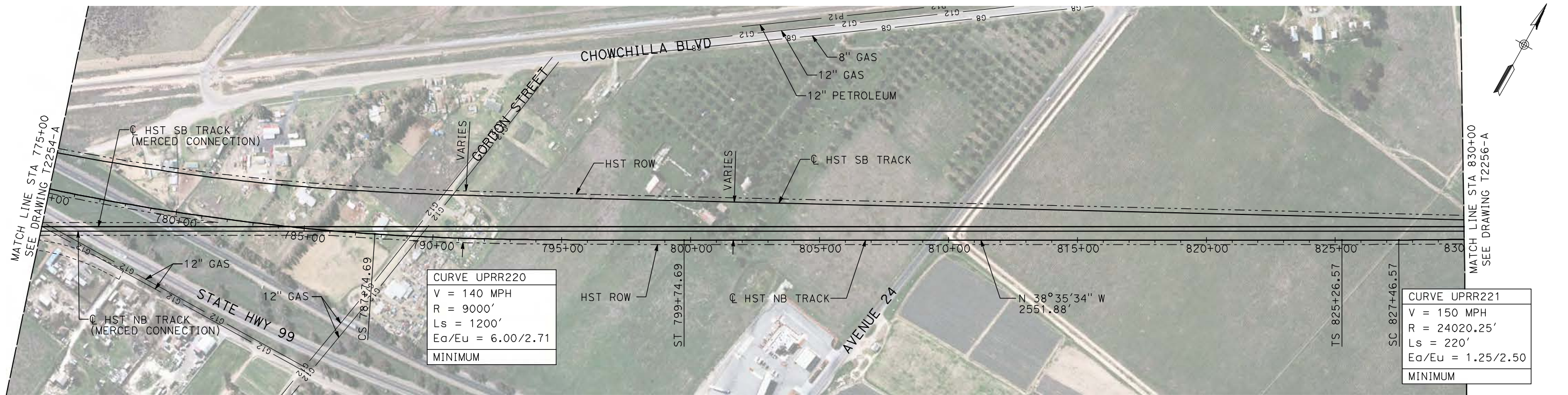
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 720+00 TO STA 775+00

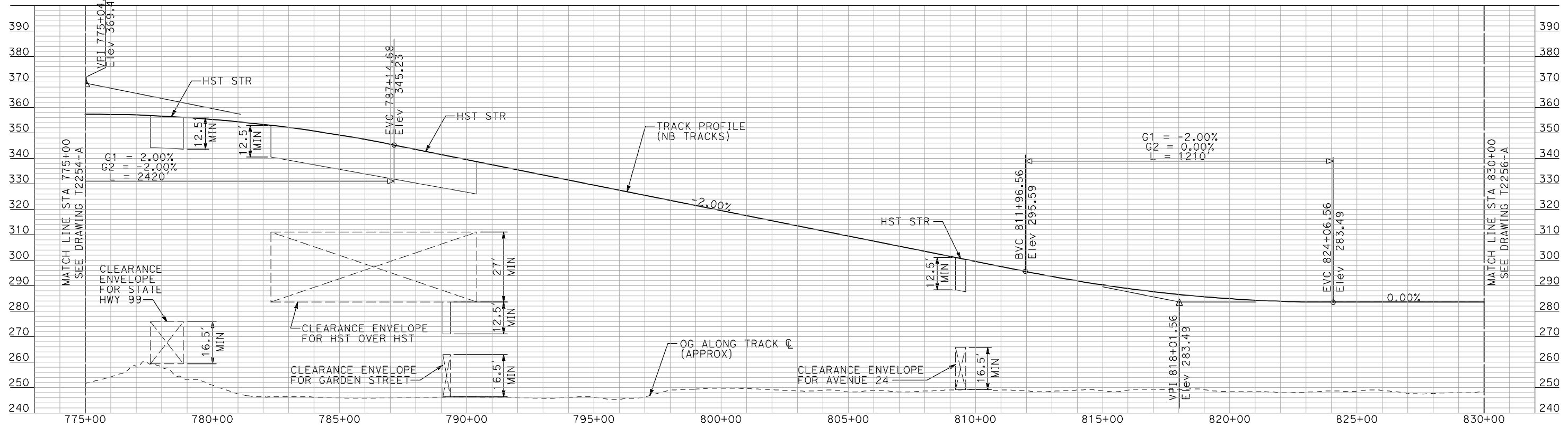
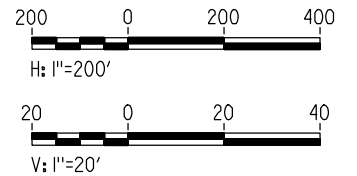
CONTRACT NO.
HSR06-007
DRAWING NO.
T2254-A
SCALE
AS SHOWN
SHEET NO.
OF



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"

7/20/2011 3:00:59 PM i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2255-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

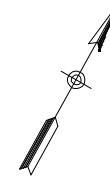
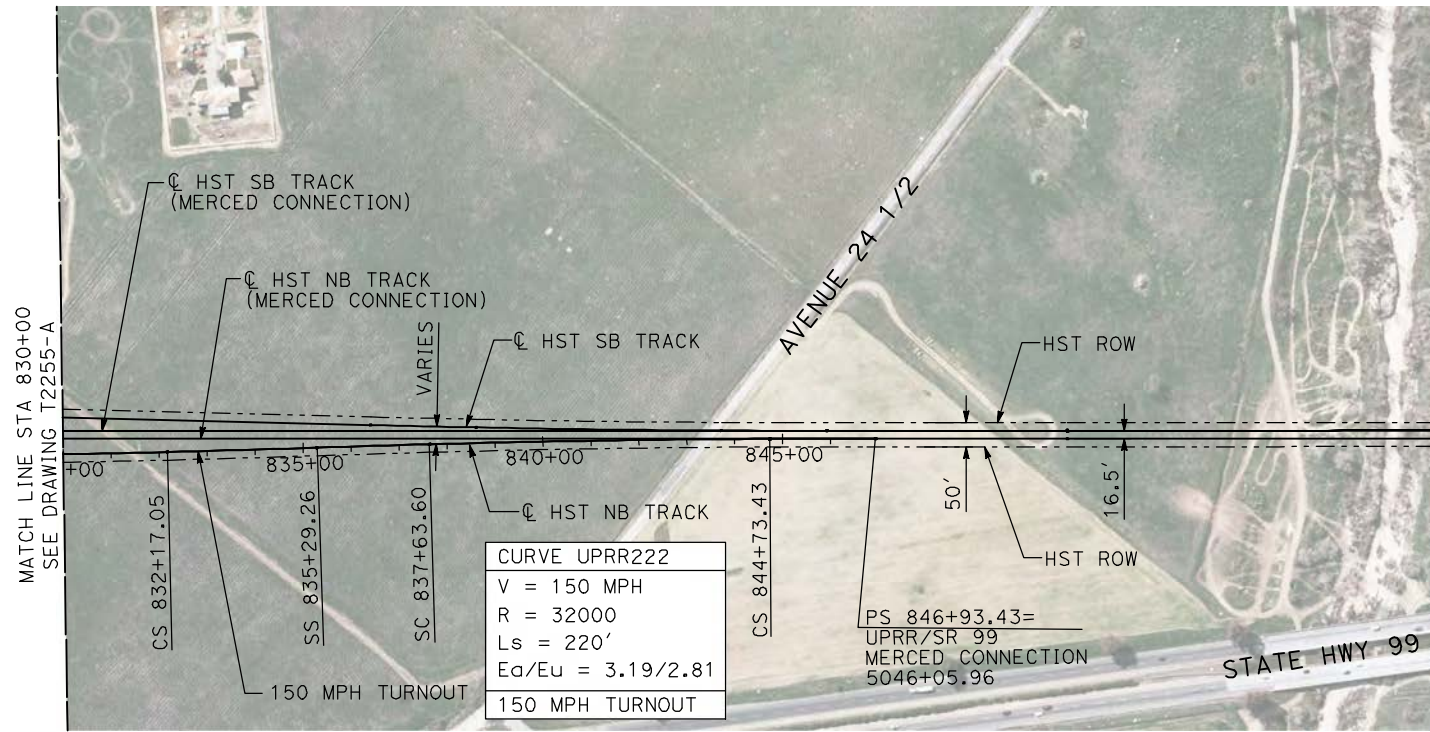
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 775+00 TO STA 830+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2255-A
SCALE
AS SHOWN
SHEET NO.
OF

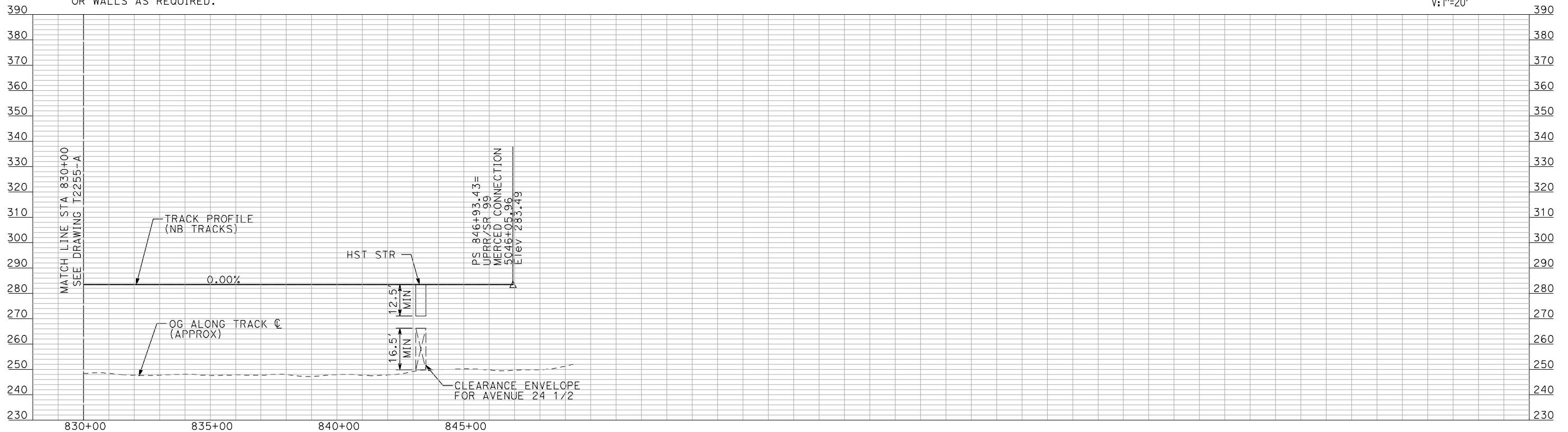
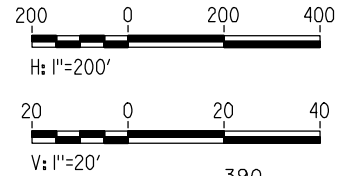
7/20/2011 3:01:12 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2256-A.dgn machadoc



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.

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

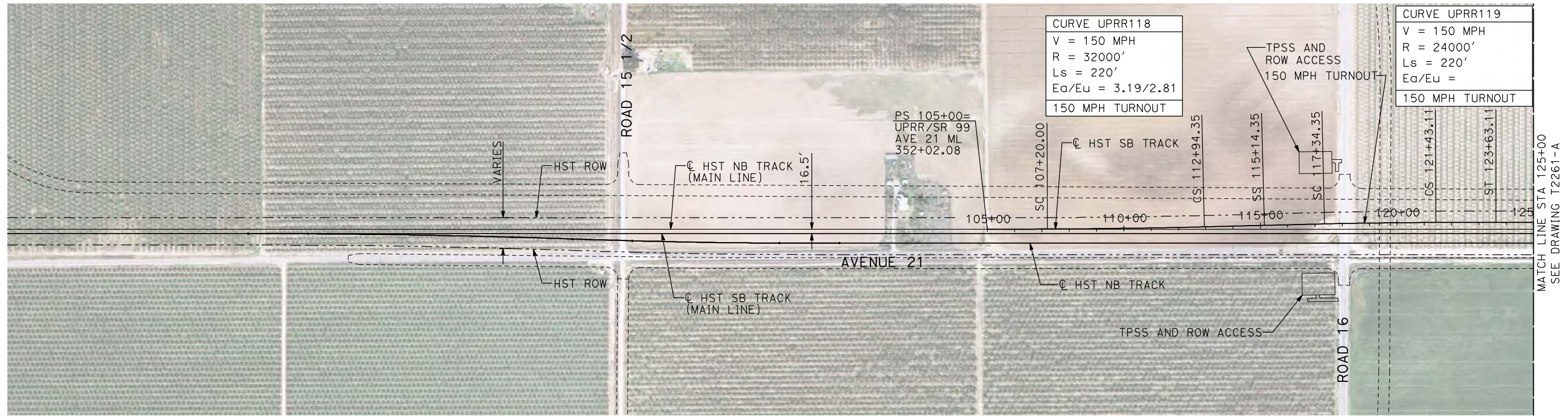
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 WYE - NB CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 830+00 TO STA 846+93.43

CONTRACT NO.	HSR06-007
DRAWING NO.	T2256-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

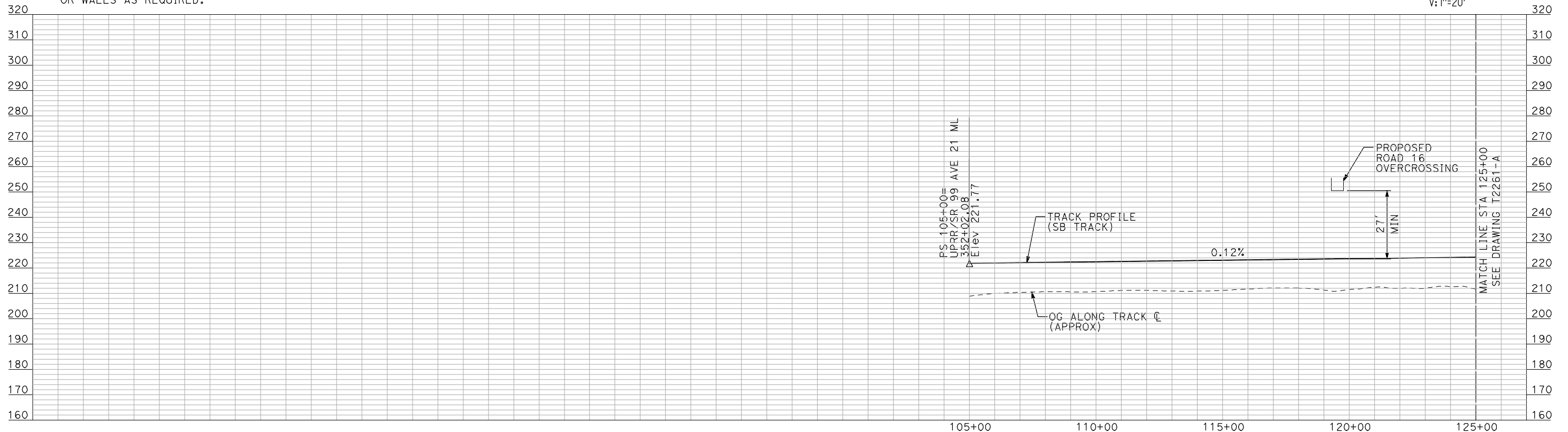
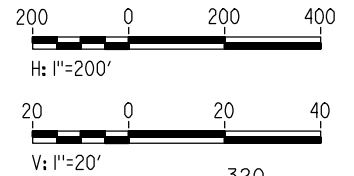
7/20/2011 3:01:22 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2260-A.dgn machadoe



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

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**

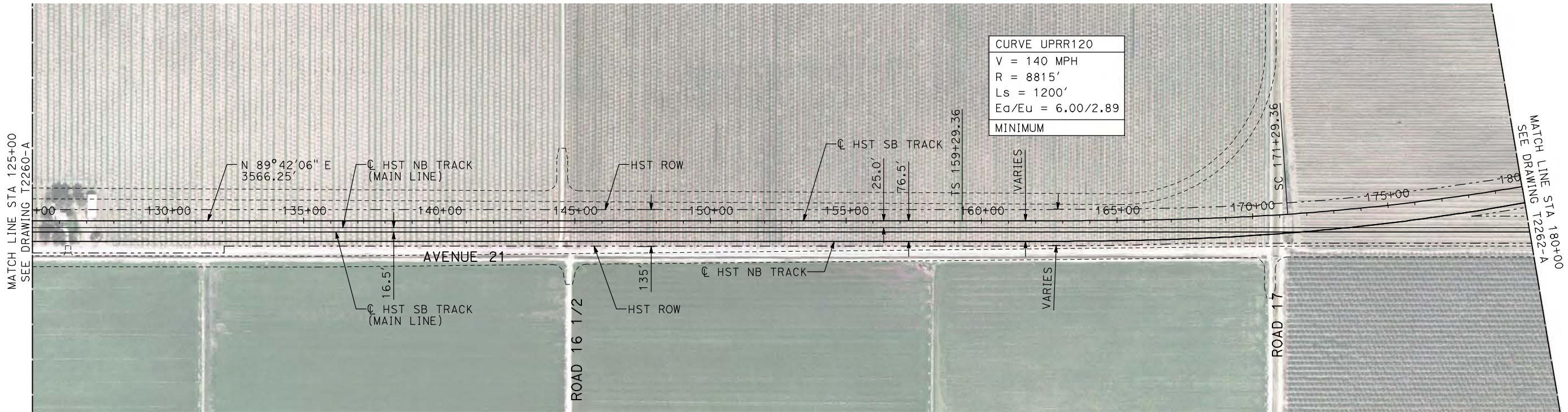


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 105+00 TO STA 125+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2260-A
SCALE
AS SHOWN
SHEET NO.
OF

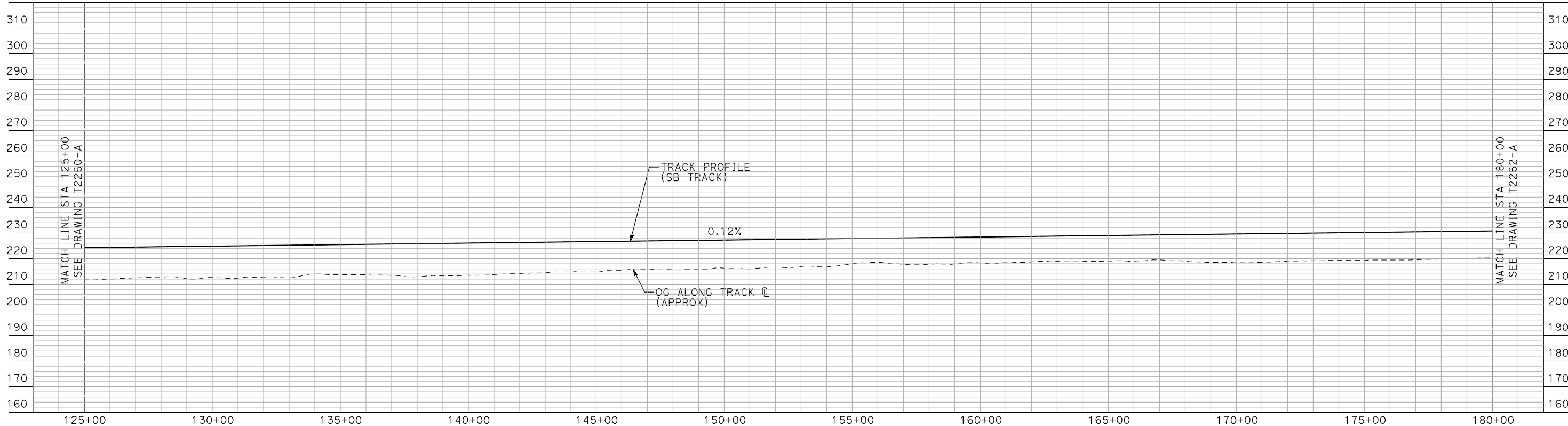
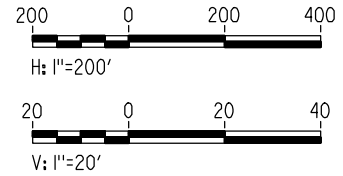
7/20/2011 3:01:35 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2261-A.dgn machadoe



CURVE UPRR120
V = 140 MPH
R = 8815'
Ls = 1200'
Ea/Eu = 6.00/2.89
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

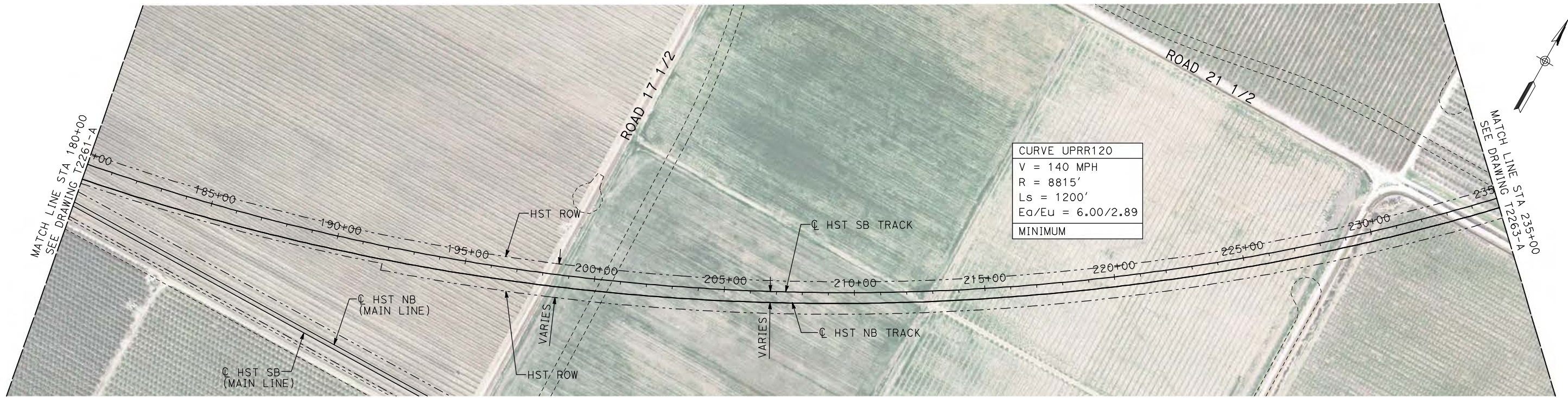
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
UPRR/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 125+00 TO STA 180+00

CONTRACT NO.	HSR06-007
DRAWING NO.	T2261-A
SCALE	AS SHOWN
SHEET NO.	### OF ###

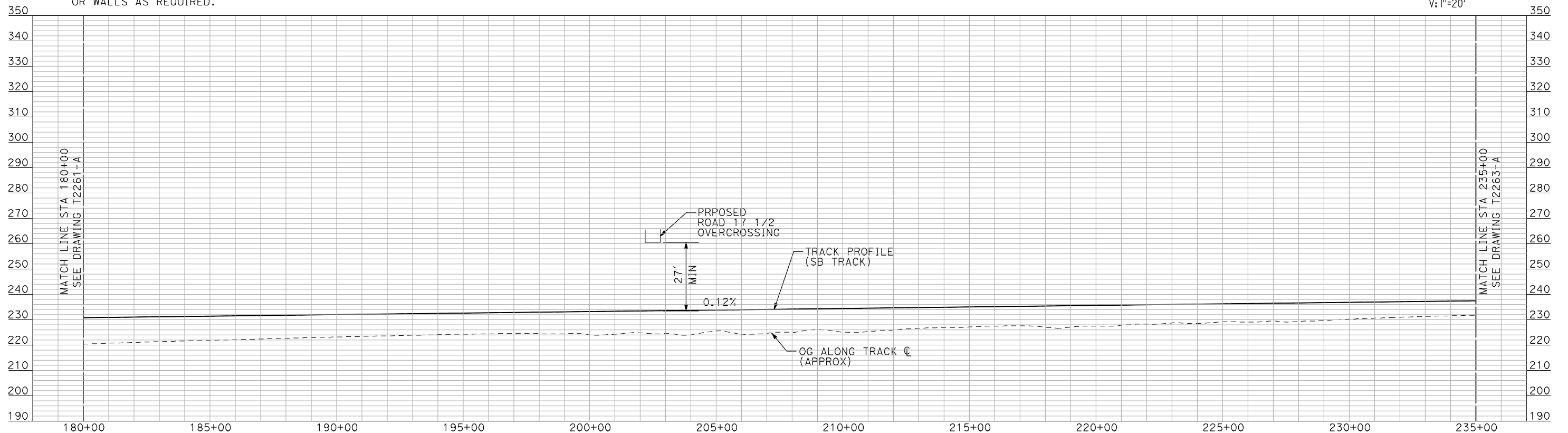
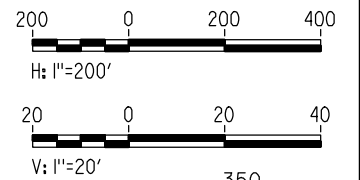
7/20/2011 3:01:48 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE_21\MF-T-2262-A.dgn machadoc



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.

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**

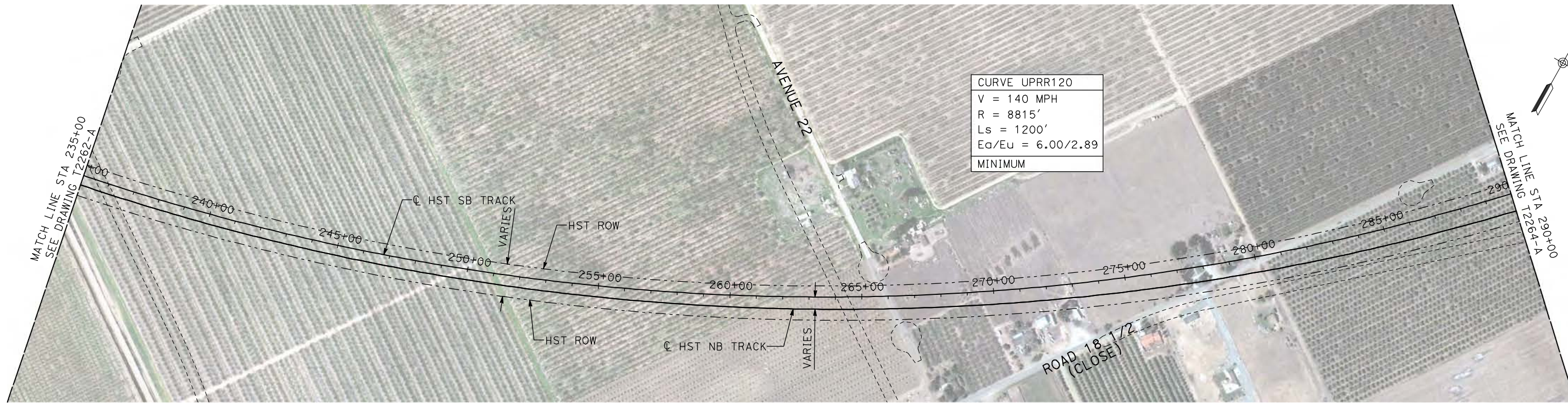


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO**

UPRR/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 180+00 TO STA 235+00

CONTRACT NO.
HSR06-007
DRAWING NO.
T2262-A
SCALE
AS SHOWN
SHEET NO.
OF

7/20/2011 3:02:02 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\uprr_ave_21\WF-T-2263-A.dgn

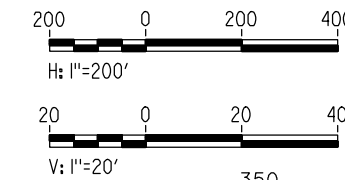


CURVE UPRR120
V = 140 MPH
R = 8815'
Ls = 1200'
Ea/Eu = 6.00/2.89
MINIMUM

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**

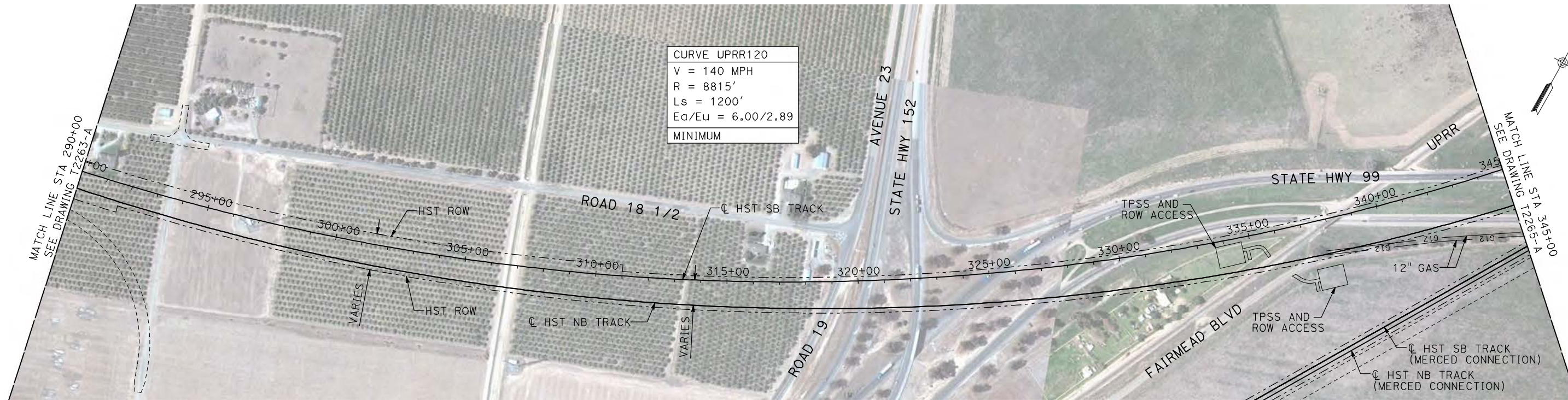
**NOT FOR
CONSTRUCTION**



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

UPRR/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 235+00 TO STA 290+00

CONTRACT NO. HSR06-007
DRAWING NO. T2263-A
SCALE AS SHOWN
SHEET NO. ### OF ###

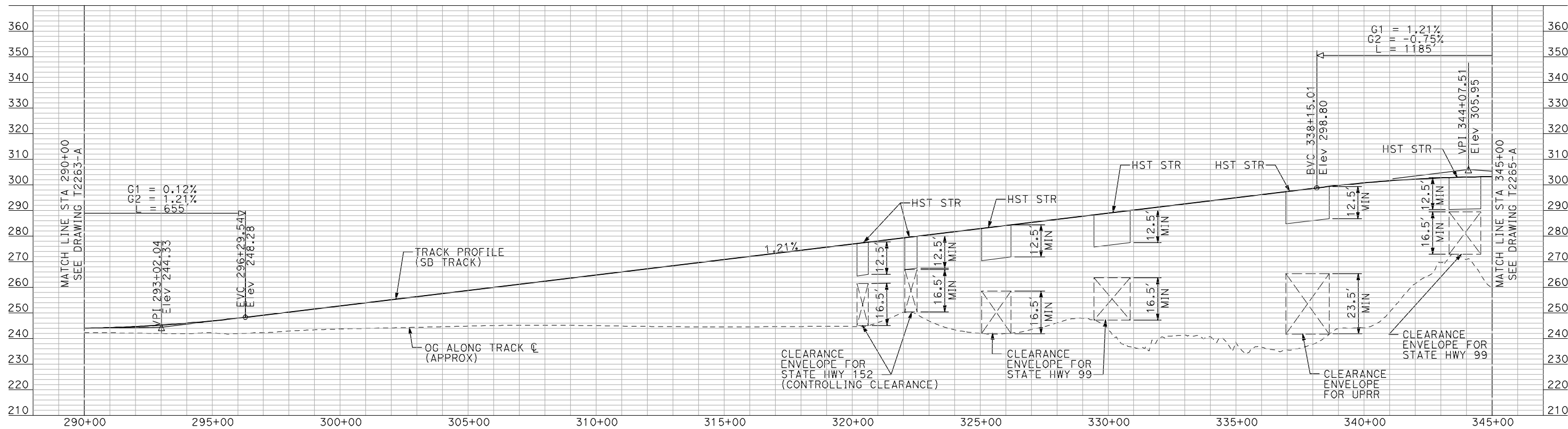
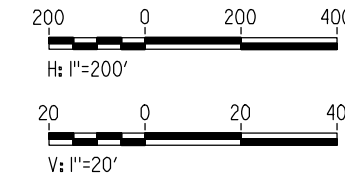


CURVE UPRR120
 V = 140 MPH
 R = 8815'
 Ls = 1200'
 Ea/Eu = 6.00/2.89
 MINIMUM

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"

7/20/2011 3:02:15 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2264-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

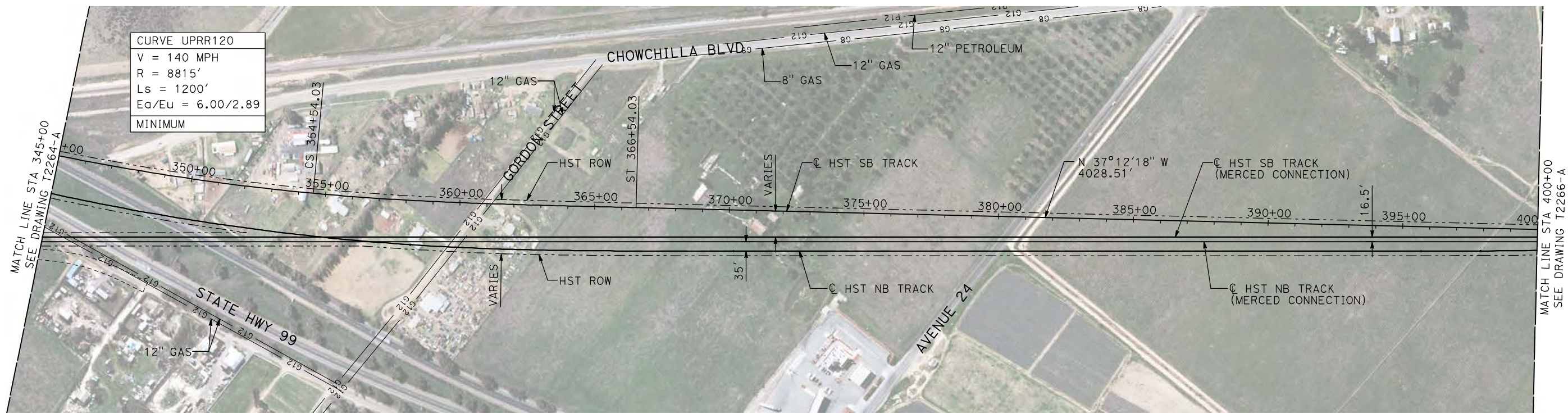
RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 WYE - SB CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 290+00 TO STA 345+00

CONTRACT NO.
HSR06-007
 DRAWING NO.
T2264-A
 SCALE
AS SHOWN
 SHEET NO.
OF

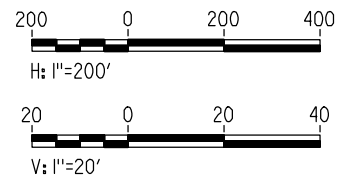


CURVE UPRR120
 V = 140 MPH
 R = 8815'
 Ls = 1200'
 Ea/Eu = 6.00/2.89
 MINIMUM

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"

7/20/2011 3:02:29 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2265-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

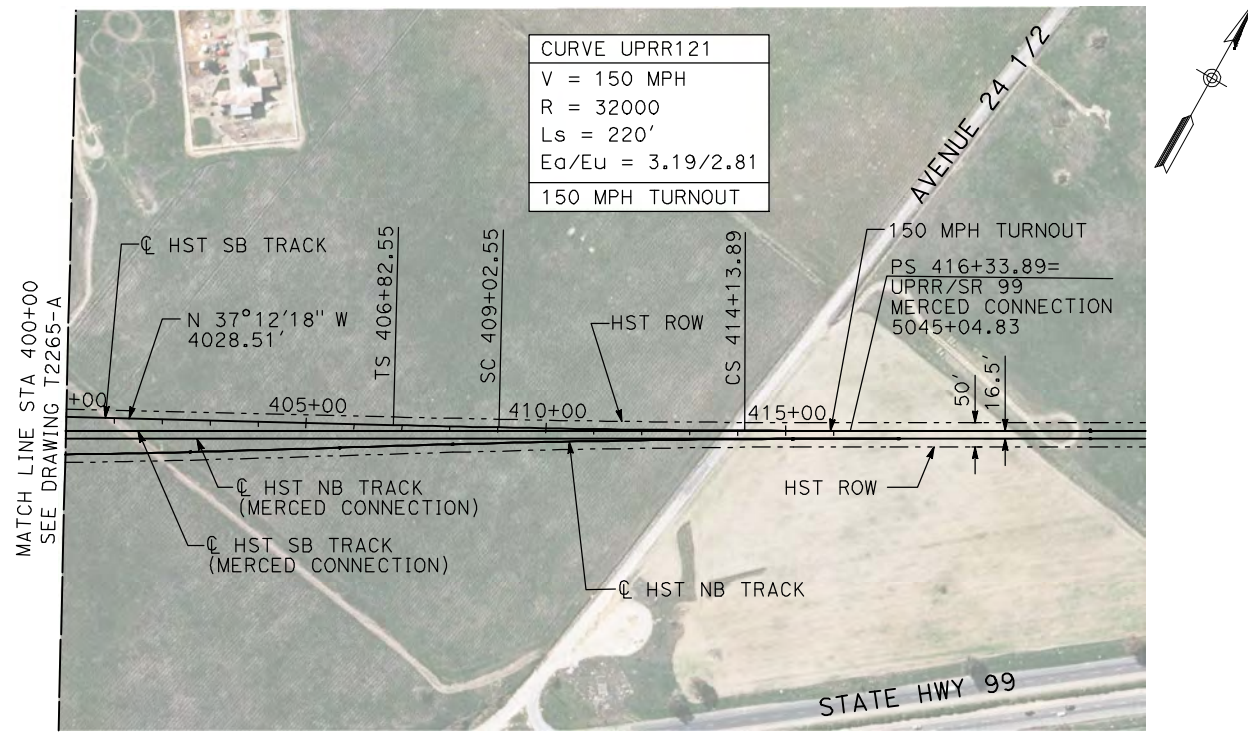
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
 UPRR/SR 99 WYE - SB CONNECTION
 AVENUE 21
 PLAN AND PROFILE
 STA 345+00 TO STA 400+00

CONTRACT NO.
HSR06-007
 DRAWING NO.
T2265-A
 SCALE
AS SHOWN
 SHEET NO.
OF

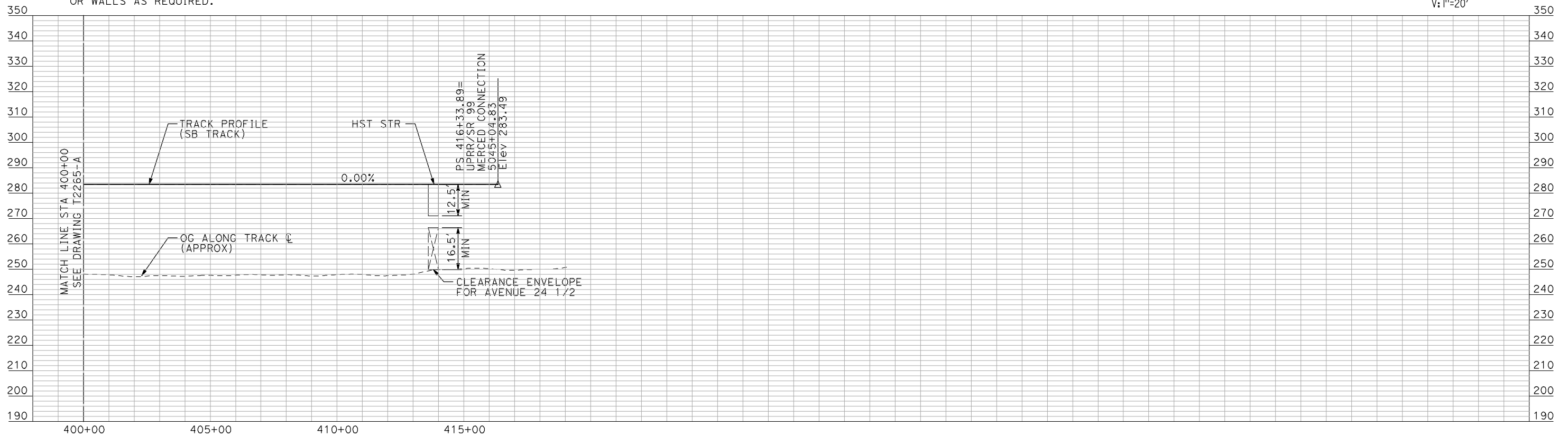
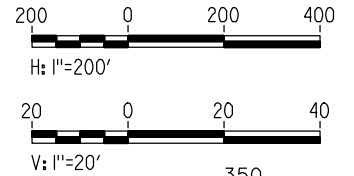
7/20/2011 3:02:42 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR_AVE 21\MF-T-2266-A.dgn machadoe



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 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 400+00 TO STA 416+33.89

CONTRACT NO. HSR06-007
DRAWING NO. T2266-A
SCALE AS SHOWN
SHEET NO. ### OF ###