



## 4.3 VERTICAL AND HORIZONTAL CLEARANCES AT OVERPASSES, TUNNELS, RR THROUGH TRUSS BRIDGES, AND PASSENGER SHEDS/CANOPIES

Data as of: May 2005

Revised: June 1, 2005

**TABLE 4.3-E TUNNELS**

No.	Hist. M.P.	Tunnel End GIS Sta.	Tunnel location	MT1 TOR to Tunnel Lining		TOR to Tunnel Ceiling		MT2 TOR to Tunnel Lining		TOR to Brick Seam		Center Dist	Dist to Wall		Total Dist	Notes
				West Rail	East Rail	MT1	MT2	West Rail	East Rail	MT2	MT1		MT2	MT1		
57	1.33	261+51	Tunnel 1 North	22.50	20.07	22.77	22.75	19.88	22.45	8.30	8.30	13.34	8.5	8.24	30.08	Applied 3 inches of shotcrete to the lining in 2004, Tunnel Rehabilitation Project
58	1.68	279+68	Tunnel 1 South	22.69	20.21	23.03	22.88	20.38	22.77	8.35	8.57	12.93	8.58	8.51	30.02	
59	1.93	293+24	Tunnel 2 North	22.45	20.26	22.71	22.68	19.74	22.33	8.55	8.46	13.13	8.83	8.01	29.97	Applied 6 inches of shotcrete to the lining in 2004, Tunnel Rehabilitation Project
60	2.14	304+10	Tunnel 2 South	22.22	19.78	22.48	22.49	19.79	22.30	8.32	8.35	13.13	8.52	8.38	30.03	
61	3.18	359+35	Tunnel 3 North	22.40	20.09	22.68	22.94	20.15	22.42	8.30	8.26	12.95	8.65	8.56	30.16	Applied 3 inches of shotcrete to the lining in 2004, Tunnel Rehabilitation Project
62	3.63	382+98	Tunnel 3 South	22.49	20.04	22.71	22.96	20.06	22.48	8.28	8.30	13.00	8.68	8.44	30.12	
63	4.27	416+65	Tunnel 4 North	22.13	19.71	22.57	22.78	19.93	22.20	8.17	8.25	13.27	8.09	8.64	30.00	Applied 3 inches of shotcrete to the lining in 2004, Tunnel Rehabilitation Project
64	4.94	452+10	Tunnel 4 South	22.31	19.80	22.21	22.77	19.85	22.19	7.97	7.96	12.90	8.54	8.63	30.07	

**TABLE 4.3-F UMBRELLA SHEDS AND CANOPIES**

No.	Hist. M.P.	Midpoint GIS Sta.	Shed/Canopy location	Canopy No.	Horizontal Distance to Track												Width	Canopy Length	Shed/Canopy	Notes					
					North End						South End														
					Track	Dist	Track	Dist	Track	Dist	Track	Dist	Track	Dist	Track	Dist									
65	0.17	200+50	San Francisco Station	1	T-1	?	T-2	?	T-1	?	T-2	?	T-1	?	T-2	?	T-1	?	T-2	?	?	?	?	Canopy	
66	0.17	200+50	San Francisco Station	2	T-3	?	T-3	?	T-3	?	T-3	?	T-3	?	T-3	?	T-3	?	T-3	?	?	?	?	Canopy	
67	0.17	200+50	San Francisco Station	3	T-5	?	T-6	?	T-5	?	T-6	?	T-5	?	T-6	?	T-5	?	T-6	?	?	?	?	Canopy	
68	0.17	200+50	San Francisco Station	4	T-7	?	T-8	?	T-7	?	T-8	?	T-7	?	T-8	?	T-7	?	T-8	?	?	?	?	Canopy	
69	0.17	200+50	San Francisco Station	5	T-9	?	T-10	?	T-9	?	T-10	?	T-9	?	T-10	?	T-9	?	T-10	?	?	?	?	Canopy	
70	0.17	200+50	San Francisco Station	6	T-11	?	T-12	?	T-11	?	T-12	?	T-11	?	T-12	?	T-11	?	T-12	?	?	?	?	Canopy	
71	13.75	919+00	Millbrae	1	MT-3	8.75	-	-	MT-3	8.75	-	-	MT-3	9.67	-	-	MT-3	9.67	-	-	7	165	Canopy		
72	13.75	922+30	Millbrae	2	MT-3	8.75	-	-	MT-3	8.75	-	-	MT-3	9.67	-	-	MT-3	9.67	-	-	10	165	Canopy		
72	20.95	1300+00	San Mateo	1	MT-1	?	-	-	MT-1	?	-	-	MT-1	?	-	-	MT-1	?	-	-	?	?	?	Canopy	
73	21.94	1351+72	Belmont	1	MT-1	?	MT-2	?	MT-1	?	MT-2	?	MT-1	?	MT-2	?	MT-1	?	MT-2	?	?	?	?	Shed	
74	47.51	2670+45	San Jose Station	1	T-1	9.96	-	-	T-1	11.24	-	-	T-1	16.94	-	-	T-1	17.10	-	-	11	484	Canopy		
75	47.51	2670+45	San Jose Station	2	T-2	8.91	T-3	3.68	T-2	8.37	T-3	4.21	T-2	17.27	T-3	16.85	T-2	17.13	T-3	16.99	22	490	Canopy		
76	47.51	2670+45	San Jose Station	3	T-4	4.02	T-5	6.03	T-4	3.86	T-5	6.19	T-4	16.97	T-5	17.19	T-4	17.28	T-5	17.21	22	490	Canopy		
77	49.26	2762+77	Tamien	1	MT-2	8.67	T-3	?	MT-2	8.67	T-3	?	MT-2	11	T-3	?	MT-2	11	T-3	?	?	?	?	Canopy	

- Notes: 1. The values (inches) shown in the Lower Track column represents the required track undercutting (subject to jpb approval) to achieve the free running catenar  
2. Not applicable (N/A) in the Track Lower column denotes locations where required track undercutting would have to be more than 12 inches. Therefore, bridge attachment is require  
3. Not known (N/K) - new stationing not established for south of Lick in UPRR territory  
4. Not available (?) - applicable information relating to improvements not available.