

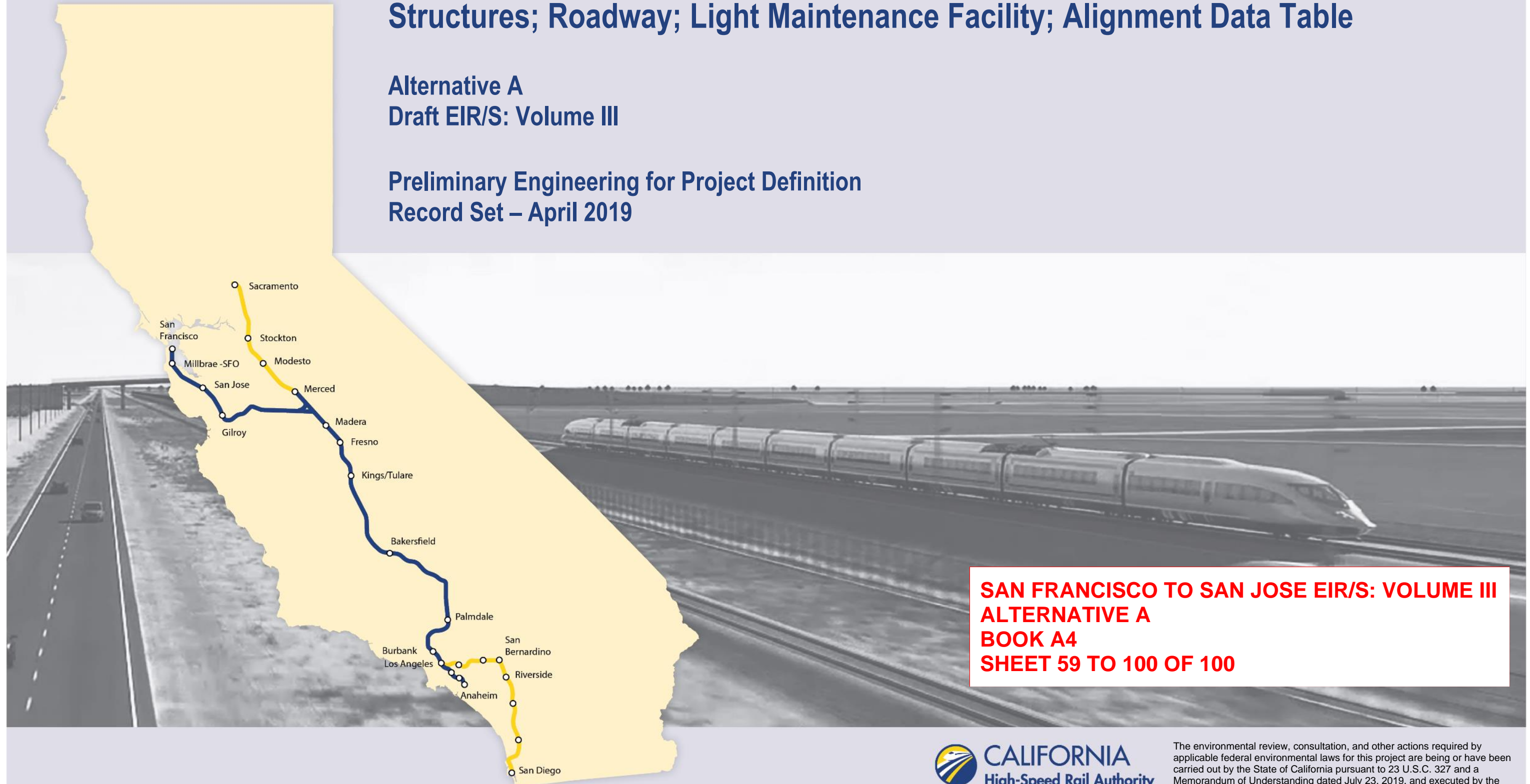
California High-Speed Rail Authority

San Francisco to San Jose Project Section

Structures; Roadway; Light Maintenance Facility; Alignment Data Table

Alternative A
Draft EIR/S: Volume III

Preliminary Engineering for Project Definition
Record Set – April 2019



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 59 TO 100 OF 100**



The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

ALTERNATIVE A - SAN FRANCISCO TO SAN JOSE

BOOK	SHEET NO	DRAWING NO	SUBSECTION	GEOGRAPHIC LOCATION OR FEATURE	ALIGNMENT OR FEATURE	SHEET DESCRIPTION	ADDITIONAL DESCRIPTION
COVER, INDEX OF DRAWING AND KEY MAPS							
BOOK A4	A	COVER		4TH & KING TO W. ALMA	ALTERNATIVE A	ALTERNATIVE A	
BOOK A4	B	GE-A1104		COMPLEX STRUCTURES, GRADE SEPARATED AND MAINTENANCE	INDEX OF DRAWINGS	SHEET 4 OF 5	
BOOK A4	C	GE-A1105		ALIGNMENT DATA TABLE	INDEX OF DRAWINGS	SHEET 5 OF 5	
BOOK A4	D	GE-D1101	ENTIRE ALTERNATIVE		KEY MAP	COMPOSITE PLAN	SHEET 1 OF 3
BOOK A4	E	GE-D1102	ENTIRE ALTERNATIVE		KEY MAP	COMPOSITE PLAN	SHEET 2 OF 3
BOOK A4	F	GE-D1103	ENTIRE ALTERNATIVE		KEY MAP	COMPOSITE PLAN	SHEET 3 OF 3
BOOK A4	G	GE-D1104	ENTIRE ALTERNATIVE		KEY MAP	SYSTEM SITES	
STRUCTURES							
BOOK A4	59	ST-T0101	SAN FRANCISCO TO SOUTH SAN FRANCISCO			OVERPASSES AND UNDERPASSES	TUNNEL AVE AND HILLCREST BLVD BRIDGES
BOOK A4	60	ST-T4001	SAN JOSE DIRIDON STATION APPROACH			UNDERPASSES	GENERAL PLAN 1 OF 4
BOOK A4	61	ST-T4002	SAN JOSE DIRIDON STATION APPROACH			UNDERPASSES	GENERAL PLAN 2 OF 4
BOOK A4	62	ST-T4003	SAN JOSE DIRIDON STATION APPROACH			UNDERPASSES	GENERAL PLAN 3 OF 4
BOOK A4	63	ST-V0101	SAN FRANCISCO TO SOUTH SAN FRANCISCO		COMPLEX STRUCTURES	LMF LEAD TRACK PERGOLA	GENERAL PLAN
ROADWAY							
BOOK A4	64	CV-T0101	ALTERNATIVE A		GRADE SEPARATED ROADWAY	PLAN, PROFILE AND TYPICAL SECTIONS	TUNNEL AVENUE
LIGHT MAINTENANCE FACILITY							
BOOK A4	65	MY-C0101	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	66	MY-C0102	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	67	MY-C0103	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	68	MY-C0104	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	69	MY-C0105	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	70	MY-C0106	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	71	MY-C0107	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	
BOOK A4	72	MY-C0108	SAN FRANCISCO TO SOUTH SAN FRANCISCO		BRISBANE LIGHT MAINTENANCE FACILITY EAST	COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET B**

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SUBMITTAL**

APRIL 11, 2019

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**

ALTERNATIVE A
INDEX OF DRAWINGS
SHEET 4 OF 5

CONTRACT NO.	HSR15-34
DRAWING NO.	GE-A1104
SCALE	NONE
SHEET NO.	

ALTERNATIVE A - SAN FRANCISCO TO SAN JOSE

BOOK	SHEET NO	DRAWING NO	SUBSECTION	GEOGRAPHIC LOCATION OR FEATURE	ALIGNMENT OR FEATURE	SHEET DESCRIPTION	ADDITIONAL DESCRIPTION
TRACK GUIDEWAY HORIZONTAL ALIGNMENT DATA TABLE							
BOOK A4	73	TT-B0001	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C103 TO C106	
BOOK A4	74	TT-B0002	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C107 TO C109	
BOOK A4	75	TT-B0003	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C110 TO C112	
BOOK A4	76	TT-B0004	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C113 TO C117	
BOOK A4	77	TT-B0005	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C118 TO C120	
BOOK A4	78	TT-B0006	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C121 TO C124	
BOOK A4	79	TT-B0007	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C125 TO C128	
BOOK A4	80	TT-B0008	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C129 TO C131	
BOOK A4	81	TT-B0009	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C132	
BOOK A4	82	TT-B0010	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C133 TO C137	
BOOK A4	83	TT-B0011	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C138 TO C141	
BOOK A4	84	TT-B0012	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C142 TO C145	
BOOK A4	85	TT-B0013	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C146 TO C149	
BOOK A4	86	TT-B0014	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C150 TO C153	
BOOK A4	87	TT-B0015	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C154 TO C156	
BOOK A4	88	TT-B0016	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C157 TO C160	
BOOK A4	89	TT-B0017	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C161 TO C163	
BOOK A4	90	TT-B0018	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C164 TO C167	
BOOK A4	91	TT-B0019	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C168 TO C171	
BOOK A4	92	TT-B0020	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C173 TO C175	
BOOK A4	93	TT-B0021	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C176 TO C179	
BOOK A4	94	TT-B0022	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C180 TO C183	
BOOK A4	95	TT-B0023	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C184 TO C187	
BOOK A4	96	TT-B0024	ALTERNATIVE A		B2 TRACK ALIGNMENT DATA TABLE	CURVE NO. C188	
BOOK A4	97	TT-B4001	ALTERNATIVE 4	N/A	MT3 TRACK ALIGNMENT DATA TABLE	CURVE NO. C401 TO C404	
BOOK A4	98	TT-B4002	ALTERNATIVE 4	N/A	MT3 TRACK ALIGNMENT DATA TABLE	CURVE NO. C405 TO C408	
BOOK A4	99	TT-B4003	ALTERNATIVE 4	N/A	MT3 TRACK ALIGNMENT DATA TABLE	CURVE NO. C409 TO C414	
BOOK A4	100	TT-B4004	ALTERNATIVE 4	N/A	MT3 TRACK ALIGNMENT DATA TABLE	CURVE NO. C415 TO C418	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET C**

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**

ALTERNATIVE A
INDEX OF DRAWINGS
SHEET 5 OF 5

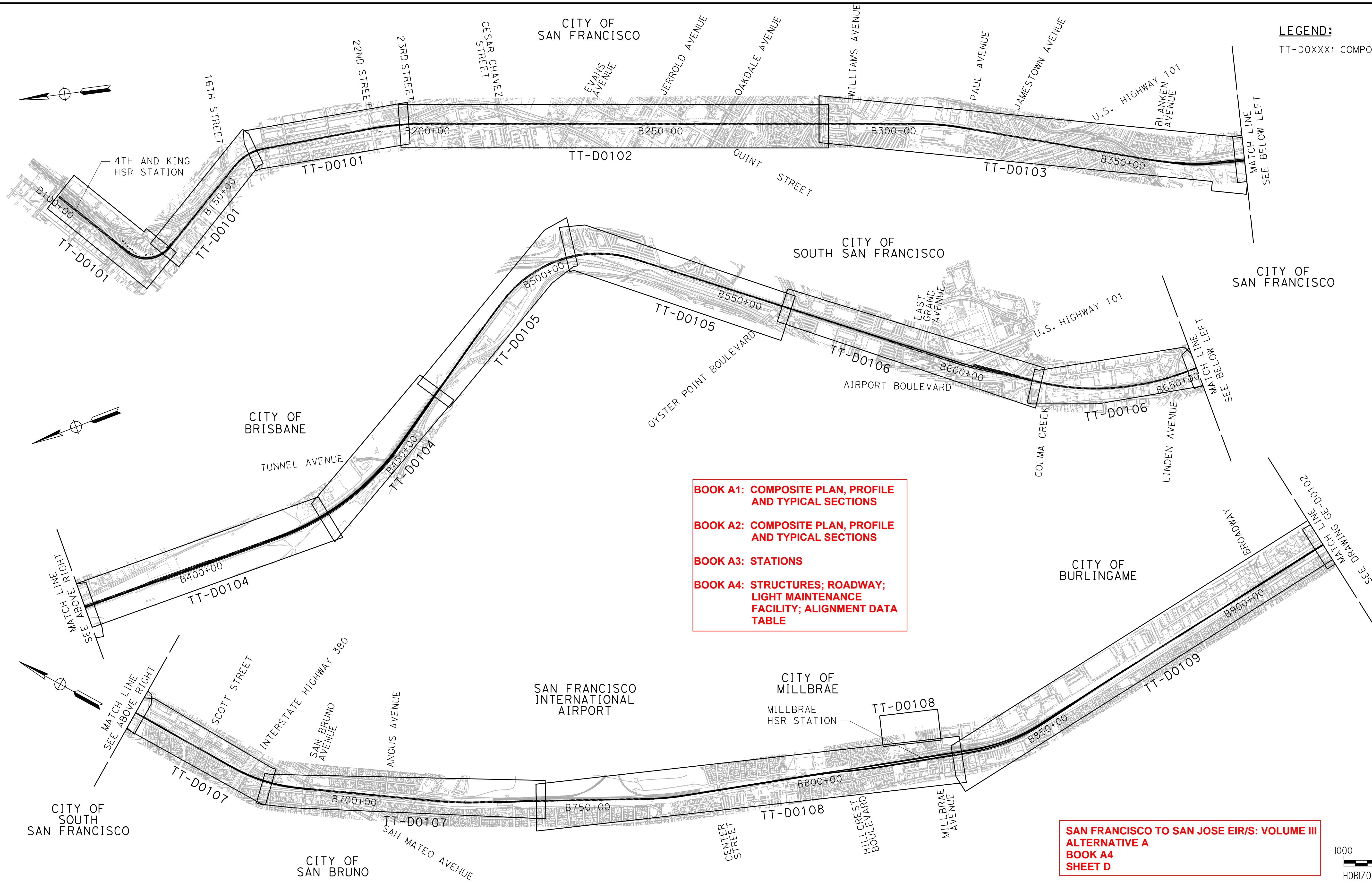
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HSR15-34

DRAWING NO.
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TT-D0XXX: COMPOSITE ROLL PLOT



BOOK A1: COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS
BOOK A2: COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS
BOOK A3: STATIONS
BOOK A4: STRUCTURES; ROADWAY; LIGHT MAINTENANCE FACILITY; ALIGNMENT DATA TABLE

BOOK A1

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
 ALTERNATIVE A
 BOOK A4
 SHEET D**



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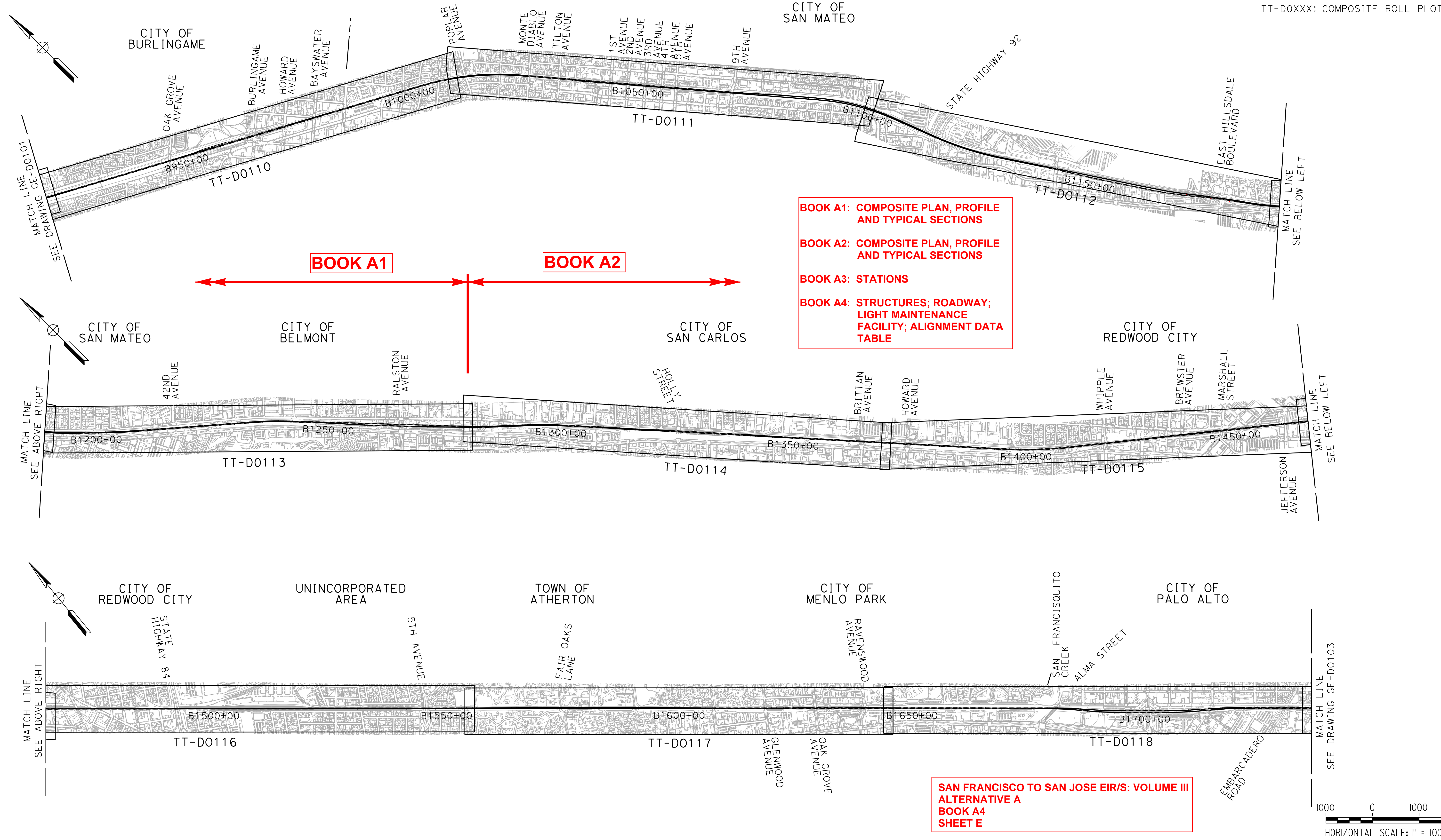
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 SAN FRANCISCO TO SAN JOSE**
 ALTERNATIVE A
 KEY MAP
 COMPOSITE PLAN
 SHEET 1 OF 3

CONTRACT NO.	HSR15-34
DRAWING NO.	GE-D1101
SCALE	AS SHOWN
SHEET NO.	



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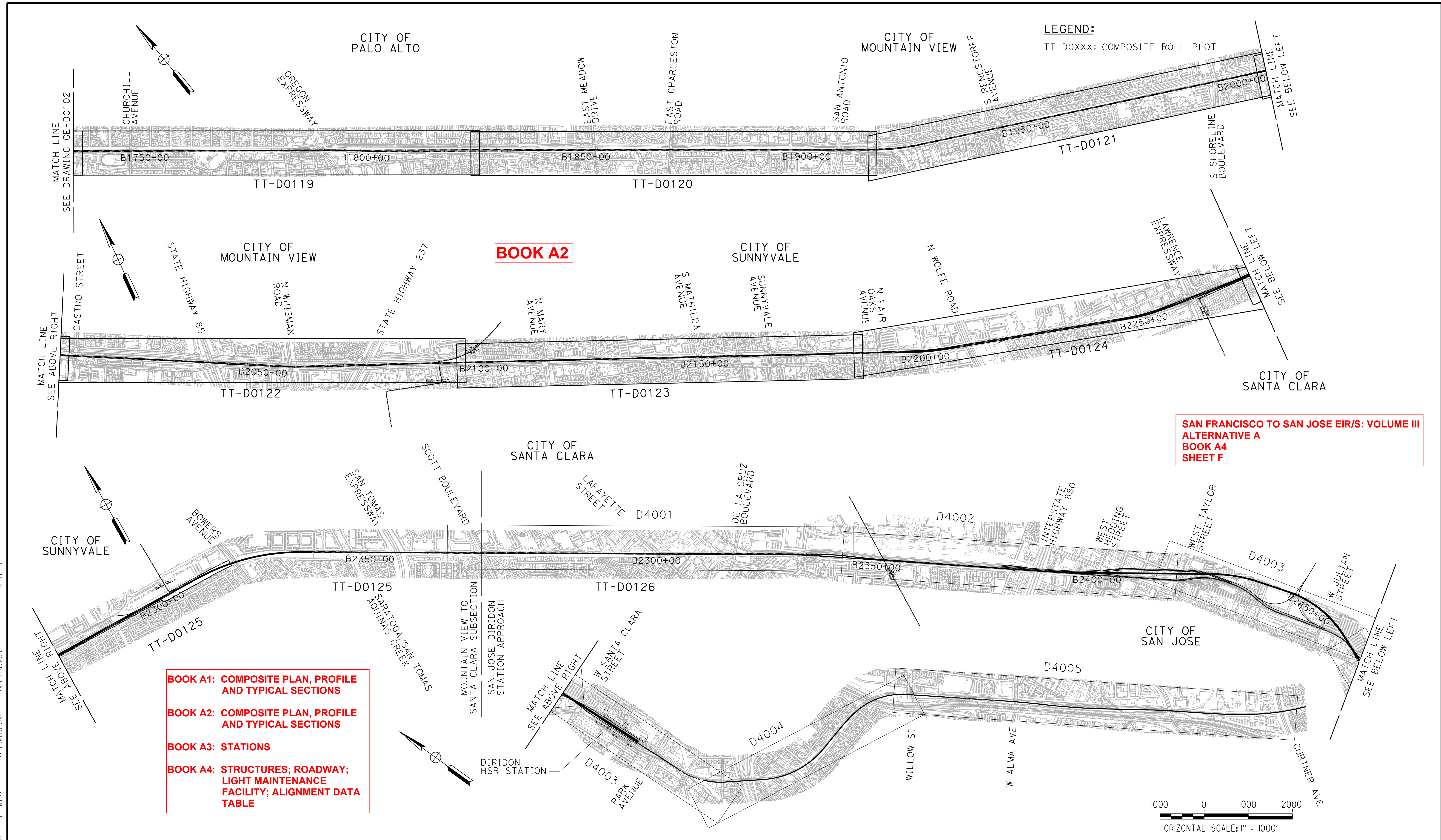
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
ALTERNATIVE A
KEY MAP
COMPOSITE PLAN
SHEET 2 OF 3

CONTRACT NO.	HSR15-34
DRAWING NO.	GE-D1102
SCALE	AS SHOWN
SHEET NO.	



BOOK A1: COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS

BOOK A2: COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS

BOOK A3: STATIONS

BOOK A4: STRUCTURES; ROADWAY; LIGHT MAINTENANCE FACILITY; ALIGNMENT DATA TABLE

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET F**

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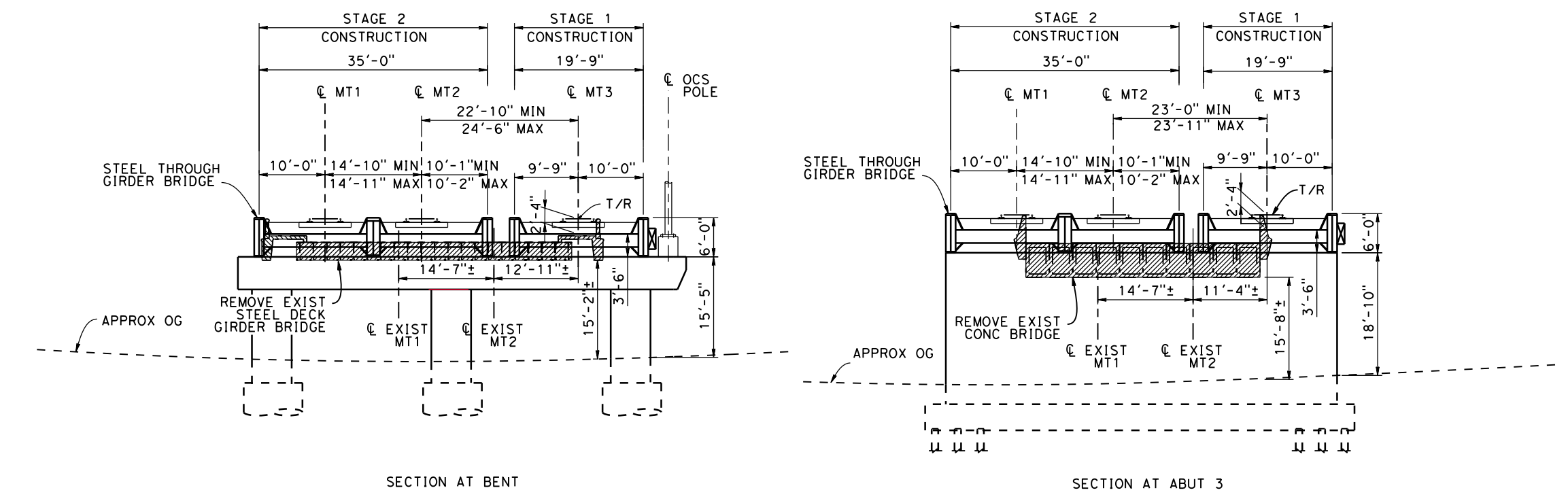
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Oakland, CA 94607

CALIFORNIA
High-Speed Rail Authority

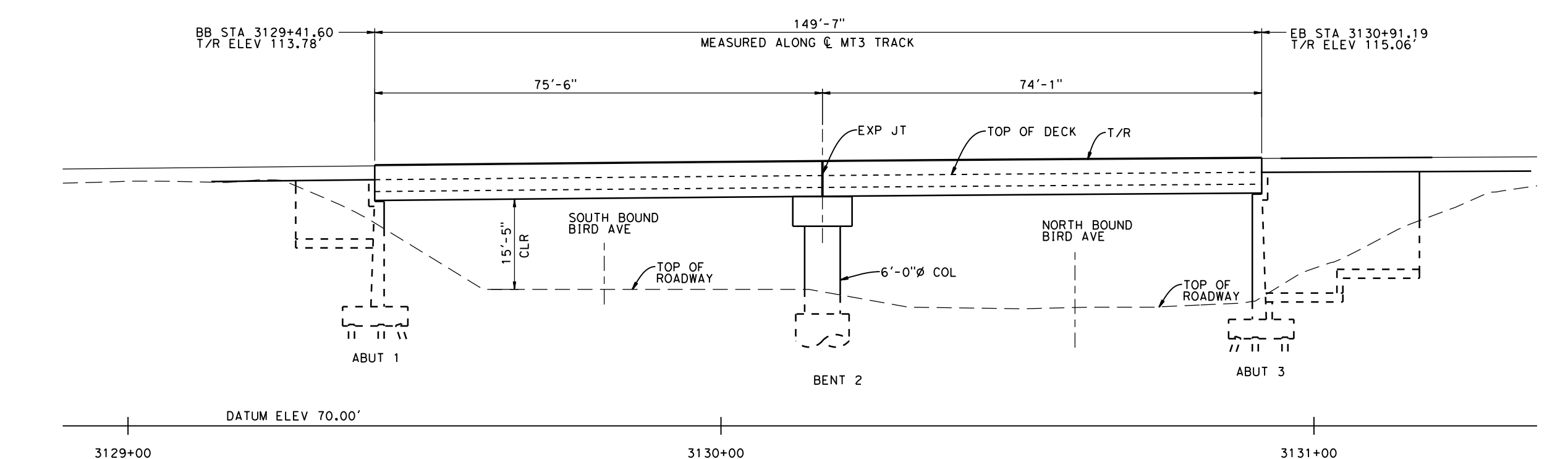
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**

ALTERNATIVE A
KEY MAP
COMPOSITE PLAN
SHEET 3 OF 3

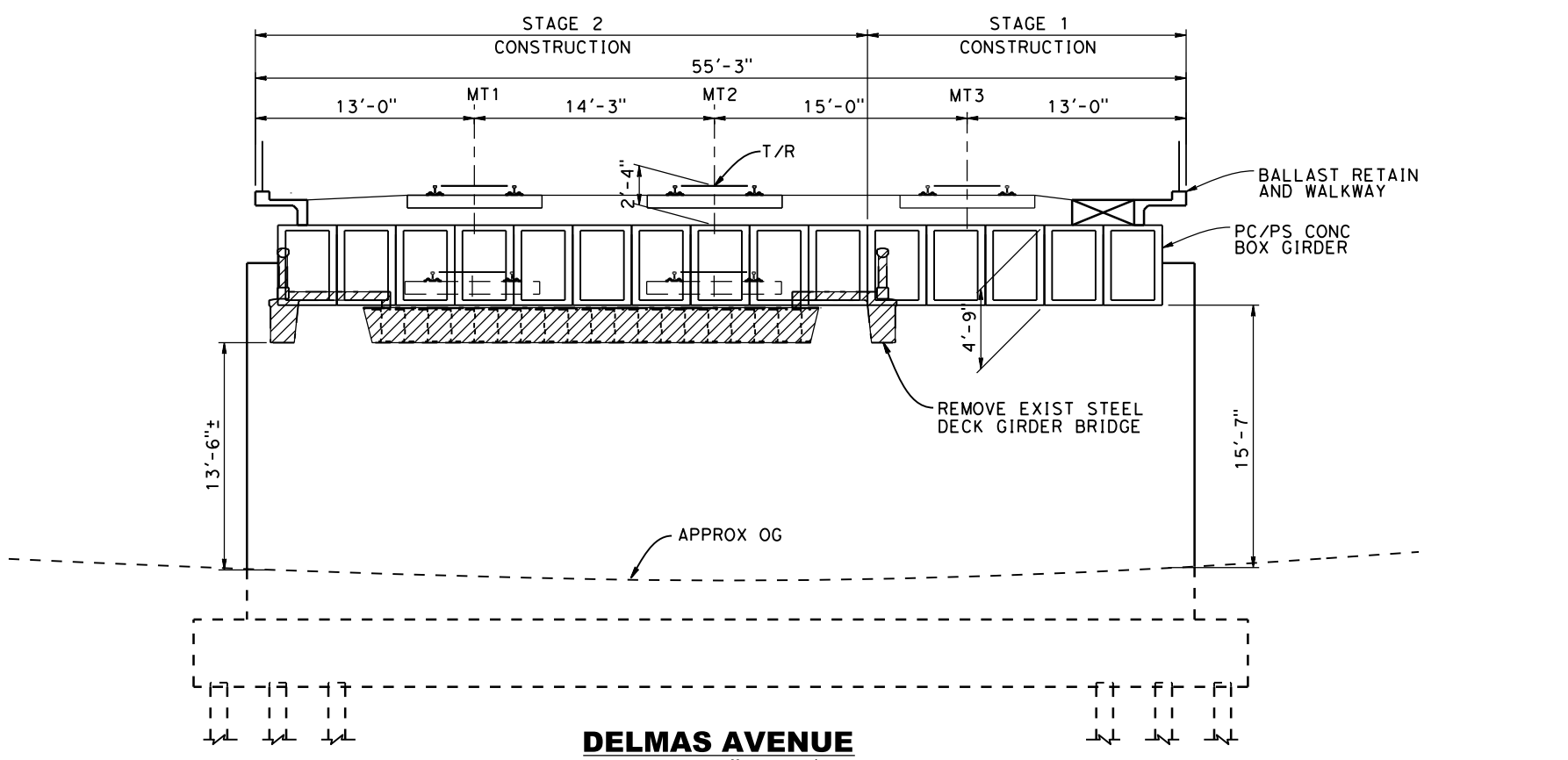
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DRAWING NO.	GE-D1103
SCALE	AS SHOWN
SHEET NO.	



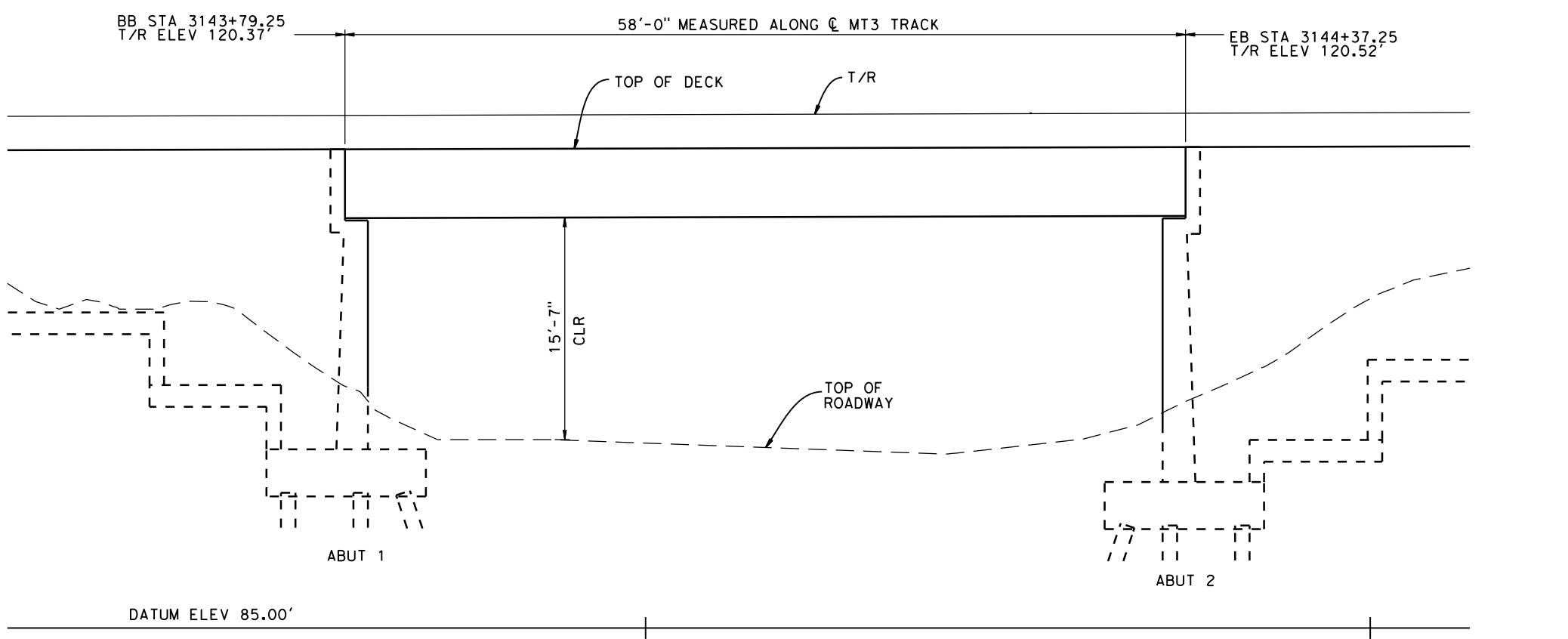
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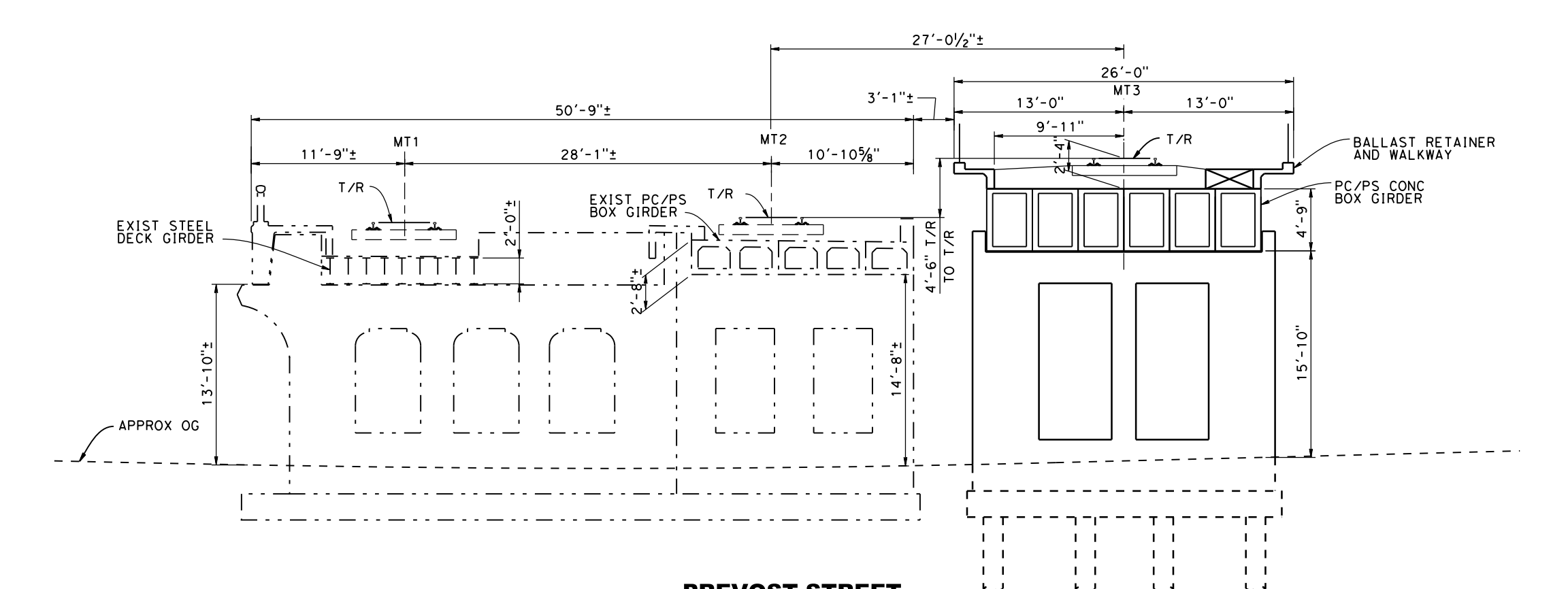
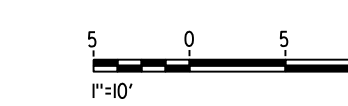
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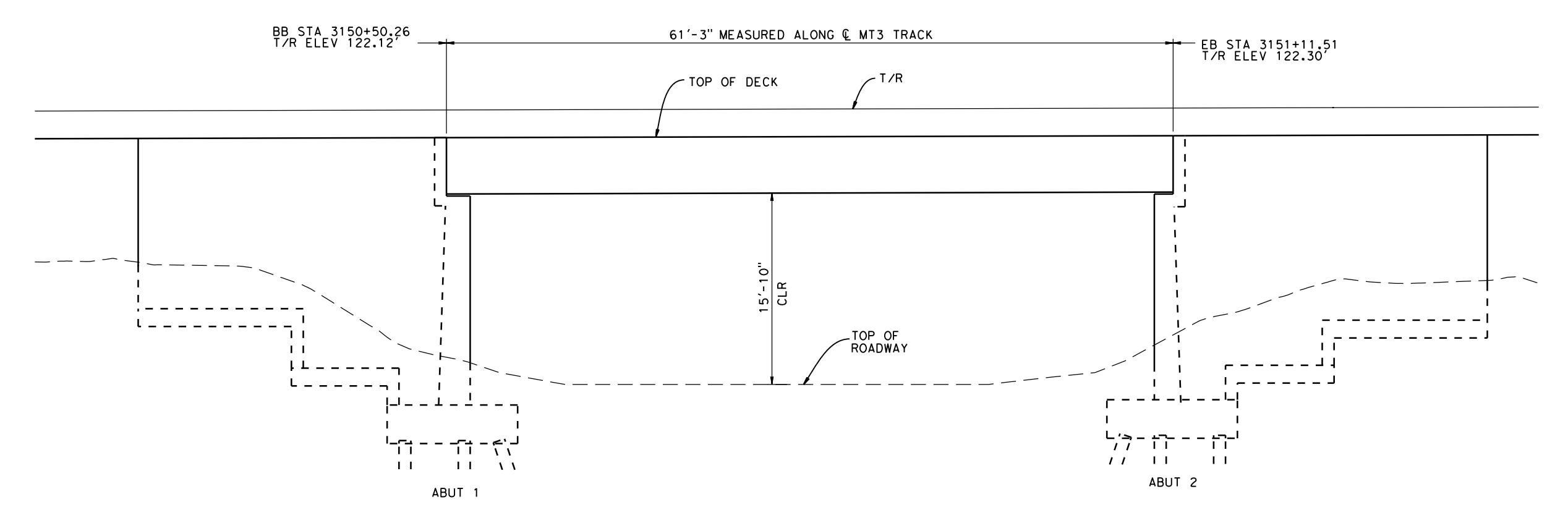
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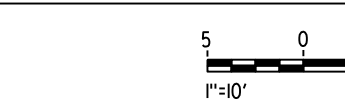
ELEVATION
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PREVOST STREET
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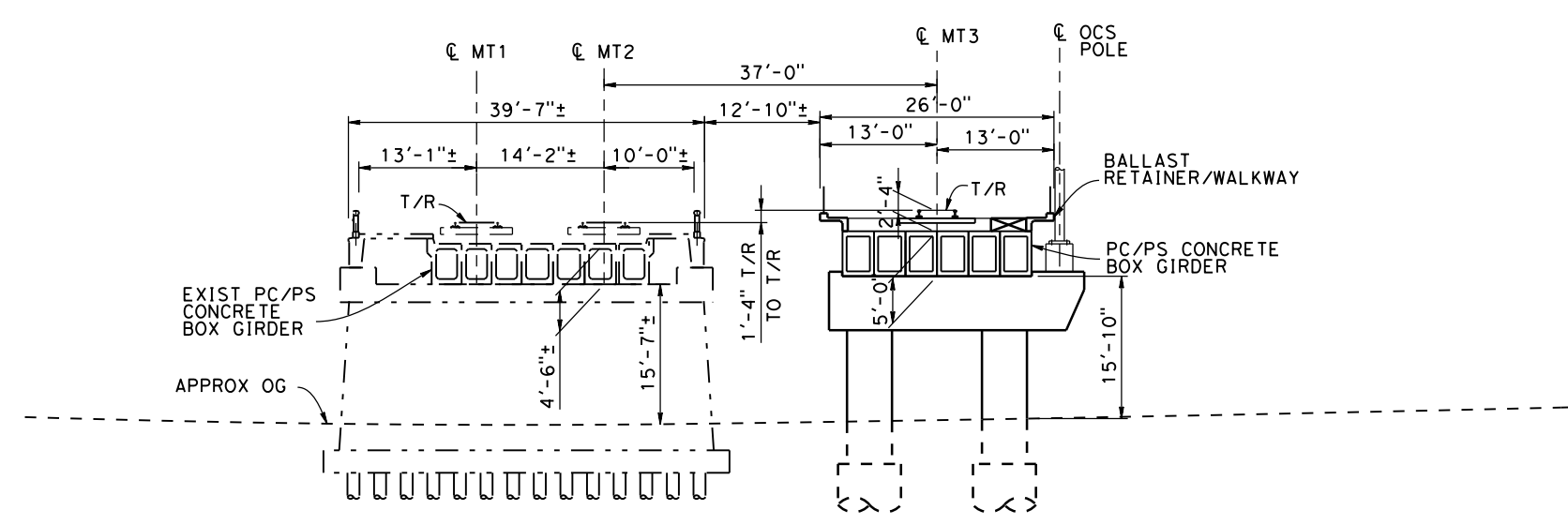


ELEVATION
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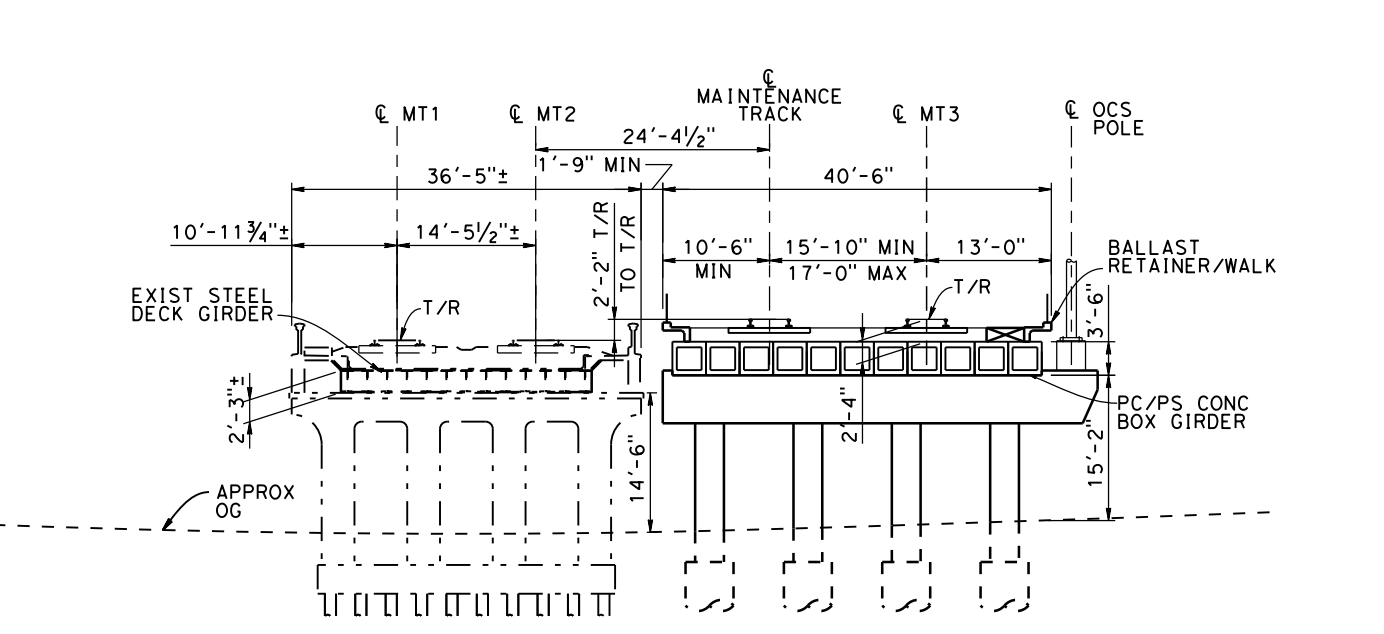


SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 61 OF 100

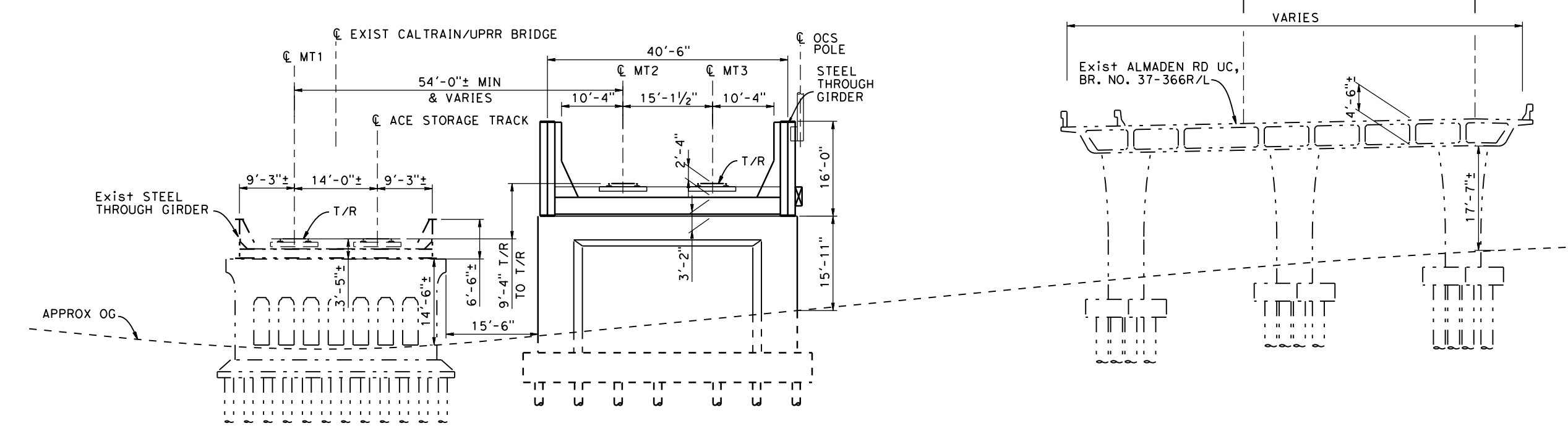
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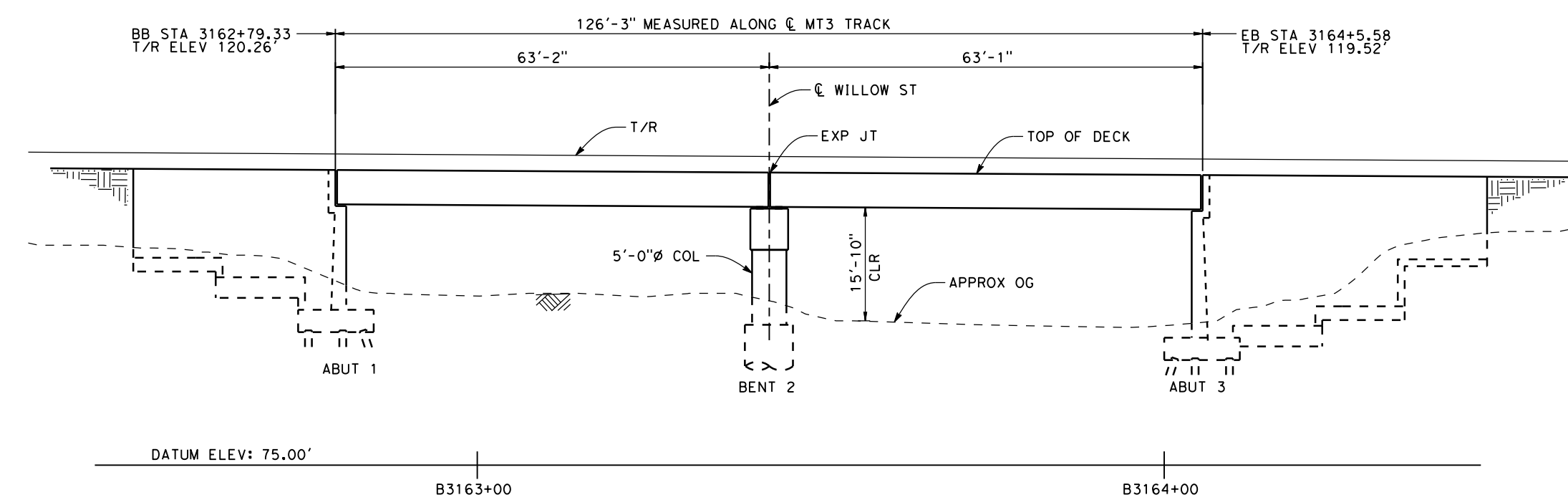
TYPICAL SECTION AT BENT 2
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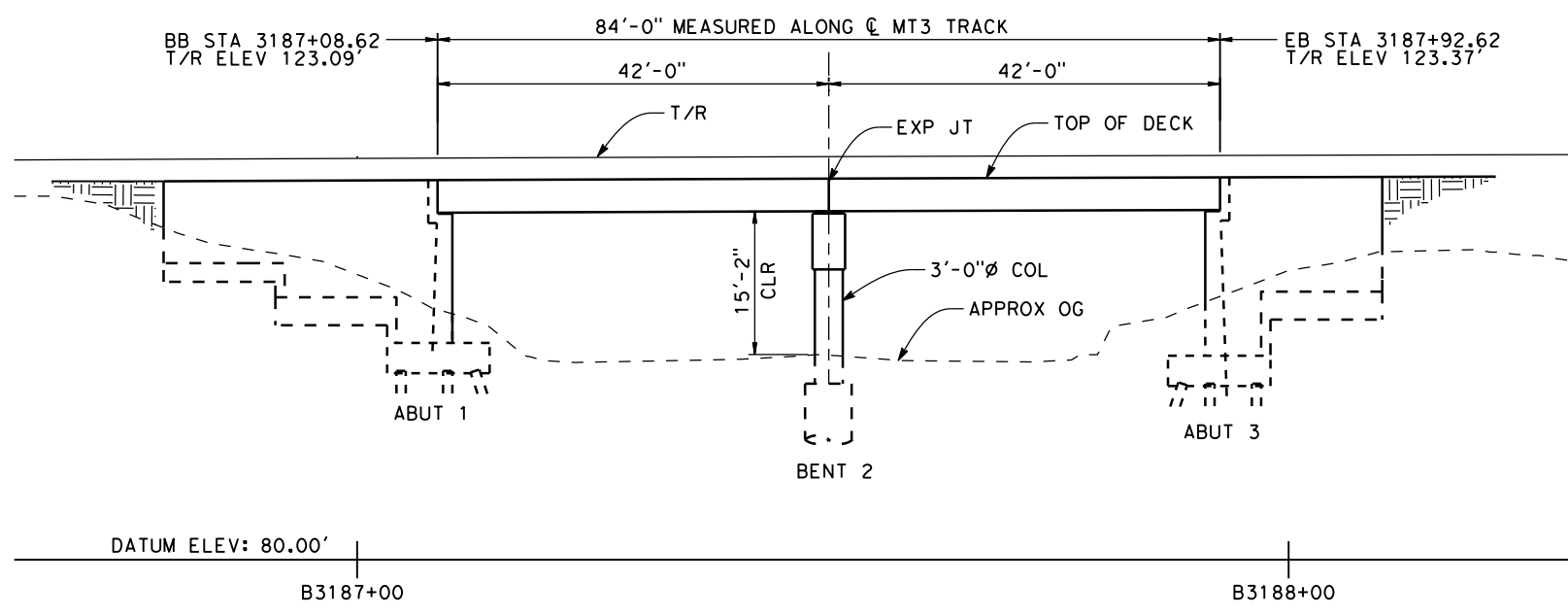
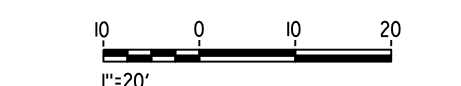
TYPICAL SECTION AT BENT 2
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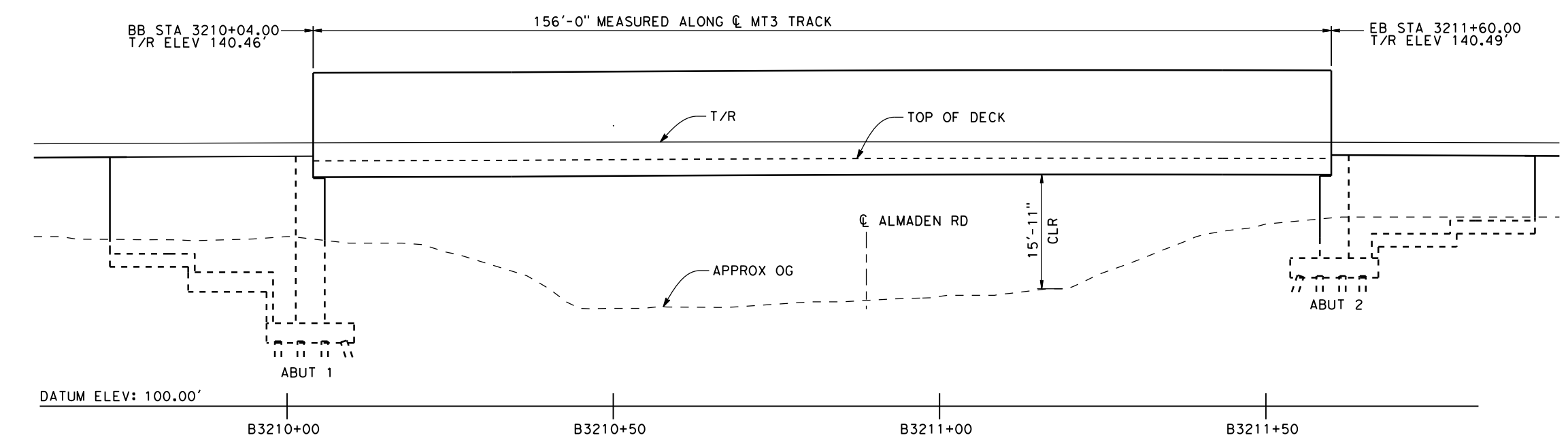
TYPICAL SECTION AT ABUT 2
SCALE: 1" = 20'



ELEVATION - WILLOW ST
SCALE: 1" = 20'



ELEVATION - ALMA
SCALE: 1" = 20'

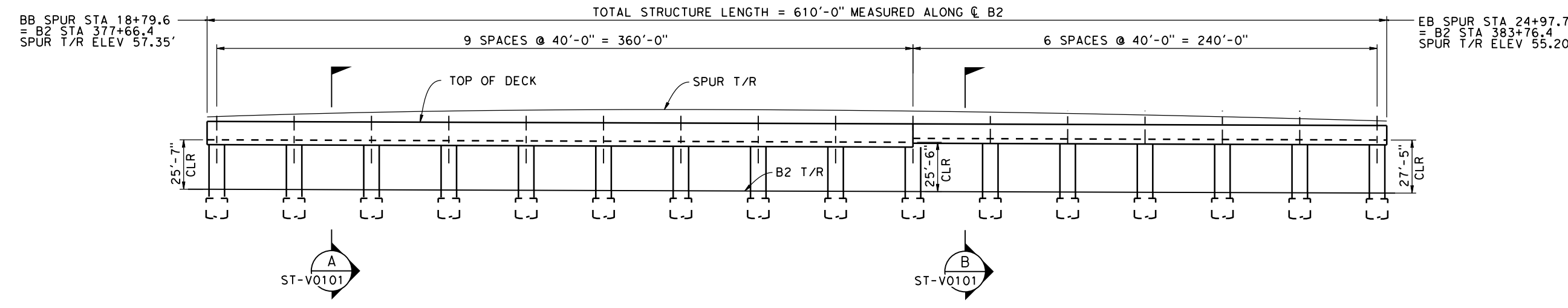


ELEVATION - ALMADEN RD
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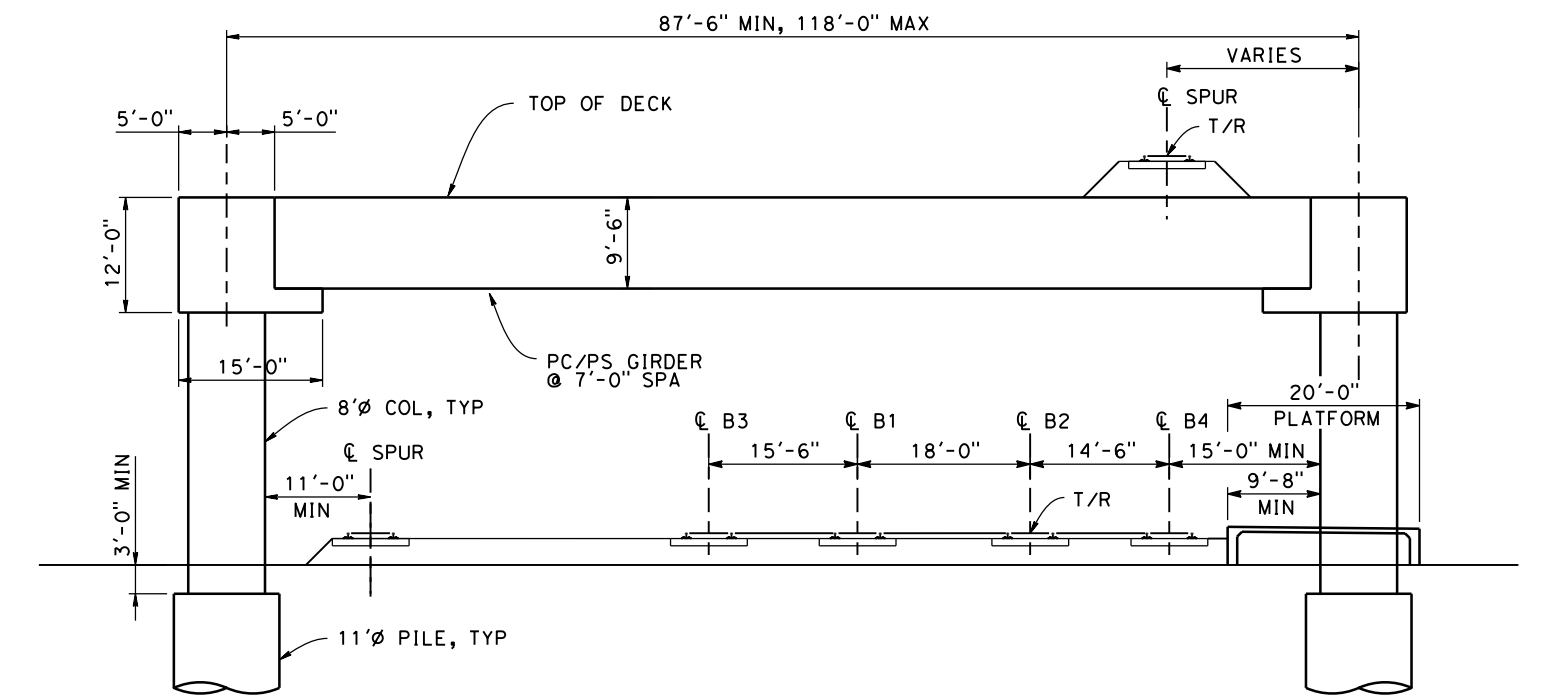


SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 62 OF 100

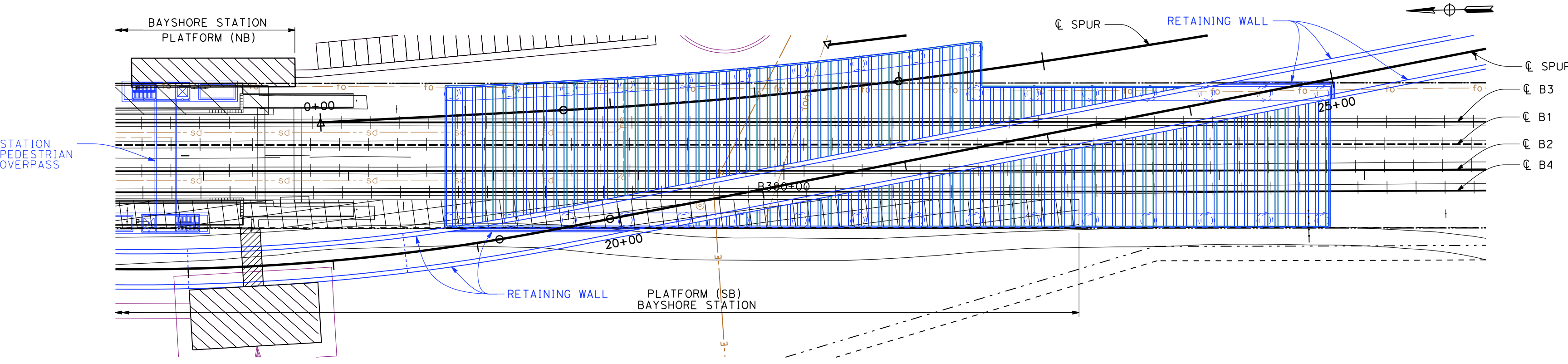
RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607	CALIFORNIA High-Speed Rail Authority	CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN JOSE TO MERCED CP COAST TO GILROY BLENDED AT-GRADE ALTERNATIVE UNDERPASSES GENERAL PLAN 3 OF 4	CONTRACT NO. HSR15-34 DRAWING NO. ST-T4003 SCALE AS SHOWN SHEET NO.
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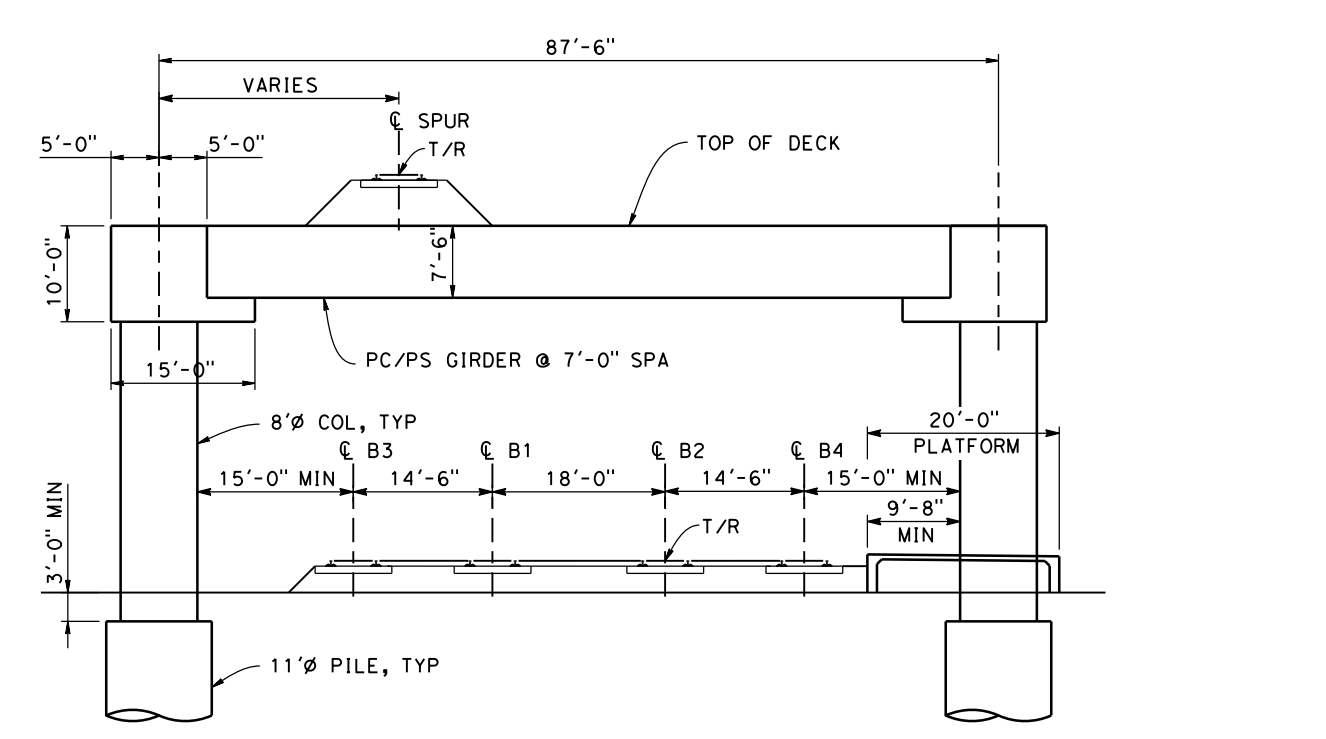
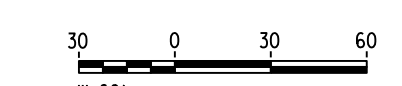
ELEVATION
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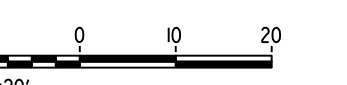
SECTION A-A
SCALE 1"=20'



PLAN
SCALE: 1" = 60'



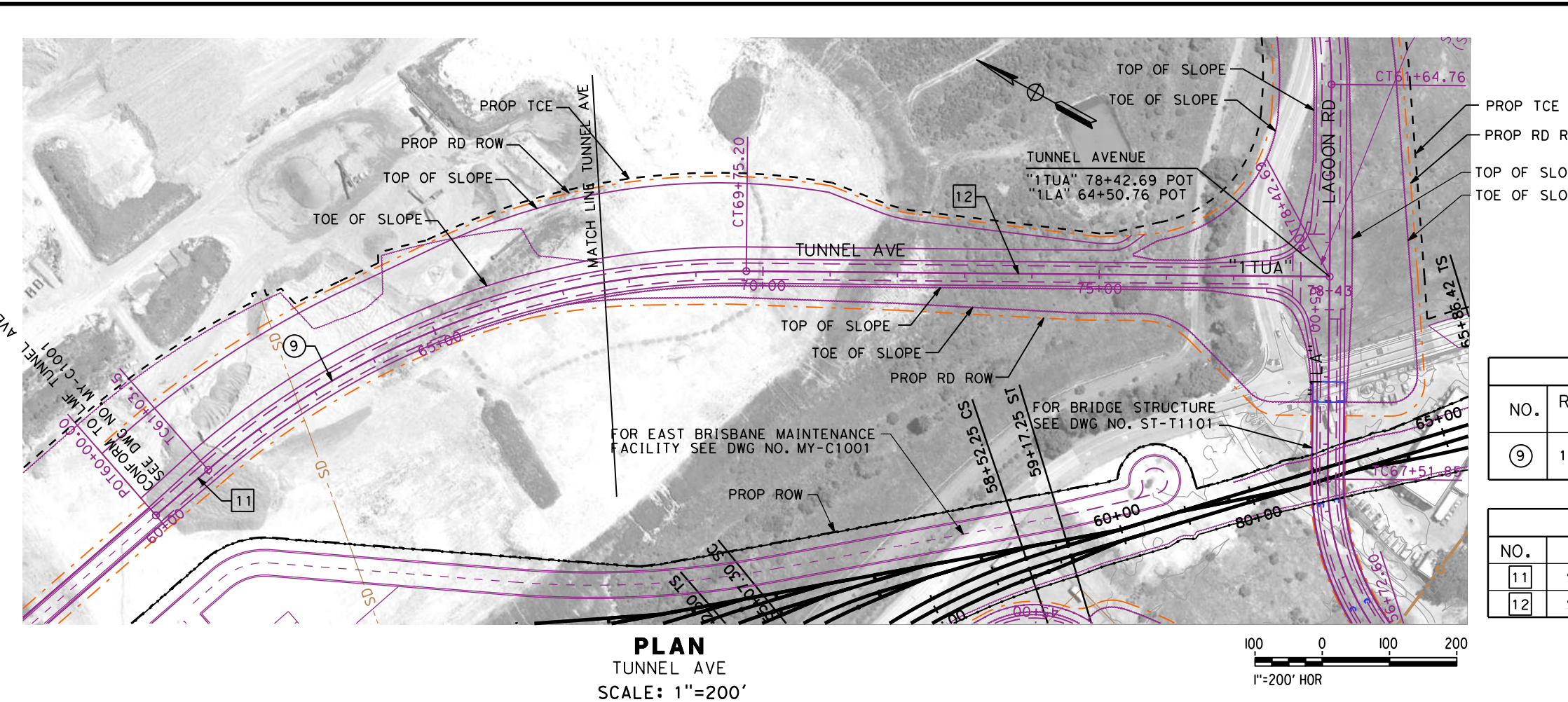
SECTION B-B
SCALE 1"=20'



NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 63 OF 100

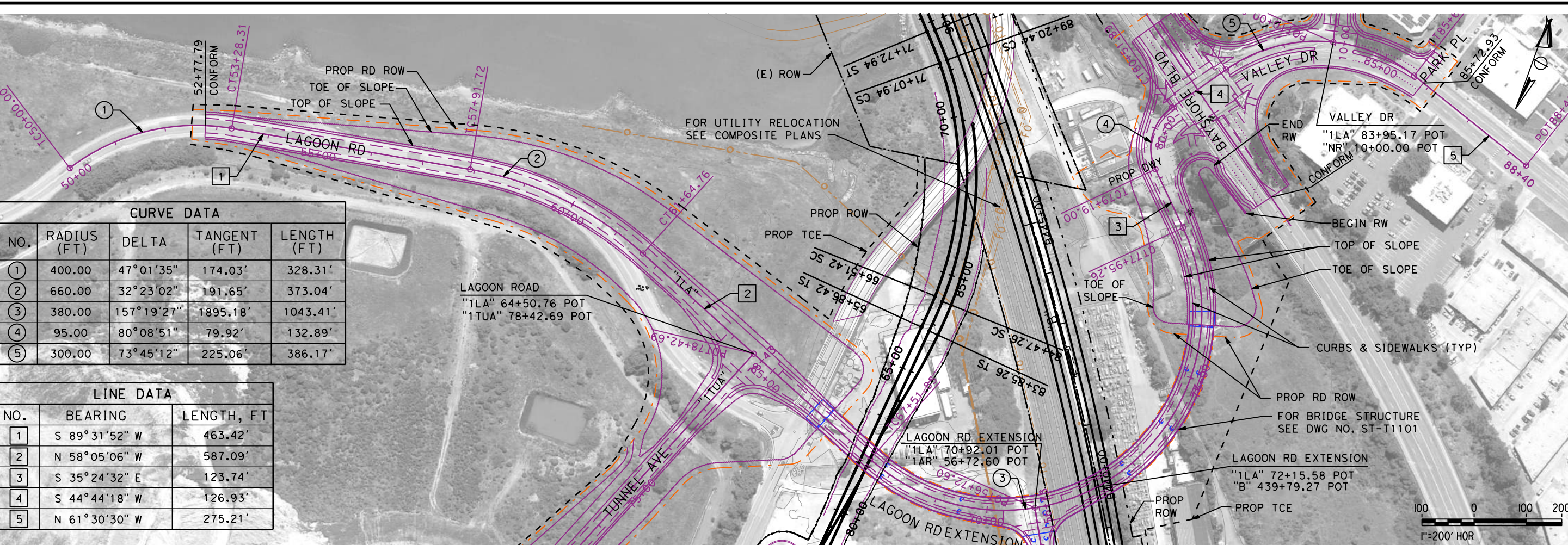
RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607		CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A COMPLEX STRUCTURES LMF LEAD TRACK PERGOLA GENERAL PLAN	CONTRACT NO. HSR15-34 DRAWING NO. ST-V0101 SCALE AS SHOWN SHEET NO.
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PLAN
TUNNEL AVE
SCALE: 1"=200'

CURVE DATA				
NO.	RADIUS (FT)	DELTA	TANGENT (FT)	LENGTH (FT)
9	1200.00	41°38'14"	456.28'	872.05'

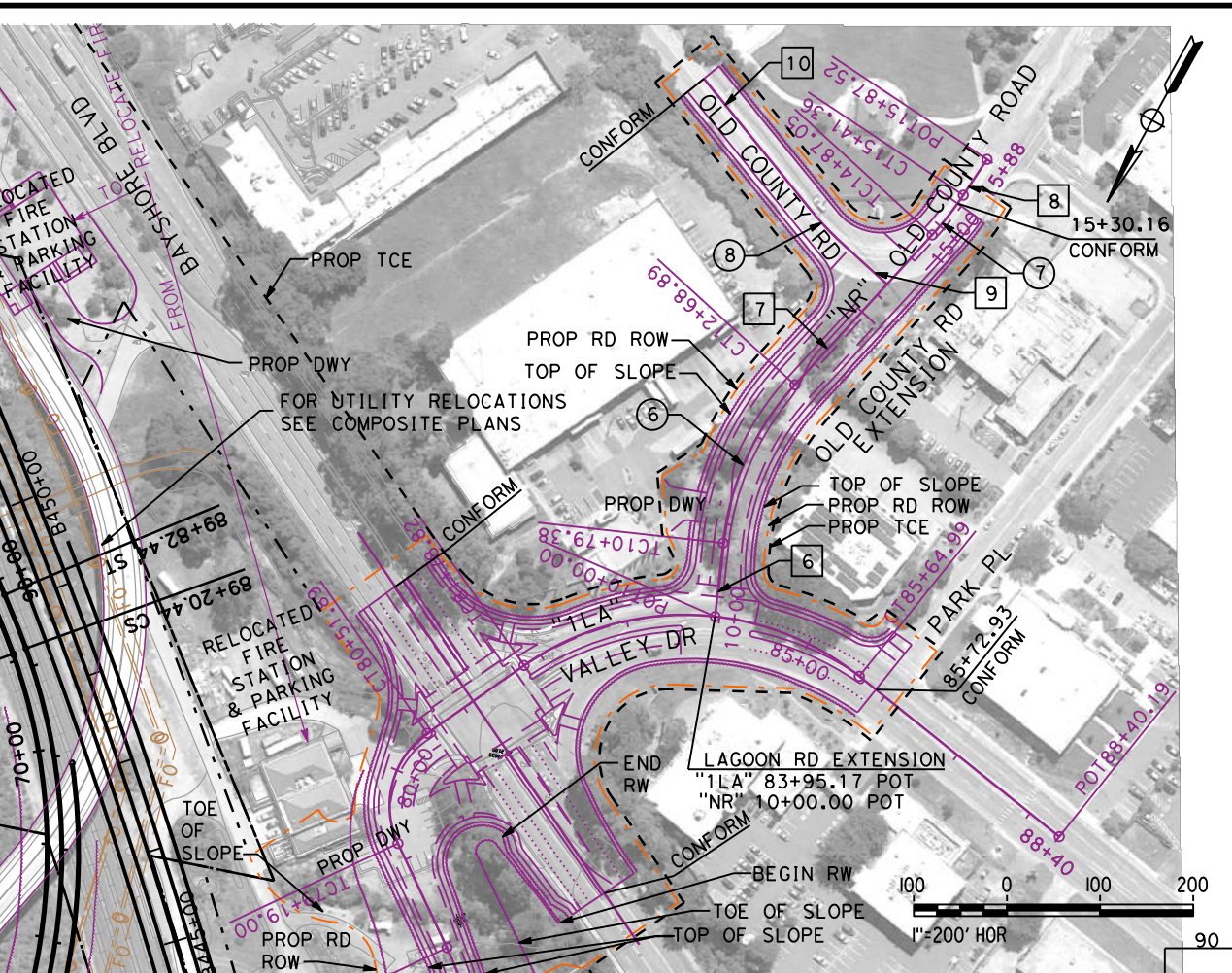
LINE DATA		
NO.	BEARING	LENGTH, FT
11	S 09°43'19" E	103.15'
12	S 31°54'54" E	867.49'



PLAN
LAGOON RD EXTENSION
SCALE: 1"=200'

CURVE DATA				
NO.	RADIUS (FT)	DELTA	TANGENT (FT)	LENGTH (FT)
1	400.00	47°01'35"	174.03'	328.31'
2	660.00	32°23'02"	191.65'	373.04'
3	380.00	157°19'27"	1895.18'	1043.41'
4	95.00	80°08'51"	79.92'	132.89'
5	300.00	73°45'12"	225.06'	386.17'

LINE DATA		
NO.	BEARING	LENGTH, FT
1	S 89°31'52" W	463.42'
2	N 58°05'06" W	587.09'
3	S 35°24'32" E	123.74'
4	S 44°44'18" W	126.93'
5	N 61°30'30" W	275.21'

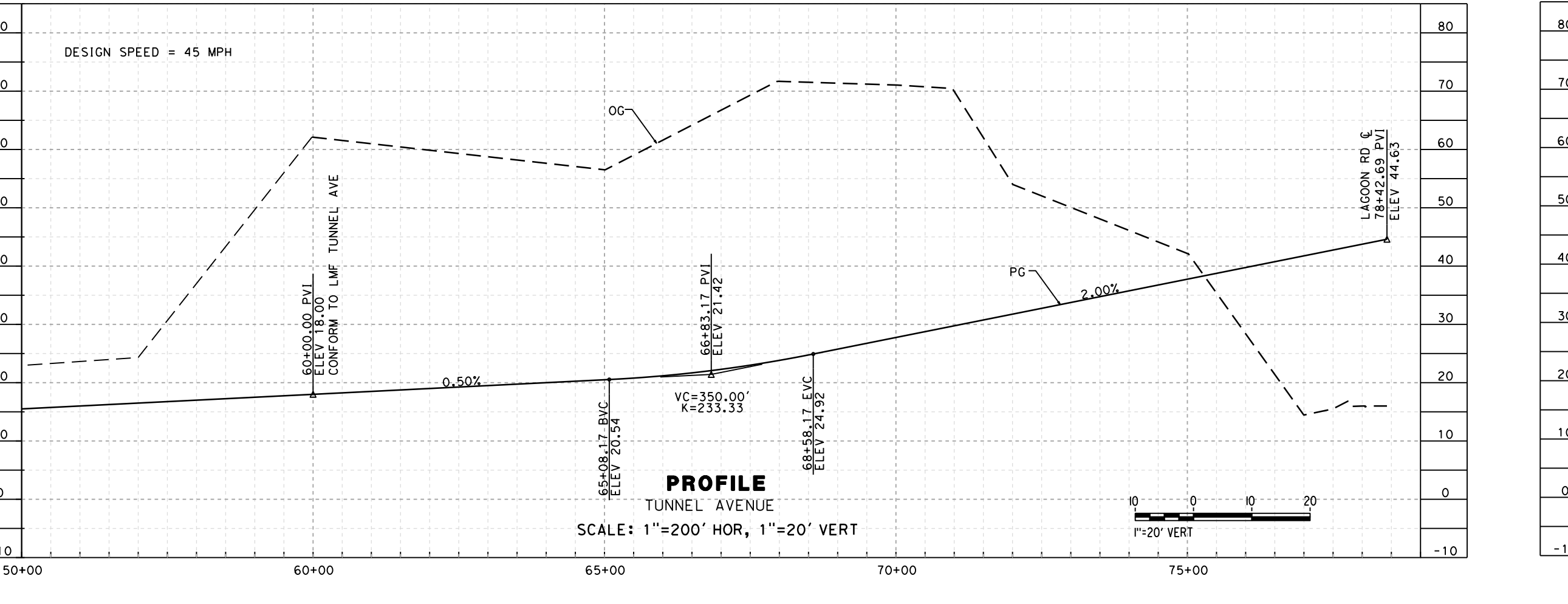


PLAN
OLD COUNTY RD EXTENSION
SCALE: 1"=200'

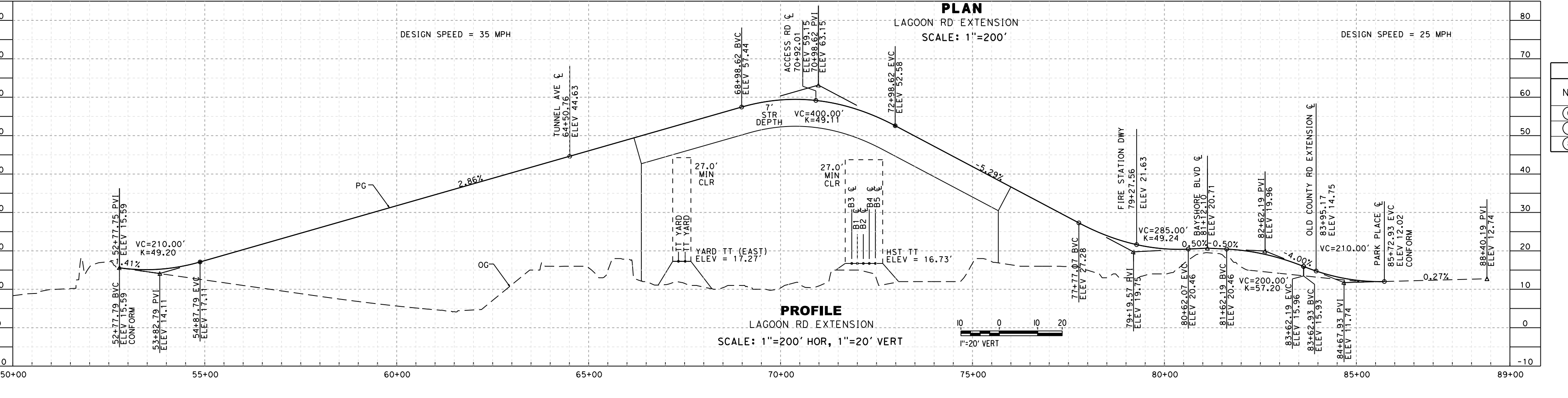
CURVE DATA				
NO.	RADIUS (FT)	DELTA	TANGENT (FT)	LENGTH (FT)
6	300.00	36°11'38"	98.04'	189.51'
7	350.00	08°53'21"	27.21'	54.30'
8	300.00	08°26'03"	22.12'	44.16'

LINE DATA		
NO.	BEARING	LENGTH, FT
6	S 03°56'25" E	79.38'
7	S 32°15'13" W	218.17'
8	S 23°21'52" W	46.16'
9	S 57°48'34" E	67.09'
10	S 49°22'31" E	184.84'

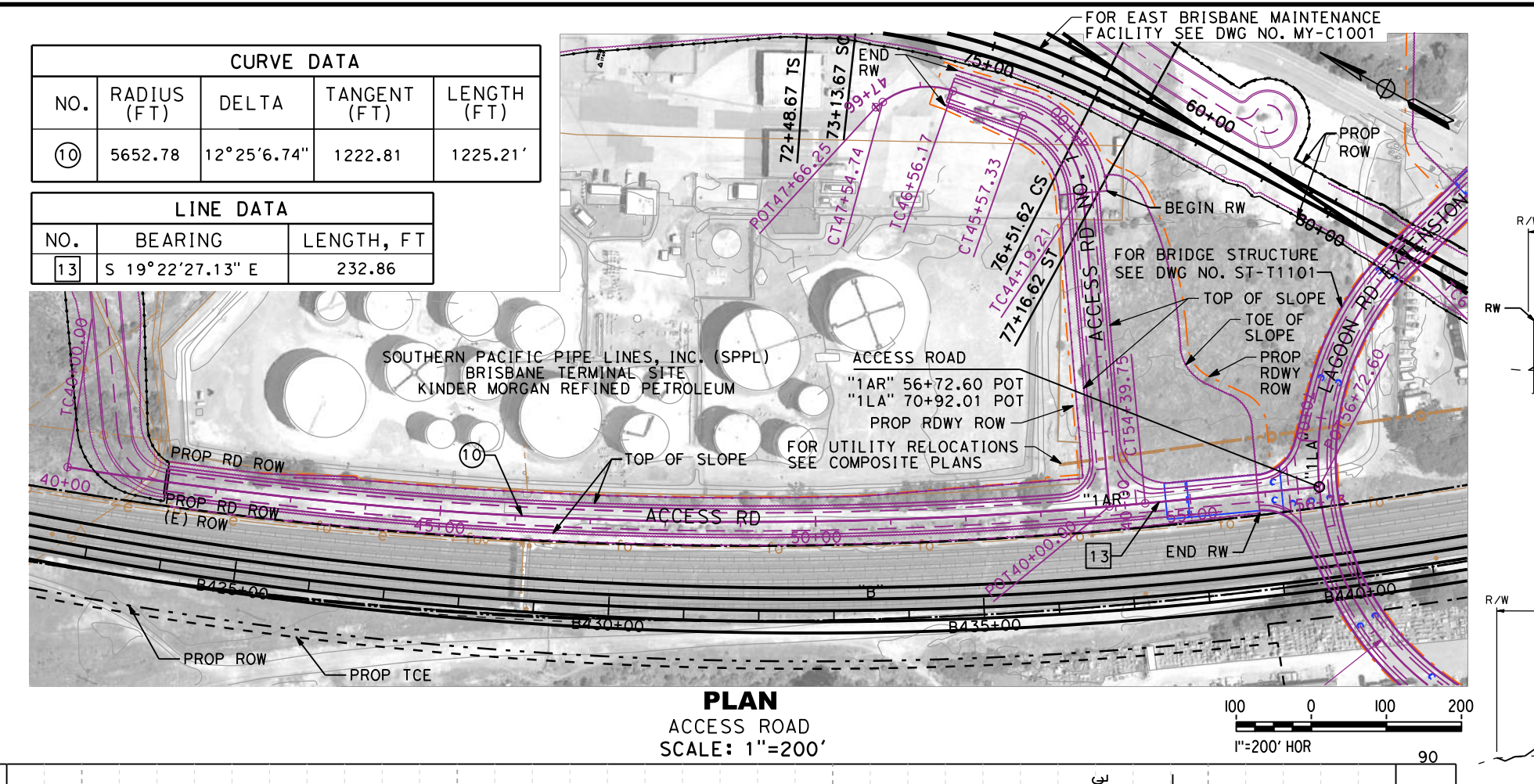
NO PROFILE FOR OLD COUNTY RD EXTENSION



PROFILE
TUNNEL AVENUE
SCALE: 1"=200' HOR, 1"=20' VERT



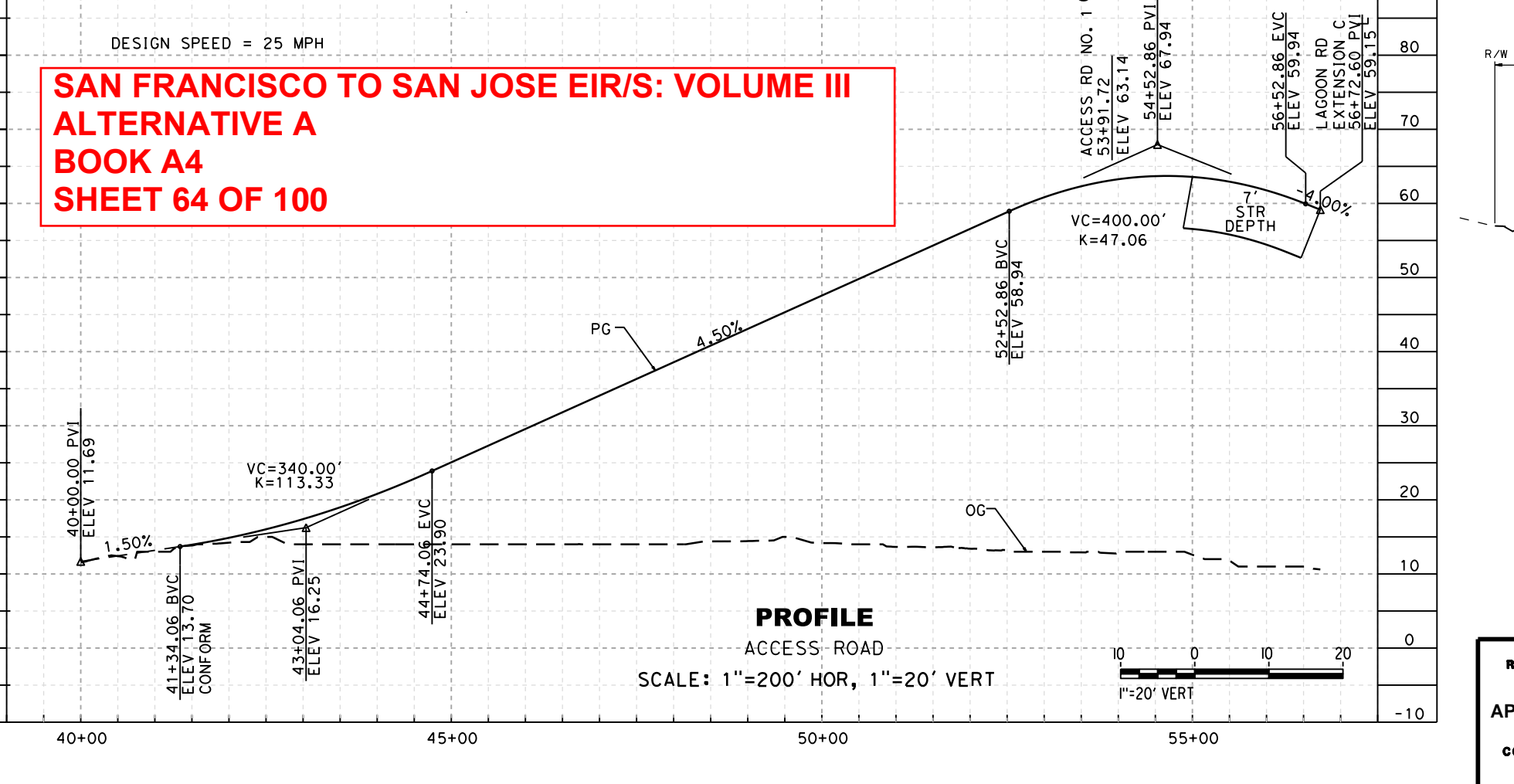
PROFILE
LAGOON RD EXTENSION
SCALE: 1"=200' HOR, 1"=20' VERT



PLAN
ACCESS ROAD
SCALE: 1"=200'

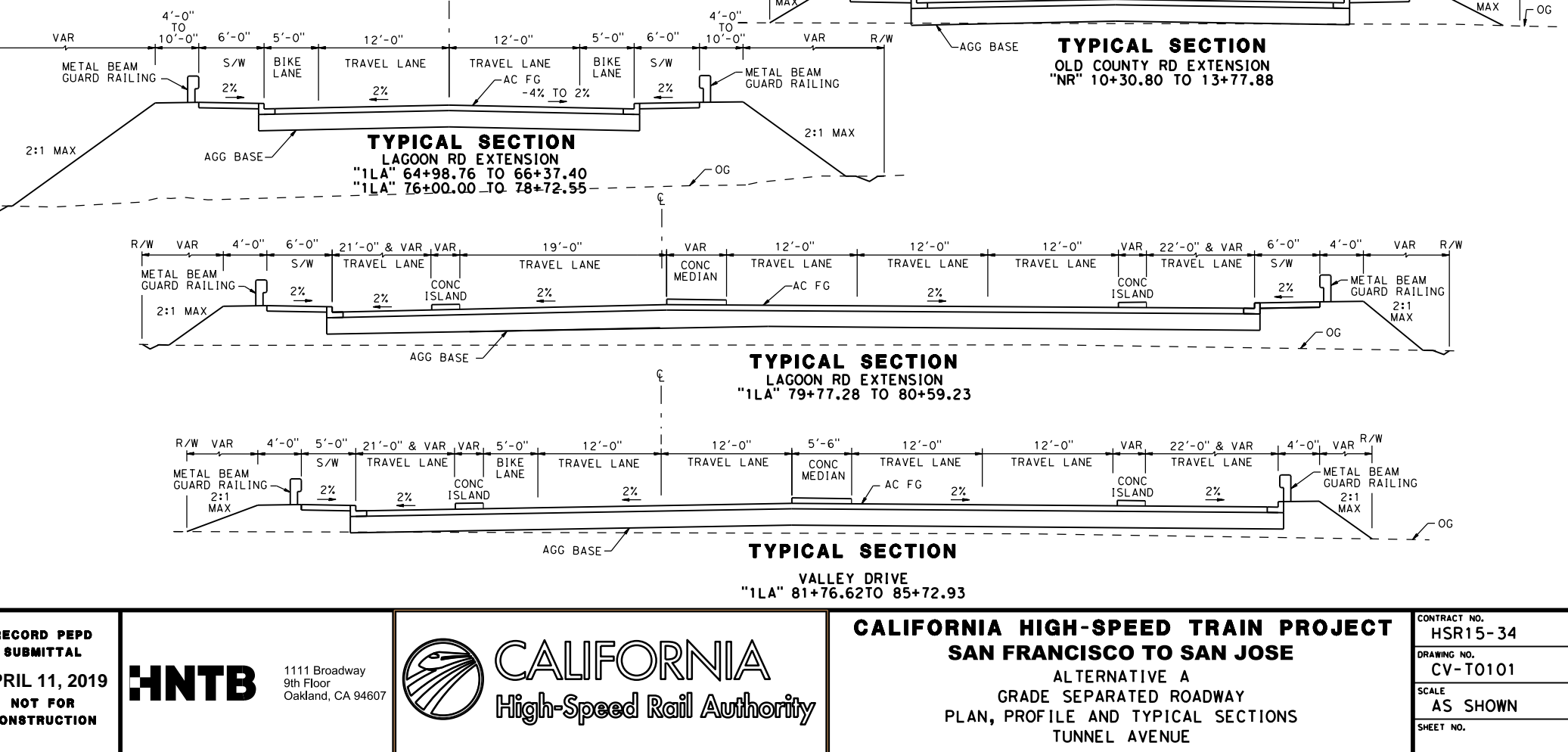
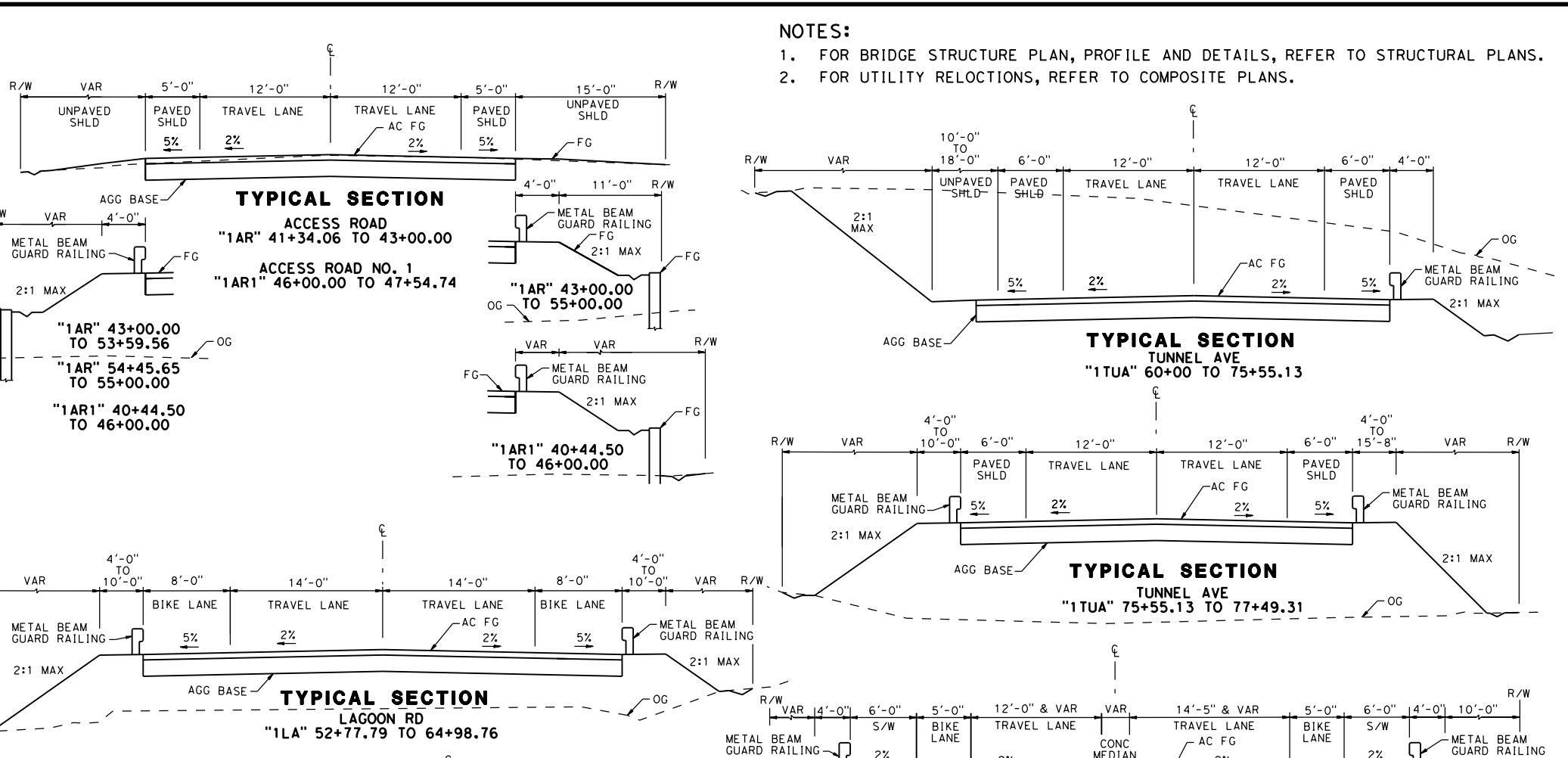
CURVE DATA				
NO.	RADIUS (FT)	DELTA	TANGENT (FT)	LENGTH (FT)
10	5652.78	12°25'6.74"	1222.81	1225.21'

LINE DATA		
NO.	BEARING	LENGTH, FT
13	S 19°22'27.13" E	232.86'



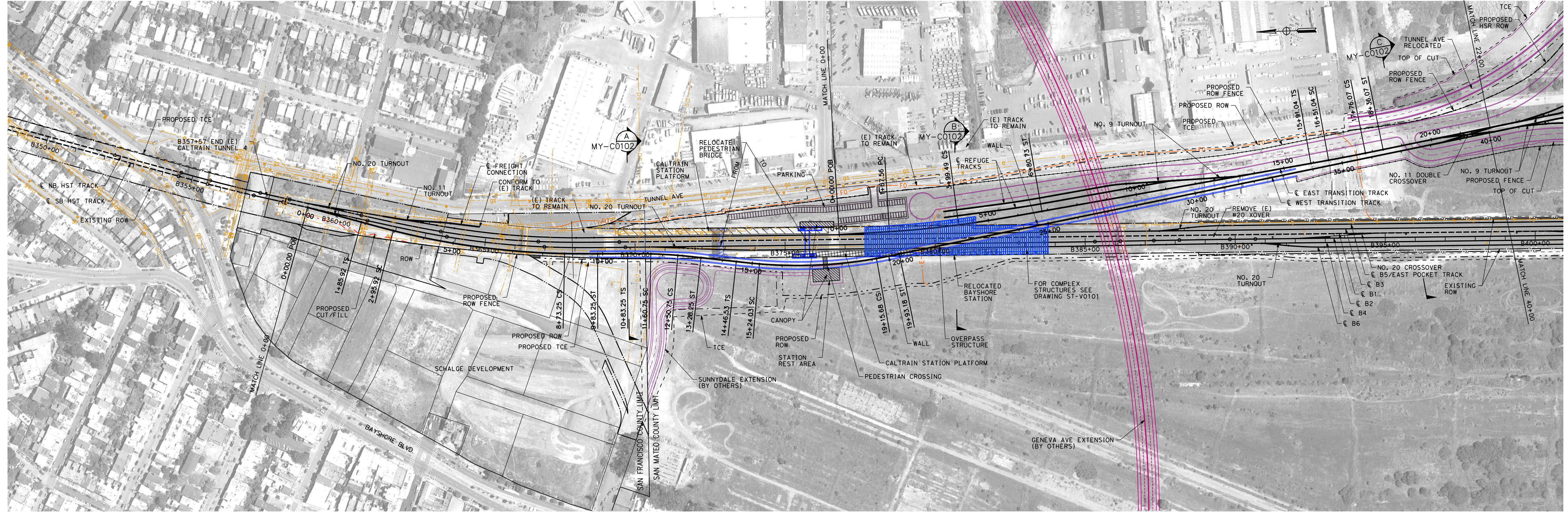
PROFILE
ACCESS ROAD
SCALE: 1"=200' HOR, 1"=20' VERT

**SAN FRANCISCO TO SAN JOSE EIRS: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 64 OF 100**



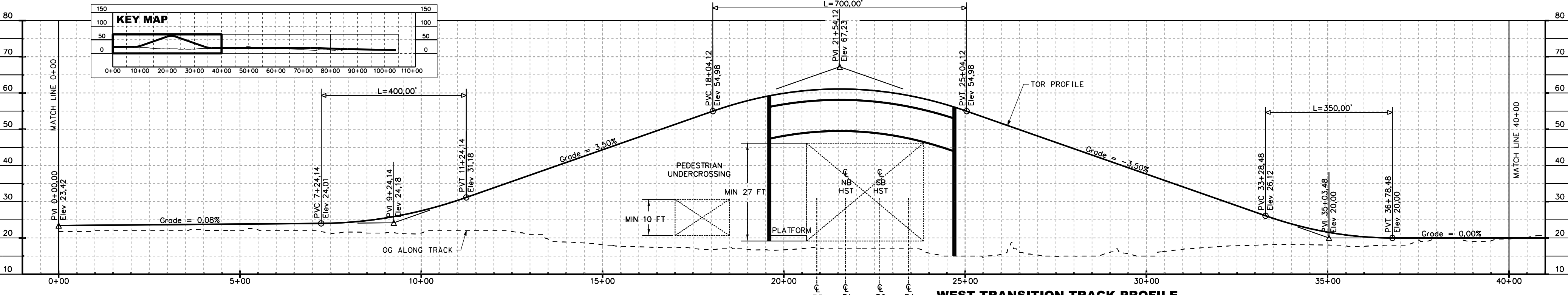
NOTES:
1. FOR BRIDGE STRUCTURE PLAN, PROFILE AND DETAILS, REFER TO STRUCTURAL PLANS.
2. FOR UTILITY RELOCATIONS, REFER TO COMPOSITE PLANS.

RECORD PREP SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607	CALIFORNIA High-Speed Rail Authority	CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A GRADE SEPARATED ROADWAY PLAN, PROFILE AND TYPICAL SECTIONS TUNNEL AVENUE	CONTRACT NO. HSR15-34 DRAWING NO. CV-T0101 SCALE AS SHOWN SHEET NO.
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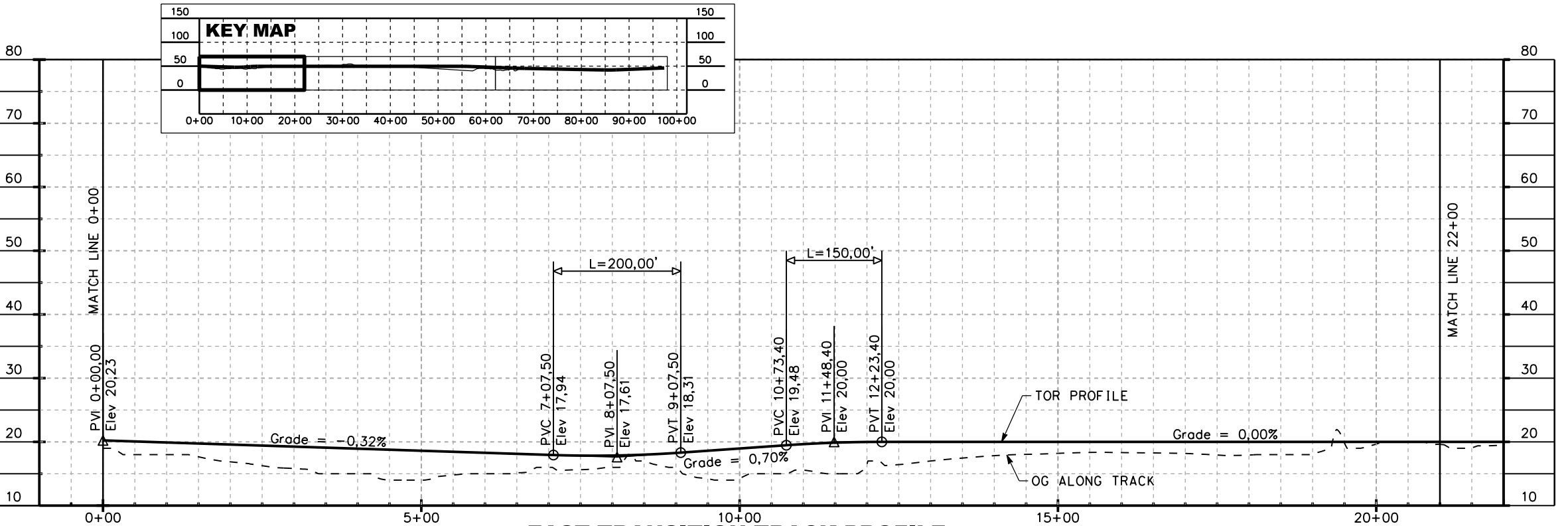


PLAN
SCALE: 1"=100'
1"=100' HOR
SCALE APPLICABLE FOR FULL SIZE ONLY

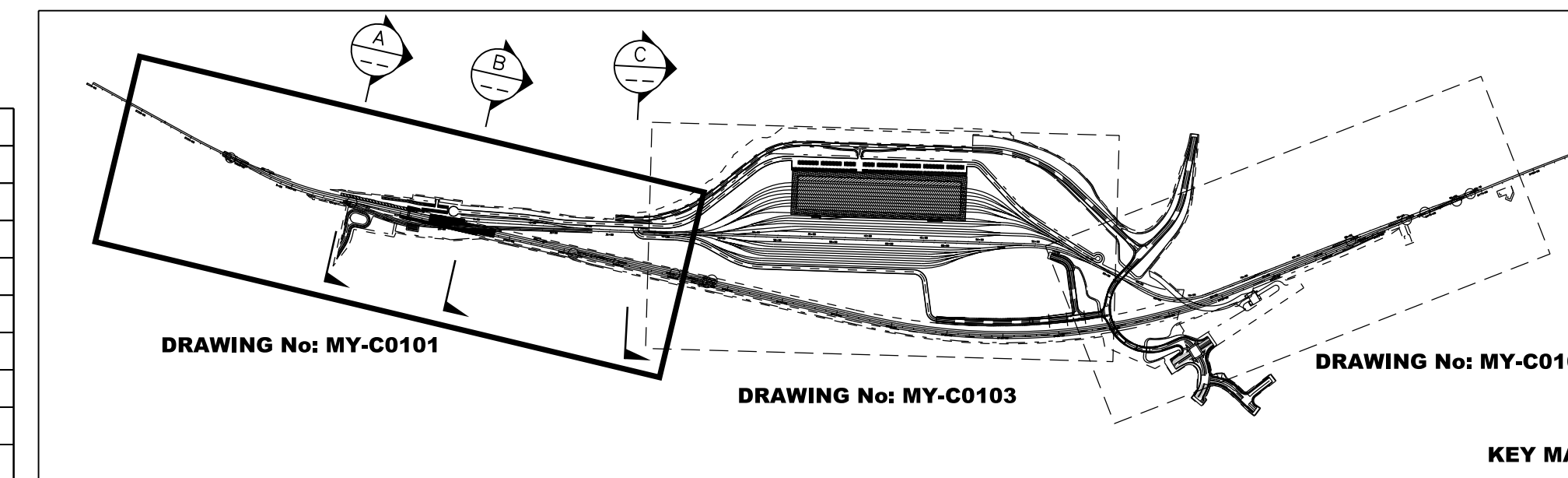
NOTES:
1. FOR UTILITY IMPACTS, ROADWAYS, STRUCTURES AND MAINLINE TRACK DESIGN, SEE COMPOSITE DRAWINGS FOR DETAIL.



WEST TRANSITION TRACK PROFILE
SCALE: 1"=100' HOR, 1"=10' VERT



EAST TRANSITION TRACK PROFILE
SCALE: 1"=100' HOR, 1"=10' VERT



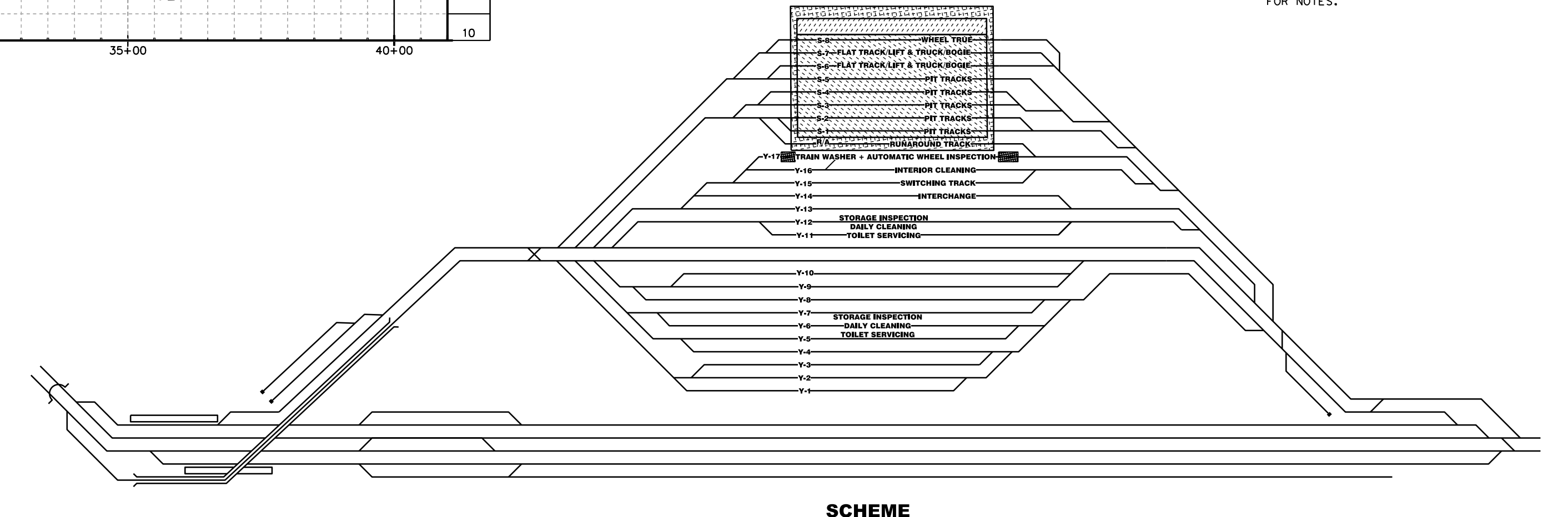
DRAWING No: MY-C0101

DRAWING No: MY-C0103

DRAWING No: MY-C0107

KEY MAP

NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.



SCHEME

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 65 OF 100

RECORD PERM SUBMITTAL
APRIL 11, 2019
NOT FOR CONSTRUCTION



1111 Broadway
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Oakland, CA 94607

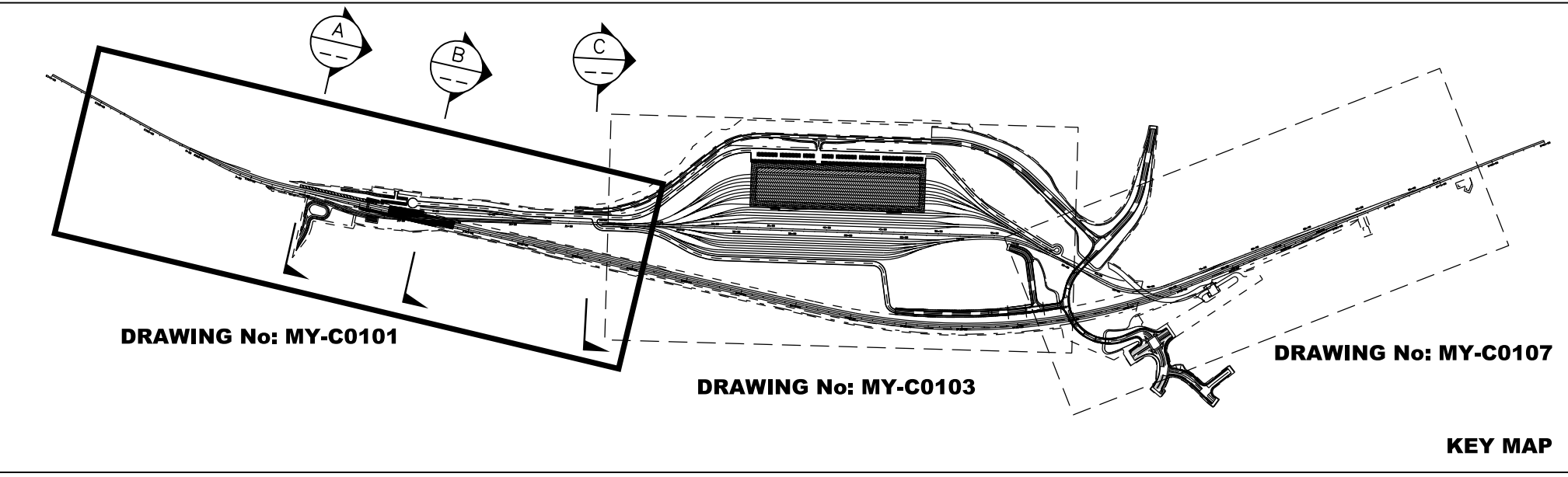


CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
ALTERNATIVE A
BRISBANE LIGHT MAINTENANCE FACILITY EAST
COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS

CONTRACT NO. HSR15-34
DRAWING NO. MY-C0101
SCALE AS SHOWN
SHEET NO.

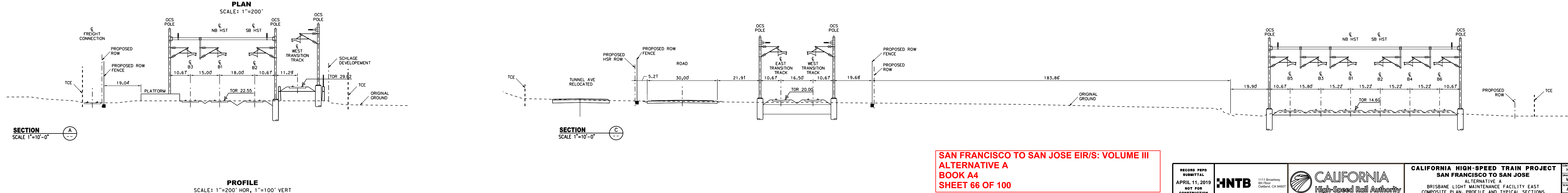
WEST TRANSITION TRACK GEOMETRY DATA

CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
1	TANGENT	POB	0+00.00	2087104.17	6011706.61									S 17°14'37" W		
	TANGENT	TS	1+85.32	2086926.61	6011650.89											
	CLOTHOID	FS	1+85.32	2086926.61	6011650.89		110	1°14'09"	55	0.2					S 17°14'37" W	S 16°00'28" W
	CLOTHOID	SPI	2+99.25	2086856.97	6011629.15											
	CLOTHOID	SC	2+99.25	2086821.33	6011619.04											
	ARC	SC	2+99.25	2086821.33	6011619.04											
	ARC	PI	5+85.82	2086542.66	6011539.09	2550	577.33	12°58'19"			44	1.75	1.692		S 16°00'28" W	S 3°02'09" W
	ARC	CC	8+73.25	2086118.12	6011401.16											
	ARC	CS	8+73.25	2086253.16	6011523.74											
	CLOTHOID	CS	8+73.25	2086253.16	6011523.74										S 3°02'09" W	S 1°48'00" W
	CLOTHOID	SPI	9+09.92	2086216.55	6011521.8		110	1°14'09"	55	0.2						
	CLOTHOID	ST	9+83.25	2086143.25	6011519.49											
TANGENT	ST	9+83.25	2086143.25	6011519.49										S 1°48'00" W		
TANGENT	TS	10+83.25	2086043.3	6011516.35												
CLOTHOID	TS	10+83.25	2086043.3	6011516.35										S 1°48'00" W	S 3°19'40" W	
CLOTHOID	SPI	11+34.92	2085991.65	6011514.33		77.5	1°28'49"	38.75	0.17							
CLOTHOID	SC	11+60.75	2085965.86	6011513.25												
ARC	SC	11+60.75	2085965.86	6011513.25										S 3°19'40" W	S 6°45'56" W	
ARC	PI	12+05.76	2085920.92	6011510.68	1500	90	3°26'16"			34	1.50	1.583				
ARC	CC	12+05.76	2085920.92	6011510.68												
ARC	CS	12+50.75	2085876.22	6011505.41												
CLOTHOID	CS	12+50.75	2085876.22	6011505.41										S 6°45'56" W	S 8°17'37" W	
CLOTHOID	SPI	12+76.58	2085850.56	6011502.39		77.5	1°28'49"	38.75	0.17							
CLOTHOID	SC	13+28.25	2085799.42	6011495.02												
TANGENT	SC	13+28.25	2085799.42	6011495.02										S 8°17'37" W		
TANGENT	TS	14+46.53	2085682.35	6011478.16												
CLOTHOID	TS	14+46.53	2085682.35	6011478.16										S 8°17'37" W	S 6°51'40" W	
CLOTHOID	SPI	14+88.19	2085612.19	6011470.19		77.5	1°28'49"	38.75	0.17							
CLOTHOID	SC	15+24.03	2085605.55	6011467.77												
ARC	SC	15+24.03	2085605.55	6011467.77										S 6°51'40" W	S 8°17'24" E	
ARC	PI	17+20.97	2085409.36	6011444.73	1500	391.65	14°57'36"			34	1.50	1.583				
ARC	CC	17+20.97	2085409.36	6011444.73												
ARC	CS	19+15.68	2085215.05	6011472.36												
CLOTHOID	CS	19+15.68	2085215.05	6011472.36										S 8°17'24" E	S 9°43'20" E	
CLOTHOID	SPI	19+41.51	2085189.48	6011476.66		77.5	1°28'49"	38.75	0.17							
CLOTHOID	ST	19+93.18	2085138.55	6011485.39												



EAST TRANSITION TRACK GEOMETRY DATA

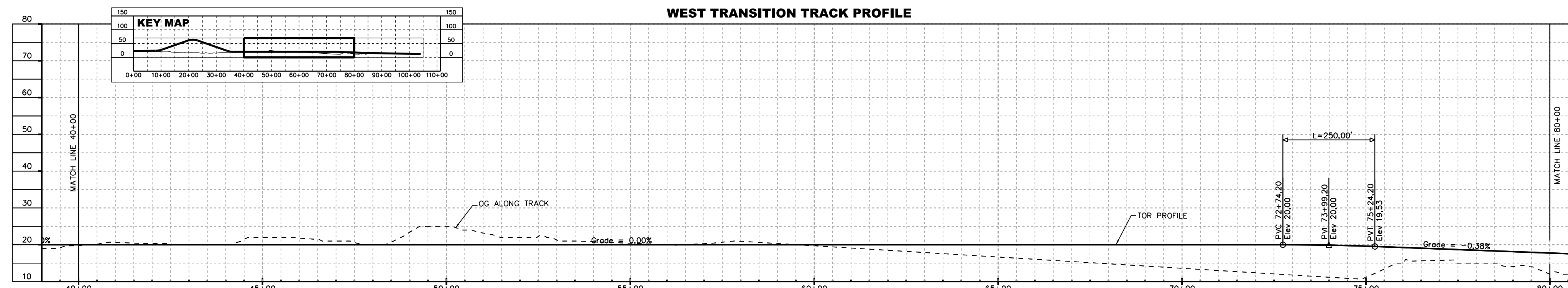
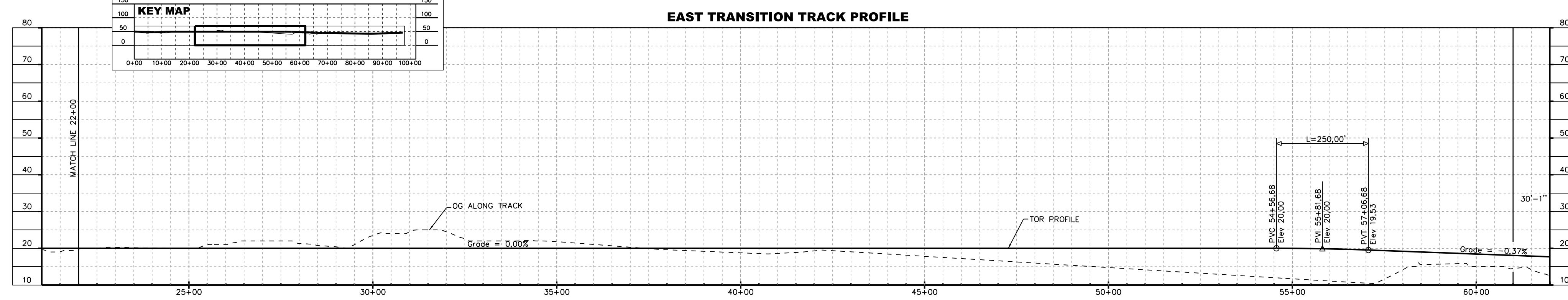
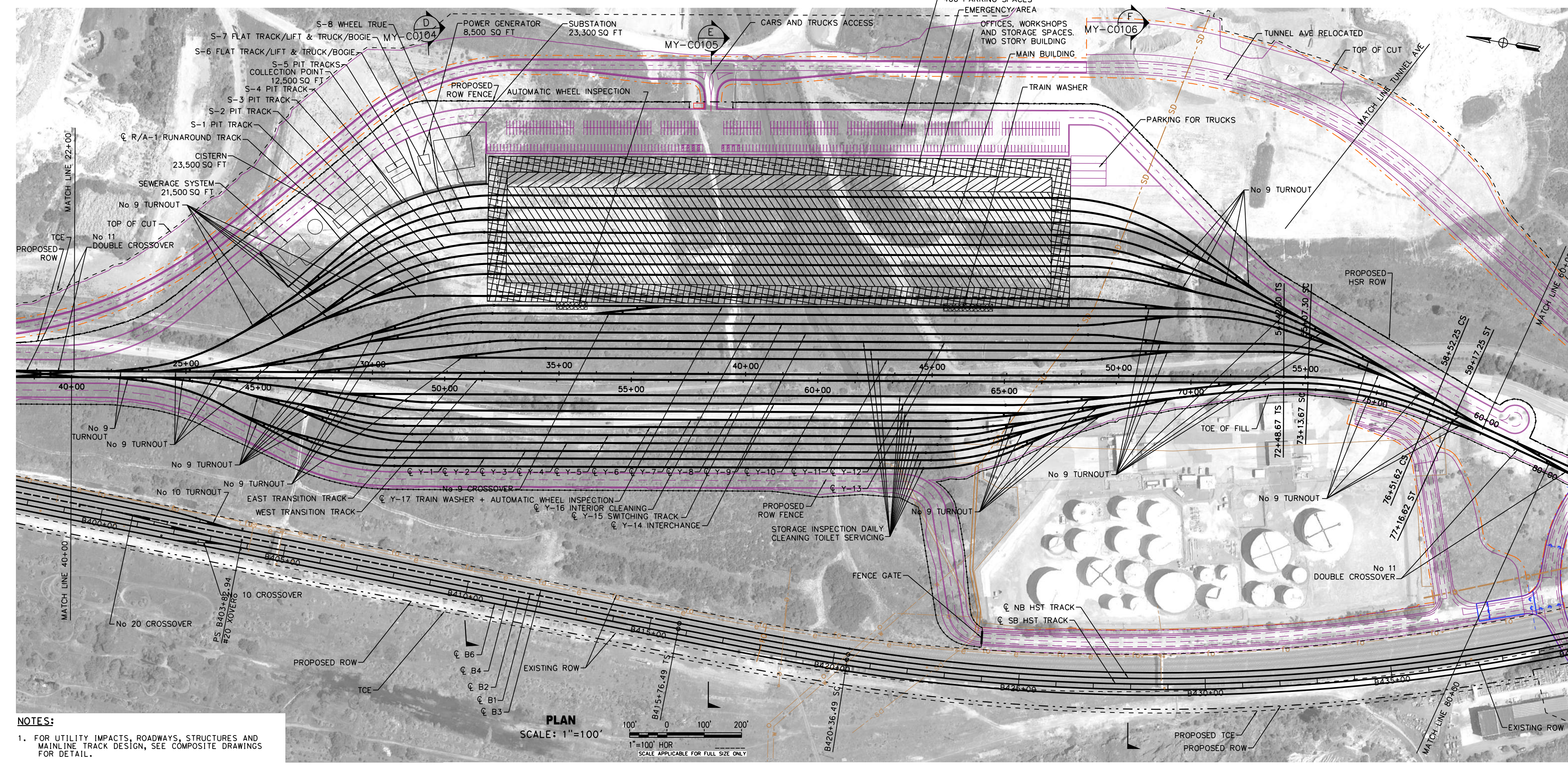
CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
1	TANGENT	POB	0+00.00	2085336.58	6011556.52									S 1°38'24" E		
	TANGENT	TS	1+67.56	2085169.06	6011561.61											
	ARC	PC	1+67.56	2085169.06	6011561.61											
	ARC	PI	2+83.58	2085053.1	6011564.32	3250	231.93	4°05'20"			49	0.000	2.955		S 1°38'24" E	S 5°43'43" E
	ARC	CC	3+99.49	2084931.66	6011575.9											
	ARC	CS	3+99.49	2084931.66	6011575.9											
	CLOTHOID	CS	3+99.49	2084931.66	6011575.9										S 5°43'43" E	S 8°12'28" E
	CLOTHOID	SPI	4+93.25	2084844.37	6011585.26		281.24	2°28'45"	140.61	1.01						
	CLOTHOID	ST	6+80.73	2084658.78	6011612.03											
	TANGENT	ST	6+80.73	2084658.78	6011612.03										S 8°12'28" E	
	TANGENT	TS	15+91.04	2083757.79	6011741.98											
	CLOTHOID	TS	15+91.04	2083757.79	6011741.98										S 8°12'28" E	S 8°27'12" E
CLOTHOID	SPI	16+51.04	2083636.58	6011759.83		60	0°14'44"	30	0.02							
CLOTHOID	SC	16+51.04	2083636.58	6011759.83												
ARC	SC	16+51.04	2083636.58	6011759.83										S 8°27'12" E	S 9°28'36" E	
ARC	PI	17+13.56	2083636.58	6011759.83	7000	125.03	1°01'24"			49	0.750	0.622				
ARC	CC	17+13.56	2083636.58	6011759.83												
ARC	CS	17+76.07	2083574.92	6011770.12												
CLOTHOID	CS	17+76.07	2083574.92	6011770.12		60	0°14'44"	30	0.02					S 9°28'36" E	S 9°43'20" E	
CLOTHOID	SPI	17+96.07	2083550.99	6011771.41												
CLOTHOID	ST	18+36.07	2083515.77	6011780.17												



NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.

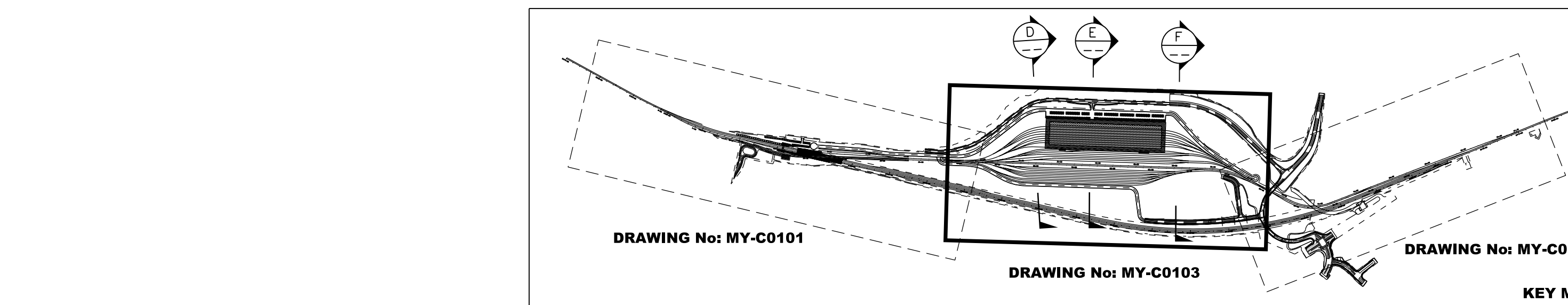
SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 66 OF 100

<p>RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION</p>	<p>HNTB 1111 Broadway 9th Floor Oakland, CA 94607</p>	<p>CALIFORNIA High-Speed Rail Authority</p>	<p>CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS</p>	<p>CONTRACT NO. HSR15-34 DRAWING NO. MY-C0102 SCALE AS SHOWN SHEET NO.</p>
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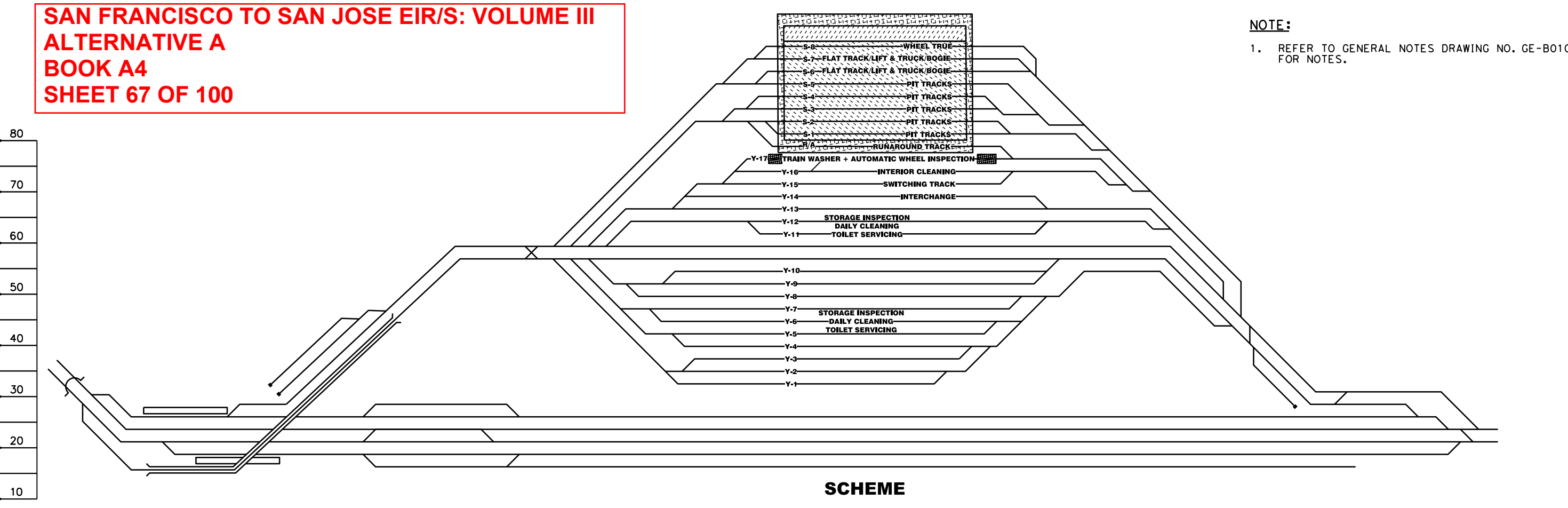


WEST TRANSITION TRACK GEOMETRY DATA

CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	
				NORTHING	EASTING									START ANGLE	END ANGLE
4	TANGENT	ST	18+36.07	2083515.77	6011780.17	950	337.95	20°22'56"	22		1	1.038	S 9°43'20" E	S 7°45'44" E	
	TANGENT	TS	54+42.30	2079961.33	6012389.16										
	TANGENT	ST	54+42.30	2079961.33	6012389.16										
	TANGENT	TS	54+42.30	2079961.33	6012389.16										
	CLOTHOID	SPI	54+85.64	2079918.61	6012386.48										
	CLOTHOID	SC	55+07.30	2079897.15	6012399.42										
	ARC	SC	73+13.67	2079894.36	6012383.14										
	ARC	PT	74+84.45	2079725.14	6012406.21										
	ARC	CC	7079766.05	6011441.85											
	ARC	CS	76+51.62	2079558.49	6012368.89										
	CLOTHOID	CS	76+51.62	2079558.49	6012368.89										
	CLOTHOID	SPI	76+73.28	2079537.34	6012364.16										
CLOTHOID	SI	77+18.62	2079495.4	6012353.25											



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 67 OF 100**



EAST TRANSITION TRACK GEOMETRY DATA

CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	
				NORTHING	EASTING									START ANGLE	END ANGLE
3	TANGENT	ST	18+36.07	2083515.77	6011780.17	65	65	1°55'36"	32.5	0.18			S 9°43'20" E	S 7°47'41" E	
	TANGENT	TS	54+42.30	2079961.33	6012389.16										
	TANGENT	ST	54+42.30	2079961.33	6012389.16										
	TANGENT	TS	54+42.30	2079961.33	6012389.16										
	CLOTHOID	SPI	54+85.64	2079918.61	6012386.48										
	CLOTHOID	SC	55+07.30	2079897.15	6012399.42										

RECORD PREP SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION

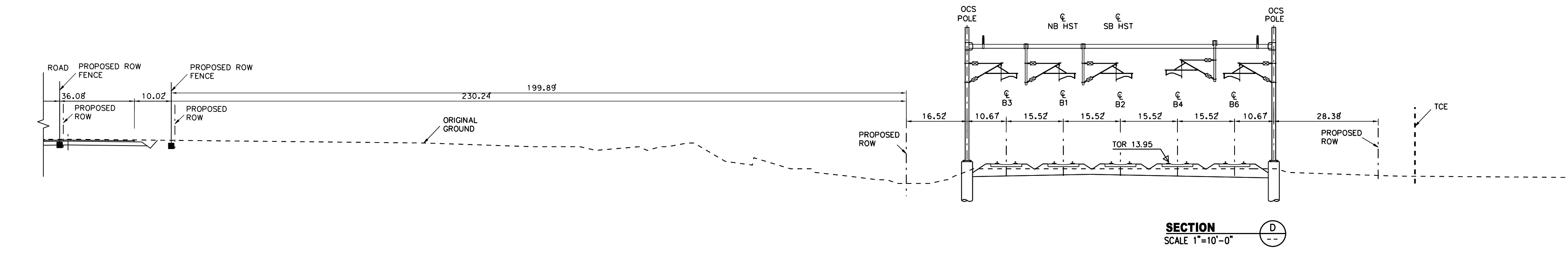
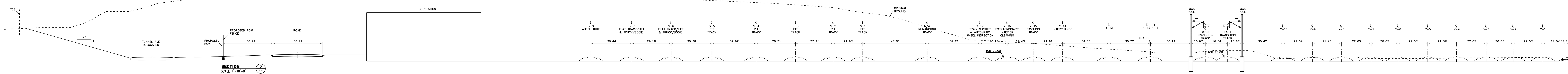
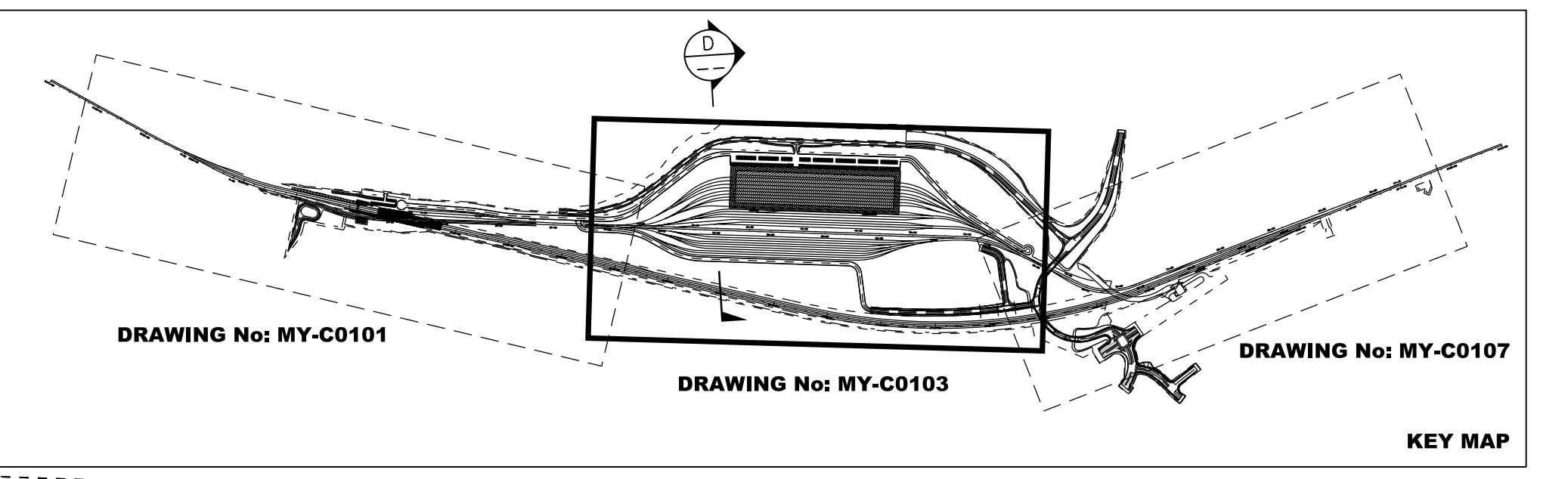
HNTB 1111 Broadway 9th Floor Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS

CONTRACT NO. HSR15-34 DRAWING NO. MY-C0103 SCALE: AS SHOWN SHEET NO.

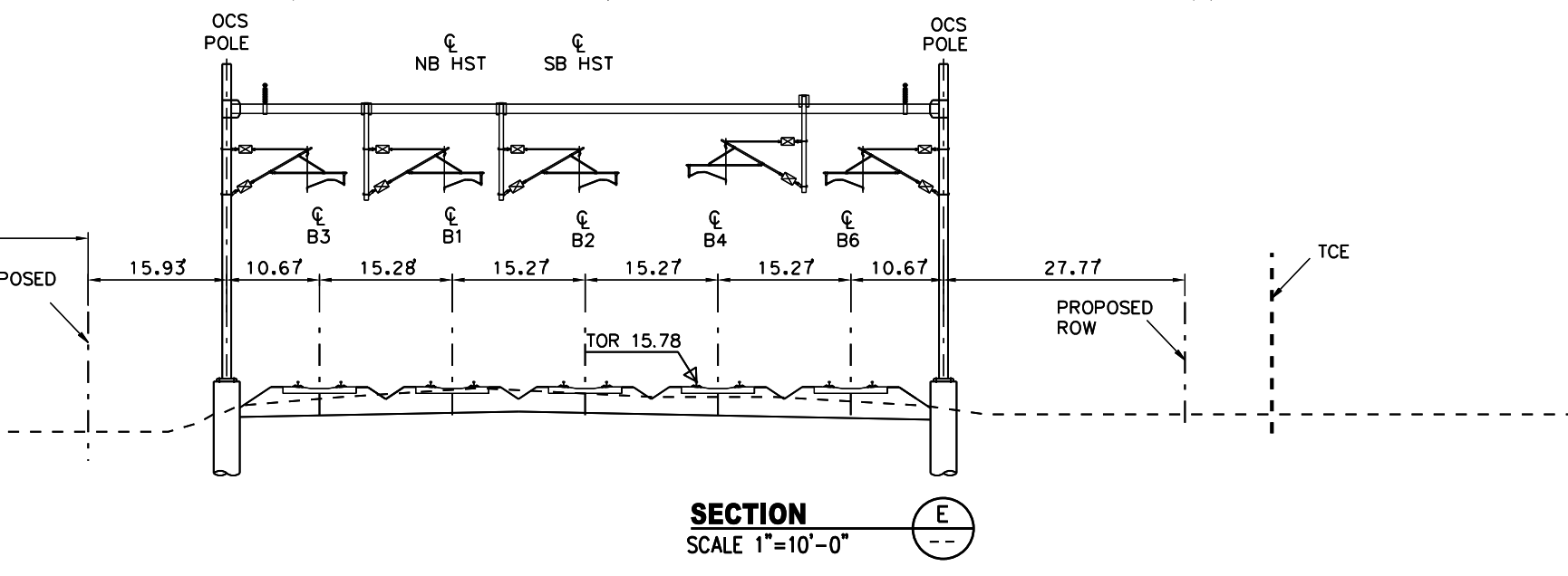
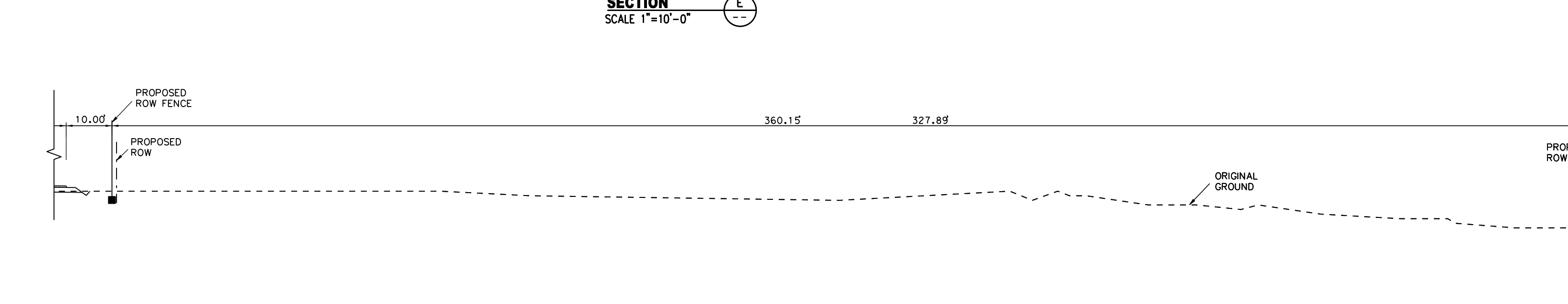
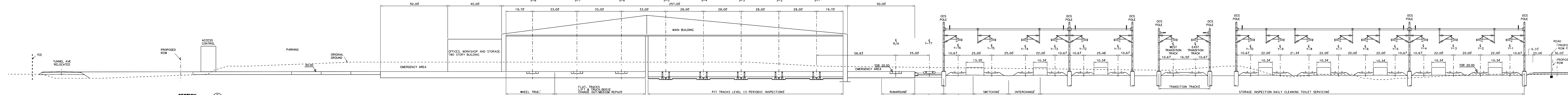
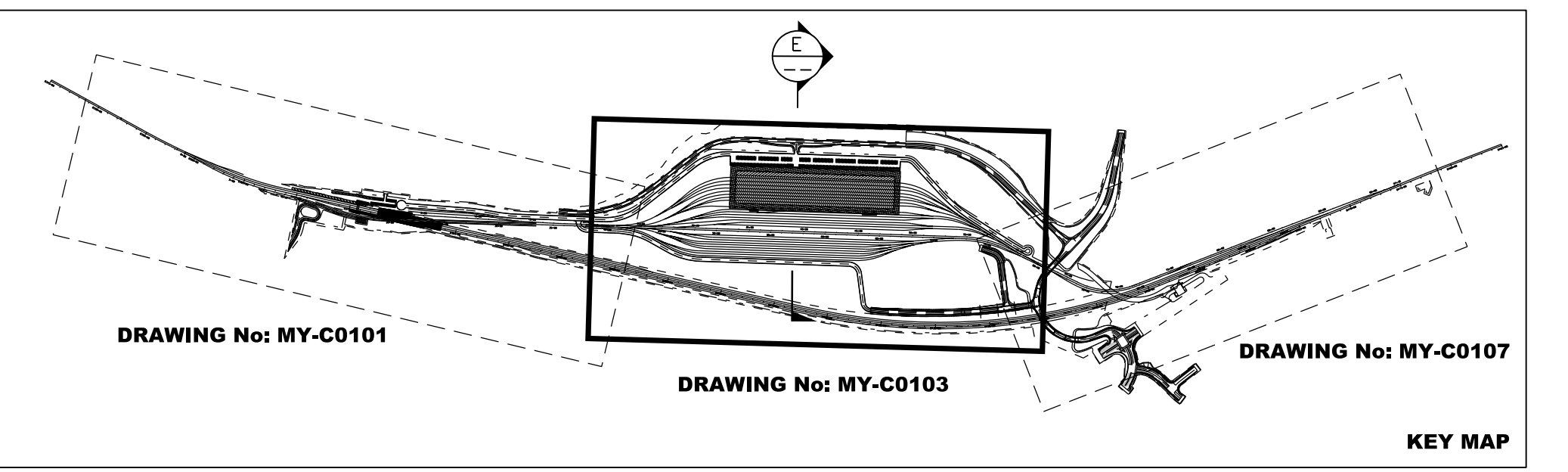
NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.



SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 68 OF 100

RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607		CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	CONTRACT NO. HSR15-34 DRAWING NO. MY-C0104 SCALE AS SHOWN SHEET NO.
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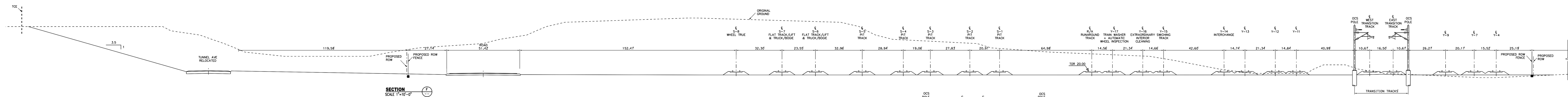
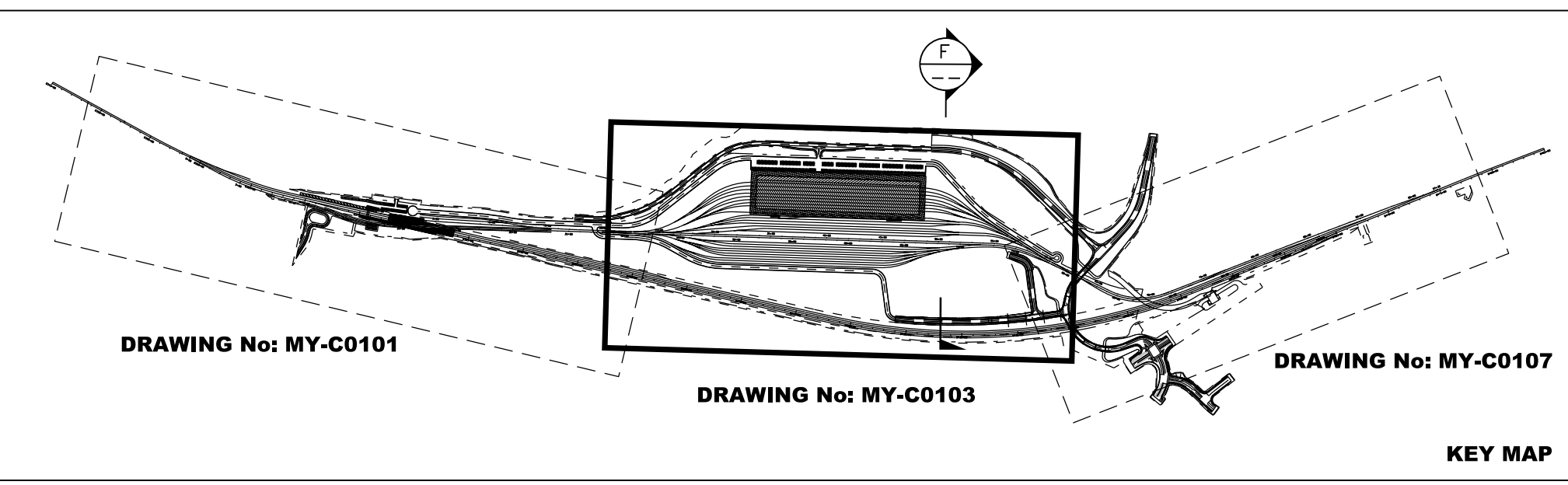
NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.



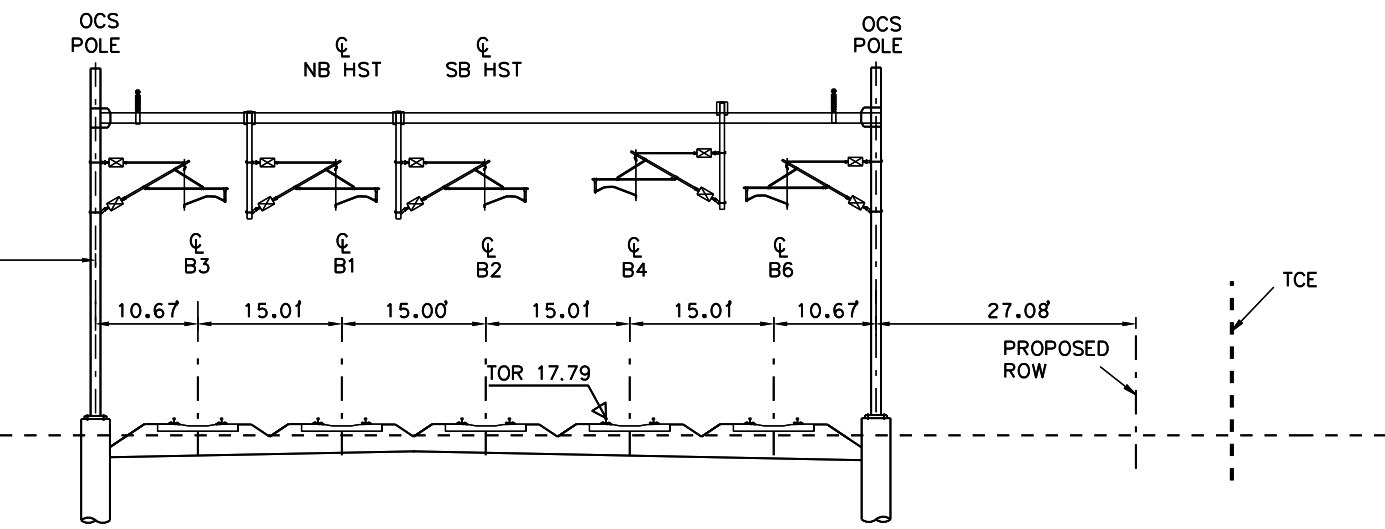
SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 69 OF 100

RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607		CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	CONTRACT NO. HSR15-34 DRAWING NO. MY-C0105 SCALE AS SHOWN SHEET NO.
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NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.



SECTION
SCALE 1"=10'-0"



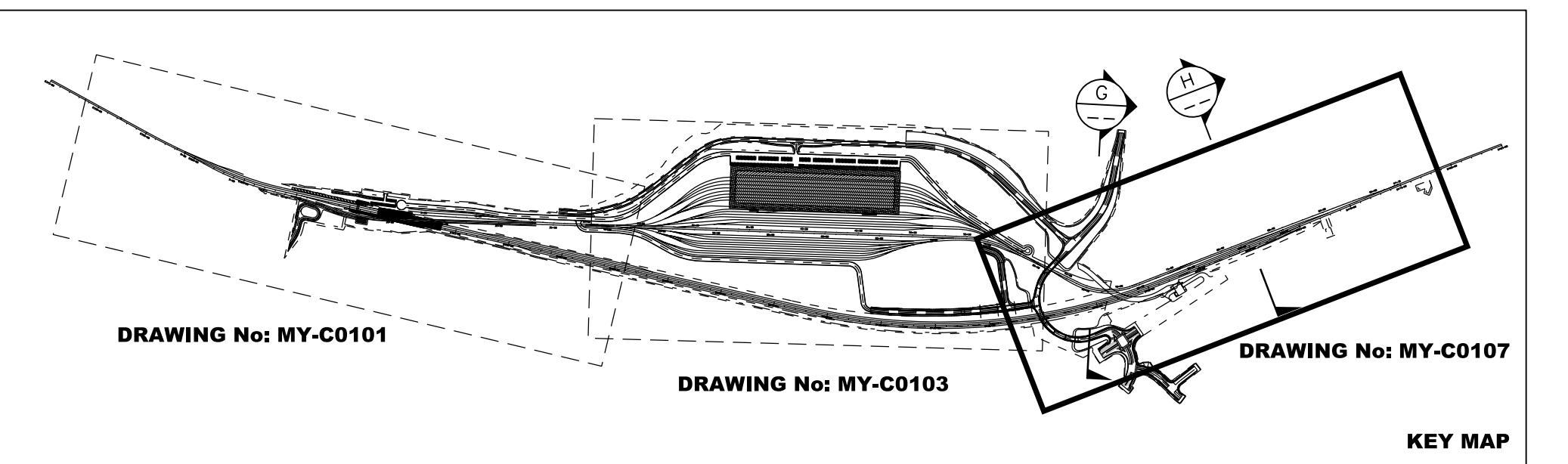
SECTION
SCALE 1"=10'-0"

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 70 OF 100

<p>RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION</p>	<p>HNTB 1111 Broadway 9th Floor Oakland, CA 94607</p>	<p>CALIFORNIA High-Speed Rail Authority</p>	<p>CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS</p>	<p>CONTRACT NO. HSR15-34 DRAWING NO. MY-C0106 SCALE AS SHOWN SHEET NO.</p>
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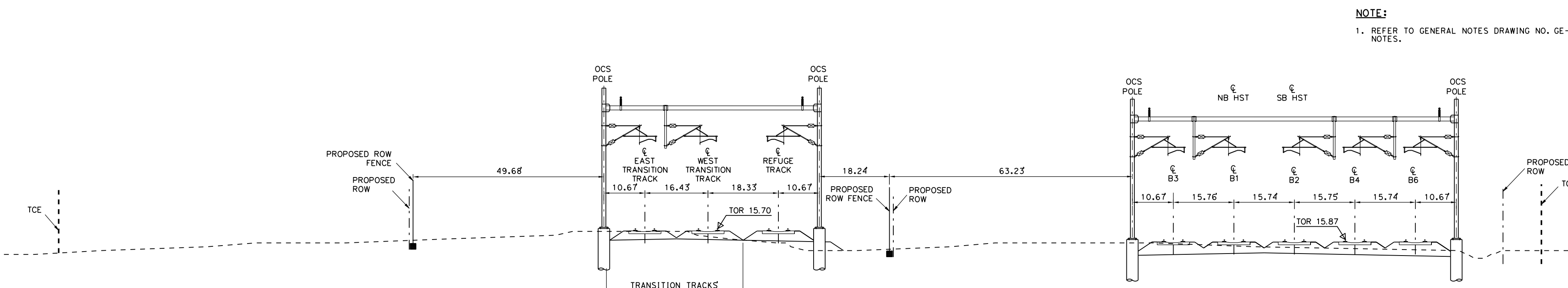
EAST TRANSITION TRACK GEOMETRY DATA

CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
3	ARC	SC	59+07.30	2079897.15	6012399.42	966.5	344.95	20°26'57"			22	1	1.003		S 7°47'44" E	S 12°39'12" W
	ARC	PI	56+81.63	2079724.43	6012423.06											
	ARC	CC	50+196.05	6011441.85	6012384.88											
	ARC	CS	58+52.25	2079554.33	6012384.88											
	CLOTHOID	CS	58+52.25	2079554.33	6012384.88											
	CLOTHOID	SPI	58+73.92	2079533.19	6012380.13											
	CLOTHOID	ST	59+17.25	2079491.25	6012369.22											
	TANGENT	TS	59+17.25	2079491.25	6012369.22											
	TANGENT	TS	60+1843.63	6012200.17												
	TANGENT	TS	60+1843.63	6012200.17												
4	CLOTHOID	TS	65+86.42	2078843.63	6012200.77	65	2°57'21"	32.5	0.28		17	1	0.835		S 14°34'48" W	S 11°37'28" W
	CLOTHOID	SPI	66+29.76	2078801.69	6012189.86											
	CLOTHOID	SC	66+51.42	2078780.46	6012185.49											
	ARC	SC	66+51.42	2078780.46	6012185.49											
	ARC	PI	68+90.22	2078546.55	6012137.37											
	ARC	CC	60+78653.52	6012802.57	6012256.39											
	ARC	CS	71+07.94	2078339.52	6012256.39											
	CLOTHOID	CS	71+07.94	2078339.52	6012256.39											
	CLOTHOID	SPI	71+29.61	2078320.74	6012267.19											
	CLOTHOID	ST	71+72.94	2078284.33	6012290.7											
5	TANGENT	TS	71+72.94	2078284.33	6012290.7	62	0°04'16"	31	0.01		79	0	0.999		S 32°51'00" E	S 32°46'44" E
	TANGENT	TS	81+90.55	2077429.44	6012842.70											
	CLOTHOID	TS	81+90.55	2077429.44	6012842.70											
	CLOTHOID	SPI	82+31.89	2077394.71	6012866.12											
	CLOTHOID	SC	82+52.55	2077377.34	6012876.31											
	ARC	SC	82+52.55	2077377.34	6012876.31											
	ARC	PI	83+24.80	2077316.59	6012915.42											
	ARC	CC	2063842.35	5991857.17	6012803.05											
	ARC	CS	83+97.05	2077295.43	6012844.19											
	CLOTHOID	CS	83+97.05	2077295.43	6012844.19											
6	CLOTHOID	CS	83+97.05	2077295.43	6012844.19	65	0°22'21"	32.5	0.04		50	1	1.040		S 32°22'36" E	S 32°00'16" E
	CLOTHOID	SPI	84+17.72	2077238.19	6012965.27											
	CLOTHOID	ST	84+99.05	2077203.28	6012987.41											
	TANGENT	TS	84+99.05	2077203.28	6012987.41											
	TANGENT	TS	92+15.58	2076564.35	6013392.52											
	CLOTHOID	TS	92+15.58	2076564.35	6013392.52											
	CLOTHOID	SPI	92+58.91	2076532.76	6013419.16											
	CLOTHOID	SC	92+80+58	2076509.38	6013427.21											
	ARC	SC	92+80+58	2076509.38	6013427.21											
	ARC	PI	93+10.11	2076484.34	6013442.85											
7	ARC	CC	2076599.47	6009181.16	6013481.20	5000	0°40'36"	75.36	0		46	1	0.992		S 32°00'16" E	S 31°19'40" E
	ARC	CS	93+39.63	2076459.12	6013481.20											
	CLOTHOID	CS	93+39.63	2076459.12	6013481.20											
	CLOTHOID	SPI	93+61.30	2076440.62	6013469.47											
	CLOTHOID	ST	94+04.63	2076403.45	6013491.76											
	TANGENT	TS	94+04.63	2076403.45	6013491.76											
	TANGENT	PI	96+54.17	2076189.46	6013620.11											
	TANGENT	PI	96+54.17	2076189.46	6013620.11											
	TANGENT	PI	96+54.17	2076189.46	6013620.11											
	TANGENT	PDE	97+36.04	2076121.44	6013665.68											



WEST TRANSITION TRACK GEOMETRY DATA

CURVE	ELEMENT	POINT TYPE	B2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, A	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EU)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
3	TANGENT	TS	77+16.62	2079495.4	6012353.25	62	2°44'51"	31	0.25		18	1	1.005		S 14°34'48" W	S 11°49'58" W
	TANGENT	TS	83+85.26	2078848.29	6012184.93											
	CLOTHOID	TS	83+85.26	2078848.29	6012184.93											
	CLOTHOID	SPI	84+26.60	2078808.28	6012174.52											
	CLOTHOID	SC	84+47.26	2078788.05	6012170.29											
	ARC	SC	84+47.26	2078788.05	6012170.29											
	ARC	PI	86+95.01	2078545.57	6012119.48											
	ARC	CC	2078659.48	6012803.05	6012803.05											
	ARC	CS	89+20.44	2078331.23	6012243.74											
	CLOTHOID	CS	89+20.44	2078331.23	6012243.74											
4	CLOTHOID	SPI	89+41.11	2078313.35	6012254.11	646.5	475.18	41°56'07"			18	1	1.005		S 30°06'09" E	S 30°06'09" E
	CLOTHOID	ST	89+82.44	2078278.62	6012276.53											
	TANGENT	TS	89+82.44	2078278.62	6012276.53											
	TANGENT	TS	99+64.04	2077453.99	6012808.99											
	CLOTHOID	TS	99+64.04	2077453.99	6012808.99											
	CLOTHOID	SPI	100+07.37	2077411.58	6012832.5											
	CLOTHOID	SC	100+29.04	2077399.29	6012844.11											
	ARC	SC	100+29.04	2077399.29	6012844.11											
	ARC	PI	100+66.81	2077367.4	6012864.36											
	ARC	CC	2075121.29	6009256.19	6012884.03											
5	ARC	CS	101+04.58	2077335.18	6012884.03	4250	75.55	1°01'07"			46	1	0.992		S 32°24'43" E	S 31°23'36" E
	CLOTHOID	CS	101+04.58	2077335.18	6012884.03											
	CLOTHOID	SPI	101+26.25	2077316.66	6012895.32											
	CLOTHOID	ST	101+69.58	2077279.5	6012917.61											
	TANGENT	TS	101+69.58	2077279.5	6012917.61											
	TANGENT	PI	103+30.81	2077141.24	6013000.54											
	TANGENT	PI	103+30.81	2077141.24	6013000.54											
	TANGENT	PI	103+30.81	2077141.24	6013000.54											
	TANGENT	PDE	104+12.68	2071073.22	6013046.11											



NOTE:
1. REFER TO GENERAL NOTES DRAWING NO. GE-B0101 FOR NOTES.

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 72 OF 100

DATE: 11/11/2019 11:11 AM

RECORD PERM SUBMITTAL APRIL 11, 2019 NOT FOR CONSTRUCTION	HNTB 1111 Broadway 9th Floor Oakland, CA 94607	CALIFORNIA High-Speed Rail Authority	CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE ALTERNATIVE A BRISBANE LIGHT MAINTENANCE FACILITY EAST COMPOSITE PLAN, PROFILE AND TYPICAL SECTIONS	CONTRACT NO. HSR15-34 DRAWING NO. MY-C0108 SCALE AS SHOWN SHEET NO.
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TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	TNGT BEARING/ CHRD DEG. CV. (0°00'00")	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	POB	100+00.00	2110730.839	6014026.793		231.94							S 46°19'23" W		
	TANGENT	PI	102+31.94	2110570.663	6013859.043											
	TANGENT	PI	102+31.94	2110570.663	6013859.043		1610.23							S 46°16'23" W		
	TANGENT	TS	118+42.17	2109457.634	6012695.419											
	CLOTHOID	TS	118+42.17	2109457.634	6012695.419										S 46°16'23" W	S 44°04'10" W
	CLOTHOID	SPI	118+75.51	2109434.592	6012671.330		50.00	2°12'13"	25.00	0.16						
	CLOTHOID	SC	118+92.17	2109422.615	6012659.736											
	ARC	SC	118+92.17	2109422.615	6012659.736											
C103	ARC	PI	124+93.95	2108990.242	6012241.184	650.00	970.00	85°35'15"			25	0.50	3.36	8°49'24"		
	ARC	CC		2108970.521	6013126.759											
	ARC	CS	128+62.17	2108539.665	6012640.073											
	CLOTHOID	CS	128+62.17	2108539.665	6012640.073										S 41°31'05" E	S 43°43'18" E
	CLOTHOID	SPI	128+78.84	2108527.185	6012651.122		50.00	2°12'13"	25.00	0.16						
	CLOTHOID	ST	129+12.17	2108503.092	6012674.163											
	TANGENT	ST	129+12.17	2108503.092	6012674.163		2115.74							S 43°43'18" E		
EON		BK	133+15.12	2108211.880	6012952.662											
EON		AHD	139+00.00													
	TANGENT	TS	156+12.79	2106974.035	6014136.468											
	CLOTHOID	TS	156+12.79	2106974.035	6014136.468										S 43°43'18" E	S 36°53'12" E
	CLOTHOID	SPI	157+69.58	2106860.726	6014244.830		235.00	6°50'06"	117.44	2.33						
	CLOTHOID	SC	158+47.79	2106797.988	6014291.912											
	ARC	SC	158+47.79	2106797.988	6014291.912											
C104	ARC	PI	160+83.06	2106609.813	6014433.130	984.98	461.69	26°52'04"			45	2.75	5.50	5°49'10"		
	ARC	CC		2106206.768	6013504.101											
	ARC	CS	163+09.48	2106378.131	6014474.061											
	CLOTHOID	CS	163+09.48	2106378.131	6014474.061										S 10°01'09" E	S 3°11'03" E
	CLOTHOID	SPI	163+87.92	2106300.887	6014487.708		235.00	6°50'06"	117.44	2.33						
	CLOTHOID	ST	165+44.48	2106144.346	6014496.416											
	TANGENT	ST	165+44.48	2106144.346	6014496.416		2067.46							S 3°11'03" E		
	TANGENT	TS	186+11.94	2104080.075	6014611.254											
	CLOTHOID	TS	186+11.94	2104080.075	6014611.254										S 3°11'03" E	S 2°16'30" E
	CLOTHOID	SPI	187+55.28	2103936.961	6014619.216		215.00	0°54'33"	107.50	0.28						
	CLOTHOID	SC	188+26.94	2103865.349	6014622.061											
	ARC	SC	188+26.94	2103865.349	6014622.061											
C105	ARC	PI	193+48.54	2103344.159	6014642.765	6773.95	1041.14	8°48'23"			100	2.50	3.42	0°50'45"		
	ARC	CC		2103596.465	6007853.452											
	ARC	CS	198+68.08	2102825.943	6014583.434											
	CLOTHOID	CS	198+68.08	2102825.943	6014583.434										S 6°31'53" W	S 7°26'26" W
	CLOTHOID	SPI	199+39.75	2102754.740	6014575.282		215.00	0°54'33"	107.50	0.28						
	CLOTHOID	ST	200+83.08	2102612.611	6014556.720											
	TANGENT	ST	200+83.08	2102612.611	6014556.720		2986.98							S 7°26'26" W		
	TANGENT	PI*	230+70.06	2099650.782	6014169.908											
	TANGENT	PI*	230+70.06	2099650.782	6014169.908		839.49							S 7°25'02" W		
	TANGENT	TS	239+09.55	2098818.320	6014061.535											
	CLOTHOID	TS	239+09.55	2098818.320	6014061.535										S 7°25'02" W	S 7°29'06" W
	CLOTHOID	SPI	239+66.22	2098762.127	6014054.220		85.00	0°04'04"	42.50	0.01						
	CLOTHOID	SC	239+94.55	2098734.036	6014050.529											
	ARC	SC	239+94.55	2098734.036	6014050.529											
C106	ARC	PI	240+48.06	2098680.978	6014043.558	36000.00	107.03	0°10'13"			110	1.00	0.35	0°09'33"		
	ARC	CC		2103423.548	5978357.274											
	ARC	CS	241+01.58	2098627.942	6014036.430											
	CLOTHOID	CS	241+01.58	2098627.942	6014036.430										S 7°39'19" W	S 7°43'22" W

* NOTE: ANGLE POINTS ARE NOT INTENDED FOR CONSTRUCTION. THEY ARE A "BEST FIT" REPRESENTATION OF THE EXISTING ALIGNMENT OVER LONG TANGENTS.

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 73 OF 100

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DESIGNED BY	
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IN CHARGE	
DATE	

RECORD PEPD SUBMITTAL
APRIL 11, 2019
NOT FOR CONSTRUCTION


 1111 Broadway
 9th Floor
 Oakland, CA 94607


CALIFORNIA
 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C103 TO C106

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0001
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	SPI	241+29.91	2098599.861	6014032.655		85.00	0°04'04"	42.50	0.01						
	CLOTHOID	ST	241+86.58	2098543.708	6014025.040											
	TANGENT	ST	241+86.58	2098543.708	6014025.040		100.28							S 7°43'22" W		
	TANGENT	TS	242+86.85	2098444.342	6014011.565											
	CLOTHOID	TS	242+86.85	2098444.342	6014011.565										S 7°43'22" W	S 7°40'07" W
	CLOTHOID	SPI	243+43.52	2098388.189	6014003.950		85.00	0°03'15"	42.50	0.01						
	CLOTHOID	SC	243+71.85	2098360.109	6014000.169											
	ARC	SC	243+71.85	2098360.109	6014000.169											
C107	ARC	PI	244+23.04	2098309.384	6013993.339	45000.00	102.37	0°07'49"			110	1.00	0.08	0°07'38"		
	ARC	CC		2092355.072	6058597.698											
	ARC	CS	244+74.22	2098258.642	6013986.624											
	CLOTHOID	CS	244+74.22	2098258.642	6013986.624										S 7°32'18" W	S 7°29'03" W
	CLOTHOID	SPI	245+02.55	2098230.554	6013982.907		85.00	0°03'15"	42.50	0.01						
	CLOTHOID	ST	245+59.22	2098174.370	6013975.526											
	TANGENT	ST	245+59.22	2098174.370	6013975.526		255.20							S 7°29'03" W		
	TANGENT	PI*	248+14.42	2097921.341	6013942.285											
	TANGENT	PI*	248+14.42	2097921.341	6013942.285		613.51							S 7°27'38" W		
	TANGENT	TS	254+27.93	2097313.024	6013862.624											
	CLOTHOID	TS	254+27.93	2097313.024	6013862.624										S 7°27'38" W	S 7°23'41" W
	CLOTHOID	SPI	254+84.60	2097256.837	6013855.266		85.00	0°03'57"	42.50	0.01						
	CLOTHOID	SC	255+12.93	2097228.740	6013851.619											
	ARC	SC	255+12.93	2097228.740	6013851.619											
C108	ARC	PI	255+64.50	2097177.602	6013844.982	37000.00	103.13	0°09'35"			110	1.00	0.31	0°09'17"		
	ARC	CC		2092466.615	6050543.882											
	ARC	CS	256+16.07	2097126.445	6013838.488											
	CLOTHOID	CS	256+16.07	2097126.445	6013838.488										S 7°14'06" W	S 7°10'10" W
	CLOTHOID	SPI	256+44.40	2097098.338	6013834.919		85.00	0°03'57"	42.50	0.01						
	CLOTHOID	ST	257+01.07	2097042.114	6013827.847											
	TANGENT	ST	257+01.07	2097042.114	6013827.847		142.32							S 7°10'10" W		
	TANGENT	TS	258+43.39	2096900.902	6013810.085											
	CLOTHOID	TS	258+43.39	2096900.902	6013810.085										S 7°10'10" W	S 7°14'00" W
	CLOTHOID	SPI	259+00.06	2096844.678	6013803.013		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	SC	259+28.39	2096816.570	6013799.445											
	ARC	SC	259+28.39	2096816.570	6013799.445											
C109	ARC	PI	259+78.80	2096766.562	6013793.098	38000.00	100.82	0°09'07"			110	1.00	0.28	0°09'03"		
	ARC	CC		2101601.203	5976101.868											
	ARC	CS	260+29.21	2096716.571	6013786.618											
	CLOTHOID	CS	260+29.21	2096716.571	6013786.618										S 7°23'07" W	S 7°26'58" W
	CLOTHOID	SPI	260+57.54	2096688.472	6013782.976		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	ST	261+14.21	2096632.284	6013775.629											
	TANGENT	ST	261+14.21	2096632.284	6013775.629		147.73							S 7°26'58" W		
	TANGENT	PI*	262+61.95	2096485.796	6013756.475											
	TANGENT	PI*	262+61.95	2096485.796	6013756.475		213.04							S 7°23'09" W		
	TANGENT	PI*	264+74.99	2096274.524	6013729.089											
	TANGENT	PI*	264+74.99	2096274.524	6013729.089		1523.11							S 7°26'44" W		

* NOTE: ANGLE POINTS ARE NOT INTENDED FOR CONSTRUCTION. THEY ARE A "BEST FIT" REPRESENTATION OF THE EXISTING ALIGNMENT OVER LONG TANGENTS.

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 74 OF 100**

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REV	DATE	BY	CHK	APP	DESCRIPTION

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**RECORD PEPD
SUBMITTAL**

APRIL 11, 2019

**NOT FOR
CONSTRUCTION**

HNTB
1111 Broadway
9th Floor
Oakland, CA 94607



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**
ALTERNATIVE A
B2 TRACK ALIGNMENT DATA TABLE
CURVE NO. C107 TO C109

CONTRACT NO. HSR15-34
DRAWING NO. TT-B0002
SCALE NONE
SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	PI*	279+98.10	2094764.251	6013531.720											
	TANGENT	PI*	279+98.10	2094764.251	6013531.720		2319.10							S 7°26'17" W		
	TANGENT	TS	303+17.20	2092464.665	6013231.498											
	CLOTHOID	TS	303+17.20	2092464.665	6013231.498										S 7°26'17" W	S 9°13'32" W
	CLOTHOID	SPI	305+53.88	2092229.978	6013200.858		355.00	1°47'14"	177.49	0.92						
	CLOTHOID	SC	306+72.20	2092113.165	6013181.885											
C110	ARC	SC	306+72.20	2092113.165	6013181.885											
	ARC	PI	309+77.35	2091811.962	6013132.964	5690.14	609.71	6°08'22"			110	4.25	4.28	1°00'25"		
	ARC	CC		2093025.409	6007565.347											
	ARC	CS	312+81.91	2091517.718	6013052.109											
	CLOTHOID	CS	312+81.91	2091517.718	6013052.109										S 15°21'54" W	S 17°09'08" W
	CLOTHOID	SPI	314+00.25	2091403.604	6013020.752		355.00	1°47'14"	177.49	0.92						
	CLOTHOID	ST	316+36.91	2091177.452	6012950.953											
	TANGENT	ST	316+36.91	2091177.452	6012950.953		1819.16							S 17°09'08" W		
	TANGENT	PI*	334+56.07	2089439.201	6012414.463											
	TANGENT	TS	354+54.58	2087529.849	6011824.176		1998.52							S 17°10'45" W		
	CLOTHOID	TS	354+54.58	2087529.849	6011824.176										S 17°10'45" W	S 16°38'16" W
	CLOTHOID	SPI	355+21.25	2087466.156	6011804.485		100.00	0°32'30"	50.00	0.08						
	CLOTHOID	SC	355+54.58	2087434.218	6011794.941											
C111	ARC	SC	355+54.58	2087434.218	6011794.941											
	ARC	PI	356+33.81	2087358.305	6011772.256	5288.92	158.45	1°42'59"			65	1.00	2.20	1°05'00"		
	ARC	CC		2085919.906	6016862.438											
	ARC	CS	357+13.03	2087281.747	6011751.855											
	CLOTHOID	CS	357+13.03	2087281.747	6011751.855										S 14°55'16" W	S 14°22'46" W
	CLOTHOID	SPI	357+46.36	2087249.537	6011743.272		100.00	0°32'30"	50.00	0.08						
	CLOTHOID	ST	358+13.03	2087184.959	6011726.716											
	TANGENT	ST	358+13.03	2087184.959	6011726.716		287.91							S 14°22'46" W		
	TANGENT	TS	361+00.94	2086906.064	6011655.214											
	CLOTHOID	TS	361+00.94	2086906.064	6011655.214										S 14°22'46" W	S 11°24'16" W
	CLOTHOID	SPI	362+80.97	2086731.678	6011610.506		270.00	2°58'30"	134.99	1.17						
	CLOTHOID	SC	363+70.94	2086643.432	6011592.705											
C112	ARC	SC	363+70.94	2086643.432	6011592.705											
	ARC	PI	365+34.64	2086482.969	6011560.337	2600.00	326.94	7°12'19"			75	3.25	5.43	2°12'14"		
	ARC	CC		2086129.322	6014141.370											
	ARC	CS	366+97.88	2086319.713	6011548.350											
	CLOTHOID	CS	366+97.88	2086319.713	6011548.350										S 4°11'58" W	S 1°13'28" W
	CLOTHOID	SPI	367+87.91	2086229.932	6011541.758		270.00	2°58'30"	134.99	1.17						
	CLOTHOID	ST	369+67.88	2086049.947	6011537.911											
	TANGENT	ST	369+67.88	2086049.947	6011537.911		1311.17							S 1°13'28" W		
	TANGENT	TS	382+79.05	2084739.078	6011509.894											
	CLOTHOID	TS	382+79.05	2084739.078	6011509.894										S 1°13'28" W	S 1°09'37" W
	CLOTHOID	SPI	383+35.72	2084682.425	6011508.683		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	SC	383+64.05	2084654.097	6011508.109											

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 75 OF 100**

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REV	DATE	BY	CHK	APP	DESCRIPTION

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SUBMITTAL**

APRIL 11, 2019

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HNTB 1111 Broadway
9th Floor
Oakland, CA 94607



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**
ALTERNATIVE A
B2 TRACK ALIGNMENT DATA TABLE
CURVE NO. C110 TO C112

CONTRACT NO. HSR15-34
DRAWING NO. TT-B0003
SCALE NONE
SHEET NO.

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
C113	ARC	SC	383+64.05	2084654.097	6011508.109											
	ARC	PI	384+48.26	2084569.908	6011506.404	38000.00	168.41	0°15'14"			110	1.00	0.28	0°09'03"		
	ARC	CC		2083884.603	6049500.317											
	ARC	CS	385+32.46	2084485.712	6011505.072											
	CLOTHOID	CS	385+32.46	2084485.712	6011505.072										S 0°54'23" W	S 0°50'32" W
	CLOTHOID	SPI	385+60.80	2084457.382	6011504.624		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	ST	386+17.46	2084400.722	6011503.791											
	TANGENT	ST	386+17.46	2084400.722	6011503.791		111.45							S 0°50'32" W		
	TANGENT	TS	387+28.91	2084289.285	6011502.153											
	CLOTHOID	TS	387+28.91	2084289.285	6011502.153										S 0°50'32" W	S 0°54'23" W
	CLOTHOID	SPI	387+85.58	2084232.624	6011501.320		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	SC	388+13.91	2084204.294	6011500.871											
C114	ARC	SC	388+13.91	2084204.294	6011500.871											
	ARC	PI	388+98.12	2084120.098	6011499.539	38000.00	168.41	0°15'14"			110	1.00	0.28	0°09'03"		
	ARC	CC		2084805.403	5973505.626											
	ARC	CS	389+82.33	2084035.909	6011497.834											
	CLOTHOID	CS	389+82.33	2084035.909	6011497.834										S 1°09'37" W	S 1°13'28" W
	CLOTHOID	SPI	390+10.66	2084007.582	6011497.260		85.00	0°03'51"	42.50	0.01						
	CLOTHOID	ST	390+67.33	2083950.928	6011496.050											
	TANGENT	ST	390+67.33	2083950.928	6011496.050		2509.16							S 1°13'28" W		
	TANGENT	TS	415+76.49	2081442.341	6011442.434											
	CLOTHOID	TS	415+76.49	2081442.341	6011442.434										S 1°13'28" W	S 1°10'18" E
	CLOTHOID	SPI	418+83.18	2081135.716	6011435.880		460.00	2°23'46"	229.99	1.60						
	CLOTHOID	SC	420+36.49	2080982.389	6011439.016											
C115	ARC	SC	420+36.49	2080982.389	6011439.016											
	ARC	PI	435+23.17	2079496.019	6011469.414	5500.00	2903.92	30°15'06"			110	4.50	4.33	1°02'30"		
	ARC	CC		2081094.848	6016937.866											
	ARC	CS	449+40.41	2078227.378	6012244.507											
	CLOTHOID	CS	449+40.41	2078227.378	6012244.507										S 31°25'24" E	S 33°49'10" E
	CLOTHOID	SPI	450+93.77	2078096.511	6012324.462		460.00	2°23'46"	229.99	1.60						
	CLOTHOID	ST	454+00.41	2077841.711	6012495.162											
	TANGENT	ST	454+00.41	2077841.711	6012495.162		2286.49							S 33°49'10" E		
	TANGENT	TS	476+86.90	2075942.100	6013767.772											
	CLOTHOID	TS	476+86.90	2075942.100	6013767.772										S 33°49'10" E	S 33°37'14" E
	CLOTHOID	SPI	477+70.24	2075872.867	6013814.153		125.00	0°11'56"	62.50	0.04						
	CLOTHOID	SC	478+11.90	2075838.170	6013837.224											
C116	ARC	SC	478+11.90	2075838.170	6013837.224											
	ARC	PI	479+41.92	2075729.904	6013909.211	18000.00	260.02	0°49'40"			110	1.50	1.19	0°19'06"		
	ARC	CC		2065871.769	5998848.199											
	ARC	CS	480+71.93	2075620.610	6013979.627											
	CLOTHOID	CS	480+71.93	2075620.610	6013979.627										S 32°47'34" E	S 32°35'38" E
	CLOTHOID	SPI	481+13.59	2075585.584	6014002.194		125.00	0°11'56"	62.50	0.04						
	CLOTHOID	ST	481+96.93	2075515.375	6014047.084											
	TANGENT	ST	481+96.93	2075515.375	6014047.084		406.68							S 32°35'38" E		
	TANGENT	TS	486+03.60	2075172.744	6014266.153											
	CLOTHOID	TS	486+03.60	2075172.744	6014266.153										S 32°35'38" E	S 26°13'43" E
	CLOTHOID	SPI	489+85.18	2074851.259	6014471.703		572.00	6°21'55"	285.88	5.29						
	CLOTHOID	SC	491+75.60	2074680.022	6014556.067											
C117	ARC	SC	491+75.60	2074680.022	6014556.067											
	ARC	PI	505+39.52	2073456.537	6015158.852	2574.34	2508.34	55°49'49"			85	6.00	5.26	2°13'33"		
	ARC	CC		2073542.285	6012246.780											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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Oakland, CA 94607



CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C113 TO C117

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0004
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	ARC	PCC	516+83.94	2072270.640	6014485.122											
	ARC	PCC	516+83.94	2072270.640	6014485.122											
	ARC	PI	517+78.35	2072188.558	6014438.489	2753.29	188.72	3°55'39"			85	6.00	4.52	2°04'52"		
	ARC	CC		2073630.678	6012091.191											
	ARC	CS	518+72.67	2072109.863	6014386.344											
	CLOTHOID	CS	518+72.67	2072109.863	6014386.344										S 33°31'45" W	S 38°43'54" W
	CLOTHOID	SPI	520+39.46	2071970.820	6014294.211		500.00	5°12'09"	249.93	3.78						
	CLOTHOID	ST	523+72.67	2071710.680	6014085.563											
	TANGENT	ST	523+72.67	2071710.680	6014085.563		1138.13							S 38°43'54" W		
	TANGENT	PI*	535+10.80	2070822.840	6013373.461											
	TANGENT	PI*	535+10.80	2070822.840	6013373.461		3899.25							S 38°42'58" W		
EON		BK	540+00.32	2070440.888	6013067.284											
EON		AHD	542+50.00													
	TANGENT	TS	576+59.73	2067780.429	6010934.627											
	CLOTHOID	TS	576+59.73	2067780.429	6010934.627										S 38°42'58" W	S 39°17'58" W
	CLOTHOID	SPI	577+76.40	2067689.399	6010861.657		175.00	0°35'00"	87.50	0.15						
	CLOTHOID	SC	578+34.73	2067644.258	6010824.709											
C118	ARC	SC	578+34.73	2067644.258	6010824.709											
	ARC	PI	578+95.96	2067596.872	6010785.925	8594.42	122.47	0°48'59"			100	2.00	2.67	0°40'00"		
	ARC	CC		2073087.731	6004173.946											
	ARC	CS	579+57.20	2067550.044	6010746.470											
	CLOTHOID	CS	579+57.20	2067550.044	6010746.470										S 40°06'57" W	S 40°41'57" W
	CLOTHOID	SPI	580+15.53	2067505.433	6010708.884		175.00	0°35'00"	87.50	0.15						
	CLOTHOID	ST	581+32.20	2067416.983	6010632.806											
	TANGENT	ST	581+32.20	2067416.983	6010632.806		183.13							S 40°41'57" W		
	TANGENT	TS	583+15.33	2067278.143	6010513.389											
	CLOTHOID	TS	583+15.33	2067278.143	6010513.389										S 40°41'57" W	S 40°06'57" W
	CLOTHOID	SPI	584+31.99	2067189.692	6010437.312		175.00	0°35'00"	87.50	0.15						
	CLOTHOID	SC	584+90.33	2067145.082	6010399.725											
C119	ARC	SC	584+90.33	2067145.082	6010399.725											
	ARC	PI	585+53.29	2067096.932	6010359.157	8594.42	125.92	0°50'22"			100	2.00	2.67	0°40'00"		
	ARC	CC		2061607.394	6016972.249											
	ARC	CS	586+16.25	2067048.193	6010319.298											
	CLOTHOID	CS	586+16.25	2067048.193	6010319.298										S 39°16'35" W	S 38°41'35" W
	CLOTHOID	SPI	586+74.58	2067003.037	6010282.369		175.00	0°35'00"	87.50	0.15						
	CLOTHOID	ST	587+91.25	2066911.977	6010209.434											
	TANGENT	ST	587+91.25	2066911.977	6010209.434		699.54							S 38°41'35" W		
	TANGENT	TS	594+90.79	2066365.983	6009772.119											
	CLOTHOID	TS	594+90.79	2066365.983	6009772.119										S 38°41'35" W	S 37°13'50" W
	CLOTHOID	SPI	596+70.79	2066225.487	6009659.588		270.00	1°27'45"	135.00	0.57						
	CLOTHOID	SC	597+60.79	2066153.824	6009605.133											
C120	ARC	SC	597+60.79	2066153.824	6009605.133											
	ARC	PI	599+35.39	2066014.805	6009499.495	5288.92	349.07	3°46'54"			100	3.25	4.33	1°05'00"		
	ARC	CC		2062953.900	6013816.209											
	ARC	CS	601+09.86	2065869.122	6009403.256											
	CLOTHOID	CS	601+09.86	2065869.122	6009403.256										S 33°26'56" W	S 31°59'11" W
	CLOTHOID	SPI	601+99.86	2065794.023	6009353.645		270.00	1°27'45"	135.00	0.57						
	CLOTHOID	ST	603+79.86	2065641.347	6009258.293											
	TANGENT	ST	603+79.86	2065641.347	6009258.293		119.05							S 31°59'11" W		
	TANGENT	TS	604+98.91	2065540.373	6009195.230											
	CLOTHOID	TS	604+98.91	2065540.373	6009195.230										S 31°59'11" W	S 32°38'49" W
	CLOTHOID	SPI	606+22.24	2065435.764	6009129.897		185.00	0°39'38"	92.50	0.18						
	CLOTHOID	SC	606+83.91	2065383.840	6009096.630											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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CALIFORNIA
 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C118 TO C120

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0005
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
C121	ARC	SC	606+83.91	2065383.840	6009096.630											
	ARC	PI	607+40.60	2065336.104	6009066.047	8025.00	113.38	0°48'34"			100	2.00	3.00	0°42'50"		
	ARC	CC		2069713.011	6002339.493											
	ARC	CS	607+97.29	2065288.806	6009034.793											
	CLOTHOID	CS	607+97.29	2065288.806	6009034.793										S 33°27'23" W	S 34°07'01" W
	CLOTHOID	SPI	608+58.95	2065237.356	6009000.795		185.00	0°39'38"	92.50	0.18						
	CLOTHOID	ST	609+82.29	2065135.248	6008931.619											
	TANGENT	ST	609+82.29	2065135.248	6008931.619		248.31							S 34°07'01" W		
	TANGENT	TS	612+30.60	2064929.674	6008792.347											
	CLOTHOID	TS	612+30.60	2064929.674	6008792.347										S 34°07'01" W	S 32°16'28" W
	CLOTHOID	SPI	614+57.74	2064741.621	6008664.945		340.70	1°50'33"	170.34	0.91						
	CLOTHOID	SC	615+71.30	2064645.591	6008604.297											
C122	ARC	SC	615+71.30	2064645.591	6008604.297											
	ARC	PI	622+01.73	2064112.562	6008267.664	5297.23	1254.94	13°34'26"			110	3.50	5.66	1°04'54"		
	ARC	CC		2061817.010	6013083.113											
	ARC	PCC	628+26.24	2063515.414	6008065.535											
	ARC	PCC	628+26.24	2063515.414	6008065.535											
	ARC	PI	633+41.45	2063027.398	6007900.347	5531.07	1027.45	10°38'36"			110	3.50	5.27	1°02'09"		
	ARC	CC		2061742.037	6013304.607											
	ARC	PCC	638+53.69	2062517.269	6007828.134											
	ARC	PCC	638+53.69	2062517.269	6007828.134											
	ARC	PI	641+57.98	2062215.981	6007785.485	5854.43	608.03	5°57'03"			110	3.50	4.79	0°58'43"		
	ARC	CC		2061696.715	6013624.771											
	ARC	CS	644+61.72	2061911.894	6007774.301											
	CLOTHOID	CS	644+61.72	2061911.894	6007774.301										S 2°06'23" W	S 0°38'58" W
	CLOTHOID	SPI	645+60.96	2061812.717	6007770.653		297.71	1°27'25"	148.85	0.63						
	CLOTHOID	ST	647+59.43	2061614.247	6007768.403											
	TANGENT	ST	647+59.43	2061614.247	6007768.403		2025.56							S 0°38'58" W		
EQN		BK	662+50.02	2060123.753	6007751.505											
EQN		AHD	665+00.00													
	TANGENT	TS	670+34.97	2059588.813	6007745.440											
	CLOTHOID	TS	670+34.97	2059588.813	6007745.440										S 0°38'58" W	S 3°20'05" E
	CLOTHOID	SPI	673+68.39	2059255.417	6007741.660		500.00	3°59'04"	249.96	2.90						
	CLOTHOID	SC	675+34.97	2059088.956	6007751.360											
C123	ARC	SC	675+34.97	2059088.956	6007751.360											
	ARC	PI	680+44.12	2058580.670	6007780.978	3595.00	1011.54	16°07'19"			100	6.00	5.16	1°35'38"		
	ARC	CC		2059298.082	6011340.272											
	ARC	CS	685+46.51	2058100.598	6007950.574											
	CLOTHOID	CS	685+46.51	2058100.598	6007950.574										S 19°27'25" E	S 23°26'29" E
	CLOTHOID	SPI	687+13.25	2057943.377	6008006.115		500.00	3°59'04"	249.96	2.90						
	CLOTHOID	ST	690+46.51	2057637.477	6008138.752											
	TANGENT	ST	690+46.51	2057637.477	6008138.752		2571.51							S 23°26'29" E		
	TANGENT	TS	716+18.02	2055278.202	6009161.719											
	CLOTHOID	TS	716+18.02	2055278.202	6009161.719										S 23°26'29" E	S 25°00'14" E
	CLOTHOID	SPI	718+68.03	2055048.826	6009261.176		375.00	1°33'45"	187.50	0.85						
	CLOTHOID	SC	719+93.02	2054935.533	6009314.014											
C124	ARC	SC	719+93.02	2054935.533	6009314.014											
	ARC	PI	721+88.09	2054758.738	6009396.469	6875.55	390.05	3°15'01"			110	3.00	4.06	0°50'00"		
	ARC	CC		2057841.674	6015545.188											
	ARC	CS	723+83.06	2054586.904	6009488.815											
	CLOTHOID	CS	723+83.06	2054586.904	6009488.815										S 28°15'15" E	S 29°49'00" E
	CLOTHOID	SPI	725+08.07	2054476.789	6009547.992		375.00	1°33'45"	187.50	0.85						
	CLOTHOID	ST	727+58.06	2054259.875	6009672.303											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 78 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C121 TO C124

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0006
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	727+58.06	2054259.875	6009672.303		231.30							S 29°49'00" E		
	TANGENT	TS	729+89.36	2054059.191	6009787.313											
	CLOTHOID	TS	729+89.36	2054059.191	6009787.313										S 29°49'00" E	S 30°04'02" E
	CLOTHOID	SPI	730+82.70	2053978.213	6009833.721		140.00	0°15'02"	70.00	0.05						
	CLOTHOID	SC	731+29.36	2053937.826	6009857.102											
C125	ARC	SC	731+29.36	2053937.826	6009857.102											
	ARC	PI	732+05.67	2053871.785	6009895.334	16000.00	152.62	0°32'47"			110	1.50	1.53	0°21'29"		
	ARC	CC		2061954.094	6023704.103											
	ARC	CS	732+81.98	2053806.112	6009934.194											
	CLOTHOID	CS	732+81.98	2053806.112	6009934.194										S 30°36'50" E	S 30°51'52" E
	CLOTHOID	SPI	733+28.65	2053765.950	6009957.959		140.00	0°15'02"	70.00	0.05						
	CLOTHOID	ST	734+21.98	2053685.834	6010005.840											
	TANGENT	ST	734+21.98	2053685.834	6010005.840		110.16							S 30°51'52" E		
	TANGENT	TS	735+32.14	2053591.275	6010062.353											
	CLOTHOID	TS	735+32.14	2053591.275	6010062.353										S 30°51'52" E	S 30°36'50" E
	CLOTHOID	SPI	736+25.47	2053511.159	6010110.234		140.00	0°15'02"	70.00	0.05						
	CLOTHOID	SC	736+72.14	2053470.997	6010133.999											
C126	ARC	SC	736+72.14	2053470.997	6010133.999											
	ARC	PI	737+46.74	2053406.796	6010171.988	16000.00	149.19	0°32'03"			110	1.50	1.53	0°21'29"		
	ARC	CC		2045323.015	5996364.090											
	ARC	CS	738+21.33	2053342.245	6010209.376											
	CLOTHOID	CS	738+21.33	2053342.245	6010209.376										S 30°04'46" E	S 29°49'44" E
	CLOTHOID	SPI	738+68.00	2053301.863	6010232.766		140.00	0°15'02"	70.00	0.05						
	CLOTHOID	ST	739+61.33	2053220.895	6010279.191											
	TANGENT	ST	739+61.33	2053220.895	6010279.191		2187.15							S 29°49'44" E		
	TANGENT	TS	761+48.49	2051323.509	6011367.104											
	CLOTHOID	TS	761+48.49	2051323.509	6011367.104										S 29°49'44" E	S 31°07'44" E
	CLOTHOID	SPI	763+21.82	2051173.136	6011453.324		260.00	1°18'00"	130.00	0.49						
	CLOTHOID	SC	764+08.49	2051098.945	6011498.130											
C127	ARC	SC	764+08.49	2051098.945	6011498.130											
	ARC	PI	766+78.29	2050867.991	6011637.608	5730.00	539.20	5°23'30"			100	2.75	4.25	1°00'00"		
	ARC	CC		2054061.145	6016403.053											
	ARC	CS	769+47.69	2050651.165	6011798.171											
	CLOTHOID	CS	769+47.69	2050651.165	6011798.171										S 36°31'14" E	S 37°49'13" E
	CLOTHOID	SPI	770+34.36	2050581.513	6011849.750		260.00	1°18'00"	130.00	0.49						
	CLOTHOID	ST	772+07.69	2050444.587	6011956.039											
	TANGENT	ST	772+07.69	2050444.587	6011956.039		2410.79							S 37°49'13" E		
	TANGENT	TS	796+18.47	2048540.216	6013434.305											
	CLOTHOID	TS	796+18.47	2048540.216	6013434.305										S 37°49'13" E	S 37°21'06" E
	CLOTHOID	SPI	797+38.47	2048445.424	6013507.887		180.00	0°28'08"	90.00	0.12						
	CLOTHOID	SC	797+98.47	2048397.728	6013544.290											
C128	ARC	SC	797+98.47	2048397.728	6013544.290											
	ARC	PI	799+08.41	2048310.340	6013610.986	11000.00	219.85	1°08'43"			110	2.00	2.41	0°31'15"		
	ARC	CC		2041723.979	6004800.087											
	ARC	CS	800+18.33	2048221.638	6013675.921											
	CLOTHOID	CS	800+18.33	2048221.638	6013675.921										S 36°12'23" E	S 35°44'16" E
	CLOTHOID	SPI	800+78.33	2048173.224	6013711.363		180.00	0°28'08"	90.00	0.12						
	CLOTHOID	ST	801+98.33	2048075.819	6013781.453											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 79 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C125 TO C128

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0007
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	801+98.33	2048075.819	6013781.453		644.56							S 35°44'16" E		
	TANGENT	TS	808+42.89	2047552.629	6014157.924											
	CLOTHOID	TS	808+42.89	2047552.629	6014157.924										S 35°44'16" E	S 36°12'23" E
	CLOTHOID	SPI	809+62.89	2047455.225	6014228.014		180.00	0°28'08"	90.00	0.12						
	CLOTHOID	SC	810+22.89	2047406.811	6014263.456											
C129	ARC	SC	810+22.89	2047406.811	6014263.456											
	ARC	PI	811+32.82	2047318.108	6014328.391	11000.00	219.85	1°08'43"			110	2.00	2.41	0°31'15"		
	ARC	CC		2053904.470	6023139.290											
	ARC	CS	812+42.74	2047230.721	6014395.087											
	CLOTHOID	CS	812+42.74	2047230.721	6014395.087										S 37°21'06" E	S 37°49'13" E
	CLOTHOID	SPI	813+02.74	2047183.025	6014431.490		180.00	0°28'08"	90.00	0.12						
	CLOTHOID	ST	814+22.74	2047088.232	6014505.072											
	TANGENT	ST	814+22.74	2047088.232	6014505.072		1576.46							S 37°49'13" E		
	TANGENT	TS	829+99.21	2045842.926	6015471.741											
	CLOTHOID	TS	829+99.21	2045842.926	6015471.741										S 37°49'13" E	S 41°24'05" E
	CLOTHOID	SPI	833+32.61	2045579.559	6015676.179		500.00	3°34'52"	249.97	2.60						
	CLOTHOID	SC	834+99.21	2045454.497	6015786.441											
C130	ARC	SC	834+99.21	2045454.497	6015786.441											
	ARC	PI	840+95.11	2045007.514	6016180.529	4000.00	1183.07	16°56'48"			105	6.00	5.05	1°25'57"		
	ARC	CC		2048099.816	6018786.823											
	ARC	CS	846+82.28	2044694.810	6016687.791											
	CLOTHOID	CS	846+82.28	2044694.810	6016687.791										S 58°20'53" E	S 61°55'45" E
	CLOTHOID	SPI	848+49.01	2044607.317	6016829.719		500.00	3°34'52"	249.97	2.60						
	CLOTHOID	ST	851+82.28	2044450.430	6017123.902											
	TANGENT	ST	851+82.28	2044450.430	6017123.902		1040.80							S 61°55'45" E		
	TANGENT	TS	862+23.08	2043960.668	6018042.266											
	CLOTHOID	TS	862+23.08	2043960.668	6018042.266										S 61°55'45" E	S 61°48'31" E
	CLOTHOID	SPI	862+93.08	2043927.728	6018104.032		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	SC	863+28.08	2043911.193	6018134.880											
C131	ARC	SC	863+28.08	2043911.193	6018134.880											
	ARC	PI	864+69.30	2043844.478	6018259.350	25000.00	282.44	0°38'50"			110	1.25	0.69	0°13'45"		
	ARC	CC		2021876.809	6006324.465											
	ARC	CS	866+10.52	2043776.360	6018383.058											
	CLOTHOID	CS	866+10.52	2043776.360	6018383.058										S 61°09'41" E	S 61°02'28" E
	CLOTHOID	SPI	866+45.52	2043759.478	6018413.718		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	ST	867+15.52	2043725.585	6018474.965											
	TANGENT	ST	867+15.52	2043725.585	6018474.965		222.94							S 61°02'28" E		
	TANGENT	PI*	869+38.46	2043617.641	6018670.031											
	TANGENT	PI*	869+38.46	2043617.641	6018670.031		1082.63							S 61°01'30" E		
	TANGENT	PI*	880+21.09	2043093.187	6019617.148											
	TANGENT	PI*	880+21.09	2043093.187	6019617.148		393.23							S 60°59'05" E		
	TANGENT	PI*	884+14.32	2042902.454	6019961.025											
	TANGENT	PI*	884+14.32	2042902.454	6019961.025		345.09							S 61°04'33" E		
	TANGENT	PI*	887+59.41	2042735.549	6020263.072											
	TANGENT	PI*	887+59.41	2042735.549	6020263.072		1691.72							S 61°02'16" E		
	TANGENT	PI*	904+51.13	2041916.359	6021743.224											
	TANGENT	PI*	904+51.13	2041916.359	6021743.224		1162.95							S 61°01'49" E		

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ALTERNATIVE A
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 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C129 TO C131

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0008
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	PI*	916+14.08	2041353.090	6022760.659											
	TANGENT	PI*	916+14.08	2041353.090	6022760.659		898.08							S 61°02'27" E		
	TANGENT	PI*	925+12.16	2040918.251	6023546.450											
	TANGENT	PI*	925+12.16	2040918.251	6023546.450		1093.77							S 61°02'10" E		
	TANGENT	PI*	936+05.93	2040388.586	6024503.412											
	TANGENT	PI*	936+05.93	2040388.586	6024503.412		1199.85							S 61°01'50" E		
	TANGENT	PI*	948+05.78	2039807.446	6025553.137											
	TANGENT	PI*	948+05.78	2039807.446	6025553.137		977.51							S 61°02'27" E		
	TANGENT	PI*	957+83.29	2039334.148	6026408.423											
	TANGENT	PI*	957+83.29	2039334.148	6026408.423		1445.58							S 61°01'34" E		
	TANGENT	PI*	972+28.87	2038633.893	6027673.071											
	TANGENT	PI*	972+28.87	2038633.893	6027673.071		450.63							S 60°59'57" E		
	TANGENT	PI*	976+79.49	2038415.420	6028067.194											
	TANGENT	PI*	976+79.49	2038415.420	6028067.194		992.35							S 61°01'27" E		
	TANGENT	PI*	986+71.85	2037934.684	6028935.329											
	TANGENT	PI*	986+71.85	2037934.684	6028935.329		508.62							S 61°00'50" E		
	TANGENT	PI*	991+80.46	2037688.210	6029380.234											
	TANGENT	PI*	991+80.46	2037688.210	6029380.234		267.25							S 61°03'31" E		
	TANGENT	PI*	994+47.71	2037558.883	6029614.110											
	TANGENT	PI*	994+47.71	2037558.883	6029614.110		326.03							S 61°00'22" E		
	TANGENT	PI*	997+73.74	2037400.851	6029899.280											
	TANGENT	PI*	997+73.74	2037400.851	6029899.280		330.57							S 60°58'32" E		
	TANGENT	TS	1001+04.31	2037240.466	6030188.331											
	CLOTHOID	TS	1001+04.31	2037240.466	6030188.331											
	CLOTHOID	SPI	1004+66.36	2037064.804	6030504.917		543.00	3°04'45"	271.47	2.43					S 60°58'32" E	S 57°53'47" E
	CLOTHOID	SC	1006+47.31	2036968.584	6030658.282											
	ARC	SC	1006+47.31	2036968.584	6030658.282											
C132	ARC	PI	1007+72.04	2036902.295	6030763.942	5051.85	249.41	2°49'44"			100	3.50	4.44	1°08'03"		
	ARC	CC		2032689.222	6027973.469											
	ARC	PCC	1008+96.72	2036830.872	6030866.202											
	ARC	PCC	1008+96.72	2036830.872	6030866.202											
	ARC	PI	1010+12.64	2036764.495	6030961.236	6250.52	231.81	2°07'30"			100	3.50	2.92	0°55'00"		
	ARC	CC		2031706.516	6027287.099											
	ARC	PCC	1011+28.53	2036694.641	6031053.744											
	ARC	PCC	1011+28.53	2036694.641	6031053.744											
	ARC	PI	1017+08.81	2036344.954	6031516.829	5690.88	1156.56	11°38'40"			100	3.50	3.55	1°00'25"		
	ARC	CC		2032153.128	6027624.345											
	ARC	CS	1022+85.09	2035908.997	6031899.805											
	CLOTHOID	CS	1022+85.09	2035908.997	6031899.805											
	CLOTHOID	SPI	1023+81.76	2035836.368	6031963.607		290.00	1°27'35"	145.00	0.62					S 41°17'54" E	S 39°50'19" E
	CLOTHOID	ST	1025+75.09	2035687.912	6032087.466											
	TANGENT	ST	1025+75.09	2035687.912	6032087.466		748.74								S 39°50'19" E	
	TANGENT	TS	1033+23.83	2035112.986	6032567.131											
	CLOTHOID	TS	1033+23.83	2035112.986	6032567.131											
	CLOTHOID	SPI	1033+57.16	2035087.391	6032588.486		50.00	0°11'15"	25.00	0.01					S 39°50'19" E	S 39°39'04" E
	CLOTHOID	SC	1033+73.83	2035074.558	6032599.121											

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C132

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0009
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
C133	ARC	SC	1033+73.83	2035074.558	6032599.121	7639.49	151.03	1°07'58"			79	0.50	2.78	0°45'00"		
	ARC	PI	1034+49.35	2035016.415	6032647.309											
	ARC	CC		2030199.725	6026717.131											
	ARC	CS	1035+24.86	2034957.330	6032694.338											
	CLOTHOID	CS	1035+24.86	2034957.330	6032694.338										S 38°31'06" E	S 38°19'51" E
	CLOTHOID	SPI	1035+41.52	2034944.290	6032704.717		50.00	0°11'15"	25.00	0.01						
	CLOTHOID	ST	1035+74.86	2034918.142	6032725.390											
	TANGENT	ST	1035+74.86	2034918.142	6032725.390		97.11								S 38°19'51" E	
	TANGENT	TS	1036+71.97	2034841.963	6032785.619											
	CLOTHOID	TS	1036+71.97	2034841.963	6032785.619										S 38°19'51" E	S 38°34'26" E
	CLOTHOID	SPI	1037+05.30	2034815.815	6032806.292		50.00	0°14'35"	25.00	0.02						
	CLOTHOID	SC	1037+21.97	2034802.785	6032816.684											
C134	ARC	SC	1037+21.97	2034802.785	6032816.684	5894.42	107.86	1°02'55"			79	0.50	3.75	0°58'19"		
	ARC	PI	1037+75.90	2034760.619	6032850.313											
	ARC	CC		2038478.089	6037424.974											
	ARC	CS	1038+29.83	2034719.076	6032884.708											
	CLOTHOID	CS	1038+29.83	2034719.076	6032884.708										S 39°37'20" E	S 39°51'55" E
	CLOTHOID	SPI	1038+46.50	2034706.238	6032895.337		50.00	0°14'35"	25.00	0.02						
	CLOTHOID	ST	1038+79.83	2034680.653	6032916.703											
	TANGENT	ST	1038+79.83	2034680.653	6032916.703		4781.43								S 39°51'55" E	
	TANGENT	TS	1086+61.26	2031010.652	6035981.528											
	CLOTHOID	TS	1086+61.26	2031010.652	6035981.528										S 39°51'55" E	S 37°11'29" E
	CLOTHOID	SPI	1089+64.63	2030777.801	6036175.982		455.00	2°40'26"	227.48	1.77						
	CLOTHOID	SC	1091+16.26	2030656.955	6036267.681											
C135	ARC	SC	1091+16.26	2030656.955	6036267.681	4875.00	1191.33	14°00'07"			110	5.50	4.45	1°10'31"		
	ARC	PI	1097+14.92	2030180.053	6036629.558											
	ARC	CC		2027710.109	6032384.161											
	ARC	CS	1103+07.59	2029629.764	6036865.294											
	CLOTHOID	CS	1103+07.59	2029629.764	6036865.294										S 23°11'23" E	S 20°30'57" E
	CLOTHOID	SPI	1104+59.29	2029490.322	6036925.029		455.00	2°40'26"	227.48	1.77						
	CLOTHOID	ST	1107+62.59	2029206.195	6037031.349											
	TANGENT	ST	1107+62.59	2029206.195	6037031.349		624.40								S 20°30'57" E	
	TANGENT	TS	1113+86.99	2028621.397	6037250.180											
	CLOTHOID	TS	1113+86.99	2028621.397	6037250.180										S 20°30'57" E	S 21°33'42" E
	CLOTHOID	SPI	1115+54.33	2028464.674	6037308.826		251.00	1°02'45"	125.50	0.38						
	CLOTHOID	SC	1116+37.99	2028386.859	6037339.574											
C136	ARC	SC	1116+37.99	2028386.859	6037339.574	6875.00	1235.71	10°17'54"			110	3.00	4.06	0°50'00"		
	ARC	PI	1122+57.52	2027810.683	6037567.253											
	ARC	CC		2030913.444	6043733.477											
	ARC	CS	1128+73.70	2027284.493	6037894.270											
	CLOTHOID	CS	1128+73.70	2027284.493	6037894.270										S 31°51'36" E	S 32°54'22" E
	CLOTHOID	SPI	1129+57.37	2027213.429	6037938.435		251.00	1°02'45"	125.50	0.38						
	CLOTHOID	ST	1131+24.70	2027072.940	6038029.343											
	TANGENT	ST	1131+24.70	2027072.940	6038029.343		744.08								S 32°54'22" E	
	TANGENT	TS	1138+68.78	2026448.237	6038433.574											
	CLOTHOID	TS	1138+68.78	2026448.237	6038433.574										S 32°54'22" E	S 32°16'52" E
	CLOTHOID	SPI	1140+35.45	2026308.309	6038524.119		250.00	0°37'30"	125.00	0.23						
	CLOTHOID	SC	1141+18.78	2026237.855	6038568.625											
C137	ARC	SC	1141+18.78	2026237.855	6038568.625	11459.19	108.38	0°32'31"			110	3.00	1.24	0°30'00"		
	ARC	PI	1141+72.97	2026192.042	6038597.566											
	ARC	CC		2020117.816	6028880.584											
	ARC	CS	1142+27.16	2026145.958	6038626.072											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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REV	DATE	BY	CHK	APP	DESCRIPTION

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 Oakland, CA 94607


CALIFORNIA
 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C133TO C137

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0010
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	SPI	1143+10.49	2026075.086	6038669.910		250.00	0°37'30"	125.00	0.23						
	CLOTHOID	ST	1144+77.16	2025932.395	6038756.035											
	TANGENT	ST	1144+77.16	2025932.395	6038756.035		276.54							S 31°06'51" E		
	TANGENT	TS	1147+53.70	2025695.636	6038898.937											
	CLOTHOID	TS	1147+53.70	2025695.636	6038898.937										S 31°06'51" E	S 31°44'21" E
	CLOTHOID	SPI	1149+20.37	2025552.945	6038985.062		250.00	0°37'30"	125.00	0.23						
	CLOTHOID	SC	1150+03.70	2025482.074	6039028.900											
	ARC	SC	1150+03.70	2025482.074	6039028.900											
C138	ARC	PI	1150+57.88	2025435.996	6039057.401	11459.19	108.36	0°32'30"			110	3.00	1.24	0°30'00"		
	ARC	CC		2031510.215	6048774.388											
	ARC	CS	1151+12.06	2025390.191	6039086.337											
	CLOTHOID	CS	1151+12.06	2025390.191	6039086.337										S 32°16'51" E	S 32°54'21" E
	CLOTHOID	SPI	1151+95.39	2025319.737	6039130.843		250.00	0°37'30"	125.00	0.23						
	CLOTHOID	ST	1153+62.06	2025179.809	6039221.387											
	TANGENT	ST	1153+62.06	2025179.809	6039221.387		821.69							S 32°54'21" E		
	TANGENT	TS	1161+83.75	2024489.947	6039667.780											
	CLOTHOID	TS	1161+83.75	2024489.947	6039667.780										S 32°54'21" E	S 34°09'44" E
	CLOTHOID	SPI	1164+07.09	2024302.440	6039789.112		335.00	1°15'22"	167.50	0.61						
	CLOTHOID	SC	1165+18.75	2024210.037	6039851.820											
	ARC	SC	1165+18.75	2024210.037	6039851.820											
C139	ARC	PI	1167+60.11	2024010.318	6039987.357	7639.49	482.57	3°37'09"			110	4.00	2.35	0°45'00"		
	ARC	CC		2028499.897	6046173.126											
	ARC	CS	1170+01.32	2023819.552	6040135.230											
	CLOTHOID	CS	1170+01.32	2023819.552	6040135.230										S 37°46'53" E	S 39°03'47" E
	CLOTHOID	SPI	1171+15.25	2023729.505	6040205.032		341.78	1°16'54"	170.89	0.64						
	CLOTHOID	SS	1173+43.10	2023552.582	6040348.624											
	CLOTHOID	SS	1173+43.10	2023552.582	6040348.624										S 39°03'47" E	S 37°46'53" E
	CLOTHOID	SPI	1175+70.96	2023375.659	6040492.217		341.78	1°16'54"	170.89	0.64						
	CLOTHOID	SC	1176+84.88	2023285.611	6040562.018											
	ARC	SC	1176+84.88	2023285.611	6040562.018											
C140	ARC	PI	1177+81.43	2023209.306	6040621.167	7639.49	193.08	1°26'53"			110	4.00	2.35	0°45'00"		
	ARC	CC		2018605.267	6034524.123											
	ARC	CS	1178+77.96	2023131.531	6040678.368											
	CLOTHOID	CS	1178+77.96	2023131.531	6040678.368										S 36°20'00" E	S 35°04'38" E
	CLOTHOID	SPI	1179+89.63	2023041.570	6040744.532		335.00	1°15'22"	167.50	0.61						
	CLOTHOID	ST	1182+12.96	2022858.794	6040872.880											
	TANGENT	ST	1182+12.96	2022858.794	6040872.880		68.27							S 35°04'38" E		
	TANGENT	TS	1182+81.23	2022802.924	6040912.113											
	CLOTHOID	TS	1182+81.23	2022802.924	6040912.113										S 35°04'38" E	S 36°43'27" E
	CLOTHOID	SPI	1185+04.58	2022620.144	6041040.464		335.00	1°38'49"	167.50	0.80						
	CLOTHOID	SC	1186+16.23	2022530.634	6041107.242											
	ARC	SC	1186+16.23	2022530.634	6041107.242											
C141	ARC	PI	1189+66.14	2022250.178	6041316.471	5826.76	698.96	6°52'23"			110	4.00	4.33	0°59'00"		
	ARC	CC		2026014.825	6045777.525											
	ARC	CS	1193+15.19	2021996.776	6041557.760											
	CLOTHOID	CS	1193+15.19	2021996.776	6041557.760										S 43°35'50" E	S 45°14'40" E
	CLOTHOID	SPI	1194+26.87	2021915.900	6041634.769		335.00	1°38'49"	167.50	0.80						
	CLOTHOID	ST	1196+50.19	2021758.648	6041793.369											

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ALTERNATIVE A
BOOK A4
SHEET 83 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C138 TO C141

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0011
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1196+50.19	2021758.648	6041793.369		398.01							S 45°14'40" E		
	TANGENT	TS	1200+48.21	2021478.413	6042076.005											
	CLOTHOID	TS	1200+48.21	2021478.413	6042076.005										S 45°14'40" E	S 45°40'01" E
	CLOTHOID	SPI	1201+60.87	2021399.086	6042156.011		169.00	0°25'21"	84.50	0.10						
	CLOTHOID	SC	1202+17.21	2021359.718	6042196.306											
C142	ARC	SC	1202+17.21	2021359.718	6042196.306											
	ARC	PI	1204+78.48	2021177.133	6042383.192	11459.19	522.45	2°36'44"			110	2.00	2.24	0°30'00"		
	ARC	CC		2029556.347	6050204.322											
	ARC	CS	1207+39.66	2021003.255	6042578.205											
	CLOTHOID	CS	1207+39.66	2021003.255	6042578.205										S 48°16'45" E	S 48°42'06" E
	CLOTHOID	SPI	1207+95.99	2020965.765	6042620.252		169.00	0°25'21"	84.50	0.10						
	CLOTHOID	ST	1209+08.66	2020891.407	6042704.897											
	TANGENT	ST	1209+08.66	2020891.407	6042704.897		2065.63							S 48°42'06" E		
	TANGENT	PI*	1229+74.29	2019528.130	6044256.771											
	TANGENT	PI*	1229+74.29	2019528.130	6044256.771		298.28							S 48°44'01" E		
	TANGENT	TS	1232+72.57	2019331.399	6044480.970											
	CLOTHOID	TS	1232+72.57	2019331.399	6044480.970										S 48°44'01" E	S 47°14'07" E
	CLOTHOID	SPI	1234+79.24	2019195.085	6044636.316		310.00	1°29'54"	155.00	0.68						
	CLOTHOID	SC	1235+82.57	2019124.918	6044712.183											
C143	ARC	SC	1235+82.57	2019124.918	6044712.183											
	ARC	PI	1237+39.63	2019018.271	6044827.492	5927.22	314.05	3°02'09"			110	3.75	4.44	0°58'00"		
	ARC	CC		2014773.469	6040687.654											
	ARC	CS	1238+96.62	2018905.668	6044936.992											
	CLOTHOID	CS	1238+96.62	2018905.668	6044936.992										S 44°11'57" E	S 42°42'04" E
	CLOTHOID	SPI	1239+99.96	2018831.582	6045009.036		310.00	1°29'54"	155.00	0.68						
	CLOTHOID	ST	1242+06.62	2018679.696	6045149.196											
	TANGENT	ST	1242+06.62	2018679.696	6045149.196		563.54							S 42°42'04" E		
	TANGENT	TS	1247+70.16	2018265.551	6045531.372											
	CLOTHOID	TS	1247+70.16	2018265.551	6045531.372										S 42°42'04" E	S 42°14'58" E
	CLOTHOID	SPI	1248+86.83	2018179.812	6045610.492		175.00	0°27'06"	87.50	0.11						
	CLOTHOID	SC	1249+45.16	2018136.632	6045649.713											
C144	ARC	SC	1249+45.16	2018136.632	6045649.713											
	ARC	PI	1250+37.40	2018068.351	6045711.734	11100.00	184.48	0°57'08"			110	2.00	2.37	0°30'58"		
	ARC	CC		2010673.456	6037433.205											
	ARC	CS	1251+29.64	2017999.048	6045772.612											
	CLOTHOID	CS	1251+29.64	2017999.048	6045772.612										S 41°17'49" E	S 40°50'43" E
	CLOTHOID	SPI	1251+87.97	2017955.222	6045811.110		175.00	0°27'06"	87.50	0.11						
	CLOTHOID	ST	1253+04.64	2017866.966	6045887.412											
	TANGENT	ST	1253+04.64	2017866.966	6045887.412		102.01							S 40°50'43" E		
	TANGENT	TS	1254+06.66	2017789.795	6045954.132											
	CLOTHOID	TS	1254+06.66	2017789.795	6045954.132										S 40°50'43" E	S 41°17'49" E
	CLOTHOID	SPI	1255+23.32	2017701.539	6046030.435		175.00	0°27'06"	87.50	0.11						
	CLOTHOID	SC	1255+81.66	2017657.713	6046068.933											
C145	ARC	SC	1255+81.66	2017657.713	6046068.933											
	ARC	PI	1256+73.63	2017588.612	6046129.633	11100.00	183.95	0°56'58"			110	2.00	2.37	0°30'58"		
	ARC	CC		2024983.305	6054408.339											
	ARC	CS	1257+65.60	2017520.526	6046191.471											
	CLOTHOID	CS	1257+65.60	2017520.526	6046191.471										S 42°14'48" E	S 42°41'54" E
	CLOTHOID	SPI	1258+23.94	2017477.344	6046230.690		175.00	0°27'06"	87.50	0.11						
	CLOTHOID	ST	1259+40.60	2017391.601	6046309.806											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C142 TO C145

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0012
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1259+40.60	2017391.601	6046309.806		855.56							S 42°41'54" E		
	TANGENT	TS	1267+96.17	2016762.817	6046889.995											
	CLOTHOID	TS	1267+96.17	2016762.817	6046889.995										S 42°41'54" E	S 42°55'02" E
	CLOTHOID	SPI	1268+82.83	2016699.123	6046948.767		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	SC	1269+26.17	2016667.388	6046978.274											
C146	ARC	SC	1269+26.17	2016667.388	6046978.274											
	ARC	PI	1270+28.15	2016592.699	6047047.721	17000.00	203.97	0°41'15"			110	1.50	1.35	0°20'13"		
	ARC	CC		2028243.401	6059428.010											
	ARC	CS	1271+30.14	2016518.849	6047118.059											
	CLOTHOID	CS	1271+30.14	2016518.849	6047118.059										S 43°36'17" E	S 43°49'26" E
	CLOTHOID	SPI	1271+73.47	2016487.471	6047147.945		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	ST	1272+60.14	2016424.943	6047207.957											
	TANGENT	ST	1272+60.14	2016424.943	6047207.957		745.55							S 43°49'26" E		
	TANGENT	TS	1280+05.68	2015887.053	6047724.205											
	CLOTHOID	TS	1280+05.68	2015887.053	6047724.205										S 43°49'26" E	S 44°45'41" E
	CLOTHOID	SPI	1281+72.35	2015766.806	6047839.614		250.00	0°56'15"	125.00	0.34						
	CLOTHOID	SC	1282+55.68	2015707.634	6047898.295											
C147	ARC	SC	1282+55.68	2015707.634	6047898.295											
	ARC	PI	1283+20.40	2015661.682	6047943.865	7639.49	129.43	0°58'15"			110	3.00	3.35	0°45'00"		
	ARC	CC		2021087.018	6053322.687											
	ARC	CS	1283+85.11	2015616.509	6047990.207											
	CLOTHOID	CS	1283+85.11	2015616.509	6047990.207										S 45°43'55" E	S 46°40'10" E
	CLOTHOID	SPI	1284+68.45	2015558.340	6048049.883		250.00	0°56'15"	125.00	0.34						
	CLOTHOID	ST	1286+35.11	2015443.971	6048171.119											
	TANGENT	ST	1286+35.11	2015443.971	6048171.119		497.70							S 46°40'10" E		
	TANGENT	TS	1291+32.81	2015102.447	6048533.149											
	CLOTHOID	TS	1291+32.81	2015102.447	6048533.149										S 46°40'10" E	S 46°02'05" E
	CLOTHOID	SPI	1292+68.81	2015009.122	6048632.077		204.00	0°38'05"	102.00	0.19						
	CLOTHOID	SC	1293+36.81	2014961.915	6048681.021											
C148	ARC	SC	1293+36.81	2014961.915	6048681.021											
	ARC	PI	1296+37.91	2014752.886	6048897.741	9208.30	601.98	3°44'44"			110	2.25	3.02	0°37'20"		
	ARC	CC		2008334.128	6042288.429											
	ARC	CS	1299+38.79	2014530.146	6049100.342											
	CLOTHOID	CS	1299+38.79	2014530.146	6049100.342										S 42°17'21" E	S 41°39'16" E
	CLOTHOID	SPI	1300+06.79	2014479.842	6049146.098		204.00	0°38'05"	102.00	0.19						
	CLOTHOID	ST	1301+42.79	2014378.227	6049236.489											
	TANGENT	ST	1301+42.79	2014378.227	6049236.489		624.72							S 41°39'16" E		
	TANGENT	TS	1307+67.50	2013911.461	6049651.698											
	CLOTHOID	TS	1307+67.50	2013911.461	6049651.698										S 41°39'16" E	S 41°28'52" E
	CLOTHOID	SPI	1308+48.17	2013851.189	6049705.313		121.00	0°10'24"	60.50	0.03						
	CLOTHOID	SC	1308+88.50	2013820.973	6049732.028											
C149	ARC	SC	1308+88.50	2013820.973	6049732.028											
	ARC	PI	1310+10.03	2013729.927	6049812.525	19985.00	243.05	0°41'49"			110	1.25	1.18	0°17'12"		
	ARC	CC		2000583.452	6034759.778											
	ARC	CS	1311+31.56	2013637.908	6049891.910											
	CLOTHOID	CS	1311+31.56	2013637.908	6049891.910										S 40°47'03" E	S 40°36'39" E
	CLOTHOID	SPI	1311+71.89	2013607.369	6049918.256		121.00	0°10'24"	60.50	0.03						
	CLOTHOID	ST	1312+52.56	2013546.131	6049970.763											

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ALTERNATIVE A
BOOK A4
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C146 TO C149

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0013
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1312+52.56	2013546.131	6049970.763		103.93							S 40°36'39" E		
	TANGENT	TS	1313+56.49	2013467.231	6050038.414											
	CLOTHOID	TS	1313+56.49	2013467.231	6050038.414										S 40°36'39" E	S 40°57'32" E
	CLOTHOID	SPI	1314+61.82	2013387.267	6050106.978		158.00	0°20'53"	79.00	0.08						
	CLOTHOID	SC	1315+14.49	2013347.495	6050141.502											
C150	ARC	SC	1315+14.49	2013347.495	6050141.502											
	ARC	PI	1315+92.73	2013288.407	6050192.792	13000.00	156.48	0°41'23"			110	1.75	1.99	0°26'27"		
	ARC	CC		2021869.239	6059958.827											
	ARC	CS	1316+70.97	2013229.941	6050244.789											
	CLOTHOID	CS	1316+70.97	2013229.941	6050244.789										S 41°38'55" E	S 41°59'49" E
	CLOTHOID	SPI	1317+23.64	2013190.587	6050279.789		158.00	0°20'53"	79.00	0.08						
	CLOTHOID	ST	1318+28.97	2013112.305	6050350.267									S 41°59'49" E		
	TANGENT	ST	1318+28.97	2013112.305	6050350.267		114.30									
	TANGENT	TS	1319+43.28	2013027.357	6050426.745											
	CLOTHOID	TS	1319+43.28	2013027.357	6050426.745										S 41°59'49" E	S 41°50'19" E
	CLOTHOID	SPI	1320+20.61	2012969.885	6050478.488		116.00	0°09'30"	58.00	0.03						
	CLOTHOID	SC	1320+59.28	2012941.077	6050504.280											
C151	ARC	SC	1320+59.28	2012941.077	6050504.280											
	ARC	PI	1321+23.87	2012892.949	6050547.370	21000.00	129.20	0°21'09"			110	1.25	1.06	0°16'22"		
	ARC	CC		1998933.345	6034858.723											
	ARC	CS	1321+88.47	2012844.557	6050590.163											
	CLOTHOID	CS	1321+88.47	2012844.557	6050590.163										S 41°29'10" E	S 41°19'40" E
	CLOTHOID	SPI	1322+27.14	2012815.591	6050615.777		116.00	0°09'30"	58.00	0.03						
	CLOTHOID	ST	1323+04.47	2012757.518	6050666.845									S 41°19'40" E		
	TANGENT	ST	1323+04.47	2012757.518	6050666.845		1681.17									
	TANGENT	TS	1339+85.64	2011495.059	6051777.032											
	CLOTHOID	TS	1339+85.64	2011495.059	6051777.032										S 41°19'40" E	S 41°16'30" E
	CLOTHOID	SPI	1340+40.97	2011453.507	6051813.572		83.00	0°03'10"	41.50	0.01						
	CLOTHOID	SC	1340+68.64	2011432.714	6051831.823											
C152	ARC	SC	1340+68.64	2011432.714	6051831.823											
	ARC	PI	1341+26.71	2011389.072	6051870.130	45000.00	116.14	0°08'52"			110	1.00	0.08	0°07'38"		
	ARC	CC		1981747.369	6018012.002											
	ARC	CS	1341+84.78	2011345.331	6051908.324											
	CLOTHOID	CS	1341+84.78	2011345.331	6051908.324										S 41°07'38" E	S 41°04'28" E
	CLOTHOID	SPI	1342+12.44	2011324.492	6051926.521		83.00	0°03'10"	41.50	0.01						
	CLOTHOID	ST	1342+67.78	2011282.778	6051962.877									S 41°04'28" E		
	TANGENT	ST	1342+67.78	2011282.778	6051962.877		197.99									
	TANGENT	TS	1344+65.77	2011133.519	6052092.966											
	CLOTHOID	TS	1344+65.77	2011133.519	6052092.966										S 41°04'28" E	S 41°07'38" E
	CLOTHOID	SPI	1345+21.10	2011091.805	6052129.322		83.00	0°03'10"	41.50	0.01						
	CLOTHOID	SC	1345+48.77	2011070.966	6052147.520											
C153	ARC	SC	1345+48.77	2011070.966	6052147.520											
	ARC	PI	1346+06.61	2011027.397	6052185.563	45000.00	115.68	0°08'50"			110	1.00	0.08	0°07'38"		
	ARC	CC		2040668.928	6086043.841											
	ARC	CS	1346+64.45	2010983.927	6052223.718											
	CLOTHOID	CS	1346+64.45	2010983.927	6052223.718										S 41°16'28" E	S 41°19'38" E
	CLOTHOID	SPI	1346+92.12	2010963.134	6052241.969		83.00	0°03'10"	41.50	0.01						
	CLOTHOID	ST	1347+47.45	2010921.582	6052278.509											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 86 OF 100

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REV	DATE	BY	CHK	APP	DESCRIPTION

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C150 TO C153

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0014
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1347+47.45	2010921.582	6052278.509		3394.48							S 41°19'38" E		
	TANGENT	PI*	1381+41.92	2008372.502	6054520.083											
	TANGENT	PI*	1381+41.92	2008372.502	6054520.083		1181.71							S 41°18'37" E		
	TANGENT	TS	1393+23.64	2007484.863	6055300.173											
	CLOTHOID	TS	1393+23.64	2007484.863	6055300.173										S 41°18'37" E	S 42°15'37" E
	CLOTHOID	SPI	1395+23.64	2007334.632	6055432.202		300.00	0°57'00"	150.00	0.41						
	CLOTHOID	SC	1396+23.64	2007260.620	6055499.453											
	ARC	SC	1396+23.64	2007260.620	6055499.453											
C154	ARC	PI	1402+08.52	2006827.746	6055892.790	9046.75	1168.14	7°23'54"			110	2.50	2.86	0°38'00"		
	ARC	CC		2013344.549	6062194.937											
	ARC	CS	1407+91.78	2006449.123	6056338.591											
	CLOTHOID	CS	1407+91.78	2006449.123	6056338.591										S 49°39'30" E	S 50°36'30" E
	CLOTHOID	SPI	1408+91.78	2006384.387	6056414.812		300.00	0°57'00"	150.00	0.41						
	CLOTHOID	ST	1410+91.78	2006257.462	6056569.380											
	TANGENT	ST	1410+91.78	2006257.462	6056569.380		843.22							S 50°36'30" E		
	TANGENT	PI*	1419+35.00	2005722.341	6057221.044											
	TANGENT	PI*	1419+35.00	2005722.341	6057221.044		1691.53							S 50°35'11" E		
EON		BK	1419+99.97	2005681.091	6057271.238											
EON		AHD	1425+00.00													
	TANGENT	PI*	1441+26.56	2004648.369	6058527.890											
	TANGENT	PI*	1441+26.56	2004648.369	6058527.890		1204.31							S 50°35'42" E		
	TANGENT	PI*	1453+30.87	2003883.874	6059458.435											
	TANGENT	PI*	1453+30.87	2003883.874	6059458.435		2953.67							S 50°35'14" E		
	TANGENT	PI*	1482+84.54	2002008.584	6061740.417											
	TANGENT	PI*	1482+84.54	2002008.584	6061740.417		4796.03							S 50°34'52" E		
	TANGENT	PI*	1530+80.57	1998963.177	6065445.466											
	TANGENT	PI*	1541+32.87	1998295.152	6066258.537		1052.30							S 50°35'36" E		
	TANGENT	PI*	1541+32.87	1998295.152	6066258.537		627.19							S 50°31'50" E		
	TANGENT	PI*	1547+60.06	1997896.470	6066742.704											
	TANGENT	TS	1552+59.95	1997579.161	6067128.986		499.90							S 50°35'56" E		
	CLOTHOID	TS	1552+59.95	1997579.161	6067128.986										S 50°35'56" E	S 50°37'43" E
	CLOTHOID	SPI	1553+13.29	1997545.308	6067170.198		80.00	0°01'47"	40.00	0.00						
	CLOTHOID	SC	1553+39.95	1997528.392	6067190.812											
	ARC	SC	1553+39.95	1997528.392	6067190.812											
C155	ARC	PI	1553+95.14	1997493.384	6067233.475	77000.00	110.38	0°04'56"			110	0.50	0.13	0°04'28"		
	ARC	CC		2057053.274	6116035.346											
	ARC	CS	1554+50.33	1997458.437	6067276.189											
	CLOTHOID	CS	1554+50.33	1997458.437	6067276.189										S 50°42'39" E	S 50°44'26" E
	CLOTHOID	SPI	1554+77.00	1997441.551	6067296.828		80.00	0°01'47"	40.00	0.00						
	CLOTHOID	ST	1555+30.33	1997407.799	6067338.123											
	TANGENT	ST	1555+30.33	1997407.799	6067338.123		873.62							S 50°44'26" E		
	TANGENT	TS	1564+03.95	1996854.946	6068014.554											
	CLOTHOID	TS	1564+03.95	1996854.946	6068014.554										S 50°44'26" E	S 50°42'39" E
	CLOTHOID	SPI	1564+57.28	1996821.194	6068055.849		80.00	0°01'47"	40.00	0.00						
	CLOTHOID	SC	1564+83.95	1996804.308	6068076.488											
	ARC	SC	1564+83.95	1996804.308	6068076.488											
C156	ARC	PI	1565+66.55	1996752.000	6068140.421	77000.00	165.21	0°07'23"			110	0.50	0.13	0°04'28"		
	ARC	CC		1937209.472	6019317.330											
	ARC	CS	1566+49.16	1996699.554	6068204.242											

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ALTERNATIVE A
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 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C154 TO C156

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0015
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	SPI	1566+75.82	1996682.623	6068224.844		80.00	0°01'47"	40.00	0.00						
	CLOTHOID	ST	1567+29.16	1996648.741	6068266.032											
	TANGENT	ST	1567+29.16	1996648.741	6068266.032		2912.35							S 50°33'29" E		
	TANGENT	TS	1596+41.51	1994798.537	6070515.147											
	CLOTHOID	TS	1596+41.51	1994798.537	6070515.147										S 50°33'29" E	S 50°30'44" E
	CLOTHOID	SPI	1596+94.84	1994764.654	6070556.335		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	SC	1597+21.51	1994747.696	6070576.915											
	ARC	SC	1597+21.51	1994747.696	6070576.915											
C157	ARC	PI	1597+83.36	1994708.364	6070624.650	50000.00	123.70	0°08'30"			110	0.75	0.22	0°06'53"		
	ARC	CC		1956159.693	6038781.224											
	ARC	CS	1598+45.21	1994668.914	6070672.287											
	CLOTHOID	CS	1598+45.21	1994668.914	6070672.287										S 50°22'14" E	S 50°19'29" E
	CLOTHOID	SPI	1598+71.88	1994651.906	6070692.825		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	ST	1599+25.21	1994617.856	6070733.874											
	TANGENT	ST	1599+25.21	1994617.856	6070733.874		356.43							S 50°19'29" E		
	TANGENT	TS	1602+81.64	1994390.298	6071008.208											
	CLOTHOID	TS	1602+81.64	1994390.298	6071008.208										S 50°19'29" E	S 50°22'14" E
	CLOTHOID	SPI	1603+34.97	1994356.248	6071049.257		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	SC	1603+61.64	1994339.240	6071069.796											
	ARC	SC	1603+61.64	1994339.240	6071069.796											
C158	ARC	PI	1604+22.56	1994300.381	6071116.719	50000.00	121.85	0°08'23"			110	0.75	0.22	0°06'53"		
	ARC	CC		2032848.461	6102960.858											
	ARC	CS	1604+83.49	1994261.636	6071163.737											
	CLOTHOID	CS	1604+83.49	1994261.636	6071163.737										S 50°30'36" E	S 50°33'21" E
	CLOTHOID	SPI	1605+10.15	1994244.677	6071184.317		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	ST	1605+63.49	1994210.793	6071225.503											
	TANGENT	ST	1605+63.49	1994210.793	6071225.503		2376.62							S 50°33'21" E		
	TANGENT	PI*	1629+40.11	1992700.868	6073060.836											
	TANGENT	PI*	1629+40.11	1992700.868	6073060.836		833.97							S 50°33'57" E		
	TANGENT	PI*	1637+74.08	1992171.139	6073704.957											
	TANGENT	PI*	1637+74.08	1992171.139	6073704.957		2284.85							S 50°32'54" E		
	TANGENT	PI*	1660+58.92	1990719.283	6075469.224											
	TANGENT	PI*	1660+58.92	1990719.283	6075469.224		1706.23							S 50°33'43" E		
	TANGENT	TS	1677+65.16	1989635.407	6076786.965											
	CLOTHOID	TS	1677+65.16	1989635.407	6076786.965										S 50°33'43" E	S 49°32'19" E
	CLOTHOID	SPI	1679+31.83	1989529.531	6076915.686		250.00	1°01'23"	125.00	0.37						
	CLOTHOID	SC	1680+15.16	1989475.452	6076979.092											
	ARC	SC	1680+15.16	1989475.452	6076979.092											
C159	ARC	PI	1681+77.03	1989370.403	6077102.256	7000.00	323.70	2°38'58"			110	3.00	3.94	0°49'07"		
	ARC	CC		1984149.542	6072436.550											
	ARC	CS	1683+38.85	1989259.774	6077220.432											
	CLOTHOID	CS	1683+38.85	1989259.774	6077220.432										S 46°53'21" E	S 45°51'58" E
	CLOTHOID	SPI	1684+22.19	1989202.821	6077281.270		250.00	1°01'23"	125.00	0.37						
	CLOTHOID	ST	1685+88.85	1989086.763	6077400.891											
	TANGENT	ST	1685+88.85	1989086.763	6077400.891		180.56							S 45°51'58" E		
	TANGENT	TS	1687+69.41	1988961.035	6077530.479											
	CLOTHOID	TS	1687+69.41	1988961.035	6077530.479										S 45°51'58" E	S 46°58'40" E
	CLOTHOID	SPI	1689+42.74	1988840.334	6077654.885		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	SC	1690+29.41	1988781.200	6077718.248											
	ARC	SC	1690+29.41	1988781.200	6077718.248											
C160	ARC	PI	1691+80.10	1988678.383	6077828.420	6700.00	301.34	2°34'37"			110	3.00	4.24	0°51'19"		
	ARC	CC		1993679.495	6082289.540											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C157 TO C160

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0016
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	ARC	CS	1693+30.75	1988580.623	6077943.104											
	CLOTHOID	CS	1693+30.75	1988580.623	6077943.104										S 49°33'17" E	S 50°39'59" E
	CLOTHOID	SPI	1694+17.42	1988524.398	6078009.062		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	ST	1695+90.75	1988414.532	6078143.133											
	TANGENT	ST	1695+90.75	1988414.532	6078143.133		836.48							S 50°39'59" E		
	TANGENT	TS	1704+27.23	1987884.341	6078790.125											
	CLOTHOID	TS	1704+27.23	1987884.341	6078790.125										S 50°39'59" E	S 51°46'41" E
	CLOTHOID	SPI	1706+00.57	1987774.474	6078924.196		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	SC	1706+87.23	1987720.851	6078992.285											
	ARC	SC	1706+87.23	1987720.851	6078992.285											
C161	ARC	PI	1708+25.43	1987635.343	6079100.861	6700.00	276.36	2°21'48"			110	3.00	4.24	0°51'19"		
	ARC	CC	1709+63.59	1987554.386	6079212.870											
	ARC	CS	1709+63.59	1987554.386	6079212.870											
	CLOTHOID	CS	1709+63.59	1987554.386	6079212.870										S 54°08'29" E	S 55°15'12" E
	CLOTHOID	SPI	1710+50.26	1987503.616	6079283.113		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	ST	1712+23.59	1987404.822	6079425.540											
	TANGENT	ST	1712+23.59	1987404.822	6079425.540		261.87							S 55°15'12" E		
	TANGENT	TS	1714+85.46	1987255.570	6079640.712											
	CLOTHOID	TS	1714+85.46	1987255.570	6079640.712										S 55°15'12" E	S 54°08'29" E
	CLOTHOID	SPI	1716+58.80	1987156.776	6079783.140		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	SC	1717+45.46	1987106.006	6079853.382											
	ARC	SC	1717+45.46	1987106.006	6079853.382											
C162	ARC	PI	1718+83.11	1987025.373	6079964.943	6700.00	275.26	2°21'14"			110	3.00	4.24	0°51'19"		
	ARC	CC	1720+20.72	1986940.227	6080073.097											
	ARC	CS	1720+20.72	1986940.227	6080073.097											
	CLOTHOID	CS	1720+20.72	1986940.227	6080073.097										S 51°47'15" E	S 50°40'33" E
	CLOTHOID	SPI	1721+07.39	1986886.614	6080141.195		260.00	1°06'42"	130.00	0.42						
	CLOTHOID	ST	1722+80.72	1986776.770	6080275.284											
	TANGENT	ST	1722+80.72	1986776.770	6080275.284		541.97							S 50°40'33" E		
	TANGENT	PI*	1728+22.69	1986433.321	6080694.537											
	TANGENT	PI*	1728+22.69	1986433.321	6080694.537		2074.35							S 50°39'16" E		
	TANGENT	PI*	1748+97.04	1985118.192	6082298.707											
	TANGENT	PI*	1748+97.04	1985118.192	6082298.707		1678.96							S 50°40'05" E		
	TANGENT	PI*	1765+76.00	1984054.041	6083597.361											
	TANGENT	PI*	1765+76.00	1984054.041	6083597.361		905.87							S 50°39'28" E		
	TANGENT	PI*	1774+81.87	1983479.762	6084297.937											
	TANGENT	PI*	1774+81.87	1983479.762	6084297.937		602.21							S 50°41'41" E		
	TANGENT	PI*	1780+84.08	1983098.292	6084763.917											
	TANGENT	PI*	1780+84.08	1983098.292	6084763.917		1262.63							S 50°40'12" E		
	TANGENT	TS	1793+46.71	1982298.056	6085740.570											
	CLOTHOID	TS	1793+46.71	1982298.056	6085740.570										S 50°40'12" E	S 50°21'47" E
	CLOTHOID	SPI	1794+46.71	1982234.677	6085817.921		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	SC	1794+96.71	1982202.781	6085856.426											
	ARC	SC	1794+96.71	1982202.781	6085856.426											
C163	ARC	PI	1795+84.12	1982147.020	6085923.741	14000.00	174.82	0°42'56"			110	1.75	1.71	0°24'33"		
	ARC	CC	1796+71.53	1982090.423	6085990.354											
	ARC	CS	1796+71.53	1982090.423	6085990.354											
	CLOTHOID	CS	1796+71.53	1982090.423	6085990.354										S 49°38'51" E	S 49°20'26" E
	CLOTHOID	SPI	1797+21.53	1982058.049	6086028.458		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	ST	1798+21.53	1981992.893	6086104.318											
	TANGENT	ST	1798+21.53	1981992.893	6086104.318		107.34							S 49°20'26" E		

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
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 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C161 TO C163

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0017
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	TS	1799+28.87	1981922.955	6086185.745											
	CLOTHOID	TS	1799+28.87	1981922.955	6086185.745										S 49°20'26" E	S 49°38'51" E
	CLOTHOID	SPI	1800+28.87	1981857.799	6086261.605		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	SC	1800+78.87	1981825.424	6086299.709											
C164	ARC	SC	1800+78.87	1981825.424	6086299.709											
	ARC	PI	1801+64.21	1981770.170	6086364.742	14000.00	170.67	0°41'55"			110	1.75	1.71	0°24'33"		
	ARC	CC		1992494.496	6095364.525											
	ARC	CS	1802+49.54	1981715.712	6086430.444											
	CLOTHOID	CS	1802+49.54	1981715.712	6086430.444										S 50°20'46" E	S 50°39'11" E
	CLOTHOID	SPI	1802+99.54	1981683.804	6086468.940		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	ST	1803+99.54	1981620.403	6086546.272											
	TANGENT	ST	1803+99.54	1981620.403	6086546.272									S 50°39'11" E		
	TANGENT	PI*	1817+90.40	1980738.577	6087621.853											
	TANGENT	PI*	1817+90.40	1980738.577	6087621.853									S 50°40'11" E		
	TANGENT	TS	1830+84.95	1979918.103	6088623.193											
	CLOTHOID	TS	1830+84.95	1979918.103	6088623.193										S 50°40'11" E	S 50°53'19" E
	CLOTHOID	SPI	1831+71.62	1979863.174	6088690.231		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	SC	1832+14.95	1979835.838	6088723.854											
C165	ARC	SC	1832+14.95	1979835.838	6088723.854											
	ARC	PI	1833+35.08	1979760.060	6088817.062	17000.00	240.25	0°48'35"			110	1.50	1.35	0°20'13"		
	ARC	CC		1993026.516	6099447.940											
	ARC	CS	1834+55.20	1979685.606	6088911.331											
	CLOTHOID	CS	1834+55.20	1979685.606	6088911.331										S 51°41'54" E	S 51°55'03" E
	CLOTHOID	SPI	1834+98.53	1979658.748	6088945.337		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	ST	1835+85.20	1979605.292	6089013.555											
	TANGENT	ST	1835+85.20	1979605.292	6089013.555									S 51°55'03" E		
	TANGENT	TS	1837+05.56	1979531.054	6089108.294											
	CLOTHOID	TS	1837+05.56	1979531.054	6089108.294										S 51°55'03" E	S 51°36'38" E
	CLOTHOID	SPI	1838+05.56	1979469.374	6089187.007		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	SC	1838+55.56	1979438.324	6089226.197											
C166	ARC	SC	1838+55.56	1979438.324	6089226.197											
	ARC	PI	1839+35.53	1979388.663	6089288.878	14000.00	159.94	0°39'16"			110	1.75	1.71	0°24'33"		
	ARC	CC		1968465.013	6080532.151											
	ARC	CS	1840+15.50	1979338.288	6089350.988											
	CLOTHOID	CS	1840+15.50	1979338.288	6089350.988										S 50°57'22" E	S 50°38'57" E
	CLOTHOID	SPI	1840+65.50	1979306.792	6089389.821		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	ST	1841+65.50	1979243.385	6089467.149											
	TANGENT	ST	1841+65.50	1979243.385	6089467.149									S 50°38'57" E		
	TANGENT	TS	1876+89.39	1977008.997	6092192.092											
	CLOTHOID	TS	1876+89.39	1977008.997	6092192.092										S 50°38'57" E	S 50°35'42" E
	CLOTHOID	SPI	1877+46.05	1976973.067	6092235.911		85.00	0°03'15"	42.50	0.01						
	CLOTHOID	SC	1877+74.39	1976955.081	6092257.803											
C167	ARC	SC	1877+74.39	1976955.081	6092257.803											
	ARC	PI	1878+27.47	1976921.383	6092298.820	45000.00	106.17	0°08'07"			110	1.00	0.08	0°07'38"		
	ARC	CC		1942184.587	6063691.866											
	ARC	CS	1878+80.55	1976887.589	6092339.757											
	CLOTHOID	CS	1878+80.55	1976887.589	6092339.757										S 50°27'35" E	S 50°24'20" E
	CLOTHOID	SPI	1879+08.89	1976869.551	6092361.607		85.00	0°03'15"	42.50	0.01						
	CLOTHOID	ST	1879+65.55	1976833.435	6092405.273											

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ALTERNATIVE A
BOOK A4
SHEET 90 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C164 TO C167

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0018
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1879+65.55	1976833.435	6092405.273		224.09							S 50°24'20" E		
	TANGENT	TS	1881+89.64	1976690.614	6092577.949											
	CLOTHOID	TS	1881+89.64	1976690.614	6092577.949										S 50°24'20" E	S 50°27'05" E
	CLOTHOID	SPI	1882+42.97	1976656.622	6092619.046		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	SC	1882+69.64	1976639.643	6092639.608											
C168	ARC	SC	1882+69.64	1976639.643	6092639.608											
	ARC	PI	1883+24.94	1976604.430	6092682.251	50000.00	110.60	0°07'36"			110	0.75	0.22	0°06'53"		
	ARC	CC		2015193.936	6124476.167											
	ARC	CS	1883+80.24	1976569.312	6092724.971											
	CLOTHOID	CS	1883+80.24	1976569.312	6092724.971										S 50°34'42" E	S 50°37'27" E
	CLOTHOID	SPI	1884+06.91	1976552.378	6092745.571		80.00	0°02'45"	40.00	0.01						
	CLOTHOID	ST	1884+60.24	1976518.543	6092786.798											
	TANGENT	ST	1884+60.24	1976518.543	6092786.798		1396.01							S 50°37'27" E		
	TANGENT	TS	1898+56.25	1975632.906	6093865.914											
	CLOTHOID	TS	1898+56.25	1975632.906	6093865.914										S 50°37'27" E	S 50°31'43" E
	CLOTHOID	SPI	1899+22.92	1975590.612	6093917.448		100.00	0°05'44"	50.00	0.01						
	CLOTHOID	SC	1899+56.25	1975569.422	6093943.179											
C169	ARC	SC	1899+56.25	1975569.422	6093943.179											
	ARC	PI	1900+14.94	1975532.116	6093988.482	30000.00	117.37	0°13'27"			110	1.00	0.62	0°11'28"		
	ARC	CC		1952411.168	6074872.384											
	ARC	CS	1900+73.63	1975494.632	6094033.638											
	CLOTHOID	CS	1900+73.63	1975494.632	6094033.638										S 50°18'16" E	S 50°12'32" E
	CLOTHOID	SPI	1901+06.96	1975473.342	6094059.286		100.00	0°05'44"	50.00	0.01						
	CLOTHOID	ST	1901+73.63	1975430.676	6094110.512											
	TANGENT	ST	1901+73.63	1975430.676	6094110.512		102.04							S 50°12'32" E		
	TANGENT	TS	1902+75.66	1975365.374	6094188.915											
	CLOTHOID	TS	1902+75.66	1975365.374	6094188.915										S 50°12'32" E	S 50°18'16" E
	CLOTHOID	SPI	1903+42.33	1975322.708	6094240.141		100.00	0°05'44"	50.00	0.01						
	CLOTHOID	SC	1903+75.66	1975301.417	6094265.789											
C170	ARC	SC	1903+75.66	1975301.417	6094265.789											
	ARC	PI	1904+40.13	1975260.241	6094315.394	30000.00	128.94	0°14'47"			110	1.00	0.62	0°11'28"		
	ARC	CC		1998384.882	6113427.043											
	ARC	CS	1905+04.60	1975219.278	6094365.175											
	CLOTHOID	CS	1905+04.60	1975219.278	6094365.175										S 50°33'02" E	S 50°38'46" E
	CLOTHOID	SPI	1905+37.93	1975198.098	6094390.915		100.00	0°05'44"	50.00	0.01						
	CLOTHOID	ST	1906+04.60	1975155.824	6094442.465											
	TANGENT	ST	1906+04.60	1975155.824	6094442.465		765.94							S 50°38'46" E		
	TANGENT	TS	1913+70.54	1974670.134	6095034.726											
	CLOTHOID	TS	1913+70.54	1974670.134	6095034.726										S 50°38'46" E	S 51°51'22" E
	CLOTHOID	SPI	1915+17.21	1974577.129	6095148.138		220.00	1°12'36"	110.00	0.39						
	CLOTHOID	SC	1915+90.54	1974531.834	6095205.814											
C171	ARC	SC	1915+90.54	1974531.834	6095205.814											
	ARC	PI	1920+24.12	1974264.041	6095546.805	5208.79	865.14	9°31'00"			90	2.25	3.99	1°06'00"		
	ARC	CC		1978628.352	6098422.961											
	ARC	CS	1924+55.69	1974056.311	6095927.378											
	CLOTHOID	CS	1924+55.69	1974056.311	6095927.378										S 61°22'22" E	S 62°34'58" E
	CLOTHOID	SPI	1925+29.02	1974021.175	6095991.750		220.00	1°12'36"	110.00	0.39						
	CLOTHOID	ST	1926+75.69	1973953.638	6096121.945											

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ALTERNATIVE A
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C168 TO C171

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0019
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	1926+75.69	1973953.638	6096121.945		10583.87							S 62°34'58" E		
	TANGENT	PI*	2032+59.55	1969080.108	6105516.992											
	TANGENT	PI*	2032+59.55	1969080.108	6105516.992		194.92							S 62°36'55" E		
	TANGENT	TS	2034+54.47	1968990.454	6105690.065											
	CLOTHOID	TS	2034+54.47	1968990.454	6105690.065										S 62°36'55" E	S 62°17'11" E
	CLOTHOID	SPI	2035+57.80	1968942.925	6105781.819		155.00	0°19'44"	77.50	0.07						
	CLOTHOID	SC	2036+09.47	1968918.897	6105827.559											
	ARC	SC	2036+09.47	1968918.897	6105827.559											
C172	ARC	PI	2036+93.57	1968879.787	6105902.010	13500.00	168.19	0°42'50"			110	1.75	1.84	0°25'28"		
	ARC	CC		1956967.563	6099549.373											
	ARC	CS	2037+77.66	1968839.753	6105975.968											
	CLOTHOID	CS	2037+77.66	1968839.753	6105975.968										S 61°34'22" E	S 61°14'37" E
	CLOTHOID	SPI	2038+29.33	1968815.157	6106021.404		155.00	0°19'44"	77.50	0.07						
	CLOTHOID	ST	2039+32.66	1968765.445	6106111.994									S 61°14'37" E		
	TANGENT	ST	2039+32.66	1968765.445	6106111.994		104.86									
	TANGENT	TS	2040+37.52	1968714.997	6106203.925											
	CLOTHOID	TS	2040+37.52	1968714.997	6106203.925										S 61°14'37" E	S 61°33'02" E
	CLOTHOID	SPI	2041+37.52	1968666.888	6106291.593		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	SC	2041+87.52	1968643.069	6106335.555											
	ARC	SC	2041+87.52	1968643.069	6106335.555											
C173	ARC	PI	2042+65.87	1968605.746	6106404.442	14000.00	156.69	0°38'29"			110	1.75	1.71	0°24'33"		
	ARC	CC		1980952.412	6113004.894											
	ARC	CS	2043+44.22	1968569.196	6106473.741											
	CLOTHOID	CS	2043+44.22	1968569.196	6106473.741										S 62°11'31" E	S 62°29'56" E
	CLOTHOID	SPI	2043+94.22	1968545.870	6106517.967		150.00	0°18'25"	75.00	0.07						
	CLOTHOID	ST	2044+94.22	1968499.693	6106606.668											
	TANGENT	ST	2044+94.22	1968499.693	6106606.668		721.71							S 62°29'56" E		
	TANGENT	TS	2052+15.93	1968166.432	6107246.826											
	CLOTHOID	TS	2052+15.93	1968166.432	6107246.826										S 62°29'56" E	S 63°53'38" E
	CLOTHOID	SPI	2054+55.94	1968055.605	6107459.713		360.00	1°23'42"	180.00	0.73						
	CLOTHOID	SC	2055+75.93	1968002.798	6107567.477											
	ARC	SC	2055+75.93	1968002.798	6107567.477											
C174	ARC	PI	2056+43.89	1967972.894	6107628.501	7393.06	135.91	1°03'12"			110	2.75	3.81	0°46'30"		
	ARC	CC		1974641.622	6110820.682											
	ARC	CS	2057+11.84	1967944.117	6107690.065											
	CLOTHOID	CS	2057+11.84	1967944.117	6107690.065										S 64°56'50" E	S 66°36'48" E
	CLOTHOID	SPI	2058+55.18	1967883.417	6107819.924		430.00	1°39'58"	214.99	1.04						
	CLOTHOID	ST	2061+41.84	1967769.625	6108083.052											
	TANGENT	ST	2061+41.84	1967769.625	6108083.052		1164.99							S 66°36'48" E		
	TANGENT	TS	2073+06.83	1967307.203	6109152.334											
	CLOTHOID	TS	2073+06.83	1967307.203	6109152.334										S 66°36'48" E	S 66°49'57" E
	CLOTHOID	SPI	2073+93.49	1967272.802	6109231.881		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	SC	2074+36.83	1967255.754	6109271.720											
	ARC	SC	2074+36.83	1967255.754	6109271.720											
C175	ARC	PI	2075+49.49	1967211.430	6109375.297	17000.00	225.32	0°45'34"			110	1.50	1.35	0°20'13"		
	ARC	CC		1982884.850	6115959.869											
	ARC	CS	2076+62.15	1967168.483	6109479.452											
	CLOTHOID	CS	2076+62.15	1967168.483	6109479.452										S 67°35'31" E	S 67°48'40" E
	CLOTHOID	SPI	2077+05.48	1967151.965	6109519.513		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	ST	2077+92.15	1967119.234	6109599.761											

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BOOK A4
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C173 TO C175

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0020
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	2077+92.15	1967119.234	6109599.761		107.05							S 67°48'40" E		
	TANGENT	TS	2078+99.20	1967078.805	6109698.884											
	CLOTHOID	TS	2078+99.20	1967078.805	6109698.884										S 67°48'40" E	S 67°35'31" E
	CLOTHOID	SPI	2079+85.86	1967046.074	6109779.133		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	SC	2080+29.20	1967029.555	6109819.194											
C176	ARC	SC	2080+29.20	1967029.555	6109819.194											
	ARC	PI	2081+45.93	1966985.056	6109927.113	17000.00	233.46	0°47'13"			110	1.50	1.35	0°20'13"		
	ARC	CC		1951313.188	6103338.777											
	ARC	CS	2082+62.66	1966939.079	6110034.411											
	CLOTHOID	CS	2082+62.66	1966939.079	6110034.411										S 66°48'18" E	S 66°35'10" E
	CLOTHOID	SPI	2083+05.99	1966922.012	6110074.242		130.00	0°13'09"	65.00	0.04						
	CLOTHOID	ST	2083+92.66	1966887.573	6110153.773											
	TANGENT	ST	2083+92.66	1966887.573	6110153.773		2983.41							S 66°35'10" E		
	TANGENT	TS	2113+76.07	1965702.050	6112891.516											
	CLOTHOID	TS	2113+76.07	1965702.050	6112891.516										S 66°35'10" E	S 66°43'23" E
	CLOTHOID	SPI	2114+49.40	1965672.909	6112958.811		110.00	0°08'13"	55.00	0.02						
	CLOTHOID	SC	2114+86.07	1965658.419	6112992.494											
C177	ARC	SC	2114+86.07	1965658.419	6112992.494											
	ARC	PI	2115+45.92	1965634.766	6113047.476	23000.00	119.71	0°17'54"			110	1.25	0.86	0°14'57"		
	ARC	CC		1986786.335	6122081.563											
	ARC	CS	2116+05.78	1965611.399	6113102.582											
	CLOTHOID	CS	2116+05.78	1965611.399	6113102.582										S 67°01'16" E	S 67°09'30" E
	CLOTHOID	SPI	2116+42.44	1965597.085	6113136.339		110.00	0°08'13"	55.00	0.02						
	CLOTHOID	ST	2117+15.78	1965568.618	6113203.921											
	TANGENT	ST	2117+15.78	1965568.618	6113203.921		118.04							S 67°09'30" E		
	TANGENT	TS	2118+33.82	1965522.795	6113312.707											
	CLOTHOID	TS	2118+33.82	1965522.795	6113312.707										S 67°09'30" E	S 67°01'16" E
	CLOTHOID	SPI	2119+07.15	1965494.328	6113380.290		110.00	0°08'13"	55.00	0.02						
	CLOTHOID	SC	2119+43.82	1965480.014	6113414.047											
C178	ARC	SC	2119+43.82	1965480.014	6113414.047											
	ARC	PI	2119+98.99	1965458.477	6113464.838	23000.00	110.34	0°16'30"			110	1.25	0.86	0°14'57"		
	ARC	CC		1944305.078	6104435.066											
	ARC	CS	2120+54.15	1965436.696	6113515.524											
	CLOTHOID	CS	2120+54.15	1965436.696	6113515.524										S 66°44'47" E	S 66°36'34" E
	CLOTHOID	SPI	2120+90.82	1965422.220	6113549.213		110.00	0°08'13"	55.00	0.02						
	CLOTHOID	ST	2121+64.15	1965393.107	6113616.519											
	TANGENT	ST	2121+64.15	1965393.107	6113616.519		484.83							S 66°36'34" E		
	TANGENT	PI*	2126+48.99	1965200.630	6114061.507											
	TANGENT	PI*	2126+48.99	1965200.630	6114061.507		948.66							S 66°35'08" E		
	TANGENT	TS	2135+97.65	1964823.650	6114932.047											
	CLOTHOID	TS	2135+97.65	1964823.650	6114932.047										S 66°35'08" E	S 66°27'54" E
	CLOTHOID	SPI	2136+67.65	1964795.834	6114996.283		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	SC	2137+02.65	1964781.858	6115028.372											
C179	ARC	SC	2137+02.65	1964781.858	6115028.372											
	ARC	PI	2137+69.30	1964755.242	6115089.483	25000.00	133.31	0°18'20"			110	1.25	0.69	0°13'45"		
	ARC	CC		1941861.428	6105045.691											
	ARC	CS	2138+35.96	1964728.300	6115150.452											
	CLOTHOID	CS	2138+35.96	1964728.300	6115150.452										S 66°09'35" E	S 66°02'21" E

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 93 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C176 TO C179

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0021
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	SPI	2138+70.96	1964714.153	6115182.466		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	ST	2139+40.96	1964685.725	6115246.433											
	TANGENT	ST	2139+40.96	1964685.725	6115246.433		107.45							S 66°02'21" E		
	TANGENT	TS	2140+48.41	1964642.090	6115344.622											
	CLOTHOID	TS	2140+48.41	1964642.090	6115344.622										S 66°02'21" E	S 66°09'35" E
	CLOTHOID	SPI	2141+18.41	1964613.662	6115408.590		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	SC	2141+53.41	1964599.515	6115440.603											
	ARC	SC	2141+53.41	1964599.515	6115440.603											
C180	ARC	PI	2142+22.52	1964571.578	6115503.825	25000.00	138.24	0°19'01"			110	1.25	0.69	0°13'45"		
	ARC	CC		1987466.387	6125545.364											
	ARC	CS	2142+91.64	1964543.991	6115567.200											
	CLOTHOID	CS	2142+91.64	1964543.991	6115567.200										S 66°28'35" E	S 66°35'48" E
	CLOTHOID	SPI	2143+26.64	1964530.021	6115599.291		105.00	0°07'13"	52.50	0.02						
	CLOTHOID	ST	2143+96.64	1964502.217	6115663.532											
	TANGENT	ST	2143+96.64	1964502.217	6115663.532		1950.97							S 66°35'48" E		
	TANGENT	PI*	2163+47.61	1963727.293	6117453.997											
	TANGENT	PI*	2163+47.61	1963727.293	6117453.997		873.90							S 66°33'19" E		
	TANGENT	TS	2172+21.51	1963379.597	6118255.754											
	CLOTHOID	TS	2172+21.51	1963379.597	6118255.754										S 66°33'19" E	S 66°47'09" E
	CLOTHOID	SPI	2173+18.18	1963341.137	6118344.440		145.00	0°13'50"	72.50	0.05						
	CLOTHOID	SC	2173+66.51	1963322.085	6118388.860											
	ARC	SC	2173+66.51	1963322.085	6118388.860											
C181	ARC	PI	2174+57.61	1963286.179	6118472.579	18015.00	182.19	0°34'46"			110	1.50	1.19	0°19'05"		
	ARC	CC		1979878.546	6125489.833											
	ARC	CS	2175+48.70	1963251.121	6118556.656											
	CLOTHOID	CS	2175+48.70	1963251.121	6118556.656										S 67°21'55" E	S 67°35'45" E
	CLOTHOID	SPI	2175+97.03	1963232.519	6118601.267		145.00	0°13'50"	72.50	0.05						
	CLOTHOID	ST	2176+93.70	1963195.676	6118690.637											
	TANGENT	ST	2176+93.70	1963195.676	6118690.637		105.05							S 67°35'45" E		
	TANGENT	TS	2177+98.74	1963155.639	6118787.753											
	CLOTHOID	TS	2177+98.74	1963155.639	6118787.753										S 67°35'45" E	S 67°21'54" E
	CLOTHOID	SPI	2178+95.41	1963118.796	6118877.123		145.00	0°13'51"	72.50	0.05						
	CLOTHOID	SC	2179+43.74	1963100.194	6118921.734											
	ARC	SC	2179+43.74	1963100.194	6118921.734											
C182	ARC	PI	2180+19.80	1963070.922	6118991.934	18000.00	152.12	0°29'03"			110	1.50	1.19	0°19'06"		
	ARC	CC		1946486.637	6111994.274											
	ARC	CS	2180+95.86	1963041.058	6119061.884											
	CLOTHOID	CS	2180+95.86	1963041.058	6119061.884										S 66°52'51" E	S 66°39'00" E
	CLOTHOID	SPI	2181+44.19	1963022.081	6119106.336		145.00	0°13'51"	72.50	0.05						
	CLOTHOID	ST	2182+40.86	1962983.767	6119195.086											
	TANGENT	ST	2182+40.86	1962983.767	6119195.086		1249.37							S 66°39'00" E		
	TANGENT	TS	2194+90.23	1962488.583	6120342.138											
	CLOTHOID	TS	2194+90.23	1962488.583	6120342.138										S 66°39'00" E	S 68°51'22" E
	CLOTHOID	SPI	2197+83.59	1962372.312	6120611.468		440.00	2°12'22"	219.99	1.41						
	CLOTHOID	SC	2199+30.23	1962319.400	6120748.280											
	ARC	SC	2199+30.23	1962319.400	6120748.280											
C183	ARC	PI	2201+15.20	1962252.680	6120920.796	5713.78	369.80	3°42'30"			110	4.00	4.50	1°00'10"		
	ARC	CC		1967648.515	6122809.304											
	ARC	CS	2203+00.04	1962197.258	6121097.265											
	CLOTHOID	CS	2203+00.04	1962197.258	6121097.265										S 72°33'52" E	S 74°46'14" E
	CLOTHOID	SPI	2204+46.72	1962153.305	6121237.213		440.00	2°12'22"	219.99	1.41						
	CLOTHOID	ST	2207+40.04	1962076.245	6121520.267											

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ALTERNATIVE A
BOOK A4
SHEET 94 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C180 TO C183

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0022
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	2207+40.04	1962076.245	6121520.267		3697.18							S 74°46'14" E		
	TANGENT	TS	2244+37.21	1961105.048	6125087.603											
	CLOTHOID	TS	2244+37.21	1961105.048	6125087.603										S 74°46'14" E	S 78°21'13" E
	CLOTHOID	SPI	2247+70.61	1961017.468	6125409.297		500.00	3°35'00"	249.97	2.61						
	CLOTHOID	SC	2249+37.21	1960983.811	6125572.593											
C184	ARC	SC	2249+37.21	1960983.811	6125572.593											
	ARC	PI	2250+80.65	1960954.856	6125713.077	3997.48	286.74	4°06'36"			110	6.00	6.14	1°26'00"		
	ARC	CC		1964898.993	6126379.559											
	ARC	CS	2252+23.95	1960936.043	6125855.274											
	CLOTHOID	CS	2252+23.95	1960936.043	6125855.274										S 82°27'49" E	S 86°02'49" E
	CLOTHOID	SPI	2253+90.68	1960914.176	6126020.563		500.00	3°35'00"	249.97	2.61						
	CLOTHOID	ST	2257+23.95	1960891.192	6126353.171											
	TANGENT	ST	2257+23.95	1960891.192	6126353.171		989.85							S 86°02'49" E		
	TANGENT	TS	2267+13.80	1960822.953	6127340.667											
	CLOTHOID	TS	2267+13.80	1960822.953	6127340.667										S 86°02'49" E	S 86°52'14" E
	CLOTHOID	SPI	2268+67.14	1960812.383	6127493.637		230.00	0°49'25"	115.00	0.28						
	CLOTHOID	SC	2269+43.80	1960808.197	6127570.191											
C185	ARC	SC	2269+43.80	1960808.197	6127570.191											
	ARC	PI	2270+71.54	1960801.224	6127697.732	8000.00	255.44	1°49'46"			110	2.75	3.31	0°42'58"		
	ARC	CC		1968796.268	6128006.920											
	ARC	CS	2271+99.25	1960798.326	6127825.432											
	CLOTHOID	CS	2271+99.25	1960798.326	6127825.432										S 88°42'00" E	S 89°31'25" E
	CLOTHOID	SPI	2272+75.91	1960796.587	6127902.080		230.00	0°49'25"	115.00	0.28						
	CLOTHOID	ST	2274+29.25	1960795.313	6128055.410											
	TANGENT	ST	2274+29.25	1960795.313	6128055.410		172.73							S 89°31'25" E		
	TANGENT	TS	2276+01.98	1960793.877	6128228.138											
	CLOTHOID	TS	2276+01.98	1960793.877	6128228.138										S 89°31'25" E	S 89°42'26" E
	CLOTHOID	SPI	2276+85.31	1960793.184	6128311.469		125.00	0°11'01"	62.50	0.03						
	CLOTHOID	SC	2277+26.98	1960792.971	6128353.135											
C186	ARC	SC	2277+26.98	1960792.971	6128353.135											
	ARC	PI	2278+09.89	1960792.547	6128436.045	19515.00	165.82	0°29'13"			110	1.50	0.99	0°17'37"		
	ARC	CC		1980307.716	6128452.861											
	ARC	CS	2278+92.80	1960792.828	6128518.957											
	CLOTHOID	CS	2278+92.80	1960792.828	6128518.957										N 89°48'21" E	N 89°37'21" E
	CLOTHOID	SPI	2279+34.47	1960792.969	6128560.623		125.00	0°11'01"	62.50	0.03						
	CLOTHOID	ST	2280+17.80	1960793.518	6128643.955											
	TANGENT	ST	2280+17.80	1960793.518	6128643.955		109.45							N 89°37'21" E		
	TANGENT	TS	2281+27.26	1960794.240	6128753.405											
	CLOTHOID	TS	2281+27.26	1960794.240	6128753.405										N 89°37'21" E	N 89°48'22" E
	CLOTHOID	SPI	2282+10.59	1960794.789	6128836.736		125.00	0°11'01"	62.50	0.03						
	CLOTHOID	SC	2282+52.26	1960794.930	6128878.403											
C187	ARC	SC	2282+52.26	1960794.930	6128878.403											
	ARC	PI	2283+32.64	1960795.202	6128958.791	19500.00	160.78	0°28'21"			110	1.50	0.99	0°17'38"		
	ARC	CC		1941295.041	6128944.400											
	ARC	CS	2284+13.03	1960794.811	6129039.179											
	CLOTHOID	CS	2284+13.03	1960794.811	6129039.179										S 89°43'17" E	S 89°32'16" E
	CLOTHOID	SPI	2284+54.70	1960794.609	6129080.846		125.00	0°11'01"	62.50	0.03						
	CLOTHOID	ST	2285+38.03	1960793.936	6129164.176											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE
 ALTERNATIVE A
 B2 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C184 TO C187

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0023
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - FJ SB TRACK

CURVE	ELEMENT	POINT TYPE	MT2 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	BEARING (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	2285+38.03	1960793.936	6129164.176		2220.94							S 89°32'16" E		
	TANGENT	TS	2307+58.97	1960776.023	6131385.046											
	CLOTHOID	TS	2307+58.97	1960776.023	6131385.046										S 89°32'16" E	S 86°40'23" E
	CLOTHOID	SPI	2310+79.02	1960773.442	6131705.078		480.00	2°51'53"	239.98	2.00						
	CLOTHOID	SC	2312+38.97	1960764.154	6131864.846											
C188	ARC	SC	2312+38.97	1960764.154	6131864.846											
	ARC	PI	2322+29.73	1960706.658	6132853.936	4800.00	1954.04	23°19'30"			110	5.75	4.36	1°11'37"		
	ARC	CC		1955972.244	6131586.288											
	ARC	CS	2331+93.02	1960262.233	6133739.425											
	CLOTHOID	CS	2331+93.02	1960262.233	6133739.425										S 63°20'53" E	S 60°29'00" E
	CLOTHOID	SPI	2333+53.05	1960190.444	6133882.458		480.00	2°51'53"	239.98	2.00						
	CLOTHOID	ST	2336+73.02	1960032.766	6134160.963											
	TANGENT	ST	2336+73.02	1960032.766	6134160.963		829.10							S 60°29'00" E		
	TANGENT	PI*	2345+02.12	1959624.287	6134882.455											
	TANGENT	PI*	2345+02.12	1959624.287	6134882.455		1797.36							S 60°28'00" E		
	TANGENT	PI*	2362+99.48	1958738.313	6136446.282											
	TANGENT	PI*	2362+99.48	1958738.313	6136446.282		1149.26							S 60°30'05" E		
	TANGENT	PI*	2374+48.74	1958172.412	6137446.562											
	TANGENT	PI*	2374+48.74	1958172.412	6137446.562		70.36							S 60°29'13" E		
	TANGENT	POE	2375+19.10	1958137.752	6137507.790											

* NOTE: ANGLE POINTS ARE NOT INTENDED FOR CONSTRUCTION. THEY ARE A "BEST FIT" REPRESENTATION OF THE EXISTING ALIGNMENT OVER LONG TANGENTS.

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 96 OF 100**

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN FRANCISCO TO SAN JOSE**
ALTERNATIVE A
B2 TRACK ALIGNMENT DATA TABLE
CURVE NO. C188

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B0024
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - JM SB TRACK

CURVE	ELEMENT	POINT TYPE	MT3 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	TNGT BEARING/ CHRD DEG. CV. (0°00'00")	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	POB	2872+86.55	1958137.752	6137507.790		4093.26							S 60°29'13" E		
	TANGENT	PI	2913+79.81	1956121.329	6141069.924											
	TANGENT	PI	2913+79.81	1956121.329	6141069.924		2621.29							S 60°29'51" E		
	TANGENT	PC	2940+01.09	1954830.444	6143351.319											
C401	ARC	PC	2940+01.09	1954830.444	6143351.319											
	ARC	PI	2940+49.22	1954806.743	6143393.205	11459.19	96.25	0°28'53"		79	0.00	2.18	0°30'00"			
	ARC	CC		1944857.125	6137708.097											
	ARC	PT	2940+97.35	1954782.692	6143434.890											
	TANGENT	PT	2940+97.35	1954782.692	6143434.890		211.89							S 60°00'58" E		
	TANGENT	TS	2943+09.24	1954676.799	6143618.421											
	CLOTHOID	TS	2943+09.24	1954676.799	6143618.421										S 60°00'58" E	S 59°43'13" E
	CLOTHOID	SPI	2943+75.90	1954643.482	6143676.165		100.00	0°17'45"	50.00	0.04						
	CLOTHOID	SC	2944+09.24	1954626.675	6143704.951											
C402	ARC	SC	2944+09.24	1954626.675	6143704.951											
	ARC	PI	2946+31.28	1954514.713	6143896.707	9683.84	444.02	2°37'38"		79	1.00	1.58	0°35'30"			
	ARC	CC		1946263.956	6138822.156											
	ARC	CS	2948+53.26	1954394.080	6144083.130											
	CLOTHOID	CS	2948+53.26	1954394.080	6144083.130										S 57°05'36" E	S 56°47'51" E
	CLOTHOID	SPI	2948+86.59	1954375.970	6144111.115		100.00	0°17'45"	50.00	0.04						
	CLOTHOID	ST	2949+53.26	1954339.464	6144166.898											
	TANGENT	ST	2949+53.26	1954339.464	6144166.898		2679.51							S 56°47'51" E		
	TANGENT	PI	2976+32.77	1952872.160	6146408.951											
	TANGENT	PI	2976+32.77	1952872.160	6146408.951		4106.14							S 56°48'33" E		
	TANGENT	PI	3017+38.91	1950624.344	6149845.190											
	TANGENT	PI	3017+38.91	1950624.344	6149845.190		1184.94							S 56°46'21" E		
	TANGENT	TS	3029+23.85	1949975.040	6150836.393											
	CLOTHOID	TS	3029+23.85	1949975.040	6150836.393										S 56°46'21" E	S 58°58'19" E
	CLOTHOID	SPI	3029+97.19	1949934.853	6150897.741		110.00	2°11'58"	55.00	0.35						
	CLOTHOID	SC	3030+33.85	1949915.950	6150929.166											
C403	ARC	SC	3030+33.85	1949915.950	6150929.166											
	ARC	PI	3031+31.38	1949865.675	6151012.745	1432.69	194.77	7°47'21"		40	1.00	3.47	3°59'57"			
	ARC	CC		1951143.645	6151667.654											
	ARC	CS	3032+28.62	1949827.192	6151102.366											
	CLOTHOID	CS	3032+28.62	1949827.192	6151102.366										S 66°45'40" E	S 68°57'39" E
	CLOTHOID	SPI	3032+65.29	1949812.722	6151136.062		110.00	2°11'58"	55.00	0.35						
	CLOTHOID	ST	3033+38.62	1949786.393	6151204.512											
	TANGENT	ST	3033+38.62	1949786.393	6151204.512		88.97							S 68°57'39" E		
	TANGENT	TS	3034+27.59	1949754.451	6151287.554											
	CLOTHOID	TS	3034+27.59	1949754.451	6151287.554										S 68°57'39" E	S 66°45'40" E
	CLOTHOID	SPI	3035+00.93	1949728.122	6151356.004		110.00	2°11'58"	55.00	0.35						
	CLOTHOID	SC	3035+37.59	1949713.652	6151389.701											
C404	ARC	SC	3035+37.59	1949713.652	6151389.701											
	ARC	PI	3038+41.26	1949593.836	6151668.731	1432.69	598.48	23°56'03"		40	1.00	3.47	3°59'57"			
	ARC	CC		1948397.199	6150824.412											
	ARC	CS	3041+36.07	1949371.124	6151875.160											
	CLOTHOID	CS	3041+36.07	1949371.124	6151875.160										S 42°49'37" E	S 40°37'39" E
	CLOTHOID	SPI	3041+72.74	1949344.229	6151900.089		110.00	2°11'58"	55.00	0.35						
	CLOTHOID	ST	3042+46.07	1949288.567	6151947.843											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
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RECORD PEPD SUBMITTAL
 MAY 3, 2019

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RECORD PEPD SUBMITTAL
APRIL 11, 2019
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HNTB
 1111 Broadway
 9th Floor
 Oakland, CA 94607



CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
 ALTERNATIVE 4
 MT2/MT3 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C401 TO C404

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B4001
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - JM SB TRACK

CURVE	ELEMENT	POINT TYPE	MT3 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	TNGT BEARING/ CHRD DEG. CV. (0°00'00")	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	3042+46.07	1949288.567	6151947.843		81.28							S 40°37'39" E		
	TANGENT	TS	3043+27.35	1949226.879	6152000.768											
	CLOTHOID	TS	3043+27.35	1949226.879	6152000.768										S 40°37'39" E	S 37°08'27" E
	CLOTHOID	SPI	3044+30.70	1949148.438	6152068.065		155.00	3°29'12"	77.49	0.79						
	CLOTHOID	SC	3044+82.35	1949107.237	6152099.271											
C405	ARC	SC	3044+82.35	1949107.237	6152099.271											
	ARC	PI	3046+29.95	1948989.578	6152188.388	1273.57	293.89	13°13'17"			40	1.50	3.53	4°29'56"		
	ARC	CC		1948338.284	6151084.041											
	ARC	CS	3047+76.24	1948854.655	6152248.233											
	CLOTHOID	CS	3047+76.24	1948854.655	6152248.233										S 23°55'10" E	S 20°25'58" E
	CLOTHOID	SPI	3048+27.92	1948807.409	6152269.188		155.00	3°29'12"	77.49	0.79						
	CLOTHOID	ST	3049+31.24	1948710.559	6152305.270											
	TANGENT	ST	3049+31.24	1948710.559	6152305.270		98.32							S 20°25'58" E		
	TANGENT	TS	3050+29.55	1948618.426	6152339.594											
	CLOTHOID	TS	3050+29.55	1948618.426	6152339.594										S 20°25'58" E	S 23°52'04" E
	CLOTHOID	SPI	3051+32.91	1948521.576	6152375.675		155.00	3°26'06"	77.49	0.77						
	CLOTHOID	SC	3051+84.55	1948474.312	6152396.588											
C406	ARC	SC	3051+84.55	1948474.312	6152396.588											
	ARC	PI	3053+30.73	1948340.639	6152455.734	1292.71	291.11	12°54'09"			40	1.00	3.96	4°25'56"		
	ARC	CC		1948997.378	6153578.747											
	ARC	CS	3054+75.66	1948223.549	6152543.234											
	CLOTHOID	CS	3054+75.66	1948223.549	6152543.234										S 36°46'14" E	S 40°12'19" E
	CLOTHOID	SPI	3055+27.35	1948182.147	6152574.173		155.00	3°26'06"	77.49	0.77						
	CLOTHOID	ST	3056+30.66	1948103.213	6152640.890											
	TANGENT	ST	3056+30.66	1948103.213	6152640.890		1016.05							S 40°12'19" E		
	TANGENT	TS	3066+46.72	1947327.217	6153296.783											
	CLOTHOID	TS	3066+46.72	1947327.217	6153296.783										S 40°12'19" E	S 37°47'23" E
	CLOTHOID	SPI	3067+50.06	1947248.291	6153363.494		155.00	2°24'56"	77.50	0.54						
	CLOTHOID	SC	3068+01.72	1947207.454	6153395.159											
C407	ARC	SC	3068+01.72	1947207.454	6153395.159											
	ARC	PI	3069+74.60	1947070.833	6153501.094	1838.21	344.75	10°44'44"			15	0.50	0.00	3°07'01"		
	ARC	CC		1946081.061	6151942.487											
	ARC	PCC	3071+46.46	1946916.856	6153579.699											
	ARC	PCC	3071+46.46	1946916.856	6153579.699											
	ARC	PI	3072+73.23	1946803.949	6153637.338	702.18	250.84	20°28'03"			15	0.50	0.79	8°09'35"		
	ARC	CC		1946597.590	6152954.298											
	ARC	PCC	3073+97.30	1946678.014	6153651.857											
	ARC	PCC	3073+97.30	1946678.014	6153651.857											
	ARC	PI	3074+61.72	1946614.020	6153659.235	1978.01	128.79	3°43'50"			15	0.50	0.00	2°53'48"		
	ARC	CC		1946451.462	6151686.864											
	ARC	PT	3075+26.09	1946549.680	6153662.434											
	TANGENT	PT	3075+26.09	1946549.680	6153662.434		122.04							S 2°50'46" E		
	TANGENT	PI	3076+48.13	1946427.787	6153668.494											
	TANGENT	PI	3076+48.13	1946427.787	6153668.494		370.75							S 2°40'24" E		
	TANGENT	PC	3080+18.89	1946057.439	6153685.787											
C408	ARC	PC	3080+18.89	1946057.439	6153685.787											
	ARC	PI	3080+73.03	1946003.357	6153688.312	2022.41	108.26	3°04'01"			15	0.00	0.45	2°49'59"		
	ARC	CC		1945963.111	6151665.578											
	ARC	PT	3081+27.14	1945949.217	6153687.940											


SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
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RECORD PEPD SUBMITTAL
APRIL 11, 2019
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 1111 Broadway
 9th Floor
 Oakland, CA 94607


CALIFORNIA
 High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
 ALTERNATIVE 4
 MT3 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C405 TO C408

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B4002
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - JM SB TRACK

CURVE	ELEMENT	POINT TYPE	MT3 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	TNGT BEARING/ CHRD DEG. CV. (0°00'00")	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	PT	3081+27.14	1945949.217	6153687.940		60.45							S 0°23'37" W		
	TANGENT	PC	3081+87.59	1945888.770	6153687.525											
C409	ARC	PC	3081+87.59	1945888.770	6153687.525											
	ARC	PI	3082+21.21	1945855.149	6153687.294	1273.57	67.23	3°01'28"			15	0.00	0.71	4°29'56"		
	ARC	CC		1945880.021	6154961.065											
	ARC	PT	3082+54.82	1945821.563	6153688.837											
	TANGENT	PT	3082+54.82	1945821.563	6153688.837		1284.03							S 2°37'51" E		
	TANGENT	PC	3095+38.85	1944538.888	6153747.775											
C410	ARC	PC	3095+38.85	1944538.888	6153747.775											
	ARC	PI	3095+94.39	1944483.402	6153750.324	2864.93	111.08	2°13'17"			15	0.00	0.32	2°00'00"		
	ARC	CC		1944670.391	6156609.685											
	ARC	PRC	3096+49.92	1944428.057	6153755.022											
C411	ARC	PRC	3096+49.92	1944428.057	6153755.022											
	ARC	PI	3097+09.98	1944368.216	6153760.102	2864.93	120.10	2°24'06"			15	0.00	0.32	2°00'00"		
	ARC	CC		1944185.724	6150900.360											
	ARC	PT	3097+70.02	1944308.214	6153762.670											
	TANGENT	PT	3097+70.02	1944308.214	6153762.670		585.99							S 2°27'02" E		
	TANGENT	TS	3103+56.00	1943722.762	6153787.724											
	CLOTHOID	TS	3103+56.00	1943722.762	6153787.724										S 2°27'02" E	S 3°39'01" E
	CLOTHOID	SPI	3104+09.34	1943669.476	6153790.004		80.00	1°12'00"	40.00	0.14						
	CLOTHOID	SC	3104+36.01	1943642.862	6153791.702											
C412	ARC	SC	3104+36.01	1943642.862	6153791.702											
	ARC	PI	3105+00.39	1943578.607	6153795.801	1910.08	128.72	3°51'40"			20	0.50	0.34	2°59'59"		
	ARC	CC		1943764.470	6155697.907											
	ARC	PCC	3105+64.73	1943514.775	6153804.218											
C413	ARC	PCC	3105+64.73	1943514.775	6153804.218											
	ARC	PI	3107+29.30	1943351.618	6153825.732	1228.11	327.19	15°15'52"			30	0.50	2.44	4°39'55"		
	ARC	CC		1943675.320	6155021.789											
	ARC	PT	3108+91.92	1943199.881	6153889.441											
	TANGENT	PT	3108+91.92	1943199.881	6153889.441		80.40							S 22°46'34" E		
	TANGENT	TS	3109+72.32	1943125.746	6153920.568											
	CLOTHOID	TS	3109+72.32	1943125.746	6153920.568										S 22°46'34" E	S 24°46'32" E
	CLOTHOID	SPI	3110+38.99	1943064.274	6153946.379		100.00	1°59'59"	50.00	0.29						
	CLOTHOID	SC	3110+72.32	1943034.005	6153960.349											
C413	ARC	SC	3110+72.32	1943034.005	6153960.349											
	ARC	PI	3112+31.71	1942889.290	6154027.143	1432.69	317.47	12°41'46"			40	1.00	3.47	3°59'57"		
	ARC	CC		1943634.398	6155261.168											
	ARC	CS	3113+89.79	1942762.792	6154124.109											
	CLOTHOID	CS	3113+89.79	1942762.792	6154124.109										S 37°28'18" E	S 39°28'17" E
	CLOTHOID	SPI	3114+23.12	1942736.334	6154144.390		100.00	1°59'59"	50.00	0.29						
	CLOTHOID	ST	3114+89.79	1942684.868	6154186.772											
	TANGENT	ST	3114+89.79	1942684.868	6154186.772		743.45							S 39°28'17" E		
	TANGENT	TS	3122+33.23	1942110.970	6154659.375											
	CLOTHOID	TS	3122+33.23	1942110.970	6154659.375										S 39°28'17" E	S 42°26'24" E
	CLOTHOID	SPI	3123+66.59	1942008.030	6154744.146		200.00	2°58'07"	99.99	0.86						
	CLOTHOID	SC	3124+33.23	1941958.818	6154789.145											
C414	ARC	SC	3124+33.23	1941958.818	6154789.145											
	ARC	PI	3131+54.02	1941426.891	6155275.543	1930.00	1379.65	40°57'27"			55	2.00	4.27	2°58'07"		
	ARC	CC		1943261.217	6156213.454											
	ARC	CS	3138+12.88	1941344.017	6155991.547											
	CLOTHOID	CS	3138+12.88	1941344.017	6155991.547										S 83°23'52" E	S 86°21'59" E
	CLOTHOID	SPI	3138+79.57	1941336.350	6156057.788		200.00	2°58'07"	99.99	0.86						
	CLOTHOID	ST	3140+12.88	1941327.898	6156190.872											

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 99 OF 100

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
 ALTERNATIVE 4
 MT3 TRACK ALIGNMENT DATA TABLE
 CURVE NO. C409 TO C414

CONTRACT NO.	HSR15-34
DRAWING NO.	TT-B4003
SCALE	NONE
SHEET NO.	

TRACK ALIGNMENT DATA SUMMARY TABLE - JM SB TRACK

CURVE	ELEMENT	POINT TYPE	MT3 TRACK STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA) (IN)	UNBALANCED SUPERELEVATION (EA) (IN)	TNGT BEARING/CHRD DEG. CV. (0°00'00")	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	ST	3140+12.88	1941327.898	6156190.872		338.42							S 86°21'59" E		
	TANGENT	TS	3143+51.30	1941306.451	6156528.610											
	CLOTHOID	TS	3143+51.30	1941306.451	6156528.610										S 86°21'59" E	S 68°44'11" E
	CLOTHOID	SPI	3149+67.71	1941267.385	6157143.774		920.00	17°37'48"	458.55	23.51						
	CLOTHOID	SC	3152+71.30	1941155.156	6157432.165											
C415	ARC	SC	3152+71.30	1941155.156	6157432.165											
	ARC	PI	3156+59.65	1941014.317	6157794.077	1494.95	759.90	29°07'27"			55	4.00	4.10	3°49'57"		
	ARC	CC		1939761.981	6156890.005											
	ARC	CS	3160+31.21	1940715.140	6158041.683											
	CLOTHOID	CS	3160+31.21	1940715.140	6158041.683										S 39°36'43" E	S 31°56'49" E
	CLOTHOID	SPI	3161+64.77	1940612.247	6158126.840		400.00	7°39'55"	199.88	4.46						
	CLOTHOID	ST	3164+31.21	1940385.758	6158268.074											
	TANGENT	ST	3164+31.21	1940385.758	6158268.074		2079.17							S 31°56'49" E		
	TANGENT	TS	3185+10.38	1938621.498	6159368.230											
	CLOTHOID	TS	3185+10.38	1938621.498	6159368.230										S 31°56'49" E	S 31°37'19" E
	CLOTHOID	SPI	3185+97.04	1938547.958	6159414.088		130.00	0°19'30"	65.00	0.06						
	CLOTHOID	SC	3186+40.38	1938511.059	6159436.808											
C416	ARC	SC	3186+40.38	1938511.059	6159436.808											
	ARC	PI	3188+19.39	1938358.626	6159530.665	11459.19	357.99	1°47'24"			90	1.50	1.33	0°30'00"		
	ARC	CC		1932502.889	6149678.992											
	ARC	CS	3189+98.37	1938203.335	6159619.716											
	CLOTHOID	CS	3189+98.37	1938203.335	6159619.716										S 29°49'55" E	S 29°30'25" E
	CLOTHOID	SPI	3190+41.70	1938165.744	6159641.272		130.00	0°19'30"	65.00	0.06						
	CLOTHOID	ST	3191+28.37	1938090.318	6159683.958											
	TANGENT	ST	3191+28.37	1938090.318	6159683.958		292.74							S 29°30'25" E		
	TANGENT	TS	3194+21.11	1937835.547	6159828.140											
	CLOTHOID	TS	3194+21.11	1937835.547	6159828.140										S 29°30'25" E	S 29°44'43" E
	CLOTHOID	SPI	3195+07.78	1937760.122	6159870.826		130.00	0°14'18"	65.00	0.05						
	CLOTHOID	SC	3195+51.11	1937722.498	6159892.326											
	ARC	SC	3195+51.11	1937722.498	6159892.326											

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III
ALTERNATIVE A
BOOK A4
SHEET 100 OF 100**

RECORD PEPD SUBMITTAL
MAY 3, 2019

4/29/2019 4:53:12 PM CAHSRP.tbl cvd_paf_bw.pltcfgrdeleon

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE

**RECORD PEPD
SUBMITTAL**

APRIL 11, 2019

**NOT FOR
CONSTRUCTION**

HNTB

1111 Broadway
9th Floor
Oakland, CA 94607



CALIFORNIA
High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT

SAN JOSE TO MERCED

ALTERNATIVE 4
MT3 TRACK ALIGNMENT DATA TABLE
CURVE NO. C415 TO C418

CONTRACT NO. HSR15-34
DRAWING NO. TT-B4004
SCALE NONE
SHEET NO.