Appendix A

Air Quality and Greenhouse Gas Emissions Impacts Report

1111 Aladdin Ave Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	1111 Aladdin Ave
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30000
Precipitation (days)	27.6000
Location	37.708560250757955, -122.15775344019289
County	Alameda
City	San Leandro
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1424
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.41

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	49.1360	1000sqft	7.26990	49,136.0	50,668.0	—	—	—

Parking Lot	155.000	Space	0.00000	62,000.0	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.0965	8.45892	75.9654	82.5938	0.13836	3.12569	11.9164	15.0421	2.87373	5.60697	8.48071	—	15,924.7	15,924.7	0.62969	0.28766	5.59487	16,031.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.0864	8.44726	76.1003	82.0503	0.13836	3.12569	11.9164	15.0421	2.87373	5.60697	8.48071	—	15,857.2	15,857.2	0.63369	0.28989	0.14534	15,959.5
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.89966	2.65290	17.5353	18.7752	0.03184	0.71937	2.71342	3.43279	0.66138	1.27860	1.93999	—	3,650.48	3,650.48	0.14539	0.07508	0.88149	3,674.61
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52919	0.48415	3.20020	3.42648	0.00581	0.13129	0.49520	0.62648	0.12070	0.23335	0.35405	—	604.378	604.378	0.02407	0.01243	0.14594	608.374

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	10.0965	8.45892	75.9654	82.5938	0.13836	3.12569	11.9164	15.0421	2.87373	5.60697	8.48071	—	15,924.7	15,924.7	0.62969	0.28766	5.59487	16,031.7
2027	5.66555	5.09489	25.1011	34.3107	0.05538	0.95916	0.80292	1.76208	0.88289	0.19288	1.07577	—	6,594.67	6,594.67	0.24987	0.13266	3.37758	6,643.82
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	10.0864	8.44726	76.1003	82.0503	0.13836	3.12569	11.9164	15.0421	2.87373	5.60697	8.48071	—	15,857.2	15,857.2	0.63369	0.28989	0.14534	15,959.5
2027	6.58579	5.86752	32.1707	44.4074	0.06933	1.25728	0.94896	2.20625	1.15717	0.22711	1.38428	—	8,191.96	8,191.96	0.31884	0.15236	0.10073	8,245.43
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.32475	1.94662	17.5353	18.7752	0.03184	0.71937	2.71342	3.43279	0.66138	1.27860	1.93999	—	3,650.48	3,650.48	0.14539	0.06690	0.56310	3,674.61
2027	2.89966	2.65290	10.5521	15.0418	0.02501	0.38098	0.46637	0.84735	0.35081	0.11225	0.46306	—	3,021.36	3,021.36	0.11530	0.07508	0.88149	3,047.49
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.42427	0.35526	3.20020	3.42648	0.00581	0.13129	0.49520	0.62648	0.12070	0.23335	0.35405	—	604.378	604.378	0.02407	0.01108	0.09323	608.374
2027	0.52919	0.48415	1.92575	2.74513	0.00456	0.06953	0.08511	0.15464	0.06402	0.02049	0.08451	—	500.220	500.220	0.01909	0.01243	0.14594	504.547

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.70501	8.14748	74.6392	78.2174	0.13215	3.11047	10.7568	13.8673	2.86163	5.32533	8.18696	—	14,081.4	14,081.4	0.57120	0.11424	0.00000	14,129.7
2027	5.40052	4.87429	24.4542	31.3377	0.05245	0.95329	0.00000	0.95329	0.87703	0.00000	0.87703	—	5,490.66	5,490.66	0.22273	0.04455	0.00000	5,509.51
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.70501	8.14748	74.6392	78.2174	0.13215	3.11047	10.7568	13.8673	2.86163	5.32533	8.18696	—	14,081.4	14,081.4	0.57120	0.11424	0.00000	14,129.7
2027	6.27813	5.61173	31.3986	41.2908	0.06640	1.25142	0.00000	1.25142	1.15131	0.00000	1.15131	—	7,001.77	7,001.77	0.28402	0.05680	0.00000	7,025.80

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.23649	1.87748	17.2062	17.9074	0.03038	0.71580	2.44882	3.16461	0.65853	1.21434	1.87287	—	3,234.85	3,234.85	0.13122	0.02624	0.00000	3,245.96
2027	2.74815	2.52945	10.1113	13.5421	0.02309	0.37713	0.00000	0.37713	0.34696	0.00000	0.34696	—	2,376.30	2,376.30	0.09639	0.01928	0.00000	2,384.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.40816	0.34264	3.14014	3.26810	0.00554	0.13063	0.44691	0.57754	0.12018	0.22162	0.34180	—	535.567	535.567	0.02172	0.00434	0.00000	537.405
2027	0.50154	0.46162	1.84532	2.47144	0.00421	0.06883	0.00000	0.06883	0.06332	0.00000	0.06332	—	393.424	393.424	0.01596	0.00319	0.00000	394.774

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.39150	0.31144	1.32617	4.37647	0.00621	0.01522	1.15961	1.17483	0.01210	0.28165	0.29375	—	1,843.28	1,843.28	0.05849	0.17342	5.59487	1,902.01
2027	0.26503	0.22061	0.64693	2.97300	0.00293	0.00586	0.80292	0.80879	0.00586	0.19288	0.19874	—	1,104.00	1,104.00	0.02714	0.08811	3.37758	1,134.32
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.38136	0.29978	1.46113	3.83292	0.00621	0.01522	1.15961	1.17483	0.01210	0.28165	0.29375	—	1,775.75	1,775.75	0.06248	0.17565	0.14534	1,829.80
2027	0.30766	0.25580	0.77211	3.11659	0.00293	0.00586	0.94896	0.95483	0.00586	0.22711	0.23297	—	1,190.19	1,190.19	0.03482	0.09556	0.10073	1,219.63
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.08826	0.06913	0.32910	0.86782	0.00146	0.00357	0.26460	0.26817	0.00285	0.06427	0.06712	—	415.623	415.623	0.01417	0.04065	0.56310	428.655
2027	0.15151	0.12345	0.44074	1.49965	0.00192	0.00384	0.46637	0.47021	0.00384	0.11225	0.11609	—	645.057	645.057	0.01891	0.05580	0.88149	663.038
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01611	0.01262	0.06006	0.15838	0.00027	0.00065	0.04829	0.04894	0.00052	0.01173	0.01225	—	68.8112	68.8112	0.00235	0.00673	0.09323	70.9688
2027	0.02765	0.02253	0.08043	0.27369	0.00035	0.00070	0.08511	0.08581	0.00070	0.02049	0.02119	—	106.797	106.797	0.00313	0.00924	0.14594	109.774

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.11581	2.01769	0.61860	5.31898	0.00376	0.05251	0.00000	0.05251	0.05041	0.00000	0.05041	54.6104	1,051.74	1,106.35	5.63179	0.06123	12.7903	1,278.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.25551	1.22373	0.57793	0.48546	0.00347	0.04392	0.00000	0.04392	0.04392	0.00000	0.04392	54.6104	1,031.87	1,086.48	5.63096	0.06106	12.7903	1,258.24
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67977	1.61527	0.59798	2.86911	0.00361	0.04816	0.00000	0.04816	0.04712	0.00000	0.04712	54.6104	1,041.67	1,096.28	5.63137	0.06114	12.7903	1,268.07
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30656	0.29479	0.10913	0.52361	0.00066	0.00879	0.00000	0.00879	0.00860	0.00000	0.00860	9.04138	172.460	181.501	0.93234	0.01012	2.11758	209.944

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	2.05224	1.98590	0.04067	4.83352	0.00029	0.00859	—	0.00859	0.00649	—	0.00649	—	19.8763	19.8763	0.00083	0.00017	—	19.9480
Energy	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	989.156	989.156	0.10949	0.00717	—	994.031
Water	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Waste	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Total	2.11581	2.01769	0.61860	5.31898	0.00376	0.05251	0.00000	0.05251	0.05041	0.00000	0.05041	54.6104	1,051.74	1,106.35	5.63179	0.06123	12.7903	1,278.18

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.19194	1.19194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	989.156	989.156	0.10949	0.00717	—	994.031
Water	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Waste	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Total	1.25551	1.22373	0.57793	0.48546	0.00347	0.04392	0.00000	0.04392	0.04392	0.00000	0.04392	54.6104	1,031.87	1,086.48	5.63096	0.06106	12.7903	1,258.24
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.61620	1.58348	0.02006	2.38365	0.00014	0.00423	—	0.00423	0.00320	—	0.00320	—	9.80201	9.80201	0.00041	0.00008	—	9.83735
Energy	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	989.156	989.156	0.10949	0.00717	—	994.031
Water	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Waste	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Total	1.67977	1.61527	0.59798	2.86911	0.00361	0.04816	0.00000	0.04816	0.04712	0.00000	0.04712	54.6104	1,041.67	1,096.28	5.63137	0.06114	12.7903	1,268.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.29496	0.28899	0.00366	0.43502	0.00003	0.00077	—	0.00077	0.00058	—	0.00058	—	1.62283	1.62283	0.00007	0.00001	—	1.62869
Energy	0.01160	0.00580	0.10547	0.08860	0.00063	0.00802	—	0.00802	0.00802	—	0.00802	—	163.766	163.766	0.01813	0.00119	—	164.573
Water	—	—	—	—	—	—	—	—	—	—	—	3.60487	7.07103	10.6759	0.37078	0.00892	—	22.6040
Waste	—	—	—	—	—	—	—	—	—	—	—	5.43651	0.00000	5.43651	0.54336	0.00000	—	19.0205
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.11758	2.11758
Total	0.30656	0.29479	0.10913	0.52361	0.00066	0.00879	0.00000	0.00879	0.00860	0.00000	0.00860	9.04138	172.460	181.501	0.93234	0.01012	2.11758	209.944

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72490	2.28674	20.6515	19.0056	0.03253	0.84309	—	0.84309	0.77564	—	0.77564	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.32807	0.32807	—	0.04968	0.04968	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72490	2.28674	20.6515	19.0056	0.03253	0.84309	—	0.84309	0.77564	—	0.77564	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.32807	0.32807	—	0.04968	0.04968	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66443	0.55759	5.03558	4.63424	0.00793	0.20557	—	0.20557	0.18913	—	0.18913	—	835.526	835.526	0.03389	0.00678	—	838.393
Demolition	—	—	—	—	—	—	0.07999	0.07999	—	0.01211	0.01211	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12126	0.10176	0.91899	0.84575	0.00145	0.03752	—	0.03752	0.03452	—	0.03452	—	138.331	138.331	0.00561	0.00112	—	138.806
Demolition	—	—	—	—	—	—	0.01460	0.01460	—	0.00221	0.00221	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05111	0.04556	0.03627	0.62227	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	149.632	149.632	0.00231	0.00555	0.55194	151.895
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.03087	0.00906	0.47482	0.19148	0.00268	0.00765	0.10728	0.11494	0.00510	0.02937	0.03447	—	398.219	398.219	0.02143	0.06276	0.85376	418.312
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04979	0.04391	0.04770	0.53457	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	138.772	138.772	0.00298	0.00588	0.01434	140.613
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.03036	0.00867	0.50250	0.19340	0.00268	0.00765	0.10728	0.11494	0.00510	0.02937	0.03447	—	398.432	398.432	0.02130	0.06289	0.02218	417.729
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01206	0.01063	0.01028	0.12709	0.00000	0.00000	0.03498	0.03498	0.00000	0.00819	0.00819	—	34.0685	34.0685	0.00065	0.00135	0.05816	34.5460
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00747	0.00218	0.11998	0.04688	0.00065	0.00187	0.02581	0.02767	0.00124	0.00707	0.00832	—	97.1218	97.1218	0.00523	0.01530	0.08985	101.903

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00220	0.00194	0.00188	0.02319	0.00000	0.00000	0.00638	0.00638	0.00000	0.00149	0.00149	—	5.64043	5.64043	0.00011	0.00022	0.00963	5.71949
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00136	0.00040	0.02190	0.00856	0.00012	0.00034	0.00471	0.00505	0.00023	0.00129	0.00152	—	16.0796	16.0796	0.00087	0.00253	0.01488	16.8712

3.2. Site Preparation (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91230	0.76659	7.11111	7.02446	0.01192	0.30297	—	0.30297	0.27873	—	0.27873	—	1,291.83	1,291.83	0.05240	0.01048	—	1,296.26
Dust From Material Movement	—	—	—	—	—	—	1.86930	1.86930	—	0.96070	0.96070	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16650	0.13990	1.29778	1.28196	0.00218	0.05529	—	0.05529	0.05087	—	0.05087	—	213.877	213.877	0.00868	0.00174	—	214.611
Dust From Material Movement	—	—	—	—	—	—	0.34115	0.34115	—	0.17533	0.17533	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05963	0.05316	0.04232	0.72598	0.00000	0.00000	0.17038	0.17038	0.00000	0.03994	0.03994	—	174.571	174.571	0.00270	0.00647	0.64393	177.211
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05809	0.05123	0.05565	0.62367	0.00000	0.00000	0.17038	0.17038	0.00000	0.03994	0.03994	—	161.900	161.900	0.00347	0.00686	0.01673	164.048
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01407	0.01240	0.01199	0.14827	0.00000	0.00000	0.04081	0.04081	0.00000	0.00955	0.00955	—	39.7466	39.7466	0.00075	0.00158	0.06785	40.3037
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00257	0.00226	0.00219	0.02706	0.00000	0.00000	0.00745	0.00745	0.00000	0.00174	0.00174	—	6.58051	6.58051	0.00012	0.00026	0.01123	6.67274
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading (2026)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	2.76251	2.76251	—	1.33569	1.33569	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	2.76251	2.76251	—	1.33569	1.33569	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35418	0.29761	2.70693	3.15303	0.00494	0.11685	—	0.11685	0.10750	—	0.10750	—	535.167	535.167	0.02171	0.00434	—	537.004
Dust From Material Movement	—	—	—	—	—	—	0.49952	0.49952	—	0.24152	0.24152	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06464	0.05431	0.49401	0.57543	0.00090	0.02133	—	0.02133	0.01962	—	0.01962	—	88.6031	88.6031	0.00359	0.00072	—	88.9071
Dust From Material Movement	—	—	—	—	—	—	0.09116	0.09116	—	0.04408	0.04408	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05111	0.04556	0.03627	0.62227	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	149.632	149.632	0.00231	0.00555	0.55194	151.895
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00687	0.00202	0.10568	0.04262	0.00060	0.00170	0.02388	0.02558	0.00114	0.00654	0.00767	—	88.6297	88.6297	0.00477	0.01397	0.19002	93.1018
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04979	0.04391	0.04770	0.53457	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	138.772	138.772	0.00298	0.00588	0.01434	140.613
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00676	0.00193	0.11184	0.04304	0.00060	0.00170	0.02388	0.02558	0.00114	0.00654	0.00767	—	88.6772	88.6772	0.00474	0.01400	0.00494	92.9720
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00894	0.00788	0.00762	0.09424	0.00000	0.00000	0.02594	0.02594	0.00000	0.00607	0.00607	—	25.2643	25.2643	0.00048	0.00100	0.04313	25.6184
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00123	0.00036	0.01980	0.00774	0.00011	0.00031	0.00426	0.00457	0.00021	0.00117	0.00137	—	16.0298	16.0298	0.00086	0.00253	0.01483	16.8189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00163	0.00144	0.00139	0.01720	0.00000	0.00000	0.00473	0.00473	0.00000	0.00111	0.00111	—	4.18279	4.18279	0.00008	0.00017	0.00714	4.24142
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00022	0.00007	0.00361	0.00141	0.00002	0.00006	0.00078	0.00083	0.00004	0.00021	0.00025	—	2.65392	2.65392	0.00014	0.00042	0.00246	2.78457

3.4. Building Construction (2026)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30558	0.25570	2.35262	3.09569	0.00559	0.09040	—	0.09040	0.08317	—	0.08317	—	572.335	572.335	0.02322	0.00464	—	574.299
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05577	0.04667	0.42935	0.56496	0.00102	0.01650	—	0.01650	0.01518	—	0.01518	—	94.7566	94.7566	0.00384	0.00077	—	95.0818
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15905	0.14178	0.11287	1.93637	0.00000	0.00000	0.45445	0.45445	0.00000	0.10652	0.10652	—	465.626	465.626	0.00720	0.01727	1.71754	472.669
Vendor	0.03285	0.01430	0.51795	0.23548	0.00293	0.00586	0.11154	0.11740	0.00586	0.03082	0.03668	—	416.970	416.970	0.01775	0.06184	1.08574	436.929
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15493	0.13664	0.14843	1.66349	0.00000	0.00000	0.45445	0.45445	0.00000	0.10652	0.10652	—	431.831	431.831	0.00926	0.01830	0.04461	437.560
Vendor	0.03164	0.01349	0.54731	0.24018	0.00293	0.00586	0.11154	0.11740	0.00586	0.03082	0.03668	—	417.364	417.364	0.01775	0.06184	0.02821	436.265
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03674	0.03238	0.03131	0.38722	0.00000	0.00000	0.10658	0.10658	0.00000	0.02495	0.02495	—	103.803	103.803	0.00197	0.00412	0.17719	105.257
Vendor	0.00775	0.00332	0.12812	0.05638	0.00070	0.00140	0.02623	0.02763	0.00140	0.00726	0.00866	—	99.5898	99.5898	0.00424	0.01476	0.11209	104.208
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00671	0.00591	0.00571	0.07067	0.00000	0.00000	0.01945	0.01945	0.00000	0.00455	0.00455	—	17.1857	17.1857	0.00033	0.00068	0.02934	17.4266
Vendor	0.00141	0.00061	0.02338	0.01029	0.00013	0.00026	0.00479	0.00504	0.00026	0.00132	0.00158	—	16.4882	16.4882	0.00070	0.00244	0.01856	17.2528
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.80686	0.67516	6.15648	8.48183	0.01534	0.22065	—	0.22065	0.20300	—	0.20300	—	1,571.47	1,571.47	0.06375	0.01275	—	1,576.86
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14725	0.12322	1.12356	1.54793	0.00280	0.04027	—	0.04027	0.03705	—	0.03705	—	260.175	260.175	0.01055	0.00211	—	261.068
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.15288	0.13561	0.09766	1.80543	0.00000	0.00000	0.45445	0.45445	0.00000	0.10652	0.10652	—	457.017	457.017	0.00617	0.01727	1.55329	463.871
Vendor	0.03245	0.01430	0.49836	0.22629	0.00293	0.00586	0.11154	0.11740	0.00586	0.03082	0.03668	—	408.717	408.717	0.01775	0.06184	1.01448	428.604
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14979	0.13149	0.13219	1.56480	0.00000	0.00000	0.45445	0.45445	0.00000	0.10652	0.10652	—	423.868	423.868	0.00926	0.01830	0.04035	429.592
Vendor	0.03164	0.01349	0.52851	0.23311	0.00293	0.00586	0.11154	0.11740	0.00586	0.03082	0.03668	—	409.119	409.119	0.01775	0.06184	0.02637	428.018
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09685	0.08485	0.07534	1.00126	0.00000	0.00000	0.29265	0.29265	0.00000	0.06851	0.06851	—	279.779	279.779	0.00540	0.01132	0.44002	283.728
Vendor	0.02101	0.00911	0.33922	0.15046	0.00192	0.00384	0.07203	0.07587	0.00384	0.01993	0.02377	—	268.057	268.057	0.01164	0.04054	0.28856	280.718
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01767	0.01549	0.01375	0.18273	0.00000	0.00000	0.05341	0.05341	0.00000	0.01250	0.01250	—	46.3207	46.3207	0.00089	0.00187	0.07285	46.9744
Vendor	0.00383	0.00166	0.06191	0.02746	0.00035	0.00070	0.01315	0.01385	0.00070	0.00364	0.00434	—	44.3799	44.3799	0.00193	0.00671	0.04777	46.4761
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Paving (2027)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.87761	0.73744	6.94439	9.95313	0.01395	0.29813	—	0.29813	0.27428	—	0.27428	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10579	0.08890	0.83713	1.19983	0.00168	0.03594	—	0.03594	0.03306	—	0.03306	—	182.161	182.161	0.00739	0.00148	—	182.786
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01931	0.01622	0.15278	0.21897	0.00031	0.00656	—	0.00656	0.00603	—	0.00603	—	30.1588	30.1588	0.00122	0.00024	—	30.2623
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04814	0.04226	0.04248	0.50286	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	136.213	136.213	0.00298	0.00588	0.01297	138.052
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00572	0.00501	0.00445	0.05917	0.00000	0.00000	0.01729	0.01729	0.00000	0.00405	0.00405	—	16.5325	16.5325	0.00032	0.00067	0.02600	16.7658
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00104	0.00092	0.00081	0.01080	0.00000	0.00000	0.00316	0.00316	0.00000	0.00074	0.00074	—	2.73715	2.73715	0.00005	0.00011	0.00430	2.77577
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2027)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	2.14466	2.14466	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	2.14466	2.14466	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08981	0.07422	0.54424	0.73690	0.00113	0.01247	—	0.01247	0.01148	—	0.01148	—	87.4234	87.4234	0.00355	0.00071	—	87.7234
Architectural Coatings	1.40431	1.40431	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01639	0.01355	0.09932	0.13448	0.00021	0.00228	—	0.00228	0.00209	—	0.00209	—	14.4739	14.4739	0.00059	0.00012	—	14.5236
Architectural Coatings	0.25629	0.25629	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03058	0.02712	0.01953	0.36109	0.00000	0.00000	0.09089	0.09089	0.00000	0.02130	0.02130	—	91.4034	91.4034	0.00123	0.00345	0.31066	92.7741
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02996	0.02630	0.02644	0.31296	0.00000	0.00000	0.09089	0.09089	0.00000	0.02130	0.02130	—	84.7736	84.7736	0.00185	0.00366	0.00807	85.9185
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01935	0.01695	0.01505	0.20001	0.00000	0.00000	0.05846	0.05846	0.00000	0.01369	0.01369	—	55.8891	55.8891	0.00108	0.00226	0.08790	56.6778
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00353	0.00309	0.00275	0.03650	0.00000	0.00000	0.01067	0.01067	0.00000	0.00250	0.00250	—	9.25307	9.25307	0.00018	0.00037	0.01455	9.38366
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Trenching and Utilities (2027)

3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.88795	1.58640	14.2321	17.2743	0.02733	0.59767	—	0.59767	0.54986	—	0.54986	—	2,960.07	2,960.07	0.12007	0.02401	—	2,970.23
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.88795	1.58640	14.2321	17.2743	0.02733	0.59767	—	0.59767	0.54986	—	0.54986	—	2,960.07	2,960.07	0.12007	0.02401	—	2,970.23
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34138	0.28686	2.57348	3.12358	0.00494	0.10807	—	0.10807	0.09943	—	0.09943	—	535.246	535.246	0.02171	0.00434	—	537.083
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06230	0.05235	0.46966	0.57005	0.00090	0.01972	—	0.01972	0.01815	—	0.01815	—	88.6161	88.6161	0.00359	0.00072	—	88.9202
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04913	0.04358	0.03138	0.58019	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	146.865	146.865	0.00198	0.00555	0.49916	149.068
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04814	0.04226	0.04248	0.50286	0.00000	0.00000	0.14604	0.14604	0.00000	0.03423	0.03423	—	136.213	136.213	0.00298	0.00588	0.01297	138.052
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00858	0.00752	0.00668	0.08875	0.00000	0.00000	0.02594	0.02594	0.00000	0.00607	0.00607	—	24.7988	24.7988	0.00048	0.00100	0.03900	25.1487
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00157	0.00137	0.00122	0.01620	0.00000	0.00000	0.00473	0.00473	0.00000	0.00111	0.00111	—	4.10572	4.10572	0.00008	0.00017	0.00646	4.16366
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	299.593	299.593	0.04847	0.00587	—	302.555
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	—	—	—	—	—	—	—	—	—	—	—	—	299.593	299.593	0.04847	0.00587	—	302.555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	299.593	299.593	0.04847	0.00587	—	302.555
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	299.593	299.593	0.04847	0.00587	—	302.555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	49.6010	49.6010	0.00802	0.00097	—	50.0915
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	49.6010	49.6010	0.00802	0.00097	—	50.0915

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	689.563	689.563	0.06103	0.00130	—	691.476
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	689.563	689.563	0.06103	0.00130	—	691.476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	689.563	689.563	0.06103	0.00130	—	691.476

Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.06357	0.03179	0.57793	0.48546	0.00347	0.04392	—	0.04392	0.04392	—	0.04392	—	689.563	689.563	0.06103	0.00130	—	691.476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.01160	0.00580	0.10547	0.08860	0.00063	0.00802	—	0.00802	0.00802	—	0.00802	—	114.165	114.165	0.01010	0.00021	—	114.482
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01160	0.00580	0.10547	0.08860	0.00063	0.00802	—	0.00802	0.00802	—	0.00802	—	114.165	114.165	0.01010	0.00021	—	114.482

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.05151	1.05151	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14043	0.14043	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.86030	0.79396	0.04067	4.83352	0.00029	0.00859	—	0.00859	0.00649	—	0.00649	—	19.8763	19.8763	0.00083	0.00017	—	19.9480
Total	2.05224	1.98590	0.04067	4.83352	0.00029	0.00859	—	0.00859	0.00649	—	0.00649	—	19.8763	19.8763	0.00083	0.00017	—	19.9480
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	1.05151	1.05151	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14043	0.14043	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.19194	1.19194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.19190	0.19190	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02563	0.02563	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07743	0.07146	0.00366	0.43502	0.00003	0.00077	—	0.00077	0.00058	—	0.00058	—	1.62283	1.62283	0.00007	0.00001	—	1.62869
Total	0.29496	0.28899	0.00366	0.43502	0.00003	0.00077	—	0.00077	0.00058	—	0.00058	—	1.62283	1.62283	0.00007	0.00001	—	1.62869

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	21.7736	42.7094	64.4830	2.23954	0.05388	—	136.529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	3.60487	7.07103	10.6759	0.37078	0.00892	—	22.6040
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	3.60487	7.07103	10.6759	0.37078	0.00892	—	22.6040

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	32.8368	0.00000	32.8368	3.28192	0.00000	—	114.885
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	5.43651	0.00000	5.43651	0.54336	0.00000	—	19.0205
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	5.43651	0.00000	5.43651	0.54336	0.00000	—	19.0205

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.7903	12.7903
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.11758	2.11758

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.11758	2.11758

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/1/2026	10/1/2026	5.00000	89.0000	—
Site Preparation	Site Preparation	6/1/2026	10/1/2026	5.00000	89.0000	—
Grading	Grading	9/1/2026	12/1/2026	5.00000	66.0000	—
Building Construction	Building Construction	9/1/2026	12/1/2027	5.00000	327.000	—
Paving	Paving	10/1/2027	12/1/2027	5.00000	44.0000	—
Architectural Coating	Architectural Coating	1/1/2027	12/1/2027	5.00000	239.000	—
Trenching and Utilities	Trenching	9/1/2027	12/1/2027	5.00000	66.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000

Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
Trenching and Utilities	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Trenching and Utilities	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Trenching and Utilities	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Trenching and Utilities	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	13.7800	LDA,LDT1,LDT2
Demolition	Vendor	—	7.30000	HHDT,MHDT
Demolition	Hauling	5.78652	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	17.5000	13.7800	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.30000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	15.0000	13.7800	LDA,LDT1,LDT2
Grading	Vendor	—	7.30000	HHDT,MHDT

Grading	Hauling	1.28788	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	46.6771	13.7800	LDA,LDT1,LDT2
Building Construction	Vendor	18.2152	7.30000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	13.7800	LDA,LDT1,LDT2
Paving	Vendor	—	7.30000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	9.33542	13.7800	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.30000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching and Utilities	Worker	15.0000	13.7800	LDA,LDT1,LDT2
Trenching and Utilities	Vendor	—	7.30000	HHDT,MHDT
Trenching and Utilities	Hauling	0.00000	20.0000	HHDT
Trenching and Utilities	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	73,704.0	24,568.0	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	44,758.0	0.00000
Site Preparation	—	—	133.500	0.00000	0.00000
Grading	—	675.000	66.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Manufacturing	0.00000	0%
Paving	Parking Lot	0.00000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	203.983	0.03300	0.00400
2027	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Manufacturing	Wood Fireplaces	0	0
Manufacturing	Gas Fireplaces	0	0
Manufacturing	Propane Fireplaces	0	0
Manufacturing	Electric Fireplaces	0	0
Manufacturing	No Fireplaces	0	0
Manufacturing	Conventional Wood Stoves	0	0
Manufacturing	Catalytic Wood Stoves	0	0
Manufacturing	Non-Catalytic Wood Stoves	0	0
Manufacturing	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	73,704.0	24,568.0	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	536,081	203.983	0.0330	0.0040	2,151,622
Parking Lot	0.00000	203.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	11,362,700	575,655
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	60.9286	0.00000
Parking Lot	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088.00	0.30000	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.85000	annual days of extreme heat
Extreme Precipitation	5.80000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.75000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	7.51711
AQ-PM	28.9857
AQ-DPM	95.0218
Drinking Water	4.20882
Lead Risk Housing	84.6881
Pesticides	0.00000
Toxic Releases	50.1750
Traffic	94.2875
Effect Indicators	—
CleanUp Sites	90.1456
Groundwater	83.3970
Haz Waste Facilities/Generators	81.0589
Impaired Water Bodies	12.4528
Solid Waste	86.5063
Sensitive Population	—
Asthma	89.4816
Cardio-vascular	63.0484
Low Birth Weights	54.8499

Socioeconomic Factor Indicators	—
Education	64.5153
Housing	34.2459
Linguistic	83.8408
Poverty	70.1256
Unemployment	30.8824

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	43.89837033
Employed	79.81521879
Median HI	39.00936738
Education	—
Bachelor's or higher	45.73335044
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	31.27165405
Active commuting	75.78596176
Social	—
2-parent households	38.71423072
Voting	45.0019248
Neighborhood	—
Alcohol availability	38.99653535
Park access	37.3668677
Retail density	83.81881175

Supermarket access	85.02502246
Tree canopy	44.79661234
Housing	—
Homeownership	30.83536507
Housing habitability	35.26241499
Low-inc homeowner severe housing cost burden	91.53086103
Low-inc renter severe housing cost burden	39.47132042
Uncrowded housing	22.16091364
Health Outcomes	—
Insured adults	49.96791993
Arthritis	22.3
Asthma ER Admissions	8.8
High Blood Pressure	34.2
Cancer (excluding skin)	32.7
Asthma	46.1
Coronary Heart Disease	28.5
Chronic Obstructive Pulmonary Disease	37.6
Diagnosed Diabetes	33.2
Life Expectancy at Birth	67.1
Cognitively Disabled	76.7
Physically Disabled	24.6
Heart Attack ER Admissions	29.6
Mental Health Not Good	51.7
Chronic Kidney Disease	35.4
Obesity	64.2
Pedestrian Injuries	60.3
Physical Health Not Good	43.5
Stroke	22.5

Health Risk Behaviors	—
Binge Drinking	91.6
Current Smoker	50.3
No Leisure Time for Physical Activity	35.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	45.2
English Speaking	25.6
Foreign-born	74.8
Outdoor Workers	53.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	18.2
Traffic Density	94.8
Traffic Access	53.6
Other Indices	—
Hardship	53.6
Other Decision Support	—
2016 Voting	32.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0000
Healthy Places Index Score for Project Location (b)	48.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	New building square footage per project site plans. Landscaping to occupy 16% of lot acreage. Parking area based on number of spaces proposed (155 per site plan).
Construction: Construction Phases	Per applicant provided information.
Construction: Off-Road Equipment	CalEEMod defaults used; Utilities assumed to require equivalent equipment to grading phase
Operations: Vehicle Data	Per trip generation assessment, project would result in net decrease in trips. Model revised to assume no vehicle trips.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.12801	7.26990
Landscape Area	sq. ft	—	50,668.0
Lot Area	acre	1.39500	0.00000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	6/29/2026	10/1/2026
Demolition	Demolition	Work Days per Phase	20.0000	89.0000
Site Preparation	Site Preparation	Start Date	6/30/2026	6/1/2026
Site Preparation	Site Preparation	End Date	7/14/2026	10/1/2026
Site Preparation	Site Preparation	Work Days per Phase	10.00000	89.0000
Grading	Grading	Start Date	7/15/2026	9/1/2026
Grading	Grading	End Date	8/12/2026	12/1/2026
Grading	Grading	Work Days per Phase	20.0000	66.0000
Building Construction	Building Construction	Start Date	8/13/2026	9/1/2026
Building Construction	Building Construction	End Date	7/1/2027	12/1/2027
Building Construction	Building Construction	Work Days per Phase	230.000	327.000
Paving	Paving	Start Date	7/2/2027	10/1/2027
Paving	Paving	End Date	7/30/2027	12/1/2027
Paving	Paving	Work Days per Phase	20.0000	44.0000
Architectural Coating	Architectural Coating	Start Date	7/31/2027	1/1/2027
Architectural Coating	Architectural Coating	End Date	8/28/2027	12/1/2027
Architectural Coating	Architectural Coating	Work Days per Phase	20.0000	239.000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Manufacturing	Weekday Trip Rate	size/day	3.93000	0.00000
Manufacturing	Saturday Trip Rate	size/day	6.42000	0.00000

Manufacturing	Sunday Trip Rate	size/day	5.09000	0.00000

Appendix B

Focused Transportation Study

January 30, 2025

Mr. Troy Leyva
TNLDB Architecture
1640 Stockton Street, Unit 330132
San Francisco, CA 94133

DRAFT Focused Transportation Study for the 1111-1133 Aladdin Avenue Project

Dear Mr. Leyva;

W-Trans has completed an evaluation of the potential transportation issues associated with the proposed project to be located at 1111-1133 Aladdin Avenue in San Leandro. The purpose of this letter is to set forth the project's anticipated trip generation and detail the analysis of the project's proposed access.

Project Description

The project as proposed would result in the demolition of an existing 44,758-square-foot administration building at 1133 Aladdin Avenue and the addition of 39,350 square feet of new manufacturing space to the building at 1111 Aladdin Avenue.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition, 2021, based on the "General Office Building" (LU #710) and "Manufacturing" (LU #140) rates as these land uses most closely match the proposed project. The project is not anticipated to generate any internal capture trips or warrant pass-by trip credits or any other trip reductions other than for removal of the existing office use. Based on the application of these rates, the project would be expected to generate an average of 187 trips per day, including 27 a.m. peak hour trips and 29 trips during the p.m. peak hour. With trip reductions applied for the removal of the existing office use, the anticipated net trip generation would include an average of 298 fewer trips each day, with 41 fewer trips during the morning peak hour and 36 fewer trips during the evening peak hour. These results are summarized in Table 1.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
	(ksf)	Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
General Office Building	-44,758	10.84	-485	1.52	-68	-60	-8	1.44	-65	-11	-54
Proposed											
Manufacturing	39,350	4.75	187	0.68	27	21	6	0.74	29	9	20
Total			**-298**		**-41**	**-39**	**-2**		**-36**	**-2**	**-34**

Note: ksf = 1,000 square feet

Vehicle Miles Traveled (VMT) Evaluation

Senate Bill (SB) 743 established the potential increase in Vehicle Miles Traveled (VMT) associated with a project as the basis for determining transportation impacts of development projects. Guidance provided by both the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018, and the *City of San Leandro's Proposed Guidelines for Analyzing VMT*, 2023, was used. These documents recommend the use of screening thresholds to quickly identify when a project can be expected to result in a less-than-significant impact without conducting a detailed study, per *CEQA Guidelines*, 15036(c)(3)(C), 15128, and Appendix G. The criteria used by the City of San Leandro states that industrial and warehouse uses located in areas where the baseline VMT for employees is below the existing regional average per employee could be considered as being in a low-VMT area and therefore presumed to have a less-than-significant VMT impact.

According to the Alameda County Travel Demand Model, the existing countywide VMT per employee for the Central Planning Area (which includes the City of San Leandro and project site) is 19.2 miles. Based on OPR guidance and the City's Proposed *Guidelines for Analyzing VMT*, an industrial project generating a VMT that is equal to this value would have a less-than-significant VMT impact. The *City of San Leandro's Proposed Guidelines for Analyzing VMT* publishes a screening map which shows that this project is located inside an area with a projected VMT per employee at least 15 percent below the regional average. Therefore, the project would be considered to have a less-than-significant VMT impact. A copy of the screening map showing VMT estimates in San Leandro is enclosed.

Finding – Based on guidance provided by the State of California and the City of San Leandro, the proposed project would screen out from further VMT analysis because it is located within a low-VMT area and therefore could be presumed to have a less-than-significant impact to VMT.

Site Access

Vehicle access to the site is currently available via three driveways on Aladdin Avenue. The proposed project would include removing all three existing driveways and the construction of two new driveways. Both new driveways would have full access and be located on Aladdin Avenue, approximately 360 feet and 980 feet east of Teagarden Street, respectively.

Sight Distance

At driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting to enter the street and the driver of an approaching vehicle. Sight distances along Aladdin Avenue at each of the proposed project driveway locations were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. Although sight distance requirements are not applicable to urban driveways, for evaluation purposes the stopping sight distance criterion was applied, which uses the approach travel speed as the basis for determining the recommended sight distance. Based on the posted speed limit of 25 miles per hour (mph), the minimum stopping sight distance required on Aladdin Avenue is 150 feet. A review in the field shows that sight distances at both proposed project driveways would exceed 150 feet in both directions. Therefore, the sight lines at both driveways would be adequate.

To maintain these sight distances and comply with Chapter 4.08.148 of the *San Leandro Zoning Code*, it is noted that any vegetation near the project's driveways should be trimmed to an appropriate height of less than three feet and trees trimmed so that nothing hangs below a height of seven feet from the surface of the roadway. Additionally, it is recommended that on-street parking be restricted to at least 15 feet on either side of the project driveways on Aladdin Avenue.

For a motorist traveling eastbound on Aladdin Avenue intending to turn left into a project driveway, the stopping sight distance looking east along Aladdin Avenue is also greater than 150 feet, providing adequate visibility to

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allow a following driver to observe and react to a vehicle that may stop in the roadway before making a left turn into any of the project driveways.

Finding – Adequate sight distance is available at both proposed driveway locations for all turning movements entering and exiting the site.

Recommendations – To maintain the appropriate minimum sight distances at each driveway access point, it is recommended that on-street parking be prohibited for 15 feet on either side of the driveways. Also, it is recommended that vegetation along the project frontage on Aladdin Avenue be trimmed as necessary to ensure adequate sight lines.

Site Circulation

On-site circulation was evaluated to determine if the layout would provide adequate circulation and room for interactions between pedestrians walking and vehicles maneuvering through the parking lot. Based on a review of the site plan, the internal drive aisles are expected to provide acceptable circulation for motorized vehicles and clearly marked paths for all pedestrians (including those with disabilities) between the building entrances, all areas of the parking lot and sidewalks along Aladdin Avenue. All curb ramps would include tactile warning strip surfaces.

The project's driveways and internal parking lot circulation network would be designed to meet current City standards and so can be expected to accommodate the access requirements for passenger vehicles. Vehicle access within the internal parking lot would be provided via a network of connected 26-foot-wide drive aisles. Each driveway would also be at least 35 feet wide where they meet Aladdin Avenue. The parking lot drive aisles would contain sufficient width to accommodate two-way traffic operations for circulating vehicles, as well as parking maneuvers to/from perpendicular parking spaces.

The *San Leandro Municipal Code,* Chapter 7-5-800 states that the California Fire Code is hereby adopted as the "Fire Code" of the City of San Leandro. Emergency response vehicles would be able to access the site via the two driveways on Aladdin Avenue as well as the network of internal drive aisles within the parking lot. All of the proposed internal aisles would be 26 feet wide, which exceeds the minimum width of 20 feet for fire access required by the *California Fire Code, Section 503.2.1,* which states, "Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than thirteen feet and six inches." Therefore, access and on-site circulation would be adequate to accommodate turning movements for emergency vehicles.

It is noted that the Alameda County Fire Department has sole responsibility for determining the suitability of the project site for adequate fire apparatus vehicle access. Since all roadway users must yield the right-of-way to emergency vehicles when using their sirens and lights, the added project-generated traffic would not impact access for emergency vehicles.

Finding – Paved pedestrian pathways are proposed between the project building and sidewalks on Aladdin Avenue. Pedestrian access between the building and all areas of the parking lot would be adequate. Vehicle circulation in the parking lot is anticipated to be adequate. Adequacy of emergency access and response would be provided at the project site since emergency vehicles can access the site from the public street and all roadway users must yield to emergency vehicles when using their lights and sirens.

Conclusions and Recommendations

- The proposed project would be expected to generate an average of 187 daily trips, including 27 during the morning peak hour and 29 during the evening peak hour. This represents a decrease of 298 trips each day with 41 fewer trips during the morning peak hour and 36 fewer trips during the evening peak hour when compared to the existing land use.

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- The proposed project would screen out from further VMT analysis since it would be located within a low-VMT area.

- Sight lines at the proposed driveway locations are adequate for the posted speed limits. To preserve the minimum sight distance of requirements at each driveway access point, it is recommended that parking be prohibited for 15 feet on either side of each project driveway. Further, to maintain adequate sight lines, vegetation along Aladdin Avenue should be trimmed to ensure that all landscaping lies below three feet in height or above seven feet.

- Emergency access and on-site circulation are anticipated to function acceptably, and traffic from the proposed development would be expected to negligibly affect emergency response times.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Kenny Jeong, PE (Traffic)
Senior Engineer

Mark Spencer, PE (Traffic)
Senior Principal

MES/kbj/SLE027.L1

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Appendix C

Arborist Report

Preliminary Arborist Report

1111 Aladdin Avenue
San Leandro, CA

PREPARED FOR:
TNLDB Architecture
1640 Stockton Street, Unit 330132
San Francisco, CA 94113

PREPARED BY:
HortScience | Bartlett Consulting
2550 Ninth Street, Suite 112
Berkeley, CA 94710

January 2025

Preliminary Arborist Report

1111 Aladdin Avenue
San Leandro, CA

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Exhibits

Tree Assessment Form

Tree Assessment Map

Preliminary Tree Disposition

Preliminary Arborist Report

1111 Aladdin Avenue
San Leandro, CA

Introduction and Overview

TNLDB Architecture is preparing plans to renovate the property at 1111 Aladdin Avenue in San Leandro. HortScience | Bartlett Consulting (Divisions of The F. A. Bartlett Tree Expert Co.) was asked to prepare a **Preliminary Arborist Report** for the project site for submission to the City of San Leandro. The structure will be located on an existing sports field.

This report provides the following information:

1. An assessment of tree health, structure, and suitability for preservation.
2. A preliminary assessment of the impacts of constructing the proposed project and recommendations for action.
3. Preliminary tree preservation guidelines.

Assessment Methods

Trees were assessed on January 8, 2025. Trees with a trunk diameter of 6 inches or greater located in or overhanging the project area were included in the assessment. The assessment procedure consisted of the following steps:

1. Identifying the tree species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54 inches above grade;
4. Evaluating the health and structural condition using a scale of 0 – 5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig, and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
   - ***0*** - Tree is dead.
5. Rating the suitability for preservation as “high”, “moderate” or “low”. Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
   - ***High***: Trees with good health and structural stability that have the potential for longevity at the site.
   - ***Moderate***: Trees with somewhat declining health and/or structural defects that can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in ‘good’ category.
   - ***Low***: Trees in poor health or with significant structural defects that cannot be mitigated. Trees are expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

Thirty-eight (38) trees were assessed, representing three species (Table 1). Brisbane box was the most common with 27 trees, followed by cajeput paperbark tree with 10. Most were in landscaping islands throughout the parking lot and in a narrow landscaping strip near the west building. One Yoshino cherry was also assessed. Every tree was in poor or very poor condition. The trees had recently been severely and improperly pruned, removing most live foliage by topping.

Descriptions of each tree are found in the ***Tree Assessment Form*** and approximate locations are shown on the ***Tree Assessment Map*** (see Exhibits).

Table 1: Condition ratings and frequency of occurrence of trees
1111 Aladdin Avenue, San Leandro

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Brisbane box	*Lophostemon confertus*	27	-	-	**27**
Cajeput paperbark tree	*Melaleuca quinquenervia*	10	-	-	**10**
Yoshino cherry	*Prunus* x *yedoensis*	1	-	-	**1**
Total		**38**	**-**	**-**	**38**

Each of the 27 Brisbane boxes were in poor condition, having been repeatedly topped (Photo 1). Little live foliage was present on any tree. Root space was limited in the landscape islands and in the narrow strip along the building. Trunk diameters measured between 3 – 14 inches.



Photo 1: Brisbane box #482 had been topped and was in poor condition. Note topped cajeput paperbark trees in the background, left.

Ten (10) cajeput paperbarks were in poor or very condition. As with the Brisbane boxes, all had been topped. Most had also been sheared to remove much of the remaining living foliage (Photo 1). Several had multiple stems that arose below 4 feet. Individual stem diameters ranged from 6 – 15 inches.

Yoshino cherry #9 was in poor condition. The tree had been topped and most interior branching had been removed, also known as lion-tailing. The trunk measured 9 inches in diameter.

Protected Trees in San Leandro

Section 5-2-200 of the San Leandro Municipal Code protects street trees and requires permits for their removal. No street trees were present at the site at the time of my visit.

Protected status of each tree is provided in the ***Tree Assessment Form*** (see exhibits).

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability, and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health present a low risk of damage or injury if they fail.

We must be concerned, however, about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure, and death should be allowed to continue.
Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than non-vigorous trees are. All trees assessed were in poor or very poor condition, and have limited ability to respond to site changes. Repeated topping depletes stored energy and lessens photosynthetic capacity, thus reducing a tree's capacity to regenerate tissue.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are more likely to fail. Trees that have been topped have poor structural integrity as weakly-attached sprouts from the cut points grow in size. They are poor candidates for preservation.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. For example, Brisbane box is relatively tolerant of root loss. Yoshino cherry is intolerant.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Invasiveness**
  Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (https://www.cal-ipc.org/paf/) lists species identified as being invasive. San Leandro is part of the Central Western California Region of the California Floristic Province. No species encountered were listed as having invasive potential.

Each tree was rated for suitability for preservation based upon its age, health, structural condition, and ability to safely coexist within a development environment (Table 2).

Table 2: Tree suitability for preservation.
1111 Aladdin Avenue, San Leandro

High	Trees in good health and with structural stability that have the potential for longevity at the site. No trees had high suitability.
Moderate	Trees in fair health and/or with structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter lifespans than those in the "high" category. No trees had moderate suitability.
Low	Trees in poor health or with significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. All 38 trees had low suitability for preservation.

We consider trees with high suitability for preservation to be the best candidates for preservation. Retention of trees with moderate or low suitability for preservation depends upon the intensity of proposed site changes and the use nature of the site.

Preliminary Evaluations of Impacts and Recommendations

Appropriate tree retention develops a practical match between the location and intensity of construction activities with the quality and health of trees. The ***Tree Assessment*** was the reference point for tree condition and quality. Impacts from construction were estimated using a conceptual site plan (*TNLDB, dated 11/11/24*). As such, this evaluation of impacts is preliminary.

The site plan depicted demolition of the west building and construction of a parking lot in its place. The existing building to the east will be extended to the west and south. Most trees were within the construction footprint.

All trees within the existing site were in poor condition and had a low suitability for preservation. Due to the major structural defects from past toppings, I originally recommended that all be removed and replaced. I do not expect the trees to tolerate the proposed site changes well, or preservation to be successful in the long-term. Based on my review of the plans and conversations with the client, 27 trees were within the construction footprint and will be removed. Eleven (11) have been identified by the client for preservation.

Of the 11 trees to be preserved:

- The landscape planters around Brisbane boxes #468 and 473 – 478 are identified to be expanded in the new plan. I expect impacts to be either moderate or severe.

- Trees #502 – 504 are immediately adjacent to the building to be demolished. Once demolished, the building will be replaced by a lunch area to the north of trees #502 and 503 and landscaping to the north of #504. These trees will require diligent and careful protection during demolition to not be mechanically damaged by equipment or falling debris. I expect impacts to be severe.

- Brisbane box #481 was located in an approximately 8-foot-wide landscape island. The plan proposes to realign the planter to be approximately 4-feet-wide. The new curbs will be approximately 2 feet from either side of the trunk. I expect impacts to be severe.

The care with which work is performed around the trees and all parties committing to the **Preliminary Tree Preservation Guidelines** (following page) may improve the chances of successful tree preservation. Given the planned construction, impacts may still exceed the tolerance of the trees.

Preliminary Tree Preservation Guidelines

The following recommendations will help reduce impacts to trees from development as well as maintain and improve their health and vitality through the clearing, grading, and construction phases. The key elements of a tree preservation plan for 1111 Aladdin Avenue project would include:

- Establishing **Tree Protection Zones (TPZ)** for each tree to be preserved. **Tree Protection Zones** are identified by the Consulting Arborist based on species tolerances, tree condition, trunk diameters and the nature and proximity of the proposed disturbance. For design purposes, **Tree Protection Zones** for trees to be preserved shall be as follows:
  - Trees #468 and #473 – 478: edge of existing landscape planter. Expand the **Tree Protection Zone** to the extent of the new landscape planters once they are constructed.
  - Tree #502, 503, and 504: edge of existing landscape area in all directions. The east edge of the **TPZ** near tree #502 may need to be adjusted during construction to match the proposed extent.
  - Tree #481: edge of proposed landscape planter.

Design recommendations

1. All revised plans depicting improvements near trees shall be reviewed by the Consulting Arborist regarding tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.

2. Irrigation systems must be designed so that no trenching severs roots larger than 1 inch in diameter within the **Tree Protection Zone**.

3. Tree Preservation Guidelines prepared by the Project Arborist, which include specifications for tree protection during demolition and construction, must be included within the plan set. Reference to the Arborist Report is not sufficient.

Pre-demolition and pre-construction treatments and recommendations

1. The demolition contractor shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection. Demolition near trees #502, 503, and 504 will require pulling the building inwards to prevent damage to the trees.

2. Trees to be preserved may require pruning after the spring flush of epicormic sprouting in response to topping. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). Ensure all pruning is done by Certified Arborist or Certified Tree Worker in accordance with the latest edition of the Best Management Practices for Pruning (International Society of Arboriculture), and adheres to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300). The Consulting Arborist may provide pruning specifications prior to site demolition upon request. Branches extending into the work area that can remain following demolition should be tied back and protected from damage where possible. Do not top trees.

3. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. Tree pruning and removal should be scheduled outside of the breeding season to avoid scheduling delays. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for tree protection during construction

1. Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.

2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.

3. Any demolition or excavation work that is expected to encounter tree roots should be monitored by the Consulting Arborist.

4. Tree protection measures are to remain until all site work has been completed. Protection may not be relocated or removed without permission of the Consulting Arborist.

5. Construction trailers, traffic, and storage areas must always remain outside Tree Protection Zones areas.

6. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

7. Any root pruning required for construction purposes shall receive prior approval of and be supervised by the Project Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2 inches in diameter should be avoided.

8. If roots 2 inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Project Arborist must be consulted to evaluate the effects on the health and stability of the tree and recommend treatment.

9. Spoil from trench, footing, utility, or other excavation shall not be placed within the Tree Protection Zone, neither temporarily nor permanently.

10. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the Tree Protection Zone. Any modifications must be approved and monitored by the Project Arborist.

11. No excess soil, chemicals, debris, equipment, or other materials shall be dumped or stored within the Tree Protection Zone.

12. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.

Maintenance of impacted trees
Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. Inspect trees annually and following major storms to identify conditions requiring treatment to manage risk associated with tree failure.

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client.

If you have any questions about my observations or recommendations, please contact me.

HortScience | Bartlett Consulting



Ryan Suttle, Consulting Arborist & Urban Forester
ISA Board Certified Master Arborist, Utility Specialist No. WE-12647BU
ISA Tree Risk Assessment Qualified
ASCA Registered Consulting Arborist #813

Exhibits

Tree Assessment Form

Tree Assessment Map

Preliminary Tree Disposition

Tree Assessment

1111 Aladdin Avenue
San Leandro, CA
January 2025

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
468	Brisbane box	8,7,5	No	2	Low	In 4-foot wide planter; repeatedly topped; multiple attachments at 3 feet.
469	Brisbane box	10	No	2	Low	In large planter; repeatedly topped; multiple attachments at 6-8 feet; 6-inch girdling root N.
470	Brisbane box	13	No	2	Low	In 6-foot planter; repeatedly topped; multiple attachments at 7
471	Brisbane box	9	No	2	Low	In parking lot planter; repeatedly topped.
472	Brisbane box	11	No	2	Low	In parking lot planter; repeatedly topped; base obscured by
473	Brisbane box	9	No	2	Low	In parking lot planter; repeatedly topped; base obscured by
474	Brisbane box	13	No	2	Low	In parking lot planter; repeatedly topped; base obscured by
475	Brisbane box	8	No	2	Low	In parking lot planter; repeatedly topped.
476	Brisbane box	14	No	2	Low	In parking lot planter; repeatedly topped.
477	Brisbane box	10	No	2	Low	In parking lot planter; repeatedly topped; base obscured by
478	Brisbane box	7	No	2	Low	In parking lot planter; repeatedly topped; base obscured by
479	Brisbane box	6,6,6,5,4,3	No	2	Low	In parking lot planter; repeatedly topped; multiple attachments at base.
480	Brisbane box	9	No	2	Low	In parking lot planter; repeatedly topped.
481	Brisbane box	10	No	2	Low	In parking lot planter; repeatedly topped.
482	Brisbane box	10	No	2	Low	In parking lot planter; repeatedly topped.
483	Brisbane box	8	No	2	Low	In small landscape planter; repeatedly topped; swollen base.
484	Brisbane box	8	No	2	Low	In small landscape planter; repeatedly topped.
485	Cajeput paperbark tree	15	No	2	Low	In small landscape planter; large surface roots along side S.; topped; pervasive twig dieback.
486	Brisbane box	8	No	2	Low	In small landscape planter; repeatedly topped.
487	Brisbane box	7	No	1	Low	In small landscape planter; repeatedly topped; little branching
488	Brisbane box	7	No	1	Low	In small landscape planter; repeatedly topped; little branching

Tree Assessment

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San Leandro, CA
January 2025

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
489	Cajeput paperbark tree	11,6	No	2	Low	In 5' planter between sidewalk and building; topped; poor structure; large girdling roots.
490	Cajeput paperbark tree	9,7	No	2	Low	In 5' planter between sidewalk and building; topped; poor structure; large surface roots.
491	Cajeput paperbark tree	13	No	2	Low	In 5' planter between sidewalk and building; topped; poor structure.
492	Cajeput paperbark tree	9	No	2	Low	In 5' planter between sidewalk and building; topped; poor structure; large surface roots.
493	Cajeput paperbark tree	10	No	1	Low	In 5' planter between sidewalk and building; topped; poor structure; little live foliage left.
494	Cajeput paperbark tree	10,6	No	1	Low	In 5' planter between sidewalk and building; topped; poor structure; little live foliage left; large surface roots.
495	Brisbane box	6	No	1	Low	In small landscape planter; repeatedly topped; little branching left; very high root collar and many surface roots.
496	Cajeput paperbark tree	11,7	No	1	Low	In 5' planter between sidewalk and building; topped; poor structure; little live foliage left.
497	Cajeput paperbark tree	8,7,7	No	1	Low	In 5' planter between sidewalk and building; topped; poor structure; little live foliage left.
498	Cajeput paperbark tree	11	No	1	Low	In 5' planter between sidewalk and building; topped; poor structure; little live foliage left; large surface roots.
499	Brisbane box	6	No	1	Low	In small landscape planter; repeatedly topped; little branching left; very high root collar and many surface roots.
500	Brisbane box	10	No	2	Low	In parking lot planter; repeatedly topped.
501	Brisbane box	11	No	2	Low	In parking lot planter; repeatedly topped.
502	Yoshino cherry	9	No	2	Low	Multiple attachments at 2', measured below; topped and lion
503	Brisbane box	9	No	1	Low	In larger planter between sidewalk and building; repeatedly topped; little foliage remains.
504	Brisbane box	10	No	2	Low	In larger landscape basin; repeatedly topped.

Tree Assessment

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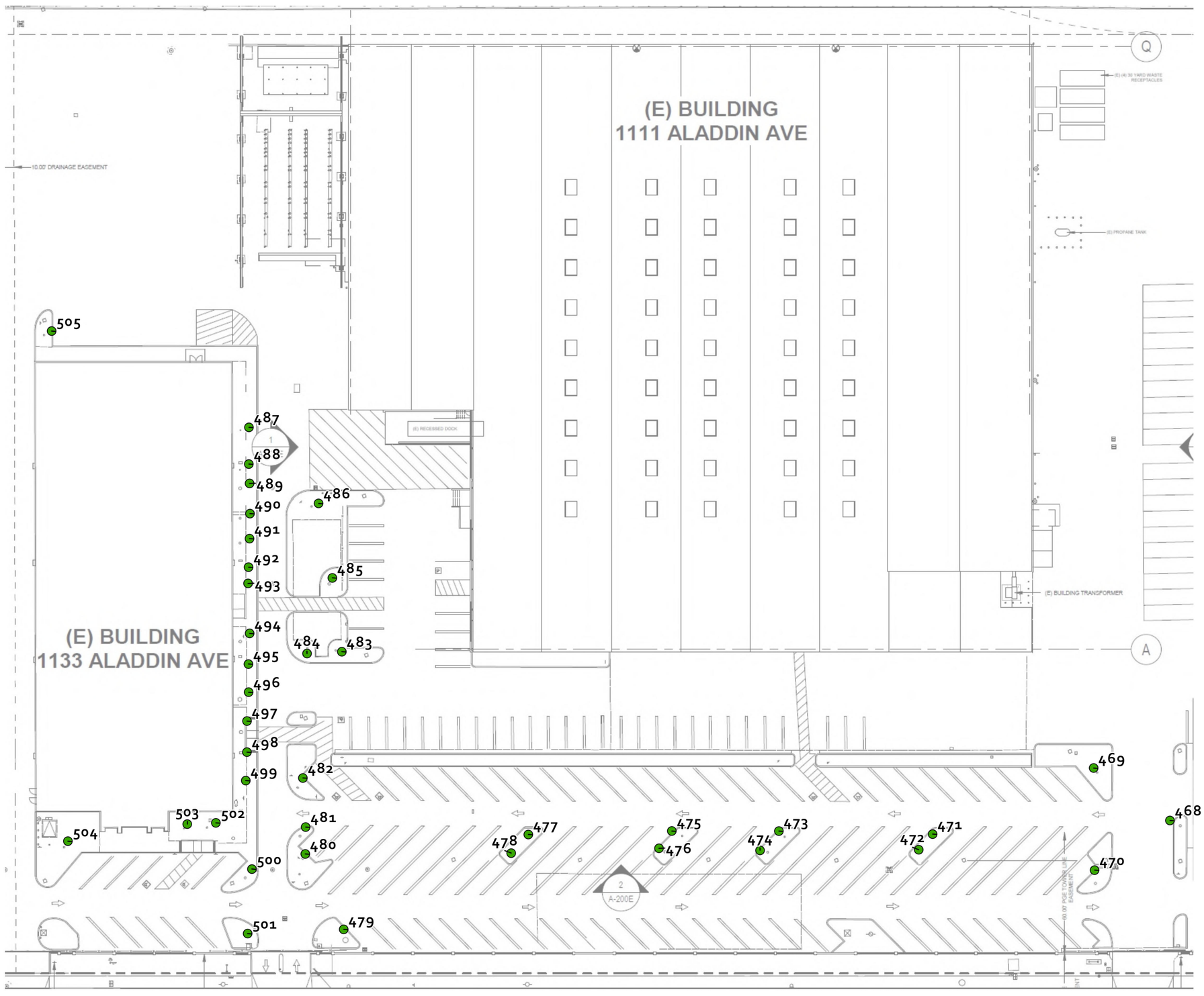
Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
505	Brisbane box	9	No	2	Low	In small landscape basin; topped.

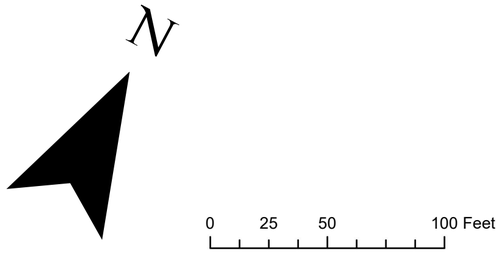
Tree Inventory Map

1111 Aladdin Avenue
San Leandro, CA

Prepared For:
TNLDB Architecture
1640 Stockton Street, Unit 330132
San Francisco, CA 94113

January 2025





Note that tree locations are approximate

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Preliminary Tree Disposition

1111 Aladdin Avenue
San Leandro, CA
January 2025

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Tree No.	Species	Trunk Diameter (in.)	Street Tree?	Disposition	Comments
468	Brisbane box	8,7,5	No	Preserve	Enlarging landscape planter.
469	Brisbane box	10	No	Remove	In project footprint
470	Brisbane box	13	No	Remove	In project footprint
471	Brisbane box	9	No	Remove	In project footprint
472	Brisbane box	11	No	Remove	In project footprint
473	Brisbane box	9	No	Preserve	Enlarging landscape planter.
474	Brisbane box	13	No	Preserve	Enlarging landscape planter.
475	Brisbane box	8	No	Preserve	Enlarging landscape planter.
476	Brisbane box	14	No	Preserve	Enlarging landscape planter.
477	Brisbane box	10	No	Preserve	Enlarging landscape planter.
478	Brisbane box	7	No	Preserve	Enlarging landscape planter.
479	Brisbane box	6,6,6,5,4,3	No	Remove	In project footprint
480	Brisbane box	9	No	Remove	In project footprint
481	Brisbane box	10	No	Preserve	Shrinking landscape planter.
482	Brisbane box	10	No	Remove	In project footprint
483	Brisbane box	8	No	Remove	In project footprint
484	Brisbane box	8	No	Remove	In project footprint
485	Cajeput paperbark tree	15	No	Remove	In project footprint
486	Brisbane box	8	No	Remove	In project footprint
487	Brisbane box	7	No	Remove	In project footprint
488	Brisbane box	7	No	Remove	In project footprint
489	Cajeput paperbark tree	11,6	No	Remove	In project footprint
490	Cajeput paperbark tree	9,7	No	Remove	In project footprint
491	Cajeput paperbark tree	13	No	Remove	In project footprint
492	Cajeput paperbark tree	9	No	Remove	In project footprint
493	Cajeput paperbark tree	10	No	Remove	In project footprint
494	Cajeput paperbark tree	10,6	No	Remove	In project footprint
495	Brisbane box	6	No	Remove	In project footprint
496	Cajeput paperbark tree	11,7	No	Remove	In project footprint
497	Cajeput paperbark tree	8,7,7	No	Remove	In project footprint
498	Cajeput paperbark tree	11	No	Remove	In project footprint
499	Brisbane box	6	No	Remove	In project footprint

Preliminary Tree Disposition

1111 Aladdin Avenue
San Leandro, CA
January 2025

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Tree No.	Species	Trunk Diameter (in.)	Street Tree?	Disposition	Comments
500	Brisbane box	10	No	Remove	In project footprint
501	Brisbane box	11	No	Remove	In project footprint
502	Yoshino cherry	9	No	Preserve	Edge of demolition
503	Brisbane box	9	No	Preserve	Edge of demolition
504	Brisbane box	10	No	Preserve	Edge of demolition
505	Brisbane box	9	No	Remove	In project footprint

Appendix D

Cultural Resources Assessment

Rincon Consultants, Inc.
66 Franklin Street, Suites 352 and 357
Oakland, CA 94607
510-834-4455

May 8, 2026
Project No: 25-18529

Anne Wong
City of San Leandro
Community Development Department
835 East 14th Street
San Leandro, California 94577
Via email: AWong@sanleandro.org

Subject: Cultural Resources Assessment for the 1111 Aladdin Avenue Industrial Project (PLN24-0036), 1111 Aladdin Avenue, San Leandro, California

Dear Ms. Wong:

The City of San Leandro (City) retained Rincon Consultants, Inc. (Rincon) to support the 1111 Aladdin Avenue Industrial Project's (PLN24-0036) (proposed project) compliance with the California Environmental Quality Act (CEQA). This letter report documents the methods and results of a California Historical Resources Information System (CHRIS) records search, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, archival and background research, geoarchaeological review, and evaluation of 1111-1133 Aladdin Avenue. Work was completed in accordance with CEQA and applicable local regulations. The City is lead agency for the purposes of CEQA.

Project Site

The project site is approximately 7.3 acres and is comprised of one parcel, Assessor's Parcel Number (APN) 077A-0648-003-12, zoned as Industrial General (IG). Specifically, the proposed project encompasses portions of Township 2 South, Range 3 West on the *San Leandro, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Attachment 1, Figure 1). The site is currently developed with two buildings, a manufacturing warehouse at 1111 Aladdin Avenue and a two-story office building located at 1133 Aladdin Avenue. Light industrial uses surround the project to the north, south, east, and west (Attachment 1, Figure 2). The project would involve demolition of the existing office building, minor demolition of a portion of the 1111 Aladdin Avenue structure, and the subsequent expansion of the 1111 Aladdin Avenue structure. The expansion would include the addition of new building area, and reconfigured parking areas. The proposed warehouse structure would have a maximum height of 36 feet.

Construction of the project is anticipated to begin in June 2027 and would last approximately seven months. The maximum depth of excavation for construction of the proposed expansion of 1111 Aladdin Avenue is expected to reach approximately 4.3 feet below the ground surface for utilities.

Methods

This section presents the methods for each task completed during the preparation of this assessment.

Background and Archival Research

Rincon completed background and archival research in support of this assessment in January and February 2026. A variety of primary and secondary source materials were consulted. Sources included,

but were not limited to, historical maps, aerial photographs, and written histories of the area. The following sources were utilized to develop an understanding of the project site and its context:

- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Sanborn Fire Insurance Company Maps accessed through the Los Angeles County Public Library
- Historical USGS topographic maps
- Historical newspaper clippings obtained from Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection
- Various historical records via Ancestry.com

California Historical Resources Information System Records Search

On February 18, 2025, Rincon received California Historical Resources Information System (CHRIS) records search results (records search number 25-1103) from the Northwest Information Center (NWIC). The NWIC is the official state repository for cultural resources records and reports for Alameda County. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.25-mile radius. Rincon also reviewed the NRHP, CRHR, California Historical Landmarks list, and the Built Environment Resources Directory (BERD). Additionally, Rincon reviewed the Archaeological Determination of Eligibility list. Non-confidential CHRIS records search files are provided in Attachment 2.

Sacred Lands File Search

Rincon contacted the NAHC on February 10, 2026, to request a search of the SLF and a contact list of Native Americans that are traditionally and culturally affiliated with the project area. No tribal outreach was conducted as part of this assessment.

Geoarchaeological Review

A desktop geoarchaeological review was conducted to assess the potential for subsurface archaeological resources to be present within the project site. Sources reviewed as part of this assessment include historical topographic maps, historical aerial photographs, geologic maps, and soil survey maps. The intent of the review was to provide a land use history of the project site and its vicinity, as well as to assess the likelihood for the project site to contain subsurface archaeological deposits.

Findings

This section presents the findings for each task completed during the preparation of this assessment.

California Historical Resources Information System Records Search

Previous Cultural Resources Studies

The CHRIS records search and background research identified 21 cultural resources studies within the project site and 0.25 mile radius (Attachment 2). Of these studies, 17 are regional histories which do not include site specific surveys or identification of historical resources. The remaining 4 studies

are located outside the project site. Therefore, the project site has not been previously surveyed or studied.

Previously Recorded Cultural Resources

The CHRIS records search and background research identified no cultural resources within a 0.25 mile of the project site. No resources are recorded within or adjacent to the project site.

Review of the NRHP and BERD for Alameda County did not identify any historic resources within or adjacent to the project site. Review of the CRHR, State Historic Landmarks, and State Points of Interest identified one historic resource adjacent to the project site, San Leandro Ball Park (2663 Teagarden Street). The resource is two doors down west of the project site and listed as a California Point of Interest (P166) on March 19, 1970.

Additionally, the City provided a previous evaluation of 1111 Aladdin Avenue completed in 2025 (Shores 2025). Prepared on California Department of Parks and Recreation 523 Series Forms, the property was recommended ineligible for listing in the NRHP and CRHR under all criteria. It is not a historical resource as defined by CEQA Section 15064.5(a). The previous evaluation is provided in Attachment 4.

Sacred Lands File Search

On February 10, 2026, the NAHC responded to Rincon's SLF request, stating the results of the SLF search were negative, meaning that no sacred lands have been reported in the vicinity of the project site. See Attachment 3 for the NAHC response letter. The City, through consultation with tribes, may elicit information as to the specifics of any sacred lands in the vicinity of the project site, however, outreach to tribes was not conducted as part of this study and as such are not considered further in this report.

Aerial Imagery and Historical Topographic Maps Review

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps and aerials from 1899 to 1915 depict the project site as undeveloped and southwest of downtown San Leandro (USGS 1899, 1915). The area surrounding the project site is also undeveloped except for an unpaved road south and a Southern Pacific Railroad line east of the project site; the closest fresh body of water is depicted 1.5 miles north of the project site, San Leandro Creek (USGS 1899, 1915). Between 1942 and 1948, historic aerial images and topographic maps depict the property as undeveloped, and the area directly north of the project site is depicted with development along a paved road (USGS 1942, 1947, 1948; UCSB 1947; NETR Online 2026). Additionally, development is shown along the San Francisco Bay labeled "Hayward" (USGS 1942, 1947, 1948; UCSB 1947; NETR Online 2026).

Aerials from 1958 to 1965, the project site is depicted with the extant warehouse building and a second building which is no longer extant (NETR Online 2026; UCSB 1958, 1965). Additional industrial development is depicted surrounding the project site to the north and vacant land to the south, and Nimitz Freeway is depicted to the west (NETR Online 2026; UCSB 1958, 1965). An aerial from 1968 shows construction of an addition to the warehouse building, and aerials between 1980 and 2002 show several additions to the warehouse building and additional development to the south of the project site (NETR Online 2026, Google 2026). Between 2003 and 2022, aerials depict the demolition of the second building and construction of the extant office building (NETR Online 2026). The surrounding area is depicted with infill development.

Geologic and Soils Map Review

Geologic mapping indicates surficial quaternary alluvium and Pleistocene to Holocene aged marine deposits (map unit QU) mapped at the surface within the project site (Graymer 2000, Graymer et al. 1997).

Review of the Natural Resources Conservation Service Web Soil Survey (United States Department of Agriculture [USDA] 2026) indicates the project site consists of the Clear Lake clay, a deep, poorly drained soil that forms on alluvial material derived from mixed rock sources. Clear lake soils are in flood basins, flood plains, and in swales of drainageways with slopes of 0 to 5 percent (USDA 2018). The typical Clear Lake series soil profile consists of a shallow clay (Ag-horizon) from depths of 0 to 13 inches below the ground surface followed by clay Bssg1, Bssg2 grading into clay Bssk horizons 13 to 60 inches below the ground surface (USDA 2018).

A horizons are the primary horizons wherein archaeological materials would be typically deposited. There are different classes of A horizons, including Ag horizons, which are A horizons that have been disturbed by agricultural activities such as plowing, and Ab horizons, which are buried A horizons that have been buried by depositional processes. They have the greatest likelihood of containing intact subsurface archaeological deposits (Waters 1992). An Ab horizon was not identified during the desktop soil map review for the project site (USDA 2018).

The project site is located east of the San Francisco Bay Area. The project site is relatively flat with an elevation 40 feet above mean sea level. The closest water source to the project site is the San Francisco Bay (2.0 miles to the west).

Archaeological Sensitivity Summary

The project site is located within a developed and industrialized portion of the city and is underlain by surficial quaternary alluvium and Pleistocene to Holocene aged marine deposits. These sediments are conducive to the natural burial and preservation of archaeological resources given they were deposited during the Holocene age (11,700 years ago to present) a period that dates to human occupation of the region (Meyer and Rosenthal 2007). There are no perennial water sources near the project site, and the San Francisco Bay is approximately 2.0 miles to the west. The CHRIS results identified no precontact or historic-period archeological resources within the project site or the 0.25 mile search radius. The SLF search yielded negative results meaning that sacred lands have not been reported in the vicinity of the project site.

Based on the historic map review, the proposed project site has been subject to previous disturbance, including agricultural use since at least 1939 and into the 1950s. The project site was graded and developed for industrial use since 1959 with the development, addition and removal of above and underground structures and features (e.g. underground storage tanks) over time. The degree of previous disturbance within the project site reduces the likelihood for encountering intact subsurface archaeological deposits during project construction. Archaeological sensitivity for the project site is low.

Conclusions and Recommendations

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form:

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, we have chosen to limit analysis under Threshold A to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

Historical Built Environment Resources

Based on background and archival research and CHRIS records search one built-environment resource, 1111-1133 Aladdin Avenue, was identified in the project site. The property was evaluated in 2025 as ineligible for listing in the NRHP and CRHR. Therefore, 1111-1133 Aladdin Avenue is not a historical resource as defined by CEQA Section 15064.5(a).

The San Leandro Ball Park (2663 Teagarden Street), a California Point of Interest (P166), was identified approximately 0.10 miles west of the project site. The project proposes to demolish and expand the existing warehouse and would not directly or indirectly impact the ballpark because project activities would remain within APN 077A-0648-003-12.

Because 111-1133 Aladdin Avenue is ineligible for the NRHP and CRHR, and the San Leandro Ball Park will not be impacted by the proposed project, the proposed project would result in ***no impact to historical resources*** under CEQA.

Historical and Unique Archaeological Resources

The CHRIS records search and background research identified no archaeological resources within or immediately adjacent to the project site. The geoarchaeological review suggests the likelihood for encountering intact subsurface archaeological resources is low given the soils, proximity to water, lack of documented resources within 0.25 miles of the project site, and previous grading and development of the project site. As such, project-related ground disturbance is not likely to encounter intact subsurface archaeological resources that may qualify as historical resources or unique archaeological resources pursuant to CEQA. However, unanticipated discoveries during construction remain a possibility. Rincon presents the following recommended mitigation measure for unanticipated discoveries during construction. With adherence to this measure, Rincon recommends a finding of ***less-than-significant impact*** with mitigation for archaeological resources under CEQA.

The proposed project would be required to comply with the following City of San Leandro Standard Conditions of Approval (COA) related to the unanticipated discovery or archaeological resources and human remains, which would reduce impacts related to archaeological resources:

Standard COA – Discovery of Historic/Prehistoric Artifacts or Human Remains

If currently unknown historic/prehistoric artifacts or human remains are discovered during ground disturbing activities, the following measures shall be implemented:

a. In compliance with State law (Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code), in the event that historical artifacts are found, all work within 50 feet of the find shall stop and a qualified archaeologist shall examine the

find. The archaeologist shall then submit a plan for evaluation of the resource to the City of San Leandro Planning Services Division for approval.

b. If the evaluation of the resource concludes that the found resource is eligible for the California Register of Historic Resources, a mitigation plan shall be submitted to the City of San Leandro Planning Services Division for approval, which shall consider reasonable efforts for the resources to be preserved in place or left in an undisturbed state.

c. If the artifacts and samples recovered during construction are determined to be significant and cannot be preserved in pace, the artifacts shall be cataloged and curated by a qualified archaeologist and placed in an appropriate curation facility. The mitigation plan shall be completed before earthmoving or construction activities can recommence within the designated resource area.

d. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will immediately identify a Native American most likely descendant (MLD) to inspect the site and provide recommendation.

Nonetheless, impacts would still remain potentially significant, and the below mitigation measure of Unanticipated Discovery of Cultural Resources would be required to provide additional specificity in the event that unanticipated cultural resources are discovered.

Unanticipated Discovery of Cultural Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 100 feet of the find shall halt and an archaeologist meeting or exceeding the Secretary of the Interior's Professional Qualifications Standards for Archeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, a Native American representative of the Confederated Villages of Lisjan Nation shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource is determined to be eligible for CRHR and significant impacts to the resource cannot be avoided via project redesign, the entity shall retain a Tribal representative and the qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR, Section 15126.4(b)(3)(C) and prepared in coordination with the Confederated Villages of Lisjan Nation. The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any potential significant impacts to the resource. The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall review and approve the treatment plan and archaeological testing, as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per CCR, Section 15126.4(b)(3)(C).

Human Remains

There are no known human remains within the project site. In the event that human remains are inadvertently encountered during ground disturbance activities, they will be treated consistently with the State of California Health and Safety Code Section 7050.5 which states that no further disturbance

shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of ***less than significant*** impact to human remains under CEQA.

Should you have any questions concerning this study, please do not hesitate to contact the undersigned at 619-841-2116 or alosco@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

Ashley Losco, MSHP
Assistant Project Manager

Kholood Abdo, MA, RPA
Senior Archaeologist

Margo Nayyar, MA
Cultural Resources Principal

Attachments

Attachment 1 Figures

Attachment 2 California Historic Records Inventory Search Results

Attachment 3 Sacred Lands File Search Results

Attachment 4 Page & Turnbull Evaluation of 1111 Aladdin Avenue

References

Google. 2026. Aerial photographs of the project site and surrounding area between 2002 and 2025. Accessed through Google Earth.

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----------. 1942. *Hayward, California* Topographic Map. Scale 1:62500. https://ngmdb.usgs.gov/topoview/viewer/#16/36.9879/-121.7798 (accessed January 2026).

----------. 1947. *San Leandro, California* Topographic Map. Scale 1:24000. https://ngmdb.usgs.gov/topoview/viewer/#16/36.9879/-121.7798 (accessed January 2026).

----------. 1948. *San Leandro, California* Topographic Map. Scale 1:24000. https://ngmdb.usgs.gov/topoview/viewer/#16/36.9879/-121.7798 (accessed January 2026).

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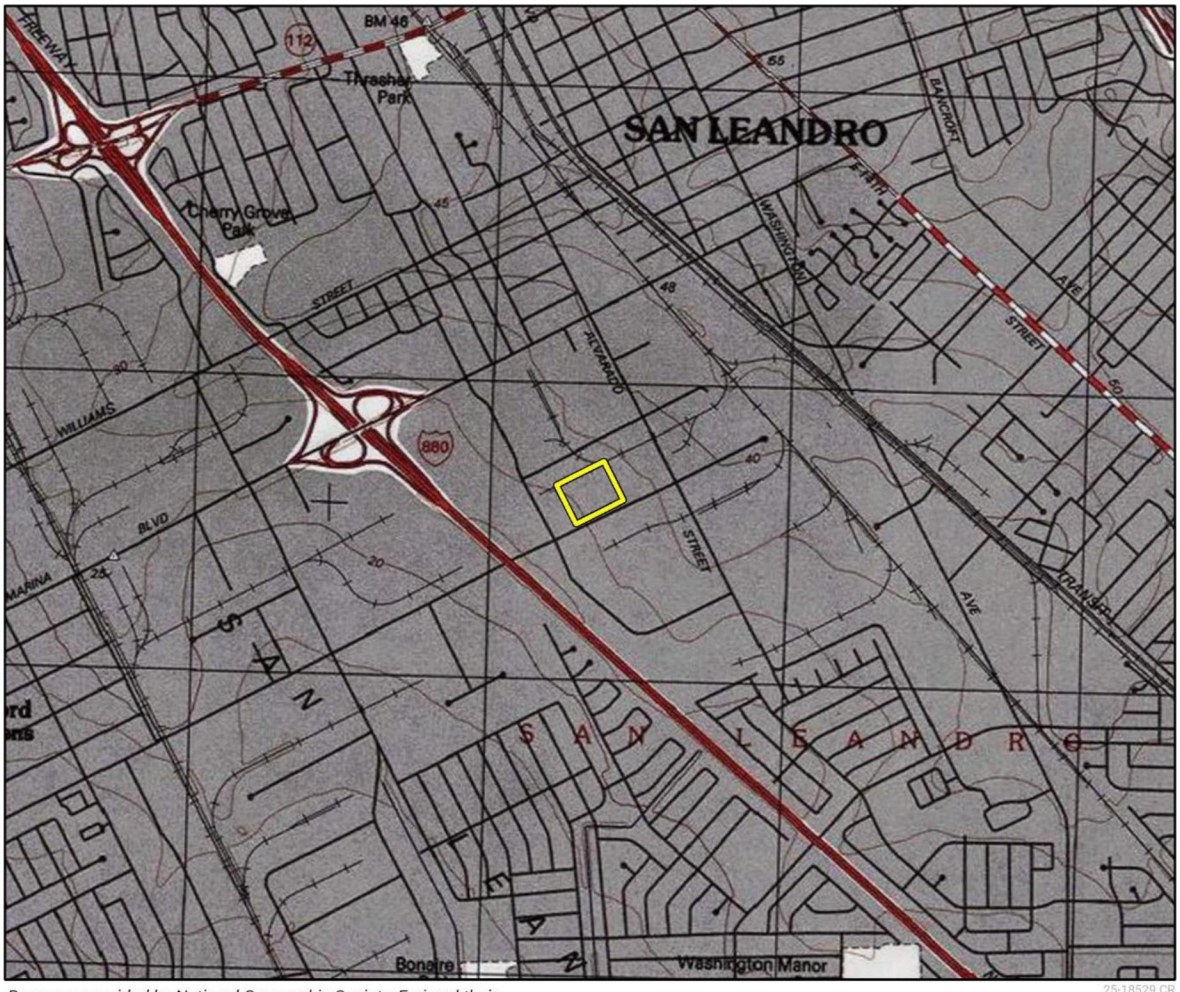
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Attachment 1

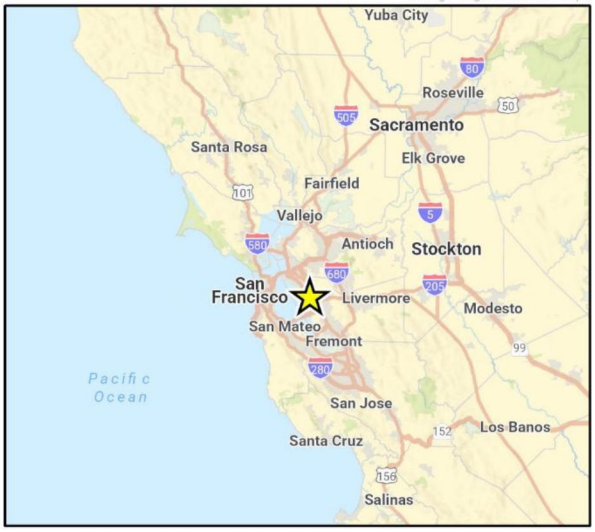
Figures

Figure 1 Regional Location Map



Basemap provided by National Geographic Society, Esri and their licensors © 2026. Map created by Rincon Consultants, Inc. 2026. San Leandro Quadrangle. T02S R03W S35. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

25-18529 CR
CR Fig 1 Regional Location Topo



Project Location

0 1,000 2,000 Feet

N

Figure 2 Project Location Map



Imagery provided by Esri and its licensors © 2026. Map created by Rincon Consultants, Inc. 2026.

25-18529 CR
CR Fig 2 Project Site

Attachment 2

California Historic Records Inventory Search Result

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

2/18/2026 NWIC File No.: 25-1103

Ashley Losco
Rincon Consultants, Inc.
180 N Ashwood Ave
Ventura, CA 93003

Re: 25-18529 1111 Aladdin Avenue

The Northwest Information Center received your record search request for the project area referenced above, located on the San Leandro USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a ¼ mile radius:

Resources within project area:	None listed
Resources within ¼ mile radius:	None listed
Reports within project area:	17: See list below (other reports)
Reports within ¼ mile radius:	S-036189; S-046322; S-046399; S-046599

Resource Database Printout (list):	☐ enclosed	☐ not requested	☒ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☐ not requested	☒ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☐ enclosed	☐ not requested	☒ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
OHP Archaeological Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Soil Survey Maps: ☐ enclosed ☒ not requested ☐ nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Soil Survey: https://alabamamaps.ua.edu/historicalmaps/soilsurvey/California/california.html

Shipwreck Inventory: https://www.slc.ca.gov/shipwrecks/

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Justin Murazzo

Justin Murazzo, Researcher

Other Reports in Project Location	
S-	848
S-	2458
S-	9462
S-	9583
S-	15529
S-	16660
S-	17773
S-	17835
S-	18217
S-	20395
S-	30204
S-	32596
S-	33239
S-	33600
S-	48927
S-	49780
S-	56662

Report List

25-1103 :: 25-18529 1111 Aladdin Avenue

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-036189	Caltrans - 04-ALA-880; PM 22.5-25.5; E-FIS Project # 0412000340; Caltrans - 4-ALA-880, PM 22.5-25.5; Caltrans - EA #04-248-3A9200; Caltrans - EA 0412000339/EA3A921	2009	Karin Goetter and Alexandra Merritt-Greenwald	Historic Property Survey Report for the Interstate 880 Southbound HOV Lane Improvement Project, Oakland and San Leandro, California; Expenditure Authorization #04-248-3A9200, 4-ALA-880, P.M. 22.5/25.5, Caltrans District 4	LSA Associates, Inc.	01-011493, 01-011494, 01-011495, 01-011496, 01-011497, 01-011498, 01-011499, 01-011500
S-036189a		2009	Karin Goetter and Alexandra Merritt-Greenwald	Archaeological Survey Report for the Interstate 880 Southbound HOV Lane Improvement Project; Oakland & San Leandro, Alameda County, CA	LSA Associates, Inc.	
S-036189b		2013	Adrian Whitaker	Supplemental Archaeological Survey Report for the Interstate 880 Southbound HOV Lane Project, Alameda County, CA	Far Western Anthropological Research Group, Inc.	
S-036189c		2013	Neal Kaptain	Supplemental Historic Property Survey Report; 4-ALA-880; PM 22-5-25.5; E-FIS Project # 0412000340	LSA Associates, Inc.	
S-036189d		2013	Michael Hibma	Historical Resources Evaluation Report for the Interstate 880 Southbound HOV Lane Improvement Project; Oakland & San Leandro, Alameda County CA; E-FIS # 0412000340 (formerly 00400000969) Former Expenditure Authorization # 3A920	LSA Associates, Inc.	
S-046322	OHP PRN - EDA_2014_0206_001	2014	Heidi Koenig	San Leandro Fiber Optic for Broadband Project, City of San Leandro, Alameda County, California; Cultural Resources Survey Report	ESA	
S-046322a		2014	Heidi Koenig	Addendum to the San Leandro Fiber Optic For Broadband Project, City of San Leandro, Alameda County, California	ESA	
S-046322b		2015	Heidi Koenig	Cultural Resources Monitoring Report, San Leandro Fiber Optic for Broadband Project, City of San Leandro, Alameda County, California	ESA	
S-046322c		2015	Heidi Koenig	Addendum #2 to the San Leandro Fiber Optic for Broadband Project, City of San Leandro, Alameda County	ESA	

Report List

25-1103 :: 25-18529 1111 Aladdin Avenue

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-046322d		2015	Carol Roland-Nawi	EDA_2014_0206_001; 2nd Area of Potential Effects Revision, San Leandro Fiber Optic Broadband Project, San Leandro, CA	California Office of Historic Preservation	
S-046399	Caltrans - EA 04-3G920; Caltrans - EIF 041000110	2015	Laura Leach-Palm and Chandra Miller	Historic Property Survey Report for the MTC Interstate 880 Express Lane Phase I Project, Alameda and Santa Clara Counties, California: State Route 84 04-ALA-84 PM R3.0-R6.1, State Route 92 04-ALA-92 PM R2.5-R6.5, Interstate 880, 04-SCL-880 PM 7.5-10.5, 04-ALA-880 PM R0.0-26.4, EA 04-3G920	Far Western Anthropological Research Group, Inc.	01-000098, 01-000099, 01-000239, 01-011556, 01-011557, 01-011558, 01-011559, 01-011598, 43-000624
S-046399a		2015	Laura Leach-Palm and Philip Kaijankonski	Archaeological Survey Report for the MTC Interstate 880 Express Lane Phase I Project, Alameda and Santa Clara Counties, California: State Route 84, 04-ALA-84 PM R3.0-R6.1, State Route 92, 04-ALA-92 PM R2.5-R6.5, Interstate 880, 04-SCL-880 PM 7.5-10.5, 04-ALA-880 PM R0.0-26.4, EA 04-3G920	Far Western Anthropological Research Group, Inc.	
S-046399b		2015	Philip Kaijankoski, Jack Meyer, and Laura Leach-Palm	Extended Phase I Report for the MTC Express Lane Project, Alameda and Santa Clara Counties, California: State Route 84, 04-ALA-84 PM R3.0-R6.1, State Route 92, 04-ALA-92 PM R2.5-R6.5, Interstate 880, 04-SCL-880 PM 7.5-10.5, 04-ALA-880 PM R0.0-26.4, EA 04-3G920	Far Western Anthropological Research Group, Inc.	
S-046399c		2015	Laura Leach-Palm	Environmentally Sensitive Area Action Plan for the Metropolitan Transportation Commission's Interstate 880 Express, Lane Phase I Project, Alameda and Santa Clara Counties, California: State Route 84, 04-ALA-84 PM R3.0-R6.1, State Route 92, 04-ALA-92 PM R2.5-R6.5, Interstate 880, 04-SCL-880 PM 7.5-10.5, 04-ALA-880 PM R0.0-26.4, EA 04-3G920	Far Western Anthropological Research Group, Inc.	
S-046399d		2015	Chandra Miller	Historic Resource Evaluation Report for the MTC Express Lanes I-880 Project, Alameda and Santa Clara Counties, California: 04-SCL-880 PM 7.38-10.5, 04-ALA-880 PM R0.0-26.66, 04-ALA-92 PM R2.29-6.73, 04-ALA-84 PM R2.7-6.22, Project EA: 04-3G920, EIF 041000110	JRP Historical Consulting, LLC	

Report List

25-1103 :: 25-18529 1111 Aladdin Avenue

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-046399e		2016	Adrian R. Whitaker	Supplemental Archaeological Survey Report for the MTC Interstate 880 Express Lane Phase I Project, Alameda and Santa Clara Counties, California, Interstate 880, 04-SCL-880 PM 7.5-10.5, 04-ALA-880 P< R0.0-26.4, EA 04-3G920	Far Western Anthropological Research Group, Inc.	
S-046599	Caltrans - EA 04-2J070; Submitter - Project ID 040000425	2015	Philip Kaijankoski, Jack Meyer, and Laura Leach-Palm	Extended Phase I Investigation for the Alameda Interstate 880 Median Barrier Replacement Project, Alameda County, California; Interstate 880, 04-ALA-880, PM R2.9-27.6, EA 04-2J070, Project ID 040000425	Far Western Anthropological Research Group, Inc.	01-000098, 01-000099, 01-002280, 01-011556, 01-011557, 01-011558, 01-011559

Attachment 3

Sacred Land File Search Results

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

February 10, 2026

Kholood Abdo
Rincon Consultants

Via Email to: kabdo@rinconconsultants.com

Re: 25-18529 (PLN24-0036) 1111 Aladdin Avenue Warehouse Project, Alameda County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at Mathew.lin@nahc.ca.gov.

Sincerely,

Mathew Lin

Mathew Lin, MPP
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Alameda County
2/10/2026

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Alameda	Amah Mutsun Tribal Band	N	Ed Ketchum, Chairman		(530) 574-3864		aerieways@aol.com	Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Monterey,San Benito,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Stanislaus	12/9/2025
	Amah Mutsun Tribal Band of Mission San Juan Bautista	N	Michelle Zimmer, Senior Cultural Monitor & Consultant	PO Box 214211, 2929 Fulton Ave Unit 19 Sacramento, CA, 95821	(916) 730-9468		michellezimmer1966@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	10/8/2024
	Amah Mutsun Tribal Band of Mission San Juan Bautista	N	Irenne Zwierlein, Chairperson	3030 Soda Bay Road Lakeport, CA, 95453	(916) 730-9468		amahmutsuntribalcommunications@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	10/8/2024
	Amah Mutsun Tribal Band of Mission San Juan Bautista	N	Christopher Zimmer, Senior Cultural Monitor & Consultant, Councilman	PO Box 214211, 2929 Fulton Ave Unit 19 Sacramento, CA, 95821	(650) 520-8418		cdzimmer93@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	10/8/2024
	Amah Mutsun Tribal Band of Mission San Juan Bautista	N	Garry Zimmer, Senior Cultural Monitor & Consultant	PO Box 214211, 2929 Fulton Ave Unit 19 Sacramento, CA, 95821	(408) 771-8901		garryzimmer@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	10/8/2024
	Amah Mutsun Tribal Band of Mission San Juan Bautista	N	Shelby Brown, Senior Cultural Monitor & Consultant, Councilwoman	2451 Tyrolean Way Sacramento, CA, 95821	(916) 276-8380		shelbyzimmer1997@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	10/8/2024
	Confederated Villages of Lisjan Nation	N	Corrina Gould, Chairperson	10926 Edes Avenue Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
	Confederated Villages of Lisjan Nation	N	Cheyenne Gould, Tribal Cultural Resource Manager	10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023

Confederated Villages of Lisjan Nation	N	Deja Gould, Language Program Manager	10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
Costanoan Rumsen Carmel Tribe	N	Henry Muñoz, Cultural Resource Officer	108 South Acacia Rialto, CA, 92376	(909) 254-1610		crct.crd@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	7/17/2024
Costanoan Rumsen Carmel Tribe	N	Carla Munoz, Tribal Council	No information provided	(415) 690-3110		crct.crd@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	7/17/2024
Costanoan Rumsen Carmel Tribe	N	Samuel Rodriguez, Cultural Resource Officer	29539 Oakbridge Dr Menifee, CA, 92586	(760) 681-6860		crct.crd@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	7/17/2024
Indian Canyon Mutsun Band of Costanoan	N	Kanyon Sayers-Roods, Tribal Chairwoman	971 S 7th Street San Jose, CA, 95122	(408) 673-0626		kanyon@kanyonkonsulting.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	5/13/2025
Indian Canyon Mutsun Band of Costanoan	N	Ann Marie Sayers, Retired Honorable Elder	P.O. Box 28 Hollister, CA, 95024	(831) 637-4238		admin@kanyonkonsulting.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	5/13/2025
Muwekma Ohlone Tribe of the SF Bay Area	N	Charlene Nijmeh, Chairperson	2570 N. First Street 2nd Floor #1035 San Jose, CA, 95131	(408) 464-2892		cnijmeh@muwekma.org	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	2/5/2026
Muwekma Ohlone Tribe of the SF Bay Area	N	Bernadette Quiroz, MLD Tribal Rep.	2570 N. First Street 2nd Floor #1035 San Jose, CA, 95131	(785) 730-6175		bquiroz@muwekma.org.	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	2/5/2026
Northern Valley Yokut / Ohlone Tribe	N	Timothy Perez, Tribal Compliance Officer	P.O. Box 717 Linden, CA, 95236	(209) 662-2788		huskanam@gmail.com	Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Sacramento,San Benito,San Joaquin,Santa Clara,Solano,Stanislaus	11/21/2023

Northern Valley Yokut / Ohlone Tribe	N	Katherine Perez, Chairperson	P.O. Box 717 Linden, CA, 95236	(209) 649-8972		canutes@verizon.net	Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Sacramento,San Benito,San Joaquin,Santa Clara,Solano,Stanislaus	4/30/2024
The Ohlone Indian Tribe	N	Vincent Medina, President	P.O Box 3388 Fremont, CA, 94539	(510) 610-7587		Ohloneindiantribe@gmail.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	9/19/2025
The Ohlone Indian Tribe	N	Desiree Vigil, THPO	259 Winwood Avenue Pacifica, CA, 94044	(650) 290-0245		dirwin0368@yahoo.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	9/19/2025
The Ohlone Indian Tribe	N	Andrew Galvan, President Emeritus	P.O. Box 3388 Fremont, CA, 94539	Phone: (510) 882-0527	(510) 687-9393	chochenyo@AOL.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	9/19/2025
Wuksachi Indian Tribe/Eshom Valley Band	N	Kenneth Woodrow, Chairperson	1179 Rock Haven Ct. Salinas, CA, 93906	(831) 443-9702		kwood8934@aol.com	Foothill Yokut Mono	Alameda,Calaveras,Contra Costa,Fresno,Inyo,Kings,Madera,Marin,Mariposa,Merced,Mono,Monterey,San Benito,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Stanislaus,Tulare,Tuolumne	6/19/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 25-18529 (PLN24-0036) 1111 Aladdin Avenue Warehouse Project, Alameda County.

Record: PROJ-2026-000687
Report Type: List of Tribes
Counties: Alameda
NAHC Group: All

Attachment 4

Page & Turnbull Evaluation of 1111 Aladdin Avenue

San F120State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 6Z
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 12 **Resource name(s) or number** (assigned by recorder) 1111 Aladdin Avenue

P1. Other Identifier: _____
***P2. Location:** ☐Not for Publication ☒Unrestricted ***a. County** Alameda
***b. USGS 7.5' Quad** San Leandro West **Date** 2021
***c. Address** 1111 Aladdin Avenue **City** San Leandro **Zip** 95131
***e. Other Locational Data:** Assessor's Parcel Number 77A-648-3-12

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
The parcel which contains 1111 Aladdin Avenue (APN 77A-648-3-12) is located south of Old San Leandro in a predominantly light industrial area, midblock on the south side of the block bound by Aladdin Avenue, Teagarden Street, Montague Avenue, and Alvarado Street **(Figure 1).**[1] The parcel fronts Aladdin Avenue to the south, and a railroad spur to the north. The 6.15-acre rectangular parcel is zoned (4200) Light Industrial/Manufacturing. The site contains a two-story office building with a rectangular footprint, built in 2003, and a one-story warehouse with an irregular footprint, built in 1953.[2] This report describes and evaluates only the warehouse constructed in 1953. The property was owned and occupied by Aladdin Heating from 1953 through ca. 2000 when it was purchased by the present owners, ACCO Engineered Systems Inc.[3]

The steel-frame warehouse consists of five gable-roof bays of identical widths and differing lengths oriented north-south, and is clad in corrugated metal. The western bay is roughly half the length of the other four bays. The westmost and eastmost bay roofs are higher than the central three roofs, and each feature a row of steel-frame clerestory windows spanning the west and east façades. The three central roofs feature rows of skylights. Typical fenestration includes divided-lite steel fixed or casement windows. Metal rolling garage doors are featured on all four façades, for loading docks and vehicle access.

***P3b. Resource Attributes:** (list attributes and codes) HP8. Industrial property
***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Oblique view of the warehouse at the subject parcel, looking northeast, January 10, 2025.

***P6. Date Constructed/Age and Sources:** ☒historic
1953 (*The Oakland Tribune*)[4]

***P7. Owner and Address:**
ACCO Engineered Systems Inc.
888 E Walnut Street
Pasadena, CA 91101-1895

***P8. Recorded by:**
Page & Turnbull, Inc.
170 Maiden Lane
San Francisco, CA 94108

***P9. Date Recorded:**
January 31, 2025

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none") None

***Attachments:** ☐None ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (list)

[1] The parcel is aligned slightly west of true north, but for simplicity the façades facing Aladdin Avenue are described as facing south, the façades facing away from Aladdin Avenue are described as facing north, and so on.
[2] "What they're Doing: Eastbay Business," *The Oakland Tribune,* December 4, 1953.
[3] Oakland City and Suburbs Directories, various issues.
[4] "What they're Doing: Eastbay Business," 1953.

***P3a. Description (continued):**



Figure 1. Location of 1111 Aladdin Avenue, subject parcel outlined in red.
Source: Google Earth, 2024. Edited by Page & Turnbull.

The westmost bay of the warehouse is about half the length than the other four bays and aligned with the north side of the warehouse. The south-facing wall of the westmost bay features no openings. The southwest corner of the warehouse features the main office. The west-facing wall of the southwest corner, and the south-facing wall of the westmost bay, form an L-shaped area used as a parking lot and loading dock (**Figure 2)**. The west-facing wall of the southwest corner features two loading bays with metal rolling garage doors, and a primary pedestrian entrance featuring a raised concrete landing, tubular steel railings, an aluminum glazed door, and a fabric awning. Metal fixed windows are featured south (right) of the primary entrance at the first story, and the length of the west facing wall at the second story.

The south façade features, at the west (left) end, a series of metal fixed windows at the first story, and a metal sign for the building owners above. The southmost walls of the three eastern bays at the south façade are set back, and feature steel-frame canopies that align with the southmost wall of the longest bay (**Figure 3**). The east three bays feature a variety of metal rolling garage doors and metal pedestrian doors at the south facade.



Figure 2: Oblique view of primary entrance and parking lot at southwest corner of the warehouse. Looking northeast.



Figure 3: Oblique view of the south façade of the warehouse. Looking northwest.

The east façade of the warehouse faces the storage area at the east edge of the parcel. It features a row of typical windows interspersed with several metal rolling garage doors, and a row of multi-lite steel fixed clerestory windows near the top of the façade **(Figure 4 and Figure 5).**



Figure 4: Oblique view of the east façade. Looking northwest.



Figure 5: Oblique view of the east façade. Looking southwest.

The north façade of the warehouse faces the railroad spur adjacent to the north edge of the parcel, and is lined by an asphalt alleyway **(Figure 6)**. The east (left) bay features no openings. The center three bays feature two rows of typical windows, one over the other. The bottom row of typical windows is interspersed with steel pedestrian doors and a single metal rolling garage door. The west (right) bay features a single metal sliding door **(Figure 7)**.



Figure 6: Oblique view of the north façade. Looking southwest.



Figure 7: Oblique view of the north façade. Looking southeast.

The west façade, consisting of the west-facing wall of the westmost bay, faces a storage yard and steel gantry **(Figure 8 and Figure 9).** It features two metal rolling garage doors, two steel pedestrian doors, and a row of clerestory windows lining the top of the façade. The north (left) metal rolling garage door features a small steel pedestrian door built into its north (left) side.



Figure 8: Oblique view of the west façade. Note the pedestrian door built into the rolling garage door, at the left end of the façade. Looking southeast.



Figure 9: View of the south (right) side of the west façade. Looking east.

The interior of the warehouse features no structural walls and is generally open from bay to bay, except for two areas which have been converted into two-story office spaces; a small office is at the center of the warehouse, and a main office occupies the southwest corner of the warehouse **(Figure 10).**

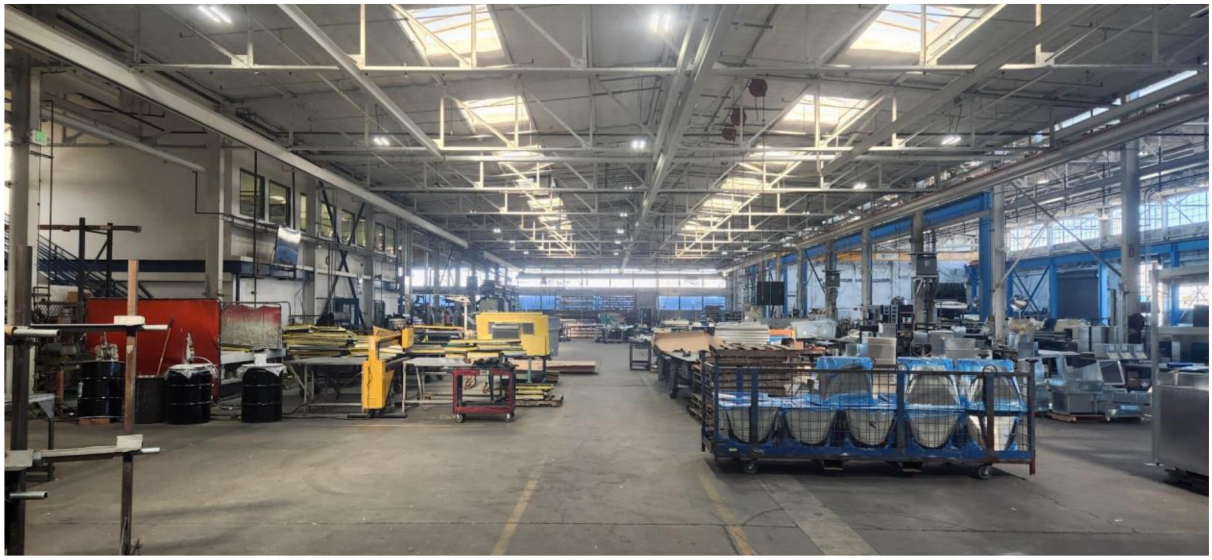


Figure 10: Interior view of the warehouse, second bay from the east (right), showing the steel frame construction and open areas between each bay. A small two-story office is at the left edge of the photograph, which is located at the center of the warehouse. Looking north.

Site Features

A two-story office building, constructed in 2003, is located at the southwest corner of the parcel. It features a flat roof, faux-stone cladding, and aluminum fixed windows and glazed aluminum doors **(Figure 11 and Figure 12).** Circulation patterns at the subject parcel are designed to accommodate large vehicles frequently entering, unloading or loading, and exiting the property. One-way alleyways line the west edge of the parcel, west of the two-story office building, and north of the warehouse, between the warehouse and the railroad spur. The south edge of the parcel, south of the two-story office building, and areas between the two-story office building and warehouse are designated for visitor and employee parking. Structured outdoor storage for materials and partially assembled airflow components are located at the northwest corner of the parcel, and along the east edge of the parcel **(Figure 13 and Figure 14).**



Figure 11: Oblique view of the office building. West façade at the left, south façade at the right. Looking northeast.



Figure 12: Oblique view of the office building. East façade at the left, north façade at the right. Looking southwest.



Figure 13: View of structured outdoor storage at the northwest corner of the parcel. The north façade of the two-story office building is at the left rear of the photograph. Looking west.



Figure 14: View of structured outdoor storage at the east edge of the parcel. The east façade of the warehouse is at the left of the photograph. Looking north.

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic name: 1111 Aladdin Avenue
B2. Common name: 1111 Aladdin Avenue
B3. Original Use: Industrial
B4. Present use: Industrial
***B5. Architectural Style**: Industrial
***B6. Construction History:** (Construction date, alterations, and date of alterations)

The warehouse at 1111 Aladdin Avenue, originally addressed 1111 West Avenue 137th, was constructed in 1953, designed by engineering firm J. Y. Long Company and built by Beckett and Federighi for original owner Aladdin Heating Company **(Figure 15 and Figure 16).**[5] The street south of the subject property was renamed "Aladdin Avenue" sometime in the 1970s.[6] Research was unable to uncover when exactly, or for what specific reason, West Avenue 137th was renamed after the Aladdin Heating Company. The site originally included a one-story warehouse that was demolished in 2002, generally at the same location of the extant two-story office building **(Figure 17).** In 2003, the two-story office building was constructed, some windows on the south façade of the warehouse were replaced, and three metal awnings were constructed at the south façade of the warehouse **(Figure 18).** No other major exterior alterations were observed or uncovered through research. (Refer to Continuation Sheet, page 8)

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown Date:** _____ **Original Location:**_____
***B8. Related Features:** No B9a. Architect: J. Y. Long Company, Engineers b. Builder: Beckett and Federighi .
***B10. Significance: Theme** N/A **Area** N/A
Period of Significance N/A **Property Type** N/A **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

Historic Context:

San Leandro History

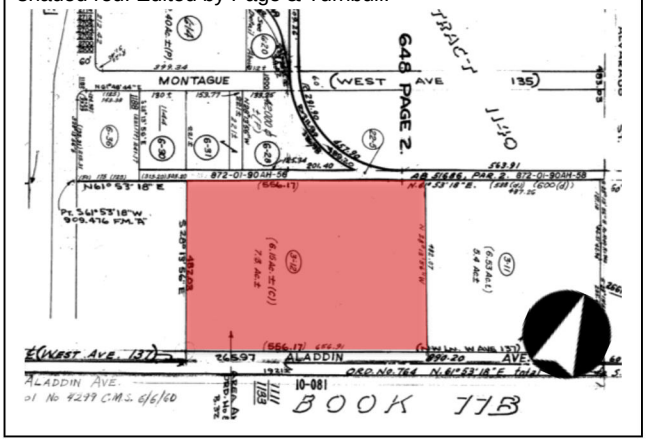
Don Jose Estudillo, the son of Capt. Jose Maria Estudillo, alcalde of San Francisco, first petitioned to be granted the land now forming San Leandro in 1836 and established his Rancho San Leandro at that time, officially receiving the grant from the Mexican Government in 1842. The adjacent land to the south of San Lorenzo Creek, known as Rancho San Lorenzo, was owned by the Castro and Soto families. Around 1850, American squatters moved in and began to dispute the Mexican land titles. They took over ownership of some of the rancho land and established the towns of San Leandro and San Lorenzo (the latter was known as "Squattersville" until 1854).[7] Cattle raising gave way to dairy operations, sheep raising, farming, and fruit orchards by the late 1800s.[8] San Leandro was especially known for its cherry orchards in the first decades of the 20th Century. The thoroughfare that is identified today as E. 14th Street, which functions as the Main Street for Old San Leandro, was known as Spanish Road in 1849, Haywards Road in 1878, and Hayward Road or County Road in the 1910s. The San Francisco and Alameda Railroad route was extended to Hayward along the street in 1865.[9] Beginning in 1892, the Oakland-San Leandro-Hayward Electric Railway Traction Line, a passenger streetcar system, ran along E. 14th Street to 150th Avenue, southeast of the subject parcel.

(Refer to Continuation Sheet, page 9)

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** Refer to Page 12
B13. Remarks: None
***B14. Evaluator:** Walker Shores, Page & Turnbull, Inc.
***Date of Evaluation:** January 31, 2025

Source: Alameda County Assessor's Office, 2025. Parcel shaded red. Edited by Page & Turnbull.



(This space reserved for official comments.)

[5] "What they're Doing: Eastbay Business," 1953.
[6] Oakland City and Suburb Directories, various issues.
[7] Mary Elizabeth Harris, *A Brief History of San Lorenzo*, Term Paper, California History, 11 May 1964, 16.
[8] Lucille Lorge, Robert Phillips, and Devon Weston, *Images of America: Castro Valley*, Charleston, SC: Arcadia Publishing, 2005.
[9] Reginald R. Stuart, *San Leandro…A History*, San Leandro, CA: First Methodist Church, 1951, 117.

***B6. Construction History (continued):**

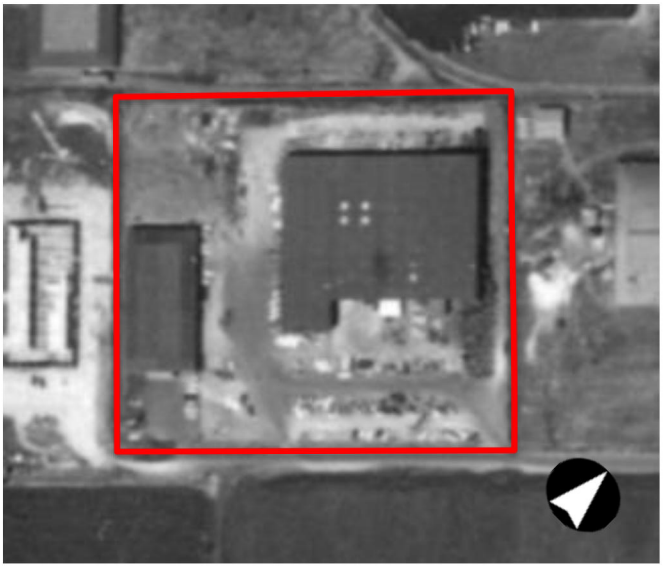


Figure 15: Aerial Photograph, 1958. Subject parcel is outlined in red. Source: Flight BUT-1958, Frame 6V-183, Courtesy of UCSB Library Geospatial Collection. Edited by Page & Turnbull.



Figure 16: Bird's Eye View Photograph, ca. 1965. Aladdin Avenue is labeled at the bottom right corner of the photograph. Source: Aladdin Heating Corporation, *Manufacturing Air Handling Equipment*, Magazine, Volume 2, ca. 1965. Edited by Page & Turnbull.



Figure 17: Bird's Eye View Photograph, ca. 2000. Aladdin Avenue is labeled at the bottom of the photograph. Provided courtesy of the property owner. Edited by Page & Turnbull.



Figure 18: Aerial Photograph, 2003. Note the under-construction foundation of the extant office building at the left edge of the photograph. Source: Google Earth. Edited by Page & Turnbull.

B10. Significance (continued):

Historic Context (continued):

The first building boom came to the San Leandro area in the 1920s. Farmland, including Ashland, Hayward Acres, and Cherryland, was subdivided for housing and small farms. Residents continued to raise fruit, vegetables, poultry, and farm animals on their plots of land.[10] Small industrial developments began close to Old San Leandro adjacent to the railroad, such as the Caterpillar Tractor Plant at the corner of Davis and Alvarado streets, but the area remained relatively rural through the 1930s. San Leandro experienced a population explosion during and after World War II. Large tracts of farmland were converted to suburban neighborhoods for wartime manufacturing workers and returning soldiers. In 1900, there were 2,253 people living in San Leandro. By 1940, the population had risen to 14,601, and between 1940 and 1950, it nearly doubled to 27,542. By 1960, the population more than doubled to 65,962.[11] During this period of extreme growth, outlying business districts flourished **(Figure 19 and Figure 20)**. The subject parcel was utilized for farmland up until 1953, and surrounding parcels remained undeveloped for at least a decade. San Leandro completed its transition from an agricultural center to an industrial and suburban hub in the last quarter of the 20th century, and since the passage of the Rumford Fair Housing Act in 1963 has become one of the most diverse cities in California.[12]



Figure 19: 1941 Aerial Photograph, showing the agricultural land uses in San Leandro before World War II. Approximate future location of 1111 Aladdin Avenue is outlined in red. Source: Flight GS-CP, Frame 2-95, Courtesy of UCSB Library Geospatial Collection. Edited by Page & Turnbull.



Figure 20: 1965 Aerial Photograph, showing postwar industrial and residential development in San Leandro. 1111 Aladdin Avenue is outlined in red. Source: Flight CAS-65-130, Frame 7-64, Courtesy of UCSB Library Geospatial Collection. Edited by Page & Turnbull.

Architect History: J. Y. Long Company

The J. Y. Long Company was an Oakland-based engineering firm active from the late 1940s to the early 1970s. The firm's design work include industrial facilities, warehouses, and occasionally large commercial or office buildings located across northern California.[13]

Builder History: Beckett and Federighi

Beckett and Federighi were an Oakland-based construction firm active from the late 1940s through the 1960s. They constructed a wide variety of buildings, including single-family tract housing, movie theaters, and large commercial buildings like supermarkets and car dealerships throughout the east San Francisco Bay area.[14]

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[10] Doris Marciel and the Hayward Area Historical Society; Cynthia Vrilakas Simons, *Images of America: San Leandro,* Charleston, SC: Arcadia Publishing, 2008, 8.

[11] Simons (2008).

[12] "San Leandro History," San Leandro Historical Society. Accessed January 24, 2025. https://www.sanleandrohistory.org/san-leandro-history.html

[13] "Business Briefs," *The Berkeley Gazette,* July 29, 1955; "Notes on Bay Commerce," *The Oakland Tribune,* June 13, 1952; "White Trucks to Build New Oakland Center," *The Oakland Tribune,* October 25, 1973.

[14] "$1,500,000 Investments to Bloom on Once Verdant 14th St. Stretch," *The Oakland Tribune,* January 27, 1946; "Business Briefs," *The Berkeley Gazette,* September 30, 1953; "Notes on Bay Commerce," *The Oakland Tribune,* September 4, 1959; "Real Quality Homes on G. I. Terms," *The Oakland Tribune,* August 3, 1952.

Ownership/Occupancy History

1111 Aladdin Avenue was originally owned by the Aladdin Heating Company when the subject building was constructed in 1953.[15] Aladdin Heating Company, later called the Aladdin Heating Corporation, was founded in Oakland in 1918.[16] They manufactured furnaces and later, at the subject property, various heating, cooling, and air circulation equipment for use in commercial, office, and industrial buildings. Previous locations occupied by the Aladdin Heating Company include 5107 Broadway (demolished), Oakland, from at least 1927-1938, and 2272 San Pablo Avenue (demolished), Oakland, from 1938 to 1953. The Aladdin Heating Company occupied the subject property through ca. 2000, when the property was purchased by the current owners, ACCO Engineered Systems. Research was unable to uncover whether the Aladdin Heating Company relocated their business or ceased operations in 1953. ACCO Engineered Systems, headquartered in Pasadena, CA, is a major national manufacturer and designer of building mechanical systems, which move air and regulate indoor climate control. They use the subject property to both design and manufacture various products to build and maintain mechanical systems.

Statement of Significance:

For a property to be considered eligible for listing in the National Register or the California Register, the property must possess significance and retain integrity to convey that significance. Criteria for significance A through D for the National Register are nearly identical in wording and scope to California Register 1 through 4. As such, discussion of National Register and California Register criteria are combined below. Each criterion is followed by discussion relative to the warehouse at 1111 Aladdin Avenue. The following discussion excludes the two-story office building on the property, as it was constructed in 2003.

National Register / California Register Evaluation

Criterion A/1 (Events)

The warehouse at 1111 Aladdin Avenue does not appear to be individually eligible for listing in the National Register or California Register under Criterion A/1 (Events). It was not the first industrial facility built in San Leandro, nor is it the first industrial facility built for the Aladdin Heating Company. The Aladdin Heating Company does not appear to have been particularly influential in the economies of San Leandro, Alameda County, California, or the United States. No significant events or innovations are known to have taken place or been developed at the subject building that would allow the building to rise to the level of significance necessary to be individually eligible under Criterion A/1.

Criterion B/2 (Persons)

The warehouse at 1111 Aladdin Avenue does not appear to be individually eligible for listing in the National Register or California Register under Criterion B/2 (Persons). The subject property's original and longest owner, the Aladdin Heating Company, was one of many manufacturers of heating, cooling, and air circulation systems. No potentially significant individual persons were found to be associated with the subject property that would make the subject building individually eligible under Criterion B/2.

Criterion C/3 (Architecture)

The warehouse at 1111 Aladdin Avenue does not appear to be individually eligible for listing in the National Register or California Register under Criterion C/3 (Architecture) as a building that embodies the distinctive characteristics of a type, period, or method of construction. The warehouse was constructed in 1953 in a minimal post-war industrial design. The design features of the building are minimal, and materials and fixtures were likely selected for utility and economic reasons and not as part of an overarching design intent. Research does not suggest that the designers, J. Y. Long Company, are designers of merit. Nor does research suggest that the builders, Beckett and Federighi, are builders of merit. The property does not express any style to the level required to be found eligible for listing under Criterion C/3.

Criterion D/4 (Information Potential)

1111 Aladdin Avenue does not appear to be individually eligible for listing in the National Register or California Register under Criterion D/4 (Information Potential). The "potential to yield information important to the prehistory or history" of the City of San Leandro, the state or the nation typically relates to archeological resources, rather than built resources. When Criterion D/4 (Information Potential) does relate to built resources, it is relevant for cases when the buildings themselves are the principal source of important construction-related information. The subject property does not appear to be individually significant under Criterion D/4 as a building that has the potential to provide information important to the prehistory or history of the City of San Leandro, the state, or the nation The building does not feature construction or material types, or embody engineering practices that would, with additional study, provide important information. Identification or evaluation of archaeological resources is beyond the scope of this study.

Conclusion

The warehouse building at 1111 Aladdin Avenue, San Leandro, California, was originally built for the Aladdin Heating Company in 1953. The property underwent few alterations until a one-story warehouse on the property was demolished in 2002, and a two-

[15] "New San Leandro Warehouse," 1975.
[16] "Terms Speed Up Factory," *The Oakland Tribune,* July 8, 1935.

story office building was constructed in 2003. This evaluation is based on a site visit and analysis of available documentation pertaining to the subject property's ownership and occupant history, chronology of construction and alterations, and architectural characteristics. The subject property does not appear to be eligible for individual listing in the National Register or California Register under any criterion. As such, the California Historical Resource Status Code (CHRSC) of "6Z" has been assigned to the building, meaning that it was "Found ineligible for NR, CR or Local designation through survey evaluation."[17]

[17] California State Office of Historic Preservation Department of Parks and Recreation, *Technical Assistance Bulletin #8: User's Guide to the California Historical Resource Status Codes & Historical Resource Inventory Directory,* Sacramento, November 2004.

***B12. References:**

"$1,500,000 Investments to Bloom on Once Verdant 14th St. Stretch." *The Oakland Tribune.* January 27, 1946.

Aladdin Heating Corporation. *Manufacturing Air Handling Equipment.* Magazine. Volume 2. ca. 1965. On file at the ACCO Engineered Systems office, 1111 Aladdin Avenue.

"Business Briefs." *The Berkeley Gazette.* September 30, 1953.

"Business Briefs." *The Berkeley Gazette.* July 29, 1955.

California State Office of Historic Preservation Department of Parks and Recreation. *Technical Assistance Bulletin #8: User's Guide to the California Historical Resource Status Codes & Historical Resource Inventory Directory.* Sacramento, November 2004.

Harris, Mary Elizabeth. *A Brief History of San Lorenzo*. Term Paper, California History, 11 May 1964.

Lorge, Lucille, Robert Phillips, and Devon Weston. *Images of America: Castro Valley*. Charleston, SC: Arcadia Publishing, 2005.

Marciel, Doris and the Hayward Area Historical Society, various communications.

"Notes on Bay Commerce," *The Oakland Tribune,* June 13, 1952.

"Notes on Bay Commerce." *The Oakland Tribune.* September 4, 1959.

Oakland City and Suburb Directories, various issues.

"Real Quality Homes on G. I. Terms." *The Oakland Tribune.* August 3, 1952.

"San Leandro History." San Leandro Historical Society. Accessed January 24, 2025. https://www.sanleandrohistory.org/san-leandro-history.html

Simons, Cynthia Vrilakas. *Images of America: San Leandro*, Charleston, SC: Arcadia Publishing, 2008.

Stuart, Reginald R. *San Leandro…A History*, San Leandro, CA: First Methodist Church, 1951.

"Terms Speed Up Factory." *The Oakland Tribune.* July 8, 1935.

"What they're Doing: Eastbay Business." *The Oakland Tribune.* December 4, 1953.

"White Trucks to Build New Oakland Center," *The Oakland Tribune,* October 25, 1973.

Statement of Professional Qualifications:
This historic documentation and evaluation was prepared by Page & Turnbull of San Francsico, California. Page & Turnbull staff responsible for this report include: Christina Dikas, Principal-in-charge; Stacy Kozakavich, Project Manager and Cultural Resources Planner; and Walker Shores, Cultural Resources Planner and primary author; all of whom meet or exceed the Secretary of the Interior's Professional Qualification Standards for Historic Architecture, Architectural History, or History.

Appendix E

Energy Calculations

1111 Aladdin Ave

Last Updated: 3/20/2026

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Concrete/Industrial Saws	1	8	33	0.73	Demolition Phase	1,008
Excavators	3	8	36	0.38	Demolition Phase	1,717
Rubber Tired Dozers	2	8	367	0.4	Demolition Phase	11,050
Rubber Tired Dozers	3	8	367	0.4	Site Preparation Phase	16,575
Tractors/Loaders/Backhoes	4	8	84	0.37	Site Preparation Phase	5,202
Excavators	1	8	36	0.38	Grading Phase	424
Graders	1	8	148	0.41	Grading Phase	1,694
Rubber Tired Dozers	1	8	367	0.4	Grading Phase	4,097
Tractors/Loaders/Backhoes	3	8	84	0.37	Grading Phase	2,893
Cranes	1	7	367	0.29	Building Construction Phase	12,877
Forklifts	3	8	82	0.2	Building Construction Phase	7,563
Generator Sets	1	8	14	0.74	Building Construction Phase	1,593
Tractors/Loaders/Backhoes	3	7	84	0.37	Building Construction Phase	12,542
Welders	1	8	46	0.45	Building Construction Phase	3,182
Excavators	1	8	36	0.38	Trenching Phase	424
Graders	1	8	148	0.41	Trenching Phase	1,694
Rubber Tired Dozers	1	8	367	0.4	Trenching Phase	4,097
Tractors/Loaders/Backhoes	3	8	84	0.37	Trenching Phase	2,893
Pavers	2	8	81	0.42	Paving Phase	1,407
Paving Equipment	2	8	89	0.36	Paving Phase	1,325
Rollers	2	8	36	0.38	Paving Phase	566
Air Compressors	1	6	37	0.48	Architectural Coating Phase	276
					Total Fuel Used	**95,099**
						(Gallons)

Construction Phase	Days of Operation
Demolition Phase	89
Site Preparation Phase	89
Grading Phase	66
Building Construction Phase	327
Paving Phase	44
Architectural Coating Phase	239
Trenching Phase	66
Total Days	920

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition Phase	24.1	15	13.8	763.33
Site Preparation Phase	24.1	18	13.8	890.55
Grading Phase	24.1	15	13.8	566.07
Building Construction Phase	24.1	47	13.8	8787.75
Paving Phase	24.1	15	13.8	377.38

Architectural Coating Phase	24.1	9	13.8	1229.91
Trenching Phase	24.1	15	13.8	566.07
			Total	**13,181.06**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
		HAULING TRIPS		
Demolition Phase	7.5	6	20.0	15.41
Site Preparation Phase	7.5	0	20.0	0.00
Grading Phase	7.5	1	20.0	3.41
Building Construction Phase	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
Architectural Coating Phase	7.5	0	20.0	0.00
Trenching Phase	7.5	0	20.0	0.00
			Total	**18.83**
		VENDOR TRIPS		
Demolition Phase	7.5	0	10.2	0.00
Site Preparation Phase	7.5	0	10.2	0.00
Grading Phase	7.5	0	10.2	0.00
Building Construction Phase	7.5	18	10.2	8093.90
Paving Phase	7.5	0	10.2	0.00
Architectural Coating Phase	7.5	0	10.2	0.00
Trenching Phase	7.5	0	10.2	0.00
			Total	**8,093.90**

Total Gasoline Consumption (gallons)	**13,181**
Total Diesel Consumption (gallons)	**103,212**

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

Appendix F

Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

Aladdin Avenue Property

1111 and 1133 Aladdin Avenue, San Leandro, California

Prepared for

Troy Leyva
TNLDB Architecture
1640 Stockton Street, Unit 330132
San Francisco, California 94133

Prepared by

Terraphase Engineering Inc.
1415 L Street, Suite 100
Sacramento, California 95814

March 7, 2025

Project Number C087.001.001

File: rpt-PhI ESA-AladdinAve-C087-001-001-DTE

terraphase engineering

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Acronyms and Abbreviations

AAI	All Appropriate Inquiries
ACCO	ACCO Engineered Systems, Inc.
AST	aboveground storage tank
ASTM	ASTM International
AUL	activity and land use limitation
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
Client	TNLDB Architecture
CREC	controlled recognized environmental condition
EBMUD	East Bay Municipal Utility District
EDR	Environmental Data Resources Inc.
EDR report	*EDR Radius Map™ Report with GeoCheck®*
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
HBMP	Hazardous Materials Business Plan
HVAC	heating, ventilation, and air conditioning
LUST	leaking underground storage tank
MTBE	methyl tert-butyl ether
NFA	No Further Action
NPL	National Priorities List
Terraphase	Terraphase Engineering Inc.
TPH	total petroleum hydrocarbons
TPH-g	total petroleum hydrocarbons quantified as gasoline
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
User	TNLDB Architecture
UST	underground storage tank
VOC	volatile organic compound

Executive Summary

Terraphase Engineering Inc. (Terraphase) has performed a Phase I Environmental Site Assessment (ESA) of the Aladdin Avenue property at 1111 and 1133 Aladdin Avenue, San Leandro, Alameda County, California (subject property; Figure 1), on behalf of TNLDB Architecture (Client), in accordance with Terraphase's proposal dated December 20, 2024.

The approximately 6.5-acre subject property, identified as Alameda County Assessor's Parcel Number 77A-648-3-12, is developed with a 22,000-square-foot, two-story, slab-on-grade office building (1133 Aladdin Avenue); a 90,000-square-foot steel-framed, slab-on-grade sheet metal and pipe fitting fabrication shop and warehouse (1111 Aladdin Avenue); parking area; and exterior materials storage. The subject property was formerly comprised of two parcels—Parcel 1 included 1111 and 1133 Aladdin Avenue and Parcel 2 included the western 100-foot portion of 2661 Alvarado Street. The subject property is currently owned by ACCO Engineered Systems, Inc., a sheet metal ducting and pipe fitting fabrication company primarily serving the heating, ventilation, and air conditioning industry. The Client is planning to demolish the 1133 Aladdin Avenue building to allow for the expansion of the 1111 Aladdin Avenue warehouse.

Raw sheet metal received at the subject property is fabricated using pneumatic and hydraulic machinery and welding operations for a variety of clients and industries. The main warehouse at 1111 Aladdin Avenue is subdivided into the sheet metal ducting fabrication area (eastern side), and the pipe fitting fabrication shop (western side). Raw and finished materials and goods storage are stored throughout the exterior of the subject property, along with a 499-gallon propane aboveground storage tank, two air compressor enclosures, dust collection system and hazardous material storage drums.

Based on a review of historical documents, the subject property was developed for agricultural use by 1939. The subject property was redeveloped with the existing industrial warehouse structure and smaller office building by 1958. The buildings have been occupied by a variety of commercial and light industrial tenants, most notably including Aladdin Heating Corporation and Aladdin Heating and Mechanical. Tenants of 2661 Alvarado Street have included Gardco Manufacturing and Lighting, Thomas Outdoor Lighting, Production Logic, Diversified Metal Fab, and Cabinet Works. Parcel 1 appeared to operate independently from the eastern-adjoining property (2661 Alvarado Street) in 1958, 1963, and 1968. However, beginning in 1974, it appeared the subject property and the eastern-adjacent property may have operated as one facility. It is unclear how long the facilities operated together or independently. In 2005, there was soil disturbance that may indicate when the current separation of parcels began.

Aladdin Heating Corporation installed two 3,000-gallon underground gasoline storage tanks with pump islands adjacent to present-day 1133 Aladdin Avenue in 1979. These tanks were removed due to potential leaking in the early 1980s and replaced with two steel-constructed 3,000-gallon unleaded gasoline tanks. In October 1991, the two steel tanks were removed. Soil and groundwater investigations in the former underground storage tank (UST) area of the subject property were conducted due to elevated concentrations of total petroleum hydrocarbons as gasoline in confirmation soil samples.

Impacts to shallow soil were discovered in the former painting area (northwestern corner) of the subject property and remediated after soil sampling and excavation. An unknown manhole feature south of the 1111 Aladdin Avenue warehouse labeled “vent” was identified during the site reconnaissance.

Based on review of historical documents, adjoining properties were developed with commercial and industrial warehouses and structures since at least 1958, with prior undeveloped agricultural use. The subject property and general vicinity are located within the bounds of the DWA Plume, a comingled, regional groundwater plume impacted by volatile organic compounds, petroleum-related compounds, and metals from multiple industrial sites towards the northwest in San Leandro.

The Phase I ESA was performed in general conformance with the scope and limitations of ASTM International (ASTM) E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). Any exceptions to, or deletions from, ASTM E1527-21 are described in Section 1 of this report. No controlled RECs, historical RECs, business environmental risks, or significant data gaps during completion of this Phase I ESA.

As shown below, this assessment has revealed seven recognized environmental conditions (RECs) during completion of this Phase I ESA. Additionally, two other environmental findings were identified as de minimis conditions.

Recognized Environmental Conditions

Terraphase identified the following recognized environmental conditions (RECs) during this Phase I ESA:

1. **Onsite petroleum hydrocarbons and solvent usage throughout the subject property from the sitewide historical industrial use**
2. **Presence of a regional groundwater contaminant plume intersecting the subject property**
3. **Onsite presence of an unidentified vent/manhole feature**
4. **Historic plating operations at the eastern adjoining property**
5. **Former UST at the adjoining 2661 Alvarado Street property**
6. **Residual petroleum impacts at the former UST area of the subject property**
7. **Residual lead and chromium III impacts in soil at the former painting area on the subject property**

De Minimis Conditions

Terraphase identified the following de minimis condition(s) during this Phase I ESA:

- The nature of the industry and operations of the site leading to staining within the interior and exterior areas of the warehouse is considered a de minimis condition.
- The limited former agricultural use at the subject property is considered a de minimis condition.

1 Introduction

At the request of TNLDB Architecture (Client), Terraphase Engineering Inc. (Terraphase) has completed a Phase I Environmental Site Assessment (ESA) of the Aladdin Avenue property at 1111 and 1133 Aladdin Avenue, San Leandro, Alameda County, California (subject property; Figure 1).

This Phase I ESA includes information gathered from federal, state, and local agencies; review of historical documents; a reconnaissance visit; and interviews. A significant amount of the regulatory and historical database information was provided by Environmental Data Resources Inc. (EDR), a third-party vendor that specializes in providing regulatory and historical records for Phase I ESAs. The qualifications of the environmental professional(s) who prepared this report are included in Section 9.

1.1 Purpose

This Phase I ESA was conducted in general accordance with ASTM International (ASTM) E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021) and United States Environmental Protection Agency (USEPA) 40 CFR 312, "Innocent Landowners, Standards for Conducting All Appropriate Inquiries"[1] (AAI) rule, adopted November 1, 2006, and most recently amended December 15, 2022.[2] This Phase I ESA assesses for recognized environmental conditions (RECs) at the subject property.

1.1 Definitions

The following terms are defined within ASTM E1527-21:

REC	"(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment."
Likely	"likely is that which is neither certain nor proved, but can be expected or believed by a reasonable observer based on the logic and/or experience of the environmental professional, and/or available evidence, as stated in the report to support the opinions given therein."
Controlled REC (CREC)	"recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)."

[1] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-312.

[2] The "AAI rule," as defined under CERCLA, https://www.federalregister.gov/documents/2022/12/15/2022-27044/standards-and-practices-for-all-appropriate-inquiries

Historical REC	"a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations). A historical recognized environmental condition is not a recognized environmental condition."
Business Environmental Risk	"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations."
de minimis	"a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor a controlled recognized environmental condition."
Property Use Limitation	"a limitation or restriction on current or future use of a property in connection with a response to a release, in accordance with the applicable regulatory authority or authorities that allows hazardous substances or petroleum products to remain in place at concentrations exceeding unrestricted use criteria."
Data Gap	"a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to, site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.)."
Significant Data Gap	"a data gap that affects the ability of the environmental professional to identify a recognized environmental condition."

1.2 Scope of Services

The Client has engaged Terraphase to perform this Phase I ESA to identify RECs (as defined in ASTM E1527-21) to help identify potential environmental liabilities associated with the subject property prior to a potential transaction.

The following services were included in this Phase I ESA:

- Interviews with past and present owners, operators, and occupants familiar with the subject property;
- Review of historical sources of information including, but not limited to, aerial photographs, Sanborn® fire insurance maps (Sanborn® maps), and land use records;
- Review of previously conducted environmental studies;
- Review of government records, including regulatory reports for both the subject property and adjoining properties;

- Review of an environmental database search;
- Review of local regulatory agency files, including the local fire department and other local government entities that have jurisdiction over hazardous waste management, permitting, and site investigations;
- Reconnaissance level visual inspection of the subject property, including observations of adjoining properties and general land uses, to look for evidence of the release(s) of hazardous materials and petroleum products and assess the potential for on-site releases of hazardous materials and petroleum products resulting from current and historical land use activities and nearby operations;
- Subject property and adjoining property photographs to document current conditions; and
- Preparation of a report that documents our research, observations, and the results of the environmental inquiry, which specifically identifies any properties that will require invasive site investigation, including a summary of conclusions.

Although not included in the standard Phase I scope, as defined in ASTM E1527-21, Terraphase conducted a vapor encroachment screen for the subject property in accordance with the ASTM E2600-22, *Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions* (2022).

Non-scope considerations as defined in ASTM E1527-21 include: Asbestos-containing building materials unrelated to releases into the environment; Biological agents; Cultural and historic resources; Ecological resources; Endangered species; Health and safety; Indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment; Industrial hygiene; Lead-based paint unrelated to releases into the environment; Lead in drinking water; Mold or microbial growth conditions; PCB-containing building materials (for example, interior fluorescent light ballasts, paint, and caulk); Naturally-occurring radon; Regulatory compliance; Substances not defined as hazardous substances (including some substances sometimes generally referred to as emerging contaminants) unless or until such substances are classified as a CERCLA hazardous substance; Wetlands, and compliance with Activity and Use Limitations.

1.3 Significant Assumptions

This Phase I ESA provides appropriate inquiry into the previous ownership and use of the subject property consistent with good commercial and customary practice to minimize liability. Terraphase also assumes that the information provided by the Client, regulatory database provider, and regulatory agencies, is true and reliable.

1.4 Limitations and Exceptions

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by Terraphase and the Client. This report was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry as practiced in California. To the extent that Terraphase relied upon

any information prepared by other parties not under contract to Terraphase, no representation as to the accuracy or completeness of such information is made.

The findings presented in this report apply solely to conditions existing at the time of the assessment. It must be recognized, however, that a Phase I ESA is intended for the purpose of evaluating the potential for contamination through limited research and investigative activities, and in no way represents a conclusive or complete characterization. Conditions in other parts of the subject property may vary from those at the locations where data were collected.

Terraphase notes that this Phase I ESA is not intended to meet provisions of the limited liability protections beyond the AAI and as stated in ASTM E1527-21: "there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered in, on, or at the subject property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for noncompliance."

Terraphase's interpretation of investigation results is related to the availability of the data and the extent of the investigation activities; 100 percent confidence in Phase I ESA conclusions cannot reasonably be achieved. Therefore, Terraphase does not provide any guarantees, certifications, or warranties (expressed or implied) that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and all applicable laws, codes, regulations, or standards.

1.5 Environmental Site Assessment Viability

According to ASTM E1527-21, Section 4.6, a Phase I ESA is presumed viable when the following components were performed or updated within 180 days prior to the date of property acquisition or the date of the intended transaction:[3]

- Interviews with owners, operators, and occupants (completed January 22, 2025);
- Review of federal, tribal, state, and local government records (completed February 12, 2025);
- Site reconnaissance of the subject property and of adjoining properties (completed January 22, 2025); and
- The declaration by the environmental professional responsible for the assessment or update (Section 10).

The 180-day or 1-year timeframe begins with the date upon which the first of the above components of the Phase I ESA was completed (January 22, 2025).

[3] Terraphase notes that completion of searches for recorded environmental cleanup liens is a user responsibility according to ASTM E1527-21; the user has not engaged the environmental professional to conduct these searches.

1.6 Deviations

In performance of this Phase I ESA, Terraphase has identified no exceptions, deletions, or deviations from ASTM E1527-21.

1.7 User Reliance

This document was prepared for the use of the Client. No other party should rely on the information contained herein without the prior written consent of Terraphase and the Client.

2 Client/User Provided Information

This section describes information provided to Terraphase by the Client (i.e., the "User" of this Phase I ESA) per the requirements of ASTM E1527-21.

The User's representative, John Voight, completed our User Questionnaire regarding knowledge of the subject property and the User's responsibilities regarding completion of this Phase I ESA. Information from the questionnaire is summarized below:

Reason for the Phase I ESA	To identify potential environmental liabilities prior to the demolition and expansion of 1133 and 1111 Aladdin Avenue, respectively.
Type of property and type of property transaction, for example, sale, purchase, exchange, etc.	ACCO Engineered Systems, Inc. (ACCO) plans to demolish the existing building at 1133 Aladdin Avenue and expand the current building at 1111 Aladdin Avenue. As part of the project site plan review, the city of San Leandro Planning Department requested a Phase I ESA.
Additional non-ASTM scope of services requested	None
Parties who will rely on the Phase I report	ACCO
Site contact information	John Voight, Project Executive, jvoight@accoes.com

2.1 Title Report, Environmental Liens, and Activity and Use Limitations

Terraphase requested title search information from the User/Client. Pursuant to ASTM E1527-21:

> "the title search information reports shall identify environmental covenants, environmental easements, land use covenant and agreements, declaration of environmental land use restrictions, environmental land use controls, environmental use controls, environmental liens, or any other recorded instrument that restricts, affects, or encumbers the title to the subject property due to restrictions or encumbrances associated with the presence of hazardous substances or petroleum products. Title search information reports shall review land title records for documents recorded between 1980 and the present. If judicial records are not reviewed, the title search information report shall include a statement providing that the law or custom in the jurisdiction at issue does not require a search for judicial records in order to identify environmental liens."

> As stated in ASTM E1527-21 it is the "user's responsibility to search for environmental liens and activity and land use limitations (AULs)." This is in "addition to the environmental professional's search of institutional control and engineering control registries described in" ASTM E1527-21 Section 8.2.

A copy of the title search information records provided by the User, included as Appendix A, is summarized below.

2.1.1 Preliminary Title Report

The User provided the Chicago Title Company's *Preliminary Report* dated July 18, 2023. Our review of the title report identified the following information regarding the subject property:

- Parcel 1 – a 6.57-acre portion of the subject property (the current location of the subject property buildings addressed as 1111 and 1133 Aladdin Avenue identified as Alameda County Assessor's Parcel Number 77A-648-3-12)
- Parcel 2 – a 1.1-acre portion of the subject property (the present-day eastern portion of the subject property)
- Additional easements include:
  - PG&E tower lines along the southern portion of the subject property
  - Railroad easements for Central Pacific Railway Corporation along the northwestern side of the subject property
  - Drainage pathways for the San Leandro Industrial Corporation along the western side of the subject property

2.1.2 Environmental Liens

Based on our review of the title report summarized above, environmental liens were not identified in association with the subject property. Additionally, no environmental liens were identified during our review of regulatory records as summarized in Section 5.2.

2.1.3 Activity and Land Use Limitations

Based on our review of the title report summarized above, activity and land use limitations were not identified in association with the subject property. Additionally, no activity and land use limitations were identified during our review of regulatory records as summarized in Section 5.2.

2.2 Land Title Survey

An *ALTA/NSPS Land Title Survey* was provided by the Client for the subject property (Appendix A). Based on our review of the survey, the current subject property consists of Parcels 1 and 2, as described in Section 2.1.1. An unknown manhole feature, labeled as "VENT," is identified on the southeast portion of the subject property. The southern portion of the subject property consists of two Pacific Gas and Electric Co.(PG&E) easements for transmission tower poles. The present-day 1111 and 1133 Aladdin Avenue buildings, parking areas, and outdoor storage areas are depicted.

2.3 Lot Line Adjustment

Parcels 1 and 2, as described in Sections 2.1 and 2.2, were identified in the March 6, 2002, Certificate of City Engineer for Lot line Adjustment record declaring the new property line as the combination of these two parcels with the new property line along the eastern side of the former Parcel 2. The certificate is provided in Appendix A.

2.4 Specialized Knowledge

The User provided specialized knowledge regarding the subject property. This knowledge is discussed further in Section 4.7.

2.5 Commonly Known or Reasonable Ascertainable Information

The User provided commonly known or reasonably ascertainable information regarding the subject property. This information is discussed further in Section 4.7.

2.6 Valuation Reduction for Environmental Contamination

The User did not indicate the valuation of the subject property has been reduced or otherwise impacted due to the presence of releases or threatened releases of hazardous substances at the subject property.

3 Site Description and Reconnaissance

The subject property's current conditions and operations, historical use, and physical setting, are discussed in this section, as well as observations made by Terraphase during the site reconnaissance.

3.1 Site Description

The subject property, 1111 and 1133 Aladdin Avenue, San Leandro, California (Figure 1), is identified as Alameda County Assessor's Parcel Number 77A-648-3-12.

The approximately 6.5-acre subject property is developed with an office building, warehouse/fabrication shop, parking area, and exterior materials storage. The southwestern portion of the subject property at 1133 Aladdin Avenue is developed with a 22,000-square-foot, two-story, slab-on-grade office building constructed in 2003. This building is scheduled to be demolished to provide adequate space for the expansion of 1111 Aladdin Avenue. The portion of the subject property at 1111 Aladdin Avenue is developed with a 90,000-square-foot warehouse constructed with a steel frame, slab-on-grade foundation, and metal-clad siding and roof build within or before 1953. Operations in this building consist of sheet metal fabrication, pipe fitting, and pipe fabrication, based on correspondence between the city of San Leandro and prior tenants in 1956. The warehouse, the existing sheet metal and pipe fabrication shop, is slated for expansion to allow for the process plumbing and piping shop to relocate on site. The subject property has historically been occupied by sheet metal fabricators; automotive repair shops; a steel company; packaging; and heating, ventilation, and air conditioning (HVAC) companies, and other commercial and light industrial tenants. Small additions to the warehouse have been constructed over the years (Figure 2).

3.2 Current Site Operations

Currently, the subject property is used as a sheet metal and pipe fitting fabrication shop and warehouse, office building, raw and finished goods material storage, and parking lot.

3.3 Site Observations

On January 22, 2025, Hallie Douglas of Terraphase conducted reconnaissance of the subject property to assess current land-use activities and environmental conditions. The subject property reconnaissance was documented with notes and photographs. Observations made during the reconnaissance are discussed below, and a photographic log is provided as Appendix B. The focus of a reconnaissance is to identify conditions that have the potential to cause adverse environmental impacts.

During the site reconnaissance, Terraphase was accompanied by John Voight, Project Executive, with ACCO, the Client-designated subject property contact. Terraphase accessed subject property building interiors and exterior areas. Terraphase observed a representative sample of the occupant spaces in the office building.

As part of the reconnaissance, Terraphase searched for evidence of the presence, use, or storage of hazardous substances and petroleum products including, but not limited to, areas of disturbed or

discolored soil; suspect equipment and/or building materials which may contain hazardous substances or petroleum products; areas of distressed vegetation; wastewater discharge areas; evidence of storage tanks/septic systems; waste management/disposal areas; lagoons, pits, or sumps; surface water management areas; and stained surfaces, etc.

3.3.1 Warehouse Eastern Side – 1111 Aladdin Avenue

The warehouse at 1111 Aladdin Avenue is subdivided into different operations. The eastern side of the warehouse houses sheet metal ducting fabrication operations, primarily serving the HVAC industry. Sheet metal is delivered to the subject property in large coils, stored both within and along the exterior of the warehouse. Automated machinery rolls flat sheet metal coils, proceeding to cutters that break them down into specified sizes. The rollers and cutters are automated and contain components that are both hydraulic and pneumatic. There are no sub-surface drains or collection systems for hydraulic fluid. Automated machinery then bends and forms the sheet metal. Certain fittings are made by hand within welding bays on the eastern side of the building. Precision presses used for “corner work” further shapes the sheet metal. Raw and completed material storage were observed throughout the eastern side of the building.

Towards the center of the sheet metal fabrication side of the building, large shears and press brakes conduct non-automated tasks and are electronically and pneumatically powered. Welding bays also provide handwork for non-automated tasks.

Electric-powered cranes are attached to the ceilings throughout the eastern side of the building. Six post-mounted transformers were observed throughout the interior. Second-story offices toward the center of the sheet metal fabrication shop have 360-degree views of the shop. A breakroom, janitors closet with natural gas-powered hot water heater, bathroom, and storage areas are located directly below the second-floor offices. Flammable chemical storage cabinets containing spray paint, paint, glue, adhesive, stripper, and paint thinner are located throughout the warehouse. Gas cylinder storage areas containing oxygen, acetylene, and argon are securely located along the interior perimeter of the eastern side of the warehouse.

A waste oil drum storage area was observed along the northwest corner of the sheet metal fabrication shop on secondary containment with approximately seven 55-gallon drums of varying fullness. No stains or odors were observed. Five-gallon buckets of duct liner adhesive glue were observed throughout the warehouse.

All welding bays have vacuum hoses for the removal of dust and fumes during handwork. The fumes are exhausted back into a dust collection system. Two dust collection systems, one within the sheet metal fabrication shop and one along the eastern exterior, filters the exhausted air. The metal dust is then collected in 55-gallon drums, managed, and removed as hazardous waste by a scrap metal contractor.

Waste streams for the facility consist of used oil, spray paint and gasses, scrap metal, and metal dust.

3.3.2 Warehouse Western Side – 1111 Aladdin Avenue

The western side of the 1111 Aladdin Avenue warehouse consists of the pipe fitting and fabrication shop. Raw materials, tools, and chemical storage were observed throughout the western side. Welding bays with exhaust connections to the dust collection system were also observed. An electronic- and pneumatic-powered plasma cutter was observed in the pipe shop, with ducting connected to the dust collection system. Welding gas storage in the pipe shop secured along the eastern wall.

3.3.3 Office Building – 1133 Aladdin Avenue

The office building at 1133 Aladdin Avenue (built in the early 2000s) is on the southwestern corner of the subject property. This building is slated to be demolished to provide additional space for the warehouse expansion. The office building consists of two stories, with mixed open cubicle space along the center and private office spaces along the exteriors. Rooftop HVAC systems provide forced air heating and cooling to the building. Wastes generated from the office building are limited to municipal trash and recycling. Commercial cleaners and chemicals were observed in a janitors closet on the second floor.

3.3.4 Building Exteriors and Parking Areas

Parking spaces for employees are located towards the southern and southeastern sides of the subject property. Two automatic gates with keycard access along Aladdin Avenue are the only access points to the subject property. Covered and uncovered raw and finished goods and material storage were observed along the southeastern and northeastern sides of the warehouse. Propane-powered forklifts, used on exteriors and stored occasionally inside the warehouse, transport and move goods. A 499-gallon propane aboveground storage tank (AST) on a concrete pad along the northeastern side of the warehouse fuels the forklifts. Two air compressor enclosures were observed along the eastern exterior wall of the warehouse. Two pad-mounted transformers were observed at the building exteriors of 1111 and 1133 Aladdin Avenue.

Solid waste dumpsters for municipal waste and recycling were observed along the eastern side of the warehouse. Several 55-gallon drums labeled as hazardous waste were observed along the northern subject property boundary. The drums contained metal dust from the dust collection systems.

Two PG&E transmission line towers were observed within the subject property boundary, towards the southeastern fence line. An unknown utility vent cap/manhole cover was identified along the southeastern side of the property, labeled “vent.” The subject property contact was unaware of subsurface features in that portion of the property.

Specific observations for elements indicative of current and historical usage of hazardous substances and/or petroleum products are provided below.

Element	Observation
Current or former underground storage tanks (USTs)	Terraphase observed an unknown manhole (vent) cover along the southeastern subject property boundary. At the time of the site reconnaissance, the site contact was unaware of the specifics of the cover. Several gasoline USTs were formerly present at the eastern exterior of the current office building. No features indicative of the presence of USTs, such as manways, vent pipes, or fill ports, were observed during the site reconnaissance. Mr. Voight was unaware of current or former USTs at the subject property.
Current or former ASTs and silos	Terraphase observed a 499-gallon propane AST on a concrete pad used to power the forklifts. Mr. Voight was unaware of the age or material of the tank during the site reconnaissance.
PCB-containing equipment	Terraphase observed two pad-mounted transformers along the exteriors of the warehouse and office building. No signage indicating PCB-free dielectric fluid was observed; however, no staining was identified on the concrete pad at the location of the transformer near the office building. De minimis staining was observed on the concrete pad at the location of the transformer near the warehouse. Six smaller transformers were observed secured along the ceiling within the main warehouse at 1111 Aladdin Avenue.
Current and former hazardous materials and/or petroleum product use/storage	Terraphase observed 55-gallon drums of hydraulic oil and glue/adhesive, along with household size containers of paint, stripper, and paint thinner. Drums were observed throughout the subject property warehouse, and household-sized paints were observed in chemical and flammable storage cabinets observed throughout the interior. Propane is used to power the forklifts used throughout the subject property exteriors, although they are occasionally stored inside of the warehouse. Welding gases, including oxygen, argon, and acetylene, were stored in cylinders in several storage locations throughout the interior of the subject property.
Hazardous waste	Terraphase observed several hazardous waste streams generated at the subject property. Waste oil is collected and stored inside the warehouse on secondary containment and removed from the subject property by a third-party vendor. Metal dust from the interior dust collection system is collected in 55-gallon drums and removed by a scrap metal vendor. The drums were observed stored on the eastern exterior of the warehouse, not on secondary containment. Empty paint and chemical containers, as well as empty gas cylinders are managed and taken offsite by a third-party vendor.
Drums, totes, and intermediate bulk containers	Terraphase observed drums, totes, and bulk containers of hazardous materials and waste as discussed above. Due to the nature of ACCO's industry, raw metal and piping materials are received in a variety of ways and either stored as is or within shelving or larger containers, in both the interior and exterior of the buildings. Individual welding bays throughout the warehouse contain a variety of smaller containers, gas cylinders, and tool storage, properly labeled and stored.
Non-hazardous solid waste (on-site disposal)	Terraphase observed no evidence of on-site solid waste disposal at the subject property (i.e., areas that appear graded by non-natural causes suggesting trash, construction debris, demolition debris, or other solid waste disposal on site).

Element	Observation
Non-hazardous solid waste (generation)	Non-hazardous waste generated at the subject property is limited to municipal waste and collected by Environmental Logistics. Terraphase observed trash receptacles inside the warehouse and dumpsters at the exterior.
Wastewater	Sanitary wastewater is discharged from the subject property to the East Bay Municipal Utility District (EBMUD) sanitary sewer system.
Floor drains, sumps, and drywells	Terraphase observed no floor drains, sumps, or dry wells within the on-site buildings.
Odors	Terraphase observed no strong, pungent, or noxious odors during the site reconnaissance.
Stains, pitting, or corrosion interior areas	Terraphase identified no significant staining or corrosion on the interior areas (floors, walls, and ceilings) during the site reconnaissance. De minimis staining was observed throughout the warehouse.
Stained or corroded exterior areas	Terraphase identified no significant staining or corrosion on the exterior surface areas during the site reconnaissance. Terraphase observed de minimis oil stains throughout the asphalt-paved parking surfaces, near one pad-mounted transformer, and within the air compressor enclosures.
Pools of liquid	Terraphase identified no standing surface water or pools or sumps containing liquids likely to be hazardous substances or petroleum products during the site reconnaissance.
Pits, ponds, or lagoons	Terraphase identified no pits, ponds, or lagoons at the subject property during the site reconnaissance.
Stressed vegetation	Terraphase did not observe stressed vegetation.
Stormwater	Stormwater from the subject property flows to the surrounding streets. A stormwater drain inlet is located along Aladdin Avenue on the southern corner of the subject property.
On-site wells	Terraphase observed no wells at the subject property. Monitoring wells were installed along the western and eastern sides of the subject property during previous environmental investigations; several wells were destroyed after the investigations were completed. No domestic wells are located at the subject property.
Septic systems	No current or former on-site septic systems were identified at the subject property.
Heating/cooling	The warehouse is heated by natural-gas powered rooftop forced air systems, and the office building is heated and cooled by natural gas-powered rooftop HVAC systems. No cooling systems are present at the 1111 Aladdin Avenue warehouse.
Other petroleum product transmission/storage	No petroleum product transmission or storage was identified at the subject property during the reconnaissance.

3.4 Site Utilities

On-site buildings are heated and cooled with natural gas rooftop forced air heating and cooling systems (cooling only provided to 1133 Aladdin Avenue). Utility service providers at the subject property include the following:

Utility	Service Provider
Electricity	PG&E
Natural gas	PG&E
Sanitary wastewater disposal	EBMUD
Industrial wastewater disposal	Not generated at the subject property
Drinking water supply	EBMUD
Solid (non-hazardous) waste disposal	Environmental Logistics
Hazardous waste disposal	Third-party service provider (waste oil disposal, scrap metal)

3.5 Site Physical Setting

The following subsections briefly describe the regional geology and hydrogeology of the subject property and the surrounding area.

3.5.1 Topography and Hydrology

Based on field observations, review of the United States Geographical Survey (USGS) 7.5-minute topographic maps provided by EDR, and the *EDR Radius Map™ Report with GeoCheck®* (EDR report; Appendix C), the subject property is situated approximately 34 feet above mean sea level. The local topography is generally flat.

The nearest surface water to the subject property is the San Francisco Bay, located approximately 1.8 miles west of the subject property at its nearest point.

3.5.2 Geology and Hydrogeology

Based on information accessed via the USGS website,[4] the majority of the subject property is underlain by quaternary deposits, which consist of alluvium, lake, playa, and marine deposits, unconsolidated and semi-consolidated. According to soil data accessed on the U.S. Department of Agriculture Natural Resources Conservation Service soil survey website[5] and the EDR report, the soils at the subject

[4] https://mrdata.usgs.gov/general/map-us.html

[5] https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

property primarily consist of Clear Lake clay, which are generally poorly drained with very slow infiltration rates.

The subject property overlies the Santa Clara Valley – East Bay Plain Groundwater Basin.[6]

According to the EDR report, no federal USGS wells or public water system wells were identified within 1 mile of the subject property. Twenty-five state wells were listed within 1 mile of the subject property.

On-site quarterly groundwater monitoring events conducted between April and November 1995 indicated groundwater flow at the subject property is to the southwest (Fox and Krogseng 1995a, 1995b, 1995c).

3.6 Adjoining Property Observations

During the reconnaissance, Terraphase observed the adjoining properties from public roadways and the subject property. The purpose of these observations was to identify obvious uses or conditions at the adjoining properties likely indicative of a REC or environmental concern for the subject property.

The subject property is in a generally commercial and industrial area. The subject property is bounded by the following properties (Figure 3):

- North-Northeast: The 1000 Montague Avenue property is developed with a large warehouse occupied by the Marathon Packing Corporation.
- Northwest: The 1144–1188 Montague Avenue properties are developed with large warehouses occupied by Lakeshore Learning Store and Santos Spice Products.
- West: The 1145 Aladdin Avenue property is developed with a large warehouse occupied by the San Leandro Maintenance Department.
- Southwest: The 2712 Teagarden Street property is developed with a large warehouse occupied by Peterson Trucking.
- South: The 978 and 1000 Aladdin Avenue property is developed with a large warehouse occupied by RahrBSG Warehouse and Hoffmeyer Company, respectively.
- Southeast: The 834 and 900 Aladdin properties are developed with large warehouse buildings occupied by Sogno Toscano Foods and Botner Manufacturing, respectively.
- East: The 2661 Alvarado Street property is developed with a large warehouse occupied by Production Logic.

Although the adjoining properties are developed and in use as industrial facilities, no evidence of releases at these facilities was observed during the site reconnaissance.

[6] https://gis.water.ca.gov/app/bp-dashboard/final/

4 Historical Records Review

A variety of sources were reviewed to develop the history of the subject property and adjacent properties to assess for environmental concerns. These resources included the following:

- Aerial photographs provided by EDR for the years 1939, 1946, 1958, 1963, 1968, 1974, 1982, 1993, 1998, 2005, 2009, 2012, 2016, and 2020;
- Sanborn® maps provided by EDR dated 1959, 1963, and 1968;
- City directories for the subject property and adjoining properties provided by EDR for the years between 1943 and 2020, in approximately 5-year increments;
- Topographic maps provided by EDR of the San Leandro and Hayward quadrangles dated 1899, 1915, 1947, 1948, 1959, 1968, 1973, 1980, 1996, 2012, 2015, 2018, and 2021;
- Tax parcel information provided by the Alameda County Assessor's Office; and
- Building plans and permits provided by the San Leandro City Clerk's Office.

Historically and environmentally significant findings from reviewed documents are summarized below. Copies of historical aerial photographs, Sanborn® maps, city directories, and topographic maps from EDR are provided in Appendices D, E, F, and G, respectively.

Based on our review of historical documents and the *ALTA/NSPS Land Title Survey*, the subject property was formerly comprised of two parcels (Section 2.2): Parcel 1 comprised of the warehouse and office buildings and Parcel 2 comprised of the eastern 100-foot portion of 2661 Alvarado Street, as shown on Figure 2. The current and previous subject property addresses have included:

- 1111 and 1133 Aladdin Avenue
- 1111 and 1133 West Avenue 137
- 2661 Alvarado Street (eastern 100-foot portion)

Additionally, based on our review of aerial photographs, the subject property (Parcel 1) appears to have operated independently from the eastern-adjoining property (2661 Alvarado Street) in 1958, 1963, and 1968. However, beginning in 1974, it appears that the subject and the eastern-adjoining properties may have operated as one facility. It is unclear how long the facilities operated together or independently. In 2005, there was soil disturbance that may indicate when the current separation of parcels began.

4.1 Aerial Photographs

Observations regarding the subject property, adjoining-properties, and surrounding area from aerial photographs are summarized below.

4.1.1 Subject Property

In the 1939 and 1946 aerial photograph, the subject property consists of unimproved, agricultural land.

The 1958 and 1963 aerial photographs depict one large warehouse, a small rectangular building, and paved parking areas. Two smaller structures are shown in between the subject property warehouse and

the eastern-adjoining warehouse. The development is consistent with present-day buildings on the subject and eastern-adjoining property. No significant changes to the subject property appear in the 1968 and 1974 aerial photographs, except for an addition depicted along the western side of the present-day ACCO warehouse, currently housed by ACCO's pipe fitting and fabrication shop. As described above, the 1974 aerial photograph depicts the subject and eastern-adjoining properties as operating contiguously.

No significant changes to the subject property appear in the 1982 through 1998 aerial photographs. The 2005 aerial photograph depicts the subject and eastern-adjoining properties as operating independently; the present-day layout of outdoor storage and eastern fencing is identified.

No significant changes to the subject property appear in the 2009 through 2020 aerial photographs.

Although a structure similar to the present building at 1133 Aladdin Avenue has consistently been observed since the 1958 aerial photograph, a slight change in the dimensions of 1133 Aladdin were identified in the 2005 aerial photograph, indicating potential new building construction in the same building footprint.

4.1.2 Adjoining Properties and Surrounding Area

A summary of development on adjoining properties is provided in the following subsections.

4.1.2.1 North-Adjoining Properties

In the 1939 and 1946 aerial photographs, the north-adjoining properties are unimproved, agricultural land.

In the 1958 aerial photograph, the north- and northwest-adjoining properties depict larger warehouse buildings and smaller structures with unpaved areas under development. The general area appears consistent with the present-day commercial and industrial use of the subject property and vicinity.

A large cylindrical building is observed on the north-adjoining property in the 1963 aerial photograph.

The north-adjoining properties are not included in the 1968 aerial photograph.

No significant changes to the north-adjoining properties appear in the 1974 through 2020 aerial photographs.

4.1.2.2 East-Adjoining Properties

In the 1939 and 1946 aerial photographs, the east-adjoining properties are unimproved, agricultural land.

In the 1958 through 1998 aerial photographs, a large rectangular warehouse building along with smaller ancillary structures and parking areas, consistent with the present-day development, are depicted on the northeastern adjoining property. The subject property and eastern-adjoining property warehouses appear to be operating contiguously.

In the 1974 aerial photographs, the southeastern-adjoining properties consist of several smaller structures and a larger warehouse building, consistent with present-day development.

In the 2005 aerial photograph, the eastern, unimproved side of the subject property appears paved and utilized for materials and equipment storage. The present-day fence line along the eastern side of the subject property is visible, indicating operational separation between the eastern adjoining and subject property.

4.1.2.3 South-Adjoining Properties

In the 1939 through 1968 aerial photographs, the south-adjoining properties are unimproved, agricultural land.

In the 1974 aerial photograph, the south-adjoining property consists of a large rectangular warehouse. The southwest-adjoining property across present-day Aladdin Avenue remains unimproved.

In the 1982 through 2020 aerial photograph, the previously unimproved southwest-adjoining property consists of two warehouse structures. No significant changes are depicted at the southwest-adjoining property.

4.1.2.4 West-Adjoining Properties

In the 1939 and 1946 aerial photographs, the west-adjoining properties are unimproved, agricultural land.

In the 1958 aerial photograph, the west-adjoining property appears to be cleared for development; a large, rectangular building footprint is visible. The general area further west remains undeveloped. Interstate 880 appears to run northwest–southeast approximately 850 feet to the west–southwest.

In the 1963 through 2020 aerial photographs, the west-adjoining property appears to be developed with a warehouse. Further west, smaller, ancillary structures are visible, along with what appears to be a track and field oval.

4.2 Sanborn® Fire Insurance Maps

Observations regarding the subject property, adjoining-properties, and surrounding area from Sanborn® maps are summarized below.

4.2.1 Subject Property

On the 1959 Sanborn® map, two buildings and a parking area are identified within the subject property boundary with the addresses 1133 and 1111 West Avenue 137. A steel-framed building with concrete floors and a wooden roof is depicted along the northeastern side of the subject property labeled as Aladdin Heating Corporation, manufacturers of industrial blowers. The warehouse is indicated to be heated via a natural gas-powered air system. Chemical extinguishers are indicated to be used. A mezzanine is depicted at the southwestern corner. One drying oven and two metal paint spray booths are noted within the factory area. A small spray paint enclosure is observed along the southeastern

portion of the building. Fenced transformers, a compressor house, and an oil house are located along the eastern exterior of the building. Four solvent tanks on iron cradles are indicated to be in a concrete dike at the northeastern portion of the subject property. A small structure labeled "inc" is located south of the solvent cradles; based on documents reviewed from the city of San Leandro, an incinerator was listed on inspection documents from 1958. An experimental shop with concrete floors is depicted on the northeastern corner. When the two parcels operated as one, the sand blasting enclosure and dust collection enclosure on the eastern side were within the subject property boundary. Parking areas are shown along the southeastern subject property line. A bank stationery and supply warehouse is depicted on the southwestern side of the subject property. The building is plastered and has reinforced concrete floors and wood trusses and posts.

No significant changes are depicted on the 1963 Sanborn® map, except a small addition is depicted at the southern side of the large warehouse at 1111 Aladdin Avenue.

On the 1968 Sanborn® map, no significant changes or improvements are observed at the subject property, except for an iron, wood-reinforced, concrete floor addition to the western side of the 1111 Aladdin Avenue warehouse. Additionally, the building at 1133 Aladdin Avenue is now labeled as "Auto Glass." Small structures along the eastern side are depicted as vacant.

4.2.2 Adjoining Properties and Surrounding Area

A summary of development on adjoining properties is provided in the following subsections.

4.2.2.1 North-Adjoining Properties

On the 1959 Sanborn® map, the north-adjoining property is developed with the Stella D'Oro Biscuit Company Cookie Bakery at 1000 West Avenue 135. The rectangular building consists of a flour and sugar warehouse on the southwestern side, the cookie factory with a large oven in the center, and an office on the northeastern corner. The southern portion of the site contains a parking lot. A Southern Pacific Railroad spur is directly north of the subject property. The northwestern adjoining property is vacant, with a reinforced concrete drug warehouse identified further west.

No significant changes are depicted on the 1963 and 1969 Sanborn® maps, except an additional structure, indicated to be used for carton storage, depicted west of the bakery at the northern-adjoining property.

4.2.2.2 East-Adjoining Properties

On the 1959 and 1963 Sanborn® maps, the east-adjoining property is developed with a large warehouse and plating facility labeled as the Ralph N Brodie Petroleum Meter Factory. The east-adjoining property and the subject property appeared to operate as one from approximately 1974 until the early 2000s. The factory is a reinforced concrete structure with concrete floors and posts, wood trusses, radiant heating (flooring), a plating room, and fuel test room.

On the 1968 Sanborn® map, the building is labeled as "Formerly Ralph N Brodie Factory" and indicated to be vacant.

4.2.2.3 South-Adjoining Properties

South-adjoining properties are not identified on the Sanborn® maps. West Avenue 137 is depicted south of the subject property in 1959 and 1963; the street is renamed to Aladdin Avenue in 1968.

4.2.2.4 West-Adjoining Properties

The majority of the western-adjoining properties are not depicted on the 1959 through 1968 Sanborn® maps. A drug warehouse was depicted towards the northwest of the subject property; the full extent of the warehouse could not be determined.

4.3 City Directories

Observations regarding the subject property, adjoining-properties, and surrounding area from city directories are summarized below. No City Directory listings were found for the previously identified subject property addresses, 1111 and 1133 West Avenue 137.

4.3.1 Subject Property

The subject property was identified in the city directories as follows:

- **1111 Aladdin Avenue**
  Aladdin Heating Corp (1960-1986), West Coast Steel Corp (1962-1992), News Equipment Sales Corp (1962-1980), Aladdin Mechanical Services (1991-1995), Sundown Environmental (1995), Stowell Sheet Metal (1995-1996), Advance Environmental Engineering (1995), Sequoia Environmental Services (1996, 2000), The Carpet Outlet (2000-2002), Direct Sales Floors (2000), Westpac Architectural Glass (2000-2005), GMS Global (2000-2005)
- **1133 Aladdin Avenue**
  Supply warehouse (1962), United California Bank (1965), Globe Auto Glass (1970), Amerada Glass Corp (1970-1975), R&S Drayage (1980), Cal-Best Pak (1986), Prestige Industries (1991-1995), R&S Reconditioning (1995-2000), San Leandro Investment Company (2000), West Coast Steel (2000), Aladdin Air Handling (2000-2002), ACCO Engineered Systems (2005-2020)
- **Eastern 100-foot portion of 2661 Alvarado Street**
  2661 Alvarado Street: Gardco Manufacturing (1970), Gardco Lighting (1980-1995, 2002), Thomas Outdoor Lighting (1996-2000, 2005), Production Logic (2014 – 2020), Diversified Metal Fab (2010-2017), Cabinet Works Co (2020)

4.3.2 Adjoining Properties and Surrounding Area

Adjacent addresses to the subject property include:

North-Northeast-Adjoining Properties:

- 1000 Montague Avenue: Stella D'Oro Biscuit Co of California (1970-1996), Marathon Packing Corp (2000)

Northwest-Adjoining Properties:

- 1144 Montague Avenue: Lakeshore Equipment (1970 – 1980), Lakeshore Curriculum (1980 – 1991), Lakeshore Learning (1992 – 2002)
- 1188 Montague Avenue: Communication Roll Co (1975 - 1980), California Service Tool (1986 - 1991), Santos Spice (1996 – 2002)

East-Adjoining Properties:

- 2661 Alvarado Street: Gardco Manufacturing (1970), Gardco Lighting (1980-1995, 2002), Thomas Outdoor Lighting (1996-2000, 2005), Diversified Metal Fab (2010-2017), Cabinet Works Co (2020)

West-Adjoining Properties:

- 1145 Aladdin Avenue: San Leandro Unified School District (1965-2020)

South-Adjoining Properties:

- 1050 Aladdin Avenue: Anixter Harbor (1970-1995), American Cable Products (1991), Eurostone Inc (1995-2010), Hoffmeyer Corporation (2014-2020), Parker Supply Co (2020)
- 1000 Aladdin Avenue: Penn's Professional Packing (1996-2017), Aladdin Freight (1996)
- 950 Aladdin Avenue: Armstrong Rubber Company (1970), Gates Rubber Co (1980), Surplus Town (2014), BSG Craftbrewing (2020)
- 978 Aladdin Avenue (CJ United Food Group (2010 – 2017), Continental Western Corporation (2017 – 2020)

Southeast-Adjoining Properties:

- 900 Aladdin: Royal Beauty Supply (1980 – 1995), Dlugosh Cabinet & Fixture (1996 – 2010)

Southwest-Adjoining Properties:

- 2712 Teagarden: California Envelope (1986 – 1992), Hudson Flooring (1995 – 2017)

The above-listed city directory observations are not an environmental concern, other than those discussed in Section 5.1.2.

4.4 USGS Topographic Maps

Observations regarding the subject property, adjoining-properties, and surrounding area from topographic maps are summarized below.

4.4.1 Subject Property

The 1899 through 1948 topographic maps depict the subject property as unimproved land.

The 1959 through 1973 topographic map shows a large building, similar in footprint and size to the present-day building at 1111 Aladdin Avenue. The subject property and general area are shaded pink, depicting dense development.

No significant changes to the subject property appear in the 1968 through 1973 topographic maps.

The 1980 topographic map depicts a smaller rectangular building, consistent with the present-day office building at 1133 Aladdin Avenue at the southwestern corner of the subject property.

The 1996 through 2021 topographic maps do not show subject property features. The maps are shaded grey and white, indicating dense development.

4.4.2 Adjoining Properties and Surrounding Area

The 1899 through 1948 topographic maps depict the adjoining properties as unimproved land.

Dense development, identified by pink shading, is depicted towards the north- and eastern-adjoining properties and general areas of the 1959 topographic map. The south- and west-adjoining properties do not appear to be developed.

No significant changes to the adjoining properties or surrounding areas appear in the 1968 topographic map, except for the addition of Pacific High School further northwest of the subject property.

On the 1973 topographic map, a large, rectangular structure appears on the south adjoining property.

On the 1980 topographic map, several small structures appear on the west adjoining property, along with two long structures towards the south.

The 1996 through 2021 topographic maps do not show adjoining property and surrounding area features. The maps are shaded grey and white, indicating dense development.

4.5 Property Tax Files

Based on tax information available on the Alameda County Assessor website, the subject property is a single 6.5-acre parcel identified as Assessor's Parcel Number 77A-648-3-12. The subject property is zoned for Industrial/Light Manufacturing.

4.6 Local Building Department Records

On January 24, 2025, Terraphase submitted a request to the city of San Leandro City Clerk's office for relevant any building plans and permits related to the subject property. An additional request was sent on February 24, 2025, with no records identified. The following city-provided records were reviewed:

- Various building, construction, and installation (fire alarms, crane system install, general building expansions and renovations) permits for ACCO at 1111 Aladdin Avenue dated between 2002 and 2020;
- Electrical and building inspection and maintenance forms for 1111 Aladdin dated between 1958 and 2003;
- Sprinkler system install plans for Aladdin Heating Corp in 1965;
- Business license applications for 1111 Aladdin Avenue from 1993;
- Plan review comments for the construction of 1133 Aladdin Avenue in 2002; and
- Certificate of Occupancy for 1133 Aladdin Avenue dated December 2, 2003.

No records of environmental concern were identified upon review of the City's public records.

4.7 Prior Reports

Terraphase reviewed the following prior environmental assessment and investigation reports (provided in Appendix H).

- *San Leandro Fire Department Underground Tank Closure Permit* (San Leandro Fire Department 1990). A UST closure permit for a 6,000-gallon gasoline UST at the eastern adjoining property (parcels formerly operating together), occupied by Gardco Lighting at the time, was submitted on May 18, 1990.
- *Underground Storage Tank Closure Report* (San Leandro Fire Department 1990). A 6,000-gallon gasoline UST, located at the eastern-adjoining property (Gardco Lighting) towards the corner of Aladdin Avenue and Alvarado Street, was removed by Tank Protect Engineering on June 6, 1990.
- *Underground Storage Tanks Closure Report, 1111 Aladdin Avenue* (San Leandro Investment Company 1991). Tank Protect Engineering, on behalf of the San Leandro Investment Company (property owner at the time), removed two 3,000-gallon gasoline USTs and associated piping from 1111 Aladdin Avenue. No corrosion or holes were identified upon removal. Petroleum odors were identified upon both tank removals. Four soil samples were collected from underneath the former locations of the tanks, and results of the analysis identified maximum total petroleum hydrocarbons (TPH) as gasoline (TPH-g) concentrations in soil of 1,500 parts per million (ppm).
- *Remediation Report, Regulatory Compliance Report – Update, San Leandro Investment Company*. (Godfrey & Associates 1992). Identification of nearby industries, contaminants, and regulatory compliance issues were addressed in this report. Former USTs discussed include two at 1111 Aladdin and one at the eastern-adjoining property, which was removed in 1991. The report includes results from a 1989 *Limited Phase II Environmental Site Assessment* (ATT 1990) from the installation of monitoring wells MW-1, MW-2, and MW-3 within the subject and eastern-adjoining properties (formerly operating as one). Petroleum product detections in soil samples indicate an old hydrocarbon spill. Volatile organic compound (VOC) detections in groundwater from wells along the eastern side of the eastern-adjoining property indicate the source is from neighboring upgradient facilities. ATT recommended no further investigation as the contamination found could be attributed to off-site sources.
- *Groundwater Monitoring, 1111 Aladdin Avenue, San Leandro, California* (Sequoia Environmental Corporation [Sequoia] 1993). Sequoia sampled groundwater monitoring wells MW-1, MW-2, and MW-3 In August 1993 and samples were analyzed for TPH-g; benzene, toluene, ethylbenzene, and xylenes (BTEX); total oil and grease; and VOCs. TPH-g, BTEX, and total oil and grease were either not detected or below detection limits. VOC results from MW-1, MW-2, and MW-3 in August 1993 compared to analysis from February 1990 indicate increasing concentrations of 1,1-dichloroethene (29 to 36, 1 to 20, and 13 to 32 parts per billion [ppb], respectively); decreasing concentrations of trichloroethene for all wells (281 to 170, 1,450 to 980, and 215 to 200 ppb, respectively); decreasing concentrations of tetrachloroethene for all wells (32 to 23, 20 to 15, and 5 to 4 ppb, respectively); and decreasing concentrations of 1,1-dichloroethane in MW-1 and MW-3 (132 to 8 and 59 to none detected, respectively) and increasing in MW-2 (3 to 27 ppb). Sequoia identified off-site migration or

attenuation by natural biological processes as the basis for the reduction of petroleum hydrocarbon and trichloroethene concentration in the wells (Sequoia 1993).

- *Additional Groundwater Investigation Report*[7]*, 1111 Aladdin Avenue* (Fox & Krogseng 1995a). A soil boring (FK-1) was advanced in the former tank area and a monitoring well was installed in November 1994. Soil samples from 5, 10, 15, and 20 feet below ground surface (bgs) detected TPH-g at concentrations of less than 0.1, 1.8, 16.2, and 0.2 ppm, respectively.
- *Quarterly Monitoring Reports, 1111 Aladdin Avenue* (Fox and Krogseng 1995a, 1995b, 1995c). Fox and Krogseng conducted quarterly groundwater monitoring at the subject property near the location of the former tank pits in April, July, and November 1995. Four groundwater monitoring wells were installed—two along the western end (FK-1 and MW-3) and two along the eastern side (MW-1 and MW-2) of the eastern-adjoining property. Concentrations of TPH-g at FK-1, the former tank pit, reduced from 44 to 8.4 ppm in December 1994 and October 1995, respectively. Additionally, BTEX drastically reduced at FK-1 from December 1994 to October 1995.
- *Phase I Environmental Site Assessment Report, San Leandro Investment Company* (Sequoia 2001). A Phase I ESA was conducted in August 2001 at 1111 Aladdin Avenue and 2661 Alvarado Street, both owned by the San Leandro Investment Company at the time. No evidence of on-site storage or disposal of hazardous materials was identified during the site reconnaissance. Sequoia did not identify RECs for the subject property.
- *Report of Soil and Groundwater Assessment* (Aqua Science Engineers Inc. 2001).[8] Soil borings (BH-H, BH-G, and BH-I) were advanced in the former painting area on the northwestern corner of the subject property, and soil samples were collected and analyzed for lead, chromium, and nickel. Laboratory results show that sample BH-I contained lead, chromium, and nickel at 7,300 pm, 1,800, and 22 ppm, respectively; sample BH-G contained lead, chromium, and nickel at 13, 20, and 15 ppm, respectively; and BH-H contained lead, chromium, and nickel at 13, 31, and 35 ppm, respectively. Elevated levels of lead and chromium were limited to a small portion of the northwestern area.

  Soil boring BH-A was advanced in a low drainage area at the north-central portion of the subject property, and samples analyzed for oil and grease had detected concentrations of 92 ppm. Soil borings BH-B and BH-C were advanced on the southeastern side of the warehouse, and soil samples were analyzed for oil and grease, lead, chromium, and nickel. Maximum detected concentrations were 52, 5.0, 27, and 37 ppm for oil and grease, lead, chromium, and nickel, respectively.

  Borings BH-D and BH-E were advanced in the former tank pit area and analyzed for lead and TPH-g, with maximum detected concentrations of 5.3 and 12 ppm, respectively. Groundwater monitoring results from FK-1 detected concentrations of TPH-g, benzene, toluene, ethyl benzene, and total xylenes at 11,000, 44, 5.3, 170, and 290 ppb, respectively. Groundwater monitoring results from MW-3 detected concentrations of TPH-g at 79 ppb.

[7] This report was downloaded from the California State groundwater reporting database GeoTracker; the report only included every other page and is considered a data gap. Soils data were included; results of groundwater monitoring was not included.

[8] This report was downloaded from the California State groundwater reporting database GeoTracker; the report only included every other page and is considered a data gap.

- *Report of Further Soil Assessment in Former Painting Area in Northwestern Portion of the Property at 1111 Aladdin Avenue (Aqua Science Engineers Inc. 2001).* Twenty-four shallow soil borings were advanced in October 2001, and soil samples were analyzed for lead and chromium in the former painting area northwest of the warehouse. None of the soil samples exceeded the San Francisco Bay Regional Water Quality Control District (SFBRWQCB) commercial/industrial risk-based screening levels (RBSLs) for lead (1,000 ppm). None of the total chromium concentrations exceeded the chromium III RBSL of 750 ppm for residential properties. Previously sampled boring BH-1 in the former painting area contained lead and chromium concentrations exceeding applicable commercial/industrial RBSLs at the time; several borings sampled in close proximity to the former BH-1 location identified low concentrations of lead and chromium.
- *Report of Further Soil and Groundwater Assessment in Former Underground Storage Tank Area, 1111 Aladdin Avenue* (Aqua Science Engineers Inc. 2001). Groundwater monitoring wells (MW-3 and FK-1) were sampled, and two new groundwater monitoring wells (MW-4 and MW-5) were installed. Soil samples collected from a boring along the western fence line of the subject property and from MW-5 (in the former tank area) contained xylene concentrations exceeding the RBSL at the time for groundwater protection (non-drinking water) but did not exceed RBSLs for nuisance or human health concerns from direct contact or indoor air impacts. Petroleum staining was present in borings BH-M and BH-N along the western property line. Groundwater samples from monitoring wells MW-4 and MW-5 and soil borings on the western property line exceeded RBSLs for non-drinking water for TPH-g, benzene, ethylbenzene, and total xylenes. Elevated hydrocarbon concentrations appear to flow off site to the west. Methyl tert-butyl ether (MTBE) was not detected in the soil and groundwater samples. Based on the low percentage of benzene and toluene concentrations relative to the TPH-g, ethylbenzene, and total xylenes, Aqua Science Engineers Inc. reported that the elevated hydrocarbons were related to a former gasoline release.
- *Soil Excavation Report* (Sequoia 2002). Excavation of the former painting area on the northwestern corner of the subject property began on March 1, 2002, with removal of the asphalt cover and soil, down to approximately 18 inches bgs. The total excavation dimensions were approximately 24 by 10 feet. Four confirmation samples (SS-1 through SS-4) were collected from the bottom of the excavation and analyzed for lead, with detected concentrations of 0.22, 0.62, 0.27, and 0.60 ppm, respectively. The excavation was eventually paved and capped with cement concrete.
- *Notice of No Further Action Required – 1111 Aladdin Avenue, San Leandro, California* (City of San Leandro 2002). Based on the *Soil Excavation Report* (referenced above) and site investigations and remedial activities in the former painting area, the city of San Leandro issued a notice of "No Further Action" (NFA) for the lead in soils in the former painting area of the subject property.
- *Report of Monitoring Well Installation on the Western Property Line* (Aqua Science Engineers Inc. 2004).[9] Groundwater wells MW-6 and MW-7 were installed along the western property line (near borings BH-M and BH-N) in February 2004, and soil and groundwater samples were collected. Soil samples from MW-6 and MW-7 were analyzed for TPH-g, BTEX, and MTBE; no detections were identified in the soil sample collected from MW-6. TPH-g, ethylbenzene, and total xylenes were

[9] This report was downloaded from the California State groundwater reporting database GeoTracker; the report was incomplete (only included every other page) and is considered a data gap.

detected in soil samples from MW-7 at concentrations of 210, 1.5, and 0.73 ppm, respectively. Soil sample results did not exceed SFBRWQCB Environmental Screening Levels (ESLs) at either residential or commercial sites where groundwater was not a current or potential source of drinking water. Analysis of groundwater samples collected from MW-6 detected concentrations of TPH-g ethylbenzene at 2,300 and 14 ppb, respectively. Analysis of groundwater samples collected from MW-7 detected concentrations of TPH-g, ethylbenzene, and total xylenes at 22,000, 1,800, and 1,500 ppb, respectively. No benzene, toluene, or MTBE were detected in either sample, indicating old and degraded hydrocarbons.

- *Closure Letter for 1133 Aladdin Avenue (formerly 1111 Aladdin Avenue), San Leandro, California* (SFBRWQCB 2004). Two steel gasoline USTs installed in 1979 at the subject property were removed and over excavated in 1991 due to an unauthorized release. Soil and groundwater investigations from within the former tank area and along the western property boundary indicate an overall decrease in contaminant concentration, with benzene and toluene depleted in soil and groundwater. According to the closure letter, no surface water bodies, domestic wells, or residential areas were listed within 1,000 feet of the subject property, and groundwater was not a current or potential source of drinking water due to the subject property overlying a regional plume of chlorinated hydrocarbons migrating from off site. The subject property is zoned for industrial/commercial and is expected to remain as such, and given those conditions, no further investigation or remediation was recommended, as the concentrations remaining on site did not pose a significant risk to human health or the environment. The determination of NFA was granted to the subject property on April 6, 2004.

4.8 Summary

Based on a review of historical documents, the subject property was developed for agricultural use prior to 1939. The subject property was developed with the warehouse and office building by or before 1956; the office building was redeveloped by 2003. The subject property was formerly comprised of two parcels: Parcel 1 comprised of the 1111 and 1133 Aladdin Avenue buildings and Parcel 2 consisting of the eastern 100-foot portion of 2661 Alvarado Street. Parcel 1 appears to have operated independently from the eastern-adjoining property (2661 Alvarado Street) in 1958, 1963, and 1968. However, beginning in 1974, it appears that the subject and the eastern-adjacent properties may have operated as one facility. It is unclear how long the facilities operated together or independently. In 2005, there was soil disturbance that may indicate when the separation of parcels began. The 1111 Aladdin Avenue building has been occupied by a variety of commercial and industrial tenants including R&S Drayage, Cal Best Packaging, R&S Reconditioning, San Leandro Investment Company, Aladdin Mechanical and Heating Corporation, Corbiere Auto Repair, West Coast Steel Company, News Equipment Sales Corporation, and Stowell Sheet Metal. Adjoining properties include a manufacturing facility (including plating), bakery and warehouse, and school maintenance buildings.

Petroleum impacts were historically encountered in soil and groundwater at the subject property due to leaking gasoline USTs; the USTs were removed in the early 1990s, and the impacts were investigated through the 1990s and early 2000s. Soil and groundwater investigations were also conducted at the former painting area at the northwestern corner of the subject property. The former painting area received a determination of NFA on May 30, 2002, and is considered a REC due to residual

concentrations. The former tank area of the subject property received a NFA determination on April 6, 2004, and is also considered a REC due to residual concentrations. Sitewide historical industrial operations is considered a REC, along with historical plating operations on the eastern-adjoining property and a regional groundwater contamination plume. An unknown manhole cover (labeled as a vent) was identified on the southeastern side of the subject property; the lack of records pertaining to potential contents of the feature is considered a REC. De minimis conditions observed at the subject property include staining within the interior and exterior areas of the warehouse and former agricultural operations.

Based on a review of historical documents, the adjoining properties have generally been developed for commercial and industrial purposes. A biscuit company and warehouse historically operated on the northern-adjoining property; a meter manufacturing facility operated on the eastern-adjoining property, including plating operations; and a school district maintenance facility operated on the western-adjoining property. The plating operations historically present on the eastern-adjoining property constitute a REC. No other adjoining sites are considered RECs.

5 Regulatory Records Review

Terraphase reviewed applicable and reasonably ascertainable federal, state, and local environmental-related databases as part of this Phase I ESA, discussed below.

5.1 Standard Environmental Record Sources

EDR provided the regulatory agency database report discussed in this section. Terraphase reviewed the EDR report for information regarding reported releases of hazardous substances and petroleum products on or near the subject property. Specific records and search distances (measured from the approximate property boundary of the subject property) for the environmental databases were reported by EDR to be consistent with ASTM E1527-21 and are discussed in the EDR report dated January 22, 2025. The EDR report is provided as Appendix C.

These sources of information, as well as interviews conducted, historical sources, and subject property observations, were found to be sufficient in evaluating the existence of RECs, historical RECs, CRECs, and/or de minimis conditions as part of this Phase I ESA. Therefore, an in-person review of the county or state records by Terraphase was found to be unwarranted (as defined in ASTM E1527-21, Section 8.2.3).

5.1.1 Subject Property Listings

The subject property's addresses, 1111 and 1133 Aladdin Avenue, were associated with the following listings in the EDR report:

- **ACCO Engineered Systems, 1111 and 1133 Aladdin Avenue**. The subject property was identified in the CA CERS Haz Waste, HWTS, CIWQS, CHMIRS, FINDS, ECHO, E Manifest, and HAZNET databases. CERS records from 2016 identified various administrative violations including failure to upload annual Hazardous Materials Business Plan (HMBP) documents in a timely manner. Each violation was returned to compliance upon addressing the citation and submitting required documents or trainings. Hazardous waste manifests from 2002 and 2012 to 2022 identified asbestos-containing waste, waste oil/mixed oil, organic liquids, and organic solids removed from the site. Based on the nature of the listings and the lack of documented release or violation, the ACCO Engineered Systems listings are not a significant environmental concern (i.e., are not considered a REC).
- **San Leandro Investment Company (also listed as Harris Rebar Oakland), 1111 and 1105 Aladdin Avenue**. The subject property was identified in the CA HWTS, CA Haznet, FINDS, and CA EMI databases. Hazardous waste records indicated 15 tons of contaminated site cleanup soil were disposed under USEPA ID CAT000646117 in 2002, and 0.45 tons of asbestos-containing waste were disposed in 1991 under a temporary USEPA ID. Based on the nature of the listings and the lack of documented release or violation, the San Leandro Investment Company listings are not considered a REC.
- **Aladdin Mechanical and Heating Corp, 1111 Aladdin Avenue**. The subject property was identified in the CA RGA LUST, UST Finder Release, EMI, ERNS, RCRA SQG, CA LUST, CA SWEEPS LUST, Hist UST, and FINDS databases. Aladdin Mechanical and Heating Corp is listed as a historical small quantity generator from 1987. Two-3,000 gallon, single-walled underground gasoline tanks were installed at

1111 Aladdin Avenue (at the time occupied by Aladdin Mechanical and Heating Corp) in 1979 and later removed and replaced with two new steel tanks in the early 1980s (SFBRWQCB 1991). Additional information regarding this listing can be found in Section 4.7. The subject property received a NFA determination from the SFBRWQCB on April 6, 2004, based on residual petroleum impacts remaining on site not posing a potential threat to human health or the environment under the subject properties' commercial/industrial land use. Additionally, the NFA stated redevelopment of the property for more sensitive uses may be proposed with additional review and investigation required. Based on residual contaminant concentrations at the subject property and no current engineering or institutional controls in place, the former UST area is considered a REC.

- **Thomas Outdoor Lighting (also listed as Acco 2661 Alvarado Street), 2661 Alvarado Street (eastern-adjoining and hydraulically upgradient of subject property)**. Although 2661 Alvarado Street is east of the subject property, the western portion of 2661 Alvarado Street (western 100 feet) was transferred to the subject property and is currently part of the subject property.

  Thomas Outdoor Lighting is listed in the RCRA SQG, SWEEPS UST, Hist UST, FID UST, FINDS, ECHO, NPDES, WDS, CIWQS, CERS, and CERS Haz Waste databases. Thomas Outdoor Lighting, a light fixture manufacturing operation, is listed as a RCRA small-quantity generator beginning in 1996. The site has a terminated permit within the industrial stormwater WDR database as of 2014. CERS records from 2016 identified various administrative violations, including failure to upload annual HMBP documents in a timely manner. Each violation was returned to compliance upon addressing the citation and submitting required documents or trainings. Based on the administrative nature of the listings and lack of a release, the CERS and RCRA listings are not considered a REC to the subject property.

  UST records indicate one 6,000-gallon UST was installed at the site in 1974. San Leandro Fire Department records indicate the 6,000-gallon gasoline UST was removed in 1990. Soil samples collected from the removal area did not detect residual petroleum hydrocarbons in the soil; low levels of BTEX were detected in soil above detection limits (Tank Protect Engineering 1990). Maps drawn during the removal indicate the tank was situated south of the 2661 Alvarado Street building, closer to the corner of Alvarado Avenue and Aladdin Street. Based on the detected concentrations of BTEX in soils post-UST removal, the Thomas Outdoor Lighting site is considered a REC.

5.1.2 Adjoining and Surrounding Property Listings

The following adjoining properties were listed in the EDR report:

- **Stella D'Oro Biscuit Company (also listed as Marathon Packing Corporation), 1000 Montague Street (northern-adjoining and hydraulically cross-gradient of subject property).** The Stella D'Oro Biscuit Company is listed on the CA LUST, Hist UST, Hist Cortese, SWEEPS UST, and FID UST databases. Two USTs (one diesel and one gasoline) were removed from the site in September 1986. Confirmation soil and grab-groundwater samples were collected during the time of removal from the test pit; concentrations of TPH-g and TPH as diesel were not detected in soil but TPH-g was detected at 20,000 ppb in the grab-groundwater sample (SFBRWQCB 1998). Soil borings and grab-groundwater samples were collected during additional investigations in 1998; no detectable concentrations of TPH-g and TPH as diesel, BTEX, or MTBE were found in both soil and groundwater samples. The site received an NFA determination on April 29, 1998. Based on the NFA status and

cross-gradient hydraulic position, the associated listing does not constitute a REC to the subject property.

The Marathon Packing Corporation is listed in the EDR Hist Auto database from 2014. No additional information is provided. Based on the administrative nature of the listing, lack of documentation of a release, and cross-gradient hydraulic location of the site, the Marathon Packing Corporation listing is not considered a REC.

- **Penn's Professional Packing, 1000 Aladdin Avenue (southern-adjoining and hydraulically cross-gradient of subject property)**. Penn's Professional Packing is listed in the PFAS ECHO and RCRA NonGen/NLR databases. No violations or enforcement actions were identified on the PFAS ECHO database. No specific wastes were provided with the RCRA NonGen/NLR listing from 2003. Based on the lack of a documented release and administrative nature of the listings, the Penn's Professional Packing site is not considered a REC to the subject property.
- **Anixter, Inc., 1050 Aladdin Avenue (southwestern-adjoining and hydraulically cross-gradient of subject property).** Anixter, Inc. is listed in the RCRA NonGen/NLR database as a handler of hazardous waste in 1986. No specific wastes were provided with the listing; however, no violations were reported. Based on the administrative nature of the listing and lack of information related to a release, the Anixter, Inc. property is not considered a REC.
- **Brewer's Supply Group, 950 Aladdin Avenue (southeastern-adjoining and hydraulically cross-gradient of subject property**). Brewer's Supply Group is listed in the RCRA NonGen/NLR database as a handler of hazardous waste in 2021. No specific wastes were provided with the listing; however, no violations were reported. Based on the administrative nature of the listing and lack of information related to a release, the Brewer's Supply Group property is not considered a REC.
- **Botner Manufacturing, 900 Aladdin Avenue (southeastern-adjoining and hydraulically cross-gradient of subject property).** Botner Manufacturing is listed in the CERS and CERS HAZ WASTE databases as a hazardous waste generator and chemical storage facility. Violations listed from 2014 to 2021 include failure to obtain a USEPA ID and failure to complete and submit an HMBP. These violations were eventually returned to compliance. Based on the administrative nature of the listings and lack of documentation of a release, the Botner Manufacturing site is not considered a REC to the subject property.
- **San Leandro Unified School District, 1145 Aladdin Avenue (southwestern-adjoining and hydraulically downgradient of subject property)**. The San Leandro Unified School District is listed in the UST Finder Release, CA Hist UST, CA LUST, CA SWEEPS, and CO Fid UST databases. UST records indicate three USTs (diesel and gasoline) were installed at the site in 1959 and 1974. A leak was identified in 1987 during tank removal. An NFA determination was issued on October 11, 1995. A memorandum dated October 12, 1995, indicated case closure for the site based on impacts to soils only. Based on the downgradient hydraulic position of the listing and NFA status, the associated listing is not considered a REC.

  Waste tracking records identify 100 pounds of an organic waste mixture was off hauled from the site in 2021. Due to the administrative nature of the listings, the waste tracking records listing is not considered a REC.

- **DWA Plume, located throughout the city of San Leandro proper.** The DWA Plume is listed in the Response, Envirostor, Hist Cal Sites, and Cortese databases. The DWA Plume is a comingled, regional groundwater plume impacted by VOCs, petroleum-related compounds, and metals from multiple sites in San Leandro, California.[10] The extent of the plume includes a 2-square-mile area within central San Leandro bounded by Marina Boulevard to the north, East 14th Street to the east, San Francisco Bay to the west, and residential development bounded by Floresta Avenue, Farnsworth Street, and Manor Boulevard to the south (RMD Environmental Solutions 2023). The subject property is in the middle of the historic plume area, originating from historical industrial activity towards the northeast, and the toe of the plume area further southwest, based on the hydraulic gradient of west–southwest. The presence of a regional groundwater plume intersecting the subject property is considered a REC.

In addition to the adjoining properties, the EDR report lists numerous sites within applicable approximate minimum search distances. These sites do not appear to have the potential to impact the subject property for the following reasons:

- Sixty-five sites are listed only as a generator of RCRA or California hazardous waste and are at least 600 feet from the subject property; records are not indicative of a release to the environment.
- Three sites are listed in a database as having had a release to the environment but are more than 0.25 miles from the subject property, are hydraulically upgradient of the subject property, have received regulatory closure, and only involved impacts to soil.
- Twenty-seven sites are listed in a database as having a release to the environment where groundwater or soil vapor were either suspected or confirmed to be impacted but are more than 0.1 miles away in a cross- or downgradient hydrologic position relative to the subject property.

The remaining sites listed in the EDR report are discussed below.

- **Peterson Tractor Co, 955 Marina Boulevard (located 0.281 miles northwest and hydraulically cross-gradient of subject)**. Peterson Tractor Co. is listed in the SEMS ARCHIVE database, which tracks sites that have no further interest under the Superfund program. An archived status indicates no further steps are taken to place these sites on the National Priorities List. Based on the distance from the subject property, cross-gradient location, and archive status, the Peterson Tractor Co. site is not considered a REC.
- **Lincoln Properties, 1465 Factor Street (located 0.34 miles southwest and hydraulically down-gradient of the subject property)**. Lincoln Properties is listed in the SEMS Archive database. Based on the distance from the subject property, downgradient location of the listing, and archived status, the Lincoln Properties site is not considered a REC.
- **Liquid Gold Oil Corporation, 1696 Martinez Street, (0.671 miles north of the subject property and hydraulically cross gradient of the subject property)**. The Liquid Gold Oil Corporation is listed in the CORRACTS database. CORRACTS is a list of handlers with RCRA Corrective Action Activity, with the database showing corrective action core events for handlers having corrective action activity. The site submitted a RCRA Part A permit application due for on-site oil potentially containing solvents in

[10] https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=01990002

1980. No interim status document was ever submitted for the facility. Based on the site being undeveloped since the mid-1980s, the distance from the subject property, and closed listing with the California Department of Toxic Substances Control due to lack of treatment, storage, and disposal facility regulation, the Liquid Gold Oil Corporation site is not considered a REC.

5.1.3 Additional Listings

Terraphase reviewed the following databases for relevant records related to the subject property and adjoining properties:

- Applicable online state cleanup database, such as Envirostor or Geotracker in California.
- Applicable hazardous waste database, such as HWTS in California.
- National Pipeline Mapping System Public Viewer website.[11]
- United States Coast Guard National Response Center online databases.
- USEPA Envirofacts website.[12]

The subject property and adjoining properties were identified in applicable database search results and further discussed in Sections 4.7, 5.1.1, and 5.1.2.

5.1.4 Orphan Listings

Terraphase also reviewed the "unmappable" (also referred to as "orphan") listings within the EDR report, cross-referencing available address information and facility names. Unmappable properties are listings that could not be plotted with confidence but are potentially in the general area of the subject property based on the partial street address, city, or zip code. EDR identified one orphan listing. Based on the available information, the listing is not considered a REC based on the distance away from the subject property.

5.2 Additional Environmental Record Sources

In addition to EDR report review, Terraphase contacted additional environmental record sources, as described in the following subsections.

5.2.1 Local Regulatory Records

Applicable municipal records reviewed in preparation of this Phase I ESA report are discussed below.

5.2.1.1 City of San Leandro Environmental Health

On January 24, 2025, Terraphase submitted a request to the city of San Leandro for relevant records related to reports, permits, inspection logs, and/or figures regarding environmental health complaints,

[11] https://pvnpms.phmsa.dot.gov/PublicViewer/

[12] https://enviro.epa.gov/

environmental permits and monitoring reports, and on-site well and septic systems at the subject property. Records were released both online and during several in person records reviews on February 5 and 27, 2025. The following city-provided records related to the subject property were reviewed:

- November 16, 1953 – Aladdin Heating Corporation communications with the city of San Leandro requesting a permit for the installation of a 1,000 gallon gasoline tank.
- December 15, 1965 – Aladdin Heating Corporation communications with PG&E regarding refusal to approve a UST location due to close proximity to a transmission tower line along southeastern property boundary.
- City business licenses for 1111 Aladdin Avenue
    - 1968 - 1973 – News Equipment Sales Corporation
    - 1974 – West Coast Steel Company
    - 1976 – Corbiere's Auto Repair
- 1974 – Application for permit to operate a UST at 2661 Alvarado Street (eastern-adjoining property). A 6,000-gallon, single-walled gasoline UST was installed at the eastern-adjoining property in 1974.
- May 1979
    - Plot plan for Aladdin Heating Corporation for the installation of two gasoline USTs.
    - Tank installation documents for installed USTs from the San Leandro Fire Department.
- December 7, 1979 – Approval notice for R&S Drayage from the San Leandro Fire Department to install a 288-gallon propane AST along the southeastern exterior of 1133 Aladdin Avenue.
- April 14, 1986 - Gasoline Dispensing Facility Permit issued by the Bay Area Air Quality Management District (BAAQMD) for Aladdin Heating Corporation for the two 3,000-gallon gasoline USTs installed at the site in 1979.
- 1988 – Tank tightness test for two on-site USTs from Paradiso Construction.
- 1991 – UST documents from the San Leandro Fire Department for the removal of two steel gasoline USTs at the subject property.
- 1979, 1985, 1999 – Fire Safety Inspection reports for West Coast Steel and Aladdin Heating Corp documenting remarks (exit doors stuck, provide cover plate for outlet) that eventually returned to compliance.
- Hazardous waste manifests for ACCO.
- 2013, 2016, 2020 and 2022 – City of San Leandro Inspection Reports; general comments include clean and well-kept outdoor areas with no trash accumulation. Common violations are administrative and include failure to update the HMBP in CERS, which was eventually returned to compliance.
- Current HMBP site maps from CERS.
- Current HMBP submittal from 2024 documenting 55-gallon drums of hydraulic oil, a 499-gallon propane AST, and cylinders of acetylene, oxygen, and argon gas located on site.

5.2.1.2 City of San Leandro Public Works

On January 24, 2025, Terraphase submitted a request to the city of San Leandro Public Works' Engineering and Planning Divisions for relevant records related to reports, permits, inspection logs, and/or figures regarding environmental health complaints, environmental permits and monitoring reports, and on-site well and septic systems at the subject property. Based on local city department organization, all files reviewed are included with the building department records discussed in Section 4.6.

5.2.1.3 San Leandro Fire Department

On January 24, 2025, Terraphase submitted a request to the San Leandro Fire Department for relevant records regarding any fires, complaints, permits, and violations involving hazardous waste or materials; UST/AST installation, abandonment, or removal; hazardous waste generation and handling records; hazardous releases; and remediation programs for the subject property. On January 27, 2025, a response was received; no records were identified for the subject property addresses.

5.2.2 County Regulatory Records

Applicable Alameda County records reviewed in preparation of this Phase I ESA report are discussed below.

5.2.2.1 Alameda County Fire Department

On January 24, 2025, Terraphase contacted the Alameda County Fire Department to request relevant records related to the installation or removal of on-site USTs and/or ASTs. On January 24, 2025, a response was received; no records were found for the subject property.

5.2.2.2 Alameda County Department of Environmental Health

On January 24, 2025, Terraphase submitted a public records request to the Alameda County Department of Environmental Health to request relevant records regarding any fires, complaints, permits, and violations involving hazardous waste or materials; UST/AST installation, abandonment, or removal; hazardous waste generation and handling records; hazardous releases; and remediation programs for the subject property. On January 27, 2025, a response was received; no records were found for the subject property address.

5.2.2.3 BAAQMD

On January 24, 2025, Terraphase submitted a public records request to BAAQMD to request relevant records regarding any fires, complaints, permits, and violations involving hazardous waste or materials; UST/AST installation, abandonment, or removal; hazardous waste generation and handling records; hazardous releases; and remediation programs for the subject property. On January 29, 2025, a response was received with the following records transmitted for 1111 Aladdin Avenue; no records were found for 1133 Aladdin Avenue:

Applications for permits from 1986, 1987, and 1990 for the operation of surface coating, solvent cleaning, and a paint booth.

Approved gasoline dispensing facility permit from 1986 for the San Leandro Investment Company.

5.2.3 State Regulatory Records

Terraphase accessed state regulatory records via Geotracker and Envirostor as discussed in Section 5.1.3.

6 Interviews

Owner and regulatory agency interviews conducted by Terraphase are presented in this section.

6.1 Interview with Current Owner, Operator, and Occupant Representatives

During the subject property reconnaissance visit on January 22, 2025, Terraphase conducted interviews with key site manager (as defined in the ASTM E1527-21, Section 10.5.1) John Voight, who has been associated with the subject property since 2023. Additional information provided by facility personnel during the Site reconnaissance is discussed in Section 3.3. Additional information otherwise provided by Mr. Voight during the reconnaissance is discussed in in applicable sections of this report.

In addition, Mr. Voight was contacted on February 24, 2025, to discuss the presence of a manhole (labeled a vent) that was identified during the site reconnaissance. Mr. Voight provided photographs from a utility locate event that occurred on February 25, 2025, indicating shallow pipes diagonally to the manhole that abruptly end. Ground-penetrating radar scans identified a potential concrete block or vessel.

6.2 Interview with Former Owner, Operator, and Occupant Representative

Former owners, operator, and occupant were not contacted/interviewed as part of this Phase I ESA.

6.3 Interviews with Regulatory Agency Representatives

Terraphase contacted local, county, and state agencies via telephone, electronic mail, letter, or in person or accessed available records online to inquire as to whether they possessed relevant records regarding the subject property, as discussed in Section 5.2.

7 Non-Scope Considerations

Terraphase reviewed available information regarding the following non-scope considerations.

ASTM E2600-22 was used as guidance for conducting vapor encroachment screening for the subject property.[13] The purpose of the screening was to assess whether a vapor encroachment condition exists from contaminants of concern that may migrate as vapors onto a property as a result of contaminated soil and groundwater on or near the subject property.

In accordance with ASTM E2600-22 (Tier 1), potential petroleum hydrocarbon sources (e.g., active LUST cases) were evaluated for vapor intrusion within 1/10 mile of the subject property and VOC sources (active SLIC cases) within 1/3 mile of the subject property. One potential petroleum hydrocarbon and VOC source was identified within applicable distances, as discussed in Section 8.1, Finding 2.

[13] Terraphase notes that vapor encroachment screening in accordance with the ASTM E2600 standard is considered a non-scope consideration in ASTM E1527-21.

8 Findings, Opinions, and Conclusions

Terraphase performed the Phase I ESA in conformance with the scope and limitations of ASTM E1527-21 of the Aladdin Avenue property at 1111 and 1133 Aladdin Avenue, San Leandro, California (the subject property). Any exceptions to, or deletions from, this practice are described in Section 1 of this report.

Upon review of user-provided information, review of historical and regulatory records, performing the site reconnaissance, and conducting interviews, Terraphase identified the following findings as having the potential to be RECs, CRECs, historical RECs, de minimis conditions, or as otherwise noteworthy. Additionally, our data gap analysis is provided below. No controlled RECs, historical RECs, business environmental risks, or significant data gaps during completion of this Phase I ESA.

As shown below, this assessment has revealed seven recognized environmental conditions (RECs) during completion of this Phase I ESA. Additionally, two other environmental findings were identified as de minimis conditions.

8.1 RECs

Terraphase identified the following RECs during this Phase I ESA:

- **Finding 1: Onsite petroleum hydrocarbons and solvent usage throughout the subject property from the sitewide historical industrial use.** The subject property has been developed for industrial use since at least 1956. Historical on-site features and equipment include aboveground solvent tanks, underground gasoline storage tanks, metal spray paint booths, transformer enclosures, and compressor enclosures, along with an incinerator, sand blasting area, plating area, drying oven, and oil house. Former subject property tenant industries include metal fabrication, fleet fueling, HVAC manufacturers and suppliers, industrial blower manufacturing, auto body repair, and auto glass. Based on the use of petroleum hydrocarbons and solvent usage throughout the subject property, the sitewide historical industrial use is considered a REC.
- **Finding 2: Presence of a regional groundwater contaminant plume intersecting the subject property.** The subject property is within the bounds of the DWA Plume, a comingled, regional groundwater plume impacted by VOCs, petroleum-related compounds, and metals from multiple sites in San Leandro, California.[14] The extent of the plume includes a 2-square-mile area within central San Leandro bounded by Marina Boulevard to the north, East 14th Street to the east, San Francisco Bay to the west, and residential development bounded by Floresta Avenue, Farnsworth Street, and Manor Boulevard to the south (RMD Environmental Solutions 2023). The presence of a regional groundwater contaminant plume intersecting the subject property with depths of groundwater at approximately 19-20 feet below grade is considered a REC.
- **Finding 3: Onsite presence of an unidentified vent/manhole feature.** During the site reconnaissance in January 2025, a manhole cover (labeled as a vent) was identified towards the southeastern side of the subject property, along with concrete patching. The subject property

[14] https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=01990002

contact was unaware of particular features during the site reconnaissance, and no additional information was uncovered during public records requests to further identify the feature. Photographs from a utility locate event indicate shallow pipes are located diagonal to the manhole that abruptly end. Ground-penetrating radar scans identified a potential concrete block or vessel. The onsite presence of an unidentified vent/manhole feature is considered a REC.

- **Finding 4: Historic plating operations at the eastern adjoining property.** Based on features from the 1959, 1963, and 1968 Sanborn® maps, plating was conducted on a portion of the eastern-adjoining property (2662 Alvarado Street). Although 2661 Alvarado Street is east of the subject property, the western portion (western 100 feet) of the property was transferred to and is currently part of the subject property. No current open remediation cases are present on the eastern-adjoining property. Based on chemical use during plating processes, the historical plating operations at 2661 Alvarado Street are considered a REC to the subject property.
- **Finding 5: Former UST at the adjoining 2661 Alvarado Street property.** A 6,000-gallon UST was installed at 2661 Alvarado Street in 1974. Although located to the east of the subject property, the western portion of 2661 Alvarado Street (western 100 feet) was transferred to and is currently part of the subject property. Based on maps reviewed, the UST was likely located outside of the western 100 feet of 2661 Alvarado Street and closer to the corner of Alvarado Avenue and Aladdin Street. The UST was removed in 1990 and soil samples collected from the removal area detected low levels of BTEX above detection limits but no residual petroleum hydrocarbons. The former UST at 2661 Alvarado Street is considered a REC.
- **Finding 6: Residual petroleum impacts at the former UST area of the subject property.** Aladdin Heating Corporation installed two 3,000-gallon underground gasoline (leaded and unleaded) tanks with pump islands adjacent to present-day 1133 Aladdin Avenue in 1979. These tanks were removed, due to potential leaking, in the early 1980s and replaced with two steel-constructed 3,000-gallon unleaded gasoline tanks. In October 1991, the two steel tanks were removed. Soil borings and groundwater monitoring wells installed within the former tank area, downgradient of the tank area, and along the western property fence line were sampled and analyzed for TPH-g, BTEX, MTBE, and solvents during investigations from 1994 until 2004. Contaminant concentrations have decreased since the removal, with benzene and toluene depleted in soil and groundwater through natural attenuation (SFBRWQCB 2004). Based on residual contaminant concentrations at the subject property, the former UST area is considered a REC.
- **Finding 7: Residual lead and chromium III impacts in soil at the former painting area on the subject property.** Impacts to shallow soil were discovered in the former painting area (northwestern corner) of the subject property and remediated after soil sampling and excavation in March 2002. A 24 by 10-foot excavation removed impacted soil down to 18 inches bgs. Confirmation soil samples analyzed for lead detected concentrations below SFBRWQCB Tier 1 ESLs. The excavation was eventually paved and capped with cement concrete. An NFA determination was granted to the former painting area on the subject property on May 30, 2002. Based on residual lead and chromium III in soil contaminant concentrations at the subject property, the former painting area is considered a REC.

Terraphase identified no CRECs during this Phase I ESA.

8.2 Historical RECs

Terraphase identified no historical RECs during this Phase I ESA.

8.3 De Minimis Conditions

Terraphase identified the following de minimis conditions during this Phase I ESA:

- **Finding 8: Staining within interior and exterior areas of the warehouse.** During the January 2025 site reconnaissance, staining was observed on concrete or asphalt surfaces within the warehouse, the parking lots, and the air compressor enclosures. Due to the nature of on-site operations, and staining from vehicles in the parking lot, the observed staining is considered a de minimis condition.
- **Finding 9: Former agricultural usage**. The subject property was developed for agricultural use until at least 1939. Based on the limited years of agricultural use and development/grading at the subject property, the former use of the property for agricultural purposes is considered a de minimis condition.

8.4 Data Gap Analysis

A data gap is a lack or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information.

Terraphase identified no significant data gaps (i.e., data gaps that affect the ability of Terraphase to identify RECs). Terraphase identified the following data gaps; however, they are not considered to be significant and do not alter the conclusions of the report:

- Under ASTM E1527-21, Section 8.3.2, “all obvious uses of the property shall be identified from the present, back to the property’s first developed use, or back to 1940, whichever is earlier.” The earliest detailed historical source identified by Terraphase was an aerial photograph dated 1939, which depicted the subject property as developed as farmland. Documentation prior to this development was not uncovered during this Phase I ESA. Based on the reviewed sources of historical information, this data gap is not considered to be significant (i.e., does not affect the ability of Terraphase to identify RECs).
- Former owners and occupants were not contacted as contact information was not provided. Based on the reviewed sources of historical information, this data gap is not considered to be significant.
- Several records downloaded from the state database GeoTracker were incomplete and did not contain all pages. Based on this information provided in multiple records found from different records requests, the data gap is not considered to be significant.

Terraphase identified no additional data gaps during this Phase I ESA.

9 Qualifications of Staff

Hallie Douglas, Project Scientist, with Terraphase has more than 8 years of experience in due diligence site assessments within industrial, commercial, and residential areas of California, Colorado, Nevada, New Jersey, Pennsylvania, Florida, and Illinois. Ms. Douglas holds a Bachelor of Science degree in Environmental Soil Science from California Polytechnic State University San Luis Obispo, and a Master of Science degree in Biosystems Engineering and Soil Physics from Auburn University.

Andrea Radtke, Senior Project Scientist, with Terraphase has more than 9 years of experience in environmental due diligence assessments and National Environmental Policy Act assessments at various industrial, commercial, and residential properties located throughout the United States. Ms. Radtke has coordinated and performed more than 300 Phase I ESAs per ASTM E1527 at sites including residential apartment buildings, dry cleaners, gasoline service stations, factories, mills, manufactured gas plants, and oil refineries. Ms. Radtke holds a Bachelor of Science degree in Natural Resources from Northland College.

Julie Welch, REPA, Principal Engineer, is part of Terraphase's Due Diligence team, which involves the execution of hundreds of Phase I and II ESAs annually. Ms. Welch has 29 years of professional experience in the field of environmental science and assessment, during which time she has managed and contributed to a variety of successful land use, water and energy planning, and residential, commercial, industrial, and infrastructure projects. She holds a Bachelor of Science degree in Environmental Engineering from Rensselaer Polytechnic Institute, Troy, New York, a Hazardous Materials Management Certificate from the University of California, Santa Barbara Extension program, and a Business Management Certificate from the University of California, San Diego Extension program. Ms. Welch is a Registered Environmental Property Assessor (14066029011231127) with the National Registry of Environmental Professionals. Ms. Welch was also a member of the ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action (2021) and routinely attends webinars and conferences regarding ASTM E1527-21.

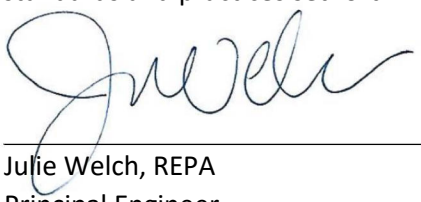
Salvador Mendoza, P.G., Senior Associate Geologist, with Terraphase has more than 25 years of professional environmental experience assessing educational, residential, commercial, and industrial facilities throughout the western United States. He has conducted and overseen numerous Phase I and II ESAs throughout northern California. Mr. Mendoza holds a Bachelor of Art in Geology from California State University, Sacramento, and is a California Department of Occupational Safety and Health Certified Asbestos Consultant (No. 03-3386) and California Department of Public Health licensed Lead-Related Inspector/Assessor (LRC–00000496).

10 Statement of Environmental Professional

This report is intended to meet the requirements of ASTM E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and has been prepared by the undersigned Terraphase environmental professional.

The assessment consisted solely of the activities described in the Introduction of this report and was performed in accordance with ASTM E1527-21 guidelines, as applicable, for Phase I ESAs and the terms and conditions of the Standard Consulting Services Agreement signed prior to initiation of the assessment, as applicable. The assessment was conducted in a manner consistent with the level of care and skill ordinarily exercised by professional engineers, professional geologists, and environmental scientists.

"I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in § 312.10 of 40 CFR 312,[15] and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312."



Julie Welch, REPA
Principal Engineer

March 7, 2025
Date

[15] Definitions, 40 CFR § 312.10 (2022), https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-312/subpart-B/section-312.10

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Appendices for the *Phase I Environmental Site Assessment* are on file at the San Leandro Community Development Department, 835 East 14th Street, San Leandro, California 95477

Appendix G

Noise Modeling Outputs

Appendix A

Roadway Construction Noise Model (RCNM) Results

Construction Noise

Distance	Noise Level @ 50 ft	Pacific Rec Complex	SFR - Corvalis Street	Kaiser
		530	1370	1900
Demolition	85	64.494	56.245	53.404
Site Preparation	82	61.494	53.245	50.404
Grading	81	60.494	52.245	49.404
Building Construction	77	56.494	48.245	45.404
Paving	78	57.494	49.245	46.404
Architectural Coating	74	53.494	45.245	42.404
Trenching & Utilities	81	60.494	52.245	49.404

Construction Vibration

Distance	Vibration @ 25 ft	Comm to West	Comm to North
		35	50
Vibratory Roller	0.21	0.127	0.074
Large Bulldozer	0.089	0.054	0.031
Loaded Trucks	0.076	0.046	0.027
Small Bulldozer	0.003	0.002	0.001

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Demolition

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Demolition	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Site Preparation	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night	Day	Calculated (dBA) Evening	Night	Day Evening	Night
Equipment	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq
Dozer	81.7 77.7	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Dozer	81.7 77.7	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Backhoe	77.6 73.6	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Total	81.7 81.5	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Grading	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	81.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Building Construction	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Man Lift	No	20		74.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Roller	No	20		80.0	50.0	0.0
Roller	No	20		80.0	50.0	0.0
Paver	No	50		77.2	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.0	78.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/17/2026
Case Description: Trenching & Utilities

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Trenching & Utilities	Residential	65.0	55.0	50.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	81.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix B

HVAC Equipment Specifications

25SCA5
Comfort™ Series Single-Stage Heat Pump with Puron® Refrigerant
1-1/2 To 5 Tons

Carrier
Turn to the experts

Product Data



This unit has been designed utilizing Carrier's non-ozone depleting Puron® refrigerant. Heat pumps with Puron® refrigerant provide a collection of features unmatched by any other family of equipment.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

Industry leading Features / Benefits

Efficiency

- 14.3 - 15.2 SEER2 / 11.0 - 12.5 EER2 / 7.5 - 8.1 HSPF2 (depending on unit size and indoor combination installed)
- Microtube technology refrigeration system
- Indoor air quality accessories available

Sound

- Sound levels as low as 69 dBA with accessory sound blanket

Comfort

- System supports programmable or standard thermostat controls

Reliability

- Non-ozone depleting Puron® refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Loss of charge switch
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

WeatherArmor™ Protection Package:

- Solid, durable sheet metal construction
- Dense wire coil guard

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient cooling (down to 0°F/-17.8°C) with approved low ambient accessory kits

Accessory Usage Guideline

Accessory	REQUIRED FOR LOW-AMBIENT COOLING APPLICATIONS (Below 55°F / 12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS*	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles / 3.22 km)
Accumulator	Standard	Standard	Standard
Ball Bearing Fan Motor	Standard	Standard	Standard
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes†	Yew	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shutoff TXV	Yes	Yes	No
Isolation Relay	Yes	No	No
Liquid Line Solenoid Valve	No	See Long-Line Application Guideline	No
Motor Master® Control or Low Ambient Switch	Yes	No	No
Support Feet	Recommended	No	Recommended

*. For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split-System Longline Application Guideline.
†. Standard on 3 phase units only

Accessory Description and Usage (Listed Alphabetically)

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

Usage Guideline:

Required on all units when MotorMaster® is used.

2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a ”hard” boost to compressor motor at each start up.

Usage Guideline:

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

3. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

4. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

5. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

6. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed and also using wind baffles. Instructions provided in accessory kit.

Usage Guideline:

A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

7. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to 0°F/–17.8°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ±5.5°C).

Usage Guideline:

A MotorMaster® Low Ambient Controller or Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

8. Outdoor Air Temperature Sensor

This device enables the thermostat to display the outdoor temperature. This device is also required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for use with compatible Carrier thermostats.

9. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level of the compressor.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3 m) apart.

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Accessory Description and Usage (Listed Alphabetically) Continued

10. Support Feet

Four or five stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

11. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

Usage Guideline:

Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

12. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Directory of Certified Product Performance (AHRI Directory).

When a Time-Delay Relay (TDR) is called for in the AHRI Directory, use a 30 second TDR for MicroChannel Indoor units and use a 90 second TDR for Round Tube Plate Fin Indoor units.

13. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

Electrical Data

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
18	208-230-1	253	197	45.7	10.3	0.50	13.4	20
24				59.5	11.1	0.60	14.5	25
30				67.9	14.1	0.60	18.2	30
36				83.1	15.3	1.20	20.3	30
42				110.0	18.6	1.40	24.7	40
48				120.0	25.0	1.52	32.8	50
60				150.0	25.6	1.20	33.2	50

*. Perrmissible limits of the voltage range at which the unit will operate satisfactorily
†. Time-Delay fuse.

FLA—Full Load Amps
LRA—Locked Rotor Amps
MCA—Minimum Circuit Amps
RLA—Rated Load Amps
NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit.
All motors/compressors contain internal overload protection.
Complies with requirements of ASHRAE Standards 90.1
Short Circuit Current Rating (SCCR): 5kA rms

Sound Power Level Without Sound Hood

UNIT SIZE	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	71	70.2	66.4	65.1	67.4	62.8	58.2	52.5
24	76	66.3	68.4	69.4	67.7	64.4	61.4	55.9
30	76	70.1	71.3	70.8	69.6	64.0	60.6	54.9
36	76	74.0	72.5	71.7	70.5	66.1	61.7	55.6
42	76	72.1	72.6	70.0	67.6	62.9	60.5	56.0
48	76	75.5	72.4	71.4	68.3	63.1	60.5	55.5
60	76	65.2	67.0	67.4	70.0	62.6	59.7	55.5

NOTE: Tested in compliance with AHRI 270 but not listed with AHRI.

Sound Power Level With Sound Hood

UNIT SIZE	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	69	70.6	66.2	64.8	65.7	61.2	57.5	51.3
24	74	66.7	68.1	68.7	66.5	63.1	60.0	53.1
30	74	71.4	70.5	70.5	68.3	63.4	60.3	53.5
36	74	74.7	72.7	71.8	68.6	64.3	59.0	51.6
42	74	72.8	73.7	70.3	67.3	62.6	59.8	53.4
48	74	76.3	71.9	71.0	68.1	62.9	60.0	53.9
60	73	65.4	67.5	67.5	68.8	61.5	58.5	52.9

NOTE: Tested in compliance with AHRI 270 but not listed with AHRI.

Charging Subcooling (TXV-Type Expansion Device)

UNIT SIZE-VOLTAGE	REQUIRED SUBCOOLING °F (°C)
18	7 (3.9)
24	7 (3.9)
30	12 (6.7)
36	12 (6.7)
42	10 (5.6)
48	13 (7.2)
60	10 (5.6)

HP Only Replacement with Piston Indoors

This heat pump may only be installed with piston metered indoor units as replacement components in a piston system.

When installing a non-rated heat pump with a piston indoor unit, the correct piston must be installed, which should be listed in the indoor unit Installation Instructions or Product Data.

Replacement pistons can be ordered from Replacement Components (RC).

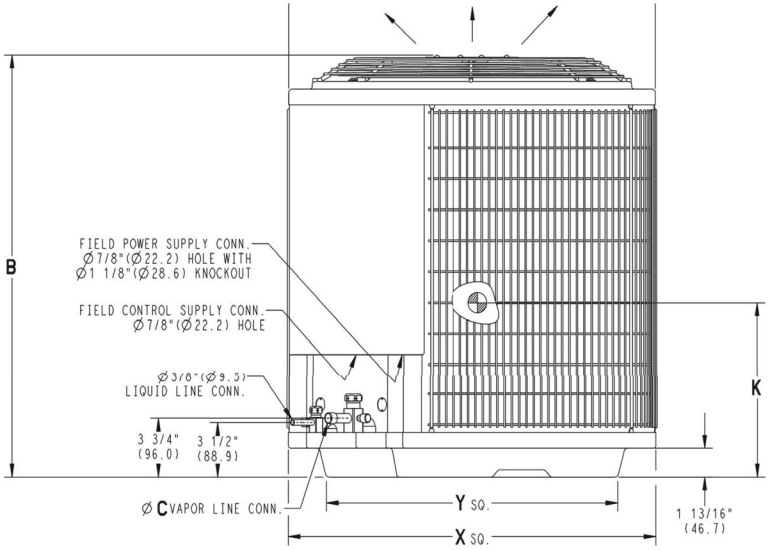
Dimensions

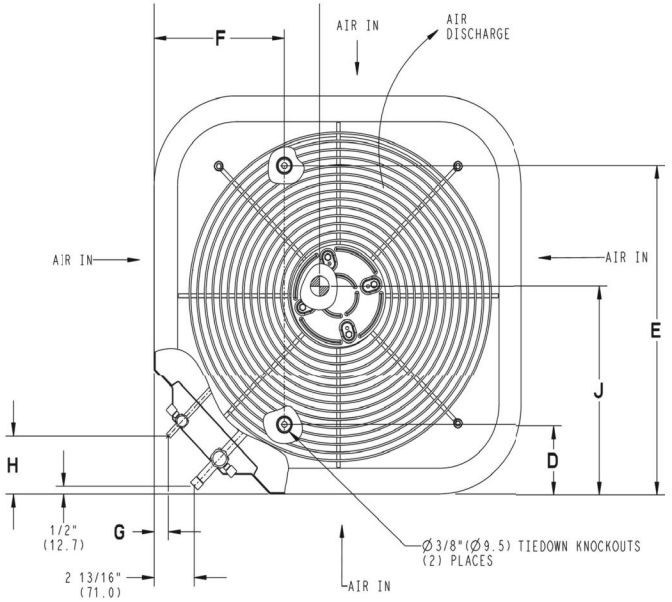
UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
						INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM
25SCA518A*0	0	Y	N	N	N	31 3/16	792.5	28 11/16	728.7	5/8	15.9	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	14 3/4	374.7	16 1/4	412.8	13 1/2	342.9	140	63.4	170	77.2	34 1/4	870.0	33 15/16	861.6
25SCA524A*0	0	Y	N	N	N	31 3/16	792.5	32 1/16	815.1	5/8	15.9	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	13 3/4	349.3	14	355.6	14 1/2	368.3	159	72.0	190	86.1	34 1/4	870.0	37 5/16	947.9
25SCA530A*0	0	Y	N	N	N	31 3/16	792.5	28 11/16	728.7	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 3/4	400.1	15 1/2	393.7	12 1/4	311.2	176	79.8	207	93.7	34 1/4	870.0	33 15/16	861.6
25SCA536A*0	0	Y	N	N	N	31 3/16	792.5	28 11/16	728.7	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	14	355.6	14 1/2	368.3	14 1/2	368.3	178	80.7	208	94.5	34 1/4	870.0	33 15/16	861.6
25SCA542A*0	0	Y	N	N	N	31 3/16	792.5	32 1/16	815.1	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 1/4	387.4	14 1/2	368.3	13 3/4	349.3	221	100.4	252	114.5	34 1/4	870.0	37 5/16	947.9
25SCA548A*0	0	Y	N	N	N	31 3/16	792.5	35 1/2	901.4	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 1/4	387.4	15	381.0	14 3/4	374.7	228	103.4	260	117.9	34 1/4	870.0	40 3/4	1034.3
25SCA560A*0	0	Y	N	N	N	35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	16 1/2	419.1	17 1/2	444.5	19	482.6	260	117.9	293	133.1	37 13/16	960.0	44 1/8	1120.7

208-230-1-60	208/230-3-60	460-3-60	575-3-60
Y=YES N=NO			

NOTES:

1. CENTER OF GRAVITY ⊕ .





UNIT SIZE	"X" MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		"Y" MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
18,24,30,36,42,48	31 3/16	792.5	22 15/16	583.2
60	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

SD5779-4 (5) REV. A

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Guide Specifications
General

Air-Cooled, Split-System Heat Pump
25SCA5
1-1/2 to 5 nominal tons

System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210/240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor unit is leak tested.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

U.S. and Canada only.

PRODUCTS

Equipment

Factory assembled, single piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron®, and special features required prior to field start-up.

Unit Cabinet

Unit cabinet will be constructed of galvanized steel and coated with pre-paint.

Available with dense grille only.

Fans

Condenser fan will be direct-drive propeller type, discharging air upward.

Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings.

Shafts will be corrosion resistant.

Fan blades will be statically and dynamically balanced.

Condenser fan openings will be equipped with steel wire safety guards.

Compressor

Compressor will be hermetically sealed.

Compressor will be mounted on rubber vibration isolators.

Condenser Coil

Condenser coil will be air cooled.

Coil will be constructed of aluminum fins mechanically bonded to copper or aluminum tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of Puron® refrigerant, POE compressor oil, accumulator, and reversing valve.

Operating Characteristics

The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F/°C. The power consumption at full load will not exceed _____ kW.

Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.

The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.

Unit electrical power will be single point connection.

Control circuit will be 24v.

Special Features

Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

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System Design Summary

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
4. Minimum outdoor operating air temperature for heating mode is –10°F (–23.3°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
8. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Factory-supplied filter drier must be installed

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Replaces: New

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