Valley Link
Connecting People, Housing, and Jobs

Appendix A: Scoping Report

Contents of this appendix are available for download at www.getvalleylinked.com.

ValleyLink
Connecting People, Housing, and Jobs

Appendix B: Preliminary Right-of-Way Requirements

Table B-1. Preliminary Right-of-Way Requirements[1]

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
941-2771-7	Alameda Flood Control (Exempt Public Agency)	6.54	N/A	3.62	Dublin/Pleasanton Station	Overhead Easement
941-2771-31-1	Private (Improved Commercial - Automobile Dealership)	6.33	N/A	0.23	Dublin/Pleasanton Station	Overhead Easement
941-2771-26	Private (Improved Commercial - 1 to 5 Story Office Building)	1.83	N/A	0.09	Dublin/Pleasanton Station	Overhead Easement
941-2771-014-00	Alameda Flood Control (Exempt Public Agency)	0.23	N/A	0.23	Dublin/Pleasanton Station	TCE
941-2771-015-00	BART (Exempt Public Agency)	6.96	N/A	0.66	Dublin/Pleasanton Station	TCE
941-2778-001-04	Alameda Flood Control (Exempt Public Agency)	1.52	N/A	1.52	Dublin/Pleasanton Station	TCE
941-2778-002-00	BART (Exempt Public Agency)	7.97	N/A	0.99	Dublin/Pleasanton Station	TCE
941-2778-003-05	Private (Improved Commercial - 1 to 5 Story Office Building)	20.45	N/A	2.83	Dublin/Pleasanton Station	TCE
Altamirano Avenue	Public	N/A	0.20	0.15	Dublin/Pleasanton Station	Section 83 (Partial, TCE)

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
986-0034-014-00	Exempt Public Agency	12.19	N/A	0.03	Tri-Valley I-580 Shifting (Alameda County)	TCE
986-0033-005-02	Private (Commercial - Vacant Commercial Land)	13.56	0.16	0.36	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0033-006-00	Private (Commercial - Vacant Commercial Land)	12.80	0.09	0.13	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0008-001-00 30	Private (Commercial - Shopping Center Community)	13.46	0.21	0.21	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0008-017-00	Private (Commercial - Shopping Center Community)	1.31	0.17	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0016-023-00 4321	Private (Commercial - Vacant Commercial Land)	3.33	0.20	0.07	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0016-024-00	Private (Improved Commercial - Automobile Dealership)	15.78	0.17	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0016-018-00	Alameda Flood Control (Exempt Public Agency)	7.11	0.07	0.05	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-0016-004-01	Private (Improved Commercial - Automobile Dealership)	5.57	0.18	0.15	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
986-0016-013-02	Private (Improved Commercial - 1 to 5 Story Office Building)	6.59	0.04	0.05	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
986-16-13-1	Pacific Gas & Electric (Exempt - Property Owned by a Public Utility)	0.09	0.02	0.02	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-16-16	City of Dublin (Single Family Residential)	1.64	0.00	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0051-005-00	Private (Commercial - Vacant Commercial Land)	20.92	0.03	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0061-007-00	Private (Commercial - Shopping Center Community)	12.24	0.15	0.17	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	0.74	0.62	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
985-0132-002-00	Private (Commercial - Shopping Center-Power Center)	2.08	0.09	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0061-004-02	Private (Improved Commercial - Condominium-office, Common Area or Use)	10.69	0.11	0.53	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
985-0027-028-00	Private (Commercial - Vacant Commercial Land)	5.39	0.10	0.59	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0027-021-00	Private (Commercial - Vacant Commercial Land)	8.54	0.10	0.86	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0027-022-00	Private (Commercial - Vacant Commercial Land)	17.73	0.00	0.51	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0079-001-03	Private (Commercial - Shopping Center-Community)	9.79	0.08	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-79-6	Private (Commercial - Shopping Center, NBHD/Grocery or Retail Anchor)	2.17	0.11	0.07	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0027-002-00	Private (Commercial - Vacant Commercial Land)	135.79	0.43	0.35	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
985-0027-004-00	Private (Industrial - Vacant Industrial Land)	0.84	0.28	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	0.62	0.40	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
985-0027-005-00	Private (Commercial - Vacant Commercial Land)	0.16	0.05	0.02	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
905-0001-006-03	Private (Commercial - Vacant Commercial Land)	50.33	0.26	0.19	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-005-02	Private (Commercial - Vacant Commercial Land)	49.30	0.25	0.19	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-004-03	Private (Commercial - Vacant Commercial Land)	8.80	0.21	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-004-04	Private (Commercial - Vacant Commercial Land)	39.86	0.19	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-003-02	Private (Rural Agriculture)	76.56	0.54	0.24	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-001-02	Private (Rural Agriculture)	109.96	0.76	0.35	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0001-002-02	Exempt Public Agency	1.07	0.14	0.07	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0016-088-00	Private (Commercial - Condominium, Commercial, Retail, Common Area or Use)	3.82	0.27	0.11	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	2.59	0.85	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
905-0009-013-03	Private (Industrial - Vacant Industrial Land)	11.31	0.19	0.12	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0009-081-00	Private (Commercial - Condominium, Commercial, Retail, Common Area or Use)	2.40	N/A	0.16	Tri-Valley I-580 Shifting (Alameda County)	TCE
905-9-60	Private (Improved Commercial - 1 to 5 Story Office Building)	1.82	0.12	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0009-027-01	Private (Commercial - National Chain Retailer)	15.32	0.49	0.19	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	1.70	1.20	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
905-0015-017-00	Private (Improved Commercial - 1 to 5 Story Office Building)	2.75	0.16	0.07	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0015-018-00	Private (Industrial - Vacant Industrial Land)	2.92	0.17	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0015-026-00	Private (Industrial - Vacant Industrial Land)	2.79	0.32	0.08	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
905-0015-027-00	Private (Industrial - Vacant Industrial Land)	22.96	0.28	0.06	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
903-0010-006-02	Private (Industrial Flex)	3.42	0.57	0.09	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
903-0010-007-03	Private (Improved Commercial - 1 to 5 Story Office Building)	4.76	0.59	0.11	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	N/A	0.01	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (TCE)
903-0010-036-03	BART (Exempt Public Agency)	6.53	0.62	0.48	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
903-0010-037-04	BART (Exempt Public Agency)	10.93	0.32	0.33	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	N/A	1.01	Tri-Valley I-580 Shifting (Alameda County)	TCE
904-5-3-33	BART (Exempt Public Agency)	19.84	19.84	N/A	Isabel Station	Full Acquisition
99-1331-12	BART (Exempt Public Agency)	3.59	3.59	N/A	Isabel Station	Full Acquisition
0903-0014-008-00	Private (Multiple Residential - Vacant Apt Common Area or Use)	5.27	N/A	0.05	Tri-Valley I-580 Shifting (Alameda County)	TCE
-	Public	N/A	0.67	0.95	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
903-0009-006-03	City of Livermore (Institutional - Government Owned Property - Vacant Land)	26.84	0.00	0.02	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
903-0009-006-04	City of Livermore (Institutional - Government Owned Property - Vacant Land)	5.02	N/A	0.01	Tri-Valley I-580 Shifting (Alameda County)	TCE
903-0009-006-10	Private (Rural Agriculture)	124.11	0.02	0.20	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
099-0100-019-08	Private (Rural Agriculture)	55.28	0.00	0.02	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	0.33	1.15	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Subsurface Easement, TCE)
99-15-1-4	Institutional - Church	10.07	N/A	0.03	Tri-Valley I-580 Shifting (Alameda County)	Subsurface Easement
99-15-7-3	Private (Rural Agriculture)	11.90	0.16	1.19	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, Subsurface Easement
99-15-16-3	Private (Rural Agriculture)	103.55	0.35	1.81	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, Subsurface Easement
902-8-5-5	Private (Rural - Vacant Rural-residential Homesite)	3.99	0.10	0.27	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
-	Public	N/A	0.07	0.11	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
902-8-5-9	Private (Rural - Vacant Rural-residential Homesite)	8.81	0.57	0.22	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
902-8-5-8	Private (Rural - Improved Rural-residential Homesite)	0.61	0.07	0.02	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
99-15-59-3	Exempt Public Agency	14.05	0.02	0.01	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
-	Public	N/A	0.02	0.04	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
-	Public	N/A	0.73	0.22	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (Partial, TCE)
902-8-7-2	Private (Rural - Vacant Rural Land, Non-renewal Williamson Act)	1.93	0.20	0.33	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
902-8-8-2	Private (Rural - Vacant Rural)	3.92	0.37	0.44	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
902-8-2-2	Private (Industrial - Vacant Industrial Land)	33.98	0.81	1.11	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, Subsurface Easement

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99-21-10-2	County of Alameda (Exempt Public Agency)	3.71	N/A	0.16	Tri-Valley I-580 Shifting (Alameda County)	TCE
99-21-9-1	City of Livermore (Exempt Public Agency)	2.45	0.39	0.38	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
99-1325-16	Private (Industrial - Warehouse Self Storage)	2.79	0.02	0.03	Tri-Valley I-580 Shifting (Alameda County)	Partial Acquisition, TCE
99-40-1-6	Private (Improved Commercial - Commercial Repair Garage)	3.43	0.31	0.06	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99-40-2-5	Private (Industrial - Warehouse Self Storage)	2.49	0.26	0.05	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99-40-3-16	Private (Industrial)	0.54	0.29	0.05	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Full Acquisition, Commercial Displacement (1)
99-40-6-4	Private (Industrial - Warehouse)	1.10	0.31	0.05	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99-40-53	Private (Improved Commercial - Commercial Repair Garage)	3.32	0.40	0.08	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, Commercial Displacement (1)

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99-40-8-5	Private (Commercial - Vacant Commercial Land)	2.14	0.46	0.02	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, Residential Displacement (1)
99-40-75	Private (Industrial - Vacant Industrial Land)	2.62	2.55	N/A	Southfront Road Station	Full Acquisition
99-40-71	Private (Commercial - Vacant Commercial Land)	0.18	0.18	N/A	Southfront Road Station	Full Acquisition
99-40-76	Private (Industrial - Vacant Industrial Land)	5.38	5.23	N/A	Southfront Road Station	Full Acquisition
99-40-77	Private (Industrial - Vacant Industrial Land)	2.24	2.18	N/A	Southfront Road Station	Full Acquisition, Commercial Displacement (1)
99-40-78	Private (Industrial - Vacant Industrial Land)	2.70	0.60	0.08	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99-40-70	Private (Industrial - Vacant Industrial Land)	0.12	0.12	N/A	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Full Acquisition
-	Public	N/A	4.18	N/A	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Section 83 (Partial)

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99-40-79	Private (Industrial - Vacant Industrial Land)	2.67	0.44	0.08	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-26	Private (Industrial - Warehouse)	2.89	0.20	0.05	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-6-22	Private (Commercial - Misc. Improved Commercial)	0.23	0.04	0.02	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-6-16	Private (Industrial - Warehouse)	0.61	0.07	0.02	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-6-18	Private (Industrial - Vacant Industrial Land)	0.94	0.01	0.01	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-5-2	Private (Industrial - Vacant Industrial Land)	2.11	0.05	0.03	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
99B-5900-4-2	Private (Industrial - Misc. Industrial)	2.10	0.05	0.03	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99B-5900-28	Private (Industrial - Warehouse Self Storage)	2.50	0.04	0.05	Tri-Valley I-580 Shifting (Alameda County), Southfront Road Shift	Partial Acquisition, TCE
-	Public	N/A	N/A	0.23	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (TCE)
-	Public	N/A	N/A	0.08	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (TCE)
-	Public	N/A	N/A	0.00	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (TCE)
-	Public	N/A	N/A	0.06	Tri-Valley I-580 Shifting (Alameda County)	Section 83 (TCE)
99B-5500-5	Private (Commercial - Vacant Commercial Land)	0.27	N/A	0.02	Tri-Valley I-580 Shifting (Alameda County)	TCE
99B-5500-2-3	Private (Commercial - Vacant Commercial Land)	1.28	N/A	0.01	Tri-Valley I-580 Shifting (Alameda County)	TCE
99B-5500-1-2	Private (Commercial - Vacant Commercial Land)	0.97	N/A	0.04	Tri-Valley I-580 Shifting (Alameda County)	TCE
99B-5700-1-38	Private (Rural Agriculture)	11.95	1.82	10.13	Altamont Track Alignment (Alameda County)	Partial Acquisition, Potential Commercial Displacement (1)
99B-6010-2	Exempt - Property Owned by a Public Utility	13.95	0.30	0.12	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99B-6010-4	Exempt Public Agency	0.96	0.96	N/A	Altamont Track Alignment (Alameda County)	Partial Acquisition
99B-6010-1-3	Private (Rural Agriculture)	468.89	N/A	0.02	Altamont Track Alignment (Alameda County)	TCE
99A-1780-999-99	Large Parcel Agriculture	299.28	0.07	0.06	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-5650-1-3	Private (Rural Agriculture)	42.56	0.05	0.09	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6275-10	Exempt Public Agency	5.27	0.05	0.05	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6275-2-2	Government Owned Property – Vacant Land	11.88	1.52	1.08	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6300-2-1	Vacant Rural Land, Non-renewal Williamson Act	74.09	3.83	1.56	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6300-3-2	Private (Rural Agriculture)	20.20	0.34	0.41	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6300-3-3	Private (Rural Agriculture)	29.76	0.96	N/A	Altamont Track Alignment (Alameda County)	Partial Acquisition
99B-6300-4-2	Industrial - Landfill	10.69	0.28	N/A	Altamont Track Alignment (Alameda County)	Partial Acquisition
99B-6325-1-1	Exempt Public Agency	24.91	5.53	2.59	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99B-6325-1-4	Private (Rural - Vacant Rural)	69.21	0.05	0.76	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6325-2-4	Private (Rural Agriculture)	86.36	6.80	1.63	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6400-1-6	Exempt Public Agency	84.42	0.69	0.39	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-6400-1-7	Private (Rural - Vacant Rural)	8.36	0.48	0.28	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7675-11	Exempt Public Agency	79.06	1.63	1.15	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7675-1-8	Exempt Public Agency	58.33	1.84	1.33	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7700-4-7	Private (Rural Agriculture)	50.22	0.06	0.53	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7700-5-3	Private (Rural Agriculture)	53.59	1.24	0.92	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7700-8-1	Private (Rural Agriculture)	22.32	0.90	0.64	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7750-5-1	Institutional (Government Owned Property - Vacant Land)	77.48	0.37	0.60	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
99B-7750-6	Private (Rural Agriculture)	100.93	1.10	1.15	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
99B-7800-4-3	Private (Rural Agriculture)	12.14	0.55	0.48	Altamont Track Alignment (Alameda County)	Partial Acquisition, TCE
20906061	Private (Mixed Use)	16.08	1.91	1.03	Altamont Track Alignment (San Joaquin County)	Partial Acquisition, TCE
20906062	Private (High-Density Residential)	16.93	1.35	0.60	Altamont Track Alignment (San Joaquin County)	Partial Acquisition, TCE
20908016	General Agriculture	5.50	0.48	0.32	Altamont Track Alignment (San Joaquin County)	Partial Acquisition, TCE
20908026	(Private) Limited Industrial	139.97	54.48	N/A	Mountain House Community Station	Partial Acquisition
20908034	Public Facilities	108.21	1.22	0.63	Altamont Track Alignment (San Joaquin County)	Partial Acquisition, TCE
20923029	City of Tracy (Agriculture - Urban Reserve)	50.03	50.03	N/A	Tracy OMF/OSS	Full Acquisition
20923030	City of Tracy (Agriculture - Urban Reserve)	149.02	149.02	N/A	Tracy OMF/OSS	Full Acquisition
20946015	Private (General Agriculture)	39.06	1.5	N/A	Mountain House LF	Partial Acquisition
20946016	Private (General Agriculture)	4.76	0.92	N/A	Mountain House LF	Partial Acquisition
20946018	Private (General Agriculture)	39.49	39.33	N/A	Mountain House LF	Full Acquisition
20946019	Private (General Agriculture)	15.44	15.37	N/A	Mountain House LF	Full Acquisition

APN	Ownership / Use	Total Parcel Area (Acres)	Permanent Acquisition (Acres)	Temporary Construction Easement (Acres)	Project Component(s)[2]	Impact Type[3]
20946020	Private (General Agriculture)	24.10	23.55	N/A	Mountain House LF	Full Acquisition

1. Slight variations in acreage totals may exist due to rounding.
2. Impacts related to stations may be related to the station platform or other components related to the station such as surface parking, pedestrian connections, shifts in local roadways to accommodate station-related features, etc.
3. Section 83 of the California Streets and Highways Code refers to "any public street or highway or portion thereof which is within the boundaries of a state highway, including a traversable highway adopted or designated as a state highway, shall constitute a part of the ROW of such state highway without compensation being paid therefor, and the department shall have jurisdiction thereover and responsibility for the maintenance thereof" (State of California 2022).

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Appendix C: 15% Preliminary Engineering Plans

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Appendix D: Ridership Forecasts Memorandum

Memorandum

To:	**William Ridder, Deputy Director, Financial Planning and Programming**
Cc:	
Subject:	**Ridership Forecasts Memorandum**
From:	**Pat Coleman, AECOM; Mark Lippert, AECOM**
Date:	**April 4, 2023**

Introduction

This technical memorandum summarizes recent ridership forecasts for Valley Link, a new transit service connecting Northern San Joaquin Valley communities with the City of Livermore and the Dublin/Pleasanton Bay Area Rapid Transit (BART) Station. This memorandum describes the process of developing the ridership forecasts, including key assumptions and inputs such as demographic data and conceptual operating plans, and summarizes the modeling results for each of the analyzed alternatives.

Ridership Methodology

The ridership forecasts were developed using two tools: (1) the Altamont Corridor Express (ACE) Passenger Rail Forecasting Model (ACE Model), and (2) a version of the Alameda County Transportation Commission (ACTC) travel demand forecasting model (ACTC Model).

ACE Model

AECOM developed the ACE Model and has used it to forecast ridership for recent and ongoing projects and plans to implement improvements to the ACE and San Joaquin services, including the ACE*forward* program and the ACE Sacramento Extension.

The ACE Model takes into account intercity and commuter passengers and is based on the Amtrak forecasting model developed by AECOM. The ACE Model was calibrated to match existing ACE ridership and updated to account for future short- and long-term investments in the passenger rail network in Northern California, including connections with statewide high-speed rail and select connections with BART.

ACTC Model

The ACTC Model is the countywide transportation planning model for use in Alameda County. Like the other countywide models in use in the nine-county San Francisco Bay Area, the ACTC Model is consistent with the regional travel demand forecasting models maintained by the

Metropolitan Transportation Commission (MTC), as well as the land use and socioeconomic database maintained by the Association of Bay Area Governments (ABAG).

In support of the BART to Livermore Extension (BLVX) Draft Environmental Impact Report (DEIR), a modified version of the ACTC Model was developed. It included refinements to improve model validation for travel between the Tri-Valley and San Joaquin County and the rest of the San Francisco Bay Area. This version of the ACTC Model was then used to forecast traffic volumes and transit ridership in the Tri-Valley area for the BLVX DEIR.

Joint ACTC–ACE Model

For Valley Link, AECOM developed a joint model based on the ACE Model and the BLVX version of the ACTC Model. Outputs from the ACE Model were combined with the ACTC Model to take advantage of the ACTC Model's network assignment procedures, enabling better reporting of transfers and other ridership statistics.

The first step in this process was to run the ACE Model to forecast ridership outside the geographic area of the ACTC Model. For this step, station-to-station trip tables were produced for the ACE network and the new Valley Link service.

Next, the base year ACTC Model was run, and the resulting station boardings were compared to boardings from the ACE Model. To facilitate this comparison, trips from the ACE Model were allocated to specific origins and destinations, approximated using a contiguous series of transportation analysis zones (TAZs) covering the geographic extent of the modeling effort. The results were then checked to avoid double-counting trips forecast in the ACTC Model. This created a combined set of transit trip tables that could be assigned to the ACTC Model networks for generating ridership estimates for Valley Link.

Demographic Assumptions

The demographic assumptions for the ACE Model and ACTC Model are described in the following sections.

ACE Model

In addition to the rail service operating plan, demographic forecasts are one of the key inputs to the ACE Model. Demographic growth forecasts, procured in 2013 from Moody's Economy.com, were used in the ACE Model to generate trips on both ACE and Valley Link. These forecasts are based on detailed national and regional econometric modeling and provide corridor-wide consistency with respect to key measures of growth, including population, income, and employment. This dataset is a custom forecast of demographic data at the county level. It includes low, base, and high forecasts of total population; total non-farm employment; and total personal income.

The ACE Model, however, requires demographic data for each station. To translate county-level demographic data to smaller-scale, station-level data, AECOM employed a custom geographic information system (GIS) application to calculate the population and employment contained within buffers around each station. Buffers ranging in radius from 5 to 20 miles around stations were used, and the weighted average population and employment for each buffer were inputted into the ACE Model.

Previously, in the first phase of the Valley Link feasibility study, the ACE Model was updated to reflect demographics from the ACTC Model. For this phase, AECOM estimated the percentage changes in demographic data by jurisdiction from the base (2013) model to the updated (2018) model, for 2025 and 2040. These jurisdictional-level percentage changes were applied to ACE Model base demographic data associated with each station, with consideration to the geographic location, catchment area, and other characteristics of each station.

ACTC Model

The BLVX version of the ACTC Model uses land use and socioeconomic databases developed by ABAG and MTC as part of Plan Bay Area 2013, which is the regionally adopted long-range plan for the nine-county Bay Area. Therefore, employment data for all Bay Area counties was readily available from the Plan Bay Area databases. San Joaquin County, however, is outside the nine-county Bay Area, and is under the jurisdiction of the San Joaquin Council of Governments (SJCOG), a separate metropolitan planning organization from the Bay Area's MTC. Therefore, the employment numbers for this county were obtained from the SJCOG's 2014 Regional Transportation Plan.[1]

As described in further detail later in this memorandum, ridership forecasts were developed for a future horizon year (2040). Demographics from the 2018 version of the ACTC Model, which contains data for 2020 and 2040, were used for this study.

For TAZs within San Joaquin County (TAZs 2301 through 2326), demographic data published by San Joaquin County for 2024 and 2042 were interpolated to derive data for 2040. An equivalency between San Joaquin County zones and the TAZ system in the ACTC Model was then established based on area, and the demographic data for the San Joaquin County zones in the ACTC Model were updated based on this equivalency.

Scenarios and Forecasts

The scenarios and resulting forecasts are described in the following sections. Ridership impacts, including passenger revenue (order-of-magnitude estimate only), parking demand at stations, and reduction in vehicle miles traveled (VMT), are also presented.

[1] BART to Livermore Ridership Projections Report, February 2018

The ridership modeling considers a long-term horizon year (2040), capturing future population and employment growth along the route in the next 20 years. Scenarios with and without the Valley Link project (i.e., “Build” and “No Build,” respectively) were modeled to determine the incremental effects of the project.

No Build Scenario

For the 2040 No Build scenarios, the “No Build” versions of the BLVX ACTC Model, which do not include the previously proposed BART extension to Livermore (i.e., Isabel Avenue), were used for the ACTC portion of the joint ACTC–ACE model.

Build Scenarios

A Build scenario with service between the Dublin/Pleasanton BART station and Mountain House was modeled in this round of forecasts. This model includes the Dublin/Pleasanton, Isabel Avenue, Southfront Road, and Mountain House stations. Forecasts were developed for the 2040 forecast year. Table 1 lists the scenario station locations for the 2040 scenario.

Table 1: Scenario Station Locations for 2040

	BART to Mountain House
Dublin/Pleasanton	X
Isabel Avenue	X
Southfront Road	X
Mountain House	X

The operating plans for the build scenarios are defined in Table 2 and Table 3.

Table 2: Station to Station Run Times

Station	Proposed Runtimes (minutes)	
	Eastbound (Read Down)	Westbound (Read Up)
Dublin/Pleasanton	—	0:30:40
Isabel Avenue	0:08:02	0:22:25
Southfront Road	0:13:16	0:16:01
Mountain House	0:29:33	—

Table 3: Project Scenarios

Scenario	Hours of Service			Headways (minutes) Tri-Valley Segment | Full Route					
				Weekdays					
	Week-days	Satur-days	Sun-days and Holi-days	Morning (Start – 5 a.m.)	AM Peak (5 a.m. – 9 a.m.)	Midday (9 a.m. – 2 p.m.)	PM Peak (2 p.m. – 7 p.m.)	Evening (7 p.m. – 12 a.m.)	Weekends and Holidays
2040 BART to Mountain House	4 a.m. – 1 a.m.			15	15	45	15	45	

For the Build scenario, AECOM developed a conceptual weekday timetable and operating plan according to the service characteristics summarized in Table 2 and Table 3.

Ridership Forecasts

The ridership forecasts are summarized in this section, using multiple metrics to describe the directionality of trips and station-level activity. **Total boardings** are the number of riders who board trains at each station throughout the day, which is equivalent to the total one-way riders. The ridership at each station is also described with productions and attractions at each station, which indicates the directionality of the trips. **Productions** are the total number of trips that are produced at each station, or the home end of the trip. **Attractions** are the other end of the trip, and typically refer to the non-home end of the trip, such as work location. In this way, each round-trip comprises two productions at the home end of the trip and two attractions at the non-home end of the trip. Describing trips in this manner helps connect residential and employment areas, and allows for an accurate calculation of parking requirements, because parking is tied to the home end of the trip.

The ridership forecasts for the new system run are summarized in this section using multiple metrics to describe the directionality of trips and station-level activity. Additional metrics requested to support the TIRCP application are presented in Attachment 1.

As a sensitivity test, an additional scenario was run to include the 2040-year transit service with the new system operating at 15-minute peak and 30-minute off-peak period service. An additional forecast was performed using the current 2040 service assumption but the 2025 land use assumptions. The service assumptions for the proposed Valley link service is the same between the two scenarios. This forecast compares favorably to the 2025 ridership forecasts performed previously. The forecasts for the scenario with slightly better off-peak frequency (30-minute) are slightly higher than the forecasts with the 45-minute off-peak frequency but are not otherwise significantly different.

Table 4 summarizes the ridership results for Valley Link with the total boardings for an average weekday for each scenario.

Table 4: Valley Link Average Weekday Performance

Scenario Year	Scenario	Average Weekday Total Boardings
2025	BART to Mountain House with 2040 Service	11,605
2040	BART to Mountain House (15-minute Peak/45-minute Off-Peak)	30,348
	BART to Mountain House (15-minute Peak/ 30-minute Off-Peak)	30,538

Table 5 summarizes the total average weekday ridership for Valley Link, as well as by station, including productions (originating trips) and attractions (destined trips) for the build alternative for the 2040 forecast years.

Table 5: Valley Link Average Weekday Ridership by Station (2040 IOS)

Station	Average Weekday 2040 BART to Mountain House (2025 Land Use)			Average Weekday 2040 BART to Mountain House		
	Boardings	Productions	Attractions	Boardings	Productions	Attractions
Dublin/Pleasanton	5,621	180	11,062	13,793	634	26,951
Isabel Avenue	800	1,321	279	3,316	4,191	2,440
Southfront Road	1,047	1,832	263	2,330	4,042	617
Mountain House	4,137	8,270	2	10,909	21,481	336
Total	**11,605**	**11,603**	**11,606**	**30,346**	**30,344**	**30,346**

Parking Demand

An estimate of parking demand was prepared, based on the daily direct boardings by station described above (subtracting transfers from other services), and applying an anticipated drive mode share and average vehicle occupancy for Valley Link riders. Based on the 2014 ACE Ridership Survey, it was assumed that approximately 72 percent of Valley Link riders would drive to/from stations. The parking demand estimates also assume that each parked car represents two trips on transit (outgoing and incoming).

A factor determined by the percentage of productions in the combined total of productions and attractions was also applied to determine the parking demand estimates. For Dublin/Pleasanton, this percentage ranges between 2 and 4 percent, depending on the scenario, reflecting this station's role as a transfer location and trip attractor. Because relatively few round trips on Valley Link would originate at this station, demand is estimated at less than ten parking spaces in each of the scenarios modeled.

Table 6 summarizes the estimated parking demand at each station, rounded up to the nearest multiple of ten.

Table 6: Valley Link Average Weekday Parking Demand Estimates by Station (2040)

Station	Average Weekday Parking Demand (2025) - 2040 BART to Mountain House Build (2025 Land Use)	Average Weekday Parking Demand (2040) - 2040 BART to Mountain House Build
Dublin/Pleasanton	10	10
Isabel Avenue	470	1,400
Southfront Road	610	1,280
Mountain House	2,980	7,740

VMT Reduction

The proposed Valley Link service would provide an alternative to automobile travel within the Altamont Pass corridor linking the Tri-Valley and San Joaquin Valley. Although ACE currently provides commuter rail service in this corridor, Valley Link would substantially improve transit options by providing a direct connection with BART, securing access to/from many key destinations throughout the Bay Area. An estimate of VMT can be derived from the ridership forecasts presented above, and then a net effect can be calculated by comparing the No Build and Build scenarios.

Table 7 summarizes the estimated reduction in automobile VMT.

Table 7: Average Weekday VMT Reduction

Scenario Year	Scenario	Average Weekday VMT		Average Weekday VMT Reduction
		No Build	Build	
2040	Mountain House	198,537,000	198,059,000	477,700

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Appendix E: Environmental Footprint

Figure E-1. Valley Link Rail Project Environmental Footprint (1 of 3)

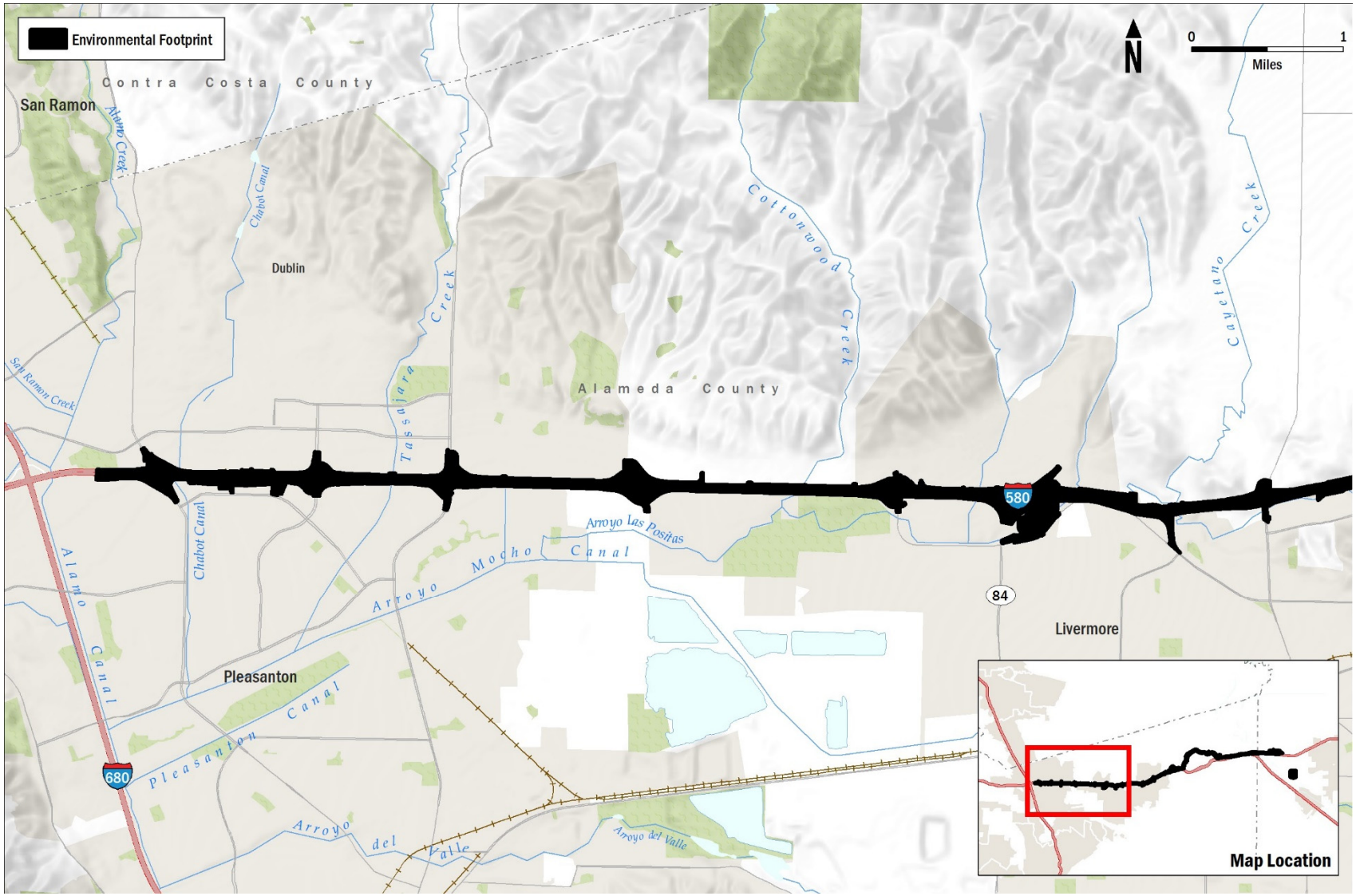


Figure E-2. Valley Link Rail Project Environmental Footprint (2 of 3)

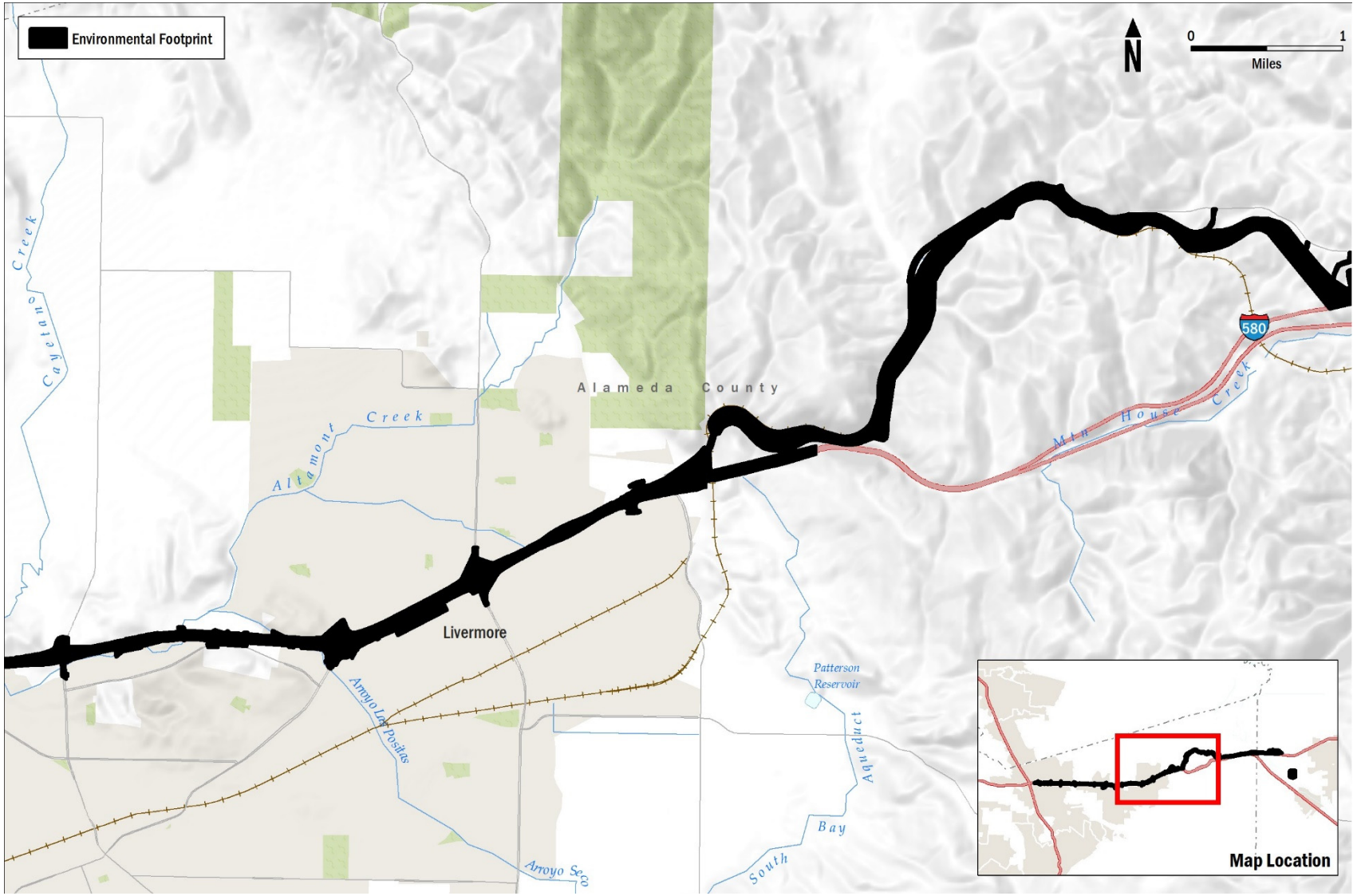
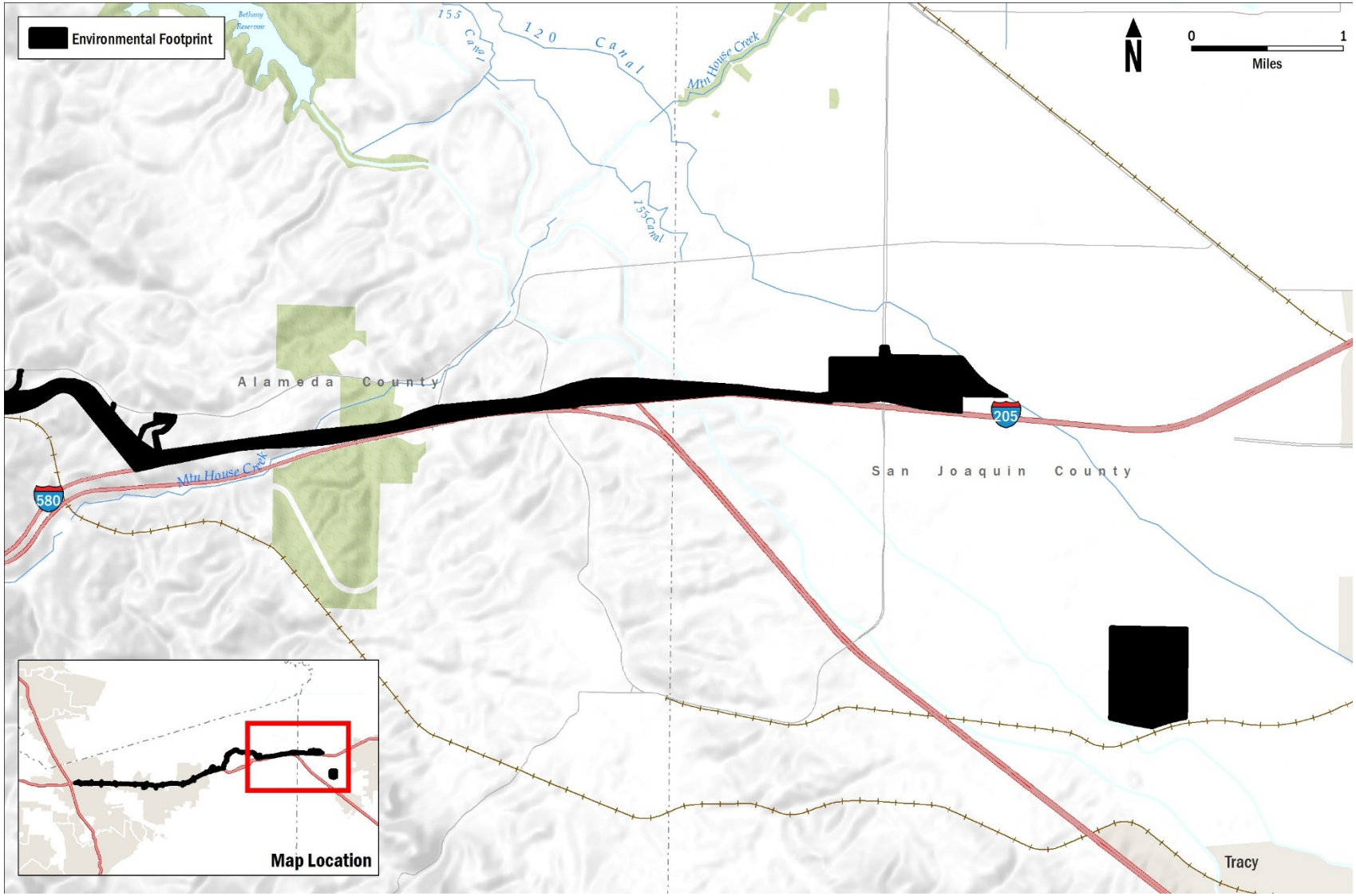


Figure E-3. Valley Link Rail Project Environmental Footprint (3 of 3)



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Appendix F: Visual Impact Assessment

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Appendix G: Air Quality and GHG Emissions

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Appendix H: Natural Environment Study

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Appendix I: Cultural Resources Technical Reports

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Appendix J: Energy Report

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Appendix K: Hazardous Materials

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Appendix L: Traffic Noise Technical Report

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Appendix M: FTA Noise and Vibration Technical Report

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