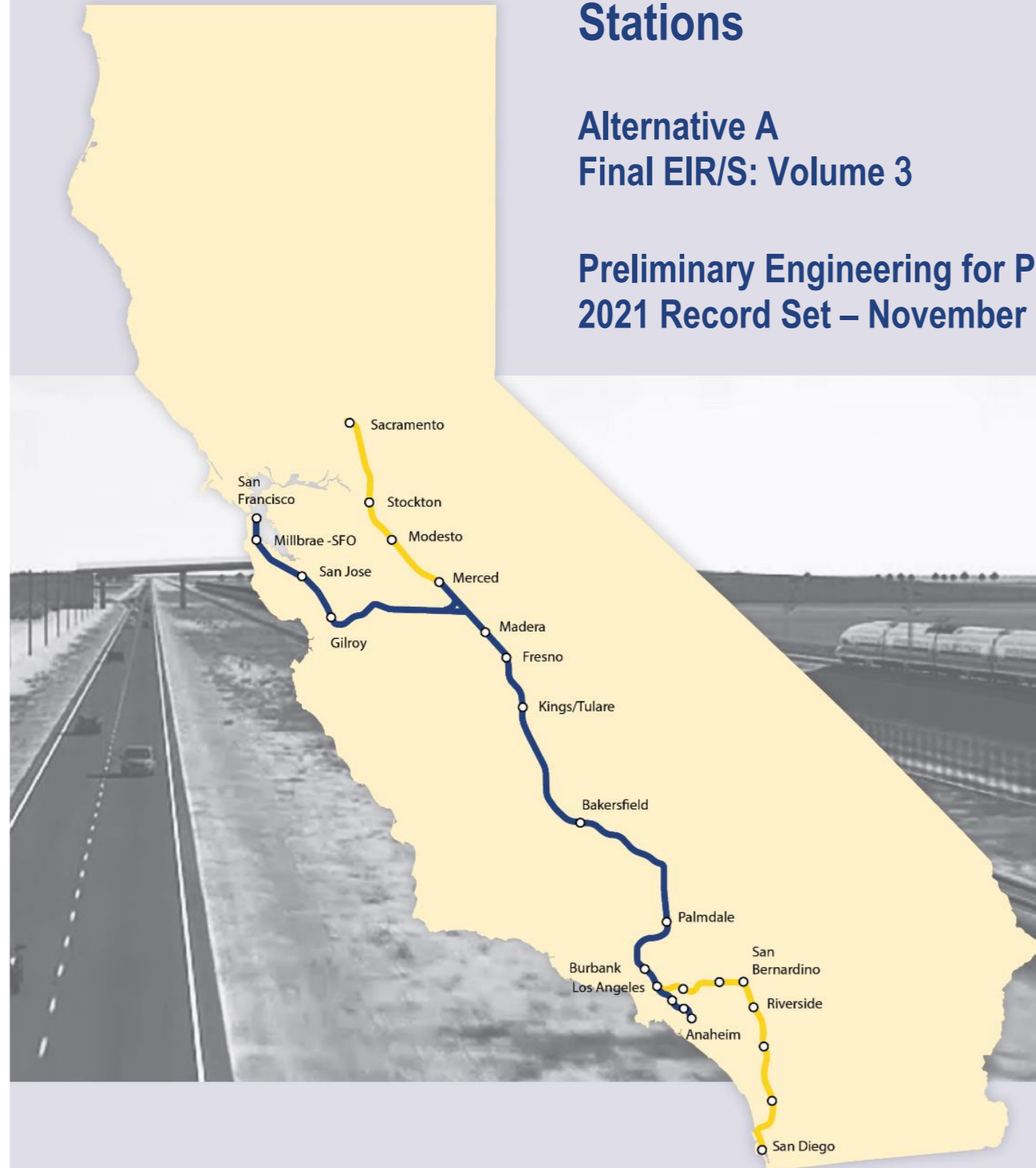


# San Francisco to San Jose Project Section

## Stations

Alternative A  
Final EIR/S: Volume 3

Preliminary Engineering for Project Definition  
2021 Record Set – November 2021



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 36 TO 62 OF 106**

**ALTERNATIVE A - SAN FRANCISCO TO SAN JOSE**

BOOK	SHEET NO	DRAWING NO	SUBSECTION	GEOGRAPHIC LOCATION OR FEATURE	ALIGNMENT OR FEATURE	SHEET DESCRIPTION	ADDITIONAL DESCRIPTION
<b>COVER, INDEX OF DRAWING AND KEY MAPS</b>							
BOOK A3	A	COVER		4TH & KING TO W. ALMA	ALTERNATIVE A	ALTERNATIVE A	
BOOK A3	B	GE-A1103	SAN FRANCISCO TO SOUTH SAN FRANCISCO, SAN BRUNO TO SAN MATEO, SAN JOSE DIRIDON STATION APPROACH	STATION	INDEX OF DRAWINGS	SHEET 3 OF 5	
BOOK A3	C	GE-D1101	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	COMPOSITE PLAN	SHEET 1 OF 3
BOOK A3	D	GE-D1102	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	COMPOSITE PLAN	SHEET 2 OF 3
BOOK A3	E	GE-D1103	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	COMPOSITE PLAN	SHEET 3 OF 3
BOOK A3	F	GE-D1104	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	SYSTEM SITES	

**STATIONS**

BOOK A3	36	AR-J0101	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	GENERAL SITE PLAN	
BOOK A3	37	AR-J0102	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	DETAILED SITE PLAN	
BOOK A3	38	AR-J0103	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	PLATFORM LEVEL PLAN	
BOOK A3	39	AR-J0104	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	SECTION	
BOOK A3	40	AR-J0105	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	MASSING DIAGRAM 1	
BOOK A3	41	AR-J0106	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	MASSING DIAGRAM 2	
BOOK A3	42	AR-J0107	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	FACILITY SIZING TABLE	
BOOK A3	43	AR-J0108	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	FACILITY SIZING TABLE	
BOOK A3	44	AR-J0109	SAN FRANCISCO TO SOUTH SAN FRANCISCO	STATION	4TH AND KING	FACILITY SIZING TABLE	
BOOK A3	45	AR-J0111	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	GENERAL SITE PLAN	
BOOK A3	46	AR-J0112	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	DETAILED SITE PLAN	
BOOK A3	47	AR-J0113	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	CONCOURSE PLAN	
BOOK A3	48	AR-J0114	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	SECTION	
BOOK A3	49	AR-J0115	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	MASSING DIAGRAM 1	
BOOK A3	50	AR-J0116	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	MASSING DIAGRAM 2	
BOOK A3	51	AR-J0117	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	FACILITY SIZING TABLE	
BOOK A3	52	AR-J0118	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	FACILITY SIZING TABLE	
BOOK A3	53	AR-J0119	SAN BRUNO TO SAN MATEO	STATION	MILLBRAE	FACILITY SIZING TABLE	
BOOK A3	54	AR-C0201	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	GENERAL SITE PLAN	
BOOK A3	55	AR-C0202	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	DETAILED SITE PLAN	
BOOK A3	56	AR-F0201	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	CONCOURSE PLAN	
BOOK A3	57	AR-Y0201	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	SECTION	
BOOK A3	58	AR-Y0202	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	MASSING DIAGRAM 1	
BOOK A3	59	AR-Y0203	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	MASSING DIAGRAM 2	
BOOK A3	60	AR-Y0204	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	FACILITY SIZING TABLE	
BOOK A3	61	AR-Y0205	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	FACILITY SIZING TABLE	
BOOK A3	62	AR-Y0206	SAN JOSE DIRIDON STATION APPROACH	STATION	SAN JOSE DIRIDON STATION	FACILITY SIZING TABLE	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET B**

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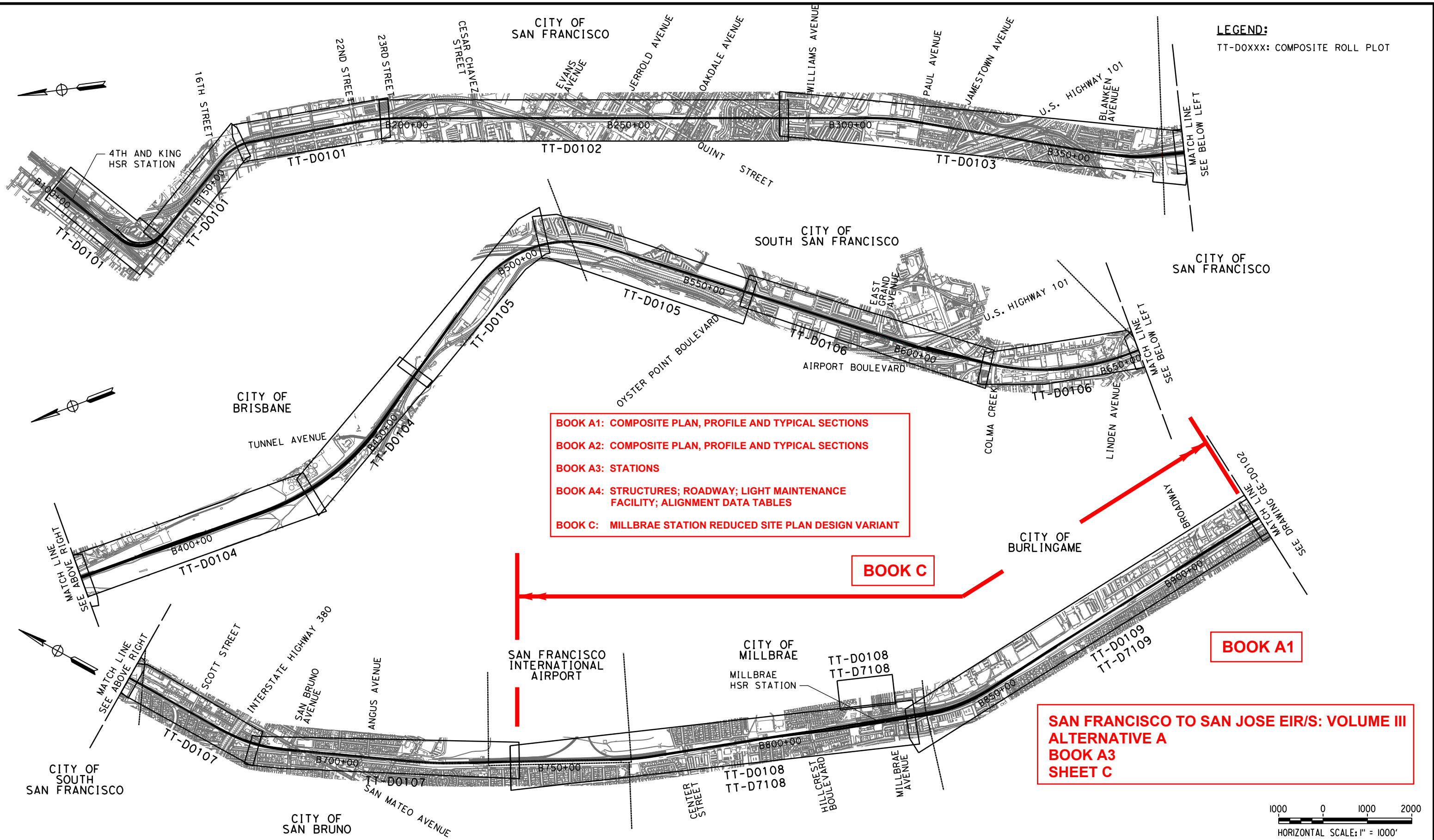
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
ALTERNATIVE A  
INDEX OF DRAWINGS  
SHEET 3 OF 5

CONTRACT NO.	HSR15-34
DRAWING NO.	GE-A1103
SCALE	NONE
SHEET NO.	



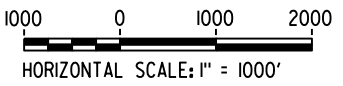
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 TT-DOXXX: COMPOSITE ROLL PLOT

- 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 TABLES
- BOOK C: MILLBRAE STATION REDUCED SITE PLAN DESIGN VARIANT

**BOOK C**

**BOOK A1**

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
 ALTERNATIVE A  
 BOOK A3  
 SHEET C**



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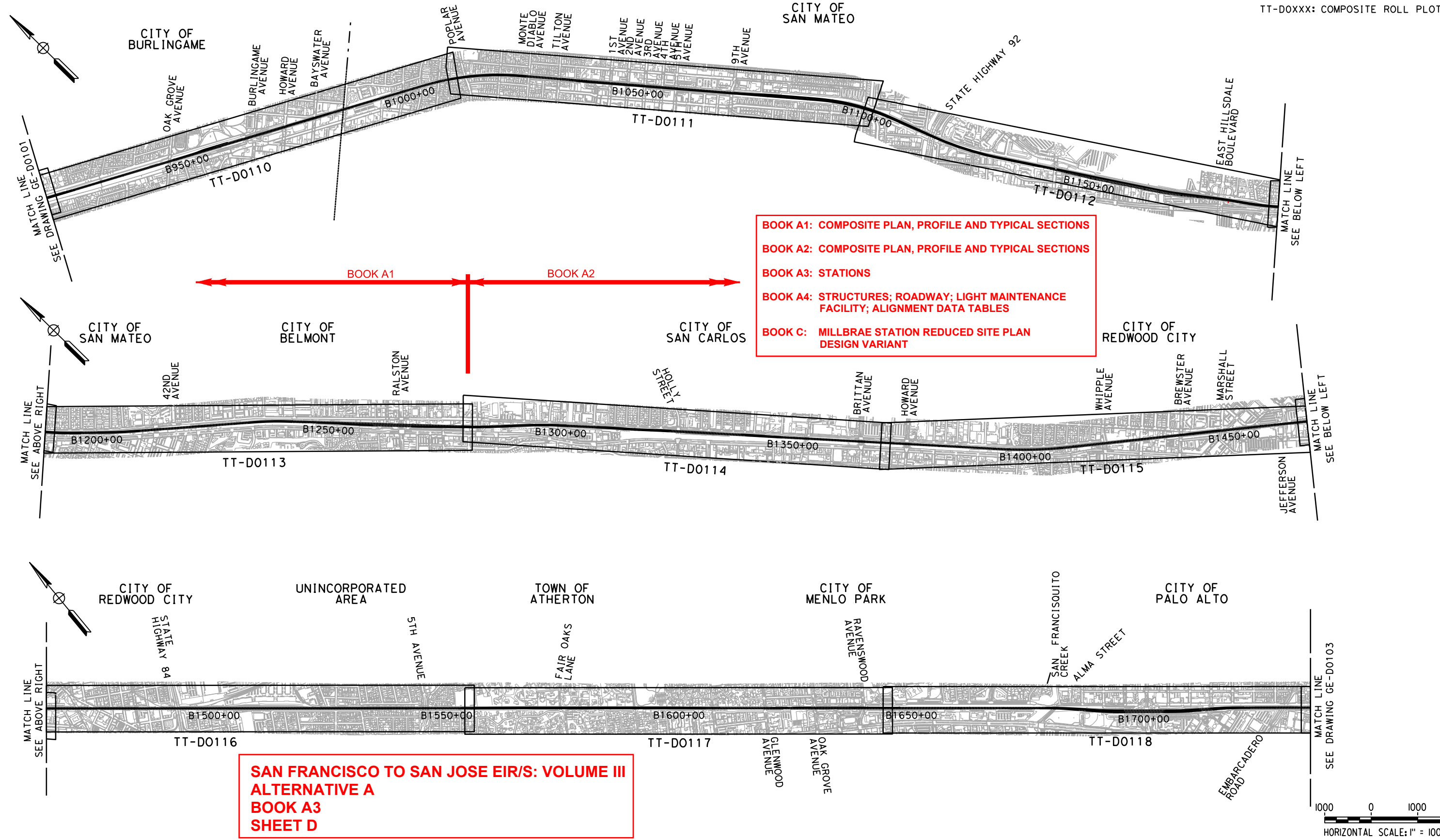
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 SAN FRANCISCO TO SAN JOSE**  
 ALTERNATIVE A  
 KEY MAP  
 COMPOSITE PLAN  
 SHEET 1 OF 3

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

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**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET D**

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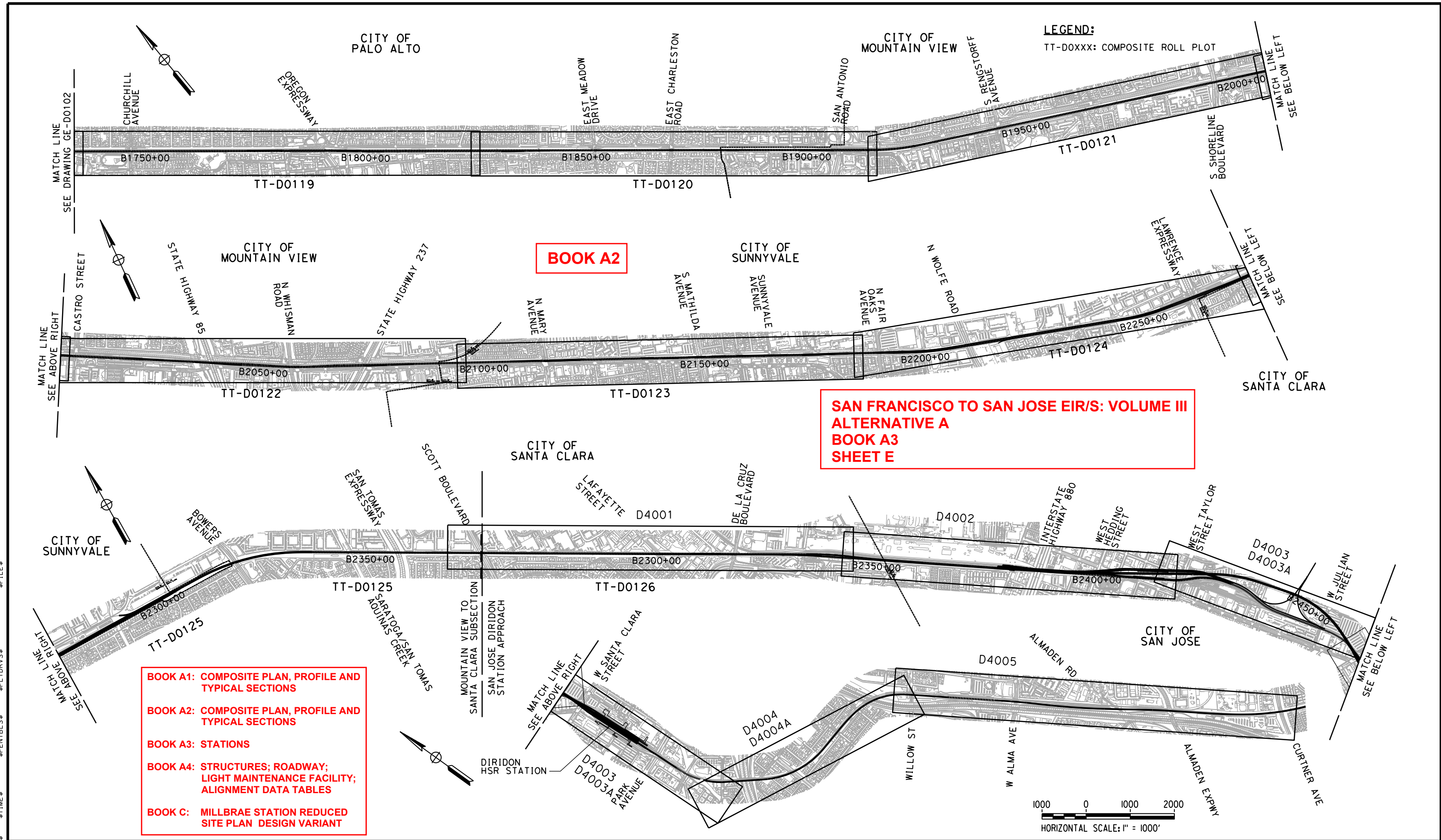
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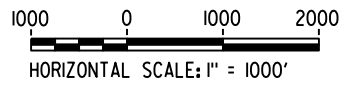


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
  
ALTERNATIVE A  
KEY MAP  
COMPOSITE PLAN  
SHEET 2 OF 3

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 TABLES**
- BOOK C: MILLBRAE STATION REDUCED SITE PLAN DESIGN VARIANT**



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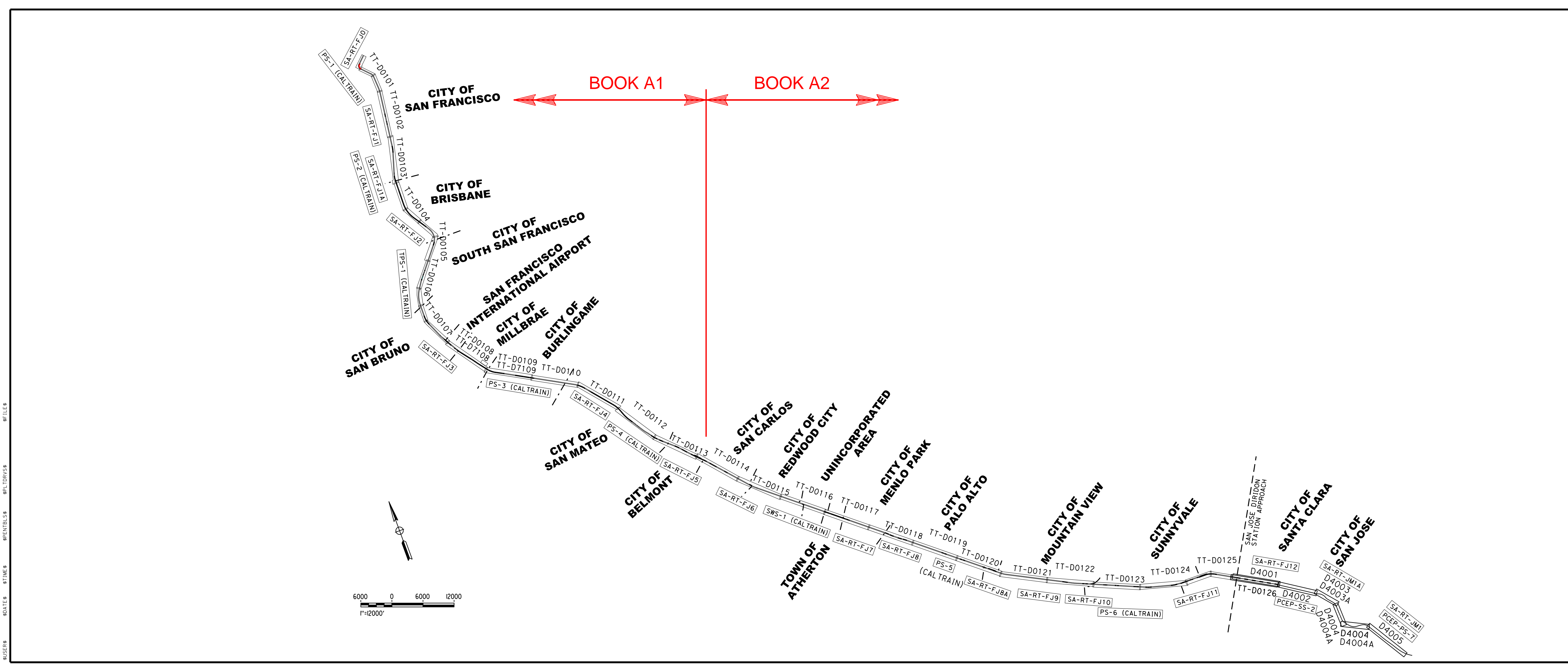
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**CALIFORNIA**  
 High-Speed Rail Authority

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

CONTRACT NO.	HSR15-34
DRAWING NO.	GE-D1103
SCALE	AS SHOWN
SHEET NO.	



**ALTERNATIVE A**

Station (SB TRK)	Traction Power Facility (TPF)	TPF ID	Dist. to Prev. TPF (mi)	Automatic Train Control Sites	Dist. to Prev. ATC-D (mi)	Communications Radio Tower	Dist. to Prev. RT (mi)	Cross Street
104+63	4th & King Passenger Station					Radio Tower 4th & King Sta		4th St
133+15								
STATION EQUATION STA B133+15.12 = STA B139+00.00								
139+00								
162+58	Mariposa PS-1 (Caltrain)	PCEP-PS-1	3.86			Radio Tower PS-1 (Caltrain)	0.99	Mariposa St
167+09	To Caltrain PS-2							
185+27								
198+80								
209+69								
245+49						Stand Alone Radio Tower FJ1 - Alt 1		Jerrold Ave
258+78						to RT 4th & King Sta	2.56	
						to RT PS-1	1.57	
						Stand Alone Radio Tower FJ1 - Alt 2		Newcomb Ave
						to RT 4th & King Sta	2.81	
						to RT PS-1	1.82	
264+92								
288+52								
322+20								
357+57								
358+50						Stand Alone Radio Tower FJ1A		Blanken Ave
						to SA-RT FJ1 - Alt 1	2.14	
						to SA-RT FJ1 - Alt 2	1.89	
366+50	Bayshore PS-2 (Caltrain)	PCEP-PS-2	3.86					Recycle Road
	To Caltrain PS-1							
467+30			4.09			Stand Alone Radio Tower FJ2 - Alt 1		Bayshore Boulevard
						to SA-RT FJ1A	2.06	
476+65						Stand Alone Radio Tower FJ2 - Alt 2		Bayshore Boulevard
						to SA-RT FJ1A	2.24	
540+00								
STATION EQUATION STA B540+00.02 = STA B542+50.00								
542+50								
585+00	South San Francisco TPS-1 (Caltrain)	PCEP-TPS-1	4.09			Radio Tower TPS-1 (Caltrain)		Grand Ave
	To Caltrain PS-2					to SA-RT FJ2 - Alt 1	2.18	
	To Caltrain PS-3					to SA-RT FJ2 - Alt 2	2.00	
	To Caltrain TPS-2							
662+50			36.21					
STATION EQUATION STA B662+50.02 = STA B665+00.00								

**ALTERNATIVE A (CONTINUED)**

Station (SB TRK)	Traction Power Facility (TPF)	TPF ID	Dist. to Prev. TPF (mi)	Automatic Train Control Sites	Dist. to Prev. ATC-D (mi)	Communications Radio Tower	Dist. to Prev. RT (mi)	Cross Street
665+00								
741+43						Stand Alone Radio Tower FJ3 - Alt 1		San Marco Ave
						to RT TPS-1	2.92	
745+23						Stand Alone Radio Tower FJ3 - Alt 2		Santa Lucia Ave
						to RT TPS-1	2.99	
890+00	Broadway PS-3 (Caltrain)	PCEP-PS-3	5.73			Radio Tower PS-3 (Caltrain)		Lincoln Ave
	To Caltrain TPS-1							
	To SA-RT FJ3 - Alt 1							
	To SA-RT FJ3 - Alt 2							
1038+91			5.48			Stand Alone Radio Tower FJ4 - Alt 1		Cypress Avenue
						to RT PS-3	2.82	
1046+13						Stand Alone Radio Tower FJ4 - Alt 2		2nd Avenue
						to RT PS-3	2.96	
1179+32	Hillsdale PS-4 (Caltrain)	PCEP-PS-4	5.48			Radio Tower PS-4 (Caltrain)		E. Hillsdale Boulevard
	To Caltrain PS-3					to SA-RT FJ4 - Alt 1	2.66	
	To Caltrain SWS-1					to SA-RT FJ4 - Alt 2	2.52	
1257+62						Stand Alone Radio Tower FJ5 - Alt 1		Middle Road
						to RT PS-4	1.48	
1269+19						Stand Alone Radio Tower FJ5 - Alt 2		Ralston Avenue
						to RT PS-4	1.70	
1383+23						Stand Alone Radio Tower FJ6 - Alt 2		El Camino Real/Central Avenue
						to SA-RT FJ5 - Alt 1	2.38	
						to SA-RT FJ5 - Alt 2	2.16	
1387+77						Stand Alone Radio Tower FJ6 - Alt 1		Center Street
						to SA-RT FJ5 - Alt 1	2.46	
						to SA-RT FJ5 - Alt 2	2.25	
1420+00								
STATION EQUATION STA B1419+99.97 = STA B1425+00.00								
1425+00								
1495+25	Redwood Junction SWS-1 (Caltrain)	PCEP-SWS-1	5.89			Radio Tower SWS-1 (Caltrain)		SR 84
	To Caltrain PS-4					to SA-RT FJ6 - Alt 2	2.03	
	To Caltrain PS-5					to SA-RT FJ6 - Alt 1	1.94	
	To Caltrain TPS-1							
	To Caltrain TPS-2							
1627+06						Stand Alone Radio Tower FJ7 - Alt 1		Derby Lane
						to RT SWS-1	2.50	
1638+84						Stand Alone Radio Tower FJ7 - Alt 2		Ravenswood Avenue
						to RT SWS-1	2.72	
1725+76						Stand Alone Radio Tower FJ8 - Alt 1		Addison Avenue
						to SA-RT FJ7 - Alt 1	1.87	
						to SA-RT FJ7 - Alt 2	1.65	
1728+64						Stand Alone Radio Tower FJ8 - Alt 2		Embarcadero Road
						to SA-RT FJ7 - Alt 1	1.92	
						to SA-RT FJ7 - Alt 2	1.70	
1801+90	West Meadow PS-5 (Caltrain)	PCEP-PS-5	5.81					
	To Caltrain SWS-1					to RT SWS-1	2.57	
	To Caltrain PS-6					to SA-RT FJ8 - Alt 2	2.52	
1861+61			6.69			Stand Alone Radio Tower FJ8A - Alt 1		E. Charleston Road
						to SA-RT FJ8 - Alt 2	2.52	
1865+41						Stand Alone Radio Tower FJ8A - Alt 1		Park Boulevard
						to SA-RT FJ8 - Alt 1	2.64	
						to SA-RT FJ8 - Alt 2	2.59	
1991+97						Stand Alone Radio Tower FJ9 - Alt 1		N. Shoreline Boulevard
						to SA-RT FJ8A - Alt 2	2.47	
						to SA-RT FJ8A - Alt 1	2.40	
1998+51						Stand Alone Radio Tower FJ9 - Alt 2		N. Shoreline Boulevard
						to SA-RT FJ8A - Alt 1	2.52	
						to SA-RT FJ8A - Alt 2	2.59	
2091+76						Stand Alone Radio Tower FJ10 - Alt 1		E. Bernardo Avenue
						to SA-RT FJ9 - Alt 1	1.89	
						to SA-RT FJ9 - Alt 2	1.77	
2093+59						Stand Alone Radio Tower FJ10 - Alt 2		E. Bernardo Avenue
						to SA-RT FJ9 - Alt 1	1.92	
						to SA-RT FJ9 - Alt 2	1.80	
2154+99	Sunnyvale PS-6 (Caltrain)	PCEP-PS-6	6.62			Radio Tower PS-6 (Caltrain)		Mathilda Avenue
	To Caltrain TPS-2					to SA-RT FJ10 - Alt 1	1.20	
						to SA-RT FJ10 - Alt 2	1.16	
2268+87						Stand Alone Radio Tower FJ11 - Alt 1		Lawrence Expressway
						to RT PS-6	2.57	
2290+53						Stand Alone Radio Tower FJ11 - Alt 2		Lawrence Expressway
						to RT PS-6	2.16	
2375+19								

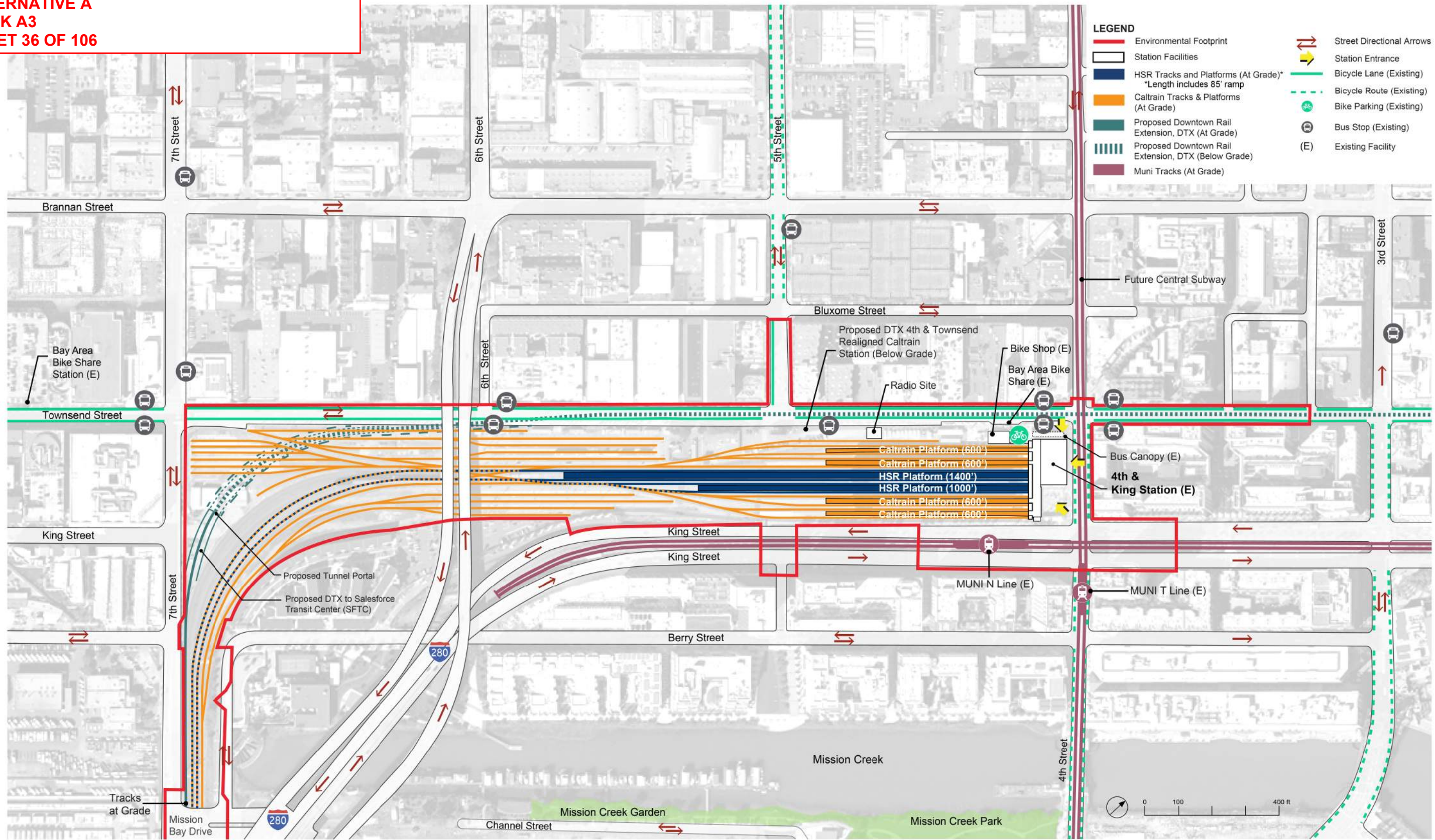
**ALTERNATIVE A (CONTINUED)**

Station (SB TRK)	Traction Power Facility (TPF)	TPF ID	Dist. to Prev. TPF (mi)	Automatic Train Control Sites	Dist. to Prev. ATC-D (mi)	Communications Radio Tower	Dist. to Prev. RT (mi)	Cross Street
SCOTT BOULEVARD								
Station Equation FJ - ALT. A POE (SB) B2375+19.10 = ALT. 4 POB (SB) B2872+66.56 POB								
2872+87								
2874+71								
Beginning of San Jose to Merced Section (JM) - CP Coast to CP Lick Subsection								
						Stand Alone Radio Tower FJ12 - Alt 1		Scott Boulevard
						to SA-RT FJ11 - Alt 1	2.05	
2899+66						Stand Alone Radio Tower FJ12 - Alt 2		Lafayette Street
						to SA-RT FJ11 - Alt 2	2.52	
						to SA-RT FJ11 - Alt 1	2.11	
3002+00	Caltrain PCEP TPS-2	PCEP-TPS-2	36.35			Radio Tower PCEP TPS-2		1880
	To Caltrain TPS-1					to SA-RT FJ12 - Alt 1	2.41	
	To SS-B - Alt 1					to SA-RT FJ12 - Alt 2	1.94	
	To SS-B - Alt 2							
	To Caltrain SWS-1							
	To SWS-A - Alt 2							
	To SWS-A - Alt 1							
	To Caltrain PS-6							
	To Caltrain PS-7							
3078+42						Stand Alone Radio Tower JM1A		
						to RT PCEP TPS-2	1.47	
3085+00	Dividon Passenger Station							
3141+50								
3196+50								
3199+00	Caltrain PCEP PS-7	PCEP-PS-7						Almaden Road

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET F**

2021 RECORD SET PEPD NOVEMBER 30, 2021 NOT FOR CONSTRUCTION	1111 Broadway 9th Floor Oakland, CA 94607	CALIFORNIA High-Speed Rail Authority	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SAN FRANCISCO TO SAN JOSE</b> ALTERNATIVE A KEY MAP SYSTEM SITES	CONTRACT NO. HSR15-34 DRAWING NO. CE-D1104 SCALE AS SHOWN SHEET NO.
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**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 36 OF 106**



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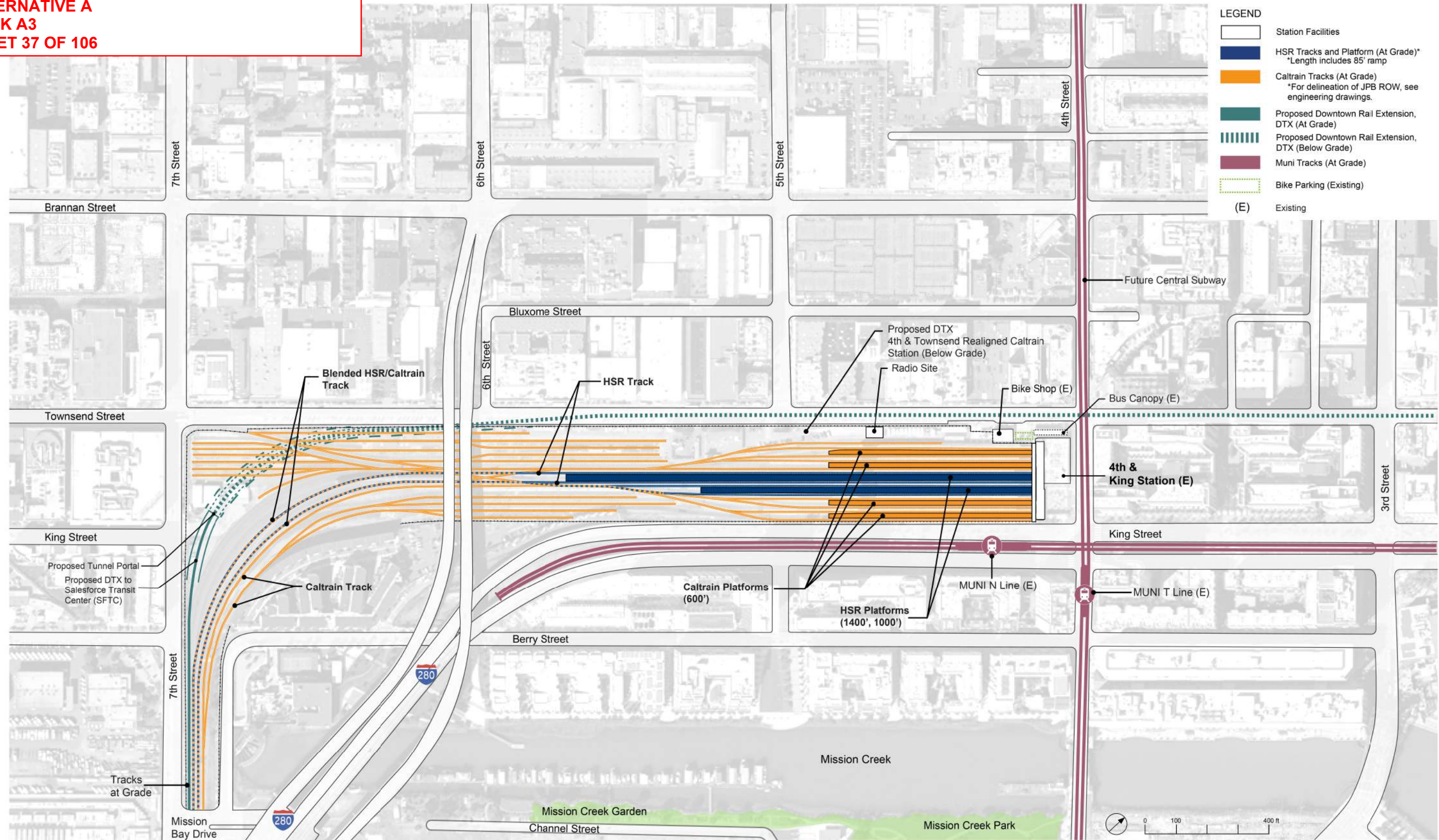
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
STATION  
4TH AND KING  
GENERAL SITE PLAN

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0101
SCALE	AS SHOWN
SHEET NO.	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 37 OF 106**



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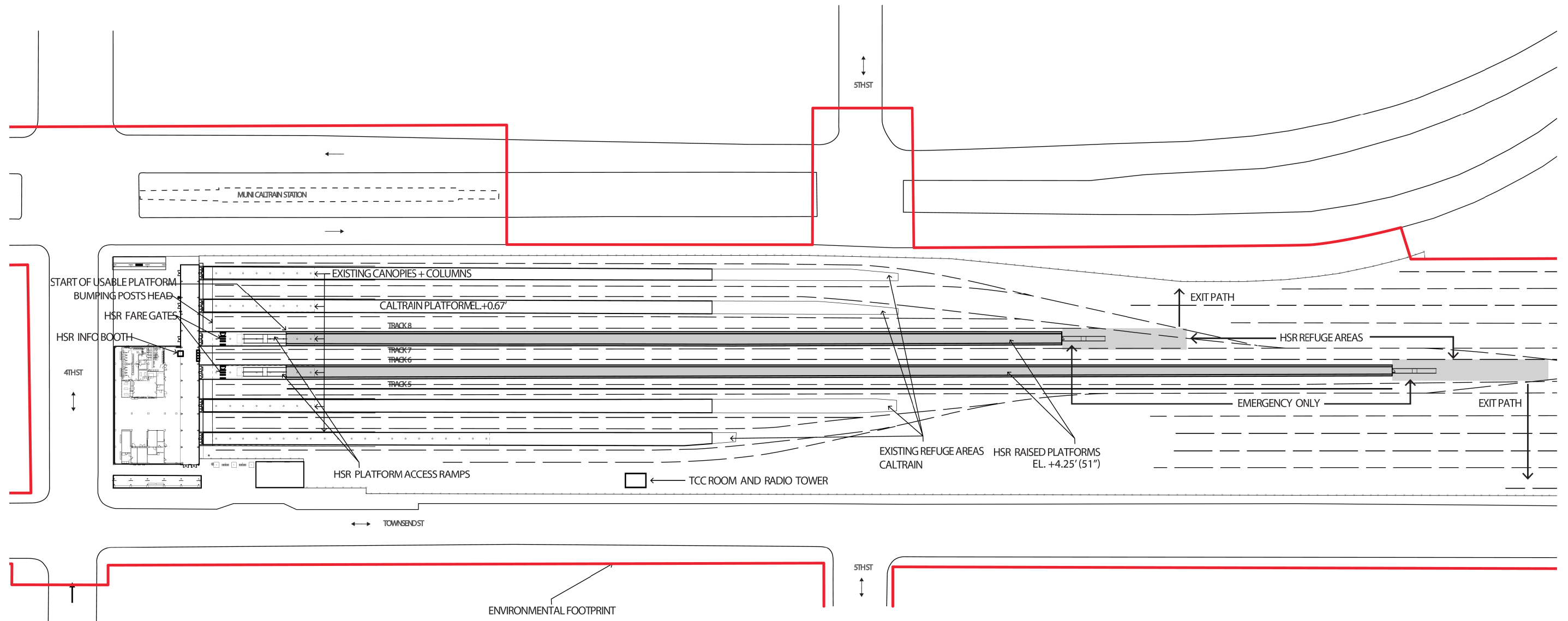
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
STATION  
4TH AND KING  
DETAILED SITE PLAN

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0102
SCALE	AS SHOWN
SHEET NO.	

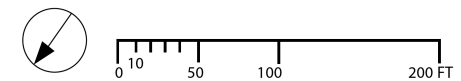


**\*\*NOTES :**

- BUMPING POST PER CALTRAIN SD-2241
- BUMPING POST SET 8' FROM END OF RAIL, 5.83' BUMPING POST LENGTH
- TRAINS PARK 20' FROM HEAD
- FROM THE EXISTING STATION WALL, 14.4' TO END OF BUMPING POST, THEN 70.6' TO USABLE PLATFORM.
- LENGTH OF USABLE PLATFORM 914' FOR 1000' PLATFORM.



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 38 OF 106**



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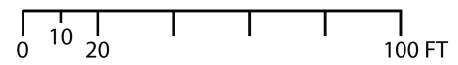
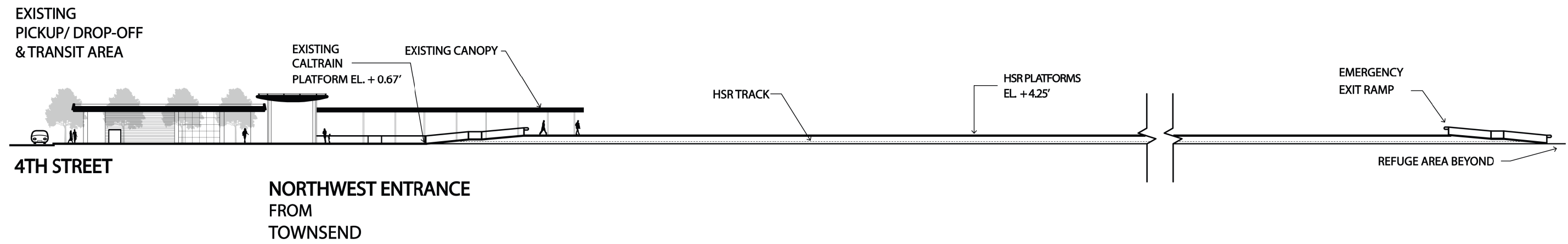
**CALIFORNIA**  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
STATION  
4TH AND KING  
PLATFORM LEVEL PLAN

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0103
SCALE	AS SHOWN
SHEET NO.	

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**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
 ALTERNATIVE A  
 BOOK A3  
 SHEET 39 OF 106**

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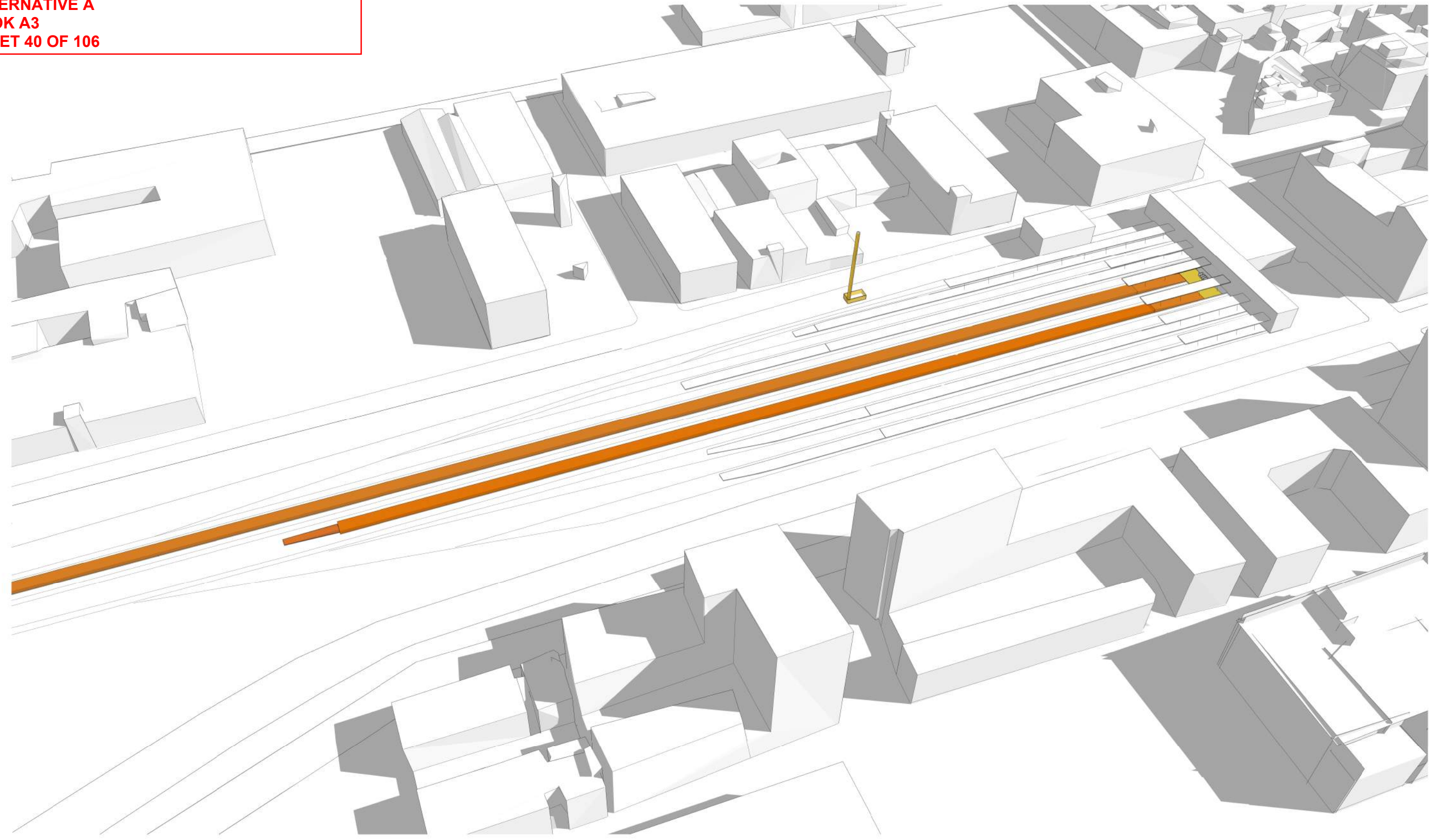
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 SAN FRANCISCO TO SAN JOSE**  
  
 STATION  
 4TH AND KING  
 SECTION

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BOOK A3  
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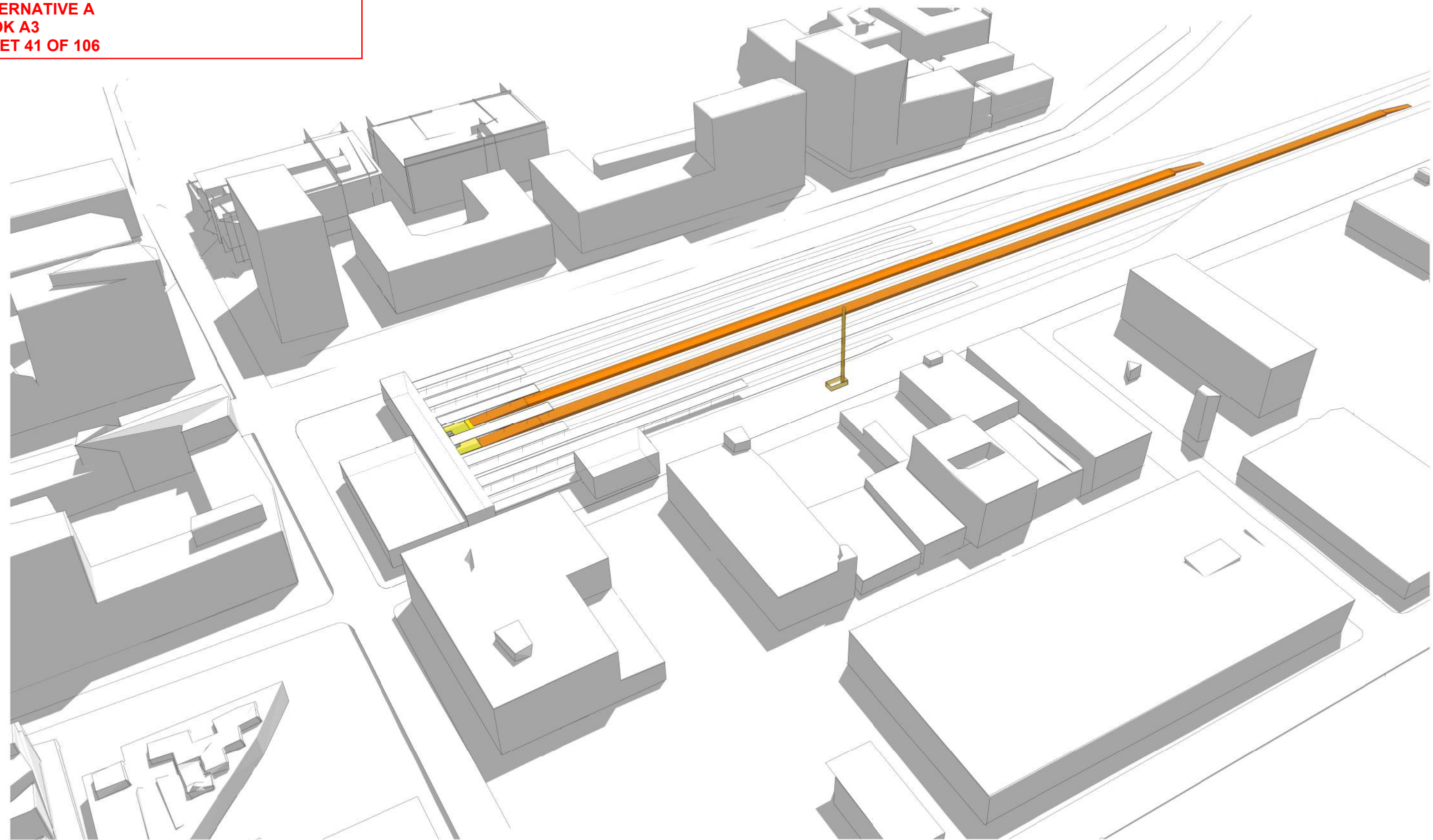
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
  
 STATION  
 4TH AND KING  
 MASSING DIAGRAM 1

CONTRACT NO.	HSR15-34
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ALTERNATIVE A  
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SHEET 41 OF 106**



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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
  
STATION  
4TH AND KING  
MASSING DIAGRAM 2

CONTRACT NO.  
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4th & King Station Programming & Area Requirements Table				
Category	Description	Formula	Requirement Area/ Unit	Comments
Daily Peak Ridership Boardings 2029	Long distance		10,175	Planning Memorandum Station Boardings, Access, Egress and Parking INST-PLAN-05
P360B	Highest Daily Boardings X Conversion Factor for Boardings=6 Hour Boardings	Highest Daily Boardings x 0.67=P360B 10,175 x 0.67	6,817	California HSTP Design Criteria, Chapter 14-Stations, Oct 2015, Working Draft, Rev.2 Table 14-1 Passenger Ridership Assumptions Table 14-3 Concourse Circulation and Waiting Areas
P360A	Peak 6 Hour Boardings X Conversion Factor for Alightings =6 Hour Alightings	P360B x 0.75=P360A 6,817 x 0.75	5,113	
P60B	Peak 6 Hour Boardings x Peak Hour Conversion Factor for Boardings=Peak Hour Boardings	P360B x 0.17=P60B 6,817 X 0.17	1,159	
P60A	Peak Hour Boardings x Peak Hour Conversion Factor for Alightings=Peak Hour Alightings	P60B x 0.75=P60A 1,159 x 0.75	869	
P30B	Peak Hour Boardings / 2 x Surge Factor = Peak 30-minute Boardings	(P60B / 2) x 1.2=P30B (1,159/2) x 1.2	695	
P30A	Peak 30-minute Boardings x Conversion Factor = Peak 30-minute Alightings	P30B x 0.075=P30A 695 x 0.75	522	
P15B	Peak Hour Boardings / 4 x Surge Factor = Peak 15-minute Boardings	(P60B / 4) x 1.3= P15B ( 1,159 /4) x 1.3	377	
P15A	Peak 15-minute Boardings x Conversion Factor=Peak 15-minute Alightings	P15B x 0.75=P15A 377 x 0.75	282	
P5B	Peak Hour Boardings /12 x Surge Factor = Peak 5-minute Boardings	(P60B / 12) x 1.4= P5B (1,159/12) x 1.4	135	
P5A	Peak 5-minute Boardings x Conversion Factor = Peak 5-minute Alightings	P5B x 0.75=P5A 135 x 0.75	101	
P1B	Peak Hour Boardings /60 x Surge Factor=Peak 1-minute Boardings	(P60B /60) x 1.5=P1B (1,159/60) x 1.5	29	
P1A	Peak 1-minute Boardings x Conversion Factor for Alightings=Peak 1-minute Alightings	P1Bx0.75 29x0.75	22	
Cf	Unobstructed Net Concourse Free Public Area Circulation Width	(P15B+P15A)/(15x10 people/ft/min) or 16 ft min. (377+282)/(15x10 people/ft/min)	16	
Wf	Net Waiting Area in Concourse Free Public Area	((P15Bx1.1) + (P15Ax0.1))x 14 SF ((377x1.1) +(282x0.1)) x 14	6,196	
Public Restrooms	Women + Men + Unisex accessible restroom for each group	(P15B+P15A) / 2 (377+282) / 2	330	
Passenger Amenity Space Allocation	Station Design Target Yr. Daily Boardings	9,000	9,000	California HSTP Design Criteria, Chapter 14 - Stations, March Rev.2 14.3.5.5 Station Public Amenity (Commercial) Spaces, Table 14-7
Ticket Windows	Station Quantity	P60B/600 1159/600	2	
Ticket Vending Machines		P60B/280 1159/280	4	14.3.5.6
Value Added Machines	2 Per Each Fare Paid Area		3	14.3.5.6
Fare Gates		P15A /50 ppm 282/50 One additional gate to be provided if under 10	6	14.3.5.6 D
Emergency Gates			2	14.3.3.6
Sr	Seating at Concourse Fare Free Waiting Area	((P15B x 1.1) + (P15A x 0.1)) x 0.25	1,043	Table 14-22: Station Seating

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 ALTERNATIVE A  
 BOOK A3  
 SHEET 42 OF 106

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 SAN FRANCISCO TO SAN JOSE  
 STATION  
 4th AND KING  
 FACILITY SIZING TABLE

CONTRACT NO.	HSR15-34
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**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 43 OF 106**

**4th & King Station Facility Sizing Table**

Projected Daily Ridership (2029) 10,175, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking

STATION TYPE: Temporary, Tenant at Caltrain's 4th and King Station facility. As a result, the program considers the following:

1. HSR will be a tenant at Caltrain's 4th and King Station facility and HSR operation at 4th and King will be temporary. HSR platforms will be designed and constructed to be removed when all HSR train service moves to SFTC.
2. HSR platforms are modified from Caltrain platforms which are existing and non-conforming to current CBC and NFPA 130 design standards. HSR's tenant improvements are subjected to review and approval by owner and/or reviewing agency who has jurisdiction over the facility.
3. HSR will operate one 700' trainset with 455 passengers max at each platform at any given time. HSR's passenger load is significantly lower than designated Caltrain passenger load and thus does not alter required passenger evacuation on platform.
4. Proposed HSR platform tenant improvements are Type II Construction, non-combustible construction, suitable for open station construction as defined by CBC.

	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14:Stations	Comments
Concourse Public Free Areas	Station Concourse (Free Area - Main Hall)	NA	1.2	19,774	P15 x 30sf/person 389 x 30	14.3.5.3	P15 = P15 B + P15 A = 389 Using Memorandum dated May 10, 2016, Attachment E Facility Sizing Table Example
	Entrances					14.3.5.2	# TBD, 15 ft width at least one entrance
	Mezzanine						Included with the Concourse Area
	Passenger Waiting Area	NA	1.2	6,196	((P15B x 1.1)+(P15Ax0.1)) x 14 SF	14.3.5.3.B.C Table 14-3	California HSTP Design Criteria, Chapter 14-Stations, March 2016, Rev. 2, Table 14-1 Passenger Ridership Assumptions, Table 14-3 Concourse Circulation and Waiting Areas
	Ticket Vending Machines (TVM)	104	1.2	4	P60B/280, 1,159/280	Table 14-5	Includes queuing space
	Baggage Storage (Concessionaire)	NA					TBD
	Retail (Concessionaire)	NA	1.2	9,000		Table 14-7	More than 15,000 daily boardings
	Restaurant (Concessionaire)	NA				Table 14-7	Included in the 9,000 SF
	Food Service (Concessionaire)	NA				Table 14-7	Included in the 9,000 SF
	Business Lounge	NA	1.2	600		14.3.5.7.C	Without restrooms
	Public Restrooms	NA	1.2	2040	CBC 2016, CPC 2016 (P15B + P15A)/2	14.3.5.4	A-3 Assembly Occupancy, 502 male, 502 female, 2 unisex Female: 7 water closets, 5 lavatories Male: 3 water closets, 4 urinal, 5 lavatories 2 drinking fountains
Janitor Closets	NA	1.2	240	60 x 4	14.3.7.1.D	Located in concourse free area, platform, and each restroom.	
	<b>Subtotal</b>	<b>104</b>					
Security & Standard Areas	Ticket Window Counters	NA	2	150	Window Counter 5F min. 75 SF/window (2 Windows) P60B/600, 1,159/600	14.3.5.6.B 14.3.5.7A	
	Station Patron Information Booth	100	1	100	Standard Unit (Kiosk)	14.3.5.7.B	
	Red "Cap" Booth						TBD
	Police Office	NA	2	500		14.3.6.2.A	
	Police Restrooms + Lockers			TBD	CBC 2016, CPC 2016		
	Janitor Closets	NA	2	60		14.3.7.1.D	
	Security Guard Office	NA	2	144 SF		14.3.6.2.B	
	<b>Subtotal</b>	<b>100</b>					

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
STATION  
4th AND KING  
FACILITY SIZING TABLE

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**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 44 OF 106**

**4th & King Station Facility Sizing Table**

Projected Daily Ridership (2029) 10,175, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking

STATION TYPE: Intermediate, Full-Service, Small: based on Chapter 14 Stations Design Criteria, Table 14-3

	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14:Stations	Comments
Non-Public Station Staff Only	Ticket Admin., Handling & Storage	NA	2	260		14.3.5.6.B 14.3.5.7 14.3.6.2.C-D	Ticket Administration Office 75SF/window
	Lost & Found & First Aid Room	NA	2	200	100 SF x (2)	14.3.6.1.E-F	
	Station Control Room (SCR)	NA	2	1,100		14.3.6.2.E	
	Main Station Computer Room	NA	2	500		14.3.6.2.F	
	Temporary Incident Command Post (CP)	NA	2	300		14.3.6.2.G	
	Station Operation Room (SOR)	NA	2	1,100		14.3.6.2.H	
	SOR Dedicated Computer Room, SOR Workroom	NA	2	500		14.3.6.2.F-H	
	Main OCC Computer Room	NA	2	500		14.6.3.2.F	
	Staff Lockers, Showers, Restrooms	NA	2		CBC 2016	14.3.6.1.I	Will need number of staff projection to determine SF required.
	Janitor Closets	NA	2	60		14.3.7.1.C	
	Staff Breakroom & Meeting Rooms	NA	2	400	200 SF x (2)	14.3.6.1.G-H	200 SF min or as req to provide 25 SF /staff
	Station Manager Office	NA	2	144		14.3.6.1.A	
	Facility Manager's Office	NA	2	144		14.3.6.1.C	
	Administration Office Space	NA	2	300		14.3.6.1.B	
	Facilities Maintenance Office	NA	2	330		14.3.6.1.C	
	Station General Storage Rooms	NA	2	200		14.3.7.1.E	Add 60 SF for misc. storage if required.
	Platform Area Op. Mgt. Booth	NA	1	100	Standard Unit	14.3.6.2.I	One OMB to be provided on each platform.
	Train Control /Communications Room	NA	2	1,915		14.3.7.2	Table 14-8, for the train control and communications equipment.
	Entrance Facility Room	NA	2	240		14.3.7.2	Table 14-8, for entry of service cabling into the building. May be co-located with the TCC room.
	3rd Party Telecom Room	NA	2	120		14.3.7.2	Table 14-8, for local telephone company.
Communications Closets	NA	2	130	130 SF each	14.3.7.2	Table 14-8, number TBD. Locate close to center of each 10,000 SF of Station Floor Area	
Renewable Energy/Stormwater	NA		TBD				
	<b>Subtotal</b>	<b>0</b>					
<b>TOTAL AREA - ENTRANCE &amp; CONCOURSE:</b>		<b>204</b>					
Bldg Services & Plant Rooms	Mech., Elec. & Plumbing Rooms	NA		TBD	Gross Factor	14.3.7.2	
	Battery Room	NA	2	400	200 SF x ( 2 )	14.3.7.4.B	Two rooms required, including one room at each end of station for low voltage (LV) batteries.
	UPS Room	NA	2	1,800	900 SF x ( 2 )	14.3.7.4.C	Two rooms required, one at each end of station for LV distribution, transforming, EP
	Fire Detection & Protection Rooms	NA		TBD	Gross Factor	14.3.7.6	
Maint. Support Areas	Main Station Recycling/Refuse	NA	2	150	150 SF min.	14.3.7.1.A	
	Secondary Station Recycling	NA	2	60		14.3.7.1.C	
	Landscape Maintenance Room	NA	2	100		14.3.7.1.F	
	Loading Dock	NA		TBD		14.3.7.1.H	
<b>FACILITIES TO BE SHARED WITH CALTRAIN</b>		<b>0</b>					

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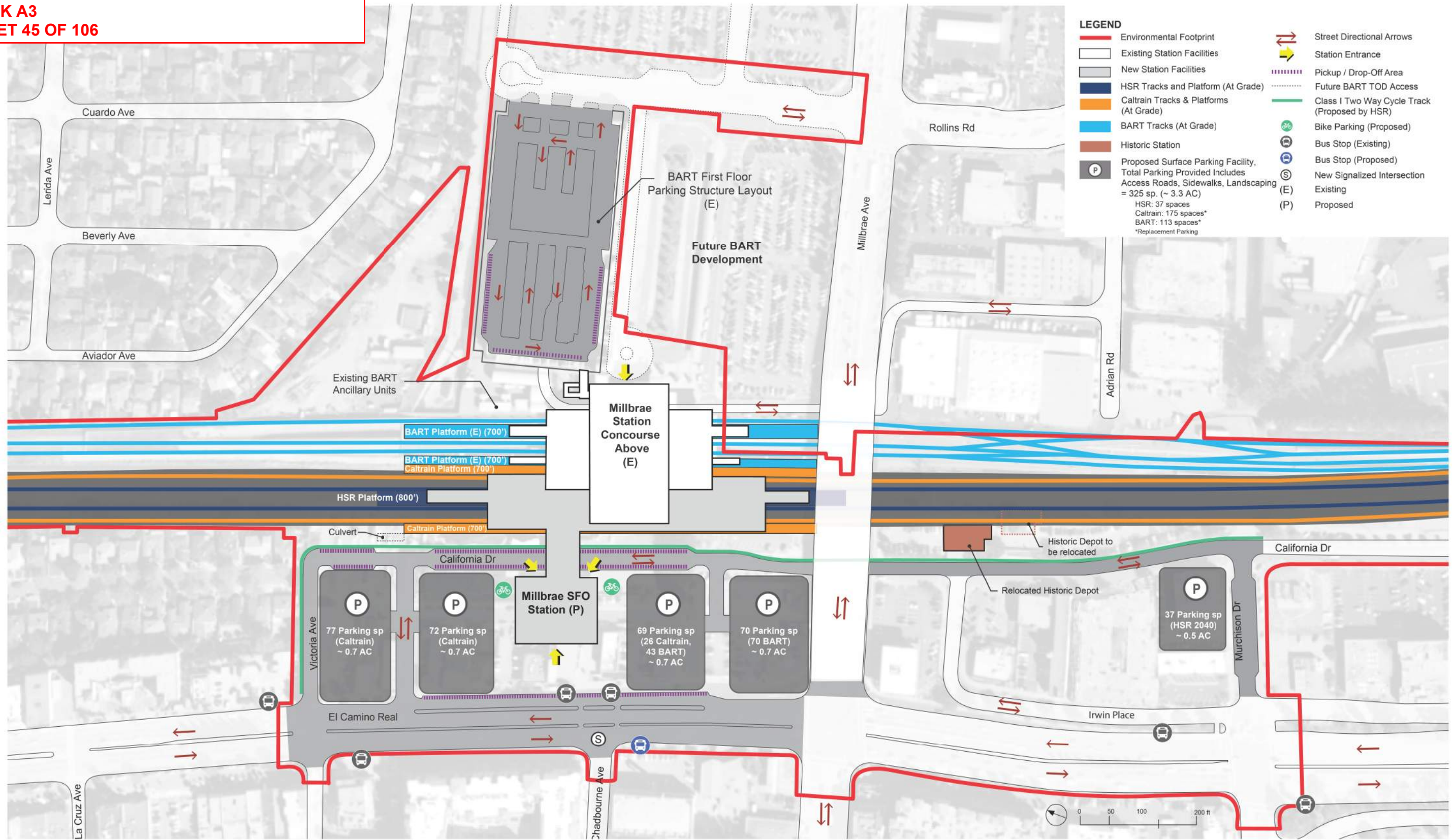
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SAN FRANCISCO TO SAN JOSE**  
STATION  
4th AND KING  
FACILITY SIZING TABLE

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ALTERNATIVE A  
BOOK A3  
SHEET 45 OF 106**



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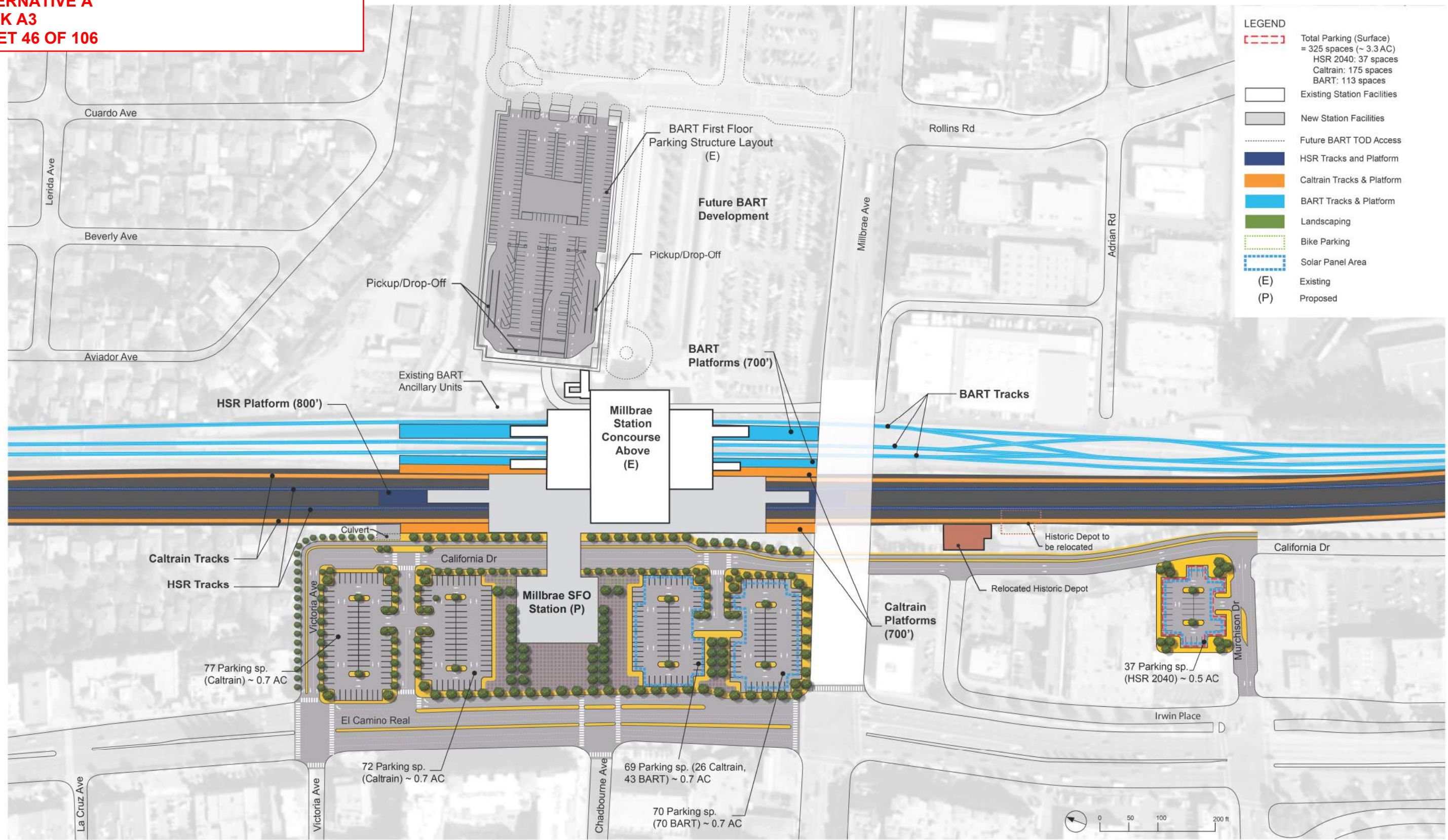


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN FRANCISCO TO SAN JOSE**  
 STATION  
 MILLBRAE  
 GENERAL SITE PLAN

CONTRACT NO. HSR15-34  
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ALTERNATIVE A  
BOOK A3  
SHEET 46 OF 106**



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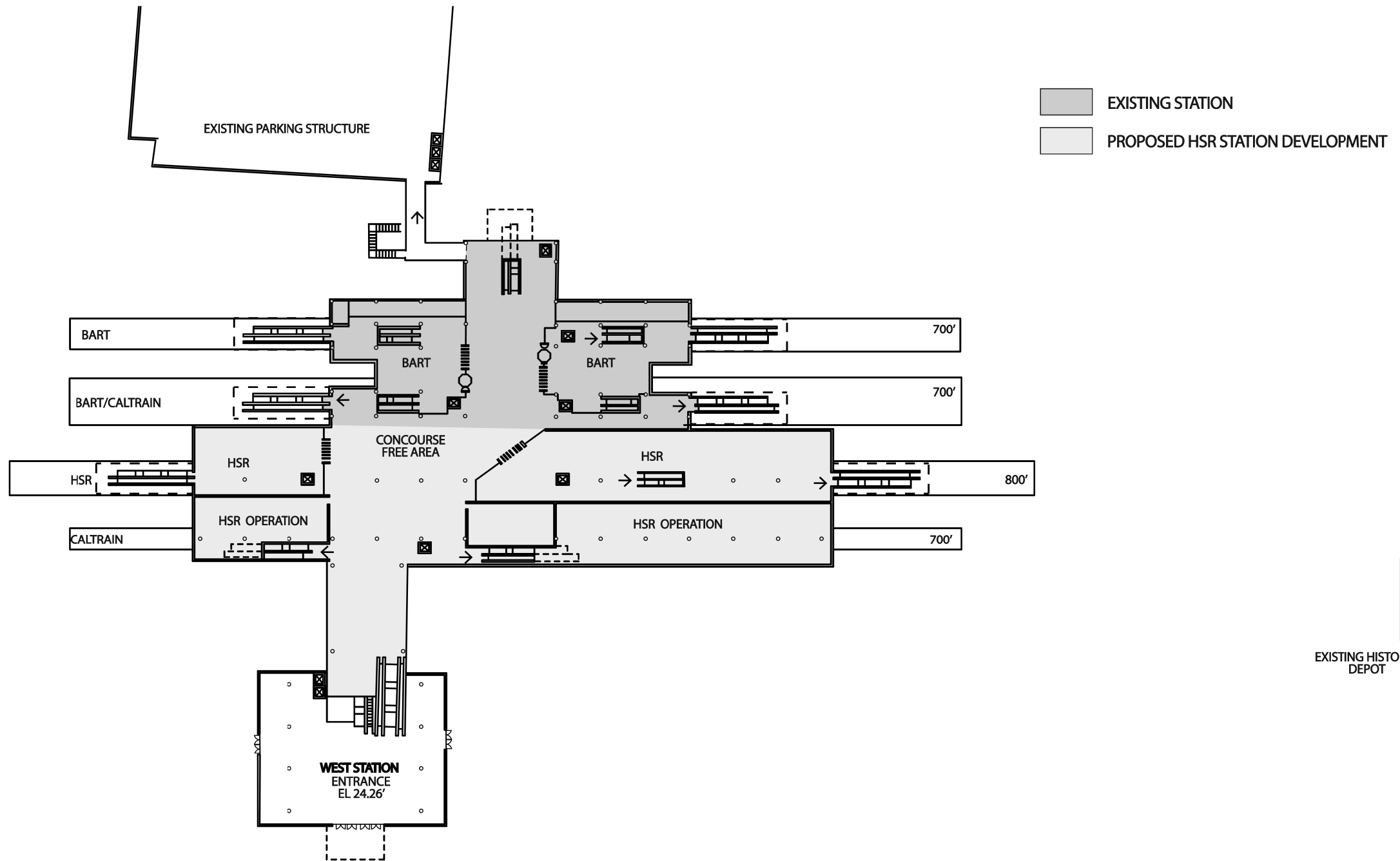
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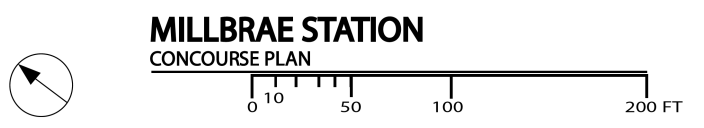
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SAN FRANCISCO TO SAN JOSE**  
 STATION  
**MILLBRAE**  
 DETAILED SITE PLAN

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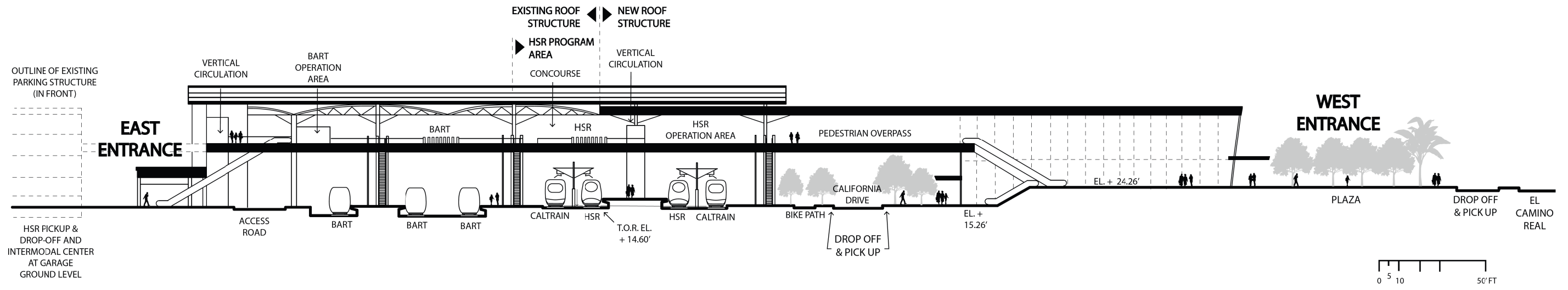
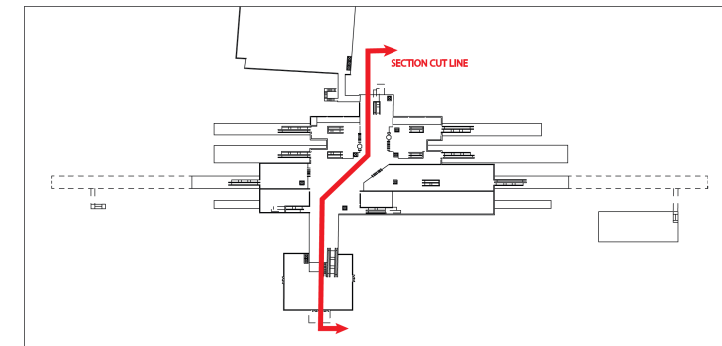
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 STATION  
 MILLBRAE  
 CONCOURSE PLAN

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**SAN FRANCISCO TO SAN JOSE**  
 STATION  
 MILLBRAE  
 SECTION

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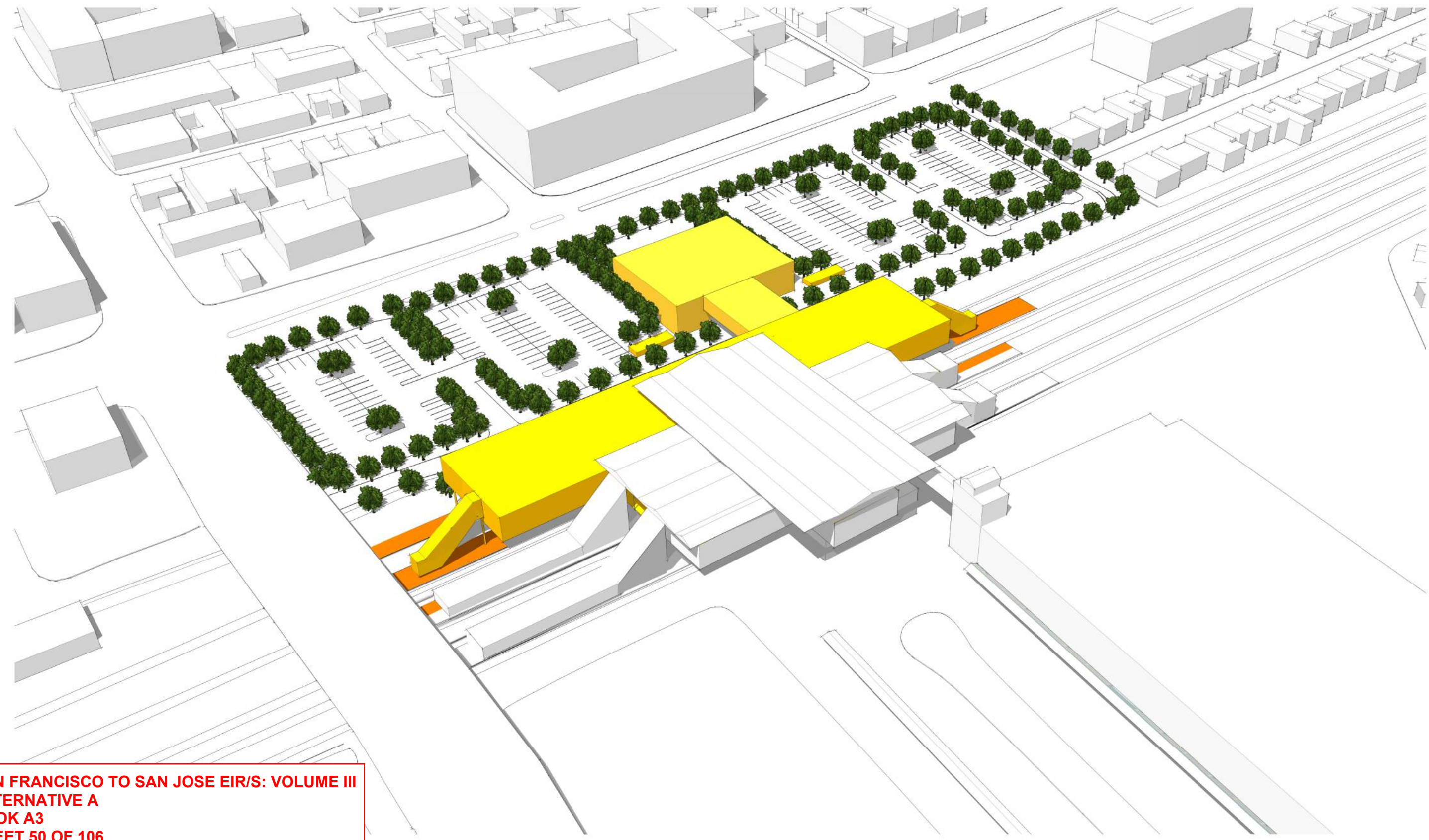


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 SAN FRANCISCO TO SAN JOSE**  
  
 STATION  
 MILLBRAE  
 MASSING DIAGRAM 1

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 SAN FRANCISCO TO SAN JOSE**  
  
 STATION  
 MILLBRAE  
 MASSING DIAGRAM 2

CONTRACT NO.  
 HSR15-34  
 DRAWING NO.  
 AR-J0116  
 SCALE  
 AS SHOWN  
 SHEET NO.

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Millbrae Station Programming & Area Requirements Table				
Category	Description	Formula	Requirement Area/ Unit	Comments
Daily Peak Ridership Boardings 2040	Long distance	5,570	5,570	Planning Memorandum Station Boardings, Access, Egress and Parking INST-PLAN-05
P360B	Highest Daily Boardings X Conversation Factor for Boardings=6hour Boardings	Highest Daily Boardings x 0.67=P360B 6,000 x 0.67	3,732	California HSTP Design Criteria, Chapter 14-Stations, Oct 2015, Working Draft, Rev.2 Table 14-1 Passenger Ridership Assumptions Table 14-3 Concourse Circulation and Waiting Areas
P360A	Peak 6 Hour Boardings X Conversation Factor for Alightings =6hour Alightings	P360B x 0.75=P360A 10,385 x 0.75	2,799	
P60B	Peak 6 hour Boardings x Peak hour conversion Factor for Boardings=Peak Hour Boardings	P360B x 0.17=P60B 10,385 X 0.17	634	
P60A	Peak Hour Boardings x Peak Hour Conversion Factor for Alightings=Peak Hour Alightings	P60B x 0.75=P60A 1,765 x 0.75	476	
P30B	Peak Hour Boardings /2 x Surge Factor = Peak 30-minute Boardings	(P60B /2) x 1.2=P30B (1,765/2) x 1.2	381	
P30A	Peak 30-minute Boardings x Conversion Factor = Peak 30 minute Alightings	P30B x 0.075=P30A 1,059 x 0.75	285	
P15B	Peak Hour Boardings / 4 x Surge Factor = Peak 15- minute Boardings	(P60B / 4) x 1.3= P15B ( 1,765 /4) x 1.3	206	
P15A	Peak 15-minute Boardings x Conversion Factor=Peak 15 minute Alightings	P15B x 0.75=P15A 574 x 0.75	155	
P5B	Peak Hour Boardings /12 x Surge Factor = Peak 5-minute Boardings	(P60B / 12) x 1.4= P5B (1,765 /12) x 1.4	74	
P5A	Peak 5-minute Boardings x Conversion Factor = Peak 5-minute Alightings	P5B x 0.75=P5A 206 x 0.75	56	
P1B	Peak Hour Boardings /60 x Surge Factor=Peak 1 Minute Boardings	(P60B /60) x 1.5=P1B (1,765/60) x 1.5	16	
P1A	Peak 1-minute Boardings x Conversion Factor for Alightings=Peak 1 Minute Alightings	P1Bx0.75 17x0.75	12	
Cf	Unobstructed Net Concourse Free Public Area Circulation Width	(P15B+P15A)/(15x10 people/ft/min) or 16 ft min. (222+167)/(15x10 people/ft/min)	16	
Wf	Net Waiting Area in Concourse Free Public Area	((P15Bx1.1) + (P15Ax0.1))x 14 square feet ((222x1.1) +(167x0.1)) x 14	3,392	
Public Restrooms	Women + Men + Unisex accessible restroom for each group	(P15B+P15A) / 2 (222+167) /2	180	
Passenger Amenity Space Allocation	Station Design Target Yr. Daily Boardings	9,000	9,000	California HSTP Design Criteria, Chapter 14 - Stations, March Rev2. 14.3.5.5 Station Public Amenity (Commercial) Spaces, Table 14-7
Ticket Windows	Station Quantity	P60B/600 1765/600	1	
Ticket Vending Machines		P60B/280 1765/280	2	14.3.5.6
Value Added Machines	2 Per Each Fare Paid Area		3	14.3.5.6
Fare Gates		P15A /50 ppm 430/50 One additional gate to be provided if under 10	3	14.3.5.6 D
Emergency Gates			2	14.3.3.6
Sr	Seating at Concourse Fare Free Waiting Area	((P15B x 1.1) + (P15A x 0.1)) x 0.25	571	Table 14-22: Station Seating

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
 ALTERNATIVE A  
 BOOK A3  
 SHEET 51 OF 106

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 SAN FRANCISCO TO SAN JOSE  
 STATION  
 MILLBRAE  
 FACILITY SIZING TABLE

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0117
SCALE	AS SHOWN
SHEET NO.	

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Millbrae Station Facility Sizing Table							
Projected Daily Ridership (2040) 5,570, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking							
STATION TYPE: Intermediate, Full-Service, Small: based on Chapter 14 Stations Design Criteria, Table 14-3							
	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14:Stations	Comments
Concourse Public Free Areas	Station Concourse (Free Area - Main Hall)	12,990	1.2	10,825	P15 x 30sf/person 389 x 30	14.3.5.3	P15 = P15 B + P15 A = 389 Using Memorandum dated May 10, 2016, Attachment E Facility Sizing Table Example
	Entrances					14.3.5.2	# TBD, 15 ft width at least one entrance
	Mezzanine						Included with the Concourse Area
	Passenger Waiting Area	4,070	1.2	3,392	$((P15B \times 1.1) + (P15A \times 0.1)) \times 14$ SF	14.3.5.3.B.C Table 14-3	California HSTP Design Criteria, Chapter 14-Stations, March 2016, Rev 2, Table 14-1 Passenger Ridership Assumptions, Table 14-3 Concourse Circulation and Waiting Areas
	Ticket Vending Machines (TVM)	68	1.2	2	P60B/280, 1765/280	Table 14-5	Includes Queuing space
	Baggage Storage (Concessionaire)	TBD					TBD
	Retail (Concessionaire)	10,800	1.2	9,000		Table 14-7	More than 15,000 daily boardings
	Restaurant (Concessionaire)	0				Table 14-7	Included in the 9,000 SF
	Food Service (Concessionaire)	0				Table 14-7	Included in the 9,000 SF
	Business Lounge	720	1.2	600		14.3.5.7.C	Without restrooms
	Public Restrooms	2448	1.2	2040	CBC 2016, CPC 2016 (P15B + P15A)/2	14.3.5.4	A-3 Assembly Occupancy, 502 Male, 502 Female, (2) Unisex Female: 7 Water closets, 5 Lavatories Male: 3 Water closets, 4 Urinals, 5 Lavatories 2 Drinking fountains
Janitor Closets	288	1.2	240	60 x 4	14.3.7.1.D	Located in concourse free area, platform, and each restroom.	
Standard Areas	Ticket Window Counters	317	2	150	Window Counter 5F min. 75 SF/window (2 Windows) P60B/600, 1,765/600	14.3.5.6.B 14.3.5.7A	
	Station Patron Information Booth	100	1	100	Standard Unit (Kiosk)	14.3.5.7.B	
	Red "Cap" Booth						TBD
Security	Police Office	1000	2	500		14.3.6.2.A	
	Police Restrooms + Lockers			TBD	CBC 2016, CPC 2016		
	Janitor Closets	120	2	60		14.3.7.1.D	
	Security Guard Office	288	2	144 SF		14.3.6.2.B	

SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
 ALTERNATIVE A  
 BOOK A3  
 SHEET 52 OF 106

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 SAN FRANCISCO TO SAN JOSE  
 STATION  
 MILLBRAE  
 FACILITY SIZING TABLE

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0118
SCALE	AS SHOWN
SHEET NO.	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 53 OF 106**

Millbrae Station Facility Sizing Table							
Projected Daily Ridership (2040) 5,570, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking							
STATION TYPE: Intermediate, Full-Service, Small: based on Chapter 14 Stations Design Criteria, Table 14-3							
	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14:Stations	Comments
Non-Public Station Staff Only	Ticket Admin., Handling & Storage	520	2	260		14.3.5.6.B 14.3.5.7 14.3.6.2.C-D	Ticket Administration Office 75SF/window
	Lost & Found & First Aid Room	400	2	200	100 SF x (2)	14.3.6.1.E-F	
	Station Control Room (SCR)	2200	2	1,100		14.3.6.2.E	
	Main Station Computer Room	1000	2	500		14.3.6.2.F	
	Temporary Incident Command Post (CP)	600	2	300		14.3.6.2.G	
	Station Operation Room (SOR)	2200	2	1,100		14.3.6.2.H	
	SOR Dedicated Computer Room, SOR Workroom	1000	2	500		14.3.6.2.F-H	
	Main OCC Computer Room	1000	2	500		14.6.3.2.F	
	Staff Lockers, Showers, Restrooms	TBD	2		CBC 2016	14.3.6.1.I	Will need number of staff projection to determine SF required.
	Janitor Closets	120	2	60		14.3.7.1.C	
	Staff Breakroom & Meeting Rooms	800	2	400	200 SF x (2)	14.3.6.1.G-H	200 SF min. or as required to provide 25 SF /staff
	Station Manager Office	288	2	144		14.3.6.1.A	
	Facility Manager's Office	288	2	144		14.3.6.1.C	
	Administration Office Space	600	2	300		14.3.6.1.B	
	Facilities Maintenance Office	660	2	330		14.3.6.1.C	
	Station General Storage Rooms	400	2	200		14.3.7.1.E	Add 60 SF for misc. storage if required.
	Platform Area Op. Mgt. Booth	100	1	100	Standard Unit	14.3.6.2.I	One OMB to be provided on each platform.
	Train Control /Communications Room	3830	2	1,915		14.3.7.2	Table 14-8, for the train control and communications equipment
	Entrance Facility Room	480	2	240		14.3.7.2	Table 14-8, for entry of service cabling into the building. May be co-located with the TCC room.
	3rd Party Telecom Room	240	2	120		14.3.7.2	Table 14-8, for local telephone company.
Communications Closets	260	2	130	130 SF each	14.3.7.2	Table 14-8, number TBD. Locate close to center of each 10,000 SF of Station Floor Area	
Renewable Energy/Stormwater			TBD				
Bldg Services & Plant Rooms	Mech., Elec. & Plumbing Rooms			TBD	Gross Factor	14.3.7.2	
	Battery Room	800	2	400	200 SF x ( 2 )	14.3.7.4.B	Two rooms required, including one room at each end of station for LV batteries.
	UPS Room	3600	2	1,800	900 SF x ( 2 )	14.3.7.4.C	Two rooms required, one at each end of station for low voltage (LV) distribution, transforming, EP
	Fire Detection & Protection Rooms			TBD	Gross Factor	14.3.7.6	
Maint. Support Areas	Main Station Recycling/Refuse	300	2	150	150 SF min.	14.3.7.1.A	
	Secondary Station Recycling	120	2	60		14.3.7.1.C	
	Landscape Maintenance Room	200	2	100		14.3.7.1.F	
	Loading Dock			TBD		14.3.7.1.H	
<b>TOTAL AREA - ENTRANCE &amp; CONCOURSE:</b>		<b>55,215</b>					
	Platform Area (800'x30')x1	24,000					
	Bus Bays	N/A					Bus bays are provided in modified BART parking structure
	Parking Area	104,800					
	Pickup and Drop-off	7,920					

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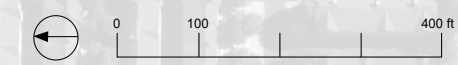
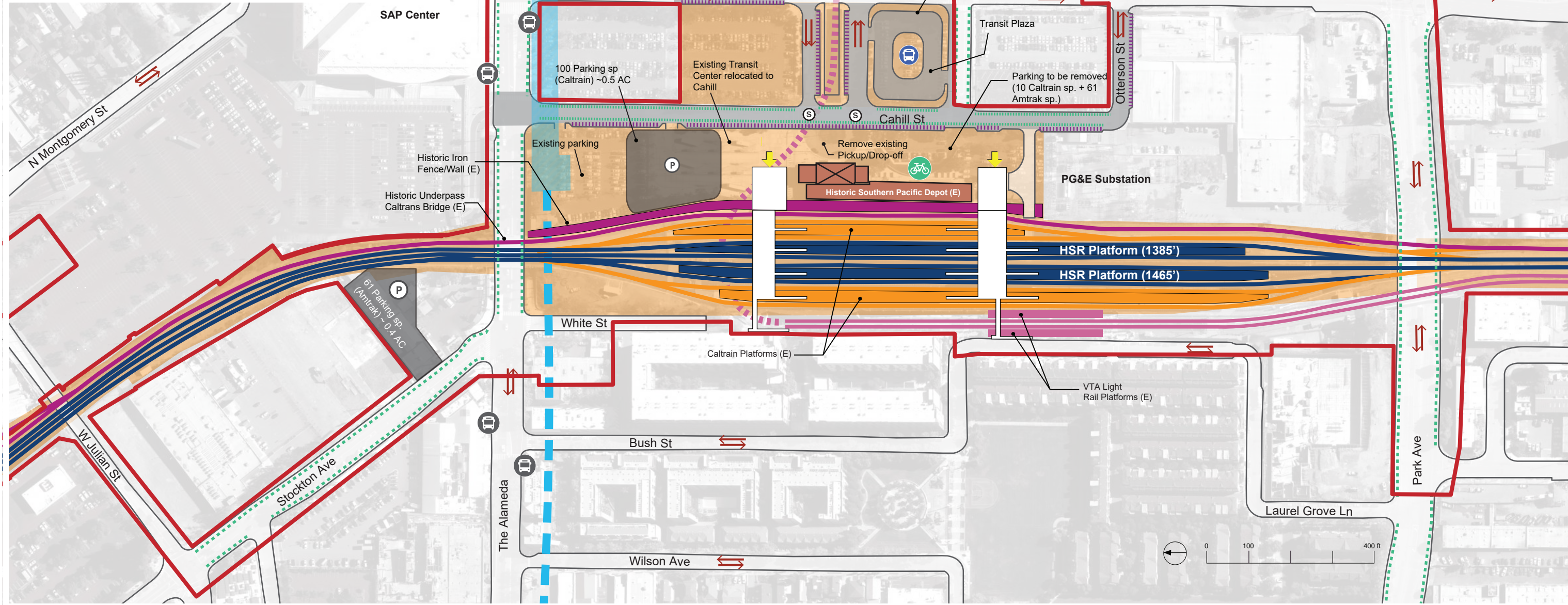


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SAN FRANCISCO TO SAN JOSE**  
STATION  
MILLBRAE  
FACILITY SIZING TABLE

CONTRACT NO.	HSR15-34
DRAWING NO.	AR-J0119
SCALE	AS SHOWN
SHEET NO.	



- LEGEND**
- Environmental Footprint
  - HSR Tracks & Platform (At Grade)
  - Caltrain Tracks & Platforms (At Grade)
  - JPB ROW
  - VTA Light Rail Tracks (At Grade)
  - VTA Light Rail Tracks (Below Grade)
  - Freight/ACE/Amtrak (Non-Electrified Track)
  - Vehicular Road (Proposed) BART (Planned)
  - Historic Station
  - P Proposed Surface Parking Facility, Total Parking Provided Includes Access Roads, Sidewalks, Landscaping = 161 spaces (~.9 AC)  
Amtrak: 61 sp.\*\*  
Caltrain: 100 sp.\*\*  
\*\*Replacement Parking
  - Vehicular Road (Proposed)
  - Station Facilities
  - Street Directional Arrows
  - Station Entrance
  - Pickup / Drop-off Area
  - Class I Bike Trail (Existing)
  - Class I Bike Trail (Proposed by Others)
  - Class II Bike Trail (Proposed by HSR)
  - Class II Bike Lane (Existing)
  - B Bike Parking (Proposed)
  - B Bus Stop (Existing)
  - B Bus Stop (12-15 Total Proposed)
  - S New Signalized Intersection



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

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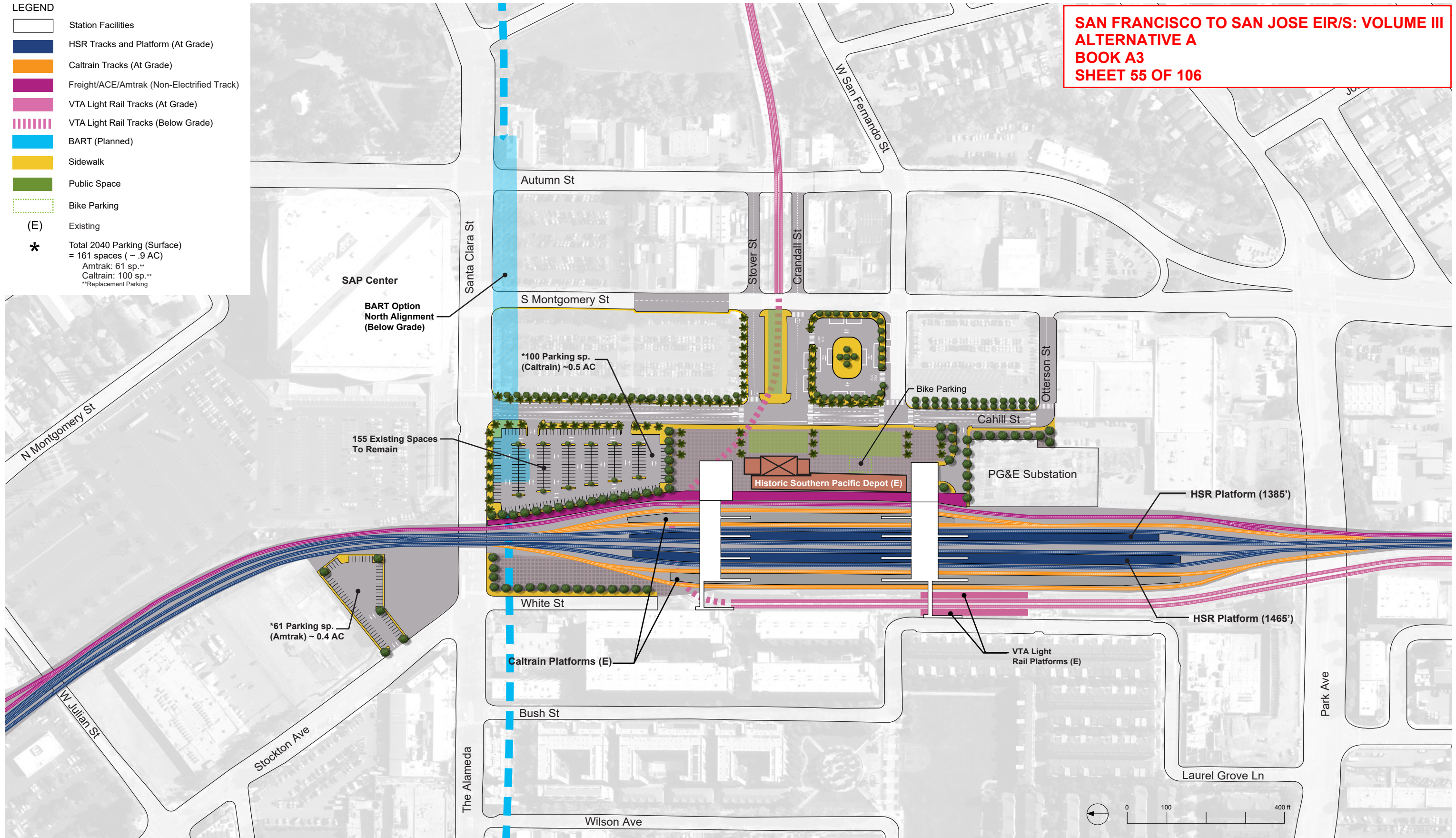
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN JOSE TO MERCED**  
SAN JOSE DIRIDON STATION APPROACH  
BLENDED AT-GRADE ALTERNATIVE  
SAN JOSE DIRIDON STATION  
GENERAL SITE PLAN

CONTR-CT NO.	HSR15-34
DR-WING NO.	AR-C0201
SC-LE	AS SHOWN
SHEET NO.	

- LEGEND**
-  Station Facilities
  -  HSR Tracks and Platform (At Grade)
  -  Caltrain Tracks (At Grade)
  -  Freight/ACE/Amtrak (Non-Electrified Track)
  -  VTA Light Rail Tracks (At Grade)
  -  VTA Light Rail Tracks (Below Grade)
  -  BART (Planned)
  -  Sidewalk
  -  Public Space
  -  Bike Parking
  -  Existing
  -  Total 2040 Parking (Surface)  
= 161 spaces (~.9 AC)  
Amtrak: 61 sp.\*\*  
Caltrain: 100 sp.\*\*  
\*\*Replacement Parking



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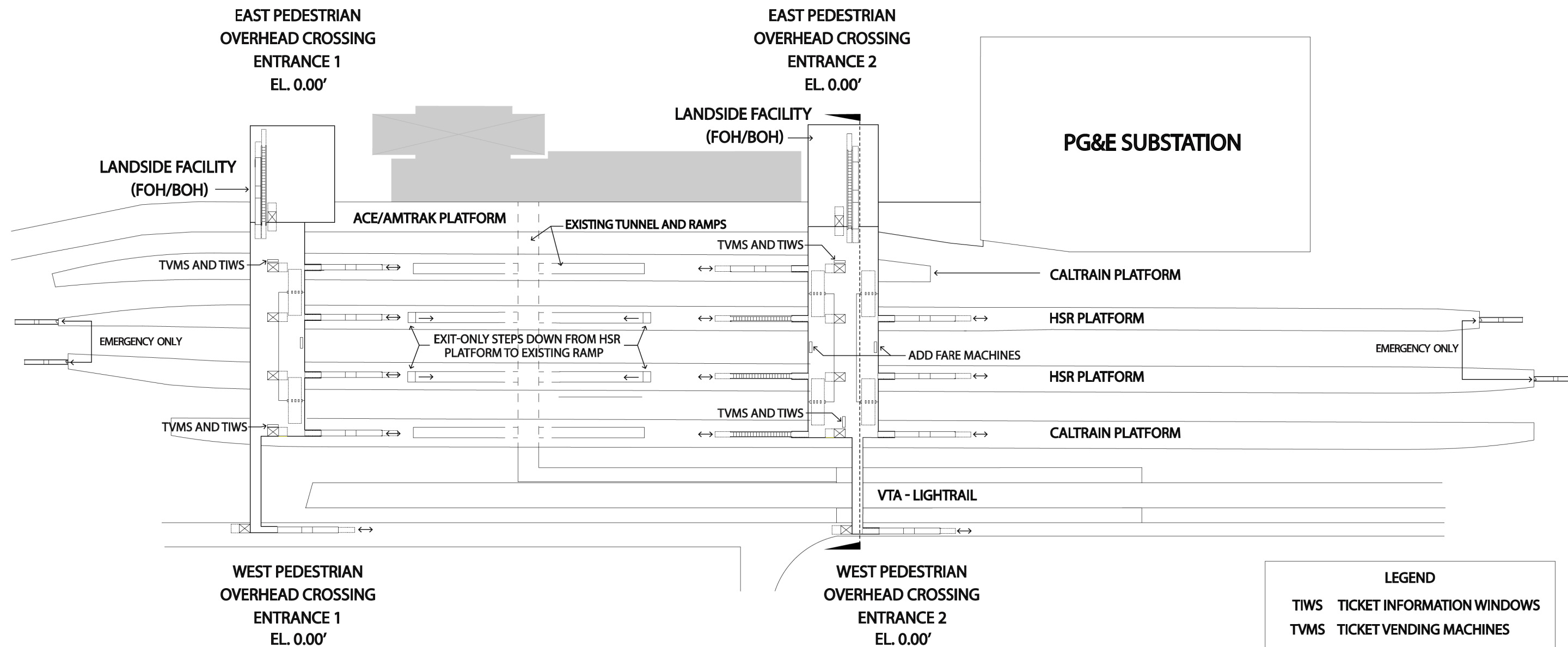
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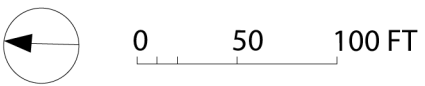
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN JOSE TO MERCED**  
SAN JOSE DIRIDON STATION APPROACH  
BLENDED AT-GRADE ALTERNATIVE  
SAN JOSE DIRIDON STATION  
DETAILED SITE PLAN

CONTR-CT NO.	HSR15-34
DR-WING NO.	AR-C0202
SC-LE	AS SHOWN
SHEET NO.	



LEGEND	
TIWS	TICKET INFORMATION WINDOWS
TVMS	TICKET VENDING MACHINES
—	QUEUING SPACE
ACE	ALTAMONT CORRIDOR EXPRESS
HSR	CA HIGH SPEED RAIL
VTA	SANTA CLARA VALLEY TRANSPORTATION AUTHORITY



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 56 OF 106**

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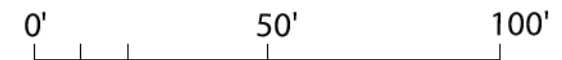
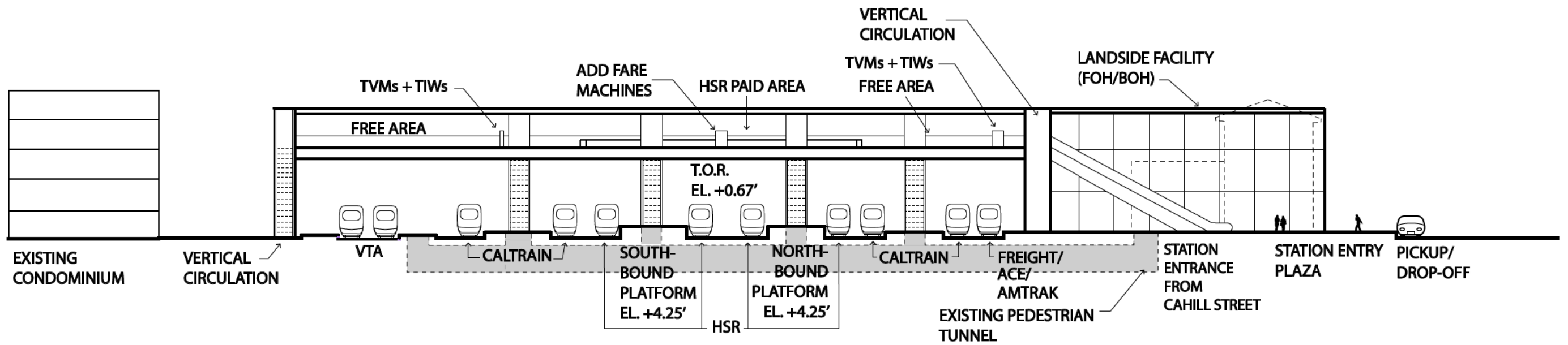
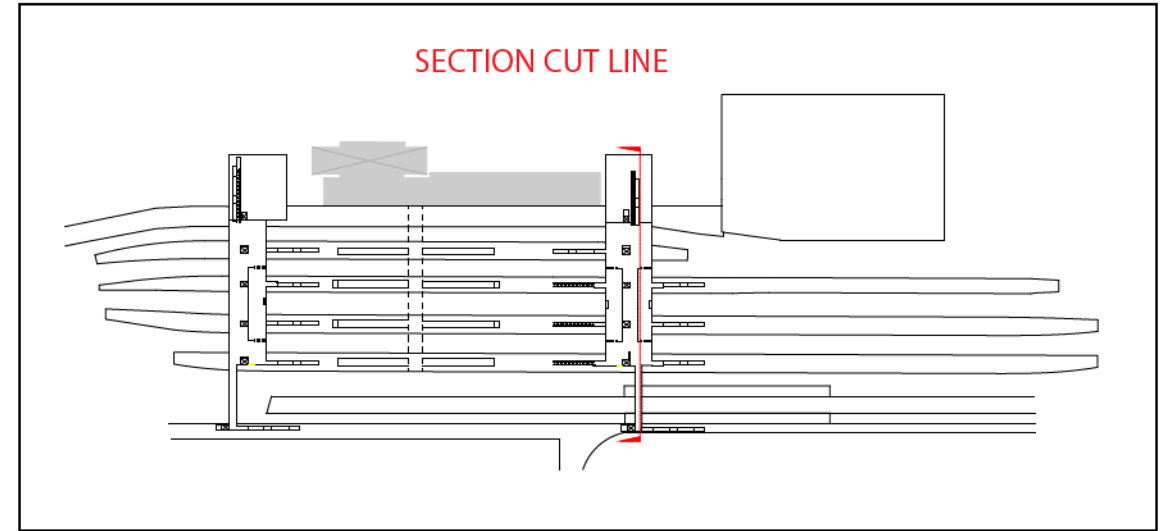
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN JOSE TO MERCED**  
SAN JOSE DIRIDON STATION APPROACH  
BLENDED AT-GRADE ALTERNATIVE  
SAN JOSE DIRIDON STATION  
CONCOURSE PLAN

CONTR-CT NO.	HSR15-34
DR-WING NO.	AR-F0201
SC-LE	AS SHOWN
SHEET NO.	

LEGEND	
TIWS	TICKET INFORMATION WINDOWS
TVMS	TICKET VENDING MACHINES
ACE	ALTAMONT CORRIDOR EXPRESS
HSR	CA HIGH SPEED RAIL
VTA	SANTA CLARA VALLEY TRANSPORTATION AUTHORITY



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 57 OF 106**

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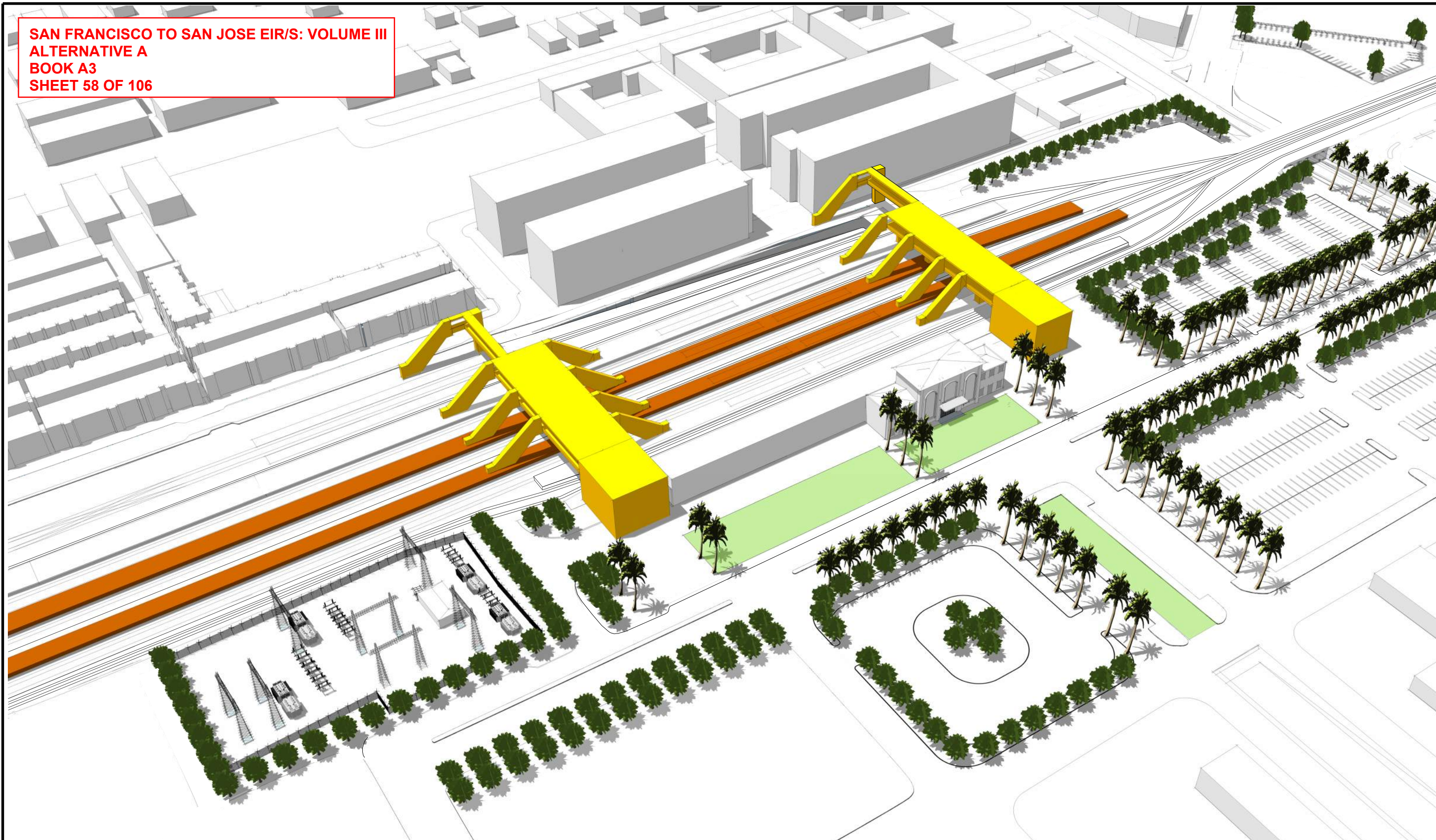
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High-Speed Rail Authority

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN JOSE TO MERCED**  
SAN JOSE DIRIDON STATION APPROACH  
BLENDED AT-GRADE ALTERNATIVE  
SAN JOSE DIRIDON STATION  
SECTION

CONTR-CT NO.	HSR15-34
DR-WING NO.	AR-Y0201
SC-LE	AS SHOWN
SHEET NO.	

**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
ALTERNATIVE A  
BOOK A3  
SHEET 58 OF 106**



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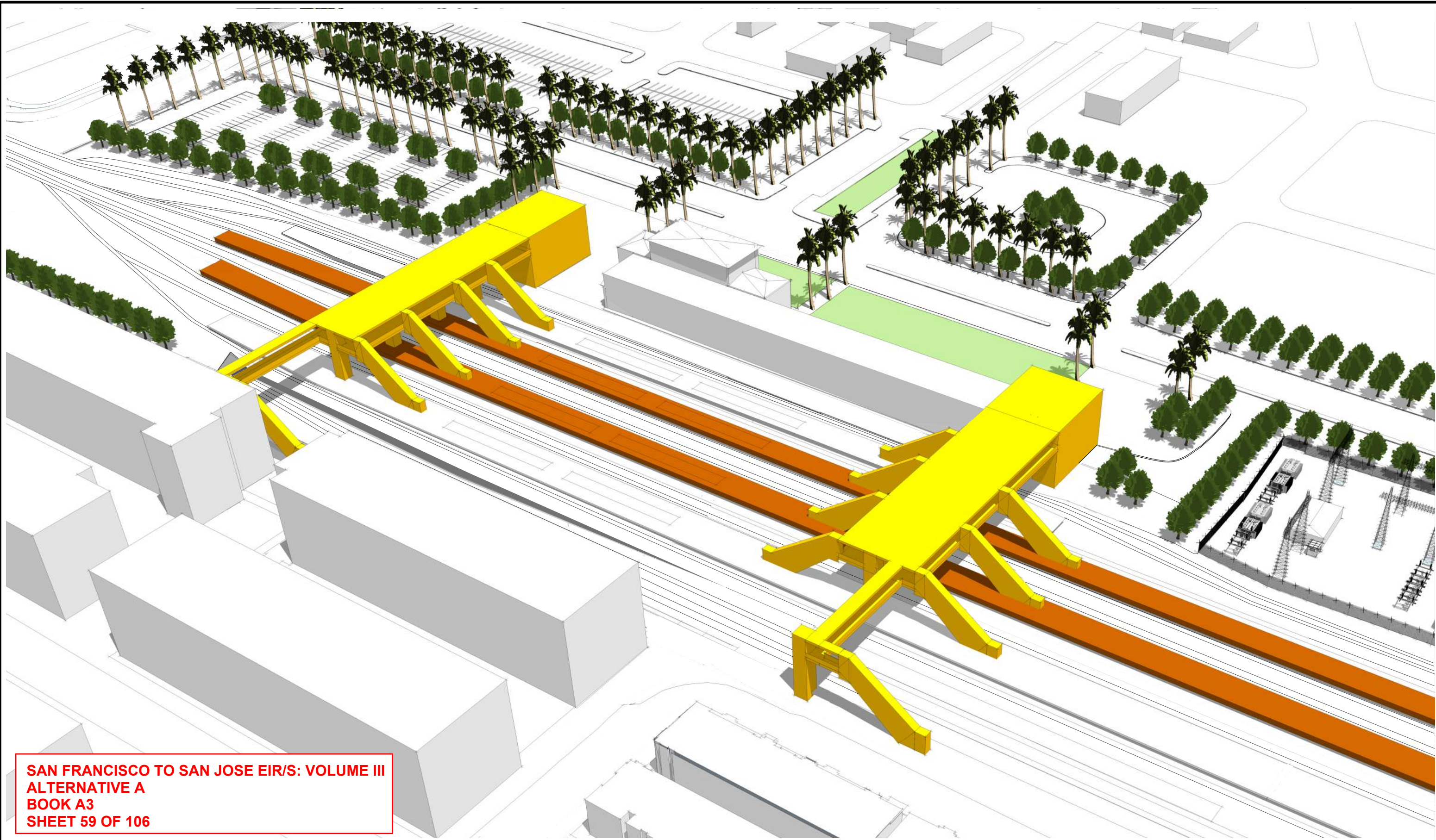
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BLENDED AT-GRADE ALTERNATIVE  
SAN JOSE DIRIDON STATION  
MASSING DIAGRAM 1

CONTR-CT NO.  
HSR15-34  
DR-WING NO.  
AR-Y0202  
SC-LE  
AS SHOWN  
SHEET NO.



**SAN FRANCISCO TO SAN JOSE EIR/S: VOLUME III  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SAN JOSE TO MERCED**  
 SAN JOSE DIRIDON STATION APPROACH  
 BLENDED AT-GRADE ALTERNATIVE  
 SAN JOSE DIRIDON STATION  
 MASSING DIAGRAM 2

CONTR-CT NO.  
 HSR15-34  
 DR-WING NO.  
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 SC-LE  
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Diridon Station Programming & Area Requirements Table				
Category	Description	Formula	Requirement Area / Unit	Comments
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P60B	Peak 6 Hour Boardings x Peak Hour Conversion Factor for Boardings = Peak Hour Boardings	P360B x 0.17=P60B 10,385 X 0.17	1,757	
P60A	Peak Hour Boardings x Peak Hour Conversion Factor for Alightings = Peak Hour Alightings	P60B x 0.75=P60A 1,765 x 0.75	1,318	
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P5B	Peak Hour Boardings /12 x Surge Factor = Peak 5 Minute Boardings	(P60B /12) x 1.4= P5B (1,765 /12) x 1.4	205	
P5A	Peak 5 Minute Boardings x Conversion Factor = Peak 5 Minute Alightings	P5B x 0.75=P5A 206 x 0.75	154	
P1B	Peak Hour Boardings /60 x Surge Factor=Peak 1 Minute Boardings	(P60B /60) x 1.5=P1B (1,765/60) x 1.5	44	
P1A	Peak 1 Minute Boardings x Conversion Factor for Alightings=Peak 1 Minute Alightings	P1Bx0.75 17x0.75	33	
Cf	Unobstructed Net Concourse Free Public Area Circulation Width	(P15B+P15A)/(15x10 people/ft/min) or 16 ft min. (222+167)/(15x10 people/ft/min)	16	
Wf	Net Waiting Area in Concourse Free Public Area	((P15Bx1.1) + (P15Ax0.1))x 14 SF ((222x1.1) + (167x0.1)) x 14	9,396	
Public Restrooms	Women + Men + Unisex Accessible Restroom for Each Group	(P15B+P15A)/ 2 (222+167) /2	499.8	
Passenger Amenity Space Allocation	Station Design Target Year Daily Boardings	9,000	9,000	California HSTP Design Criteria, Chapter 14 - Stations, March Rev. 2 14.3.5.5 Station Public Amenity (Commercial) Spaces, Table 14-7
Ticket Windows	Station Quantity	P60B/600 1765/600	3	
Ticket Vending Machines		P60B/280 1765/280	6	14.3.5.6
Value Added Machines	2 Per Each Fare Paid Area		3	14.3.5.6
Fare Gates		P15A /50 ppm 430/50 One additional gate to be provided if under 10	9	14.3.5.6 D
Emergency Gates			2	14.3.3.6
Sr	Seating at Concourse Fare Free Waiting Area	((P15B x 1.1) + (P15A x 0.1)) x 0.25	1,581	Table 14-22: Station Seating

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Diridon Station Facility Sizing Table							
Projected Daily Ridership (2040) 15,430, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking							
STATION TYPE: Intermediate, Full-Service, Small: based on Chapter 14 Stations Design Criteria, Table 14-3							
	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14: Stations	Comments
Concourse Public Free Areas	Station Concourse (Free Area - Main Hall)	27,600	1.2	29,987	P15 x 30 SF /person 389 x 30	14.3.5.3	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for Minimal Viable Product
	Entrances					14.3.5.2	
	Mezzanine						
	Passenger Waiting Area	200	1.2	9,396	$((P15B \times 1.1) + (P15Ax0.1)) \times 14$ SF	14.3.5.3.B.C Table 14-3	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for Front of House Facilities
	Ticket Vending Machines (TVM)	188	1.2	6	P60B/280, 1765/280	Table 14-5	Includes queuing space
	Baggage Storage (Concessionaire)	NA					TBD
	Retail (Concessionaire)	800	1.2	9,000		Table 14-7	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for Front of House Facilities
	Restaurant (Concessionaire)	NA				Table 14-7	Included in the 9,000 SF
	Food Service (Concessionaire)	1,800				Table 14-7	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for Front of House Facilities
	Business Lounge	NA	1.2	600		14.3.5.7.C	Without restrooms
Standard Areas	Public Restrooms	200	1.2	2040	CBC 2016, CPC 2016 (P15B + P15A)/2	14.3.5.4	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' 1.4.3.5 Restrooms.
	Janitor Closets	NA	1.2	240	60 x 4	14.3.7.1.D	Located in concourse free area, platform, and each restroom.
	Ticket Window Counters	200	2	150	Window Counter 5F min. 75 SF/window (2 windows) P60B/600, 1,765/600	14.3.5.6.B 14.3.5.7A	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for Front of House Facilities
	Station Patron Information Booth	NA	1	100	Standard Unit (Kiosk)	14.3.5.7.B	
Security	Red "Cap" Booth						TBD
	Police Office	NA	2	500		14.3.6.2.A	
	Police Restrooms + Lockers			TBD	CBC 2016, CPC 2016		
	Janitor Closets	NA	2	60		14.3.7.1.D	
	Security Guard Office	NA	2	144		14.3.6.2.B	


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Diridon Station Facility Sizing Table							
Projected Daily Ridership (2040) 15,430, based on CHSR Planning Memorandum Station Boardings, Access, Egress and Parking							
STATION TYPE: Intermediate, Full-Service, Small. based on Chapter 14 Stations Design Criteria, Table 14-3							
	Function Name	Area (SF)	EF	Required Area (SF)	Formula	Chapter 14: Stations	Comments
Non-Public Station Staff Only	Ticket Administration, Handling & Storage	520	2	260		14.3.5.6.B 14.3.5.7 14.3.6.2.C-D	Ticket Administration Office 75 SF /window
	Lost & Found & First Aid Room	100	2	200	100 SF x (2)	14.3.6.1.E-F	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Station Control Room (SCR)	1,400	2	1,100		14.3.6.2.E	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Main Station Computer Room	1,000	2	500		14.3.6.2.F	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Temporary Incident Command Post (CP)	NA	2	300		14.3.6.2.G	
	Station Operation Room (SOR)	1,300	2	1,100		14.3.6.2.H	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	SOR Dedicated Computer Room, SOR Workroom	500	2	500		14.3.6.2.F-H	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Main OCC Computer Room	500	2	500		14.6.3.2.F	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Staff Lockers, Showers, Restrooms	NA	2		CBC 2016	14.3.6.1.I	Will need number of staff projection to determine SF required.
	Janitor Closets	120	2	60		14.3.7.1.C	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Staff Breakroom & Meeting Rooms	600	2	400	200 SF x (2)	14.3.6.1.G-H	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Station Manager Office	200	2	144		14.3.6.1.A	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Facility Manager's Office	NA	2	144		14.3.6.1.C	
	Administration Office Space	NA	2	300		14.3.6.1.B	
	Facilities Maintenance Office	NA	2	330		14.3.6.1.C	
	Station General Storage Rooms	NA	2	200		14.3.7.1.E	Add 60 SF for miscellaneous storage if required.
	Platform Area Op. Mgt. Booth	NA	1	100	Standard Unit	14.3.6.2.I	One OMB to be provided on each platform.
	Train Control /Communications Room	1,500	2	1,915		14.3.7.2	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	Entrance Facility Room	NA	2	240		14.3.7.2	Table 14-8, for entry of service cabling into the building. May be co-located with the TCC room.
	3rd Party Telecom Room	NA	2	120		14.3.7.2	Table 14-8, for local telephone company.
Communications Closets	260	2	130	130 SF each	14.3.7.2	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'	
Renewable Energy/Stormwater			TBD				
Building Services & Plant Rooms	Mech., Elec. & Plumbing Rooms			TBD	Gross Factor	14.3.7.2	
	Battery Room	420	2	400	200 SF x (2)	14.3.7.4.B	Reference 'Alt 4 Gilroy and Diridon SOW 2018.09.17 v1 (002)' requirements for 'Back of House Facilities'
	UPS Room	NA	2	1,800	900 SF x (2)	14.3.7.4.C	Two rooms required, one at each end of station for LV distribution, transforming, EP
	Fire Detection & Protection Rooms			TBD	Gross Factor	14.3.7.6	
Maint. Support Areas	Main Station Recycling/Refuse	NA	2	150	150 SF min.	14.3.7.1.A	
	Secondary Station Recycling	NA	2	60		14.3.7.1.C	
	Landscape Maintenance Room	NA	2	100		14.3.7.1.F	
	Loading Dock			TBD		14.3.7.1.H	
<b>TOTAL AREA - ENTRANCES &amp; CONCOURSE:</b>		<b>39,408</b>	<b>SF</b>				
	Platform Area (800'x30')x2	48,000					
	Bus Bays						Included in Cahill transit street improvement
	Parking Area						No parking for HSR provided
	Pickup and Drop-off						Included in Cahill transit street improvement

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