



SR 84 EXPRESSWAY WIDENING AND SR 84/I-680 INTERCHANGE IMPROVEMENTS PROJECT, ALAMEDA COUNTY



California Department of Transportation (Caltrans) and the Alameda County Transportation Commission (Alameda CTC) proposed to widen and upgrade State Route (SR) 84 to the east of the Interstate 680 (I-680) SR 84 interchange. The project would also include ramp improvement, addition of an auxiliary lane, and extending the existing southbound I-680 High-Occupancy Vehicle (HOV) express lane. The project would modify about 5 miles of SR 84 in Pleasanton, Sunol, and unincorporated Alameda County. Baseline was in charge of preparing the

initial site assessment (ISA), the air quality technical report, and the Environmental Impact Report/Environmental Assessment (EIR/EA) sections in Hazardous Waste/Materials, Air Quality, Climate Change, and Energy.

Baseline carried out a range of activities in accordance with Chapter 10 of the Caltrans Environmental Handbook for the ISA, such as site reconnaissance, review of physical setting sources, historical land uses, and regulatory records, and preparation of a summary of findings, conclusions, and recommendations. The ISA was incorporated into the EIR/EA Hazardous Waste/Materials section, with the recommendation of a Preliminary Site Investigation during the final project design phase.

The air quality technical report was prepared by Baseline to determine the highway project's conformity with federal air quality regulations. The report contains analysis on carbon monoxide (CO) and particulate matter (PM) hot-spot(s), construction and operational emissions of criteria pollutants and greenhouse gases, mobile source air toxics during project operation, and relevant control measures from Caltrans Standard Specifications. Baseline was also involved in the consultation process for PM2.5 conformity determination with the Bay Area Air Quality Conformity Task Force. The tools used for the quantitative analysis in the report include CALINE4 for CO hot spots, the Sacramento Road Construction Model for construction emissions, and CT-EMFAC for mobile source air toxics. Findings and recommendations in the air quality technical report were incorporated into the EIR/EA sections in Air Quality and Climate Change.

Baseline also prepared the EIR/EA Energy section in accordance with Chapter 13 of the Caltrans Environmental Handbook and Energy and Transportation Systems. Direct energy consumption was calculated based on gasoline and diesel consumptions for vehicles travelling through the project area; indirect energy consumption was calculated for activities such as roadway construction and maintenance. The conclusions for the Energy section were incorporated into the final EIR/EA, which was approved in May 2018.

